



ImagePilot

Version 1.80

Operation Manual



CE 0197



Manufacturer:
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EN

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Foreword

Thank you for purchasing the ImagePilot Console (hereinafter referred to as ImagePilot).

ImagePilot is a console that designed for use with cassettes.

ImagePilot enables total management of patient and image information from registration to image confirmation, providing a more comfortable and efficient imaging environment.

This manual details cautions relating to usage as well as operational procedures to enable the user both to become fully familiar with the performance of the product and to gain the knowledge necessary to use the product safely. The manual should be kept in a readily accessible place at all times for easy reference. Should you lose the manual, please contact your service representative.

The product of ImagePilot sold in EU and Canada is comprised of the software only.

Features

This device is a software product that makes PC Computed Radiography- Digital X-ray image control console intended to be used to receive and process electronic images of patients. Additionally this device has the following feature.

1. Wide Range of Link Functions

ImagePilot is capable of handling a wide range of protocols including DICOM and of linking with generally available electronic carte systems.

2. Capable of Handling Wide Range of Inputs

ImagePilot is capable of acquiring CR and AeroDR, DICOM, non-DICOM images, as well as images taken by digital cameras.

3. Diverse Output Modes

ImagePilot is capable of output not only to film and host devices, but also to generic printers and media such as CD/DVD.

4. Abundant Image Processing Functions


Various methods of image processing are furnished including contrast adjustment and annotation functions that enable annotation of characters or lines on images. Additionally, ImagePilot is capable of playing motion images.

5. Security

ImagePilot features reinforced security realized by use of user ID and password input.



This manual principally describes ImagePilot applications. ImagePilot should be used only after thoroughly reading this manual as well as computer and display manuals.

| | |
|---------|---|
| Remarks |  0197 It means conformity with the Medical Devices Directive 93/42/EEC. 0197 is Notified Body number. EC Directive 93/42/EEC does not cover animal use. So, the notified body whose identification number is 0197 is not responsible for animal use. |
|---------|---|

Notes

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- "Windows 8.1" is the abbreviation of "Microsoft Windows 8.1 Pro Edition Operation System".
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Before Usage

This chapter presents items that the user should be aware of before using the system.

| | |
|---|----------|
| Summary of usability specifications (for IEC/EN 60601-1-6, IEC/EN 62366) | 4 |
| How to use this manual | 5 |
| Page Layout | 6 |

Summary of usability specifications (for IEC/EN 60601-1-6, IEC/EN 62366)

1. Medical purposes

- Display of diagnostic images for diagnosis of disease and injury.

2. Patient groups

- All patients requiring diagnostics using images such as X-ray images, ultrasonic images, and endoscope images.

3. Parts of body or organizations to which the device is mounted or that interact with the device.

- No appropriate points. (Device does not come in contact with the patient.)

4. Operating principle

Refer to ["Features" on page 2](#).

5. Significant physical characteristics

Refer to ["Specifications" on page 570](#).

6. Significant performance characteristics

Refer to ["Outline of ImagePilot" on page 28](#).

7. Unit operator

- Physicians, radiologists, nurses.
- Qualified professional specialists who are in good physical health.
- Although no special training is required to use this unit, this manual should be read and thoroughly understood prior to use.

How to use this manual

Structure of this manual

This manual consists of the chapters listed below.

| | |
|---------------------------------------|---|
| Chapter 1 | Safety Precautions & Warnings This chapter describes warnings and cautions pertaining to the safe use of ImagePilot. |
| Chapter 2 | Product Outline This chapter presents an outline of ImagePilot. |
| Chapter 3 | Start up & Shutdown This chapter gives details of starting up and shutting down ImagePilot. |
| Chapter 4 | Patient Information Input and Initiation of Examination This chapter describes method of inputting patient information. |
| Chapter 5 | Image Acquisition and Editing This chapter describes the procedures to import images. |
| Chapter 6 | Note Function This chapter describes the Note function for the informed consent. |
| Chapter 7 | Previewer Functions This chapter describes previewer functions. |
| Chapter 8 | Image Output This chapter describes the procedures to export images. |
| Chapter 9 | User Tool This chapter describes operational procedures for User Tool used as a utility to customize ImagePilot. |
| Chapter 10 | Options This chapter describes operational procedures for ImagePilot options and optional functions. |
| Chapter 11 | Image Processing This chapter describes procedures for CR image processing using ImagePilot. |
| Chapter 12 | Activation This chapter describes the Configuration Activation feature. |
| Chapter 13 | AeroDR Detector Calibration This chapter describes AeroDR Detector calibration. |
| Chapter 14 | ImagePilot Viewer Operation This chapter describes how to operate ImagePilot Viewer. |
| Chapter 15 | Troubleshooting This chapter describes procedures for handling typical problems and error messages displayed on ImagePilot. |
| Chapter 16 | Care and Maintenance This chapter describes items that require regular care and maintenance. |
| Appendix | This appendix describes the additional information. |
| ImagePilot-touch Function List | This section describes each function offered by the ImagePilot-touch. |
| Specifications | This chapter details the specification of the ImagePilot. |
| Index | The index describes special terminology used in the ImagePilot Operation Manual. |

Page Layout



Hint
Points to be noted.



Caution
Cautions for operating the device. Details should be carefully noted.



User Tool
Settings or other things to be made through the User Tool. Contact your system administrator to change the settings using the user tool.

Chap. 3 Start-up & Shutdown

3.2 Log-in
The procedure for logging in to ImagePilot is described below.

1 Input the user name and password from the keyboard.
 • Asterisks will be displayed in the password input box in place of the reception characters. The actual password itself is not displayed.
 • Password reception is case sensitive. Check that the [Caps Lock] or [Num Lock] buttons are not active.

2 Click the [Login] button.
 • If the correct user name and password have been entered, the patient reception screen will be displayed.

3 The name of the logged-in user will be shown at the top right of the patient reception screen.

The user name and password should be input in lower case.

The message at the right will be displayed if user name or password input is incorrect. Click the [Yes] button and correct the input after the message has disappeared.

If you have forgotten your user name or password, inform the system administrator and register a new user name and password.

< 35 >

Q 0.41 Patient Information Input
Q 0.294 8-1) Image Move Screen
Q 0.306 8-1) DVD Backup Screen
Q 0.262 Do not remember the previous login name (Operation Settings)
Q 0.213 Edit User Registration Screen

Title
This title stands for the general meanings for the descriptions.

Display
Display with the operational procedure is shown.

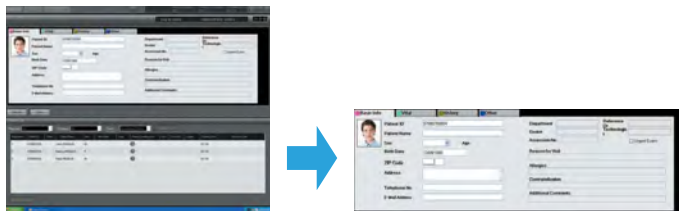
Operation Procedure
Operation procedure is explained in order.

Technical Term
Technical terms are explained.

Reference
Shows reference pages or sections. See the page for more details.

Display in this manual

In this manual, the unnecessary area of the display may be trimmed away.



Parenthesis in a sentence.

The word in this mark shows that it is displayed on the monitor of the ImagePilot operation unit.

➡ Ex. "Exposure possible"

The word in this mark shows that it is the name of the button to be pushed.

➡ Ex. [Perform Exam] button

Glossary

"Patient" that appears on this manual or on the device represents all examinees that undergo the medical examination.

Glossary of Terms

The meanings of terms used in this manual are as follows:

| Term | Definition |
|-------------------------------|---|
| CR | An acronym for Computed Radiography. In this manual, it refers to the REGIUS Series "REGIUS 110", "REGIUS 110HQ", "REGIUS 210", "REGIUS 190", "REGIUS 170", "REGIUS SIGMA", and "REGIUS SIGMA2". |
| DR | An acronym for Digital Radiography. In this manual, it refers to AeroDR or digital radiography (FPD) from other manufacturers. |
| AeroDR | AeroDR is an abbreviated designation of AeroDR SYSTEM. AeroDR SYSTEM is indicated for use in generating radiographic images of human anatomy as Digital Radiography. |
| DX(AeroDR) | This refers to AeroDR. |
| DR(DX) | This refers to FPD of other manufacturers. |
| DX | This refers to FPD of other manufacturers. |
| DX(DR/AeroDR) | This refers to AeroDR as well as FPD of other manufacturers. |
| CR Image | This refers to REGIUS images. |
| CR Images (DICOM Images) | This refers to CR images from other manufacturers, as well as well as PDI output REGIUS images. |
| AeroDR Image | This refers to AeroDR images. |
| DR (DX) Images (DICOM Images) | This refers to FPD images from other manufacturers, as well as PDI output AeroDR images. |

Chap. 1
Safety Precautions & Warnings

The cautions detailed in this chapter must be strictly followed to ensure safety during usage of ImagePilot.

- 1.1 Alert and Symbol Marks 10
- 1.2 Warning Text (Signal Word)..... 10
- 1.3 Most Important Warnings 11
- 1.4 Cautions in Use 13
- 1.5 Overall Cautions 17
- 1.6 Cautions Relating to Power Supply and Power Cables 18
- 1.7 Cautions Relating to Installation, Movement and Storage 19
- 1.8 Cautions Relating to Care 20
- 1.9 Cautions to be Observed During Usage 21
- 1.10 Cautions Relating to Use of CD/DVD..... 22
- 1.11 Cautions Relating to Use of LCD Monitor (option) 22
- 1.12 Cautions Relating to Use of NAS (option) 23
- 1.13 Intended Use..... 25
- 1.14 Requirements and Limitations to be Noted for the Connection to Other Devices and Equipments 25

1.1 Alert and Symbol Marks



Safety Alert Symbol

This is the safety alert symbol and is intended to draw the attention of the user to potential dangers to the user him/herself or to others that may arise during the use or operation of this system.

These messages must be read thoroughly and strictly observed.

All safety related precautions should be carefully read and fully understood before proceeding with assembly or usage of this system.

Description of Graphic Symbols

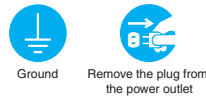
Symbols indicating the need for caution (including danger and warnings)



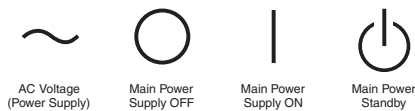
Symbols indicating prohibited acts



Symbols indicating essential acts (compulsory or indicated acts)



Other Symbols



1.2 Warning Text (Signal Word)

Signal words indicate the degree of potential hazards in the product.

There are 3 degrees of caution labels, and each is used depending on the level of risk and damage caused by incorrect use and mishandling.

DANGER : Failure to observe the caution will produce high risk of serious or fatal injury.

WARNING : Failure to observe the caution will produce moderate risk of serious or fatal injury.

CAUTION : Failure to observe the caution will produce risk of moderate or light injury.

| | | Risk of the damage | |
|---|---|----------------------------------|----------------|
| | | High | Low |
| Bodily injury (and damage to property) | Loss of life or serious injury (Damage is serious) | DANGER | WARNING |
| | Moderate damage or light injury (Damage is light) | WARNING or CAUTION | CAUTION |
| Damage to property only | | CAUTION | |

NOTE : If the contents of this page are not legible, order a new manual.

1.3 Most Important Warnings

These warnings are of utmost importance with regard to the handling of ImagePilot.

The items detailed below must be observed without fail and proper handling procedures followed.



WARNING

Handling of Patient Information

Always verify that the patient information entered is correct before implementing any operation on the patient information. In addition, make sure that the operated result is what is intended whenever the operation on the patient information is implemented.

Patient selection (Danger of using wrong patient information)

Care must be exercised to ensure that when correlating patient information with images, images acquired for one patient are not mistakenly correlated to another patient. Special care must be taken to check information such as dates of exposure when processing images for multiple patients at the same time.

If images are mistakenly acquired from the wrong patient, carry out re-correlation to the right patient following prescribed procedures for amendments.

Do not defragment the PC in which the ImagePilot is installed.

Konica Minolta is not liable to the loss of image data resulted from defragmentation.

Remarks for the display of Study Date and Time

For the CR images and AeroDR images, "Reception date and time for the image exposed" is maintained with each image as the Study Date, whereas the Study Date of the DICOM data is maintained with the images other non-CR and non-AeroDR.

Note: If the Study Date has no value, the date and time when the image is imported to the ImagePilot is maintained as the Study Date.

Data backup

(Lack of backup may lead to image/data loss in the event of device failure.)

As precautionary measure use of NAS(option), DVD backup or preservation of the original film should be considered before to start using the device.

Image measuring (Errors in measuring presents danger to patients.)

Care must be taken to specify the correct coordinates when using measuring functions. Failure to set the correct coordinates will lead to errors in measuring results.

The judgment of measuring results is the responsibility of the user. Results may differ to actual values depending on factors such as exposure methods.

The measuring functions incorporated in the system are not the kind that guarantees the precision.

To prevent falsification or alteration, do not provide the raw Word file in which the patient information has been recorded to the other institutions.

Use the printout or PDF when it is necessary to provide the report to the other institutions.

NOTE : If the contents of this page are not legible, order a new manual.



WARNING

Memory Card Reader

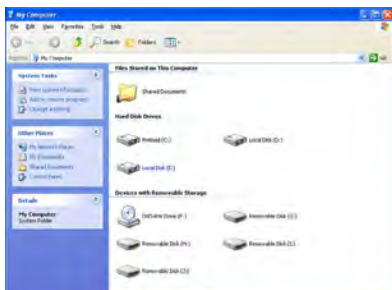
A memory card reader is built-in on the PC's front panel as shown below depending on the model used as the server. The memory card reader supports xD Picture Card/Smart Media(SM)/Multi-Media Card(MMC)/SD Memory Card/Compact Flash Type-1(CF)/Micro Drive(MD)/Memory Stick(MS)/Memory Stick Duo/Memory Stick PRO. Care must be taken against the computer virus, etc. when copying the data from the media. In addition, make sure to back up the data before using the memory card. Konica Minolta is not liable even in case if the data is damaged.



<Unplugging the media from the memory card reader>
Always follow the procedure below when unplugging the media.

1. Select from (G) to (J) the device that should be unplugged.

Note: When the system is connected to electronic medical chart, it may not be (G) to (J).



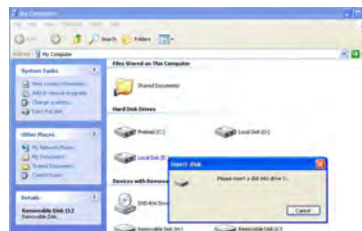
2. Right-click on the selected device icon to show the right-click menu, and select "Eject".
(The following window shows the example of (I) drive being selected)



3. Confirm that the access lamp of the card reader has been extinguished, and confirm that the "XX: insert the disc in the drive" dialogue box is displayed. Then unplug the card from the card reader.



Confirm the lamp is OFF



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1.4 Cautions in Use

Following cautions must be observed when handling the ImagePilot and followed in order to handle the ImagePilot in a correct manner. Before using the ImagePilot, thoroughly read this operation manual, and become fully familiar with the operation of the ImagePilot.



WARNING

ImagePilot is classified as Class B Information Technologies Equipment based on the standard prescribed by VCCI (Voluntary Control Council of Interference by Information Technology Equipment).
Use of this product may cause electromagnetic disturbance. In such cases, the user may be requested to take necessary actions to remedy the problem.

Caution against Computer Virus

Pay full attention not to allow the computer virus to infect the PC when using the product whether it is stand alone or networked.

Cautions when disposing of the product and its packing materials

Please follow the rules and regulations of your relevant authorities in the disposal of this product, accessories, options, consumables, media and their packing materials.

Please contact your technical representative when the lithium batteries inside the ImagePilot need to be replaced.

For basic operational procedures, user manuals included in packing for computers and displays used with this product must be read.

Setting the LCD display in an unstable location may result in the unit toppling or falling. Ensure that the unit is set in a stable location.

Please note that the operation of the ImagePilot is no longer guaranteed if the user connects devices purchased not from KONICA MINOLTA to the PC which installed ImagePilot.

In addition, when the PC which is not specified in the specifications in this Operation manual is used as the client for the ImagePilot, the user must be responsible for the results of study implemented on that PC.

Software of manufacturers other than KONICA MINOLTA purchased by customers cannot be installed in ImagePilot.

Customers must not attempt to modify ImagePilot units purchased from KONICA MINOLTA.

Operation of the system will be unstable if power is left on continuously for 24 hours.

Power off the device when a job is completed in order to ensure stable operation.

If 24-hour operation is unavoidable due to the nature of the system used by your facility, device power should be switched off and back on at least once a week.

Attention must be paid to password control. Care must be taken not to forget passwords or to share passwords with others.

Please note that KONICA MINOLTA will accept no responsibility whatsoever for damage occurring due to connection with devices of other manufacturers.

KONICA MINOLTA will accept no responsibility for operational failures due to network errors during Wireless LAN use.

Any client using a wireless LAN environment should not connect REGIUS SIGMA/SIGMA2.

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If the server and client are connected via a wireless LAN, network authentication may fail when launching the client PC depending on the performance of wireless LAN adapters.
If this happens, clear the failure message, then click the ImagePilot icon on the desktop to launch the application.

Use wireless LAN equipment that complies with the telecommunication regulations for your country.

Do not connect the wireless LAN of the ImagePilot Mobile to anything other than the Portable UF/RF Unit.

Operation of ImagePilot applications cannot be guaranteed when generally available freeware or off-the-shelf software is installed.

Concerning measuring

- Care must be taken to specify the correct coordinates when using measuring functions.
Failure to set the correct coordinates will lead to errors in measuring results.
- Judgment of the results of measuring are the responsibility of the user.
measuring errors in respect to actual values may occur depending on factors such as the method of exposure used.
- When undertaking medical practices involving the use of measuring obtained through image processing, consider differences between the actual subject under test and measuring data, and take responsibility for the practices. In particular, differences between the actual length of the subject under test may sometimes occur, so consider the differences in image and measuring data during use.

OS settings should not be changed.
Additionally, files or shortcut icons on the desktop must not be deleted.

The replay rate of the cine mode is only for relative guide. Therefore do not use it for diagnostic purpose.

Do not remove warning labels or nameplates affixed to the unit.

Do not use the ImagePilot for the primary image diagnosis of mammography, linacgraphy and bone mineral calculation.

- Pay full attention to virus, etc. when downloading generic images.
- Normal operation is not guaranteed for the connection with generic printers that are not tested and qualified by Konica Minolta.

Do not turn OFF the Server PC during the operation of the Client PC. Make sure that there is no Client PC in operation before turning OFF the Server PC.

When moving the ImagePilot Mobile, turn off the power to the PC before moving it.

When taking images, make sure to paste the marker showing exposure condition such as exposure direction, right or left.

Please contact the agent qualified by Konica Minolta as to the connectable device types and connection work.

Carefully check the patient name and his/her data before deleting the patient data.
It is recommended to delete the patient data after having backed up the data if possible.

ImagePilot software must be installed to PC only by the agent qualified by Konica Minolta.

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Konica Minolta, Inc. (hereinafter KM) provides only the English Graphic User Interface (GUI). However, user of the ImagePilot might be able to order the agent of KM to provide the modified ImagePilot whose GUI is other than the English GUI provided by KM. If the user orders so, the user is responsible for the modified ImagePilot, and the user becomes the in-house manufacturer of the modified ImagePilot in the meaning of Medical Device Directive (MDD).

The unit progress status of each modality and its icon are displayed using a modality name registered in the system. If data exists for a patient that has not been completely diagnosed, "Update (*)" will be displayed. The number of data that have not been browsed is displayed in parenthesis, but when starting an exam of the patient and advancing to the Viewer screen, check whether or not additional data that has not been browsed exists outside of those in parenthesis.

Moire may be generated due to the number of grid lines used, and the scan direction of the reader unit, so make sure to use the grid appropriately.

When communicating the Patient Info with the HL7 communication device, make sure the data received from higher device is correct.

When communicating URL with the EMR(Electrical Medical Record) and PMR(Patient Management System), make sure the medical data automatically opened on the EMR and PMS sides is the same patient's data on the ImagePilot side.

The image copy function allows you to adjust copied image and change the zoomrate as the original image. It is also possible to arrange two images for diagnostics. Only one copy can be created. Be careful not to confuse the master with the copy by using numbers displayed on each icon.

When changing the date & time of generic format image, erroneous input may cause unintended consequences. The images may not be displayed on the viewer in historical order.

When utilizing the WEB based client function, make sure the line environment is authorized by the communications law and the security of the line environment is ensured.

The Print Composer function allow you to output multiple images of different patients on the same film. Therefore, make sure the stamp/overlay setting is performed and the Patient Info is displayed on each image so as to prevent the image from being confused with other patient's image.

When utilizing the DICOM header editing and outputting function, erroneous data correction may cause mix up of exam information at the output destination. Utilizing this function is on your own responsibility.

When using MWM collaboration, transmit to all modality devices after checking the receiving patient and the test information.

Do not use reference JPEG images for diagnostics.



For EU member states only

This symbol means: Do not dispose of this product together with your household waste!

Please refer to the information of your local community or contact our dealers regarding the proper handling of end-of-life electric and electronic equipments.

Recycling of this product will help to conserve natural resources and prevent potential negative consequences for the environment and human health caused by inappropriate waste handling.

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CALIFORNIA, USA ONLY

This product contains a CR Lithium Battery which contains

Perchlorate Material - special handling may apply.

See

www.dtsc.ca.gov/hazardouswaste/perchlorate

Notification for USA ONLY

Do not touch a damaged LCD panel directly with bare hands.

The liquid crystal which leaks from the panel is poisonous if it enters the eyes or mouth.

If any part of the skin or body comes in direct contact with the panel, please wash thoroughly. If some doctor symptoms result, please consult your doctor.

Follow local regulation or laws for safe disposal.

The backlight of the LCD panel contains mercury.

Dispose According to Local, State or Federal Laws.

NOTE : If the contents of this page are not legible, order a new manual.

1.5 Overall Cautions



WARNING

- **The unit must not be used if smoke, unusual odors or sounds are detected.**

In the event of detection of smoke, unusual odors or sounds, the power should be switched off immediately, the power plug disconnected from the power outlet and the service representative contacted. Continued use under such circumstances may result in fire.

- **Do not insert wire or metal blades.**

Do not insert wire, metal blades or other foreign objects into ventilation grids or disc drives: doing so may result in electrocution.



CAUTION

- **Do not introduce water or other foreign substances into ImagePilot.**

Do not introduce foreign substances such as water or other liquids, pins or clips into ImagePilot: doing so may result in fire, electrocution or damage. In the event of accidental introduction of such foreign substances or objects into the unit, power should be switched off immediately and the power plug disconnected from the power outlet. No attempts should be made to disassemble the unit. Contact your service representative for assistance.



CAUTION

- **Shutdown of the unit or removal of discs from the unit should be carried out only after checking that the hard disk access lamp is extinguished.**
- **After switching off the power to the unit, power should be switched back on only after allowing an interval of 10 seconds or more after power down.**
- **When carrying out work such as relocation of the ImagePilot, which may cause vibration, a period of at least 30 seconds should be allowed after power down before commencing work.**
- **ImagePilot should be regularly cleaned.**

Regular cleaning helps to prevent the occurrence of various malfunctions.



CAUTION

- **Cautions regarding use of the shutter function**

Although the shutter function automatically recognizes the exposure field, in cases where the distance between the edge of the cassette and the exposure field is less than 3cm, the shutter function may fail to correctly recognize the exposure field. When using collimated exposure, ensure that sufficient distance is allowed between the edge of the cassette and the exposure field.

NOTE : If the contents of this page are not legible, order a new manual.

1.6 Cautions Relating to Power Supply and Power Cables



WARNING



- **Do not touch power plugs with wet hands.**

Do not disconnect power plugs with wet hands: doing so may result in electrocution.



- **Do not connect ground lines to gas pipes.**

Never connect ground lines to gas pipes: doing so may cause gas explosions.



- **The following must be observed to prevent fire or electrocution.**

Do not expose the unit to water or other liquids.



- Always use the specified power cables.
- Do not use the accessory cables for other electrical appliances.
- Always use an specified (50Hz/60Hz) power outlet.



- Do not allow dirt or grime to accumulates on power plugs or power plug pins.
- If power plugs or cables become hot, or if power plug to power outlet connections are loose, use of the unit should be discontinued and the service representative contacted.
- Confirm that the ground lines are correctly connected to the device or power cable.



- **Do not insert clips, pins or other foreign bodies into the unit: doing so may cause fire or electrocution.**



CAUTION



- **Do not use power outlets other than the recommended ratings.**

Power plugs should be directly connected to the specified power outlet. Use of power supplies that do not comply with ratings may result in fire or electrocution. Additionally, the unit should not be installed in a location where extension cords are required.



- **Multi-plugs should not be used.**

Use of multi-plugs may result in overheating causing fire due to current in excess of ratings.



- **Only specified power cables should be used.**

Do not use power cables other than those provided with the unit: doing so may result in fire due to current in excess of ratings.



- **Following must be observed to prevent electrocution or fire resulting from damage to power cables.**

- Do not tug power cables.
- Do not twist power cables.
- Do not bundle power cables.
- Do not use equipment such as stapler to fix power cables in place.
- Do not allow power cables to become trapped.
- Do not place objects on top of power cables.
- Do not attempt to modify, process and repair power cables.
- Do not use damaged power cables.
Damaged power cables should be immediately replaced with specified cables. For details of replacement, please consult your service representative.



- **Do not lay power cables in the vicinity of heat-generating equipment.**



- **During extended periods when the unit is idle, power plugs should be disconnected from power outlets.**

NOTE : If the contents of this page are not legible, order a new manual.

1.7 Cautions Relating to Installation, Movement and Storage



WARNING



- **Packing material should not be left standing.**

ImagePilot packing material should be stored in a location non-accessible to patients. Particular care must be taken with plastic bags that can cause accidents such as suffocation if accessible to children.



CAUTION



- **Do not install the unit in locations other than that specified.**

Do not install ImagePilot either in the locations listed below or in locations other than those specified in this manual.

- Locations where the unit will be exposed to excess dust.
- Locations where the unit will be exposed to direct sunlight.
- Locations such as the vicinity of water heaters where the unit will be exposed to excessive humidity.
- Unstable locations.
- Locations with poor ventilation.
- Locations where the unit will be exposed to soot or steam.
- Locations with extreme fluctuations between light and darkness.
- Locations such as the vicinity of heating equipment where the unit will be exposed to high temperatures. Additionally, do not install the unit directly on the floor.



- **Do not connect or disconnect interface cables with the power cable connected.**

Interface cables should be connected or disconnected after the power cable has been disconnected from the power outlet. Even with power switched off, touching cables or connectors with the power cable connected may still cause electrocution or fire due to short circuits.



- **Do not use interface cables other than those specified.**

Always use the interface cables specified by KONICA MINOLTA and implement connections only after checking devices to be connected and connectors. Use of cables other than those specified or wrong connections may cause electrocution due to short circuits. Additionally, the following cautions should be observed concerning the handling and connection of interface cables.

- Do not use damaged cable connectors.
- Do not place objects on top of cables.
- Do not use damaged cables.
- Do not step on cables.
- Do not use the unit if cable connections are loose.



- **Do not use the unit placed on its back, upside down or on its side.**

Doing so will result in heating leading to overheating or fire. To ensure maintenance of the features of ImagePilot, the unit should be installed at a horizontal angle +/- 5 degrees.



- **Do not block ventilation grids.**

The unit is furnished with ventilation grids on the front and back in order to allow heat generated internally to escape. To ensure adequate ventilation, the unit should be installed so that the ventilation grids on the front and back are at least 10cm from walls or surrounding equipment.



- **Do not move the unit with power cables or other cables connected.**

Doing so will result in pulling on power cables or other cables possibly causing the unit to fall or topple.

NOTE : If the contents of this page are not legible, order a new manual.



CAUTION



- **Even after power has been switched off, ImagePilot must not be moved until all operation has stopped.**

Work on ImagePilot likely to cause vibration or shock such as relocation should be carried out only after at least 30 seconds have elapsed after power down.



- **Do not pull off the power cable or turn OFF the power during the system is in operation.**

1.8 Cautions Relating to Care



WARNING



- **Do not attempt disassembly, repairs or modifications.**

Under no circumstances should the user attempt disassembly, repair or modification of the unit. Doing so may result in failure of the unit to operate normally leading to the danger of electrocution or fire. In cases where repairs are necessary, please contact your service representative.



- **Do not remove the lithium battery.**

A lithium battery is built into ImagePilot. Do not remove the lithium battery. Exposure of the lithium battery to heat or water may cause the battery to explode. Additionally, do not attempt disassembly, replacement or recharging of the battery in cases where the unit ceases to function normally due to expiry of the life of the lithium battery: in such cases, please contact your service representative.



- **Do not carry out care or maintenance procedures with the plug connected.**

Always switch off power to ImagePilot and disconnect the power plug from the power outlet before beginning care or maintenance procedures. Even after power has been switched off, touching internal components with power cables still connected may cause electrocution.

Additionally, the power plug should be occasionally disconnected and wiped with a dry cloth to remove any accumulation of grime or dust. Accumulation of dust or grime may cause overheating leading to fire.



CAUTION



- **Care must be exercised regarding high temperatures.**

Components inside ImagePilot such as the hard disk will retain heat immediately after power to the unit has been switched off.



- **Cables, etc. must be properly installed.**

Power cables, interface cables and boards must be properly installed. Improper installation may cause poor connections leading to generation of smoke or fire.



- **Do not scrape or strike the unit with hard objects.**

Doing so may cause damage leading to malfunctions.



- **Do not neglect internal cleaning.**

A request for internal cleaning of ImagePilot should be placed with the service representative approximately once a year. Accumulation of dust inside the unit may cause overheating or fire.

NOTE : If the contents of this page are not legible, order a new manual.

1.9 Cautions to be Observed During Usage



WARNING



- **Work must be discontinued during electrical storms.**

When an electrical storm is imminent, work must be discontinued immediately and the power plug disconnected from the power outlet. Additionally, if lightning occurs before the power plug has been disconnected, do not touch either the unit or the cables. Doing so may cause electrocution or fire.



CAUTION



- **Do not place drinks such as coffee or juice or other liquids on the unit.**

Use of the unit with water, liquid or metallic objects inside is dangerous. Care must be taken to ensure that foreign objects or substances are not introduced into the unit.



- **Do not use the unit in locations where chemicals are being used or stored.**



- **Do not use mobile phones or pagers near the unit.**

Mobile phones and pagers must be switched off in the vicinity of the unit. Failure to do so may result in operational errors caused by electro-magnetic waves.



- **Users should be sure to maintain a distance of at least 80cm from the screen when using the monitor.**



- **Continuous use over extended periods of time should be avoided.**

Users using the unit continuously should break for 10 ~ 15 minutes each hour. Continuous viewing of the monitor for an extended period of time may lead to eye strain.



- **Care must be exercised concerning use of radios or televisions nearby while the unit is in use.**

Radios or televisions near the unit may cause noise. In such cases, sources of such noise should be removed from the vicinity of the unit.

NOTE : If the contents of this page are not legible, order a new manual.

1.10 Cautions Relating to Use of CD/DVD

To ensure correct usage, the following cautions should be observed relating to use of CDs or DVDs with the unit.



WARNING



- **Caution regarding exposure to laser**

The optical head in the CD/DVD device emits a laser beam from the optical head. For the sake of safety, do not look at the optical head objective lens.



CAUTION



- **Do not expose discs to shock.**

Be careful not to drop CD or DVD discs from a height.



- **Do not touch disc surfaces.**

Doing so may result in damage to disc surface resulting in read errors.



- **Affix labels.**

Labels should be affixed to CD or DVD disc cases to identify content recorded on discs. Additionally, disc content may be noted on the label area of the disc surface.



- **Discs should be stored in cases.**

CD/DVD discs should be stored in their cases.

CD and DVD discs should be stored in a location where they will not be exposed to excessive dust, humidity, direct sunlight or fire.

1.11 Cautions Relating to Use of LCD Monitor (option)

The following cautions must be observed when using the optional LCD monitor.



WARNING

- **Continued display of the same screen on the LCD monitor over an extended period of time will result in screen burning.**



CAUTION

- **Do not attempt to disassemble the unit.**
- **When using the LCD monitor in a dark room, be sure that monitor brightness is not excessively high.**
In environments with a darkness of 100Lx or less, do not use the monitor at or near maximum brightness. Doing so may result in damage to the eyes and deterioration of vision. Use at the shipping configuration brightness setting is recommended. For details of the shipping configuration brightness setting value, refer to the LCD Monitor User Manual.
- **In cases where the LCD monitor is idle for an extended period of time, the power switch on the unit should be turned off and the power plug disconnected from the power outlet.**
- **The LCD monitor backlight will deteriorate over time resulting in a gradual darkening of the screen.**
Check that the monitor is functioning at normal brightness before using. In cases where the monitor brightness is not adequate, please contact the company specified by KONICA MINOLTA.
- **In cases of continued use over an extended period of time, the user should break for 10 ~ 15 minutes each hour to avoid eye strain.**
- **Users are recommended to maintain a distance of at least 80cm from the monitor when viewing the screen.**
- **Use of the LCD monitor in a dark room may produce eye strain: it is recommended that the unit be used in a well-lit room.**
- **LCD monitor may have tiny spots(bright spots, dead pixels) at some position of the screen due to its nature. If such spot appears on the image, please check if it is due to the spots originated from the monitor or from the image.**
- **When using the touch panel monitor, do not touch its front panel with sharp objects.**
If the panel is smudged with fingerprints or dirt, clean its front surface with the cleaning cloth provided with the monitor.

NOTE : If the contents of this page are not legible, order a new manual.

1.12 Cautions Relating to Use of NAS (option)

The following cautions must be observed when using the optional NAS (Network Attached Storage).



WARNING



In the event of occurrence of any of the following, usage should be discontinued immediately.

- Detection of smoke or unusual odors.
- Introduction of water or other foreign object into the unit.
- Damage to the body of the unit caused by dropping, etc.

Continued use of the unit in any of the above circumstances may result in fire or electrocution. In such circumstances, please contact sales outlet for repairs. Customers must not attempt repairs themselves: doing so is extremely dangerous.



Do not attempt to disassemble or modify the unit: doing so may cause fire or electrocution.



Do not expose the unit to water or other liquids: doing so may cause fire or electrocution.



Do not use multi-plugs to connect power cords: doing so may cause fire, malfunction or error.



Do not connect the unit power cable to a power outlet to which power cables of other units (particularly devices such as multifunction units that require large power volume) are connected: doing so may cause malfunction or error.



Do not block ventilation grids. Installation of the unit in locations where heat cannot escape may lead to device malfunction.



Do not install the unit in locations where it will be exposed to excessively high or low temperatures or sudden temperature changes: doing so may cause device malfunction or error.



Do not install the device near sources of strong magnetic fields (ex. televisions, radios, antennas, transmission devices). If installation in such locations cannot be avoided, shielding should be provided.



Do not install the unit near sources of power supply noise.

NOTE : If the contents of this page are not legible, order a new manual.



CAUTION

Do not install the unit in locations where it will be exposed to excessive heat or humidity caused by direct sunlight or heat-generating devices such as heaters or cooking equipment: doing so may result in warping, degeneration, malfunction or error.



Do not install the unit in the locations listed below: doing so may result in fire, electrocution or injury.

- Locations where the unit will be exposed to excessive humidity.
- Unstable surfaces such as warped table tops or slanting surfaces.
- Locations where the unit will be exposed to soot or steam such as the vicinity of cooking areas or heaters.



Do not use power outlets other than the voltage specified, parallel 2-pole with earth.



Do not wire the unit in excess of the rated power supply.



Excessive accumulation of dirt or grim on the unit should be removed using a neutral detergent. Under no circumstances should thinner or benzene be used.



Be careful not to expose the unit to shock when moving. Additionally, the unit should be moved only after all power cables, LAN cables, other cables and devices connected to the unit have been disconnected.



When the unit needs to be transported, packing material intended exclusively for the unit should be used. Exposure of the unit to shock or vibration may cause malfunction.



Do not install the unit in locations where it will be exposed to vibration: doing so may lead to malfunction or error.



Do not disconnect the power cable while the unit is in operation. Follow the correct power shutdown procedure when it is necessary to switch off power to the unit.



Do not install the unit in locations where it may be exposed to falling objects.



The unit should not be set on surface of carpet that is not treated for anti-static finish.

NOTE : If the contents of this page are not legible, order a new manual.

1.13 Intended Use

[For EEA (European Economic Area), Swiss and Turkey] ImagePilot is intended to receive and process DICOM and None DICOM images generated by CR, Ultrasonography, endoscope, digital camera etc.

And, ImagePilot is intended to output to the display for diagnosis or to the image server, printer or storage media.

ImagePilot is the console to control the REGIUS Readers of the DIRECT DIGITIZER and AeroDR System of the DIRECT DIGITIZER as well as to receive and process images from REGIUS Readers and AeroDR System, and to output to the image server, printer or storage media.

The intended user of ImagePilot is assumed to be a medical staff (physician, radiographer, nurse, etc.) who is healthy and sound, and fully familiar with the operation manual or undergone the training of equivalent level.

1.14 Requirements and Limitations to be Noted for the Connection to Other Devices and Equipments

- KONICA MINOLTA's original protocol is used for the communication with REGIUS Readers.
- When it is connected to the Modalities such as Ultrasonic CT or Endoscope, and to the image server or printer that supports DICOM Service, services are supported within the scope of those listed in DICOM 3.0 Conformance Statement of the ImagePilot.
Those services or tag information not listed are not supported.
- Image formats that can be imported as None DICOM image (images from digital cameras or generic scanners) are as follows;
Generic (None DICOM) image acquisition specifications
Images meeting the following parameters may be acquired by ImagePilot.
 - <Still images>
 - Data size : 30MB or less
 - Pixel count : 10 ~ 5000 pixels or less/either side
 - File format : exif/JPEG, JPEG, BMP, PNG
 - <Motion images>
 - Data size : 30MB or less
 - Playing time : 1 minute or less
 - File format : AVI (only for Motion JPEG), MPEG-1
- When HL7 connection is made with the device that supports HL7 messages such as EMR or PMS, it is compatible within the scope of messages listed in HL7 Conformance Statement of the ImagePilot.
Those messages not listed are not supported.
- Network settings for other devices and equipments will be made by the technical representative.
In addition, only the technical representative is allowed to install the ImagePilot Software but the user not.
- Stand-alone use of the off-the-shelf product such as Microsoft Word, etc. that is used in linkage with the ImagePilot Microsoft Word is not allowed.

NOTE : If the contents of this page are not legible, order a new manual.

Chap. 2

Product Outline

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2.1 Outline of ImagePilot

This section presents an outline of ImagePilot.

2.1.1 Outline

ImagePilot is a device intended primarily for diagnostic activities and is equipped with a wide range of functions such as Patient Info. receipt, exposed image acquisition and image Input/ Output.

The exposed image acquisition function enables acquisition of not only CR and AeroDR images, but also DICOM still and motion images from echo devices as well as non-DICOM images such as digital camera images.

Additionally, acquired images may be processed for density and contrast, annotated or aligned for comparison.

Moreover, these images can be printed on normal PPC paper for the use of informed consent, output to films or CDs/DVDs.

2.1.2 Server and Clients

Two types of ImagePilot are available depending on the purpose of usage.

- **Used as server and client:**
Server device furnished with all client functions.
- **Used as client:**
Installed in the X-ray room and receive orders and acquire images from the ImagePilot which is used as server/client.

For details of applications of the two ImagePilot types, refer to "[Examples of System Configuration](#)" on page 30.

Hereinafter, the server type will be referred to as "ImagePilot-SV," the client type as "ImagePilot-CL" and the server/client type as "ImagePilot-SV/CL."

There is a laptop type machine called "ImagePilot Mobile" for ImagePilot-SV.

2.1.3 Acquiring Images

ImagePilot is capable of acquiring the following various images.

- **CR images:**
Capable of acquiring images scanned by REGIUS 110/110HQ(for Russia only)/170/190/210/SIGMA/SIGMA2.
- **AeroDR images:**
Capable of acquiring images taken by AeroDR Detector.
- **DICOM still and motion images:**
Capable of acquiring DICOM images such as echo-examination images and motion images.
- **Non-DICOM still and motion images:**
Capable of acquiring image data for general use such as digital camera images.

2.1.4 Editing Images

Images acquired by ImagePilot may be subject to various types of processing.

- **Brightness (film density)/Contrast changes:**
Image brightness and contrast may be changed.
- **Annotation:**
Numericals or symbols may be written on the image area.
- **Cine-tool:**
Sequential examination images may be automatically stream-displayed.
- **Analysis:**
The image distance and area may be measured.



DICOM

DICOM is the acronym for **D**igital **I**maging and **C**ommunications in **M**edicine and is the medical digital image and communications standard developed by the American College of Radiology and the National Electrical Manufacturers Association.



Server and client

The server is a device that provides functions or data and the client is a computer that receives and uses such output.



p.58 Acquiring Images



Do not use for mammography.



p.118 Editing Images

2.1.5 Outputting Images

ImagePilot is capable of the following methods of output.

- **Printing on film** : Data may be printed on medical film from a DICOM printer.
- **Printing on PPC paper (General-Purpose Printing)** : Data may be printed on PPC paper from a generally available printer (hereinafter referred to as "generic printer").
When printing the Patient Information for the purpose of informed consent, implement General-Purpose Printing using the Note Function. (Refer to the chapter for Note Function for details)
- **HOST output** : Data may be output to the host device.
- **Writing data on CD/DVD (PDI write)** : Data may be written on CD/DVD using methods complying with DICOM standards. Since not only images, but also data such as Patient Info. is also included, data may be acquired by other CR devices to be added as Exam. History.
The resulting data size is larger than that produced by generic writing.
- **Writing data on CD/DVD (generic writing)**: Images only may be written on media such as CD/DVD and memory cards.
Used for reference by other computers or for printing.
- **PDF Output** : Installing the bundled software "Adobe Acrobat" allows output of PDF files.
- **DVD Backup** : Image data may be backed up to DVD.



p.245 Image Output



p.233 Note Function



PDI

PDI is the acronym for **Portable Data for Imaging** and refers to a method of sending DICOM data by CD/DVD instead of via network.



p.384 DVD Backup Function



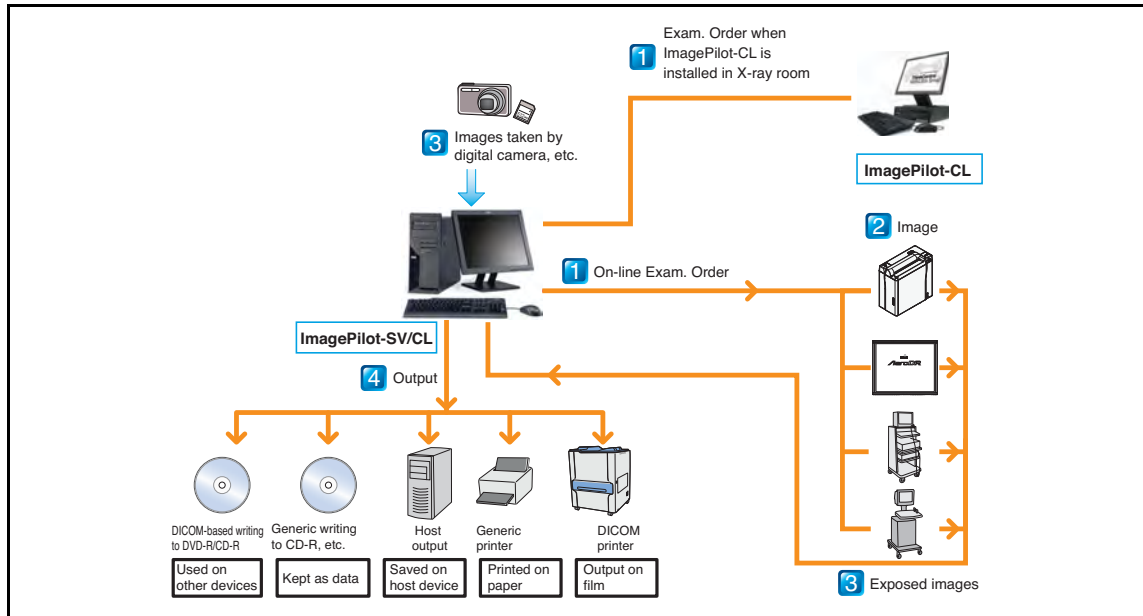
Readable/Writable Media

ImagePilot is capable of reading and writing from/on "DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM, CD-*". However, please note that failure may occur in reading or writing depending on the type of media.

2.2 Examples of System Configuration

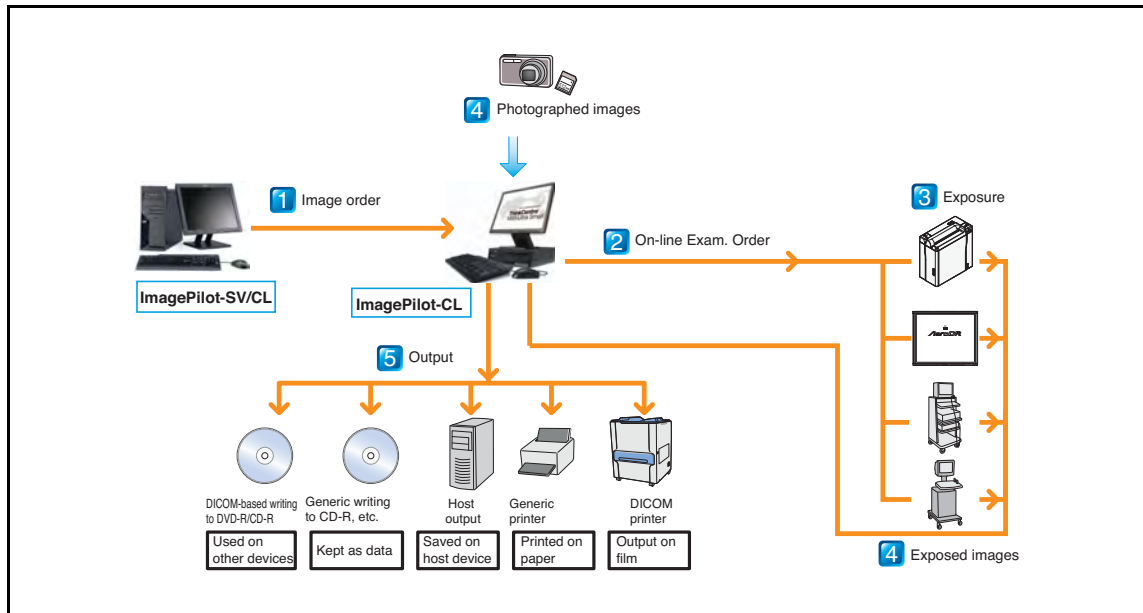
Examples of ImagePilot system configurations are shown below.

2.2.1 ImagePilot-SV/CL Configuration



Patient reception, image acquisition and output are all carried out by one unit. The ImagePilot configuration also allows sending of examination orders.

2.2.2 ImagePilot-SV/CL and ImagePilot-CL Configuration



Examination order from ImagePilot is received and exposure executed.

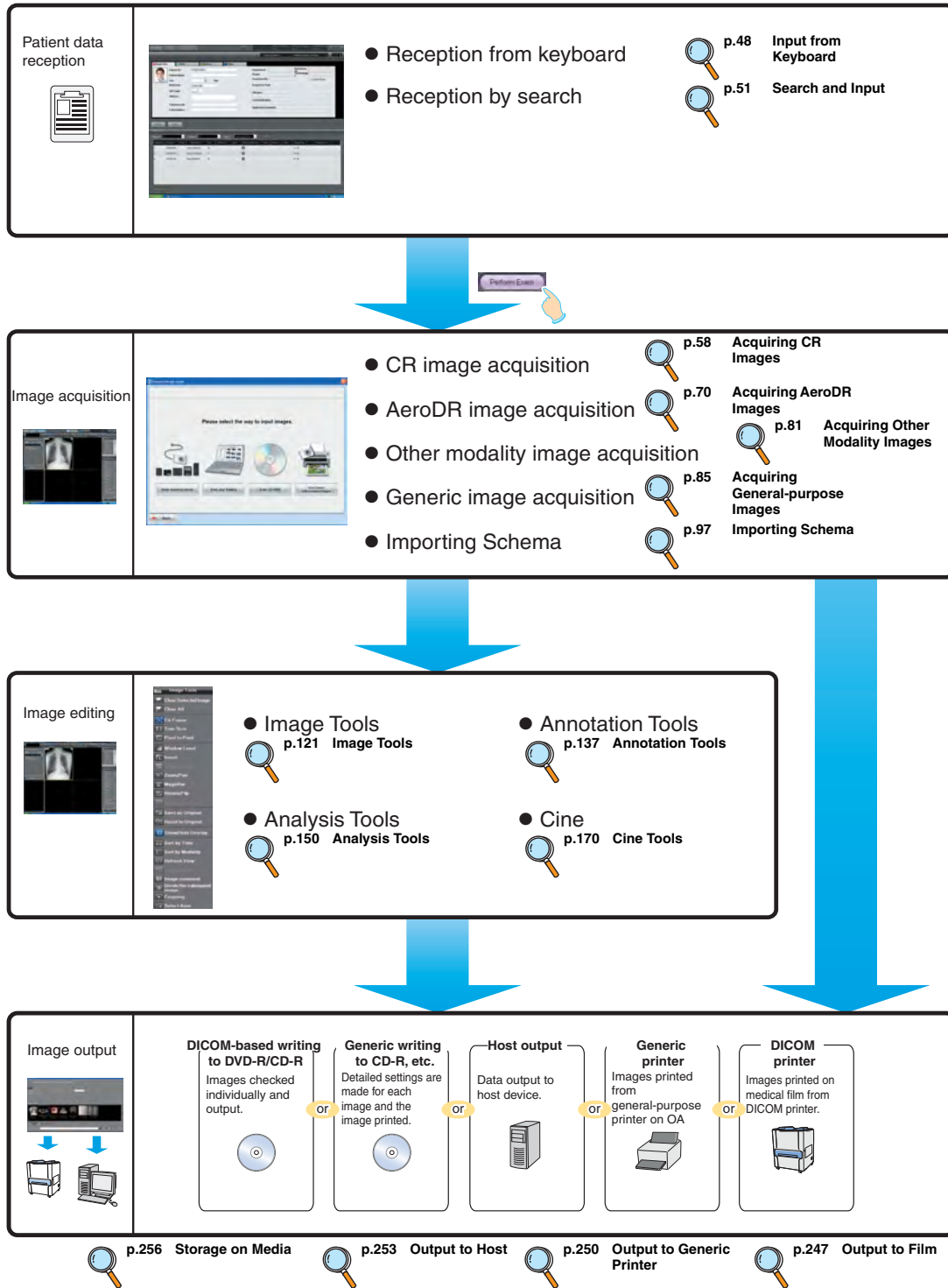
Exposed images may be checked and output.

In facilities where an examination specialist is available, the unit is set up and used in the examination room.

Maximum 6 units of ImagePilot-CL can be connected to one ImagePilot-SV.

2.3 Operational Flow

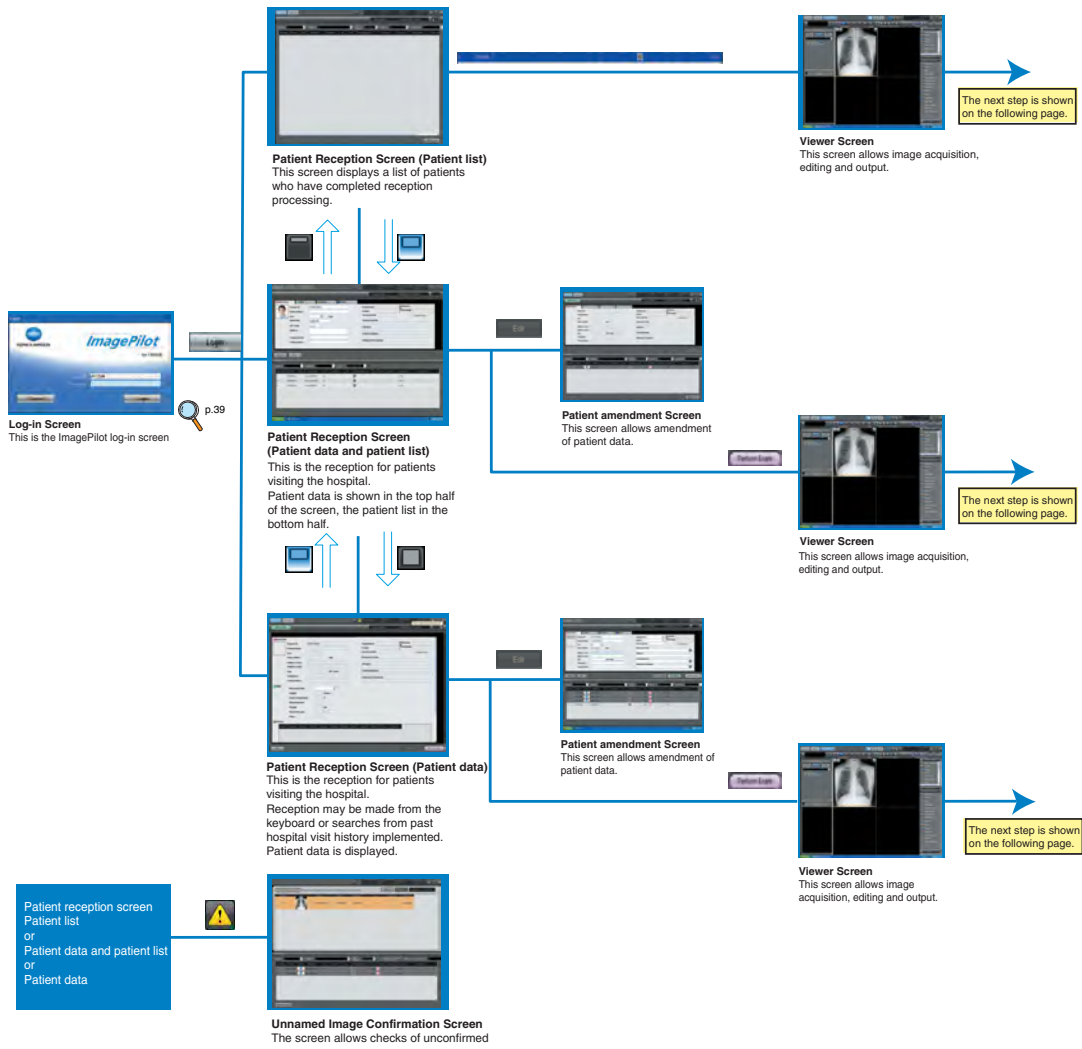
An outline of the operational sequence is shown below.



2.4 Screen Flow

The ImagePilot screen flow is described below divided into two parts: Log-in screen ~ Viewer screen and Viewer screen ~ Output screen.

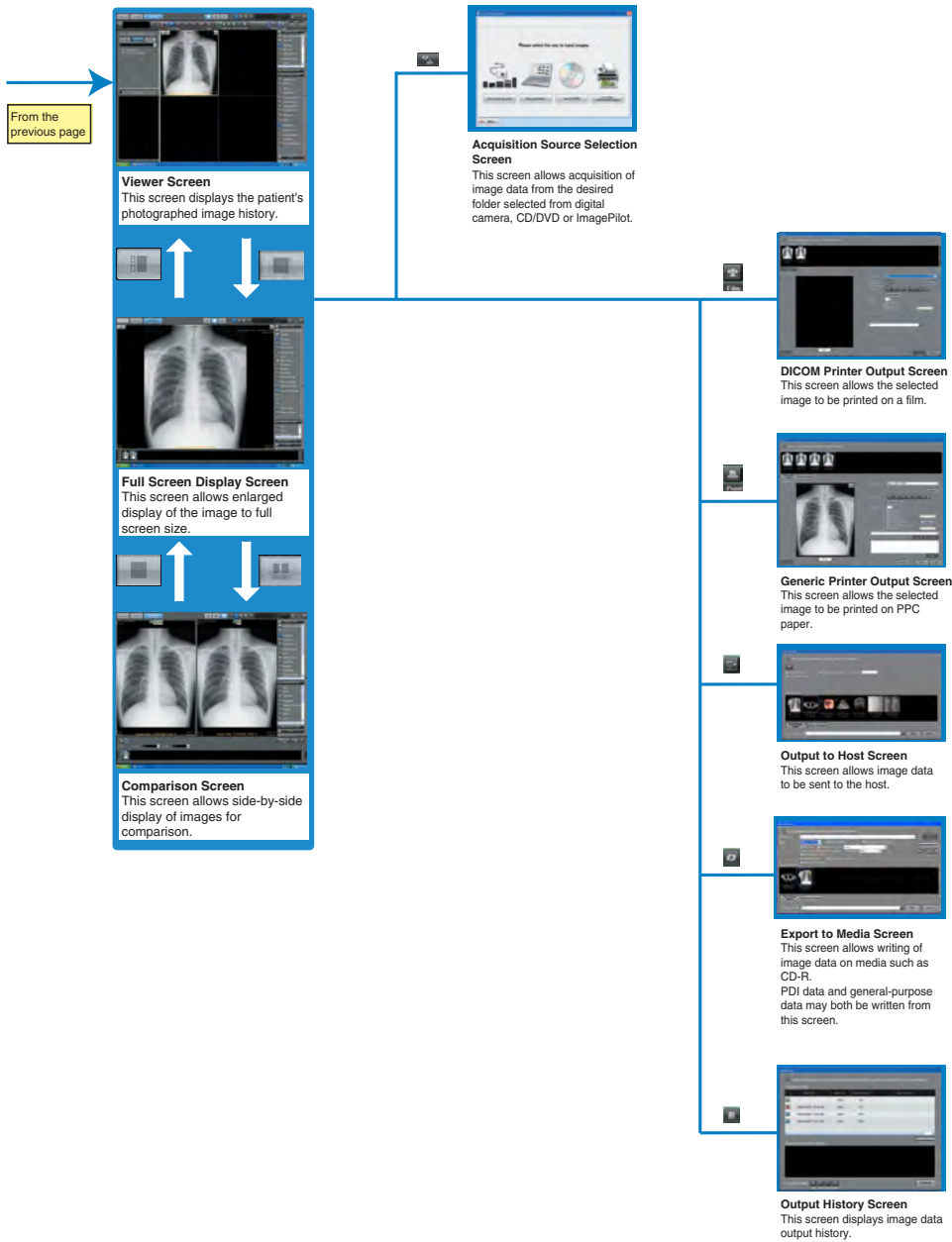
2.4.1 Log-in Screen ~ Viewer Screen




- The screen first displayed when logged in is Patient Reception screen. Log-out is only possible either on Patient Reception screen or Viewer screen.
- There are three display formats for the patient reception screen and it is possible to switch between formats.
- Of the above three patient reception screens, the screen shown immediately after log-in is the screen that was last displayed before log-off.

2.4.2 Viewer Screen ~ Input/Output Screen

Chap. 2



 An image tools palette may be displayed on the Viewer Screen, Full Screen Display Screen and Comparison Screen.

 p.118 Editing Images

2.5 Keyboard and Mouse Operation

Keyboard and mouse operation procedures for the entire ImagePilot operation are described below.

2.5.1 Click and Drag

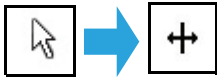
Click refers to a pressing and releasing the mouse button once. Usually, the term "click" is used to refer to pressing and releasing the left mouse button once while "right-click" refers to pressing and releasing the right mouse button once.

Drag refers to moving the mouse with the button held down in depressed position.

2.5.2 Adjusting Display Box Width

To adjust the width of a display box, position the cursor on the box boundary line: the cursor shape will change as shown below.

Once the shape has changed, drag the mouse horizontally (or vertically) to adjust the boundary line position.



2.5.3 Switching Display Alignment (Sorting)

This refers to re-aligning the listed data. Display of a triangle (s or t) to the side of an item name indicates that data is aligned in accordance with that item. s indicates that data is aligned in ascending order, t that data is aligned in descending order.

The sorting key can be changed by clicking different item.

Additionally, adding or reducing items can be effected by executing a right-click or item replacement by drag and drop depending on the list.

2.5.4 Moving the Cursor in the Input Box to the Next Item

Inputting one item and then clicking the [Tab] button on the Patient Info. Screen will automatically move the cursor to the next item.

Items where no reception is required may be skipped by clicking the [Tab] button, or by directly clicking the next item box requiring reception.

2.5.5 Buttons

Use of each button is described below.



Pull-down menu button : Clicking the downward pointing arrow shown at the right side of a selection box will produce display of options. (ex. Gender)



Spin button : Clicking the upward or downward pointing arrow shown at the right side of a selection box will increment or decrement the displayed value.




Minimization button : This button reduces the ImagePilot application window to the minimum and inserts the application window in the task bar. Reducing the size produces display of the ImagePilot window button in the task bar. Clicking the window button will restore the ImagePilot application to its original size.

2.5.6 Mouse Wheel

The mouse wheel is allocated to the function of image enlargement/reduction and stack image sending on the viewer screen.

Mouse wheel settings can be configured in the user tool.

Note: Place the mouse button over the stack image to send the stack image.

 p.366 3-2) Edit Mouse Button Screen



Concerning the Printlink5-IN Icon

In systems with Printlink5-IN (option available at cost), the Printlink5-IN icon shown at the right will be displayed in the task tray on the Windows desktop screen (displayed at the bottom right of the screen in the initial setting).




For details of usage, refer to the Printlink5-IN user manual.



Printlink5-IN

This is printer server that receives images from each DICOM device via the network and automatically sends the images to the required printer or save destination (host device).

 p.265 Deleting Print Queues

Chap. 2


2.6 About the Optional and Recommended Equipment

Optional and Recommended Equipment for the ImagePilot are described below.

2.6.1 NAS (option)

NAS stands for "Network Attached Storage". It is a file server equipped with multiple disks and functions as "RAID" and "Hot Swap", and is used by directly connecting to the network.


Although there is no work required by the user for normal operation, the power should always be kept ON. If it needs to be turned OFF due to non-use for an extended period of time, please contact your technical representative in advance.

 p.23 Cautions Relating to Use of NAS (option)

2.6.2 UPS (recommended equipment)

UPS stands for "Uninterruptible Power Supply". It is a device incorporating batteries or generator to provide electricity to the ImagePilot for certain periods in case of the power failure. If power failure occurs, the system will be automatically shut down to protect the data from damage.

Although there is no work required by the user for normal operation, the power should always be kept ON. If it should be turned OFF due to non-use for an extended period of time, please contact your technical representative in advance.

 p.494 UPS (Troubleshooting)

Chap. 3
Start up & Shutdown

This chapter describes the procedures for start up/ shutdown

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3.2 Log-in39
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3.1 Start Up

The procedure for starting up ImagePilot is described below.



Check that any devices connected to ImagePilot (ex. cassette readers, generic printers, viewers, servers) are properly connected and switched on before switching the power on.
A communication error will occur if power to connected devices is not switched on.



If LAN cable is not connected when the system is started up, a message "Not connected to network. Check network connection. PC will be restarted." will be displayed. If LAN cable is disconnected after the system has completed start-up, a message "failed to connect to network. Check network connection and restart Windows." will be displayed. Check connection of LAN cables and power supply to the network hub, and restart the system.

1 Switch on the [Standby] button of LCD monitor.



2 Switch on PC power.

- Startup message of the OS(Operating System) will be displayed on the LCD monitor.
- Log-in screen of the ImagePilot will be displayed after a while.



For details of the LCD monitor and PC buttons, refer to the respective user manuals.



ImagePilot and User Tool start up simultaneously.



When "informativity", the paid option is introduced, the log-in screen looks like the one on the right, and allows the user to check on the ImagePilot update program, etc.



Re-Log-In/User Change

If after logging out of the ImagePilot the log-in screen does not appear, follow the procedure below.



1 Double click the ImagePilot shortcut icon.



- ImagePilot and User Tool start up simultaneously.

If the ImagePilot shortcut icon has been deleted, click the OS [Start] button, start up [Internet Explorer] from the program menu and input the following in the "Address" box.

`http://KIM-S-*****/KimWindow/KimWindow.application`
(KIM-S-*****represents the computer name of ImagePilot for server use.)

3.2 Log-in

The procedure for logging in to ImagePilot is described below.

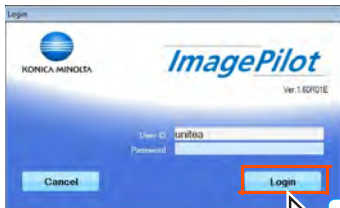


1 Input the user name and password from the keyboard.

- Asterisks will be displayed in the password input box in place of the reception characters. The actual password itself is not displayed.



Password is case sensitive. Check that the [Caps Lock] or [Num Lock] buttons are not active.



2 Click the [Login] button.

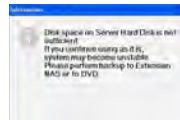
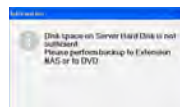


- If the correct user name and password have been entered, the patient reception screen will be displayed.



When the free space of the hard disk becomes low, the screen shown on the right will be displayed at the time of log-in. Please implement backup to the extended NAS or DVD.

In addition, when the screen on the right is displayed, import of images beyond this point may cause problems to the ImagePilot currently in use. Please implement backup to the extended NAS or DVD without delay.



p.47 Patient Information Input



p.334 6-1) Image Move Screen



p.330 5-1) DVD Backup Screen



Using the User Tool setting, it is possible to set not to display the user name used for the last log-in. (Default : OFF)

Setting can be made through [Common Settings] - [Operation Settings] - [Basic] - [Do not remember the previous login name].



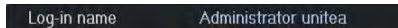
p.278 Do not remember the previous login name (Operation Settings)



The AeroDR Detector needs to be calibrated regularly. For facilities using the AeroDR Detector, if the expiration date of calibration after implementation is approaching, a message which prompts you to calibrate the AeroDR Detector is displayed after logging in to ImagePilot. When the message appears, make sure to calibrate the AeroDR Detector.



3 The name of the logged-in user will be shown at the top right of the patient reception screen.





The message at the right will be displayed if user name or password input is incorrect. Click the [Yes] button and correct the input after the message has disappeared.



p.280 2-2) User Management Tool Screen



If you have forgotten your user name or password, inform the system administrator and register a new user name and password.

3.3 Log-off

The procedure for logging off from ImagePilot is described below.



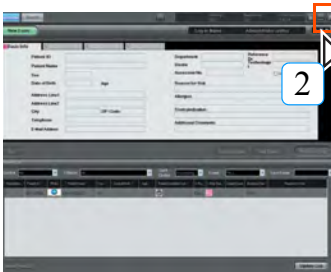
The following procedure must be followed when logging off from ImagePilot. Failure to do so may result in loss of data.

- 1 Finish all operations and ensure that the patient reception screen is displayed. Log-off is only possible either on Patient Reception screen or Viewer screen.



Log-off is only possible either on Patient Reception screen or Viewer screen.

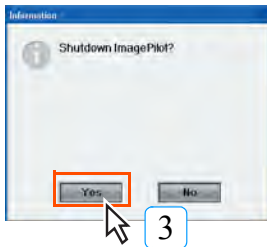
Chap. 3



- 2 Click the [X] button at the top right of the screen.



- A request for confirmation will be displayed.



- 3 Click the [Yes] button.

- Click the [No] button to return to the patient reception screen.
- ImagePilot will be shutdown and the OS desktop screen displayed.





Anti-Tamper Function

ImagePilot is furnished with an Anti-tamper Function that prevents others from operating or viewing while the logged in user temporarily leaves the unit.

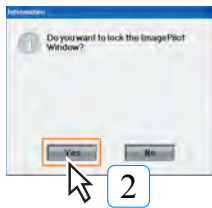
<Starting up the Anti-tamper Function>



- 1 Click the [Anti-tamper] button at the top right of the screen.



- A confirmation request will be displayed.



- 2 Click the [Yes] button.

- The log-in screen will be displayed. Attempts by other users to use the program while in the standby mode will result in the display of a request for a user name and password. Thus, preventing tampering.

<Disabling Anti-Tamper Function>



- 1 Input the password from the keyboard.

- Asterisks will be displayed in the password input box in place of the reception characters. The actual password itself is not displayed.



- 2 Click the [Login] button.

- If the correct user name and password have been entered, the patient reception screen will be displayed.



3.4 Shutdown

The procedure for shutting down ImagePilot is described below.



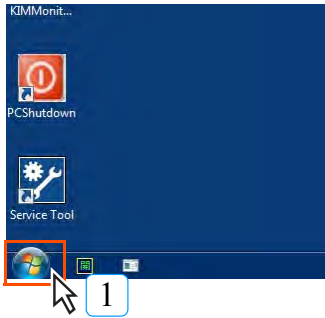
The following procedure must be followed to shut down power to ImagePilot.
Do not shut down power from the PC power switch.
Doing so may result in loss of data or damage to system software.



Ensure that no users are logged in as clients before shutting down the power.

Chap. 3

Windows 7



1 Click in sequence [Start] menu → [Shut down] button.



- ImagePilot power will be shut down.

Windows 8.1



1 Right-click on the [Start] menu and select [Shut down or sign out] and then [Shut down].



- ImagePilot power will be shut down.



To restart the PC

Windows 7

From the [Start] menu, click the [?] button next to [Shut down] and then click the [Restart] button.

Windows 8.1

Right-click on the [Start] menu and click [Shut down or sign out] and then the [Restart] button.

However, in the case of ImagePilot-SV, the system is configured so that the PC does not restart, though it shuts down. To restart the PC, push the PC's power button after confirming that the power to the PC has been turned off.



When the system is configured to back up the data to a NAS (option), a screen prompting back up may be displayed at the time of system shut down.



In the case where the DVD Backup(option) has been activated, windows for backup purpose may also be displayed at the time of system shutdown.

Chap. 4

Patient Information Input and Initiation of Examination

This chapter describes methods for inputting patient information.

Chap. 4

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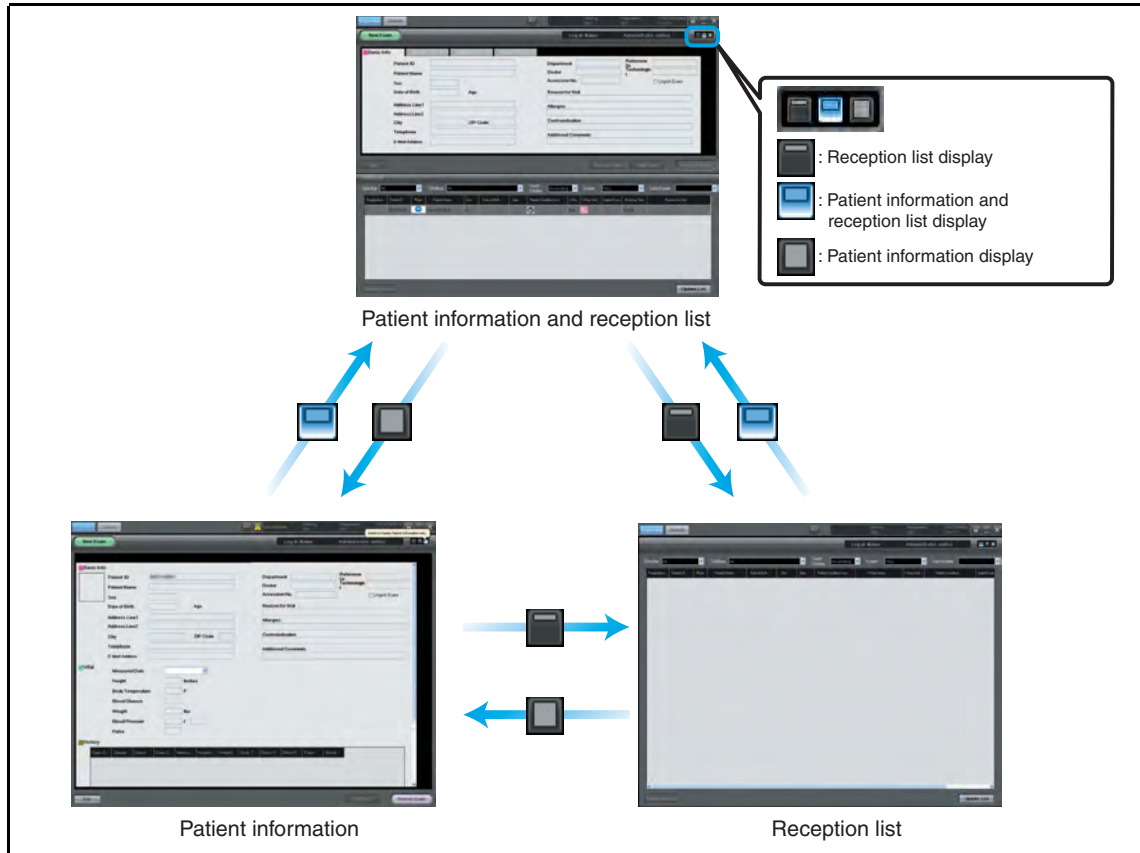
4.1 Switching between Patient Reception Screens


The Patient Reception Screen provides reception information on patients visiting the hospital.


There are three types of patient reception screen, as shown below:


- Reception list : Displays patients waiting for examinations in list format.
- Patient information and reception list : Patient information is displayed at the top of the screen and the reception list at the bottom.
- Patient information : Displays information of specific patients including private information such as name, gender and addresses, insurance information and history of hospital visits.


To switch between these screens, click the [Display switch] button at the top right corner of the screen.



 The screen displayed when a user first logs in is the screen last displayed before the users previous log-off.

 **Exporting the Patient Reception List in CSV file**
 Using the User Tool setting, it is possible to display [Data Output] button on the Output History screen.
 Clicking [Data Output] button outputs the table in which the Reception List is displayed as it is in CSV file.
 Setting can be made through [Client Settings] - [Display Information] - [Add Data Output button to Reception Screen]. (Default : OFF)

 **p.359 Add Data Output button to Reception Screen (Display Information)**

 **CSV format**
 This is a text file with delimiter, and can be edited using the spreadsheet or text editor.

4.2 Patient Information Input

The procedure for inputting patient information on ImagePilot is described below.

There are two methods of inputting patient information, as shown below.

- Input from keyboard : Patient information may be input from the ImagePilot keyboard.
- Search and input : The patient's hospital visits history may be searched using key information such as Patient ID.



Make sure the input is correct when inputting or searching the patient information. Also check that the patient information resulted from input or search is correct.



When MWM link is in use.

When MWM link is in use, there are several operation patterns as shown below as to the acquisition of the patient information.

- ImagePilot regularly sends a polling signal to the terminals in the upper network, and imports the order that has been hit. (= list operation)
- Implements search into the terminals in the upper network using the patient ID that has been input on the ImagePilot.(=search operation)

Notes for the list operation.

When discrepancies are found during the list operation between "Patient Name, Birth Date, Sex" of the received data and the data stored on the ImagePilot after checking the received data, all of the patient information as well as the study information will be discarded.

Notes for the search operation.

When discrepancies are found during the search operation between the search result by the terminals in the upper network and the patient DB information on the ImagePilot after comparing them, the DB information of the ImagePilot will be displayed.



The Patient List display for multiple studies on the same day of a single patient. On the patient list, the Study Description entered for each study is displayed in the Study Description column. Each entry is separated by a comma. Also, there is a column for the Accession No. The column can contain several Accession No.'s, each separated by a comma. When there are several Accession No.s, the Accession No. of the last study received is displayed in the Accession No. column for standard information.

| Registration... | Patient ID | Photo | Patient Name | Date of Birth | Age | Study Description | Accession No. |
|-----------------|------------|-------|--------------|---------------|-----------|-------------------|------------------|
| 2 | 1111111 | | sample user | 09/12/1983 | 28yrs2... | aaaa, bbbb, cccc | aaaa, bbbb, cccc |



Setting the mandatory registration items

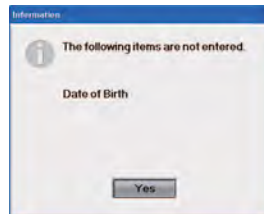
When you enter the patient information, set the mandatory input items using the user tool settings.

The configured input items in the mandatory registration items are underlined.

If you click on either the [Reception Start], [Save], [Diagnosis Reserve], [Diagnosis Start], [Data Acquisition] buttons when an input item configured to the mandatory registration item is not entered, a warning message pops up showing the item that was not entered.

In addition, any functions used during temporary patient registration will be invalid. (Default : OFF)

Configure via [Common Settings] -[Operation Settings] -[Reception Search] - [Settings a Mandatory Registration].

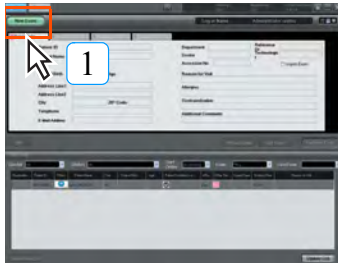


4.2.1 Input from Keyboard

The procedure for inputting patient information from the ImagePilot keyboard is described below.

1) Input from Automatically issued Numbers

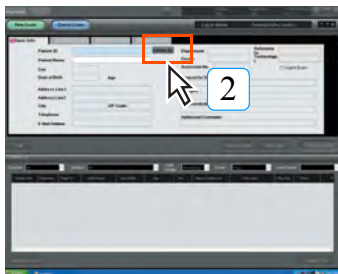
The procedure for automatically issuing an ID number and inputting patient information is described below.



1 Click the [New Exam] button.



- The patient information input screen will be displayed.



2 Click the [Create ID] button.

3 Input patient information items from the keyboard.



For the case of animal hospital, it is possible using the User Tool to switch to the setting that accepts year & month only. (Default : OFF)
 Note: When the setting is switched to year & month input, all inputs are deemed to be performed on the 1st of the month.

Ex) April 2009 → 1st April 2009

Setting can be made through [Common Settings] - [Operation Settings] - [Reception Search] - [DOB Format].

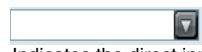


p.284 DOB Format (Operation Settings)



Normally, "Attending Physician", "Attending Technologist" and "Referring Physician" are selected from the registered name list using the pull-down menu. It is also possible to directly enter the name on the keyboard depending on the setting of User Tool. (Default : OFF)

Setting can be made through [Common Settings] - [Operation Settings] - [Reception Search] - [Add Physician Name & Technician Name to the pull down from the Manual input].



Indicates the direct input possible



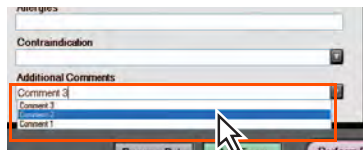
Indicates the selection from pull-down menu only possible



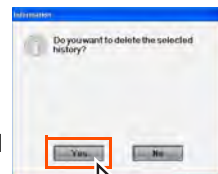
p.284 Add Physician Name & Technician Name to the pull down from the Manual input (Operation Settings)



In the case of the pull-down menu that allows direct input, it is possible to delete the input history as follows;
 To delete the input history, select the item to be deleted from the pull-down menu, then right-click or press [Delete] key. A warning message will be displayed before the deletion is made.



Right-click or press [Delete] key



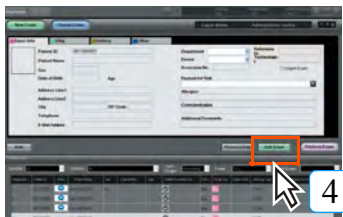
Click the [Yes] button.



Physician or Technologist that was registered on the "User Management Tool Screen" of the User Tool cannot be deleted.



p.280 2-2) User Management Tool Screen



4 Click the [Add Exam] button.

The patient information will be displayed on the reception screen area.



Selected items for the animal hospital can also be registered in a similar manner with the exception below, which should be selected using the pulldown menu.

- Gender
- Animal Species (Note)
- Body Type
- Breed (Note)
- Hair Color (Note)

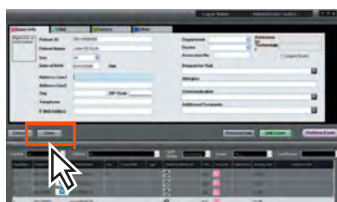
Note: Setting can be made for "Animal Species", "Breed" and "Hair Color" using the User Tool.



p.272 1-1) Institution Information Screen



Click the [Save] button instead of [Add Exam] button if the patient information only should be registered. The patient information will be registered with the Patient DB.

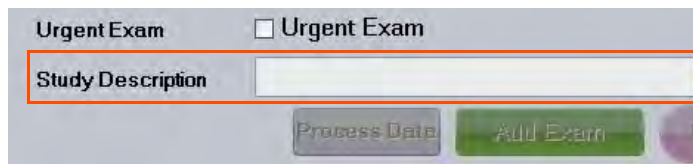


Chap. 4



Exam Identifier

- Exam body part info, etc. can be freely entered (up to 64 characters). However, data entered here can only be retained for the exam day, so only content entered into REGIUS images exposed on the exam day will be reflected.



- It is synchronized with the exam descriptor displayed at the Image Properties Screen by the [Image Properties] button, which is the imaging palette's basic function.

2) Entering and Specifying the Patient ID or Accession No.

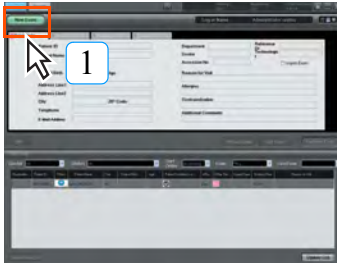
Enter the Patient ID or Accession No. using the keyboard, and describe the input method used for the patient information.



MWM is the only search object for the Accession No. If MWM link is not set, you cannot search for the Accession No.



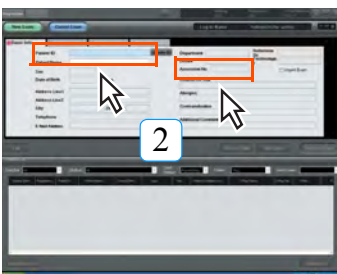
When entering exam body part info, always make sure the data is correct.



1 Click the [New Exam] button.



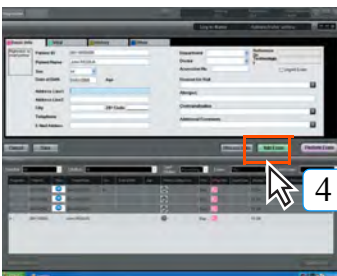
- The patient information input screen will be displayed.



2 Input the Patient ID or Accession No. and then press the [Enter] key on the keyboard.



If the input patient ID already exists, patient information for the existing ID will be displayed.



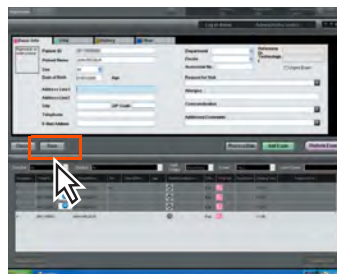
3 Input items of patient information from the keyboard.

4 Click the [Add Exam] button.

- The patient information will be displayed on the patient reception screen area.



Click the [Save] button instead of [Add Exam] button if the patient information only should be registered. The patient information will be registered with the Patient DB.



For the case of animal hospital, it is possible using the User Tool to switch to the setting that accepts year & month only.
 Note: When the setting is switched to year & month input, all inputs are deemed to be performed on the 1st of the month.
 Ex) April 2009 → 1st April 2009

4.2.2 Search and Input

The procedure for searching hospital visits history from key information such as patient ID is described below.




1 Click the [New Exam] button.



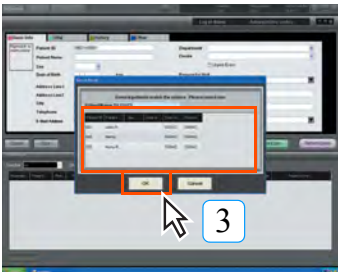
- The patient information input screen will be displayed.

2 Input a search key such as patient ID, or patient name and press the [Enter] key on the keyboard.

- A search will be initiated and the corresponding patient information displayed.

 After inputting the search key, the search will also start if the focus moves to the other input column, etc.


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3 If multiple patients matching search parameters exist, all results will be displayed: Select the required item from the list and click the [OK] button.

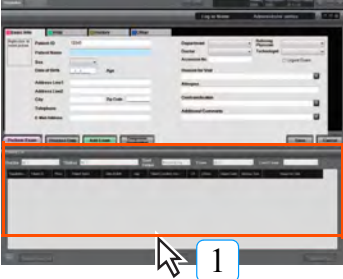
4.2.3 Adding and Amending Patient Information

The procedure for adding and amending patient information is described below.

 Patient information cannot be changed when that patient is under examination.


1 Click in the reception list(or search list) the row of the patient whose information shall be amended.

- **The selected patient will be highlighted in blue.**



2 Click the [Edit] button.

- **Patient information may now be amended.**

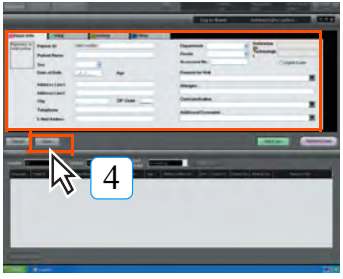



3 Amend items of patient information from the keyboard.


- **The patient information input screen will be displayed.**


4 Click the [Save] button.

- **The patient information editing session will be saved and the display returns to the patient reception screen.**



 The change will not be instantly reflected upon the list when the amendment is made on the search list. To confirm that the amendment is correctly made, click the [Search] button again under the same status.

 When the amendment is made on the search list and the reception date is the day before or earlier, the status up to the day before and earlier will be maintained as it is and the new reception data is created.

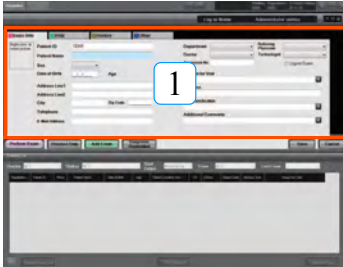
 Right clicking above [Reason for Visit] on the search screen and selecting the word [Update] that is displayed allows you to edit [Reason for Visit] with the date of the test intact but not the date of the comment.
(Defaultsetting:OFF)

| Date of Birth | Age | Urgent Exam | Modality | Contraindicati... | Additional Comm... | Reason for Visit |
|---------------|-----|-------------|----------|-------------------|--------------------|------------------|
| | | | CRx1 | | | Update |

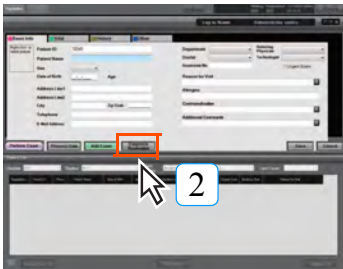
Set using [Common Settings] - [Operation Settings] - [Reception/Search] - [Edit Today's Comment above the patient list (details of medical examination)].

4.2.4 Diagnosis Reserve Registration

If a patient is planning to undergo exposure on the next day, they can be registered the day before.



1 The information of the patient planning to undergo exposure the following day is displayed.



2 Click the [Diagnosis Reserve] button.
• Registers patient information on a reception list.



To delete the reservation, follow the two steps below.

- Click the [Exit] button on the Viewer screen containing the registered patient information.
- Delete the information of the patient with a reserved registration from the reception list.

4.3 Initiation of Examination

The procedure for initiating examination based on input patient information is described below.



It is possible to start examination of the same client on several units of ImagePilot. In this case, ImagePilot on which the examination is first started is given the authority to edit the image, allowing image editing or capturing as normal. However, other ImagePilots on which the examination is started later are not given the authority to edit the image but only to display the viewer screen for reference. In addition, the following restrictions are imposed;

- Key icon is displayed on the image that was captured in the past, indicating the image is only for reference. A part of editing function such as Density/Contrast or Enlarge/Reduction mode is enabled, however, the edited result will not be saved when the examination is terminated.
- Image capture is enabled. Key icon that is displayed on the image captured in the past will not be displayed on the newly captured image, allowing the authority to edit the image.

That image will not be displayed on other ImagePilot until the ImagePilot which captured the image has completed diagnosis. However, CR and AeroDR images can be displayed on other ImagePilot units when the [OK] button, displayed based on the user tool settings, is clicked.

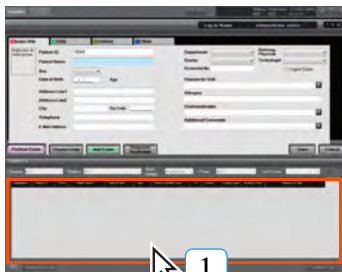
When ImagePilot that started the examination first completes and terminates the examination, the Patient Status on the other ImagePilots will also change to "Exam Completed" even if it is in process of examination.



When several ImagePilots attempt to open the same patient information, a message informing which ImagePilot has already opened the patient information will be displayed.

4.3.1 Initiation of Examination of Patients displayed on Reception List

The procedure for initiating an examination for a patient displayed on the reception list is described below.



1

Click the line on the reception list showing the patient whose examination is to be initiated.

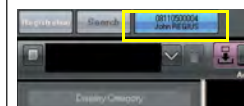
- **The viewer screen will be displayed.**



When the function that allows change of the listing order by Drag & Drop is enabled, wrong patient may be selected if the click to select the patient is made just at the moment when update takes place on the other ImagePilot client. Therefore, it is recommended to make sure on the viewer screen the selected patient is correct every time the screen is switched to the viewer screen.

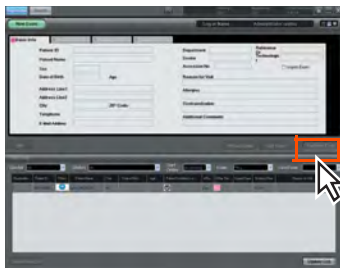


Always check that the patient name displayed corresponds to the image on the viewer screen. The name of patient currently under examination may be checked on the patient tab shown in light blue at the top left of the viewer screen. (When examination has been initiated and the patient is not displayed on the viewer, this tab will be shown in grey.)

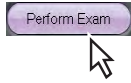


4.3.2 Initiation of Examination of Patients displayed on Patient Information Display

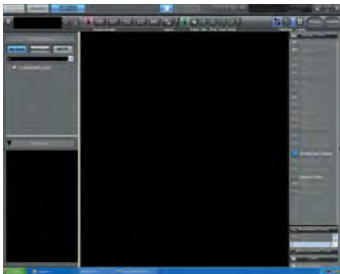
The procedure for initiating examination of a patient shown in the patient information display is described below.



1 Click the [Perform Exam] button.



- The viewer screen will be displayed.



When you are using a horizontally long display, it is possible to move the [Perform Exam] button, etc. to the left of the screen. This can be set using the [Button Layout] of the "Operation Settings" screen.

Note: In the case when the buttons are moved to the left of the screen, move the [Edit] button to the right of the screen to avoid clicking the button by mistake.

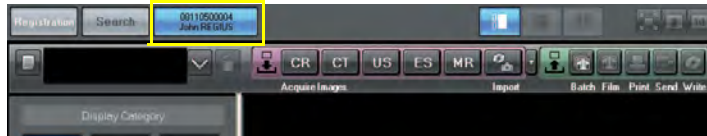
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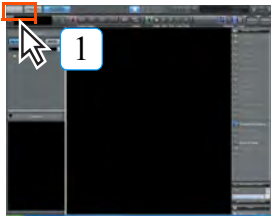
p.278 2-1) Operation Settings Screen



Always check that the patient name displayed corresponds to the image on the viewer screen. The name of patient currently under examination may be checked on the patient tab shown in light blue at the top left of the viewer screen. (When examination has been initiated and the patient is not displayed on the viewer, this tab will be shown in grey.)



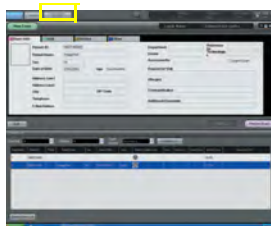
To suspend a patient examination that has been initiated and return to the patient information input screen.



1 Click the [Registration] button at the top corner of the screen.



- The patient reception screen will be displayed.
- The patient under examination will be shown on the patient tab at the top left of the screen. The patient's examination may be re-initiated at any time by clicking the patient tab. A maximum of 3 patient examinations may be suspended.
- Clicking the [Return] button also switches to the patient reception screen while maintaining the current status. (Study will not be completed) However, please note in this case that the patient under examination will not be shown on the patient tab.





Using the User Tool setting, it is possible to select between "By Date" / "By Modality" for the Folder Display Classification when the Viewer screen is displayed.

<CAUTION>

When [Display the previous status in case of same patient] option is ticked, this setting is given priority. In cases where the selected Folder Display Classification should be applied when the Viewer screen of the patient is redisplayed, untick [Display the previous status in case of same patient].

However, in this case, note that the screen from the last view is not retained.

(Default : By Modality)

Setting can be made through [Client Settings] - [Operation Settings] - [Set the Folder Display Type]

Chap. 5
Image Acquisition and Editing

This chapter describes procedures for acquiring CR or non-DICOM images as well as procedures for editing images.

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Chap. 5

5.1 Acquiring Images

The procedure for acquiring images using ImagePilot is described below.
The procedure for image acquisition differs depending on the data type.



It is necessary to make settings using the User Tool to display the orientation of the patient for the data that contains the information of patient's orientation.



Note the following when displaying the CR image acquired in HI-Resolution mode or any single image larger than 22MB on the viewer screen.
Only up to about 160MB of CR image in HI-Resolution mode or any image larger than 22MB can be displayed on the viewer screen. (The image will be stored in the Unread folder)
Either click [Clear Selected Image] of the Image Tool after selecting unnecessary image or delete all images on the viewer screen using [Clear All]. Then select the image stored in the Unread folder.



p.302 2-5) Overlay Items Screen



While the example used in the description at left is based on connection to REGIUS MODEL 110, the operational procedure for acquisition of images using other cassette readers is the same.

5.1.1 Acquiring CR Images

The procedure for acquiring images from modalities connected to ImagePilot is described below.

There are two methods of acquiring CR images, as shown below. The method of acquisition to be used may be set from User Tool. (password=1234)

- Acquisition using the [Modality] button.
- Acquisition without using the [Modality] button.

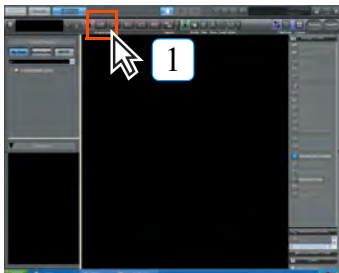


Only up to about 160MB of CR image in HI-Resolution mode can be displayed on the viewer screen. (The image will be stored in the Unread folder)
Either click [Clear Selected Image] of the Image Tool after selecting unnecessary image or delete all images on the viewer screen using [Clear All]. Then select the image stored in the Unread folder.



The characters displayed on the [Modality] button may vary depending on facility-specific settings.

1) Acquisition using the [Modality] button



1

Click the CR [Modality] button.



- The button color will change from deep grey to blue, indicating that ImagePilot is ready for image acquisition.



If you have captured an image without clicking the [Modality] button, patient info will not be associated with the captured image, and it will be saved to the ImagePilot Unnamed Folder as a result.
In this case, manually associate patient info with the image.



p.102 Associating patient info with an image (Unnamed Image Folder Function)



Using the User Tool settings, it is possible to change the CR reading resolution on the Viewer screen.



p.60 Changing the Import Method of CR Images



Ensure that the patient name displayed corresponds to the image on the viewer screen. The name of the patient currently undergoing examination will be displayed in light blue on the patient tag at the top left of the screen.





If the front panel of the cassette reader is opened or closed with the [Modality] button activated, the following procedures should be carried out.

1. **After firmly closing the front panel, click the [Modality] button to temporarily cancel the image acquisition standby status.**
2. **Click the [Modality] button again to re-invoke the image acquisition standby status (the button will change to blue).**



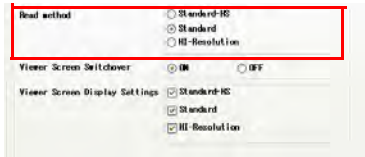
Changing the Import Method of CR Images

Read method of CR images can be changed following the procedure below.

1. Changing the read method using the User Tool settings.

Selecting from "Read method" of "CR Image Read" of the operation settings screen, set the read method of CR images.

Note: "Standard-HS" is the optional setting.



Select from "Standard-HS", "Standard", "HI-Resolution". Each of "Standard-HS", "Standard" and "HI-Resolution" has following differences in reading method.

Standard-HS:

Read/save/display at 175 μ m pitch.

Standard:

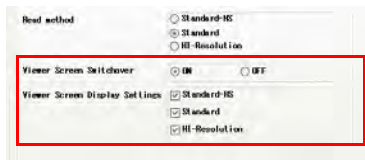
Read at 87.5 μ m pitch → Save/display at 175 μ m pitch.

HI-Resolution:

Read at 87.5 μ m pitch → Save/display at 87.5 μ m pitch.

2. Changing the read method using the User Tool Settings.

Setting the [Viewer Screen Switchover] to ON, and setting the [Viewer Screen Display Settings] also allows changing the read method of CR images on the viewer screen.

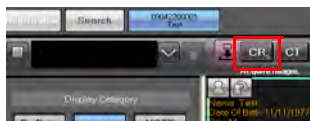


Setting the [Viewer Screen Switchover] to ON allows the [Viewer Screen Display Settings] to be selected.

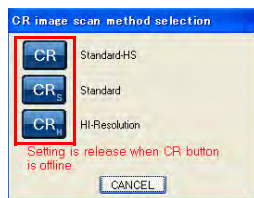
The item checked on the [Viewer Screen Display Settings] is the one selectable on the viewer screen.

Note that all of these checks cannot be removed.

- 1) When both the [Viewer Screen Switchover] and the modality button for CR displayed on the viewer screen are set to ON, right-clicking the modality button for CR will display the "CR image scan method select" screen will be displayed.



- 2) Upon display of the following screen, click the icon for the desired read method. (Click [Cancel] button to leave the setting unchanged)



The modality button for the CR displayed on the viewer screen becomes identical to the one selected.



Notes when changing the import method on the Viewer screen

When the import method changed and set on the Viewer screen, it is continuously valid for import of CR images until the Modality button for the CR is turned OFF.

Note: The import method resumes the original type set by the User Tool as soon as the Modality button for the CR is turned OFF. (When no setting was made, it resumes the Default: [Standard].)

When the [CR Image Import Counts] has been set using the User Tool, the Modality button will automatically turn OFF after importing the specified number of images.

Note that the import method resumes the original type set by the User Tool also when the setting is automatically turned OFF.

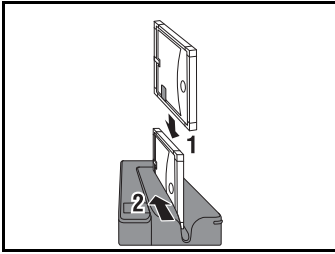


For the system where the previewer is incorporated, it is not possible to change the scan method using the viewer other than the previewer.

Note: Scan method can be changed using the User Tool.

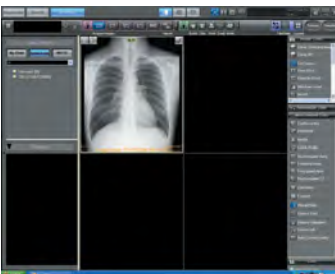


p.60 Changing the Import Method of CR Images



2 Insert the exposed cassette into the cassette reader.

- Refer to the cassette user's manual for details of cassette reader insertion.



- During image acquisition, a progress bar will be displayed and the acquired image will be displayed on the ImagePilot screen.



Setting [Window Level] button of the basic function palette to ON allows changing the brightness(film density)/contrast by horizontally and vertically dragging the mouse on the image.



Using the User Tool setting, assignment between the drag direction(up/down, right/left) and functions(brightness(film density)/contrast). (Default: right/left = density, up/down = contrast) The setting can be made through [Client Settings] - [Operation Settings] - [Mouse Button Settings].

Chap. 5



Previewer Function (CR only)

Clicking the [Modality] button on a system comprised of multiple ImagePilot units can be used to send the information of the patient and the corresponding modality selected by clicking to the other ImagePilot unit instead of acquiring images. For the images from the modality, reception information are displayed on the reception list of the receiving ImagePilot and images are acquired based on the selected patient. This function is called the Previewer. Settings need to be made by a Konica Minolta service engineer for such system operation using the examination order function.



The acquired image is subject to automatic processing to adjust density and contrast.



Luminance and Film Density

Luminance refers to the brightness of the monitor display. The higher the luminance, the brighter (whiter) the image. Film density refers to the darkness of the film and the higher the density value, the darker (blackier) the image.



The [NG] button is displayed at the top right of the acquired image. The [NG] button functions differently according to settings.



When the NG image save setting is disabled:
An image can be discarded by clicking its [NG] button.

When the NG image save setting is enabled:
The NG Reason Selection Screen is displayed, where you can select a reason for discarding the image.



Cautions relating to Image Acquisition

To avoid acquiring images from other patients when the desired patient has been selected, either wait for a while after examination has been completed before closing the Previewer, or switch off the [Modality] button. (The [Modality] button changes between ON ↔ OFF each time it is clicked.) If images from another patient are acquired, follow the "Return to Name Unset" sequence to correct the patient demographics.



p.366 3-2) Edit Mouse Button Screen



The captured images will be displayed on the screen in the order that the image is created.



p.241 Previewer Functions



p.217 Disposing of Images



p.219 Selecting an NG reason



p.103 Moving to unnamed image folder



Completing exposure with the [Modality] button in image-acquisition standby status (button shown in blue) will result in automatic cancellation of the image-acquisition standby status.



If the auto-determine function is enabled, CR/DX (DR/AeroDR) images that were taken are automatically determined as good images after the set time has elapsed.

(* Only for CR/DX (DR/AeroDR) images)

The auto-determine function can be set using "Common Settings" - "Operation Settings" - "Viewer" - "Automatically confirm image (for CR/DX(AeroDR))".




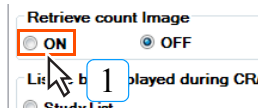


Remarks when importing the images.

We recommend to follow the procedure below so as not to import images from a wrong patient onto the targeted patient.

Procedure 1: Using the User Tool, set to automatically turn OFF the [Modality] button when the examination is completed. (Enabled only for CR)

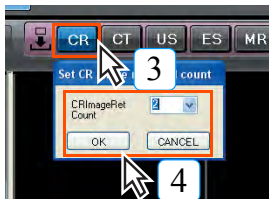
 p.103 Moving to unnamed image folder



1 Select through "User Tool" → [Common Settings] → [Operation Settings] → [Retrieve Count Image], and tick "ON".

2 Click the [Save & Exit] button.

- Exits from the User Tool after the settings are saved.



3 Open the viewer screen, and click the [CR] of [Modality] button.

- A dialogue box that allows setting the CR image acquisition count will be displayed.

4 Specify the count, and click the [OK] button.

- After acquiring the specified count of images, [CR] of the [Modality] button automatically turned OFF.

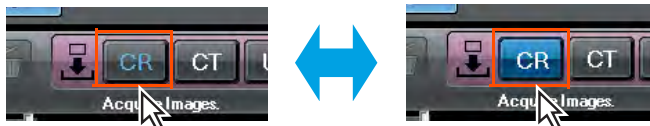
Note: It should be noted when the image of next patient is acquired on the Reader side under the condition where the total number of images actually acquired is less than what has been set and the viewer screen is kept for the previous patient, the image intended for the next patient will be acquired as that for the previous patient.

On the other hand, when the total number of images actually acquired is more than what has been set, a registration error will occur when an attempt to acquire the image is made on the Reader side, disabling the acquisition.

When such happens, click [CR] of the [Modality] button and set the image acquisition condition again.

Procedure 2 : Close the viewer screen or turn OFF the [Modality] button as soon as the examination is completed.

Note: [Modality] button switches between "ON" and "OFF" with each click.



(Switching with clicks)

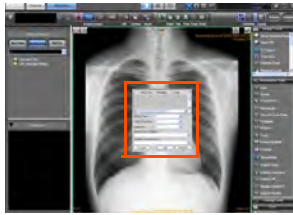
Should an image from a wrong patient be acquired, link the image with the correct patient according to the procedure "Mark as Unnamed".

Chap. 5

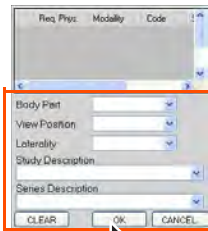


Entering the Study Descriptions and Series Descriptions

Enter the Study Descriptions and Series Descriptions following the procedure below. The procedure is required only for the institution where the study descriptions and series descriptions are controlled.



1 At the institution where the study descriptions and series descriptions are controlled, study descriptions and series descriptions input screen will be automatically displayed when a CR image is imported.



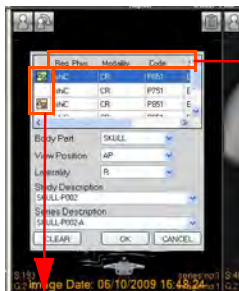
2 Enter the body part, View Position, Laterality as necessary. Then enter study descriptions and series descriptions, and click the [OK] button.

- After adding the body part, View Position, Laterality, study descriptions and series descriptions to the image information, the screen returns to the viewer screen.
- [Study Info] icon will be displayed on the image of the viewer screen. Clicking this icon allows editing the body part, View Position, Laterality, study descriptions and series descriptions.

p.346 8-8) Study Code Mapping Screen

***When MWM link is in use**

When MWM link is in use, study information will be read and displayed on the exam list screen.



Exam List Mark
Indicates whether the exam information is linked to the image.

- Assigned to this image.
- Assigned to other image.
- (No mark) Assigned to no image.

- Req. Phys.**
Displays the Requesting Physician.
Dicom tag (0032, 1032)
- Modality**
Displays the Modality.
Dicom tag (0008, 0060)
- Code**
Displays the Code Value.
Dicom tag (0008, 0100)
* There are two cases, one is (0040,0008)Scheduled Procedure Step Code Sequence and the other is (0032,1064)Requested Procedure Code Sequence.
- Scheduled Proc. Desc.**
Displays the Scheduled Procedure Step Description.
Dicom tag (0040, 0007)
- Accession No.**
Displays the Accession Number.
Dicom tag (0008, 0050)

When there is study information to which the image currently selected should be assigned, select the study information from the list and click [OK] button.

The study list mark in the list changes to green when the study is assigned, indicating that the study has been assigned. The study information to which the image has been assigned can be verified using the image properties, etc.

*** When HL7 link is in use**

When HL7 link is in use, the study information can also be assigned to the image in a similar manner as practiced for the MWM link described above.



Make sure not to select the wrong image when selecting/inputting the information.



Creating a new folder in the Data List Display

Use the following steps to create a new folder.

This folder can only be created when the "By Modality" display is selected.



1 Place the cursor on the Modality Folder, right click, and select [Create Folder].

- The Folder Properties screen is displayed.

2

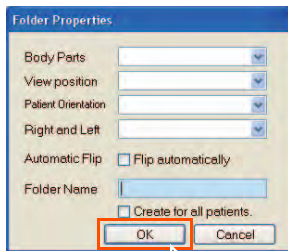
Use the keyboard to enter a name for the folder, then click the [OK] button.

- A new folder is created.
- By filling in the checkbox for [Create for all patients.], a folder of the same name will be created for all currently registered patients, and a folder of the same name will automatically be created for all patients to be taken on in the future.

3

Drag and drop the thumbnail image to the created folder.

- The image is moved to the new folder.



In the case of a CR image, body part and direction information editing can be performed by right clicking on the created folder and selecting [Properties].



- User tool settings can be used to change the display order of "Body Parts" at the Folder Properties screen.
- The setting can be made through [Common Settings] - [Operation Settings] - [DICOM] - [Body part name display order Settings].

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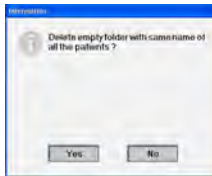


p.318 2-13) Body Part Name Display Order Settings screen

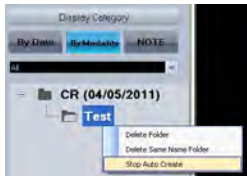


Operations for the folder automatically created by filling in the [Create for all patients.] checkbox

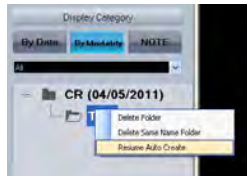
- Folders of the same name created for all patients can be deleted all at once. By right clicking on the automatically created folder and selecting [Delete Same Name Folder], a dialogue box will be displayed to confirm folder deletion, and no more folders for all patients will be created from that point. Clicking the [Yes] button will delete all folders of the same name created for all patients. However, images existing within the folders will not be deleted.



- If you want to stop auto creation of same name folders for all patients, right clicking on an auto created folder and selecting [Stop Auto Create] will halt auto creation of any other same name folders for patients to be taken on in the future.



- If you want to resume auto creation of same name folders for all patients, right clicking on an auto created folder and selecting [Resume Auto Create] will resume auto creation of same name folders for patients to be taken on in the future.

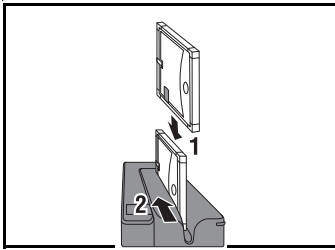


Depending on the setting made at the time of installation, grid pattern removal process and grid moiré suppression process have been enabled.



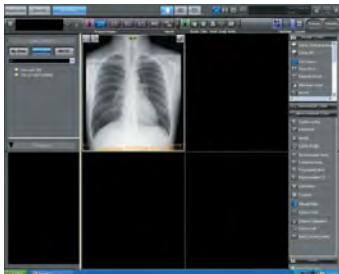
Grid pattern removal and grid moiré suppression are processes to reduce the influence of the spatial frequency introduced into images taken with stationary grids that cause a grid or moiré pattern, using the fact that the grid lines are localized along the spatial frequency. Therefore, not only the grid or moiré pattern but also the signal component of the image adjacent to the spatial frequency may be reduced.

2) Image Acquisition without using the [Modality] button



1 Insert the exposed cassette into the cassette reader.

- Refer to the cassette user's manual for details of cassette reader insertion.
- Images without an accompanying patient name will be saved in the unnamed image folder.



The captured images will be displayed on the screen in the order that the image is created.

If an image was saved in the unnamed folder, manually associate patient info with the image.

The [NG] button is displayed at the top right of the acquired image. The [NG] button functions differently according to settings.

When the NG image save setting is disabled:
An image can be discarded by clicking its [NG] button.

When the NG image save setting is enabled:
The NG Reason Selection Screen is displayed, where you can select a reason for discarding the image.



[OK] button will be displayed at the upper right of the captured image. If there are other ImagePilot clients in the network, clicking the [OK] button immediately allows other ImagePilot clients to reference the image. (Note: Only for CR/DX (DR/AeroDR) images)
Show/hide of the [OK] button can be set using "Common Settings" - "Operation Settings" - "Edit Overlay" of the User Tool.



p.102 Associating patient info with an image (Unnamed Image Folder Function)

p.217 Disposing of images

p.219 Selecting an NG reason

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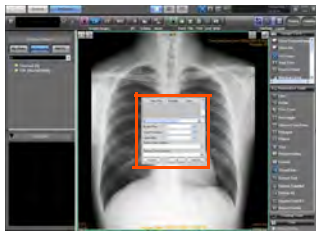
When the acquired image whether it is CR image or not is not studied, [Update] icon will be displayed, and the reference to the images can be made by categorizing the images into past images and new images with this [Update] icon as the border stone.

However, in actual diagnosis, make sure to check whether the new image is contained in the images that does not bear [Update] icon so that the new image is overlooked.



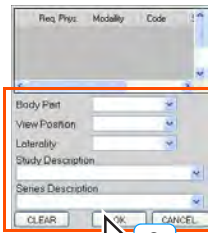
Entering the Study Descriptions and Series Descriptions

Enter the Study Descriptions and Series Descriptions following the procedure below. The procedure is required only for the institution where the study descriptions and series descriptions are controlled.



1

At the institution where the study descriptions and series descriptions are controlled, study descriptions and series descriptions input screen will be automatically displayed when a CR image is imported.



2

Enter the body part, View Position, Laterality as necessary. Then enter study descriptions and series descriptions, and click the [OK] button.

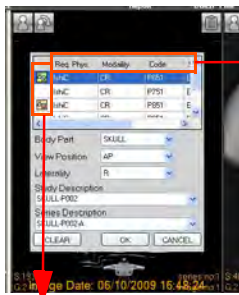
- After adding the body part, View Position, Laterality, study descriptions and series descriptions to the image information, the screen returns to the viewer screen.
- [Study Info] icon will be displayed on the image of the viewer screen. Clicking this icon allows editing the body part, View Position, Laterality, study descriptions and series descriptions.



p.346 8-8) Study Code Mapping Screen

***When MWM link is in use**

When MWM link is in use, study information will be read and displayed on the exam list screen.



Exam List Mark
Indicates whether the exam information is linked to the image.

- Assigned to this image.
- Assigned to other image.
- (No mark) Assigned to no image.

Req. Phys.

Displays the Requesting Physician.
Dicom tag (0032, 1032)

Modality

Displays the Modality.
Dicom tag (0008, 0060)

Code

Displays the Code Value.
Dicom tag (0008, 0100)

* There are two cases, one is (0040,0008)Scheduled Procedure Step Code Sequence and the other is (0032,1064)Requested Procedure Code Sequence.

Scheduled Proc. Desc.

Displays the Scheduled Procedure Step Description.
Dicom tag (0040, 0007)

Accession No.

Displays the Accession Number.
Dicom tag (0008, 0050)



p.60 Changing the Import Method of CR Images

When there is study information to which the image currently selected should be assigned, select the study information from the list and click [OK] button.

The study list mark in the list changes to green when the study is assigned, indicating that the study has been assigned. The study information to which the image has been assigned can be verified using the image properties, etc.

*** When HL7 link is in use**

When HL7 link is in use, the study information can also be assigned to the image in a similar manner as practiced for the MWM link described above.



Make sure not to select the wrong image when selecting/inputting the information.



Depending on the setting made at the time of installation, grid pattern removal process and grid moiré suppression process have been enabled.



Grid pattern removal and grid moiré suppression are processes to reduce the influence of the spatial frequency introduced into images taken with stationary grids that cause a grid or moiré pattern, using the fact that the grid lines are localized along the spatial frequency. Therefore, not only the grid or moiré pattern but also the signal component of the image adjacent to the spatial frequency may be reduced.

5.1.2 Acquiring AeroDR Images

This section describes how to acquire images from the modality connected to ImagePilot.



When acquiring images from the AeroDR Detector, if the AeroDR Detector is unable to correctly capture images and image capturing shuts down because the PC power was cut unexpectedly from the ImagePilot side, the network circuit was cut, or some other reason, the AeroDR Detector will shift modes to resend the images that could not be sent.

If this happens, when the ImagePilot system transmission is restored, clicking the online button will resend the image or images from the AeroDR Detector. When this is done, images will be acquired without displaying a preview image, unlike when acquiring images under normal circumstances. In addition, depending upon the timing of the transmission interruption, a message informing you that the images are stored in an unnamed image folder may be displayed. If this happens, allot the appropriate patient information from the unnamed image folder.



Take note of the panel status display on the console screen since exposure in Aero Sync mode enabled even when the AeroDR Detector is turned off, the battery is depleted, or the network is not connected, and expose after making sure the panel status is [Ready].



If multiple AeroDR Detectors are registered and used, check the selection status from the selected AeroDR Detector name and LED display on top of the AeroDR Detector before carrying out exposure.



The Aero Sync mode is a connection method that automatically detects X-ray exposure of the panel and acquires the X-ray image exposed by the panel.



The text displayed in the [Modality] button may vary with the AeroDR being used.



You can also select by pressing the select switch on the AeroDR panel to be used .For details, see "AeroDR SYSTEM Operation Manual."

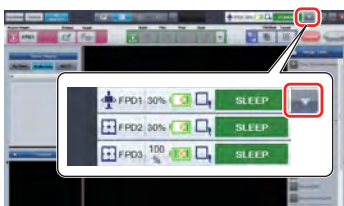


After clicking the [Modality] button, it will return to the original position after a pre-determined amount of time has passed in order to save electric power.

The message [Panel Status "READY" is timeout. Will you continue to expose?] will be displayed. If you want to continue Exposure, click the [Yes] button.

If [Hospital Type] is set to animal hospital and [Common Settings] - [Operation Settings] - [Enable online operation by SELECT button on AeroDR panel] is set to ON, you can continue Exposure by pressing the [SELECT] button on the AeroDR panel. In this case, after clicking the [Modality] button, the above-mentioned message screen will not be displayed after the pre-determined amount of time has passed.

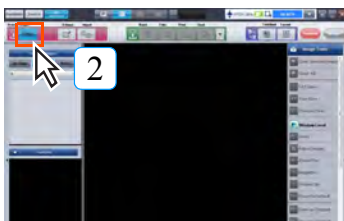
1) Acquisition using the [Modality] button



1

Select the AeroDR Detector to be used in the exposure from the detector selection list.

- When multiple AeroDR Detectors are registered, select the panel to be used from the pull-down menu.



2

Click the [Modality] button for AeroDR.



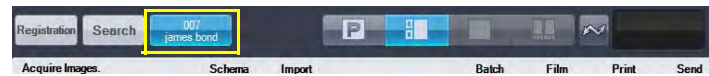
- The button's color will change from dark gray to blue indicating that ImagePilot is ready for image acquisition.



Do not turn the PC off while images are being transferred, as this may lead to images becoming lost.



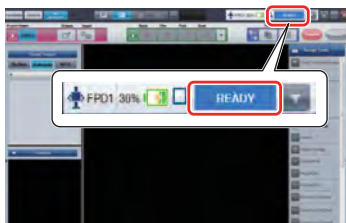
Make sure that the viewer screen being displayed is that of the selected patient before carrying out the exposure with the X-ray generator. The name of the patient currently being treated can be checked from the patient tag displayed in blue at the top left of the viewer screen.



With ImagePilot Mobile, make sure the there is sufficient power remaining in the PC battery before using. The laptop goes into hibernation mode automatically when the battery power is critically low. When the laptop wakes up from a hibernate, restart the laptop before acquiring AeroDR images.



When switching the panel to [READY] by clicking the [Select] button on the AeroDR panel, make sure the patient online is on the Viewer Screen and Exposure after making sure it is [READY].




3 Confirm that the panel status display shows [READY] before starting exposure preparation.



The panel statuses displayed are as follows.



| No. | Item | Function | |
|-----|---------------------------------|---|---|
| 1 | Aero Sync X-ray detection level | The AeroSync detection level settings can be changed by clicking it when it is displayed. The icon for detection change is displayed only in the AeroSync mode, and for AeroDR 1417HQ, 1417FIP, 1012HQ and 1717HQ systems.  p.72 Step 4 | |
| 2 | Device type | If connected to a UF cable, the wall stand or table exposure stage icon of the UF cable is displayed. | |
| 3 | Battery display | Displays the remaining battery level as a number and an image. | |
| 4 | Signal strength display | Displays the wave status of the AeroDR Detector. | |
| 5 | Panel status display | WAKEUP | The power to the AeroDR Detector has been turned on and is currently being initialized. |
| | | SLEEP | Status whereby power consumption is minimal (sleep). Goes to sleep when no operations are conducted for a certain amount of time. |
| | | STANDBY | Standby status whereby power consumption is medium. Goes to sleep when no operations are conducted for a certain amount of time. |
| | | PREPARING | Preparations are being made so that readings are possible with AeroDR. |
| | | READY | Ready for exposure. |
| | | TRANSMIT | Status whereby AeroDR Detector is reading or transmitting an image. |
| | | ERROR | Displayed if there is an error generated within any device. |
| | | CHARGING | The device is charging as exposure cannot be carried out due to the low battery level. |
| | PLEASE CHARGE | Exposure cannot be carried out due to the low battery level. Charge the AeroDR Detector. | |
| | CONNECTING | Displayed if exposure is collaborated via AeroDR Generator Interface Unit. | |
| 6 | Panel selection list | If multiple AeroDR Detectors are registered, select the active AeroDR Detector from the list. | |



Battery level display of AeroDR Detector.

| Status | Battery Level | | | | |
|-------------|---------------|--------|-------|--|------|
| | Low | | | | High |
| Not charged | | | | | |
| Charging | | | | | |
| Icon color | Red | Orange | Green | | |

Device icon display

| Name of icon | device |
|--------------|--|
| | Connect to UF cable of stand position exposure stage |
| | Connect to UF cable of table position exposure stage |
| | No connection to UF cable |

AeroDR Detector connection status display.

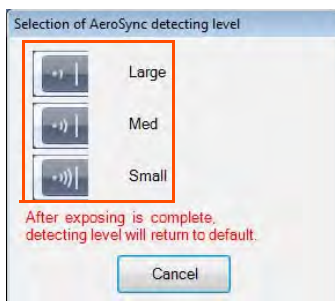
| Not connected. (Out of range or power OFF) | Wireless Status | | | Wired |
|---|-----------------|--|------|-------|
| | Poor | | Good | |
| | | | | |



4

Depends on the situation, The AeroSync detection level can be changed as [Large], [Med] or [small]. It is available only for AeroDR 1417HQ, 1417FIP, 1012HQ, 1717HQ and when their states are the AeroSync mode.

- Click button to display Aero Sync X-ray detection level.
- Click button of sensitivity to be established. If not to be set, click the [Cancel] button.



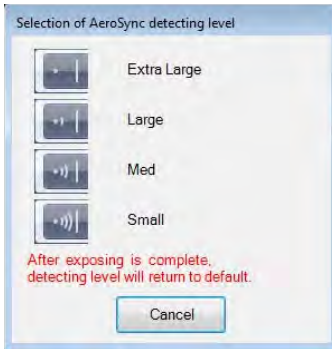


With Aero Sync mode exposure, X-rays with specified intensity that reached the AeroDR Detector are detected, and image acquisition is started. Select the X-ray detection level during exposure from the following 3 exposure detection levels according to the condition.

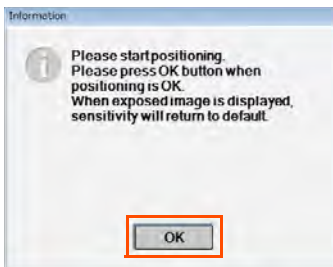
- [Small]
Used for general imaging such as that of the chest and limb bones.
- [Med]
This is effective for imaging of the abdomen or lumbar front of patients with thick bodies as well as in the case where the direct X-ray region does not enter the AeroDR Detector because of the narrowed exposure field. Be careful not to subject the AeroDR Detector to strong shocks during exposure.
- [Large]
This is more effective than the medium detection level for imaging of the abdomen or lumbar front of patients with thick bodies as well as in the case where the direct X-ray region does not enter the AeroDR Detector because of the narrowed exposure field. Let the patient stand still for as long as possible during exposure.



When AeroSync is in operation, short-term exposure is partially restricted (exposure time 5msec or more).
When imaging under these conditions, horizontal lines may appear in images, so caution is necessary especially when imaging at low radiation doses.



- **The [Extra Large] setting does not normally need to be changed when taking images in AeroSync mode with AeroDR 2 1417HQ, AeroDR 2 1417S, and AeroDR 2 1417S FIP models.**



- **When the sensitivity setting is changed, the [Information] dialogue box is displayed. When exposure is ready, click the [OK] button.**



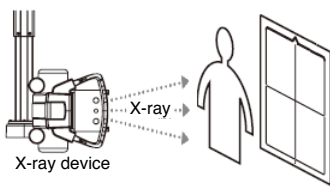
Display/Hidden for the messages can be changed by the settings.



p.294 <Input Screen>

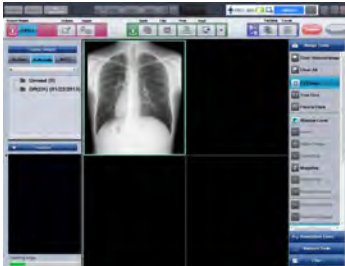


When exposed image is displayed, sensitivity will return to default.



5 Press the exposure switch of the X-ray generator to carry out the exposure.

- When the exposure is complete, the image is stored in the AeroDR Detector, sequentially converted to digital data, and sent to ImagePilot.



- The progress bar is displayed on the bottom left hand corner of the screen while the image is loaded, and the loaded image is displayed on the ImagePilot screen.

The captured images will be displayed on the screen in the order that the image is created.



If the [Window Level] button of the basic function palette is ON, the brightness (film density) or contrast can be changed by dragging the mouse over the image vertically or horizontally.



p.366 3-2) Edit Mouse Button Screen



Using the User Tool setting, assignment between the drag direction(up/down, right/left) and functions(brightness(film density)/contrast). (Default: right/left = density, up/down = contrast)
The setting can be made through [Client Settings] - [Operation Settings] - [Mouse Button Settings].



The acquired image is subject to automatic processing to adjust density and contrast.



Luminance and Film Density

Luminance refers to the brightness of the monitor display. The higher the luminance, the brighter (whiter) the image. Film density refers to the darkness of the film and the higher the density value, the darker (blacker) the image.



The [NG] button is displayed at the top right of the acquired image. An image can be discarded by clicking its [NG] button.



Completing exposure with the [Modality] button in image-acquisition standby status (button shown in blue) will result in automatic cancellation of the image-acquisition standby status.



[OK] button will be displayed at the upper right of the captured image. If there are other ImagePilot clients in the network, clicking the [OK] button immediately allows other ImagePilot clients to reference the image. (Note: Only for CR/DX (AeroDR) images)
Show/hide of the [OK] button can be set using "Common Settings" - "Operation Settings" - "Edit Overlay" of the User Tool.





Initial Display Optimization Process (AeroDR only)

After reading an image, the smallest cassette size as a whole, which includes the exposure field area in the DX (DR/AeroDR) image, serves as the default display.



p.423 Initial Display Optimization Process



If the auto-determine function is enabled, CR/DX (DR/AeroDR) images that were taken are automatically determined as good images after the set time has elapsed.



(* Only for CR/DX (AeroDR) images)

The auto-determine function can be set from "Common Settings" - "Operation Settings" - "Viewer" - "Automatically confirm image (for CR/DX(AeroDR))".



Do not change the [Extra Large] setting for the Aero Sync X-ray detection level when taking images in AeroSync mode with AeroDR 2 1417HQ, AeroDR 2 1417S, and AeroDR 2 1417S FIP models.

If radioactive substances remain the body of the patient due to having received a nuclear medicine test or similar, the detection of his radiation may cause images that are mostly white to appear. In such cases, lower the Aero Sync X-ray detection level to [Large] and re-image.

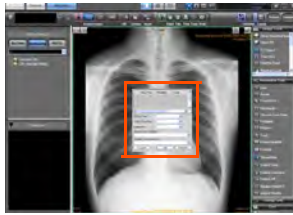
Take images under the following conditions when the X-ray detection level is set to [Large].

- **Establish an area to which direct X-rays are irradiated.**
- **Do not restrict the irradiation field. Ensure that the entire panel surface is irradiated.**
- **Set the tube current to 140 mA or more.**

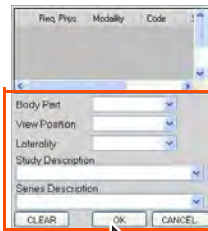


Entering the Study Descriptions and Series Descriptions

Enter the Study Descriptions and Series Descriptions following the procedure below. The procedure is required only for the institution where the study descriptions and series descriptions are controlled.



1 At the institution where the study descriptions and series descriptions are controlled, study descriptions and series descriptions input screen will be automatically displayed when a DX(DR/ AeroDR) image is imported.

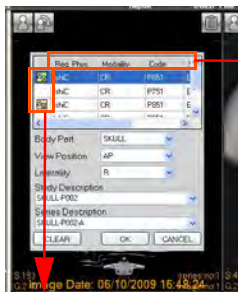


2 Enter the body part, View Position, Laterality as necessary. Then enter study descriptions and series descriptions, and click the [OK] button.

- After adding the body part, View Position, Laterality, study descriptions and series descriptions to the image information, the screen returns to the viewer screen.
- [Study Info] icon will be displayed on the image of the viewer screen. Clicking this icon allows editing the body part, View Position, Laterality, study descriptions and series descriptions.

***When MWM link is in use**

When MWM link is in use, study information will be read and displayed on the exam list screen.



Exam List Mark
Indicates whether the exam information is linked to the image.

- Assigned to this image.
- Assigned to other image.
- (No mark) Assigned to no image.

- Req. Phys.**
Displays the Requesting Physician.
Dicom tag (0032, 1032)
- Modality**
Displays the Modality.
Dicom tag (0008, 0060)
- Code**
Displays the Code Value.
Dicom tag (0008, 0100)
* There are two cases, one is (0040,0008)Scheduled Procedure Step Code Sequence and the other is (0032,1064)Requested Procedure Code Sequence.
- Scheduled Proc. Desc.**
Displays the Scheduled Procedure Step Description.
Dicom tag (0040, 0007)
- Accession No.**
Displays the Accession Number.
Dicom tag (0008, 0050)

When there is study information to which the image currently selected should be assigned, select the study information from the list and click [OK] button.

The study list mark in the list changes to green when the study is assigned, indicating that the study has been assigned. The study information to which the image has been assigned can be verified using the image properties, etc.

*** When HL7 link is in use**

When HL7 link is in use, the study information can also be assigned to the image in a similar manner as practiced for the MWM link described above.



- The study description and series description input screen can be set using the user tool (Default: No setting). Set it in "Common Settings" - "Operation Settings" - "Input" - "List to be displayed during CR/DX (AeroDR) acquisition".



p.295 List to be displayed during CR/DX(AeroDR) acquisition



Make sure not to select the wrong image when selecting/inputting the information.



Creating a new folder in the Data List Display

Use the following steps to create a new folder.

This folder can only be created when the "By Modality" display is selected.

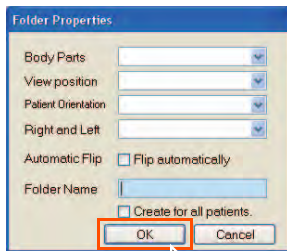


1 Place the cursor on the Modality Folder, right click, and select [Create Folder].

- The Folder Properties screen is displayed.

2 Use the keyboard to enter a name for the folder, then click the [OK] button.

- A new folder is created.
- By filling in the checkbox for [Create for all patients.], a folder of the same name will be created for all currently registered patients, and a folder of the same name will automatically be created for all patients to be taken on in the future.



3 Drag and drop the thumbnail image to the created folder.

- The image is moved to the new folder.



In the case of a DX(DR/ AeroDR) image, body part and direction information editing can be performed by right clicking on the created folder and selecting [Properties].



User tool settings can be used to change the display order of "Body Parts" at the Folder Properties screen.

The setting can be made through [Common Settings] - [Operation Settings] - [DICOM] - [Body part name display order Settings].

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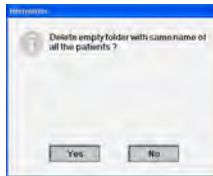


p.318 2-13) Body Part Name Display Order Settings screen

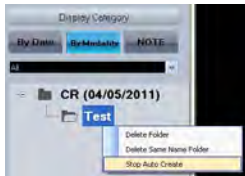


Operations for the folder automatically created by filling in the [Create for all patients.] checkbox

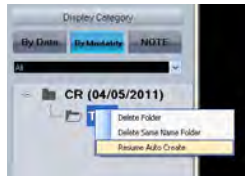
- Folders of the same name created for all patients can be deleted all at once. By right clicking on the automatically created folder and selecting [Delete Same Name Folder], a dialogue box will be displayed to confirm folder deletion, and no more folders for all patients will be created from that point. Clicking the [Yes] button will delete all folders of the same name created for all patients. However, images existing within the folders will not be deleted.



- If you want to stop auto creation of same name folders for all patients, right clicking on an auto created folder and selecting [Stop Auto Create] will halt auto creation of any other same name folders for patients to be taken on in the future.



- If you want to resume auto creation of same name folders for all patients, right clicking on an auto created folder and selecting [Resume Auto Create] will resume auto creation of same name folders for patients to be taken on in the future.





CAUTION

- When multiple AeroDR Detectors are registered and used, check the selection status from the selected panel name and the LED display on top of the panel before carrying out exposure.
- Do not turn the PC off while images are being transferred, as this may lead to images becoming lost.
- Make sure that the panel status display on the screen shows "Ready" before capturing an image, since exposure is enabled even when the AeroDR Detector power cable or LAN cable is disconnected, or the battery charge level is low.
- Patients cannot be switched from the time the exposure SW is pressed, during exposure, and until the image has been imported. When using Aero Sync, patients cannot be switched from the time of exposure until the image has been imported.
- If Aero Sync is connected, take note that exposure can be carried out at any time since there is no communication synchronization that triggers the exposure signal from the X-ray generator. (Confirm that the panel status display on the screen shows "Ready".)
- Remember to use the Aero Sync function within the range of pre-determined dose. Also note that vibrations or shocks may result in malfunctions.
- Make sure that you have the correct patient selected for image import before pressing the exposure switch of the X-ray generator.

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CAUTION

Precautions when performing exposures in Aero Sync mode

- Confirm that the device is ready for exposure through its display before performing exposure.
- Confirm the confirmation tone of the device after starting exposure.
- Do not subject the AeroDR Detector to vibrations and shocks until the preview image is displayed.
- Confirm that the battery charge level of the AeroDR Detector is sufficient before performing exposure.
- Use the device within the scope of exposure conditions confirmed in advance.
- If a mistake is made in the default sensitivity settings, malfunctions may occur when the AeroDR Detector is subjected to events such as shocks. When the value is changed, be sure to check whether the change is intentional.
- If medium or high sensitivity is used, malfunctions may occur when the AeroDR Detector is subjected to events such as shocks.
- Perform exposure the moment "Ready" is displayed.
- If image acquisition was started in a state in which exposure is not being performed, incorrect detection may occur due to noise, etc. Delete the image and restart exposure.
- If image acquisition does not start after exposure, it is possible that the voltage is insufficient. Check the exposure conditions and restart exposure.
- If exposure is performed when "Ready" is not displayed, repeat exposure after at least one minute.
- Conditions that switch the sensitivity differ according to the device used. Follow the survey results at the time of installation.



CAUTION

Grid precautions

- Use 34 to 40lp/cm for the grid during exposure. If exposure is performed using an unspecified grid, you may not be able to eliminate moire.
* The AeroDR Detector uses a specified grid.

Indication for Use (This description is for the United States only):

AeroPilot is a software device that is used in conjunction with REGIUS Unitea to control Konica Minolta Digital radiography system. This device is indicated for use in generating radiographic images of human anatomy.

It is intended to replace radiographic film/screen systems in general-purpose diagnostic procedures.

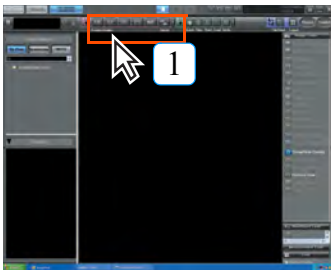
This device is not indicated for use in mammography, fluoroscopy, tomography and angiography applications.

The AeroPilot is the licensed software used by installing this system.

This subsection (5.1.2) explains the functions of the AeroPilot.

5.1.3 Acquiring Other Modality Images

This section describes how to acquire DICOM images other than CR/AeroDR images.



1 Click the [Modality] button for the acquisition-target device.




- The button will change from dark grey to blue indicating that ImagePilot is ready for image acquisition.



2 Carry out exposure with the DICOM device.

- Refer to the device user's manual for details of exposure procedures.
- The acquired image will be displayed on the ImagePilot screen.

 The captured images will be displayed on the screen in the order that the image is created.

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Setting [Window Level] button of the basic function palette to ON allows changing the brightness(film density)/contrast by horizontally and vertically dragging the mouse on the image.



Using the User Tool setting, assignment between the drag direction(up/down, right/left) and functions(brightness(film density)/contrast). (Default: right/left = density, up/down = contrast)
The setting can be made through [Client Settings] - [Operation Settings] - [Mouse Button Settings].



p.366 3-2) Edit Mouse Button Screen



Carrying out exposure without clicking the [Modality] button will result in allocation of the image to the patient matching the patient information (patient name and ID) included in the DICOM image.

In cases where patient information is not included in the DICOM image, or where there is not matching patient information, the image will be saved in the unnamed image folder.

Use the unnamed image folder function to correlate patient information with images. It is possible using the User Tool setting to automatically register as a new patient, the image that should be assigned to the unnamed folder.

It is also possible to set per each modality the consistency check that will be implemented at the time of registration.



p.102 Associating patient info with an image (Unnamed Image Folder Function)



For the color image, display properties of ImagePilot is not the same as that of the diagnostic device.



When linked to the color ultrasonic image diagnosis equipment SONIMAGE HS1, click the Link button on the [Modality] button to link the patient information to SONIMAGE HS1.

When linking patient information, check that the patient information displayed in the viewer screen of ImagePilot is the same as the patient information displayed in SONIMAGE HS1.



When list linkage with SONIMAGE P3 is used, do not use the following characters in any patient ID and patient name (Information may be sent incorrectly).
\\/*?>|_,"



After sending patient information from ImagePilot to SONIMAGE P3, make sure the patient information sent is correct on SONIMAGE P3 before conducting the test.



In SONIMAGE HS1, if the following characters are included in the patient ID and patient name, they will be replaced by [?] in the display.


= ^ ¥

a) Acquired Image Specifications (classified by input source)

Image acquisition is carried out under the following conditions.

| Input Source | Input Image Registration on ImagePilot | |
|--|--|---|
| | [Modality] button ON | [Modality] button OFF |
| REGIUS 110/ 110HQ(for Russia only)/170/190/210/ REGIUS SIGMA/ SIGMA2 | Registered as image for patient selected on ImagePilot. | Removing the check against "Refusal to receive image without name" under "Operation Settings" in User Tool will enable temporary registration as unnamed image. In such cases, patient information must be correlated with the image. |
| DICOM Modality | Patient ID, Name, Sex and Date of Birth match with the patient registered in ImagePilot: Registered as image for patient matching Patient ID and Name. | |
| | Patient ID, Name, Sex and Date of Birth match with the patient registered in ImagePilot: The image will be registered as an unnamed image. | |
| | When Patient ID is unavailable: The image will be registered as the one for the patient selected on ImagePilot. | When Patient ID is unavailable: The image will be temporarily registered as an unnamed image in the unnamed folder. In such cases, patient information must be correlated with the image. |
| Non-DICOM Modality | Patient ID, Name, Sex and Date of Birth match with the patient registered in ImagePilot: Registered as image for patient matching Patient ID and Name. | |
| | Patient ID, Name, Sex and Date of Birth match with the patient registered in ImagePilot: The image will be registered as an unnamed image. | |
| | When Patient ID is unavailable: The image will be registered as the one for the patient selected on ImagePilot. | When Patient ID is unavailable: The image will be temporarily registered as an unnamed image in the unnamed folder. In such cases, patient information must be correlated with the image. |
| Digital Camera, Various Media | Generic images such as JPEG, AVI: Allows to select Yes/No for the image to be registered as the one for the patient selected on ImagePilot. | - |
| | When Patient Name and date of birth in DICOM file match with those of the selected patient: Allows to select Yes/No for the image to be registered as the one for the patient selected on ImagePilot. | - |
| | When Patient Name and Date of Birth in DICOM file does not match with those of the selected patient: Although a message "Unmatched" will be displayed, it is possible to select Yes/No for the image to be registered as the one for the patient selected on ImagePilot. | - |

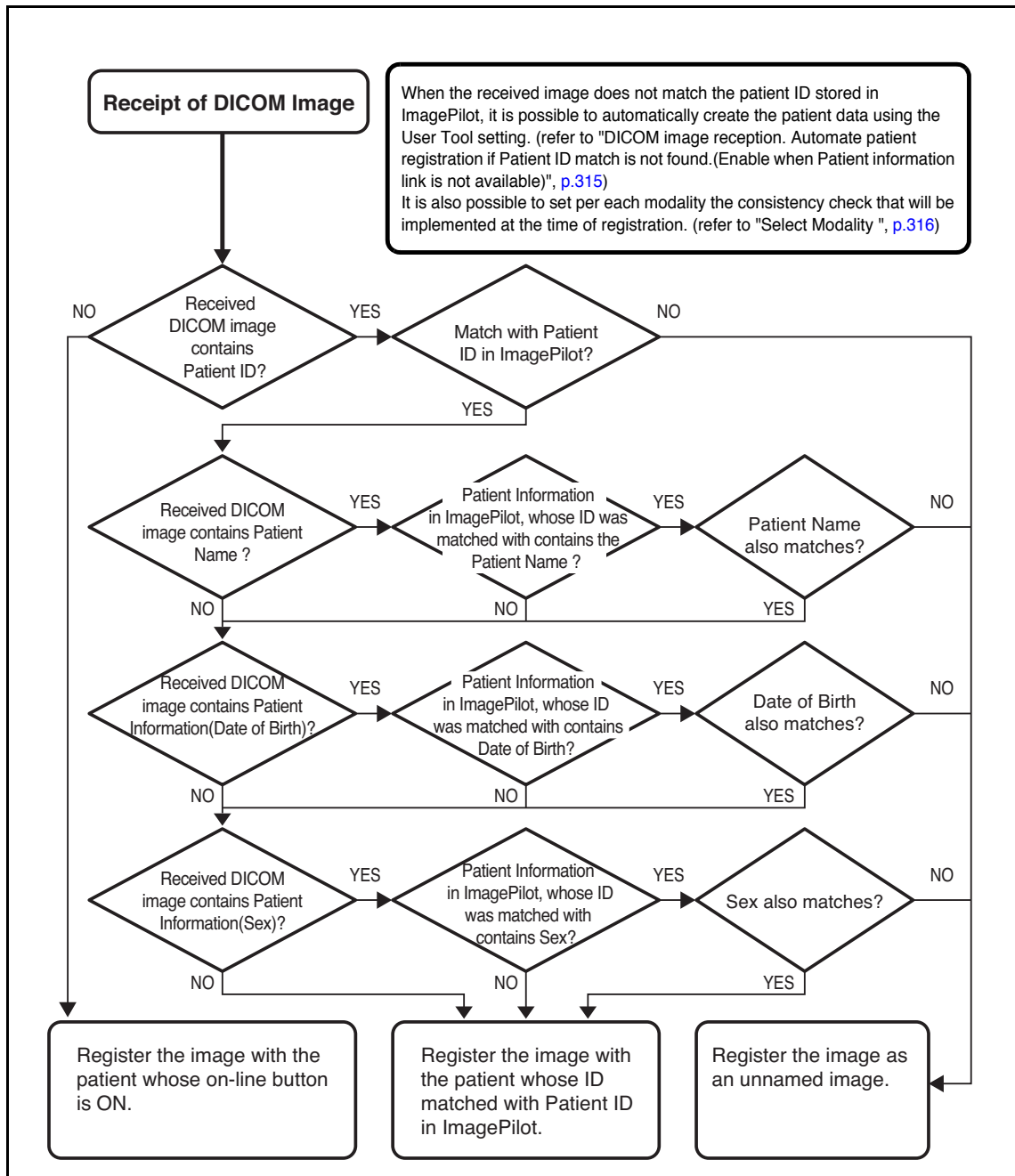
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- Do not use for mammography.
- Sex and Date of Birth are also the items to be used for the judgment of Match/Unmatch.
- When the series instance UID has been correlated with the patient, the image sent with the same series instance UID will be automatically correlated with that patient.

 p.421 Image Processing

b) Flowchart for Correlating DICOM Receipt Image



5.1.4 Acquiring General-purpose Images

The procedure for acquiring general-purpose images such as digital camera images and DICOM images on ImagePilot is described below.



Generic image acquisition specifications

Images meeting the following parameters may be acquired by ImagePilot. However, write/read to/from the media may not be successful if the media contains excessive number of images. Note that maximum 1200 images or less is the limit per media.

<Still images>

- Data size: 30MB or less
- Pixel count: 10 ~ 5000 pixels or less/either side
- File format: exif/JPEG, JPEG, BMP, PNG

<Motion images>

- Data size : 300MB or less
- Playing time : 10 minute or less
- File format: AVI (only for Motion JPEG), MPG/MPEG (MPEG-1)



DICOM image acquisition specifications

DICOM images meeting the following parameters may be acquired by ImagePilot.

- Numerical data, data with ".dcm" or ".dicom" extensions or data without extension.

<Caution> Acquisition of data in violation of DICOM standards is not possible. However, in the case of violation of VM Count and Item Length, using the User Tool setting allows the data to be imported. Note that the data imported here may be different from the original data before import. Setting can be made [Common Settings]-[Operation Settings]-[DICOM]-[DICOM Standard Violation (VM Count/Item Length Violation) Correction Output Settings] .



VM Count

"VM" of "VM Count" is the acronym of "Value Multiplicity", and indicates the number of data when several values are stored in single DICOM tag. Use "\" to separate one value from the other. For example, when three data are stored in the tag of the VM Count is "2", one "\" should be inserted between the first and second data. Therefore, it is judged as violation if there are two "\" in the data that has the VM Count =2. (two "\" are allowed when the VM Count is "3")



Item Length

This represents the length of data stored in the DICOM tag.

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When acquiring the images, PDF, cine files using the Generic Image Acquisition function, make sure not to import files named with codes other than alphanumerics.



•Caution: All files of 22MB and above are uniformly handled as "Large files" and only files up to 160MB total can be displayed in the viewer.

[Ex.]

It is possible to open 6 images in a 25MB file
(25MB x 6 images = 150MB < 160MB),
but when you attempt to open the 7th image, an error is displayed
(25MB x 7 images = 175MB > 160MB).

1) Acquiring Images from Digital Cameras

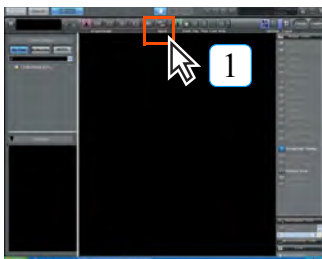


Images can be acquired from a digital camera with memory cards and a USB connection.



Concerning image acquisition from sources such as digital cameras, scanners, media

Caution must be exercised not to correlate images with the wrong patient.



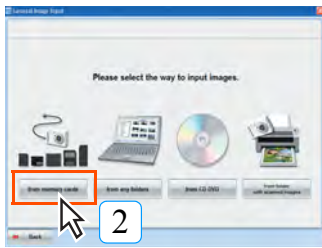
1 Click the [Import] button.



- The acquisition source selection screen will be displayed.



In the cases of digital cameras not recognized as a disc drive, image acquisition by ImagePilot should be carried out after the memory card has been read by the memory card reader.



2 Click the [from memory cards] button.

- The acquisition source selection screen will be displayed.

3 Connect the USB cable from the digital camera to ImagePilot, or set the digital camera memory card in the card reader.

- When ImagePilot recognizes the memory card, the message “Memory card inserted” will be displayed followed by the message “Preparing image display. Please wait.” This will be followed by display of the image list display screen.




4 Click the image on the list to be acquired by ImagePilot.


- The frame of the selected image will be shown in blue. Clicking the selected image will delete the blue frame and cancel the selection.



- Multiple images may be selected. Selections are displayed at the bottom of the screen.
- Click the [Select all] button to select all images.
- Click the [All clear] button to cancel all image selections.



Do not disconnect the media until image acquisition has been completed.

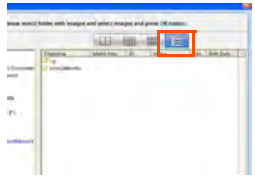



Only images (or motion images) acquirable by ImagePilot will be displayed on the image list.

user tool

Using the User Tool setting, it is possible to display [List Display] button. Clicking this button displays images in list. The displayed images can then sorted by item. (Default : OFF)

The setting can be made through [Client Settings] - [Operation Settings] - [Addition of List Display function in Generic].






p.364 [Addition of List Display function in Generic Image] checkbox [Client Settings] - [Operation Settings]




5 Click the [OK] button.

- The patient ID confirmation screen will be displayed.



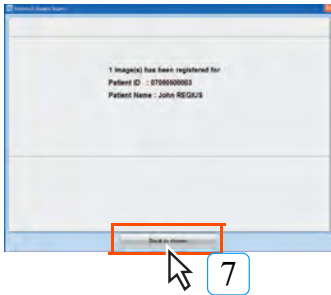
Select the image file format in “Refine” pull-down menu and click [Run] button to extract the images to be displayed in the image list.






6 Confirm the patient ID for the image and click the [Yes] button if OK.

- The message “Registering image. Please wait.” will be displayed followed by the message “Image registration complete” together with the content of the registration (patient ID and name).



7 Confirm the registration content and click the [Back to viewer] button.

- The viewer screen will be displayed.
- The registered image will be added to the viewer screen.

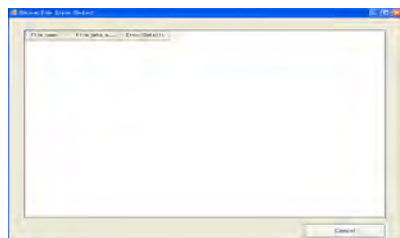
 The captured images will be displayed on the screen in the order that the image is created.



A message will be displayed when the image registration is failed.



Clicking the [Details] button displays the reason of failure, allowing you to locate the reason of failure.



Possible reasons for registration failure are as follows;

- Data defined and required by DICOM standard does not exist.
- Data in format not defined by DICOM standard exists.
- Data length exceeds the limit defined by DICOM standard.
- Data with characters or numerical codes not defined by DICOM standard exists.

The reasons displayed by [Detailed] button will be stored in the following directory;

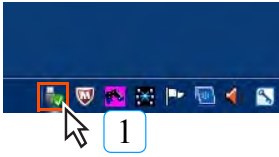
D:\KonicaMinolta\Kim\Server\Log\InTakeError.csv
(When D-drive is not available, the same directly but in C-drive)

Note: A blank may be displayed, though seldom, for errors caused by illegal images. If such is the case, please contact the technical representative.



Disconnecting media

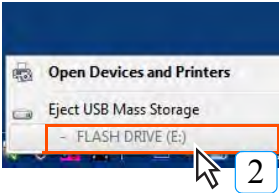
After completion of the step-7 above, disconnect the media from the task tray at the bottom of the OS desktop following the procedure described below.



1

Click the [Safely Remove Hardware and Eject Media] icon in the task tray at the bottom-right of the Desktop.

- The [Safely Remove Hardware and Eject Media] menu appears.



2

[From the list of options in the [Safely Remove Hardware and Eject Media] menu, click the hardware that you wish to remove.

- A message indicating that the hardware was safely removed appears.



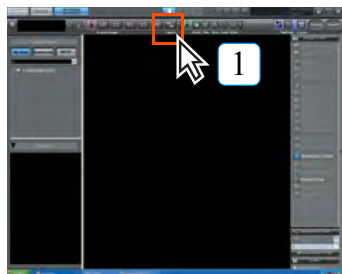
3

Remove the media.

- The "Stop Hardware Device" screen appears.

2) Acquisition from Folder

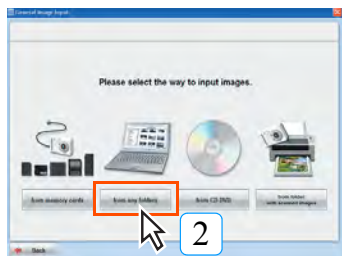
Allows ImagePilot to acquire images from folders.



1 Click the [Import] button.

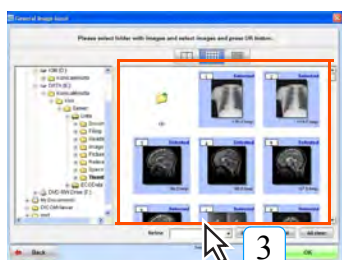


- The acquisition source selection screen will be displayed.



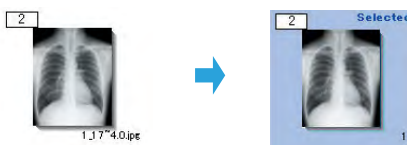
2 Click the [from any folders] button.

- The image list display screen will be displayed.



3 Click the image on the list to be acquired by ImagePilot.

- The frame of the selected image will be shown in blue. Clicking the selected image again will delete the blue frame and cancel the selection.



- Multiple images may be selected. Selected are displayed at the bottom of the screen.
- Click the [Select all] button to select all images.
- Click the [All clear] button to cancel all image selections.



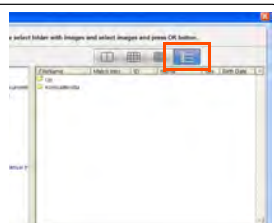
Only images (or motion images) acquirable by ImagePilot will be displayed on the image list.



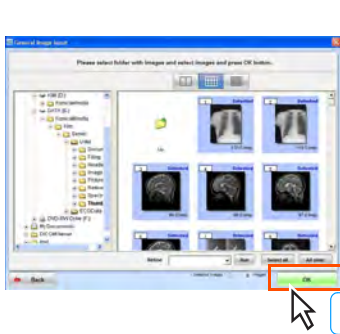
Select the image file format in "Refine" pull-down menu and click [Run] button to extract the images to be displayed in the image list.



Using the User Tool setting, it is possible to display [List Display] button. Clicking this button displays images in list. The displayed images can then sorted by item. (Default : OFF)
The setting can be made through [Client Settings] - [Operation Settings] - [Addition of List Display function in Generic].




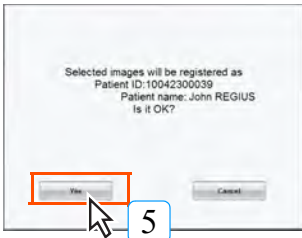
p.364 [Addition of List Display function in Generic Image] checkbox
[Client Settings] - [Operation Settings]



4 Click the [OK] button.

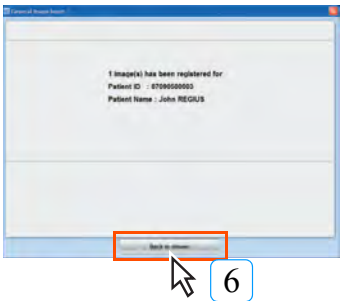
- The patient ID confirmation screen will be displayed.

 In cases where a DICOM images patient ID is different from the currently opened one, the message. [Mismatch] will be displayed below the image.




5 Check the patient ID for the image and click the [Yes] button if OK.

- The message “Registering image. Please wait.” will be displayed followed by the message “Image registration complete” together with the content of the registration (patient ID and name).



6 Check the registration content and click the [Back to viewer] button.

- The viewer screen will be displayed.
- The registered image will be added to the viewer screen.

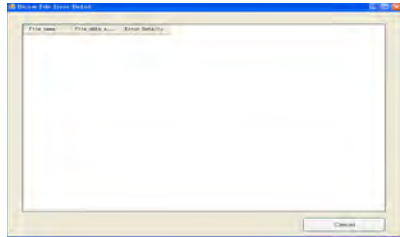
 The captured images will be displayed on the screen in the order that the image is created.



A message will be displayed when the image registration is failed.



Clicking the [Detail display] button displays the reason of failure, allowing you to locate the reason of failure.



Possible reasons for registration failure are as follows;

- Data defined and required by DICOM standard does not exist.
- Data in format not defined by DICOM standard exists.
- Data length exceeds the limit defined by DICOM standard.
- Data with characters or numerical codes not defined by DICOM standard exists.

The reasons displayed by [Detail display] button will be stored in the following directory;

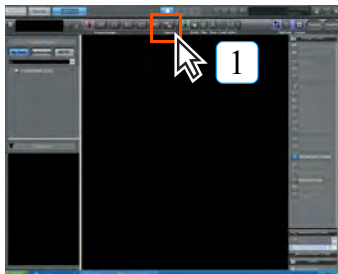
D: \KonicaMinolta\Kim\Server\Log\InTakeError.csv
 (When D-drive is not available, the same directly but in C-drive)

Note: A blank may be displayed, though seldom, for errors caused by illegal images. If such is the case, please contact the technical representative.

3) Acquisition from CD/DVD

Images may be acquired from CD/DVD.

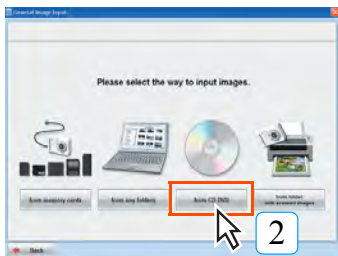
PDI write images and general-purposes write images may also be acquired following the procedure described below.



1 Click the [Import] button.




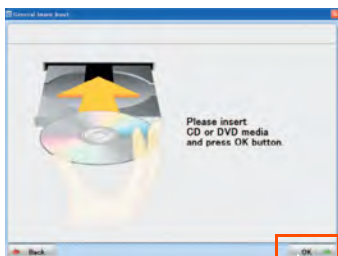
- The acquisition source selection screen will be displayed.



2 Click the [from CD DVD] button.

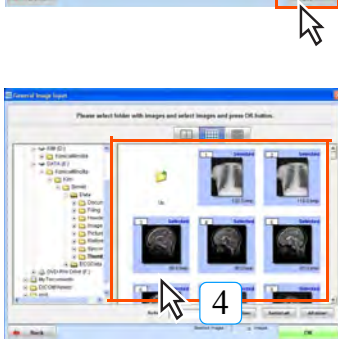
- The message "Please Insert CD or DVD media and press OK button" will be displayed.
- The disc drive tray will open.

 p.29 Readable/
Writable Media



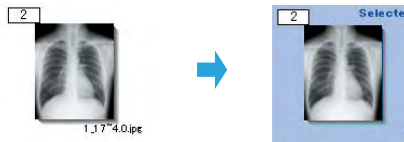
3 Set the CD-R or DVD containing the required image data in the disc drive and click the [OK] button.

- The message "Preparing image display. Please wait" will be displayed followed by display of a list of images.





4 Click the image on the list to be acquired by ImagePilot.


- The frame of the selected image will be shown in blue. Clicking the selected image again will delete the blue frame and cancel the selection.



- Multiple images may be selected. Selection are displayed at the bottom of the screen.
- Click the [Select all] button to select all images.
- Click the [All clear] button to cancel all image selections.

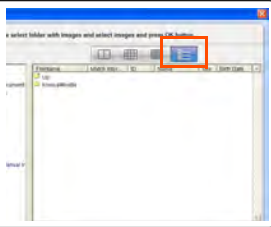
 Do not disconnect the media until image acquisition has been completed.

 Only images (or motion images) acquirable by ImagePilot will be displayed on the image list.

 If a DICOM image that has a Patient ID different from the image currently displayed is imported, a message "Unmatched Image" will be displayed beneath the image.

user tool Using the User Tool setting, it is possible to display [List Display] button. Clicking this button displays images in list. The displayed images can then sorted by item. (Default : OFF)

The setting can be made through [Client Settings] - [Operation Settings] - [Addition of List Display function in Generic].




p.364 [Addition of List Display function in Generic Image] checkbox [Client Settings] - [Operation Settings]

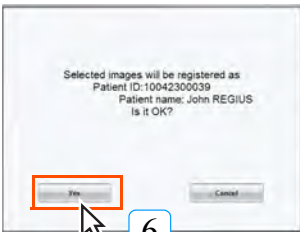


5 Click the [OK] button.

- The patient ID confirmation screen will be displayed.

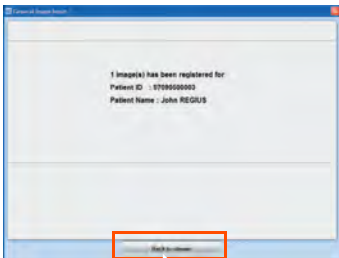
 Select the image file format in "Refine" pull-down menu and click [Run] button to extract the images to be displayed in the image list.

Refine Run




6 Check the patient ID for the image and click the [Yes] button if OK.

- The message "Registering image. Please wait." will be displayed followed by the message "Image input is complete" together with the content of the registration (patient ID and name).



7 Check the registration content and click the [Back to viewer] button.

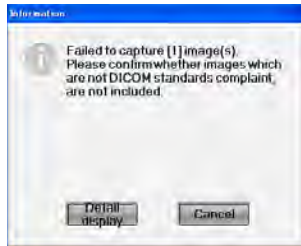
- The viewer screen will be displayed.
- The registered image will be added to the viewer screen.

 The captured images will be displayed on the screen in the order that the image is created.

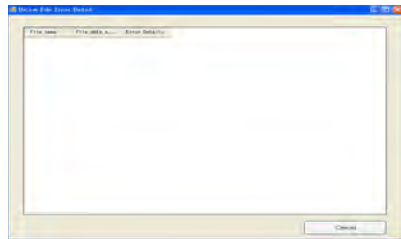
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A message will be displayed when the image registration is failed.



Clicking the [Detail display] button displays the reason of failure, allowing you to locate the reason of failure.



Possible reasons for registration failure are as follows;

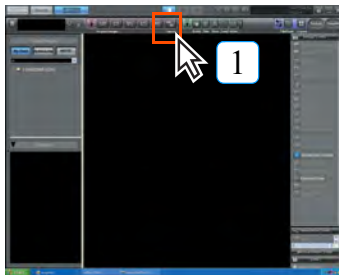
- Data defined and required by DICOM standard does not exist.
- Data in format not defined by DICOM standard exists.
- Data length exceeds the limit defined by DICOM standard.
- Data with characters or numerical codes not defined by DICOM standard exists.

The reasons displayed by [Detail display] button will be stored in the following directory;

D: \KonicaMinolta\Kim\Server\Log\InTakeError.csv
(When D-drive is not available, the same directly but in C-drive)

Note: A blank may be displayed, though seldom, for errors caused by illegal images. If such is the case, please contact the technical representative.

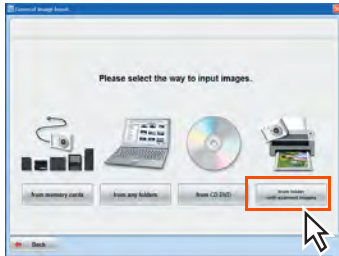
4) Acquisition from Folder of Images read by Scanner



1 Click the [Import] button.

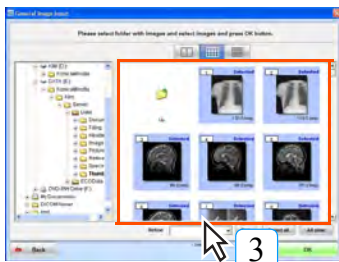


- The acquisition source selection screen will be displayed.



2 Click the [from folder with scanned images] button.

- The acquisition source selection screen will be displayed.



3 Click the image on the list to be acquired by ImagePilot.

- The frame of the selected image will be shown in blue. Clicking the selected image will delete the blue frame and cancel the selection.



- Multiple images may be selected. Selected are displayed at the bottom of the screen.
- Click the [Select all] button to select all images.

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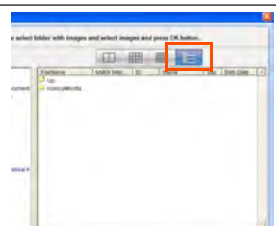
Only images (or motion images) acquirable by ImagePilot will be displayed on the image list.

In cases where a DICOM images patient ID is different from the currently opened one, the message. [Mismatch] will be displayed below the image.

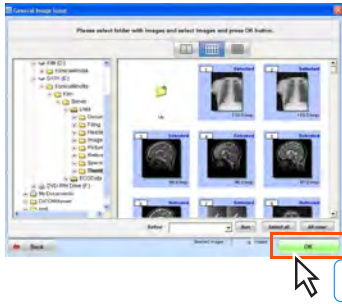


Using the User Tool setting, it is possible to display [List Display] button. Clicking this button displays images in list. The displayed images can then sorted by item. (Default : OFF)

The setting can be made through [Client Settings] - [Operation Settings] - [Addition of List Display function in Generic].




p.364 [Addition of List Display function in Generic Image] checkbox [Client Settings] - [Operation Settings]

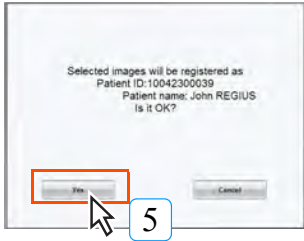


4 Click the [OK] button.

- The patient ID confirmation screen will be displayed.

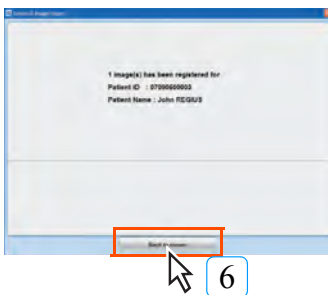
 Select the image file format in "Refine" pull-down menu and click [Run] button to extract the images to be displayed in the image list.

Refine Run




5 Check the patient ID for the image and click the [Yes] button if OK.

- The message "Registering image. Please wait." will be displayed followed by the message "Image input is complete" together with the content of the registration (patient ID and name).



6 Check the registration content and click the [Back to viewer] button.

- The viewer screen will be displayed.
- The registered image will be added to the viewer screen.

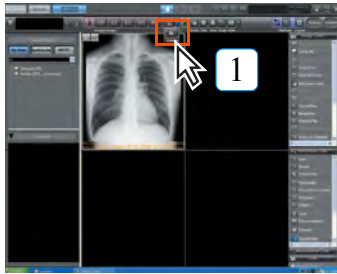
 The captured images will be displayed on the screen in the order that the image is created.



In cases of image registration failure, the message "Failure to register... (number) images of selected image count X" will be displayed. Damaged images, images not meeting specification requirements or images already acquired cannot be registered.

5.1.5 Importing Schema

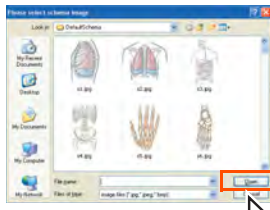
The procedure for importing the schema to ImagePilot is described below.



1 Click the [Schema] button.

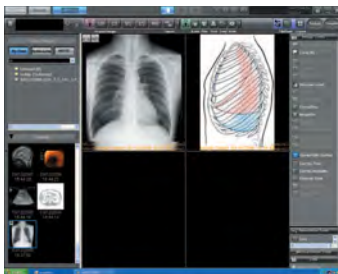



- Import target folder select screen will be displayed.




2 Select the schema image to be used, and click [Open] button.

- The schema is imported and displayed on the viewer screen.



 It is possible to add annotations or output the schema image as is possible with other images.

 Having stored an available JPEG or BMP format image with the following path enables the doctor to import the image as a schema to ImagePilot.
 D:\KonicaMinolta\Kim\Server\Env\DefaultSchema
 (For the Server PC where D-drive is not available, the same path will be applied to the image file stored in C-drive)
 * For the PC that has no D-drive, it resides at the same directory in C-drive.

5.1.6 Importing images using the PDI Importer

Read the file structure of the DICOM media file that has images that were created and saved on different kinds of media (CD, DVD, USB memory) at another facility. Combine the import information from the other facility and import the images.

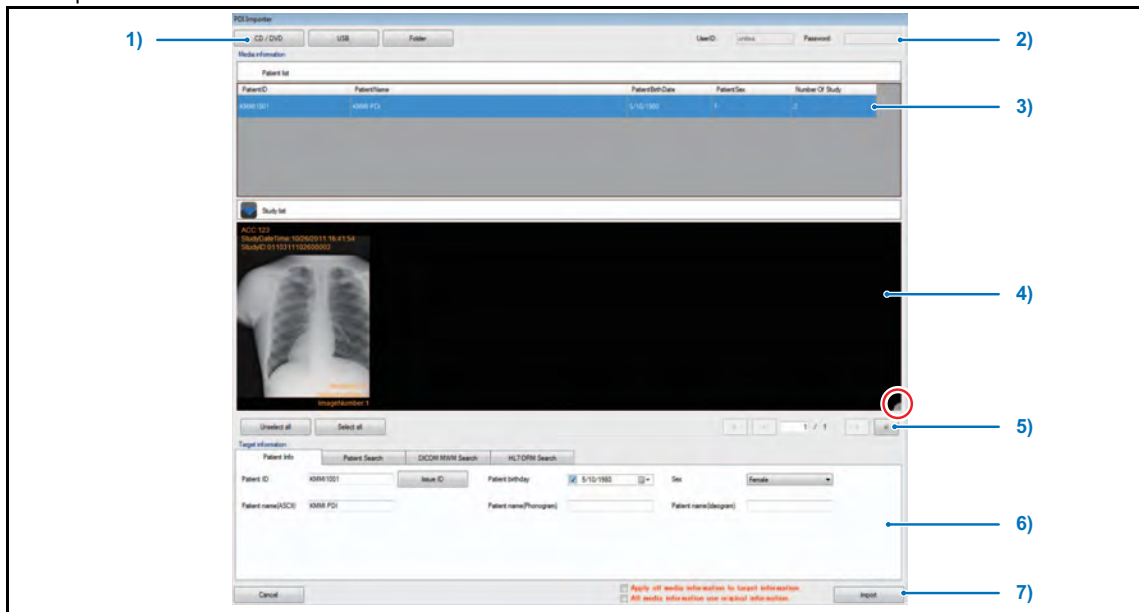


This function is only enabled when the ImagePilot MEDIA INPUT OPTION is set in Options.

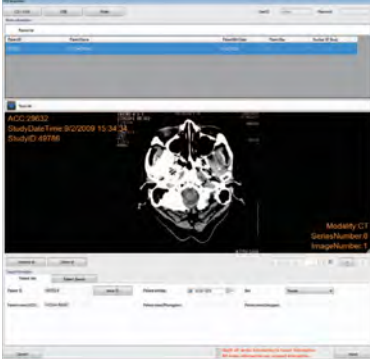
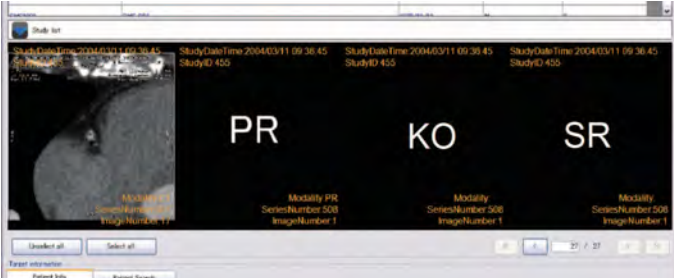


p.297 Display PDI Importer button in patient registration screen

PDI Import Screen

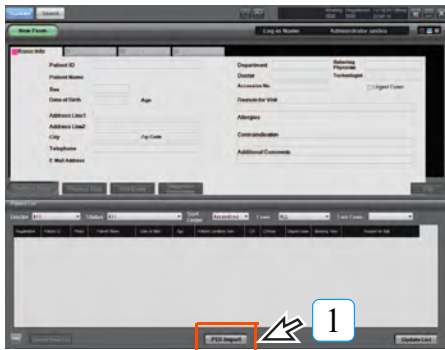


| Item | Function |
|----------------------------------|---|
| 1) Media Selections | |
| [CD/DVD] button | Used to import images from a CD or DVD. |
| [USB] button | Used to import images from a USB memory. |
| [Folder] button | Used to import images from another computer. |
| 2) Login Information | |
| UserID / Password | Displays the information of the user currently logged onto ImagePilot. |
| 3) Patient Information Display | |
| Patient ID, Patient Name, others | Displays the information of the DICOMDIR read from media.(Display only) |
| Study List / Series List | If you double click on the display or click the [V] button, a study list or series list is displayed. |

| Item | Function |
|-------------------------------------|---|
| 4) Image Information Display | |
| Image Display | <p>Displays images read from media.</p> <p>The image display on the screen will be a 1x1 to 3x10 display. (Row x Column)</p> <p>The screen on the previous page reads a single image on a 1x5 display.</p> <p>Click the part shown in the circle on the lower right corner of the image information display to change the format (Image display default: 1x5).</p> <p>Example of 1x1 display</p>  <p>Note that, for KO and SR data, [KO] and [SR] character thumbnails appear to enable patients allocated as images to be specified and captured.</p>  |
| 5) Image Selections | |
| [Unselect all] button | Unselects all selected images. |
| [Select all] button | Selects all images. |
| [<] button | Displays the previous undisplayed page (image) on a separate display. |
| [>] button | Displays the subsequent undisplayed page (image) on a separate display. |
| m / n | <p>Current page number/total number of pages for the study.</p> <p>Enter the page number and press the [Enter] key to bring up the screen you selected.</p> <p>If you change the image division number that is shown on the screen, it modifies the value for the "current page number/total number of pages for the study".</p> |
| [<] button | Displays the previous exam image. |
| [>] button | Displays the subsequent exam image. |
| 6) Specifying the Allocation Method | |
| [Patient Info] tab | <p>For new patients, register the patient information directly from the media.</p> <p>The patient information shown in this tab can be edited.</p> |
| [Patient Search] tab | <p>Search existing patient information using patient ID and patient name.</p> <p>The search results are shown in the Results List Display.</p> <p>Click the patient to allocate an image from the media.</p> |

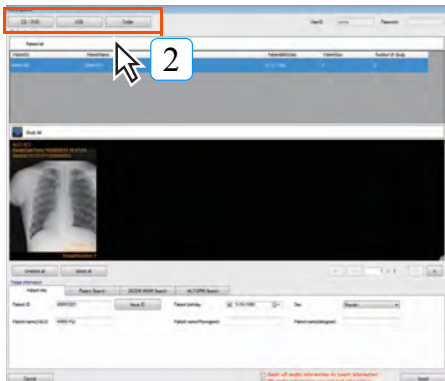
| Item | Function |
|---|---|
| 7) Controls | |
| [Cancel] button | Cancels the image import and closes the PDI Importer screen. |
| [Apply all media information to target information] | Checking this item allocates all images selected from media to patient information specified by the allocation method. |
| [All media information use original information] | Patient information shown on the patient information display is enabled only when there is one case. Checking this item removes all allocated settings and directly imports all information from media. |
| [Import] button | Imports images under set import conditions. |

How to import images using the PDI Importer



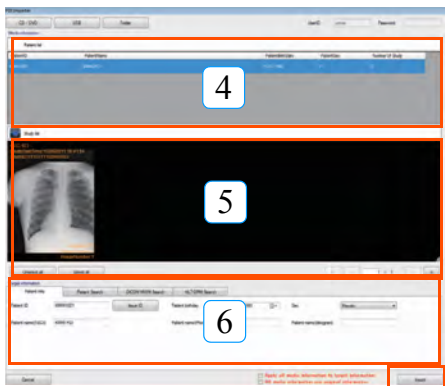
1 Click the [PDI Import] button on the Patient Receipt screen.

- The PDI Importer screen opens.



2 Click the Import Media button.

- [CD/DVD] button:
Opens the drive and displays a confirmation message.
- [USB], [Folder] buttons:
Displays a confirmation message.



3 Set up the media to be read.

- CD/DVD:
If you place the media in the PC's drive and close it, the media will initialize and read automatically.
- USB memory:
If you insert the memory in the PC's USB port, the media will initialize and read automatically.
- Folder:
The folder select dialogue box is displayed. Select the load folder and click the [OK] button.

4 Select the patient whose image is imported on the patient information display.

- The image of the selected patient is displayed on the image information display.



5 Select the image to import.

- To select an image, click on it.
Re-click the image to unselect it.
You can select the range by using the Shift key.


6 Specify the patient to allocate to the selected image.

- Selects the search method for an designated patient using the specify allocation method tab, and specifies the patient to allocate to images from search results.

7 Click the [Import] button.

- The selected image is read onto the image information display, and allocated to the patient information specified by the specify allocation method.


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 If you don't perform these steps correctly, you could assign the wrong image to a patient by mistake. Proper operation is the responsibility of the user.

5.1.7 Associating patient info with an image (Unnamed Image Folder Function)

In normal CR and AeroDR image import, images cannot be read without inserting a cassette into the cassette cartridge after clicking the [Modality] button of ImagePilot. However, if the unnamed image folder function is ON, images can be read without clicking the [Modality] button of ImagePilot. The imported images are saved in the unnamed image folder in ImagePilot.

Note, however, that when this function is used, correlation between patient information and images is not possible making it necessary to carry out correlation after image acquisition. The procedure for correlating patient information with images saved in the unnamed image folder is described below.

 **Cautions regarding correlating patient information with images**

- Care must be taken not to correlate images with the information of another patient.
- Do not carry out for multiple patients simultaneously as this may result in confusion between patients.
- The date of exposure should be checked before carrying out correlation.
- When the patient whose image is being viewed, association of unnamed images is disabled. Associate the image after the study is completed.

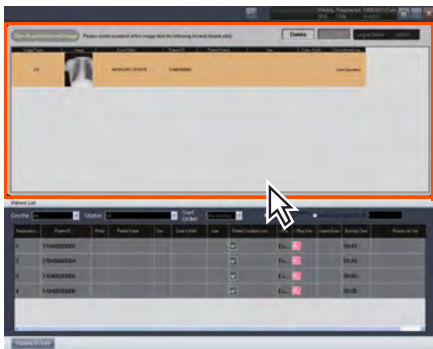
<Correlating Patient Information with Images> When unnamed images are acquired, an exclamation mark [!] is displayed at the top of the screen to indicate that the image is unnamed.



1 Display the patient information input screen and click the [!] button.

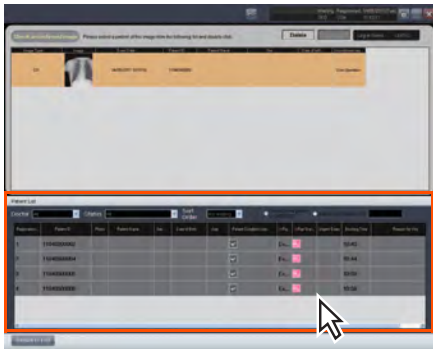


- The unnamed image setting screen will be displayed.



2 Select the image to be correlated to patient information from the unnamed image list displayed at the top of the screen.

- The selected image line will change to orange.
- Several lines in the Image List can be selected by selecting while [shift] and [Ctrl] keys are kept pressed.



3 Select the patient to whom the image selected in step-2 above is to be correlated from the patient list displayed at the bottom of the screen. Press the [Enter] key, or double click the patient tab.

- The image will be associated with the Patient Information, and will be deleted from the “Unnamed Image List”.

4 Repeat the steps-2 and 3 to complete correlation of all images to patient information.

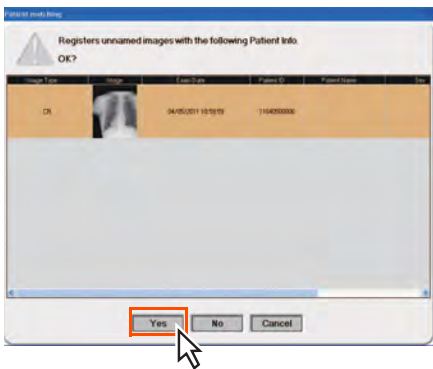
5 Click the [Return to List] button.

- A request for confirmation will be displayed.



6 Check images and patient names and click [Yes] button if OK.

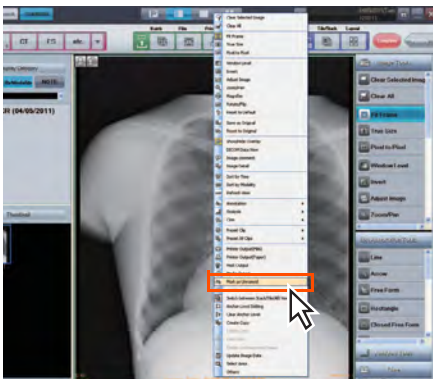
- Correlation of patient information with images will be carried out.



5.1.8 Moving to unnamed image folder

If an image is associated with the wrong Patient Information, the demographics may be fixed by following the procedure below.

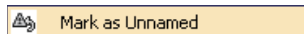
Display the image on the viewer screen.




1 Select and right-click the desired image.


- The right-click menu will be displayed.

2 Select [Mark as Unnamed] button.



- Display will return to the pre-image correlation status.
- Return to "5.1.7 Associating patient info with an image (Unnamed Image Folder Function)", and re-associate patient info with the image.

 When moving multiple images to unnamed image folder, if there are images that have no name set or cannot be moved (such as NOTE images or images specified by NOTE) included in the selected images, a message will be displayed indicating that the images cannot be moved after selecting [Mark as Unnamed].

 Caution: New study IDs and series numbers are created for images that are moved to unnamed and they become independent studies and series.

5.1.9 Reading the images from external viewers or servers

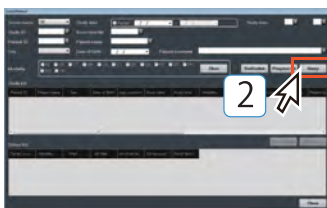
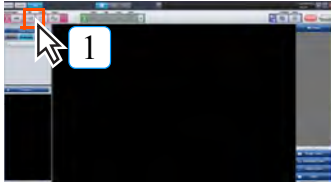
The procedure to import images from external viewers or servers is described below.



- 1 Click the [Query/Retrieve] button of the patient search screen or [QR] button of the viewer screen.



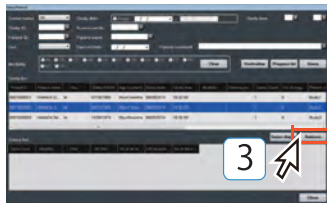
- Query/Retrieve screen will be displayed.



- 2 Set the search condition such as "Server name", "Study date" or "Study time", and click the [Query] button.

- Search results will be displayed in the Study list.

Note: When the procedure is started from the Viewer screen, the search results will be displayed together with the information for the corresponding patient.



- 3 Select from the Study list the study of which the image shall be imported, and click the [Retrieve] button.

- The image will be imported to the ImagePilot.

In addition, after selecting the Study of which the image shall be imported, clicking the [Series Display] button will display the Series linked to that Study.

Select from the displayed list the Series of which the image shall be imported, and click the [Retrieve] button.

- The image will be imported to the ImagePilot.



Two or more rows where "Study" or "Series" is displayed can be collectively selected by selecting them while keep pressing the [Shift] or [Ctrl] key.

Note: "Series" cannot be displayed when several "Study" are selected.




Clicking the [Progress list] button of the Query/Retrieve screen to display the Progress list allows viewing the status of image reading or canceling the image reading.




Images such as mammography, linac graphy or stitched image that are not supported by the ImagePilot cannot be imported or diagnosed.

5.1.10 Animal Imaging by using an ExamProtocol

In animal imaging, an ExamProtocol is applicable.

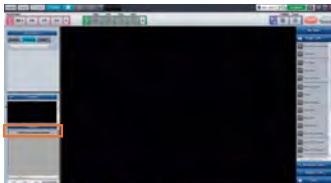


The ExamProtocol function is available by configuring user tool setting.
(Default: OFF)
Select ExamProtocol for [List to be displayed during CR/DX(AeroDR) acquisition] on
[Common Settings] - [Operation Settings] - [Input] tab.

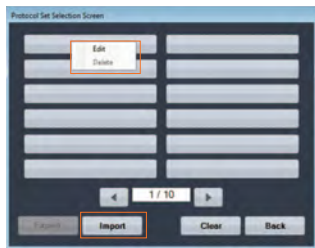


This function cannot be used on patients who are already displayed on another ImagePilot-CL.
Also, changing and clearing Protocol can only be done from ImagePilot-SV/CL.


Creating an ExamProtocol setting



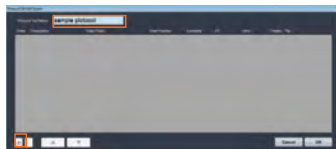
- 1 Click the button at the top of the tool box at the lower left side of the dialog box.
 - [Protocol Set Selection Screen] is displayed.



- 2 Right-click on [Protocol Set Selection Screen], and then select [Edit] in the menu displayed.
 - [Protocol Set Edit Screen] is displayed.

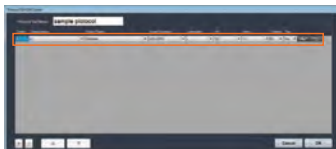
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- 3 Enter the name of the ExamProtocol in the [Protocol Set Name] field, and then click [+].
 - A blank line is displayed.

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- 4 Configure the [Description], [Body Parts], [View Position], [Laterality], [kV], and [mAs] settings.




Configurations can be customized to add [Rotate] and [Flip] settings to specify rotate and flip operations to be performed when acquiring images. [Body Part] settings can also be added to specify specific areas of the body to image.
Refer to one of our service advisors for more information.



- 5 Add blank lines by clicking [+] to configure settings of the ExamProtocol as you need.



- 6 Click [OK].




To delete a line, select the line and click [-]. To change the order in which the lines are listed, select a line and click the [▲] and [▼] buttons.



- The ExamProtocol you created is saved and it is shown in [Protocol Set Selection Screen].

7 Repeat Steps 1 to 6 to register ExamProtocols as you need.

 Click [Export] to output the file of the ExamProtocol you created.

Taking images by using an ExamProtocol



1 Click the button at the top of the tool box at the lower left side of the dialogue box.

- [Protocol Set Selection Screen] is displayed.

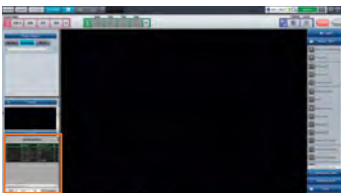


2 Configure an ExamProtocol or load an ExamProtocol you have configured.

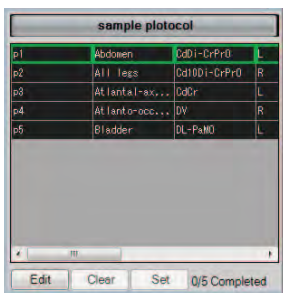
- To load an ExamProtocol you have configured. click [Import].



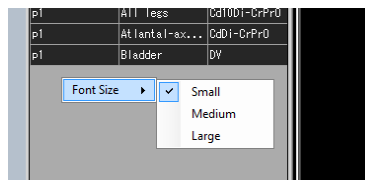
3 Click the ExamProtocol you use.





- The tool box at the lower left side of the dialogue box shows the ExamProtocol you selected.



- Right click the mouse in the tool box and select [Font Size] to display the sub-menu and change the size of the font inside the tool box.




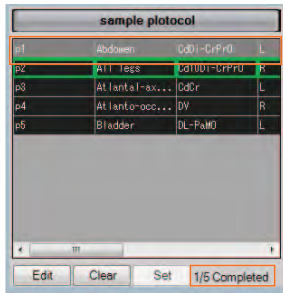
 **p.109 ExamProtocol (tool box)**

 When Edit has been performed on the Protocol Set Selection Screen, use ExamProtocol (tool box) to make sure the edits have been correctly applied before using.




4 Load one image.

 Open Viewer Screen before imaging.
Use caution because the protocol values are not shown on the Full Screen and Comparison Screen.



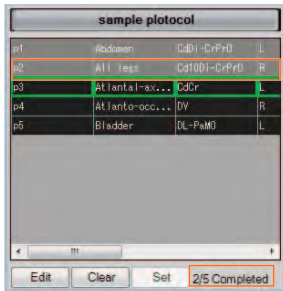
- The protocol setting selected in a green frame turns to gray, and the [Completed] value at the lower side of the tool box counts up.

 To delete captured image and re-capture an image, click the [Clear] button. The protocol that was allocated to the image will be released, and the green frame returns to the original protocol position in order to allocate the same protocol to the next captured image.

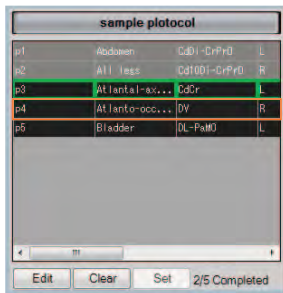
- To allocate a selected protocol setting to a selected image, select an image, select a protocol setting, and then click [Set].



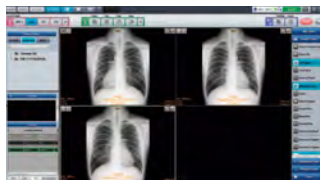
5 Load the next image.



- The protocol setting selected in a green frame turns to gray, and the [Completed] value at the lower side of the tool box counts up.

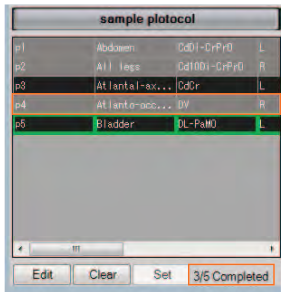


- To allocate another ExamProtocol you want to use. Select the protocol you want to use and load images.



6 Load the 3rd image.

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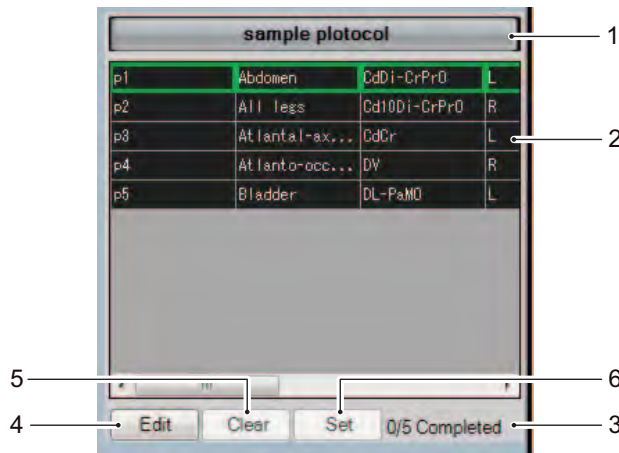


- The protocol setting selected in a green frame turns to gray, and the [Completed] value at the lower side of the tool box counts up.
To the image loaded, the ExamProtocol setting you selected is applied.



To retake images, click the [Edit] button in the lower-left corner of the [Viewer] screen and configure settings on the [Protocol Set Edit Screen].

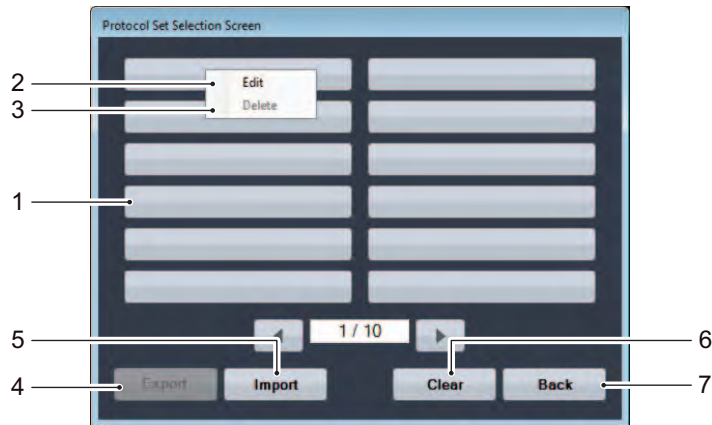
ExamProtocol (tool box)



| No. | Item | Function |
|-----|---------------------------|---|
| 1 | ExamProtocol name | Shows the name of the ExamProtocol. |
| 2 | ExamProtocol setting name | Shows the name of the ExamProtocol setting. The ExamProtocol setting currently selected is indicated by a green frame. To an image loaded, the selected protocol setting is allocated; the ExamProtocol setting is set as allocated and grayed. The green frame moves to the next ExamProtocol setting. |
| 3 | Allocated count | Shows the number of those allocated and the number of all objects. |
| 4 | [Edit] button | This button is used to add protocols when taking images using of areas other than those defined by the ExamProtocol presets. Added protocols are only valid for the current study. They will not be available for subsequent patients. |
| 5 | [Clear] button | Allows you to cancel the ExamProtocol setting allocated to the image. This button is enabled only when the allocated ExamProtocol is selected. If more than one image is selected or no ExamProtocol has been allocated to the selected image, this button is disabled. |
| 6 | [Set] button | Allows you to allocate the selected ExamProtocol setting to the selected image. Note that only one ExamProtocol setting is allocatable to one image. |

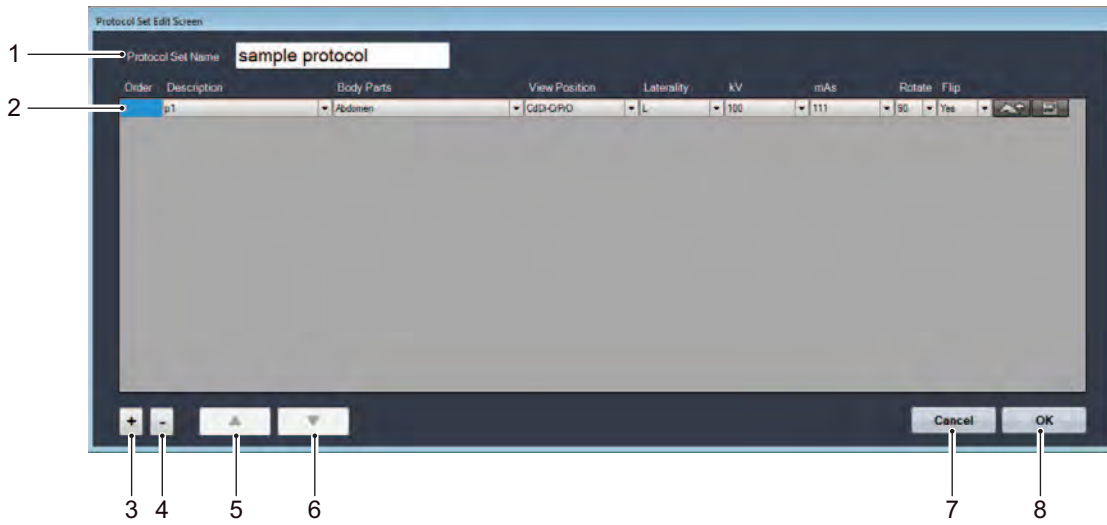
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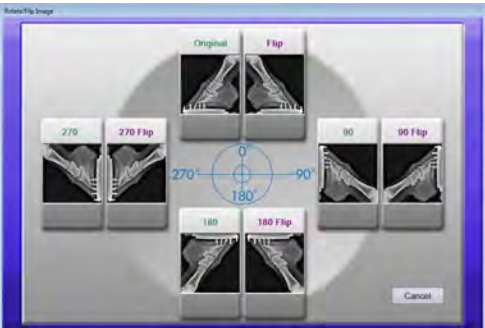


Protocol Set Selection Screen



| No. | Item | Function |
|-----|----------------------------|---|
| 1 | ExamProtocol display field | Shows an ExamProtocol registered. |
| 2 | Edit | Right-clicking on the ExamProtocol display pane shows a menu. Select [Edit] to show [Protocol Set Edit Screen], which allows you to create an ExamProtocol. |
| 3 | Delete | Right-clicking on the ExamProtocol display pane shows a menu. Select [Delete] to remove the ExamProtocol you select. |
| 4 | [Export] button | Outputs the ExamProtocol you created into a file. |
| 5 | [Import] button | Loads an ExamProtocol created. |
| 6 | [Clear] button | Close [Protocol Set Selection Screen] without selecting exposure protocol and the display returns to the viewer screen. |
| 7 | [Back] button | Closes [Protocol Set Selection Screen]; the viewer window is displayed again. |

Protocol Set Edit Screen

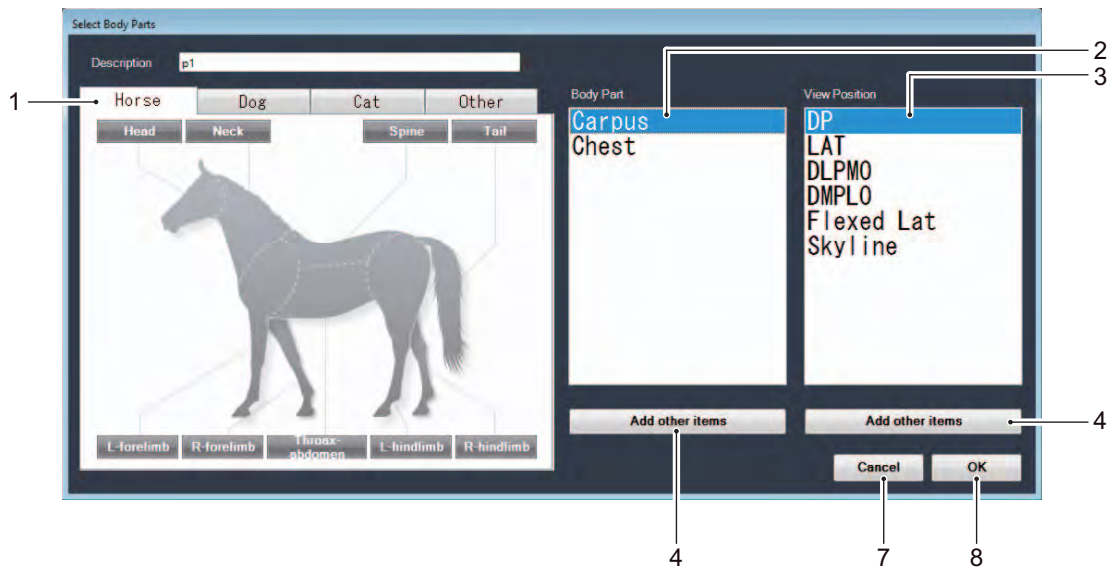


| No. | Item | Function |
|-----|-----------------|--|
| 1 | [Protocol Name] | Enter the name of the ExamProtocol. |
| 2 | Record | <p>Allows settings of the ExamProtocol to be specified. Enter an ExamProtocol setting or select a setting available in the pull-down menu of the items.</p> <ul style="list-style-type: none"> Configurations can be customized to add [Rotate] and [Flip] settings to specify automated rotate and flip operations to be performed when acquiring images. You can also click the [] button to display the following screen to configure rotate and flip settings based on resulting images displayed for your reference.  <ul style="list-style-type: none"> [Body Part] settings can also be added to specify specific areas of the body to image. Click the [] button to display the following screen.  <p>Refer to "[Select Body Parts] Screen" for more information.</p> |
| 3 | [+] button | Adds a new record. |

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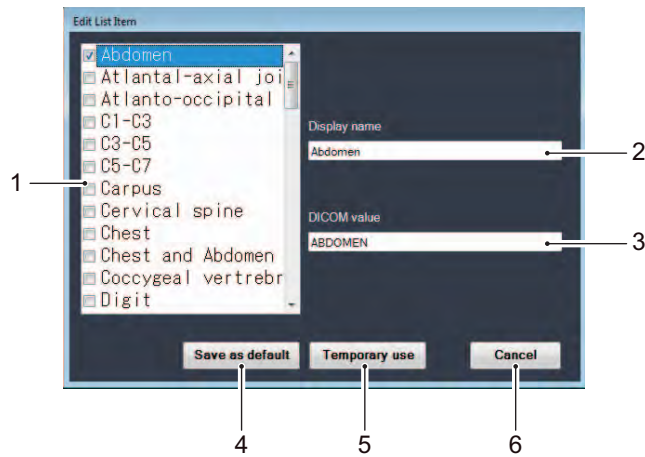
| No. | Item | Function |
|-----|-----------------|---|
| 4 | [-] button | Deletes the selected record. |
| 5 | [▲] button | Moves the selected record up. |
| 6 | [▼] button | Moves the selected record down. |
| 7 | [Cancel] button | Discards the configured settings; [Protocol Set Selection Screen] is displayed again. |
| 8 | [OK] button | Saves the configured settings; [Protocol Set Selection Screen] is displayed again. |

[Select Body Parts] Screen



| No. | Item | Function |
|-----|-------------------------|---|
| 1 | Animal Selection tab | Different types of animals are separated by tabs. Select the appropriate tab and click on the area of the animal image that you want to image. The areas of the body corresponding to the area of the image selected appears in the [Body Part] column. |
| 2 | [Body Part] | Select the specific body part to image. The imaging orientation options available for the selected body part appear in the [View Position] column. |
| 3 | [View Position] | Select the imaging orientation. |
| 4 | [Add other item] button | Click the [Add other item] button to display the [Edit List Item] screen and select desired areas of the body and orientations to image from the available options. Refer to "[Edit List Item] Screen" for more information. |
| 7 | [Cancel] button | Discards the configured settings; [Protocol Set Edit Screen] is displayed again. |
| 8 | [OK] button | Saves the configured settings; [Protocol Set Edit Screen] is displayed again. |

[Edit List Item] Screen



| No. | Item | Function |
|-----|--------------------------|--|
| 1 | Item List | This list allows you to select which options to display in the [Body Part] and [View Position] lists on the [Select Body Parts] screen. |
| 2 | Display name | This text string is the value used for the display of the corresponding option in the [Body Part] and [View Position] lists on the [Select Body Parts] screen. |
| 3 | DICOM value | This is the value saved to the DICOM image when a display name is selected. |
| 4 | [Save as default] button | This button saves the changes. The changes will appear in the [Body Part] and [View Position] lists the next time the [Select Body Parts] screen is displayed. |
| 5 | [Temporary use] button | When using this button, the changes will not appear in the [Body Part] and [View Position] lists the next time the [Select Body Parts] screen is displayed. |
| 6 | [Cancel] button | This button closes the [Edit List Item] screen. |

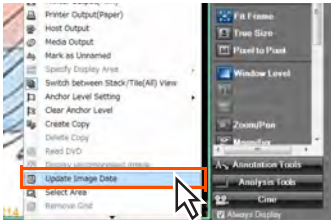
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5.1.11 Changing the date and time of a captured image

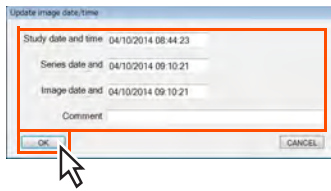
If the date of the captured DICOM or JPEG image differs from the actual photographing date, the image date and time may be changed.



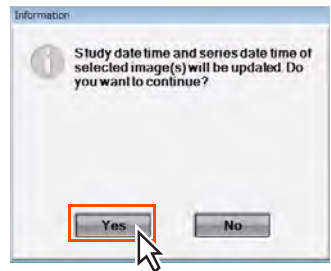
Because the date and time of the image captured by REGIUS and AeroDR is correct, the image date may not be changed.



- 1 Select image and right click.
 - The right click menu is displayed.
- 2 Select [Update Image Date].
 - The [Update Image Date/time] dialog is displayed.



- 3 Correct each setting and click the [OK] button.
 - The [Information] dialog is displayed.




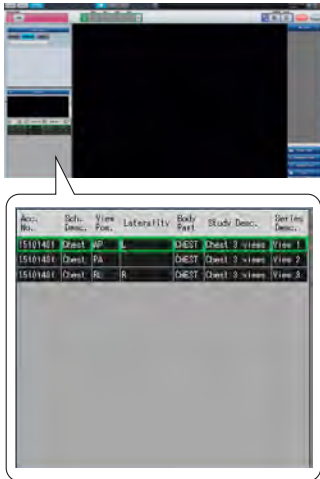
- 4 Click the [Yes] button.
 - The image date and time are corrected.



The [Study date and time] may not be corrected to a future date and time.

5.1.12 Acquiring Images via the Order List

 The OrderList function is available by configuring user tool setting.
 (Default : OFF)
 Select OrderList for [List to be displayed during CR/DX(AeroDR) acquisition] on
 [Common Settings] - [Operation Settings] - [Input]tab.



The Order List appears in the lower-left corner of the Viewer screen.

- The order information for the current day appears here.

ACC. No. :The Accession Number retrieved via MWM appears here.
Dicom tag (0008, 0050)

Sch. Desc. :The Scheduled Procedure Step Description retrieved via MWM appears here.
Dicom tag (0040, 0007)

View Pos. :The View Position acquired by the Study Code Mapping from the Code Value, which is retrieved via MWM, appears here.



"8-8) Study Code Mapping Screen"

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Laterality :The Laterality acquired by the Study Code Mapping from the Code Value, which is retrieved via MWM, appears here.

Body Part :The Body Part acquired by the Study Code Mapping from the Code Value, which is retrieved via MWM, appears here.

Study Desc. :The Study Description acquired by the Study Code Mapping from the Code Value, which is retrieved via MWM, appears here.

Series Desc. :The Series Description acquired by the Study Code Mapping from the Code Value, which is retrieved via MWM, appears here.



1 Retrieve the first image.

- The values in the selected row (first row) are allocated to the retrieved image and displayed in gray.
- The cursor moves to the next row.



2 Retrieve the second image.

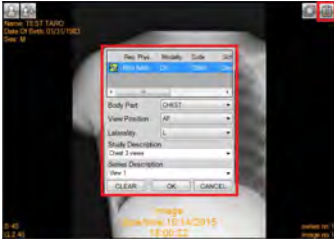
- The values in the selected row (second row) are allocated to the retrieved image and displayed in gray.
- The cursor moves to the next row.



3

Retrieve the third image.

- The values in the selected row (third row) are allocated to the retrieved image and displayed in gray.
- The cursor will no longer be displayed after all rows have been allocated.

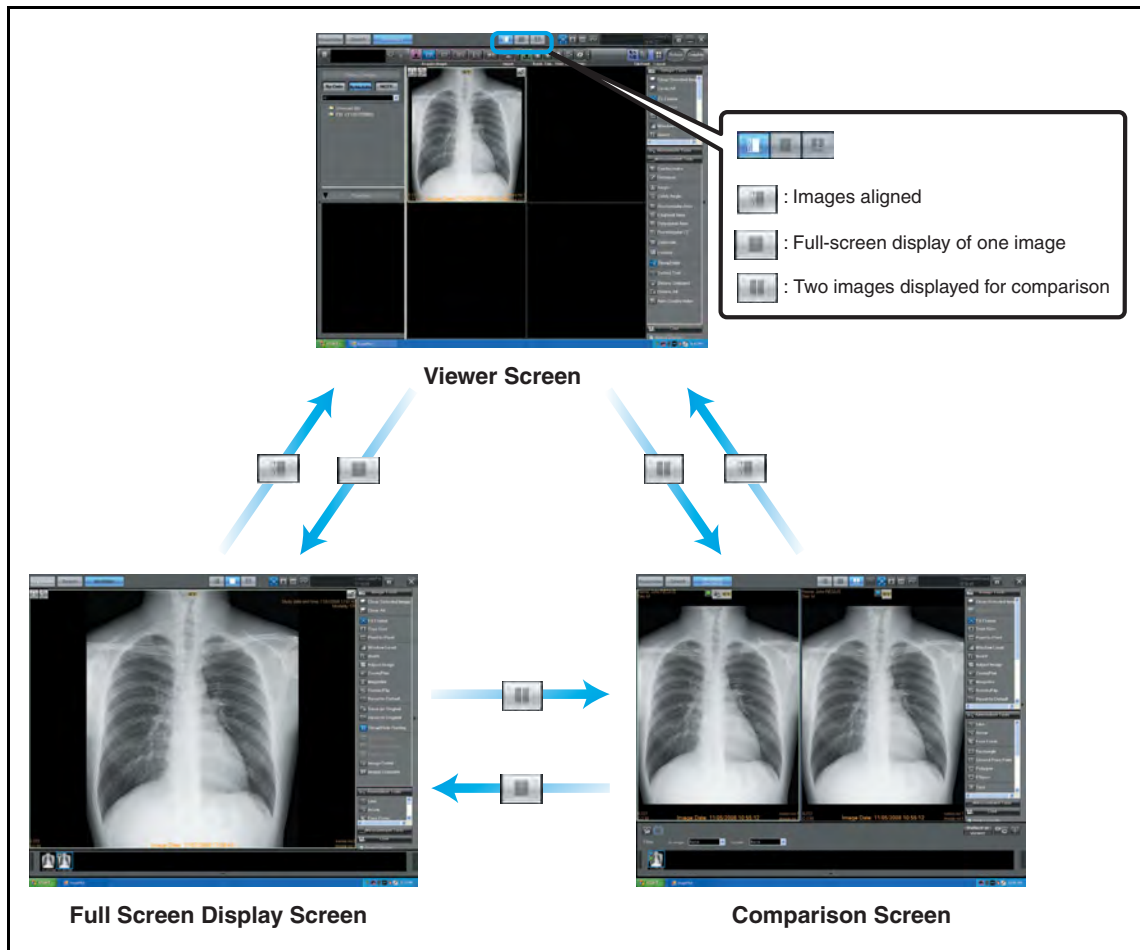


4


To change the order allocation, use the existing Study List.

5.2 Switching Display Modes

Display may be switched between the viewers, full-screen display and comparison screens depending on the application. Click the buttons at the top of the screen to switch display modes.



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 Image input/output is possible only on the viewer screen.

5.3 Editing Images

Procedures for editing images acquired by ImagePilot are described below.

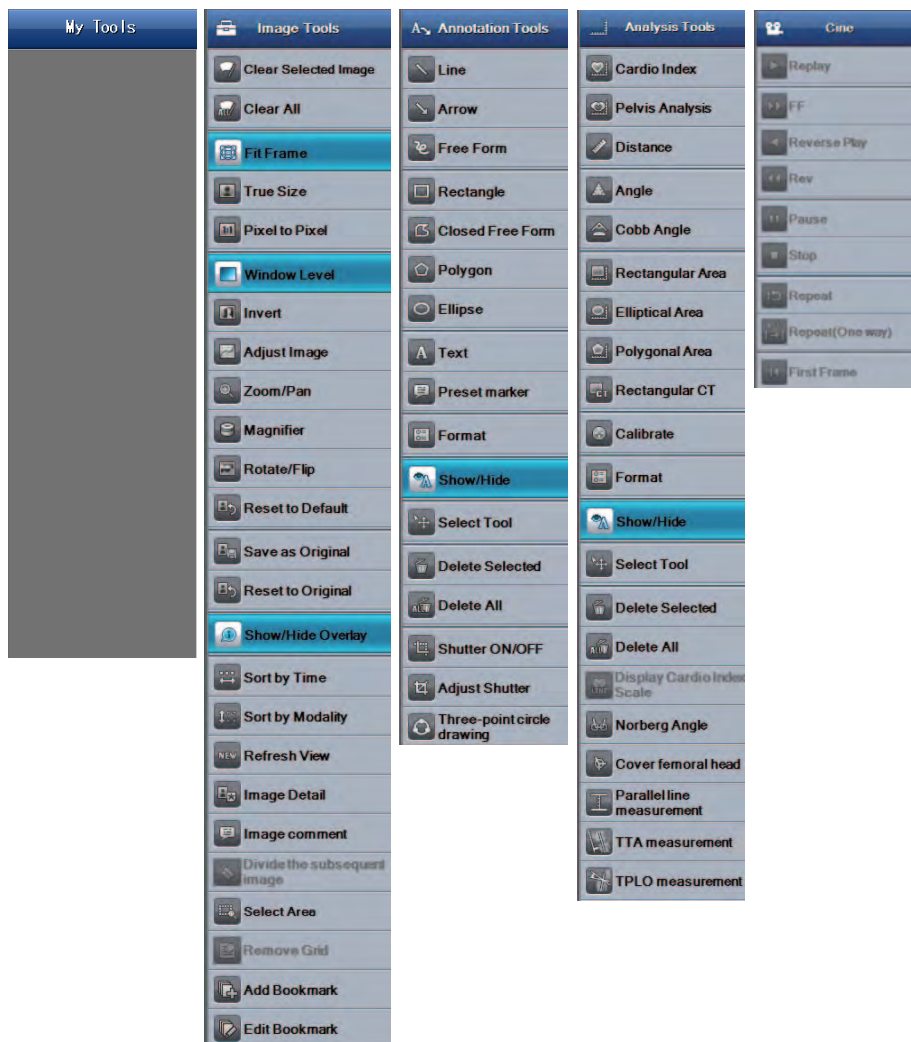
Various palettes featuring alignment of image processing buttons are used to edit images. The palettes are displayed at the right edge of the viewer, full-screen and comparison screens.

Palettes are in the following 5 types.


- **My Tools** : You can create an original editing palette for functions you often use that is registered to each user.
- **Image Tools Palette** : Features basic functions for operations such as image enlargement and image processing.
- **Annotation Tools Palette** : Features various types of annotation.
- **Analysis Tools Palette** : Features measuring functions.
- **Cine Palette** : Features functions for operations such as continuous playing or stopping of multi-frame images.

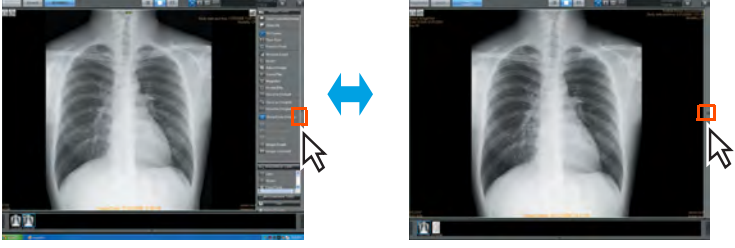


Selecting the image and pressing [Ctrl] + C on the keyboard allows copying of the image. The copied image can then be pasted to the Paint Software, etc. (the copied image will be deleted once a different operation is performed)
 Note: When pasting the image, make sure that the pasted result is correct.





Items shown in the palettes on the left are the example when all items are displayed. Therefore, it may look different from the palettes initially set on your system.


 **Switching between Palettes**
Click the black triangular button at the center of the right edge of the screen to show or conceal palettes.
In addition, if the palette name only displayed with the tools concealed, click the palette name to display the palette tools.




Palette shown Palette concealed


 **[Always Display] checkbox**
Check this box to ensure that palettes are constantly displayed.



 Image processing implemented by "Editing Images" can be stored using "GSPS" function.

 p.221 **Saving the Image Processing Settings**

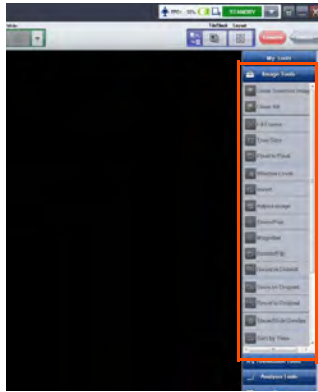
 The imaging process performed with the image edit function can be saved with the GSPS function.

 p.221 **Registering the GSPS**

5.3.1 My Tools

1) Registering functions to My Tools

Register functions you often use to My Tools.



1 Select the function you want to register to My Tools from the [Basic Functions] palette, the [Annotation] palette, the [Analysis] palette, or the [Cine] palette and drag & drop into [My Tools].

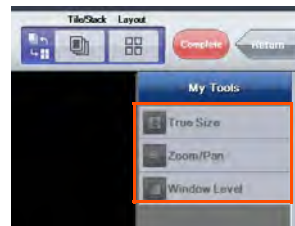
- The selected function is copied into [My Tools].



When changing the display order of registered functions

Select the function to move and drag & drop it to the place you want to move it to.

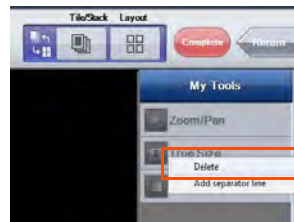
- The selected function is copied into [My Tools].



When deleting registered functions

Right click the mouse above the function you want to delete and select [Delete] from the menu that is displayed.

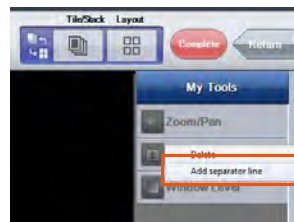
- The selected function is deleted.



When adding section lines between names of registered functions

Right click the mouse above the function under the location where you want to insert the section line and select [Add separator line] from the menu that is displayed.

- A section line is added above the selected function.



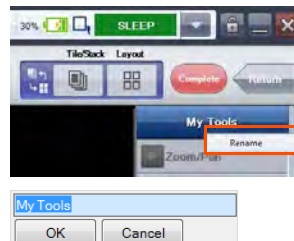
When changing the palette name [My Tools]

The only palette that can be changed is [My Tools].

1. Right click the mouse above the [My Tools] palette and select [Rename] that is displayed.

2. Enter the palette title and click the [OK] button.

- It changes to the input palette title.



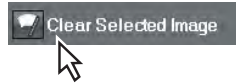
5.3.2 Image Tools

1) Clear Selected Image


Selected images may be cleared from the viewer screen.



1 Click the [Clear Selected Image] button on the Image Tools palette.



- The selected image will be cleared from the viewer field.

 Image Tools may also be manipulated from the right-click menu.

2) Clear All

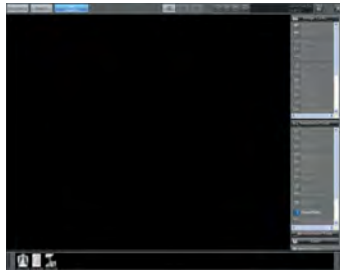
Clears all images in the viewer field.



1 Click the [Clear All] button on the Image Tools palette.



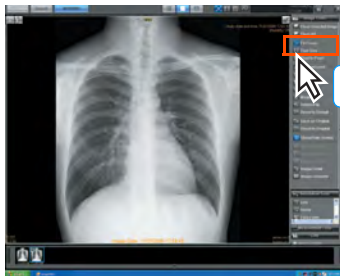
- All images displayed in the viewer field will be cleared.



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3) Fit Frame

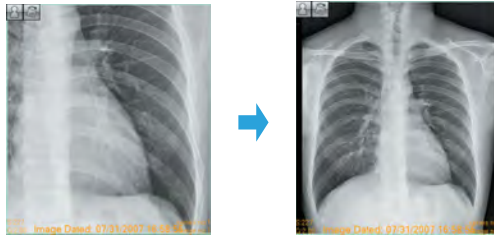
Displayed images will be matched to the frame size.



1 Click the [Fit Frame] button on the Image Tools palette.

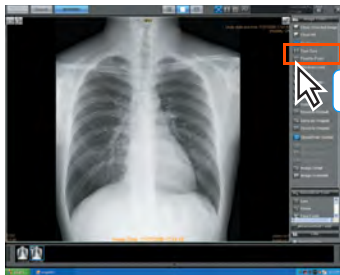


- The image on the viewer screen will be displayed with its size matched to the frame size.
- The [Fit Frame] button will be shown in light blue when selected.

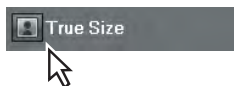


4) True Size

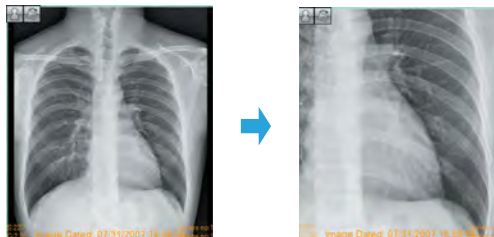
Images may be displayed in true size.



1 Click the [True Size] button on the Image Tools palette.



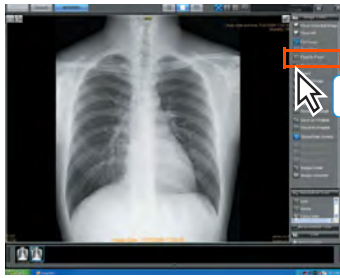
- The image on the viewer screen will be displayed in true size.



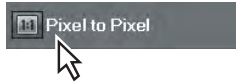
- The [True Size] button will be shown in light blue when selected.

5) Pixel to Pixel

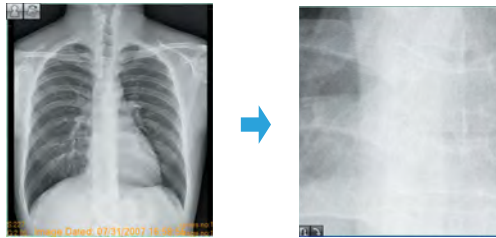
Images may be displayed in 1 on 1 format (monitor image pixel ratio).



1 Click the [Pixel to Pixel] button on the Image Tools palette.



- The image on the viewer screen will be displayed in 1 on 1 size (monitor image pixel ratio).



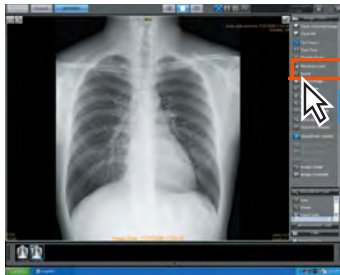
- The [Pixel to Pixel] button will be shown in light blue when selected.

6) Window Level

The image density and contrast may be adjusted.



This function is especially useful for black & white images and RGB images.



1 Click the [Window Level] button on the Image Tools palette.




2 Adjust the density and contrast by moving the mouse up, down, right or left on the image.

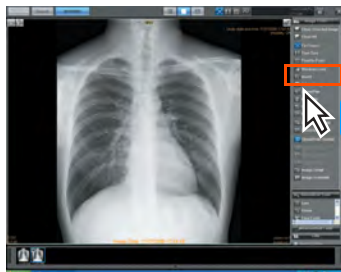
- The image will change as the mouse is moved.


7) Invert

Selected images may be black and white inverted.

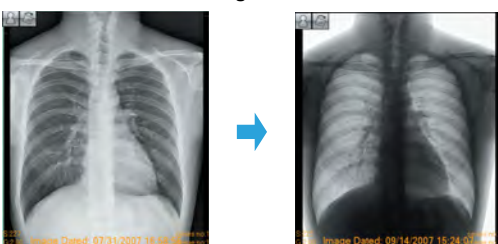
 This function is valid only for black and white images.

1 Click the [Invert] button on the Image Tools palette.




1 

- The selected image will be black and white inverted.

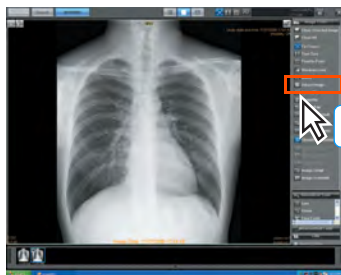



8) Adjust Image

The density and contrast of CR and AeroDR images may be adjusted.

 This function is only enabled for CR and AeroDR images. It is disabled for CR and AeroDR images imported from a media.

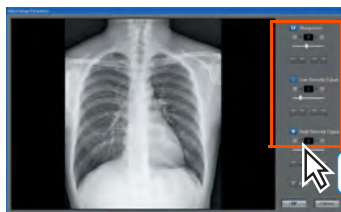
1 Click the [Adjust Image] button on the Image Tools palette.



1 

- The adjust image palette will be displayed.


2 Adjustments may be made by dragging the cursor along the [Sharpness], [Low Density Equal.] and [High Density Equal.] bars.



2


- The image will change as the mouse moves on the adjustment bars.


3 Click the [OK] button.



3

- The adjusted image will be saved and the viewer screen displayed.

 When performing image adjustment after changing Image Processing Intensity, a dialogue box will be displayed to confirm whether or not the image processing will be redone with the changed Image Processing Intensity. Clicking the [OK] button will redo the imaging process, and by clicking the [Cancel] button, a redo will not be performed.

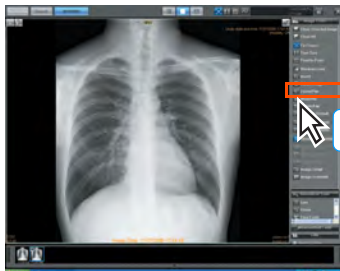
 p.322 2-15 Image Processing Intensity Setting Screen

9) Zoom/Pan

Images may be enlarged or reduced.



To change the amount of enlargement, set the Print zoom/Print zoom out Rate on the overlay display so that the current display rate can always be checked. Refer to 2-5) Overlay Items Screen for overlay settings.



1

Click the [Zoom/Pan] button on the Image Tools palette.



1

- The enlargement/reduction function will be selected and the [Zoom/pan] button shown in light

2

Click the image to be enlarged or reduced.

- The image frame will be shown in green.

3

Rotate the mouse wheel up or down to enlarge or reduce the image. Additionally, the image may be panned by dragging the mouse on the image.



user tool

Which between up/down of the mouse wheel to be assigned to zoom/pan can be set using the User Tool. (Default: up = pan, down = zoom)

The setting can be made through [Client Settings] - [Operation Settings] - [Mouse Button Settings] - [Edit Mouse Button Screen].



p.366 3-2) Edit Mouse Button Screen

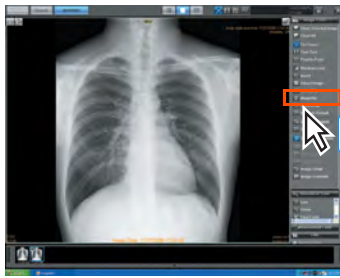
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Rotating the mouse wheel while pressing the [shift] key on the keyboard allows the image to be enlarged/reduced more precisely. Note that while in Print Composer mode, pressing the [Ctrl] key while rotating the mouse wheel allows the image to be enlarged/reduced in 5% increments without any other options.

10) Magnifier

One area of the image may be enlarged.

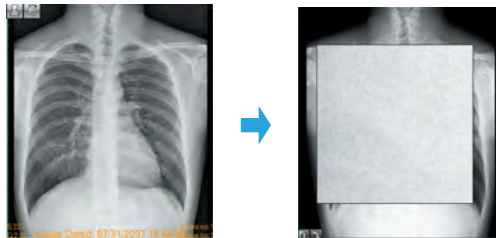


1 Click the [Magnifier] button on the Image Tools palette.



2 Click the mouse button in the area you want to enlarge.

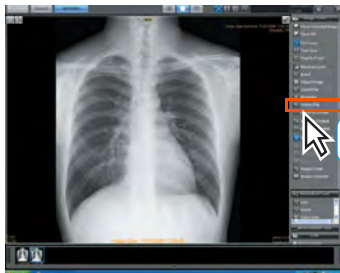
- The selected area will be enlarged when the mouse is clicked, and returns to normal when you release your finger from the mouse. Dragging the mouse while clicking the button will change the location displayed while remaining enlarged.



Pressing the [shift] key on the keyboard while the display is enlarged will retain the enlarged display even after removing your finger from the mouse.

11) Rotate/Flip

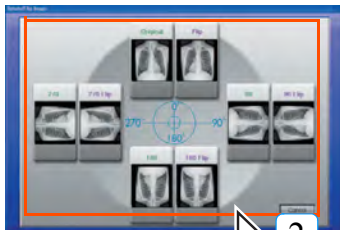
The image may be rotated or flipped.



1 Click the [Rotate/Flip] button on the Image Tools palette.

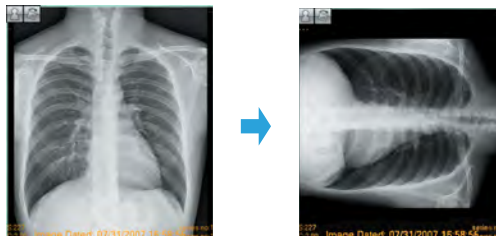


- The rotate/flip screen will be displayed.



2 Select rotate/flip referring to the images displayed on screen and click the required display area.

- The rotate/flip screen will be closed and the viewer screen displayed.
- The image will be rotated or flipped.



Example of 90-degree rotation

12) Reset to Default

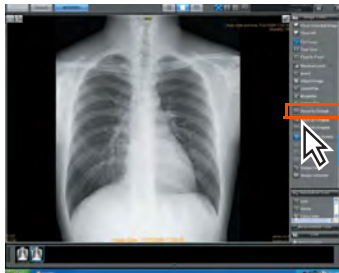
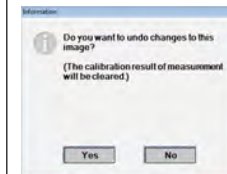
The procedure for returning to the initial status is described below.



This function is only enabled for CR and AeroDR images. It is disabled for CR and AeroDR images imported from a media. Image rotation and inversion will be retained.



When returning an image that underwent measuring calibration to its initial state, the message is displayed and the result of measuring calibration is deleted.



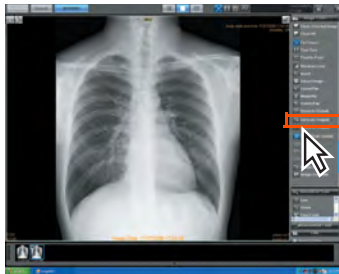
1 Click the [Reset to Default] button on the Image Tools palette.



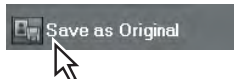
- After canceling the altered settings of density, contrast and image adjustment, resumes the original condition when it was captured.

13) Save as Original

The currently edited image (invert/rotate/flip/enlarge/zoom/image processing) will be saved as the original.



1 Click the [Save as Original] button on the Image Tools palette.



- A request for confirmation will be displayed.



2 Click the [Yes] button.

- The currently edited image (invert / rotate / flip / enlarge / zoom / image processing) will be saved as the original.



Original Image

The original image is the image and its changes (processing and markups) once the image is confirmed. The first time an image is displayed, changes are saved as the original image upon completion. Upon additional views the image changes are only saved if the save as original icon is used. Additionally, even when the image is first displayed, valid parameters when the [Save as Original] is clicked will be saved.)

<Example>

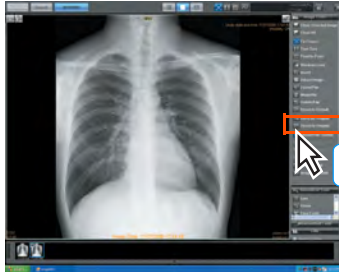
- When viewing is carried out on the viewer screen with changed processing parameters after image adjustments and output to film, or when images are re-output to film with changed image processing parameters, the original image will be saved with the final display on the viewer screen as the viewing original.
- If the image is viewed by changing the density/contrast after outputting the film or the film is reprinted by changing the image processing condition, the original image will be saved with the final display on the viewer screen as the viewing original.



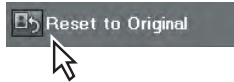
p.421 Image Processing

14) Reset to Original

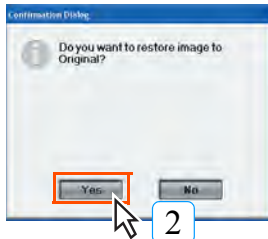
Restores selected images to original status.



1 Click the [Reset to Original] button on the Image Tools palette.

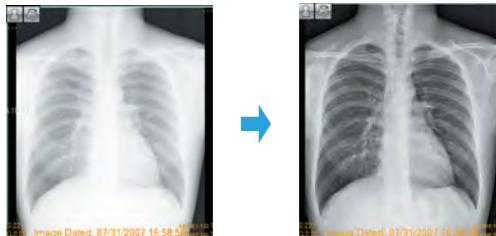


- A request for confirmation will be displayed.

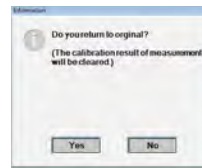


2 Click the [Yes] button.

- **Editing (invert/rotate/flip/zoom/pan/image processing) of the image on the viewer screen will be cleared and the original image displayed.**

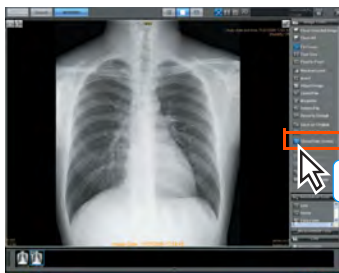


When an image on which measuring calibration was applied is restored to the original status, the message shown in the right illustration is displayed and the result of measuring calibration is deleted.



15) Show/Hide Overlay

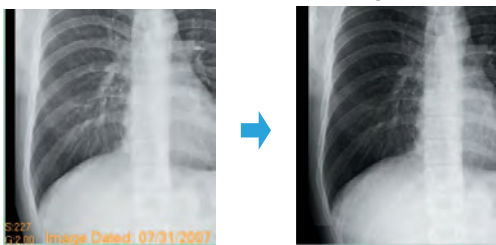
Demographic information overlaid on the image may be shown or hidden.



1 Click the [Show/Hide Overlay] button on the Image Tools palette.



- **Display will switch between show/hide image information including patient or exposure information overlaid on the image.**

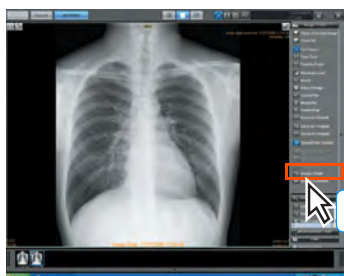


Show overlaid information

Hide overlaid information

16) Image Detail

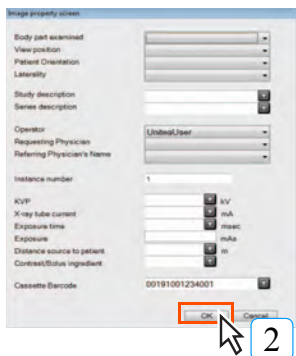
Displays the image property screen.



1 Click the [Image Detail] button on the basic function palette.



- The image property screen will be displayed.



2 Input or select the setting items, and click the [OK] button.



Once you set in [Body part examined] one of the body parts for QA/QC ([PHANTOM], [FLAT], [ERASED], [DARKNOISE]) for an image, it is excluded from the adjustment data and no longer used in the automatic customization function.

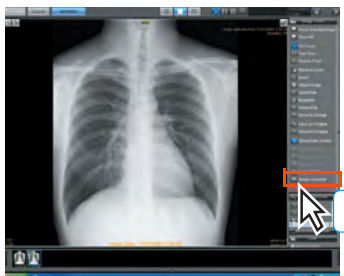


In an environment where ImagePilot and REGIUS SIGMA are connected and QA/QC function is used, the [Cassette Barcode] column is displayed, so the ID No. allotted to the cassette must be input manually.
For more information, please refer to the separate manual "Simple Check QC OPERATION MANUAL for REGIUS SIGMA & ImagePilot".

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17) Image Comments

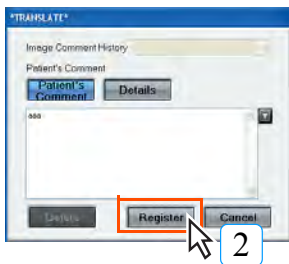
Displays the image comment screen.



1 Click the [Image Comment] button on the basic function palette.

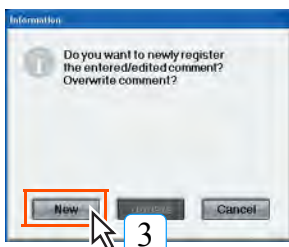


- The image comments screen will be displayed.



2 Select [Patient's Comment] or [Details], and click the [Register] button after entering the comment.

- The message screen will be displayed.



3 There are [New] and [Update] available for registration. However, only [New] is available for the patient with whom the comment is first entered, click the [New] to register.

- The comment is registered, and the icon indicating that the image comment is attached will be displayed at the lower left of the image on the viewer screen.



In the case of multi-frame images displayed, the comment can be input for each image.



"Patient's Comment" and "Details" are separately available assuming the use for informed consent. Enter the comment for informed consent in "Patient's Comment" and other comment in "Details".



Modifying the comment

Comment can be modified following the procedure below.

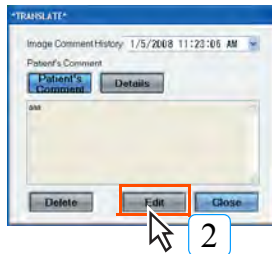
- 1 Click the [Image Comment] of the basic function palette.



- "Patient's Comment" entered last will be displayed.

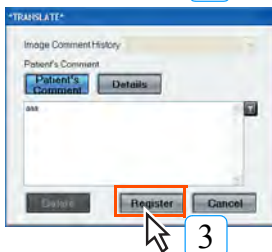
Note: Always displays "Patient's Comment". Even in the case that the comment is entered in "Details" only, "Patient's Comment" will be displayed in blank.

- 2 Click the [Edit] button.



- Switches to the mode that allows editing the comment.

- 3 Select either [Patient Comment] or [Details] similarly as done for the first time. Then enter the comment, and click the [Register] button.



- The message screen will be displayed.

- 4 Click either [New] or [Update] button. (For the registration of image comment for the second time or later, choice can be made from [New] and [Update])



- **New**
The comment will be newly added separately from the one previously registered.

Note: It will be added to the history.

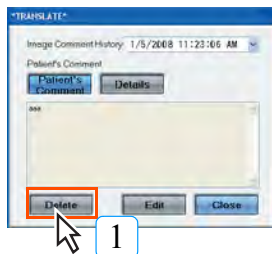
- **Update**
Modifies the previous comment.

Note: It will not be added to the history.

Removing the comment

Comment can be removed following the procedure below.

- 1 Click the [Delete] button.



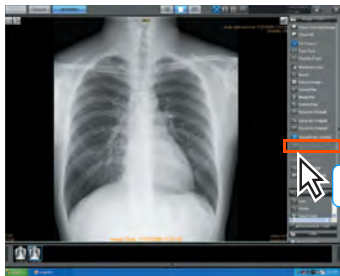
- Comment currently displayed will be deleted.



Historical management of the image comment is performed according to hr/min/sec, dd/mm/yy. Both "Patient's Comment" and "Details" are saved in the history. In addition, once the comment is confirmed by the Note function, overwriting after modifying the past comment becomes no longer possible when it passes the modifiable period(default=1 day). (New registration is still possible)

18) Sort by Time

All images displayed in the viewer field will be sorted and re-aligned according to the time the exposure was made (date of creation of image).



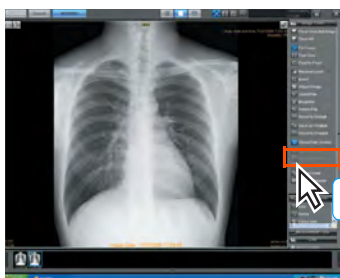
- 1 Click the [Sort by Time] button on the Image Tools palette.



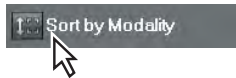
- Images shown in the viewer field will be sorted and re-aligned according to their dates of creation.

19) Sort by Modality

All images displayed in the viewer field will be sorted and re-aligned according to modality.



- 1 Click the [Sort by Modality] button on the Image Tools palette.

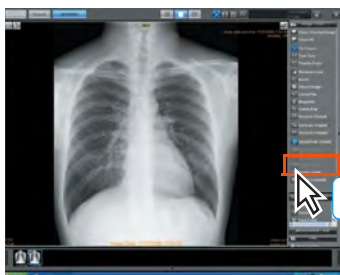


- Images shown in the viewer field will be sorted and re-aligned according to modalities.

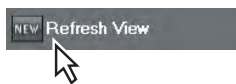
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20) Refresh View

All the most recently dated images from each modality for the patient currently viewed will be displayed.



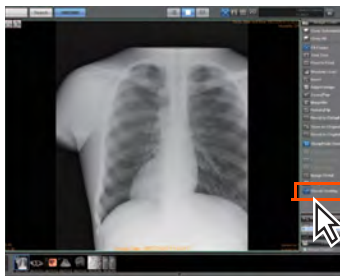
- 1 Click the [Refresh View] button on the Image Tools palette.



- All the most recently acquired images from each modality will be displayed.

21) DICOM Overlay

Switches between show/hide of DICOM Overlay.



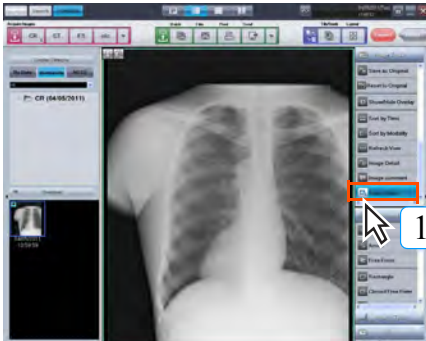
- 1 Click the [Dicom Overlay] button on the Image Tools palette.



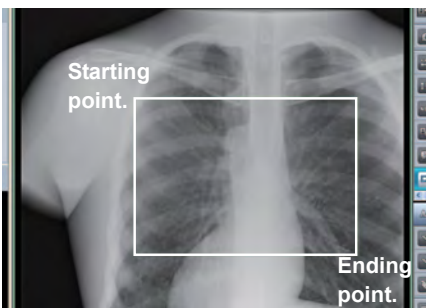
- DICOM Overlay switches between show/hide each time it is clicked.

22) Select Area

The image will be enlarged based on the width of the assigned range in order to fit within the image frame.



- 1 Click the [Select Area] button on the Image Tools palette.



- 2 Left click the mouse on the starting point.
- 3 Hold down the left mouse button and move the mouse to select an area.
- 4 Release the left mouse button at the ending point.



- The long side is enlarged to fit within the frame length, and the short side ratio is ignored.

23) Divide the subsequent image

Joined series of images can be sliced at any desired position.



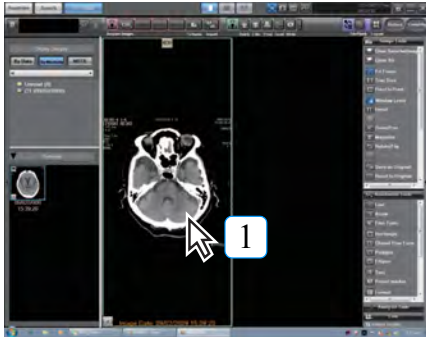
With this operation, if you select the wrong image, it is divided as a separate series. Therefore, always backup and save the target image.



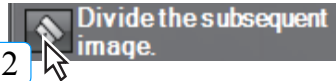
To use the function to slice joined series of images, you must enable the function in User Tools. (Default setting: Off)
This setting can be found under [Common Settings] - [Operation Settings] - [Dicom] - [Apply image division functionality on multi-frame images and series image join function].



p.316 Apply image division functionality on multi frame images and series image join function



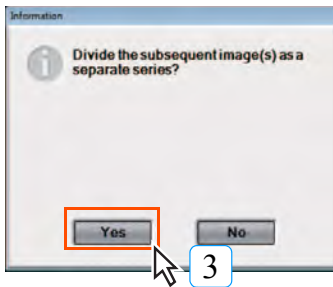
- 1 Displays the image of the division position.
 - Here, the subsequent image up to the selected image are divided.
- 2 Click the [Divide the subsequent image] button on the basic function palette.



- Displays a confirmation message.

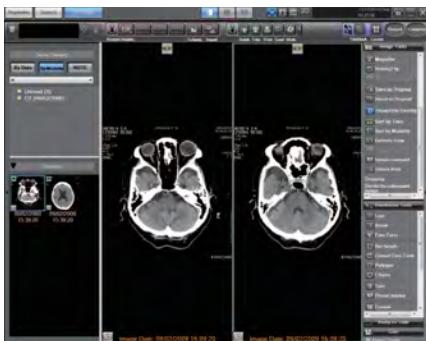
- 3 Click the [Yes] button.

- The subsequent image up to the selected image are divided.



When dividing images in which GSPS is registered, GSPS is registered in the first half of the divided images, but it is not registered in the latter half of the images.

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24) Cropping

The cropping function is for REGIUS images only. Select an area on any image, crop it, and save it as a separate image.



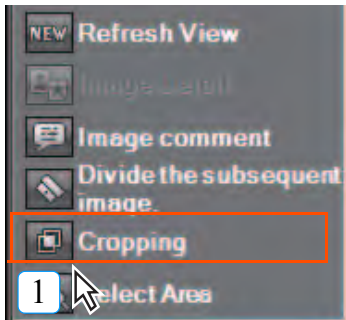
- When an image is cropped, the original stays the same.
- Even if the original image undergoes image processing (GSPS, annotations, etc.), image processing is not reflected in the cropped image.
- The cropping function can only be used on normal images.



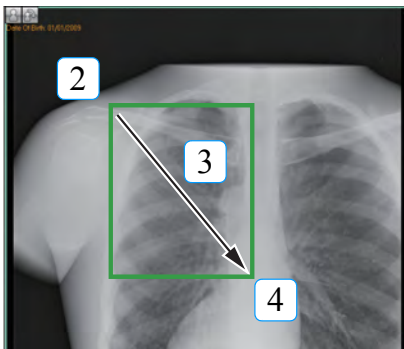
To use this function, you must set it up using the user tool. (Default : OFF)
 [Common Settings] - [Operation Settings] - [DICOM] - [Viewer Function Enhancement Settings] - [Cropping]



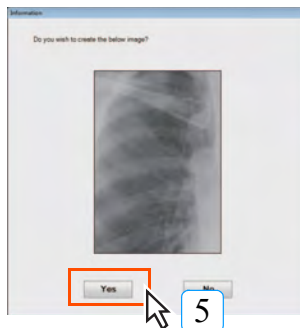
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- 1 Right-click on the basic function palette or image, and click the [Cropping] button from the display menu.



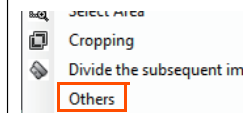
- 2 Left-click on the mouse at the starting point.
- 3 Left-click on the mouse, hold it down and drag it over to select the cropping area.
- 4 Release the left button on the mouse at the end point.
 - Displays a confirmation message.



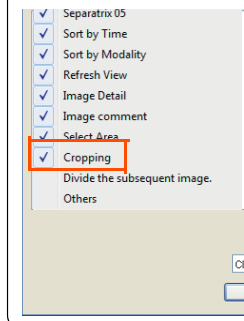
- 5 Click the [Yes] button.
 - The selected portion of the image is saved as a separate file.



Additional steps within the [Cropping] menu of the basic function palette
 Select [Others] from the right-click menu to bring up the Display Settings screen.



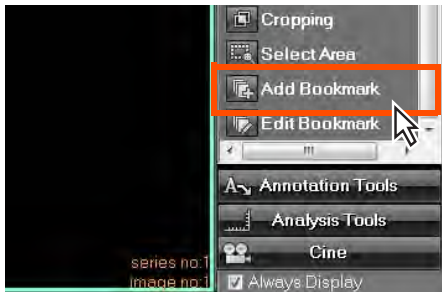
Place a check next to [Cropping].



25) Add Bookmark

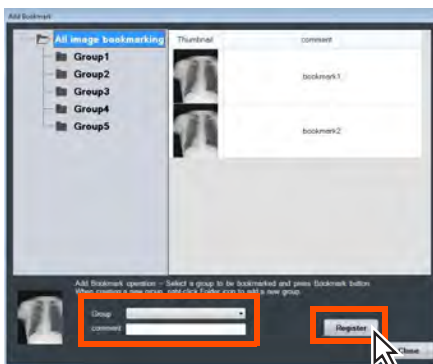
Register the selected image as the case image.

The registered case image may be referred to as that of the patient in the comparison screen.




1 Select the screen to be registered as the case image and click the [Add Bookmark] button on the basic functions palette.

- The [Add Bookmark] screen is displayed.



2 Select a [Group] where the case image is to be registered from the pull-down menu, input the [Comment] and click the [Register] button.

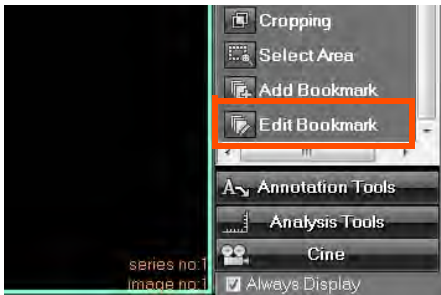
- The selected image is registered as the case image.

 The [Group] and [Comment] must absolutely be set.

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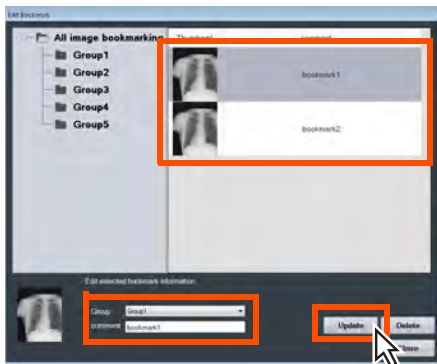
26) Edit Bookmark

Add or delete the groups where the case image is registered and edit the group.



1 Click the [Edit BookMark] on the basic function palette.

- The [Edit Bookmark] screen is displayed.



2 Select the case image to be edited.

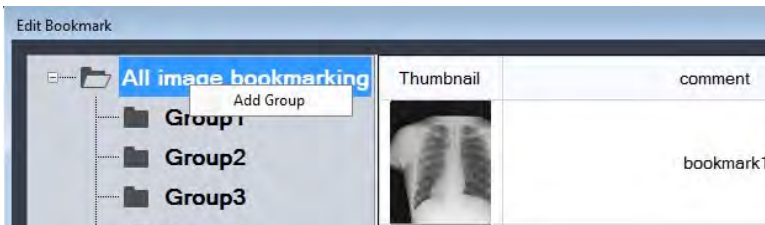
3 To change a registered group, select the new registration destination group from the pull-down menu.

4 To change a registered comment, re-input the comment.

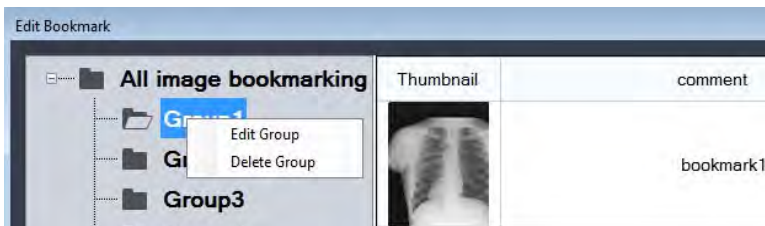
5 Click the [Update] button.



Right click the [All image bookmarking] item to display the [Add Group] item where a group can be added.



Right click the [Group] item to display [Edit Group] and [Delete Group] where the group name can be changed or the group can be deleted.



<Note> When deleting a group, the stored case images are also deleted.

5.3.3 Annotation Tools

Annotations may be overlaid on images.



Ticking [Continuous Selection of Annotation] of the User Tool allows continuous use of the menu without reselection. (Default : OFF)
 Setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [Continuous Selection of Annotation].



p.291 **Continuous Selection of Annotation (Operation Settings)**



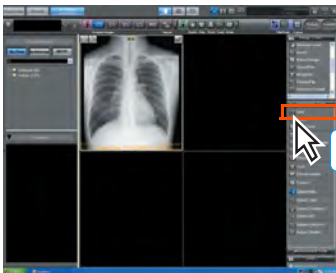
When a tool button that does not generate a mouse event on the screen is selected, drawn annotations can be selected by clicking on them without the need to click [Select] in the [Annotation] menu of the tool button.

Also, when a text object drawn on the image is selected, the following occur:

- Single-click: The text object is selected
- Double-click: Text edit mode of the text object

1) Line

Draws a straight line on the image.



1 Click the [Line] button on the Annotation Tools Palette.



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2 Left-click the mouse at the start position.

3 Continue to hold the left button and drag the mouse to draw a straight line.

- The line drawn corresponds with the operation of the mouse.



Left-click the mouse at the start position



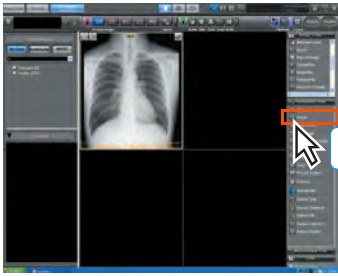
Drag the mouse to draw a straight line

4 Release the mouse button at the end position.

- This completes the line draw operation and displays the straight line on the image.

2) Arrow

Draws arrows on the image.



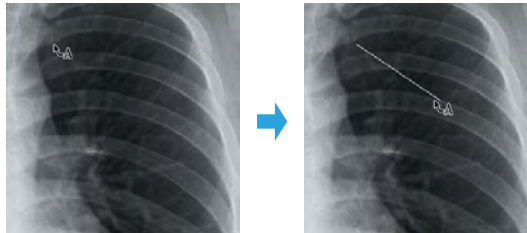
1 Click the [Arrow] button on the Annotation Tools Palette.



2 Left-click the mouse at the start position.

3 Continue to hold the left button and drag the mouse to draw a straight line.

- The line drawn corresponds with the operation of the mouse.
- An arrow will be added to the end of the line.



Left-click the mouse at the start position

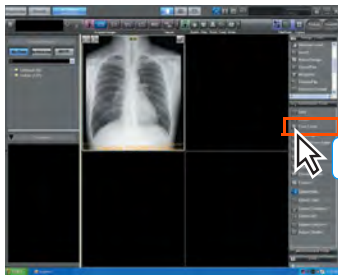
Drag the mouse to draw a straight line

4 Release the mouse button at the end position.

- This completes the arrow draw operation and displays arrow on the image.

3) Free Form

Draws a free form on the image.

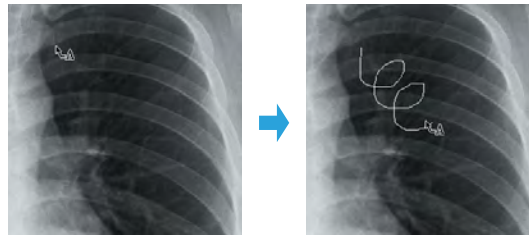


- 1 Click the [Free Form] button on the Annotation Tools Palette.



- 2 Press the left mouse button at the starting point.
- 3 Holding down the left mouse button, move the mouse to draw a curve.

- A curve will be displayed matching the movement of the mouse.



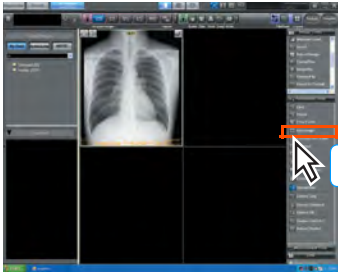
Press the left mouse button at the starting point

Move the mouse to draw a curve

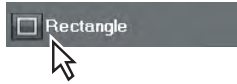
- 4 Release the left mouse button at the termination point.
- The drawing process is completed and the depicted curve displayed.

4) Rectangle

Draws a rectangle on the image.



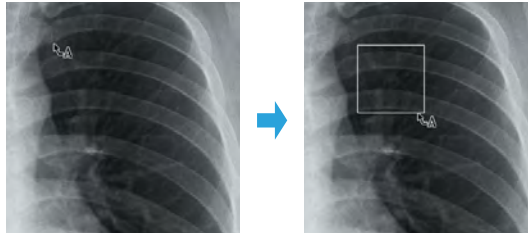
- 1 Click the [Rectangle] button on the Annotation Tools Palette.



- 2 Press the left mouse button at the starting point.

- 3 Holding down the left mouse button, move the mouse to draw a rectangle.

- A rectangle will be displayed matching the movement of the mouse.



Press the left mouse button at the starting point.

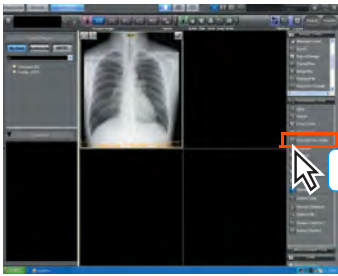
Move the mouse to draw a rectangle.

- 4 Release the left mouse button at the terminal point.

- The drawing process is completed and the depicted rectangle displayed.

5) Closed Free Form

Draws closed free form curve on the image.



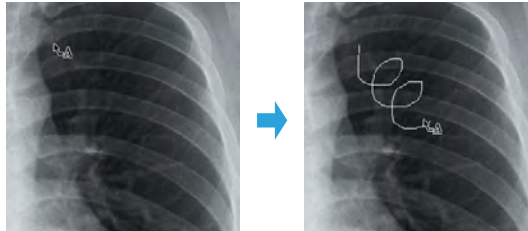
1 Click the [Closed Free Form] button on the Annotation Tools Palette.



2 Press the left mouse button at the starting point.

3 Holding down the left mouse button, move the mouse to draw a closed free form.

- A closed free form will be displayed matching the movement of the mouse.

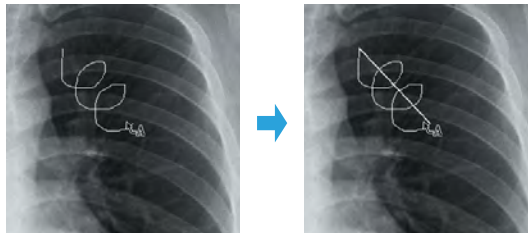


Press the left mouse button at the starting point.

Move the mouse to draw a closed free form curve.

4 Release the left mouse button at the terminal point.

- The drawing process is completed and the depicted free form curve is closed.



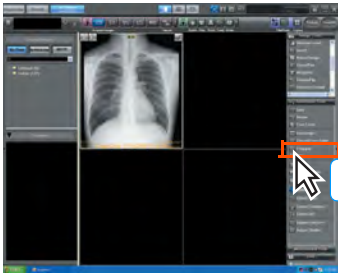
Release the left mouse button at the terminal point.

The starting and terminal points will be linked.

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6) Polygon

Draws a polygon on the image.



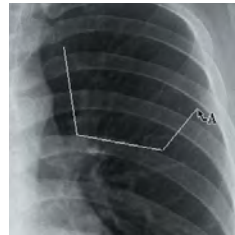
1 Click the [Polygon] button on the annotation tools palette.



2 Click the starting point.



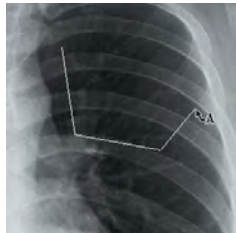
Click the starting point



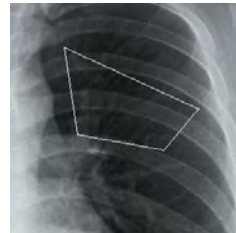
Click the second and third points.

3 Click the terminal point.

- The drawing process is completed and the depicted polygon displayed.



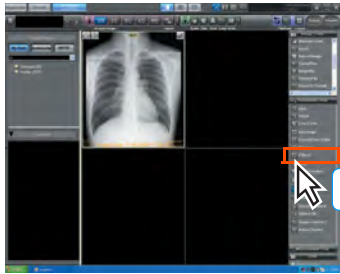
Click the terminal point.



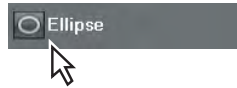
The starting and terminal points are linked.

7) Ellipse

Draws an elliptical circle on the image.

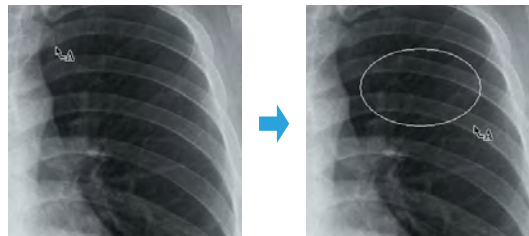


1 Click the [Ellipse] button on the annotation tools palette.



2 Drag the cursor from the starting to the termination point to draw a circle or an elliptical circle.

- The circle or elliptical circle is displayed after completion of the drawing process.



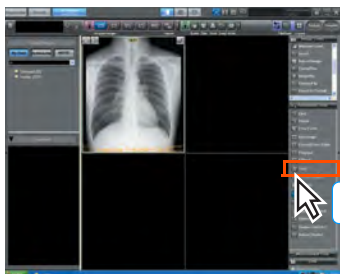
Drag

Release the left mouse button at the terminal point.

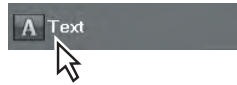
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8) Text

Positions text on the image.

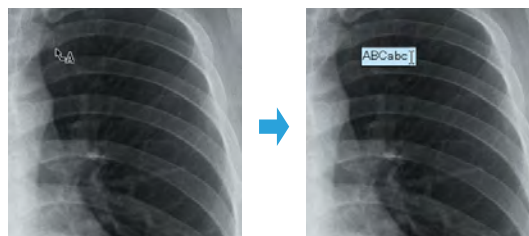


1 Click the [Text] button on the annotation tools palette.



2 Click the position where the text is to be input.

- A text box will open.



Click the position where text is to be input.

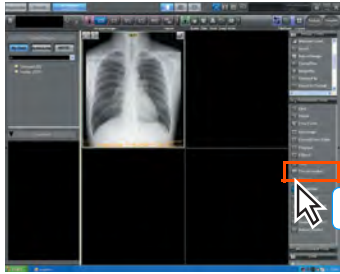
Input the text.

3 Input text from the keyboard and click a point outside the text field.

- The text will be displayed on the screen.

9) Preset Marker

Allocates the preset markers.

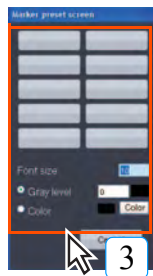


1 Select the image on which the preset marker should be allocated.

2 Click the [Preset marker] button.



- The marker preset screen will be displayed.



3 Set the "Font size", "Gray level" and "Color", and select the marker to be allocated.

- The selected preset marker will be allocated.
- The font size can be selected from the value range of 1 to 200.
- The gray level can be selected from the value range of 0(black) to 255(white).
- Clicking the [Color] button will display the color palette, allowing selection of the color.

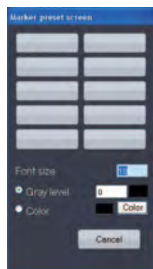


Images output to the film may be difficult to read depending on the type of color. Color images should be utilized in the environment where the color output is properly viewed (for example, output to the viewers or generic color printers).



The [Marker preset screen] dialogue box offers a different number of slots that can be registered as preset markers depending on the settings.

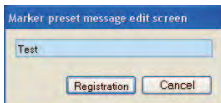
When set to 10 (2 x 5)



When set to 50 (5 x 10)



When right clicking a marker button on the [Marker preset screen] dialogue box, the [Marker preset message edit screen] is displayed, and the message displayed on the marker button can be edited.



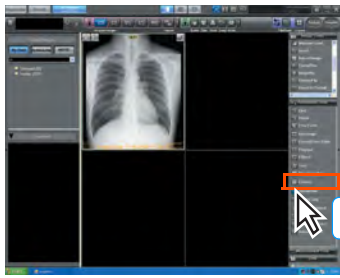
Check that the selected marker is displayed on the image. Also when outputting to film or media, check that the selected marker is correctly reproduced as intended.



p.292 Marker Settings

10) Format

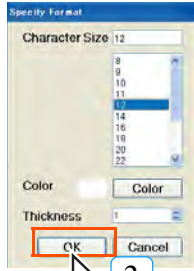
Sets the size, color and thickness of text input on the image.



1 Click the [Format] button on the annotation tools palette.



- The annotation tools palette format setting screen will be displayed.



2 Set the "Character Size", "Color", "Thickness".

- "Character Size" may be set within a range of 8 ~ 72 points.
- Click the [Color] button to display the color setting palette and select the desired color.
- "Thickness" may be set within a range of 1 ~ 10.

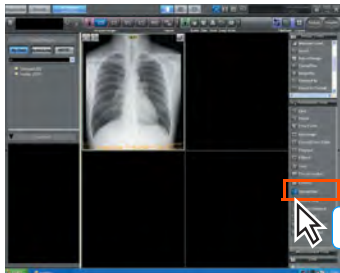
3 Click the [OK] button.

- The settings will be saved and the viewer screen displayed.
- The text settings will be used for the next annotation.

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11) Show/Hide

Annotation may be shown or hidden.



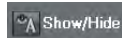
1 Click the [Show/Hide] button on the annotation tools palette.



- Each click will switch between show and hide settings.



: Show (blue)



: Hide (gray)



Annotation shown

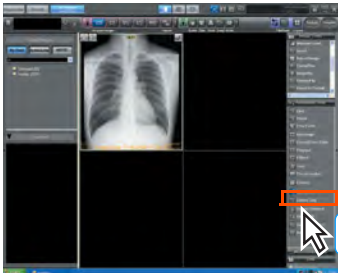


Annotation hidden

12) Select Tool

Selects positioned annotation.

Selecting the annotation enables operations such as dragging the annotation or deleting the annotation using the [Delete] key.



1 Click the [Select Tool] button on the annotation tools palette.

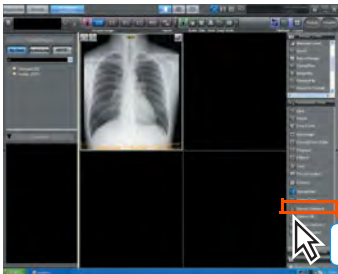


2 Click the positioned annotation.

- Selection of the annotation will be enabled.

13) Delete Selected

Deletes the selected annotation.



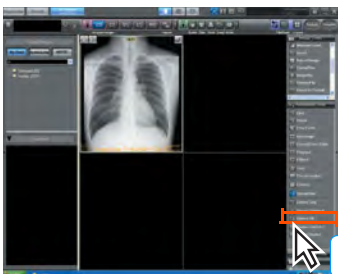
1 Click the [Delete Selected] button on the annotation tools palette.



- The selected annotation will be deleted.

14) Delete All

Deletes all selected annotations.



1 Click the [Delete All] button on the annotation tools palette.



- All annotations positioned on the selected image will be deleted.
- In no image selection has been made, annotations on all images will be deleted.

15) Shutter ON/OFF

Switches the shutter on or off.



This function is only enabled for CR and AeroDR images.
It is disabled for CR and AeroDR images imported from a media.

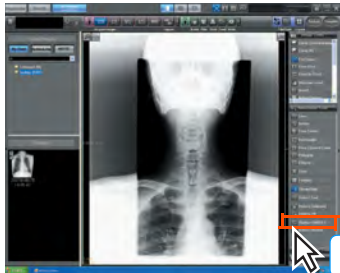


Shutter

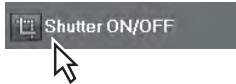
This is a image process to black out the areas outside the X-ray exposure field.

As the result of masking the area outside the X-ray exposure field, unwanted light leak is removed when viewing the film on the light table or the image on the monitor.


In cases where the output to the printer or host is made with the shutter ON, the image with the shutter processing applied is output.




1 Click the [Shutter ON/OFF] button on the annotation tools palette.



- Each time the button is clicked, the setting switches between ON and OFF.

 Shutter ON/OFF : Shutter ON (blue)

 Shutter ON/OFF : Shutter OFF (gray)



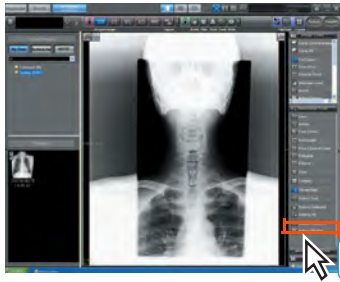
Shutter OFF



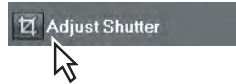
Shutter ON

16) Adjust Shutter

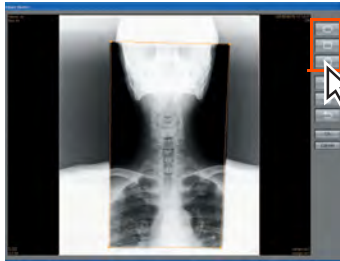
Adjusts the shutter position.



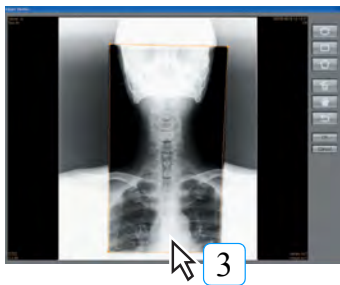
1 Click the [Adjust Shutter] button on the annotation tools palette.



• The shutter adjustment screen will be displayed.



2 Click the [Ellipse], [Rectangle] or [Polygon] buttons at the upper right corner of the screen to select the shape of the shutter.

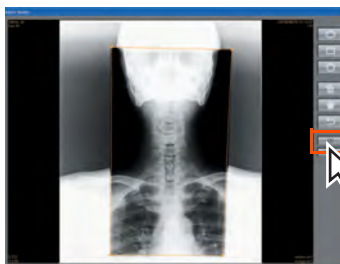


3 Draw the shutter shape.

• The shutter frame will be shown in orange.

The drawn shutter frame may be edited as follows :

| | | |
|--|--|---|
| | | Delete : Deletes the shutter frame. |
| | | Move : Moves the shutter frame. |
| | | Return : Returns the shutter frame depiction to the previous status. |

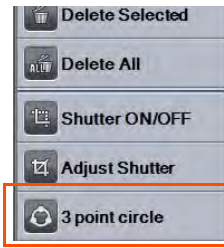


4 Click the [OK] button.

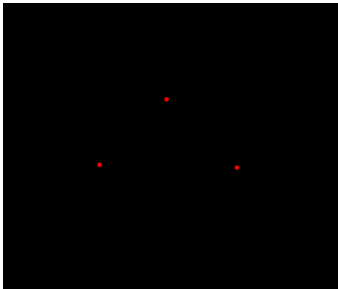
• The edited shutter frame will be saved and the shutter adjustment screen closed.

17) 3 point circle

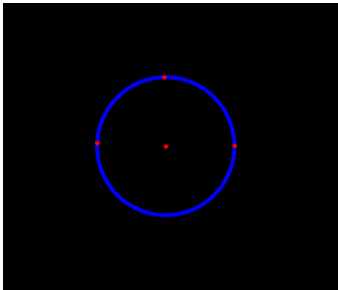
Draws a precise circle on the image.
The function is for veterinary hospitals.



1 Click the [3 point circle] button of the annotation palette.



2 Click three points on the image.



- A perfect circle is drawn along the 3 points, then another point is drawn in its center.

5.3.4 Analysis Tools

Selected distances on an image may be measured.



Measuring calibration must be carried out before proceeding with measuring of images without distance information such as images taken by digital camera.



Ticking [Continuous Selection of Annotation] of the User Tool allows continuous use of the menu without reselection. (Default : OFF)
Setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [Continuous Selection of Annotation].



The display position of the value measured by various measuring instruments can be moved by dragging.



p.291 **Continuous Selection of Annotation (Operation Settings)**

1) Cardio Index

Measures the heart ratio

Heart-to-chest ratio calculation is only enabled for CR and AeroDR images.



The image on which the pelvis has been calculated cannot be used for the heart-to-chest ratio calculation.



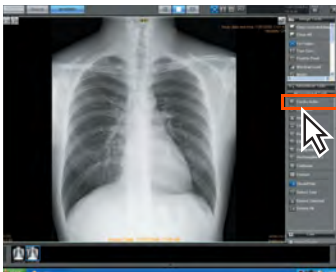
Images underwent the heart-to-chest ratio calculation cannot be moved to the unnamed image setting screen. Delete the heart-to-chest ratio calculation result to move to the unnamed image setting screen.



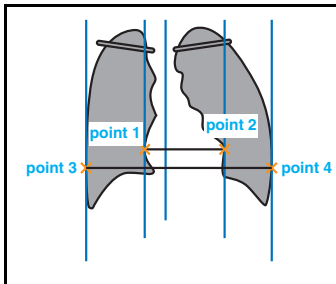
Digits to be displayed after the decimal point of the calculated value can be set using the User Tool. (Default: X.XXX)
The setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [Decimal settings for analysis].



p.292 **Decimal settings for analysis**



1 Click the [Cardio Index] button.

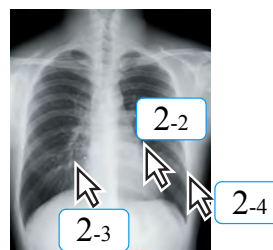


2 As shown in the figure on the left, click two points on the heart breadth and other two points on the chest breadth.

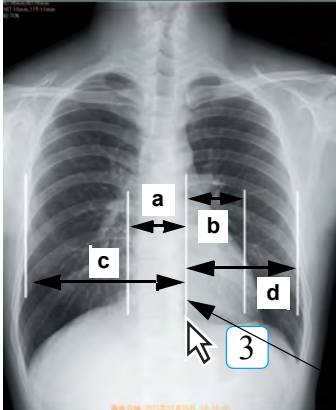
- Upon clicking on the fourth point, five perpendicular lines including the median line will be displayed.



Click on the first point.





Click on the second point and so on.




3 Move the median line after clicking [Select] button as necessary.


Median Line


 In the figure on the left, the clicking order does not make a difference. Among the four points that have been clicked, inner two points are recognized as the heart width, outer two points as the chest width.


 5 lines of Heart-to-chest ratio can be adjusted by dragging the end of the line.


 Normally, the calculation result will be displayed at the upper left of the screen. However, using the User Tool, it is also possible to display the result at the position you like. Drag the calculation Result to any point after clicking [Select] button of the Annotation Palette. In the case when the setting is made so that the calculation result can be moved, note that there is a risk that the image is overlaid by the moved image. (Default: fixed)
Setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [CTR/ Pelvic calculation result - Display position settings]

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 Selecting the calculation result after clicking [Select] button of the Annotation palette, followed by pressing [Ctrl] + C on the keyboard allows copy of the text strings of the calculation Result. The copied text strings can be copied to the Text Editor, etc.
(The copied text strings will be deleted once the other operation is performed.)
Note: When pasting the text strings, make sure that the pasted result is correct.

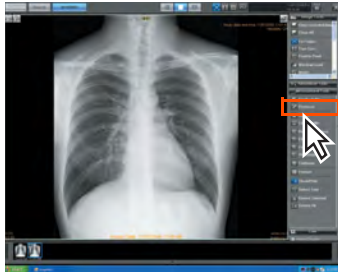
 • The measuring result will be displayed in distance either to the right or left from the median line.
In the case of "SUM" representation;
Heart Breadth : (a + b mm)
Chest Breadth : (c + d mm)
Heart-to-Chest Ratio : (a + b) / (c + d) x 100%
In the case of "SEPARATE" representation;
Heart Breadth : a mm, b mm
Chest Breadth : c mm, d mm
Heart-to-Chest Ratio : (a + b) / (c + d) x 100%
Note: Default is the SUM representation.

 Display type of the Cardio Index measure result can be set using the User Tool. (Default : SUM)
The setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [Cardio index display type].

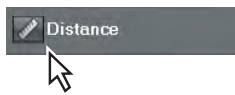
 p.291 Cardio index display type (Operation Settings)

2) Distance

Measures the distance between two points.

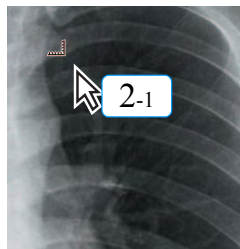


1 Click the [Distance] button.

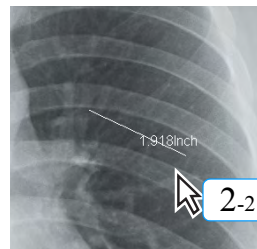


2 Drag the mouse from the first point to the second point to draw a straight line.

- The distance between the two points will be displayed.



Left-click the mouse at the start position



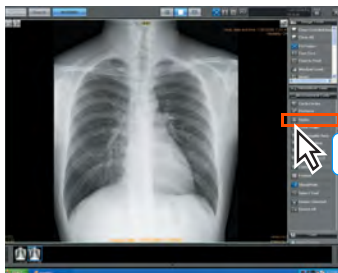
Drag the mouse to draw a straight line (the distance will be displayed)

3 Release the mouse button at the end position.

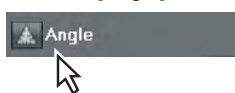
- This completes the draw operation.

3) Angle

Measures the angle of the triangle formed between 3 selected points.



1 Click the [Angle] button.

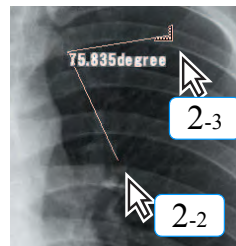


2 Click 3 points as shown below.

- The angle between points 1 and 2 and 1 and 3 will be measured and displayed.



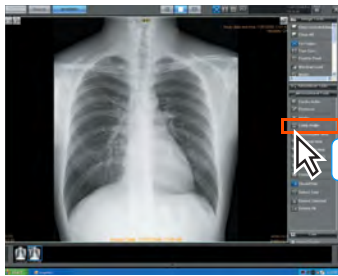
Click the first point.



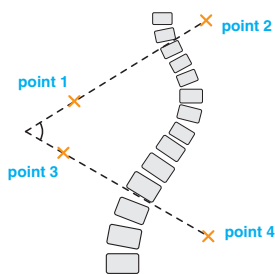
Click the second and third points. (The angle will be displayed.)

4) Cobb Angle

Measures the Cobb angle.



1 Click the [Cobb Angle] button.

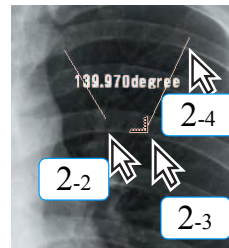


2 Click four points as shown at left.

- Clicking the four points will result in display of the angles between the lines linking points 1 and 2, and 3 and 4.



Click the first point.




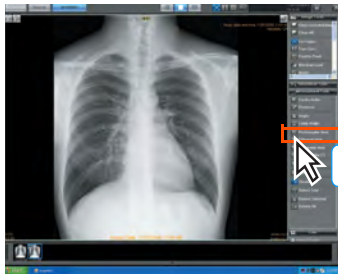
Click the second, third and fourth points.
(The angles will be displayed.)

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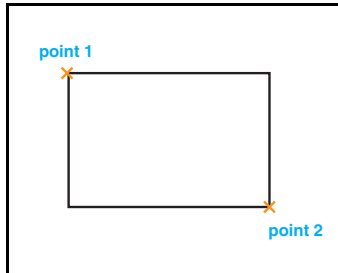
5) Rectangular Area

Measures the surface area of selected rectangles.

 Only rectangles with vertical/horizontal sides can be measured using the [Rectangle Area] button. For measuring of other rectangles, the [Polygonal Area] button should be used.

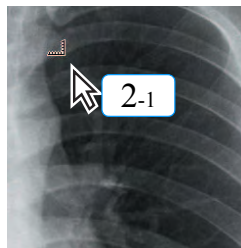


1 Click the [Rectangular Area] button.

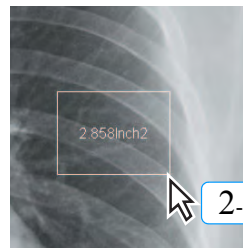


2 Drag the cursor from point 1 to point 2 to draw a rectangle, as shown at left.

- Rectangular defined by connecting between the first and second points will be displayed.



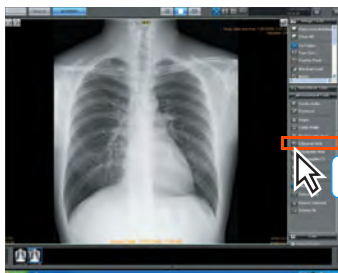
Drag



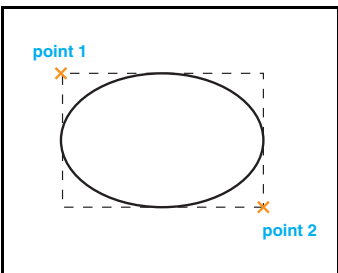
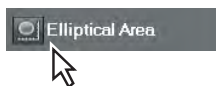
Release the left mouse button at the terminal point. (The surface area will be measured.)

6) Elliptical Area

Measures the surface area of selected elliptical shapes.

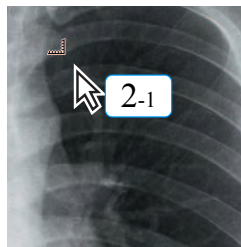


1 Click the [Elliptical Area] button.

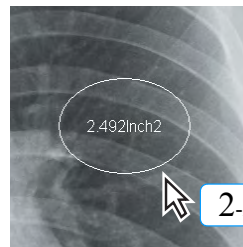


2 Drag the cursor from point 1 to point 2 to draw an elliptical shape, as shown at left.

- The surface area of the elliptical shape inscribed between points 1 and 2 will be displayed.



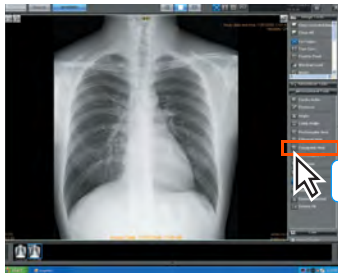
Drag



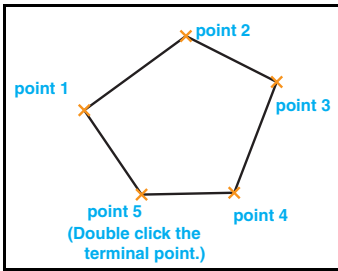
Release the left mouse button at the terminal point. (The surface area will be measured.)

7) Polygonal Area

Measures the surface area of a selected polygon.



1 Click the [Polygonal Area] button.

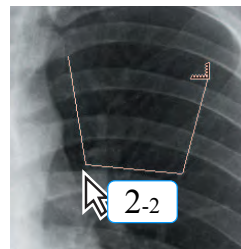


Sequence for Polygon

2 Click the corners of the polygon in sequence, as shown at left.



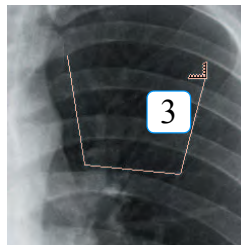
Click the first point.



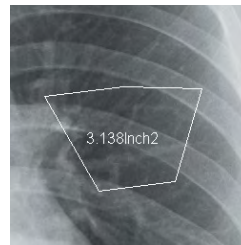
Click the remaining points.

3 Double click the termination point.

- The polygon will be finalized and the surface area displayed.



Double click the terminal point.

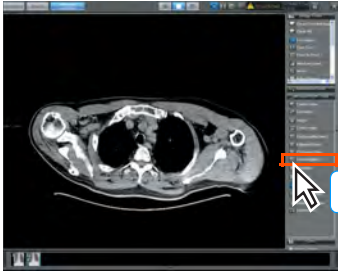


Polygon finalized.
(Surface area measured.)

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8) Rectangular CT

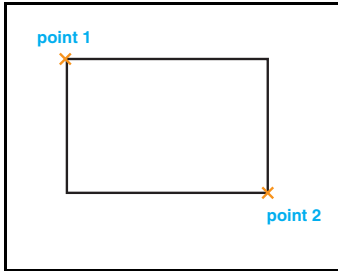
The density and area of the selected CT image region is measured.



1 Click the [Rectangular CT] button.



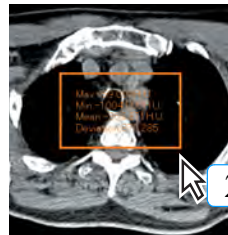
2 Drag the cursor from point 1 to point 2 to draw a rectangle, as shown at left.



- The density value of the rectangle formed between points 1 and 2 will be displayed.






Drag



Release the left mouse button at the terminal point.
(The CT value will be displayed.)


9) Calibrate

Calibrates distance on images with no distance information by measuring displayed on the image.

-  This function is valid only for images with no distance information. Calibration of images with no distance information should be carried out before each measuring.
-  Whenever "Calibrate" is implemented, make sure the measured result is correct.
- 
 - With the default setting, calculation calibration can be done by horizontal and vertical measuring.
 - Calculation calibration can be performed on REGIUS images. For more information, please contact our service representative.

user tool

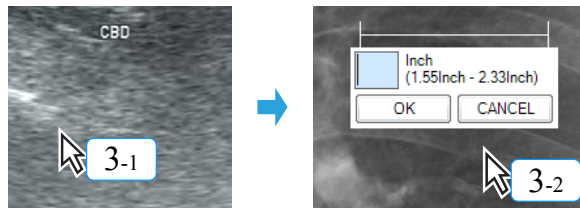
Calculation calibration can be performed even for diagonal calculations depending on the user tools settings. (Default: OFF) The setting can be made through [Common Settings] - [Operation Settings] - [Viewer]-[Perform diagonal calibration measuring].

 **p.291 Perform diagonal calibration measurement**



- 1 Display an image with measuring information.
- 2 Click the [Calibrate] button.
- 3 Click 2 points on the measure in sequence.

• The result of measuring of the 2 points will be displayed and editing of numerical values awaited.

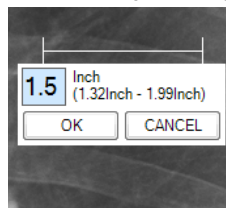


Click the first point.


Click the second point.
(An input box will be displayed.)

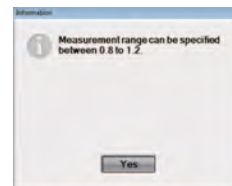
- 4 Input the value of the measuring in step 3 and click the [OK] button.

• Calibration will be carried out by the analysis tools.



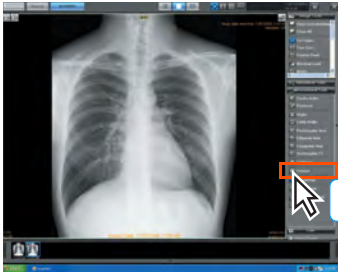
Input value and click [OK] button.

 If you enter values beyond the 0.8 to 1.2 range and click the [OK] button, the error message below appears. Upon clicking the [Yes] button, you will be prompted to re-enter a number.

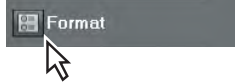


10) Format

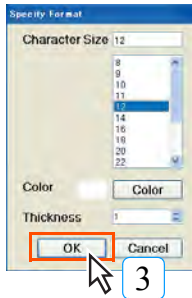
Sets the size, color and thickness of text displayed by the measuring function.



1 Click the [Format] button.



- The analysis tools palette format setting screen will be displayed.



2 Set the "Character Size", "Color", "Thickness".

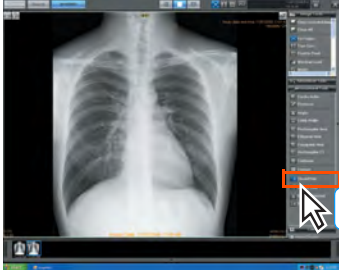
- "Character Size" may be set within a range of 8 ~ 72 points.
- Click the [Color] button to display the color setting palette and select the desired color.
- "Thickness" may be set within a range of 1 ~ 10.

3 Click the [OK] button.

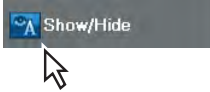
- The settings will be saved and the analysis tools palette format setting screen closed.
- The text settings will be used from the next measuring result.

11) Show/Hide

Annotation may be shown or hidden.



1 Click the [Show/Hide] button.



- Each click will switch between show and hide settings.

 : Show (blue)

 : Hide (gray)



Annotation shown

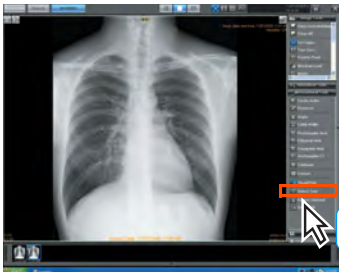


Annotation hidden

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12) Select Tool

Selects positioned annotation.



1 Click the [Select Tool] button.

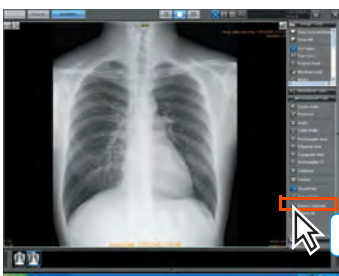


2 Click the positioned annotation.

- Selection of the annotation will be enabled.

13) Delete Selected

Deletes the selected annotation.



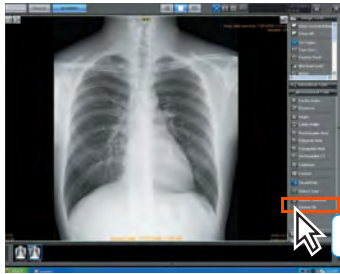
1 Click the [Delete Selected] button.



- The selected annotation will be deleted.

14) Delete All

Deletes all selected annotations.



1 Click the [Delete All] button.



- All annotations positioned on the selected image will be deleted.
- In no image selection has been made, annotations on all images will be deleted.

15) Pelvis Analysis

Calculates the pelvis.

Pelvis measuring is only enabled for CR and AeroDR images.



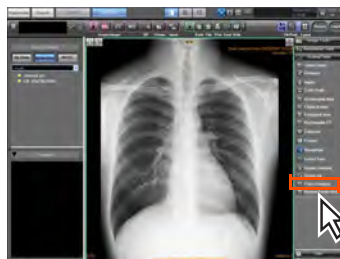
The image on which the heart-to-chest has been calculated cannot be used for the pelvis calculation.



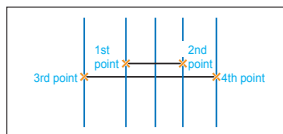
Images underwent the pelvis calculation cannot be moved to the unnamed image setting screen. Delete the pelvis calculation result to move to the unnamed image setting screen.



The pelvis can be analyzed in two ways, one is by clicking four points and the other is by drawing two lines. Which to select shall be set by the technical representative at the time of installation according to the instruction of the administrator of the institution.



1 Click the [Pelvis Analysis] button.



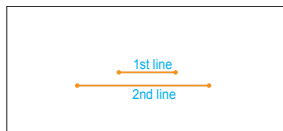
To click four points.

2 As shown in the figure on the left, click the four calculation points or draw the two lines.

- The result will be displayed after calculating the pelvis calculation value based on the four points (or the four end points of two lines).



calculation result will be calculated as follows when four points are clicked.
Pelvis calculation Result: (Distance between the outer two points) / (Distance between the inner two points) x 100%



To draw two lines.



When two lines are drawn, the calculation result will be displayed as follows;
Pelvis calculation Result: (Length of longer line) / (Length of shorter line) x 100%

user tool

Display of decimal places can be set using the User Tool. (Default: X.XXX)
The setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [Decimal settings for analysis].



p.292 Decimal settings for analysis (Operation Settings)




Any order to click the points (or to draw the two lines) in the figure on the left is accepted.





The lines of pelvis calculation can be leaned by dragging the end of the line.

Display Position of Calculation Result

 Normally, the calculation result will be displayed at the upper left of the screen. However, using the User Tool, it is also possible to display the result at the position you like. Drag the calculation Result to any point after clicking [Select] button of the Annotation Palette. In the case when the setting is made so that the calculation result can be moved, note that there is a risk that the image is overlaid by the moved image. (Default: fixed)

Setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [CTR/ Pelvic calculation result - Display position settings]

 p.291 CTR/Pelvic measurement result - Display position settings (Operation Settings)

 Selecting the calculation result after clicking [Select] button of the Annotation palette, followed by pressing [Ctrl] + C on the keyboard allows copy of the text strings of the calculation Result. The copied text strings can be copied to the Text Editor, etc. (The copied text strings will be deleted once the other operation is performed.)

Note: When pasting the text strings, make sure that the pasted result is correct.

16) Show/Hide of Cardio Ratio Calculating Line


Clicking this button switches between Show/Hide of the calculating lines that have been drawn in Cardio Ratio calculation. The result of Cardio Ratio calculation is kept displayed.





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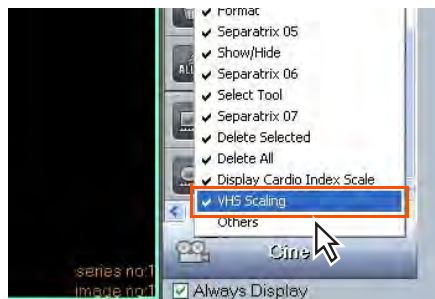
17) VHS Scaling

This function is for veterinary hospitals. It enables you to calculate the ratio of how many vertebral bodies exist from the caudal end, with the fourth thoracic vertebra as a point of origin taken from the total of the heart's long axis and short axis.

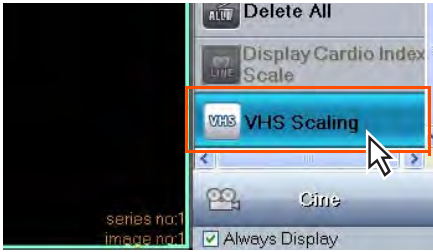
 Settings are necessary when using the VHS scaling function. Please contact our service representatives.

 If you are going to use the VHS scaling function during veterinary hospital settings, make sure to follow the proper operations and use the correct measuring points.

 The VHS scaling function is intended for calculating the following images:
- CR, CR (DICOM), AeroDR, and DR (DX) (DICOM) images

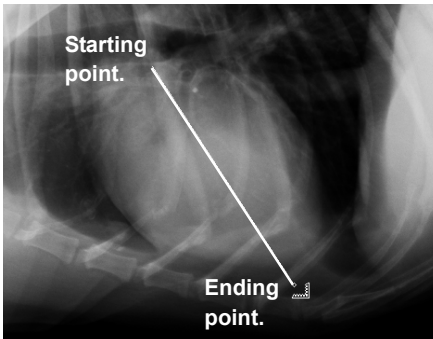


- 1 Right click on the [Analysis Tools] palette to display the submenu.
 - 2 Select [VHS Scaling] from the submenu.
- The [VHS Scaling] category will be displayed in [Analysis Tools].



3 Select [VHS Scaling] from [Analysis Tools].

- The mouse cursor will change to a VHS Scaling cursor.



4 First determine the heart's long axis.

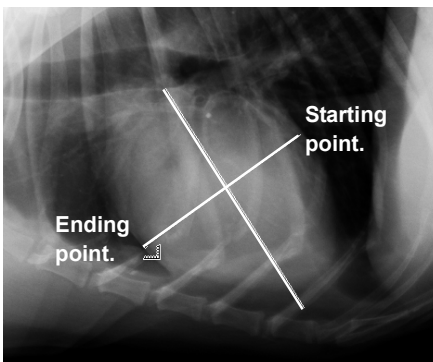
- Click the edge of the heart's long direction (starting point), then click the edge at the opposite end (ending point).



Make sure to always start measuring from the long axis.



After confirming the ending point, pressing the [Back space] key on the keyboard will take you back a step to before the ending point was confirmed.

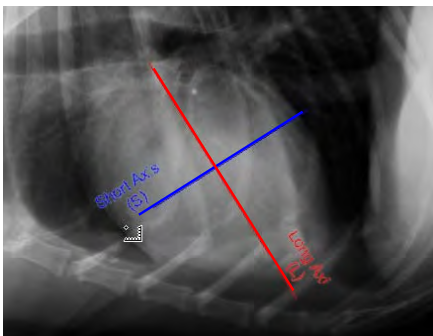


5 Next determine the heart's short axis.

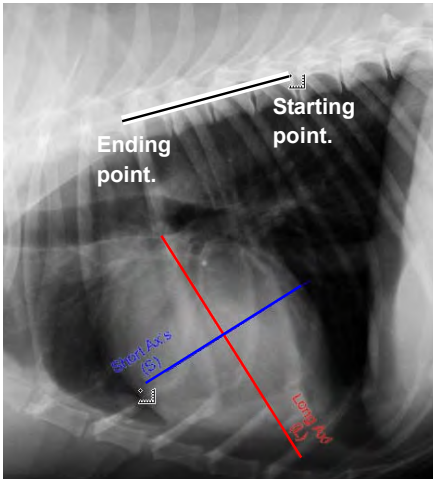
- Click the edge of the heart's short direction (starting point), then click the edge at the opposite end (ending point) at a right angle with the long axis line.



Make sure to measure at a right angle with the long axis line.




- After this, the heart's long axis line turns red, its short axis line turns blue, and measuring is confirmed.



- 6 Click the edge of the fourth thoracic vertebra at the cranial end (starting point), then click any area that is parallel to the corpus vertebrae.
- The long and short axis line will then be displayed along the corpus vertebrae, and the entry dialogue box will be displayed in the lower left corner of the screen.

L + S
 = VHS
 Enable Auto Measurement

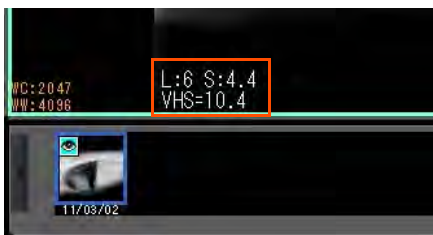
- 7 Take the length of the long axis (red line) that was measured parallel to the corpus vertebrae, or the length of the short axis (blue line), and with the cranial end of the fourth thoracic vertebra as a point of origin, use a ruler or visual confirmation to determine how many corpus vertebrae it corresponds to. After that, enter a value in the L column (long axis) or S column (short axis) and press the [Enter] key.
- The VHS value will be determined automatically according to the entered value, and the results will be displayed in the entry dialogue box.

 - Values from 1.0 to 99.9 can be entered to the nearest decimal.
 - Make sure the [Enable Auto measuring] checkbox is filled in.

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L + S
 = VHS
 Enable Auto Measurement

- 8 Click the [Save] button.



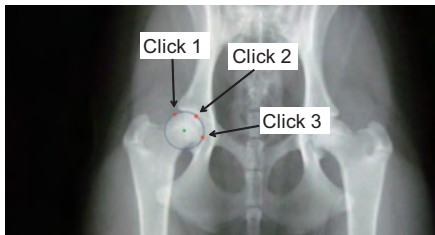
- The entry dialogue box is closed, and results will be displayed in the lower left corner of the Viewer Screen.

18) Calculation function 1 for veterinary hospital

This function is for veterinary hospitals.
Draw a diagnosis template.

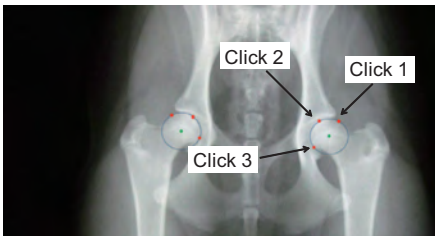


1 Click the [Norberg Angle] button in the Analysis Tools.



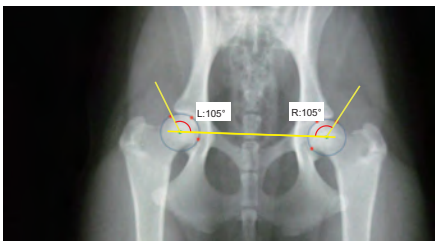
2 Click three points on the image.

- The function will trace out an arc from the three points that were clicked, seek a center point, and draw the center point.



3 Click three points at the other side of the image.

- The function will trace out an arc from the three points that were clicked, seek a center point, and draw the center point.



- When the two circles are drawn, a straight line connecting the center points of two circles, and an auxiliary line with an interior angle of 105° relative to the straight line are automatically drawn. In this case, the value of the interior angle is displayed as an overlay. The angle shown will be one of the two listed below depending on the user tools settings.
- Angle of the interior angle for the auxiliary line
- Angle of the interior angle for the auxiliary line (-90°)



Always click the three points on the screen from left to right, and in a circular pattern.
If you click them in reverse order, the function will not execute properly.



The display of the measurement result values can be set using user tools. (Default: OFF)
[Common Settings]-
[Operation Settings]-
[Viewer]-[Norberg-Olsen-Angle-Result angle (-90)]



p.292 Norberg-Olsen-Angle-Result angle (-90)

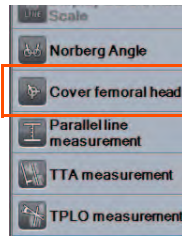


Editing a drawn circle

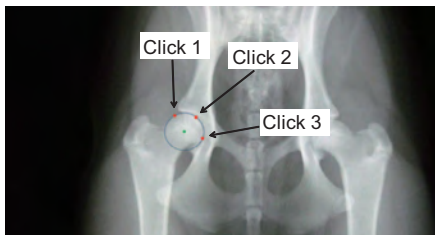
- Drag the three points on the perimeter of the circle to change its size and position points. The circle will then be redrawn.
- Drag the center point of the circle to move the circle's position.
- If you alter the size and position of the circle, the straight line connecting the center of the circle and the auxiliary line will be redrawn.

19) Calculation function 2 for veterinary hospital

This function is for veterinary hospitals.
Draw a diagnosis template.

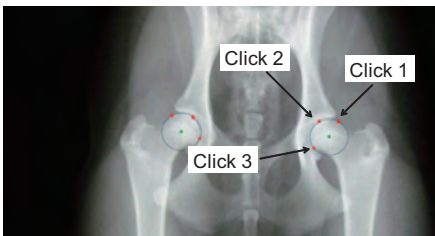


1 Click the [Cover femoral head] button in the Analysis Tools.



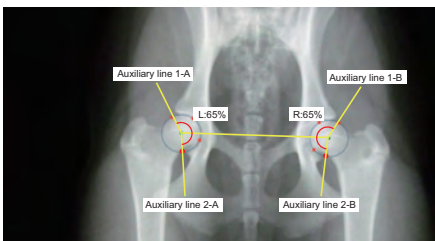
2 Click three points on the image.

- The function will trace out an arc from the three points that were clicked, seek a center point, and draw the center point.




3 Click three points at the other side of the image.


- The function will trace out an arc from the three points that were clicked, seek a center point, and draw the center point.



- When the two circles are drawn, a straight line connecting their center points, and auxiliary lines 1-A and 1-B with an interior angle of 105° relative to the straight line are automatically drawn. At the same time, the sum of the interior angles from the auxiliary lines 1-A and 1-B are calculated to be 65%, and the auxiliary lines 2-A and 2-B are drawn. In this case, the percentage of the interior angle is displayed as an overlay.

 Always click the three points on the screen from left to right, and in a circular pattern.
If you click them in reverse order, the function will not execute properly.

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 **Editing a drawn circle**

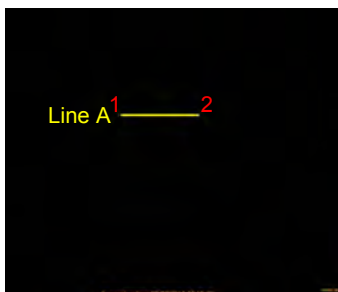
- Drag the three points on the perimeter of the circle to change its size and position points. The circle will then be redrawn.
- Drag the center point of the circle to move the circle's position.
- If you alter the size and position of the circle, the straight line connecting the center of the circle and the auxiliary line will be redrawn.

20) Parallel lines

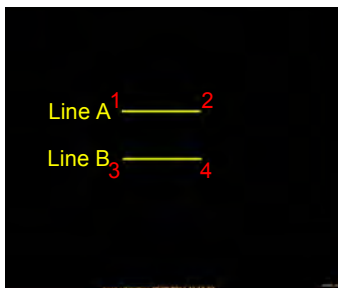
Measure the distance between 2 of drawn parallel lines.
The function is for veterinary hospitals.



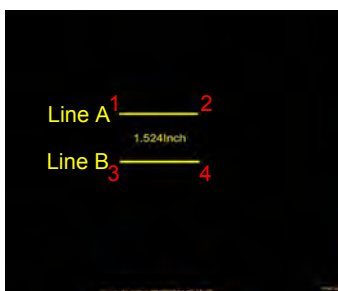
1 Click the [Parallel lines] button of the measurement palette.



2 Clicking the first and second points will cause a straight line to be drawn.



3 Clicking the third and fourth points will cause a straight line to be drawn parallel to the first line.

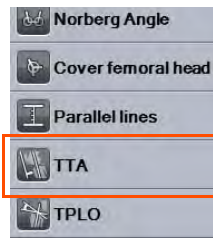


• The distance between the first and second lines is displayed as the measurement result.

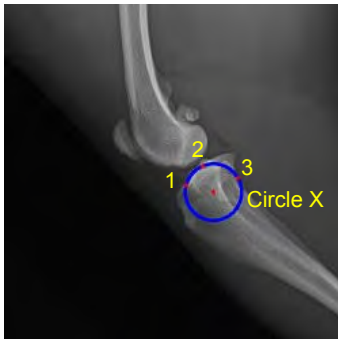
21) TTA

Measures TTA

The function is for veterinary hospitals.

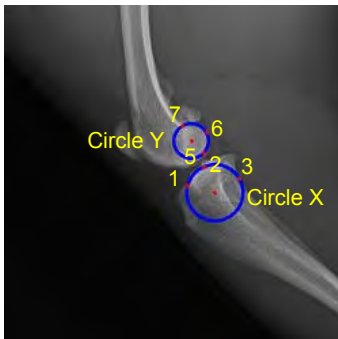


1 Click the [TTA] button of the measurement palette.



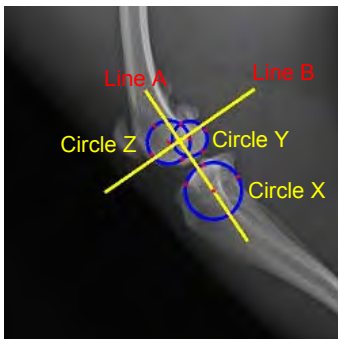
2 Click the 3 points on the tibial head.

- Circle X is drawn along the 3 points, then another point is drawn in its center.



3 Click the 3 points on the medial femoral condyle.

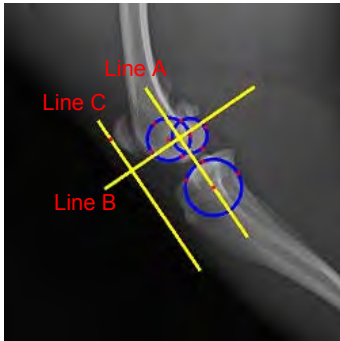
- Circle Y is drawn along the 3 points, then another point is drawn in its center.



4 Click the 3 points on the lateral femoral condyle.

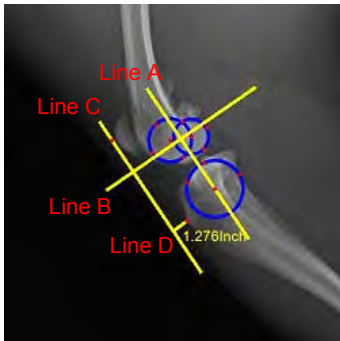
- Circle Z is drawn along the 3 points, then another point is drawn in its center.
- After drawing Circles X, Y, and Z, Line A will be drawn connecting the center point of Circle X to those of Circles Y and Z.
- After drawing Line A, Line B will be drawn in a position perpendicular to Line A.

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5 Click above the patella.

- Line A and the parallel Line C are drawn from the designated position.



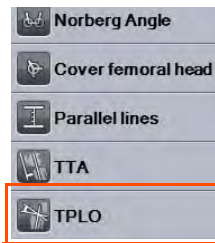
6 Click 1 point.

- Line D will be drawn perpendicular to Line C from the designated position.
- The length of Line D is displayed as the measurement result.

22) TPLO

Measures TPLO

The function is for veterinary hospitals.



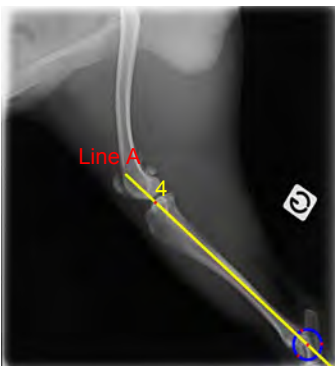
1 Click the [TPLO] button of the measurement palette.



2 Click 3 points.

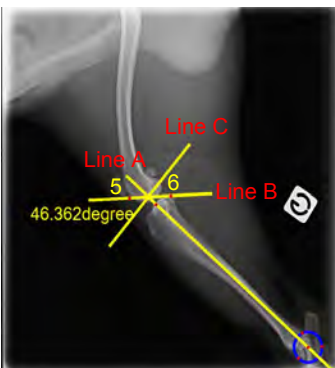
- A perfect circle is drawn along the 3 points, then another point is drawn in its center.

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3 Click 1 point.

- Line A, which passes through the point designated as the center point of the circle, will be drawn.



4 Click 2 points.

- Line B will be drawn in a position where it passes through the designated 2 points.
- After drawing Line B, Line C will be drawn in a position perpendicular to Line A.
- The angle between Line B and Line C is displayed as the measurement result.

5.3.5 Cine Tools

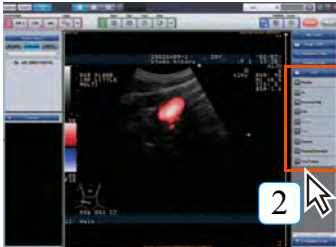
The procedure for using the cine tool to play sequential examination images is described below.



Cine display of more than 100 images may not be possible depending on ImagePilot performance. Additionally, the "Stack" setting must be selected in advance using the [Tile/stack] button.



The replay speed of the cine image with ImagePilot may differ from that with the diagnostic device depending on the display condition of the image.



1

Click the motion image to be played.

- **The frame of the selected image will be shown in green.**

2

Click the [Replay] button to select.

- **Motion images will be played.**
- **Click the [FF] button to fast-forward.**
- **Click the [Reverse Play] button to reverse pay.**
- **Click the [Rev] button to reverse.**
- **Click the [Pause] button to pause the image motion.**
- **Click the [Stop] button to stop the image motion.**
- **Repeat:**
If it is selected before cine play, revers play starts rightafter reaching the last frame.
- **Repeat (One way):**
If it is selected before cine play, it repeats the play from the first frame.
- **Click the [First Frame] button to return to the first image of the series.**
- **Pressing the [↑][↓]key allows switching from one frame to the other of the cine data.**
- **When the mouse point is placed over the image. It is possible to send the image forward / backward using the mouse wheel.**

user
tool

The cine image may be played back without advance reading of the image frame for cine playback.
(Default setting: ON)
[Common Settings]-
[Operation Settings]-
[Viewer]-[Cine operation,
Prior reading]



p.290 <Viewer
Screen>

5.4 Chiropractic and Orthopedic tools

Indication for Use (This description is for the United States only):

The CO pilot is software intended for installation on an off-the-shelf PC (REGIUS Unitea / 510(K) number: K071436) meeting or exceeding minimum specifications.
 The CO pilot software primarily facilitates processing and presentation of medical images on display monitors suitable for the medical task being performed.
 The CO pilot software can process and display images from the following modality types: Plain X-ray Radiography, X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities.
 The CO pilot software must not be used for primary image diagnosis in mammography.
 The CO pilot is the licensed software used by installing this system.
 This section (5.4) explains the functions of the CO pilot.


Procedures for editing images by Chiropractic and Orthopedic tools are described below. Various palettes featuring alignment of image processing buttons are used to edit images. The palettes are displayed at the right edge of the viewer, full-screen and comparison screens.


The following four palettes are available.

- **Annotation Tools/Analysis Tool : Features chiropractic functions.**
- **Orthopedic Tools : Features orthopedic functions.**

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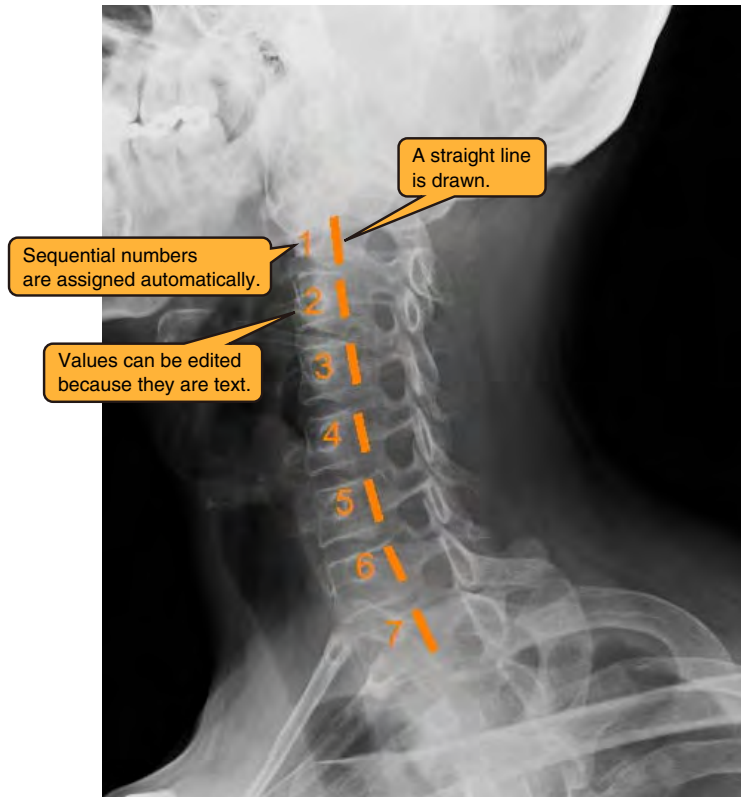
 When using Orthopedic tools, the ImagePilot Ortho TOOL OPTION is required. For more information, contact our service personnel.

 It is assumed this function will be used with the reverse/rotate and enlarge/reduce functions, but make sure the line and measured values are correct.

5.4.1 Chiropractic tools

1) George's Line

Draws multiple straight lines assigned with sequential numbers.



a) Click the George's Line button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Click the mouse button

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative line is drawn from the position where the mouse button was pressed.

c) Release the mouse button.

- The straight line drawn from the position where the button was pressed is fixed.
- A sequential number is assigned to the straight line.
- The mouse is enabled to move outside the drawing area.

b) Continue to draw straight lines (repeat b to c)

- Straight lines are drawn and sequential numbers are assigned to them.

* The line color and width and the character font and color are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* Sequential numbers can be text edited by clicking them.

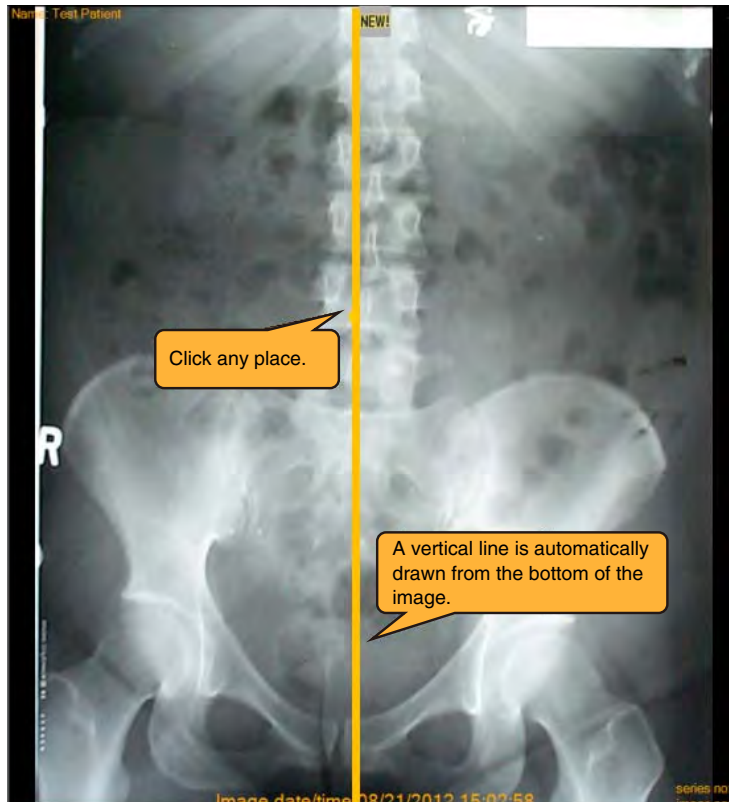
* Assigned sequential numbers will not change even when a straight line in the middle is deleted with Delete Selected.

* When the selection of George's Line is canceled or a right-click is performed, sequential numbers are reset and assignment starts from 1.

* This tool is an annotation function, not a measuring function.

2) Gravity Line

Draws a vertical line from the bottom of an image.



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a) Click the Gravity Line button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select any place.

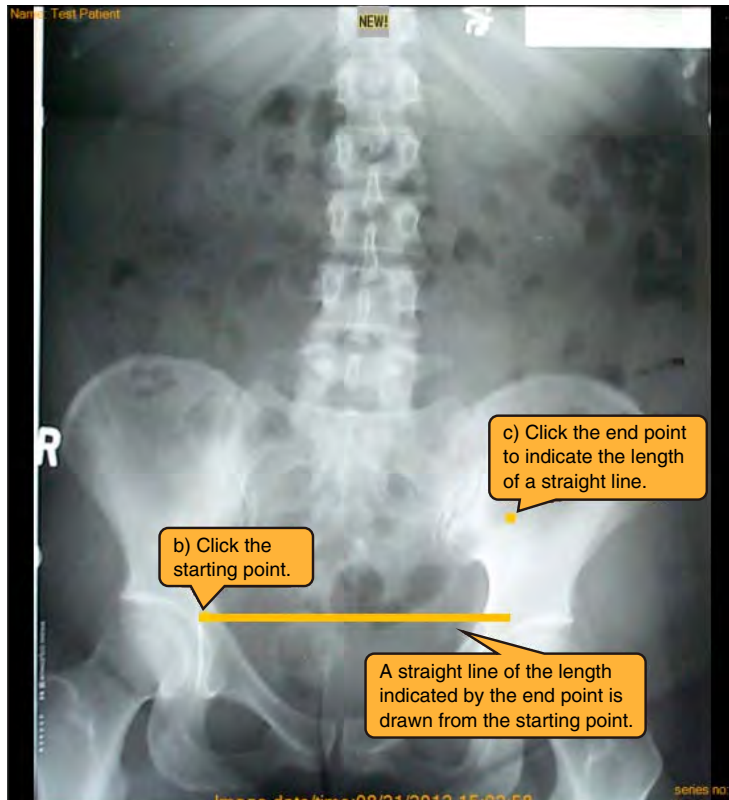
- A straight line is drawn vertically from the bottom of the image to the top of the screen passing the selected point.

* The line color and width are those specified in Format.

* This tool is an annotation function, not a measuring function.

3) Horizontal Line

Draws a line parallel to the bottom of an image.



a) Click the Horizontal Line button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- A marking (dot) appears at the selected position.
- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative line parallel to the floor is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The marking (dot) is hidden, and the straight line parallel to the floor starting from the first point is fixed.
- The mouse is enabled to move outside the drawing area.

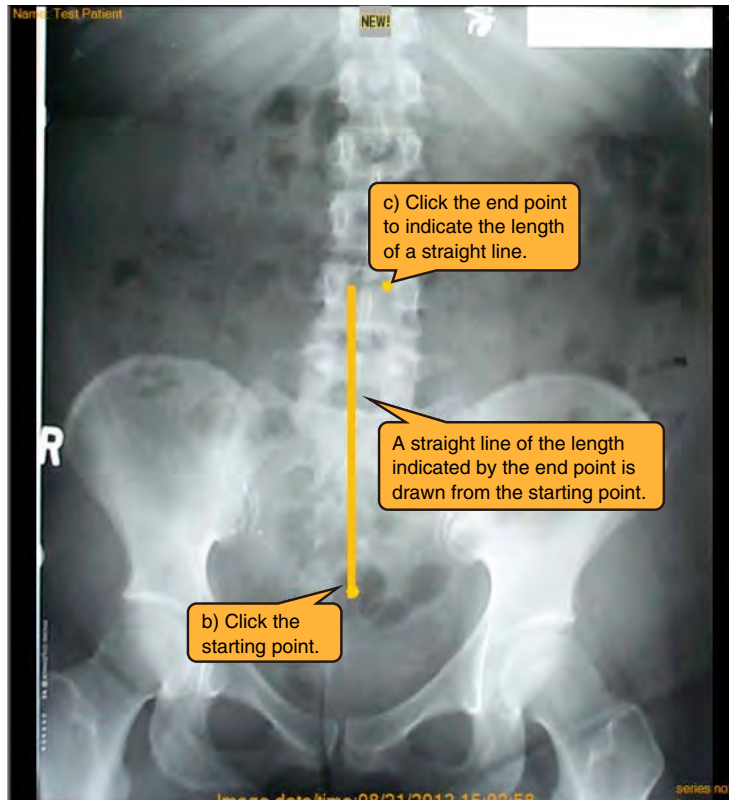
* Right-clicking during each operation will undo to the state before the first point was selected.

* The marking color and the line color and width are those specified in Format.

* This tool is an annotation function, not a measuring function.

4) Vertical Line

Draws a line vertical to the bottom of an image.



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a) Click the Vertical Line button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- A marking (dot) appears at the selected position.
- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative line vertical to the floor is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The marking (dot) is hidden, and the straight line vertical to the floor starting from the first point is fixed.
- The mouse is enabled to move outside the drawing area.

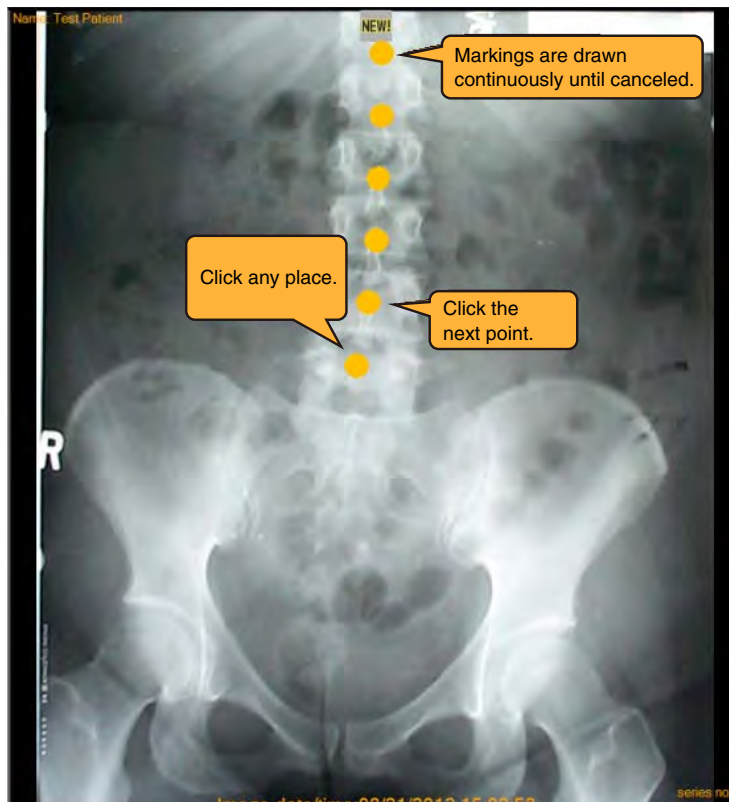
* Right-clicking during each operation will undo to the state before the first point was selected.

* The marking color and the line color and width are those specified in Format.

* This tool is an annotation function, not a measuring function.

5) Markers

Draws dots by continuous clicking.



a) Click the Markers button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select any place.

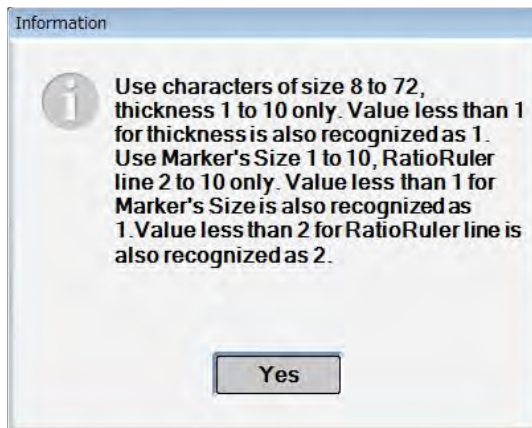
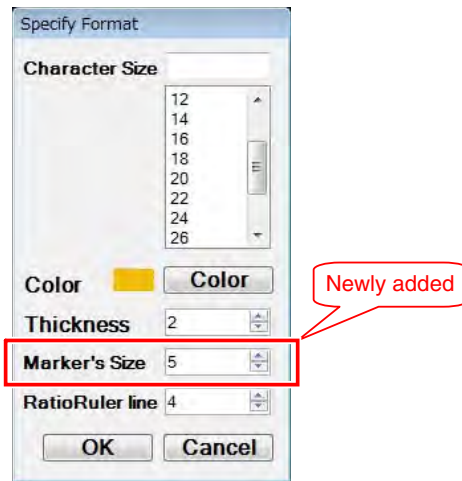
- A marking (dot) appears at the selected position.
- Markings can be put continuously until the selection of Markers is canceled.
- There is no limit on mouse movement.

* This tool is an annotation function, not a measuring function.

* About the marking size

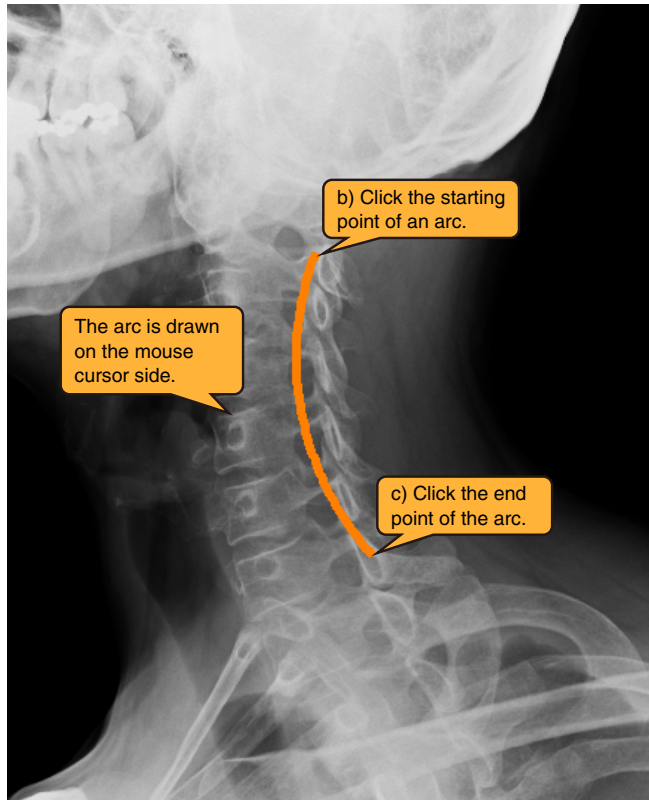
The size of markings drawn with Markers can be changed by adding the Marker's Size item to the Format dialog box (the available range is 1 to 10).

When a value outside the range is input, an Information dialog box should appear.



6) Cervical Lordosis

Draws a template of cervical spine.



a) Click the Cervical Lordosis button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- A marking (dot) appears at the selected position.
- The mouse is disabled from moving outside the drawing area.

c) Select the second point.

- A marking (dot) appears at the selected position.
- The mouse is still disabled from moving outside the drawing area.
- By moving the mouse, an arc of a circle connecting the two points with the center angle 63 degrees is tentatively drawn on the cursor side.

d) Select the third point.

- The markings (dots) are hidden and the arc is fixed.
- The mouse is enabled to move outside the drawing area.
- * Because the third point specifies on which side the arc should be displayed based on the first and second points, it does not need to accurately indicate a part of the arc.

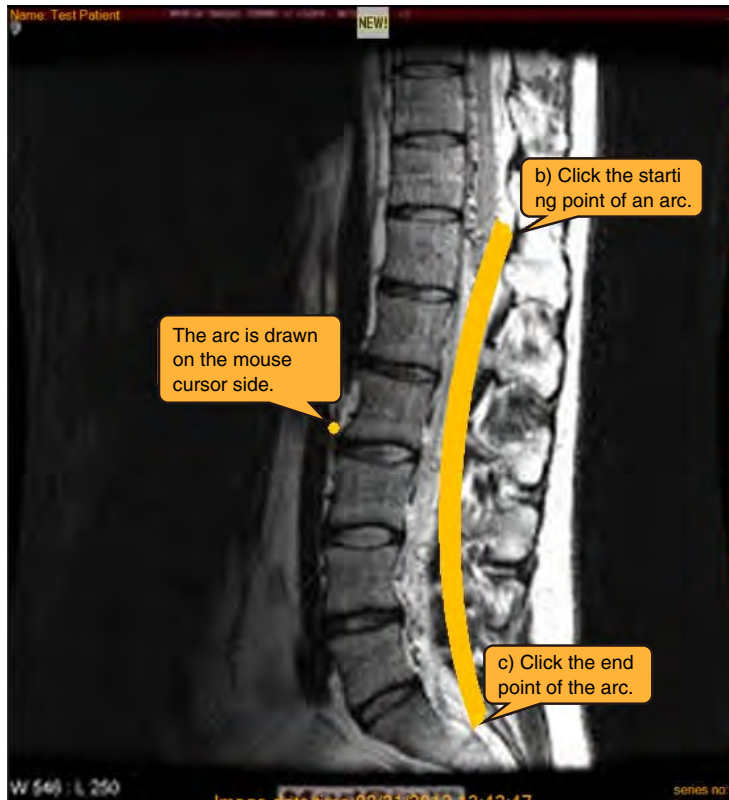
* Right-clicking during each operation will undo to the state before the first point was selected.

* The marking color and the line color and width are those specified in Format.

* This tool is an annotation function, not a measuring function.

7) Lumbar Lordosis

Draws a template of lumbar spine.



Chap. 5

- a) Click the Lumbar Lordosis button.
 - The mouse cursor changes to annotation cursor in the drawing area.
 - There is no limit on mouse movement.
 - b) Select the first point.
 - A marking (dot) appears at the selected position.
 - The mouse is disabled from moving outside the drawing area.
 - c) Select the second point.
 - A marking (dot) appears at the selected position.
 - The mouse is still disabled from moving outside the drawing area.
 - By moving the mouse, an arc of an ellipse connecting the two points is tentatively drawn on the cursor side.
 - See (* About the arc to be drawn) for an arc to be displayed.
 - d) Select the third point.
 - The markings (dots) are hidden and the arc is fixed.
 - The mouse is enabled to move outside the drawing area.
 - * Because the third point specifies on which side the arc should be displayed based on the first and second points, it does not need to accurately indicate a part of the arc.
- * Right-clicking during each operation will undo to the state before the first point was selected.
- * The marking color and the line color and width are those specified in Format.

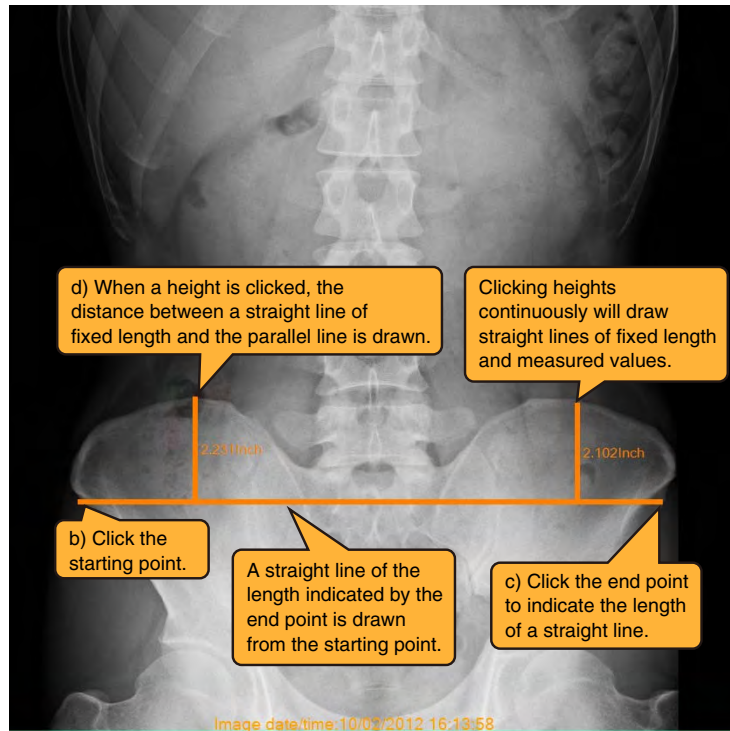
* About the arc to be drawn

The arc to be drawn is an arc of an ellipse with the long axis to short axis ratio of 1:0.4 and between 5 to 90 degrees.

* This tool is an annotation function, not a measuring function.

8) Vert Deviation

Draws multiple straight lines parallel to the bottom of an image, and measures the distance between them.



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a) Click the Vert Deviation button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- A marking (dot) appears at the selected position.
- The mouse is disabled from moving outside the drawing area.

c) Select the second point.

- The marking (dot) is hidden, and the line parallel to the floor starting from the first point is drawn.
- The mouse is enabled to move outside the drawing area.

d) Select any place.

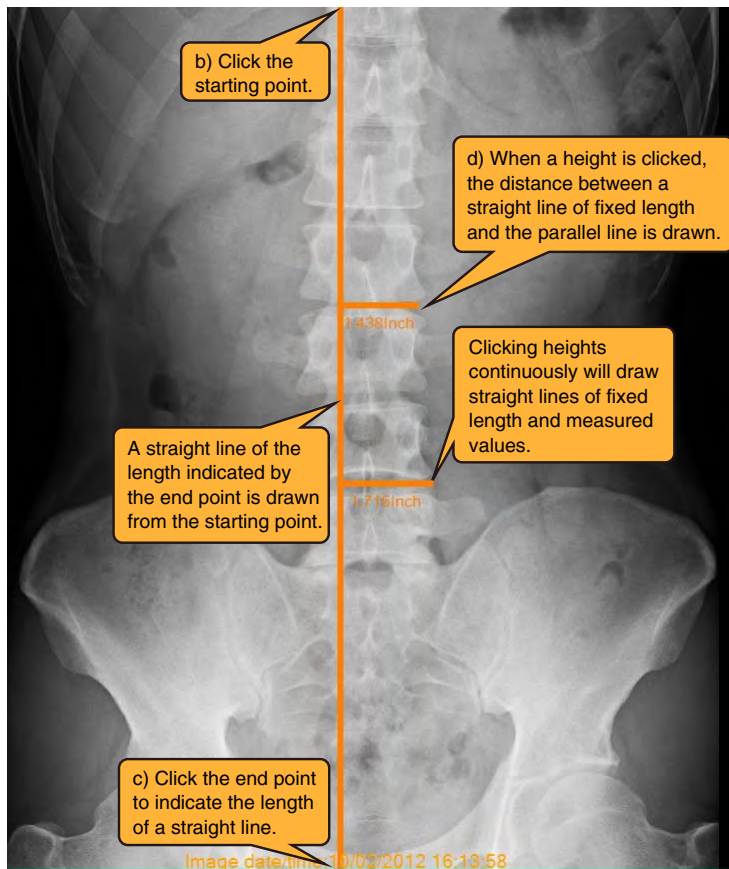
- Draws a straight line parallel to the straight line drawn in the above step, and displays the distance between them.
- Lines can be drawn continuously until the selection of Vert Deviation is canceled.

* The marking color, the line color and width, and the character font and color are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

9) Horiz Deviation

Draws multiple straight lines vertical to the bottom of an image, and measures the distance between them.

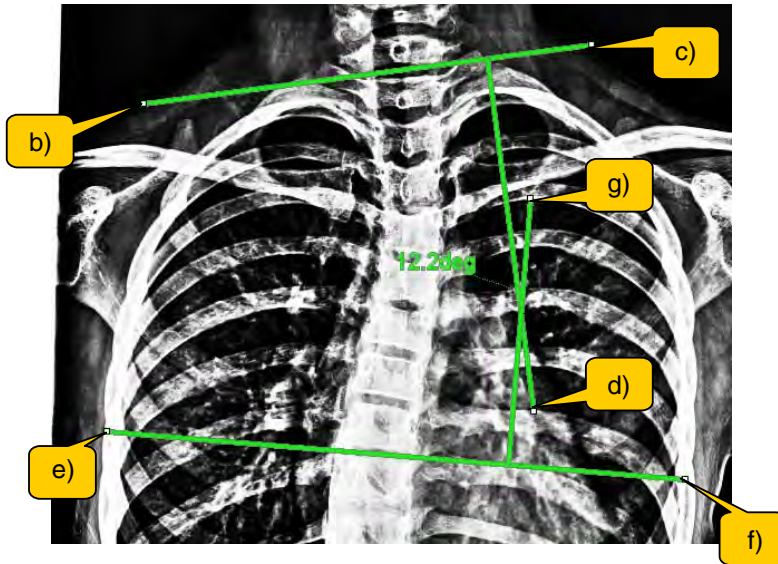


- a) Click the Horiz Deviation button.
 - The mouse cursor changes to annotation cursor in the drawing area.
 - There is no limit on mouse movement.
 - b) Select the first point.
 - A marking (dot) appears at the selected position.
 - The mouse is disabled from moving outside the drawing area.
 - c) Select the second point.
 - The marking (dot) is hidden, and the straight line vertical to the floor starting from the first point is drawn.
 - The mouse is enabled to move outside the drawing area.
 - d) Select any place.
 - Draws a straight line parallel to the straight line drawn in the above step, and displays the distance between them.
 - Lines can be drawn continuously until the selection of Horiz Deviation is canceled.
- * The marking color, the line color and width, and the character font and color are those specified in Format.
- * Text is displayed at a position where it does not overlap the lines as much as possible.

5.4.2 Orthopedic Tools

1) Perpendicular Cobb Angle

Measures the Cobb angle.



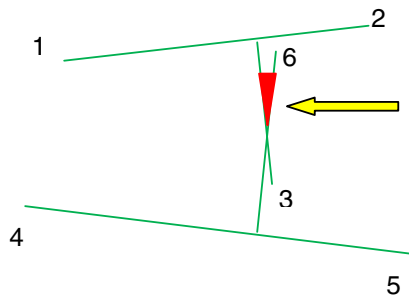
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- a) Click the Perpendicular Cobb Angle button.
 - The mouse cursor changes to annotation cursor in the drawing area.
 - There is no limit on mouse movement.
- b) Select the first point.
 - The mouse is disabled from moving outside the drawing area.
 - By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- c) Select the second point.
 - The straight line connecting the first and second points is fixed.
 - By moving the mouse, a tentative straight line vertical to the first line appears.
 - The mouse is still disabled from moving outside the drawing area.
- d) Select the third point.
 - The straight line vertical to the first line is fixed.
 - The mouse is still disabled from moving outside the drawing area.
- e) Select the fourth point.
 - The mouse is still disabled from moving outside the drawing area.
 - By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- f) Select the fifth point.
 - The straight line connecting the fourth and fifth points is fixed.
 - By moving the mouse, a tentative straight line vertical to the third line appears.
 - The mouse is still disabled from moving outside the drawing area.

g) Select the sixth point.

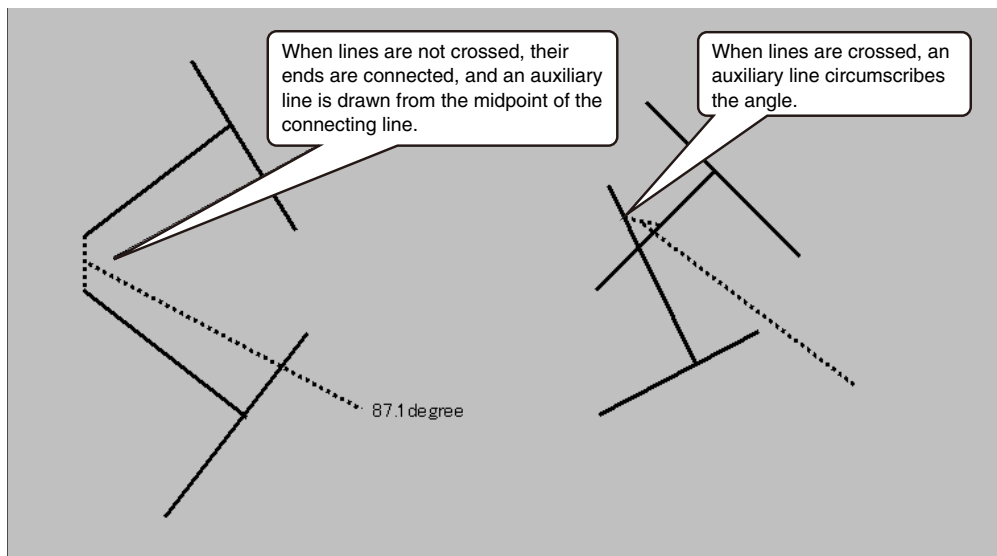
- The straight line vertical to the third line is fixed.
- The angle between the second line and the fourth line and an auxiliary line are displayed.
- The mouse is enabled to move outside the drawing area.

- * Right-clicking during each operation will undo to the state before the first point was selected.
- * The line color and width and the character font to be displayed are those specified in Format.
- * Text is displayed at a position where it does not overlap the lines as much as possible.
- * About the angle to be displayed
The angle to be displayed is the angle shown in the figure.



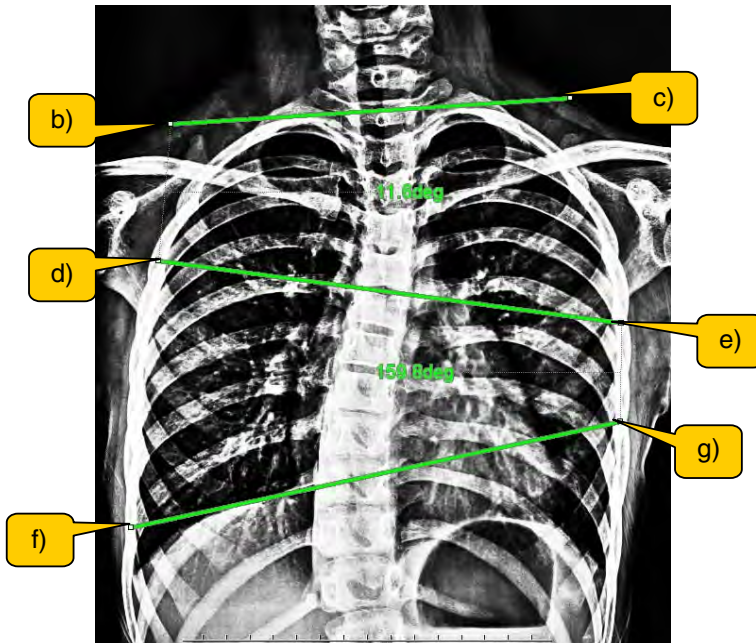
* About auxiliary lines

The following figure shows auxiliary lines for an angle between crossed lines and for an angle of uncrossed lines.



2) Three Line Cobb Angle

Measures three line Cobb angles.



Chap. 5

a) Click the Three Line Cobb Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- The mouse is still disabled from moving outside the drawing area.

f) Select the fifth point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

g) Select the sixth point.

- The straight line connecting the fifth and sixth points is fixed.
- Angles and auxiliary lines are displayed for the sharp angles between the first and second lines and between the second and third lines.
- The mouse is enabled to move outside the drawing area.

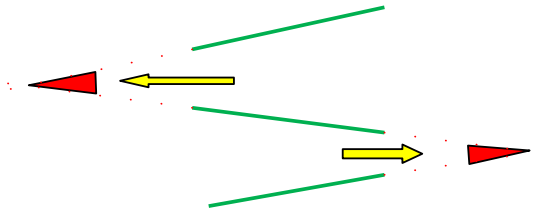
* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

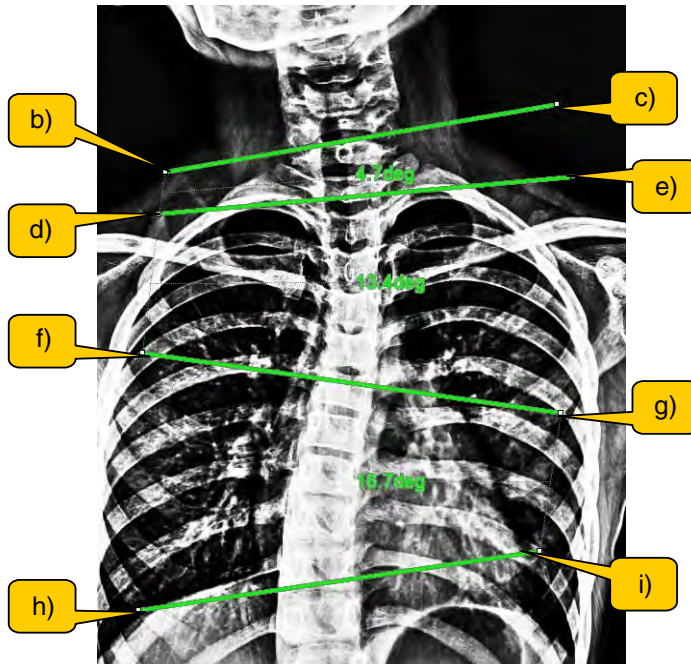
* About the angles to be displayed

The angles to be displayed are the angles shown in the figure.



3) Four Line Cobb Angle

Measures four line Cobb angles.



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a) Click the Four Line Cobb Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to a higher Y coordinate than the Y coordinate of one end of the first line which has lower Y coordinate than its other end, the mouse cursor changes to the unavailable cursor and the third point cannot be fixed.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to a higher Y coordinate than the Y coordinate of one end of the first line which has lower Y coordinate than its other end, the mouse cursor changes to the unavailable cursor and the fourth point cannot be fixed.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to a higher Y coordinate than the Y coordinate of one end of the second line which has lower Y coordinate than its other end, the mouse cursor changes to the unavailable cursor and the fifth point cannot be fixed.

f) Select the fifth point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to a higher Y coordinate than the Y coordinate of one end of the second line which has lower Y coordinate than its other end, the mouse cursor changes to the unavailable cursor and the sixth point cannot be fixed.

g) Select the sixth point.

- The straight line connecting the fifth and sixth points is fixed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to a higher Y coordinate than the Y coordinate of one end of the third line which has lower Y coordinate than its other end, the mouse cursor changes to the unavailable cursor and the seventh point cannot be fixed.

h) Select the seventh point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to a higher Y coordinate than the Y coordinate of one end of the third line which has lower Y coordinate than its other end, the mouse cursor changes to the unavailable cursor and the eighth point cannot be fixed.

i) Select the eighth point.

- The straight line connecting the seventh and eighth points is fixed.
- Angles and auxiliary lines are displayed for the sharp angles between the first and second lines, between the second and third lines, and between the third and fourth lines.
- The mouse is enabled to move outside the drawing area.

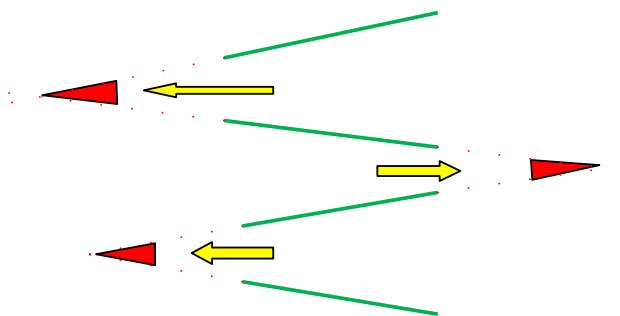
* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* About the angles to be displayed

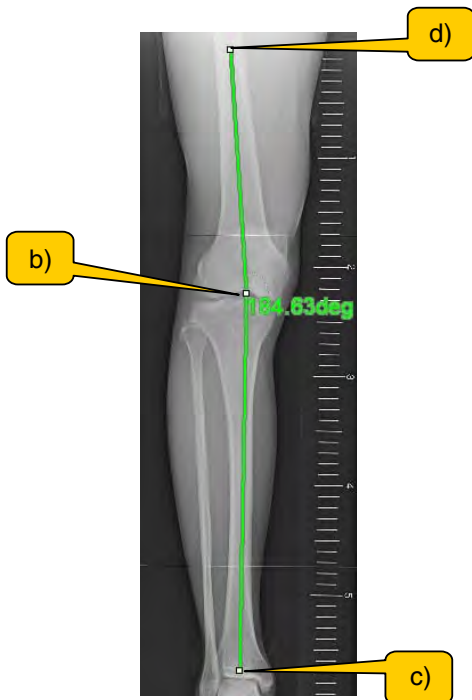
The angles to be displayed are the angles shown in the figure.



* Arguments of the MGGraphic function are the same as those of Three Line Cobb Angle.

4) Femorotibial Angle

Measures the femorotibial angle (FTA).



a) Click the Femorotibial Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- A marking (dot) appears at the selected position.
- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed. (The color and width of the line are those specified in Format.)
- By moving the mouse, a tentative line starting from the first point appears. (The marking of the first point remains.)
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- The marking of the first point disappears, and the straight line connecting the first and third points is fixed.
- The angle on the mouse cursor side compared to the X coordinate of the first point is displayed.
- When the cursor moves to the other side compared to the X coordinate of the first point, the angle also changes.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The angle to be displayed is fixed.
- An auxiliary line for the displayed angle appears.
- The mouse is enabled to move outside the drawing area.

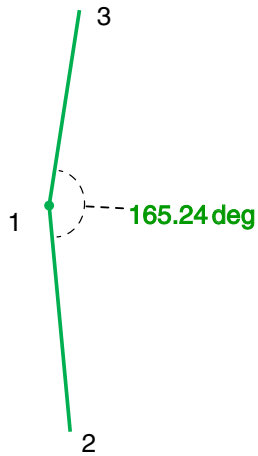
* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

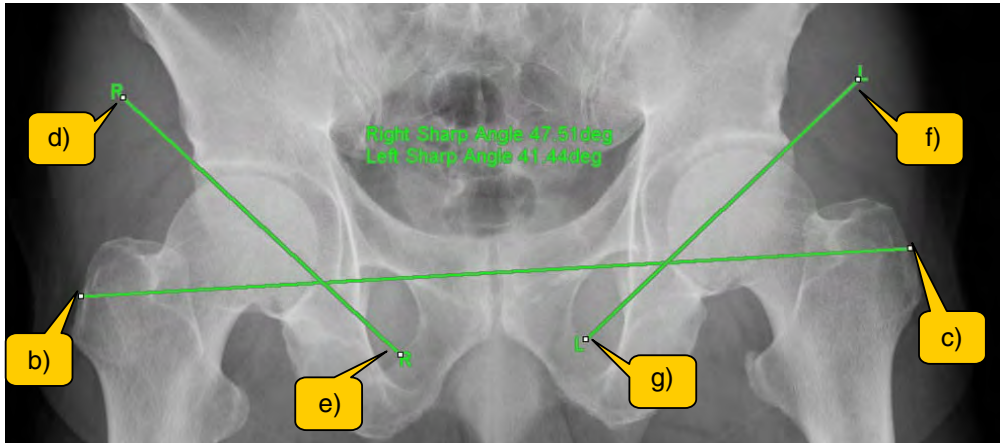
* About auxiliary lines

A line is drawn circumscribing the angle and to the text as shown in the figure.



5) Sharp Angle

Measures the acetabular angle (Sharp angle).



a) Click the Sharp Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to the left of the X coordinate of one end of the second line which is more on the right than its other end, the mouse cursor changes to the unavailable cursor and the fifth point cannot be fixed.

f) Select the fifth point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.
- If the mouse moves to the left of the X coordinate of one end of the second line which is more on the right than its other end, the mouse cursor changes to the unavailable cursor and the sixth point cannot be fixed.

g) Select the sixth point.

- The straight line connecting the fifth and sixth points is fixed.
- "R" is displayed on the third point and the fourth point, and "L" is displayed on the fifth point and the sixth point.
- The angle between the first line and the second line is displayed as "Right Sharp Angle", and the angle between the first line and the third line is displayed as "Left Sharp Angle".
- See (* About the angles to be displayed) for the angles to be displayed.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* About the angles to be displayed

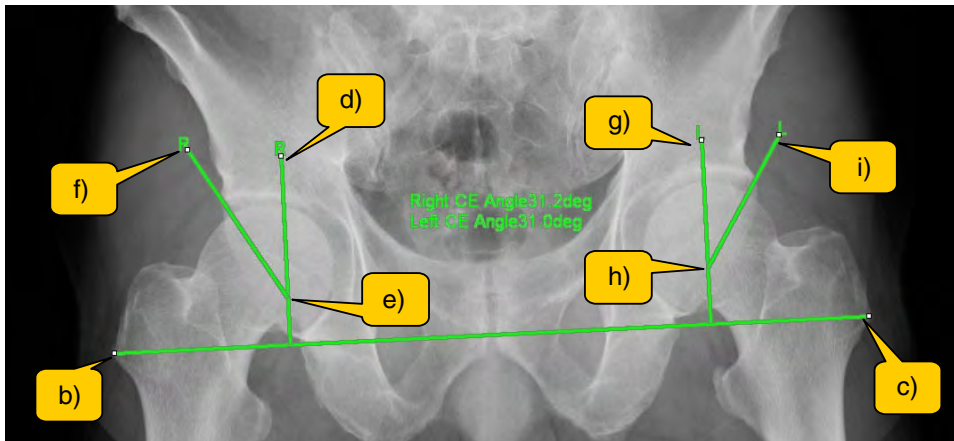
Angle A is Right Sharp Angle.

Angle B is Left Sharp Angle.



6) CE Angle

Measures the CE angle.



a) Click the CE Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed. (The color and width of the line are those specified in Format.)
- By moving the mouse, a tentative line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- The line vertical to the first line is fixed.
- The mouse is still disabled from moving outside the drawing area.
- By moving the mouse, if the Y coordinate of the cursor is in the range of the second line, a marker appears on the second line.
- By moving the mouse, if the Y coordinate of the cursor is outside the range of the second line, the cursor changes to the unavailable cursor and the fourth point cannot be fixed.

e) Select the fourth point.

- The fourth point is fixed at the marker position on the second line.
- By moving the mouse, a tentative straight line starting from the fourth point appears.
- The mouse is still disabled from moving outside the drawing area.

f) Select the fifth point.

- The straight line connecting the fourth and fifth points is fixed.
- The mouse is still disabled from moving outside the drawing area.
- By moving the mouse, if the cursor is on the left of the second line, the cursor changes to the unavailable cursor and the sixth point cannot be fixed.
- By moving the mouse, if the cursor is on the side of the first line opposite to the second line, the cursor changes to the unavailable cursor and the sixth point cannot be fixed.
- When the cursor is not in the unavailable range, a tentative line vertical to the first line appears.

g) Select the sixth point.

- The line vertical to the first line is fixed.
- The mouse is still disabled from moving outside the drawing area.
- By moving the mouse, if the Y coordinate of the cursor is in the range of the fourth line, a marker appears on the fourth line.
- By moving the mouse, if the Y coordinate of the cursor is outside the range of the fourth line, the cursor changes to the unavailable cursor and the fourth point cannot be fixed.

h) Select the seventh point.

- The seventh point is fixed at the marker position on the fourth line.
- By moving the mouse, a tentative straight line starting from the seventh point appears.
- The mouse is still disabled from moving outside the drawing area.

i) Select the eighth point.

- The straight line connecting the seventh and eighth points is fixed.
- "R" is displayed on the third point and the fifth point, and "L" is displayed on the sixth point and the eighth point.
- The angle between the second line and the third line is displayed as "Right CE Angle", and the angle between the fourth line and the fifth line is displayed as "Left CE Angle".
- See (* About the angles to be displayed) for the angles to be displayed.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

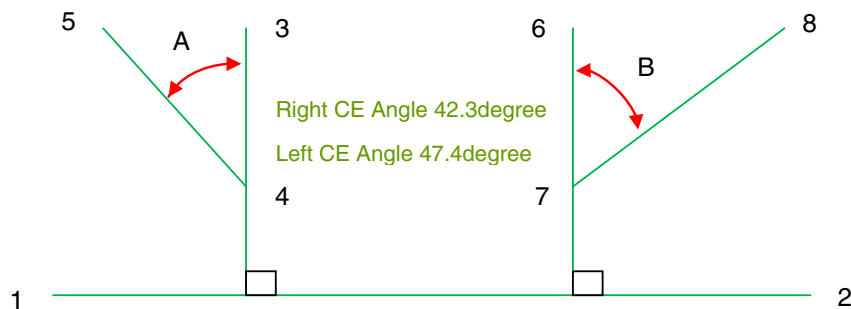
* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* About the angles to be displayed

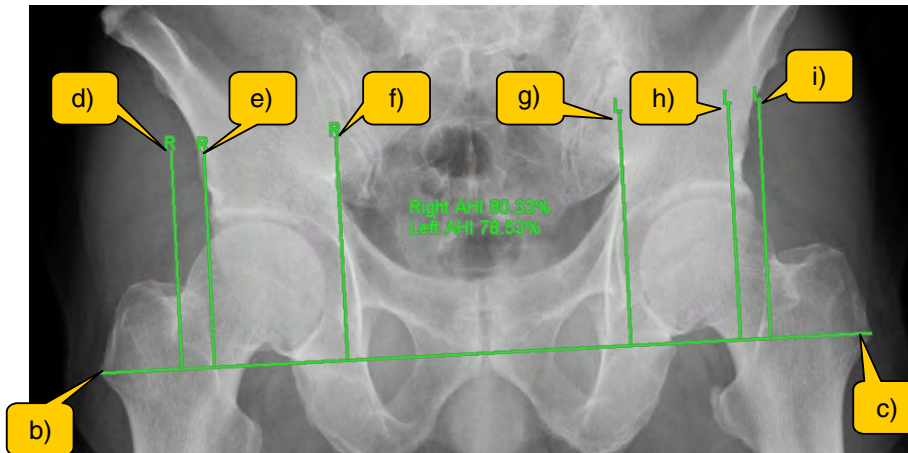
Angle A is Right CE Angle.

Angle B is Left CE Angle.



7) AHI

Measures AHI.



a) Click the AHI button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- By moving the mouse, a tentative straight line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- A straight line vertical to the first line is fixed (can be outside the range of the first line segment).
- By moving the mouse, a tentative straight line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- A straight line vertical to the first line is fixed (can be outside the range of the first line segment).
- By moving the mouse, a tentative straight line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

f) Select the fifth point.

- A straight line vertical to the first line is fixed (can be outside the range of the first line segment).
- By moving the mouse, a tentative straight line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

g) Select the sixth point.

- A straight line vertical to the first line is fixed (can be outside the range of the first line segment).
- By moving the mouse, a tentative straight line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

h) Select the seventh point.

- A straight line vertical to the first line is fixed (can be outside the range of the first line segment).
- By moving the mouse, a tentative straight line vertical to the first line appears.
- The mouse is still disabled from moving outside the drawing area.

i) Select the eighth point.

- A straight line vertical to the first line is fixed (can be outside the range of the first line segment).
- "R" is displayed on the ends of the left three lines among the straight lines vertical to the first line.
- "L" is displayed on the ends of the right three lines among the straight lines vertical to the first line.
- Ratio is calculated and "Right AHI" and "Left AHI" are displayed.
- See (* About the ratio calculation) for calculation of ratio.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

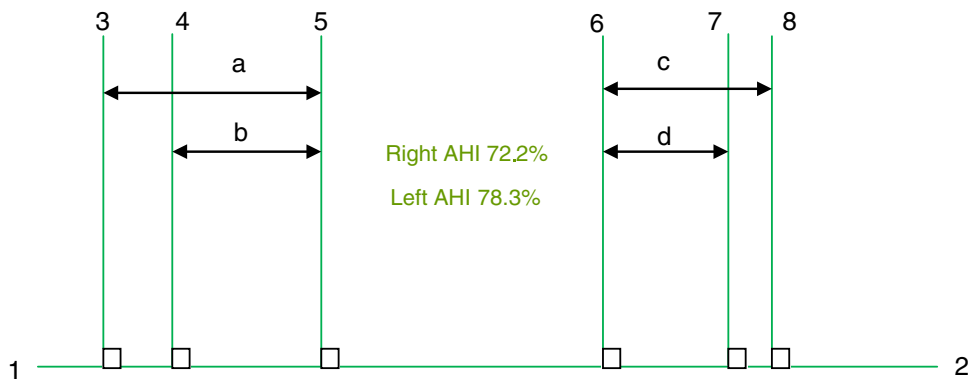
* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* About the ratio calculation

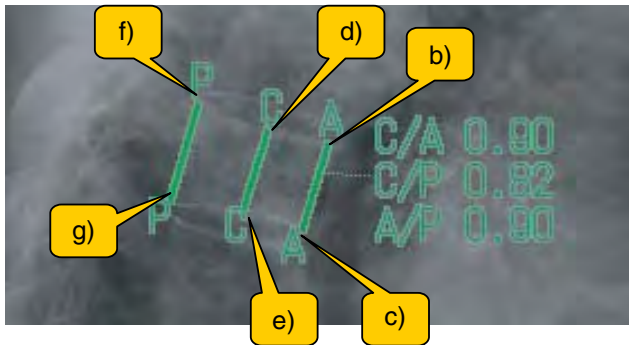
b/a is Right AHI.

d/c is Left AHI.



8) CA CP AP

Measures CA/CP/AP.

**a) Click the CA CP AP button.**

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- By moving the mouse, if the mouse cursor is on the first line, the cursor changes to the unavailable cursor and the third point cannot be fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative line parallel to the first line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line parallel to the first line starting from the third point is fixed.
- By moving the mouse, if the mouse cursor is moved to the first line side of the second line, the cursor changes to the unavailable cursor and the fifth point cannot be fixed.
- The mouse is still disabled from moving outside the drawing area.

f) Select the fifth point.

- By moving the mouse, a tentative line parallel to the first line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

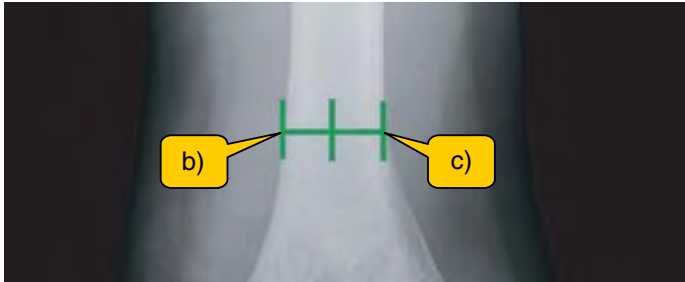
g) Select the sixth point.

- The straight line parallel to the first line starting from the fifth point is fixed.
- "A" is displayed on both ends of the first line, "C" is displayed on both ends of the second line, and "P" is displayed on both ends of the third line.
- (Length of segment C)/(Length of segment A) is displayed as "C/A".
- (Length of segment C)/(Length of segment P) is displayed as "C/P".
- (Length of segment A)/(Length of segment P) is displayed as "A/P".
- The mouse is enabled to move outside the drawing area.

- * Right-clicking during each operation will undo to the state before the first point was selected.
- * The line color and width and the character font to be displayed are those specified in Format.
- * Text is displayed at a position where it does not overlap the lines as much as possible.

9) Ratio Ruler

Displays a ratio ruler.

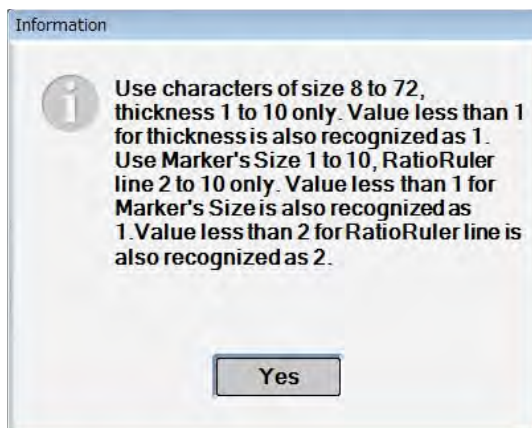
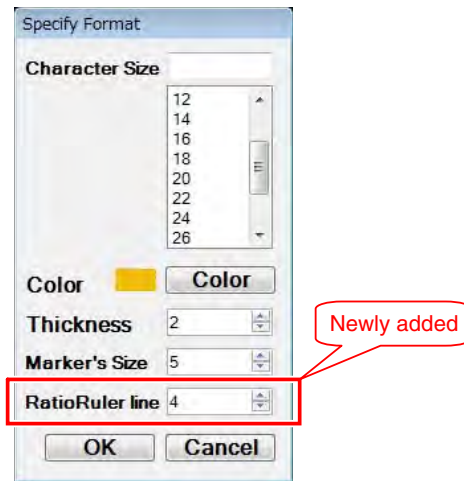


- Click the Ratio Ruler button.
 - The mouse cursor changes to annotation cursor in the drawing area.
 - There is no limit on mouse movement.
 - Select the first point.
 - The mouse is disabled from moving outside the drawing area.
 - By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
 - Select the second point.
 - The straight line connecting the first and second points is fixed.
 - Vertical lines are displayed to show the number of partitions specified in Format.
 - The mouse is enabled to move outside the drawing area.
- * Right-clicking during each operation will undo to the state before the first point was selected.
 - * The line color and width to be displayed are those specified in Format.

* About the number of partitions

Add the "RatioRuler line" item to the Format dialog box in order to make changes (the available range is 2 to 10).

When a value outside the range is input, an Information dialog box should appear.



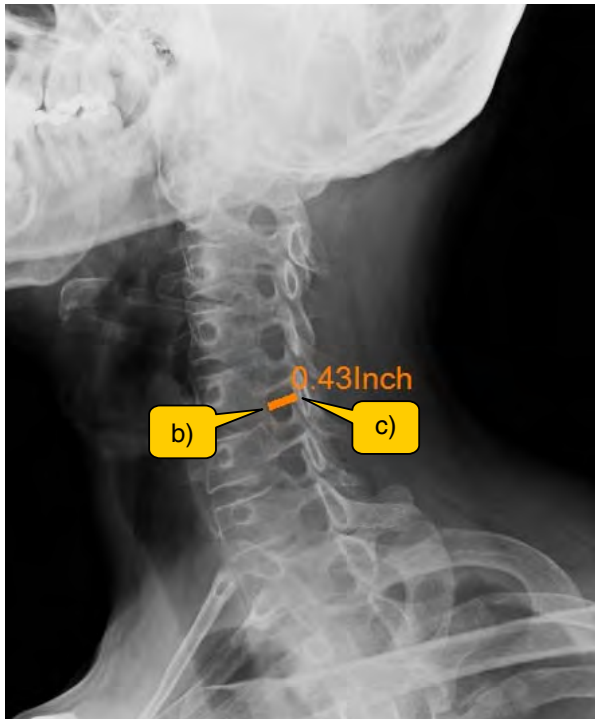
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* About doubling of the number of partitions

When Select Tool is selected, double-clicking the figure doubles the number of partitions. It changes in order of double --> quadruple --> default in loop every time the figure is double-clicked.

10) Sagittal Diameters

Measures the sagittal diameter of the cervical spinal canal.



a) Click the Sagittal Diameters button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The length of the segment is displayed.
- The mouse is enabled to move outside the drawing area.

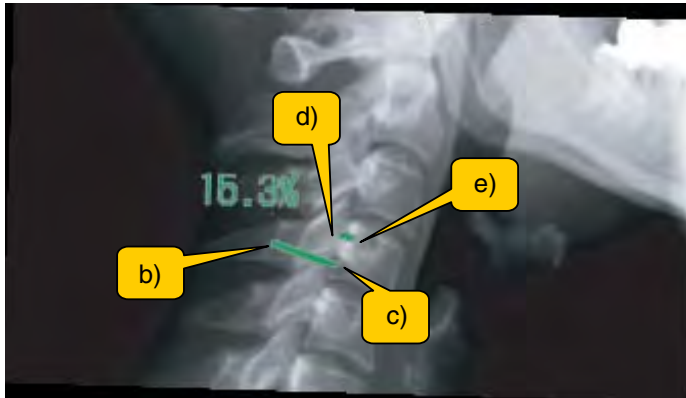
* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

11) Spinal Canal Narrowing Ratio

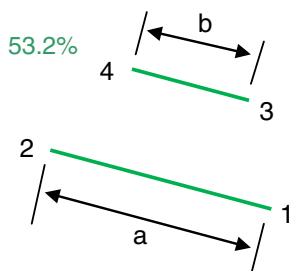
Measures the spinal canal narrowing ratio.



- a) Click the Spinal Canal Narrowing Ratio button.
 - The mouse cursor changes to annotation cursor in the drawing area.
 - There is no limit on mouse movement.
- b) Select the first point.
 - The mouse is disabled from moving outside the drawing area.
 - By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- c) Select the second point.
 - The straight line connecting the first and second points is fixed.
 - The mouse is still disabled from moving outside the drawing area.
- d) Select the third point.
 - By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
 - The mouse is still disabled from moving outside the drawing area.
- e) Select the fourth point.
 - The straight line connecting the third and fourth points is fixed.
 - See (* About the ratio) for the ratio to be displayed.
 - The mouse is enabled to move outside the drawing area.

- * Right-clicking during each operation will undo to the state before the first point was selected.
- * The line color and width and the character font to be displayed are those specified in Format.
- * Text is displayed at a position where it does not overlap the lines as much as possible.

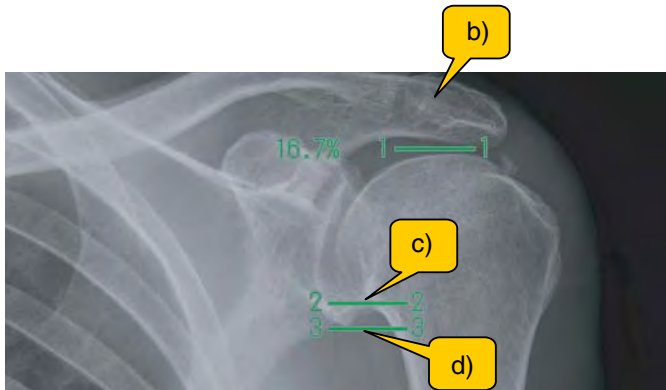
- * About the ratio
The ratio to be displayed is b/a .



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12) Descending Ratio of Humeral Head

Measures the descending ratio of humeral head.



a) Click the Descending Ratio of Humeral Head button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- A marking (dot) appears at the selected position.

c) Select the second point.

- A marking (dot) appears at the selected position.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- Lines parallel to the floor appear taking the first to third points selected as respective centers.
- "1" is displayed on both ends of the topmost parallel line.
- "2" is displayed on both ends of the parallel line second from the top.
- "3" is displayed on both ends of the parallel line third from the top.
- See (* About the ratio) for the ratio to be displayed.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

* The marker color, the line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

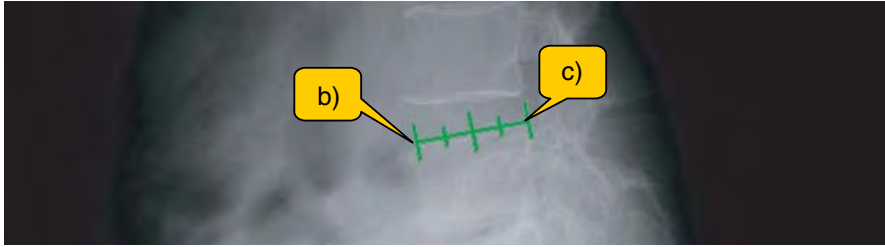
* About the ratio

The ratio to be displayed is b/a .



13) Meyerding

Measures for the Meyerding grading.



a) Click the Meyerding button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

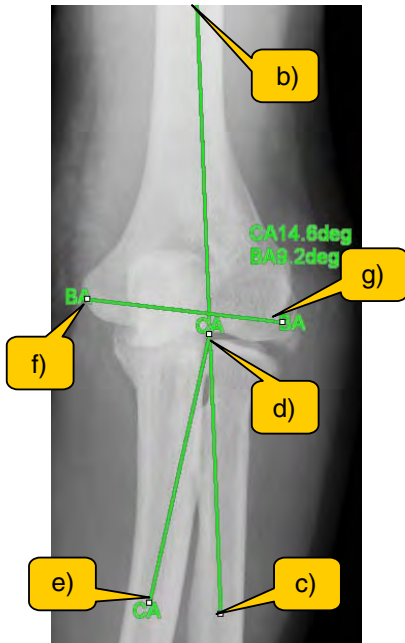
- The straight line connecting the first and second points is fixed.
- Vertical lines that divide the line into quarters appear.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width to be displayed are those specified in Format.

14) CABA Angle

Measures the CA angle and the BA angle.



a) Click the CABA Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- The mouse is still disabled from moving outside the drawing area.

f) Select the fifth point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

g) Select the sixth point.

- The straight line connecting the fifth and sixth points is fixed.
- "CA" is displayed on both ends of the second line, and "BA" is displayed on both ends of the third line.
- See (* About the angles to be displayed) for the CA angle and the BA angle to be displayed.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

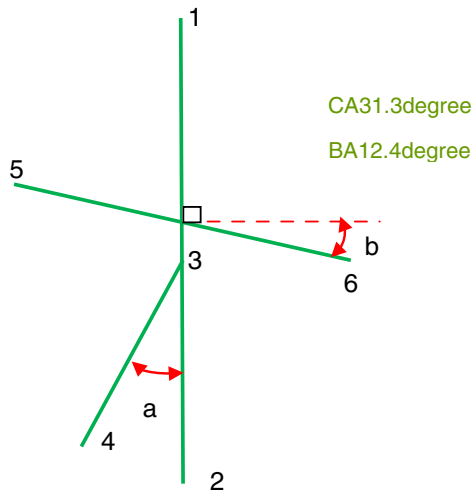
* About the angles to be displayed

When lines are drawn in the order as shown in the figure.

Angle a is CA.

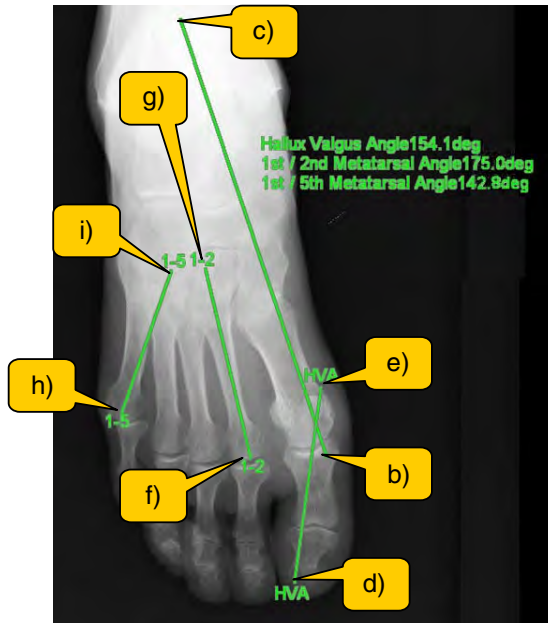
Angle b is BA.

(If lines are drawn in the opposite order, the adjoining angles will be measured.)



15) Hallux Valgus Angle

Measures the hallux valgus angle.



a) Click the Hallux Valgus Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- The mouse is still disabled from moving outside the drawing area.

f) Select the fifth point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

g) Select the sixth point.

- The straight line connecting the fifth and sixth points is fixed.
- The mouse is still disabled from moving outside the drawing area.

h) Select the seventh point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

i) Select the eighth point.

- The straight line connecting the seventh and eighth points is fixed.
- "HVA" is displayed on both ends of the second line.
- "1-2" is displayed on both ends of the third line.
- "1-5" is displayed on both ends of the fourth line.
- See (* About the angles to be displayed) for the HVA angle, 1-2 angle and 1-5 angle to be displayed.
- The mouse is enabled to move outside the drawing area.

* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* About the angles to be displayed

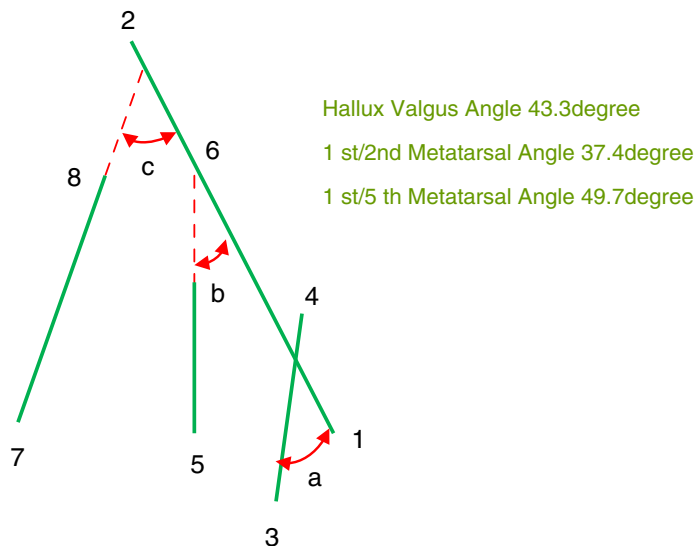
When lines are drawn in the order as shown in the figure.

Angle a is Hallux Valgus Angle.

Angle b is 1 st/2 nd Metatarsal Angle.

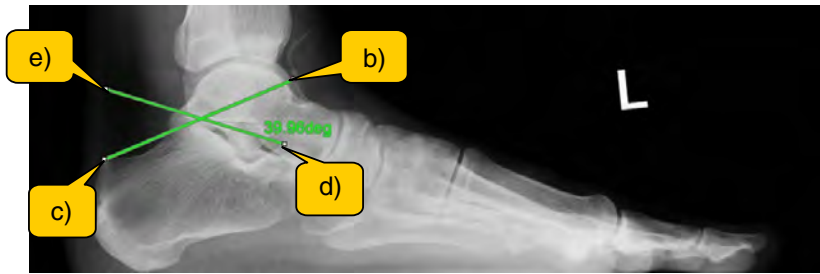
Angle c is 1 st/5 th Metatarsal Angle.

(If lines are drawn in the opposite order, the adjoining angles will be measured.)



16) Bohler Angle

Measures the Bohler angle.



a) Click the Bohler Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- See (* About the angle to be displayed) for the angle to be displayed.
- The mouse is enabled to move outside the drawing area.

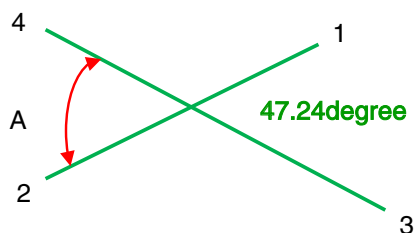
* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

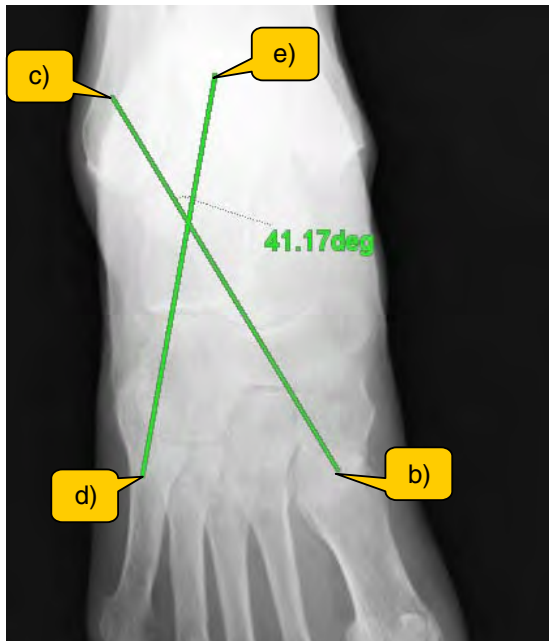
* About the displayed angle

The displayed angle is the angle (= the opposite angle) measured between the start point of line 1 (1 in the figure below) and the start point of line 2 (3 in the figure below).



17) Talocalcanean Angle

Measures the talocalcanean angle.



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a) Click the Talocalcanean Angle button.

- The mouse cursor changes to annotation cursor in the drawing area.
- There is no limit on mouse movement.

b) Select the first point.

- The mouse is disabled from moving outside the drawing area.
- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.

c) Select the second point.

- The straight line connecting the first and second points is fixed.
- The mouse is still disabled from moving outside the drawing area.

d) Select the third point.

- By moving the mouse, a tentative straight line is drawn from the position where the mouse button was pressed.
- The mouse is still disabled from moving outside the drawing area.

e) Select the fourth point.

- The straight line connecting the third and fourth points is fixed.
- See (* About the angle to be displayed) for the angle to be displayed.
- The mouse is enabled to move outside the drawing area.

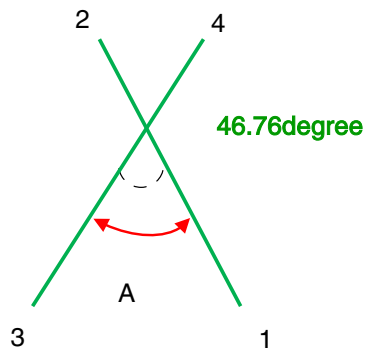
* Right-clicking during each operation will undo to the state before the first point was selected.

* The line color and width and the character font to be displayed are those specified in Format.

* Text is displayed at a position where it does not overlap the lines as much as possible.

* About the displayed angle

The displayed angle is the angle (= the opposite angle) measured between the start point of line 1 (1 in the figure below) and the start point of line 2 (3 in the figure below).



5.5 Comparing Images

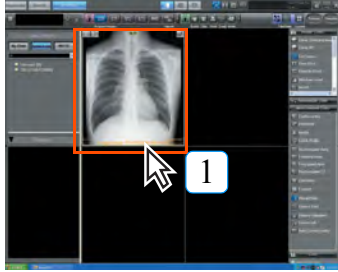
The procedure for comparing acquired images is described below.

Images for comparison may be aligned horizontally or vertically for image processing or display size adjustments.

Comparison may be made either of two completely different images or of two versions of the same image with differing densities and contrasts.

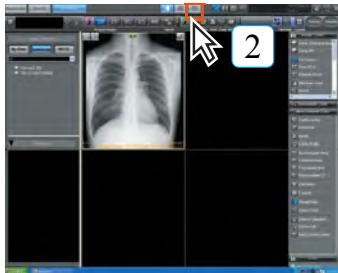
5.5.1 Aligning Images for Comparison

The procedure for aligning images to be compared is described below.



1 Click the first image.

- The frame of the selected images will be shown in green.



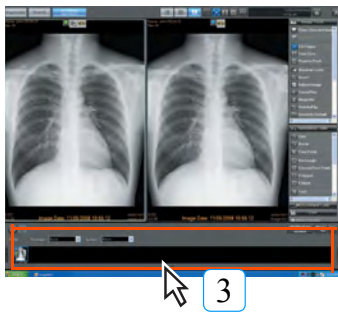
2 Click the [Compare] button.

- The images for comparison will be displayed.
- The image selected in step-1 above will be displayed as the first image.



The original image is displayed on the right side of the screen in horizontal-alignment format and the bottom of the screen in vertical-alignment format.

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3 Select the image for comparison from the thumbnails at the bottom of the screen.

- The image selected for comparison will be displayed beside (or above) the image selected in step-1.
- When comparing two versions of the same image, select the original image as the image to be compared.




Changing the image for comparison

Select the image to be used as the original from the thumbnails at the bottom of the comparison screen and drag and drop the image to the field where the original image is displayed.



The following icons are displayed in the thumbnails displayed at the bottom of the comparison screen.

To compare two versions of the same image, select the original image here as the image to be compared.

Original image icon (blue):  Image to be compared (green): 

When the original image and the image to be compared are the same, the icon for the original (blue) and the image to be compared (green) will be aligned vertically in the thumbnail display.



Clicking the [Switch screen layout] button will enable switching between horizontal and vertical-alignment formats.

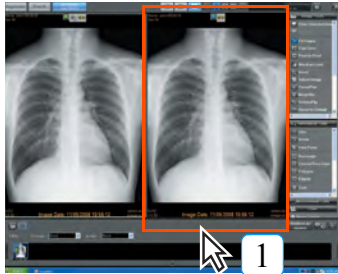


Horizontal alignment

Vertical alignment

5.5.2 Comparing Images after Processing

The procedure for comparing the original with the image for comparison while implementing separate image processing, enlargement or reduction of each is described below.



- 1 Select the image to be processed, enlarged or reduced.
 - **The frame of the selected image will be shown in green.**

- 2 Use the Image Processing Palette to carry out image processing, enlargement or reduction.

- **Image processing, enlargement or reduction will be carried out only for the image selected in step-1 above.**

- 3 Repeat steps 1 and 2 to select the second image and carry out image processing, enlargement or reduction.



Forwarding multi-frame images

- To forward multi-frame images, select the required image and rotate the mouse wheel.
- **Note:** Only effective if the mouse pointer is placed over the multi-frame image.

5.5.3 Comparison Using Image Processing Link

The procedure for comparing the original image with the a comparison while carrying out identical changes in density, contrast, enlargement and reduction while linked is described below.

This function is used, for example, for time-lapse observation of a targeted body part.



- 1 Click the [Link] button.



- **The link status display icon changes to "Link ON," indicating readiness for linked processing of density, contrast, enlargement and reduction.**



Link OFF



Link ON

- 2 Carry out image processing, enlargement or reduction.

- **The same processing, enlargement and reduction will be reflected on both the original image and the image for comparison.**



When the link is ON, frame-forwarding of multi-frame images is also linked.



Linked image processing, enlargement and reduction are only possible when the link is ON.



Image processing link reference point

Linked image processing (density, contrast, enlargement, reduction) is carried out with the reference point set at the center of the displayed images.

The image processing link will not function properly if this reference point is off-center.

Adjustments may be made following the procedure detailed below.

< For images other than multi-frame images >

- 1 Click the [Image processing link] button to cancel the function.



- 2 Click the [Display reference point] button.

- A grid will be displayed.

2



- 3 Carry out adjustments such as moving, enlarging or reducing the images so that the images appear identical and the grid line positions match.

- 4 Click the [Image processing link] button.

4

- The images will be linked.

< For Multi-frame images >

- 1 Click the [Image processing link] button to cancel the function.

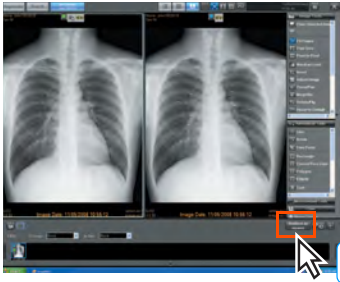
- 2 Forward the frames to display a frame that appears identical.

- 3 Click the [Image processing link] button.

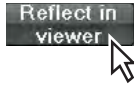
- The images will be linked.

5.5.4 Reflecting the Comparison Screen in the Viewer Screen

It is necessary to display the image data on the Viewer screen before printing the contents of the Comparison screen.



1 Click the [Reflect in viewer] button located at the lower right of the comparison screen.



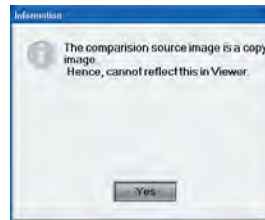
- The image will be displayed in the Viewer screen.

Note: The layout applied to the Viewer screen here is the same as the last layout applied to the Viewer screen.



When the same image is compared, the image will be reflected in the Viewer screen after copying the comparison target.

Therefore, if the copied image already exists, a message indicating that the image will not be reflected in the Viewer screen will appear.

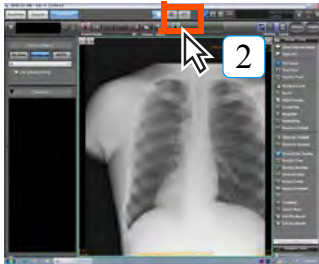


5.5.5 Case image comparisons

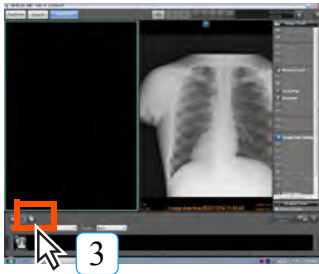
The patient's image is registered as the case image to enable reference as the case image in the comparison screen.

p.135 25) Add Bookmark


- 1 Click to select the comparison origin image.
 - The frame of the selected image changes to green.



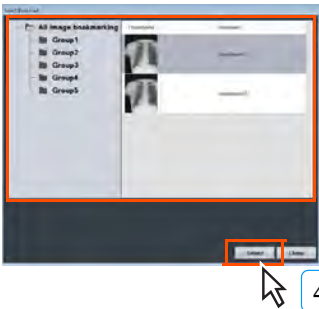
- 2 Click the [Comparison] button.
 - The comparison screen is displayed.
 - The screen selected in Procedure 1 is displayed as the comparison base.



- 3 Click the case button.
 - The [Select BookMark] screen is displayed.

 The comparison base image is displayed on the right side, if the screen is divided vertically, or the bottom if divided horizontally.


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- 4 Select the case image to be used for comparison and click the [Select] button.



- The image selected as the case image is displayed on the left side of the comparison screen.

 The following icons are displayed on the comparison screen.

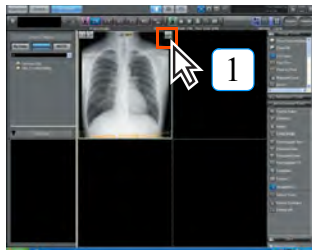
- Comparison base image icon (blue)
- Case image icon (yellow)



- Any image data overlaying the image registered as the case image will be deleted when the case image is registered and not be displayed.
- Operations on the case image and information linked to comparison images will not be saved.
- Basic operations for the case image are density contrast, black/white reversal, expansion/contraction and rotation.
- Although the annotation function cannot be used again, if annotation is enabled for images when registering the case, annotation display/non-display can be switched.

5.6 Disposing of Images

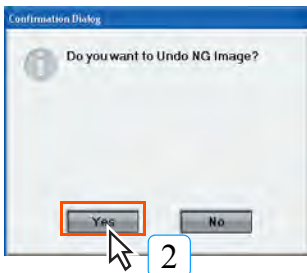
This section describes how to discard imported CR and AeroDR images.



- 1 If you want to discard imported CR and AeroDR images, click the [NG] button displayed on the upper right corner of each image.

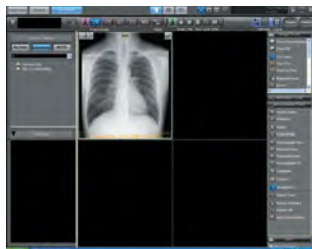


- A request for confirmation will be displayed.



- 2 Click the [Yes] button.

- The image will be disposed of and an NG icon displayed on the image.



If the NG reason setting is enabled, clicking the [NG] button will display the NG Reason Selection Screen, where you can select a reason for discarding the image.



p.219 Selecting an NG reason



When the screen is switched back to the Patient Reception screen using the [Return] button after rejecting the image ([NG] button), the rejected image will not be imported.

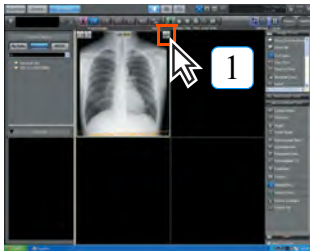


When the NG image save setting is enabled, it will be saved as an NG image. When the setting is disabled, the image will be deleted.



To restore an image that has been disposed of

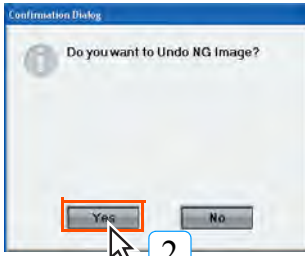
Follow the procedure detailed below to restore an image that has been disposed of.



1 Click the arrow button displayed at the top right of the image that has been disposed of.



- A request for confirmation will be displayed.



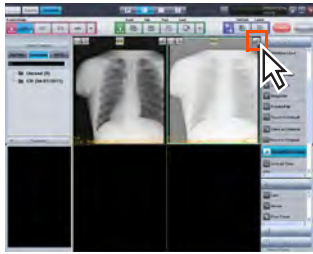
2 Click the [Yes] button.

- The image will be restored.



5.7 Selecting an NG reason

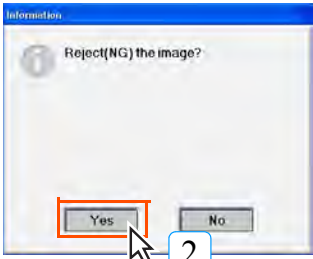
Label a captured image as NG, and set an NG reason.



- 1 If you want to discard a captured CR image, click the [NG] button located in the image's upper right corner.



- A confirmation message is displayed.



- 2 Click the [Yes] button.

- The NG Reason Selection Screen is displayed.





- 3 Select a reason for discarding the selected image.


- An [NG] icon is displayed above the image, identifying it as an NG image.





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 NG images can be returned to normal until the diagnosis is complete.

 **p.218** To restore an image that has been disposed of

 When redisplaying it after diagnosis is complete, clicking the [NG] button will allow you to check the NG reason, make changes, etc.

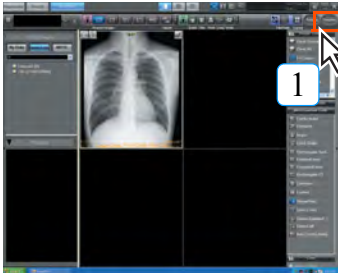
 When the NG image save setting is enabled, it will be saved as an NG image. When the setting is disabled, the image will be deleted.

 Total NG results can be confirmed.

 **p.517** ImagePilot Monitoring Tool Screen

5.8 Finalizing Images

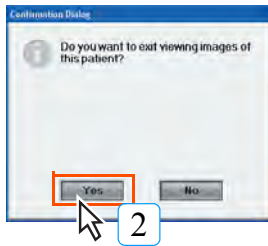
The procedure for finalizing an acquired image and returning to the patient reception screen is described below.



1 Check all acquired images by displaying on the viewer screen. Then click the [Complete] button.



- A request for confirmation will be displayed.



2 Click the [Yes] button.

- The image will be finalized and the patient reception screen displayed.

user tool

Show/hide of the confirmation message shown on the left can be set using the User Tool. (Default: ON)
The setting can be made through [Client Settings] - [Operation Settings] - [Display Settings] - [Display Confirmation Message at Shutdown of Viewer].



p.364 [Display confirmation message when the viewer screen is closed] checkbox (Operation Settings)

5.9 Saving the Image Processing Settings

The procedure for registration, switchover, edition and output of GSPS is described below.



GSPS

GSPS is the function to save the information relating to image density/contrast edition, annotation, measuring result, etc. separately from the image. GSPS can be used to save the information for each single image, and it is also possible to save several information for one image as the GSPS. Using GSPS, it becomes possible to utilize one image for various purposes. For example, GSPS that applied the image processing for conference use or the other that applied the image processing for in-house training. ON/OFF of GSPS, switching to other GSPS can be freely performed.



Images registered by GSPS can be saved in HOST output and Media as "Images in GSPS" or "Image reflected in GSPS".

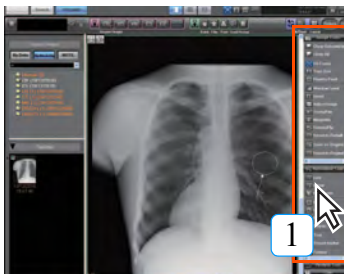


p.225 Outputting the Image attached with GSPS

p.226 Outputting the Image with GSPS reflected

5.9.1 Registering the GSPS

The procedure to newly register the GSPS is described below.

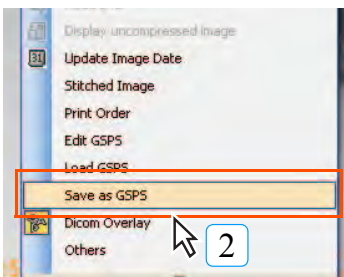


1 Implement the image processing(density/contrast edition, annotation, measuring) so that the information is registered as the GSPS.



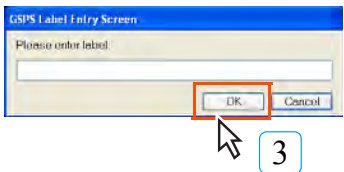
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2 Right-click on the image to open the right-click menu, and select [Save as GSPS].

- GSPS Label Entry screen will be displayed.



3 Enter the name for the GSPS, and click [OK].

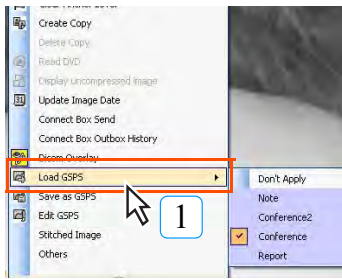
- The image processing performed in the step 1 is registered as the GSPS.



Repeating the above step 1 through 3 will register several GSPS's.

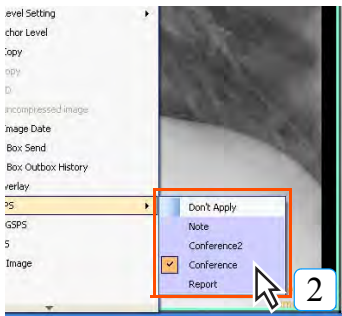
5.9.2 Switching the GSPS to the others

The procedure for switching several GSPS's registered to those applicable to the image.



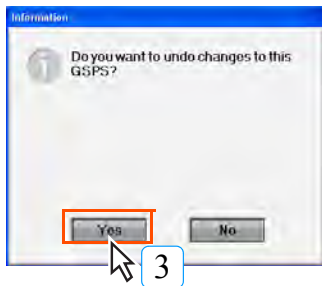
1 Right-click on the image for which the GSPS shall be switched, and select [Load GSPS] from the menu.

- Registered GSPS will be displayed in list on the right of [Load GSPS].




2 Select the name of GSPS that shall be applied to the image.


- A confirmation screen will be displayed.




3 Click [YES].

- The selected GSPS will be applied to the image. (Selected GSPS is displayed with checkmark.)

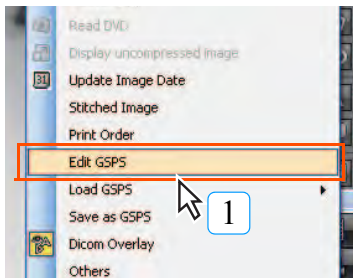
 Repeating the above step 1 through 3 will switch to the other GSPS.

 GSPS that was created by the user currently logging in is displayed in purple.

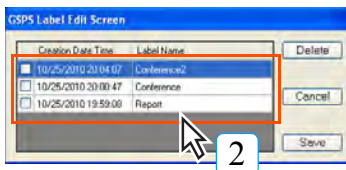
 When referring to the GSPS, browse all information without failure.

5.9.3 Editing the GSPS


The procedure to change or delete the name of the GSPS that has been registered is described below.

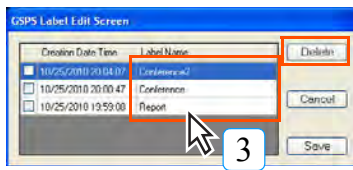


- 1 Right-click on the image whose name shall be changed or deleted, and select [Edit GSPS] from the menu.
 - **GSPS Edit screen will be displayed.**

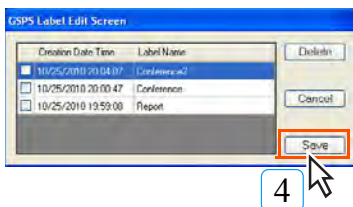


- 2 Select the GSPS whose name shall be changed or deleted.

 GSPS's whose name can be changed or deleted are those created by the user currently logging in.




- 3 To change the name, double-click the current name, and overwrite the new name. To delete the name, select the GSPS, and click [Delete] button.

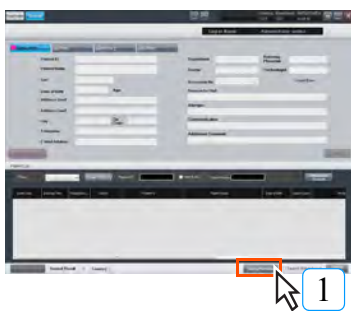


- 4 Click [Save] button.
 - **Edited GSPS is saved, and returns to the Viewer screen.**

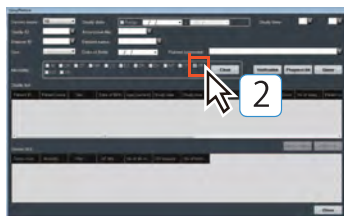
5.9.4 Acquiring the image registered as GSPS from the external viewer or server

The procedure to acquire the image with GSPS from the external viewer or server is described below.


 p.104 Reading the images from external viewers or servers

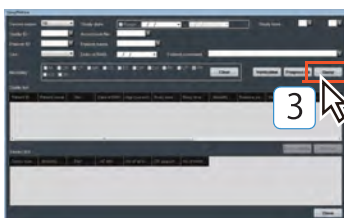


- 1 Click the [Query/Retrieve] button of the patient search screen or [QR] button of the viewer screen.
- **Query/Retrieve screen will be displayed.**

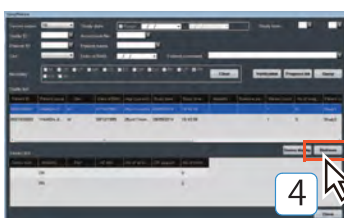


- 2 To acquire the GSPS, tick the checkbox for "PR" in addition to the checkbox for the modality type that is related to the image with GSPS.

 In cases when acquiring the GSPS, make sure to acquire the relative image as well. The information cannot be displayed if GSPS alone is acquired.



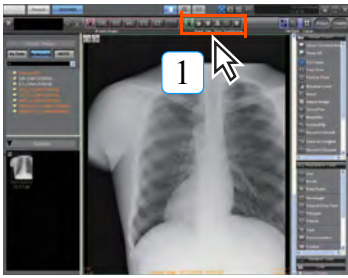
- 3 Set the search condition such as "Server name", "Study date" or "Study time", and click the [Query] button.
- **Search results will be displayed in the Study list.**



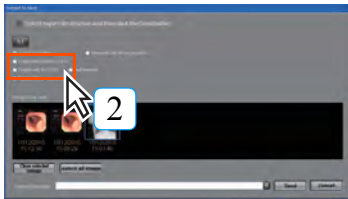
- 4 Select from the Study list the study of which the image shall be imported, and click the [Retrieve] button.
- **When the GSPS is linked with the image, the image is acquired with the GSPS attached.**

5.9.5 Outputting the Image attached with GSPS

The procedure to export or save the image attached with GSPS to Host or media is described below.

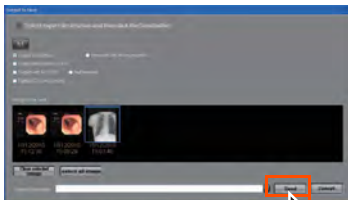


- 1 Select the image and click the output button.
- Output screen will be displayed. (the case on the left shows the output to host.)





- 2 Click [Output with All GSPS] to output all GSPS's, while [Output with current GSPS] to output the GSPS that is currently displayed.

- 3 Implement other output settings.



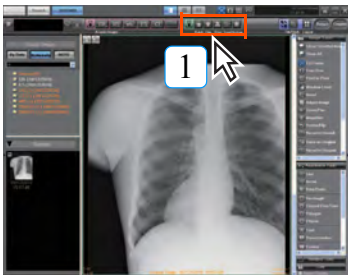
- 4 Click [Send] for the output to Host, [Write] for Media.
- The image accompanying the image-related GSPS will be output.

 p.253 Output to Host
 p.256 Storage on Media

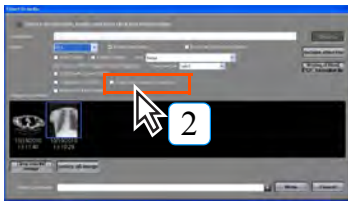
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5.9.6 Outputting the Image with GSPS reflected

The procedure for saving the image with the GSPS reflected to Host or media is described below.





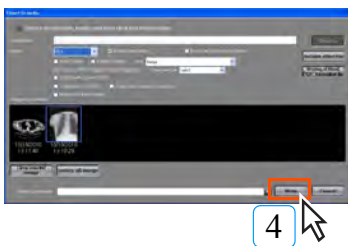
- 1 Select the image and click the output button.
- Output screen will be displayed. (the case on the left shows the output to host.)



- 2 Select [Output with image processing].

- 3 Implement other output settings.

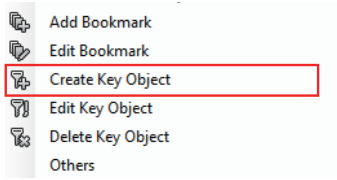
 p.253 Output to Host
 p.256 Storage on Media



- 4 Click [Send] for the output to Host, [Write] for Media.
- The image with the GSPS reflected will be output.

5.10 Creating Key Object

Important images among multiple images are labeled and set as important.



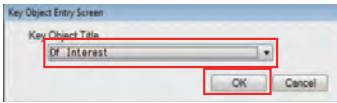
1

Right click the image to create the Key Object and select [Create KeyObject] from the displayed submenu.

- The [Key Object Entry Screen] is displayed.



Selecting multiple images on the viewer screen enables the same KO layout as the first time for the selected multiple images.



2

Select the [Key Object Title] allocated to the image selected from the pull-down menu and click the [OK] button.

- The icon representing the Key Object is displayed in the selected image.



The [Key Object Title] allocated to the image is displayed in the [Patient List] screen search items and [Query/Retrieve] screen settings to enable its application to searches and settings.

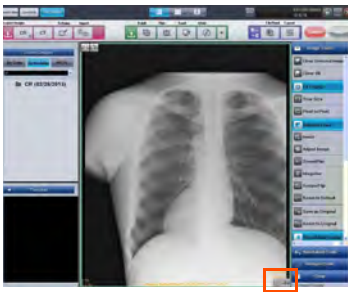


Place the mouse cursor on the icon representing the KO image to display the [Key ObjectTitle] allocated to the image, if any, as a popup.

Multiple KO may be allocated to one image.

5.11 Downloading the Image (Databank)

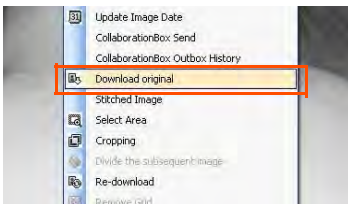
When using the Databank function, there may be no image on the PC used for temporary operation or restoring. In such case, a JPEG image for reference is automatically downloaded when the viewer screen is opened.



1

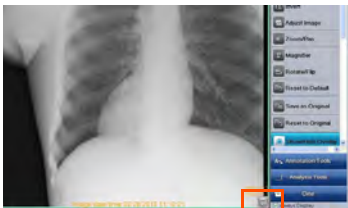
If there is no image in the PC being used, a JPEG image for reference is automatically downloaded when the viewer screen is opened.

- While the JPEG image is displayed, a [JPEG] icon is displayed at the bottom right of the screen.



2

Right-click on the JPEG image and select [Download original] in the menu displayed to download the original image.

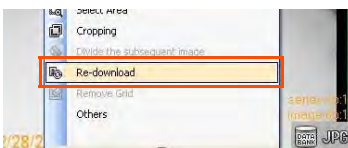


- [JPEG] icon will disappear when the original image is displayed.



3

When a failure for communication environment, etc., occurs on the viewer screen display, the JPEG image for reference may not get downloaded.



In such case, right-click on the image display space and select [Re-Download] in the menu displayed.

- JPEG image for reference is downloaded.



If you cannot re-download, confirm that there is any error such as power supply for the router or hub, connection of the LAN, etc., in the communication environment in use.

5.12 Cropping the image size that matches the cassette size

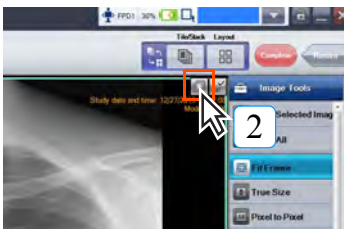
You can crop an image from the entire image using the indicated cassette size. For example, when you want to make a comparative interpretation after imaging a small sized area, you can simply match the area and sizes when comparing by cropping using the cassette size beforehand.



- Setup is required to use the save function for cropped images. For more information, contact our service personnel.
- Can be used only with REGIUS images or AeroDR images.

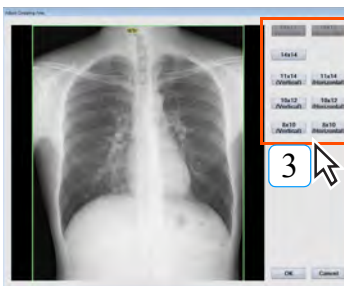


1 Capture REGIUS images or AeroDR images on the Viewer screen.



2 Click the Save Cropped Image button in the upper right corner of the image display area.

- The adjust cropping area screen is displayed.



3 Click the button for the cassette size that will crop the image.

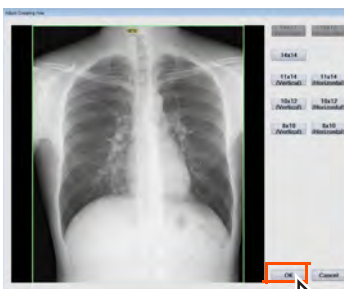
- Framing lines showing the size that corresponds to the selected cassette size are displayed.
- The framing lines can be moved by dragging them.



You cannot select a cassette size that is larger than the cassette size as the imaged size.



Clicking the button for the size you have previously selected, will return you to the original imaged size.



4 Click the [OK] button.

- The image that corresponds to the size of the selected cassette size is cropped.



Selecting [Reset to original] in [Image Tools] will return you to the original image before it was cropped to the cassette size. Also, when setting the image that was cropped as the original image using [save as Original] in [image Tools], changing the cassette size again allows you to return it to its original size.

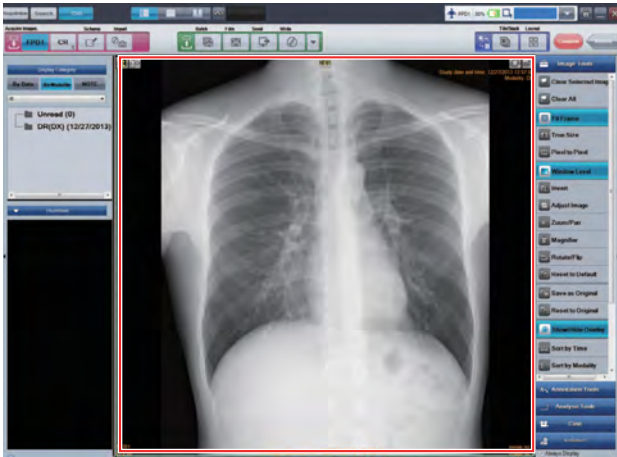
5.12.1 Auto crop function when imaging an AeroDR image in a restricted irradiation field

By collimating the x-ray irradiation field when imaging an AeroDR image, the unnecessary parts that are not irradiated by x-rays are recognized and can be automatically cropped.

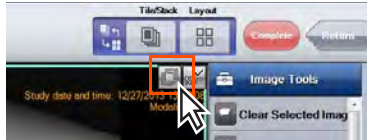
For example, even when imaging using a 14" x 17" size panel, you can crop an image size that is the same as when imaging using a 10" x 12" size panel.



- When using the auto crop function and when changing the candidate crop sizes, contact your service personnel.
- AeroDR image is the target.
- Irradiate X-rays into an area slightly smaller (at least 1.4 cm) than that you wish to capture.



- The cropped size and area can be changed by clicking the adjust cropping area button.




- When enabling the auto trimming function and cropping an image from the AeroDR system, be sure to image with the correct image field specified. Also, after creating each image, make sure the image is displayed correctly and as it was exposed.

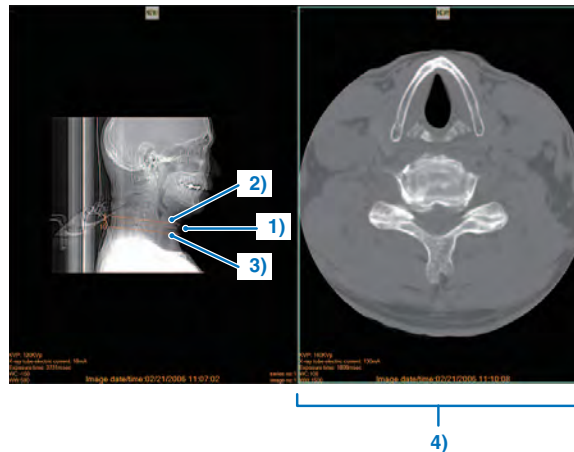
5.13 Scout Function

When modality is CT or MR, moving the scout line and reference line (line that indicates the site on the displayed slice image) displayed in the upper portion of the scout screen will allow you to display the slice image of the corresponding site.

5.13.1 Switching images using the scout line

When modality is CT, activating the slice image on the Viewer screen will display the scout line on the scout image.

 When the scout image is activated, the scout line is not displayed.



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| | Item | Function |
|----|------------------------|--|
| 1) | Scout line | Line that indicates the position on the currently displayed slice image. It is shown as a dotted line. |
| 2) | Scout line (beginning) | Line that indicates the beginning of the slice image. The actual line and slice number are displayed. |
| 3) | Scout line (end) | Line that indicates the end of the slice image. The actual line and slice number are displayed. |
| 4 | Slice image | The slice image nearest the specified location and coupled to the scout line is displayed . You can directly switch the slice images using the mouse wheel, etc. Since the scout line is coupled, when you switch images the scout line will move to the corresponding position. |



1 Move the mouse to the location of the slice image that you want to display between the beginning and end of the scout line.

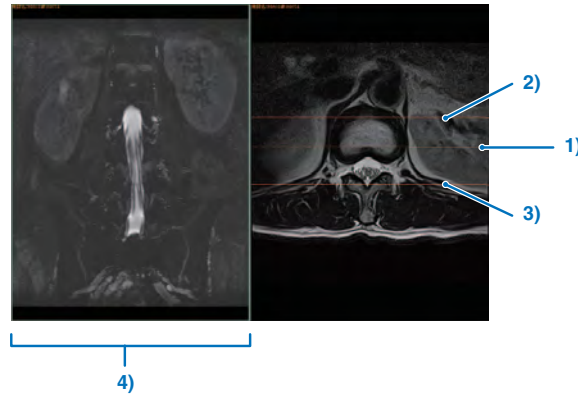
- The mouse cursor icon becomes the scout line and the slice line is displayed.

2 Click the displayed slice line.

- The image at the location of the selected slice line is displayed as the slice image.

5.13.2 Switching images using the reference line

When modality is MR, activating the slice image on the Viewer screen will display the reference line on the scout image.



| | Item | Function |
|----|----------------------------|---|
| 1) | Reference line | Line that indicates the position on the currently displayed slice image. |
| 2) | Reference line (beginning) | Line that indicates the beginning of the slice image. |
| 3) | Reference line (end) | Line that indicates the end of the slice image. |
| 4) | Slice image | The slice image that corresponds to the specified line is coupled to the reference line and displayed. You can directly switch the slice images using the mouse wheel, etc. Since the reference line is coupled, when you switch images the reference line will move to the corresponding position. |

Chap. 6
Note Function

This chapter describes the Note function for the informed consent.

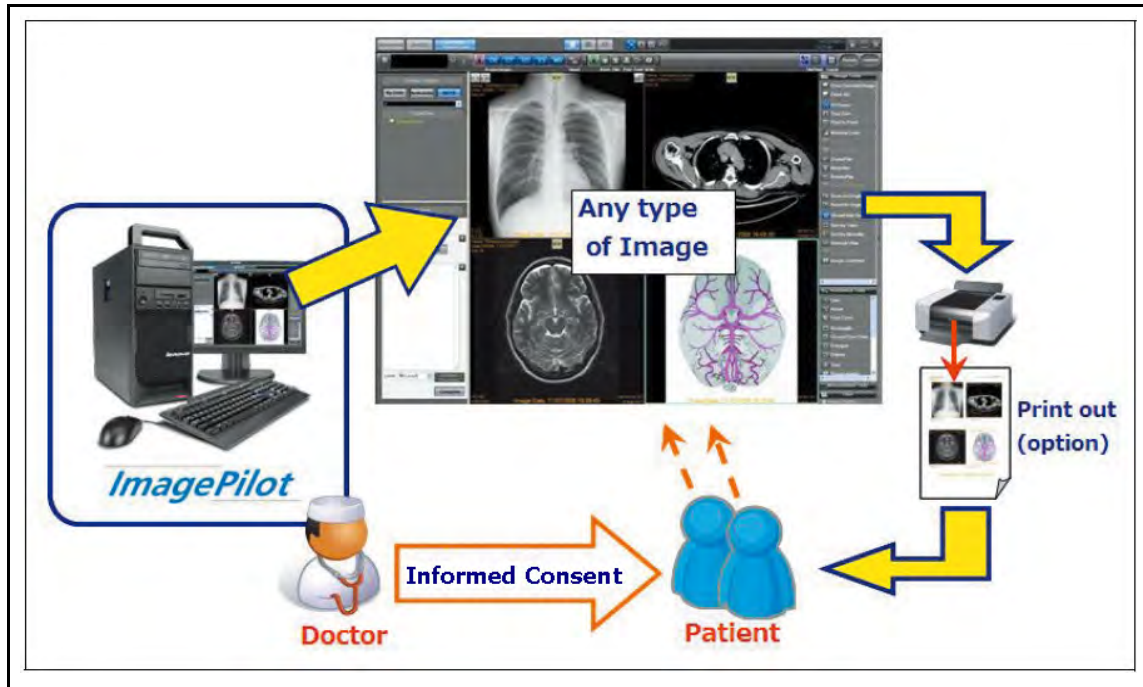
- 6.1 Outline234**
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6.1 Outline

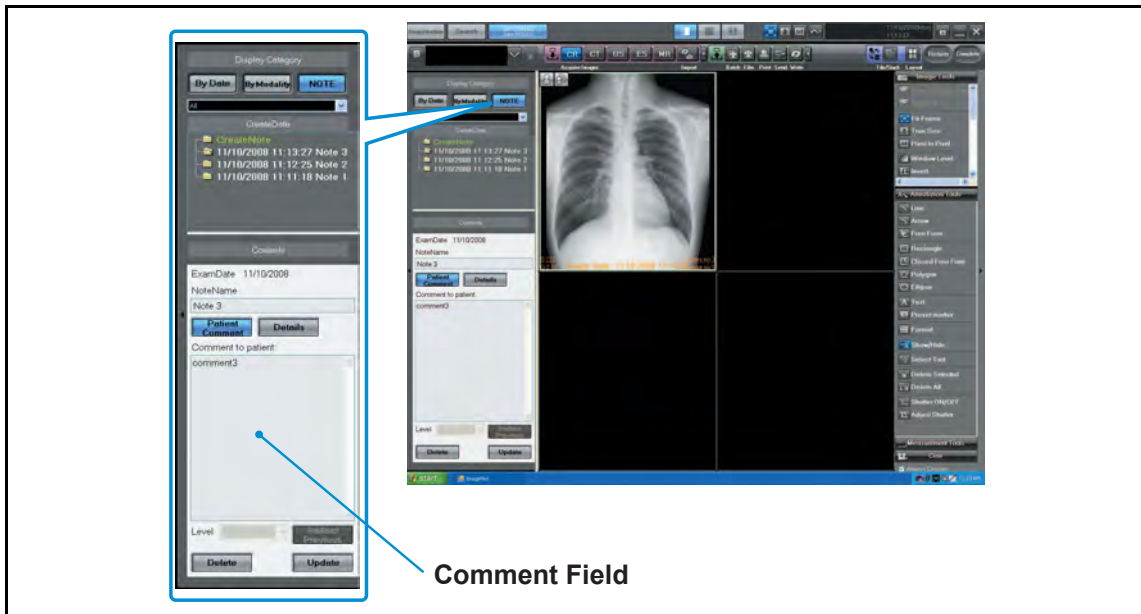
ImagePilot is equipped with the function to manage the sophisticated informed consent.

The Note function provides utilities for recording various patient information concerning X-ray images and doctor's comments, etc.

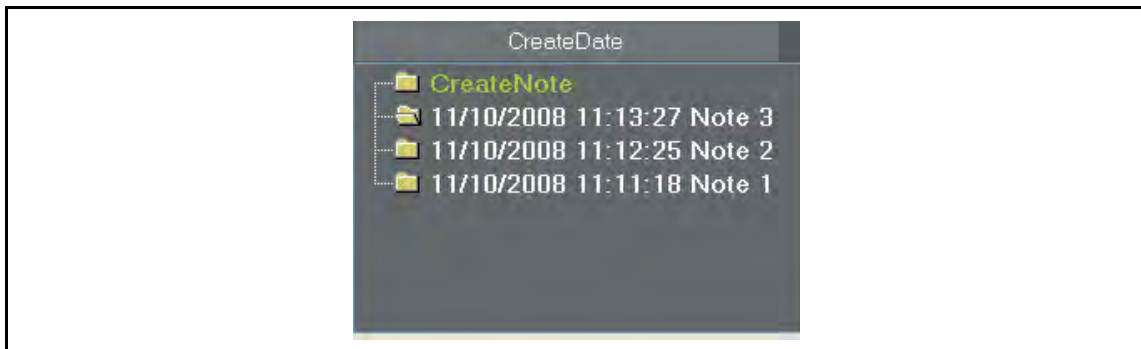


6.2 Note Function

The typical function of the Note is the capability to preserve(status as confirmed) the information as well as the comments given at the time of explanation to the patient and image printout.



The preserved Note(status as confirmed) will be managed by dd/mm/yy and hr/min/sec, and become unable to be modified once the Note exceeds the predefined expiry or printed.



Once the Note is put into the status as confirmed, the listing order of images becomes unable to be replaced. However, display layout, switching the display between tile\stack and functions such as zoom, etc. are still available. (These are tentatively effective, and the status is not sustained)

6.3 Operation of Note

6.3.1 Creating the Note

The procedure for newly creating the Note is described below.



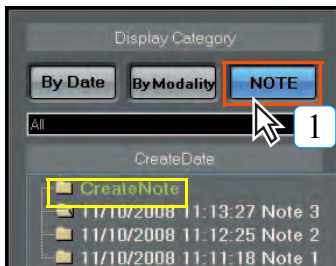
Only the user entitled as "Administrator" or "Physician" is allowed to create the note.



You can create note only on the selected images.
To use this function, you must set it up using the user tool.
(Default: OFF)
[Common Settings] - [Operation Settings] - [Viewer] - [During title display. create note only on the selected image]



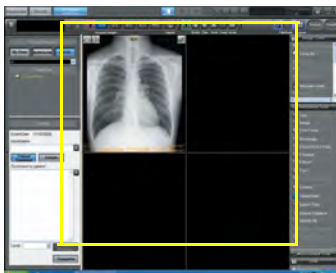
p.291 During title display, create note only on the selected image



1 Click the [NOTE] button of Display Category.



- "Create Note" will be displayed in the Create Date field.

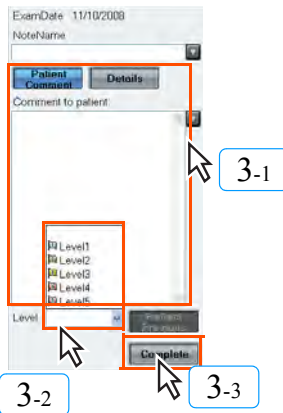


2 Because images or data currently displayed on the Viewer screen will be preserved as the Note, check the screen again.

- Those images that are not saved in the note, click [Clear Selected Image] button before [Complete] button is clicked to clear them from the Viewer screen.



If you set the [During tile display, create note only on the selected image] to enable, you can select arbitrary images and create notes for them during the tile display.

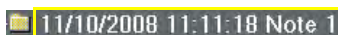


3 Enter in the "Note Name", "Patient Comment" and "Details", select any in the Level. Then click the [Complete] button.

- Note will be created.

Note:

The Level is classified into 5 ranks. However, there is no difference between each rank. Use it just for identification.




- The Note created will be displayed beneath the previous one.
- Check the preserved date and the name of the Note.



The folder color will be the same as that of the selected rank.

6.3.2 Modification of the Note

The procedure for modifying the already created Note is described below.

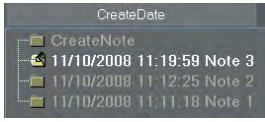


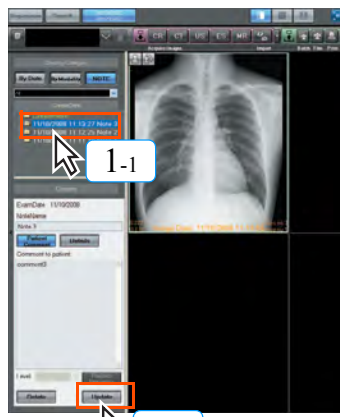
There are two types of Note, one is modifiable and the other is not.

Among the Notes listed in the Create Date filed, only those displayed in white(highlighted) are available for modification.

Notes displayed in white(highlighted) : Modifiable
 Notes displayed in gray : Not modifiable

Note: The Notes displayed in gray has exceeded the specific expiry or been printed, and no longer available for modification.

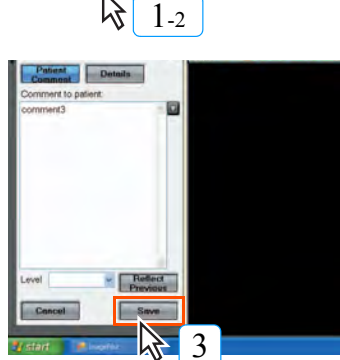




1 Selecting the modifiable Note in the Create Date field will display the [Update] button. Click this button.

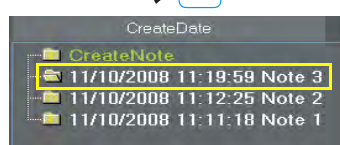


- The Note switches to the modification mode.



2 Modify the contents of the Note.

- In addition to the Patient Comments, Details and Importance recorded in the Note, it is possible to modify or delete the selected image.




3 Click the [Save] button.

- Exits the modification mode after saving the modified data.
- Clicking the [Cancel] button will cancel the modification and exit the modification mode.

- Confirm that the date & time when the modification is applied is reflected on the "CreateDate".

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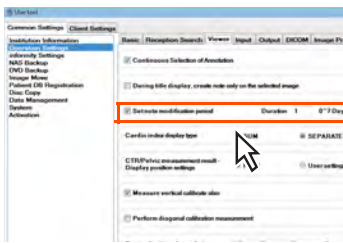
user tool


Setting the time period for which the Note is modifiable.

The Note modification period can be altered by setting through "User Tool"→[Operation Settings]→[Viewer]→[Set note modification period].

Selecting [OFF] allows modification at any time. Selecting [ON] and setting the Duration to "0" day allows no time for the Note to be modified, thus disabling the modification after it is confirmed.
 (Default : ON, Duration : 1day)

The setting can be made through [Common Settings] - [Operation Settings] - [Viewer] - [Set note modification period].



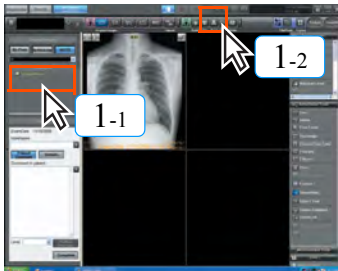
 **p.291 Set note modification period (Operation Settings)**

6.3.3 Printout of the Note

The procedure for printing the created Note to normal PPC paper.



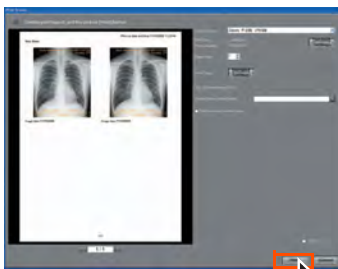
"ImagePilot Paper Print Option" is required to print the Note to normal PPC paper.



1 Select the Note to be printed, and click the [Print] button.



- Output to generic printer screen exclusive to the Note printing will be displayed.



2 Check on the Preview screen, and set the printer and copy count, etc. Then click the [Print] button.

- The Note will be printed.
- Printed Note data is put into the status as confirmed, and no longer available for modification.
- The printed data will be rasterized in PNG format and preserved in the folder named as "Confirmed Note".

Note:

This rasterized image data can be written to various media.



Clicking the [Print] button after ticking the [ON] checkbox for the [Test Print] located above the [Print] button will perform test print of the Note.
This operation does not put the Note into the status as confirmed.



Detailed settings for the Note printing

There are two [Detailed Settings] buttons for the Note printing.

- [Detailed Settings] button of the Output Device.
- [Detailed Settings] button of the Print Setup.



[Detailed Settings] button of the Output Device.

Display the Page Setup screen.

Following items can be set in the Page Setup screen.

- **Size** : Select the size of printing paper.
- **Source** : Select the type of paper feed.
- **Orientation** : Set the output orientation.



[Detailed Settings] button of the Print Setup.

Display the Print Setting screen.

Following items can be set in the Print Setting screen.

- Print Annotation
- Print Stamp
- Print Header/Footer
- Print Note name
- Print image comments for patient
- Print detailed image comments
- Print patient comments
- Print detailed comments
- Print image date/time
- Print Overlay
- Select Layout



When the print out of the Note spreads over 2 pages, the print image will be displayed in multiframe mode.

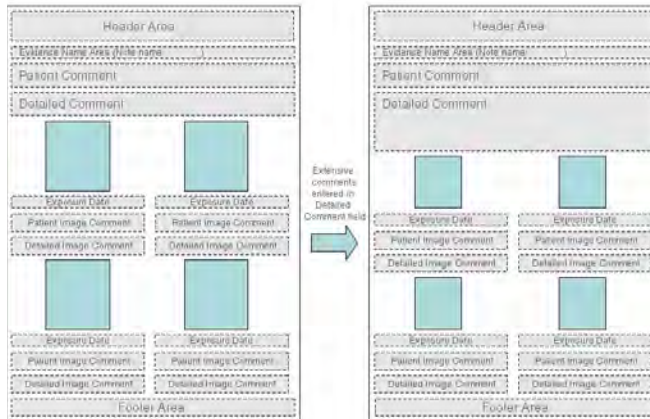


Print image of the Note

When the Note is printed, image sizes will vary depending on the contents or items to be printed.

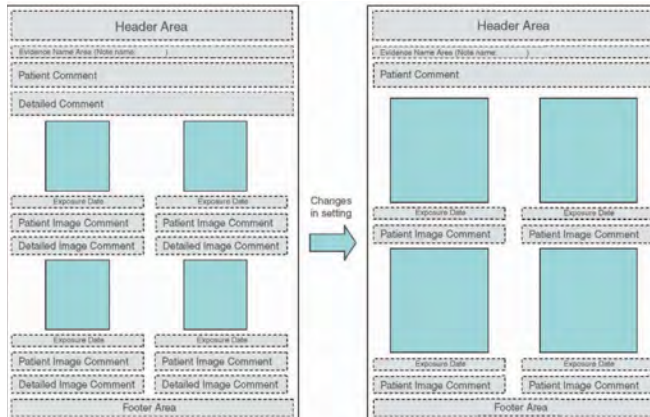
Ex-1 Variation when the volume of Detailed Comment is increased.

Image will be decreased in size according to the increased volume of Detailed Comment.



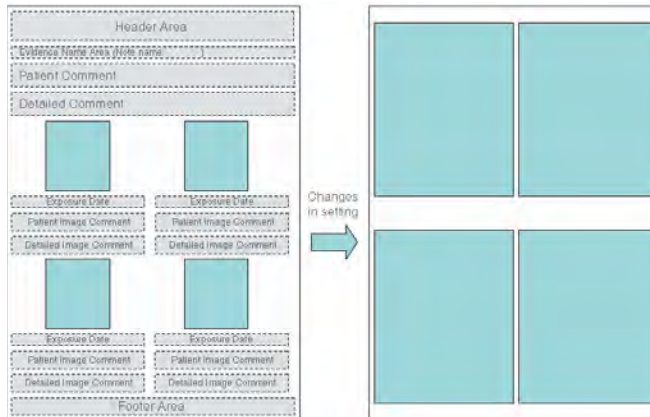
Ex-2 Variation when the number of items to be displayed is decreased.

Images will be increased in size according to the decreased number of items.



Ex-3 Variation when all of items to be displayed are not printed.

Images will be increased in size as the result that no item is printed.



Chap. 7
Previewer Functions

This chapter describes the Previewer used exclusively for CR image acquisition.

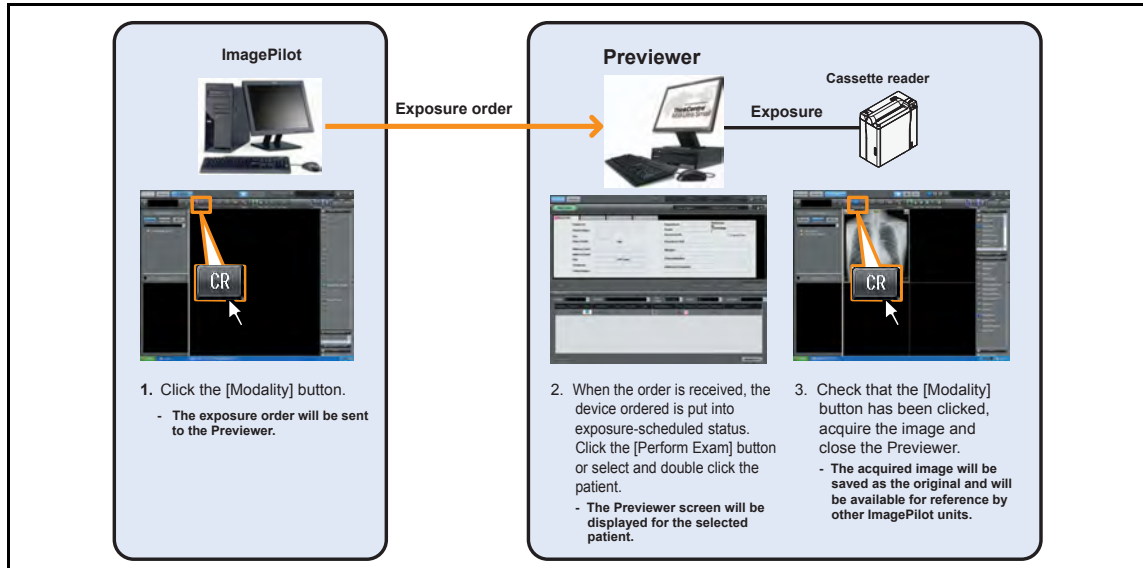
- 7.1 Outline 242**
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7.1 Outline

The Previewer is an ImagePilot unit located principally in a X-ray room and used exclusively for CR image acquisition and image quality checks.

Exposure orders are received from the ImagePilot dedicated for image checks and images are acquired based on this order (patient information).



When a Previewer is introduced into the system, acquisition of CR images will be possible only from the ImagePilot unit set as the Previewer.

7.2 Operational Procedures

The operational procedure for the ImagePilot unit sending orders to the Previewer and for the Previewer itself are described below.

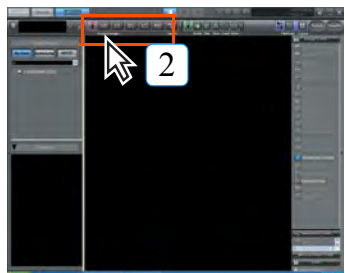
7.2.1 Operation of ImagePilot Outputting Exposure Orders

The operational procedure for sending exposure orders to the Previewer from other ImagePilot units is described below.



- 1 Double click the line containing the patient for whom the exposure order is to be sent to the Previewer.

- The viewer screen will be displayed.



- 2 Click the CR [Modality] button allocated for orders.



- The button color will change from dark grey to blue and the order sent to the Previewer.

- 3 Click the [Complete] button and return to the patient reception screen.

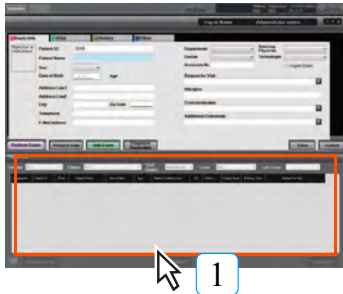


Clicking the [Modality] again will erase the order sent to the Previewer.

7.2.2 Operation of Previewer

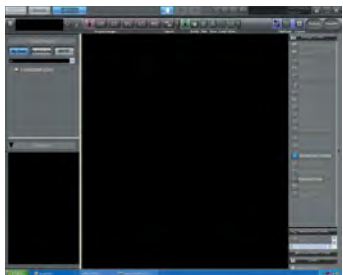
The procedure for acquiring images from the Previewer is described below.

When the order is received, the patient information is displayed on the patient reception list.



1 Double click the required patient in "Exam Reserved" status on the patient reception list.

- The viewer screen will be displayed.
- Where there is no [Exam Reserved] column, right-click the list display item names column and check that a name item (ex. CR) identical to the name registered under [Modality name] is registered.



2 Acquire the image following the usual procedure and complete image editing and viewing.

- The acquired image will be saved as the original and will be available for reference by other ImagePilot units.



Features of the Previewer

The Previewer is furnished with the following features not available on regular ImagePilot units.

- The CR [Modality] button is in ON status from the moment it is displayed on the viewer screen.
- Patients being referenced by other ImagePilot units may be displayed on the Previewer.



Temporary patient cannot be referred to with the Previewer.

Note: It is necessary to exit the temporary patient image on the other PC to display the temporary patient.

Chap. 8
Image Output

This chapter describes procedures for outputting images to generic printers, film, etc.

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8.1 Batch Output

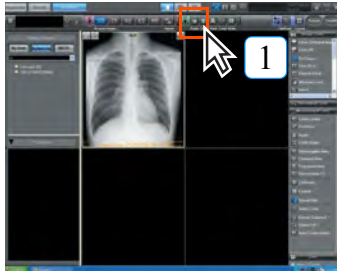
The procedure for outputting in batch the image currently displayed on the screen to medical film or Host is described below.



Output layout of the medical film can be made through [Common Settings] - [Operation Settings] - [Output] - [Modality-wise Layout Settings].
 Host device to which the data is output can be set through [Common Settings] - [Operation Settings] - [Output] - [Configure batch output settings].
 In both cases above, it is possible to make settings that allow batch output of only those images that are imported today.
 (Default: ON)

p.299 **Modality-wise Layout Settings (Operation Settings)**

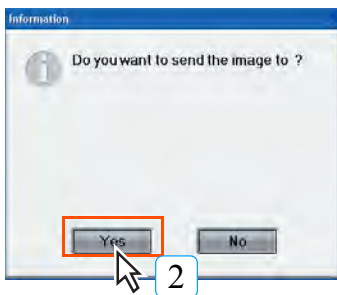
p.299 **Configure batch output Settings (Operation Settings)**



1 Click the [Batch Output] button.



- A request for confirmation will be displayed.



2 Click the [Yes] button.

- All images displayed in the viewer field will be output to film.



General use video such as DICOM video and AVI, etc. and PDF files cannot be output.

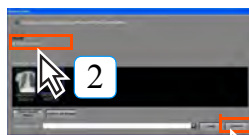


Follow the procedure below to set ON/OFF of annotation when the images are sent to the host in batch output mode.

To switch ON/OFF of the annotation for batch output to the host.



1 Click the [Send] button on the viewer screen.



2 Tick the checkbox for "Print Annotation" to output or untick not to output.



3 Click the [Cancel] button to return to the viewer screen.

- The setting(ON/OFF) of the annotation will be effected next time when the batch output is implemented.

Note: Use the User Tool to set ON/OFF of the annotation for the output to film in batch mode.

Note: It is not possible to automatically send the same image to the same host. To do so, use the manual operation.



When CT or MR multi-frame images are stack-displayed, only the images visible on the screen will be output. In addition, when the display field for full-tile display is specified, all specified images in the display field will be output.

8.2 Output to Film

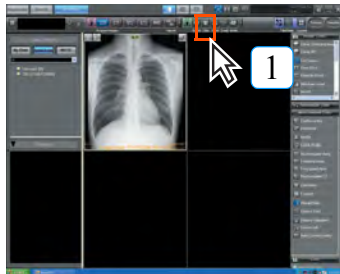
The procedure for output to medical film from a DICOM printer is described below.



Generic images such as DICOM motion images and AVI cannot be printed. When outputting several frames, an error will occur if the selected image exceeds the pixel size that can be allocated to one frame. If such happens, either decrease the number of output frames or select the image with less pixels.



When the image comprises multiple frames, only the displayed image will be printed.



1 Click the [Film] button.



- The image displayed on the viewer screen will be selected for output to film and the printer output screen will be displayed.

2 Select the printer type from the [Output Device] pull-down menu.



3 Select the number of sheets to be printed using the [Copies] spin button.



- Specification may be made within a range of 1 - 99.

4 Select the image to be output.



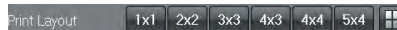
- The frame of the selected image will change to blue.
- Double-clicking the image will display the enlarged image.



The image bearing at the lower left the icon shown on the right represents that the output to the Imager has been implemented in the past. This icon will disappear when the data is deleted from the output history.



5 Select the print layout (number of images printed on one sheet).



Switching Format:

Specify the output format. Formats set under "Operation Settings" - "Print Output Dialog Layout Button Setting" in User Tool may be specified.

6 To print annotation on the film, tick the [Print Annotation] box.



When the image with annotation is output from the printer, pixelation may appear at the line-work part depending on the imaging condition such as image size.



Click the [Viewer], [Whole] or [1:1(Same Size)] buttons to switch between image output methods. However, the [Same Size] button is only displayed when working with CR and AeroDR images.

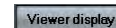
[Viewer]
Only the segment displayed on the viewer screen will be printed.

[Whole]
The entire image will be printed.

[1:1] (1x1 for CR and AeroDR images only)
The image will be printed at the same size.



Clicking the [Viewer display] button will apply the image layout displayed in the viewer screen to the output.




Use of the [Layout] button allows selection of layouts other than those shown at left.



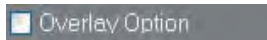
Chap. 8

- 7 Tick [Reflect DICOM Overlay] when the DICOM Overlay shall be output to the film.




 [Reflect DICOM Overlay] is valid only when the DICOM Overlay information is included in the image.

- 8 Tick the [Overlay Option] when the overlay shall be printed on the film.




- 9 To print demographic stamp on the film, tick the [Print Stamp] box.

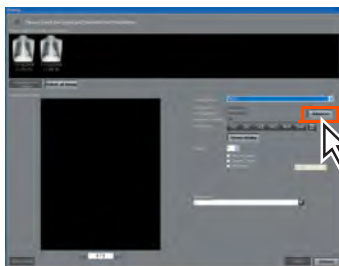


 When the image with stamp is output from the printer, the stamp size may vary depending on the imaging condition such as output image size.

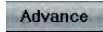
user tool
Character strings printed as stamp may be edited from [Common Settings] - [Operation Settings] - [Output] - [Stamp Settings Screen] in User Tool.

 **p.308 2-9) Stamp Settings Screen**


- 10 To retain a comment in the output history, input characters in the [Comments] box.



- 11 If necessary, click the [Advance] button to make detailed output settings.




11

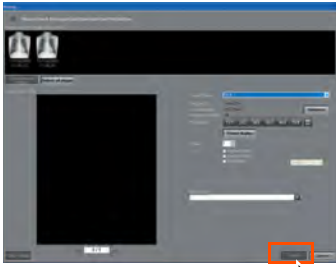
 Where the following parameters apply, "1:1 (same size)"/"Whole" output settings may be made for output.

- CR and AeroDR images
- Only when Film Size and Film Orientation are specified under "Detailed Settings," or when a "Same Size" setting of 1 X 1 is possible.

"1:1 (Same size)" output:
The image is enlarged or reduced from the read and output device pixel sizes to enable same size output.

"Whole" output:
The image is enlarged or reduced to enable output of the whole matched to the maximum film size.
Note, however, that if the film size is larger than the read image size, the image cannot be output at more than the "1:1 (same size)".

 When selecting [Whole] to output after overlaying the annotation, both the whole image and the annotation font size are decreased in conjunction. As the result, the annotation will not be printed as its font size specified in the "Font Size". It is therefore recommended to select relatively larger font size for the annotation in cases where the large size, especially the stretched image is output to the small film using [Whole] mode.



12 Click the [Print] button.





- A message will be displayed during printing and film will be output from the DICOM printer.

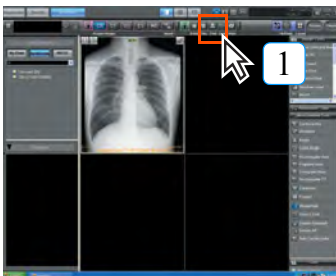
12

8.3 Output to Generic Printer

The procedure for printing images on PPC paper from a generic printer is described below.

 Generic images such as DICOM motion images and AVI cannot be printed.

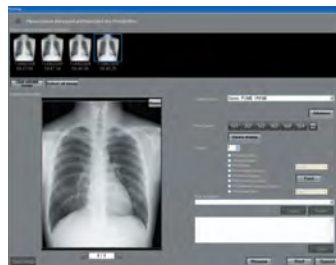
 When the image comprises multiple frames, only the displayed image will be printed.



1 Click the [Print] button.




- The printer output screen will be displayed.



2 Select the printer type from the [Output Device] pull-down menu.
Selecting the [Adobe PDF] here will output the file in PDF format.


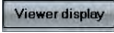


 To output the image in PDF format, install the bundled software "Adobe Acrobat" in advance.

3 Select the number of sheets to be printed using the [Copies] spin button.



- Specification may be made within a range of 1 ~ 99.

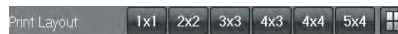
 Clicking the [Viewer display] button will apply the image layout displayed in the viewer screen to the output.


4 Select the image to be output.



- The frame of the selected image will change to blue.
- Double-clicking the image will display the enlarged image.


5 Select the print layout (number of images printed on one sheet).



Switching Format:

Specify the output format.

Formats set under "Operation Settings" - "Print Output Dialog Layout Button Setting" in User Tool may be specified.


 When the image with annotation is output from the printer, jaggy may appear at the line-work part depending on the imaging condition such as image size.

6 To print annotation on the film, tick the [Print Annotation] box.

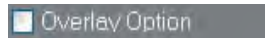


- 7 Tick [Print DICOM Overlay] when the DICOM Overlay shall be output to the film.




 [Print DICOM Overlay] is valid only when the DICOM Overlay information is included in the image.


- 8 Tick the [Overlay Option] when the overlay shall be printed on the film.



- 9 To print demographic stamp on the film, tick the [Print stamp] box.



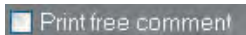
 p.308 2-9) Stamp Settings Screen

 When the image with stamp is output from the printer, the stamp size may vary depending on the imaging condition such as output image size.

- 10 Tick the [Print header/footer] box to print the header/footer.



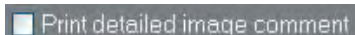
- 11 Tick the [Print free comment] box to print the free memo, and input the fixed phrase (phrase repeatedly used) in the text box located on the [Save] button at the lower right. Then click the [Save] button. Now, the text input in the text box is available for choice. Clicking the [Apply] button will display the selected fixed phrase to be displayed in the text box below. To delete the fixed phrase, select the fixed phrase to be deleted, and click the [Delete] button.





- 12 Tick the [Print image comment] when the comment for the patient shall be printed.





- 13 Tick the [Print detailed image comment] when the detailed comment shall be printed.




 The text string to be output as "header/footer" can be edited using [Common Settings] - [Operation Settings] - [Output] - [Header and Footer] of the User Tool.

 p.299 Header and Footer

 Free comment can be changed to autocomplete. Autocomplete is the function to automatically display or enter the memorized text when the input is the same as what has been input before.

 p.363 3-1) Operation Settings screen ((Client Settings))

 Printout of the image comments can also be used as informed consent.

- 14 To print the exposed date, tick the [Print image date], and select [Date] or [Date/Time].



- 15 If necessary, click the [Advance] button to make detailed output settings.



- 16 Clicking the [Preview] button will display the image simulating the actual print.



- 17 Click the [Print] button.



- A message will be displayed during printing and film will be output from the generic printer.



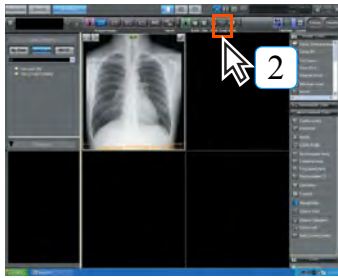
Clicking the [Font] button allows changing the font type and font size used for expressing "Header", "Free description", "Image comment" and "Image date".



Output paper size, area/resolution/color reproduction actually printed may vary depending on the settings of the generic printer that is connected to the system.

8.4 Output to Host

The procedure for outputting images to host devices is described below.



1 Displays the image to be output on the Viewer screen. (In addition to the image displayed on the Viewer screen, images selected by thumbnails can also be output)

2 Click the [Send] button.



- The output to host screen will be displayed.



It is not possible in batch output to automatically send the same image to the same host. To do so, use the manual operation.



3 Select the host device to which images will be sent.

- The button for the selected host device will be shown in blue.



In the case of multi-frame images, all of the images will be exported when they are displayed in stack mode. However, when the output destination is the image conversion tool(option), only the top image is converted to JPEG and output. Each of the all images can be individually exported when they are displayed in tile mode.

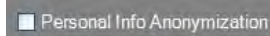


Clicking the [Clear selected image] button will cancel output of selected image.

4 When the annotation is not output, untick the checkbox for [Output Annotation].



5 Tick [Personal Info Anonymization] when the Patient Information shall be sent to the Host excluding the personal information.



In addition, specify the Patient ID at the time of output.



6 Tick [Reflect DICOM Overlay] when the DICOM Overlay shall be output.



[Reflect DICOM Overlay] is valid only when the DICOM Overlay information is included in the image.



Shutting down the PC when sending large images will cause the image transmission to fail. Resend it if the transmission fails.

Chap. 8



When the DICOM tag information edit function is enabled, DICOM tag info can be edited and sent.

7 To leave the comments in Output History, input the text in [Output Comments].



p.540 DICOM tag edit function



8 Select the image to be output.

- The frame of the selected image changes to blue.
- Double-clicking the image shows enlarged image.



CR and AeroDR Image Host Output

When outputting CR and AeroDR images to a host, the physician and operator names contained in the DICOM tag are automatically set in the following order of priority:
If there is no applicable priority level, blank will be output. (Log-in user name will be output for the person operating the system)

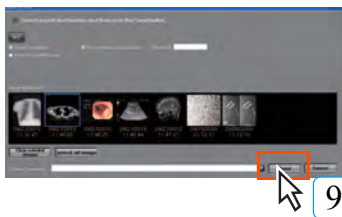
| Dicom Tag | High ← | ←Priority> | → | Low |
|---|---|------------|---|------------------|
| (0008, 0090) Name of referring physician When the MWM link is in use and the received Dicom tag (0008,0090) information is valid, the Dicom tag information that is received will be sustained. | Name of referring physician set on the image properties. | | Name of referring physician set on the patient screen. | - |
| (0008, 1050) Name of implementing physician | Name of attending physician set on the patient screen. | | - | - |
| (0008, 1070) Name of operator | Name of technologist set on the image properties. | | Name of attending technologist set on the patient screen. | Log-in user name |
| (0032, 1032) Name of requesting physician When the MWM link is in use and the received Dicom tag (0032,1032) information is valid, the Dicom tag information that is received will be sustained. | Name of requesting physician set on the image properties. | | - | - |



About Multi-Frame Images

In the case of multi-frame images, it is possible to output only necessary images by clicking and selecting the images to be output. (The selected images will be framed in blue)

Note: This is valid when the viewer screen is set to tile display mode.



9 Click the [Send] button.

- A request for confirmation will be displayed.



10 Check the destination host device and, if correct, click the [Yes] button.

- A message will be displayed during transmission as the images sent to the host device.
- After the image is sent to the host device, the following information is displayed in the reception list and the search list.
- Reception list:
Displays the Sent icon.

| us Icon | Urgent Exam | Booking Time | Host Output Done |
|---------|-------------|--------------|------------------|
| | | 13:48 | |

- Search list:
Displays the Sent icon and Send date (last date sent).



No specific message will be displayed after the data is sent. Confirmation of output can be made on the output history screen.



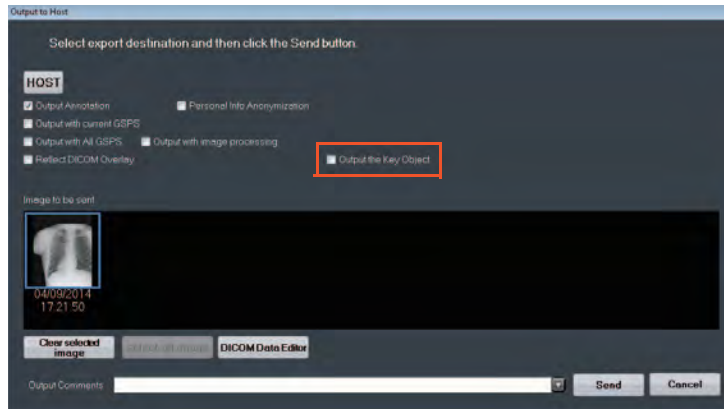
The Sent icon display is for REGIUS images only. Also, the imported REGIUS image of the actual day is displayed when the Send icon in the Reception list is input to all hosts.



Key Object host output

If there is an image with KO set in the [Output to Host] screen thumbnail, the [Output with Key Object] checkbox is enabled.

Place a check to enable output including all relating KO at host transmission.



8.5 Storage on Media

The procedure for writing images to media such as CDs and DVDs is described below.



Before saving images on media, read the "Cautions relating to CD/DVD" carefully to ensure correct handling of the media used.



p.22 Cautions
Relating to Use
of CD/DVD



In cases where the write data is added by clicking [Include other file], [Writing of Word, PDF, Animation file] button for the output to Host, do not import the file with the file name using codes other than alphanumerics.



You can save data on USB memory and all types of memory cards, etc. in addition to a CD-R and DVD-R.



Readable/Writable Media

ImagePilot is capable of reading and writing from/on "DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM, CD-R". However, please note that failure may occur in reading or writing depending on the type of media.



An optional license is required to use this function.



Selection of the Write mode

Write mode has two different modes, that are [PDI] and [Generic] modes.

What is [PDI] Write?

PDI is an acronym for "Portable Data for Imaging", providing the calculates to transfer the data to CD or DVD in place of network interface. Folder structure needs to follow the specific rule. Selecting the [PDI] for write mode, checkboxes for [Web Options] and [Simple Viewer] as well as the options relating to the auto-view becomes selectable.

- What is [Web Options]?

Allows the written data to be viewed with the Web viewer such as Internet Explore.

- What is [Simple Viewer]?

PDI viewer (software) that allows simple viewing of the DICOM images is delivered together with the ImagePilot software. (Refer to "[Using the PDI Viewer](#)" on page 510 for details)

- What is [Auto-View]?

Ticking this checkbox enables automatic display of the contents when the recorded media is inserted in the PC.

This automatically displays the web screen when the Web option is selected, while starts the viewer when the Simple Viewer is selected.

Note: To use this option, it is necessary that the PC supports the auto-view.

What is [Generic] Write?

Allows normal writing to CD/DVD. A folder stamped with the time when the [Write] button is clicked will be created and the files are saved in this folder in order.

Selecting the [Generic Write] for the write mode enables selection of the checkboxes for [Convert to JPEG before writing] and [Export All Multiframe Images].

- What is [Convert to JPEG before writing] ?

Write the data after converting the DICOM image to JPEG file. In addition, it becomes possible to select and output frame by frame as to the multiframe images.

Note: Do not use the JPEG image for actual diagnosis.

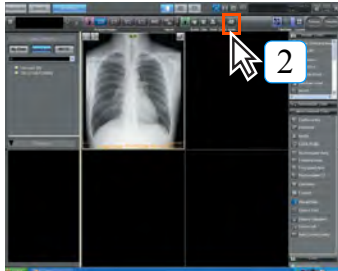
- What is [Export All Multiframe Images] ?

Outputs all frames when the data is a multiframe image.



p.510 Using the PDI
Viewer

1 Displays the image that shall be saved to Media on the viewer screen. (In addition to the images displayed on the viewer screen, images selected by thumbnail can also be the output target.)



2 Click the [Write] button.



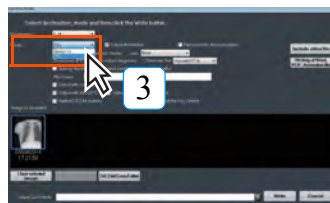
- The output to media screen will be displayed.



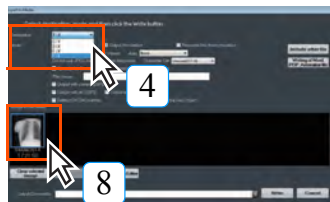
When the DICOM tag information edit function is enabled, DICOM tag info can be edited and sent.



p.540 DICOM tag edit function



3 Select the [Mode] (Generic Write or PDI write) pull-down menu and make a selection.



4 Select the write destination.

- When designating the hard-disk that is the PDI output target, create a date + time folder and output it to that folder.

5 When the annotation is not output, untick the checkbox for [Output Annotation].



6 Tick [Personal Info Anonymization] when the Patient Information shall be sent to the Host excluding the personal information.



7 Tick [Reflect DICOM Overlay] when the DICOM Overlay shall be output.



8 Select the image to be written.

- The frame of the selected image will change to blue.
- Double-clicking the image will display the enlarged image.

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[Reflect DICOM Overlay] is valid only when the DICOM Overlay information is included in the image.



To output files displayed in thumbnails, other than captured CR and AeroDR images or imported DICOM images, to media, select the applicable button below:

- [Include other file]
Reads any selected files, and outputs together.
- [Write Word, PDF, Cine file]
Outputs Word, PDF or Cine files to the media.



There are overlay items which cannot be viewed entirely or are displayed differently on the PDI Viewer.
Ex. "-: Patient Name" may be displayed differently in the viewer screen and the PDI Viewer.



Using the User Tool setting, it is possible to output required frames by clicking the frames of multi-frame images that shall be output. In order to validate this function, it is necessary to switch to the Tile display on the Viewer screen first, then to Media Output screen.
(Default: OFF)
Setting can be made through [Common Settings] - [Operation Settings] - [Output] - [Frame output of Multi frame images].



p.299 Frame output of Multi frame images

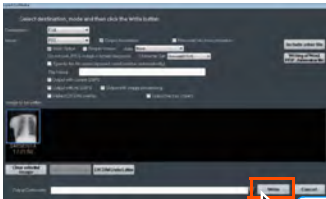
9 To retain a comment in the output history, input characters in the [Output Comments] box.



Saving CR and AeroDR Images to Media

When saving CR and AeroDR images to media, the physician and operator names contained in the DICOM tag is automatically set in the following order of priority. If there is no applicable priority level, blank will be output. (Log-in user name will be output for the person operating the system)

| Dicom Tag | High ← <Priority> ← Low | | |
|---|---|---|------------------|
| (0008, 0090) Name of referring physician When the MWM link is in use and the received Dicom tag (0008,0090) information is valid, the Dicom tag information that is received will be sustained. | Name of referring physician set on the image properties. | Name of referring physician set on the patient screen. | - |
| (0008, 1050) Name of implementing physician | Name of attending physician set on the patient screen. | - | - |
| (0008, 1070) Name of operator | Name of technologist set on the image properties. | Name of attending technologist set on the patient screen. | Log-in user name |
| (0032, 1032) Name of requesting physician When the MWM link is in use and the received Dicom tag (0032,1032) information is valid, the Dicom tag information that is received will be sustained. | Name of requesting physician set on the image properties. | - | - |



10

10 Click the [Write] button.

- The data will be saved in the media.
- When data is written to disc, the drive tray automatically opens after completion of the write process.



About Multi-Frame Images

In the case of multi-frame images, it is possible to output only necessary images by clicking and selecting the images to be output. (The selected images will be framed in blue)

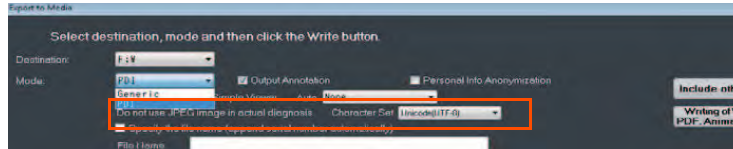
Note: This is valid when the viewer screen is set to tile display mode.





Auto-view when PDI write is implemented

In the case of PDI write, it is possible to write [Web Option](function to view using the generic browser) or [Simple Viewer](function to view using the PDI viewer for DICOM images) together with the image. However, it is required to select either function for auto-view from the [Auto-View] pull-down menu when PDI write is implemented so that the selected option is automatically effected when the disc is set in the PC.



Auto-view when Generic write is implemented

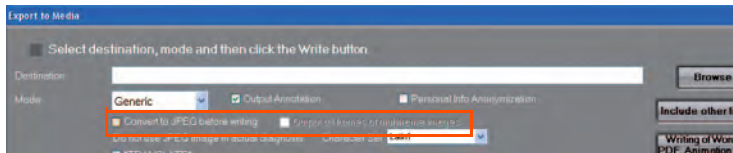
In the case of Generic write, checkboxes for [Convert to JPEG before writing] and [Output all frames of multiframe images] are displayed.

[Convert to JPEG before writing]

Writes DICOM images to the media after converting them to JPEG.

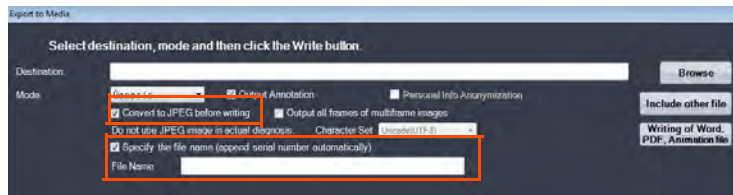
[Output all frames of multiframe images]

Writes all frames of multiframe images to the media.



Setting up JPEG file names

Placing a check in the check box for [Convert to JPEG before writing] display s the check box for [Specify the file name] and you can set up the converted JPEG file name. In addition, in the file a sequence number will be attached to the set up file.



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Using the User Tool setting, folder configuration of the media to which the data is written can be set. (Default : ON)

ON : A dated folder is created in the destination and the files are written in this folder disregard of the number of files to be written.

OFF : A file is directly written in the media if it is one, while a dated folder is created in the destination and the files are written in this folder if there are several files.

Setting can be made through [Common Settings] - [Operation Settings] - [Output] - [Create Date folder even a single file is written].



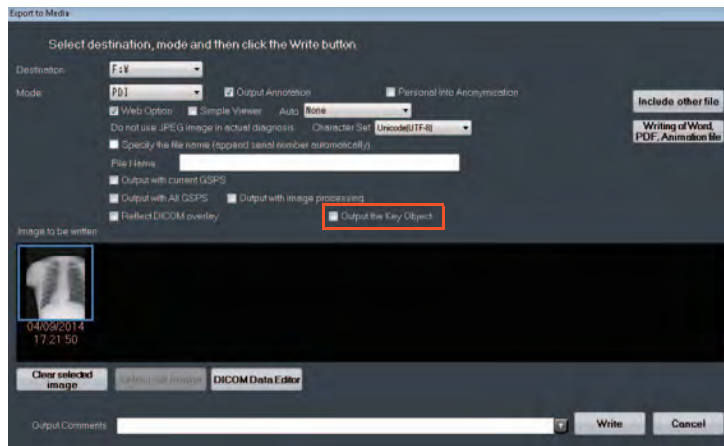
p.299 Create Date folder even a single file is written (Operation Settings)



Key Object media output


If there is an image with KO set in the [Export to Media] screen thumbnail, the [Output with Key Object] checkbox is enabled.


Place a check to enable output including all relating KO at media output.



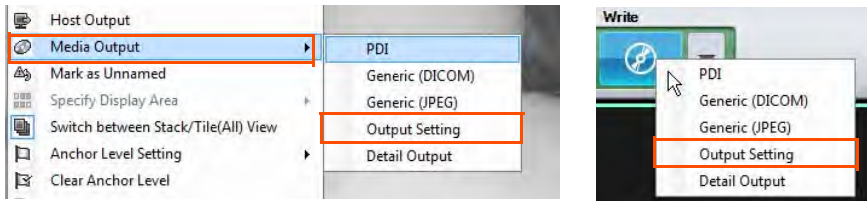
8.5.1 Direct output

According to user tool settings, you can directly output to media using the immediately preceding output setting.

 Set by [Common Settings] - [Operation Settings] - [Output] - [Media Output Direct Menu] of the user tool. (Default: OFF)

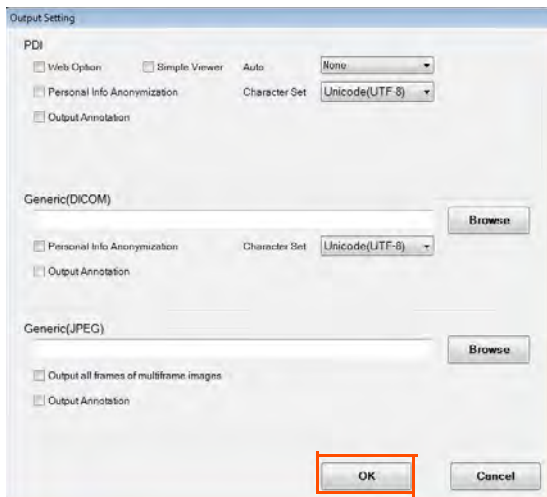
 p.298 <Output Screen>

- 1 For output setting, click the media write button or display the menu from [Right-click menu] - [Media Output] and click [Output Setting].



The [Output Setting] screen will be displayed.

- 2 Make settings for output and click the [OK] button.



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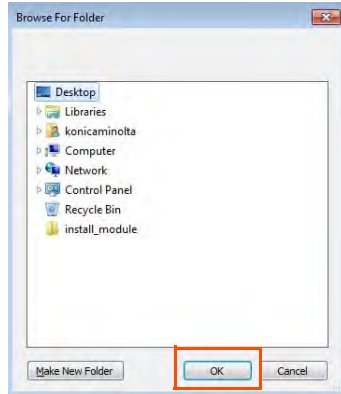


For generic output, you must specify the directory path of the output destination. Click the [Browse] button of [Generic(DICOM)] or [Generic(JPEG)].

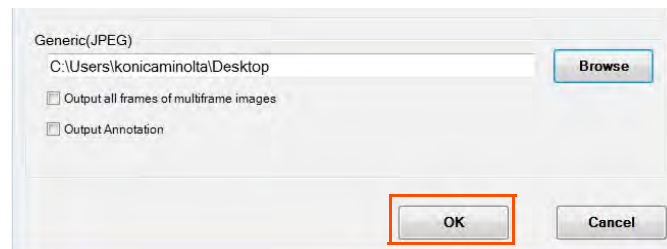


The [Browse For Folder] screen will be displayed.

Select the output destination directory from the [Browse For Folder] screen and click the [OK] button.



The selected directory path is displayed in the text box, and the settings are saved when the [OK] button of the [OutputSetting] is clicked.

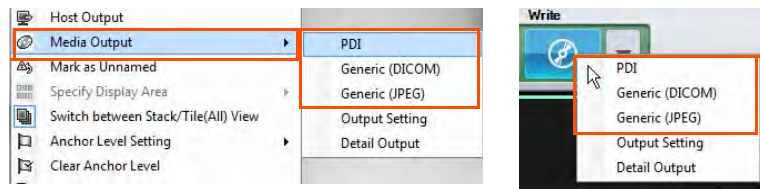


If the output destination directory is not set, the following message is displayed when generic output is conducted.



When outputting, click the media output button or display the menu from [Right-click menu] - [Media Output] and execute [PDI], [Generic (DICOM)], [Generic(JPEG)].

Also, even if the direct output function is ON, you can set output settings when outputting from [Detail Output] as usual.



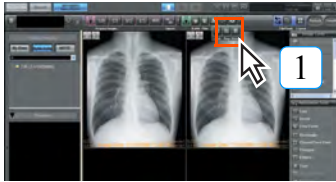
If you want to output another file such as PDF or Word, or you want to add a comment, open the conventional screen from [Detail Output] and output.

8.6 Output History Management

The procedures for referencing output history and resending images are described below.

8.6.1 Referencing Output History

The procedures for referencing output history is described below.



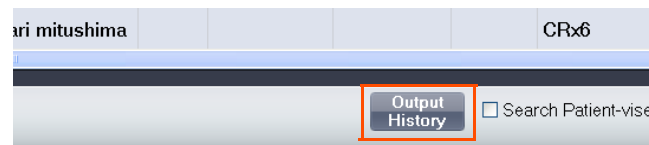
1 Click the [History] button.



- History screen will be displayed.



For some settings, the [Output History] button can be displayed on the [Patient Search Screen].



Clicking the [Output History] button will display the [Export Log] dialogue box. Contact our service representative for answers to setting-related queries.

user tool

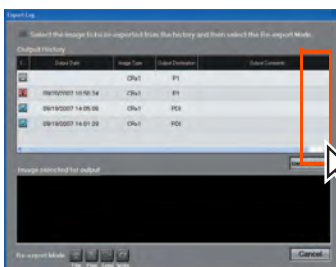
[History] button show/hide settings may be made from [Client Settings] - [Display Information] - [Image Output Menu Settings] under User Tool.



p.359 Image Output Menu Settings (Display Information)

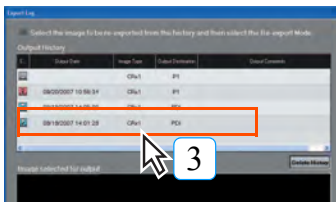


Output history comprises a list of output images and is not an output queue. Printlink5-IN should be used for print queue deletion.



2 Reference output history by moving the slide bar on the list shown at right up or down.

2



3 Selection of a specific item from the output history will produce a display of corresponding images under that item at the bottom of the screen.

- The selected line of output history will be shown in blue.

user tool

Using the User Tool, it is possible to display [Data Output] button on the Output History screen.

Clicking [Data Output] button will output the Output History List in CSV format. (Default : OFF)

Setting can be made through [Common Settings] - [Operation Settings] - [Output] - [Data Output button in Output History Screen].

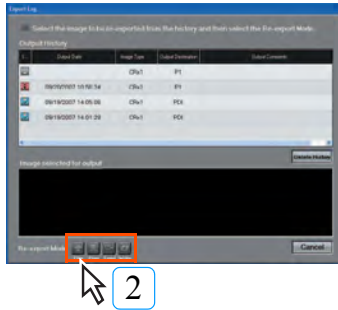


p.299 Data Output button in Output History Screen (Operation Settings)

8.6.2 Re-sending Images from the Output History

The procedure for re-sending images is described below.

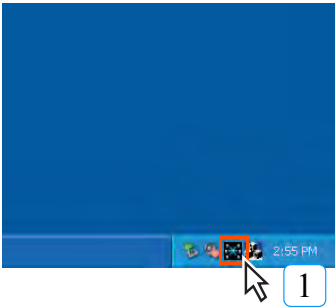
An output destination different from the original destination may be selected for re-sending images.



- 1 Reference the image for repeat output.
- 2 Click the Re-export button (Film, Print, Send or Write) at the bottom of the screen.
 - **The image corresponding the selected output procedure will be displayed.**
- 3 Execute repeat output following the corresponding output procedure.

8.7 Deleting Print Queues

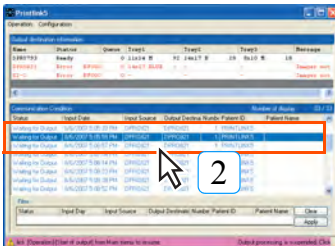
The procedure for deleting print queues is described below.



1 Click the [Printlink5-IN] button displayed in the task tray at the bottom right of the Windows desktop.

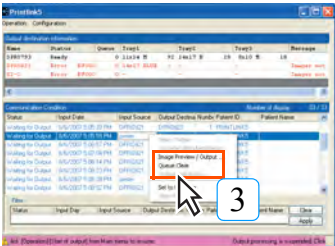


- The Printlink5-IN screen will be displayed.



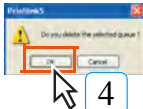
2 Select and right-click the line in the queue to be deleted.

- A menu will be displayed.



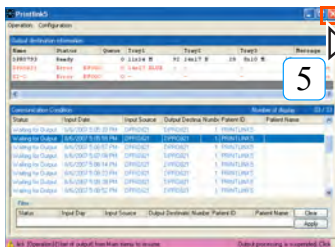
3 Select the [Queue Clear] button.

- A request for confirmation will be displayed.



4 Click the [OK] button.

- The print queue will be deleted.



5 Click the [X] button at the top right corner of the screen.

- The Printlink5-IN screen will be closed.

Chap. 9
User Tool

This chapter describes operational procedures for User Tool used as a utility to customize ImagePilot.

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9.1 Outline of User Tool

An outline of User Tool is described below.

9.1.1 Cautions regarding Use of User Tool

Concerning User Tool

User tools are a utility used to customize various information handled by ImagePilot to match the environment in which the unit is used.

Making appropriate ImagePilot settings enables smooth, efficient operation.

Note that, since User Tool make use of important information that affects processing carried out by ImagePilot, password protected privileges have been provide.



If you need the connecting with the following function, please contact your service representative.

- **client, NAS, RIS, modality, host, imager**

9.1.2 Outline of User Tool Functions

An outline of functions that may be set using User Tool is set out on the list below.

There are two User Tools to choose from: [For general users] and [For administrators].

1) User tool for general users

User tools are furnished with two types of settings, common and client settings, and each type comprises multiple setting items.

Common Setting : Setting items common to the server and clients.

Items set here are applied to both the server and clients.

Client Setting : These are client-specific settings made by each client.



System time and date should be set from the OS control panel.

| Function | Content | Page | |
|----------------|-------------------------|---|-----------------------|
| Common Setting | Institution Information | Inputs institution information. | p.272 |
| | Operation Settings | Settings relating to ImagePilot operation. | p.278 |
| | informity Settings | Allows setting to network to "informity". (Optional Function) | p.326 |
| | NAS backup | NAS-related settings. | p.328 |
| | DVD Backup | Backs up the image data to DVD. (Optional Function) | p.330 |
| | Image Move | Sets the condition for transferring the image from ImagePilot to NAS (Optional Function). | p.334 |
| | Disc Copy | Implements copies of CD or DVD. (Optional Function) | p.335 |
| | Data Management | Deletes the image data or JM order information. | p.336 |
| | System | Total system settings. | p.350 |
| | Activation Setting | Sets "Configuration and Activation" to manage the information of the installed equipment. | p.352 |
| | Adjustment | Performs calibration of the AeroDR Detector. This item is only displayed when DX (AeroDR) exists in the system configuration. | p.356 |
| Client Setting | Display information | Sets display information for each client. | p.359 |
| | Operational settings | Makes operational settings for each client. | p.363 |
| | Monitor Calibration | A screen to implement settings of LCD monitor. | - |



Items accompanied by "Optional Function" in the above indicate the paid option, and will not be displayed unless it is purchased. Contact your technical representative for the purchase of optional accessories and optional functions.



[p.373](#) Optional Functions



NAS backup cannot be set from a client.

2) User tool for administrators

Allows you to edit the NG reason used when marking an image as NG.

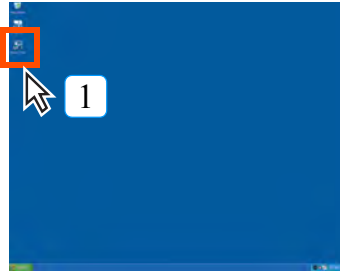
| Function | | Content | Page |
|----------|--------|----------------------|-----------------------|
| System | System | Edits the NG reason. | p.369 |

9.2 Starting up and Exiting User Tool

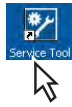
The procedures for starting and exiting User Tool are described below.

9.2.1 Starting up User Tool

The procedure for starting up User Tool is described below.



- 1 Double click the short cut icon [Service Tool] displayed on the OS desk top.

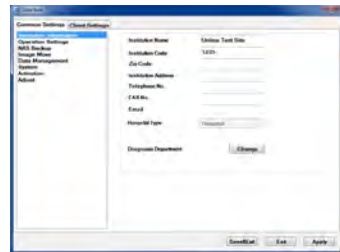



- The password input screen will be displayed.




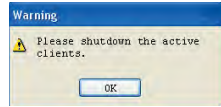
- 2 Input the password and click the [Go] button.


- Asterisks (*) will be displayed in the password input window in place of characters.
- If password input is incorrect, click the [C] button once to clear the input and type in the password again.
- The password itself will not be displayed.




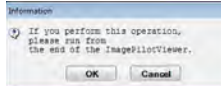
 If the user tool short cut icon is accidentally deleted, click the OS [Start] button and select [run].
Input the following into the "open" text box on the displayed screen and click the [OK] button to start up User Tool.
`http://KIM-S-*****/kimutility/kimutility.application`
(KIM-S-***** represents the computer name of ImagePilot for server use.)


 ImagePilot and User Tool cannot be started up simultaneously. Additionally, User Tool cannot be started up when another ImagePilot in the system is activated.



 The initial password setting is "1234." Changes may be made from the system screen in User Tool.

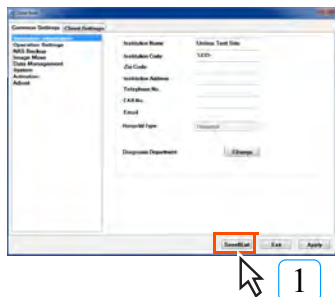
 If the following screen is displayed when starting User Tool, make sure that ImagePilot Viewer is not running. If it is, close it before continuing.



 p.451 Closing ImagePilot Viewer (Logout)

9.2.2 Exiting User Tool

The procedure for exiting User Tool is described below.



- 1 Click the [Save & Exit] button on any of the user tool screens.

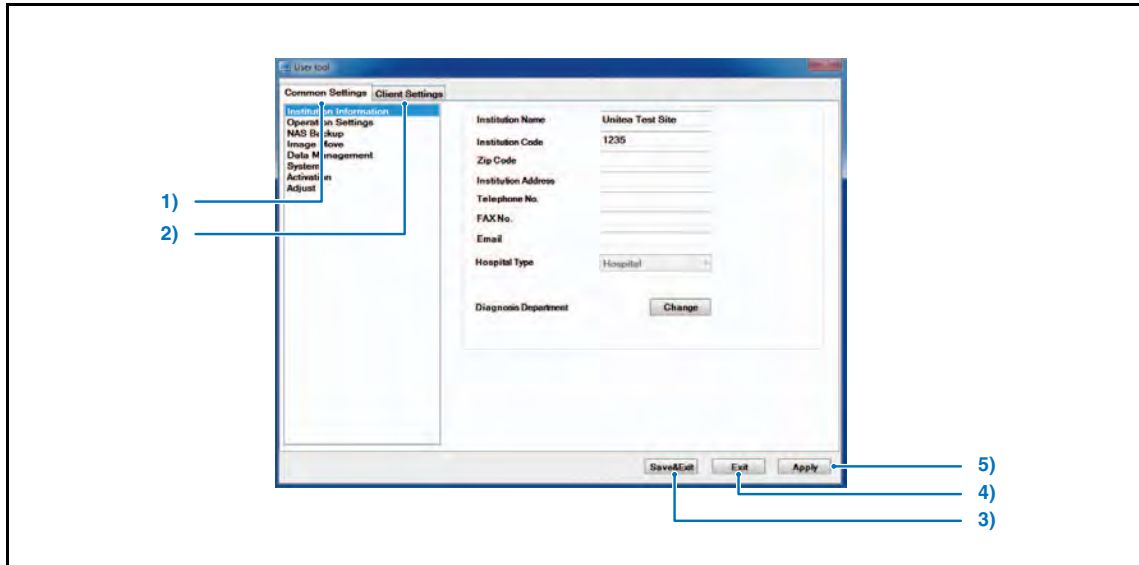
- Settings will be saved and the OS desk top screen displayed.
- Click the [Exit] button to close User Tool and display the OS desk top screen without saving settings.

9.3 User Tool Operation


User tool operational procedures are described below.

Common Buttons

The following common buttons are displayed on all user tool screens.



| | Item | Function |
|----|-------------------------------|--|
| 1) | [Common Settings] Tab | Displays the Common Settings screen. |
| 2) | [Client Settings] Tab | Displays the Client Setting screen. |
| 3) | [Save&Exit] button | Saves edited settings and exits User Tool. <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 4) | [Exit] button | Exits User Tool without saving edited settings. <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 5) | [Apply] button | Saves edited settings and reflects changes in the current display. User Tool is not exited enabling further editing. |

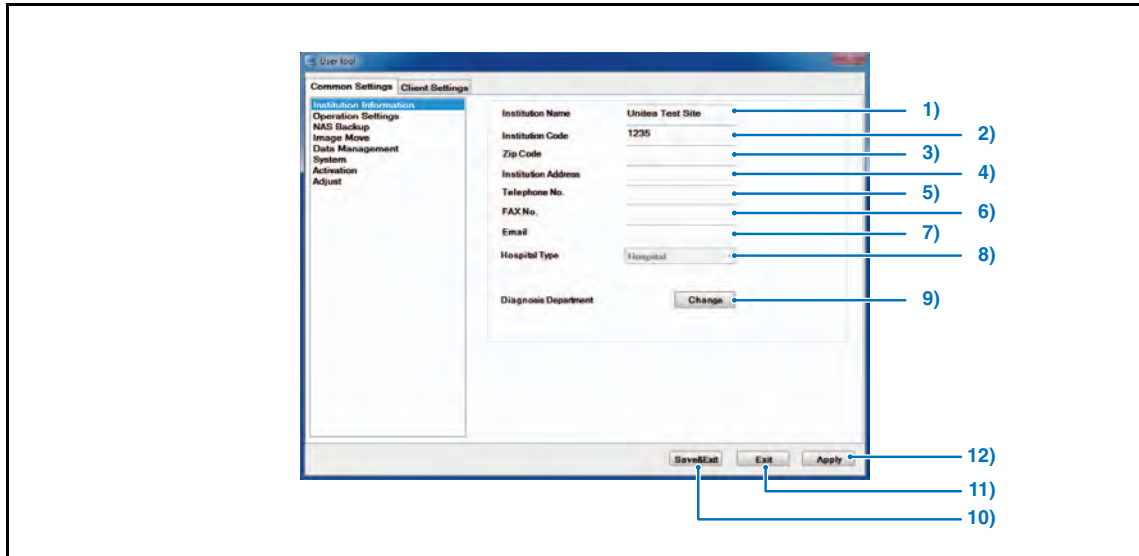
 Clicking the [Apply] button and then the [Exit] button to exit User Tool will result in saving of edited settings before the [Apply] button was clicked.

9.3.1 Common Settings


The setting items common to the server and clients are described below.


1-1) Institution Information Screen

Allows input of institution information.



| | Item | Function |
|-----|-------------------------------|---|
| 1) | Institution Name | Input the institution name from the keyboard. *Maximum 60 alphanumerics. |
| 2) | Institution Code | Input the fixed 10-digit number allocated by the social insurance to each medical institution. (State code (2 digits) + medical institution code (8 digits)) |
| 3) | Zip Code | Input the postal code of the institution using keyboard. |
| 4) | Institution Address | Input the institution address from the keyboard. |
| 5) | Telephone No. | Input the institution telephone number from the keyboard. |
| 6) | FAX No. | Input the institution fax number from the keyboard. |
| 7) | Email | Input the institution e-mail address from the keyboard. |
| 8) | Hospital Type | To be set by the technical representative at the time of installation. Changes cannot be made by the User Tool. |
| 9) | Diagnosis Department | Allows registration, amendment or deletion of diagnostic departments in the institution. • Edit Diagnosis Department screen will be displayed. |
| 10) | [Save&Exit] button | Saves edited settings as exits User Tool. • Display returns to the OS desk top screen. |
| 11) | [Exit] button | Exits User Tool without saving edited settings. • Display returns to the OS desk top screen. |
| 12) | [Apply] button | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

 Depending on settings, the above institution information may be printed on film.

 Depending on the settings, the institution information may not be editable.
Refer to one of our service advisors for more information.



When the hospital type is "Animal Hospital", use this screen to set "Animal DICOM" and "Animal Setting".

Ticking the checkbox for "Animal DICOM" allows DICOM tags such as "Sex" or "Breed Name" to be output to the external devices.

Animal DICOM DICOM Tags Support

Animal Setting

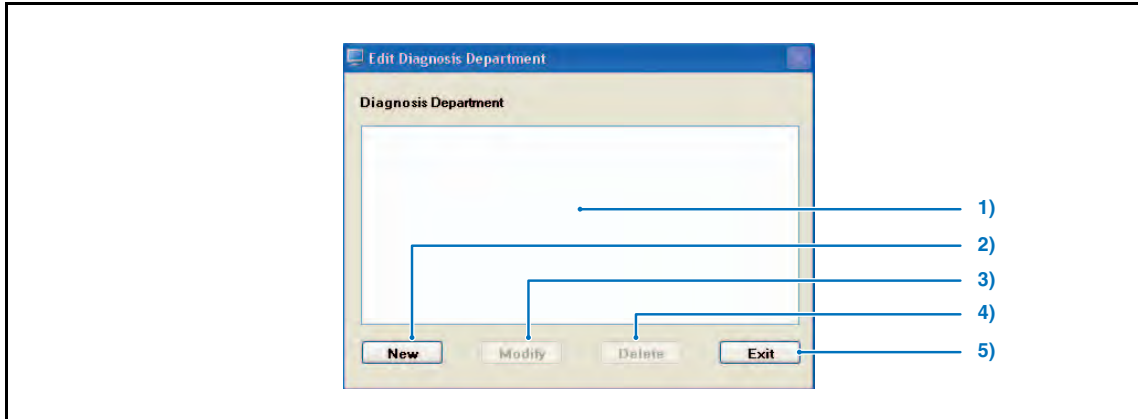
| | |
|-----------------------|--------|
| Edit Animal Type | Change |
| Edit Animal Breed | Change |
| Edit Animal Fur Color | Change |



p.275 Animal Type / Animal Breed / Animal Fur Color edit screen

1-2) Edit Diagnosis Department Screen

Allows editing of diagnostic department information.

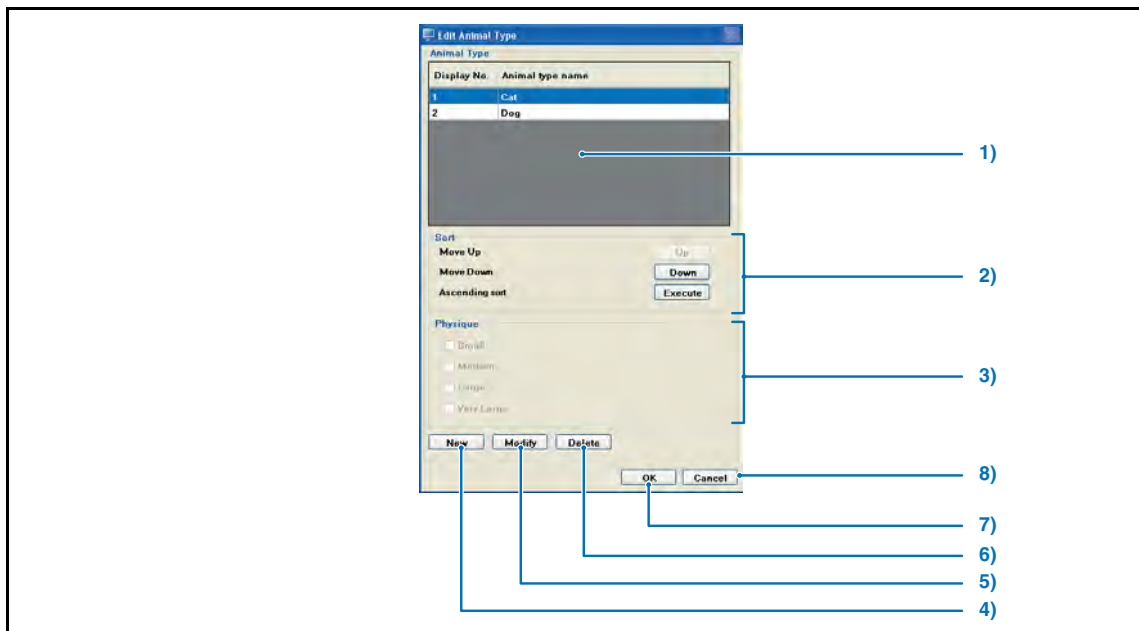


| | Item | Function |
|----|-----------------------------------|--|
| 1) | Diagnostic department list | Displays a list of registered diagnostic departments. Select the department if it should be amended or deleted. |
| 2) | [New] button | Allows registration of new diagnostic departments. • The new registration screen will be displayed. |
| 3) | [Modify] button | Allows amendment of diagnostic department names selected from the diagnostic department list. |
| 4) | [Delete] button | Deletes diagnostic department names selected from the diagnostic department list. |
| 5) | [Exit] button | Exits the diagnosis department editing screen. |

1-3) Edit Animal Type Screen

(When "Veterinary" is selected for "Hospital Type")

Edits the animal type name.

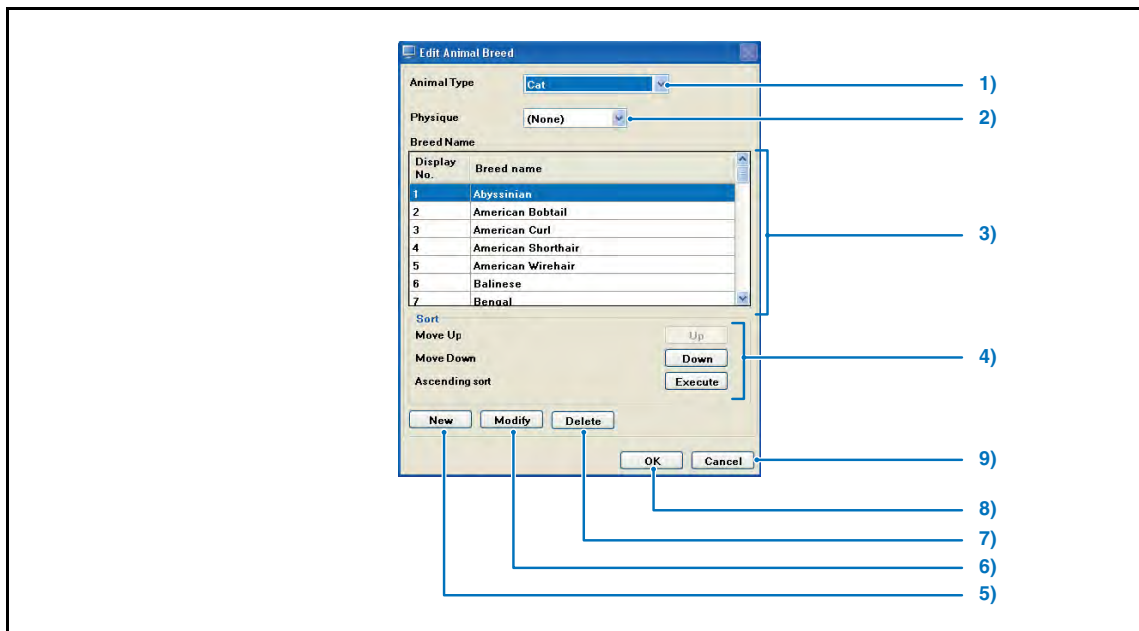


| | Item | Function |
|----|-------------------------|--|
| 1) | Animal Type List | Displays the registered animal type and display order. |
| 2) | Sort | Move Up : Moves the selected animal type one row up. Move Down : Moves the selected animal type one row down. Ascending sort : Sorts the selected animal types in alphabetical order. |
| 3) | Physique | Small : Check this box for small size animals. Medium : Check this box for medium size animals. Large : Check this box for large size animals. Very Large : Check this box for very large size animals. |
| 4) | [New] button | Newly registers the animal type. |
| 5) | [Modify] button | Modifies the animal type. |
| 6) | [Delete] button | Deletes the animal type. |
| 7) | [OK] button | Returns to the Institution Information screen after saving the modified settings. |
| 8) | [Cancel] button | Returns to the Institution Information screen without saving the modified settings. |

1-4) Edit Animal Breed Screen

(When "Veterinary" is selected for "Hospital Type")

Edits the animal breed name.

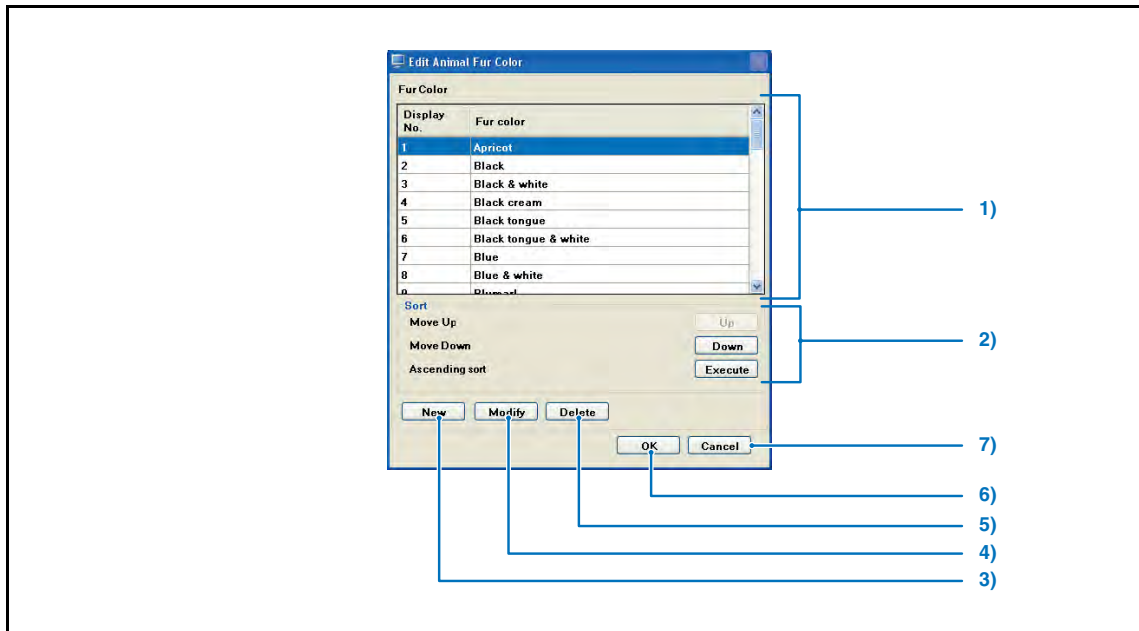


| | Item | Function |
|----|------------------------|---|
| 1) | Animal Type | Select the animal type targeted for editing. |
| 2) | Physique | Select the physical size of the animal type targeted for editing. |
| 3) | Breed Name | Displays the registered animal breed names. |
| 4) | Sort | Move Up : Moves the selected animal breed name one row up. Move Down : Moves the selected animal breed name one row down. Ascending sort : Sorts the selected animal breed names in alphabetical order. |
| 5) | [New] button | Newly registers the animal breed name. |
| 6) | [Modify] button | Modifies the animal breed name. |
| 7) | [Delete] button | Deletes the animal breed name. |
| 8) | [OK] button | Returns to the Institution Information screen after saving the modified settings. |
| 9) | [Cancel] button | Returns to the Institution Information screen without saving the modified settings. |

1-5) Edit Animal Fur Color Screen

(When "Veterinary" is selected for "Hospital Type")

Edits the fur color.



| | Item | Function |
|----|------------------------|--|
| 1) | Fur Color | Displays the registered fur colors. |
| 2) | Sort | Move Up : Moves the selected fur color one row up. Move Down : Moves the selected fur color one row down. Ascending sort : Sorts the selected fur color in alphabetical order. |
| 3) | [New] button | Newly registers the fur color. |
| 4) | [Modify] button | Modifies the fur color. |
| 5) | [Delete] button | Deletes the fur color. |
| 6) | [OK] button | Returns to the Institution Information screen after saving the modified settings. |
| 7) | [Cancel] button | Returns to the Institution Information screen without saving the modified settings. |

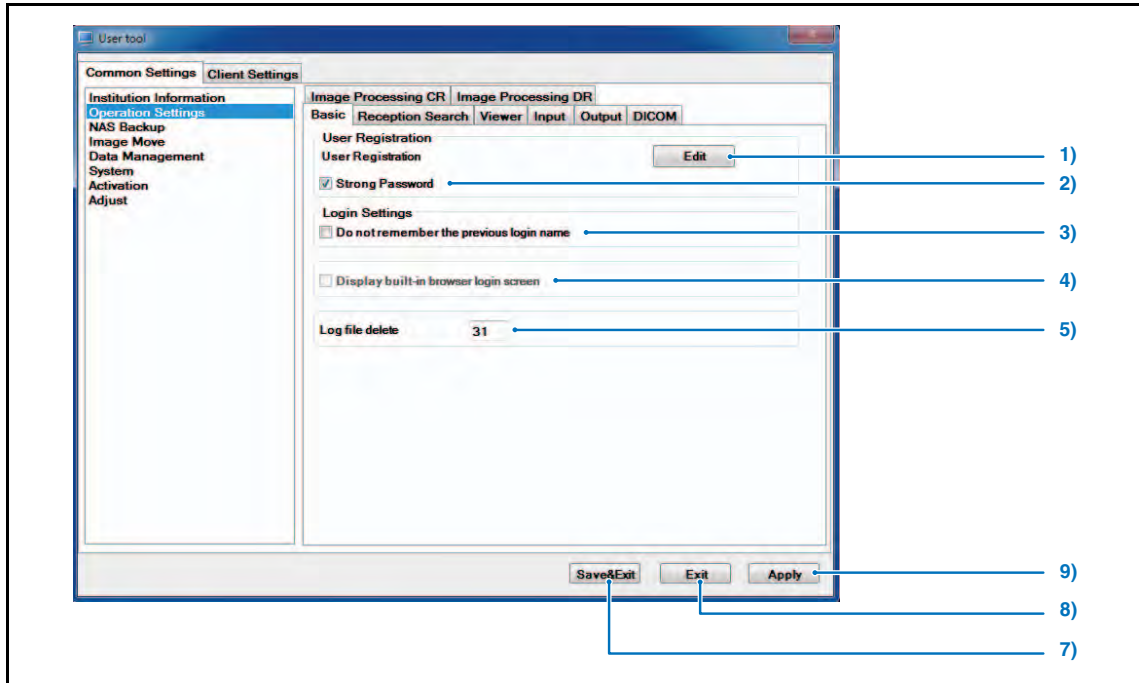
2-1) Operation Settings Screen


Makes ImagePilot operational settings.


Operation settings are divided into 7 items according to the setting content, and setting is performed by selecting setting items with the tabs.

<Basic Screen>

Perform basic settings when running ImagePilot.

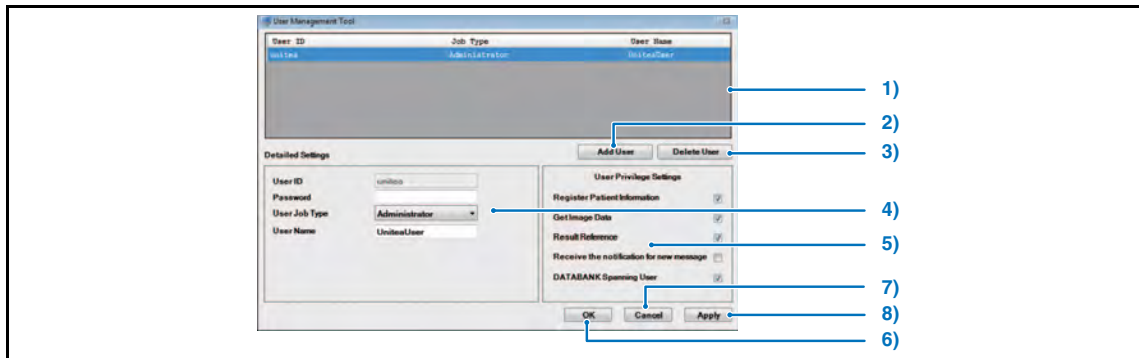


| | Item | Default | Function |
|-------------------|--|---------|--|
| User Registration | | | |
| 1) | User Registration | - | Controls registration information of ImagePilot users. Clicking the [Edit] button displays the Edit User Registration screen. If the setting of "Strong Password" is changed, click [Apply] button first to save the setting. Then click [Edit] button. When you modify the user name that has been registered with the patient information as the physician or technologist, pay attention to the following. <ul style="list-style-type: none"> Because the previous name before modification still remains on the patient information screen, it is necessary to reselect the correct user name on the amendment screen.  p.280 2-2) User Management Tool Screen |
| 2) | Strong Password | ON | Tighten the restriction of text string used to set the password for logging in ImagePilot if the box is checked. The password can be set on Edit User Registration screen. |
| Login Settings | | | |
| 3) | Do not remember the previous login name | OFF | Ticking the checkbox hides the log-in name that was used last time to log in on the Log-IN screen of ImagePilot. |

| | Item | Default | Function |
|------|---|-----------------------|--|
| 4) | Display built-in browser screen | OFF | <p>Checking this option will display the built-in browser on the Log-in screen.</p> <p>With the built-in browser displayed on the Log-in screen allows checking on the upload programs as well as useful information on Konica Minolta products.</p> <p>The [CL Settings] tab's [Display built-in browser] setting category is displayed, allowing you to set whether or not the built-in browser is displayed at login for the client PC.</p> <p> p.360 Built-In browser display</p> |
| 5) | Log File Delete | ON 31 (days later) | Sets whether the log file be deleted after specific days or not. When it should be deleted, set days after which the file is deleted. |
| QAQC | | | |
| 6) | Display Images/ Cassettes in QAQC Screen | 7 | <p>Sets the period of the image data to be extracted as QA/QC calculation object to 1 to 7 days. The initial setting is 7 days.</p> <p>Any cassette with no QA/QC image read during the subject period for calculation is deleted from the Cassette Registration Screen display.</p> |
| 7) | [Save&Exit] button | - | <p>Saves edited settings as exits User Tool.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 8) | [Exit] button | - | <p>Exits User Tool without saving edited settings.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 9) | [Apply] button | - | <p>Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing.</p> |

2-2) User Management Tool Screen

Allows new user registration and editing of registration information.



| | Item | Function |
|----|---------------------------------|--|
| 1) | List of registered users | Displays a list of registered users. Clicking an item to select will change the color of the selected line to blue. |
| 2) | [Add User] button | Allows addition of new user registration. |
| 3) | [Delete User] button | Deletes selected users form the registration list. |
| 4) | Detailed Settings | Allows editing of user registration information such as user names, passwords and privileges. |
| 5) | User Privilege Settings | Sets operation privileges for selected users. The following four operation privileges are available: <ul style="list-style-type: none"> • Register Patient Information • Get Image Data • Result Reference • Receive the notification for new message When new messages are delivered from the portal site, the informity icon flashes on the patient information screen. When you mouse-over the blinking informity icon, the number of new messages is displayed. * This check box is displayed when the [Built-In browser display] on [Client Settings] - [Display Information] - [Login Screen] is checked. The check box for the Built-In browser display on the Login Screen is displayed when the [Display built-in browser login screen] on [Common Settings] - [Operation Settings] - [Basic]. • DATABANK Spanning User (Default: OFF) Place a check if you want to use the Databank Spanning function. Databank Spanning function setting procedure <ol style="list-style-type: none"> 1. Place a check in the checkbox of [DATABANK Spanning] on the [Option Settings] screen. 2. Place a check in the checkbox of [Image Retrieval] on the [Option Settings] screen. 3. Click the [Settings] button of [Viewer Function EnhancementSettings] of the [DICOM] tab of the [Operation Settings] screen, and turn [GPS] of the [Settings] dialog ON. |
| 6) | [OK] button | Saves edited user registration and returns to the Operation Settings screen. |
| 7) | [Cancel] button | Returns to the Operation Settings screen without saving edited user registration. |
| 8) | [Apply] button | Saves edited settings and reflects changes in current display. The Edit User Registration screen is not exited enabling further editing. |



A series of asterisks (*) representing the password is displayed in the "Password" window under detailed settings.



"Strong password" is supported.

Password condition :

- Minimum 6, maximum 20 characters

Text/Digits/Signs are acceptable



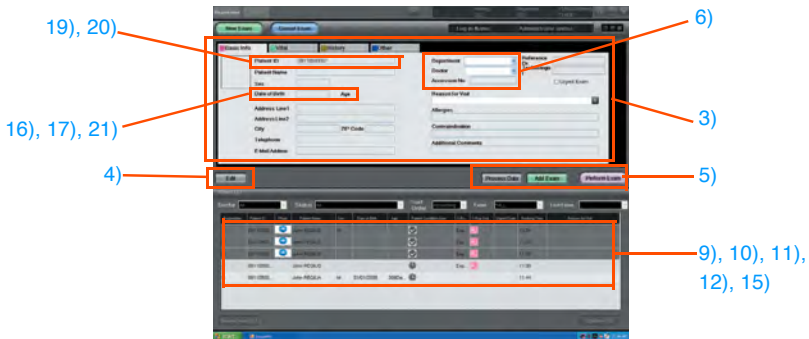


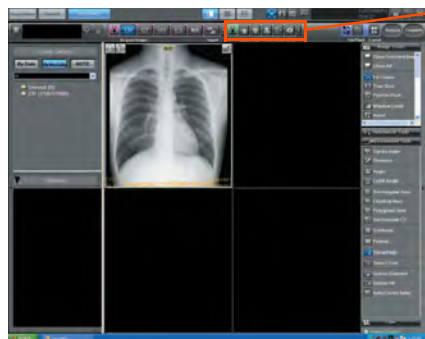





When you modify the user name that has been registered with the patient information as the physician or technologist, pay attention to the following.

- Because the previous name before modification still remains on the patient information screen, it is necessary to reselect the correct user name on the

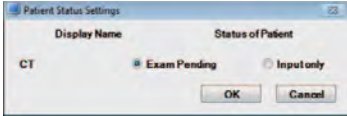
<Reception Search Screen>

A screen allowing setting of items related to the patient reception and search.

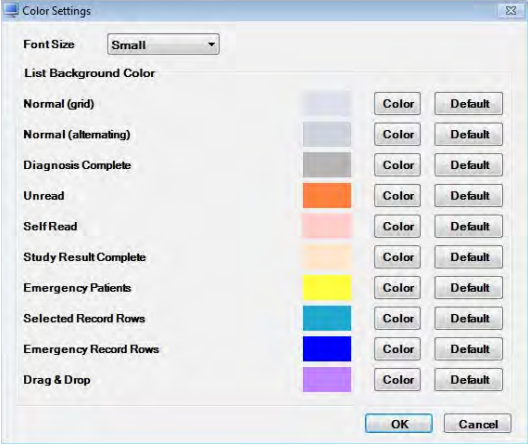
The screenshot displays the 'Reception Search' configuration window. The interface includes a sidebar with 'Client Settings' selected, a top navigation bar with tabs for 'Basic', 'Reception Search', 'Viewer', 'Input', 'Output', and 'DICOM', and a main settings area. The settings are organized into sections: 'Mandatory Registration', 'Patient Screen', 'Button Position', 'Add Exam from Search Result', 'Physician Name & Technician Name Input Settings', 'Birth date Input', 'Registration list auto sort Settings', 'Registration list drag & drop operation', 'Display position for ID issue message', 'Emergency Patient Settings', 'Patient Status Settings', 'Data Acquisition Settings', 'Device Term Settings', 'Age Format Settings', 'Patient ID format', 'Temporary Patient ID Format', 'Study ID format', 'Font Size/Background Color Settings', and 'No setting(ENG) chkTodaysCommenEditMode'. Each setting is accompanied by a checkbox, radio button, or text input field. A 'Settings' button is present for several sections. At the bottom, there are 'Save&Exit', 'Exit', and 'Apply' buttons. Blue lines with numbers 1 through 26 point to these specific elements.

| | Item | Default | Function |
|--|--|---------|---|
| <p style="text-align: center;">"Patient Reception Screen"</p>  <p>Allows setting show/hide of the layout settings of Patient Reception screen and [Data Output] button using [Client Settings] - [Display Information].   p.359 2-1) Display Information Screen</p> | | | |
| <p style="text-align: center;">"Viewer Screen"</p>  <p><Image output related items>  7)</p> <p>There are items in [Client Settings] - [Display Information] / [Operation Settings], which also allows settings related to the Viewer screen.  p.359 2-1) Display Information Screen  p.363 3-1) Operation Settings screen</p> | | | |
| 1) | Settings a Mandatory Registration | OFF | <p>Checking this option allows setting of mandatory registration items for patient registration.</p> <ul style="list-style-type: none"> The Mandatory Registration Item Setting Screen is displayed by pressing the [Settings] button.  p.288 2-3) Mandatory Registration Item Setting Screen |
| 2) | Accession Number Input check | OFF | <p>When you check this box, the Accession No. entered during the patient reception registration, and the previously registered Accession No. are checked. If a previously registered Accession No. and a duplicate Accession No. are input, dialogue box requesting reentry will be displayed.</p> |
| 3) | Patient Screen | - | <p>Sets the layout of the patient screen.</p> <p>New : Newly create the patient screen. Edit : Edits the already created patient screen. Delete : Deletes the already created patient screen.</p>  p.289 2-4) Patient Screen Layout Screen |

| | Item | Default | Function |
|---|--|---------|--|
| Button Position | | | |
| 4) | Edit Receipt Change | ON | Checking this option will replace the position of [Modify](or [Save], [Cancel]) button with [Import Data], [Reception] and [Perform exam] buttons. This option is useful for the cases where the display with wide screen such as 24inch(61cm) display is used, requiring more distance to reach the [Perform Exam] button. |
| Add Exam from Search Result | | | |
| 5) | Add Exam button in Search Result | OFF | Ticking this button will display [Add Exam] button on the Patient Search screen, allowing patient registration directly on the Patient Search screen. |
| Physician Name & Technician Name Input Settings | | | |
| 6) | Add Physician Name & Technician Name to the pull down from the Manual input | OFF | Allows setting the input method of "Physician Name" on the Patient Search screen and "Attending Doctor", "Attending Technologist" and "Referring Physician" on the Patient Information Input screen and Image Property screen. ON: Allows selection from pull down menu and manual input. OFF: Allows selection from pull down menu only. |
| 7) | Combine the search item in Batch Output screen & Normal Search screen | ON | This function is only enabled when the Batch Output license is set in Options. It allows you to set whether or not search items from the [Batch output screen] dialogue box are aligned with search item content displayed at the Search List Screen. |
| Birth date Input | | | |
| 8) | DOB Format | OFF | (applicable to animal hospital only) Checking this option switches the birthday format(yy/mm/dd) of the patient to the other(yy/mm). (in the case of yy/mm format, the first day of the month that is input is used as the basis to calculate the age.) |
| Registration list auto sort Settings | | | |
| 9) | Automatically move diagnosis completed patient to last line | OFF | Allows setting to move the patient after completion of the study to the last row of the patient reception list. Note: Do not switch this function ON/OFF under the condition where the study completed patient is still exists or the study is being implemented. |
| Registration list drag & drop operation | | | |
| 10) | Rearrange of patient order is allowed by drag & drop | OFF | Allows setting to change the listing order of the patient in the patient reception list by drag & drop operation. However, this function, the operation with drag & drop can be set on only one unit among several ImagePilot units. In the following cases, drag & drop operation is disabled. <ul style="list-style-type: none"> • When the list is sorted and the display order is mixed up. • Study completed patient. |

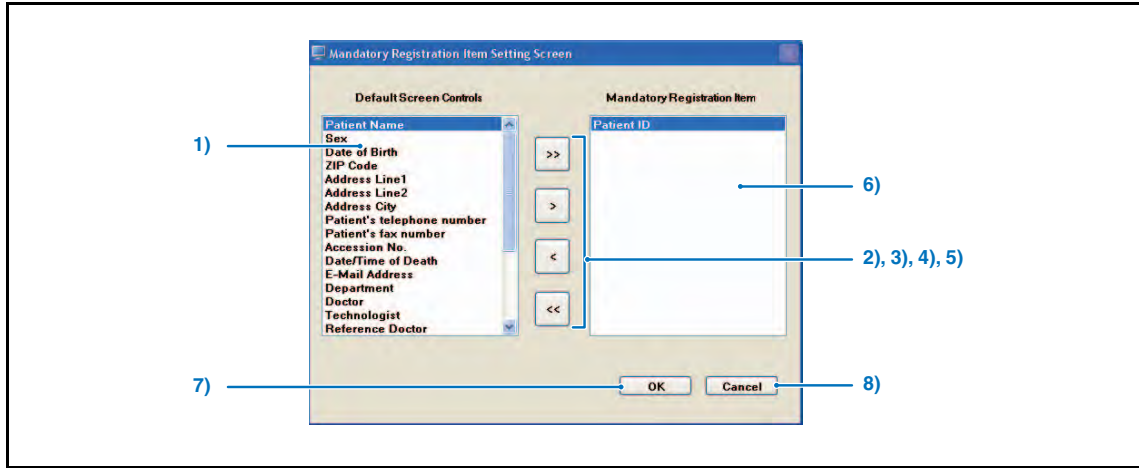
| | Item | Default | Function |
|---------------------------------------|--|-----------------------|---|
| Display position for ID issue message | | | |
| 11) | Change display position for new patient ID issue message | ON | Allows setting the position of the confirmation dialogue box close to the mouse, which is displayed when registering a new patient. |
| Emergency Patient Settings | | | |
| 12) | Clear Emergency Patient Settings | OFF | Allows setting the duration(hours) after which the emergency patient status that has been set is automatically cancelled. |
| Patient Status Settings | | | |
| 13) | Patient status setting for modality while auto retrieve image | - | <p>Sets the patient status in the case where the modality image is acquired.</p> <p>Note: Modality items displayed here are for those modalities actually usable.</p>  |
| 14) | Data Acquisition Settings | Input Only | <p>Sets the patient status either to "Input Only" or to the status before [Process Data] button is clicked.</p> <p>For example, when the image acquisition is made from the media while the setting is made to display only the patients of "Exam to be Performed", this option avoids the case where the status changes and the patients will not be listed in the list.</p> |
| Device Term Settings | | | |
| 15) | Clear Devices Status Settings | 1 / All OFF | Sets the duration(days) after which the device progress status on the Reception List display is cleared. |
| Age Format Settings | | | |
| 16) | 1 year and above | xx Year(s)xx Month(s) | Sets the age display format for the patient at the age of one year or elder. |
| 17) | Below 1 year | xx Day(s) | Sets the age display format for the patient at the age of less than one year old. |
| 18) | Add Output History Button in Search Screen | OFF | Checking this option will display the [Output History] button on the patient search screen. It allows you to check the image output history and re-output the already output image from the patient search screen. |

| | Item | Default | Function |
|-----|------------------------------------|--------------|--|
| 19) | Patient ID Format | !!""##***** | <p>Allows setting of value formats used as patient IDs.</p> <ul style="list-style-type: none"> * : Count value !!!! : Western calendar (4 digits) !! : Western calendar (2 digits) "" : Month (2 digits. January : "01," December : "12") ## : Date (2 digits. 7th : "07," 18th : "18") \$\$: Hour (2 digits. 10:00 AM: "10," 2:00 PM: "14") %% : Minute: (2 digits. 27 minutes : "27") && : Second: (2 digits, 14 seconds : "14") @ : Machine number (ImagePilot machine number set during installation) <p>Enabling [Reset count value daily (reset from 1)] changes the automatically issued number for the patient ID from "Date + number continuing from previous number" to "Date + From Daily 1".</p> <p>Total number of digits : Sets the total digits of the format. (Default Format : !!""##*****/Total No of Digits : 10)</p> <p>Checking the checkbox of "ZERO Padding before Patient ID" will fill vacant space before the ID with "0" when the digit of the patient ID shortfalls.</p> |
| 20) | Temporary Patient ID Format | *** | <p>Allows setting of value formats used as emergency IDs.</p> <ul style="list-style-type: none"> * : Count value !!!! : Western calendar (4 digits) !! : Western calendar (2 digits) "" : Month (2 digits. January : "01," December : "12") ## : Date (2 digits. 7th : "07," 18th : "18") \$\$: Hour (2 digits. 10:00 AM: "10," 2:00 PM: "14") %% : Minute: (2 digits. 27 minutes : "27") && : Second: (2 digits, 14 seconds : "14") @ : Machine number (ImagePilot machine number set during installation) <p>Total No of Digits : Sets the total digits of the format. (Default Symbol for Registration : QQ/format : ***)</p> |
| 21) | Study ID Format | @!!""##***** | <p>Allows setting of value formats used as study IDs using the following codes.</p> <ul style="list-style-type: none"> * : Count value !!!! : Western calendar (4 digits) !! : Western calendar (2 digits) "" : Month (2 digits. January : "01," December : "12") ## : Date (2 digits. 7th : "07," 18th : "18") \$\$: Hour (2 digits. 10:00 AM: "10," 2:00 PM: "14") %% : Minute: (2 digits. 27 minutes : "27") && : Second: (2 digits, 14 seconds : "14") @ : Machine number (ImagePilot machine number set during installation) |

| | Item | Default | Function |
|-----|--|---------|--|
| 22) | Font Size/Background Color Settings For Recep/Search List Screen | - | <p>Clicking the [Settings] button will display the [Color Settings] dialogue box. You can change the background color and the font size of lists in the Patient Reception screen and Search screen.</p>  |
| 23) | No setting(ENG) chkTodaysCommentEditMode | OFF | <p>Edit today's comments (medical interview details) on the patient list. Checking will allow editing of the comment "Today's comment (medical interview details)" on the patient list of the search screen with the test date remaining the same rather than updating the comment date to the date of the revision.</p> |
| 24) | [Save&Exit] button | - | <p>Saves edited settings as exits User Tool.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 25) | [Exit] button | - | <p>Exits User Tool without saving edited settings.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 26) | [Apply] button | - | <p>Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing.</p> |

2-3) Mandatory Registration Item Setting Screen

A screen to set the mandatory registration items for patient information registration.

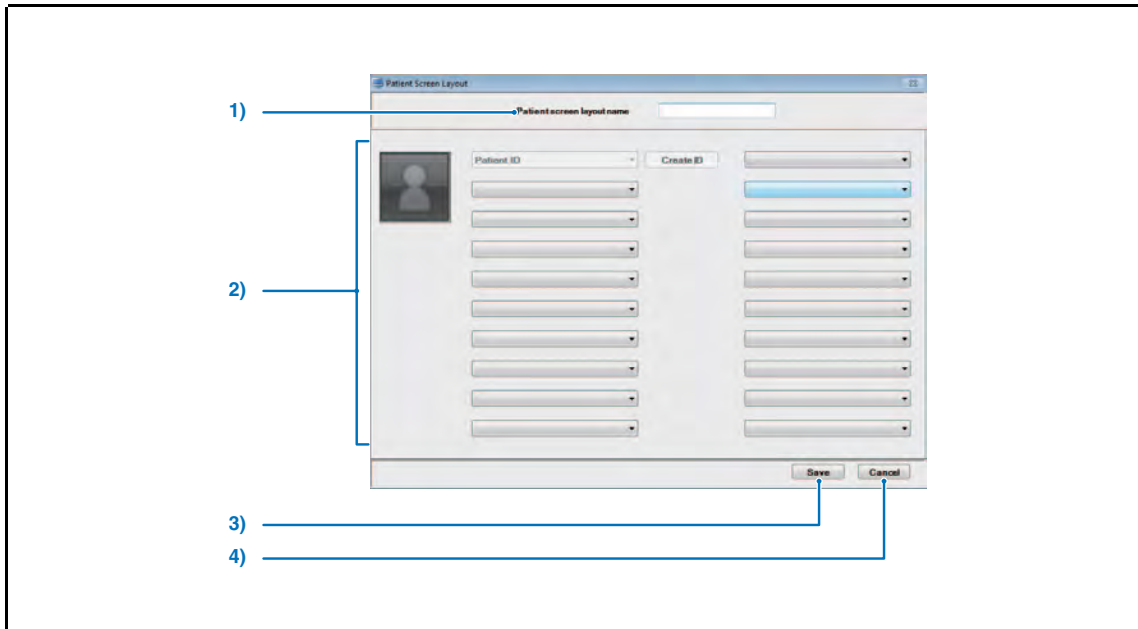


| | Item | Function |
|----|------------------------------------|--|
| 1) | Mandatory Registration Item | Displays items that can be set as mandatory items for patient registration. |
| 2) | [>] button | Registers items selected from the list. |
| 3) | [>>] button | Registers all items displayed on the list. |
| 4) | [<] button | Cancels registration of items selected from the list. |
| 5) | [<<] button | Cancels registration of all items on the list. |
| 6) | Mandatory Registration Item | Displays items that are registered as mandatory items for patient registration. In addition, Patient ID is fixed as a mandatory item, and cannot be removed from the mandatory item. |
| 7) | [OK] button | Returns to the Operation Settings screen after saving the settings. |
| 8) | [Cancel] button | Returns to the Operation Settings screen without saving the settings. |

2-4) Patient Screen Layout Screen

Sets the layout of the Patient screen.

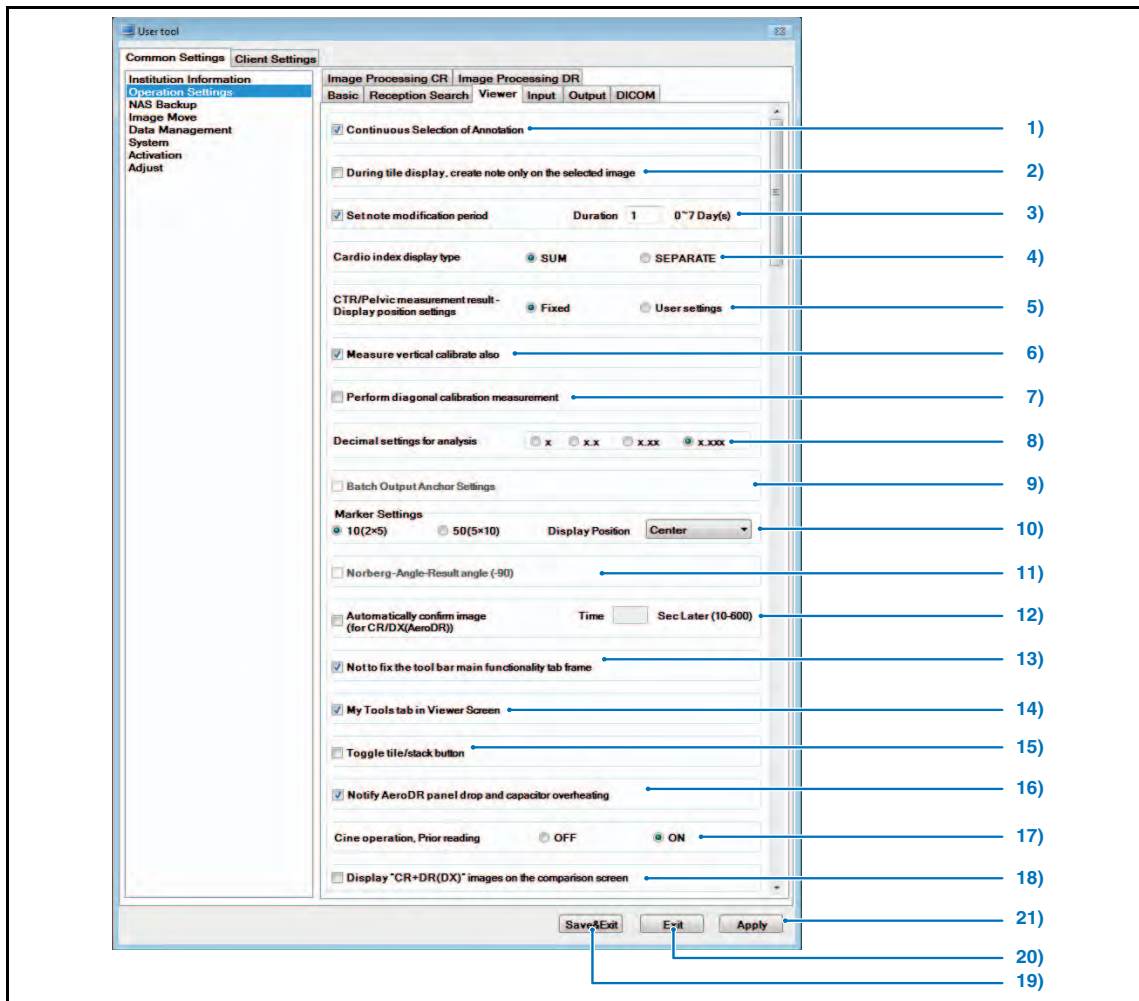
Note: The Patient screen saved here can be selected by [Screen layout Format] of the Patient List screen that can be opened through "User Tool" → "Client Settings".








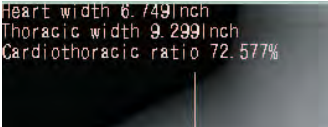
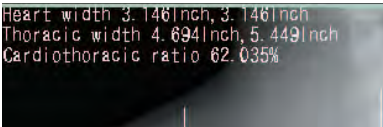


| | Item | Function |
|----|-----------------------------------|---|
| 1) | Patient screen layout name | Sets the name of the Patient screen whose layout is formulated. |
| 2) | Layout Setting | Select the items that shall be displayed on the Patient screen. |
| 3) | [Save] button | Returns to the Operation Settings screen after saving the settings. |
| 4) | [Cancel] button | Returns to the Operation Settings screen without saving the settings. |



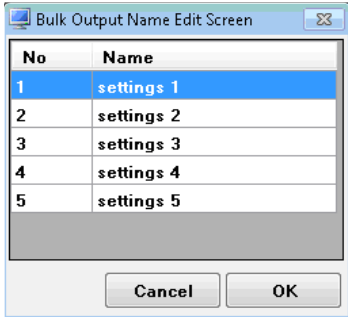


<Viewer Screen>

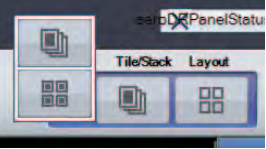

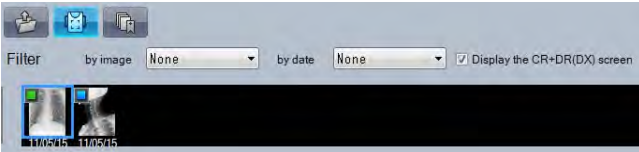
Allows setting related to the Viewer screen.



| Item | Default | Function |
|--|---------|--|
| "Viewer Screen" | | |
| <Image acquisition related items> | | |
| 1) | | |
| 3) | | |
| | | <Palette related items> |
| | | 4), 5), 6), 8) |
| <p> There are items in [Client Settings] - [Display Information] / [Operation Settings], which also allows settings related to the Viewer screen.</p> | | |
| | | <p> p.359 2-1) Display Information Screen</p> <p> p.363 3-1) Operation Settings screen</p> |

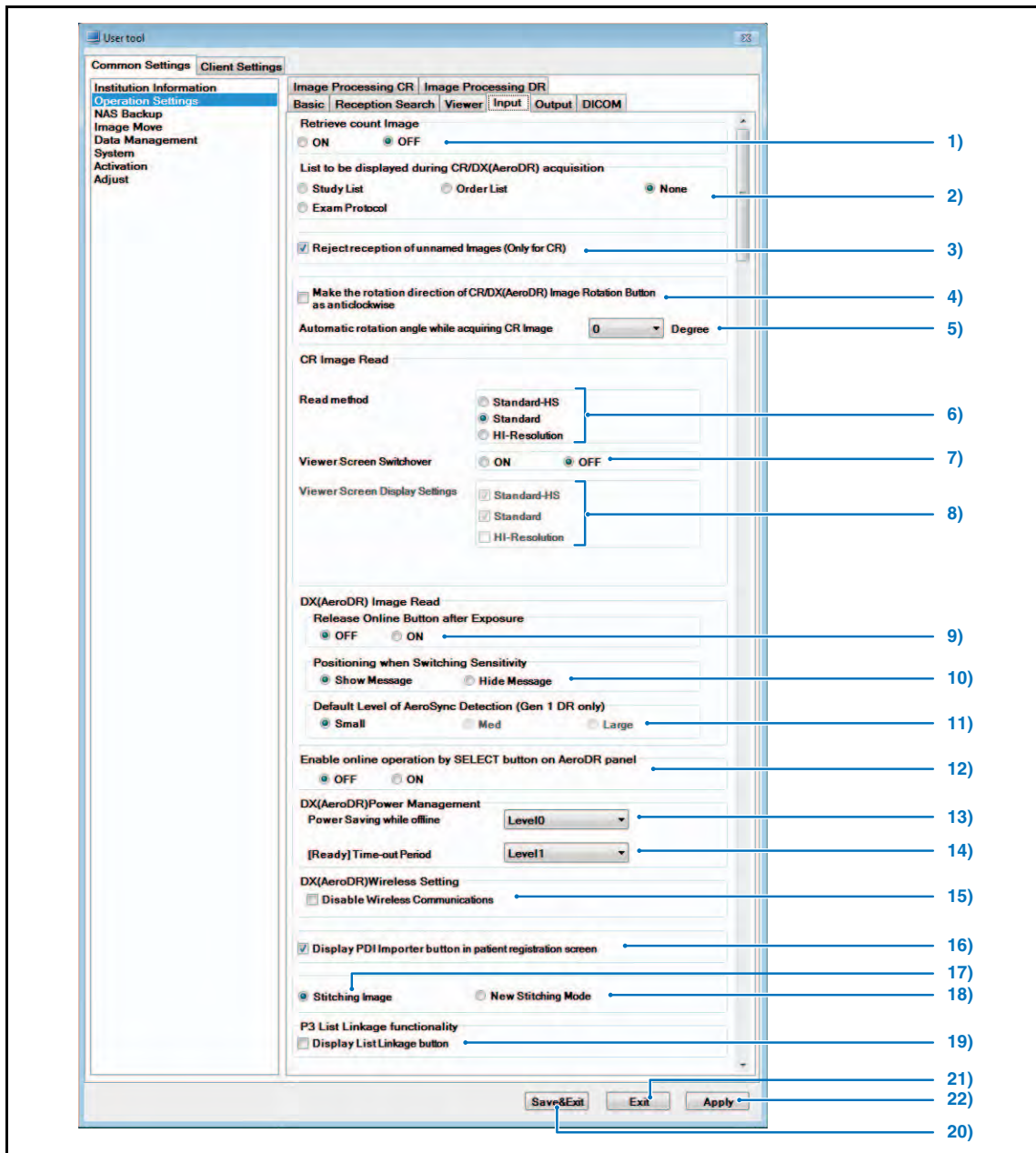
| | Item | Default | Function |
|----|---|----------|---|
| 1) | Continuous Selection of Annotation | ON | Ticking this option allows the same function to be activated on the annotation/analysis tools palette of the Viewer screen without reselecting the menu.  p.137 Annotation Tools |
| 2) | During title display. create note only on the selected image | OFF | Checking this option allows creation of notes on images individually selected while displaying multi-frame images or series join images displayed in tiling. |
| 3) | Set note modification period | ON, 1day | Sets the time period during which the Note can be modified. Removing(OFF) the check from the checkbox allows modification at any time. When it is set to "0" day(s) with the check removed, no time period for modification becomes available, thus disabling the modification after the confirmation.  p.237 Modification of the Note |
| 4) | Cardio index display type | SEPARATE | SUM : Displays the sum of right & left side for each of heart breadth and chest breadth.  SEPARATE : Displays the right & left side respectively for each of heart breadth and chest breadth.  Note: Modification applied to the Perpendicular calculates display type will not be reflected on the calculations before the modification.  p.150 Cardio Index |
| 5) | CTR/Pelvic measurement result - Display position settings | Fixed | Sets whether to fix or allow the operator to move the display position of the calculation result of Cardio Index and Pelvis Analysis. In cases when "User settings" is selected, the calculation result can be dragged and moved.  p.161 Display Position of Calculation Result |
| 6) | Measure vertical calibrate also | ON | Checking in this checkbox allows the measure calibration that is enabled using the Analysis Tools Palette of the Viewer screen also available for vertical calibration. |
| 7) | Perform diagonal calibration measurement | OFF | Checking this option allows diagonal calibration measuring to be performed with the measuring Pallet on the Viewer screen. |

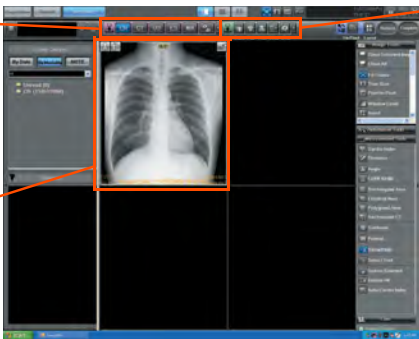



| | Item | Default | Function |
|-----|---|------------|---|
| 8) | Decimal settings for analysis | X.XXX | <p>Select the display format for the analysis.</p> <p>Note: Modification applied to the Decimal settings for analysis will not be reflected on the analysis values obtained before the modification.</p> <p> p.150 Analysis Tools</p> |
| 9) | Batch Output Anchor Settings | OFF | <p>This function is only enabled when the Batch Output license is set in Options. It allows you to set whether or not a function will be used that outputs images assigned at the Viewer Screen in a batch to host and media.</p> <p> p.380 Perform batch output only for assigned images</p> <p>Selecting this checkbox displays the [Edit] button, allowing you to edit the name of the batch output anchor.</p>  |
| 10) | Marker Settings | 10 (2 x 5) | <p>Allows you to select and set the number of preset markers that can be registered.</p> <p>10 (2 x 5) : Up to 10 can be registered 50 (5 x 10) : Up to 50 can be registered</p> <p>Set the display location of the preset market from the [Display Position] pull-down menu.</p> <p> p.144 Preset Marker</p> |
| 11) | Norberg-Olsen-Angle-Result angle (-90) | OFF | <p>Sets up the method of displaying the angle in the measuring function for veterinary hospitals.</p> <p>When not checked, the drawn angle is displayed as is. When checked, the value with 90 degrees subtracted from the drawn angle is displayed.</p> |
| 12) | Automatically confirm image (for CR/DX (AeroDR)) | OFF | <p>When this option is checked, captured CR or AeroDR images are automatically determined as good images after the set time has elapsed.</p> |
| 13) | Not to fix the tool bar main functionality tab frame | ON | <p>When this option is checked, the fixed position of the [Main Functionality] tab displayed in the toolbar of the viewer screen will be released.</p> |
| 14) | My Tools tab in Viewer Screen | OFF | <p>When this option is checked, the My Tools tab is displayed in Toolbox.</p> <p> p.120 My Tools</p> |


| | Item | Default | Function |
|-----|--|---------|--|
| 15) | Toggle tile/Stack button | OFF | <p>Sets the way the [Tile/Stack] button is displayed.</p> <p>OFF: Clicking the [Tile/Stack] button will display the [Tile] button and [Stack] button in a popup.</p>  <p>ON: Every time the [Tile/Stack] button is clicked, the [Tile] button and [Stack] button are displayed alternately.</p>  |
| 16) | Notify AeroDR panel drop and capacitor overheating | ON | <p>This setting is used to turn on/off the detection of errors in the connected ImagePilot when the AeroDR Detector is dropped, experiences strong impact, or temperature anomalies are detected. The device that the error messages will be sent is only that of the viewer is activated and the corresponding AeroDR panel is in online state.</p> <p>If the viewer is not activated, or the corresponding AiroDR Detector is in an offline state, the error messages will be sent when it changes its state as online.</p> <p>* This function is only valid when using AeroDR 2 1417HQ and 1417FIP, AeroDR 2 1417S and 1417S FIP.</p> |
| 17) | Cine operation, Prior reading | ON | <p>Determines whether to execute advance reading of cine playback.</p> <p>ON : Advance reading of the image frame for cine playback to accelerate playback.</p> <p>OFF : Without advance reading of the frame, playback at normal speed.</p> <p>*Cine playback on the viewer screen is the subject. The cine playback speed on the PDI Importer screen may not be changed.</p> |
| 18) | Display “CR+DR(DX)” images on the comparison screen | OFF | <p>Selecting the check box displays [Display the CR+DR (DX) screen] at the bottom of the comparison screen.</p> <p>Selecting the [Display the CR+DR (DX) screen] check box enables display of CR and DR (DX) images as thumbnails on the comparison screen.</p>  |
| 19) | [Save&Exit] button | - | <p>Saves edited settings as exits User Tool.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 20) | [Exit] button | - | <p>Exits User Tool without saving edited settings.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 21) | [Apply] button | - | <p>Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing.</p> |

<Input Screen>

Allows setting related to image input.



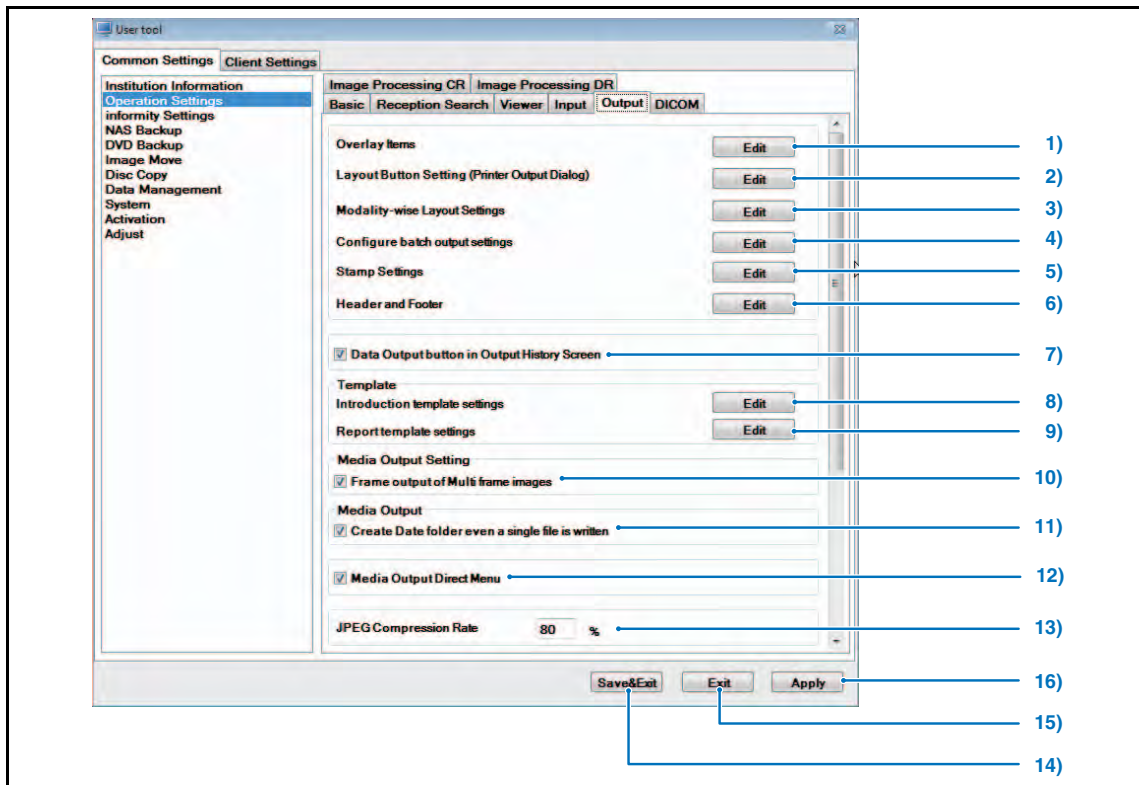
| | Item | Default | Function |
|--|---|--------------------------|--|
| <p style="text-align: center;">"Viewer Screen"</p>  <p><Image acquisition related items> 1), 2), 5)~7)</p> <p><Image output related items> 8)</p> <p><Image display related items> 3), 4)</p> <p style="text-align: right;">  p.359 2-1) Display Information Screen  p.363 3-1) Operation Settings screen </p> | | | |
| <p> There are items in [Client Settings] - [Display Information] / [Operation Settings], which also allows settings related to the Viewer screen.</p> | | | |
| 1) | Retrieve Count Image | OFF | Sets whether or not to set a count when the [CR]/ [DX (AeroDR)] button is clicked. When the set count is reached, the modality button of [CR]/ [DX (AeroDR)] will automatically switch OFF. |
| 2) | List to be displayed during CR/DX(AeroDR) acquisition | None | Sets whether the description of inspection/ExamProtocol entry screen is displayed on CR/DX (AeroDR) image loading and allows the screen to be configured when it is displayed. Caution: The ExamProtocol is a function intended only for an animal hospital. The ExamProtocol is not displayed on the Chinese version. |
| 3) | Reject reception of unnamed Images (Only for CR) | ON | This setting determines whether or not to use the Unnamed Image folder function. Reject = ON, Use = OFF |
| 4) | Make the rotation direction of CR/ DX(AeroDR) Image Rotation Button as anticlockwise | OFF | Changes the direction effected by clicking the [Rotate Image] button on the viewer screen from clockwise to counterclockwise. |
| 5) | Automatic rotation angle white acquiring CR image | 0 (Degree) | Sets the angle for automatic rotation when CR image is imported to the viewer screen. Select from 0, 90, 180 and 270. |
| CR Image Read | | | |
| 6) | Read method | "Standard" (175 μ m) | Select the read method of the CR images. Select from Standard-HS"(reads at 175 μ m), "Standard"(decimates the image after reading at 87.5 μ m) and "Hi-Resolution" (reads at 87.5 μ m). Note: "Standard-HS" is the optional setting. |

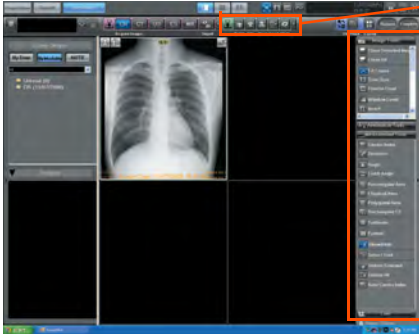
| | Item | Default | Function |
|------------------------------|---|--|--|
| 7) | Viewer Screen Switchover | OFF | <p>Sets whether the import method of CR image be available or not. When it is set to ON, right-clicking on the [CR] button that is also set to ON displays the CR image import method setting screen.</p> <p> p.60 Changing the Import Method of CR Images</p> |
| 8) | Viewer Screen Display Settings | Standard-HS : ON Standard : ON HI-Resolution : OFF | <p>Sets whether to display "Standard"(175μm) and "Slow Mode(moire removal)" items on the CR image import method setting screen. Even in the case when the import method is changed on the CR image import method setting screen, the setting returns to the original setting made by "Read Type" if OFF/ON of the [CR] button is performed on the viewer screen.</p> <p>Note: When the CR modality button is automatically switched OFF according to the setting made by "CR Image Import Count Setting", the setting returns to the original setting made by "Read Type".</p> <p>This option cannot be set if the setting of "Viewer Screen Display" is OFF.</p> <p>Note: "Standard-HS" is the optional setting.</p> |
| DX(AeroDR) Image Read | | | Note: This item is only displayed when [DX (AeroDR)] is registered in the modality through the system configuration. |
| 9) | Release Online Button after Exposure | OFF | <p>When this item is [OFF], online status will be preserved by not going offline for each exposure.</p> <p>If this is set to [ON], the Online button will automatically be released and go offline after every single image capture.</p> <p>Note: This item is a function that is enabled only when using AeroSync mode.</p> |
| 10) | Positioning when Switching Sensitivity | Show Message | Sets repositioning request messages for detection level change. It can be changed during the state of shooting. |
| 11) | Default Level of AeroSync Detection (Gen 1 DR only) | Small | <p>Sets the default detection level of AeroSync.</p> <p>Even when the AeroSync detection level is changed when exposing, after one image has been exposed, it will return to the detection level set here.</p> <p>When [Release Online Button after Exposure] is set to [ON], you can select [Small], [Med], or [Large].</p> <p>When [Release Online Button after Exposure] is set to [OFF], you can select only [Small].</p> <p>Note: This function is only valid when used in the AeroSync mode and is applicable for only the AeroDR 1417HQ, 1417FIP, 1012HQ, and 1717HQ.</p> |
| 12) | Enable online operation by SELECT button on AeroDR panel | OFF | <p>Enables online operation using the SELECT button.</p> <p>Enabled when the hospital type is set to animal hospital. When ON is checked and the AeroDR panel is [SLEEP] or [STANDBY], pressing the [SELECT] button on the AeroDR panel without operating the screen will allow you to return to [READY].</p> <p>This function operates only in system configurations that are not connected to a client.</p> <p>Note: This function is not displayed in the Chinese language version.</p> |










| | Item | Default | Function |
|--------------------------------------|---|---------|---|
| DX(AeroDR) Power Management | | | Note: This item is only displayed when [DX (AeroDR)] is registered in the modality through the system configuration. |
| 13) | Power Saving while offline | Level 0 | Power saving level of AeroDR Detector can be set when it is offline through the viewer screen. Level 0: Standby Level 1: Sleep Setting this to Level 1 sets the device to Sleep mode to minimize power consumption. However, it will take longer until the status changes to "Ready" after the Online button is pressed. |
| 14) | [Ready] Time-out Period | Level 1 | Sets the time to automatically go back offline when a certain time has elapsed with the Online button turned on. Level 0: Power consumption increases but going back offline takes longer. Level 1: Standard power consumption. Level 2: Power consumption decreases but the time to go back offline becomes short. |
| DX(AeroDR) Wireless Setting | | | Note: This item is only displayed when [DX (AeroDR)] is registered in the modality through the system configuration. |
| 15) | Disable Wireless Communications | OFF | When this option is checked, wireless communication is turned off. |
| 16) | Display PDI Importer button in patient registration screen | ON | Checking this option adds the [PDI Import] button to the Patient Reception screen. Opening the PDI Import screen using the [PDI Import] button allows you to import image files saved on DICOM media from other facilities. Note: This function is only enabled when the ImagePilot MEDIA INPUT OPTION is set in Options. |
| 17) | Stitching Image | ON | Tick this option when the stitching image license has been purchased. |
| 18) | New Stitching Mode | OFF | Enabled only when [Stitching Image] is checked. Checking this option changes the mode to Stitching Mode that supports cassette folder of that supports optional Cassette Grid Cabinet. |
| P3 List Linkage functionality | | | |
| 19) | Display List Linkage button | OFF | Enables list linkage with SONIMAGE P3 when this is checked. The ultrasound images taken are saved in to the "SONIMAGE P3" directory. (* List linkage needs an application to be installed. For more information, refer to the SONIMAGE P3 manual.) |
| 20) | [Save&Exit] button | - | Saves edited settings as exits User Tool. • Display returns to the OS desk top screen. |
| 21) | [Exit] button | - | Exits User Tool without saving edited settings. • Display returns to the OS desk top screen. |
| 22) | [Apply] button | - | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

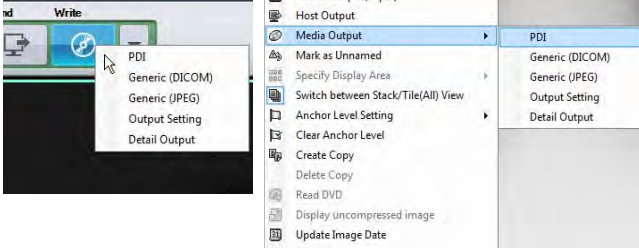

<Output Screen>

Allows setting related to image output.



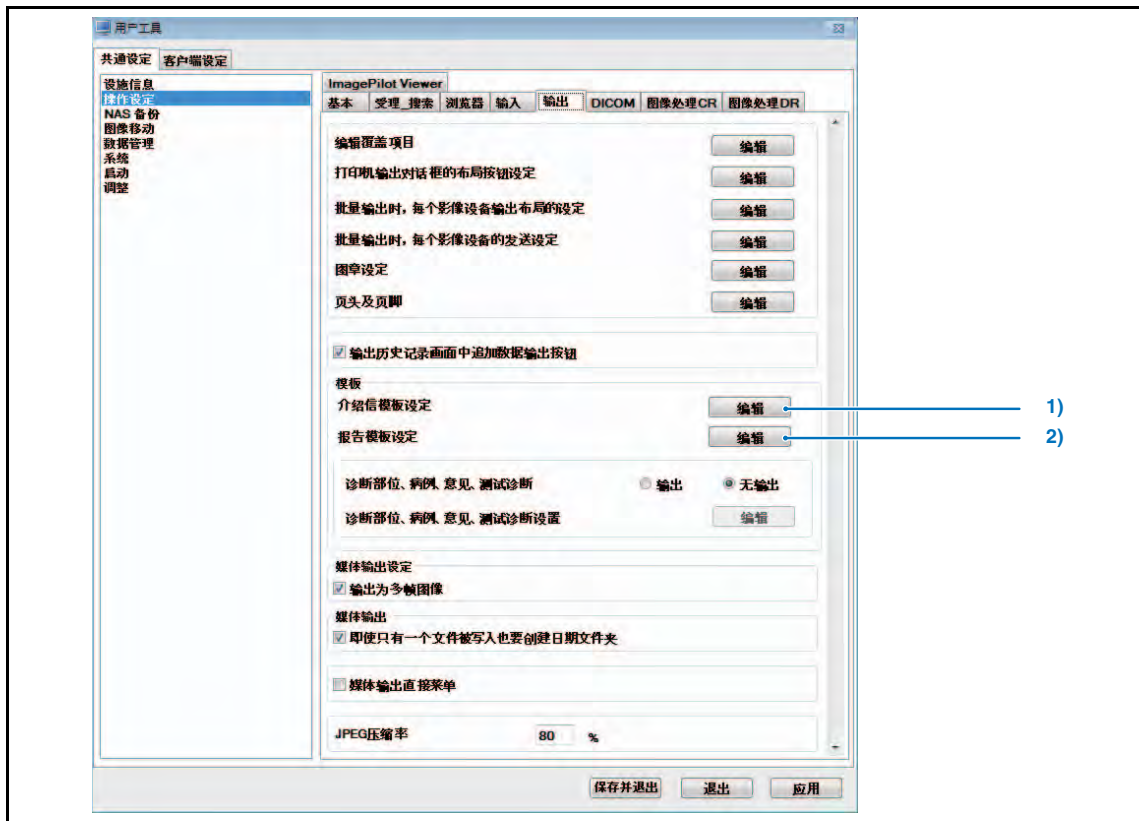
| | Item | Default | Function |
|----|--|---------|---|
| | <p>"Viewer Screen"</p>  | | <p>There are items in [Client Settings] - [Display Information] / [Operation Settings], which also allows settings related to the Viewer screen.</p> <p>p.359 2-1) Display Information Screen</p> <p>p.363 3-1) Operation Settings screen</p> |
| 1) | Overlay Items | - | <p>Allows editing of character strings used in demographic overlays.</p> <ul style="list-style-type: none"> The Edit Overlay screen is displayed. <p>p.302 2-5) Overlay Items Screen</p> |


| | Item | Default | Function |
|----------------------|---|---------|--|
| 2) | Layout Button Setting (Printer Output Dialog) | - | <p>Sets the print format.</p> <ul style="list-style-type: none"> The printer O/P dialogue box layout setting screen is displayed.  p.305 2-6) Layout of Printer Output Screen |
| 3) | Modality-wise Layout Settings | - | <p>Sets output destination by batch output button.</p> <ul style="list-style-type: none"> The O/P setting of modality screen is displayed.  p.306 2-7) Layout of Modality Output Screen |
| 4) | Configure batch output Settings | - | <p>Sets the output destination when [Batch Output] button is pressed.</p> <ul style="list-style-type: none"> Output Layout Settings screen will be displayed.  p.307 2-8) Host Output Modality Settings Screen |
| 5) | Stamp Settings | - | <p>Sets the stamp format.</p>  p.308 2-9) Stamp Settings Screen |
| 6) | Header and Footer | - | <p>Sets the header and footer.</p>  p.310 2-10) Header/ Footer Settings Screen |
| 7) | Data Output button in Output History Screen | ON | <p>Checking in this checkbox displays [Data Output] button on the Output History screen. Clicking [Data Output] button enables the output history to be exported in CSV format.</p> |
| Template | | | |
| 8) | Introduction template settings | - | <p>Sets the template of the referral form.</p>  p.312 2-11 Introduction Template Settings Screen |
| 9) | Report template settings | - | <p>Sets the template of the report.</p>  p.313 2-12) Report Template Settings Screen |
| Media Output Setting | | | |
| 10) | Frame output of Multi frame images | ON | <p>Sets whether the output of multi frame images is made per slice or not on the Media Output screen.</p>  p.256 Storage on Media |
| Media Output | | | |
| 11) | Create Date folder even a single file is written | ON | <p>Sets the folder configuration for the media output.</p> <p>ON: Even in the case of outputting to one media, dated folder is created and the data is written in this folder.</p> <p>OFF: Data is written to the media without creating a dated folder when it is output to one media, while with a dated folder when it is output to several media.</p>  p.256 Storage on Media |

| | Item | Default | Function |
|-----|---------------------------------|---------|---|
| 12) | Media Output Direct Menu | OFF | <p>When checked, clicking the media output button or selecting media output from within the menu that is displayed when right-clicking will display the submenu, and the selected image can be output directly to the media.</p>  <p>PDI: PDI output Generic (DICOM): General-purpose DICOM output Generic (JPEG): General-purpose JPEG output Output Setting: Output setting Detail Output: Conventional media output screen</p> |
| 13) | JPEG Compression Rate | 80 (%) | <p>Sets the compression rate of lossy compression JPEG files when writing media. The configurable compression rate is 1 to 99%. Non compression (100%) is not available.</p> <p> p.256 Storage on Media</p> |
| 14) | [Save&Exit] button | - | <p>Saves edited settings as exits User Tool.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 15) | [Exit] button | - | <p>Exits User Tool without saving edited settings.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 16) | [Apply] button | - | <p>Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing.</p> |

<Output Screen>

This function is a function of the Chinese language version only.

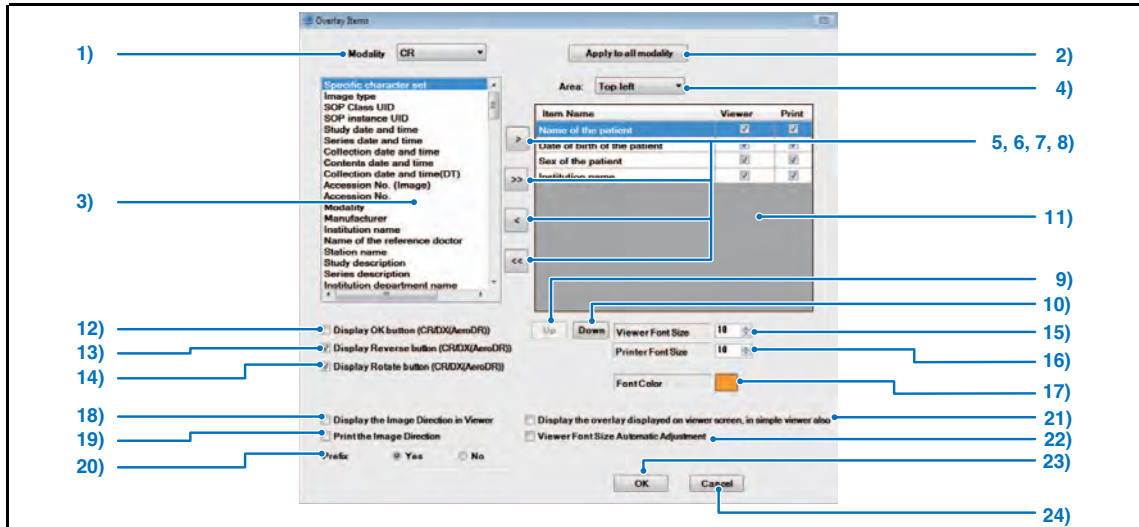


| | Item | Default | Function |
|----|--|-----------|--|
| 1) | Diagnosis part, Medical case, Opinion, Test diagnosis | No Output | Set whether or not to output [Diagnosis part, Medical case, Opinion, Test diagnosis] with referral output and report output. When [Output] is selected, a form to select [Diagnosis part, Medical case, Opinion, Test diagnosis] on the [Introduction card output screen] or the [Report output screen] will appear.  |
| 2) | Diagnosis part, Medical case, Opinion, Test diagnosis Settings | - | Edit the [Diagnosis part, Medical case, Opinion, Test diagnosis] list. |

2-5) Overlay Items Screen

Allows editing of character strings displayed as items selected for demographic overlays.

Overlay settings may be changed from the image acquisition source device.



| | Item | Function |
|-----|---|---|
| 1) | Modality | Selects the input device where overlay items are to be edited. |
| 2) | [Apply to all modality] button | Overlay settings edited for the selected modality will be reflected in all other modalities. |
| 3) | List of items | Displays overlay items available for selection. |
| 4) | Area | Selects the position where overlay is displayed. |
| 5) | [>] button | Registers the items selected from the list. |
| 6) | [>>] button | Registers all items displayed on the list. |
| 7) | [<] button | Cancels registration of items selected from the list. |
| 8) | [<<] button | Cancels registration of all items on the list. |
| 9) | [Up] button | Moves one item higher on the list. |
| 10) | [Down] button | Moves one item lower on the list. |
| 11) | List of registered items | Displays a list of registered overlay items. Overlay is printed in the sequence shown here. <About the Checkbox> [Viewer] and [Print] checkboxes are available for each item. Remove the check from the box if the corresponding display is not necessary. Note: Zoom ratio cannot be printed. (Default: ON) |
| 12) | Display OK button (CR/DX(AeroDR)) | Checking this box will display in the viewing field of the viewer screen the [OK] button that is used to judge whether the image is acceptable or unacceptable. (Default : OFF) |
| 13) | Display Reverse button (CR/DX(AeroDR)) | Check this box to print an icon indicating the enable/disable status of image inversion. (Default : ON) |
| 14) | Display Rotate button (CR/DX(AeroDR)) | Check this box to print an icon indication the enable/disable status of image rotation. Displays the angle if the image was rotated. (Default : ON) |

| | Item | Function |
|-----|--|---|
| 15) | [Viewer Font Size] spine button | Sets the size of font displayed on the viewer screen. (Default : 10) |
| 16) | [Printer Font Size] spine button | Sets the size of font for print. (Default : 10) |
| 17) | [Font Color] button | The color palette will be displayed. Select the desired overlay font color. |
| 18) | Display the Image Direction in Viewer checkbox | Displays the image direction when displayed on the viewer screen. (Default : OFF) |
| 19) | Print the Image Direction checkbox | Prints the image direction when printed. (Default : OFF) |
| 20) | Prefix checkbox | If "Yes", displays the overlay item name in addition to the overlay contents. (Default : Yes) |
| 21) | Display the overlay displayed on viewer screen, in simple viewer also | Allows you to display the overlay displayed on the viewer screen and on the PDI Viewer overlay display. In addition, overlays shown in the top center, bottom center, left center and right center of the viewer screen are not displayed on the PDI Viewer. Some overlays cannot be displayed on the PDI Viewer, or the display shows different overlay items. Ex. ": Patient Name" may be displayed differently in the viewer screen and the PDI Viewer. (Default:OFF) |
| 22) | Viewer Font Size Automatic Adjustment | Sets automatic adjustment of overlay font size according to the number of partition for viewer screen. (Default:OFF) |
| 23) | [OK] button | Saves settings and returns to the operation settings screen. |
| 24) | [Cancel] button | Returns to the Operation Settings screen without saving settings. |

| List of Overlay Items |
|--|
| Specific character set, Image type, SOP Class UID, SOP Instance UID, Study date and time, Series date and time, Collection date and time, |
| Contents date and time, Collection date and time(DT), Accession No.(Image), Accession No., Modality, Manufacturer, Institution name, |
| Name of the reference doctor, Station name, Study description, Series description, Institution department name, Name of the Operator, |
| Model name of the manufacturer, Name of the patient, Patient ID, Data of birth of the patient, Sex of the patient, Additional Comments, |
| Study part, Scanning sequence, Sequence variation, Scan option, MR collection type, KVP, Addition count, Repetition time, Echo time, |
| Reversal time, Image frequency, Image nucleus, Magnetic field intensity, Interval between slices, Echo length, Spatial resolution, |
| Trigger time, Interval between source detectors, Interval between source patients, Exposure time, X-ray tube electric current, |
| Exposure quantity, Count ratio, Collection matrix, Flip angle, Study instance UID, Series instance UID, Study ID, Series No., Collection No., |
| Instance No., Patient direction, Time resolution, Image comment, Sample per pixel, Brightness scaling explanation, Face format, |
| Number of frames, Row, Column, Pixel aspect ratio, Corrected image, Assigned bit, Storage bit, High order bit, Pixel terms, Window center, |
| Window width, Rescale segment, Rescale grade, Rescale type, Description of window center and width, Requested procedure ID, |
| Reserved procedure step ID, Frame No/Number of all the frames, Past Days, Study date, Study time, Series date, Series time, Collection date, |
| Collection time, Contents date, Contents time, Collection date(DT), Collection time(DT), Requesting doctor, Laterality, Contrast/Bolus Ingredient, |
| Technologist, Patient's Age, ZoomRate, Resolution Level(Only CR), Plate size, PrintZoomRate, Contrast/Bolus Agent, Contrast/Bolus Volume, |
| Contrast/Bolus Start Time, Contrast/Bolus Stop Time, Contrast/Bolus Total Dose, Relative X-Ray Exposure, Contrast Flow Rate, |
| Contrast Flow Duration, Slice Thickness, Slice Location, View Position, Allergies, Description |
| <Following items are also available for choice when the system has been set for the animal hospital> |
| Owner's Name, Breed, Neutered date, Fur color, Dietary, Character, Physique, Animal sex, Species, Owner's Name(ASCII), |
| Breed Registration No. |



The [Display Reverse button] checkbox and [Display Rotate button] checkbox are only enabled for CR and AeroDR images. It is disabled for CR and AeroDR images imported from a media.



Notes for Study date and time

When the patient is registered with the reception list for several times on the same day, the Study date and time displayed will be the one for the first registration on that day.



When the system is not set for the animal hospital, though the owner name can be selected, it will not be displayed.



When the attending technologist on the patient information screen is changed after the examination, note that the operator name will not be properly displayed or printed.



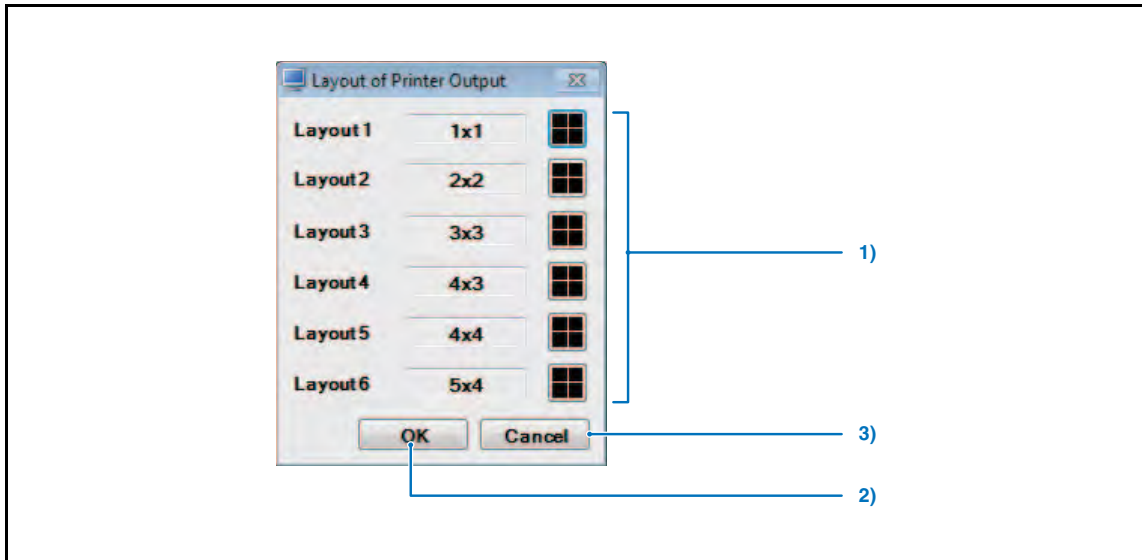
"Age" displayed in the overlay represents the age at the time when the patient is exposed.



"Zoom Rate" displayed in the overlay may have an error compared to the actual value depending on the display condition of the image. Therefore, the user is requested to be responsible for the judgment based on the zoom rate. In addition, "Zoom Rate" cannot be printed.

2-6) Layout of Printer Output Screen

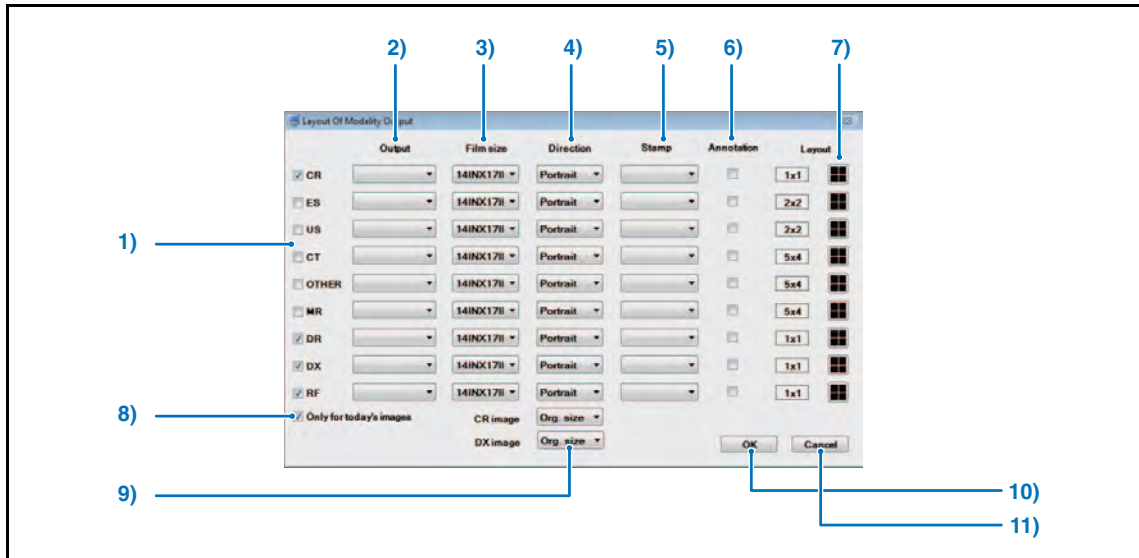
Allows setting of the layout for printer output.



| | Item | Function |
|----|-----------------|--|
| 1) | Layout 1~6 | Allows setting of the layout for printer output. (Default : "Layout 1" 1x1 / "Layout 2" 2x2 / "Layout 3" 3x3 / "Layout 4" 4x3 / "Layout 5" 4x4 / "Layout 6" 5x4) |
| 2) | [OK] button | Saves settings and returns to the operation settings screen. |
| 3) | [Cancel] button | Returns to the Operation Settings screen without saving settings. |

2-7) Layout of Modality Output Screen

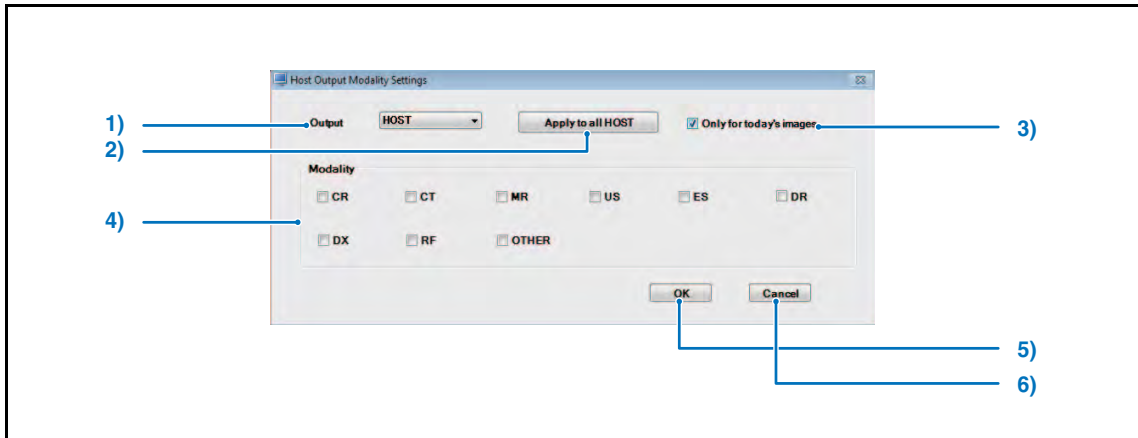
Allows setting of output destination and details per modality type.



| Item | Function |
|---|--|
| 1) [Modality] checkbox | Allows setting of layout for printer output. (Default: CR, DR, DX, RF, Only for today's images = ON, all others = OFF) <div style="border: 1px solid gray; padding: 5px; width: fit-content;"> Set to [DX] for AeroDR. </div> |
| 2) [Output] pull-down menu | Selects the output destination for images selected by the [Modality] checkbox. The pull-down menu displays the names of connected printers. (Default : No setting) |
| 3) [Film size] pull-down menu | Selects film size. The pull-down menu displays film types loaded in the printer selected from the [Output Destination] pull down menu. (Default : 14INX17IN) |
| 4) [Direction] pull-down menu | Selects the output image orientation. "Portrait" or "Landscape" may be selected. (Default : Portrait) |
| 5) [Stamp] pull-down menu | Select the stamp position when the image is output with stamp. Select "OFF" when the image is output without stamp. (Default : None) |
| 6) [Annotation] checkbox | Check this box to output images with annotation included. (Default : OFF) |
| 7) [Layout] button | Selects the output image layout. (Default : 1x1, 2x2, 2x2, 5x4, 5x4, 5x4, 1x1, 1x1, 1x1) |
| 8) [Only for today's images] checkbox | Check this box for batch output only of images acquired on the day. (Default : ON) |
| 9) [CR/DX(AeroDR) image] pull-down menu | Selects the output method for the CR/DX (AeroDR) image. "Org. size" or "Full size" may be selected. (Default : Org. size) |
| 10) [OK] button | Saves settings and returns to the operation settings screen. |
| 11) [Cancel] button | Returns to the Operation Settings screen without saving settings. |

2-8) Host Output Modality Settings Screen

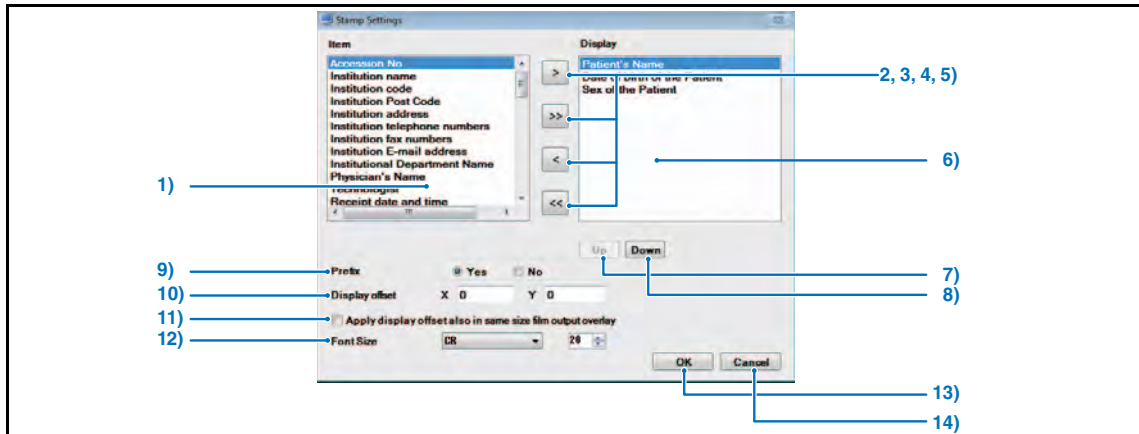
A screen to set the export destination for batch output.



| | Item | Function |
|----|------------------------------------|---|
| 1) | [Output] pull-down menu | Selects the Host to which the image is output. Registered Hosts are listed in the pull-down menu. |
| 2) | [Apply to all HOST] button | Settings made for the images that shall be output to the specific Host will be reflected to all other Host as well. |
| 3) | [Only for today's images] checkbox | Tick this option to output in batch only those images imported on the current day. (Default : ON) |
| 4) | [Modality] checkbox | Selects the type of image that shall be output to the Host selected from the pull-down menu. (Default : all OFF) |
| 5) | [OK] button | Returns to the operation settings screen after saving the settings. |
| 6) | [Cancel] button | Returns to the operation settings screen without saving the settings. |

2-9) Stamp Settings Screen

Allows setting of text type and size used on print demographic overlays.



| | Item | Function |
|-----|--|--|
| 1) | Item | Displays optional items that can be used for the stamp. |
| 2) | [>] button | Registers items selected from the list. |
| 3) | [>>] button | Registers all items displayed on the list. |
| 4) | [<] button | Cancels registration of items selected from the list. |
| 5) | [<<] button | Cancels registration of all items on the list. |
| 6) | Display | Displays items registered in stamp. Stamps are printed in the sequence in which they are displayed here. |
| 7) | [Up] button | Moves the item selected on the registered items list one place higher. |
| 8) | [Down] button | Moves the item selected on the registered items list one place lower. |
| 9) | Prefix | This setting determines whether or not to display prefixes (item names). (Default : ON) |
| 10) | Display Offset | Sets the stamp position. (Default : X=0, Y=0) |
| 11) | Apply display offset also in same size film output overlay | Checking this option applies the Display offset setting of Stamp Settings to overlay. In addition, this setting is applied only for film printing at the same magnification. Note: the settings do not apply when printing film in the print composer mode. (Default : OFF) |
| 12) | Font Size | Allows selection of the stamp font size. Select the font size for each modality respectively. (Default : all 20) |
| 13) | [OK] button | Saves settings and returns to the operation settings screen. |
| 14) | [Cancel] button | Returns to the Operation Settings screen without saving settings. |

| List of Stamp Items |
|---|
| Additional Comments, Animal sex, Breed, Character, Date of birth of the patient, Dietary, Fur color, Institution, |
| Institution address, Institution code, Institution E-mail address, Institution fax numbers, Institution name, |
| Institution telephone numbers, Institution Department Name, Neutered date, Operator's name, Owner's name, |
| Patient's address, Patient's address City, Patient's address line1 (Street address), Patient's address line2 (State), |
| Patient's address State, Patient's Age, Patient's E-mail address, Patient's fax number, Patient's Name, Patient's telephone number, |
| Patient's ID, Photography date (image date), Physician's Name, Physique, Print out date, Print out date and time, |
| Print out time, Receipt date, Receipt date and time, Receipt date time, Reception No., Sex of the patient, Species, Taboo, |
| Tag numbers, Visit comment, Zip Code |



"Registered Date & Time/ Registered Date/ Registered Time" represents the latest time when the patient is registered.
(if the patient is registered twice in the same day, the displayed value represents the time of the second registration)



When outputting several images on one sheet of film, the name will be printed at the specific position of the whole film.



The stamp item <No CRLF for Print Composer>

If you select this item, the selected item on the stamp will be displayed in a single column.

In addition, the following limits are placed on its use.

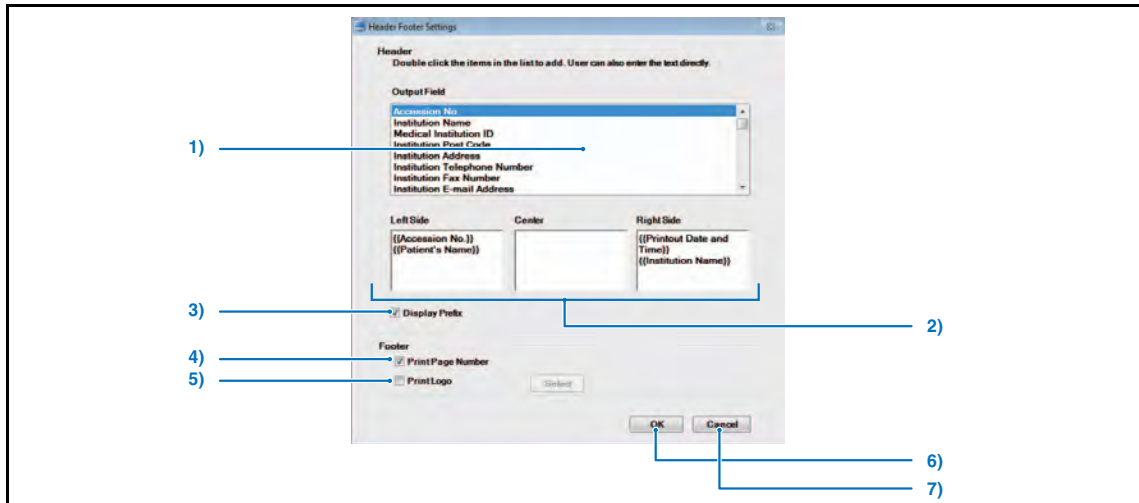
- No CRLF for Print Composer can only be used by Print Composer.
- The selection of No CRLF for Print Composer for other functions beside Print Composer is possible, however any images will be blank.
- If the image does not fall within the display width, center it and cut at both ends.
- When the stamp and print composer are in the same row, the font size of the print composer are unified.



"Age" of the stamp is the age when it is printed.


2-10) Header/Footer Settings Screen


Sets the header and footer.



| | Item | Function |
|----|--|---|
| 1) | Header Item | Select the item to be printed as the header. |
| 2) | Header Position | Sets the position where the selected header item is printed. |
| 3) | [Display Prefix] checkbox | Outputs the item name as well as the item value when this box is checked. (Default : ON) |
| 4) | [Print Page Number] checkbox (Footer) | Check this box to print page numbers as the footer. (Default : ON) |
| 5) | [Print Logo] checkbox (Footer) | Check this box to print logos as the footer. BMP or JPEG format logos can be accepted. [Select] button allows selecting the image to be used as the logo. (Default : OFF) |
| 6) | [OK] button | Returns to the operation settings screen after saving the settings. |
| 7) | [Cancel] button | Returns to the operation settings screen without saving the settings. |

| List of Header Items |
|--|
| Reception Number, Institution Name, Medical Institution ID, Institution Post Code, Institution Address, Institution Telephone Number, Institution Fax Number, Institution E-mail Address, Diagnosis Department, Physician's Name, Operator's name, Receipt date and time, Receipt date, Receipt time, Home - Zip code, Home - address, Home - city, Home - Line2(state), Home - house number, Home - telephone number, |
| FAX number, E-mail address, Breed name, Neutered date, Fur color, Dietary, Character, Physique, Rabies, Rabies registered date, Rabies registration number, Tag number (License), Visit comment, Taboo 1, Patient's Age, Patient's Name, Owner's Name, Patient ID, Date of birth of the patient, Sex of the Patient, Patient comment, Animal Sex, Animal Type, Printout Date & Time, PrintOut Date, PrintOut Time |

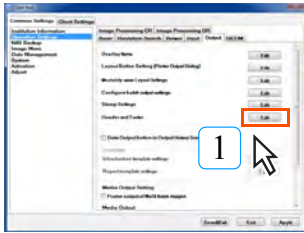
 **Recommended size of the footer logo.**
 Recommended size of the image data that can be used as the footer in generic printing is as follows.
 Height: Less than 50bits (13mm on print)
 Width: Less than 300bits (79mm on print)
 However, the image larger than the above size may be printed, all of the image may not be printed or the print area may be narrowed.

 "Age" of the header is the age when it is output.



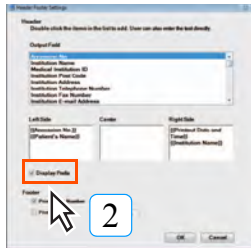
Editing the Header Item Name

Follow the procedure below to rename the item selected in the header.

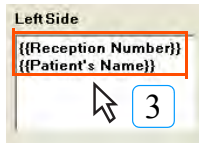


1 Open Header/Footer Setting screen using the User Tool.
(Select through "User Tool" → [Operation Settings] → [Output]→ [Header and Footer].)

- Header Footer Settings screen will be displayed.

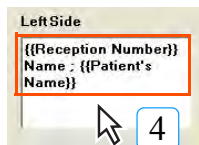


2 Uncheck [Display Prefix].



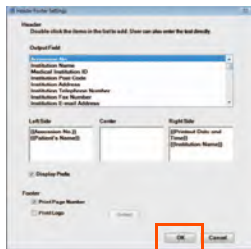
3 Set the items to be output in a desired position.

- The figure on the left is an example when the patient name to be output in the left header.



4 Insert the item name before the item set in Step 3.

- The figure on the left is an example when the item name is set to "Name :".



5 Click the [OK] button.

- Returns to the Operation Settings screen.



6 Click the [Save & Exit] button.

- Saves the settings.
- Selecting the [Header/Footer] when printing will generate the screen as shown on the left.



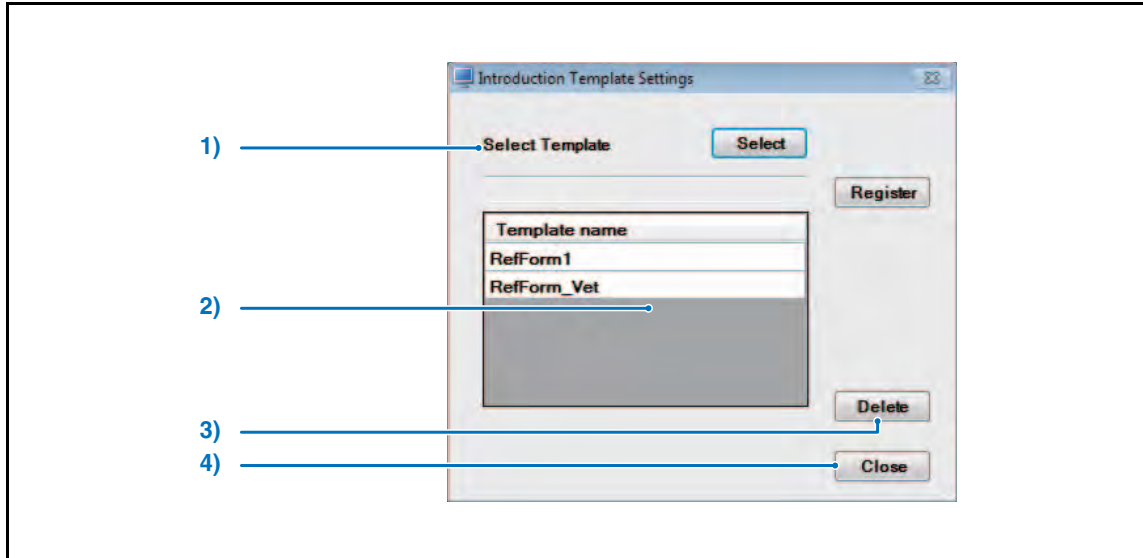
Please note that selecting the next header item with the cursor kept placed on the header item that has been selected may destroy the previously selected header item.



p.359 2-1) Display Information Screen

2-11 Introduction Template Settings Screen

Allows setting of referral form template.



| | Item | Function |
|----|------------------------|---|
| 1) | Select Template | Selects the file to be used as the template. The template can be selected by selecting the Word file with [Select] button, followed by clicking the [Register] button. |
| 2) | Template List | Displays the registered templates in list. |
| 3) | [Delete] button | Deletes the template selected in the list. |
| 4) | [Close] button | Returns to the operation settings screen. |



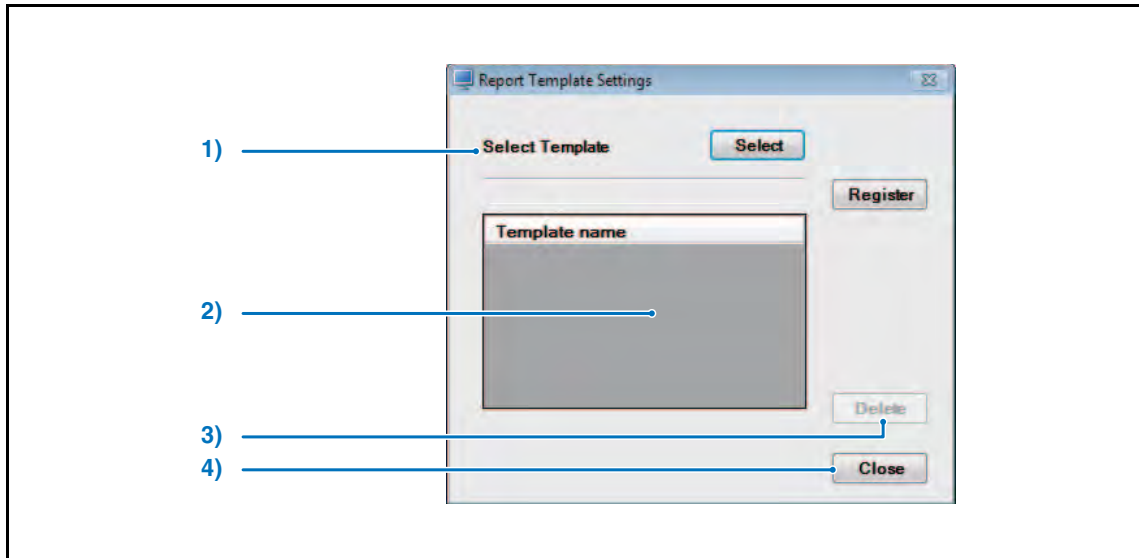
Do not register the file that has the same file name except for its suffix("abc" of "abc.doc")
Example: When "Template.doc(Word file)" has been registered and resides, do not register "Template.docx(Word2007 file)".



The referral form provided by the manufacturer is stored in the following folder:
D:\KonicaMinolta\Kim\Server\Env\WordModelFile\DocReferral
(For the Server PC where D-drive is not available, the same path will be applied to the image file stored in C-drive)

2-12) Report Template Settings Screen

Allows setting of report form template.



| | Item | Function |
|----|------------------------|---|
| 1) | Select Template | Selects the file to be used as the template. The template can be selected by selecting the Word file with [Select] button, followed by clicking the [Register] button. |
| 2) | Template List | Displays the registered templates in list. |
| 3) | [Delete] button | Deletes the template selected in the list. |
| 4) | [Close] button | Returns to the operation settings screen. |

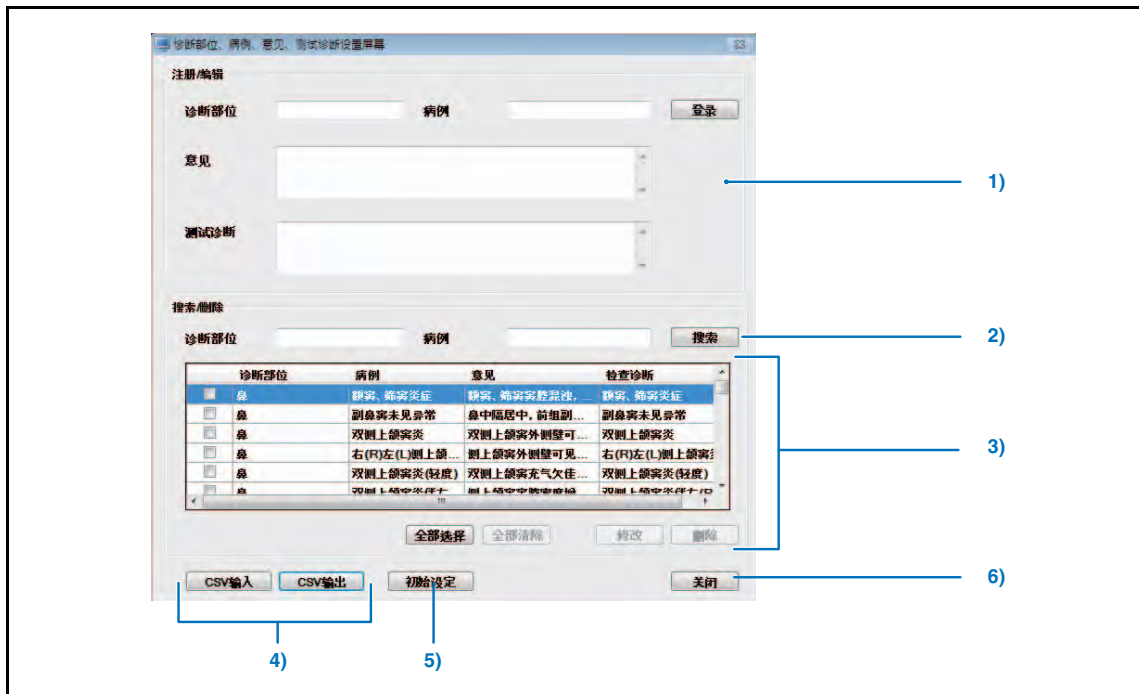


Do not register the file that has the same file name except for its suffix("abc" of "abc.doc")
Example: When "Template.doc(Word file)" has been registered and resides, do not register "Template.docx(Word2007 file)".



The report template provided by the manufacturer is stored in the following folder:
D:\KonicaMinolta\Kim\Server\Env\WordModelFile\Report
(For the Server PC where D-drive is not available, the same path will be applied to the image file stored in C-drive)

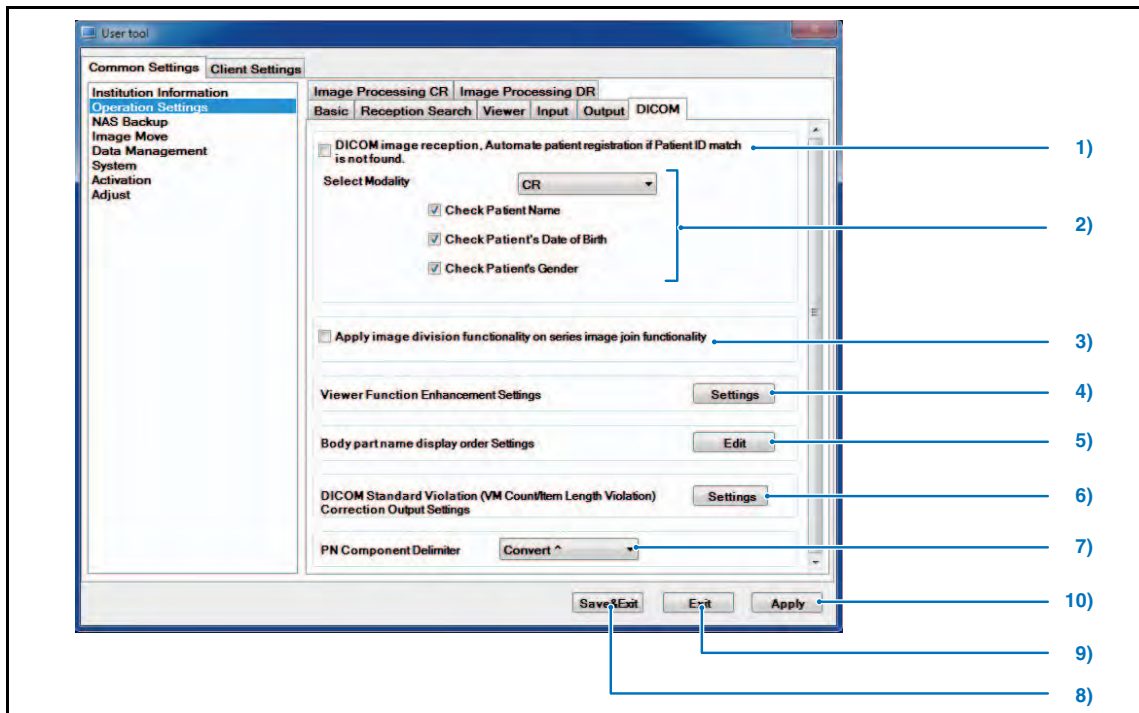
<Diagnosis part, Medical case, Opinion, Test diagnosis Settings Screen>





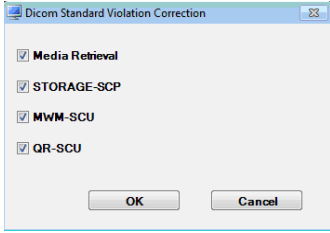

| | Item | Function |
|----|---|---|
| 1) | Register/Edit | Enter [Diagnosis part], [Medical case], [Opinion], [Test Diagnosis] and press the [Register] button to register the data. |
| 2) | Search | You can search using [Diagnosis part] or [Medical case] and specify the contents displayed in the list. |
| 3) | Diagnosis part / Medical case / Opinion / Test diagnosis | Edit the data that has been checked. Press the [Modify] button, edit and re-register the contents using [Register/Edit]. Pressing the [Delete] button will delete the data. |
| 4) | Import CSV/ Export CSV | You can output data as a CSV format file or input CSV format data. |
| 5) | Initialize | Return the data to the initial setting. |
| 6) | Close | Close the screen and shutdown. |

<DICOM Screen>

Allows setting related to DICOM.



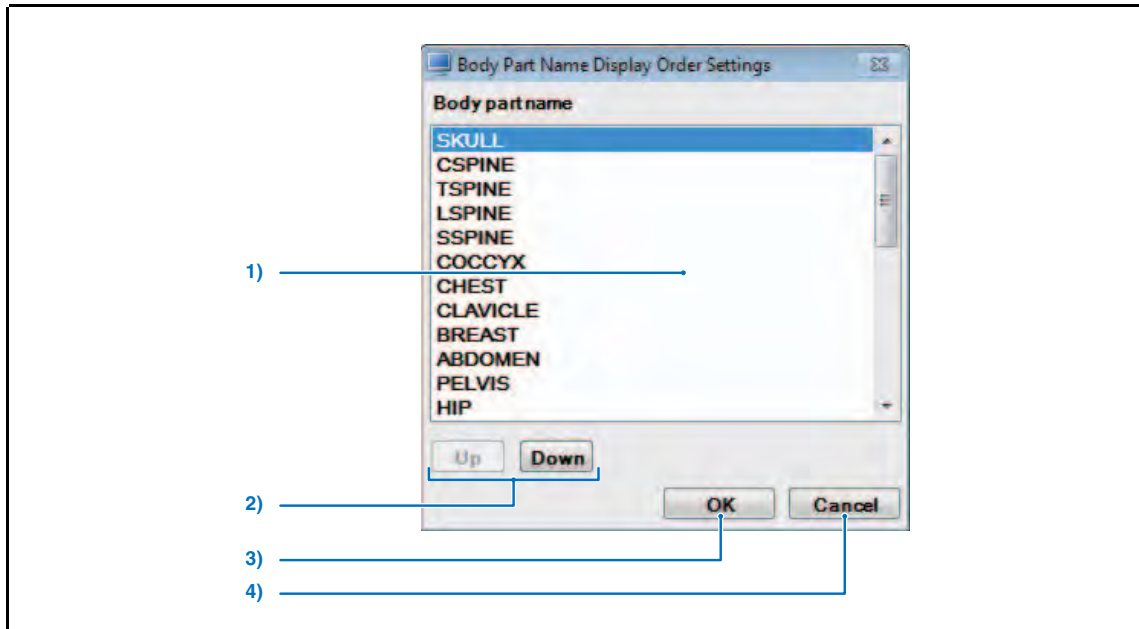
| Item | Default | Function |
|--|---------|---|
| "Viewer Screen" | | |
| | | |
| <p> There are items in [Client Settings] - [Display Information] / [Operation Settings], which also allows settings related to the Viewer screen.</p> <p> p.359 2-1) Display Information Screen</p> <p> p.363 3-1) Operation Settings screen</p> | | |
| 1) | OFF | <p>DICOM image reception. Automate patient registration if Patient ID match is not found. (Enable when Patient information link is not available)</p> <p>When the patient information is not associated, sets whether a new patient ID be created or not if no patient ID identical to that of received DICOM image exists.</p> |

| | Item | Default | Function |
|----|---|---------------|---|
| 2) | Select Modality | CR | When creating a new patient ID, select the modality the image received from which be processed by this function and select the patient information targeted for check. |
| 3) | Apply image division functionality on multi frame images and series image join function | OFF | <p>Checking this option adds the basic pallet to the Viewer screen and [Divide after Selected Image] to the context menu.</p> <p>This function is available for multi-frame images and series join images, and it can divide a series of images at any position.</p> <p>Note : When dividing images in which GSPS is registered, GSPS is registered in the first half of the divided images, but it is not registered in the latter half of the images.</p> |
| 4) | Viewer Function Enhancement Settings | - | <p>A screen to allow setting the DICOM Overlay.</p> <ul style="list-style-type: none"> Viewer Function Enhancement Settings screen will be displayed.  p.319 2-14) Viewer Function Enhancement Settings Screen |
| 5) | Body part name display order Settings | - | <p>Set the display order of the body part that is displayed when selecting the body part.</p>  p.318 2-13) Body Part Name Display Order Settings screen |
| 6) | DICOM Standard Violation (VM Count/ Item Length Violation) Correction Output Settings | All items: ON | <p>Click the [Settings] button, and the [DICOM Standard Violation Correction] dialogue box is displayed.</p> <p>When using Image Retrieve or STORAGE-SCP to retrieve a DICOM image from another server, and the retrieved DICOM image breaches DICOM standards (VM violation, item value length violation), set whether or not it will be retrieved to ImagePilot after auto correction.</p>  <p>All items are checked in the initial state. Remove the check from items you do not want to correct automatically.</p> <p>Example of VM violation</p> <p>For the DICOM tag with two VMs, the data is imported with the data after the second "\" removed if two or more of "\" are found.</p> <p>Example of Item Length violation</p> <p>When 18-byte data is stored in the DICOM tag of 16-byte item length, the data is imported with the data at 17-byte or later removed.</p> <p>*However, when the DICOM tag starting with "0002" cannot be imported due to Item Length violation, it may be the alternative to correct the group length of "0002" instead of correcting the said tag.</p>  p.85 Acquiring General-purpose Images |
| 7) | PN Component Delimiter | Convert ^ | <p>Sets either "space" or "^" as the delimiter between the family name and the first name of the patient name(PN).</p> <p>"convert ^" ----- inserts "A".</p> <p>"not convert ^" ----- inserts "space".</p> |
| 8) | [Save&Exit] button | - | <p>Saves edited settings as exits User Tool.</p> <ul style="list-style-type: none"> Display returns to the OS desk top screen. |

| | Item | Default | Function |
|-----|----------------|---------|--|
| 9) | [Exit] button | - | Exits User Tool without saving edited settings. • Display returns to the OS desk top screen. |
| 10) | [Apply] button | - | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

2-13) Body Part Name Display Order Settings screen

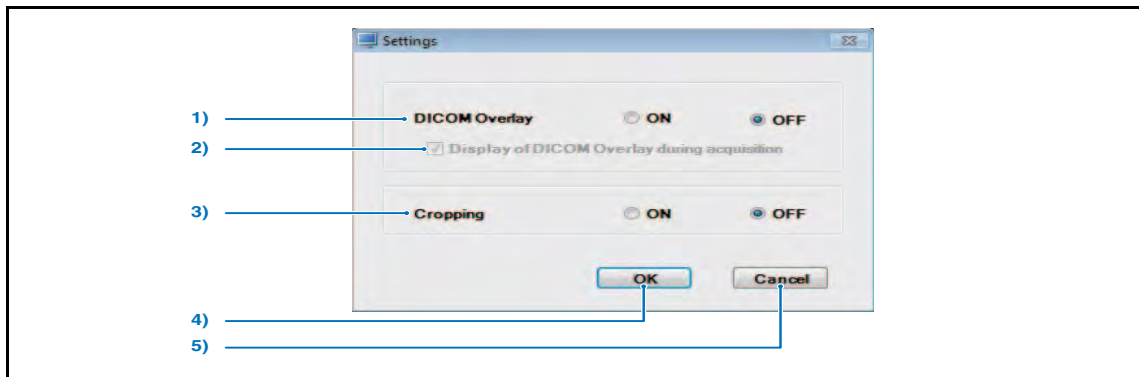
Sets the display order of the body part that is displayed when the body part is selected.



| | Item | Function |
|----|-----------------------------|---|
| 1) | Body part name | Displays the body part names that are selectable. |
| 2) | [Up] / [Down] button | Moves the selected body part up/down. |
| 3) | [OK] button | Returns to the Operation Settings screen after saving the settings. |
| 4) | [Cancel] button | Returns to the Operation Settings screen without saving the settings. |

2-14) Viewer Function Enhancement Settings Screen

A screen to allow setting the DICOM Overlay.



| | Item | Default | Function |
|----|---|---------|---|
| 1) | DICOM Overlay | OFF | Sets ON/OFF of DICOM Overlay function. Setting it to ON displays [DICOM Overlay Display] button on the basic palette of the Viewer screen, allowing to switch between show/hide of the DICOM Overlay. In addition, [Reflect(print) DICOM Overlay] checkbox will be displayed on each output screen, and ticking this checkbox allows outputting or printing the DICOM Overlay. |
| 2) | Display of DICOM Overlay during acquisition | ON | Ticking this option displays the DICOM Overlay when the image containing DICOM Overlay is imported. The setting is valid only when [DICOM Overlay] is set to ON. |
| 3) | Cropping | OFF | Placing a check in this box adds Cropping to the basic palette and the right-click menu on the Viewer screen. This function is for REGIUS images only, and allows you to crop any portion of an image and save as a different image. |
| 4) | [OK] button | - | Returns to the Operation Settings screen after saving the settings. |
| 5) | [Cancel] button | - | Returns to the Operation Settings screen without saving the settings. |



Cropping function restrictions

- **Cropping function values and parameters not carried over from the original cropped image by the crop function.**

Values for tags that cannot be carried over

0008,0013 : Instance Creation Time / 0008,0018 : Instance Creation Time / 0008,0032 : Acquisition Time / 0008,0033 : Content Time / 0018,0015 : Body Part Examined / 0018,5101 : View Position / 0020,0013 : Instance Number / 0020,0020 : Patient Orientation / 0020,0060 : Laterality / 0020,4000 : Image Comments / 0028,0010 : Rows / 0028,0011 : Columns


Flags and comments that cannot be carried over

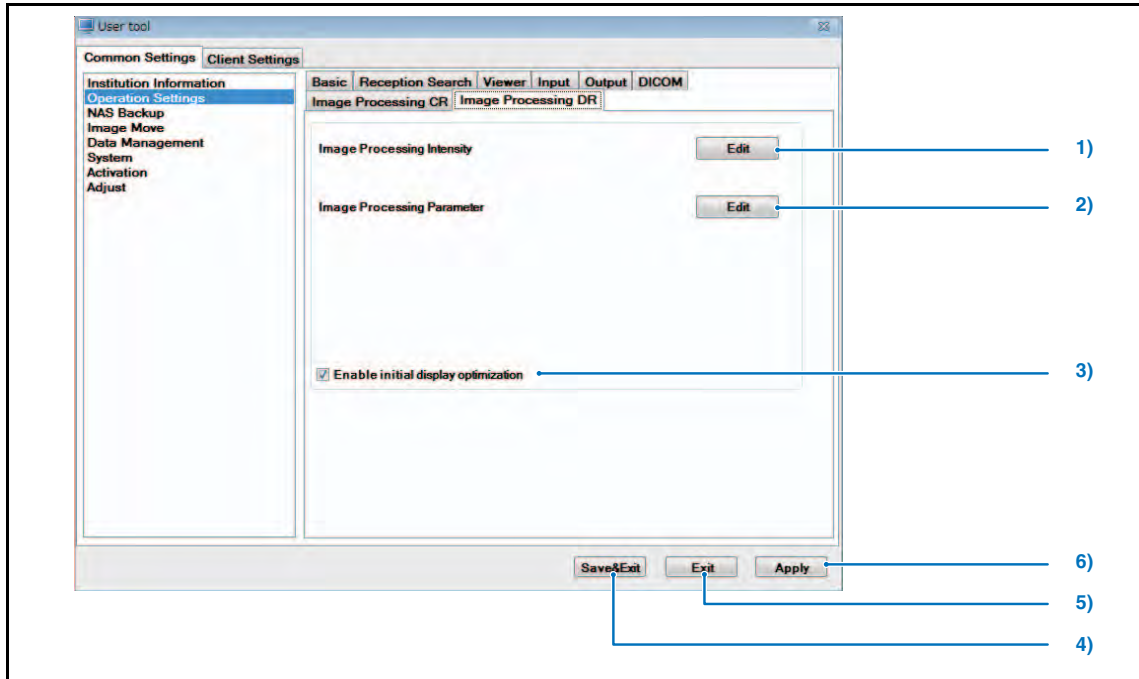
Image comment / Anchor Level Setting / Batch output anchor settings / Preset Clip

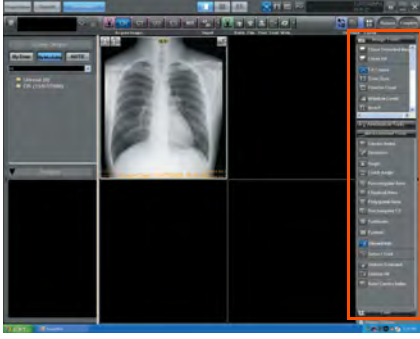



- **The cropping function is operational only on a normal screen.**
- **The cropping function cannot assign a range larger than the dimensions of an image.**
- **An image created by the cropping function is not compatible with processes unique to REGIUS (image adjust, shutter, image property, cropping, etc.).**
- **An image created by the cropping function does not carry over to annotation/GSPS.**



<Image Processing Screen>

Allows setting related to image processing.

 The [Image Processing DR] tab is only displayed when the AeroDR Detector is set. Item No. 3 on the following figure is only displayed in the [Image Processing DR] tab. The other items are the same for both the [Image Processing CR] tab and the [Image Processing DR] tab.

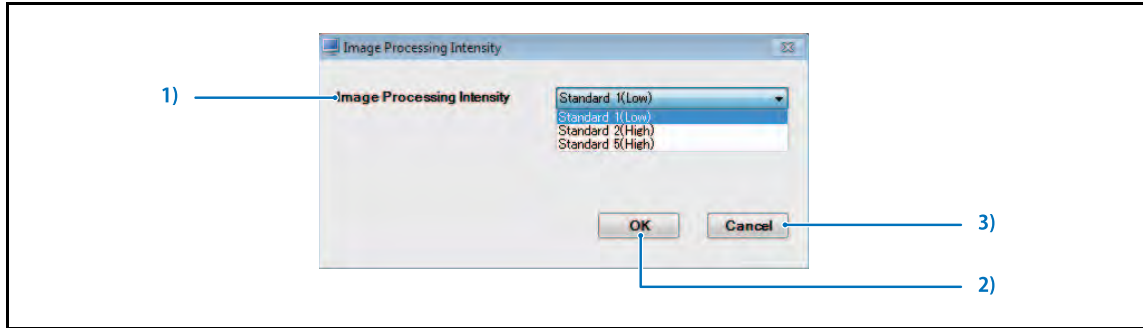


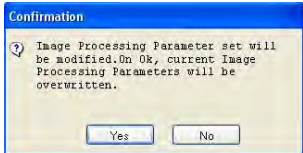
| | Item | Default | Function |
|---|------|---------|----------|
| "Viewer Screen" | | | |
| <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <p><Palette related items> 2)</p> </div> </div> | | | |
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p> There are items in [Client Settings] - [Display Information] / [Operation Settings], which also allows settings related to the Viewer screen.</p> </div> <div style="width: 35%;"> <p> p.359 2-1) Display Information Screen</p> <p> p.363 3-1) Operation Settings screen</p> </div> </div> | | | |

| | Item | Default | Function |
|----|--|---------|---|
| 1) | Image Processing Intensity | - | The parameter set to be used for imaging can be changed here. <ul style="list-style-type: none"> • Image Processing Intensity Setting Screen is displayed.  p.322 2-15) Image Processing Intensity Setting Screen |
| 2) | Image Processing Parameter | - | Allows editing of image processing parameters. <ul style="list-style-type: none"> • Allows editing of image processing parameters.  p.323 2-16) Image Process Parameter (User) Screen |
| 3) | Enable initial display optimization | ON | Enables the initial display optimization process. <Important> This setting item is only displayed in the [Image Processing DR] tab. |
| 4) | [Save&Exit] button | - | Saves edited settings as exits User Tool. <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 5) | [Exit] button | - | Exits User Tool without saving edited settings. <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 6) | [Apply] button | - | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

2-15) Image Processing Intensity Setting Screen

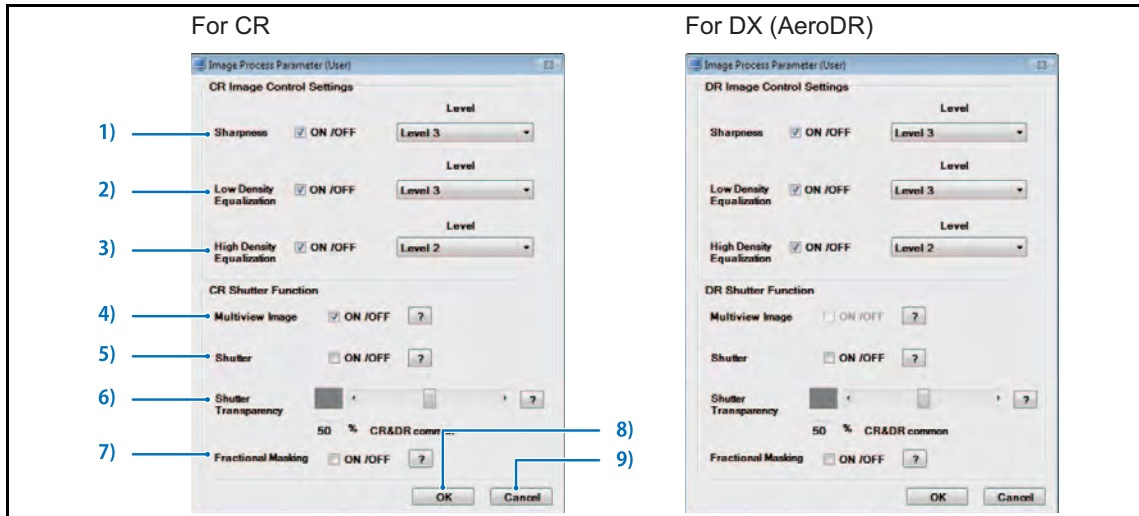
The Image Processing Intensity Setting can be changed.




| | Item | Function |
|----|-----------------------------------|--|
| 1) | Image Processing Intensity | <p>Image Processing Intensity can be selected here.</p> <p>Standard 1(Low) :This parameter has lower G-Value and low frequency enhancement. Therefore, this parameter has a low impact on changing the overall contrast of the image. This parameter is suitable for both output onto film and for display on a monitor.</p> <p>Standard 2(High) :Compared with Standard 1, this parameter gives higher contrast and sharpness without increasing noise. This parameter gives a wide visible range, and is suitable for the diagnostic imaging system using a monitor.</p> <p>Standard 5(High) :Compared with Standard 1, this parameter gives higher sharpness. This parameter is more suitable than Standard 2 for AeroDR image.</p> <p>Important : This setting item is only displayed in the [Image Processing DR] tab.</p> |
| 2) | [OK] button | <p>Displays the Change Image Processing Intensity set confirmation dialogue box.</p>  <p>[Yes] button:Performs the selected Image Processing Intensity set change. [No] button:Returns to the Image Processing Intensity Setting Screen without changing Image Processing Intensity set.</p> |
| 3) | [Cancel] button | Returns to the Operation Settings screen without saving edited user registration. |

2-16) Image Process Parameter (User) Screen

Allows editing of image processing parameters.



| Item | Function |
|---|---|
| CR/DX(AeroDR) Image Control Settings | |
| 1) Sharpness (*1) | This setting determines whether or not to apply sharpness processing. Check the checkbox to apply sharpness processing to acquired CR/DX(AeroDR) images for display. If sharpness processing is applied, the processing level may be selected. Equalization level settings may be made within a range of 1 ~ 10: The higher the level, the more intense the sharpness processing. (Default: ON / Level 3) |
| 2) Low Density Equalization (*1) | This setting determines whether or not to apply low density equalization. Check the checkbox to apply low density equalization to acquired CR/DX(AeroDR) images for display. If low density equalization is applied, the processing level may be selected. Equalization level settings may be made within a range of 1 ~ 10: The higher the level, the more intense the bone part correction processing. (Default : ON / Level 3) |
| 3) High Density Equalization (*1) | This setting determines whether or not to apply high density equalization. Check the checkbox to apply high density equalization to acquired CR/DX(AeroDR) images for display. If high density equalization is applied, the processing level may be selected. Equalization level settings may be made within a range of 1 ~10: The higher the level, the more intense the high density equalization. (Default : ON/Level 2) |
| CR/DX(AeroDR) Shutter Function | |
| 4) Multiview Image | To enable multiview imaging please place a check mark in the box. Multiview images will automatically be identified and the shutter will be applied. If multiview imaging is not used, do not checkbox. This will improve shutter recognition accuracy. (Default : ON) |
| 5) Shutter | This setting determines whether or not the shutter will be applied when images are acquired. (Default : OFF) |
| 6) Shutter Transparency | Sets the shutter transparency level. (Default : 50)  The setting value for this item is linked between CR and DX (AeroDR). A value set in one will be reflected in both. |
| 7) Fractional Masking | When the shutter includes edges during image reading (the entire image, etc.), you can set whether or not fractional masking is performed to move the shutter location within the image. (Default: OFF) Default display and transparency are determined according to each setting (5) (6). |
| 8) [OK] button | Saves edited settings and returns to the operation settings screen. |
| 9) [Cancel] button | Returns to the Operation Settings screen without saving edited settings. |

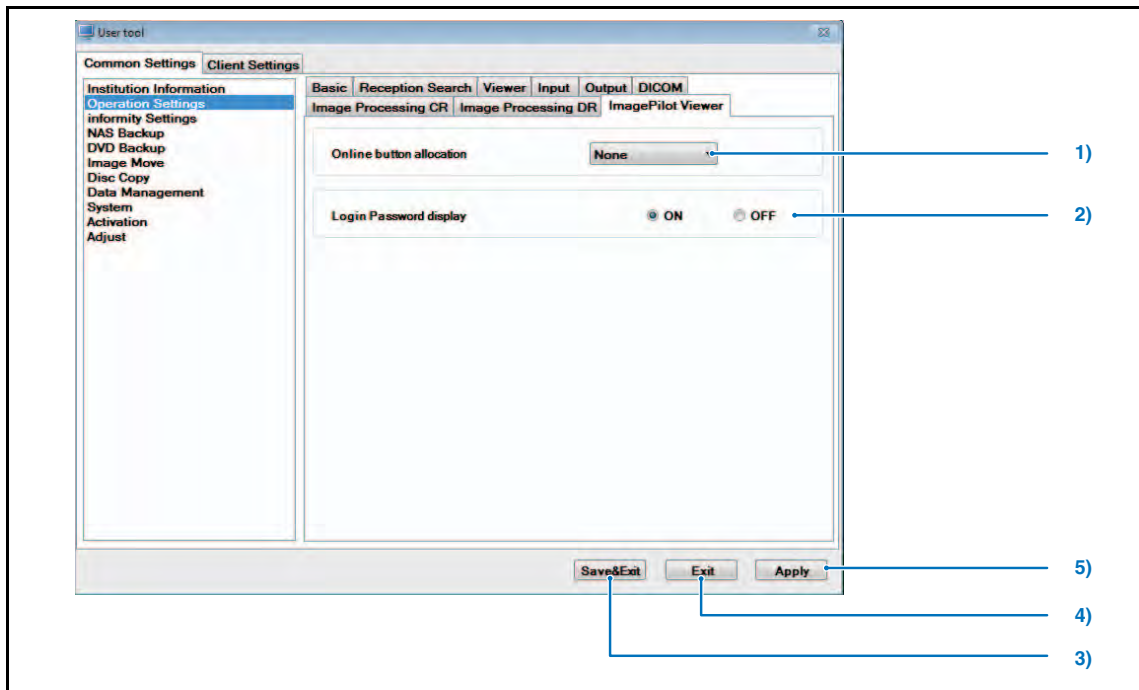
(*1): Listed default values are for the ImagePilot/ImagePilot-touch.

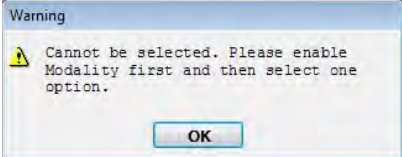


Clicking the [?] button will produce display of a description of the corresponding item.

<ImagePilot Viewer screen>

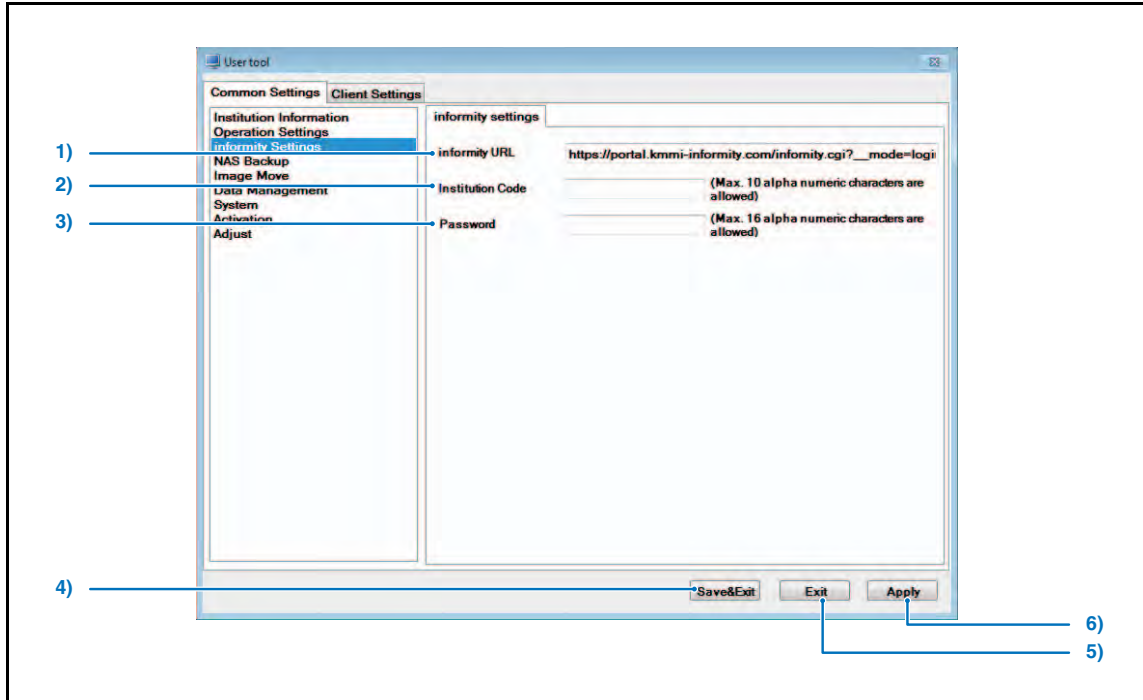
Set up ImagePilot Viewer.



| | Item | Function |
|----|---------------------------------|---|
| 1) | Online button allocation | Set up the online buttons that display in the ImagePilot Viewer view screen. When selecting modalities that have not been selected in [System Configuration] - [Modality] - Modality Type, the following error message will be displayed.  |
| 2) | Login Password display | Save the password used for login and set whether to display it in the login screen the next time you log in. |
| 3) | [Save & Exit] button | Saves edited settings and exits User Tool. • Returns to OS desktop screen. |
| 4) | [Exit] button | Exits User Tool without saving edited settings. • Returns to OS desktop screen. |
| 5) | [Apply] button | Saves edited settings and reflects changes in the current display. • User Tool is not exited enabling further editing. |

3-1) informity settings

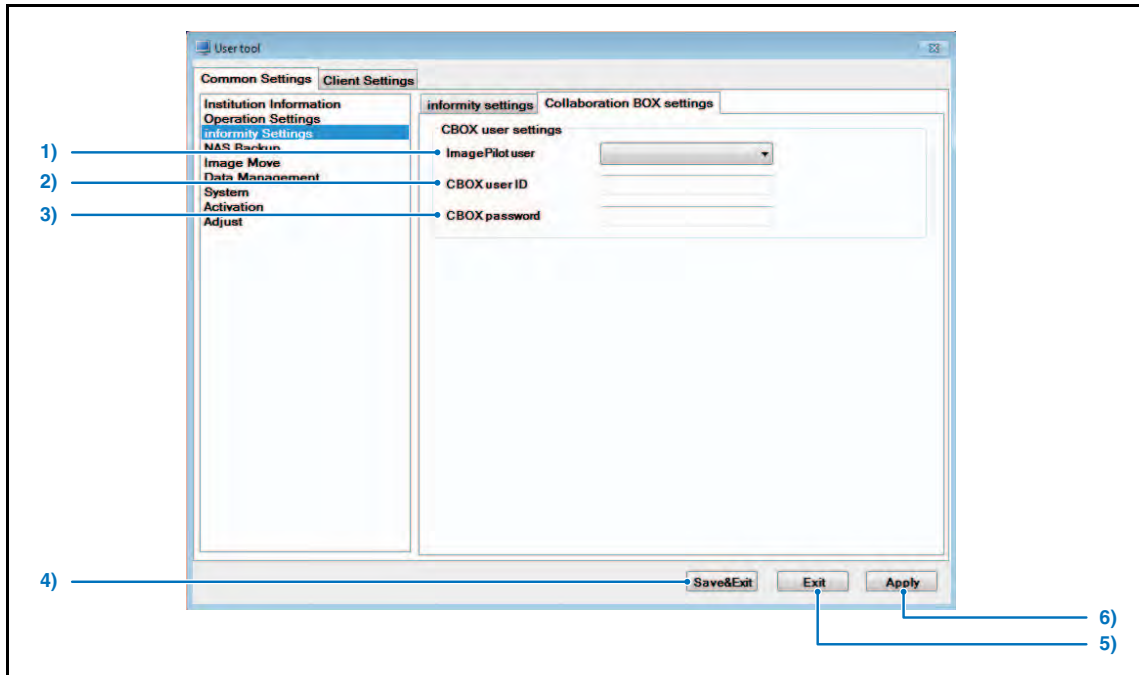
Allows settings for informity settings.



| | Item | Function |
|----|---------------------------------|--|
| 1) | informity URL | Starts the disc copy. |
| 2) | Institution Code | Inputs the informity site URL (Usually, it is not necessary to change this setting.) |
| 3) | Password | Inputs the institution code (Usually, it is not necessary to change this setting.) |
| 4) | [Save & Exit] button | Saves edited settings and exits User Tool. <ul style="list-style-type: none"> • Returns to OS desktop screen. |
| 5) | [Exit] button | Exits User Tool without saving edited settings. <ul style="list-style-type: none"> • Returns to OS desktop screen. |
| 6) | [Apply] button | Saves edited settings and reflects changes in the current display. <ul style="list-style-type: none"> • User Tool is not exited enabling further editing. |

3-2) Collaboration BOX settings

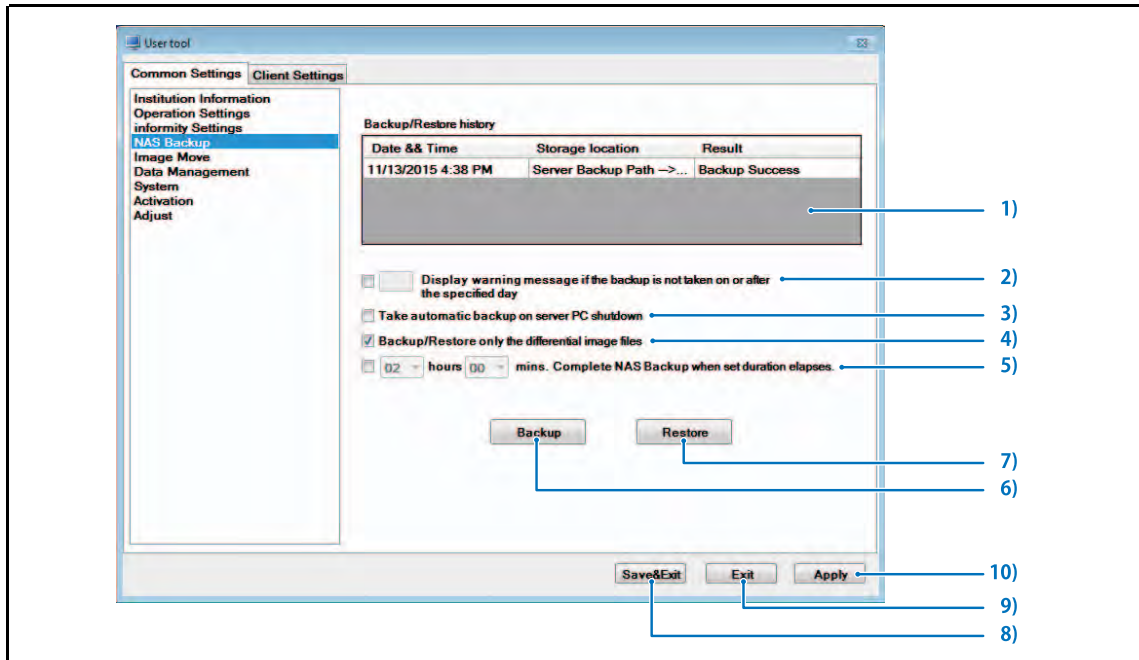
Allows settings for Collaboration BOX settings.




| | Item | Function |
|----|---------------------------------|--|
| 1) | ImagePilot user | Selects ImagePilot users for the CBOX. *All ImagePilot users registered under [User Registration] under [Operation Settings] are set. |
| 2) | CBOX user ID | Inputs the user ID created in the CBOX. |
| 3) | CBOX password | Inputs the user password created in the CBOX. |
| 4) | [Save & Exit] button | Saves edited settings and exits User Tool. • Returns to OS desktop screen. |
| 5) | [Exit] button | Exits User Tool without saving edited settings. • Returns to OS desktop screen. |
| 6) | [Apply] button | Saves edited settings and reflects changes in the current display. • User Tool is not exited enabling further editing. |

4-1) NAS Backup Screen

Allows NAS (option) settings.



| | Item | Function |
|----|---|---|
| 1) | Backup/Restore history | Displays the past backup history/restore history. |
| 2) | Display warning message if the backup is not taken on or after the specified day | Allows setting of display of a warning on screen if data is not backed up for the specified number of days. Settings may be made within a range of 1~30. (Default : OFF) |
| 3) | Execute automatic backup when server PC is shut down | Check this box to ensure that data is automatically backed up each time the ImagePilot PC is shut down. (Default : OFF) |
| 4) | Backup/Restore only the differential files | Check this box to ensure that backup/restore is carried out after verification of differences between image stored in ImagePilot and NAS. Executing this option may take less time than executing backup/restore of all images. (Default : ON) |
| 5) | Server PC End Time Setting | If NAS backup is to be automatically performed during the server PC ending, and an end time is set here, the server PC will end when the set time has elapsed, even partway through backup. The maximum set time is 72 hours, in 30-minute increments.(Default: OFF) |
| 6) | [Backup] button | Executes backup. |

| | Item | Function |
|-----|-------------------------------|---|
| 7) | [Restore] button | <p>Executes restore operation. When an additional NAS is connected, the following dialogue box appears to give you a choice of processing.</p>  <p>[Restore images to Server and Ext NAS (as usual)] Restores image data both in the server and added NAS from the backup NAS. (conventional method)</p> <p>[Restore Ext NAS images only.] Restores image data only in the added NAS from the backup NAS.</p> <p>[Restore Server images only.] Restores image data only in the server from the backup NAS.</p> |
| 8) | [Save&Exit] button | <p>Saves edited settings as exits User Tool.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 9) | [Exit] button | <p>Exits User Tool without saving edited settings.</p> <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 10) | [Apply] button | <p>Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing.</p> |

5-1) DVD Backup Screen

A screen that allows the ImagePilot images to be backed up to DVD.

Following four tabs comprises the DVD backup screen.

[DVD Backup]

: Manually backs up the image data to DVD.

[DVD Restore]

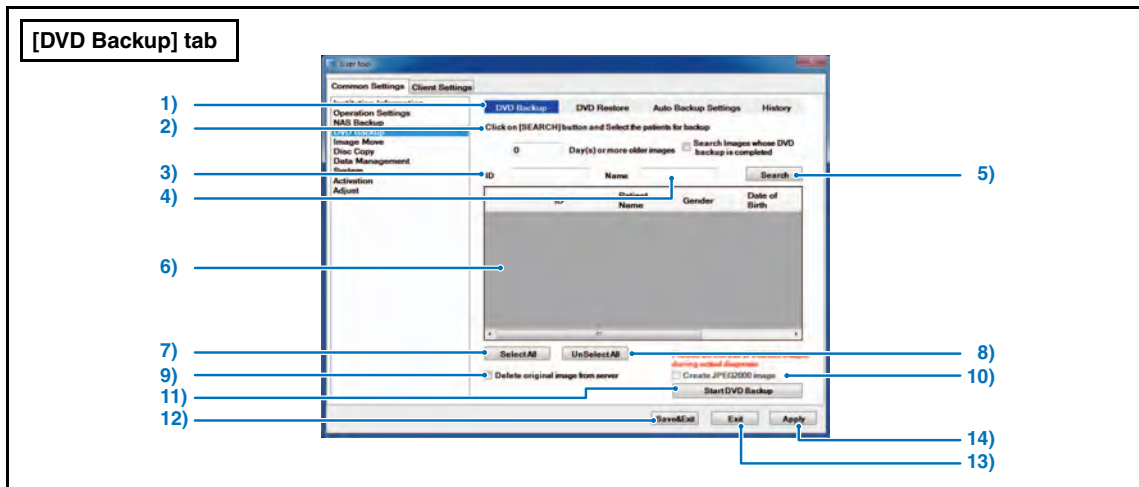
: Restores the backup image from DVD.

[Auto Backup Settings]

: Sets the automatic backup to DVD.

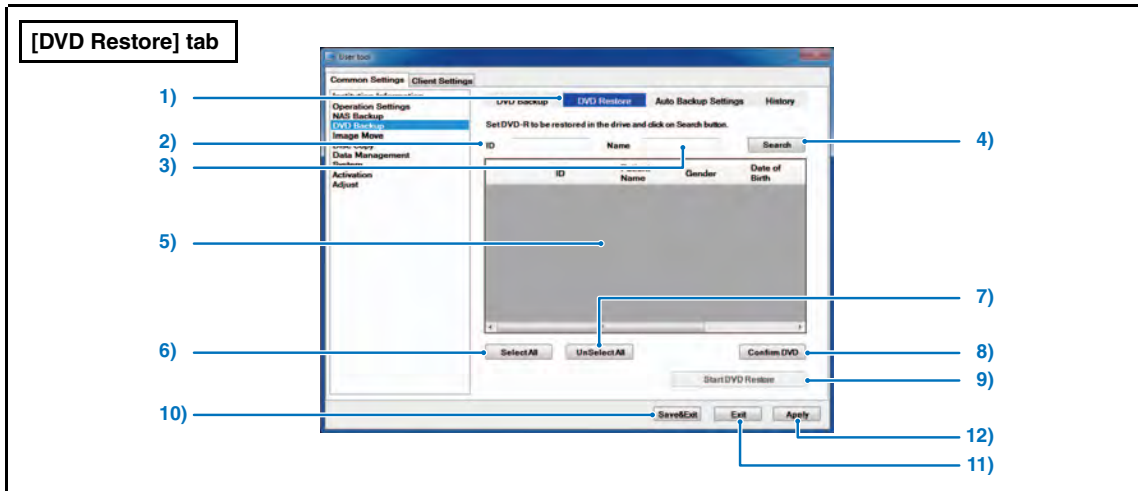
[History]

: Displays the DVD backup logs.

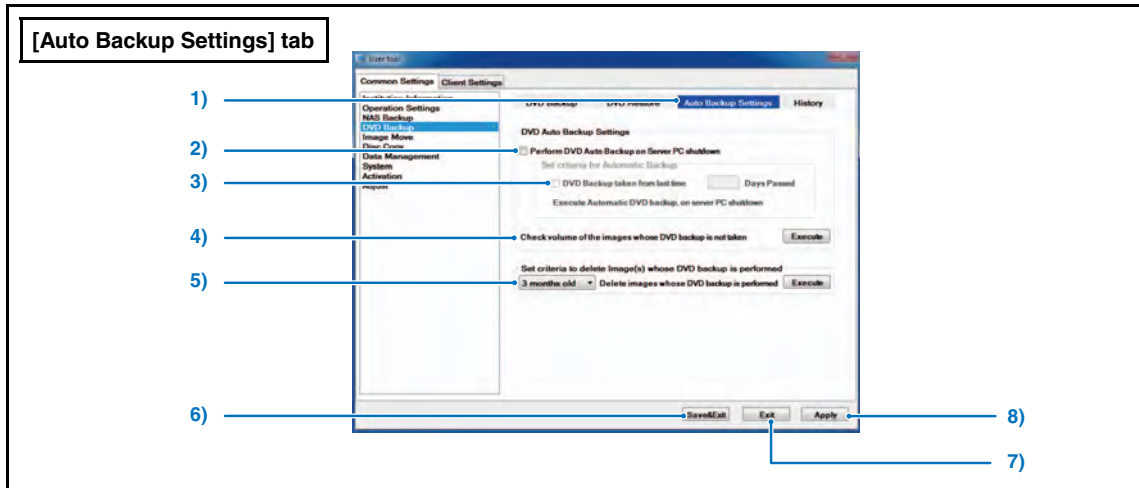


| Item | Function |
|--|---|
| 1) DVD Backup | Manually backs up the image data to DVD. |
| 2) Set the search period. | Patients with images that are older than the time specified here will be the backup target. [Search Image whose DVD backup is completed] checkbox : Checking the box allows the patient whose images have been backed up to be the backup target. |
| 3) Search target ID | Enter the Patient ID that shall be set as the search key. |
| 4) Search target name | Enter the Patient name that shall be set as the search key. |
| 5) [Search] button | Starts searching at the condition(Time Period, ID, Name) that has been set. |
| 6) Search Patient List | Displays the searched patients. |
| 7) [Select All] button | Selects all patients in the Search Patient List. |
| 8) [Free All] button | Deselect all patients in the Search Patient List. |
| 9) [Delete original image from server] checkbox | Deletes the images of the target patients from the server after backing up to DVD. |
| 10) [Create JPEG2000 image] checkbox | Creates the highly compressed image (JPEG2000) on the server after the backup is completed. Doing so facilitates the simple display of the original image. |
| 11) [Start DVD Backup] button | Starts DVD backup. |
| 12) [Save & Exit] button | Exits the User Tool after saving the edited settings. • Returns to the OS's desktop. |

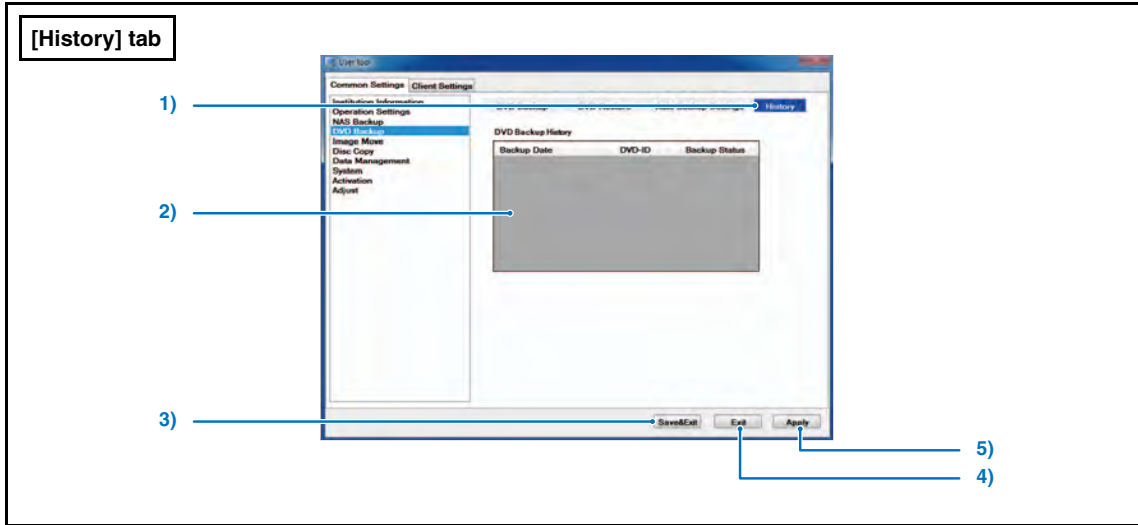
| | Item | Function |
|-----|----------------|--|
| 13) | [Exit] button | Exits the User Tool without saving the edited settings. <ul style="list-style-type: none"> • Returns to the OS's desktop. |
| 14) | [Apply] button | Saves the edited settings and applies the settings to the current screen. <ul style="list-style-type: none"> • Operation can be continued without exiting the User Tool. |



| | Item | Function |
|-----|-----------------------------------|--|
| 1) | DVD Restore | DVD Restore: Restores the image data from the backup DVD. |
| 2) | Search target ID | Enter the Patient ID that shall be set as the search key. |
| 3) | Search target name | Enter the Patient name that shall be set as the search key. |
| 4) | [Search] button | Starts searching at the condition(Time Period, ID, Name) that has been set. |
| 5) | Search Patient List | Displays the searched patients. |
| 6) | [Select all] button | Selects all patients in the Search Patient List. |
| 7) | [Free all] button | Deselects all patients in the Search Patient List. |
| 8) | [Start DVD Restore] button | Starts the DVD restore. |
| 9) | [Confirm DVD] button | Checks the properties of the DVD inserted. Displayed Items : DVD ID : Creation date of DVD |
| 10) | [Save & Exit] button | Exits the User Tool after saving the edited settings. <ul style="list-style-type: none"> • Returns to the OS's desktop. |
| 11) | [Exit] button | Exits the User Tool without saving the edited settings. <ul style="list-style-type: none"> • Returns to the OS's desktop. |
| 12) | [Apply] button | Saves the edited settings and applies the settings to the current screen. <ul style="list-style-type: none"> • Operation can be continued without exiting the User Tool. |



| | Item | Function |
|----|---|--|
| 1) | Auto DVD Backup Settings | Sets the automatic backup to DVD. |
| 2) | [Perform DVD Auto backup on server PC shutdown] checkbox | When this box is checked, checks the total volume of the image data that are not backed up at the time of PC shutdown, and if it exceeds the capacity of one DVD, displays a dialogue box confirming whether to implement backup or not. |
| 3) | DVD Backup taken from Last time | Sets whether to display or not the message confirming to back up the data specified days after the last backup to DVD. (This can be set regardless of the total volume of the images that are not backed up) |
| 4) | Check volume of the images whose DVD backup is not taken | Checks the volume of the images that are not backed up to DVD. |
| 5) | Delete image whose DVD backup is taken | Deletes among the already backed up images the image with the date older than the date set here. |
| 6) | [Save & Exit] button | Exits the User Tool after saving the edited settings. • Returns to the OS's desktop. |
| 7) | [Exit] button | Exits the User Tool without saving the edited settings. • Returns to the OS's desktop. |
| 8) | [Apply] button | Saves the edited settings and applies the settings to the current screen. • Operation can be continued without exiting the User Tool. |

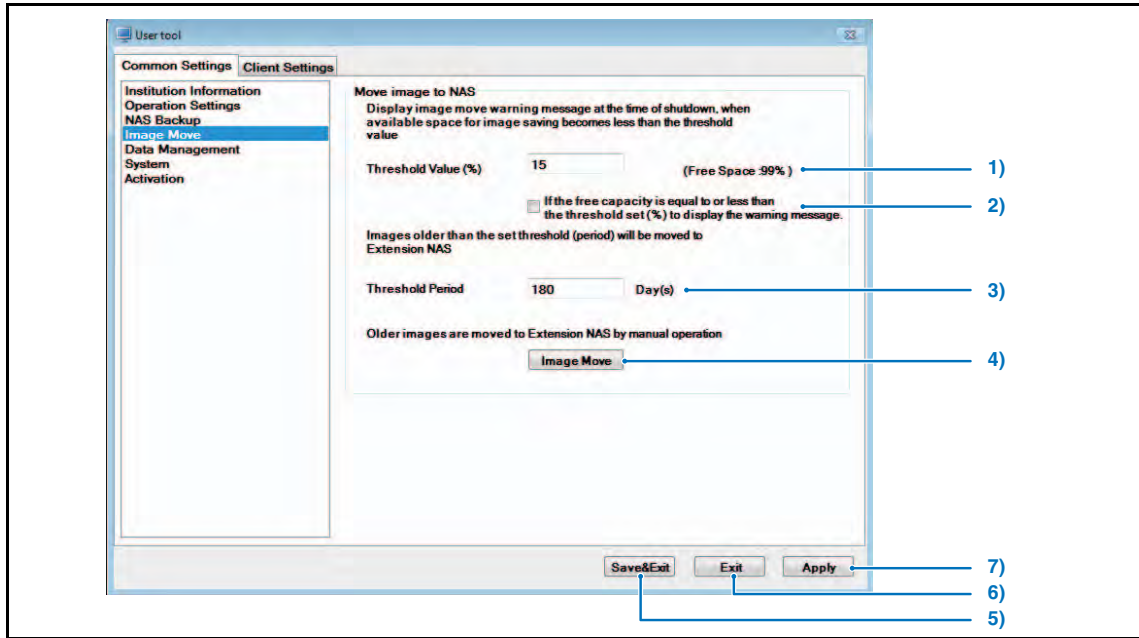


| | Item | Function |
|----|---------------------------------|--|
| 1) | History | Allows browsing the history of DVD backup. |
| 2) | DVD backup history | Displays the history of backups in the past. |
| 3) | [Save & Exit] button | Exits the User Tool after saving the edited settings. <ul style="list-style-type: none"> • Returns to the OS's desktop. |
| 4) | [Exit] button | Exits the User Tool without saving the edited settings. <ul style="list-style-type: none"> • Returns to the OS's desktop. |
| 5) | [Apply] button | Saves the edited settings and applies the settings to the current screen. <ul style="list-style-type: none"> • Operation can be continued without exiting the User Tool. |


6-1) Image Move Screen

Sets the condition for the image to be transferred from ImagePilot to NAS.

Please note that this screen cannot be activated by ImagePilot-CL.





| | Item | Function |
|----|---|--|
| 1) | Threshold Value (%) | Warning message will be released next time when the PC is shut down if the free space of E-drive comes below the level set by the Threshold(%) described here. This will not be applied to the Server PC that has no E-drive. Note that it represents the free space of C-drive in case there is no E-drive in the PC. (Default : 15) |
| 2) | If the free capacity is equal to or less than the threshold set(%) to display the warning message. | A message prompting the user to transfer images to the extension NAS appears when the free space is below the threshold. (Default : OFF) |
| 3) | Threshold Period | When migrating the data, only those data older than the time point set here will be migrated. (Default : 180 days) |
| 4) | [Image move] button | Manually migrates the image data to NAS. |
| 5) | [Save & Exit] button | Saves the edited settings and exit the User Tool. • Display returns to the OS desk top screen. |
| 6) | [Exit] button | Exits User Tool without saving edited settings. • Display returns to the OS desk top screen. |
| 7) | [Apply] button | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

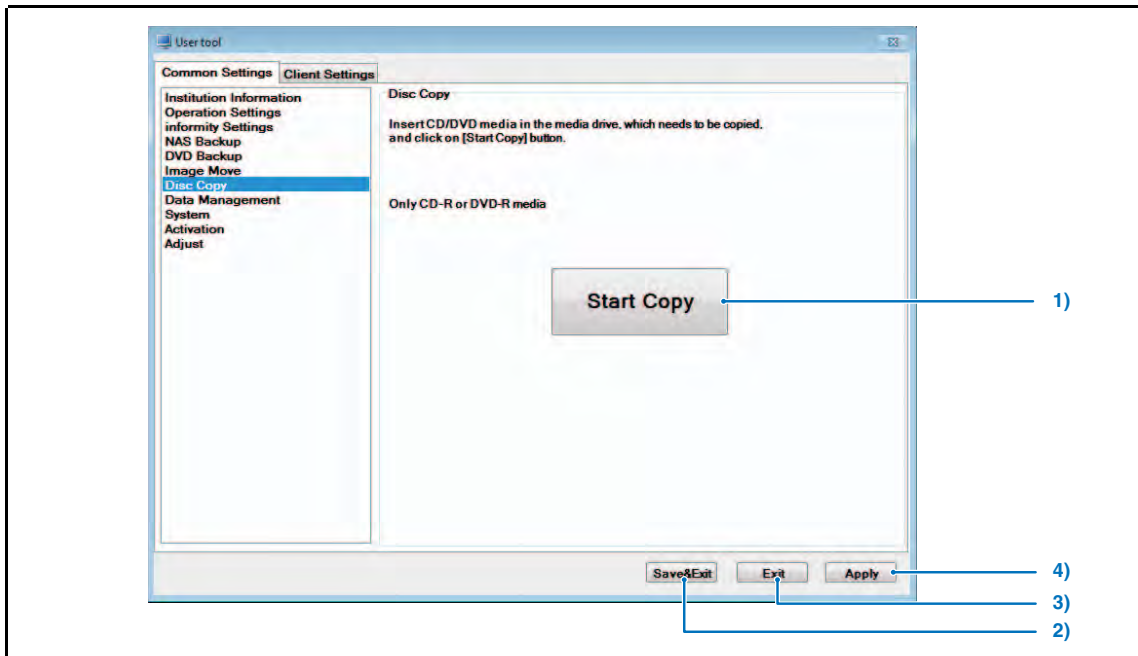
 "Display Warning", "Threshold(Time)" and [Image move] button can be available only when the extended NAS option is effective.

7) Disc Copy Screen

A screen allowing copies from CD-R to other CD-R or from DVD-R to other DVD-R.

 Disc copy is only possible for the case where the copy is made from CD-R to CD-R or DVD-R to DVD-R.

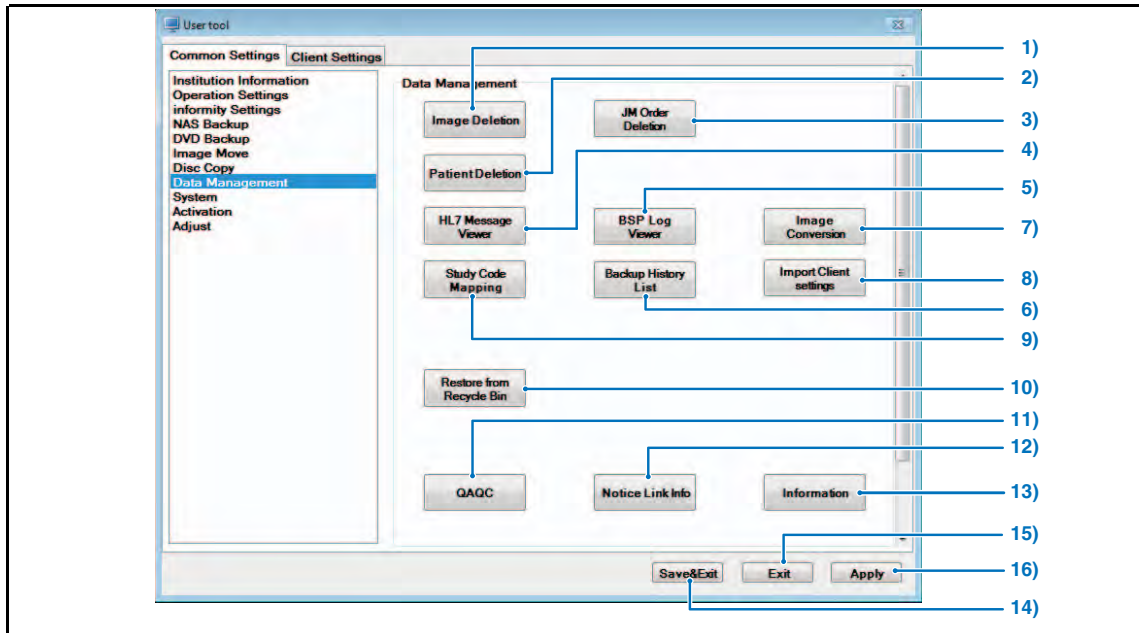
 The data that is available for copy is only those edited on the ImagePilot.












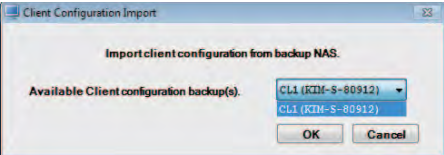





| | Item | Function |
|----|---------------------------------|---|
| 1) | [Start Copy] button | Starts the disc copy. |
| 2) | [Save & Exit] button | Saves the edited settings and exits the User Tool. • Returns to the OS desktop. |
| 3) | [Exit] button | Exits the User Tool without saving the edited settings. • Returns to the OS desktop. |
| 4) | [Apply] button | Saves the edited setting and reflect the new setting on the current display. • Editing can be continued without exiting the User Tool. |

8-1) Data Management Screen

A screen to allow deleting the image data or JM order information.



| | Item | Function |
|----|--|---|
| 1) | <p>[Image Deletion] button</p> | <p>Deletes the image data.</p> <ul style="list-style-type: none"> • Image deletion screen will be displayed. <p>This button will not be displayed for some settings.</p> <p><Caution></p> <p>If the following screen is displayed when this button is pressed, make sure that ImagePilot Viewer is not running. If it is, close it before continuing.</p> <div style="border: 1px solid gray; padding: 5px;"> <p>Information</p> <p>ⓘ If you perform this operation, please run from the end of the ImagePilotViewer.</p> <p>OK Cancel</p> </div> <p style="text-align: right;">  p.338 8-2) Delete Data Screen  p.451 Closing ImagePilot Viewer (Logout) </p> |
| 2) | <p>[Patient Deletion] button</p> | <p>Deletes the patient data.</p> <ul style="list-style-type: none"> • Deleting Patient screen will be displayed. <div style="border: 1px solid yellow; padding: 2px; display: inline-block;">  </div> <p>With the current version, deletion of the patient does not automatically delete corresponding patient image data. Therefore, to delete the patient together with the image data, it is required first to delete the image data using the image deletion tool, followed by deleting. (It is not possible to delete the image data of the patient who has been deleted)</p> <p><Caution></p> <p>If the following screen is displayed when this button is pressed, make sure that ImagePilot Viewer is not running. If it is, close it before continuing.</p> <div style="border: 1px solid gray; padding: 5px;"> <p>Information</p> <p>ⓘ If you perform this operation, please run from the end of the ImagePilotViewer.</p> <p>OK Cancel</p> </div> <p style="text-align: right;">  p.339 8-3) Deleting Patient  p.451 Closing ImagePilot Viewer (Logout) </p> |
| 3) | <p>[JM Order Deletion] button</p> | <p>Deletes the order registered with the JM(Job Manager). This is used to clear the order if conflict occurs with the order.</p> |

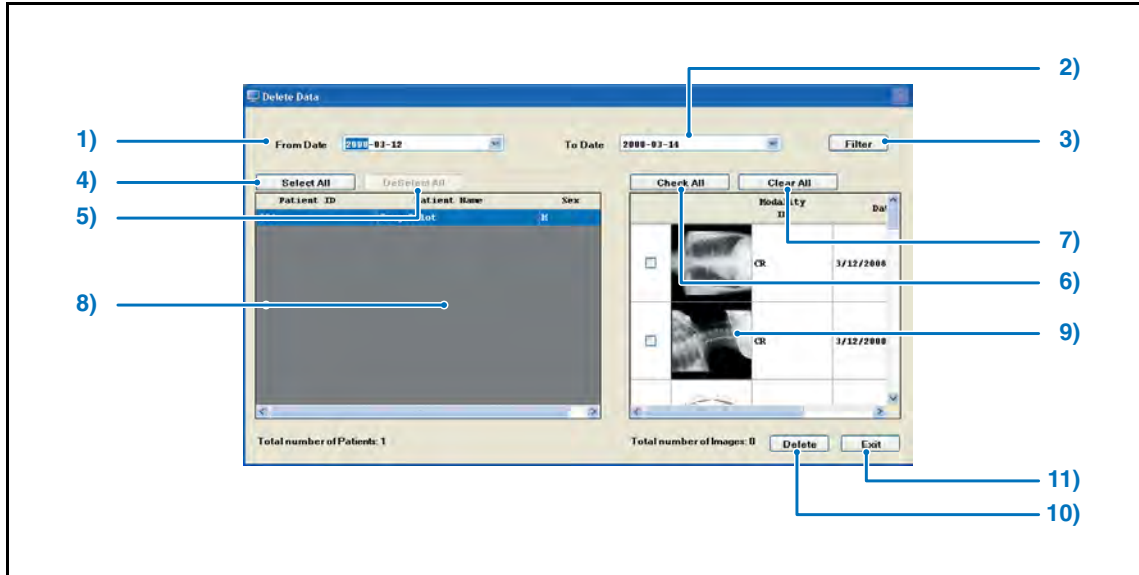
| | Item | Function |
|-----|--|---|
| 4) | [HL7 Message Viewer] button | Allows viewing the contents of messages communicated in HL7(Health Level Seven: Standard code for exchange of medical information).  p.340 8-4) HL7 Message Viewer Screen |
| 5) | [BSP Log Viewer] button | Allows viewing the contents of BSP logs.  p.343 8-5) BSP Log Viewer Search Screen |
| 6) | [Backup History List] button | <ul style="list-style-type: none"> • Image deletion screen will be displayed.  p.344 8-6) Backup Result List Screen |
| 7) | [Image Conversion] button | Converts the imported image into JPEG2000 format. This option is necessary to be used only when the remote access(option) is implemented.  p.345 8-7) Image Conversion Screen |
| 8) | [Import Client settings] button | <p>This button is displayed after the NAS backup is complete. Click the button to display Client Configuration Import Screen and restore the backup data of each client.</p>  |
| 9) | [Study Code Mapping] button | Allows mapping of the Study Code of external devices and ImagePilot.  p.346 8-8) Study Code Mapping Screen |
| 10) | [Restore from Recycle Bin] button | <p>Restores deleted image data and patient information from the Databank server.</p> <ul style="list-style-type: none"> • Restore Deleted Files screen will be displayed.  p.347 8-9) Restore Deleted Files Screen <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;">  This button is displayed only when Databank service is available with your system. </div> |
| 11) | [QAQC] button | <p>Executes QA/QC of CR system.</p> <p>Various calculations can be executed with value(s) of the image for quality assurance and the image read and intended for QA/QC to display the judgment result.</p> <p>Please note that this button is displayed only when the optional QA/QC function is purchased and the setting is enabled.</p> <p>For more information, please refer to the separate volume "Simple Check QC OPERATION MANUAL for ImagePilot".</p> |
| 12) | [Notice Link Info] button | <p>If you are unable to acquire link info by HL7 message via EMR during EMR coordination, ORU messages, MDM messages, etc. can be resent.</p> <p>"Notice Link Info Screen" will be displayed.</p> <p>This button will not be displayed for some settings.</p>  p.348 8-10) Notice Link Info Screen |
| 13) | [Information] button | Displays "CE" mark of the ImagePilot.  p.349 8-11) Information Screen |
| 14) | [Save&Exit] button | Saves edited settings as exits User Tool. <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 15) | [Exit] button | Exits User Tool without saving edited settings. <ul style="list-style-type: none"> • Display returns to the OS desk top screen. |
| 16) | [Apply] button | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

8-2) Delete Data Screen

A screen to allow deleting the image data.




If you are using Databank service from informity, selected image data are backed-up in the server at the data center so the deleted data are able to be restored with [Restore from Recycle Bin] function.

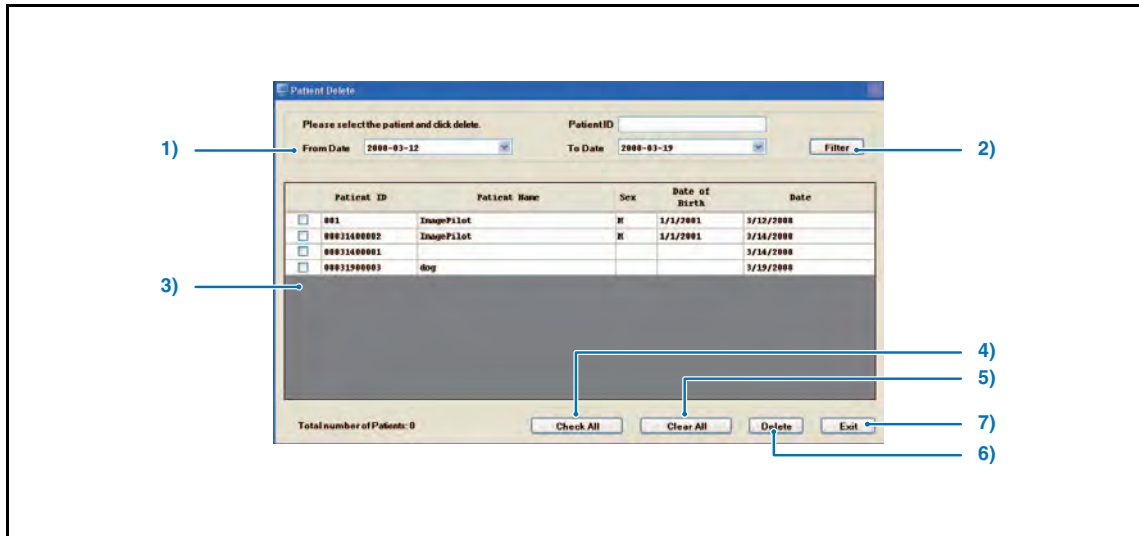


| | Item | Function |
|-----|------------------------------|---|
| 1) | From Date | Selects the start date of the list which should narrow down using the filter. |
| 2) | To Date | Selects the end date of the list which should narrow down using the filter. |
| 3) | [Filter] button | Narrows down the patient list specified by "From Date" and "To Date". |
| 4) | [Select All] button | Selects all patient available in the patient list. |
| 5) | [DeSelect All] button | Deselects all patient available in the patient list. |
| 6) | [Check All] button | Checks all items available in the modality list. |
| 7) | [Clear All] button | Unchecks all items available in the modality list. |
| 8) | Patient List | Patients completed examination will be displayed in list. |
| 9) | Modality ID, Date | Sorts the list by connected modality or Date/Time. Selecting another patient automatically uncheck the selection made for previous patient. |
| 10) | [Delete] button | Deletes the image file selected by "Select file to be deleted". Confirmation dialogue box appears upon click. |
| 11) | [Exit] button | Exits the data deletion screen. <ul style="list-style-type: none"> • Returns to the data control screen. |

8-3) Deleting Patient Screen

Deletes the patient from the ImagePilot DB.

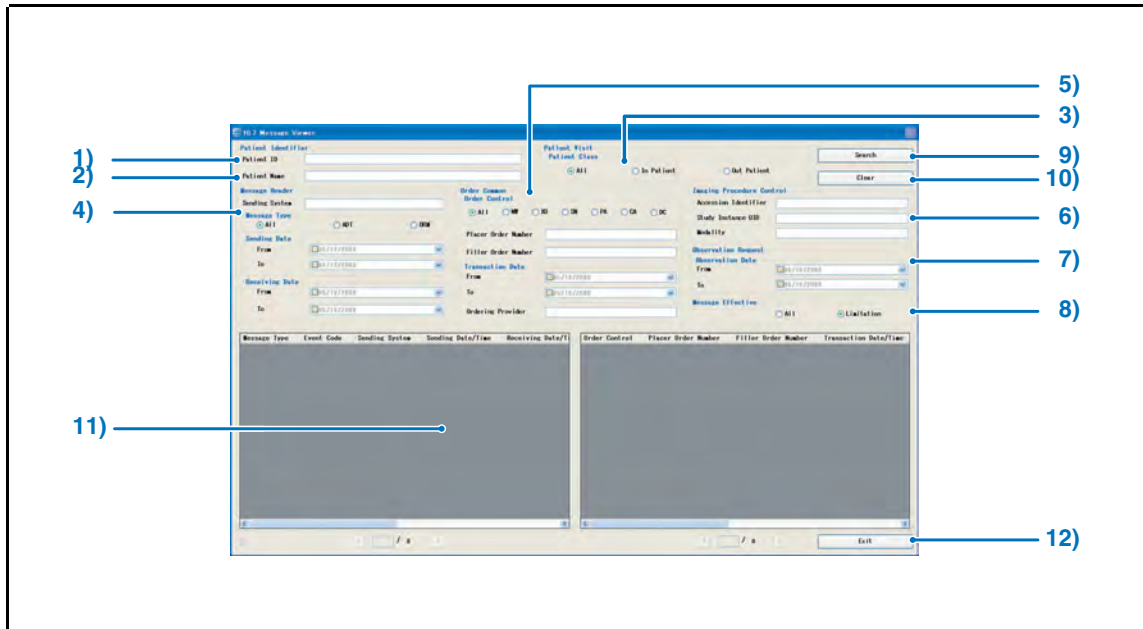
 If you are using Databank service from informity, selected patient information are backed-up in the server at the data center so the deleted data are able to be restored with [Restore from Recycle Bin] function.



| | Item | Function |
|----|----------------------------|--|
| 1) | From Date / To Date | Select from the pull-down menu the time range of the data that shall be deleted. |
| 2) | [Filter] button | Searches the corresponding patient between the "From Date" and the "To date". |
| 3) | Patient list | Displays the patient with patient ID, patient name, sex, birth date, date in list. |
| 4) | [Check All] button | Selects all lists. |
| 5) | [Clear All] button | Clears selection of all lists. |
| 6) | [Delete] button | Deletes the selected patient. |
| 7) | [Exit] button | Terminates the deletion of patient. |

8-4) HL7 Message Viewer Screen


A screen to allow viewing the contents of messages communicated in HL7(Health Level Seven: Standard code for exchange of medical information).



| Item | Function |
|---------------------------|---|
| Patient Identifier | |
| 1) | Patient ID Enter the Patient ID targeted for search. |
| 2) | Patient Name Enter the Patient name targeted for search. |
| Patient Visit | |
| 3) | Patient Class Select the patient type targeted for search. Select from "All", "In Patient" and "Out Patient". (Default: All) |
| 4) | Message Header Allows setting the header of the message targeted for search. Sending System Select the sending system targeted for search. Message Type Select from "All", "ADT(Admission, Discharge, and Transfer: a message type regulated by Health Level 7), ORM(Order Message: a message type regulated by Health Level 7) (Default: All) Sending Date Select the sending date targeted for search. Receiving Date Select the receiving date targeted for search. |


| | Item | Function |
|-----|----------------------------------|---|
| 5) | Order Common | <p>Items common to the order.</p> <p>Order Control Set the order control targeted for search. NW: New order, XO: Update, SN: Altered, PA: Parent order, CA: Canceled, DC: Discontinued (Default: All)</p> <p>Placer Order Number Set the placer order number targeted for search.</p> <p>Filler Order Number Set the filler order number targeted for search.</p> <p>Transaction Date Set the order input date targeted for search.</p> |
| 6) | Imaging Procedure Control | <p>Items for imaging procedure control.</p> <p>Accession Identifier Set the accession identifier.</p> <p>Study Instance UID Set the study instance UID targeted for search.</p> <p>Modality Set the modality targeted for search.</p> |
| 7) | Observation Request | <p>Items for observation request.</p> <p>Observation Date Set the observation date span targeted for search.</p> |
| 8) | Message Effective | <p>Set the effective message targeted for search. (Default: Limitation)</p> |
| 9) | [Search] button | Start searching based on the search condition set by the Filter Condition. |
| 10) | [Clear] button | Cancels the search condition set by the Filter Condition. |
| 11) | Search Result | Displays the search results in list. |
| 12) | [Exit] button | Exits the HL7 Message Viewer screen. |

How to use the HL7 Message Viewer.

 When coordinating patient information with the HL7 communication device, make sure that data received from the host device is correct.

1. Select the Data Management using the User Tool, and click [-]
Following screen will be displayed.



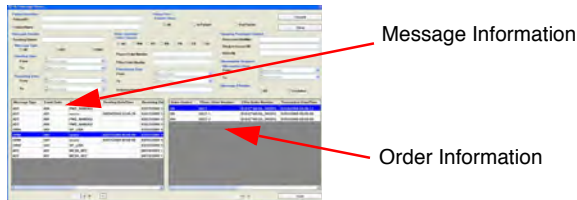
 p.347 8-9) Restore Deleted Files Screen

2. Narrowing down the search keys will facilitate the search of HL7 messages you want.
The search keys are roughly grouped as follows.

- Patient Information(Patient Identifier, Patient Visit)
- Message Information(Message Header)
- Order Information(Order Common)
 - Image Information(Image Procedure Control)
 - Observation Information(Observation Request)

(*Setting the Message Effective to "All" allows including less important Message Information as the search target)

The Message targeted for search will be displayed at lower left, while the Order linked to that Message will be displayed at the lower right of the screen.



Double-clicking the displayed Message targeted for search allows viewing the detailed information.



*Detailed screen for Message Information + Order Information




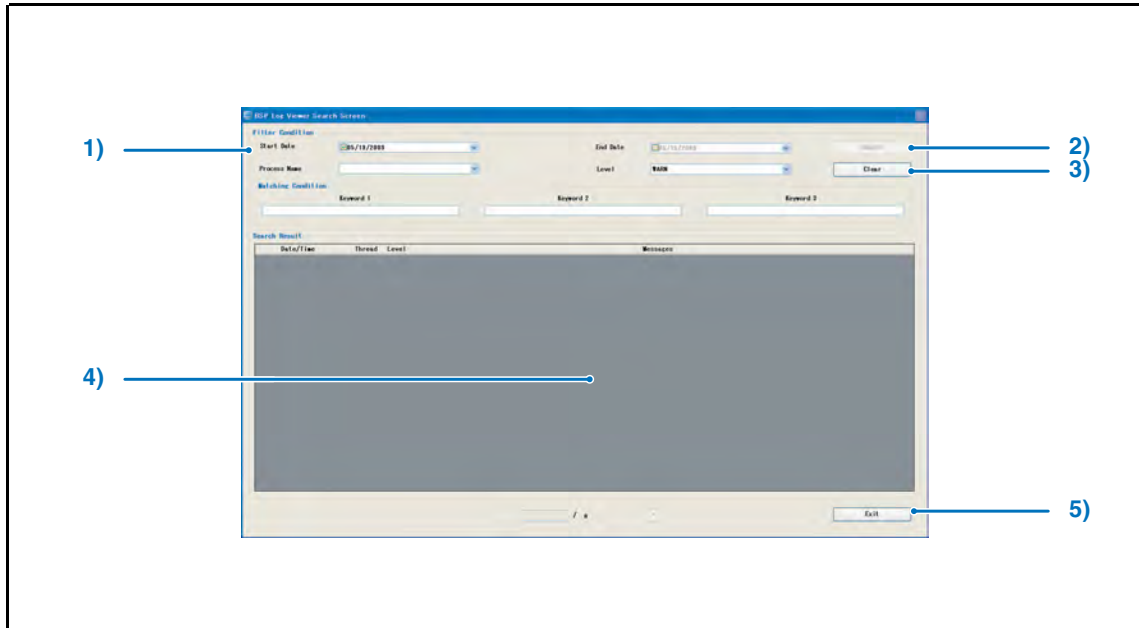
*Detailed screen for Message Information only

8-5) BSP Log Viewer Search Screen

A screen that allows viewing of the contents of BSP logs.

BSP(Back Server Process) is the process relating to the ImagePilot, mainly addressing the transmission logs for communications between processes and the communication logs of the gateway process.

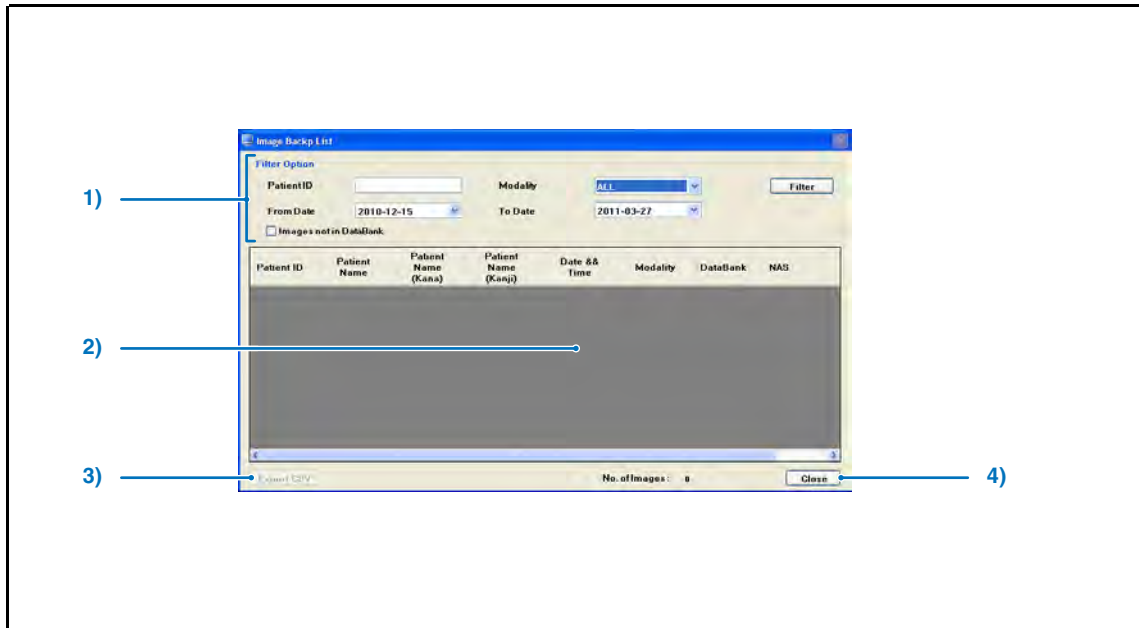
 p.347 8-9) Restore Deleted Files Screen



| | Item | Function |
|----|-------------------------|--|
| 1) | Filter Condition | Set the search condition. Start Date/End Date Set the search period as the search key. Process Name Set the processing as the search key. Level Set the level as the search key. Select from "FATAL", "ERROR", "WARN", "INFO" AND "DEBUG". (Default : WARN) * Messages higher than the level set here will be the search targets. Ex) FATAL, ERROR, WARN will be the target when WARN is selected. Matching Condition Set the keyword as the search key. Maximum three keywords can be set. |
| 2) | [Search] button | Start searching based on the search condition set by the Filter Condition. |
| 3) | [Clear] button | Cancels the search condition set by the Filter Condition. |
| 4) | Search Result | Displays the search results in list. |
| 5) | [Exit] button | Exits the BSP Log Viewer Search screen. |

8-6) Backup Result List Screen

Logs of the gateway process.



| | Item | Function |
|----|----------------------------|---|
| 1) | Filter Option | Sets the parameters for the image that shall be displayed on the Search Result screen, and the search is triggered by [Search] button. Search will be made using the patient ID, type of modality from which the image is imported, time period(from date, to date) of image acquisition as the key. Ticking [Images not stored in DB] allows extracting the images not stored in "infirmity" databank. |
| 2) | Search Result List | Displays in list the images that match the parameters set by the Search Option. |
| 3) | [Export CSV] button | Outputs the Search Result List in CSV format. CSV format file is a text file delimited by commas, and can be opened using the spread-sheet software or text editors. |
| 4) | [Close] button | Exits the Backup Image List screen. <ul style="list-style-type: none"> • Returns to the Data Management screen. |

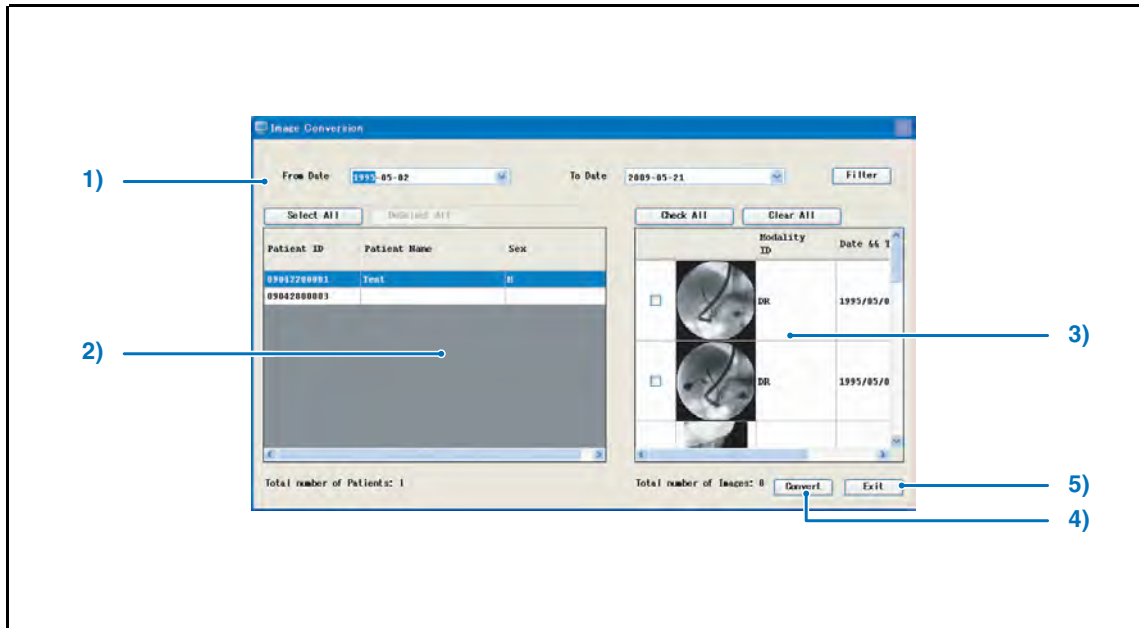


Note for use of Databank


For the multi-frame images, the status of the Databank switches to "Saved" when all image frames are saved.

8-7) Image Conversion Screen

A screen to allow converting the imported image into JPEG2000 format.

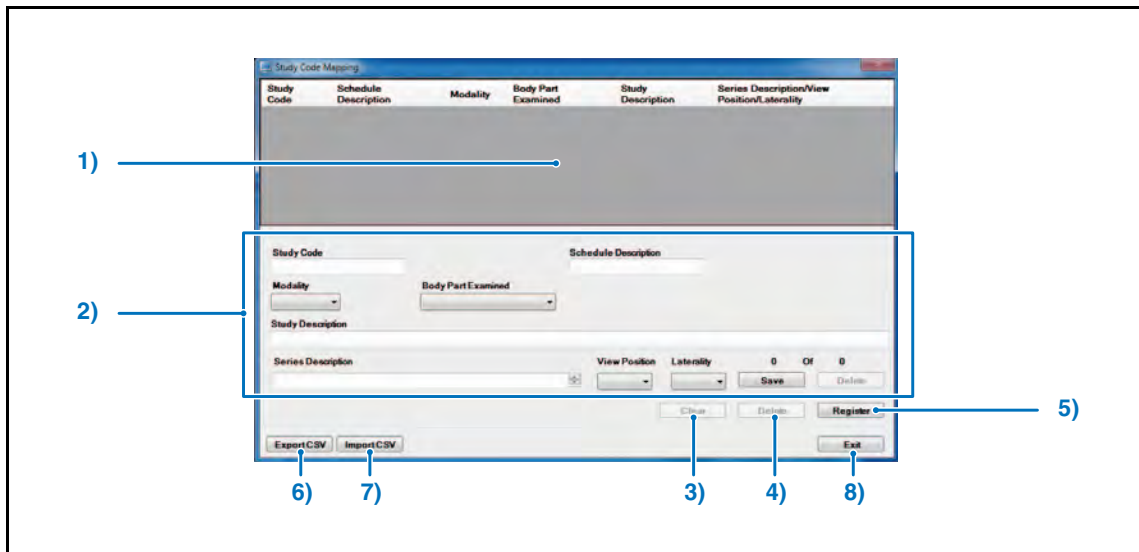


| | Item | Function |
|----|----------------------------|--|
| 1) | From Date / To Date | Sets the duration for which the patient is retained in the list for the purpose of image conversion. |
| 2) | Patient List | Displays in list the patients whose images have been imported within a time frame set by "Start/Finish Date". Select the patient whose image shall be converted. Clicking the [Select All] button selects all of the images displayed in the list, while clicking the [Deselect All] button deselects all of the images displayed in the list. |
| 3) | Image List | Displays the imported image of the patient selected in the "Patient List". |
| 4) | [Convert] button | Converts the image data for the selected patient into JPEG2000. |
| 5) | [Exit] button | Closes the image convert screen. <ul style="list-style-type: none"> Returns to the data control screen. Images targeted for image conversion are CR images and DICOM images. Generic images such as JPEG, AVI are exempted from the target. |

 The targets for image conversion are captured CR and AeroDR images, and imported DICOM images.
 Generic images such as JPEG or AVI format cannot be the target for conversion.

8-8) Study Code Mapping Screen

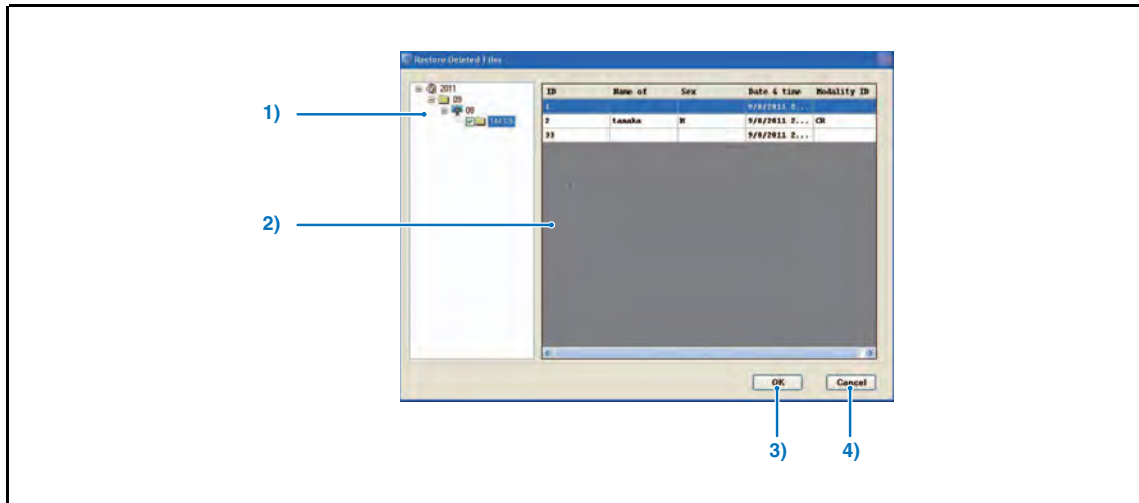
A screen to allow automatically assigning(mapping) the information using the Study Code of the image retrieved by MWM link.




| | Item | Function |
|----|------------------------------|---|
| 1) | Study Code List | Displays the Study Codes in list. |
| 2) | Study Code Edit Field | Displays the contents of the Study Code selected from the Study Code list, allowing edition of each item. The items available for edition are; Study Code, Schedule Description, Modality, Body Part Examined, Study Description, Series Description, View Position, Laterality <ul style="list-style-type: none"> • Select the item as to Modality, Body Part Examined, View Position and Laterality. • You can input new text strings for the [Series Description] and register the [View Position] and [Laterality] into each [Series Description]. |
| 3) | [Clear] button | Cancels the edited result of Study Code. |
| 4) | [Delete] button | Deletes the selected Study Code. |
| 5) | [Register] button | Registers the modification of Study Code. |
| 6) | [Export CSV] button | Exports the Study Code in CSV format. |
| 7) | [Import CSV] button | Import the Study Code in CSV format. <Note> CSV files that can be imported are limited to those listed below. <ul style="list-style-type: none"> • EASCII • EUTF-8 (with BOM) • EUTF-8 (without BOM) • EUTF-16LE(with BOM) • EUTF-16BE(with BOM) *BOM : Byte Order Mark |
| 8) | [Exit] button | Exits the Study Code Mapping screen. |

8-9) Restore Deleted Files Screen

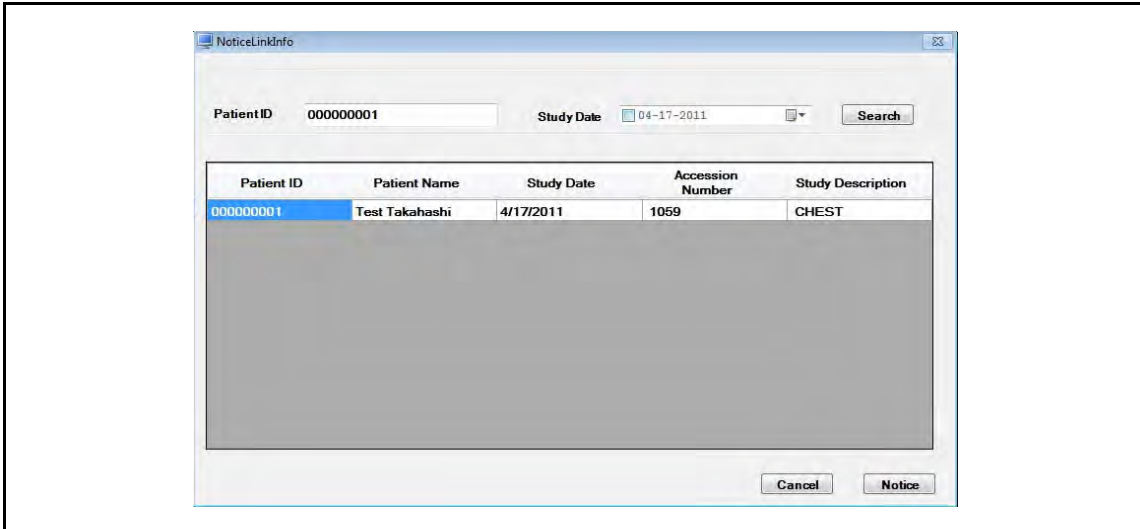
Restores the deleted images and patient information from the data center server.



| | Item | Function |
|----|------------------------|--|
| 1) | Backup folder | The backed-up "Year (A.D)" - "Month" - "Day" - "Time (Hour, Minute, Second)" will be displayed in a hierarchal structure. If you restore image data and patient information, they will be restored in a "Time (Hour, Minute, Second)" folder basis. |
| 2) | Backup list | The image data and patient information that are backed-up in the selected "Time (Hour, Minute, Second)" can be checked. |
| 3) | [OK] button | Restores the image data and patient information that are backed-up in the selected "Time (Hour, Minute, Second)" folder. In addition, if there is no image data to be restored in the folder, the following message will be displayed.  |
| 4) | [Cancel] button | Cancel the restoration of image data and patient information. |

8-10) Notice Link Info Screen

If you are unable to acquire link info by HL7 message via EMR during EMR coordination, ORU messages, MDM messages, etc. can be resent.



| | Item | Function |
|----|----------------------------|--|
| 1) | Search Conditions | Enter search conditions. |
| 2) | [Search] button | A search for patient info will be carried out according to set conditions. |
| 3) | Search Results List | Patient info corresponding to the search conditions is displayed here. |
| 4) | [Cancel] button | Searched content is discarded, and you are taken back to the Data Management Screen. |
| 5) | [Notice] button | Listed ORU and MDM messages are resent to EMR. |

8-11) Information Screen

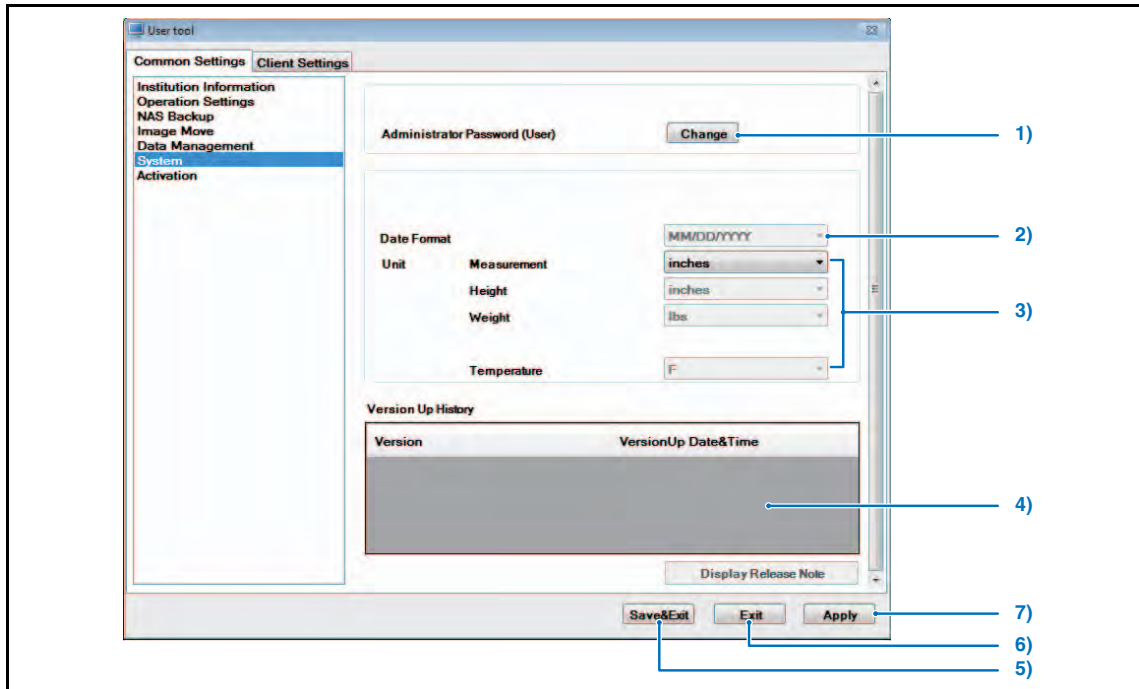
Displays "CE" mark of the ImagePilot.




| | Item | Function |
|----|-------------|-------------------------------|
| 1) | [OK] button | Exits the Information Screen. |

9-1) System Screen

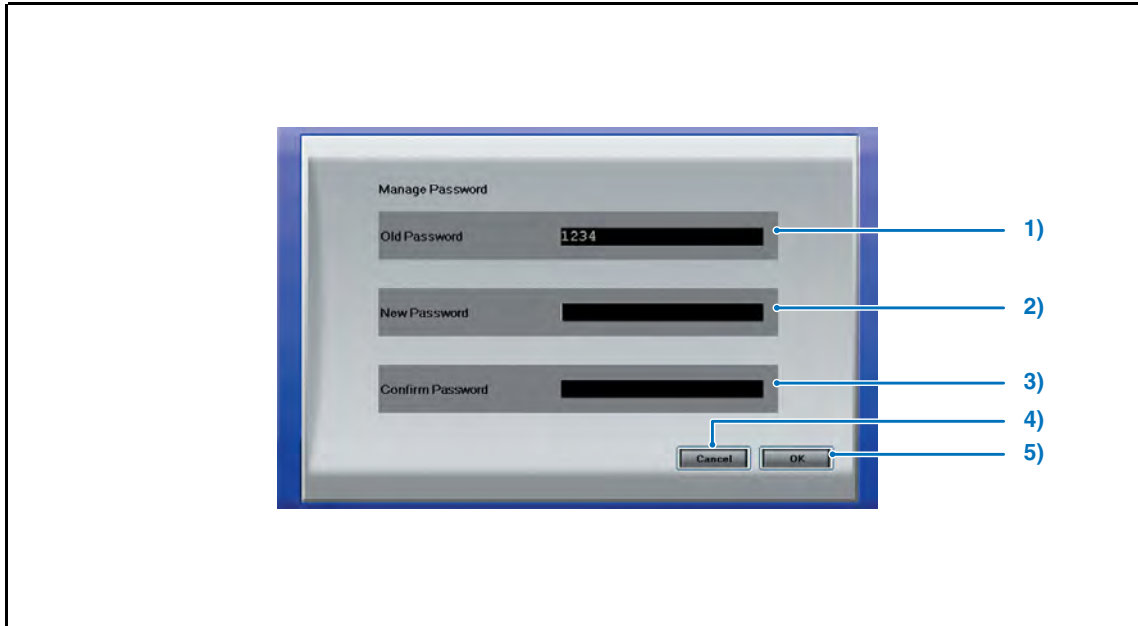
Total System Settings




| | Item | Default | Function |
|----|-------------------------------|------------------------------|--|
| 1) | Administrator Password (User) | - | Controls the password input to start up User Tool. Click the [Change] button to display the Manage password screen.  p.351 9-2) Manage Password Screen |
| 2) | Date Format | MM/DD/YYYY | Western calendar display format is as follows: (M : month / D : day / Y : year) MM/DD/YYYY is fixed (western calendar year) Note : Date Format is required to be the same as that of date format used(Local & Language option) on Windows. Note : Date Format can be set only when there is no patient registered. |
| 3) | Unit | inches inches lbs F | Units for the values displayed ImagePilot. When there is no patient registered, the units for [Height], [Weight], [Temperature] can be changed. (Units cannot be changed if minimum one patient is registered) Measurement : [mm / inches] Height : [cm / inches] Weight : [kg / lbs] Temperature : [C / F] |
| 4) | Version Up History | - | Displays the update logs of ImagePilot software. |
| 5) | [Save&Exit] button | - | Saves edited settings as exits User Tool. • Display returns to the OS desk top screen. |
| 6) | [Exit] button | - | Exits User Tool without saving edited settings. • Display returns to the OS desk top screen. |
| 7) | [Apply] button | - | Saves edited settings and reflects changes in the current display. User Tool are not exited enabling further editing. |

9-2) Manage Password Screen

Controls the password input to start up ImagePilot.

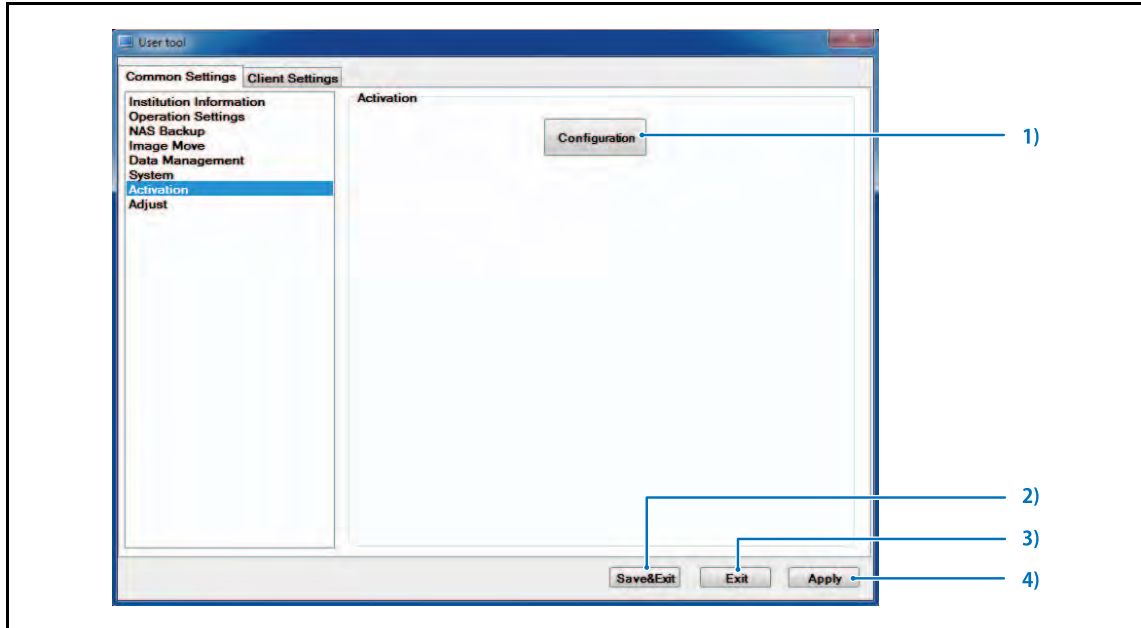



| | Item | Default | Function |
|----|-------------------------|---------|---|
| 1) | Old Password | - | Display the currently set password from the keyboard. |
| 2) | New Password | - | Input the new password. <ul style="list-style-type: none"> • Settings may be made within a range of 4 ~ 12 lower case. |
| 3) | Confirm Password | - | Input the new password again from the keyboard for confirmation. |
| 4) | [Cancel] button | - | Exits the system screen without changing the password. <ul style="list-style-type: none"> • Display returns to the system screen. |
| 5) | [OK] button | - | Changes the password and exits the system screen. <ul style="list-style-type: none"> • A message requesting confirmation that the password is to be saved and the screen exited will be displayed: Select the [Yes] button to return to the system screen. |

 A series of asterisks equivalent to the number of characters input in the "Old Password," "New Password" and "Confirm Password" boxes in place of characters actually input.

10-1) Activation Setting Screen

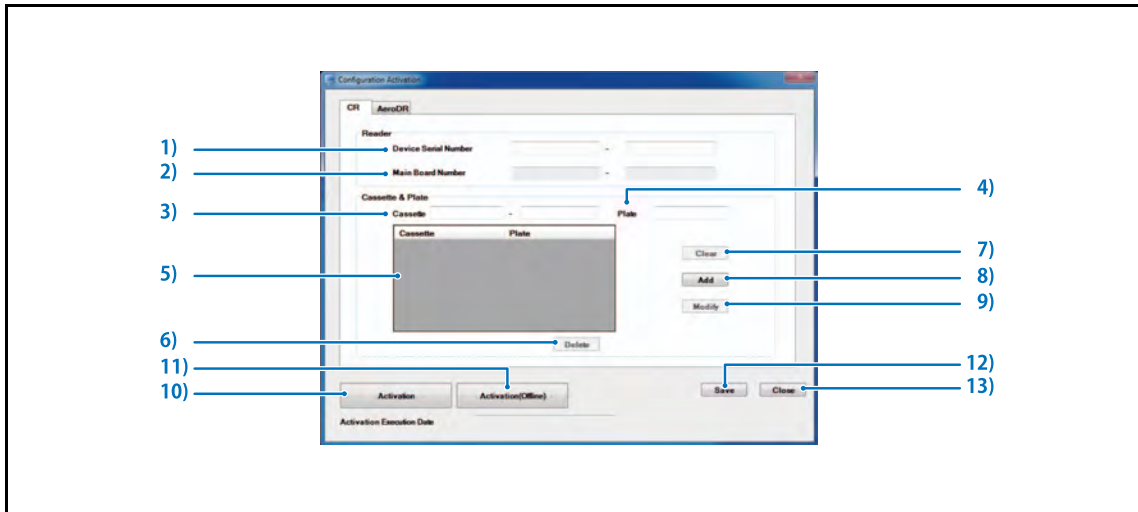
"Configuration Activation" for managing installed unit information can be set at this screen.



| | Item | Function |
|----|-------------------------------|--|
| 1) | [Configuration] button | The Configuration Activation Setting Screen is displayed, and "Configuration Activation" can be set for managing installed unit information.  p.353 10-2) Configuration Activation Setting Screen |
| 2) | [Save&Exit] button | Saves the edited settings and exits User Tools. • Returns you to the OS desktop screen. |
| 3) | [Exit] button | Exits User Tools without saving the edited settings. • Returns you to the OS desktop screen. |
| 4) | [Apply] button | Saves the edited settings and applies them to the current display. • You will not exit User Tools in this case, and editing can still be done. |

10-2) Configuration Activation Setting Screen

"Configuration Activation" for managing installed unit information can be set at this screen.

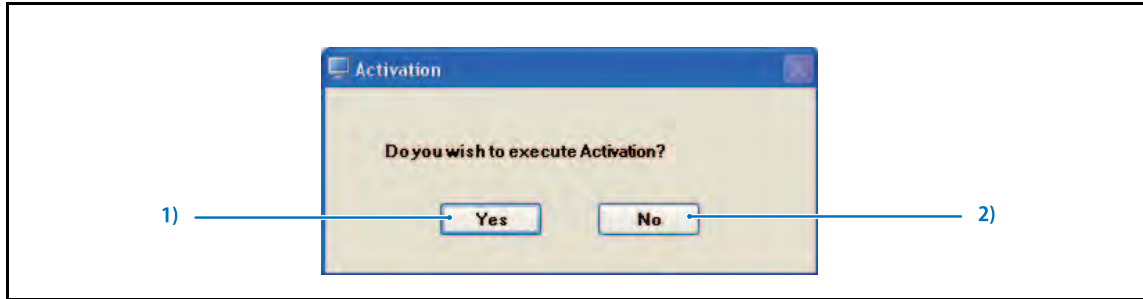


| | Item | Function |
|-----------------------------|--|--|
| Reader | | |
| 1) | [Device Serial Number] | Enter the serial number of the connected reader here. |
| 2) | [Main Board Number] | When connected to REGIUS SIGMA/SIGMA2, its Main Board Number is displayed here. When connected to another reader, nothing will be displayed in the [Main Board Number] column. |
| Cassette & Plate | | |
| 3) | [Cassette] | The cassette to be used can be entered and registered here. |
| 4) | [Plate] | The plate to be used can be entered and registered here. |
| 5) | Cassette & Plate Display Column | Registered cassette and plate are displayed here. |
| 6) | [Delete] button | Deletes settings selected at the Cassette & Plate Display Column |
| 7) | [Clear] button | Deletes settings entered in the Cassette Column and Plate Column. |
| 8) | [Add] button | Adds settings entered in the Cassette Column and Plate Column. |
| 9) | [Modify] button | Modifies settings selected at the Cassette & Plate Display Column. |
| 10) | [Activation] button | Performs activation settings for a unit being used online. The Online Activation Setting Screen is displayed. |
| 11) | [Activation (Offline)] button | Performs activation settings for a device being used offline. • The Offline Activation Setting Screen is displayed. |
| 12) | [SAVE] button | Edited settings are saved. |
| 13) | [Close] button | Closes the Configuration Activation Setting Screen. |

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10-3) Online Activation Setting Screen

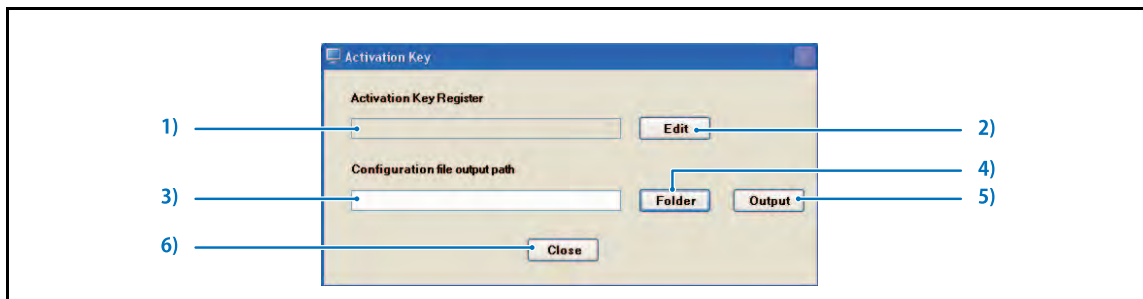
Sets online activation.




| | Item | Function |
|----|--------------|----------------------|
| 1) | [Yes] button | Performs activation. |
| 2) | [No] button | Cancels activation. |

10-4) Offline Activation Setting Screen

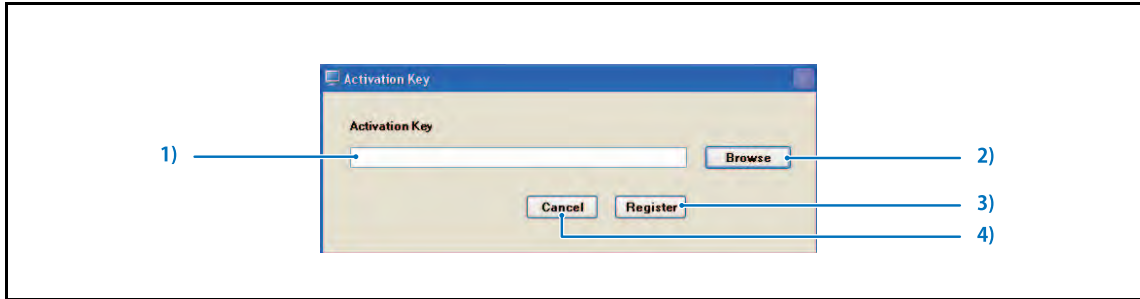
Sets offline activation.



| | Item | Function |
|----|---|---|
| 1) | Activation Key Register Display Column | The set activation key is displayed here. |
| 2) | [Edit] button | Performs activation key settings. • The Activation Key Setting Screen is displayed.  p.355 10-5) Activation Key Setting Screen |
| 3) | Configuration Information File Output Destination Display Column | The output destination of assigned installation information is displayed here. |
| 4) | [Folder] button | Assign a destination folder for installation information. |
| 5) | [Output] button | Outputs the installation information file to the assigned destination. |
| 6) | [Close] button | Cancels offline activation settings. |

10-5) Activation Key Setting Screen

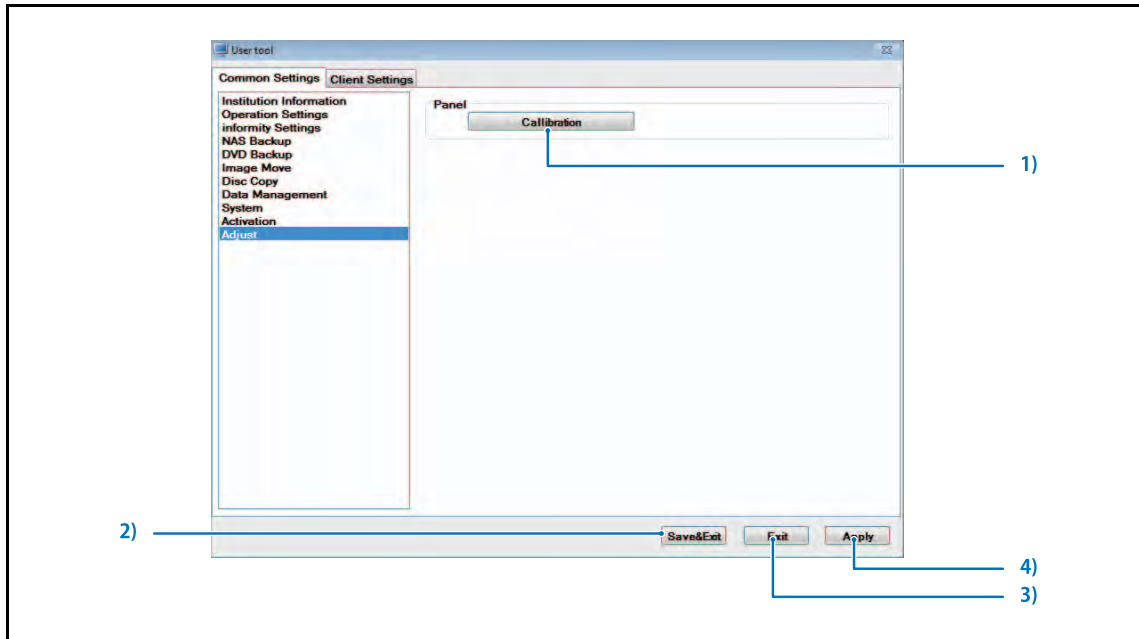
The offline activation key is set here.




| | Item | Function |
|----|------------------------------------|---|
| 1) | Activation Key Entry Column | Directly type in the activation key here. |
| 2) | [Browse] button | Acquires the activation key from a file. |
| 3) | [Register] button | Registers the activation key. |
| 4) | [Cancel] button | Cancels activation key settings. |

11-1) Adjustment Screen

This is the screen for calibrating the AeroDR Detector.



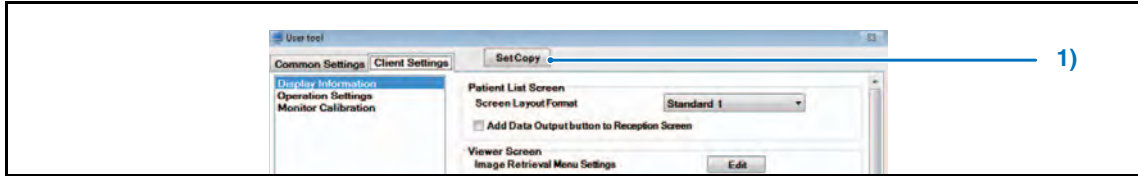
| | Item | Function |
|----|----------------------|---|
| 1) | [Calibration] button | Performs calibration of the AeroDR Detector.  p.432 AeroDR Detector Calibration |
| 2) | [Save & Exit] button | Saves modified settings and closes User Tool. - Returns to the OS desktop screen. |
| 3) | [Exit] button | Closes User Tool without saving modified settings - Returns to the OS desktop screen. |
| 4) | [Apply] button | Saves modified settings and applies them to the current display. - You can continue modifying settings without closing User Tool. |

9.3.2 Client Settings Screen

Allows settings for each client. Settings are made per client.

1-1) Button Common to all Screens

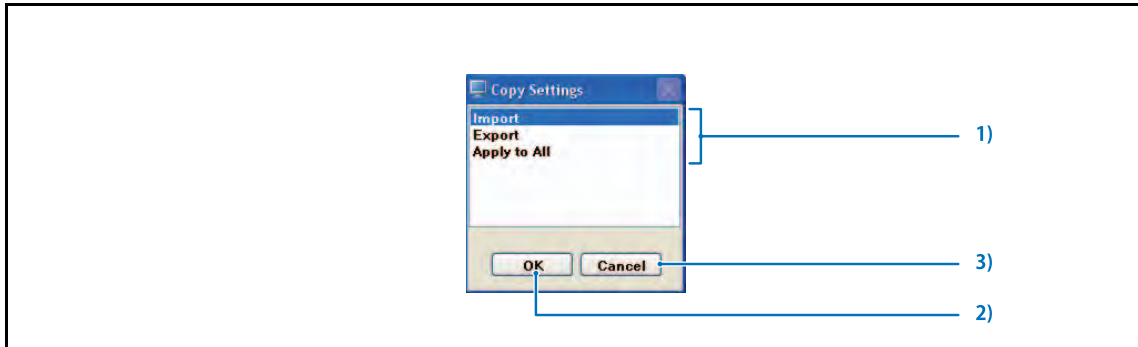
This buttons is displayed on all CL screens.




| | Item | Function |
|----|-------------------|---|
| 1) | [Set Copy] button | Copies content of client settings to another client. <ul style="list-style-type: none"> • The Set Copy Selection Screen is displayed. |

1-2) Set Copy Selection Screen

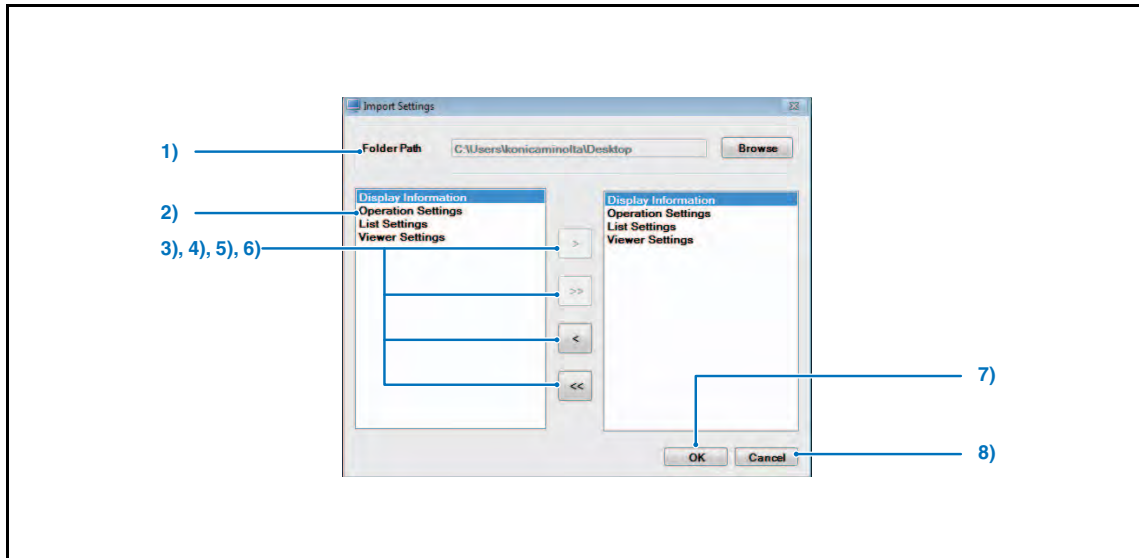
Allows selection of setting copy methods.



| | Item | Function |
|----|---|---|
| 1) | Set Copy Method Selection Column | Select a Set Copy method here. Select from Import, Export, and Apply to All.  [Apply to All] only copies [Operation Settings] and [Display Information] settings as a batch to all client PCs. |
| 2) | [OK] button | The client setting copy screen is displayed according to the method selected in the setting copy method selection window. |
| 3) | [Cancel] button | Cancels setting copy. |

1-3) Client Setting Copy Screen

Allows import or export of the content of client settings.



| | Item | Function |
|----|--------------------------|--|
| 1) | File Path | For export : Specify the folder for saving of client settings For import : Specify the folder where exported client settings are saved. |
| 2) | Copy items list | Allows selection of items to be copied. |
| 3) | [>] button | Registers items selected from the copy items list. |
| 4) | [>>] button | Registers all items displayed on the copy items list. |
| 5) | [<] button | Cancels registration of items selected from the copy items list. |
| 6) | [<<] button | Cancels registration of all items on the copy items list. |
| 7) | [OK] button | Copies selected items and returns to the display information screen. |
| 8) | [Cancel] button | Returns to the display information screen without copying selected items. |

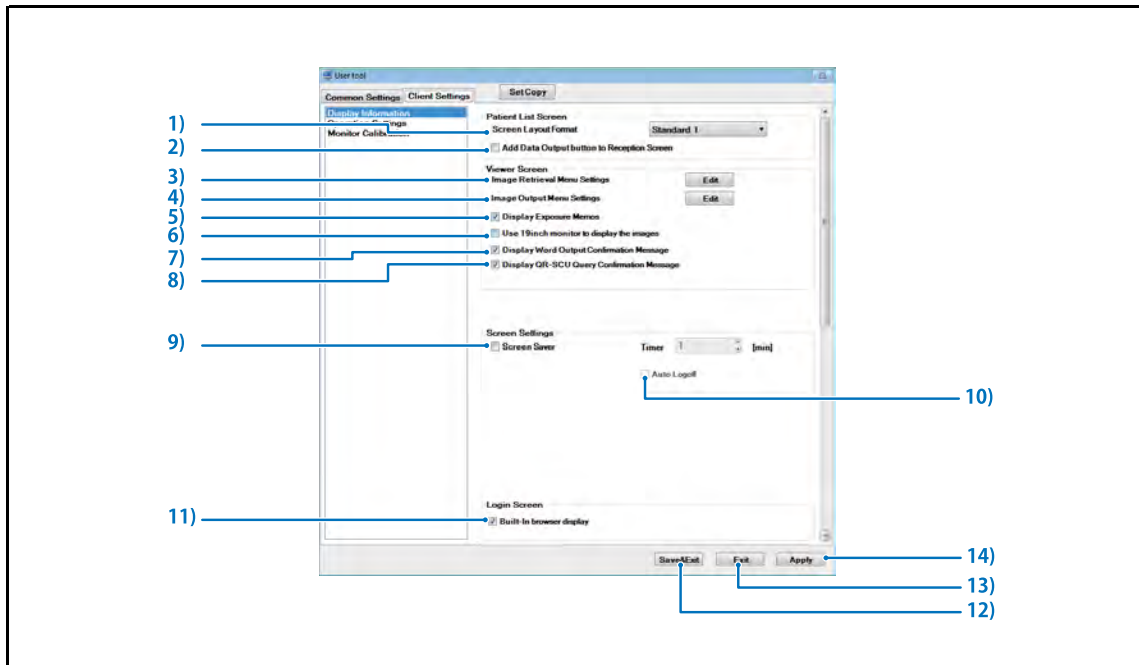


Precautions when copying the client settings




- **You must use the same version of ImagePilot.**
- **You cannot copy client settings between different groups.**
 <Ex.> The client information of a client belonging to a group on server A cannot be copied to a client belonging to a group on server B.
 If you copy across a separate group, ImagePilot could freeze.
 Client settings can be copied only when a client has been added into the same group.

2-1) Display Information Screen

Allows settings for ImagePilot screen display.

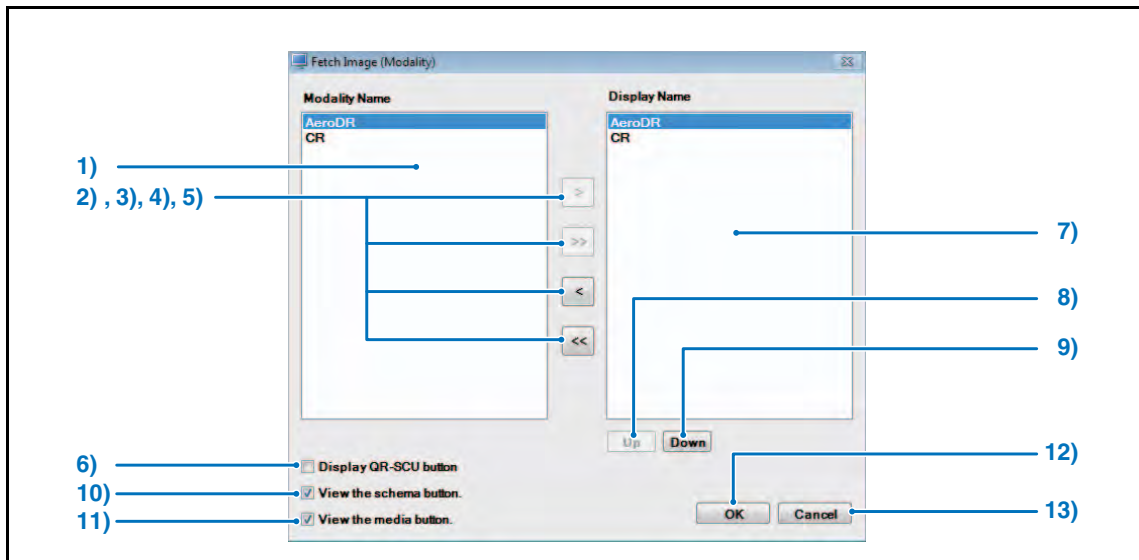


| Item | Default | Function |
|---|----------|--|
| Patient List Screen | | |
| 1) Screen Layout Format | Standard | Allows selection and layout of information displayed on the patient reception screen. For ImagePilot "Standard 1", "Standard 2", "Animal 1" or "Animal 2" may be selected. For ImagePilot-touch "Standard 1" or "Animal 1" may be selected. "Animal" is available for selection only when the ImagePilot is set for animal hospital use. "Standard 2" is identical to "Standard 1" with the addition of the "State" item. Allows selecting the data that has been created and saved through Common Settings → Operation Settings → Patient screen of the User Tool. |
| 2) Add Data Output button to Reception Screen | OFF | Sets whether or not to display the [Data Output] button on the reception screen. |
| Viewer Screen | | |
| 3) Image Retrieval Menu Settings | - | Allows editing of image acquisition button types and alignment displayed on the viewer screen. • The image acquisition menu editing screen is displayed. |
| 4) Image Output Menu Settings | - | Allows editing of image output button types and alignment displayed on the viewer screen. • The image output menu editing screen is displayed. |
| 5) Display Exposure Memos | ON | Check this box to display exposure memos on the viewer screen. |

| | Item | Default | Function |
|-----|--|---------|--|
| 6) | Use 19inch monitor to display the images | OFF | Check this box when 19inch(48cm) monitor is used for the image display. |
| 7) | Display Word Output Confirmation Message | ON | Allows setting the confirmation message that is displayed when out putting to MS Word. |
| 8) | Display QR-SCU Query Confirmation Message | - | Allows setting show/hide of the message, "It may take long to complete image acquisition" that will be displayed when the image acquisition is initiated by clicking the [Retrieve] button on the Query/ Retrieve screen. |
| 9) | Screen Saver | - | Allows setting use/nonuse of the screen saver. Set the time(min) before the screen saver is activated in the case when the screen saver is used. |
| 10) | Auto Logoff | OFF | Checking this item results in execution of the following operations depending on the screen currently displayed when the screen saver activation point has been reached. Patient reception screen, Search screen: Logoff Screens other than the patient reception screen, search screen: Automatic user-away-from desk setting. This function is available for use when the screen saver function is enabled. |
| 11) | Built-In browser display | ON | <p>When checked, a built-in browser is displayed during client PC login.</p> <ul style="list-style-type: none"> • Login Screen when checked (Built-in Browser Login Screen)  <ul style="list-style-type: none"> • Login Screen when unchecked (Normal Login Screen)  <p>This option is only enabled when the [Built-In browser display] on [Common Settings] tab is checked.</p> <p> p.279 Display built-in browser screen</p> |
| 12) | [Save&Exit] button | - | Saves edited settings and exits User Tool. <ul style="list-style-type: none"> • Returns to OS desk top screen. |
| 13) | [Exit] button | - | Exits User Tool without saving edited settings. <ul style="list-style-type: none"> • Returns to OS desk top screen. |
| 14) | [Apply] button | - | Saves edited settings and reflects changes in current display. User Tool are not exited enabling further editing. |

2-2) Fetch Image (Modality) Screen

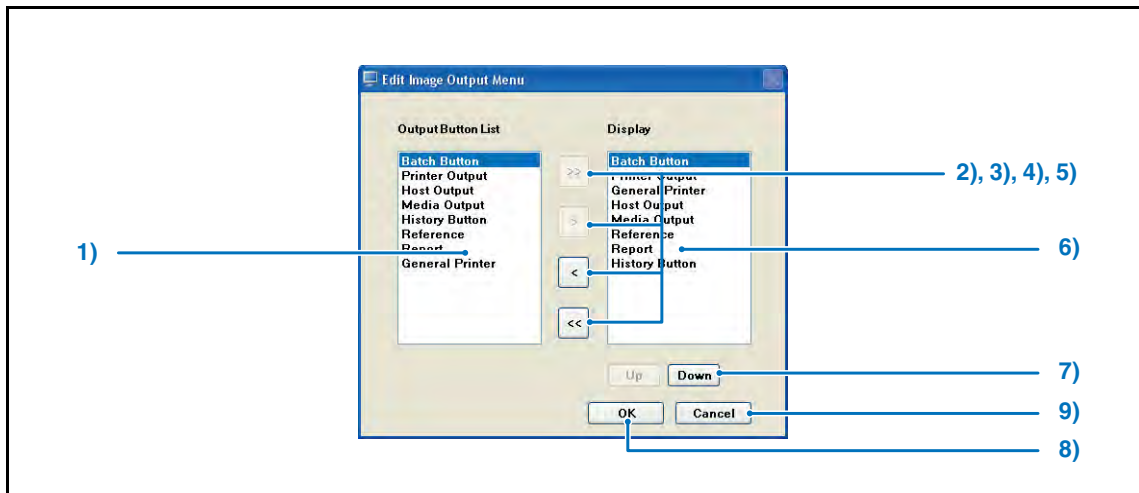
Allows setting of modality buttons displayed on the image acquisition menu at the top of the viewer screen.

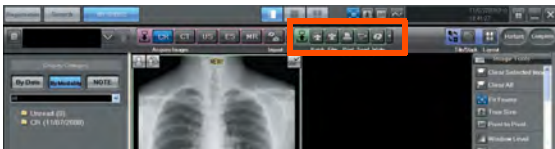


| Item | Function |
|--|---|
| 1) Modality Name List | Displays the modalities that can be registered with the image acquisition menu. When set in cooperation with an outside application, set options are listed, and application cooperation can be displayed on the image capture menu. If a setting is needed, please contact our service representative. |
| 2) [>] button | Registers the modality selected in the modality list. |
| 3) [>>] button | Registers all modalities in the modality list. |
| 4) [<] button | Cancels the registration of the modality selected in the modality list. |
| 5) [<<] button | Cancels the registration of all modalities selected in the modality list. |
| 6) [Display QR-SCU button] checkbox | Ticking this checkbox will display the [QR(Query/Retrieve)] button in the field for the modality buttons. |
| 7) Display Name List | Displays the modalities registered with the image acquisition menu. |
| 8) [Up] button | Moves up the modality selected in the display name list by one line. |
| 9) [Down] button | Moves down the modality selected in the display name list by one line. |
| 10) View the schema button. | Checking it will display the [Schema] button on the image import menu. Also, this function is an option. Normally it is not displayed. |
| 11) View the media button. | Checking it will display the [Media] button on the image import menu. Also, this function is an option. Normally it is not displayed. |
| 12) [OK] button | Saves edited image acquisition menu settings and returns to the display information screen. |
| 13) [Cancel] button | Returns to the display information screen without saving edited image acquisition menu settings. |

2-3) Edit Image Output Menu Screen

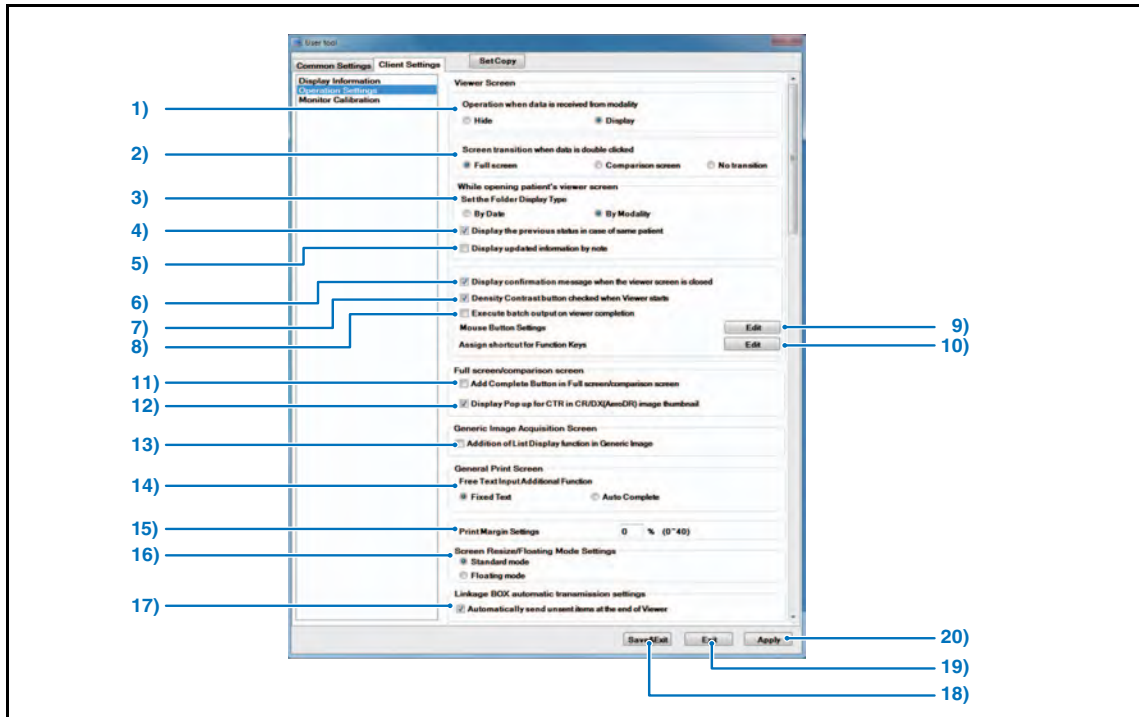
Allows setting of items displayed on the image output menu at the top of the viewer screen.






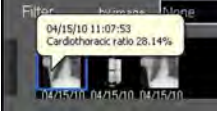
| | Item | Default | Function |
|----|---------------------------|---|--|
| 1) | Output Button List | - | Displays items that can be set as the output button in list. |
| 2) | [>>] button | - | Registers all items listed in the output button list. |
| 3) | [>] button | - | Registers the item selected in the output button list. |
| 4) | [<] button | - | Cancels registration of the item selected in the output button list. |
| 5) | [<<] button | - | Cancels registration of all items selected in the output button list. |
| 6) | Display Target | 1 : Batch button 2 : Printer Output 3 : Host Output 4 : Media Output 5 : History button 6 : Reference 7 : Report 8 : Generic Printer | Sets the layout of output buttons displayed on the viewer screen. Select from [Batch Output] button, Imager, Output to Host, Output to Media, [History] button, Referral Form and Report, Generic Printer.  |
| 7) | [Up][Down] button | - | Switches the position of display target. |
| 8) | [OK] button | - | Saves edited output button settings and returns to the display information screen. |
| 9) | [Cancel] button | - | Returns to the display information screen without saving edited output button settings. |

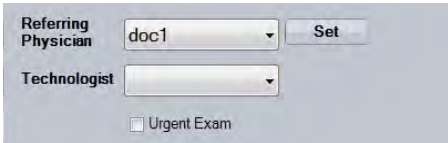
3-1) Operation Settings screen

Allows setting of ImagePilot operation.



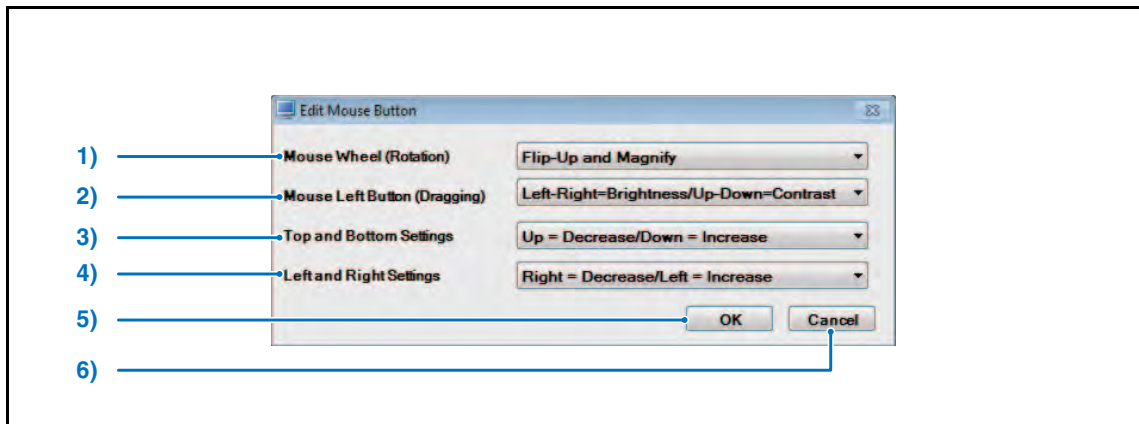
| | Item | Default | Function |
|----------------------|---|-------------|---|
| Viewer Screen | | | |
| 1) | Operation when data is received from modality | Display | Allows selection of operation executed when image data is received from the exposure device. "Hide", "Display" may be selected. |
| 2) | Screen transition when data is double clicked | Full Screen | Allows selection of operation executed when image data is double clicked. "Full Screen", "Comparison Screen" or "No Transition" may be selected. Full Screen : Full screen is displayed. Comparison Screen : The comparison screen is displayed. No transition : Preserves the status of the screen currently displayed. |
| 3) | Set the Folder Display Type | By Modality | Sets either "By Date" or "By Modality" as the display type when the viewer screen is displayed. Caution: Checking [Display the previous status in case of same patient], will be prioritize this setting. Remove the check on [Display the previous status in case of same patient] when the set folder display type is to be set even when the patient viewer screen is displayed again. However, in such cases, the screen displayed when the previous screen was exited will not be saved. |
| 4) | [Display the previous status in case of same patient] checkbox | ON | Check this box to display the images in the same condition as they were displayed in the viewer field next time the viewer screen is opened for the same patient. |

| | Item | Default | Function |
|----------------------------------|--|---------|---|
| 5) | [Display updated information by note] checkbox | OFF | Check this box to automatically display in the Note mode the unread data in viewing field if it exists, keeping the new Note folder selected. Displays the latest Note status if the unread data does not exist. |
| 6) | [Display confirmation message when the viewer screen is closed] checkbox | ON | Check this box to display a message confirming whether to exit the viewing when it is attempted to close viewer screen by clicking the [Complete] button. |
| 7) | [Density Contrast button checked when Viewer starts] checkbox | ON | Checking this item allows the [Window Level] button to turn ON upon startup of the viewer screen. |
| 8) | [Execute batch output on viewer completion] checkbox | OFF | Checking this item allows batch output upon closing the viewer screen with [Exit] button.  p.246 Batch Output |
| 9) | Mouse Button Settings | - | Allows editing of allocation of mouse functions. The Confirm Mouse Button screen is displayed.  p.366 3-2) Edit Mouse Button Screen |
| 10) | Assign shortcut for Function Keys | - | Edit the function assigned to the keyboard. <ul style="list-style-type: none"> • Assigns the function to F1 to F10 keys of the keyboard.  p.367 3-3) Function Key Settings Screen |
| Full screen / comparison screen | | | |
| 11) | [Add Complete Button in Full screen/comparison screen] checkbox | OFF | Sets whether to display [Complete] button at the upper right of the Full screen or Comparison screen. Displaying [Complete] button allows returning to the Patient Reception screen from both Full screen and Comparison screen. |
| 12) | [Display Pop up for CTR in CR/DX(AeroDR) image thumbnail] checkbox | ON | Sets whether the Cardio Index pops up on the Full screen and Comparison screen when the cursor is placed on the thumbnail that is displayed at the lower part of the screen. (bellow is the example when the setting is ON)  |
| Generic Image Acquisition Screen | | | |
| 13) | [Addition of List Display function in Generic Image] checkbox | OFF | Sets whether or not to display the [List Display] button used to move from the Generic Image Acquisition Screen to the Generic Image List Screen. |

| | Item | Default | Function |
|---|---|---------------|--|
| General Print Screen | | | |
| 14) | Free Text Input Additional Function | Fixed Text | Allows entering the free memo on the Generic Print screen and selecting the option for input support. Fixed Text : Allows selection and input of the script by registering the description as the fixed script. Auto Complete : Allows automatically displaying the text by predicting the spell from the text that has been input and recorded. |
| 15) | Print Margin Settings | 0% | Sets the margin when generic printing is performed. |
| Screen Resize / Floating Mode Settings | | | |
| 16) | Screen Resize / Floating Mode Settings | Standard mode | Checking [Floating mode] allows the ImagePilot screen to float instead of full screen mode. In addition, zooming of the screen is enabled. Note: When the screen is reduced exceeding the minimum resolution (1240 x 1024 pixels) allowed for ImagePilot, a scroll bar will be displayed. |
| Linkage BOX automatic transmission settings | | | |
| 17) | Automatically send unsent items at the end of Viewer | OFF | Shows the Set button to specify the destination of automatic transmission of the Collaboration Box on the reception dialogue box when this is checked.  Caution: To show this, the Collaboration Box setting needs to be enabled. |
| 18) | [Save&Exit] button | - | Saves edited settings and exits User Tool. • Returns to OS desk top screen. |
| 19) | [Exit] button | - | Exits User Tool without saving edited settings. • Returns to OS desk top screen. |
| 20) | [Apply] button | - | Saves edited settings and reflects changes in current display. User Tool are not exited enabling further editing. |

3-2) Edit Mouse Button Screen

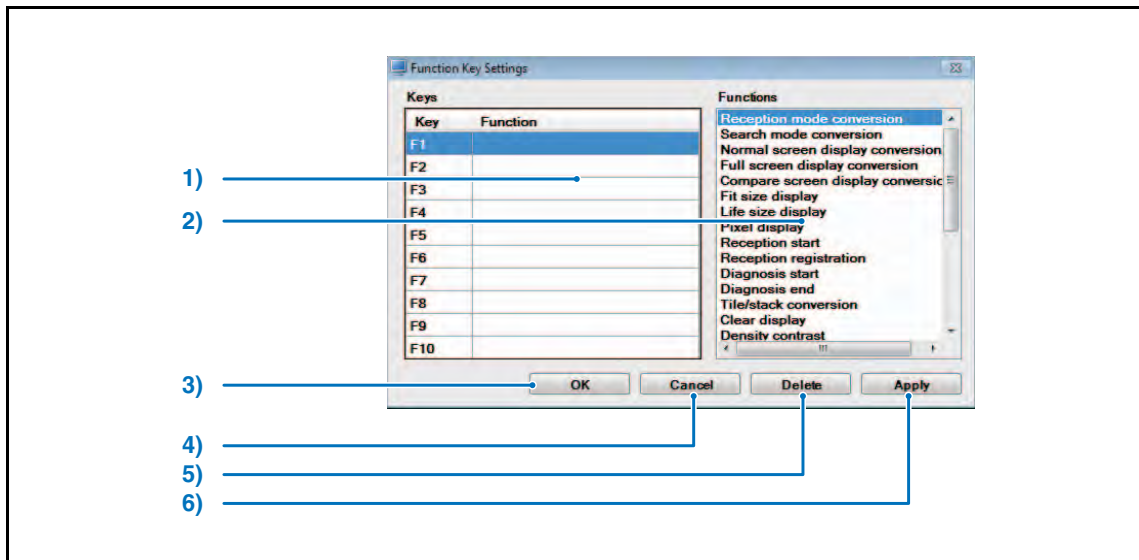
Allows setting of operations executed by the left and right mouse buttons in the viewing field of the viewer screen.



| | Item | Default | Function |
|----|--|--|---|
| 1) | [Mouse Wheel (Rotation)] pull-down menu | Flip-Up and Magnify | Allows setting of image enlargement or reduction matched to the direction of rotation of the mouse wheel. "Flip-Down and Magnify" or "Flip-Up and Magnify" may be selected. |
| 2) | [Mouse Left Button (Dragging)] pull-down menu | Left-Right=Brightness / Up-Down=Contrast | Allows setting of image processing matched to the direction in which the mouse is dragged. "Left-Right =Brightness/Up-down = contrast" or "Left-Right = contrast/Up- down = Brightness" may be selected. |
| 3) | [Top and Bottom Settings] pull-down menu | Up=Decrease / Down=Increase | Allows setting of image processing increase/decrease matched to the vertical direction in which the mouse is dragged. "Up=Increase/Down=Decrease" or "Up=Decrease/Down=Increase" may be selected. |
| 4) | [Left and Right Settings] pull-down menu | Right = Decrease/ Left = Increase | Allows setting of image processing increase/decrease matched to the horizontal direction in which the mouse is dragged. "Right = Increase/Left = Decrease" or "Right = Decrease/Left = Increase" may be selected. |
| 5) | [OK] button | - | Settings are saved and the button editing screen exited. |
| 6) | [Cancel] button | - | Exits the button editing screen without saving settings. |

3-3) Function Key Settings Screen

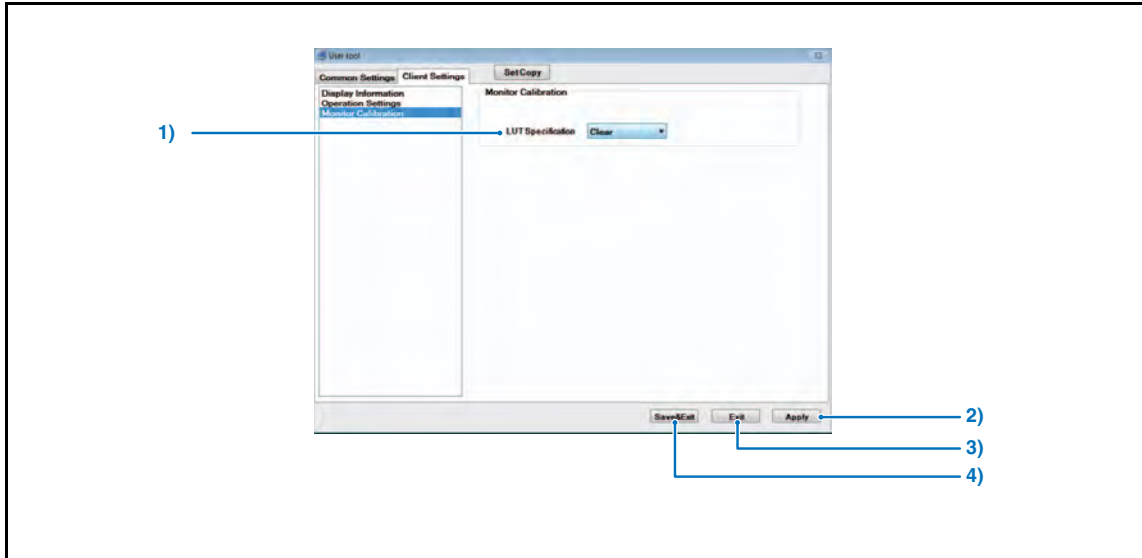
Allows assigning the function to function keys (F1 to F10) of the keyboard.



| | Item | Default | Function |
|----|-------------------------|---------|--|
| 1) | Keys (F1 to F10) | - | Displays the association between the key (F1 to F10) and the assigned function. Select the function to be assigned after selecting the key, and click the [Apply] button to assign the selected function to that key. |
| 2) | Functions | - | Displays in list the functions to be assigned to F1 to F10. |
| 3) | [OK] button | - | Saves the settings and exits the key assignment screen. |
| 4) | [Cancel] button | - | Exits the key assignment screen without saving the settings. |
| 5) | [Delete] button | - | Deletes the selected assignment. |
| 6) | [Apply] button | - | Saves the edited settings and applies the settings to the current display. Key assignment screen remains open, allowing editing to continue. |

4-1) Monitor Calibration


A screen to implement settings of LCD monitor.

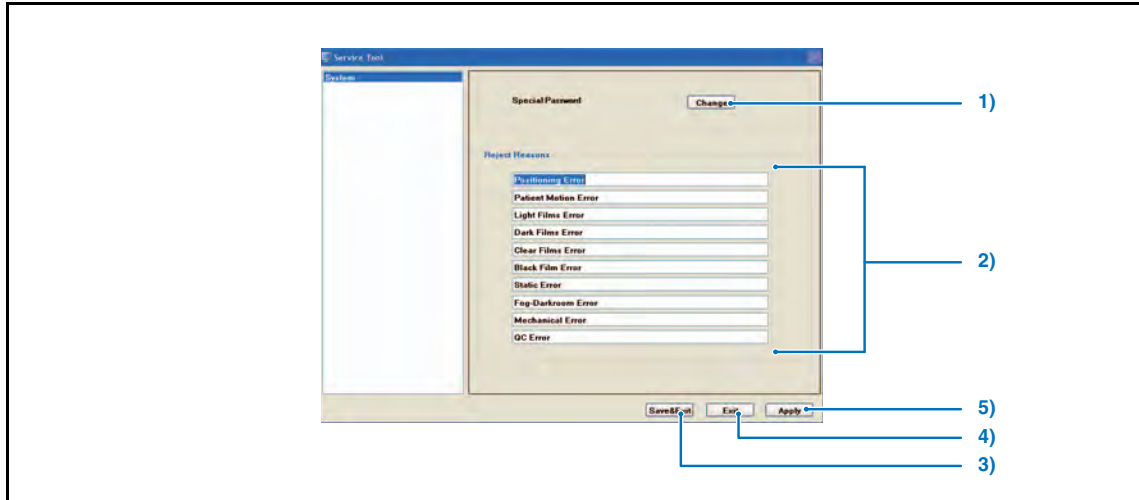



| | Item | Default | Function |
|----|-------------------------------|---------|--|
| 1) | LUT Specification | Clear | Selects the display LUT type. Select from "Clear", "blue1", "blue2", "blue3". |
| 2) | [Save&Exit] button | - | Saves edited settings and exits User Tool. • Returns to OS desk top screen. |
| 3) | [Exit] button | - | Exits User Tool without saving edited settings. • Returns to OS desk top screen. |
| 4) | [Apply] button | - | Saves edited settings and reflects changes in current display. User Tool are not exited enabling further editing. |

9.4 User Tool Operation (for administrators)

NG reasons can be edited at this screen.

 The User Tool (for administrators) shipping password is "9012". Change the password as needed, and manage while the administrator is present.



| | Item | Function |
|----|-------------------------------|---|
| 1) | [Change] button | Manage the password entered when starting up User Tool (for administrators). Click the [Change] button to display the Manage password screen.  p.351 9-2) Manage Password Screen |
| 2) | [Reject Reasons] | When clicking the [NG] button at the Viewer Screen, you can edit the NG reason that is displayed. |
| 3) | [Save&Exit] button | Saves edited settings and exits User Tool. • Display returns to the OS desk top screen. |
| 4) | [Exit] button | Exits User Tool without saving edited settings. • Display returns to the OS desk top screen. |
| 5) | [Apply] button | Saves edited settings and reflects changes in the current display. User Tool is not exited enabling further editing. |

Chap. **10**
Options

This chapter describes optional functions and devices available for ImagePilot.

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10.1 Options

Optional equipment are available for the ImagePilot as described below.

| Name | Type | Remarks |
|-------------------------------|------------------|---|
| 17inch color LCD monitor | RadiForce MS170 | 17inch (43cm) |
| 19inch color LCD monitor | RadiForce MX191 | 19inch (48cm) |
| 21inch color LCD monitor | RadiForce MX210 | 21.3inch (54cm) |
| 24inch color LCD monitor | RadiForce MX241W | 24.1inch (61cm) |
| 2M color LCD monitor | RadiForce RS210 | 20.8inch (53cm) |
| 3M color LCD monitor | RadiForce RX320 | 24.1inch (61cm) |
| High resolution graphic board | SMD3-DUL | For Client PC (ThinkCentre M55) /Server (IntelliStation M Pro) |
| High resolution graphic board | FireMV2250 | For Client PC (ThinkCentre M58) Compatible with 3M Color LCD Monitor |
| Multi-monitor graphic board | FireMV2200 | For Client PC (ThinkCentre M55 / ThinkCentre M57)Compatible with 21inch, 24inch, 2M Color LCD Monitor |
| NAS | ReadyNAS Pro | File server to be connected to the network. |



For details of cautions relating to usage, operational procedures and specifications of each of the above, please refer to relevant user manual.

10.2 Optional Functions

The following optional functions are available for use with ImagePilot.

| Name | Remarks |
|---|---|
| ImagePilot CLIENT ADDITIONAL#2 | Functions that allow client PCs to interface with the system containing ImagePilot. Maximum nine units can be added. <Important> However, maximum of only 7 units of server and client PCs in combination can access the data at the same time on the network. |
| ImagePilot CLIENT ADDITIONAL#3 | |
| ImagePilot CLIENT ADDITIONAL#4 | |
| ImagePilot CLIENT ADDITIONAL#5 | |
| ImagePilot CLIENT ADDITIONAL#6 | |
| ImagePilot CLIENT ADDITIONAL#7 | |
| ImagePilot MODALITY ADDITIONAL#1 | |
| ImagePilot MODALITY ADDITIONAL#2 | |
| ImagePilot MODALITY ADDITIONAL#3 | |
| ImagePilot MODALITY ADDITIONAL#4 | |
| ImagePilot MODALITY ADDITIONAL#5 | |
| ImagePilot DICOM STORAGE ADDITIONAL#1 | Functions that allow ImagePilot to export images to the image servers such as PACS using DICOM Storage. Output devices equivalent to the number of options purchased can be utilized. Maximum five units can be added. |
| ImagePilot DICOM STORAGE ADDITIONAL#2 | |
| ImagePilot DICOM STORAGE ADDITIONAL#3 | |
| ImagePilot DICOM STORAGE ADDITIONAL#4 | |
| ImagePilot DICOM STORAGE ADDITIONAL#5 | |
| ImagePilot DICOM STORAGE EXPAND OPTION | HOST output: 6~10ch |
| ImagePilot DICOM PRINT ADDITIONAL#1 | Functions that allow ImagePilot to output to DICOM printers or generic printers. |
| ImagePilot DICOM PRINT ADDITIONAL#2 | |
| ImagePilot DICOM PRINT ADDITIONAL#3 | |
| ImagePilot DICOM PRINT ADDITIONAL#4 | |
| ImagePilot DICOM PRINT ADDITIONAL#5 | |
| ImagePilot MEDIA INPUT OPTION | Function that allows ImagePilot to capture images from various media such as digital camera, memory card, CD or DVD. |
| ImagePilot HIGH SPEED SCANNING OPTION | HIGH SPEED SCANNING license |
| ImagePilot HIGH SPEED SIGMA45 OPTION | Become available to 45 Plate/Hour for Sigma. |
| ImagePilot HIGH SPEED SIGMA60 OPTION | Become available to 60 Plate/Hour for Sigma. |
| ImagePilot DICOM Q/R SCU ADDITIONAL #1" | DICOM Q/R SCU License Max. 5ch Acquires images from the external host using DICOM Q/R. |
| ImagePilot DICOM Q/R SCU ADDITIONAL #2" | |
| ImagePilot DICOM Q/R SCU ADDITIONAL #3" | |
| ImagePilot DICOM Q/R SCU ADDITIONAL #4" | |
| ImagePilot DICOM Q/R SCU ADDITIONAL #5" | |

| Name | Remarks |
|---|--|
| ImagePilot DICOM Q/R SCP ADDITIONAL #1" | DICOM Q/R SCP License Max. 5ch Responds to DICOM Q/R inquiries sent from the external systems. |
| ImagePilot DICOM Q/R SCP ADDITIONAL #2" | |
| ImagePilot DICOM Q/R SCP ADDITIONAL #3" | |
| ImagePilot DICOM Q/R SCP ADDITIONAL #4" | |
| ImagePilot DICOM Q/R SCP ADDITIONAL #5" | |
| ImagePilot NAS BACKUP OPTION | Function that allows the data stored in ImagePilot to be backed up on NAS. |
| ImagePilot NAS EXPAND OPTION | Function that allows connection of NAS. |
| ImagePilot DVD BACKUP OPTION | DVD backup license |
| ImagePilot MONITOR SETUP TOOL | Function that allows connecting monitor calibration tool. |
| ImagePilot CINE OPTION | CINE tool license |
| ImagePilot RESOLUTION SWITCH OPTION | Function that allows ImagePilot to add resolution switch. |
| ImagePilot STITCHING OPTION | Function that allows ImagePilot to use STITCHING OPTION. |
| ImagePilot QC TOOL OPTION | QC Tool function. |
| ImagePilot SHARED PATIENT INFO OPTION | Function that allows ImagePilot to use SHARED PATIENT INFO OPTION. |
| ImagePilot HL7 CONNECTION OPTION | Allows the external system to acquire the patient/study information using HL7. |
| ImagePilot MWM/DETACHED OPTION | Function that allows MWM Link. |
| ImagePilot COLLABORATION BOX OPTION | Function that allows ImagePilot to use COLLABORATION BOX OPTION.(Available only for USA.) |
| ImagePilot DATA BANK OPTION | Function that allows ImagePilot to use DATA BANK OPTION. (Available only for USA.) |
| ImagePilot Data Bank Archiving OPTION | This enables you to use Data Bank Archiving mode. (Available only for USA.) |
| ImagePilot Spanning OPTION | Function that allows ImagePilot to use ImagePilot Spanning OPTION. (Available only for USA.) |
| ImagePilot REMOTE ACCESS OPTION | Function to allow the ImagePilot-CL that is installed outside the institution to access to the ImagePilot-SV at the institution. |
| ImagePilot VERSION 1.70 | License for upgrade to V1.70 |
| ImagePilot VERSION 1.62 | License for upgrade to V1.62 |
| ImagePilot VERSION 1.61 | License for upgrade to V1.61 |
| ImagePilot VERSION 1.60 | License for upgrade to V1.60 |
| ImagePilot VERSION 1.52 | License for upgrade to V1.52 |
| ImagePilot VERSION 1.51 | License for upgrade to V1.51 |
| ImagePilot VERSION 1.50 | License for upgrade to V1.50 |
| ImagePilot VERSION 1.41 | License for upgrade to V1.41 |

| Name | Remarks |
|---------------------------------------|---|
| ImagePilot VERSION 1.30 | License for upgrade to V1.30 |
| ImagePilot AeroDR OPTION | Function that allows ImagePilot to connect AeroDR SYSTEM. |
| ImagePilot AeroDR(G1) Speed Up Option | AeroDR(G1) High Speed License |



Please contact your service representative for details of options and optional functions.



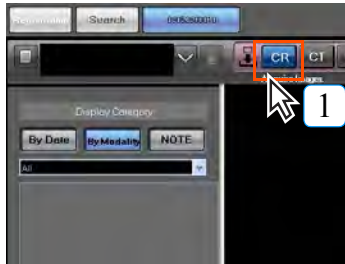
Available options may differ depending on the country where the system is installed.

10.2.1 Changing the Import Method of CR Images

This is the function to switch between the different import methods of CR images on the viewer screen.

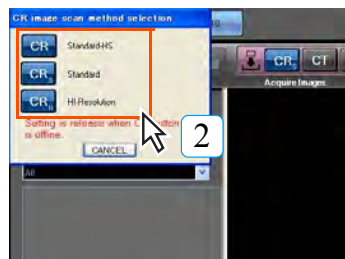
Following is the example of the procedure to switch from the Standard mode to the HI-Resolution mode.

- Standard-HS
Read/display/save at 175µm
- Standard
Read at 87.5µm, display/save at 175µm
- HI-Resolution
Read at 87.5µm, display/save at 87.5µm



1 With the modality button for CR on the viewer screen is ON, right-click on the button.


- CR image read method select screen will be displayed.




2 Select the import method of the CR image.

- Returns to the viewer screen after changing the import method.
- The [CR] button displayed on the viewer screen will be changed according to the import method selected.

 : Standard-HS

 : Standard

 : HI-Resolution



"S" will be displayed at the lower right of the icon for the "Standard" mode, "H" for the "HI-Resolution" mode.



For the system where the previewer is incorporated, it is not possible to change the scan method using the viewer other than the previewer.

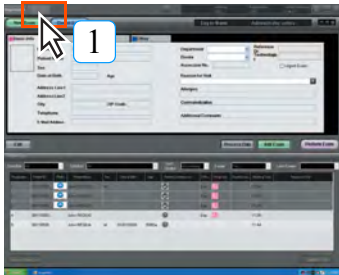
* Scan method can be changed using the User Tool.

10.2.2 Batch Output of Multiple Patient Images Function

Allows batch output of multiple patient images.
Also allows saving multiple patient images on a single media.

1) Sending to the host

Procedure to implement batch output of images to the host is described below.



1 Click the [Search] button.



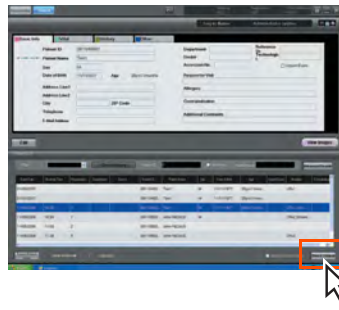
- Patient search screen will be displayed.



Batch output can be performed only with images assigned at the Viewer Screen.



p.380 Perform batch output only for assigned images



2 Click the [Batch Output] button.

- Batch output screen will be displayed.



Shutting down the PC when sending large images will cause the image transmission to fail. Resend it if the transmission fails.



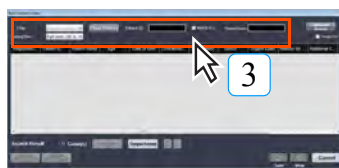
Search options from the [Batch output screen] dialogue box can be matched to the [Search Patient Screen] search option display content.



Click the [Advanced Search] button on the patient list of the Patient Search screen to conduct searches using more detailed search items.

Search items with [Advanced Search]

Search the date of birth, sex, modality, diagnosis fee, duration, physician's name, input items, temporary patient, Accession No., and link data only. (Setup by our service personnel is required.)



3 Set search conditions and click the [Search] button.

- Patients that match the condition will be displayed in list.



When used in veterinary clinics, you can search by owner name by selecting [Owner] from the [Name] pull-down menu.

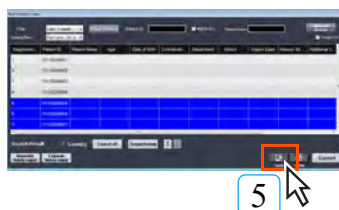


The sequence of information output when multiple patients are selected is determined by the list display. Click the up and down arrow buttons while selecting patient info to change the output sequence of selected patient info.



4 Click the patient information that should be output in batch mode.

- Patient's line changes to blue upon selection.



5 Click the [Send] button.

- Output to Host screen will be displayed.



Clicking the [Inspection history output] button or [Exposure history output] button will create and save the corresponding output history data as "csv" format file.




6 Select the write mode.




7 Click the [Send] button.


- Selected patient image will be sent to the host.
- After the image is sent to the host device, the following information is displayed in the reception list and the search list.


• **Reception list:**
Displays the Sent icon.

| Regius Icon | Urgent Exam | Booking Time | Host Output Done |
|-------------|-------------|--------------|---|
| | | 13:48 |  |

- **Search list:**
Displays the Sent icon and Send date (last date sent).

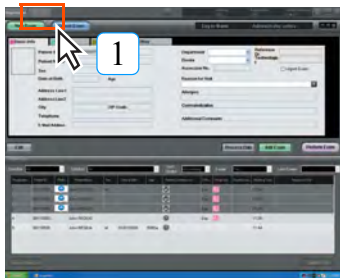
 Similarly as in the case of host output, functions such as reflection of DICOM overlay and anonymization of personal information can be used.

 p.253 Output to Host

 The Sent icon display is for REGIUS images only. Also, the imported REGIUS image of the actual day is displayed when the Send icon in the Reception list is input to all hosts.

2) Writing on the media

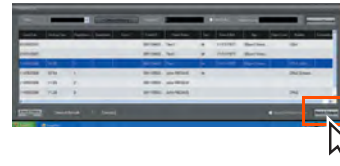
Procedures to write the image on the media are described below.



1 Click the [Search] button.

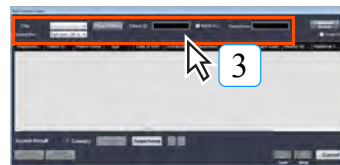


- Patient search screen will be displayed.



2 Click the [Batch Output] button.

- Batch output screen will be displayed.



3 Set search conditions and click the [Search] button.

- Patients that match the condition will be displayed in list.



When used in veterinary clinics, you can search by owner name by selecting [Owner] from the [Name] pull-down menu.



4 Click the patient information that should be output in batch mode.

When setting the output target to multiple patients

- Clicking while pressing [Ctrl] allows you to select more than one.
- Clicking the [Select All] button allows you to select all.
- When you want to output all in the displayed list order, after selecting the patient at the top of the list, click the [Select All] button.



5 Click the [Write] button.

- Export to Media screen will be displayed.



6 Select the write mode.

7 Click the [Writing of Word, PDF, Animation file] button.

- Selected patient image will be written on the media.



About [Terminate] button

Click the [Terminate] button if writing on the media should be cancelled halfway through.



Batch output can be performed only of images assigned at the Viewer Screen.



p.380 Perform batch output only for assigned images



Search options from the [Batch Output Screen] dialogue box can be matched to the [Search Patient Screen] search option display content.



If you set multiple sort in the [Sort Filter] pulldown menu, you can sort search results by multiple sorted items.



The sequence of information output when multiple patients are selected is determined by the list display. Click the up and down arrow buttons while selecting patient info to change the output sequence of selected patient info.



Clicking [Inspection History Output] button or [Exposure History Output] button will create and save each output history on "csv" format.





Setting [Personal Info Anonymization] checkbox to ON, the data will be written to the media without personal information of the patient.

Personal Info Anonymization

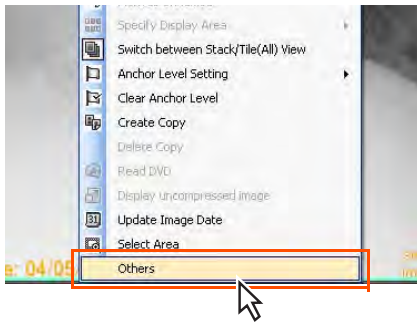
3) Perform batch output only for assigned images

This section explains how to perform batch output to host and media of specific images that were assigned at the Viewer Screen.


 This function can be used only when an option of Batch Output license is purchased and settings are done through [Common Settings] - [Operation Settings] - [Batch Output Anchor Settings].

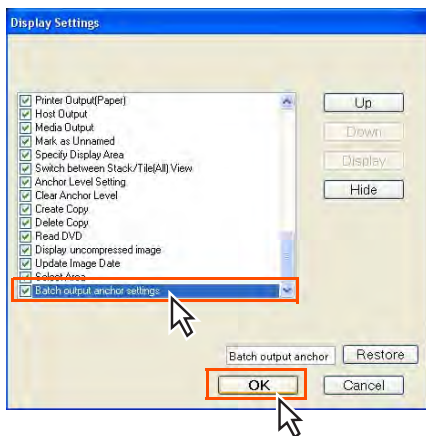
 p.292 Batch Output Anchor Settings

<Setting of Output Images>

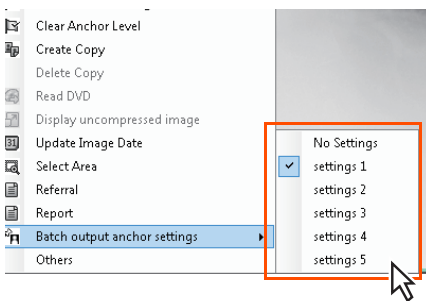


- 1 Display the image you want to output to the Viewer Screen.
- 2 Right click on the Viewer Screen to display the submenu.
- 3 Select [Others] from the submenu.
 - The [Display Settings] dialogue box is displayed.


 Shutting down the PC when sending large images will cause the image transmission to fail. Resend it if the transmission fails.

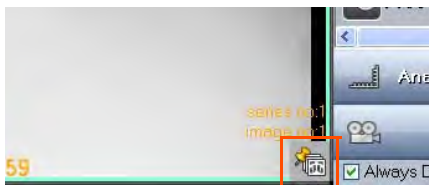


- 4 Fill in the [Batch output anchor settings] checkbox, then click the [OK] button.
 - The [Display Settings] dialogue box closes and the batch output anchor settings function is added to the Image tools and sub-menu.




- 5 Display the sub-menu either by selecting [Batch output anchor settings] in the Image tools or by right-clicking the viewer screen.
- 6 Click [Batch output anchor settings] from the sub-menu, and select the batch output anchor name assigned within the sub-menu.
 - A batch output anchor icon is displayed in the bottom right corner of the screen.

 Batch output anchor names displayed in the sub-menu can be edited by selecting [Common Settings] - [Operation Settings] - [Viewer] - [Batch output anchor settings] - [Edit] - [Bulk Output Name Edit Screen] in the user tools.



This concludes the steps required for output images set up. Images with this batch output anchor icon displayed are targeted for output. Set other images for output as needed.

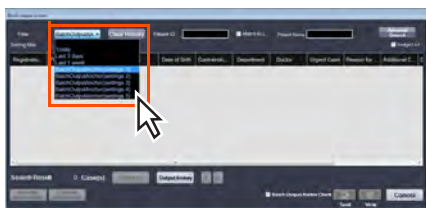
 A batch output anchor may be allocated to the indicated image even in the batch output screen.

<Image Output>



1 Click the [Batch Output] button at the Search Patient Screen.

- The [Batch output screen] dialogue box is displayed.



2 Select the batch output anchor name assigned to the image you want to output from the [Filter] pull-down list.

- Patients who meet the selected conditions are listed.



3 Click a patient for batch output.

When setting the output target to multiple patients

- Clicking while pressing [Ctrl] allows you to select more than one.
- Clicking the [Select All] button allows you to select all.
- When you want to output all in the displayed list order, after selecting the patient at the top of the list, click the [Select All] button.



Search options from the [Batch output screen] dialogue box can be matched to the [Search Patient Screen] search option display content.



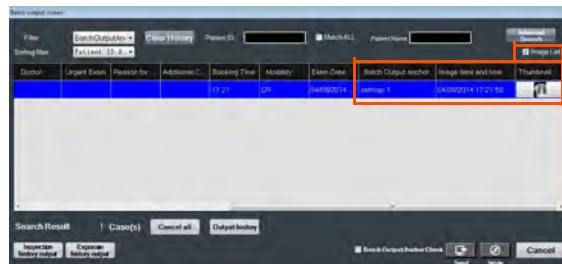
p.284 Combine the search item in Batch Output screen & Normal Search screen



If having selected multiple patients for output, the order of output will be the order of the displayed list.



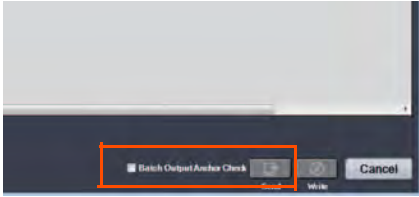
Place a check in the [Image List] checkbox to display [BatchOutput anchor], [Image date and time] and [Thumbnail] in the list, and the list displayed in modality units is displayed in image units.



Click the [Thumbnail] thumbnail to display the image.


Click the [Batch Output anchor] field to display the pull-down menu and enable the allocation of a batch output anchor to the selected images.

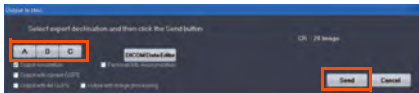
Note that the batch output anchor set here is the same as on the anchor setting.



4 Fill in the [Batch Output Anchor Check] checkbox, then press the Output Destination button.

- The steps below will differ depending on the destination selected for output.
When outputting to a host, click the [Send] button and move on to step 5.
When outputting to media, click the [Write] button and move on to step 6.

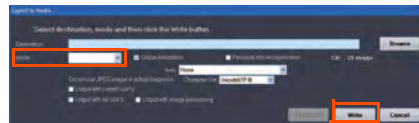
 If the [Batch Output Anchor Check] checkbox is not selected in Step 4, the batch output anchor will not be released.



5 Select a host to send to at the [Output to Host] dialogue box, then click the [Send] button.

- The batch output anchor settings configured with the output image will be released after the image has been output.

This concludes the steps taken for outputting multiple assigned patient images to a host.



6 At the [Export to Media] dialogue box, select a mode from the [Mode] pulldown menu, then click the [Write] button.

- **Of the selected patient images, only those that are set with a batch output anchor will be output to the selected destination.**
After the images are output, their batch output anchor settings are removed.

This concludes the steps taken for outputting multiple assigned patient images to media.

10.2.3 Output Function for "Microsoft Word"

Function to allow creating and outputting the referral form and report.

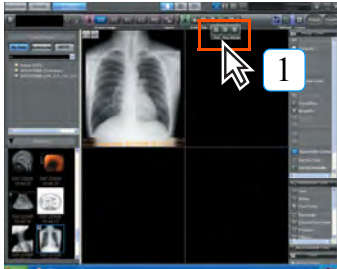


Bans when using Microsoft Word

Following should be prohibited when creating the report using Microsoft Word.
- Save with the name.



Do not deliver the Word file that contains the patient information in the form of electronic file in order to prevent falsification, further editing of the file.
When it is required to deliver the report, deliver it in the form of print out or PDF.



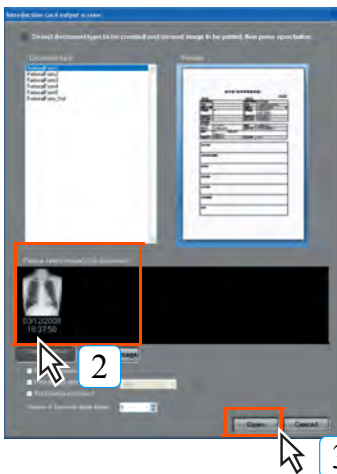
1 Click the [Ref] for referral form or [Rep] button for report.



- Word output screen will be displayed.



The printed report created by using the report function can be used for the purpose of informed consent.

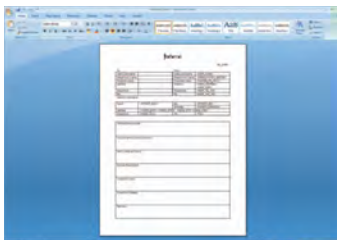


2 Select the image that should be placed on the referral form or report.

- Frame of the selected image changes to blue.
- Clicking the [Clear selected image] button will clear the selection of all images.
- Clicking the [Select all images] button will select all images.
- Double-clicking the image will show the enlarged image.

3 Click the [Open] button.

- Microsoft Word starts up.
- Patient information that the ImagePilot possesses will be automatically entered.



4 Input the items as required, and print or create PDF file.

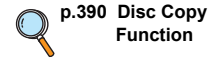


Created referral form or report will be displayed with the Microsoft Word icon on the viewer screen.
Double-clicking this icon will automatically start Microsoft Word, allowing edition of the file again.

10.2.4 DVD Backup Function

This is the function to back up the image to DVD.

In addition, a disc copy function that allows copies of discs is also implemented.

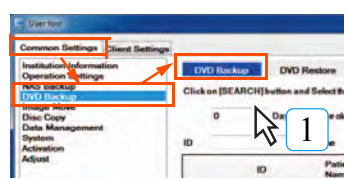


DVD backup function is the option.

Please note the following before start using the DVD backup function.

- Output after the DVD backup
When the original image is deleted from the ImagePilot-SV by implementing the DVD backup, it is possible to display the image on the Viewer screen using [DVD Import] but not possible to implement the Imager output, Generic Printing or Report Output. It is always necessary to implement "DVD Restore" to enable these outputs.
- About the image copy
When the original image is deleted from the ImagePilot-SV by implementing the DVD backup, it is possible to copy that image.
- CR and AeroDR image adjustment after the DVD backup
If you performed the DVD backup through a setting that deletes the original image from ImagePilot-SV, then afterwards read the CR and AeroDR images through [DVD Import], and then performed [Image Adjustment], the results of those image adjustments will not be reflected on the images displayed immediately after DVD Restore. To reflect the adjustments, make sure to re-open the [Image Adjustment] screen after restoring.

10.2.4.1 Procedure to implement DVD backup



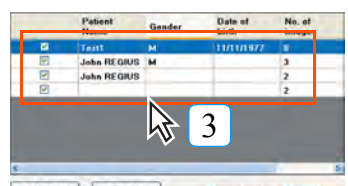
- 1 Start the User Tool, and select [Common Settings] → [DVD Backup]. Then select "DVD Backup" tab.
- DVD Backup screen will be displayed.

Image comment will not be backed up.



- 2 Specify the condition with which the patient to be backed up is selected, and click [Search].
- Select the time period(Older patient images).
 - Search Image whose DVD backup is completed.
 - Search by ID.
 - Search by Name.
 - Patients hit by the search will be displayed in list.

Search will be made using the search keys in overlapping manner. Therefore, if the target patient is not found, try searching again by reducing some search keys.



- 3 Select the target for backup.
- Those with check mark in the leftmost column will be the target.
 - All patient displayed are set as the target by default.
 - Using the [Select All/Free All] button, all patients can be selected or deselected as the target.



- 4 Select the mode for DVD backup, and click [Start DVD Backup] button.
- Confirmation dialogue box will be displayed.



Backup Procedure

There are two different procedures for backup.

1. Delete the original image from the server.

Deletes the original image of the target patient from the ImagePilot server. The deleted image of the patient is no longer available for viewing. It is necessary to implement [DVD Import] from the backup DVD on the Viewer screen or [DVD Restore].

2. Create JPEG2000 image

Create the JPEG2000 file format image that is stored in DVD and leave it on the server. Doing so allows a simple view of the image after backup & deletion of original image. However, pay attention in the study to the icon attached to the image, indicating that the image is JPEG2000.

(The displayed image may be rough depending on the image format)



When the original image is deleted from the server without creating JPEG2000 image, a message will be displayed on the Viewer screen as shown on the right.

ID of the DVD in which the original image is backed up will be displayed at the lower right of the screen.



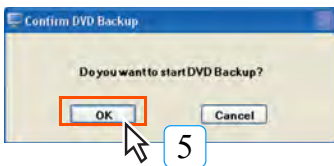
Original image will not be deleted even when implementing [Create JPEG2000 image] if the original image format is generic such as JPEG or AVI.

Note: Leaves the original JPEG or AVI as it is.



Following function becomes invalid or operation disabled for the created JPEG2000 image.

- Image adjustment (CR and AeroDR images only)
- Initialization (CR and AeroDR images only)
- Selection of display preset



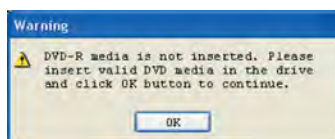
5 Click the [OK] button.

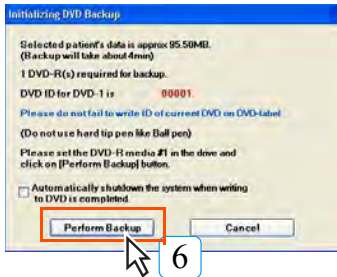
- A dialogue box "Initializing. . ." will be displayed and information concerning the backup procedures that takes place will be displayed. The information is as follows;

- Total volume to be backed up (size)
- Number of DVDs required.
- What number DVD shall be set in the drive.
- ID of the DVD.
- Whether to shut down the system when writing to DVD is completed. (Default: Unchecked)



If the DVD media is not set at this point, a warning message as shown on the right will be displayed. Set the blank DVD in the drive, and click [OK] button.



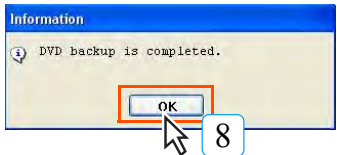


6 Read and confirm the instruction on the screen, and set the blank DVD in the drive. Then click [Perform Backup] button.



7 Backup to DVD starts.


- DVD is ejected and pulled back to the drive in the course of DVD backup process. Do not touch the DVD during the process.
- Backup is completed when a message "DVD backup is completed" is displayed.



8 Click [OK] button.

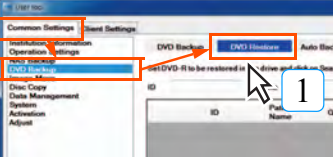
- DVD will be automatically ejected as soon as the writing to the DVD is completed.
- Put the identification on the label of DVD in preparation for restoration, etc. later.

10.2.4.2 Procedure for DVD Restore

 DVD Restore is available for the same ImagePilot from which the backup to the DVD is implemented.


1 Start the User Tool, and select [Common Settings] → [DVD Backup]. Then select "DVD Restore" tab.


- DVD Restore screen will be displayed.



2 Specify the condition with which the patient to be restored is selected, and click [Search].

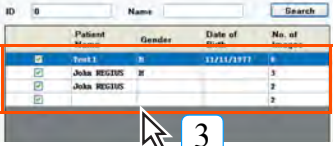
- Search by ID.
- Search by Name.
- Patients hit by the search will be displayed in list.



 Search will be made using the search keys in overlapping manner. Therefore, if the target patient is not found, try searching again by reducing some search keys.

3 Select the target for restore.

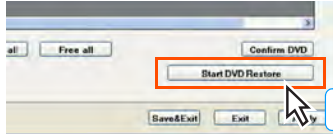
- Those with check mark in the leftmost column will be the target.
- All patient displayed are set as the target by default.
- Using the [Select All/Free All] button, all patients can be selected or deselected as the target.



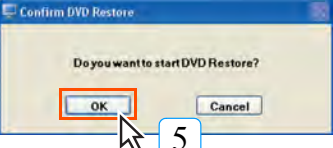
| ID | Name | Gender | Date of Birth | No. of Images |
|-------------------------------------|-------------|--------|---------------|---------------|
| Test 1 | | M | 11/11/1977 | 6 |
| <input checked="" type="checkbox"/> | John REGIUS | M | | 3 |
| <input checked="" type="checkbox"/> | John REGIUS | M | | 2 |
| <input checked="" type="checkbox"/> | John REGIUS | M | | 2 |


4 Click the [Start DVD Restore] button.

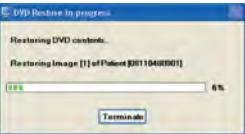
- Confirmation dialogue box will be displayed.



5 Click the [OK] button.

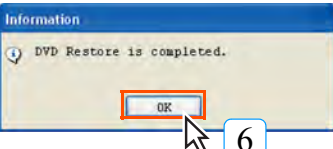


 To cancel restoration, click [Terminate] button on the "Restoring DVD contents . . ." window.




- Restore is completed when the message "DVD Restore is completed." is displayed.


6 Click the [OK] button.



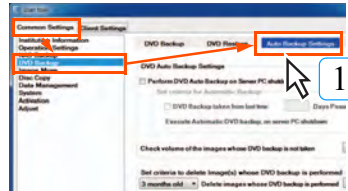
10.2.4.3 Procedure for DVD Auto Backup

The procedure for setting the auto backup that allows automatic backup to DVD at the time when the server PC is shut down is described below.

 Image comment will not be backed up.

 This function cannot be used in combination with NAS Auto Backup. Therefore, when the NAS Auto Backup is enabled, DVD Backup function cannot be used.

1 Start the User Tool, and select [Common Settings] → [DVD Backup]. Then select "Auto Backup Settings" tab.



- Auto Backup Settings screen will be displayed.

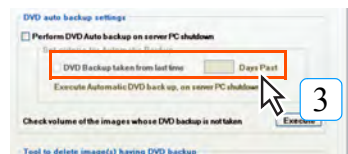
2 Check the checkbox for [Perform DVD Auto backup on server PC shutdown].



- Putting the check mark in this box enables to check the volume of all images that are not backed up at each time when the server PC is shut down, and a dialogue box prompting backup will be displayed when the total volume reaches the capacity of one DVD.



3 To implement backup at certain interval instead of checking the volume, check the checkbox for [DVD Backup taken from last time] of "DVD auto backup settings", and specify the days for the interval.

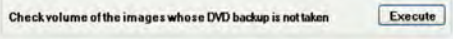


- The interval can be selected from "1 to 99 days".



Other functions of DVD Auto Backup

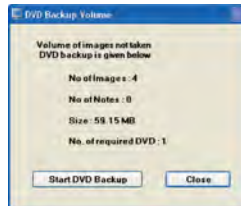
In addition, following options can be set on the DVD Auto Backup screen.



Check volume of the images whose DVD backup is not taken

Clicking [Execute] button of "Check volume of this images whose DVD backup is not taken" will display the following dialogue box, enabling to check the total volume of images in the server PC, which are not backed up.

Click [Start DVD Backup] to implement backup as it is now.



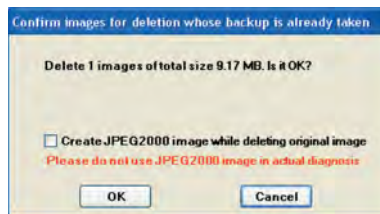
Set the search period.

Delete image whose DVD backup is taken

Setting the period located on the tool for deleting the images already backed up to the DVD, and clicking [Execute] button will display the following dialogue box, enabling to delete the images backed up to the DVD.

Click [OK] button to implement deletion as it is now or click [OK] button after checking the checkbox for "Create JPEG2000 image while deleting original image" to create JPEG2000 image.


Note: Pay attention in the study to the icon attached to the image, indicating that the image is JPEG2000.

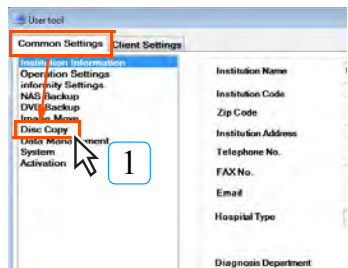


10.2.4.4 Disc Copy Function

This is the function to copy the contents of CD or DVD, allowing copies from DVD-R to DVD-R or CD-R to CD-R.

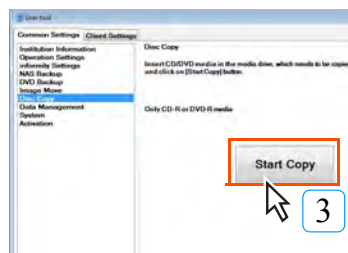
(However, it is not possible to copy from DVD-R to CD-R or CD-R to DVD-R)

 The data that is available for copy is only those edited on the ImagePilot.



1 Start the User Tool, and select [Common Settings] → [Disc Copy].

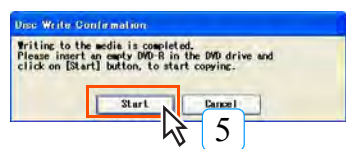
- Disc copy screen will be displayed.



2 Set the original disc to be copied in the drive.

3 Click the [Start Copy] button.

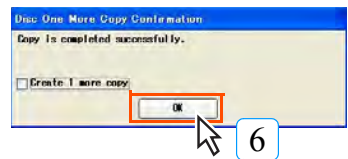
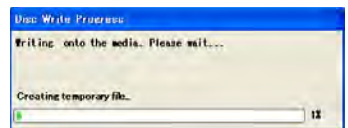
- After the "Wait for a while" message is displayed, it starts creating the image to be written.
- After the image has been created, a message prompting to set a blank CD-R or DVD-R will be displayed.



4 Set the blank disc (nothing written in) that is the same type as the copy original in the drive.

5 Click the [Start] button.

- After the "Wait for a while" message is displayed, it starts writing the image to the disc.
- After the image has been written, a message will be displayed.



6 Click the [OK] button.

- Returns to the disc copy screen.
- When another disc of the same type is successively created, tick the checkbox for "Create 1 more copy", and click the [OK] button. Repeat the procedures (step 4 to 6) to create another disc using the image created in the step 3.


10.2.5 Remote Access Function

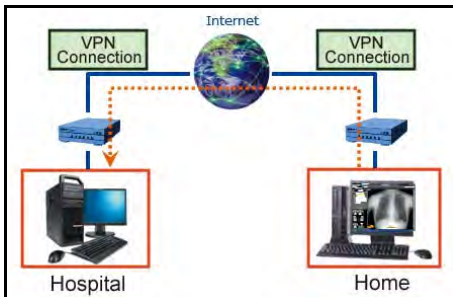
Allows the remote access function and ImagePilot WAN Client to be used.

10.2.5.1 Remote Access Function

The procedure how to use the remote access function is described below.

Enabling the remote access allows an access to the ImagePilot via internet (VPN connection).

 The Remote Access is an optional function.



1) About the Display in JPEG2000 Mode

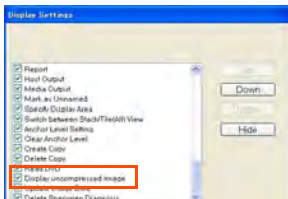
When the remote access is activated, the image may be displayed on the viewer in JPEG2000 format depending on the setting.

The following icon will be attached to the JPEG2000 image if it is so.



Some of image processing features are not available for JPEG2000 image. When such is the case, right-click on the target image, and select "uncompressed image display" from the displayed menu.

- If "Non-compressed image display" option is not located, select "Others" at the bottom, followed by selecting "Non-compressed image display".



When the following icon is displayed, the image is JPEG format, generated at the time of DVD backup. To display the original image, set the DVD of the indicated disc No. Then implement "DVD Retrieve" from the right-click menu.



2) Display Order of JPEG2000 Images

In the case where the JPEG2000 images have been already generated as the result of DVD backup or no original image is available when the remote access is performed, the display will be as follows;

| | | DVD Backup | | |
|------------------|-----------------------|--|--|------------------------------------|
| | | Original Image N/A JPEG2000 Image A/V | Original Image N/A JPEG2000 Image N/A | Original Image A/V |
| Remote Access | JPEG2000 Image A/V | JPEG2000 image of DVD Backup | JPEG2000 image of remote access | JPEG2000 image of remote access |
| | JPEG2000 Image N/A | JPEG2000 image of DVD Backup | No display (no image available) | Original image |

A/V : Available

N/A : Not Available

3) About the Import/Export of Remote Access

Import

Import from each modality is disabled when the remote access is in operation. (An error will be displayed when the modality button is clicked)

However, generic imports from media, imports of schema or cardiograph are possible.

Export

In the case when viewing JPEG2000 images while performing remote access, implementing the generic printing or write to media will result in output of JPEG2000 images.

Output to film or host will be made with the original images.

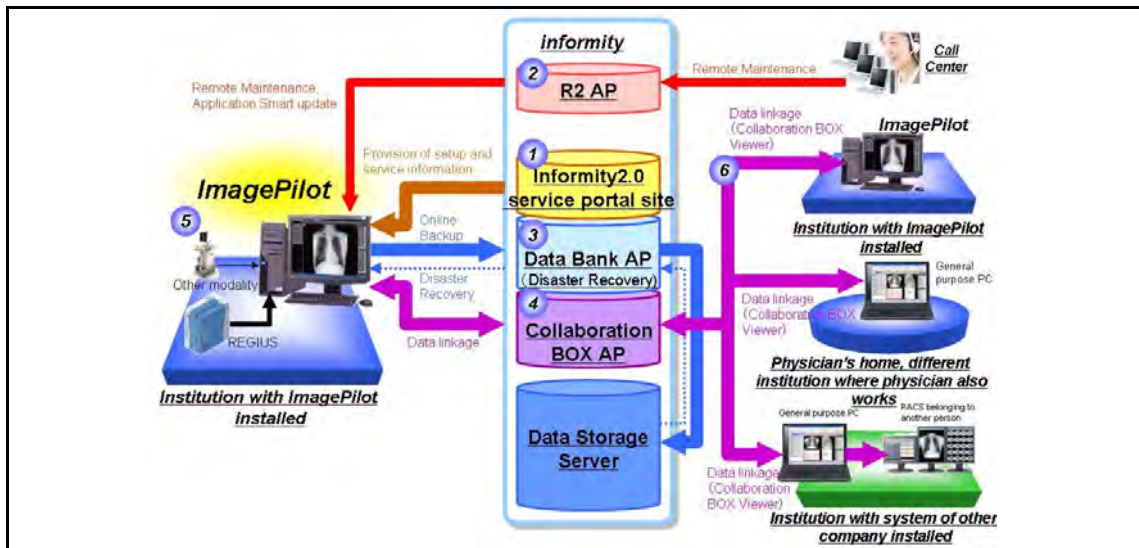
In the case when JPEG2000 images are not viewed while performing remote access (this means the original images are viewed), implementing the generic printing or write to media will result in output of original images.

10.2.6 informity 2.0 (Only the United States)

"informity 2.0" provides the function in which various services are available for the ImagePilot at the user's site by utilizing Konica Minolta's data center via internet.

Functions of "informity 2.0" are as follows;

- Data Bank
- ImagePilot WAN Client
- Collaboration BOX
- Collaboration BOX Viewer
- informity2.0 service portal site



informity2.0 service portal site : ①

1. The portal site allows the user to check on the various menu contents including the data bank and Collaboration BOX.
2. Displays the usage(storage capacity, link request count, etc.) of data bank and Collaboration BOX.
3. Allows user registration, ID and password issue for the browse of Collaboration BOX.
4. It is possible to apply for informity services, capacity increase of data bank or Collaboration BOX.

Remote Maintenance : ②


Allows remote maintenance of the ImagePilot device.

Data Bank : ③

1. All of historical data(various setup files + original images + reference images) of the ImagePilot installed at the institution is stored in the security-controlled center server.
2. For the abnormal cases such as replacement of main unit, it is possible to brows the historical data stored in the data bank using the alternative unit.
3. It is possible to restore the data backed up in the data bank online to the ImagePilot.

Collaboration BOX : ④

1. Various contents files(DICOM images, generic images, Word files, PDF files) uploaded from the ImagePilot for the purpose of linkage are stored in the security-controlled center server.
2. It is possible to manage the authority of each user that allows an access to the data stored in the Collaboration BOX.
3. When the Collaboration BOX has been configured on the ImagePilot, the automatic transmission settings are configurable. The following describes the settings and operations.

 When using the collaboration transmission function, shutting down the PC when sending large images will cause the image transmission to fail. Resend it if the transmission fails.

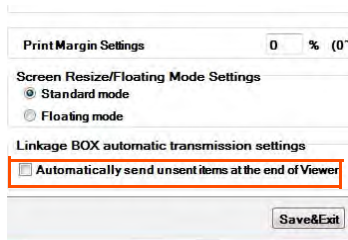
1 Create the destination of collaboration by using informity Collaboration BOX.

- For how to create the destination of collaboration, refer to the informity Collaboration BOX Service Operation Manual.

2 Associate a user registered with the ImagePilot as a Collaboration BOX user.

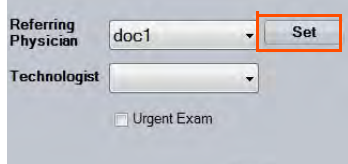
3 On the user tool, select [Client Settings]-[Operation Settings], and then check [Automatically send unsend items at the end of Viewer].

- Automatically send unsend items at the end of Viewer is displayed only when the Collaboration BOX setting is ON.
The automatic transmission setting must be configured on the respective terminals.



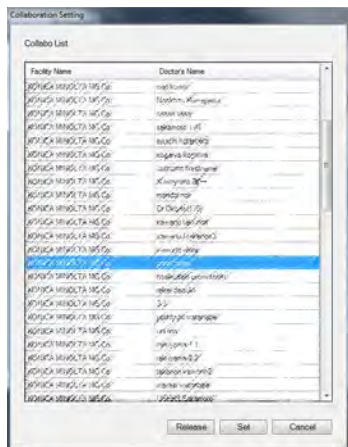
4 Launch the ImagePilot, and then carry out patient acceptance.

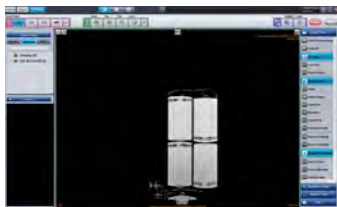
- Select [Referring Physician] and click [Set].
- The [Set] button becomes active when the one who selected for [Referring Physician] has Collaboration BOX users already registered.
The users displayed in Referring Physician are those who have the doctor permission.



5 Clicking [Set] shows the collaborated users of the person selected in [Referring Physician]; select one in the list and click [Set]. (only one destination is specifiable.)

- If no contact has been registered in the CollaborationBOX, nothing is listed.





6 On the viewer screen, load an image to inspect, and then click [Complete]; the image is sent to the destination.

- The images already sent are not sent. To send images already sent, take the procedure for collaboration transmission.

ImagePilot WAN Client : 5

Client service that allows the institution(user) where the ImagePilot is installed viewing all data stored in the ImagePilot even from home or business destination.

Alternatively, check 11.2.5.2 ImagePilot Client.



The ImagePilot WAN client should be used in a secure environment such as lines permitted by telecommunications laws.



The following functions are not available for use by the ImagePilot WAN client.

- Long body part function
- 6000 series overlay
- GSPS
- Dicom tag display
- Word document creation
- Moving image/PDF file display
- QR-SCU
- Media output
- Media acquisition

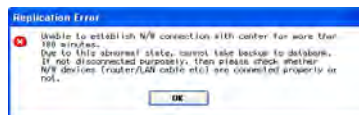
Collaboration BOX Viewer : 6

1. This is a Web browser viewer that allows referencing, editing and linking of data saved in CBOX.
2. DICOM, generic images, moving images and PDF files can be acquired and uploaded into CBOX.
3. Data in CBOX can be viewed using the ID and password provided by informity.
4. Link transmission and reception histories can be displayed and managed.
5. Viewer functions such as enlargement/reduction, density contrast adjustment and magnifying glass are provided.
6. Response comments can be added.
7. Received data can be registered in ImagePilot. In addition, operations such as transmission of received data to other PACS and downloading are possible.

For details of use of the CBOX viewer, see the "informity Collaboration BOX service Operation Manual."



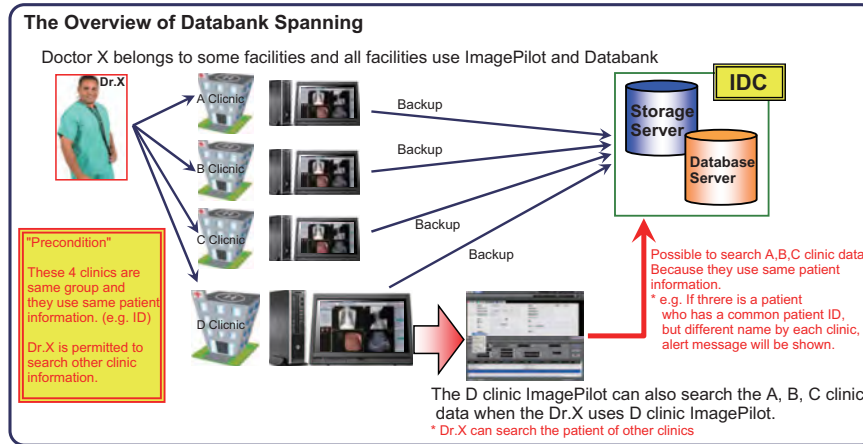
A message shown on the right will be displayed when an error occurs in the communication with the informity 2.0. Check on the connection with network devices(router or LAN cables).



10.2.6.1 Databank Spanning Function

The Databank Spanning function allows you to get patient information, image information, and image data of those belonging to the same groups in the other facilities by using the Databank function.

Summary of Databank Spanning



To use the Databank Spanning function, the service tool settings need to be changed. For more information, contact our service personnel.



On the user tool, navigate to [Common Setting] - [Operation Settings] - [Basic]- [UserRegistration], and then check [DATABANK Spanning User].

Requirements for DB information/image data acquisition with Spanning

Login user names must be the same in the respective facilities.

* For Spanning, create login user names with the same name to log in in the respective facilities.

The facilities must belong to the same groups.

* If there is more than one ImagePilot server in one facility, Spanning by server is allowed.

Patient IDs and names must be the same.

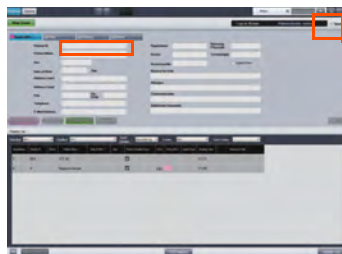
* Spanning is valid only for patients whose ID and name fully match.

* If patient names includes spaces, fully matching including the spaces are indispensable.

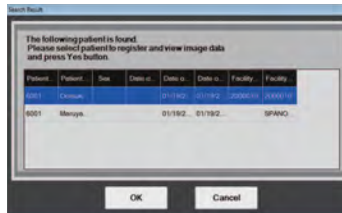
Example: Facility A "John Smith": Facility B "John Smith" → Allowable

Facility A "John Smith": Facility B "JohnSmith" → Not allowable

Procedure

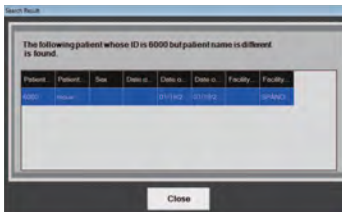


1 On the reception/search screen, check the [Spanning] check box.



2 Enter [Patient ID], and then press [Enter].

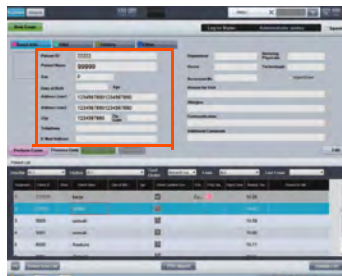
- If there is no other person with the same ID or name in the other facilities, the cursor moves to the name and the regular entry sequence starts.
- If there is another person with the same ID or name in the other facilities, the [Search Result] screen is displayed.



3 To get the patient information, select the patient, and click the [OK] button.
To make a direct input without getting the patient information, click the [Cancel] button.

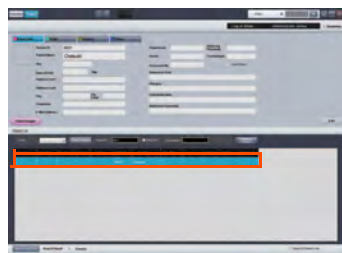
- If the patient ID and patient name data is already registered on the PC you are using, the patient information registered on your PC is displayed without displaying the dialogue box shown on the left. If however a different patient name of the same patient ID exists for another facility, a dialogue box to inform you of this is displayed.

On the reception screen:



- The patient information is displayed.

On the search screen:



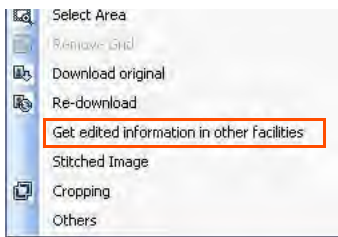
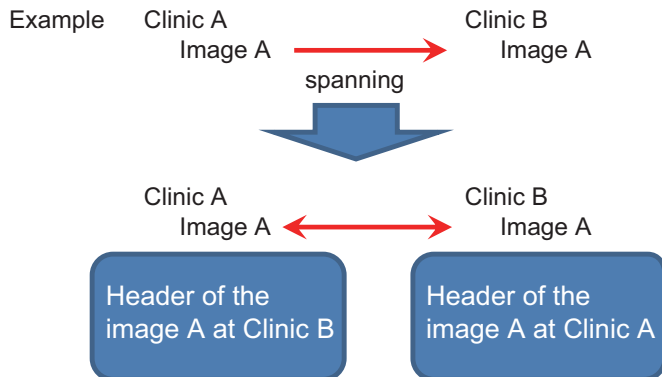
- Selected and added to the patient list.



In the case of the search screen, if you press the [Search] button after inputting [Patient ID], information of other facilities will not be acquired. In the case of Spanning, be sure to press the [Enter] key after inputting [Patient ID].

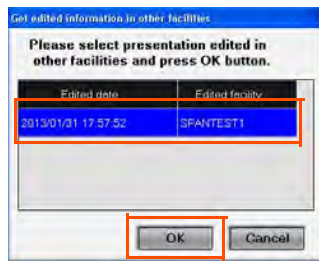
Procedures to Acquire Information from Other Facilities

The users allowed spanning can acquire the header information of the same image at other facilities.



1 Right-click on the image acquired by spanning in the viewer screen or the image acquired by spanning, and select [Get edited information from other facilities] in the menu displayed.

- Header information of other facilities is displayed.



2 Select the facility to acquire, and click the [OK] button.

- Header information acquired from other facilities is reflected on the image in the current viewer screen.
- The header information of own facility up to the acquisition is saved as GSPS. The header for own facility saved as GSPS can be restored with the [Load GSPS] in the menu displayed with right-click.

If [Get edited information from other facilities] and [Load GSPS] is not in the menu displayed with right-click, select [Other] at the bottom of the menu displayed with right-click, and mark the check boxes for respective items so they will be displayed.

When [Get edited information from other facilities] is performed on the multi-frame image, it may take some time to acquire the data. Be careful regarding the multi-frame image containing over 100 slices.

When an image after adjustment is acquired with spanning and [Get edited information from other facilities] is performed on that image, original image is downloaded even if the current display is JPEG image.



Notes on the Databank Spanning function

- A change to a patient ID or name makes Spanning disabled. Spanning assumes full matching of the patient IDs and names. A change to an ID or name makes Spanning unavailable from another facility. If the ID or name of a patient is to be changed, the ID or name must be changed in all the facilities. (As long as the patient information matches, Spanning is available.)
- Images loaded through Spanning from other facilities are not subject to application of data bank backup. The data bank backup feature does not handle images loaded through Spanning from other facilities.
- When images are acquired through Spanning from other facilities, the duration of time to make it available on the viewer changes depending on the traffic on the line. Spanning employs a data bank function to download JPEG2000 and other data, thus its download speed depends on the state of the line. When you go to the viewer screen, the viewer screen does not show data acquired through Spanning, so you have to select a modality and dated folder. Concerning JPEG2000, only the images you try to show are downloaded, so only the first image of a multi-frame in the stack state is downloaded even if you attempt to show it.
- Concerning DICOM series joined images acquired through Spanning, regardless of the settings on the receiver side, the series join state of the source location is secured. When CT images are loaded with series join in the facility A and acquired through Spanning in the facility B, images are loaded in the state of series joined even if the series join of the general-purpose image loading is unchecked in the facility B.



Notes on the Databank Spanning function

- For temporary patients (QQ patients), Spanning is unavailable. Concerning "temporary patients (usually referred to as QQ patients)" handled by a function of ImagePilot, even if a patient ID and name match by chance, images in other facilities cannot be obtained through Spanning.
- When patient IDs are automatically numbered, Spanning is unavailable for the patient information. When automatic numbering to patient information is used, information about patients who have the same IDs in other facilities cannot be acquired through Spanning. However, in a case where a patient ID automatically numbered is the same as that of a patient in another facility, image data is obtained through Spanning if the name of the patient is the same.
- Spanning is unavailable before loaded images are finalized. Concerning ImagePilot images, images loaded but not finalized in the facility A cannot be acquired from the facility B through Spanning.
- When images handled through Spanning are deleted or moved to an unnamed folder and allocated to another patient, any information about the deletion or allocation is not applied in the facility to which the images are sent through Spanning. Spanning gets patient information, image information, and image data on that occasion, so any information about deletion or allocation to another patient after movement to an unnamed folder in the location at which Spanning is carried out is not automatically posted nor applied to the other facilities.



Notes on the Databank Spanning function

- When Spanning is set, multi-frame images are not separable.
When Spanning is set, images are not separable.
- When Spanning is set, copy source images and copied images can no longer have a parent-child relationship.
When Spanning is set, copied images in a facility from which it is obtained can no longer have a parent-child relationship when it is obtained.
- Spanning allows the anchor settings to be transferred.
When Spanning is set, the anchor settings of the facility from which images are copied are transferred. So, be careful when the anchor settings are facility-specific.
- Information about modality icons are transferred.
When Spanning is set, information about the modality icons from which images are copied are transferred (but not updated).
- Concerning Note, only images of Note are obtained. The images cannot be edited or modified.
Note images are subject to application of Spanning but uneditable.
- The format of SUM/SEPARATE for cardiothoracic ratio measuring/pelvmetry is the same as that of the source.
The settings of SUM/SEPARATE for cardiothoracic ratio measuring/pelvmetry are the same as those of the source. To change the settings, it is necessary to perform measuring again.
- Data bank backup icons are the same as those of the sources.
Therefore, data bank icons are displayed but the icons merely indicate that it has been backed up in the facility from which it is obtained through Spanning.
- Image comments and detailed comments are the same as those of the sources.
Image comments and detailed comments are transferred through Spanning, but modified comments in the source are not applied to those at the destination of Spanning.



Patient data of other institutions which has been referred using Spanning functionality will be stored in Imagepilot. Therefore, it should be noted carefully when the edit operations such as Image adjustments, annotations etc cannot be referred by the synchronised state of Databank.

10.2.7 Automatic Acquisition Function of Generic Images

Function to allow linkage with the other manufacturer's modalities that export the generic images by on-line.

With the linkage with various modalities, ImagePilot becomes capable of acquiring the examination images. Acquired images are handled as the generic image.



The function allows reading the patient ID contained in the file name for the exam image received, and acquires the image. When the ID of the read image is not found in the registration, either of the two actions below will be implemented depending on the setting of "DICOM image reception. Automate patient registration if Patient ID match is not found."

1. When the checkbox for "DICOM image reception. Automate patient registration if Patient ID match is not found." is ticked, the patient matching that ID will be automatically registered with the ImagePilot, and the image is acquired as the examination image for that patient.
2. When the checkbox for "DICOM image reception. Automate patient registration if Patient ID match is not found." is not ticked, acquires the image as the unnamed image.



When establishing the linkage with the modality, make sure that the patient information displayed on the ImagePilot Viewer is identical to that displayed on the modality. Note that when the patient ID is not identical, linkage cannot be established.

In cases where the image is acquired using the auto generic image acquisition function, do not use the code other than alphanumerics for the patient ID.



It is possible to edit the image as in the case of JPEG generic images. (Black and white reverse is not possible as in the case of JPEG.)



Refer to the following page for "DICOM image reception. Automate patient registration if Patient ID match is not found."



p.315 DICOM image reception. (Operation Settings)

10.2.8 Image Stitching Process

Procedures to stitch the images and to create a composite image are described below



Automatic Long Body Part Image Stitching Function

ImagePilot can incorporate an option, the Composite Image function. This option functions by automatically recognizing the long body part and stitching each body part to create a composite image. However, please note that recognition of the body part may not be performed properly depending on the condition for exposure, etc., resulting in incorrect stitching of the body parts. Therefore, care should always be taken to ensure the stitching borders are correct. If the borders are improper, adjust the image position so that the border comes to correct position using the Composite Image Adjustment screen. It is recommended to expose a measure and body parts at a time in order to facilitate check of the border of the stitching part later. In addition, information regarding dimensions should be checked before film output and host output.



Composite images output to the host will be output in actual size. In addition, check the dimensional information before outputting to the host or film when the size is decreased or increased.



To ensure that diagnostic information regarding pathological changes is not concealed at the stitching borders, check the image using the top-bottom reversing function.



Even when the stitching mode is changed during operation, the display shown when the [Update] button is pressed is initially displayed during the stitching processing. In addition, press the [Dup] button to update the display for the current stitching mode.



When long body part stitching processing is carried out, all image information such as image processing, print formats, overlays, annotations and image properties before stitching will be cleared.



Long body stitching processing is not possible using images photographed at high-resolution, images of differing dimensions or images acquired from REGIUS console. In addition, composite images cannot be rotated 90° or 270°



This function is unable to make long stitches of images that do not match (Regius, AeroDR), so when checking stitches, make sure the selected images are of matching types.

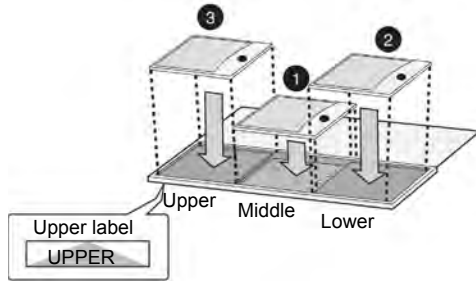


Prior to stitching, when making each image, irradiate on the CR cassette or the AeroDR detector full screen even if the subject to be imaged is small. For example, if the area outside the irradiation field is large, the area outside the irradiation field is recognized as the normal irradiation field. This can make it impossible to correctly process images during stitching.

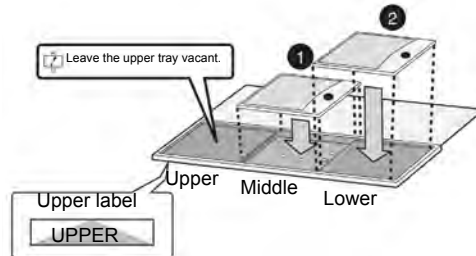


When an exposure is made with an Exposure-Only Cassette for Stitching (for three REGIUS Plates) containing only two REGIUS Plates, make an exposure with the REGIUS Plates set on the middle and lower trays while keeping the upper tray vacant.

Exposure with three REGIUS Plates set

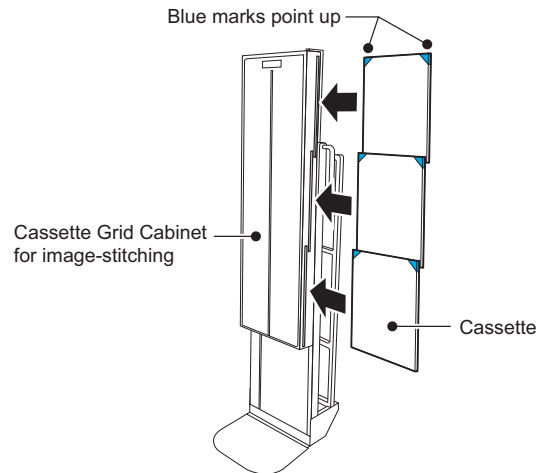


Exposure with two REGIUS Plates set



The cassette insertion method when using the Cassette Grid Cabinet for image-stitching.

Set the cassette so that the black surface (front plate) faces toward the patient. Also, set the blue corner blocks on the cassette so that they point upwards. Confirm that all cassettes are inserted all the way.



Always conduct exposure with the blue corner block at the top, even when using the Cassette Grid Cabinet for image-stitching after removing it from its special stand. Conduct the exposure again if exposure is accidentally conducted with the folder upside-down. Using the exposure image after flipping it vertically may mean the size is incorrect.



<CAUTION>

Be aware that the white stitching line or silhouette of the cassette may appear in between the combined images which results from the image stitching process. The stitched image is created to allow accurate measuring of distances and angles by qualified medical practitioners. Any incidental clinic findings that are seen on the source of stitched images should be verified or further evaluated by additional diagnostic methods.



When performing measuring using the Cassette Grid Cabinet for image-stitching, do not use the ImagePilot calculation function and carry out measuring on images by exposing them together with major.

10.2.8.1 Composite Image Select Screen

Images to be stitched can be selected from the exposed exam order using this screen.




Image List

A list of photographed images is displayed in button format.

Clicking an image once will register the image in the long body part stitching display and clicking the same image again will remove the image from the long body part stitching display. Images registered in the long body part stitching display are enclosed in a blue frame.

In addition, when long body part stitching is carried out, one image will be added for the long body part composite image.

 When the set modality is CR, CR image will be displayed in the image list. And when it is AeroDR, AeroDR image will be displayed. When the modality is set to both, the image of the modality of the selected image will be displayed. In addition, when both modalities are set, you can switch between displayed images using [Image Type].



Composite Image Display

Images registered for composite image is displayed.

The order of images registered in the long body part stitching display can be changed using the drag and move function.



[Select] (Standard image selection) button

Select the standard image to be used for image processing.

Stitched images will be processed according to the image processing algorithm of the selected standard image. In addition, the selected standard image processing button will change to blue.



When the reverse image is selected as the standard image, the image after it is stitched will be handled as the reverse image.



[Cancel] button

Returns to the Viewer Screen after terminating the stitching process.



[Update] button

Readjusts the joint border of the images already stitched. This button is available only when the composite order is being selected in the image list.

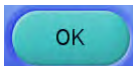
•The Composite Image Adjust screen is displayed.



p.406 Composite Image Adjust Screen



When original images used for stitching have been moved to the unnamed setting folder or have been deleted, the [Update] button cannot be used.



[OK] button

Adjust the joint border of the images registered and displayed in the composite image display. This button is available only when multiple images are registered for the display of composite image.

•The Composite Image Adjust screen is displayed.



p.406 Composite Image Adjust Screen



Stitching process is not completed only by registering the multiple orders for the display of composite image. It will be stitched and become effective when the [OK] button is clicked and the Composite Image Adjust screen is displayed.

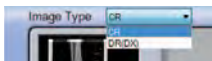
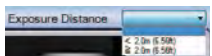


Image Type

The set modality is automatically selected.

When both CR and AeroDR modalities are set, you can switch CR images or AeroDR images.



Exposure Distance

This setting is displayed only when the New Stitching Mode is selected.

Select from the menu based on the exposure distance.

- When the exposure distance exceeds 2.0 m: <2.0 m (6.56 ft)
- When the exposure distance is 2.0 m or less: >2.0 m (6.56 ft)

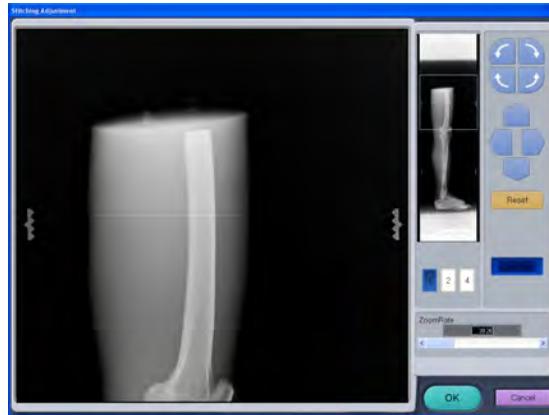
If you click the [OK] button without entering an exposure distance, a warning dialogue box is displayed and setup cannot be complete.



Setup is required to use the New Stitching Mode. Please contact our customer service representative.

10.2.8.2 Composite Image Adjust Screen

Adjusts the position of joint borders of the images selected in the Composite Image Select screen.






Enlarged Stitched Image

Enlarges and displays the image area selected (framed in blue) in the Whole Stitched Images screen. Magnification may be set using the zoom slider.


Check if the border of the stitched images is aligned.


If it is misaligned, click the [Rotate], [Move] buttons or drag the image to correctly position.


Only the image in the lower frame of the displayed images can be dragged to adjust its position. The cursor icon changes according to its position on the image as follows:

- Cursor resides in the area capable of adjustment** : 
- While dragging the image** : 
- Cursor resides in the area incapable of adjustment** : 

When the image is exposed using the marker cassette for image-stitching, the markers can be located on right and left sides of the border of the stitched image. Use these markers as a target for visual check and adjustments.

 **p.412** Checking the stitching border of the images exposed using the marker cassette for image-stitching

 When stitched images have been rotated or reversed, the rotation and inversion orientation before stitching will be displayed on the composite image adjust screen. However, this applies only to the composite image adjust screen, and images will be displayed in their rotated or converted orientation when display is returned to the viewer screen after operation.

 When manually aligning the stitched images, use the distinctive pattern (or measure) on the image of the body part as a target to be aligned, whereas the marker displayed on the screen should be used as a supplementary target in manual image-stitching.

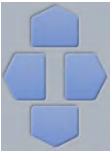
**Whole Stitched Images**

Select in the Whole Stitched Images the area that shall be enlarged and displayed. The area enlarged is indicated with the blue frame. The size of the blue frame changes by the setting of zoom slider.

**Rotate buttons**

Clicking this button will rotate the image. Lower image in the Whole Stitched Images will be rotated.

There is a limit for rotation, and rotation along the arrow direction beyond this limit is not possible.

**Move buttons**

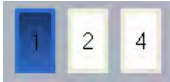
Moves the image up/down or right/left.

Lower image in the Whole Stitched Images moves.

There is a limit (100 mm) for move, and move along the arrow direction beyond this limit is not possible.

**[Reset] button**

Resets the image positioning, and restores the original image position as the automatic stitching is completed.



[Display Change] Buttons

Switches the display format that will be shown on the Enlarged Stitched Image window.

The button indicates Single Image, 2-Image and 4-Image in order from the left.

When the 2-Image or 4-Image format is displayed, clicking Whole Stitched Image will switch the image framed in green (one image of 2-image or 4-image format is always framed in green) in conjunction with the image area that has been clicked.

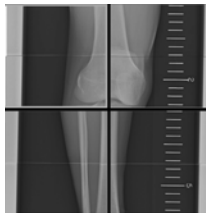
Example of Single Image



Example of 2-Image



Example of 4-Image



[Order] Button

Changes overlapping order of the images.

Selecting Normal simulates the overlapping of the plates set in the long body part cassette.

Selecting Reverse allows overlapping of the images in the opposite way as the plates are overlapped.



Relation between the Plate Positions overlapped in the Long Body Part Cassette and the [Order] button.

| [Order] button setting | 3 plates | 2 plates |
|------------------------|----------|----------|
| Normal | | |
| Reverse | | |

New Stitching Mode.

| [Order] button setting | 3 plates | 2 plates |
|------------------------|----------|----------|
| Normal | | |
| Reverse | | |



Checking the stitching border in the vertical direction using the [Dup Type] button

Detection of the misalignment of the stitched images in the vertical direction becomes easier by switching between Normal and Reverse of the [Dup Type] button. Smaller the misalignment of the stitched images, smaller the difference in view of the stitched images between Normal and Reverse of the [Dup Type] button.

| Normally stitched | | Image is shrunken | |
|-------------------|---------|-------------------|---------|
| Normal | Reverse | Normal | Reverse |
| | | | |



Zoom Slider

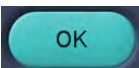
Changes the magnification of composite image by dragging the slider to the right and left. Dragging to the left decreases the zoom rate (smaller). Dragging to the right increases the zoom rate (larger).



[CANCEL] button

Cancels the composite image adjustment.

- Returns to the Composite Image Select screen.



[OK] button

Saves the setting made by composite image adjustment and exits the screen.

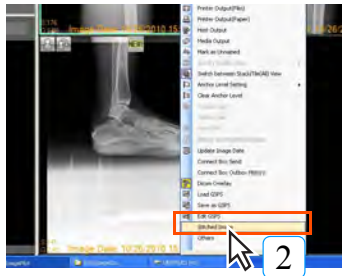
- Returns to the Composite Image Select screen.

10.2.8.3 Stitching Images

Procedures to stitch the long body part images are described below.


- 1 Insert the long body part cassette into the cassette reader to receive all images stitched by the ImagePilot.

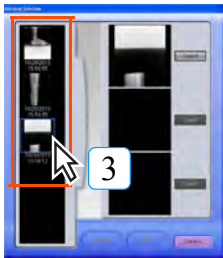
- The image will be displayed on the ImagePilot.



- 2 Select [Stitched Image] from the right-click menu.

- The Composite Image Select screen is displayed.

 If [Stitched Image] does not appear on the right-click menu, select [Others] at the bottom of the menu and check the "Stitched Image" box on the Display Settings screen.

- 3 Click the order name that should be allocated in the top of the composite image.

- Frame of the order changes to blue.



- 4 Click the order name that should be allocated in the middle of the composite image.

- Frame of the order changes to blue.

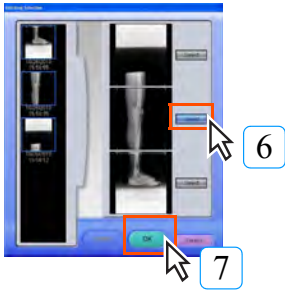


- 5 Click the order name that should be allocated in the bottom of the composite image.

- Frame of the order changes to blue.



Stitching process is not completed only by registering the multiple orders for the display of composite image. It will be stitched and become effective when the [OK] button is clicked and the Composite Image Adjust screen is displayed.

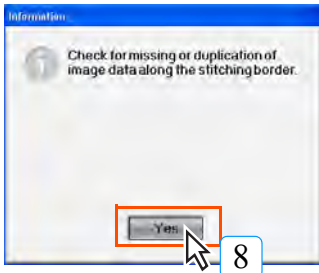


6 Using the [Standard Image Select] button, select the order in the Composite Image Display, whose image processing is judged to be best preferable.

- The same image processing as applied to the selected image will be applied to the images after stitching.

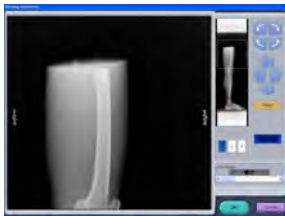
7 Click [OK] button.

- After a message "Wait for a while.", a message "Check for missing or duplication of the image data along the stitching boarder." will be displayed.




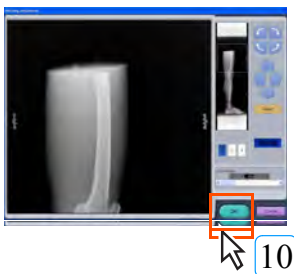
8 Click [YES] button.

- The Composite Image Adjust screen is displayed.



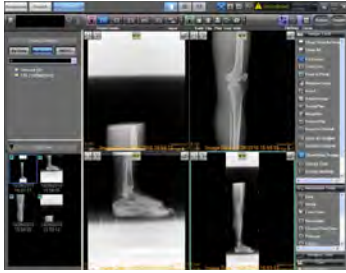
9 Check if the border of the stitched images is aligned. If it is misaligned, adjust the position using the Rotate and Move buttons. When the image is exposed using the marker cassette for image-stitching, the markers can be located on both sides of the border of the stitched image. Use these markers as a target for visual check and adjustments.

 p.410 **Stitching Images**



10 Click [OK] button.

- Returns to the viewer screen.



11 Select the stitched image from the Unread folder under Display Category - By Modality and check the image on the viewer screen.

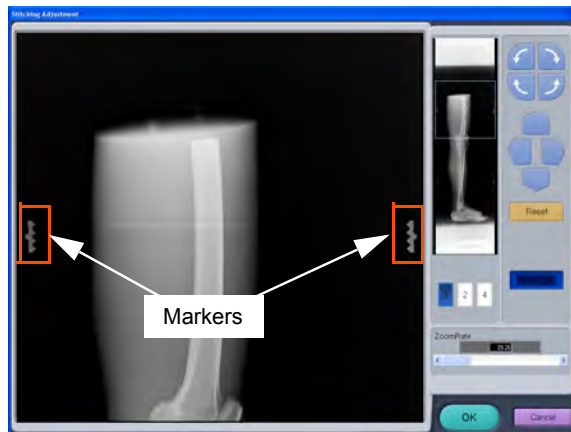


Displaying the reselect stitched image screen using the [Stitched Image] button on the right-click menu will enable the [Update] button. Clicking the [Update] button will display the long body part stitching adjust screen and allow readjustment of the stitching position of the image.



Checking the stitching border of the images exposed using the marker cassette for image-stitching

When the image is exposed using the marker cassette for image-stitching, the markers can be located on right and left sides of the border of the stitched image. (see images below) (However, these markers may not be viewed in the cases where the body part image overlaps with the marker or exposure field is narrowed) Misalignment of the stitched images can be judged by checking the marker images displayed on the Enlarged Stitched Image field. (The example below is the case of the left marker)



Normally stitched



Stitching position is vertically misaligned (image is stretched)



Stitching position is vertically misaligned (image is shrunken)



Stitching position is horizontally misaligned

Detection of the misalignment of the stitched images in the vertical direction becomes easier by switching between Normal and Reverse of the [Dup Type] button.



When manually aligning the stitched images, use the distinctive pattern (or measure) on the image of the body part as a target to be aligned, whereas the marker displayed on the screen should be used as a supplementary target in manual image-stitching.



p.409 Checking the stitching border in the vertical direction using the [Dup Type] button



Notes for checking the alignment at the stitched border using the marker

As a result of the automatic image-stitching or manual image-stitching process, subtle differences in marker position will be produced due to microscopic differences in magnification of the images. These differences are attributed to the fact that the plates are set in the cassette partially overlapping the others in order to eliminate image loss at the border between the plates, this in consequence produces differences (approx. 2mm) in distance to the X-ray source from one plate to the other. Image on the plate that is positioned far from the X-ray source will be magnified by 0.10 to 0.15%(note1) larger than that on the plate closer to the X-ray source, causing subtle differences in size at the overlapping area of the two images of the adjacent plates. This causes misalignment of approx. 0.5mm(note2) between the right and left markers in manual image-stitching process. Therefore, alignment verification of the stitching position using the markers should be done taking the above mentioned facts in consideration.

Note 1 At exposure distance of 1.5 to 2.0m

Note 2 With REGIUS CASSETTE RC-110T (14x51), at the exposure distance of 1.5m; alignment difference between the right and left markers is approx. 0.5mm.
with REGIUS CASSETTE RC-110T (14x51), at the exposure distance of 2.0m; alignment difference between the right and left markers is approx. 0.4mm. (smaller the cassette size, smaller the difference between the right and left markers)



Font size and output method of the annotation(same size/whole image output)

When selecting [Whole] to output after overlaying the annotation, both the whole image and the annotation font size are decreased in conjunction. As the result, the annotation will not be printed as its font size specified in the "Font Size". It is therefore recommended to select relatively larger font size for the annotation in cases where the large size, especially the stretched image is output to the small film using [Whole] mode.

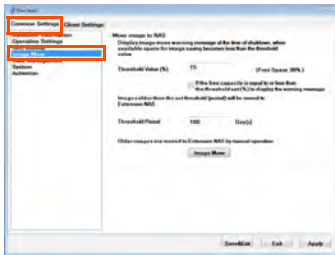
10.2.9 Function to move images to added NAS

Moves images from ImagePilot to added NAS.

Moving images can be done using the execution method when the PC is shut down and the method of moving manually from user tools.

Image move settings when shutting down PC

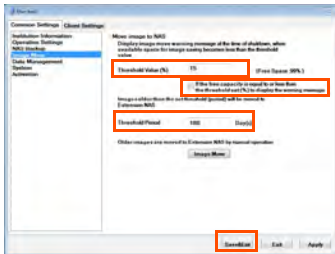
Execute settings for moving images when shutting down the PC using user tools.



1 Click [Common Settings]-[Image Move] in user tools.

p.334 6-1) Image Move Screen

- The image will be displayed on the ImagePilot.



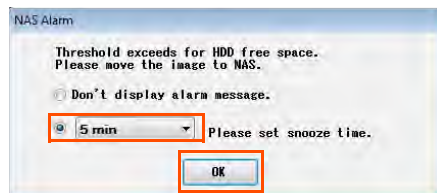
2 Set the free space threshold (%) and time period threshold (days).

3 Select the [If the free capacity is equal to or less than the threshold set (%) to display the warning message.] check box.

4 Click the [Save&Exit] button.



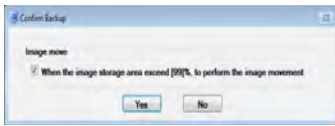
The following screen will display periodically when the free space on the hard disk in the PC used is below the configured threshold.



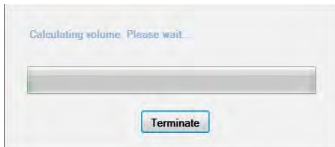
Specify the time until the next warning message is displayed (5 mins. to 1 hour), click the [OK] button, and shut down the dialog.

Image move when shutting down the PC

The Transfer Image Confirmation screen appears when using a configuration to transfer images to the extension NAS when the PC is shut down.



- 1 The confirmation dialog box appears.
- Click the [Yes] button to start the image transfer process.
 - Click the [No] button to shut down the PC.



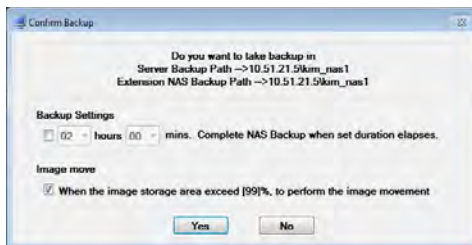
- 2 Wait a few moments for the processing to calculate free space to finish.
- Click the [Terminate] button to shut down immediately.
 - Once the calculation processing finishes, the [Image move is in Progress] dialog box appears.



- 3 The screen as illustrated on the left appears while images are being transferred.
- The PC will continue to shut down once images have been transferred.
 - Click the [Terminate] button to abort the image transfer process and continue shutting down the PC.

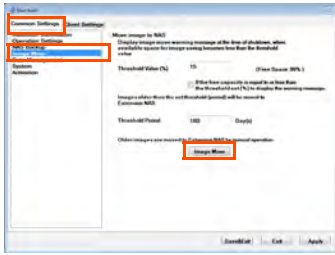


If configured, NAS backup processing will automatically start after images have been transferred.



Manually moving images from user tools

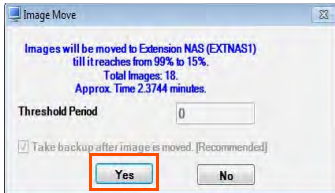
Execute image move manually from user tools.



1 Click [Common Settings]-[Image Move] in user tools.

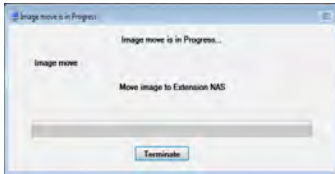
2 Click the [Image Move] button.

- The [Image Move] dialog is displayed.



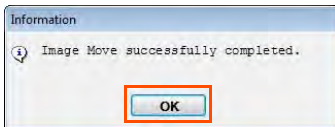
3 Click the [Yes] button.

- Image move starts.



The screen on the left is displayed while the image is moving.

- Clicking [Terminate] cancels image move.
- Once the process is complete, the [Information] dialog is displayed.
- If configured, NAS backup processing will start running.



4 Click the [OK] button.

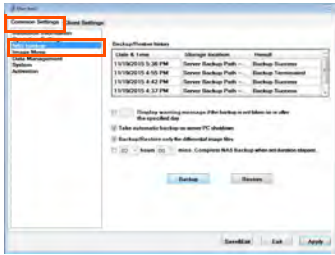
10.2.10 NAS Backup Function

ImagePilot images can be backed up to a backup NAS.

The NAS backup can be performed automatically when the PC is shut down or manually from the user tool.

Configuring automatic NAS backups during PC shutdowns

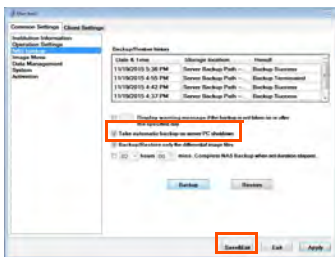
The settings for performing automatic NAS backup when shutting down the PC is accessed from the User Tool menu.



- 1 From the [User Tool] menu, click [Common Settings] - [NAS Backup].



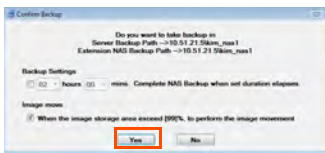
p.328 4-1) NAS Backup Screen



- 2 Select the [Take automatic backup on server PC shutdown] check box.
- 3 Click the [Save&Exit] button.

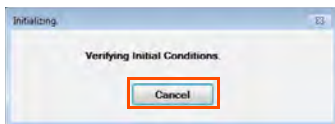
Automatic NAS backups during PC shutdowns

This message displays after configuring automatic NAS backups during PC shutdowns.



- 1 To perform the backup, click the [Yes] button.

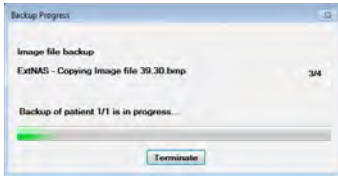
- Click the [No] button to cancel the NAS backup and continue to shut down the system.
- Selecting the [Complete NAS Backup when set duration elapses.] check box in Options and setting a time will cause the server PC to shut down when the configured time elapses even if the backup process is not complete. This time can be configured in 30-minute increments up to a maximum of 72 hours.
- If image transfer is configured, the image transfer options appear. Selecting the [When the image storage area exceed [99]%, to preform the image movement] check box will cause the image transfer process to execute before the backup process.



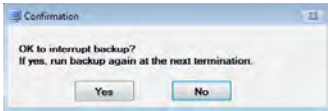
- 2 Once the backup process starts, the screen indicating that the system is confirming the content to back up continues to appear for a few moments.
- Click the [Cancel] button to continue shutting down the PC. Backups will not be performed in this scenario.

3

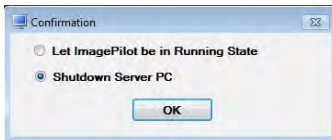
The backup process starts and a message indicating that the backup is in progress appears.



- The PC continues to shut down after the backup process is complete.



- Click [Terminate] during the backup process to display the Confirm Backup Abortion screen. Click [No] to continue the NAS backup process. Click [Yes] to abort the process.

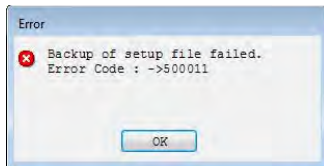


- The backup process continues to store data until the [Terminate] button is clicked.

- Once the backup has been aborted, a confirmation screen appears to select whether to [Let ImagePilot be Running State] or [Shutdown Server PC]. Select the desired operation and then click the [OK] button. The backup process continues to store data until the [Terminate] button is clicked.



The following message appear when the backup process fails.



Click the [OK] button to continue shutting down the PC.



NAS Backup Warning Messages

From [Common Settings] in the User Tool, select the [Display warning message if the backup is not taken on or after the specified day] check box in [NAS Backup] and use the combo box to select the desired period to display warning messages.

The warning messages appear after the configured period of time elapses since the date of the last backup.

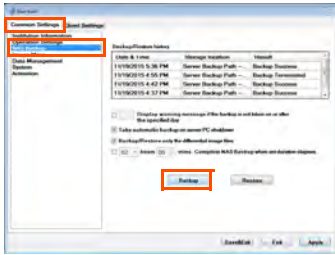
[Don't show this message again.] : Checking this and clicking [OK] button disables warning messages from appearing again. (Doing so also deselects the [Display warning message if the backup is not taken on or after the specified day] check box found in the User Tool.)

[Snooze time.] : Checking this and clicking [OK] button redisplay the warning message after the selected period of time elapses. The available options for the snooze time period include: 5 minutes, 10 minutes, 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 8 hours, half day, 1 day, 3 days, 1 week, 2 weeks, and 1 month.



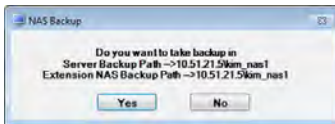
Manually Performing NAS Backups from the User Tool

You can manually perform NAS backups from the User Tool.



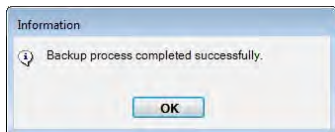
1 From the User Tool, click [Common Settings] and then [NAS Backup].

2 Click the [Backup] button.



3 To perform the backup, click the [Yes] button.

- The operation of the backup screen is the same as that for automatic backups performed when the PC is shut down.
- Click the [No] button to cancel the NAS backup and close the dialog box.
- A dialog box appears once the backup is complete.



4 Click the [OK] button.

Chap. 11
Image Processing


This chapter describes procedures for CR image processing using ImagePilot.

- 11.1 Outline422**
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 - 11.1.2 Sharpness Processing.....423
 - 11.1.3 Low/High Density Equalization 423
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 - 11.2.1 Features and Cautions of Automatic Gradation Adjustment Function 424
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11.1 Outline


This is an overall image processing that adjusts CR and AeroDR images and provides images for diagnosis. The following processes are applied to CR and AeroDR images. The auto gradation adjustment function is performed based on imaging parameters.

This image processing Intensity has multiple sets, which can be changed in User Tools, [Image Processing Intensity] Setting Screen.

 p.322 2-15) Image Processing Intensity Setting Screen

11.1.1 Automatic Gradation Adjustment Function

Allows automatic adjustments to image density and contrast. Adjustment of density and contrast can be made through mouse adjustments. For details, refer to "[Image Processing Features and Cautions](#)" on page 424.

 p.58 Acquiring CR Images

 p.70 Acquiring AeroDR Images



Contrast Adjustment

The image contrast (G value) is fixed. Therefore, if different radiographic conditions, such as KV or grids are used, the resulting image quality will differ.

Examples of exposure-parameter dependent changes

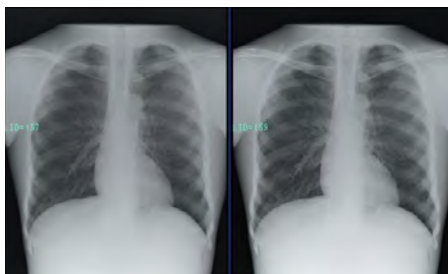
<With grid>



120kV

75kV

<Without grid>



120kV

75kV



The S value or G value are used in CR and AeroDR images as an index to represent image brightness (film density) or contrast.



Density and contrast are automatically adjusted by the automatic gradation and automatic customizing functions. This automatic function provides similar density and contrast on comparison examinations. Fine image adjustments may be necessary to match.

11.1.2 Sharpness Processing

Adjusting image sharpness will affect image edges and detail. Increasing sharpness too greatly may result in image noise. Sharpness Processing can be adjusted using Image Tools Palettes. (For details of processing, refer to [?] in the Image Tools Palettes.)



Using intense Sharpness Processing may bring out noise and produce a grainy image texture. In such cases, the strength of Sharpness Processing should be reduced.

11.1.3 Low/High Density Equalization

This function enables visualization of soft tissue and bony structures without losing fine structural detail. Equalization of tissue and bone can be changed using Image Tools Palettes. (For details of processing, refer to Image Tools Palettes.)



Excessively intense correction of soft tissue or bone areas may produce deterioration in the contrast of the overall image and image flatness. In such cases, the setting should be reduced.

11.1.4 Noise Suppression Processing

This function enables suppression of elements contributing to image noise. (Since this processing function is set to the optimum value, changes to parameters by the user are not possible.)

11.1.5 Automatic Learning Function

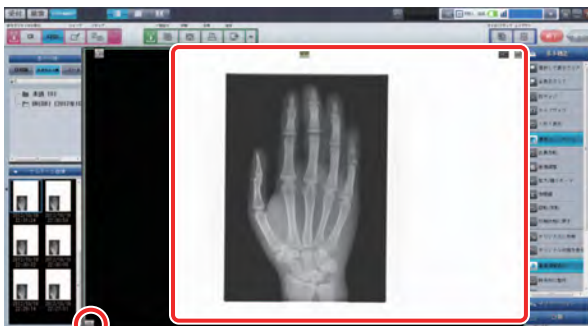
This function analyzes image adjustment trends to density and contrast made by the user. And adjustments are recorded and averaged. The new value is automatically applied to subsequent images of the same body part. For details, refer to "Image Processing Features and Cautions" on page 424.

11.1.6 Initial Display Optimization Process

After reading an image, the smallest cassette size as a whole, which includes the exposure field area in the AeroDR image, serves as the default display. Images are displayed in five sizes: 8" X 10", 10" X 12", 11" X 14", 14" X 14", and 14" X 17". Position is also adjusted so that the exposure field area is at the center of the display.



Since 14" X 17" is displayed in full-screen, position adjustment is not performed.



When performing optimization on the default display, an Enlarge Display icon shown left is displayed. When checking the entire image, you can switch to a frame display by clicking the Enlarge Display icon.

11.2 Image Processing Features and Cautions

11.2.1 Features and Cautions of Automatic Gradation Adjustment Function

Automatic gradation adjustment extracts the bone area in the image and makes adjustments to ensure that the bone area in the image is depicted with optimum balance.

However, appropriate grey scale processing may not be possible in the following cases.

It may be necessary to manually adjust the image using the mouse.

- Soft tissue exams. (ex. Neck, adenoids, mastoid process behind ear)
- When the body part of interest is positioned at the edge of the imaging plate or cassette.
- When a large object (ex. Pillow) other than the body part is present in the area of exposure.
- When a large structure other than human structures such as a plaster cast or artificial bone are present in the image.
- Extremely small areas of exposure.



To ensure greater processing consistency

Refer to [p.498 CR and AeroDR Images\(Troubleshooting\)](#) to carry out exposure with greater processing consistency.



p.498 CR and AeroDR Images

11.2.2 Automatic Learning Features and Cautions

This function supplements automatic gradation processing by dividing the image into 13 body-part specific categories and reflecting the density and contrast adjustment trends of each category when the image is acquired.



When the "Veterinary" is selected for the hospital type, brightness(film density)/contrast adjustment results will be reflected depending on the similarity of the image to the one exposed in the past.



p.272 1-1) Institution Information Screen(User Tool)

Density and contrast changes made during the initial viewing will be used for the learned average upon completion of the study. Density and contrast changes made in subsequent viewings will not be used for the learned average. Subsequent viewings can be used for the learned average by pressing the save as original icon. For details, refer to the page detailing "Original Display Status.", allowing the image adjustment trends to be analyzed, thus enabling correction of automatic gradation adjustment for the next exposure/image acquisition.



p.128 Reset to Original



To ensure greater processing consistency

Reference section "[Classified Category Features](#)" on [page 425](#) for a list of recommended imaging techniques to improve the automatic learning function.

Note: When the "Veterinary" is selected for the hospital type, exposing the image so that the image that has the tendency of the similar adjustment results in the similar image characteristics will help enhance the automatic learning features due to increased image similarities.



p.272 1-1) Institution Information Screen(User Tool)



Concerning data used for the automatic parameter adjustment function

The automatic learning function records density and contrast adjustment along with the images' display size. Density and contrast changes made to images displayed at least 80% of full size will be used for the learned average.

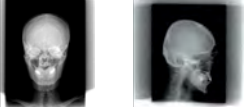





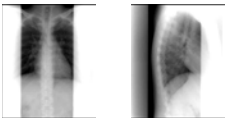
- Images that show extreme adjustments in density or contrast are not used for the learned average.

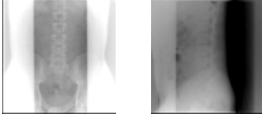
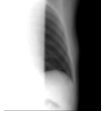

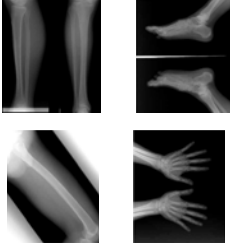



Once an image is set as the image for QA/QC tool (optional function), it is deleted from the adjustment data and no longer used in the automatic customization function.

11.3 Classified Category Features

Images in ImagePilot are classified into the following categories and processed by the automatic customization function (correction of automatic gradation adjustment).

| Category (Body Part) | Definition (Recommended Exposure) | Example of Image | Remarks (Target Body Parts/Target Methods of Exposure, etc.) |
|-------------------------------|---|---|---|
| Head | <ul style="list-style-type: none"> The head is positioned in the center of the image. The entire head area is shown. |  | <ul style="list-style-type: none"> Skull/Town/Waters, etc. |
| Neck | <ul style="list-style-type: none"> Direct X-ray exposure areas exist on both sides of the neck. The exposure field focus is parallel to the cassette edge. |  | <ul style="list-style-type: none"> Applicable to exposure for angled/forward bending/backward bending exposures. Exposure with the open mouse is not included in this category. |
| Chest, frontal | <ul style="list-style-type: none"> Shoulders are included in the image. The thoracic spine is positioned at the center of the image. Direct X-ray exposure areas exist on both sides of the image. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Chest, lateral | <ul style="list-style-type: none"> Direct X-ray exposure areas exist on left and right sides of exposed body. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Abdomen | <ul style="list-style-type: none"> Direct X-ray exposure areas exist on left and right sides of exposed body. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Shoulder joint/ Collarbone | <ul style="list-style-type: none"> One shoulder is shown with the arm lowered. X-ray is focused to ensure that lungs and upper arms are not exposed to excess. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Thoracic spine | <p>Front:</p> <ul style="list-style-type: none"> Exposure area is reduced left and right sides so that there is not direct X-ray exposure area at left and right of the exposed body. <p>Side:</p> <ul style="list-style-type: none"> Exposure area is reduced at the front (chest) of the exposed body so that no direct X-ray exposure area exists. The back of the exposed body is not concealed by exposure area reduction. (Direct X-ray exposure area exists). |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |

| Category (Body Part) | Definition (Recommended Exposure) | Example of Image | Remarks (Target Body Parts/Target Methods of Exposure, etc.) |
|------------------------------|--|---|--|
| Lumbar Spine | Front: <ul style="list-style-type: none"> Exposure area is reduced at left and right sides so that no direct X-ray exposure areas exist. Side: <ul style="list-style-type: none"> Exposure field is reduced at the front of the exposed body so that there is no direct X-ray exposure area. Ensure direct X-ray exposure area exists at the back of the exposure area. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Ribs | <ul style="list-style-type: none"> Exposure implemented with the arms raised out of the exposure area with direct X-ray exposure area on one side of the exposed body. |  | <ul style="list-style-type: none"> Used for angled /tangent position exposure. |
| Pelvis/hip joint, frontal | <ul style="list-style-type: none"> Direct X-ray exposure areas exist at left and right sides of the exposed body. Direct X-ray exposure area exists below pubic bone. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Extremity | <ul style="list-style-type: none"> Exposed area must not be excessively small. In order to ensure processing consistency, at least three digits (finger or toes) should be included in the exposure field. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. Examples of body parts in this category: Radius, ulna/humerus/lower leg/femur/hip joint (left/right exposure) /fingers, toes/elbow, knee joint/finger, toe joints, etc. |
| Knee, elbow | <ul style="list-style-type: none"> The knee cap is positioned in the center of the cassette or imaging plate. |  | <ul style="list-style-type: none"> Applicable to exposure with cassette long side on the bottom. |
| Other body parts | <ul style="list-style-type: none"> Body parts other than the category listed above. | | |

Chap. 12
Activation

This is an explanation regarding the Configuration Activation feature.

12.1 Setting up Configuration Activation428

12.1 Setting up Configuration Activation

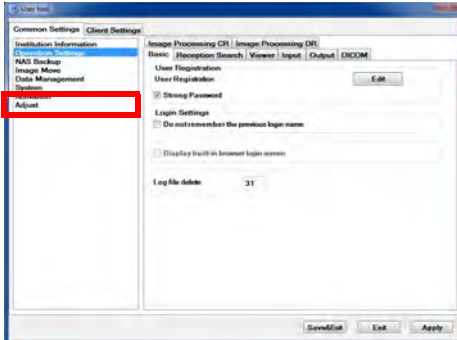
This section explains how to set up Configuration Activation.

The Configuration Activation feature allows to manage device information for installed consoles and readers, and to respond quickly to malfunctions and device-related queries.



Normally one of our service representatives will set up this feature when a console or reader is installed, but if the device is installed where no network connection is available, at times we have to ask the customer to set it up at a later date.

The following steps are only to be performed when a service representative has requested Configuration Activation settings be performed.

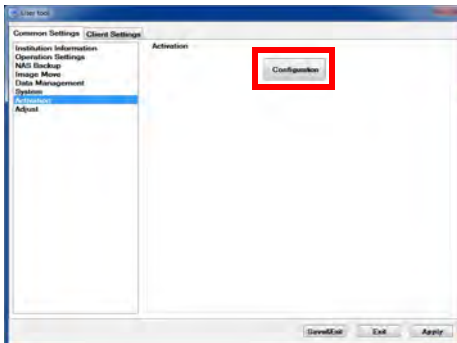


1 Start up the user tool.

For details on how to start up the user tool, refer to "9.2.1 Starting up User Tool"

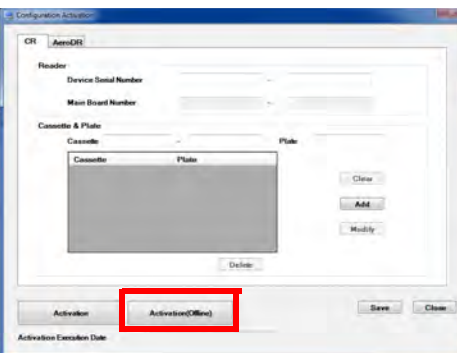
2 Click the [Activation].

The Activation Selection screen is then displayed.



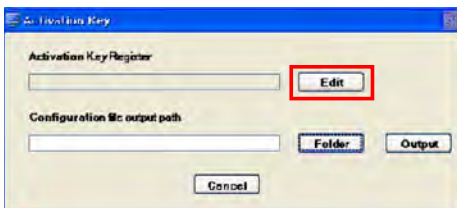
3 Click the [Configuration] button.

The [Configuration Activation] screen is then displayed.



4 Click the [Activation (Offline)] button.

The [Activation Key] dialogue box is then displayed.



5 Click the [Edit] button.

The [Activation Key] dialogue box is then displayed.

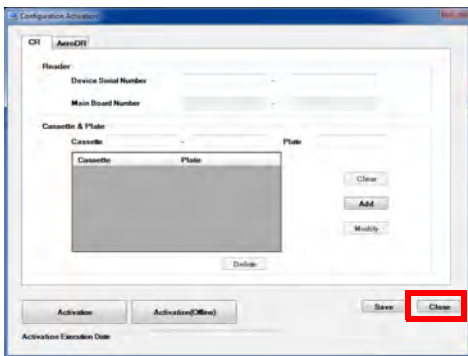


6 Enter the Configuration Activation Key string of text received from the service representative into the [Activation Key] column, then click the [Register] button.

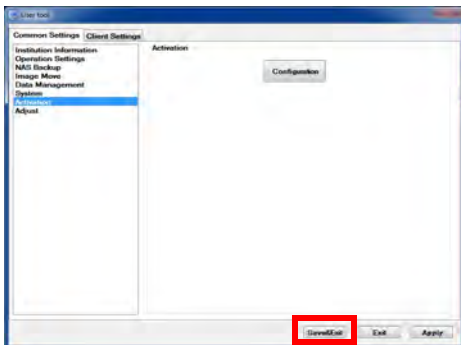
7 Click [X] to close the [Activation Key] dialogue box.
You will then be taken back to the [Activation Key] dialogue box.



8 Click [X] to close the [Activation Key] dialogue box.
You will then be taken back to the [Configuration Activation] screen.



9 Click the [Close] button.
You will then be taken back to the Activation Selection screen.



10 Click the [Save&Exit] button.

Exit the service tool.

This concludes the steps required to set up Configuration Activation.

Chap. **13**
**AeroDR Detector
Maintenance**

This chapter describes how to perform AeroDR Detector Maintenance.

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 - 13.1.1 ImagePilot Client/ImagePilot Viewer Shutdown.... 432
 - 13.1.2 Connecting to ImagePilot Server from iPad..... 432
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- 13.2 AeroDR Detector test440**
 - 13.2.1 Flow chart of AeroDR Detector test..... 440
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13.1 AeroDR Detector Calibration

This section describes how to perform AeroDR Detector calibration.

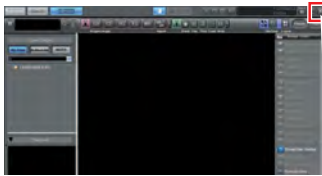


- To cope with environmental change through time, periodic calibration work is necessary.
- The screens displays are different depending on the synchronization type of the x-ray room you are using. In these sections, the screens displayed when [Sync] is selected are used.
- Fully charge the AeroDR Detector before calibration.

13.1.1 ImagePilot Client/ImagePilot Viewer Shutdown

<When using ImagePilot>

Viewer Screen



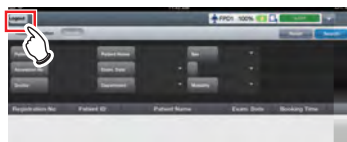
1

Click the [x] button on the upper right of the Viewer Screen or the Patient Reception screen.

Patient Reception Screen



<When using ImagePilot Viewer>



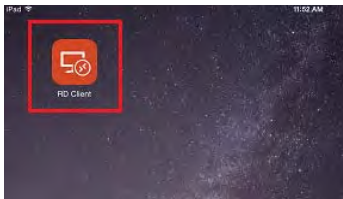
1

Click the [Logout] button on the Search screen and log out of ImagePilot Viewer.

You will be logged out from ImagePilot Viewer and the [login] screen will be displayed.

13.1.2 Connecting to ImagePilot Server from iPad

*Available only when using iPad.



1

Touch the RD Client icon on the Home screen.



2


Touch the PC icon.

The server device desktop will be displayed.

13.1.3 AeroDR Detector Calibration

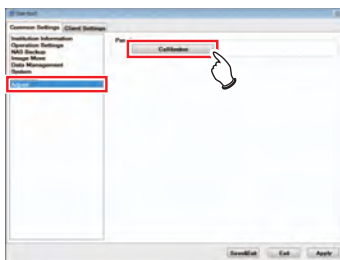
Perform AeroDR Detector calibration as described below.

Clicking the [Calibration] icon on desktop will also display the calibration tool.



1 Start up User Tool.

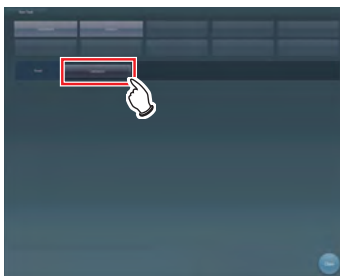
For how to start up User Tool, refer to "9.2.1 Starting up User Tool"



2 Select the [Common Settings] tab, and then click [Adjustment].

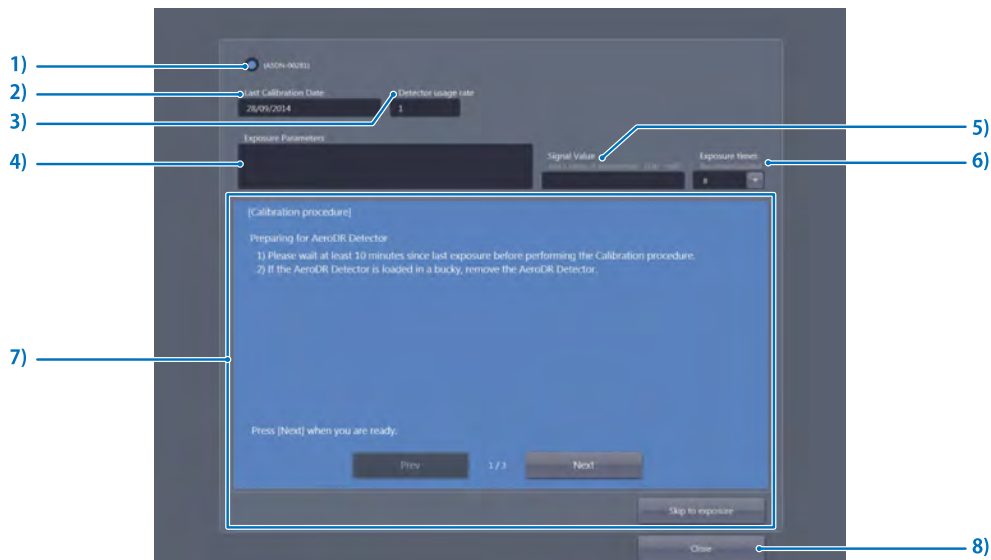
3 Click the [Calibration] button.

The AeroDR Detector service tool starts up.

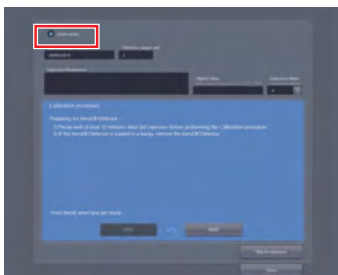


4 Click the [Calibration] button.

The AeroDR Detector calibration screen is displayed.



| No. | Item | Description |
|-----|---------------------------------|--|
| 1 | Panel selection button | Select the AeroDR Detector that is connected. The AeroDR Detector that is displayed will differ depending upon the synchronization method you are using. The AeroDR Detector displayed in red letters is the panel for performing calibration (calibration expired). |
| 2 | [Last Calibration Date] | The date of the last calibration will be displayed. |
| 3 | [Detector usage rate] | Displays the ratio of the dose currently accumulated in the selected AeroDR Detector versus the permitted upper limit of accumulated dose. |
| 4 | [Exposure Parameters] | Input the X-ray exposure parameters. |
| 5 | [Signal Value] | The signal value is displayed when exposing. |
| 6 | [Exposure times] | Select 8, 16, or 32 for your exposure times. (Default setting: 8) |
| 7 | Scope of operating instructions | Operating instructions will be displayed. Use the [Prev] button to return the instructions screen to the previous page. Use the [Next] button to advance the instructions screen to the next page. Use the [Skip to Exposure] button to advance to the exposure screen. |
| 8 | [Close] | Calibration tool ends. |

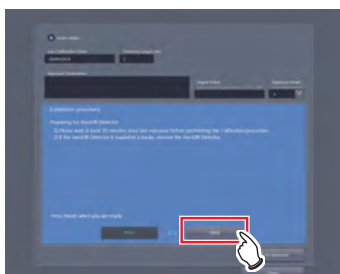


5 Select AeroDR Detector to perform calibration.

When unable to prepare for AeroDR connection, the AeroDR Detector may not be displayed. Also, [Last Calibration Date], [Next Calibration Due Date], [Exposure times] may not be displayed. If this happens, click the [Close] button once and start again from Step 4.



The AeroDR Detector displayed in red letters is the calibration execute (panel calibration expired).



6 Prepare the AeroDR Detector in accordance with the message on the screen and click the [Next] button.

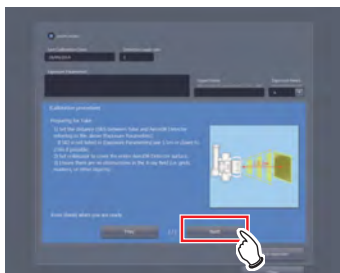
The following message will be displayed on the screen. After performing preparations in accordance with the message, click the [Next] button.



When all preparations in Step 7 to 9 are complete, press [Skip to Exposure] to display the screen for Step 10.

Preparing the AeroDR Detector

- (1) Perform after waiting at least 10 minutes after the previous exposure.
- (2) If the AeroDR Detector is loaded into the exposure stage, remove it.



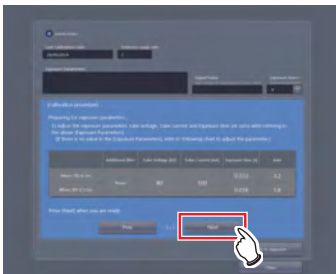
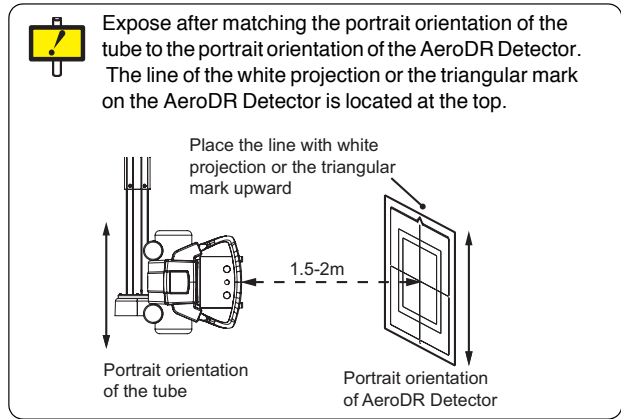
7 Perform preparations for X-ray tube in accordance with the message on the screen, and click the [Next] button.

The following message will be displayed on the screen.

After performing preparations in accordance with the message, click the [Next] button.

Preparing the X-ray tube

- (1) Calibrate exposure distance (SID) to the exposure distance (SID) in the [Exposure Parameters] listed above. (When there is no value in the memory, come as close to 2m as possible but be sure you are over 1.5 m).
- (2) Open the exposure field so that it is larger than the AeroDR Detector.
- (3) Make sure there is nothing such as grids or markers between the X-ray tube and the AeroDR Detector.



8 Perform exposure parameter preparations in accordance with the message on the screen and click the [Next] button.

The following message will be displayed on the screen.

After performing preparations in accordance with the message, click the [Next] button.

Preparing exposure parameters

- (1) In accordance with the above[Exposure Parameters] set up the X-ray device tube voltage, current, and exposure time (mAs value) values. When no information exists in [Exposure condition comment], set the X-ray exposure condition using the following table as a reference.

Exposure condition for calibration

AeroDR 1012HQ/AeroDR 1012FIP/
 AeroDR 1417HQ/AeroDR 1417FIP/AeroDR 1717HQ/
 AeroDR 2 1417HQ/AeroDR 2 1417FIP:

| | Additional filter | Tube voltage [W] | Tube current [mA] | Exposure time [S] | mAs |
|-------------------|-------------------|------------------|-------------------|-------------------|-----|
| When SID is 2 m | None | 80 | 100 | 0.032 | 3.2 |
| When SID is 1.5 m | | | | 0.018 | 1.8 |

* AeroDR 1012FIP/AeroDR 1417FIP/AeroDR 2 1417FIP are US-only specifications.

AeroDR 1417S/AeroDR 2 1417S/AeroDR 2 1417S FIP:

| | Additional filter | Tube voltage [W] | Tube current [mA] | Exposure time [S] | mAs |
|-------------------|-------------------|------------------|-------------------|-------------------|-----|
| When SID is 2 m | None | 80 | 100 | 0.05 | 5.0 |
| When SID is 1.5 m | | | | 0.028 | 2.8 |

- No additional filter is used.
- Appropriate condition is different for respective X-ray devices.
- For a different SID, change mAs according to the distance inverse square law.
 (Example) When the SID is 1.8 m, mAs is: $3.2 \times (1.8/2.0)^2 = 2.6$ mAs.

If connection preparations for the AeroDR panel cannot be made, imaging conditions may not be displayed on the screen.
If this happens, click the [Close] button once and carry out procedure 4 again.

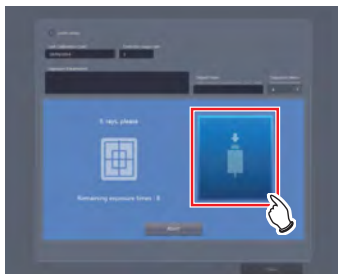


9

[Please wait...] message will be displayed.



Once AeroDR Detector preparations are complete, [X-rays, please] message will be displayed.



10

Expose the X-ray.

Expose the X-ray once [X-rays, please] is displayed. [Remaining exposure times : n] showing the remaining number of exposure times will be displayed on the screen, and if the exposure parameters are appropriate, this number will decrease by 1 each time an exposure is made. Also, after the exposure the [Please wait...] message will be displayed and after AeroDR Detector preparations are complete, [X-rays, please] will again be displayed.

If the conditions are not satisfactory, a warning message will be displayed. Try exposure again after checking the exposure conditions, looking for obstacles (e.g., grid, marker), and confirming the exposure field.

11

Repeat X-ray exposure.

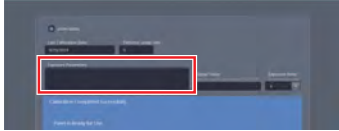
Once the X-ray exposures have gone through the designated number of times, calibration will be complete.

Exposure times may exceed the designated number of times. Perform calibration in accordance with the message on the screen.

If the conditions are not satisfactory or there is an obstacle such as a grid or marker, a warning message will be displayed. In such a case, perform the calibration again.

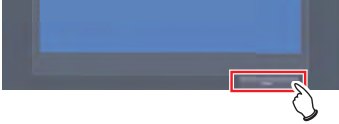


The displayed signal value is almost in proportion to the actual amount of X-rays contacting the AeroDR Detector. For example, when the signal value is "8,000", setting the mAs value to 0.75 times (6,000/8,000) can meet the optimal exposure conditions.



12 Enter the calibration conditions you applied in [Exposure Parameters].

Note down the tube voltage, tube current, exposure time, exposure distance, and remarks.



13 Click the [Close] button.



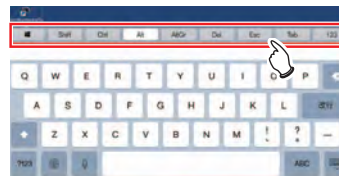
14 Click the [Close] button.



To display the software keyboard while the Microsoft Remote Desktop is activated, tap the keyboard icon at the top of the screen.



When executing calibration from iPad using Microsoft Remote Desktop, if something other than the calibration tool is displayed fullscreen, you may not be able to execute calibration using touch operation. If that occurs, operate the software keyboard to either switch windows or display desktop. ([Alt + Tab] and [Esc], [Windows+D])



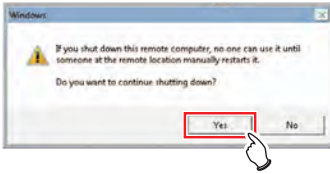
- After calibration is complete, if necessary write comments about this calibration in [Exposure Parameters].
- Since the comments will be saved, they will be useful for the next calibration.

13.1.4 Ending iPad Connection

*Available only when using iPad.



- 1 Click the PCShutdown icon.
ImagePilot power will be shut down.



- 2 Click [Yes].
The server device desktop will be displayed.

- 3 Press the iPad Home button.



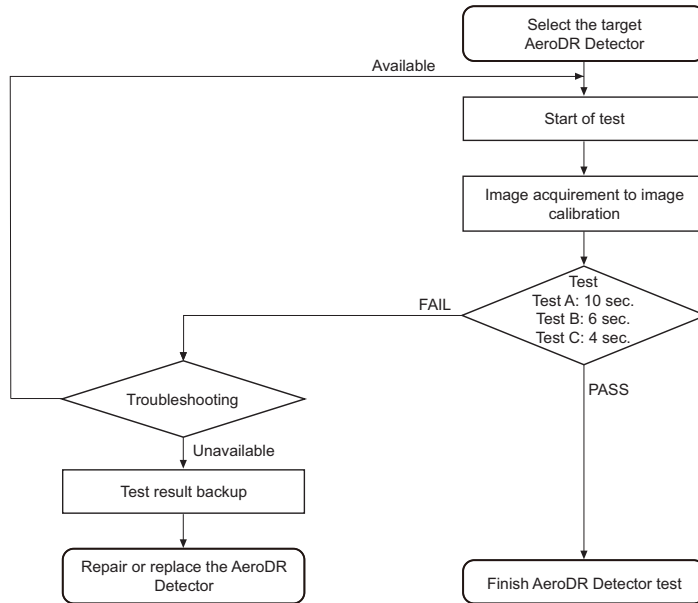
When using REGIUS Reader, the REGIUS Reader may not perform coupled shutdown.

13.2 AeroDR Detector test

13.2.1 Flow chart of AeroDR Detector test

Flow of the AeroDR Detector test is as following. The process time in the flow chart is a rough estimate. To perform testing the AeroDR Detector, place it on a stable worktable such as a desk.




| Item | | Description |
|--------|----------|---|
| Test A | Test A-1 | Lateral-stripe (global/local) analysis |
| | Test A-2 | Vertical-stripe (global/local) analysis |
| | Test A-3 | ROIC dispersion |
| Test B | | Defect analysis |
| Test C | | Spike noise analysis |



Take the appropriate action for each test with FAIL detected by referring to possible problems. For details, refer to "Fixing Problems" in the "AeroDR SYSTEM/AeroDR SYSTEM 2 Installation/Service Manual".

13.2.2 AeroDR Detector test


Performs the AeroDR Detector test.


- 
Fully charge the AeroDR Detector before testing the AeroDR Detector.
- 
If untransferred images remain in the AeroDR Detector, acquire those images before starting the test. The untransferred images in the AeroDR Detector will be deleted when the test starts.
- 
 When performing the test through a wireless connection, the test may last longer than the displayed estimated time period depending on the communication status.

1 Confirm that the monitor, this device, AeroDR SYSTEM, are powered on.

2 Prepare for exposure with AeroDR detector.

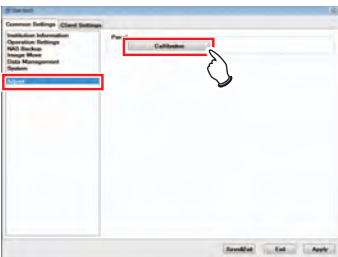
Place the AeroDR Detector on a stable worktable such as a desk.


 Clicking the [Calibration] icon on desktop will also display the calibration tool.



3 Start up User Tool.

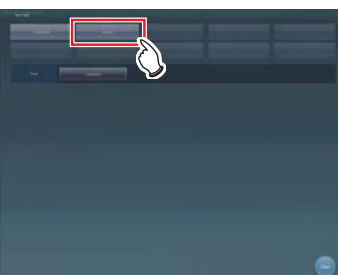
For how to start up User Tool, refer to "9.2.1 Starting up User Tool"



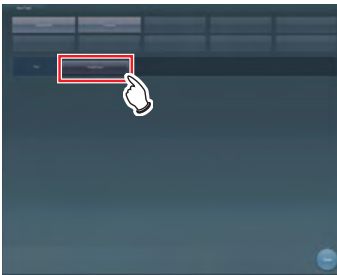
4 Select the [Common Settings] tab, and then click [Adjustment].

5 Click the [Calibration] button.

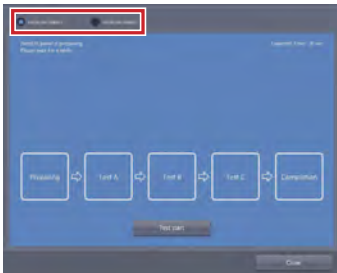
The AeroDR Detector service tool starts up.



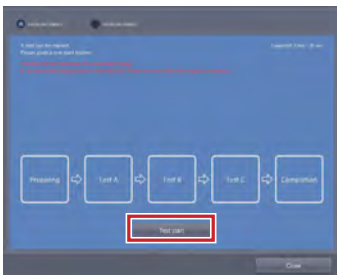
6 Click the [Analysis] button.



- 7 Click the [PanelCheck] button.
The AeroDR Detector Analysis screen is displayed.



- 8 Select the AeroDR Detector to be tested.
The status of the AeroDR Detector is displayed in the message display area.



- 9 When the AeroDR Detector becomes ready for the test, press [Test start].

When the tool becomes ready to execute test, testing starts.

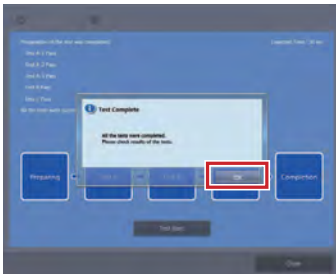
The dark blue bar in the icon extends as the test progresses. If the test fails, the icon is displayed in red.





The result and progress of the test are displayed in the message display area.


When all the test processes are completed, a confirmation screen is displayed.


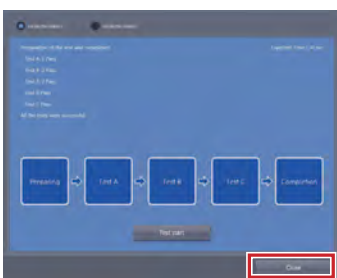


10 Press [OK].

The test result is displayed in the message display area.



 If the test fails, the icon and message are displayed in red, and a corrective action is displayed in the message display area. Carry out the corrective action that is displayed.

11 Press [Close] to close the panel check tool screen.

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ImagePilot Viewer Operation

This chapter describes how to operate ImagePilot Viewer.

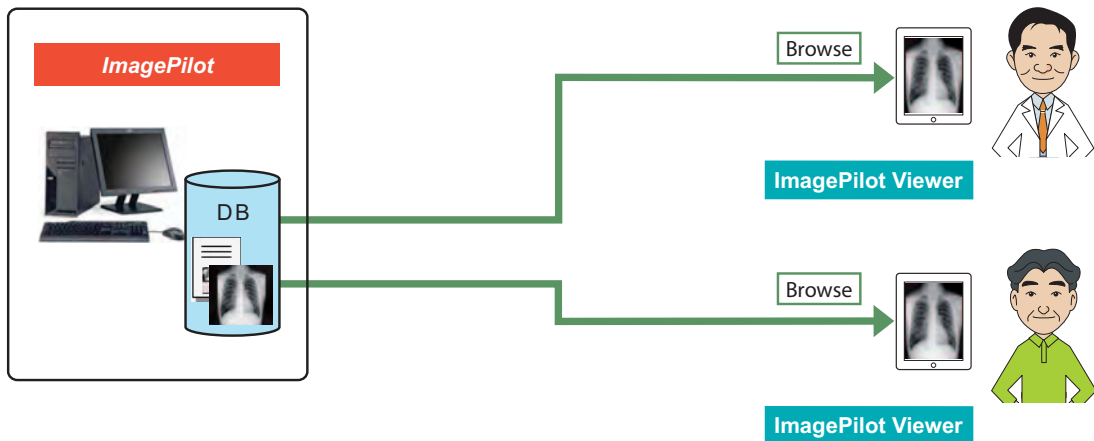
| | |
|---|------------|
| 14.1 Functional Overview | 446 |
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| 14.2 Basic Operation..... | 447 |
| 14.2.1 Starting ImagePilot Viewer (Login) | 447 |
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14.1 Functional Overview

This section describes an overview of ImagePilot Viewer and basic operations.

14.1.1 What is ImagePilot Viewer?

ImagePilot Viewer is a service for browsing data saved in ImagePilot using Web browsers such as mobile devices.



ImagePilot Viewer provides a view for reference. Do not use it to make a diagnosis.
If you use it to make a diagnosis, you do so on your own responsibility.

- Images that can be browsed are JPEG data for browsing.
- Images and data can only be browsed. Browsed data content cannot be changed.
- SR/KO image will not be displayed.

14.2 Basic Operation

14.2.1 Starting ImagePilot Viewer (Login)

Close all applications in your device before starting ImagePilot Viewer.

- 1 Open the home screen by clicking the Home button.
- 2 Double-click the Home button.
A list of running applications is displayed.

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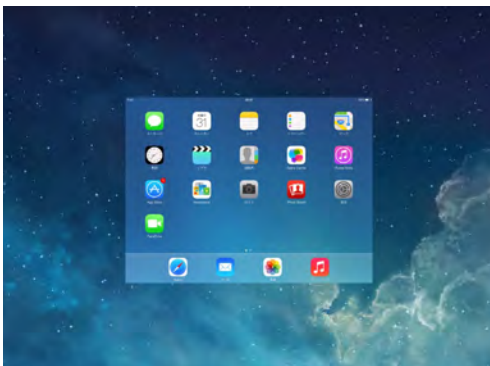


- 3 Thumbnails for shutdown applications are swapped at the top.



The thumbnail and icon displays disappear and the application shuts down.

- 4 Use the same procedure to shut down all applications.



- 5 On the Home screen, tap the ImagePilot Viewer icon.



The Login screen is displayed.

- 6 Enter your [ID] and [Password], and tap the [Login] button.

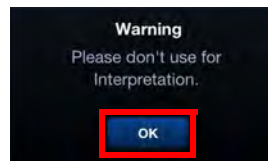


When it is set to save password, the login password input the last time you logged in is displayed. Refer to Login Screen Password Save on p. 441 for information on save/do not save password settings.

ImagePilot Viewer will start and display the Search screen.



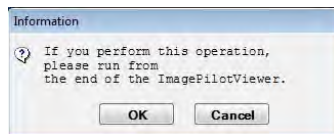
After logging in
After logging in, the following message screen will be displayed.
Check the display content then tap the [OK] button.
The current day's reception screen will be displayed.



Do not run User Tool on the ImagePilot server or client while running ImagePilot Viewer.



If the following screen is displayed on the ImagePilot server or client, make sure that ImagePilot Viewer is not running.



To use User Tool, click the [OK] button on the above screen after closing ImagePilot Viewer.

To use ImagePilot Viewer, click the [Cancel] button on the above screen.

When shutting down ImagePilot Viewer, refer to "14.2.3 Closing ImagePilot Viewer (Logout)" page 451.



If you cannot login successfully, you will need to enable cookies in your browser.

For iOS8, iOS9:

From the [Home] screen, select [Settings] - [Safari] - [Block Cookies] and then either [Allow from Current Website Only], [Allow from Websites I Visit], or [Never]. Select [Never] if using ImagePilot Viewer on multiple devices.

For iOS7:

On the Home screen, select [From third parties and advertisers] or [Never] via [Settings]-[Safari]-[Block Cookies]. Also, when using ImagePilot Viewer on multiple terminals, be sure to select [Never].

For iOS6:

On the Home screen, select [Only from sites you navigate to] or [Always] via [Settings]-[Safari]-[Accept Cookies]. Also, when using ImagePilot Viewer on multiple terminals, be sure to select [Always].

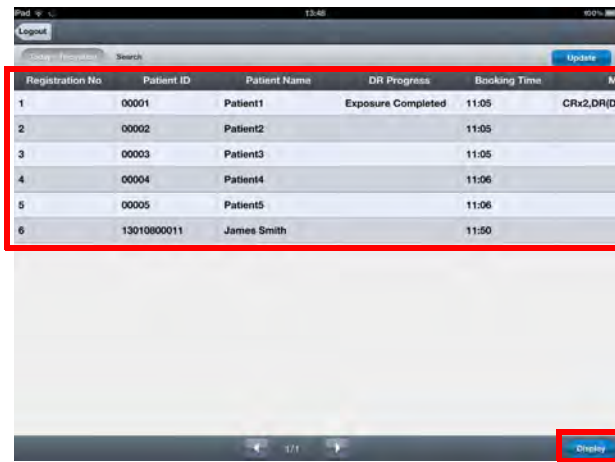



While logging into ImagePilot Viewer, do not perform [Settings] - [Safari] - [Clear Cookies] from iPad. Doing so may cause problems with the display.


If you perform this operation by mistake, restart ImagePilot server.


14.2.2 Data Browsing

- 1 From the study list of the current day's reception screen, select the patient to be browsed by double-tapping the patient's name, or tapping the name once and then tapping the [Display] button.

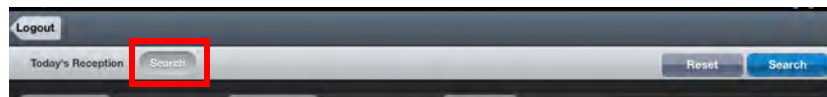


 When entering or searching patient information, make sure you do not enter mistakes. Also, make sure there are no mistakes in the patient information you are entering or searching.

 You can check the hidden parts of the study list by flicking or dragging the list horizontally or vertically.

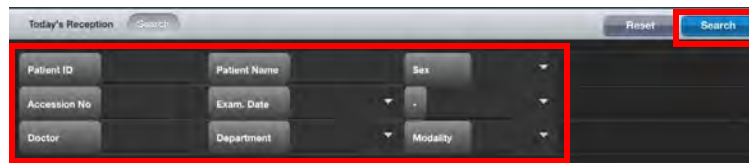
 Search for and display a patient
You can search for a patient with certain conditions by setting search conditions.

- 1 Tap the [Search] button.



The Search screen will be displayed.

- 2 Specify search conditions and tap the [Search] button.

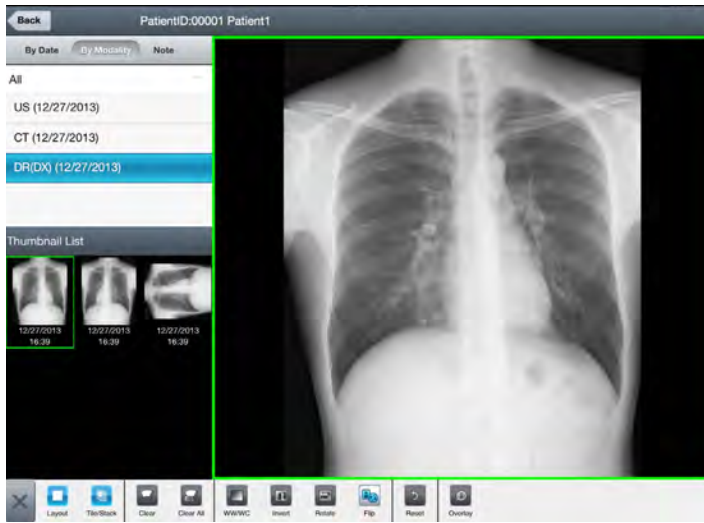


Data matching the specified search conditions will be displayed on the study list.

- 3 From the study list, select the patient to be browsed by double-tapping the patient's name, or tapping the name once and then tapping the [Display] button.



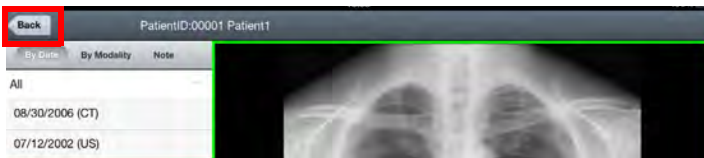
- The Viewer screen will be displayed.



- For more information on the Search screen, refer to "14.3.1 Search Screen" on page 456.
- For more information on the Viewer screen, refer to "14.3.2 Viewer Screen" on page 458.

Going back to the Search screen

- Tap the [Back] button.



When view screen is displayed, if you do not operate within a certain time or reopen ImagePilot Viewer after pressing the Home button or Power button, the login screen will be displayed, but the view screen will not have been closed. Since you cannot revise patient information that is displayed on the Viewer screen from another client when in this condition, login using ImagePilot Viewer. Or, restart ImagePilot server.

14.2.3 Closing ImagePilot Viewer (Logout)

- 1 Tap the [Logout] button on the Search screen.




You will be logged out from ImagePilot Viewer and the [Login] screen will be displayed.



When you are currently logged in, the Login screen is displayed if the application is left idle for a certain period of time or if the power button pressed and the application is re-opened. However, this does not mean that you have been logged out completely from the system. When closing the application, log in first then tap the [Logout] button.

14.2.4 Patient reception

Patient reception is carried out using ImagePilot Viewer.

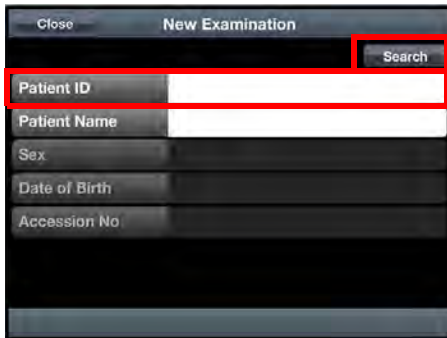
 The reception button is displayed when the online button allocation setting is [CR] or [DR].
For the online allocation registration method, see p.472 Registering ImagePilot Viewer online button allocation to ImagePilot.

- 1 Tap the [Registration] button on the reception screen for the day.



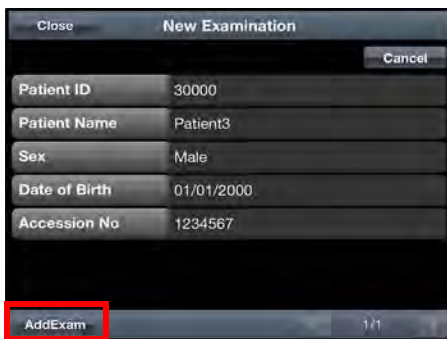
[New Examination] screen is displayed.

- 2 Enter the [Patient ID] and tap the [Search] button.





Information of patients whose IDs were searched is displayed.


- 3 Confirm the search result and if there is no mistake, tap the [AddExam] button.



The confirmation dialog is displayed.

 When entering or searching patient information, make sure you do not enter mistakes. Also, make sure there are no mistakes in the patient information you are entering or searching.

 If there are several patients in the search result, the following message is displayed. Switch pages and confirm patient.

A screenshot of a confirmation dialog box. The dialog has a dark background and contains the text: 'Multiple patients match the criteria. Please select one.' Below the text is a blue 'OK' button.

4 Tap the [Yes] button.




The patient will be recorded in the reception list for that day.

| Registration No | Patient ID | Patient Name | CR Progress | Booking |
|-----------------|------------|--------------|-------------|---------|
| 2 | 10000 | Patient1 | | 16:11 |
| 3 | 20000 | Patient2 | | 16:12 |
| 4 | 30000 | Patient3 | | 16:12 |

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14.2.5 New patient registration

New patients are registered from the ImagePilot Viewer.

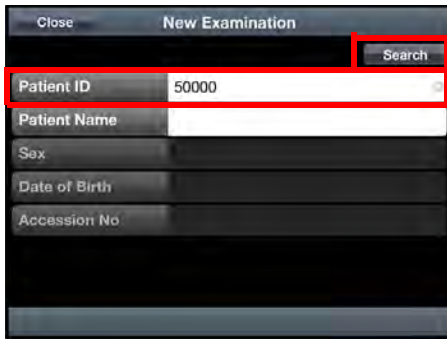
 The reception button is displayed when the online button allocation setting is [CR] or [DR].
For the online allocation registration method, see p.472 Registering ImagePilot Viewer online button allocation to ImagePilot.

- 1 Tap the [Registration] button on the reception screen for the day.



[New Examination] screen is displayed.

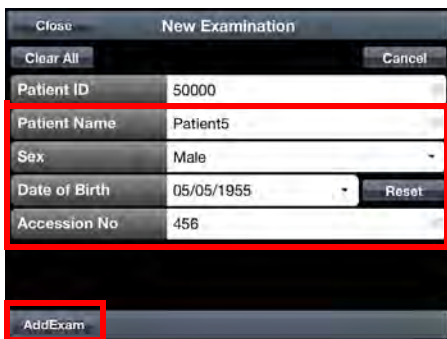
- 2 Enter the [Patient ID] and tap the [Search] button.




Verify that there is no overlap of the inputted patient ID in the database.

If there is no overlap in the patient ID, the following items may be inputted.

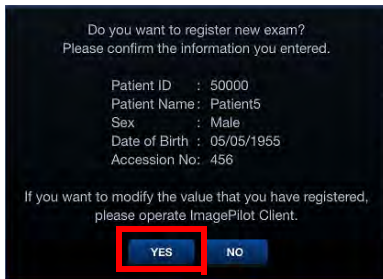
- 3 Input each item and tap the [AddExam] button.



The confirmation screen is displayed.

 When entering or searching patient information, make sure you do not enter mistakes. Also, make sure there are no mistakes in the patient information you are entering or searching.

4 Tap the [YES] button.



The patient is registered as a new patient and displayed in today's reception list.

| | | | |
|---|-------|----------|-------|
| 2 | 10000 | Patient1 | 16:11 |
| 3 | 20000 | Patient2 | 16:12 |
| 4 | 30000 | Patient3 | 16:12 |
| 6 | 50000 | Patient5 | 16:19 |



- Correct the information of reception recorded patients on the ImagePilot server or Client.
- Special characters and pictogram symbols may not be displayed properly on each terminal. It is recommended that these characters not be used.

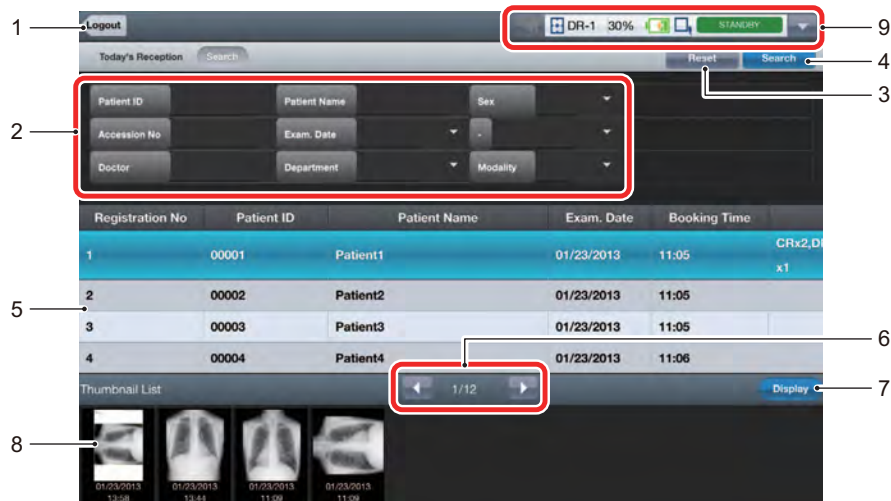
14.3 Screen Description


This chapter describes the screen displayed in ImagePilot Viewer.


14.3.1 Search Screen

This is the screen for searching data to be browsed.

When a search is performed, the matching data are displayed in the study list and from there you can select one data you want to browse.

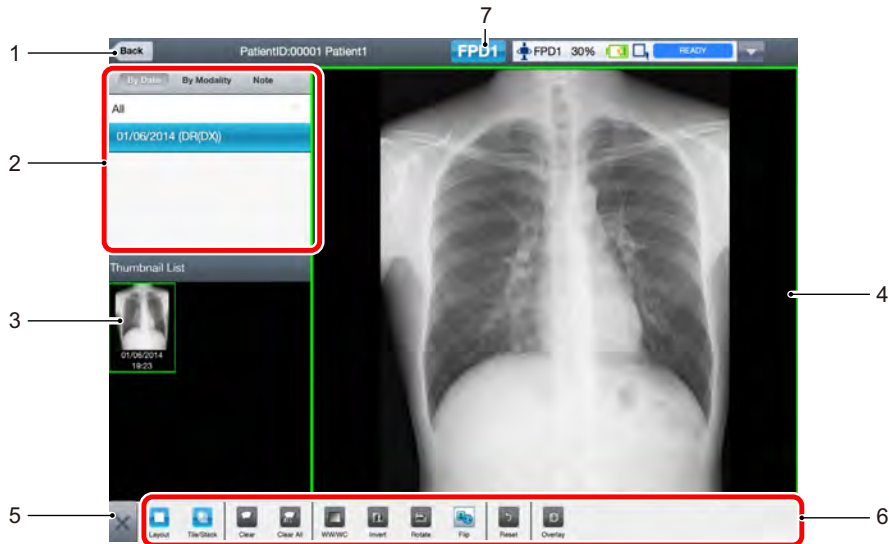


| No. | Item | Description |
|-----|-------------------|---|
| 1 | [Logout] button | Logs you out of ImagePilot Viewer. |
| 2 | Search conditions | Specifies the search conditions. |
| 3 | [Reset] button | Clears the specified search conditions. |
| 4 | [Search] button | Starts the search based on the specified conditions. After searching, data matching the conditions will be displayed on the study list. |
| 5 | Study list | <p>Data matching the search conditions are displayed. Select the data you want to browse from this list.</p> <div style="border: 1px solid gray; padding: 10px; margin-top: 10px;"> <p> - You can check the hidden parts by flicking or dragging the list horizontally or vertically.</p> <p>- The information displayed in the search list of the search screen (search tab) differs in ImagePilot and ImagePilot Viewer. The ImagePilot side is for all the patients existing in ImagePilot, while the ImagePilot Viewer shows search results from among patients with a reception record history or patients with existing examination results. Note that search functions on the patient reception record screen (14.2.4 Patient reception) display search results for all patients existing in ImagePilot.</p> </div> |

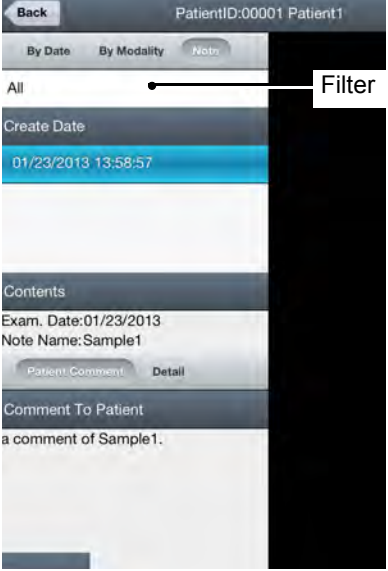
| No. | Item | Description |
|-----|--------------------------------|--|
| 6 | Page change buttons | Displays the previous or next pages when tapped if the list contains multiple pages. |
| 7 | [Display] button | Displays the Viewer screen and displays the selected data in a list. For more information on the Viewer screen, refer to "14.3.2 Viewer Screen" on page 458. |
| 8 | [Thumbnail List] | Displays the thumbnails of currently selected data in a list. <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px 0;">  <p>Data other than images are displayed as icons. Data received but not captured do not have images so no thumbnails are displayed.</p> </div> |
| 9 | AeroDR Detector status display | When setting up the DR online button, the AeroDR Detector status will be displayed. For more information on the displayed status, refer to "5.1.2 Acquiring AeroDR Images" on page 70. |

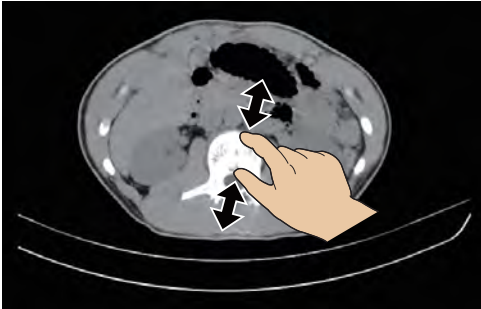

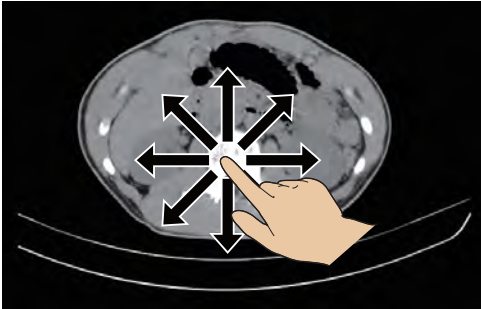
14.3.2 Viewer Screen





This is the screen which displays details of the data selected in the study list on the Search screen. You can display data of the same patient in a list on the left part of the screen then browse for other study data.




| No. | Item | Description |
|-----|---------------|---|
| 1 | [Back] button | Returns you to the Search screen. |
| 2 | Study list | <p>Displays the search data of the same patient hierarchically by study date and modality. You can also extract and display only the note data.</p> <p>[By Date] The list is displayed by date first then modality. You can narrow down modalities using a filter as necessary.</p> <p>[By Modality] The list is displayed by modality first then date. You can narrow down dates using a filter as necessary.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> </div> |

| No. | Item | Description | |
|-----|---|--|--|
| | | <p>[Note] Displays note data in a list. You can narrow down dates using a filter as necessary.</p>  | |
| 3 | <p>[Thumbnail List] (when [By date] or [By modality] is selected)</p> | <p>Displays the thumbnails of currently selected data in the study list. Tapping a thumbnail will display that image in the image display area. (You can also drag and drop a thumbnail to the image display area to display the image.)</p> <p>Non-image data Non-image data (e.g. video files, such as AVI or MPEG, Word files) are displayed as icons. These data files are downloaded and opened by dedicated applications by tapping on them.</p> | |
| | <p>[Details] (when [Note] is selected)</p> | <p>Displays the details of the note data currently selected data in the study list.</p> | |

| No. | Item | Description |
|-----|--------------------|--|
| 4 | Image display area | <p>Displays the browsed image (JPEG) of the selected thumbnail in the [Thumbnail List]. You can also switch the view. For details, refer to "14.3.4 Changing The Image View" on page 463.</p>  <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">  You can enlarge or reduce the size of an image by pinching it. </div> <p>Image panning You can move the image around within the frame when it is enlarged. 1. Touch anywhere on the image and drag.</p>  <div style="float: right;"> <p>The image will move according to the direction you drag it to.</p> </div> |
| 5 | [X] button | You can hide/unhide the study list and the [Thumbnail List]. |
| 6 | Toolbar | Contains tools to change the view of the image display area and make image browsing easier. For more information on tool functions, refer to "14.3.5 Tool Functions" on page 465. |

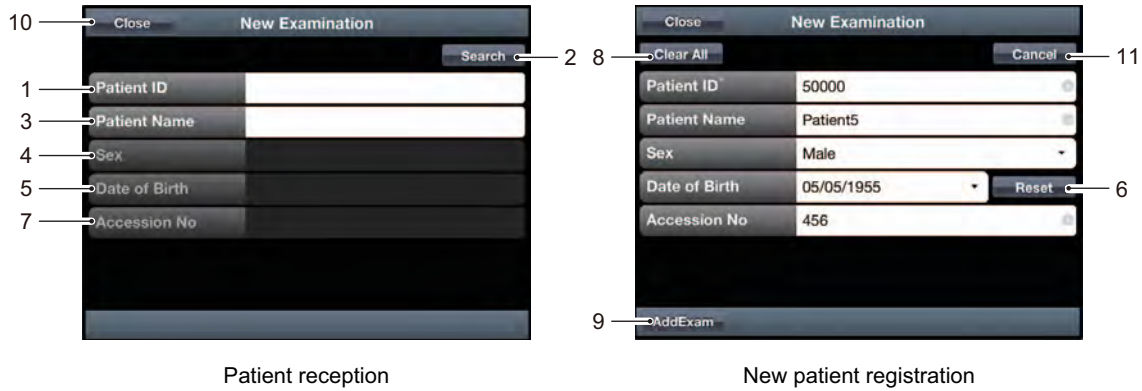
| No. | Item | Description |
|-----|--------------------------------|---|
| 7 | Online button | <p>The Online button is only displayed when a patient is selected in the current day's reception screen and the display is transitioned to the Viewer screen. The button's color changes depending on the online status. ON: Blue OFF: Gray</p> <p>Online allocation in user tools is displayed during CR or DR. Setup from the [Common Settings] - [Operation Settings] - [ImagePilot Viewer] tabs. Refer to p.325 <ImagePilot Viewer screen> for information about setup.</p> <p>When setting up the CR online button display</p>  <p>When setting up DR online button display</p>  <p>When setting online buttons so that they do not display</p>  <p>*The Online button is not displayed when the patient is selected from the search screen and the display is transitioned to the Viewer screen.</p> <div style="border: 1px solid gray; padding: 10px; margin-top: 10px;">  <p>After a certain amount of time has passed from tapping the Online button, it returns to the original offline status. You will see either one of the following two messages depending on the environments:</p> <p>For CR: [CR button has been changed to offline. Will you Change to online?]</p> <p>For DR: [Panel Status "READY" is timeout. Will you continue to expose?]</p> </div> |
| 8 | AeroDR Detector status display | <p>When setting up the DR online button to display, the AeroDR Detector status will be displayed. For more information on the displayed status, refer to "5.1.2 Acquiring AeroDR Images" on page 70.</p> |



Parts of the display may be hidden if there are many items in the study list or [Thumbnail List]. You can check them by flicking or dragging the list horizontally or vertically.

14.3.3 [New Examination] screen

Clicking the [Registration] button on the reception screen for that day will display the information. Screen for receiving patients and registering new patients.



| No. | Item | Description |
|-----|--------------------|--|
| 1 | [Patient ID] | Patient ID matching the search conditions for the patient will be displayed. |
| 2 | [Search] button | Starts the search based on the specified conditions. After searching, data matching the conditions will be displayed. |
| 3 | [Patient Name] | The name matching the search conditions for the patient will be displayed. |
| 4 | [Sex] | The sex of the patient matching the search conditions will be displayed. |
| 5 | [Date of Birth] | The date of birth of the patient matching the search conditions will be displayed. |
| 6 | [Reset] button | Reset the inputted date of birth. |
| 7 | [Accession No] | Patient Accession No. matching the search conditions will be displayed. |
| 8 | [Clear All] button | Reset all the set information. |
| 9 | [AddExam] button | The patient will be recorded in the reception list for that day. |
| 10 | [Close] button | Closes the reception registration screen. |
| 11 | [Cancel]button | Stops the registration of new patients and return to patient reception. |

14.3.4 Changing The Image View

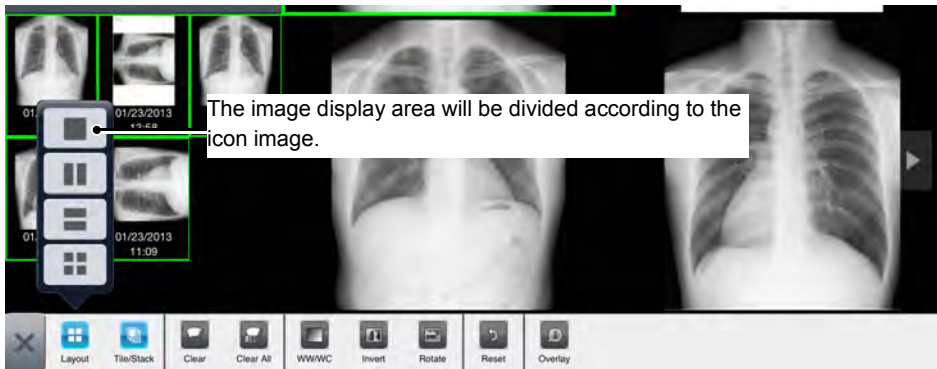
This section describes how to change the view and layout of the image display screen.

Changing the Layout

You can change the layout using [Layout] from the toolbar.

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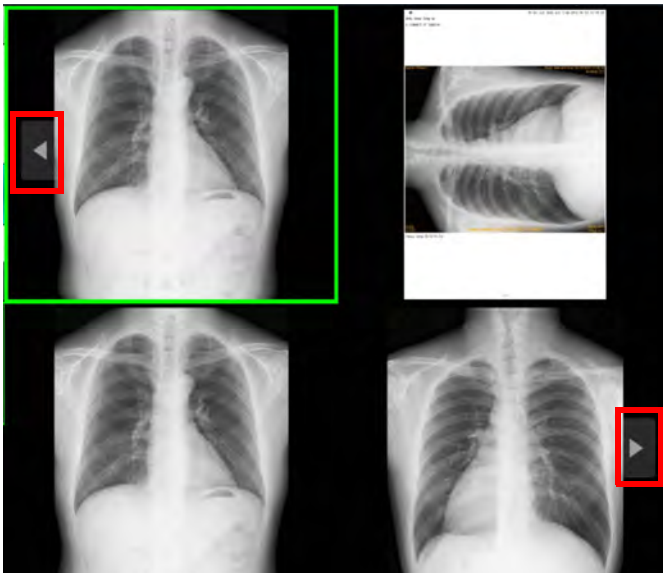
- 1 Tap the [Layout] icon.
A popup will be displayed.
- 2 Select by tapping a layout.



The layout will change to the selected layout.

When there are more images than the number of frames

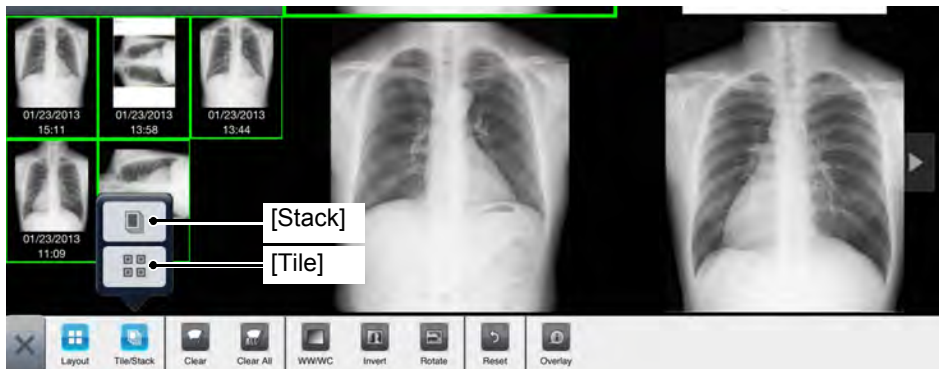
When there are more images than the number of frames, a triangle button will be displayed on the first or last frame. The previous or next images are displayed by tapping the triangle button.



Changing the View

You can switch to tile or stack view using [Tile/Stack] on the toolbar.

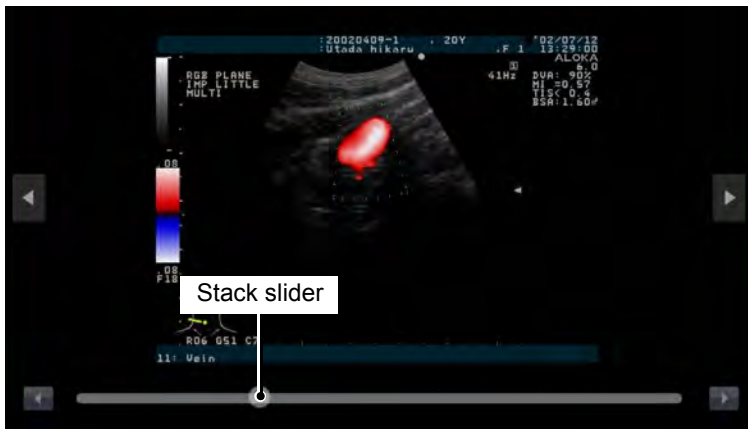
- 1 Tap the [Tile/Stack] icon.
A popup will be displayed.
- 2 Select the view.



The view of the selected image will change.

Switching images in Stack view

In Stack view, the stack slider is displayed inside the frame.



You can switch between images by dragging the stack slider. You can switch images one by one by tapping the triangle button on each side of the stack slider.



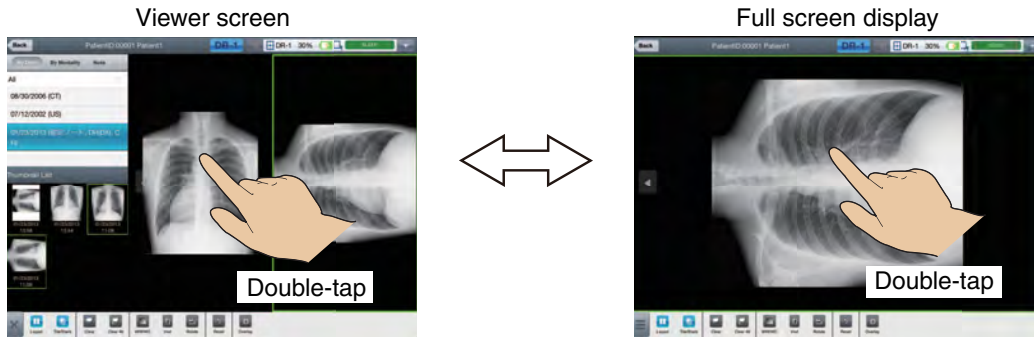
When there is a large number of images, the number of images is reacquired for each fixed number.

Displaying images in full screen

You can enlarge an image to its maximum size.

- 1 Double-tap the image you want to enlarge.
The screen will switch to full screen and the enlarged image will be displayed.
- 2 Double-tap the image to go back to the previous screen.

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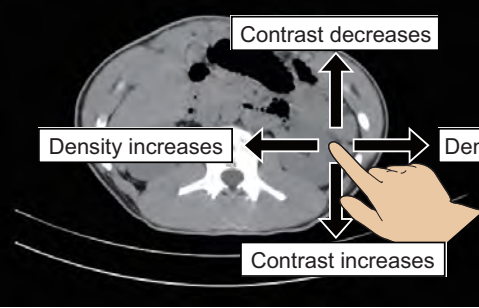

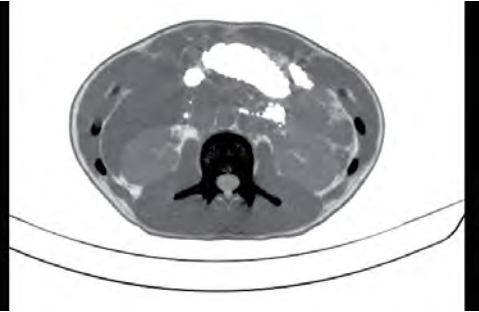

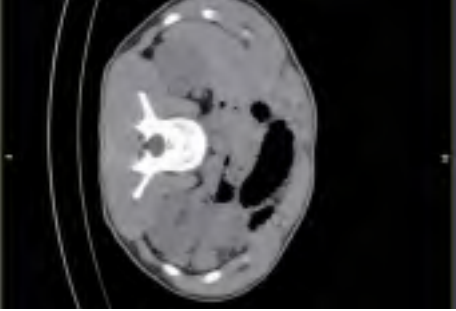


14.3.5 Tool Functions


This section describes each function that can be selected from the toolbar.



*: [Enlarge/Reduce] is not displayed on the iPad. You can enlarge or reduce images on the iPad by pinching on them.

| No. | Item | Description |
|-----|---|--|
| 1 | [Layout]  | Specifies the layout of the image display area. For details, refer to "14.3.4 Changing The Image View" on page 463. |
| 2 | [Tile/Stack]  | Specifies the image view. For details, refer to "14.3.4 Changing The Image View" on page 463. |
| 3 | [Clear]  | Clears the selected image display. |
| 4 | [Clear All]  | Clears all image displays. |

| No. | Item | Description |
|-----|---|---|
| 5 | [WW/WC]  | Changes the image density and contrast. Procedure after function selection: 1. Drag across the screen.  <p>The image contrast will change according to the drag direction.</p> |
| 6 | [Invert]  | Reverses the black and white tones of the selected image.  |
| 7 | [Rotate]  | Rotates the selected image by 90° .  |
| 8 | [Flip]  | Reverses the right and left of the selected image. When the button is OFF the image is not reversed and when the button is ON the image is reversed. |
| 9 | [Reset]  | Clears all processing done on the image and returns it to its initial state. |

| No. | Item | Description |
|-----|--|--|
| 10 | [Overlay]  | Displays the image information overlay on the screen. <Caution> The following overlays are not displayed in ImagePilot Viewer: "Accession No", "Samples Per Pixel", "Photometric Interpretation", "Surface Configuration", "Number of Frames", "Row", "Column", "Allocation Bit", "Storage Bit", "High-Order Bit", "Pixel Notation", "Window Center", "Window Width", "Rescale Intercept", "Rescale Inclination", "Rescale Type", "Study Date", "Study Time", "Series Date", "Series Time", "Collection Date", "Collection Time", "Content Date", "Content Time", "Collection Date (DT Version)", "Collection Time (DT Version)", "Age", "Enlargement Factor", "Slice Thickness", "Slice Position", "Vision Field Position", "Resolution", "Cassette Size", "Contrast Medium / Bolus Agent Volume", "Contrast Medium / Bolus Start Time", "Contrast Medium / Bolus End Time", "Contrast Medium / Total Bolus Dose", "Relative X-ray Exposure", "Contrast Medium Flow Rate", "Contrast Medium Flow Period", and "Allergies". Image top, left-right, and center overlay displays are not supported. |



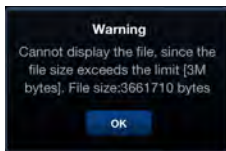
The ImagePilot Viewer reference image is updated by the periodic monitoring process after the Viewer screen is closed on the ImagePilot side.
 Also, if an image is updated in ImagePilot, the browsed image on ImagePilot Viewer will also be updated when the data bank function is enabled.

14.4 Limitations

- 1 When used with iPad, dividing the keyboard into 2 will prevent proper operation.



- 2 When using ImagePilot Viewer, patients who have been registered using ImagePilot's medical examination reservation function are displayed on the reception list only for the day they are registered.
- 3 The size limit for PDF files that can be opened on ImagePilot Viewer's view screen is 3MB and the maximum number of pages is 30. If files that exceed these maximum values are opened, the following error message will be displayed.

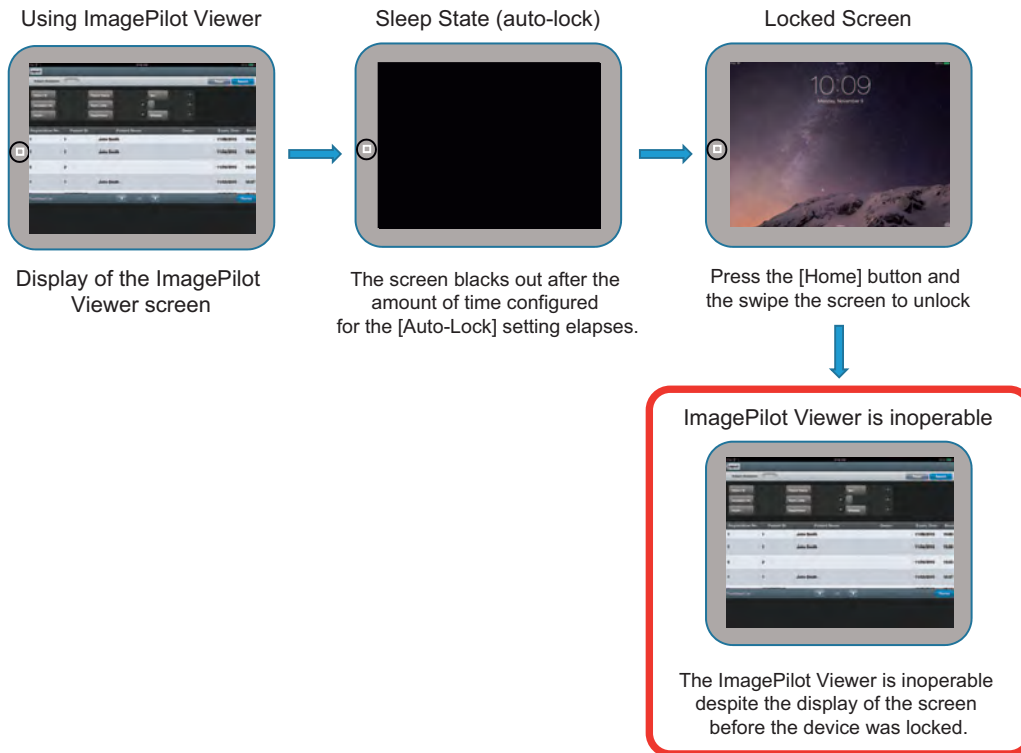


- 4 Using the Viewer Screen in ImagePilot Viewer for extended periods of time may cause the following error message to appear.



Tap [OK] on the error message to close the message and then tap [Back] on the [Viewer] screen to return to the search screen.

5 ImagePilot Viewer is not operable after the device is locked for iOS versions 8.0 through 8.1.2.

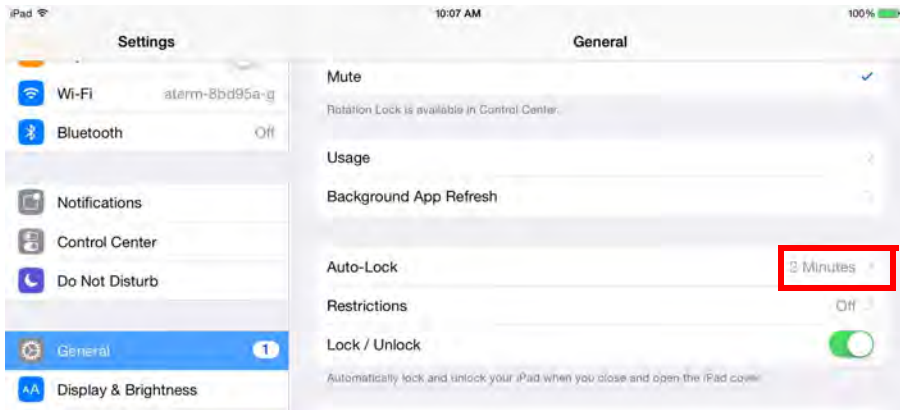


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This is caused by a bug in the OS. There is currently no workaround for this issue. If you experience this issue, display the Home screen and tap the ImagePilot Viewer icon to log in again. You can prevent this issue from occurring by using the following procedure to prevent the iPad lock function from operating.

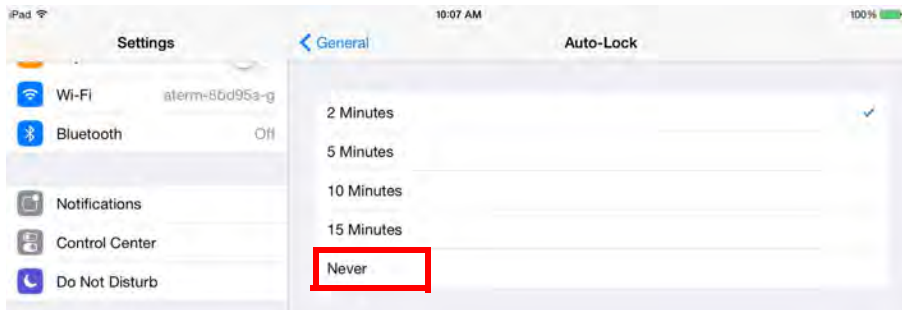
Procedure to prevent the lock function from operating

- 1 From the Home screen, click the [Settings] icon.
- 2 From the left menu, select [General].
- 3 From the right menu, tap the ">" symbol on the right edge of the [Auto-Lock] parameter.

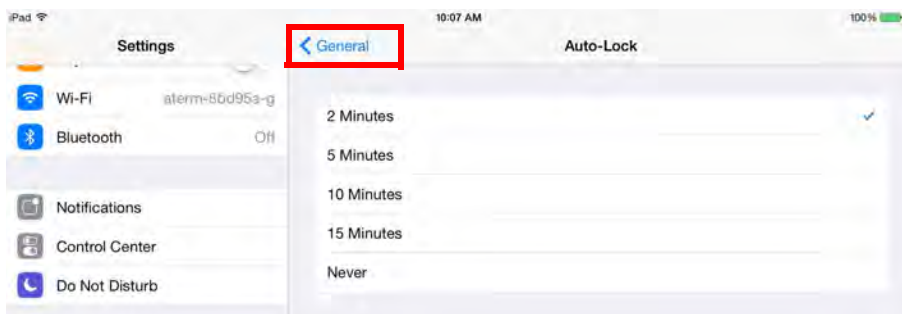


The Auto-Lock options appear on the right.

- 4 Tap and select [Never].

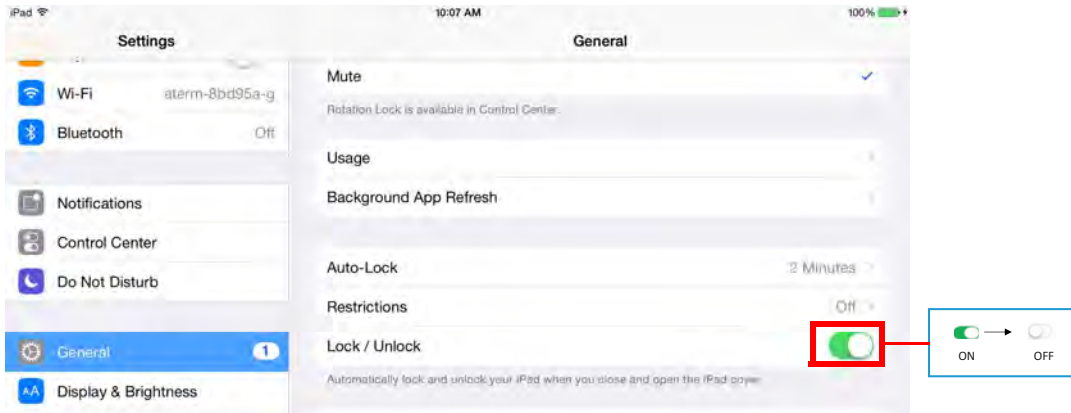


- 5 Tap [General].



This returns you to the General menu.

- 6 Slide the switch at the right edge of the [Lock/Unlock] option under the [General] menu to turn off this option.



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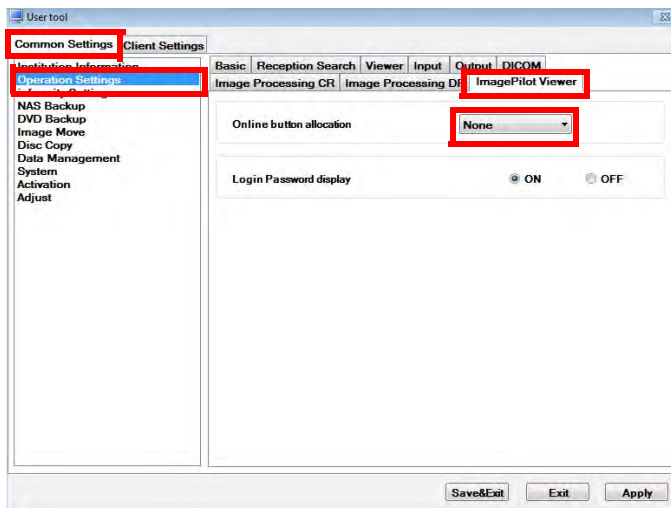
14.5 Registering ImagePilot Viewer online button allocation to ImagePilot

Change the display status of the online import button.



Execute the following procedure after shutting down ImagePilot Viewer.

- 1 On the Windows desktop, double-click the [ServiceTool] icon.
 - The screen to enter the password is displayed.
For how to start up the service tool, refer to "9.2.1 Starting up User Tool" on page 270.
- 2 Enter the ImagePilot User tool password (1234), and then click the [Go] button.
 - The ImagePilot User Tool screen is displayed.
- 3 Click the [Common Setting] - [Operation Setting] - [ImagePilot Viewer] tab.
- 4 Select the online input button you want to display from the [Online button Allocation] pulldown list.
- 5 Click [Apply], and then click the [Save&Exit] button.



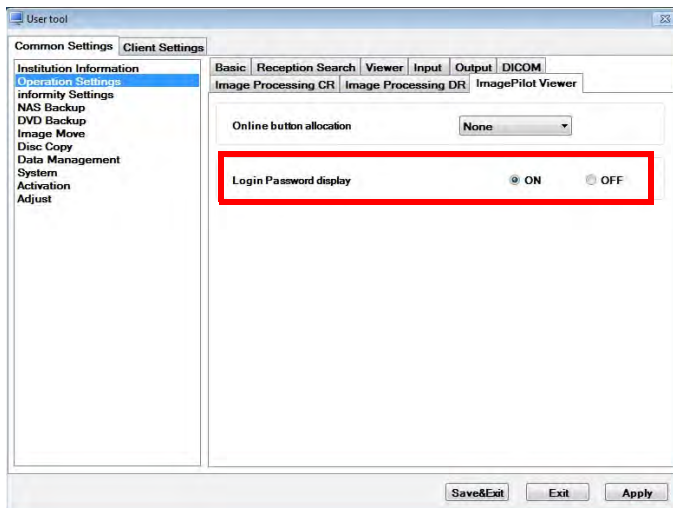
14.6 Saving the login screen password

When the login screen is displayed, the previously input login password is displayed.



Execute the following procedure after shutting down ImagePilot Viewer.

- 1 On the Windows desktop, double-click the [ServiceTool] icon.
 - **The screen to enter the password is displayed.**
For how to start up the service tool, refer to "9.2.1 Starting up User Tool" on page 270.
- 2 Enter the ImagePilot User tool password (1234), and then click the [Go] button.
 - **The ImagePilot User Tool screen is displayed.**
- 3 Click the [Common Setting] - [Operation Setting] - [ImagePilot Viewer] tab.
- 4 If you don't want to display the previously input password on the login screen, select [OFF] from among the [Login Password display] options. If you want to display it, select [ON].
- 5 Click [Apply], and then click the [Save&Exit] button.



Chap. 15

Troubleshooting

This chapter describes typical methods of troubleshooting and includes a list of error messages displayed on ImagePilot.

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15.1 Messages relating to Applications

| Major Messages | Remedy |
|---|---|
| Includes document/cine files which cannot be displayed in viewing area. Please double click on file icon in order to view the data. | Images such as animation or document file that cannot be displayed in the viewing field are contained in the data that is selected to be displayed in the Viewing field. When viewing the animation file, etc. that requires the special viewer, double-click the file icon in the data list located at the left of the Viewer screen. |
| Do you want to cancel image acquisition? (Even though image acquisition is cancelled, images already captured will not be cancelled) | Click [Yes] button to cancel acquisition of the selected image or [No] to continue with. The image that has been acquired will not be canceled at the moment when [Yes] button is selected. |
| Failed to capture [Numeric] image(s). Please confirm data format of the images whose image acquisition failed. | Data not suitable for import is contained in the data that shall be displayed on the viewing field. Check the data format (*.bmp, *.jpg or *.jpeg, etc.) that shall be imported as the schema image is correct. *.jpeg) |
| Failed to capture [Numeric] image(s). Please confirm whether images which are not DICOM standards complaint, are not included. | Data not suitable for import is contained in the data that shall be displayed on the viewing field. Check the data that shall be imported as DICOM image is correct. |
| Failed in creating image adjustment parameter. Move to image adjustment screen and re-try the process. | Reading could not be performed because the image read process is not running. If the same error occurs even after restarting the PC and retrying the process, please contact our Service Center. |
| Image reading process is not running. Please re-start the system. | Reading could not be performed because the image read process is not running. If the same error occurs even after restarting the PC and retrying the process, please contact our Service Center. |
| Service tool is running. Please retry after closing service tool. | ImagePilot is designed not to start up while the Service Tool is in operation. Try after shutting down the Service Tool. |
| NG Images are included in target items for output. Exclude NG Images from output target. | Rejected(NG) image is contained in the image selected for output. Images other than NG will be output. |
| Read only Images are included in target items for output. Exclude Read only Images from output target. | Reference image is contained in the image selected for output. Images other than reference image will be output. |
| calculation calibration is disabled as dimension information is already available for this image. | This message will be displayed for DICOM image, etc. that has the length information when clicking [Calibrate] button in the basic function palette located at the right of the Viewer screen, followed by clicking on the image. It is not necessary to implement the calculation calibration. |
| This operation is disabled for non-CT images. | This message will be displayed for images other than CT image when clicking [Rectangular CT] button in the basic function Palette located at the right of the Viewer screen, followed by clicking on the image. This function is available only for CT images. |
| This operation is disabled for non-CR/DR(DX) images. | This message will be displayed for images other than CR and AeroDR images when clicking the [Cardio Index] button or the [Pelvis Analysis] button on the measuring palette located at the right of the Viewer screen followed by clicking on the image. This function cannot be applied to non-CR and non-AeroDR images. |
| System error occurred. [Error Information] | System error occurred due to occurrence of unexpected operation or instance. Contact your technical representative if the same error repeats when trying the same after restarting the system. |
| System error occurred. The program will be closed.[Error Information] | System error occurred due to occurrence of unexpected operation or instance. Contact your technical representative if the same error repeats when trying the same after restarting the system. |

| Major Messages | Remedy |
|--|---|
| These contents will be saved in Microsoft Word document file. Is it ok? | Saves the created simple document in Microsoft Word file format. Click [Yes] button to save or click [No] button to cancel. |
| Error occurred while creating document in Microsoft Word format. [Error Information] | An error occurred while creating the simple document in Microsoft Word file format. Check the selected document type, images pasted on the document is correct. |
| Document creation software(Microsoft Word) is not installed. This function cannot be used. | Cannot create the simple document due to absence of document creator(Microsoft Word). Contact your technical representative. |
| Failed in image acquisition. [Error Information] | Importing an image has failed. Follow the instructions displayed inside the []. |
| This exposing order has already been reserved. | This message will be displayed when the ImagePilot-CL registered with the Previewer screen attempts to register the Exam order by clicking [Order] button while the said Exam order has been already registered by other ImagePilot-CL. Check the registration status of the ImagePilot-CL that is registered with the Previewer screen. |
| This exposing order is now in Exposing mode. | This message will be displayed when the ImagePilot-CL registered with the Previewer screen attempts to register the Exam order by clicking [Order] button while the said Exam order has been already in exposure process by other ImagePilot-CL. Check the operation status of the ImagePilot-CL that is registered with the Previewer screen. |
| Currently window is used by other user. Please confirm the window is closed, and retry again. | This message will be displayed when [Confirm Unnamed Image] button of the Patient Reception screen is clicked while the image is already opened on other ImagePilot-CL. Retry after confirming that the image is closed on other ImagePilot-CL. |
| Currently window is being updated by other user. Please confirm the window is closed, and retry again. | This message will be displayed when the editing operation is already in process on other ImagePilot-CL including the cases where [Edit] button is clicked while the information of any patient in the Patient Reception screen is displayed or [Preset marker] button is clicked in the Annotation Palette located at the right of the Viewer screen. Retry after confirming that the image is closed on other ImagePilot-CL. |
| This device is not registered. | This message will be displayed when an attempt is made to output to the devices not registered with the system. Contact your technical representative for the procedure to register the output devices. |
| Disk space on Server Hard Disk is not sufficient. Please perform backup to Extension NAS or to DVD. | This message will be displayed when the available disk space of the HDD on the server PC is insufficient. Back up the data to extension NAS or DVD, or contact your technical representative. |
| Insufficient free space on server PC. | This message will be displayed when the available disk space of the HDD on the your PC is insufficient. Check that there is unnecessary files in the disk, and contact your technical representative. |
| The basic license of permitted active client connections. Disconnect any client PC not in use, and try again. | This message will be displayed when the ImagePilot-CL starts up and the total number of the client connected to the system exceeds the number allowed by the license. Wait until the ImagePilot-CL in use shuts down or shut down the idling ImagePilot-CL. Then retry the operation. |
| This PC is not registered as client PC. | This message will be displayed when the ImagePilot-CL not registered with the system starts up. Modify the settings on the PC or check that the illegal software on the PC, and contact your technical representative. |
| Specified patient does not exist. | This message will be displayed when the specified patient does not exist. Check if the Patient information is altered, and retry the operation. |

| Major Messages | Remedy |
|--|---|
| Failed in displaying specified Thumbnail image. [Error Information] | This message will be displayed when the attempt to open the data by clicking the thumbnail in the data list located at the left of the Viewer screen failed. If the same error repeats when the operation is attempted after restarting the system, contact your technical representative. |
| Failed in invoking document creation software (Microsoft Word). | Cannot create or edit the simple document due to failure to activate the document creator(Microsoft Word). Contact your technical representative. |
| Cannot perform this operation when patient data is being viewed in viewer screen. Please try again once diagnosis of this patient is completed. | This message will be displayed when [!] button of the Patient Reception screen or [Modify] button of the Patient Information(basic info, vital, study history, others) is clicked while the Patient is being referred to on the Viewer screen, or when [X] button at the upper right of the screen is clicked. Retry the operation after closing the patient being referred to. |
| Cannot shutdown Windows during the execution of ImagePilot. | This message will be displayed when an attempt to shut down the Windows is made. Retry the operation after shutting down the ImagePilot in operation. |
| Only data addition and data view are permitted for this patient since either patient information update, or view in viewer screen is in progress by "Computer Name", "Client Name", "User Name". | This message will be displayed when [View images] button is clicked on the Patient Reception screen, or the selected patient information is being modified or referred to on the Viewer screen. Only reference or addition of the data is possible. |
| Cannot perform the operation when the patient information is being viewed or edited "Computer Name", "Client Name", "User Name". Please try again after completion. | This message will be displayed when [Edit] button of the Patient Information on the Patient Reception screen is clicked, or the selected patient information is being modified on the other PC (judged from the displayed "Computer name", "ID", "User name") or referred to on the Viewer screen. Retry the operation after the process on the other PC is completed. |
| Cannot register this patient when patient information is being edited or viewed in viewer screen "Computer Name", "Client Name", "User Name". Please try again after completion. | This message will be displayed when [Add exam] button is clicked on the Patient Reception screen, or the selected patient information is being modified on the other PC(judged from the displayed "Computer name", "ID", "User name") or referred to on the Viewer screen. Retry the operation after the process on the other PC is completed. |
| Cannot perform this operation since image acquisition for this patient is in progress. | Operation is not possible because the image of selected patient is being imported. Retry the operation after the image import is completed. |
| Since patient information is under modification or under reference in viewer screen for patient in "Computer Name", "Client Name", "User Name". and temporary patient, this operation is not possible. | Operation is not possible because the patient information of the selected patient is being modified or referred to on the Viewer screen, and because the patient is a temporary patient. |
| Cannot perform this operation, since it is in view mode. | This message will be displayed when the operation such as Annotation is attempted on the reference image that has been confirmed while the Patient data is being referred to on the Viewer screen using the Reference mode. After the process on the other PC is completed, select the same patient following the normal procedure, and retry the operation. |
| Timeout occurred . Cannot perform patient search. Please confirm the status of search point device. | Time-out error occurred when an attempt is made to connect to the search target device to start the search operation after entering the Patient information such as Patient ID, etc. on the Patient Reception screen. Check that the target system is correctly operating, abnormalities with the network devices(Hub, cable, etc.). |
| Viewing of this patient will be completed. - If any images are acquired, please end after confirming image acquisition. - Unconformed NOTE contents will not be saved. | This message will be displayed when [Complete] button is clicked on the Viewer screen. Make sure that the shutdown is performed after confirming the image is successfully acquired when it is imported. |

| Major Messages | Remedy |
|---|--|
| Cannot perform this operation for the same image. | This message will be displayed when the operation such as Annotation or Analysis is attempted after selecting the same image as the original for comparison target on the Viewer screen. This function cannot be used when the same image as the original is selected as the comparison target. |
| Network error occurred. [Error Information] | Name and error information of the connection target device will be displayed. Check that the target system is correctly operating, abnormalities with the network devices(Hub, cable, etc.). |
| Device error occurred. [Error Device Name] [Error Information] | Name and error information of the connection target device will be displayed in the case where the communication error or error on the connection target device is located as the result of checks on the connection target device for communication. Check that the target device is correctly operating, abnormalities with the network devices(Hub, cable, etc.). |
| Failed to connect with JM. [Error Information] Please confirm the startup of server PC. | This message will be displayed when the connection to the JM(Job Manager), a built-in module failed when [CR] button of the [Modality] buttons is clicked on the Viewer screen. If the same error repeats in the operation retried after canceling the [CR] button, restart the server PC. If the error still repeat, contact your technical representative. |
| Failed to connect with JM. Please confirm the startup of server PC. | This message will be displayed when the connection to the JM(Job Manager), a built-in module failed when the ImagePilot started up. Check that the server PC is correctly operating. If the error still repeats, shut down the ImagePilot, and restart the server PC. If the error cannot be canceled, contact your technical representative. |
| Failed to retrieve image process parameter. Please confirm the startup of server PC. | This message will be displayed when the acquisition of image processing parameters from the built-in module failed when the ImagePilot started up. Check that the server PC is correctly operating. If the error still repeats, shut down the ImagePilot, and restart the server PC. If the error cannot be canceled, contact your technical representative. |
| Cannot perform this operation, since this modality device is used by other client PC. | This message will be displayed when the same modality is selected(ON) on the other ImagePilot-CL when [Modality] button is clicked on the Viewer screen of your PC. The error will be canceled as soon as the Modality is deselected(OFF) on the other ImagePilot-CL. |
| Cannot perform this operation since this modality device is under image acquisition process. | This message will be displayed in the case where the image is being imported from the target modality when [Modality] button is deselected(OFF) on the Viewer screen. The error will be canceled as soon as the image acquisition is completed. |
| Cannot perform this operation since there is no response from this modality device. [Error Information]. | This message will be displayed in the case where no response is returned when an attempt is made to confirm the connection(ping command) with the Modality after selecting(ON) the [Modality] button on the Viewer screen. Check that the target device is correctly operating, abnormalities with the network devices(Hub, cable, etc.). |
| Cannot close ImagePilot since image acquisition is in progress. Please try after image acquisition is completed. | This message will be displayed when [Complete] button is clicked on the Viewer screen while the image is being imported from the Modality. Retry the operation after the image acquisition is completed. |
| This user does not have privileges to perform this operation. | This message will be displayed when the operation is implemented by the log-in user who is not authorized for the specific operation. Either retry logging in with the user of higher authority or start up the User Administration Tool and click [Edit] button through "User Tool" → "Common Settings" tab → "Operation Settings" → "Basic" tab → "User Registration" to check the authority level of the said user. |
| Do you want to save this image as Original? | This message will be displayed when [Save as Original] button is clicked in the basic function palette located at the right of the Viewer screen. Click [Yes] to enable the option, and [No] to cancel. |

| Major Messages | Remedy |
|---|--|
| Do you want to undo changes to this image? | This message will be displayed when a CR and AeroDR image is selected on the Viewer screen and the [Reset to Default] button is clicked in the basic function palette located at the right of the Viewer screen. Select [Yes] to undo, and [No] to cancel. |
| Do you want to restore image to Original? | This message will be displayed when [Reset to Original] button is clicked in the basic function palette located at the right of the Viewer screen. Click [Yes] to reset, and [No] to cancel. |
| Reject(NG) the image? | <p>This message will be displayed when the [NG] button displayed on the upper right of the imported CR and AeroDR image is clicked when it is displayed on the viewing area. Click [Yes] for NG, and [No] to cancel.</p> <p>Note: [NG] button will be confirmed when the Viewer screen is closed, and will not be displayed next time onward.</p> |
| Do you want to Undo NG Image? | This message will be displayed when selecting the image on which [NG] button is clicked, followed by clicking [NG] button displayed at the upper right of the again. Click [Yes] to cancel NG and to reset to the original, or click [No] to cancel. |
| Do you want to move the image to the unnamed folder? | This message will be displayed when "Mark as Unnamed" is selected in the Display menu after right-clicking the mouse while the image is being selected on the Viewer screen. Click [Yes] to send, or click [No] to cancel. |
| Please enter the folder name. | This message will be displayed when [OK] button is clicked on the Properties screen without entering the folder name under the condition where [By Modality] in the display classification located at the left of the Viewer screen is selected and the folder selected in the folder list is right-clicked to select [Create Folder]. Retry the operation after entering the folder name. |
| Folder name already exists. | This message will be displayed in the case where the folder with the same name already exists in the same directory when the folder is created in the above case. |
| Folder name should be shorter than 43 characters. | This message will be displayed in the case where an attempt is made to create the folder with the name of 42 characters or more when the folder is created in the above case. |
| Cannot move this image to unnamed folder. | This message will be displayed when an attempt is made to send to the Unnamed folder the image whose attached information(DICOM tag) holds the Patient information and matched Patient ID under the condition where "Mark as Unnamed" is selected in the Display menu after right-clicking the mouse while the image is being selected on the Viewer screen. Click [Yes] to send, or click [No] to cancel. |
| Maximum of only three patients can be viewed simultaneously. | This message will be displayed when [Perform Exam] button is clicked after selecting 4 patients in the Patient Reception screen while the data for 3 patients are already being referred to on the Viewer screen. Note that the fourth or further patient cannot be referred to at the same time. Retry the operation after closing the Viewer screen on which the patient is being referred to. |
| Cannot perform this operation since this patient is in view mode. | This message will be displayed when an attempt is made to refer to the data of several patients on the Viewer that is set as previewer on the ImagePilot-CL. Retry the operation after closing the Viewer screen on which the patient is being referred to. |

| Major Messages | Remedy |
|--|--|
| Cannot delete this folder. Please try again after deleting the folder contents. | This message will be displayed when an attempt is made to select the Delete Folder in the right-click menu despite the data still remaining in the folder under the condition where [By Modality] is selected in the display classification located at the left of the Viewer screen followed by selecting the folder created in the folder list. Retry the operation after moving the data remaining in the folder to empty the folder. |
| Enter the preset name. | This message will be displayed when the mouse is right-clicked while a CR and AeroDR image is selected on the Viewer screen, and then the image is closed by clicking the [OK] button without entering a preset name in the preset registration screen when [Registration] is selected from [Preset Clip] or [Preset All Clips] on the display menu. Enter a preset name and repeat the process. |
| This preset name already exists. | This message will be displayed in the case where the preset name that is already present is entered according to the instruction in the above. Retry the operation after entering the different preset name. |
| Shutdown ImagePilot? | This message will be displayed when [X] button at the upper right of the screen is clicked. Click [Yes] to terminate or [No] to cancel. |
| Received shutdown command. ImagePilot will close after (Numeric) seconds. | This message will be displayed on the target ImagePilot-CL when [Stop ImagePilot] button is clicked against the target ImagePilot-CL using the ImagePilot Administration Tool. (Numeric) will be counted down starting from 60(default) by 1. Click [Yes] to terminate or [No] to cancel. |
| Do you want to lock ImagePilot screen? | This message will be displayed when [Anti-tamper] button at the upper right of the screen is clicked. Click [Yes] to lock the image or [No] to cancel. |
| Patient is not registered. Do you want to register the patient for a new exam? | This message will be displayed when [New Exam] button is clicked on the Patient Reception screen followed by clicking [Cancel Exam] button after registering the Patient ID. Click [Yes] to register with reception or [No] to cancel. |
| Patient is already registered for an exam today. Do you want to re-register as a new exam? | This message will be displayed when an attempt is made to register with the reception the patient who has been already registered and study completed on the Patient Reception screen. Click [Yes] to register with reception or [No] to cancel. |
| Cannot delete picture. Please try again, after confirming the data format. | This message will be displayed in the case where the facial photo data, etc. is wrong when an attempt is made to delete the facial photo data by clicking [Edit] button on the Patient Reception screen. Check that the data format(*.jpg, *.jpeg, *.bmp) of the facial photo data is correct. Then retry the operation. |
| This patient is already waiting for consultation. Please confirm the patient list. | This message will be displayed when an attempt is made to register with reception the patient who at the same time has been registered and waiting for exam on the Patient Reception screen. Check that the patient to be registered with reception has been already registered on the Patient List as the waiting patient. |
| Invalid User ID or Password. | This message will be displayed when the wrong user name or password is entered on the Login screen. Check the user name or password, and retry the operation. Should the password is forgotten, contact the user who has the administrative authority or reset the password using the User Tool. |
| (Folder Name) already exists in this folder. Do you want to overwrite? | This message will be displayed in the case where the image with the same file name exists in the write destination folder when an attempt is made to write the file by clicking [Write] button on the Viewer screen. Select [Yes] to allow overwrite and continue with operation or [No] to reconfirm the path of the write destination. |

| Major Messages | Remedy |
|---|---|
| Image to be exported cannot be found. | This message will be displayed in the case where all selected images are reference images that cannot be printed when [Film], [Print] or [Send] button is clicked using the output function such as Print or Send available on the Viewer screen. Select [Yes] to allow overwrite and continue with operation or [No] to reconfirm the path of the write destination. Confirm that the selected images are other than the reference images and retry the operation. |
| Cannot export as the total size of [Error Information] selected images exceeds the limit. | This message will be displayed in the case where the image size exceeds the maximum output size(per modality) that has been set in the Detailed Settings of Print screen when [Print] button is clicked using the Print function available on the Viewer screen. Check the selected image size, or increase the set value for the maximum output size in the Detailed Settings. Then retry the operation. |
| Cannot export as the size of the selected image exceeds the limit. | This message will be displayed in the case where the image size exceeds the maximum output size(per sheet) that has been set in the Detailed Settings of Print screen when [Print] button is clicked using the Print function available on the Viewer screen. Check the selected image size, or increase the set value for the maximum output size in the Detailed Settings. Then retry the operation. |
| Failed to output the data. Please try again by confirming the status of the specified file or by changing the file name. | This message will be displayed in the case where the selected CSV file is in use on the other PC or read-only status when an attempt is made to output the data to a file by clicking [Export Patient Data] button at the lower left of the screen after switching to the Search screen and selecting the patient on the Patient Reception screen. Check the selected file status or change its file name. Then retry the operation. |
| Maximum of 4 shutters areas can be specified. | This message will be displayed in the case where the shutter areas exceeds the limit(max.4 areas) on the Adjust Shutter screen that is activated by selecting "Adjust Shutter" in the Annotation Palette at the right of the Viewer screen. Retry the operation after deleting some of the shutter areas. |
| Maximum point that can be specified is 40. | This message will be displayed in the case where the points of the shutter area exceeds the limit(max.40 points) on the Adjust Shutter screen that is activated by selecting "Adjust Shutter" in the Annotation Palette at the right of the Viewer screen. Retry the operation after confirming the points. |
| Access denied to write in the destination path. Please try again by changing the destination path. | This message will be displayed in the case where an attempt is made to output to the path to which the access is not permitted for ImagePilot when outputting to the media on the Viewer screen. Change the write destination and retry the operation. |
| Writing error. Please check the media inserted. | This message will be displayed in the case where the write to media failed when outputting to the media on the Viewer screen. Retry the operation after checking the media. |
| Files that cannot be open by PDI are included. Please include only displayable files. | This message will be displayed in the case where the process cannot be completed for some reasons when outputting to the media on the Viewer screen. If the same repeats, check that the media and the drive is correct. Then retry the operation. |
| Unable to create folders. | This message will be displayed in the case where the file unsuitable for display by PDI viewer is contained in the selected data when outputting to the media on the Viewer screen. Click [Yes] to write only those suitable for display or [No] to cancel. |
| Unable to write into temporary folder for PDI output. | This message will be displayed in the case where the process cannot be completed for some reasons when outputting to the media on the Viewer screen. If the same repeats, check that the media and the drive is correct. Then retry the operation. |

| Major Messages | Remedy |
|--|--|
| Cannot use the selected drive. | This message will be displayed in the case where the failure is found with the media of write destination when outputting to the media on the Viewer screen. If the same repeats, check that the media and the drive is correct. Then retry the operation. |
| Unable to create folder for saving data. | This message will be displayed in the case where the folder for saving the DICOM data cannot be created in the media of write target when outputting to the media on the Viewer screen. If the same repeats, check that the media and the drive is correct. Then retry the operation. |
| Insufficient free space in HDD. Cannot allocate the space required for media output. | This message will be displayed in the case where the sufficient work space for the data for output to the media is secured due to insufficient space in the HDD when outputting to the media on the Viewer screen. If the same repeats, check that the media and the drive is correct. Then retry the operation. Implement backup to secure sufficient space in the HDD. Then retry the operation. |
| Data cannot be retrieved from the database. | This message will be displayed in the case where the acquisition of the Patient information, etc. from the DB failed when outputting to the media on the Viewer screen. If the same repeat when the operation is retried, contact your technical representative. |
| Unable to import file. | This message will be displayed in the case where the process cannot be completed for some reasons when outputting to the media on the Viewer screen. If the same repeats, check that the media and the drive is correct. Then retry the operation. |
| Data writing failed. | This message will be displayed in the case where an attempt to create P10 or JPEG file in the temporary folder failed when outputting to the media in generic format on the Viewer screen. If the same repeat when the operation is retried, contact your technical representative. |
| Failed during output history registration. | This message will be displayed in the case where the output of error logs failed when canceling the output to the media on the Viewer screen. If the same repeat when the operation is retried, contact your technical representative. |

15.2 AeroDR Detector errors

Error codes starting with "F" are indicating AeroDR Detector errors.

| Error code | Displayed message | Problems/countermeasures | |
|--|--|---|---|
| F0100* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. | |
| F0101* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0200* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0201* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0202* F0203* | [AeroDR Detector name] version update error It has failed to update the version. Contact a service representative. | | |
| F0210* F0211* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0300* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0400* | [AeroDR Detector name] version update error It has failed to update the version. Contact a service representative. | | |
| F090** F091** F092** F093** F094** | Temporarily wireless status became worse. | | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. Wireless connection cannot be used, but continued operation is possible with the wired connection. |
| F0H00* F0H01* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0H02* | [AeroDR Detector name] internal error. Internal device has malfunctioned. Contact a service representative. | | |
| F0H03* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0H04* F0H05* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0H06* F0H07* F0H08* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |
| F0H09* F0H10* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | | |

| Error code | Displayed message | Problems/countermeasures |
|--------------------------------------|---|---|
| F0100* F0101* F0102* F0103* | [AeroDR Detector name] power source error There is a fault in the power source unit. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0104* F0105* | [AeroDR Detector name] power source error There is a fault in the power source unit. Contact a service representative. | |
| F0106* F0107* | [AeroDR Detector name] capacitor error There is a fault in the capacitor. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0108* F0109* F0110* | [AeroDR Detector name] capacitor error There is a degradation in the capacitor. Contact a service representative. | Lithium ion capacitor is degraded, or the power consumption of the whole AeroDR SYSTEM has increased. (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. However, continued use is possible. |
| F0111* F0112* F0113* | [AeroDR Detector name] capacitor error There is a degradation or fault in the capacitor. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0114* | [AeroDR Detector name] power source error There is a fault in the power source. Contact a service representative. | |
| F0115* | [AeroDR Detector name] capacitor error There is a fault in the capacitor. Contact a service representative. | |
| F0116* | [AeroDR Detector name] power source error There is a fault in the power source unit. Contact a service representative. | |
| F0117* | AeroDR Battery Charger error There is a fault in the AeroDR Battery Charger. Contact a service representative. | |
| F0118* | [AeroDR Detector name] Power source error There is a fault in the Battery Charger or the power source unit of the [AeroDR Detector name]. Contact a service representative. | (1) Restart the AeroDR Detector and AeroDR Battery Charger/AeroDR Battery Charger2. (2) Contact Konica Minolta technical representatives. |
| F0119* | [AeroDR Detector name] power source error There is a fault in the power source unit. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0120* | [AeroDR Detector name] power source error There is a fault in the power source. Contact a service representative. | (1) Remove the AeroDR Detector from the AeroDR Battery Charger/AeroDR Battery Charger2 or the wired connection cable. (2) Contact Konica Minolta technical representatives. |
| F0121* | [AeroDR Detector name] capacitor error There is a fault in the capacitor. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0122* | [AeroDR Detector name] power source error There is a fault in the power source. Contact a service representative. | |


| Error code | Displayed message | Problems/countermeasures |
|--------------------------------------|---|--|
| F0I23* | [AeroDR Detector name] power source error The AeroDR panel cannot be charging because of high temperature inside the panel. You can charge it again after cooling down. | (1) Move the AeroDR Detector away from an electrical carpet, a location exposed to direct sunlight, or a place where heat can build up, then wait until the temperature falls. If an error occurs, charging will not be possible. However, it will be possible to carry out exposures. (2) If the problem persists, contact Konica Minolta technical representatives. |
| F0I24* F0I25* | [AeroDR Detector name] capacitor error There is a degradation in the capacitor. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0I26* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F0I27* | [AeroDR Detector name] capacitor error There is a degradation in the capacitor. Contact a service representative. | |
| F0I28* | AeroDR Battery Charger error There is a fault in the AeroDR Battery Charger. Contact a service representative. | (1) Restart the AeroDR Battery Charger/AeroDR Battery Charger2. (2) Contact Konica Minolta technical representatives. |
| F0I34* F0I35* F0I36* F0I37* | [AeroDR Detector name] cable/cradle connection error Poor connection of a cable or a cradle. Please reconnect after checking for a foreign particle in the connector. | (1) Confirm that the wired connection connector part of the AeroDR Detector, AeroDR Battery Charger, AeroDR Battery Charger2, AeroDR I/F Cable, and AeroDR I/F Cable2 doesn't have any foreign objects attached. (2) Confirm that the AeroDR I/F Cable or AeroDR I/F Cable2 is not connected at an angle. (3) Reconnect. |
| F0I38* | [AeroDR Detector name] cable/cradle connection error Poor connection of a cable or a cradle. Please reconnect after checking for a foreign particle in the connector. | (1) Confirm that the wired connection connector part of the AeroDR Detector, AeroDR Battery Charger, AeroDR Battery Charger2, AeroDR I/F Cable, and AeroDR I/F Cable2 doesn't have any foreign objects attached. (2) Check the AeroDR Battery Charger or AeroDR Battery Charger2 power. (3) Confirm that the AeroDR I/F Cable or AeroDR I/F Cable2 is not connected at an angle. (4) Reconnect. |
| F0I39* | [AeroDR Detector name] power source error There is a fault in the power source unit. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0I46* | [AeroDR Detector name] power source error The AeroDR panel cannot be charging because of high temperature inside the panel. You can charge it again after cooling down. | (1) Move the AeroDR Detector away from an electrical carpet, a location exposed to direct sunlight, or a place where heat can build up, then wait until the temperature falls. If an error occurs, charging will not be possible. However, it will be possible to carry out exposures. (2) If the problem persists, contact Konica Minolta technical representatives. |
| F0J11* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F0P01* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |

| Error code | Displayed message | Problems/countermeasures |
|--------------------------------------|---|---|
| F0Q00* F0Q01* | [AeroDR Detector name] shock detection Detected a shock. Be careful in handling the panel. | The AeroDR Detector is precision equipment, therefore subjecting it to strong impacts or excessive loads such as falls and hits may cause it to malfunction. Be careful in handling the AeroDR Detector. |
| F0Q02* F0Q03* | [AeroDR Detector name] shock detection Detected a shock. Please run the panel check tool because of the possibility of malfunction. | The AeroDR Detector may be malfunctioning. (1) Use the panel check tool to check if the AeroDR Detector is malfunctioning or not. (2) If an error occurs, contact Konica Minolta technical representatives. |
| F0Q10* F0Q11* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F2E01* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F2E17* | [AeroDR Detector name] version update error It has failed to update the version. Contact a service representative. | |
| F3205* F3500* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F3600* F3601* F3604* F3605* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F3606* F3700* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F3800* F3801* | [AeroDR Detector name] internal error Contact a service representative. | |
| F3802* F3803* F3804* | [AeroDR Detector name] wired LAN error Wired LAN has malfunctioned. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F39*** | [AeroDR Detector name] Temporarily wireless status became worse. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. Wireless connection cannot be used, but continued operation is possible with the wired connection. |
| F3C00* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F3C11* F3C12* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F3J00* | [AeroDR Detector name] Temporarily wireless status became worse. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. Wireless connection cannot be used, but continued operation is possible with the wired connection. |
| F3K24* | [AeroDR Detector name] network error IP address is already in use for another device. Contact a service representative. | Contact Konica Minolta technical representatives. |

| Error code | Displayed message | Problems/countermeasures |
|------------------|--|--|
| F3L27* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | (1) Restart the AeroDR Detector. (2) Contact Konica Minolta technical representatives. |
| F3P00* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F3Y00* F3Z02* | [AeroDR Detector name] internal error Internal device has malfunctioned. Contact a service representative. | |
| F4I32* | [AeroDR Detector name] power switch push error. Power switch of the AeroDR Detector is held pressed. Release the power switch. | The power switch of the AeroDR Detector is pressed and held for 30 seconds or longer. Release the power switch. |
| F4I33* | [AeroDR Detector name] Selection switch push error. The selection switch on AeroDR Detector is continually pressed. Release the selection switch. | The selection switch of the AeroDR Detector is pressed and held for 30 seconds or longer. Release the selection switch. |

15.3 AeroDR Interface Unit2/AeroDR Generator Interface Unit/AeroDR Generator Interface Unit2/AeroDR Portable RF Unit/AeroDR Portable RF Unit2 errors

Error codes starting with "G" are indicating AeroDR Interface Unit2, AeroDR Generator Interface Unit, AeroDR Generator Interface Unit2, AeroDR Portable RF Unit, AeroDR Portable RF Unit2 errors.



- Error codes are common to the AeroDR Interface Unit2, AeroDR Generator Interface Unit, AeroDR Generator Interface Unit2, AeroDR Portable RF Unit, and AeroDR Portable RF Unit2.
- [Device name] under the Displayed message column and the "corresponding device" under the Problems/countermeasures column indicate a device in which an error is occurring.

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| Error code | Displayed message | Problems/countermeasures |
|------------------|---|--|
| G0600X | Version up failed. Contact a service representative. | Contact Konica Minolta technical representatives. |
| G0601X | Restart the AeroDR Interface Unit / AeroDR Interface Unit2, and ImagePilot. If the error cannot be released, contact a service representative. | (1) Restart the corresponding device and this device. (2) Contact Konica Minolta technical representatives. |
| G0602X | Restart the AeroDR Interface Unit / AeroDR Interface Unit2, and ImagePilot. If the error cannot be released, contact a service representative. | |
| G06030 | Restart the AeroDR Interface Unit / AeroDR Interface Unit2, and ImagePilot. If the error cannot be released, contact a service representative. | |
| G2010S G2011S | [Device name] There is a startup error. Release the exposure switch. | Initial status error of the corresponding device occurred. Release the exposure switch. |
| G2012S | [Device name] There is a startup error. Contact a service representative. | Contact Konica Minolta technical representatives. |
| G2020S G2021S | [Device name] There is a startup error. Release the exposure switch. | Initial status error of the corresponding device occurred. Release the exposure switch. |
| G2022S | [Device name] There is a startup error. Contact a service representative. | Contact Konica Minolta technical representatives. |
| G2030S G2031S | [Device name] There is a startup error. Release the exposure switch. | Initial status error of the corresponding device occurred. Release the exposure switch. |
| G2032S | [Device name] There is a startup error. Contact a service representative. | Contact Konica Minolta technical representatives. |
| G22000 | [Device name] There is a X-ray device exposure link error. Restart the X-ray device and AeroDR Interface Unit/AeroDR Interface Unit2. | Link error between the X-Ray device and the corresponding device occurred. Restart the X-ray device and the corresponding device. |
| G2201U | [Device name] There is a X-ray device exposure link error. Contact a service representative. | Contact Konica Minolta technical representatives. |

| Error code | Displayed message | Problems/countermeasures |
|--------------------|---|--|
| G2300U - G2302U | [Device name] There is an internal device error or a communication error. Restart the AeroDR Detector, AeroDR Interface Unit/AeroDR Interface Unit2 and ImagePilot. | System error of the corresponding device occurred. Restart the corresponding device, and the device. |
| G2303U | [Device name] Exposure link failed, X-rays are not exposed. Please take exposure once again. | X-rays were not exposed. Perform exposure again. |
| G2500U | [Device name] There is an internal device error. Restart the AeroDR Interface Unit/AeroDR Interface Unit2. | System error of the corresponding device occurred. Restart the corresponding device. |
| G2501U | [Device name] There is an internal device error or a communication error. Contact a service representative. | Contact Konica Minolta technical representatives. |
| G410** | [Device name] Exposure switch is not released. Release the exposure switch. | Release the exposure switch. |
| G4103U | [Device name] Exposure link failed, X-rays are not exposed. Please take exposure once again. | X-rays were not exposed. Perform exposure again. |

15.4 Network Related

15.4.1 The message "ERROR 19990650 AC power has been restored" is displayed.

If this message is displayed when the PC is activated, the user should wait a few seconds until the initial OS screen is displayed and activation carried out normally.

15.4.2 The message "Server cannot be found. Page cannot be displayed." is displayed.

This message may be displayed when the icon for the shortcut to ImagePilot applications is double clicked in attempt to activate.

In such cases, check the following two items and if no problems are found, consult your service representative.

1. Check that ImagePilot-SV is activated.
2. Check that the network cable is properly connected.

15.5 During Usage

15.5.1 Measurements to be taken when the [!] marks on all ImagePilot main body sides are illuminated orange.

If the [!] marks on all sides are illuminated orange, re-boot the PC.

If the marks remain illuminated after the PC has been re-booted, consult your service representative.

15.5.2 Measurements to be taken when the unit will not accept input

The following measurements should be carried out if ImagePilot will not accept input from the keyboard or mouse.

- 1 Press and immediately release the PC power switch after ensuring that the hard disk access lamp is extinguished.
 - The PC display will change and the system will shut down.



If the display does not change, keep pressing the Power Button of the PC until it is turned OFF.

- 2 Wait 10 seconds or more after power has been switched off and press the power switch again to start up ImagePilot.
 - ImagePilot will start up.
 - The start up process may take longer than usual due to the internal check.



In cases where incidence of failure by the ImagePilot to accept input becomes frequent, consult your service representative.

15.6 Cassette Reader (REGIUS 110/110HQ(for Russia only)) does not terminate (Sleep) operation despite of shutting down the ImagePilot.

If a cassette on the REGIUS 110/110HQ(for Russia only) is left in the ejection slot, the Cassette Reader (REGIUS 110/110HQ(for Russia only)) will not be terminated (Sleep) even if the ImagePilot is shut down.
Make sure that the cassette read on the REGIUS 110/110HQ(for Russia only) is not left in the ejection slot.

15.7 Input/Output

15.7.1 Printing of extra pages without images when using a generic printer

This type of problem may occur when printing large images where the blank margins will not fit on the same page as the image itself.

In such cases, the printing area should be enlarged by making adjustments to margins in the generic printer properties.

For details of printing area settings, please refer to the generic printer manual.

15.7.2 Error screen is displayed when attempts are made to save data to DVD-R

Display of this message when attempts are being made to re-create backup, electronic storage, error corrections or electronically stored disks on DVD-R may indicate that the DVD-R set in the DVD-RAM/DVD-R drive is closed.

Additional data cannot be written to DVD-R discs that are closed when media is changed.

Click the [OK] button on the screen to close the screen and then click the [Finish] button to close processing screens.

After returning to the menu screen, replace the DVD-R in the DVD-RAM/DVD-R drive with a newly formatted disc and re-execute the process previously aborted.

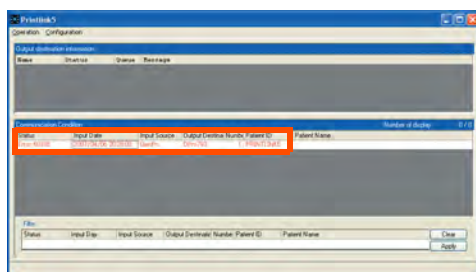
15.7.3 If an output is made with the film size not registered with the DICOM Printer.

If an output is made with the film size not registered with the DICOM Printer, an error icon as shown below may be displayed on the task bar.



Clicking this icon enables to specify which output queue caused the error.

Retry output with the film size registered with the DICOM Printer to correct the error.

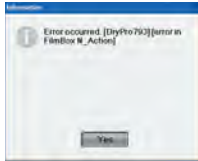


15.7.4 About the Enlargement/Reduction of the Output Image

The size of the image will be reduced if the output is made by specifying the output area smaller than the image size. (Ex: when outputting a 14x17inch(36x43cm) image onto the one of 5x4 frames formatted on the 14x17inch(36x43cm) size.)

If the reduction rate exceeds the specific limit in this operation, a message as follows will be displayed. If such is displayed, retry output by lowering the reduction rate.

Note: Verification of the reduction rate will be made on the image allocated at the upper left of the layout.



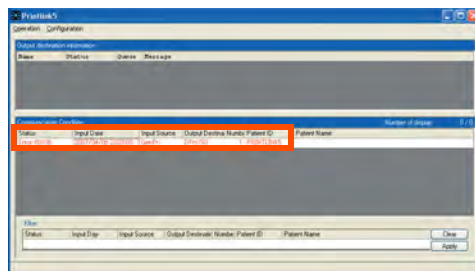
The size of the image will be enlarged if the output is made by specifying the output area larger than the image size. (Ex: when extensively enlarging a part of the image on the viewer and outputting the enlarged image onto the 1x1 frame formatted on the 14x17inch(36x43cm) size.)

If the enlargement rate exceeds the specific limit in this operation, an error icon as follows will be displayed on the task bar of the ImagePilot.



Clicking the error icon allows to specify the output queue as shown below, which caused the error.

If such is displayed, retry output by lowering the enlargement rate.



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15.8 When an image that is not associated with patient info is captured, a [!] icon is displayed for it, indicating an unnamed image.

When an image that is not associated with patient info is captured, a [!] icon is displayed for it, indicating an unnamed image. All unnamed images that are captured are saved to the ImagePilot's unnamed folder.



For details on how to associate images saved to the unnamed file to patient info, refer to ["5.1.7 Associating patient info with an image \(Unnamed Image Folder Function\)"](#).

15.9 When patient info is associated with the wrong image

When patient info is accidentally associated with the wrong image, steps can be performed to move the image to the unnamed status folder, and return it to an unassociated image.

For details, refer to ["5.1.8 Moving to unnamed image folder"](#)


15.10 Options/Recommended Products

15.10.1 UPS



UPS malfunctions will be indicated by the following displays. Follow the procedures detailed below to resolve the problems.

| Indicator | Meaning | Remedial Calculates |
|---|--|--|
| Warning tone occasionally generated by UPS | This is normal if the UPS is running in on-battery status. | This is not a malfunction. The UPS is protecting connected devices from unregulated fluctuations occasionally occurring in applicable power supply. |
| Short UPS backup time | As the result of a recent power interruption, the battery discharged or the battery is showing wear as it approaches the end of its life span. | Charge the battery. After a long power interruption, the battery needs recharging. Additionally, frequent use or use in a location exposed to high temperatures results in heightened wear on the battery. Backup time only approximately half of the time expected even with the battery charged indicates that the battery is approaching the end of its life span. In such cases, the battery should be replaced, even if the battery replacement LED is not illuminated. |
| LEDs flashes in the left half, right half or center of the front panel. | UPS internal malfunction. UPS output has stopped. | Discontinue use of the UPS. Shut down the UPS power supply, disconnect the battery connector plug at back of the UPS and immediately contact your service representative. |
| The LED on the front panel is continually flashing. | The UPS has been shut down by the remote software. | This is not a malfunction. Restoring the power supply will result in automatic re-start of the UPS (sleep mode operation) |
| All LEDs are extinguished even though the UPS is connected to the power outlet. | Either the UPS is shut down, or battery capacity is exhausted due to a long power interruption. | This is not a malfunction. As long as the minimum battery capacity if not 0% when the UPS is restored from the shutdown, power supply will be restored, and the UPS will return to its original status after charging to the set capacity. |
| The overload LED illuminates and the UPS alarm sounds. | The UPS is in overload status. The connected load devices are supplying VA in excess of the level | Connected devices are in excess of the maximum load stipulated. The warning alarm will continue to sound until the overload status has been remedied. Disconnect low-priority devices from the UPS to reduce overload. As long as the circuit breaker does not operate while the UPS is on-line, power will continue to be supplied. If the applicable power supply is interrupted in overload status, the UPS will not provide power from the battery. Continued occurrence of overload when the UPS is operating on-battery, will result in discontinuation of UPS output to prevent the damage caused by the overload. |
| Input circuit breaker operates. | The UPS is in overload status. The circuit breaker plunger pops up. | Disconnect some of the devices to reduce overload on the UPS and push the circuit breaker plunger back into position. |
| AVR boost or AVR trim LED illuminates | System voltage is higher or lower than the rated value. | Consult your service representative. |
| Battery charge and battery load LEDs illuminate simultaneously. | The UPS has stopped output. The internal temperature of the UPS has exceeded the safe operation tolerance level. | Check that the room temperature is within the specified operational range. Check that the UPS is properly installed and that ventilation is adequate. Wait until the UPS power has dropped and re-boot the unit. If the problem persists, consult your service representative. |
| Commercial power supply voltage diagnosis function | 5 LEDs are illuminated. | Indicates that voltage is extremely high. Consult you service representative. |
| | No LEDs are illuminated.LED | Failure of all LEDs to illuminate indicates that voltage is extremely low even though the UPS is properly connected to the power outlet. |

15.11 CR Images

| Problem | Observation | Solutions |
|---|------------------------------------|---|
| Blurred image | | Is an appropriate grid being used? Additionally, is the Sharpness Processing function disabled? The image may be sharpened by using an appropriate grid or by making sharpness processing adjustments. However, excessive sharpness processing may also emphasize noise. |
| Noise appears in image | Grainy image | Possible causes: insufficient X-ray dosage or use of inappropriate grid (exposure distance, alignment). Failure to use an appropriate grid results in an insufficient amount of X-rays reaching the cassette producing a grainy image. The S value should be within a range of 100 ~ 300. |
| | Wavy-shaped noise on image | Was exposure carried out with the grid in horizontal orientation? Exposure with the grid in horizontal orientation produces a phenomenon known as "moire" which results in wavy-shaped noise. Repeat exposure with the grid in vertical orientation. |
| | Banding noise on one or both sides | Is grid alignment and distance appropriate? Improper grid alignment or distance results in excessive reduction of X-rays at the image edges, resulting in band-shaped noise. Check grid alignment and distance. |
| | Single line noise (black) | Shutter recognition error may be the cause. If the line artifact disappears after disabling shutter tool, this was caused by shutter recognition error. Either adjust the shutter or proceed with the shutter off. (*If divided exposure is not to be carried out, recognition precision may be improved by removing the check from "With/without divided exposure" on the image processing parameter editing screen.)  p.323 2-16) Image Process Parameter (User) Screen |
| Acquired image is completely black or white | | This may be due to a failure in automatic grey scale adjustment function processing. Adjust density and contrast. (If appropriate exposure procedure was followed, setting the G value to approximately 2.0 and changing the S value within a range of approximately 50 ~ 500 will produce an improved image. Failure to produce display of the exposed body even after changing the S value within a range of 0 ~ 3000 indicates that possibility of incorrect exposure.) Caution: Even if the image appears completely black or white, image data is saved as long as the exposure is made properly. Change brightness/contrast before proceeding with re-exposure to check whether or not appropriate image adjustments are possible. |
| Inappropriate shutter shape | | Automatic shutter recognition failure: Make corrections on the shutter adjustment screen. Additionally, shutter processing precision may be improved by paying attention to the following points during exposure. <ul style="list-style-type: none"> • As much as possible, place protective equipment parallel to the edges of the field of exposure, or ensure that such equipment does not enter the field of exposure. • Ensure no structures (ex. clothing) other than the target body part are shown. • Make sure that target body part is positioned as close as possible to the center of the exposed area. • When carrying out divided exposure, ensure that a space of at least 1cm is between areas of exposure. |

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| Problem | Observation | Solutions |
|---------------------------------------|--|---|
| Absence of part of image | Part of the image is blackened | <p>Possibility of shutter recognition error: If image visualization improves after turning shutter off, this indicates shutter recognition failure. Make shutter adjustments or proceed with the shutter off. (*Adjust the transparency using "Transparency Adjustment" in "Shutter Adjustment Screen", this will assist in determination of shutter failure.)</p> <p style="text-align: right;"> p.323 Shutter Transparency</p> |
| No image visible upon density changes | | <p>Extreme over or under exposures may cause failure to correctly display image density. (Signal saturation due to excess or insufficiency of dosage during exposure)</p> |
| Image lacks proper contrast | Flat image | <p>Possibility of excessive soft area/bone area correction. All densities may be compressed in too narrow of a range producing a flat image if excessive equalization processing is applied. Make adjustments using soft area/bone area correction processing.</p> <p style="text-align: right;"> p.421 Image Processing</p> |
| Dark image (black) | Fingers, toes, etc., | <p>The narrow exposure field for fingers and toes results in inclusion of non-target areas in the image producing blackness in the image. Slight widening of the exposure field (to approximately three finger widths) will broaden the exposed body area and improve gradation processing precision.</p> |
| Light image (white) | Whiteness of thoracic spine | <p>In cases where the field of exposure for thoracic spine images are wide and the image includes a large portion of the lung area, the thoracic spine often appears white. Narrowing the exposure area to reduce the portion of the lung area included may improve gradation processing precision.</p> |
| | Whiteness of the head areas in head images | <p>Inclusion of the lung area in head images often produces whiteness of the head area. Suppressing inclusion of the lung area by collimation or positioning adjustments may improve grey scale processing precision.</p> |
| | Whiteness of lumbar spine in lumbar spine images | <p>Lumbar spine images often show the lumbar spine area as white due to gas in the stomach area. Adjusting the exposure area to suppress the effects of gas on the image may improve grey scale processing precision.</p> |
| | Others | <p>Image whiteness is sometimes produced when the exposed body is positioned too far toward one edge of the imaging plate or cassette. Ensuring that the exposed body is positioned at the center of the imaging plate or cassette may improve gradation processing precision.</p> |

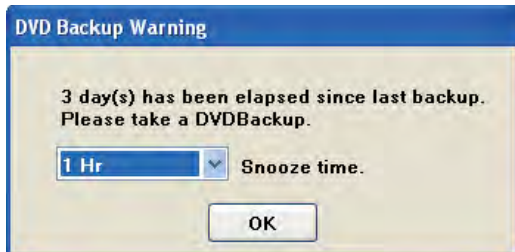
15.12 Optional Function


15.12.1 Backup to DVD

Reaction to be taken when the backup to DVD is not implemented for a certain period

A message prompting the backup to DVD will be displayed when the backup is not implemented for a certain period. Upon display of this message, immediately implement the backup.

If it is not possible to implement the backup immediately, select from the pull-down menu the interval before the same message is redisplayed, and click [OK].




 p.384 DVD Backup Function

 user tool

The interval for the message to be displayed can be set using [DVD Backup Settings] -> [DVD Backup taken from Last time] of the User Tool.

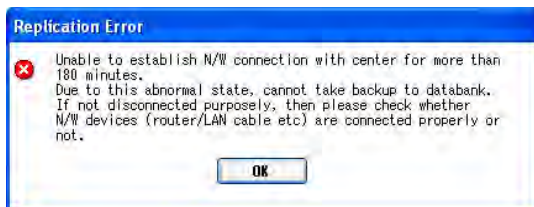
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 p.330 5-1) DVD Backup Screen

15.12.2 informity 2.0


Reaction to the Communication Error with informity 2.0



A message shown below will be displayed when an error occurs in the communication with the informity 2.0. Check on the connection with network devices(router or LAN cables).



 p.393 informity 2.0 (Only the United States)

15.13 CR and AeroDR Images

| Problem | Details (Part/Event) | Measures |
|--|----------------------------|---|
| The image is blurred | | Are you using the correct grid? Also, is sharpening turned OFF? You can improve image sharpness by using the correct grid and applying sharpening. However, note that applying strong sharpening will also emphasize noise. |
| The image has noise | The image is rough | The X-ray exposure dose may be insufficient or an incorrect grid may be in use (exposure distance, alignment). If an incorrect is used, not enough X-ray will reach the cassette and may cause the image to become rough due to this lack of dose. It is recommended to set the S value between 100 and 300. |
| | There is circular noise | Is the exposure being performed with horizontal grids? If horizontal grids are used, circular noise may occur due to a phenomenon called moire. Perform exposure using vertical grids. |
| | There is belt-shaped noise | Is the grid alignment/distance correct? If the grid alignment and distance is not correct, X-rays are cut off at the edges of the image and may cause belt-shaped noise. Make sure that the distance and alignment is correct. |
| | There is linear noise | <p>The shutter may have false recognition. If the linear noise disappears when the shutter is turned off, it means that the noise is due to recognition failure of the shutter. Correct the problem by adjusting the shutter or turning it OFF.</p> <p>(* When not performing split exposure, you can improve recognition accuracy by unchecking [Apply split exposure] on the image processing parameter editing screen.)</p> <div style="text-align: right;">  p.323 2-16) Image Process Parameter </div> |
| The image taken is completely black or white | | <p>The automatic gradation adjustment function processing may have failed.</p> <p>Adjust the brightness (film density) or contrast.</p> <p>(If exposure was done properly, the subject is displayed by setting the G value to about 2.0 and changing the S value between 50 to 500. If the subject is not displayed even after changing the S value between 0 to 3000, exposure may not have been performed properly.)</p> <p>Note: If exposure was done properly, image information is saved even if the displayed image has turned completely black or white. Before repeating exposure, change the brightness (film density) or contrast.</p> |
| The shape of the shutter is incorrect | | <p>Auto-recognition of the shutter has failed. Make corrections on the shutter adjustment screen. You can also increase the shutter process recognition accuracy by taking note of the following points during exposure:</p> <ul style="list-style-type: none"> - Place the protective equipment parallel to exposure field edge as much as possible, or position it so as not to touch the exposure field edge. - Do not let structures (e.g. clothes) other than target parts for exposure be captured. - Position the target part for exposure on the center of the exposure field as much as possible. - When performing split exposure, do it with a clearance of at least 1 cm between exposure fields. |

| Problem | Details (Part/Event) | Measures |
|--|---|---|
| Some parts of the image are missing | Some parts of the image are black | <p>The shutter may have false recognition. If the image appears when the shutter is turned OFF, the problem is caused by shutter recognition failure. Correct the problem by adjusting the shutter or turning it OFF. (* You will be able to check whether or not the subject is included in the area by changing the transparency through "Adjust transparency" on the "Shutter Adjustment Screen".)</p> <p> p.323 Shutter Transparency</p> |
| The signal does not come out even if the density is adjusted | | <p>The signal which forms the image may not have been obtained correctly because the exposed dose was too much or too little. (Signal saturation due to insufficient X-ray exposure dose or X-ray exposure overdose)</p> |
| There is no sense of a three-dimensional image | The image is flat | <p>Is a strong soft tissue / bone correction being applied? You can contain all areas of the image in a visible range by compressing the dynamic range through soft tissue / bone correction processing. However, if too much correction is applied, changes in density may become narrow and may produce an image without a three-dimensional sense. Adjust the soft tissue / bone correction processing.</p> <p> p.421 Image Processing</p> |
| The image is dark (black) | Limbs, fingers, etc. | <p>The image may become dark in the limbs or phalange areas if the exposure field is narrow and many areas outside the exposure field are captured. You can improve gradation processing accuracy by bringing the exposure field to a slightly wider area (at least the width of three fingers is a good measure) and expanding the subject area.</p> |
| The image is bright (white) | The thoracic spine in the thoracic image is white | <p>The thoracic spine may become white in the thoracic image if the exposure field aperture is wide and much lung field is captured. You can improve gradation processing accuracy by making the aperture narrower and reducing the area of the lung field that gets captured.</p> |
| | The head region in the head image is white | <p>The head region may become white in the head image because it was included in the image area of the lung field. You can improve gradation processing accuracy by controlling how much of the lung field is included through aperture adjustment or positioning.</p> |
| | The lumbar part in the lumbar image is white | <p>The lumbar area may become white in the lumbar image due to the effect of gas in the abdominal area. You can improve gradation processing accuracy by making the aperture narrower and minimizing the effects of gas.</p> |
| | Others | <p>The image may become white if the subject is too close to the edge of the image. You can improve gradation processing accuracy by positioning the subject in the center of the image.</p> |

15.14 LCD monitor

A list of recommended settings for each LCD monitor is described below.

15.14.1 Recommended Settings for RadiForce Series

| Type | Mode | Max. Luminance | Min. Luminance | Color Temp. | Gamma |
|------------------|---------------|---------------------------|----------------|-------------|-------|
| RadiForce MS170 | DICOM-CL Mode | 250cd/m ² typ. | - | 7500K | GSDf |
| RadiForce MX191 | DICOM-CL Mode | 300cd/m ² typ. | - | 7500K | GSDf |
| RadiForce MX210 | DICOM-CL Mode | 300cd/m ² typ. | - | 7500K | DICOM |
| RadiForce MX240W | DICOM-CL Mode | 320cd/m ² typ. | - | 7500K | DICOM |
| RadiForce RS210 | DICOM-CL Mode | 300cd/m ² typ. | - | 7500K | GSDf |
| RadiForce RX320 | DICOM-CL Mode | 900cd/m ² typ. | - | 7500K | DICOM |

15.14.2 Detailed Description

| Type | Available Mode |
|------------------|------------------------------|
| RadiForce MS170 | DICOM-CL, Custom, sRGB, Text |
| RadiForce MX191 | DICOM-CL, Custom, Text, CAL |
| RadiForce MX210 | DICOM-CL, Custom, Text, CAL |
| RadiForce MX240W | DICOM-CL, Custom, Text, CAL |
| RadiForce RS210 | DICOM-CL, Custom, Text, CAL |
| RadiForce RX320 | DICOM-CL, Custom, Text, CAL |

- **DICOM-CL and DICOM-BL Modes**

These are the modes simply emulating the DICOM standard. Because the FlexScanM Series are not conforming to DICOM Part14, the mode is only for image reference use.

Calibration was made for the RadiForce Series at the factory before shipment in order to conform to DICOM Part 14. All setting values such as "Gamma" and "Brightness" for the FlexScanM Series cannot be changed.

- **Custom Mode**

This mode allows change of setting values as required. Setting value of "Brightness", "Color Temperature" and "Gamma", etc. can be changed.

- **sRGB Mode**

This mode is a display mode for sRGB which is the global standard for color display. "Brightness" can be changed though the settings for "Color Temperature", etc. are fixed.

- **Text Mode**

This mode is a mode to help reduce eye fatigue even for an extended use of the monitor in text input work. Although the color temperature is set rather lower, the setting can be changed.

- **Calibration Mode**

This mode should be selected if the calibration has been implemented using the manufacturer's quality control tool "RadicS". Calibration will be implemented using the value arbitrarily set by "RadicS", and the calibrated result will be maintained.

- **1-DICOM, 2-Custom, 3-CAL**

Each mode is capable of implementing the calibration using the manufacturer's quality control tool "RadicS". Default names of the mode are set as "DICOM", "Custom", "CAL", it is possible to implement the calibration using arbitral standard and also to change the mode name.



"DICOM-CL" or "1-DICOM" mode is recommended to be used for the display monitor of the ImagePilot. Refer to the Instruction Manual of each monitor to confirm whether the monitor is set to "DICOM-CL" or "1-DICOM" mode. An auto-adjust function is available only if each monitor is connected with analogue cables. Refer to the Instruction Manual of each monitor for the operation of the function.

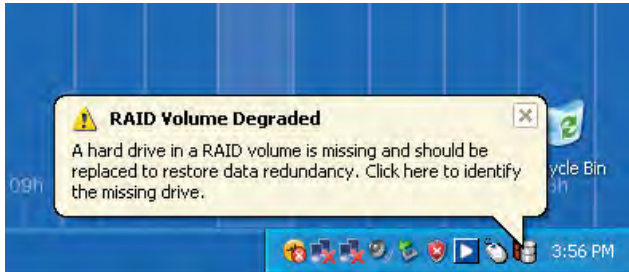
15.15 Remedial Action when RAID is faulty

When an error occurs to the RAID, an error message as follows will be displayed in the task tray of Windows desktop.

"RAID Volume Degraded A hard drive in a RAID is missing and should be replaced to restore data redundancy. Click here to identify the missing drive."

The failure of the RAID is caused by an error of either HD that is used for mirroring(writing the same data on multiple HDs to enhance the reliability).

Since all HDs are not damaged, it is possible to continue operation of the ImagePilot. However, it is necessary to replace the damaged HD as soon as possible to retain the reliability.



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If there is an error with a hard drive in PCs that are configured with RAID, the error icon shown in the image above will be displayed in the task tray of Windows desktop. Follow the message shown and restore the RAID configuration, or contact your maintenance service provider.

15.16 Action to be taken for the messages displayed after the PC is kept ON for a long period

When the power to the ImagePilot-SV is kept ON for a long period of time, a message prompting restart of the PC will be displayed to ensure the stable operation of the system. When such message is displayed, restart the ImagePilot-SV following the instruction contained in the message.

A message to be displayed after one week of continuous use

This message is repeated on the screen every 24 hours until the user restarts the ImagePilot-SV.

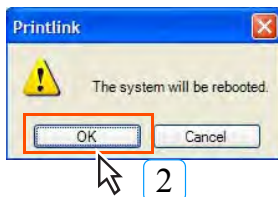
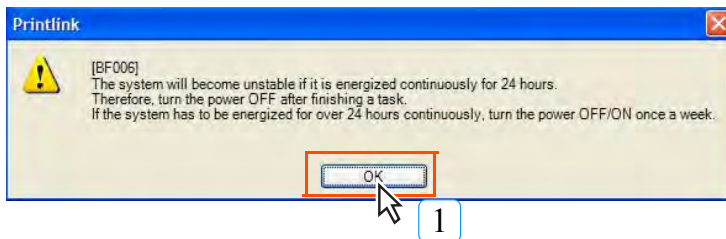
A message displayed on the ImagePilot-SV



A message displayed on the ImagePilot-CL



A message to be displayed after two weeks of continuous use

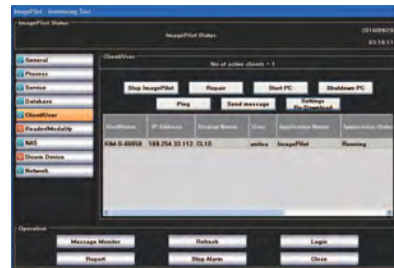
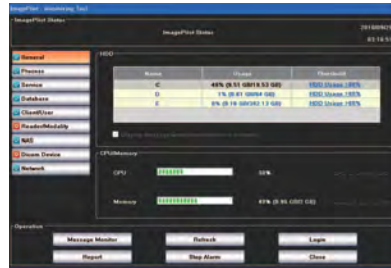


Restart the ImagePilot-SV as soon as the window shown on the left is displayed. Failure to restart will result in disabling film output.

15.17 Reaction to be taken when the ImagePilot does not start up

When the following screen is displayed on the ImagePilot and the startup is disabled, follow the procedures below using the ImagePilot Monitor Tool.

1. Click [YES_BIN] button.
2. Start up the ImagePilot Monitor Tool, and click [Refresh] button.
3. Click [Client/User] button, and click [Settings Re-Download] button.



p.518 [Client/User] button

Chap. 15

15.18 Major Error Messages When Connecting REGIUS SIGMA

15.18.1 When the Error Lamp is unlit

If the Error Lamp is not lit, but the device is not operating properly, check ImagePilot-touch message (displayed in the middle of the screen) and take action as described in the following chart.

| Displayed Message | Remedy |
|---|--|
| Study is not registered. In order to perform image retrieval, click on [OK] button to close this dialog, and then click on [CR] button. | After clicking the [OK] button to close the dialogue box, click the ImagePilot-touch [CR] button. |
| Study is not registered. To eject the cassette, click on [Eject] button. In order to perform image retrieval, click on [OK] button to close this dialog, and then click on [CR] button. | To read an image, after clicking the [OK] button to close the dialogue box, click the ImagePilot-touch [CR] button. If you do not wish to read an image, click the [Eject] button to remove the cassette. |

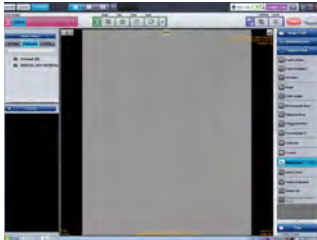
15.18.2 When a message is displayed on the ImagePilot-touch

When the device is not working properly, regardless of Error Lamp status, check the message shown on the ImagePilot-touch (displayed above the task tray), and take action as described in the following chart.

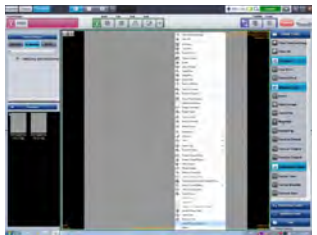
| Displayed Message | Remedy |
|---|---|
| Connection failed. Check all LAN connections. Reboot the system if it is not recovered. | If the ImagePilot-touch server is not running, wait for startup to complete. If the ImagePilot-touch server is running, make sure network devices (HUB, cables, etc.) are working properly between the ImagePilot-touch client connected to the reader, and the ImagePilot-touch server. (Also remove and reconnect the cable connector.) If the error is not fixed, restart the ImagePilot-touch PC. |
| Connection with server PC failed. Check all LAN connections with server. Reboot the system if it is not recovered. | Make sure network devices (HUB, cables, etc.) are working properly between the ImagePilot-touch client connected to the reader, and the ImagePilot-touch server. (Also remove and reconnect the cable connector.) If the error is not fixed, restart the ImagePilot-touch PC. |
| Data transmission failed by LAN disconnection. Check all LAN connections with server. Re-send data after connection recovery. | Make sure network devices (HUB, cables, etc.) are working properly between the ImagePilot-touch client connected to the reader, and the ImagePilot-touch server. (Also remove and reconnect the cable connector.) By returning to the proper connection status, image data will be retransmitted. (However, this will only occur when ImagePilot-touch and reader operations are uninterrupted. If power is turned OFF, or operations are halted, image data will not be retransmitted.) If the error is not fixed, restart the ImagePilot-touch PC. (Image data will be lost in this case.) |
| Data transmission failed by LAN disconnection. Check all LAN connections with server. Reboot the system if it is not recovered. | Make sure network devices (HUB, cables, etc.) are working properly between the ImagePilot-touch client connected to the reader, and the ImagePilot-touch server. (Also remove and reconnect the cable connector.) If the error is not fixed, restart the ImagePilot-touch PC. |

15.19 AeroDR panel image quality check

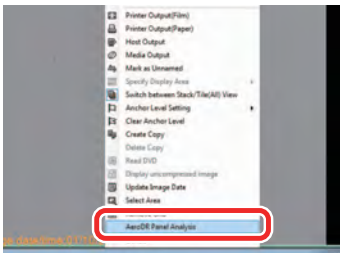
If the AeroDR panel suffers a shock from being dropped, etc., you can execute an image quality check of the AeroDR image. Also, the image quality check history is saved in each AeroDR panel, so you can also display lists of the check history.



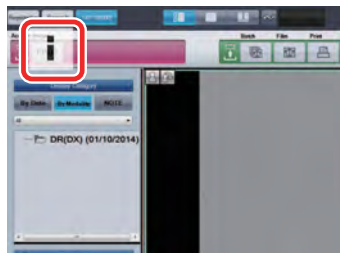
- 1 Display images that were imaged using the AeroDR panel on the Viewer screen.



- 2 Select image and right click.
- The right click menu is displayed.



- 3 Select [AeroDR Panel Analysis].
- Images to be checked are sent to the AeroRemote server where the image quality check is executed.



- 4 Once the image quality check is complete, the animation button is displayed.

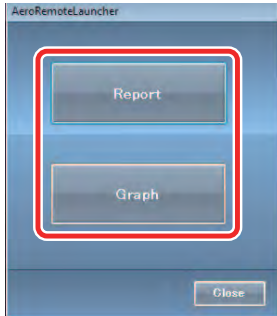


- 5 Clicking the animation button displays the check results.



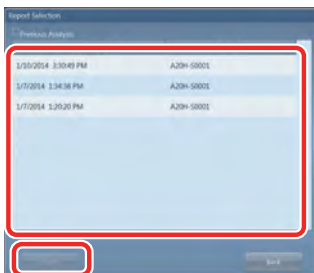
6 To check the image quality check results history, double click the [AeroRemoteLauncher] icon on the desktop.

- The [AeroRemoteLauncher] screen is displayed.



7 Select the method of displaying the image quality check results.

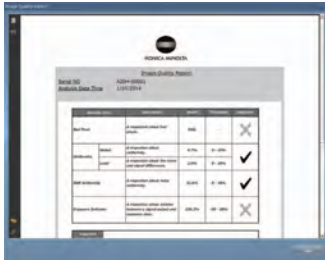
- The [Report Selection] screen is displayed.



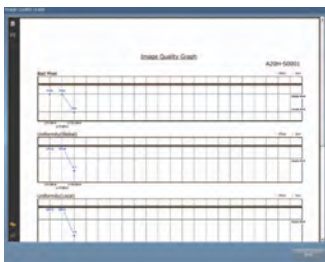
8 Select the item from the list and click the [Display] button.

- When you click the [Report] button according to step 7, the image quality check report screen is displayed.
- When you click the [Graph] button according to step 7, the image quality check graph screen is displayed.

<Image quality check report screen>



<Image quality check graph screen>



Chap. 16
Care and Maintenance

This chapter describes procedures for regular care and maintenance of ImagePilot.



16.1 Care and Maintenance Schedule508
16.2 Items for Care and Maintenance508

16.1 Care and Maintenance Schedule



The following work schedule is intended as a guide only and will differ depending on circumstances at the user's facility.

Work to be carried out by the User

| | | Frequency | Weekly | Monthly |
|------------------|--|-----------|--------|---------|
| Maintenance Task | | | | |
| 1) | Checking the operation of the cooling fan. | | ✓ | |
| 2) | Checking the time displayed by the build-in clock. | | ✓ | |
| 3) | Cleaning the keyboard. | | | ✓ |
| 4) | Cleaning the mouse. | | | ✓ |



For details of procedures for the care and maintenance of the LCD monitor, optional and recommended equipment, refer to the relevant user manuals.



The life of batteries incorporated in the UPS is 3.5 years. It is necessary to regularly replace the batteries to sustain the security of the device. Please contact your technical representative as to the specific replacement schedule.

16.2 Items for Care and Maintenance

The following items of care and maintenance should be carried out regularly.

1) Checking cooling fan operation

Ensure that the cooling fan has not stopped and does not emit any abnormal sounds (mechanical noise).

The cooling fan exhaust grid should be periodically cleaned using a vacuum cleaner. (For the position of the cooling fan, refer to the hardware manual.)

2) Checking time displayed by the internal clock

Periodically check and, when necessary adjust the internal clock using the "Date and Time" function on the OS control panel.

3) Cleaning the keyboard

Wipe the surface of the keyboard with a dry cloth after ensuring that the ImagePilot power supply, as well as those of peripheral devices, is switched off (power supply lamp extinguished).

4) Cleaning the mouse

To ensure normal functioning of the optical mouse, the built-in sensor needs to correctly sense the direction of movement and the distance moved. To avoid accumulation of dirt or grime on the sensor, the mouse should be used in a low-dust environment and should be periodically wiped using a dry cloth.

Appendix

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A.1 Using the PDI Viewer


The procedure for using the PDI Viewer saved on PDI written discs is described below.


A.1.1 Starting up PDI Viewer

1) When starting from INDEX.HTM

- 1 Set the disc in the disc drive of the general-purpose PC.

- The INDEX.HTM screen will be displayed.

 If it does not start automatically, double-click "INDEX.HTM" file in the disc to start the PDI Viewer.

 **To start up the PDI viewer from the Windows7/8.1 CD.**

When the PDI viewer is started up from the Windows7/8.1 CD, the screen shown at the right will be displayed. Click **[Run rundll32.exe]** to activate the PDI viewer.

One of the following settings must be made for automatic startup of the PDI viewer.

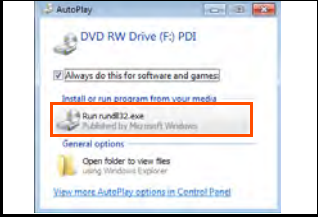
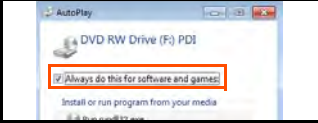
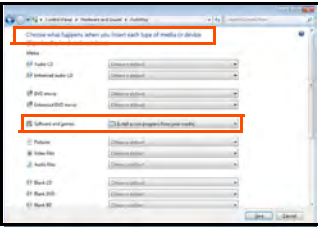
1. Check [Always do this for software and games] on the "Auto Play" message at the right and click [Run rundll32.exe].

- Windows7 Only

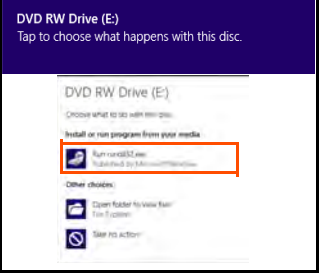
2. Set Control Panel > Hardware and Sound > Autoplay screen as follows.

- [Use Autoplay for all media and devices]: ON
- Select "Software and games": "Install or run program from your media"

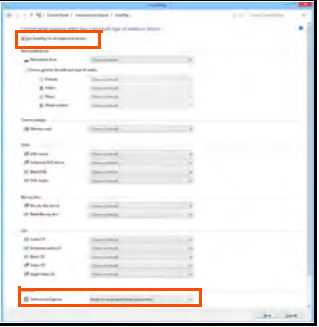
Windows7

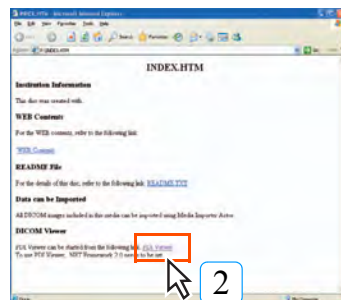




Windows8.1




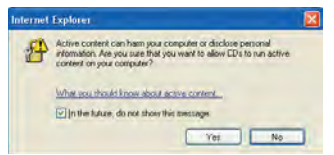
Click the [Tap to choose what happens with this disc] screen to display the [Choose what to do with this disc] screen.

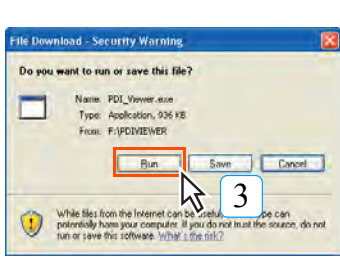




- 2 Click **[PDI Viewer]**.
- A security warning message will be displayed.

 When the screen on the right appears upon clicking on the [PDI Viewer], click the [Yes] button.



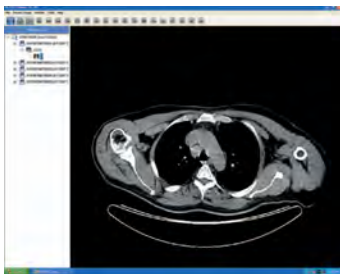
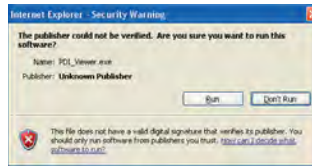


3 Click [Run].

- The PDI Viewer will be displayed.




The window as shown on the right may appear when [Run] button is clicked. If this window is displayed, click [Run] button.



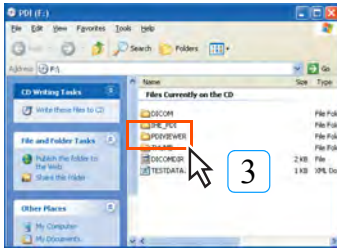
2) When starting from the executable file

1 Set the disc in the disc drive of the generic PC.

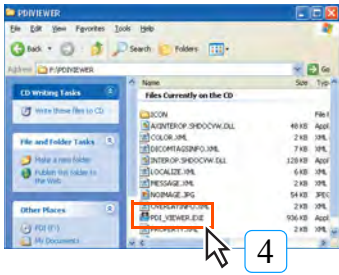
2 Display the disc drive using Explore.

 p.510 To start up the PDI viewer from the Windows/8.1 CD.

3 Double-click "PDIVIEWER" Folder.

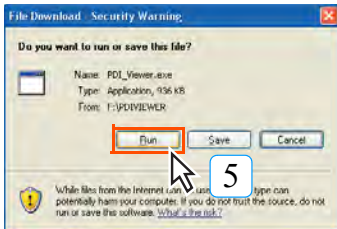


4 Double-click "PDI_VIEWER.EXE".



• A security warning message will be displayed.

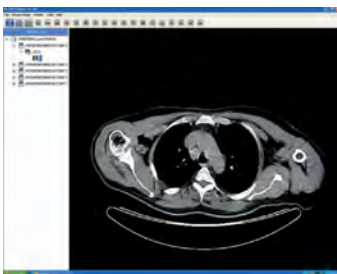
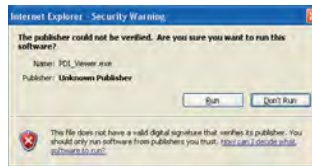
5 Click [Run].



• The PDI Viewer will be displayed.




The window as shown on the right may appear when [Run] button is clicked. If this window is displayed, click [Run] button.

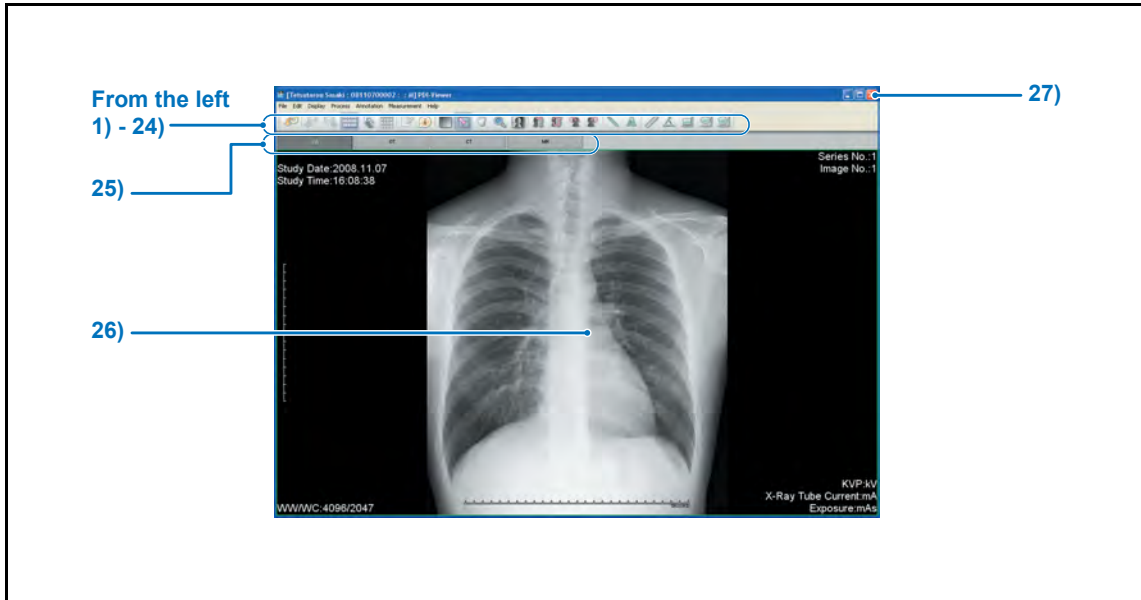


A.1.2 New PDI Viewer Operation

Buttons displayed on the new PDI viewer are as follows.
Browse the image using these buttons.

 **The generic PC that is used to run the new PDI viewer needs to satisfy the following requirements.**

- OS : Windows Vista, Windows 7, Windows 8.1
- CPU : PentiumIII processor or more
- Memory : 256MB or more
- Graphic Board : 32bit or more
- Resolution : 1024 x 768pixels or more
- CD-ROM Drive : (24x) or higher



Appendix

| | Item | Function |
|-----|---------------------------------|--|
| 1) | Patient List Display | Displays the Patient List dialogue box. |
| 2) | file read | Reads the data contained in the drive. |
| 3) | Move to Next Patient | Moves to the next patient screen. |
| 4) | Move to Previous Patient | Moves to the previous patient screen. |
| 5) | Previous_Series | Moves the image before the DICOM image. |
| 6) | Next_Series Moves | Moves the image after the DICOM image. |
| 7) | Mode(Title) | Switches to the tile display. |
| 8) | Mode(Stack) | Switches to the stack display. |
| 9) | Format | Allows to change the number of image frames displayed. |
| 10) | Report | Displays the report. |
| 11) | TagInfo | Displays the DICOM tag information. |
| 12) | Gradation | Applies density/contrast processing to the image. |
| 13) | Magni | Zooms out/in the image. |
| 14) | Pan | Moves the image. |
| 15) | Loupe | Enlarges the position where the mouse pointer is placed. |
| 16) | Invert | Inverts black/white. |
| 17) | Flip Right Or Left | Flips the image horizontally. |

| | Item | Function |
|-----|----------------------------|-------------------------------------|
| 18) | Flip Up Or Down | Flips the image vertically. |
| 19) | Rotate Right | Rotates the image clockwise. |
| 20) | Rotate Left | Rotates the image counterclockwise. |
| 21) | Line | Draws the straight line. |
| 22) | Text | Allows entering the texts. |
| 23) | Distance | Calculates the distance. |
| 24) | Angle | Calculates the angle. |
| 25) | RectArea | Calculates the area of rectangular. |
| 26) | CircleArea | Calculates the area of ellipse. |
| 27) | PolygonArea | Calculates the area of polygon. |
| 28) | Switch Image Tab | Allows switching between images. |
| 29) | Image display field | Displays the image. |
| 30) | [x] | Exits the PDI viewer. |

A.2 Patient Reception Screen Format

Displays the layout formats available for use on the patient reception screen.

Standard 1

This screenshot shows a patient reception form with the following fields:

- Basic Info:** Patient ID, Patient Name, Sex, Date of Birth, Address Line 1, Address Line 2, City, Telephone, E-Mail Address.
- Age:** A separate field for the patient's age.
- Department:** A dropdown menu.
- Doctor:** A dropdown menu.
- Accession No.:** A text input field.
- Reference:** Reference Dr. Technologist (checkbox).
- Urgent Exam:** A checkbox.
- Reason for Visit:** A text input field.
- Allergies:** A text input field.
- Contraindication:** A text input field.
- Additional Comments:** A text input field.

Standard 2

This screenshot shows a patient reception form with the following fields:

- Basic Info:** Patient ID, Patient Name, Sex, Date of Birth, Address Line 1, Address Line 2, City, Zip Code, Telephone, E-Mail Address.
- Age:** A separate field for the patient's age.
- Department:** A dropdown menu.
- Doctor:** A dropdown menu.
- Accession No.:** A text input field.
- Reference:** Reference Physician (checkbox), Reference Technologist (checkbox).
- Urgent Exam:** A checkbox.
- Reason for Visit:** A text input field.
- Allergies:** A text input field.
- Contraindication:** A text input field.
- Additional Comments:** A text input field.

Appendix

Animal 1

This screenshot shows an animal patient reception form with the following fields:

- Basic Info:** Patient ID, Patient Name, Owner, Accession No., Gender, Animal Species, Breed, Hair Color, Registration Org, Registration No.
- Age:** A separate field for the animal's age.
- Doctor:** A dropdown menu.
- Technologist:** A dropdown menu.
- Date of Birth:** A date input field.
- Date Neutered:** A date input field.
- Nature:** A text input field.
- Environment:** A text input field.
- Food:** A text input field.
- Urgent Exam:** A checkbox.
- Reason for Visit:** A text input field.
- Additional Comments:** A text input field.

Animal 2

This screenshot shows an animal patient reception form with the following fields:

- Basic Info:** Patient ID, Patient Name, Owner, Accession No., Gender, Animal Species, Body Type, Breed, Hair Color.
- Age:** A separate field for the animal's age.
- Doctor:** A dropdown menu.
- Technologist:** A dropdown menu.
- Date of Birth:** A date input field.
- Date Neutered:** A date input field.
- Nature:** A text input field.
- Environment:** A text input field.
- Food:** A text input field.
- Urgent Exam:** A checkbox.
- Reason for Visit:** A text input field.
- Additional Comments:** A text input field.

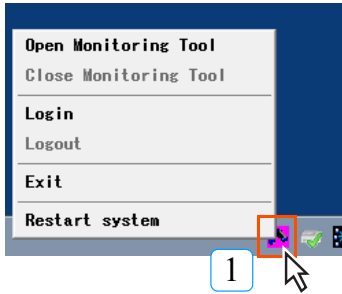
A.3 ImagePilot Monitoring Tool

Operation procedure of the ImagePilot monitoring tool is described below.

A.3.1 Starting Up the ImagePilot Monitoring Tool

How to start up the ImagePilot monitoring tool is described below.

Different initial screen of ImagePilot monitoring tool will be displayed depending on whether it is invoked by server PC or client PC.



1 Click the [ImagePilot Monitoring Tool] button displayed on the task tray at the lower right of the desktop screen, and select the [Open Monitoring Tool].



- [Open Monitoring Tool] : Displays the ImagePilot Monitoring Tool appears.
- [Close Monitoring Tool] : Closes the ImagePilot Monitoring Tool.
- [Login] : This is used by service engineers.
- [Logout] : This is used by service engineers.
- [Exit] : Exits the ImagePilot Monitoring Tool.
- [Restart system] : Restarts the system.

<Invoked by ImagePilot-SV>



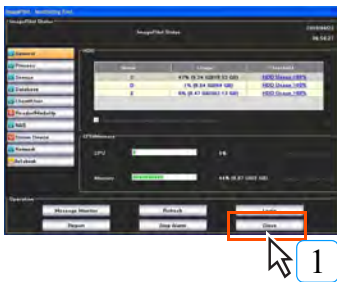
<Invoked by ImagePilot-CL>



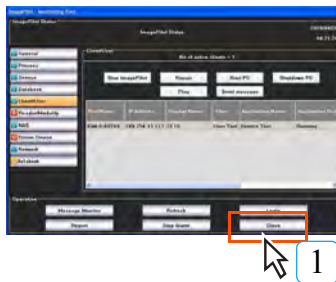
A.3.2 Exiting ImagePilot Monitoring Tool

How to exit the ImagePilot monitoring tool is described below.

<Invoked by ImagePilot-SV>



<Invoked by ImagePilot-CL>



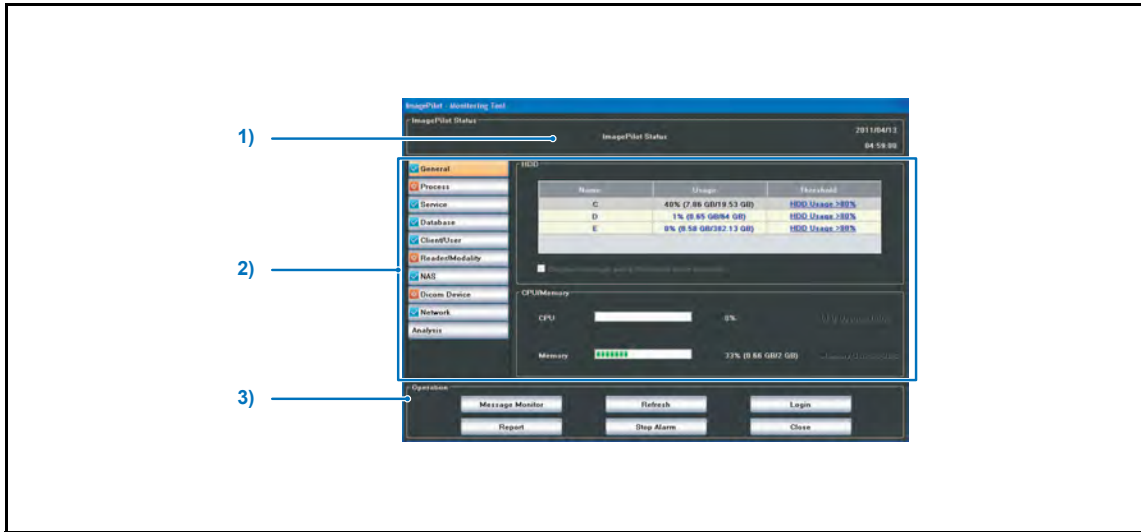
1 Click the [Close] button at the lower right of the ImagePilot monitoring tool screen.

- ImagePilot monitoring tool screen will be closed.

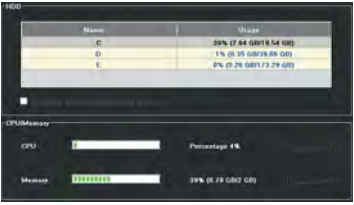


A.3.3 ImagePilot Monitoring Tool Screen


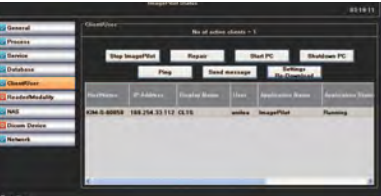

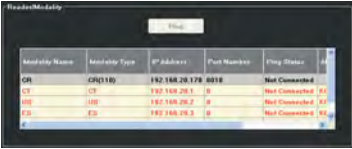


Functions of ImagePilot monitoring tool screen are described below.

1) ImagePilot monitoring tool for server

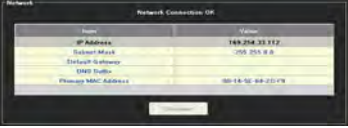
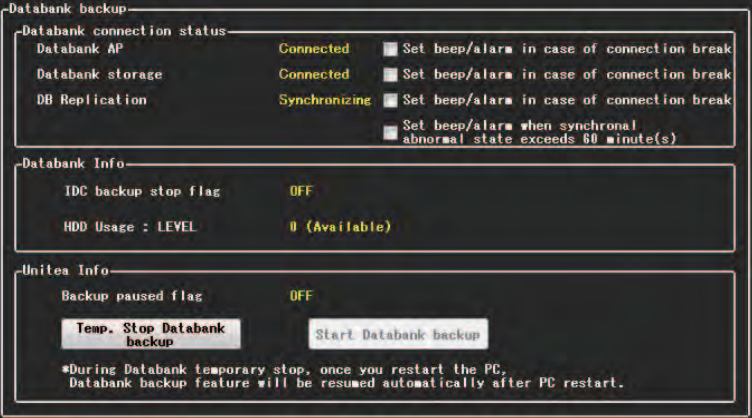








Appendix


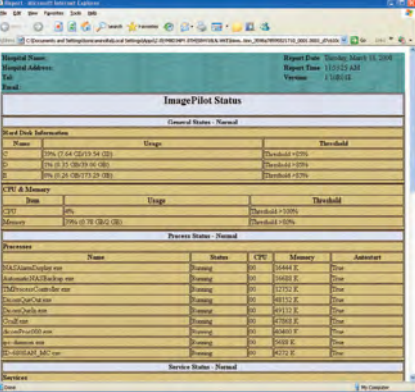
| | Item | Function |
|----|-------------------|--|
| 1) | ImagePilot Status | Displays the status of the ImagePilot. |
| 2) | Function | <p>[General] button Displays the utilization rate of the hard disk, CPU and memory.</p>  <p>[Process] button Displays the implementation status of each process.</p>  <p>[Service] button Displays the implementation status of each program.</p>  |

| | Item | Function |
|----|---|--|
| 2) | <p>Function (continued from previous page)</p> | <p>[Database] button Displays the current status of the image database and the patient database.</p>  <p>[Client/User] button Displays the current status of clients.</p> <p>[Stop ImagePilot] button : Execute forced shutdown of the ImagePilot. [Repair] button : If the system fails to shut down normally due to error, etc., forcibly restores the control data flag of the server. [Start PC] button : Starts up the client PC. [Shutdown PC] button : Shuts down the client PC. [Ping] button : Sends "Ping" to the client PC. [Send message] button : Sends the message to the client PC. [Settings Re-Download] button : Redownloads the settings of the ImagePilot. Click this button when the following screens are displayed while the ImagePilot is in startup process.</p>   <p>[Reader/Modality] button Displays the status of the reader.</p>  <p>[NAS] button Displays the status of the NAS.</p>  <p>[Dicom Device] button Displays the status of the DICOM device.</p> <p>[DICOM Log]: The [DICOM Log Viewer] screen appears, which allows you to check error logs that occurred during DICOM communication. Refer to p.522 DICOM Log Viewer Screen for more information. The [DICOM Log] button appears only for the monitoring tool started from servers and is enabled only for users logged in with administrative privileges.</p>  |

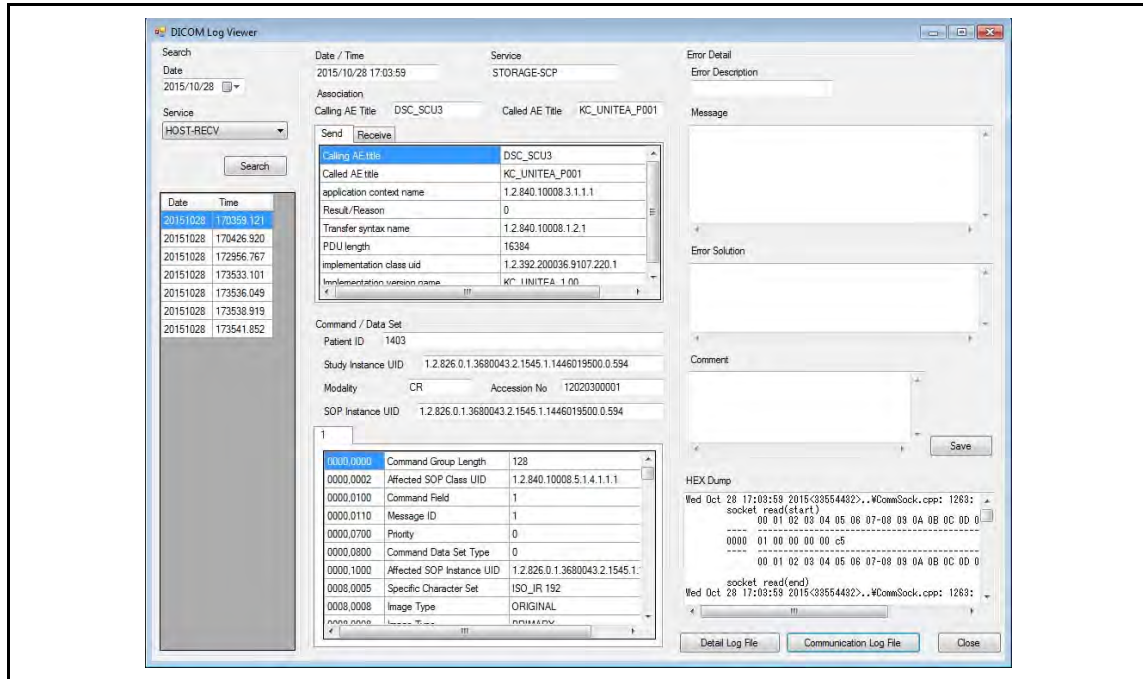


| | Item | Function |
|----|---|--|
| 2) | <p>Function (continued from previous page)</p> | <p>[Network] button Displays the status of network.</p>  <p>[Databank] button Displays connection status and backup status of the Databank. (Data Backup is an optional function.)</p>  <p>Databank connection status Displays the connection status with each server used in the Databank.</p> <p>Connected : Status that connection is available to the data center.</p> <p>Synchronizing : Status that is displayed in [DB Replication] only and indicates that synchronization with the data center is successfully made.</p> <p>Stopped : Status that is displayed in [DB Replication] only and indicates that synchronization with the data center has not been successfully made.</p> <p>Terminated : Status that the connection is not available to the data center, or indicates that communication error has been occurred between the ImagePilot and the data center.</p> <p>If you check [Set beep/alarm in case of connection break] to the right of each item, you can set an alarm to be activated when a disconnection is detected.</p> <div style="border: 1px solid black; padding: 5px;">  <ul style="list-style-type: none"> • This alarm also goes off when there are a busy connection and a problem in the transit point so it is suggested to use this function temporarily, for example, when you test the connection status. • Instantaneous interruption of communication may occur in the normal uncongested line status so the communication may recover even when a disconnection occurs or the stopped status is displayed. </div> |

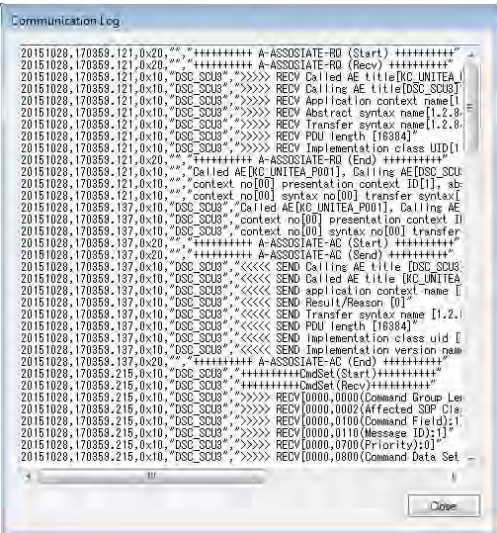
| Item | Function |
|---|--|
| <p>Function (continued from previous page)</p> | <p>Databank Info Displays the setting at the center server side of the Databank.</p> <p>IDC backup stop flag : Normally OFF.It turns on when the contract becomes invalid, expired, or backup capacity exceeds the contract capacity.</p> <p>HDD Usage : LEVEL : Normally LEVEL 0.LEVEL may vary depending on the remaining free space in the contract capacity.</p> <ul style="list-style-type: none"> - LEVEL 1 : Less than 10% of overall capacity - LEVEL 2 : Less than 2% of overall capacity - LEVEL 3 : 0% <p>Backup will be stopped at the LEVEL 3.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">  <ul style="list-style-type: none"> If you have set the Databank setting to [Delete old images to fetch new images], backup does not stop and newly importing images will be stored by deleting the same amount capacity of old images. Level does not change if you are using a metered system such as the pay-as-you-go plan. </div> <p>ImagePilot Info</p> <p>Backup paused flag : Normally OFF.It turns on when stopped by the [Temp. Stop Databank backup] button.</p> <p>[Temp. Stop Databank backup] Button : Backup stops temporarily.</p> <p>[Start Databank backup] Button : The temporarily stopped backup will re-start.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">  <p>If you re-boot your computer with pressing and holding the [Temp. Stop Databank backup] button, temporal stop will be invalid and backup re-starts.</p> </div> <p>In addition, the status of the backup can be checked with the mark displayed on the [Databank] button.</p> <p> Databank : It means the Databank is operated successfully. This is also displayed when DB replication is in [Synchronizing].</p> <p> Databank : It means that DB replication is stopped. This is displayed when communication with the center server is disconnected temporarily.</p> <p> Databank : It means that the Databank is not operated successfully. This is displayed when network with the server is disconnected or the Databank does not have any free space.</p> |

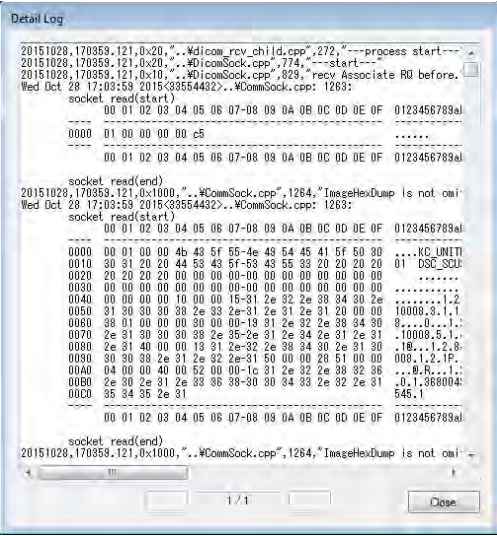
| | Item | Function |
|----|-----------|--|
| 3) | Operation | <p>[Message Monitor] button Displays the list of messages displayed on the ImagePilot.</p>  <p>[Refresh] button Update the current display of the ImagePilot monitoring tool.</p> <p>[Login] button To be used by technical service person.</p> <p>[Report] button Displays the monitor report of the ImagePilot.</p>  <p>[Stop Alarm] button Stops the alarm activated due to detection of abnormality.</p> <p>[Close] button Exits the ImagePilot monitoring tool.</p> |

DICOM Log Viewer Screen

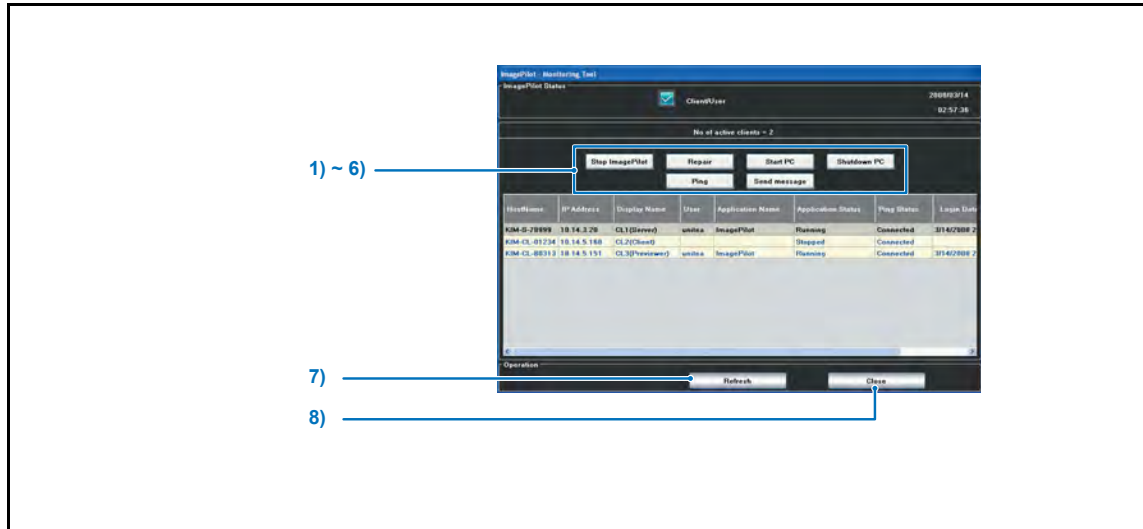



| Item | Function |
|----------------------|---|
| [Search] | Searches logs. |
| [Date] | Specifies the date/time for searches. |
| [Service] | Specifies filtering based on services. |
| [Search] button | Searches logs matching the search criteria. |
| List of results | Displays search results matching the search criteria. |
| [Date/Time] | Displays the date/time of DICOM communication activity. |
| [Service] | Displays DICOM communication services. |
| [Association] | Displays DICOM communication association information. |
| [Calling AE Title] | Retrieves and displays Calling AE titles from communication logs. |
| [Called AE Title] | Retrieves and displays Called AE titles from communication logs. |
| [Send]/[Receive] tab | A list of association communication values from the communication logs appear in grid format. |
| [Command/Data Set] | Displays the content of DICOM communication data. |
| [Patient ID] | Retrieves and displays values of (0010,0020) tags from communication logs for Storage-SCU and Storage-SCP services. Does not display such information for the QR-SCU, QR-SCP, and MWM-SCU services. |
| [Study Instance UID] | Retrieves and displays values of (0020,000D) tags from communication logs for Storage-SCU and Storage-SCP services. Does not display such information for the QR-SCU, QR-SCP, and MWM-SCU services. |
| [Modality] | Retrieves and displays values of (0008,0060) tags from communication logs for Storage-SCU and Storage-SCP services. Does not display such information for the QR-SCU, QR-SCP, and MWM-SCU services. |

| Item | Function |
|---------------------------------|--|
| [Accession No] | Retrieves and displays values of (0008,0050) tags from communication logs for Storage-SCU and Storage-SCP services. Does not display such information for the QR-SCU, QR-SCP, and MWM-SCU services. |
| [SOP Instance UID] | Retrieves and displays values of (0008,0018) tags from communication logs for Storage-SCU and Storage-SCP services. Does not display such information for the QR-SCU, QR-SCP, and MWM-SCU services. |
| List of tags | Displays a list of commands and data set tags from communication logs. Storage-SCU: Displays a list of tags sent by Storage. Storage-SCP: Displays a list of tags received by Storage. QR-SCU, QR-SCP, MWM-SCU: Displays two vertical data grids and a list of query and response tags in each grid. |
| [Error Detail] | Displays error information for errors that have occurred. |
| [Error Description] | Determines the level of processing performed from the content of communication logs and displays error types. |
| [Message] | Displays all error messages that occurred during communication processing. |
| [Error Solution] | Displays troubleshooting messages for corresponding errors. |
| [Comment] | You can enter comments. |
| [Save] button | Stores the displayed log format with your comments. |
| [HEX Dump] | Extracts and displays the HEX Dump found in detailed logs. |
| [Communication Log File] button | Displays the [Communication Log] screen. Extracts and displays corresponding processing details from communication log files.  |

| Item | Function |
|---------------------------------|--|
| <p>[Detail Log File] button</p> | <p>Displays the [Detail Log] screen. Extracts and displays corresponding processing details from detailed log files.</p>  <p>The screenshot shows a window titled 'Detail Log' with a scrollable text area. The text contains several log entries with timestamps and hex dump data. For example, it shows 'socket read(start)' followed by a hex dump of data received from a socket. The hex dump is presented in a grid format with columns for hex values and their corresponding ASCII characters. The window has a 'Close' button at the bottom right.</p> |
| <p>[Close] button</p> | <p>Exits the application.</p> |

2) ImagePilot monitoring tool for client



| | Item | Function |
|----|--------------------------|--|
| 1) | [Stop ImagePilot] button | Forcibly shuts down the ImagePilot program. |
| 2) | [Repair] button | If the system fails to shut down normally due to error, etc., forcibly repair the control data flag of the client. |
| 3) | [Start PC] button | Restarts the PC for ImagePilot-CL. <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">  Since WOL is not supported by Windows8 or later systems, this function is disabled. </div> |
| 4) | [Shutdown PC] button | Shuts down the PC for ImagePilot-CL |
| 5) | [Ping] button | Sends "Ping" (verification of network connection) to the device selected in the list. |
| 6) | [Send Message] button | Sends the message to other ImagePilot. |
| 7) | [Refresh] button | Updates the ImagePilot monitoring tool. |
| 8) | [Close] button | Exits the ImagePilot monitoring tool. |

Appendix

A.4 Creating Template for Referral Form/Report

Procedure to create the referral form/report is described below.

Referral form/report output function utilizes "Mail Merge" function of Microsoft Office Word 2007 (referred to MS Word hereinafter) . The template file will be created as the MS Word file. Refer to MS Word Help for other functions of MS Word.

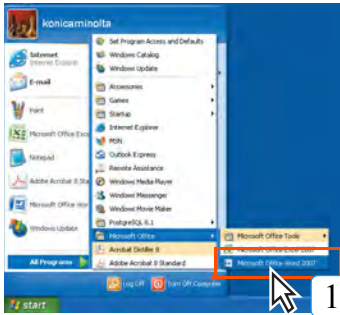


Reference to be made in MS Word Help

- About tables and lines : "Tables", "Create Tables".
- About formats of text : "Change Format", "Change Text Format".
- About mail merge : "Mail Merge", "Create/print letter and document using mail merge".

A.4.1 Starting Up MS Word

How to start up the MS Word is described below.

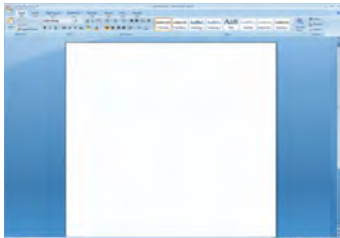


1 Click [Start Menu] at the lower left of the desktop, and select [All Programs] - [Microsoft Office] - [Microsoft Office Word 2007].

- **MS Word starts up, and Document-1(new document file) will be displayed.**

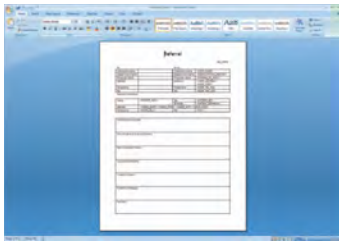


Double-clicking [Microsoft Office Word 2007] in "Recently operated program list" or the Word file also starts up MS Word.



A.4.2 Deciding Template Design

Decide the layout of various information such as patient information for the template.

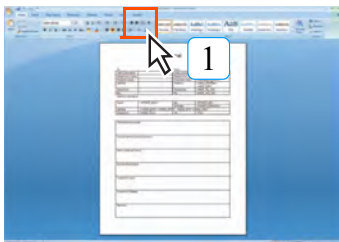


1 Using the function of MS Word, create the fixed text strings or lines that should be placed on the referral form or report.

- Type, size and color of the font can also be specified.
- Downloaded Word file can also be used.
- MS Office Word 2003 files can also be used.

A.4.3 Adding the Definition of Mail Merge Print Field

Allows defining the field from which the mail merge printing is made.



1 Select the [Mailings].



- Indication of mail merge document will be displayed.

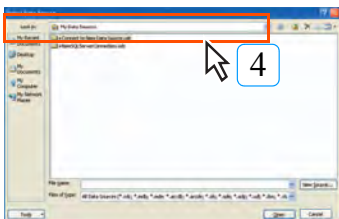


2 Select the [Start Mail Merge] - [Letters].

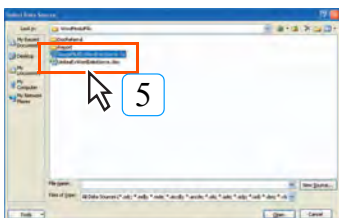


3 Select the [Select Recipients] - [Use Existing List...].

- Data file selection screen will be displayed.

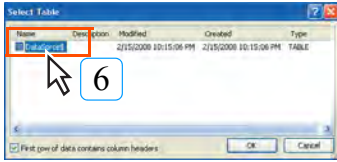


4 Select "\\Kim-S-XXXXX \Env\WordModelFile" in "Look In:".
(Kim-S-XXXXX represents the server name)

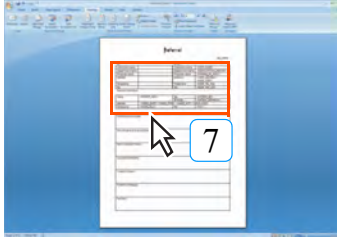
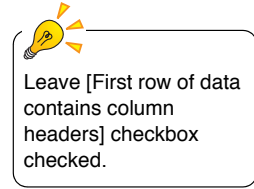


5 Select "ImagePilotExWordDataSorce.xls", and click the [Open] button.

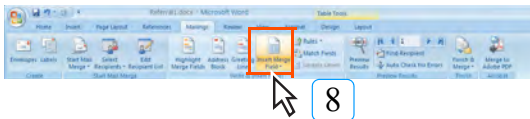
- Table selection screen will be displayed.



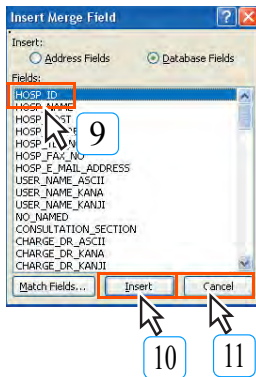
- 6 Select "DataSource\$", and click the [OK] button.
- Returns to MS Word screen.



- 7 Move the cursor to the position where the mail merge field is inserted.



- 8 Select [Mailings] - [Insert Merge Field].
- Insert mail merge field screen will be displayed.



- 9 Select the field appropriate to the field type.



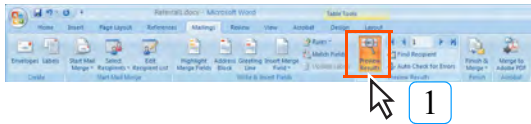
- 10 Click the [Insert] button.

- 11 Click the [Cancel] button.
- Insert mail merge screen closes, and returns to MS Word screen.

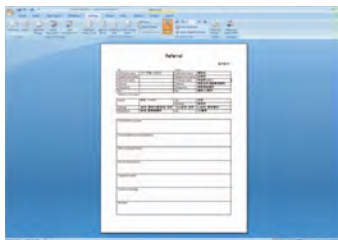
- 12 Repeat the Step 7 through 11, and register other fields in the same manner.

A.4.4 Confirming the Mail Merge Print Field that has been set

Confirm the mail merge print field that has been set using Microsoft Word.



1 Select the [Mailings] - [Preview Results].

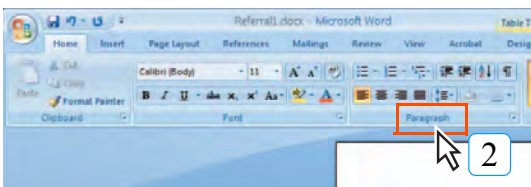



2 Confirm the mail merge print based on the result displayed on the preview screen.

A.4.5 Text Format Setting

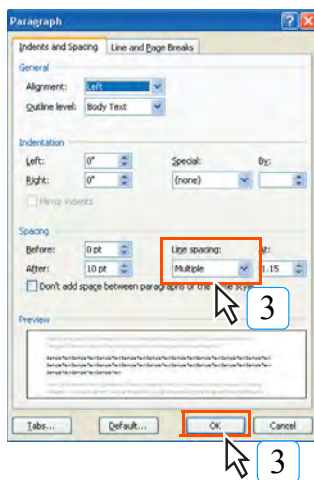
How to set the text format is described below.

1 Move the cursor to the tail end of the file.

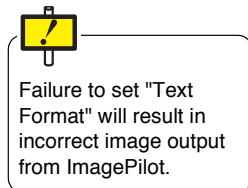


2 Select the [Home] - [Paragraph].
(Click  on the right of [Text Format])

- Paragraph dialogue box will be displayed.



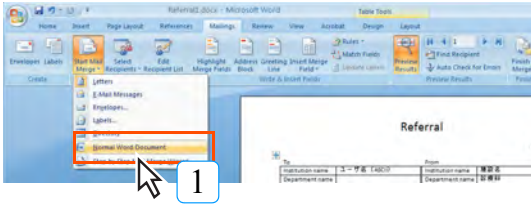
3 Select the [Indents and Spacing] - [Line spacing:], set 1 line for the line space. Then click the [OK].



Appendix


A.4.6 Saving the Completed Template

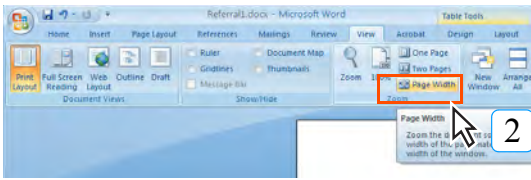
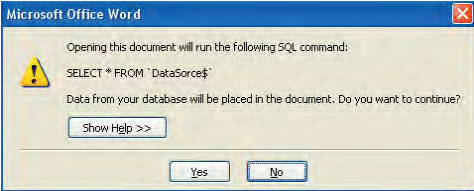
Saves the completed template.



1 Select the [Mailings] - [Start Mail Merge] - [Normal Word Document].


- Mail merge option will be terminated.

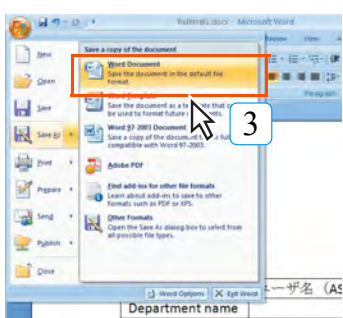
 When the completed template file is opened by double-click, following message may appear.
Saving the file after setting it to "Standard Word Document" will stop the display of the message.



2 Select the [View] - [Page Width].

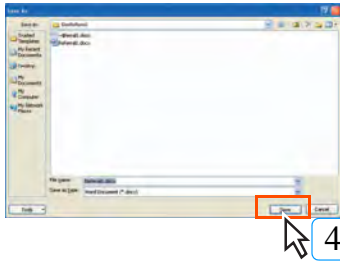
- Template display changes to the one based on page width.

 Make sure to set to [Display Based on Page Width]. Failure to set correctly will lead to incorrect template preview on the ImagePilot. (Whole page design cannot be included in the preview area)



3 Select the [Save As] - [Word Document].

- Save as screen will be displayed.



4 Specify the file name and save destination, and click the [Save] button.

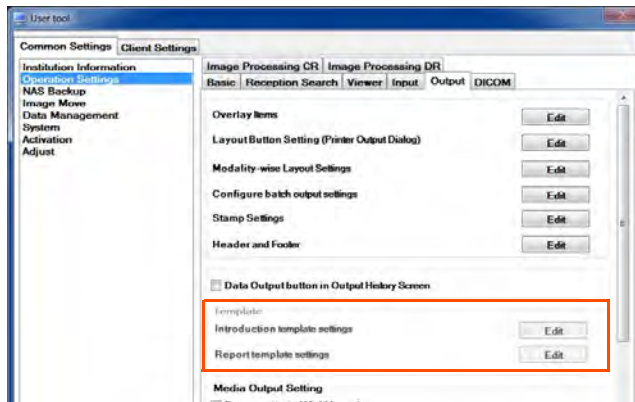
- The template file will be saved.



Attach different names to each template.



The created template file can be transformed to the template usable on the ImagePilot using [Operation Settings] - [Output] - [Template] of the User Tool.



No default is available for the file name or save destination. Put the name and select the save destination whatever it is convenient.

Appendix

Mail Merge field name and ImagePilot data supported table.

| No. | ImagePilot Item | Mail Merge Field | Remarks |
|-----|-------------------------------|----------------------|----------------------------------|
| 1 | Institution ID | HOSP_ID | |
| 2 | Institution name | HOSP_NAME | |
| 3 | Institution Zip code | HOSP_POST | |
| 4 | Institution address | HOSP_ADDRESS | |
| 5 | Institution telephone numbers | HOSP_TEL_NO | |
| 6 | Institution fax numbers | HOSP_FAX_NO | |
| 7 | Institution E-mail address | HOSP_E_MAIL_ADDRESS | |
| 8 | User name | USER_NAME_ASCII | ImagePilot login user |
| 9 | User name (Kana) | USER_NAME_KANA | Valid only for the use in Japan. |
| 10 | User name (Kanji) | USER_NAME_KANJI | Valid only for the use in Japan. |
| 11 | Diagnosis department | CONSULTATION_SECTION | |
| 12 | Physician's name | CHARGE_DR_ASCII | |
| 13 | Physician's name (Kana) | CHARGE_DR_KANA | Valid only for the use in Japan. |
| 14 | Physician's name (Kanji) | CHARGE_DR_KANJI | Valid only for the use in Japan. |
| 15 | Operator's name | XRAY_OPRT_NAME_ASCII | |
| 16 | Operator's name (Kana) | XRAY_OPRT_NAME_KANA | Valid only for the use in Japan. |
| 17 | Operator's name (Kanji) | XRAY_OPRT_NAME_KANJI | Valid only for the use in Japan. |
| 18 | Patient ID | PATIENT_ID | |
| 19 | Patient name | PATIENT_ASCII | |
| 20 | Patient name (Kana) | PATIENT_KANA | Valid only for the use in Japan. |
| 21 | Patient name (Kanji) | PATIENT_KANJI | Valid only for the use in Japan. |
| 22 | Title | PATIENT_TITLE | |
| 23 | Date of birth | PATIENT_BIRTHDAY | |
| 24 | Sex | PATIENT_SEX | |
| 25 | Patient comment | PATIENT_COMMENT | |
| 26 | Standard unit - Height | PATIENT_HEIGHT_TYPE | |
| 27 | Standard unit - Weight | PATIENT_WEIGHT_TYPE | |
| 28 | Standard unit - Temperature | TEMPERATURE_TYPE | |
| 29 | Height(cm) | PATIENT_HEIGHT | Valid only for the use in Japan. |
| 30 | Height(feet) | PATIENT_HEIGHT_FT | |
| 31 | Weight(kg) | PATIENT_WEIGHT | Valid only for the use in Japan. |
| 32 | Weight(lb) | PATIENT_WEIGHT_LB | |
| 33 | Temperature(C) | TEMPERATURE | Valid only for the use in Japan. |
| 34 | Temperature(F) | TEMPERATURE_F | |
| 35 | Blood Pressure(High) | BLOOD_PRESSURE_UP | |
| 36 | Blood Pressure(Low) | BLOOD_PRESSURE_DOWN | |
| 37 | Pulse | PULSE | |
| 38 | Blood glucose | BLOOD_GULUCOSE | |
| 39 | Scaled date | VITAL_TIME | |
| 40 | Nationality | NATIONALITY | |
| 41 | Race | RACE | |
| 42 | Marriage | MARITAL | |
| 43 | Study name | STUDY_NAME | |
| 44 | Accession No. | ACCESSION_NO | |
| 45 | Receipt order | RECEIPT_ORDER | |
| 46 | Receipt date and time | RECEIPT_DATETIME | |
| 47 | Receipt date | RECEIPT_DATE | |

| No. | ImagePilot Item | Mail Merge Field | Remarks |
|-----|-----------------------------|----------------------------|----------------------------------|
| 48 | Receipt time | RECEIPT_TIME | |
| 49 | Death | DEATHKBN | |
| 50 | Death date and time | DEATH_DATETIME | |
| 51 | Death date | DEATH_DATE | |
| 52 | Death time | DEATH_TIME | |
| 53 | Home - Zip code | HOME_POST | |
| 54 | Home - address | HOME_ADRS | Valid only for the use in Japan. |
| 55 | Home - address City | HOME_CITY | |
| 56 | Home - address State | HOME_STATE | |
| 57 | Home - house number | HOME_BANTI | |
| 58 | Home - telephone number | HOME_TEL1 | |
| 59 | Fax number | FAX | |
| 60 | E-mail | EMAIL | |
| 61 | Owner name | OWNER_NAME | |
| 62 | Species | ANIMAL_TYPE | |
| 63 | Breed | BREED | |
| 64 | Gender | ANIMAL_SEX | |
| 65 | Date neutered | NEUTERED_DATE | |
| 66 | Fur color | FUR_COLOR | |
| 67 | Dietary | DIETARY | |
| 68 | Character | CHARACTER | |
| 69 | Physique | PHYSIQUE | |
| 70 | Environment | STAY_AREA | |
| 71 | Rabies | RABIES | |
| 72 | Rabies registered date | RABIES_REGISTERED_DATE | |
| 73 | Rabies registration numbers | RABIES_REGISTRATION_NUM | |
| 74 | Tag number (License) | TAG_NUM | |
| 75 | Owner DM | OWNER_DM | |
| 76 | Comment | COMMENT_1 | |
| 77 | Visit comment | VISIT_COMMENT | |
| 78 | Taboo | TABOO_1 | |
| 79 | Urgent exam flag | EMERGENCY_FLAG | |
| 80 | Notes for exposure | XRAYED_MEMO | |
| 81 | Note user ID | XRAYED_MEMO_USER_ID | |
| 82 | Note date and time | XRAYED_MEMO_INSERTDATETIME | |
| 83 | Note date | XRAYED_MEMO_INSERTDATE | |
| 84 | Note time | XRAYED_MEMO_INSERTTIME | |
| 85 | Age | PATIENT_AGE | |
| 86 | Print out date and time | EX_DATETIME | |
| 87 | Print out date | EX_DATE | |
| 88 | Print out time | EX_TIME | |

A.5 About HIPAA Log

HIPAA Log is the log generated according to the standard posed by HIPAA, providing details of implementation status of the ImagePilot.

HIPAA logs are stored in D:/KonicaMinolta/Kim/Server/Log (*) as "Hipaa.log".

(For the Server PC where D-drive is not available, the same path will be applied to the image file stored in C-drive)

The basic information included in the log is "date, PC name, user name, role, event name and event details".

Date : YYYY/MM/DD hh:mm:ss.sss (down to millisecond)
 PC Name : Name of the PC operated (ImagePilot)
 User Name : Name of the login user
 Role : Administrator = 01, Doctor = 02, Technologist = 03
 Receptionist = 04, Nurse = 05
 Event Name : Refer to the following.
 Event Details : Refer to the following.

Followings are the details exhibited in HIPAA logs.

| Event Name | Event Details |
|-------------------|---|
| Server-Start | Starts up ImagePilot server PC program. (starts up KimSubProcessController) |
| Server-Shutdown | Shuts down ImagePilot server PC program. (shuts down KimSubProcessController) |
| Start | Starts up KimWindows program. |
| Shutdown | Shuts down KimWindows program. |
| Log in | Logs in (including termination of the screen saver) *Failure to log in is also recorded as the log. |
| Log off | Logs off (including manual log-off, automatic log-off(screen saver)). Log off during unattendance, auto-unattendance and linkage with electronic medical chart system. |
| MODIFY | Logs will be generated when [OK] button is pressed after modification completed on the patient input screen. (always generates the log of one line per patient even if there are several images are involved) |
| OPERATION | Start/completion of the viewer screen (VIEWER OPEN/CLOSE), Clicks on buttons of toolbar/context menu on the viewer screen(with button name), creation/update/deletion of folders (CREATE/UPDATE/DELETE FOLDER xx:xx = folder name), switches to whole screen/comparison screen/viewer screen (WHOLE SCREEN OPEN/COMPARE SCREEN OPEN/VIEWER OPEN) |
| OPERATION | Operation information for the following. (without patient information) Start/completion of batch output of multiple patient. (BULK OUTPUT OPEN/ CLOSE) |
| ACQUISITION | When reading of REGIUS image is completed |
| IMAGE CONFIRM | When the [OK] button of the image is clicked. (including auto-OK) |
| IMAGE REJECT | Logs for the images deleted as NG when exiting the viewer screen |
| UNNAMED REGISTERS | Assignment of unnamed images to the patient (logs of patient information after the image assigned) |
| MOVE TO UNNAMED | Transfer of the patient image to the unnamed image folder |
| MASKING | Logs for the images whose masking is changed when exiting the viewer screen |
| ROTATION/FLIP | Logs for the images whose rotation/flip is changed when exiting the viewer screen |
| IMAGE PROCESSING | Logs for the images whose H-processing is changed when exiting the viewer screen |
| RESET TO DEFAULT | Logs for the images that are reset to the default when exiting the viewer screen |
| RESET TO ORIGINAL | Logs for the images that are reset to the original when exiting the viewer screen |
| OVERLAY | Logs for the images whose annotation/analysis is changed when exiting the viewer screen |
| MOVE TO xx | Images sent to the different folders, xx=folder name which the image was transferred to. |
| HRM PROCESSING | Logs for the images whose density/contrast is changed when exiting the viewer screen |
| CONTRAST INVERT | Logs for the images whose B&W inversion is changed when exiting the viewer screen |
| OUTPUT START xx | Output started (XX=host/printer name or output to media (MEDIA-OUTPUT)) |

| Event Name | Event Details |
|----------------------------|--|
| OUTPUT FINISH xx | Output completed (XX=host/printer name or output to media (MEDIA-OUTPUT)) |
| OUTPUT ERROR xx | Output failed (XX=host/printer name or output to media (MEDIA-OUTPUT)) |
| OUTPUT CANCEL xx | Deleted output queues (output to media (MEDIA-OUTPUT)) |
| DICOM IMAGE | Logs generated when DICOM STORAGE images are received |
| INTAKE STATIC IMAGE | Logs generated when importing generic images (still images) |
| INTAKE MOVIE IMAGE | Logs generated when importing generic images (cine images) |
| INTAKE DICOM IMAGE | Logs generated when importing generic images (DICOM) |
| UNNAMED SCREEN OPEN | Switches from Patient Reception screen to Unnamed screen. |
| UNNAMED SCREEN CLOSE | Switches from Unnamed screen to Patient Reception screen. |
| UNNAMED REGISTER CONFIRMED | Confirms the link between unnamed image and patient. |
| UNNAMED REGISTER CANCELED | Cancels the link between unnamed image and patient. |
| UNNAMED IMAGE DELETED | Deletes the unnamed images. |
| DIALOG INFO | Allows operating the dialogue box(contents of message and button operation). |

A.6 List of URL Link Availability

Availability of URL link with the electronic medical chart system, etc. is listed below.

A.6.1 URL Link Availability on Each Screen of ImagePilot

Symbols:.....: Link available x: Error message displayed -: No response

| ImagePilot Screen | URL | | | | Remarks |
|-------------------------|--------|---------|------------|---------|---|
| | Log-In | Display | Nondisplay | Log-Out | |
| Log-In Screen | • | - | - | - | |
| Patent Reception Screen | - | • | • (note1) | • | |
| Editing Patient | - | x | x | x | |
| Search Screen | - | • | • (note1) | • | |
| Searching | - | x | x | x | All not available due to sub-screen display. |
| Batch Output | - | • | • (note1) | • | |
| Sub-Screen | - | x | x | x | Available Operations: Send/Write |
| Off-Line | - | • | • | • | |
| Viewer Screen | - | • | • (note2) | x | Log-out is disabled during On-Line. |
| On-Line | - | • | • (note2) | x | |
| Image Capture | - | • | • | • | |
| Modality | - | x | x | x | All not available due to sub-screen display |
| General-Purpose Image | - | • | • | • | Density/contrast, zoom/unzoom processing starts upon halt of the mouse operation. |
| Image Editon | - | x | x | x | Operations: Image Adjust/Rotate & Flip/Image Comments/Image Properties. |
| Sub-Screen | - | • | • | • | Processing starts upon halt of the mouse operation. |
| While displayed | - | • | • | • | Operation: Advanced Settings/Shutter Adjust |
| Annotation | - | x | x | x | Processing starts upon halt of the mouse operation. |
| Sub-Screen | - | • | • | • | Operation: Advanced Settings |
| While displayed | - | x | x | x | Processing starts upon halt of the mouse operation. |
| Sub-Screen | - | • | • | • | Operation: Advanced Settings |
| While cine is operated | - | • | • | • | Processing starts upon halt of replay when playing the cine. |
| Cine | - | x | x | x | All not available due to sub-screen display. |
| Output Processing | - | x | x | x | All not available due to sub-screen display. |
| Unattended Screen | - | x | x | x | |

Note1: Implements the processing if the patient on viewer screen resides. (However, except for the patient whose on-line button is clicked)
 Note2: In practice, the viewer screen will be minimized in size when the on-line button is clicked.

A.7 Anonymization Tags

When the checkbox for [personal Info Anonymization] is ticked for writing to the recording media or outputting to the host, those tag information that will be anonymized are shown below.

| Tag | Tag Name | Tag Contents | Anonymized to |
|-------------|--|--|---|
| (0008,0080) | Institution Name | Institution name | to "" as many as codes |
| (0008,0081) | Institution Adress | Institution address | to "" as many as codes |
| (0008,0090) | Referring Physician's Name | Referring physician's name | to "" as many as codes |
| (0008,0092) | Referring Physician's Address | Referring physician's address | to "" as many as codes |
| (0008,0094) | Referring Physician's Telephone Numbers | Referring physician's tel No. | to "" as many as codes |
| (0008,1040) | Institutional Department Name | Department name | to "" as many as codes |
| (0008,1050) | Performing Physician's Name | Performing physician's name | to "" as many as codes |
| (0008,1060) | Name of Physician(s) Reading Study | Study physician's name | to "" as many as codes |
| (0008,1070) | Operators' Name | Operator's name | to "" as many as codes |
| (0010,0010) | Patient's Name | Patient's name | Patient1 (Serially increments the numerical part in the case of write to media, multiple patients.) |
| (0010,0020) | Patient ID | Patient ID | <ul style="list-style-type: none"> In the case of write to media: Serially increments the numerical part if there are multiple patients. In the case of export to HOST: Serially increments the numerical part entered in "Patient ID". |
| (0010,0030) | Patient's Birth Date | Patient's Birth Date | to "0"(0x00) |
| (0010,0040) | Patient's Sex | Patient's Sex | to "O(oo)" |
| (0010,1000) | Other Patient IDs | Other Patient IDs | to "" as many as codes |
| (0010,1001) | Other Patient Name | Other Patient Name | to "" as many as codes |
| (0010,1040) | Patient's Address | Patient's Address | to "" as many as codes |
| (0010,2154) | Patient's Telephone Number | Patient's Tel No. | to "" as many as codes |
| (0020,1070) | Other Study Number | Other Study No. | to "0"(0x00) |
| (0032,0012) | Study ID Issuer | Study ID Issuer | to "" as many as codes |
| (0032,1032) | Requesting Physician | Requesting Physician | to "" as many as codes |
| (0038,0010) | Admission ID | Admission ID | to "" as many as codes |
| (0038,0011) | Issuer of Admission ID | Issuer of Admission ID | to "" as many as codes |
| (0038,0300) | Current Patient Location | Current Patient Location | to "" as many as codes |
| (0038,0400) | Patient's Institution Residence | Patient's Institution Residence | to "" as many as codes |
| (0040,3001) | Confidentiality Constraint on Patient Data Description | Confidentiality Constraint on Patient Data | to "" as many as codes |
| (0070,0084) | Presentation Creator's Name | Presentation Creator's Name | to "" as many as codes |
| (300E,0008) | Reviewer Name | Reviewer Name | to "" as many as codes |
| (4008,0102) | Interpretation Recorder | Interpretation Recorder | to "" as many as codes |
| (4008,010A) | Interpretation Transcriber | Interpretation Transcriber | to "" as many as codes |
| (4008,010C) | Interpretation Author | Interpretation Author | to "" as many as codes |
| (4008,0114) | Physician Approving Interpretation | Physician Approving Interpretation | to "" as many as codes |
| (4008,0119) | Distribution Name | Distribution Name | to "" as many as codes |
| (4008,011A) | Distribution Address | Distribution Address | to "" as many as codes |

A.8 Precautions and Setup Procedure when using Generic PC for ImagePilot-CL

Precautions and setup procedure when using generic PC for ImagePilot-CL are described below.

A.8.1 Precautions

Precautions when using the PC prepared by the user are described below.



It may be possible to install the client software of ImagePilot on the PC available at the user. However, please note that Konica Minolta, Inc. is not responsible for proper operation of the PC on which the client software is installed as well as all software included in the PC.



Use the PC newly purchased for ImagePilot-CL.
Refer to the following as to the specifications required for the PC.

Recommended Specifications

Screen Resolution : 1280 x 1024 pixel (W x H) or more
OS : Windows Vista Business (32bit)
/ Windows 7 Professional (32bit)
/ Windows 7 Professional (64bit)
/ Windows 8.1 Professional (64bit)
Memory : Windows Vista : 1GB or more
/ Windows 7 (32bit) : 2GB or more.
/ Windows 7 (64bit): 4GB or more.
/ Windows 8.1 (64bit): 4GB or more.

Required Devices

A drive that allows writing to DVD-R when DVD write is performed.
DVD write operation is not warranted.



Konica Minolta, Inc. has tested and evaluated the operation on the following two PCs. (This does not necessarily mean that Konica Minolta, Inc. warrants the operation on the following two PCs)

Case-1 : SONY VAIO

Model : VGN-BX4KANB
Resolution : 1400 x 1050 pixel (W x H)
OS : Windows Vista Business
CPU : Intel Core 2 Duo processor T7100 1.80GHz
Memory : 2GB (1GBx2)
HDD : 120GB 5400rpm

Case-2 : SONY VAIO

Model : VGN-R72B/W
Resolution : 1280 x 800 pixel (W x H)
OS : Windows Vista Business
CPU : Intel Core 2 Duo processor T8100 2.10GHz
Memory : 2GB (2GBx1)
HDD : 200GB 5400rpm

A.8.2 Setup Procedure for Generic PC

The procedure to set up the generic PC available at the user for the use as ImagePilot-CL is described below.

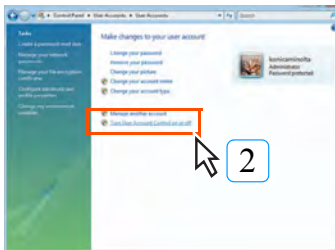
Invalidating the "UAC".

Because "UAC"(User Account Control) option is set to ON for Windows Vista Business, invalidate this option first.

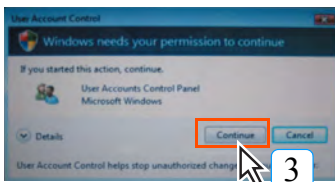


Use the account with administrator right to implement the settings below.

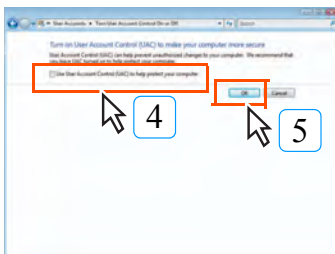
- 1 Select [Control Panel] → [User Account] → [User Account].
 - "Make changes to your user account" screen will be displayed.



- 2 Click the [Turn User Account Control on or off] button.
 - "User Account Control" screen will be displayed.



- 3 Click the [Continue] button.
 - "Turn on User Account Control(UAC) to make your computer more secure" screen will be displayed.



- 4 Check the checkbox for "Use User Account Control (UAC) to help protect your computer".
- 5 Click the [OK] button.
 - "Restart your computer to enable changes" will be displayed. Select [Restart Now] to restart the system.



Uninstall of the software for network securities.

When the network security software is preinstalled on the PC the user purchased, uninstall the software before start using.
(Norton Internet Security of Symantec, etc.)

A.9 DICOM tag edit function

When sending images from the ImagePilot to a host or media, you can edit and send DICOM tag info.

The following steps will serve as an example of how to edit DICOM tag info when sending to a host.



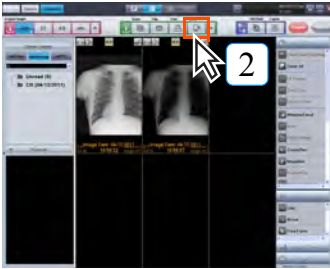
Things to note regarding DICOM tag editing

When editing a DICOM tag, sometimes the image can no longer be sent to its destination, or problems may occur due to cooperation with outside devices, etc. Editing a DICOM tag is on your own responsibility.



The DICOM Tag Edit Function must be enabled to edit DICOM tags. Direct any queries or comments to our service representative.

- 1 Displays the image to be output on the Viewer screen. (In addition to the image displayed on the Viewer screen, images selected by thumbnails can also be output)



- 2 Click the [Send] button.



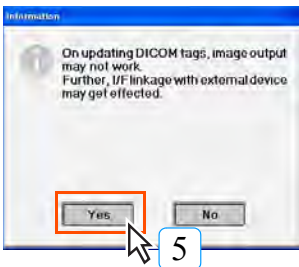
- The output to host screen will be displayed.



- 3 Select a thumbnail image for DICOM tag editing.

- 4 Click the [DICOM Data Editor] button.

- A message is displayed.



- 5 Confirm all notifications, and if you are willing to perform DICOM tag editing under user responsibility, click the [Yes] button.

- The [DICOM Data Editor] screen is displayed.



- 6 Edit DICOM tags as needed.
- The DICOM tag info of images selected via [Edit Image Select] is listed. Clicking each item will enable it for editing.

White lines:

These DICOM tags can be edited.

Gray text strings:

These DICOM tags cannot be edited.

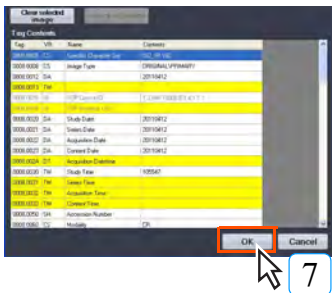
The following items cannot be edited.

- (0008,0005) specific character groups
- (0008,0016) SOP class UID
- (0008,0018) SOP instance UID
- (0010,0020) Patient ID
- (0020,000D) Study instance UID
- (0020,000E) Series instance UID
- (0028,0008) Number of Frame
- SQ related tags (content can be edited)

Yellow lines:

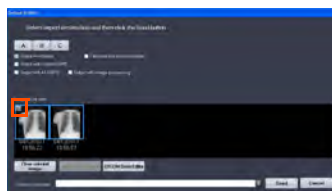
If multiple images are selected, DICOM tags will differ for each image.

When editing this item, the DICOM tags of all selected images will be changed at once.

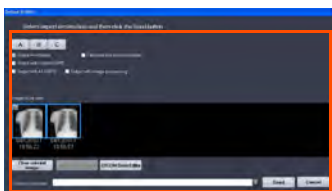


- 7 When finished editing, click the [OK] button.

- The [DICOM Data Editor] screen will close.



- An icon will be displayed for each thumbnail image that DICOM tag editing was performed for to indicate that editing has occurred.



- 8 Perform other output settings as needed, and send to host.

Character type and text limits when editing DICOM tags

Character type and text limits when editing DICOM tags are as follows.

The input function is disabled for prohibited characters, and a check is performed related to maximum length and fixed length violations after input has been confirmed.

| VR | Max length (VM=approximately1) | Fixed length (VM=approximately1) | Allowed/prohibited characters /Input range | Remarks |
|----|---|-------------------------------------|--|------------------------------|
| AE | 16-byte | - | All allowed | |
| AS | - | 4-byte | When a 3-byte is at the beginning, only numbers, D, W, M, Y, and ¥ are allowed for the 4th byte. | |
| AT | - | 4-byte | All allowed | |
| CS | 16-byte | - | Only capital alphabet characters, numbers, [space], underscore (_), and "¥" are allowed. | |
| DA | - | 8-byte | Only numbers, "-", [space], and "¥" are allowed. | Range input is not permitted |
| DS | 16-byte | - | Only numbers, "E", "e", "+", "-", ".", and "¥" are allowed. | |
| DT | 26-byte | - | Only numbers, "+", "-", ".", " [space], and "¥" are allowed. | Range input is not permitted |
| FL | - | 4-byte | All allowed | |
| FD | - | 8-byte | All allowed | |
| IS | 12-byte | - | Only numbers, "+", "-", and "¥" are allowed. | |
| LO | 64 characters | - | All allowed | |
| LT | 10240 characters | - | All allowed | |
| OB | 10240 characters | - | All allowed | |
| OF | 10240 characters | - | All allowed | |
| OW | 10240 characters | - | All allowed | |
| PN | 194 characters (each group = up to 64 characters) | - | All allowed 1 data element (VM=1) approximately. "=" is limited to a max of 2 | |
| SH | 16 characters | - | All allowed | |
| SL | 11 | - | Only numbers, "-", and "¥" Range: -2147483648 to 2147483648 ($-2^{31} \leq n \leq (2^{31}-1)$) | |
| SQ | - | - | - | Not for editing |
| SS | 6 | - | Only numbers, "-", and "¥" Range: -32768 to 32768 ($-2^{15} \leq n \leq 2^{15}-1$) | |
| ST | 1024 characters | - | All allowed | |
| TM | 16-byte | - | All allowed | |
| UI | 64-byte | - | Only numbers, "." and "¥" are allowed | |
| UL | 10 | - | Only numbers and "¥" Range: 0 to 4294967296 ($0 \leq n \leq 2^{32}$) | |
| UN | 10240 characters | - | All allowed | |
| US | 5 | - | Only numbers and "¥" Range: 0 to 65535 ($0 \leq n \leq 2^{16}$) | |
| UT | 10240 characters | - | All allowed | |

Limits during editing (before confirmation)

- For each VR, key operation will be disabled if a prohibited character is entered. If the paste operation is included among prohibited characters, it will also be disabled.
- AS tag allowed/prohibited character limits (when a 3-byte is at the beginning, only numbers, D, W, M, and Y are allowed for the 4th byte) are not limits during editing, and a check is performed for each edit.
- PN tag allowed/prohibited character limits (1 data element (VM=1) approximately, "=" is limited to a max of 2) are not limits during editing, and a check is performed for each edit.
- Character max limit and fixed limit checks are performed when confirming each edit, and key operations, etc. are not disabled during editing.



There are character type and text limits to follow when editing DICOM tags.



p.542 Character type and text limits when editing DICOM tags

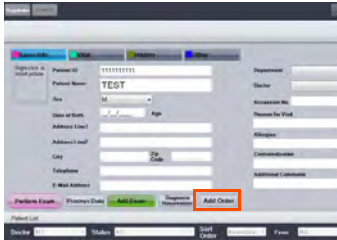
A.10 Create order for other Modalities

Use ImagePilot to create MWM orders to other Modality.

Mainly, at facilities with no RIS, ImagePilot can be used instead of RIS.



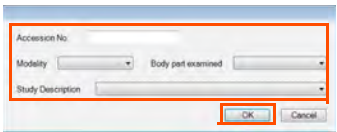
To use this function, the [Order transfer is performed at the time registration] setting in the ServiceTool needs to be [ON].



1 Input the patient information for which an order is to be created.

2 Click the [Add Order] button.

- The order creation dialogue is displayed.

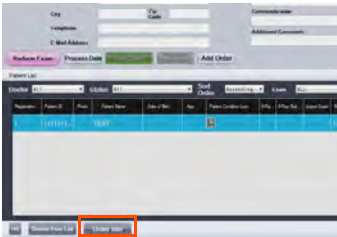


3 Enter the [Accession No.] and select the [Modality], [Body part examined] and [Study Description] from the pull down menu.

4 Click the [OK] button.

- Create order information.

Verify the created order under the following procedure.



1 Click on the [Order Info] button.



- The [Order Information] screen is displayed.



When selecting multiple images, the DICOM tags of all images can be edited at once.



JPEG, BMP, and other images not output to DICOM will not be displayed as thumbnails during output to media.



The [DICOM Data Editor] button is only enabled when DICOM images are included among the selected thumbnail images.

Touch panel Operation

Operation offered by the ImagePilot-touch are explained in detail.

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B.1 ImagePilot-touch Summary

Functions offered by the ImagePilot-touch are explained in detail.

"Safety Warnings & Cautions", "Product Summary", and "Controls" not mentioned below are shared by the ImagePilot, so please refer to that page for details.

For ImagePilot-touch specifications, refer to the "[Specifications](#)" chapter.

B.2 ImagePilot-touch basic controls

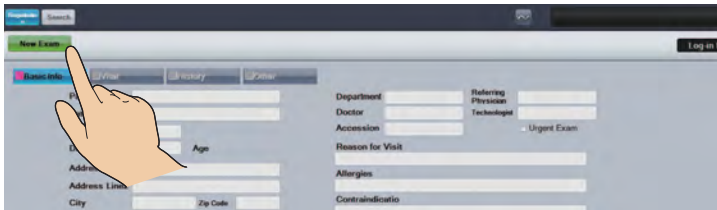
The ImagePilot-touch has a touch panel for controls.

Touching the monitor screen with the accessory stylus or your finger allows you to select functions and input text from the keyboard displayed on the screen.

The following steps will be explained with directly touching the monitor screen.

Selecting functions

Functions can be selected by touching the desired function button on the screen with the accessory stylus or your finger.



Functions can also be selected with a mouse, and text can be entered via a conventional keyboard if so desired.

Entering text

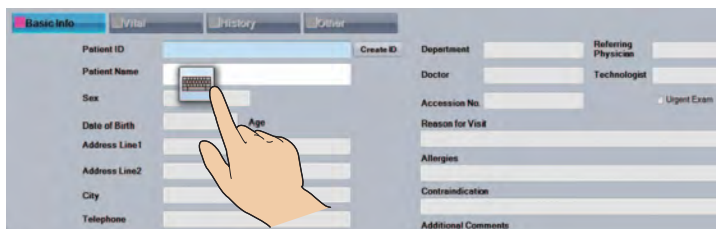
Touching the Text Entry column on the screen with the accessory stylus or your finger will display a soft keyboard, and you will be able to enter text there.

- 1 Touch the Text Entry column.



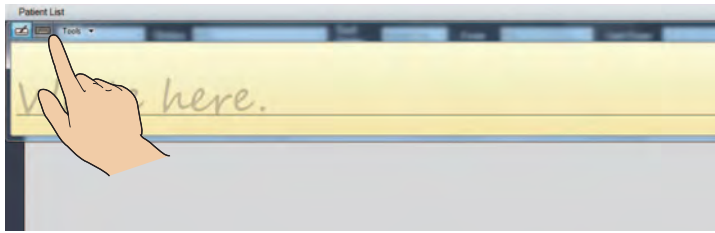
An icon for the keyboard is displayed.

- 2 Touch the icon for the keyboard.



When using the touch panel to perform operations, touch the screen lightly with the accessory stylus or your finger. Touching the screen with too much force or using objects other than the accessory stylus or your finger may damage the touch panel.

- 3 Touch the icon for the keyboard.

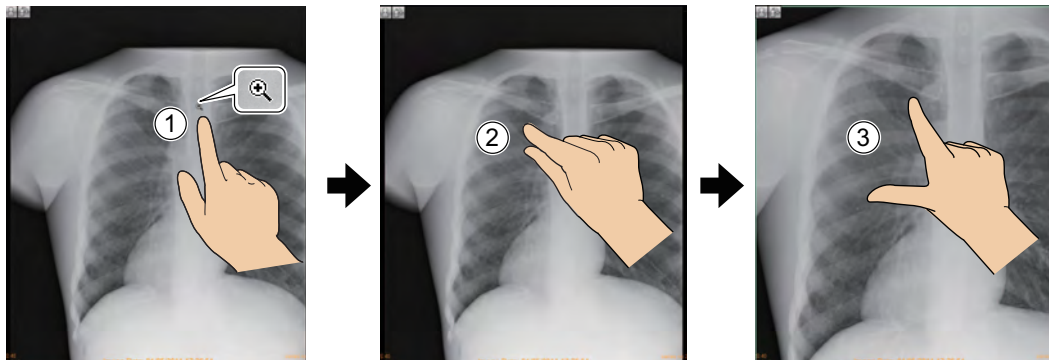


A soft keyboard is then displayed.



Image Zoom In/Out function

This is an explanation of the Image Tools Palette's Zoom In/Out function. The illustrations below show how to enlarge an image by zooming in.

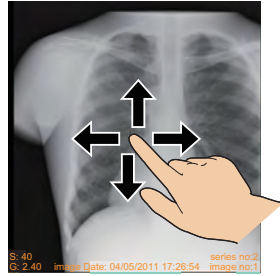


Touch panel
Operation

- 1 Select the Zoom In/Out function from the Image Tools Palette, then touch the portion of the image you want to zoom in/out.
A magnifying glass icon will appear.
- 2 Touch the starting point with your thumb and index finger.
- 3 Move your thumb and index finger inward or outward to zoom in or out to the desired range.

Pan & Contrast functions

To use the Image Tools Palette's pan or contrast functions, touch the screen once, then touch it again and drag your finger in the direction you want the image to move. Contrast adjustment directions correspond to those when using the mouse.



Other controls

Other controls are identical to those of the ImagePilot.

Mouse controls correspond to touch panel controls as follows.

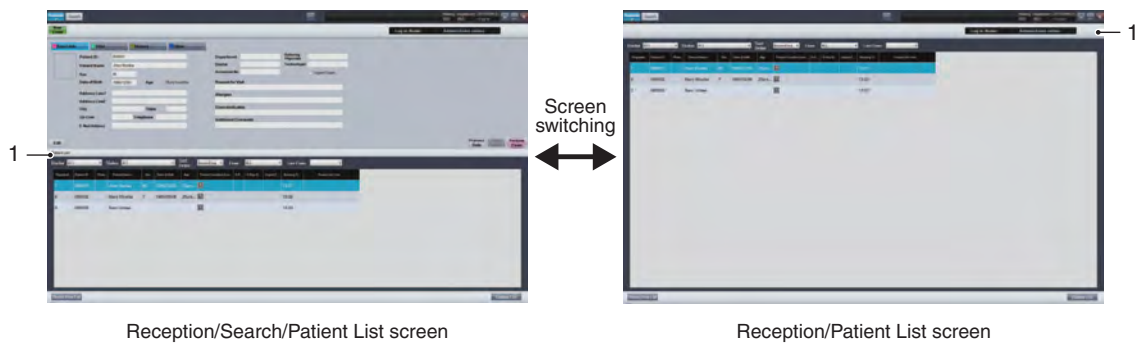
| Mouse control | Touch panel control |
|----------------|--|
| Left click | Touch the panel |
| Right click | The following 2 controls can be performed: <ul style="list-style-type: none">• Hold your finger to the panel for about 1 second, and once a circle appears around your finger, release it.• Hold one finger to the panel, then touch the panel with another finger. |
| Double click | Tap the panel 2 times. |
| Click and drag | Hold your finger to the panel and slide it in the desired direction. |
| Drop | Release your finger from the panel. |

B.3 Screen types

B.3.1 Login screen



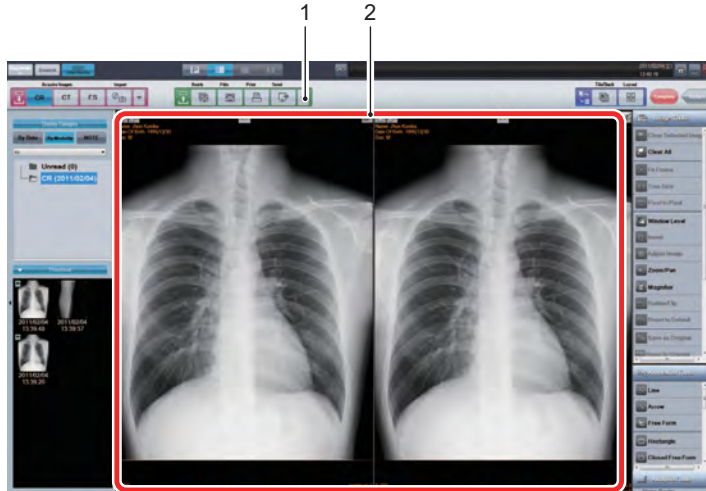
B.3.2 Patient reception/search screen



Touch panel Operation

| No. | Item | Function |
|-----|--------------------|---|
| 1) | [Patient List] tab | By double tapping (double clicking) the [Patient List] tab, the Reception/Patient List screen will be displayed. By double tapping (double clicking) the [Patient List] tab again, the Reception/Search/Patient List screen will be displayed. |

B.3.3 Viewer screen (viewer display mode)



| No. | Item | Function |
|-----|----------------------------------|---|
| 1) | Output Destination button | Enables you to select the output destination. |
| 2) | Viewing area | Hold your finger to the panel for about 1 second, and once a circle appears around your finger, release it to display a submenu. (The same function as right clicking a mouse.) |

B.3.4 Print Composer screen

This screen is exclusive to the ImagePilot-touch.

It allows you to set the print layout for film or paper output, display the print status at the viewing area, etc.



When outputting images opened in View Mode (images opened with a newer client terminal) to film in Print Composer Mode, image information modified with the an older client terminal such as image adjustments and annotations may be updated, so always check that the image is output as it is opened in View Mode.

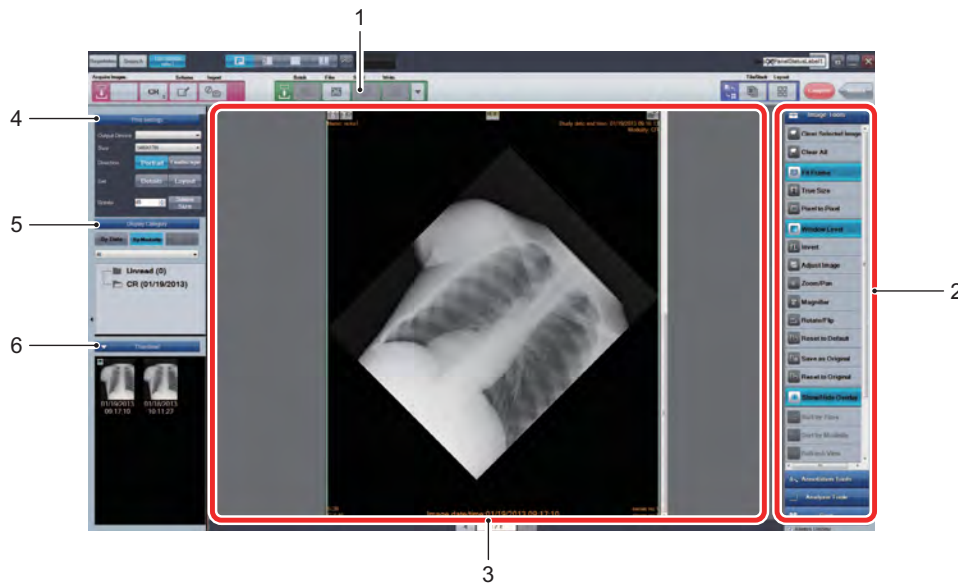


The overlay includes [Pan Ratio] and [Print zoom out Rate]. Both of these display the enlargement/reduction ratio, however do so in a different way. Take care not to become confused by the operation of each function and avoid using them incorrectly.

[Pan Ratio] : Displays the enlargement/reduction ratio with respect to the LCD screen.
 [Print zoom out Rate] : Displays the enlargement/reduction ratio with respect to the actual size of the image.








While a data bank or remote client is used, film-printing a JPEG2000 image intended for reference (image that has a JPG icon on the lower right side) in print compose mode makes the JPEG2000 image printed on the film. To film-print the original image, right-click on the JPEG2000 image for reference, click the "Download Original" button, and then film-print the downloaded original image. * After the original image is fully downloaded, the JPG icon on the lower right side disappears.
 cf. In other modes, film-printing a JPEG2000 image intended for reference makes its original image automatically downloaded and film-printed.

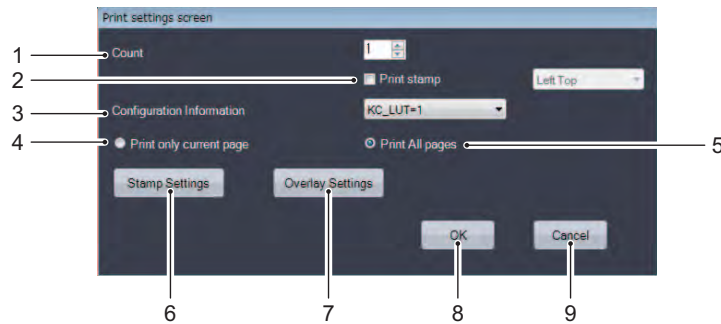


Touch panel Operation

| No. | Item | Function |
|-----|----------------------------------|---|
| 1) | Output Destination button | Enables you to select the output destination. At the Print Composer screen, output can only be selected for [Film] or [Print]. |
| 2) | Palette | Image Tools, Annotation Tools, and Analysis Tools are displayed here for performing the image process. The imaging process can be performed for an image displayed in the viewing area. This function is identical to that of the ImagePilot. (The CinePalette function is not available.) Refer to "5.3 Editing Images" for function details. |
| 3) | Viewing area | By displaying the set print layout in the viewing area, you will be able to check the print image, create a print layout, etc. For details on print layout creation, refer to "B.5 Creating a print layout". Also, the image of the area in the specified range is cropped to enable its creation and output as a separately image. For the image extraction method, see "B.4.3 Printing a cropped image". |

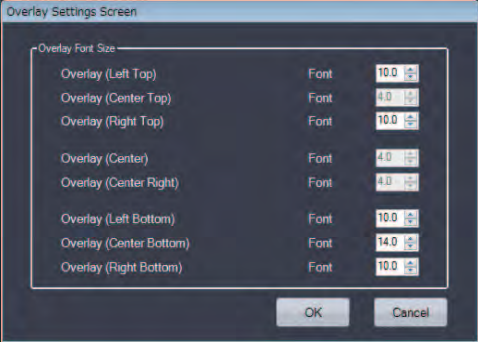
| No. | Item | Function |
|-----|--|---|
| 4) | [Print settings] | This area allows you to make print settings when film or paper is to be output. |
| | [Size] | Select the size of film to be printed from a pulldown menu. When changing the settings, the viewing area display will be changed to the set film size. |
| | [Direction] ([Vertical] button/ [Horizontal] button) | Select the direction of film or paper to be printed. Touching one of these buttons will change the viewing area display to the set direction. |
| | [Details] button | The [Print Settings screen] dialogue box is displayed, allowing you to make print settings for the film or paper to be output. For details, refer to "[Print settings screen] dialogue box". |
| | [Layout] button | The [Select Image] dialogue box is displayed, allowing you to set the previously created print layout, or create a new print layout. For details, refer to "[Select Image] dialogue box". |
| | [Rotate] | <p>This allows the image to lay out to be rotated at the specified angle. If an annotation or shutter setting has been applied to the image, it cannot be rotated. (Annotation and shutter settings are applicable to a rotated image.) The annotation and shutter settings applied after rotation are deleted when the viewer screen is displayed again.</p> <p>To images with an angle setting specified in, the following functions are unusable:</p> <ul style="list-style-type: none"> - Save as Original - Reset to Original - Reset to Default - Remove Grid - Load GSPS - Save as GSPS - Edit GSPS - Fixed process(*1) - Cropping - Create Copy - Delete Copy - Read DVD - Re-download - Get edited information in other facilities <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 5px;">  Image rotation function cannot be used with a temporary patient. </div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 5px;">  Image rotation function cannot be used with a long image. </div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 5px;">  When Angular rotation function is used, it should be noted carefully that there is a possibility that the image quality will be deteriorated due to the rotation. </div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 5px;">  When Angular rotation function is used, it should be noted carefully that there is a possibility that the image quality will be deteriorated due to the rotation. </div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 5px;">  When using this function, be sure to turn off the "shutter" setting of UserTool [Common Settings] - [Operation Settings] - [Image Processing CR] or [Image Processing DR] - [Image Processing Parameter]. </div> <p>(*1) : On [Fixed process], the name specified by the utility is displayed.</p> |
| | [Same Size] button | This allows the selected image to be output with the life size. |
| 5) | [Display Category] | Patient images can be displayed [By Date] or [By Modality]. This function is identical to that of the ImagePilot. |
| 6) | [Thumbnail] | Patient images are displayed as thumbnails. This function is identical to that of the ImagePilot. |

[Print settings screen] dialogue box

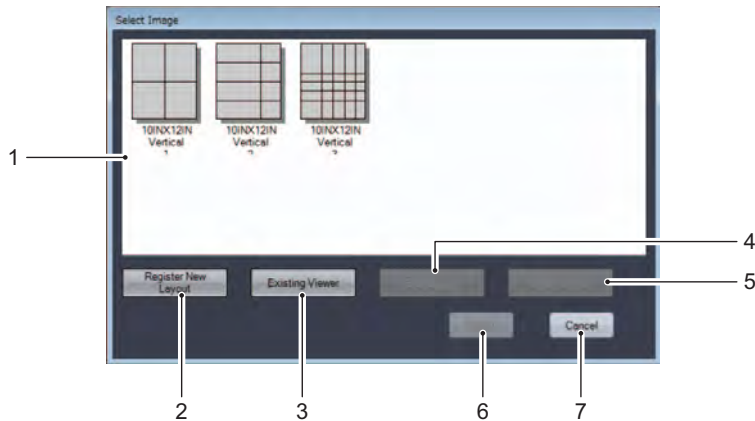


| No. | Item | Function |
|-----|-----------------------------|---|
| 1) | [Count] | Allows you to set the number of films for output. |
| 2) | [Print Stamp] | Set whether or not a stamp is printed out. Filling in the check box will enable a pulldown list of items to the right, allowing you to set the area for a stamp to be printed. |
| 3) | [Configuration Information] | Allows you to set the gradation curve for imager output. Normally the default setting of [KC_LUT=1] (linear) is used. |
| 4) | [Print Only Current page] | Only the Page 1 image displayed in the Print Composer screen's viewing area will be printed. |
| 5) | [Print All pages] | All images displayed in the Print Composer screen's viewing area will be printed, including those on Page 2 and higher. |
| 6) | [Stamp Settings] button | <p>The following [Stamp Settings Screen] dialogue box is displayed, allowing you to change patient information to be printed out as a stamp, facility information, font size, etc.</p> <p>This function is primarily used for cases when inaccurate patient or facility info is entered. Instead of going back to reception to correct the error, information for printing and database entry can be corrected before printing occurs.</p> <p>When changing patient info, the altered content will also be applied to the database and image info (DICOM tags).</p> |

Touch panel Operation

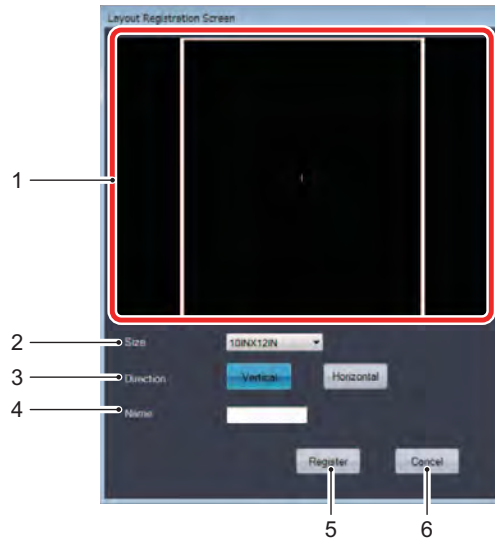
| No. | Item | Function |
|--|---------------------------|--|
| 7) | [Overlay Settings] button | The following [Overlay Settings Screen] dialogue box is displayed, allowing you to change the overlay font size on the image to be printed. When changing the settings, the overlay font size displayed in the viewing area will change as well. Make sure to check the overlay size of the output image at the viewing area. |
|  | | |
| 8) | [OK] button | Saves the changed content and returns you to the Print Composer screen. |
| 9) | [Cancel] button | Cancels the changed content and returns you to the Print Composer screen. |

[Select Image] dialogue box



| No. | Item | Function |
|-----|------------------------------|--|
| 1) | Print layout | Displays the registered print layout for printing. |
| 2) | [Register New Layout] button | The [Layout Registration Screen] dialogue box is displayed, allowing you to create a new print layout. For details, refer to "[Layout Registration Screen] dialogue box". |
| 3) | [Existing Viewer] button | Registers the layout currently displayed in the viewing area as a print layout. |
| 4) | [Edit Layout] button | The [Layout Registration Screen] dialogue box is displayed, allowing you to change the settings of the print layout selected at the print layout area. Settings are made in the same way as when creating a new layout. For details, refer to "[Layout Registration Screen] dialogue box". |
| 5) | [Delete Layout] button | Deletes the print layout selected in the display area. |
| 6) | [Select] button | Sets the print layout selected in the display area for printing, and returns you to the Print Composer screen. |
| 7) | [Cancel] button | Cancels the set content and returns you to the Print Composer screen. |

[Layout Registration Screen] dialogue box



| No. | Item | Function |
|-----|--|---|
| 1) | Display area | A display area used when editing or creating a print layout. |
| 2) | [Size] | Used to select the size of film or output paper to be used from a pulldown menu for output. |
| 3) | [Direction] ([Vertical]/[Horizontal] buttons) | Allows you to set the direction of film or output paper. |
| 4) | [Name] | Enter a name for the created layout. |
| 5) | [Register] button | Registers set content and returns you to the [Select Image] dialogue box. |
| 6) | [Cancel] button | Cancels set content and returns you to the [Select Image] dialogue box. |

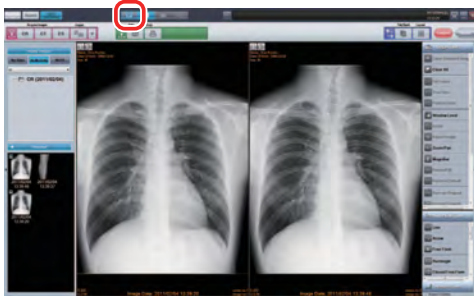
Touch panel
Operation

B.4 Printing an image

The following section explains how to print an image on film or paper.

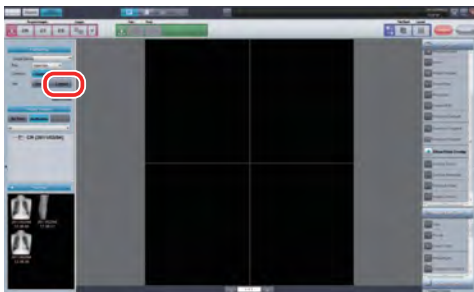
B.4.1 Printing image(s) of a single patient

The following steps explain how to print image(s) of a single patient on 1 sheet of film or paper.



- 1 Display the patient's image on the Viewer screen to be printed on film or paper, then touch the [P] button.

The Print Composer screen is then displayed.



- 2 Touch the [Layout] button from [Print settings].



When manually setting the layout division number, select it with the [Layout] button in the upper right corner.

Also, when touching a partition line displayed in the viewing area, it will turn orange and can be moved when sliding it with your finger.

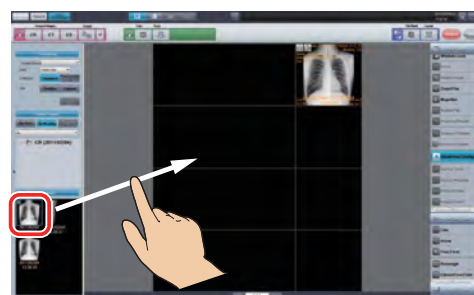
The [Select Image] dialogue box is then displayed.



- 3 Select a layout to be used for printing, then touch the [Select] button.

The selected print layout will then be displayed in the viewing area.

When creating a new print layout, refer to "[B.5 Creating a print layout](#)".



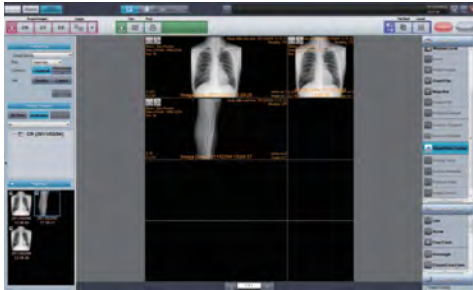
- 4 Touch an image to print from among the [Thumbnail], then slide it into the viewing area.

Release your finger from the thumbnail after sliding it to the desired spot, and the image will be set in place.




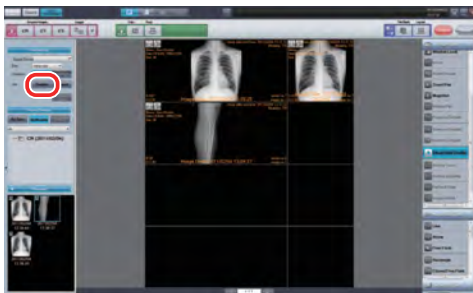
Images will be laid out in the order they were placed.

For placement details, refer to "[Image placement order](#)". When changing an image's place within the viewing area, touch the image you want to move, and slide it to the division area of your choice.



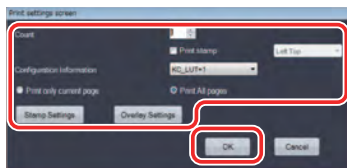
5 When printing multiple images of a single patient on 1 sheet of film or paper, the targeted images will be positioned in the same sequence.

 If you want to remove an image from the print target after positioning it, select it in the viewing area, then select [Clear Selected Image] from the [Image Tools] palette.




6 Touch the [Details] button from [Print settings].

The [Print settings screen] dialogue box will then be displayed.



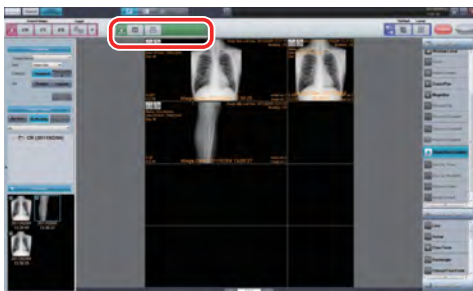
7 After setting each item, touch the [OK] button.

 When preparing to output a stamp or annotation, check how the text size compares to the image and film size in the viewing area. If you want to change the stamp or annotation text size, touch the [Stamp Settings] or [Overlay Settings] button at the [Print settings screen] dialogue box, then change the font size.

Touch panel Operation

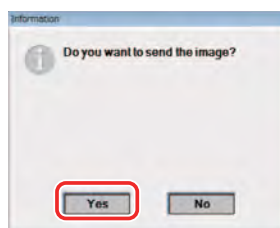
For details, refer to "[Print settings screen] dialogue box".

Close the [Print settings screen] dialogue box, and you will return to the Print Composer screen.




8 When printing to film, touch the [Film] button. When printing to paper, touch the [Print] button.

The [Information] dialogue box will then be displayed.



9 Touch the [Yes] button.

The image will then be printed from the specified output destination.

 After output, make sure the images and patient info match up accordingly.

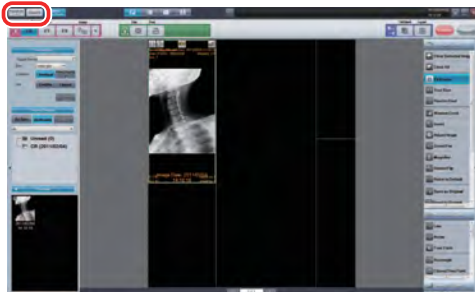
This concludes the steps taken for printing image(s) of a single patient.

B.4.2 Printing images of multiple patients

The following steps explain how to layout and print images of multiple patients on 1 sheet of film or paper.

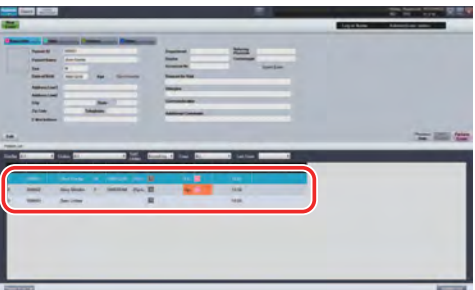


This function can only be used when another patient mode is enabled.
If setting is needed, please contact our service representative.



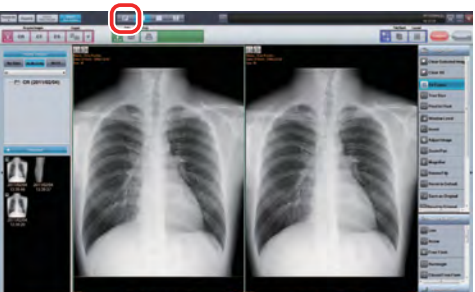
- 1 With images of the first patient displayed on the Print Composer screen, touch the [Registration] or [Search] button.

The Patient Reception/Search screen will then be displayed.



- 2 At the same time, select a patient for printing.

The selected patient's images will be displayed on the Viewer screen.



- 3 Touch the [P] button.

The displayed patient's images will then be displayed on the Print Composer screen.



Images of patients other than the first patient will be displayed as shaded images on the Print Composer screen.



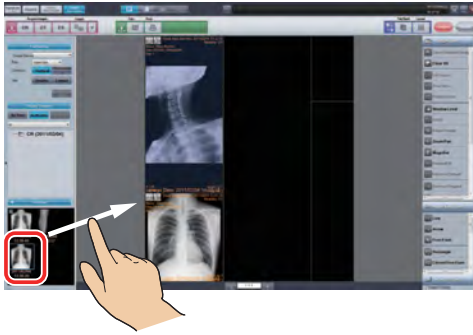
Shaded images

Shaded images in the viewing area are only used to indicate differences between patients. The actual printed images will not be shaded.

Switching between patients


A blue button is displayed in the upper left corner of the Print Composer screen which indicates the currently selected patient. If you want to switch to another patient, select the button of the patient you would like to switch to.

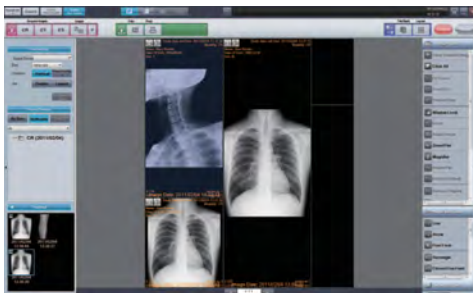
When switching patient displays, all unselected patient images will be shaded.




4 At the same time, touch a [Thumbnail] of the image you would like to print, then slide the image from the viewing area to the position you would like to place it in.

After sliding the image, release your finger from it and it will be placed.

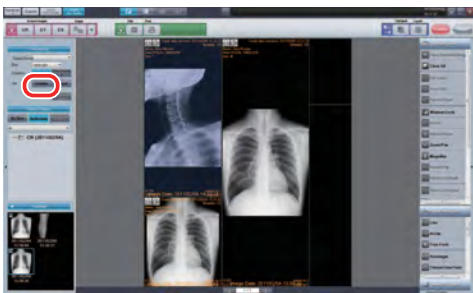
 Images will be laid out in the order they were placed. For placement details, refer to "[Image placement order](#)". When changing an image's place within the viewing area, touch the image you want to move, and slide it to the division area of your choice.



5 When printing multiple images of a patient on 1 sheet of film or paper, position the targeted images in the same sequence.

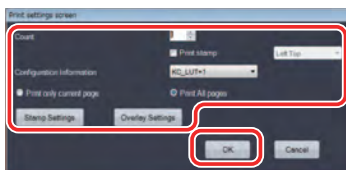
 If you want to remove an image from the print target after positioning it, select it in the viewing area, then select [Clear Selected Image] from the [Image Tools] palette.

If you want to place the images of another patient, start over from step 1, and place the images of the patient to be printed on 1 sheet of film or paper.




6 Touch the [Details] button from [Print settings].

The [Print settings screen] dialogue box will then be displayed.

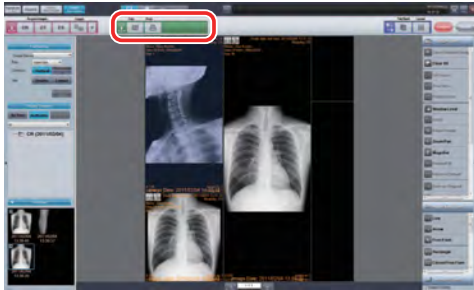


7 After setting each item, touch the [OK] button.

 When preparing to output a stamp or annotation, check how the text size compares to the image and film size in the viewing area. If you want to change the stamp or annotation text size, touch the [Stamp Settings] or [Overlay Settings] button at the [Print settings screen] dialogue box, then change the font size.

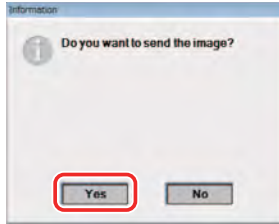
For details, refer to "[\[Print settings screen\] dialogue box](#)".

Close the [Print settings screen] dialogue box, and you will return to the Print Composer screen.



- 8 When printing to film, touch the [Film] button.
When printing to paper, touch the [Print] button.

The [Information] dialogue box will then be displayed.



- 9 Touch the [Yes] button.

The image will then be printed from the specified output destination.




After output, make sure the images and patient info match up accordingly.

This concludes the steps taken for printing image(s) of multiple patients.


B.4.3 Printing a cropped image

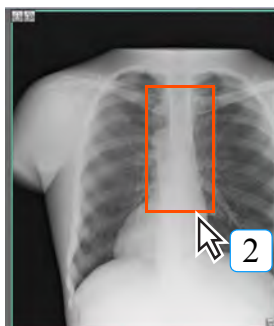
Procedures for cropping an image in a range specified from an image laid out in the print compose mode screen and printing as a separate image are explained.

 An image cannot be cropped from an image of a patient other than the one laid out (shaded image).



1 Select the image to be cropped on the print compose mode screen and click the [Cropping] button.

 Select the image and right click to show the menu from which the [Cropping] function may be selected.



2 Specify the cropping range on the image to be cropped.


The crop confirmation dialog is displayed.



3 Click the [Yes] button.

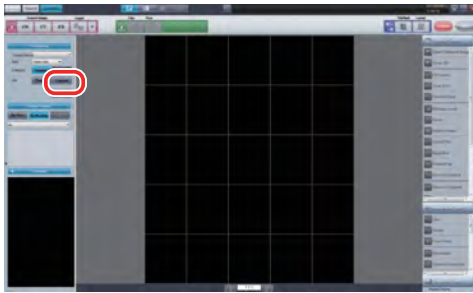
The specified range image is cropped and recreated as a separate image.

The generated image is automatically arranged in the position of the latest number among the layout numbers not yet allocated to images on the same film as the original image.

 If the image is allocated to the entire layout of the same film as the original image, a new film with the same layout is prepared and the image is automatically arranged in the position of the latest number.

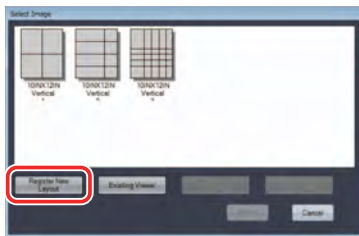
B.5 Creating a print layout

This section explains how to create a print layout to be used for printing.



- 1 Touch the [Layout] button from [Print settings] at the Print Composer screen.

The [Select Image] dialogue box is then displayed.



- 2 Touch the [Register New Layout] button.

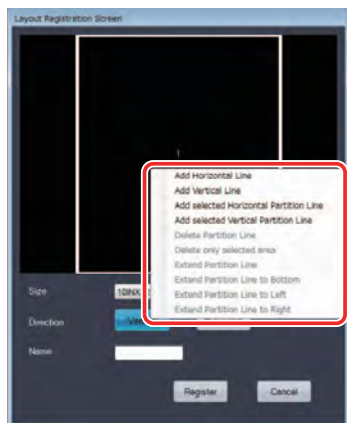
The [Layout Registration Screen] dialogue box will then be displayed.



- 3 Select the size of film or paper to be used from the [Size] pulldown menu.

- 4 Use [Direction] to select the direction of film or paper to be printed.

- 5 Enter a name for the layout to be created in the [Name] column.



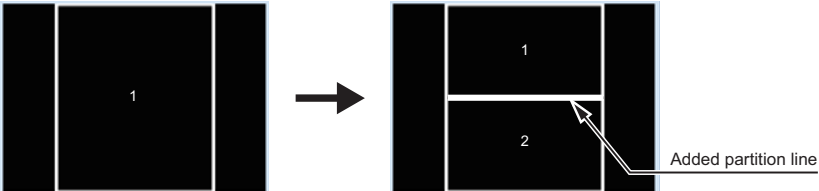
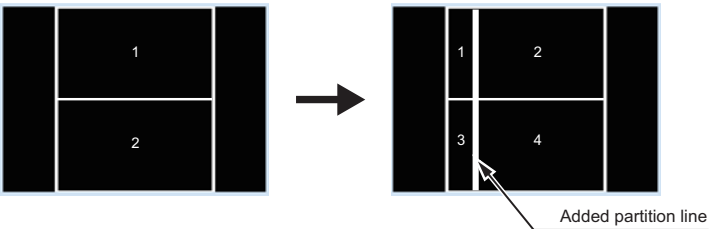
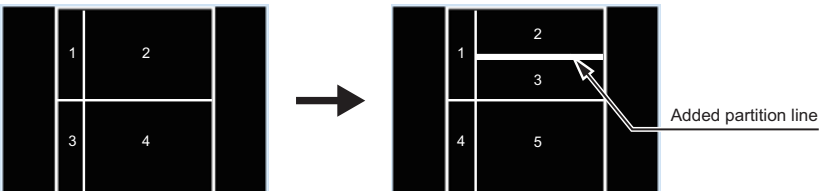
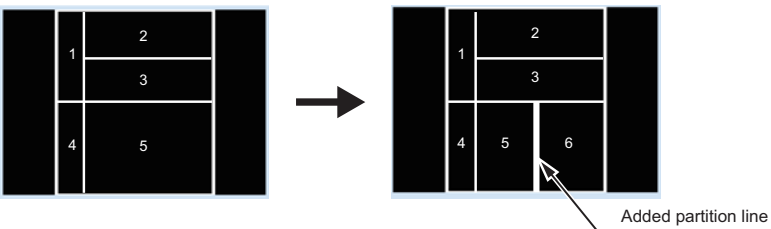
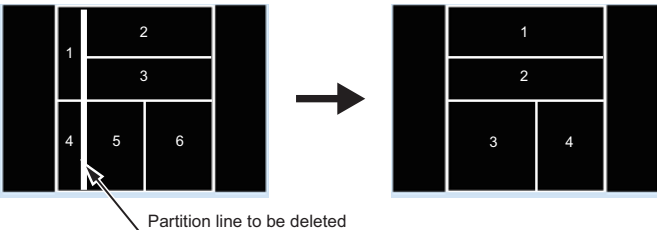
- 6 Hold your finger on the [Layout Registration Screen] dialogue box for about 1 second, and once a circle appears around your finger, release it.

The submenu shown to the left will then be displayed.

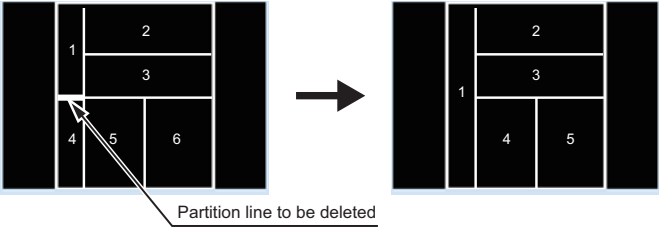
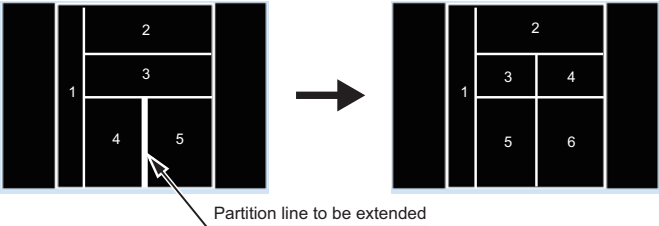
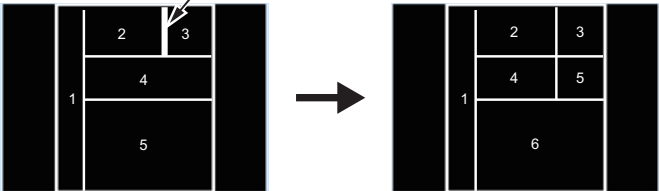
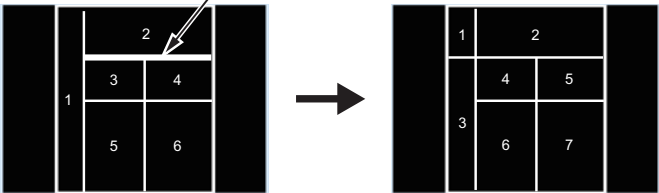
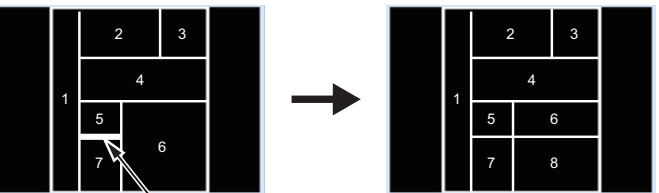


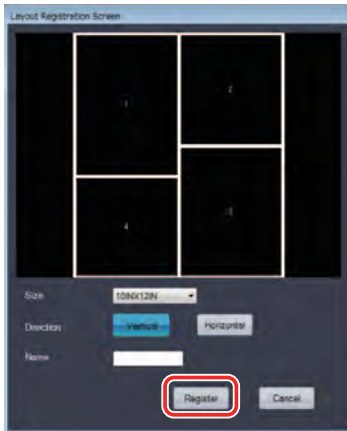
While keeping your finger on the panel, touching it with another finger in a different area can also display the submenu.
When using a mouse, right click to display the submenu.

The following items are included in the submenu. Refer to the function descriptions below to create a print layout.
 In order to make the differences between each function in the submenu easy to understand, the explanation below shows partition lines to be changed (or which have already changed) in bold. However, on the actual screen all partition lines are of the same thickness. In addition, when touching a partition line in the display area, it will turn green, and you will be able to slide it to a different area.
 Images are placed by order according to the number displayed when divided.
 For details, refer to "[Image placement order](#)".

| Item | Function |
|--|---|
| [Add Horizontal Line] | <p>A horizontal partition line will be added from end to end of the film size.</p>  |
| [Add Vertical Line] | <p>A vertical partition line will be added from end to end of the film size.</p>  |
| [Add Selected Horizontal Partition Line] | <p>A horizontal partition line will be added for the selected range only.</p>  |
| [Add Selected Vertical Partition Line] | <p>A vertical partition line will be added for the selected range only.</p>  |
| [Delete Partition Line] | <p>The selected partition line running horizontally or vertically from end to end will be deleted.</p>  |

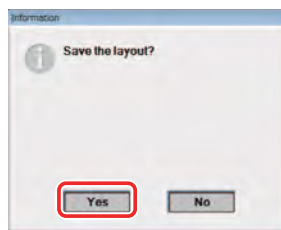
Touch panel
Operation

| Item | Function |
|--|---|
| <p>[Delete Only Selected Area]</p> | <p>Only the selected area of a partition line will be deleted.</p>  |
| <p>[Extend Partition Line Upward]</p> | <p>The selected portion of a partition line will be extended upward.</p>  |
| <p>[Extend Partition Line Downward]</p> | <p>The selected portion of a partition line will be extended downward.</p>  |
| <p>[Extend Partition Line to Left]</p> | <p>The selected portion of a partition line will be extended to the left.</p>  |
| <p>[Extend Partition Line to Right]</p> | <p>The selected portion of a partition line will be extended to the right.</p>  |



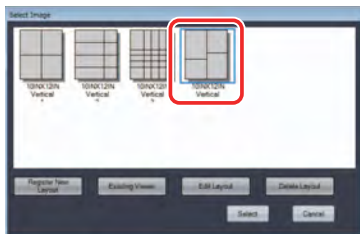
7 After creating a print layout, touch the [Register] button.

The [Information] dialogue box will then be displayed.



8 Touch the [Yes] button.

The created print layout will be saved.



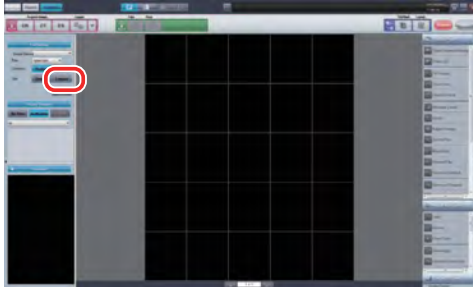
The created print layout will then be displayed in the [Select Image] dialogue box, shown when touching the [Layout] button from [Print settings] at the Print Composer screen.

This concludes the steps taken for creating a print layout.

B.6 Registering a print layout displayed in the viewing area

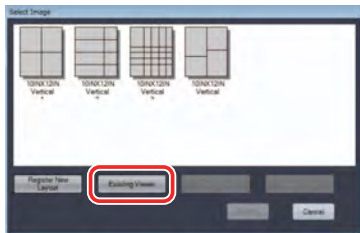
This section explains how to register a print layout displayed in the viewing area.

When creating or changing a print layout in the viewing area, the currently displayed layout can be registered as a print layout.

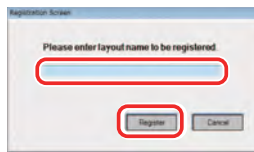


1 Move into a status in which the layout in the viewing area will be registered as a print layout.

2 Touch the [Layout] button from [Print settings].
The [Select Image] dialogue box is then displayed.



3 Touch the [Existing Viewer] button.
The [Registration Screen] dialogue box will then be displayed.



4 Enter a name for the created layout in the entry column, then touch the [Register] button.

The print layout currently in the viewing area will then be registered.

This concludes the steps taken for registering a print layout displayed in the viewing area.

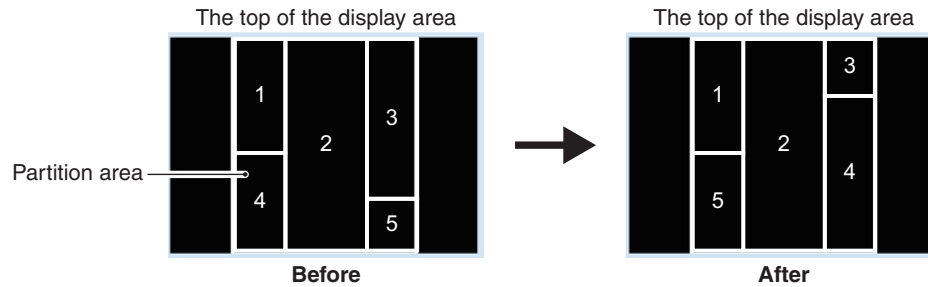
Image placement order

When moving images from thumbnails at the Print Composer screen to the viewing area, they will be placed in order according to print layout partition numbers.

Partition numbers are fixed as shown below, and cannot be changed.

- 1) Numbers are provided in order from the upper left to the upper right of the display area.
- 2) The partitioned area that is not connected to the top of the display area receives its number from the partitioned area closest to the top.

The pictures below provide an example in which the height of partition area 5 is extended closer to the top than partition area 4.



As a result, the partition numbers of partition areas 4 and 5 will change.

In addition, when changing the position in which an image is placed, select the image to be excluded from the viewing area after placement, then select [Select and Clear Display] from the [Image Tools] palette.

Specifications

ImagePilot specifications are detailed in this chapter.

Specifications

■ ImagePilot software (for EEA, Swiss, Turkey and Canada):

| | |
|----------------------------------|---|
| Image processing | I-processing, Masking |
| CR and AeroDR image input | 1ch |
| DICOM support | DICOM STORAGE SCP, DICOM STORAGE SCU, DICOM PRINT SCU(Grayscale), DICOM GSPS SCP/SCU, MWM/DETACHED, Q/R SCP/SCU |
| Accessories | Operation manual |
| Measurement function | Accuracy of measuring function: distance $\pm 1\text{mm}$, angle $\pm 2^\circ$, ratio $\pm 1\%$, surface area $\pm 5\%$ |

■ PC for ImagePilot software (for EEA, Swiss, Turkey and Canada):

| | |
|---------------------------------|---|
| Server | IntelliStation M-Pro, ThinkStation S10, ThinkCentre M58 Small, Z400 WorkStation, S30 ThinkStation, Compaq 8000 Elite, Compaq 8200 Elite, Compaq Pro 6300 ProDesk 600G1, Z230 WorkStation |
| Client | ThinkCentre M55 Small, ThinkCentre M57 Small, ThinkCentre M58 Small, Compaq 8000 Elite, Compaq 8200 Elite, Compaq Pro 6300 ProDesk 600G1 |
| CPU | Core Processor |
| RAM | 2048 MB or more |
| Memory for image storage | 100GB or more (ex. 250GByte x2 RAID 1) |
| I/O port | Ethernet/100baseTX/1000base-T (Standard X 1) |
| Accessories | PC power supply cable, monitor power supply cable, PC-to-monitor connection cables(multiple), keyboard, mouse, hardware user's manual, power tap. |
| Options | 17inch LCD monitor (FlexScan L568-M, RadiForce MS170), 19inch LCD monitor (FlexScan S1910-M, FlexScan MX190S, RadiForce MX191), 21inch LCD monitor (FlexScan S2100-M, FlexScan MX210), 23 inch LCD monitor (RadiForce MS235WT), 24inch LCD monitor (FlexScan S2411W-M, FlexScan MX240W), 2M LCD monitor (Radiforce R22-S, RadiForce RS210), 3M LCD monitor (Radiforce R31, RadiForce RX320), NAS. (PNS40TS) |



The above specifications are subject to change without notice due to continual improvement.



For details of the specifications of the monitor, optional and recommended products, please refer to the relevant user manuals

Power Source/Power Consumption/Heat Generation

This product may use other general-purpose products that meet specifications.

| PC | | Power Source | | Power Consumption | |
|--------|------------------|--------------|-----------|-----------------------------|--------------------------------------|
| | | Voltage | Frequency | Normal Operation | Sleep |
| Server | ProDesk 600G1 | AC90~264V | 50/60Hz | Max : 83W Std : 26W | Standby : 1.42W Power Off : 0.50W |
| | Compaq Pro 6300 | AC90~264V | 50/60Hz | Max : 240W Std : 31.42W | Standby : 2.37W Power Off : 1.06W |
| | ThinkStation S30 | AC90~264V | 50/60Hz | Max : 165.6W Std : 52.3W | Standby : 3.1W Power Off : 1.6W |
| | Workstation Z230 | AC100~240V | 50/60Hz | Max : 154W Std : 130W | Standby : 1.65W Power Off : 0.91W |
| Client | ProDesk 600G1 | AC90~264V | 50/60Hz | Max : 83W Std : 26W | Standby : 1.42W Power Off : 0.50W |
| | Compaq Pro 6300 | AC90~264V | 50/60Hz | Max : 240W Std : 31.42W | Standby : 2.37W Power Off : 1.06W |

| Monitor | | Power Source | | Power Consumption | |
|--------------------------|-------------------|--------------------------|-----------|-------------------|---------------------|
| | | Voltage | Frequency | Normal Operation | Sleep |
| 17inch color LCD monitor | RadiForce MS170 | AC100~120V AC200~240V | 50/60Hz | 23W | 0.6W or less (*) |
| 19inch color LCD monitor | RadiForce MX191 | AC100~120V AC200~240V | 50/60Hz | 43W or less | 0.8W or less (*) |
| 21inch color LCD monitor | RadiForce MX210 | AC100~120V AC200~240V | 50/60Hz | 37W | 2W or less (*) |
| 23inch color LCD monitor | RadiForce MS235WT | AC100~120V AC200~240V | 50/60Hz | 21W | 0.5W or less (*) |
| 24inch color LCD monitor | RadiForce MX240W | AC100~120V AC200~240V | 50/60Hz | 100W or less | 2W or less (*) |
| 2M color LCD monitor | RadiForce RS210 | AC100~120V AC200~240V | 50/60Hz | 37W | 1W or less (*) |
| 3M color LCD monitor | RadiForce RX320 | AC100~120V AC200~240V | 50/60Hz | 110W | 2.5W or less (*) |

(*): Input from one line, no USB device connected

| Monitor | | Power Source | | Power Consumption | | Heat Generation |
|---------|---------|--------------|-----------|-------------------|-------|-----------------|
| | | Voltage | Frequency | Normal Operation | Sleep | |
| NAS | PNS40TS | AC100~230V | 47~63Hz | Max 150W | – | – |

Index

Terms used in the ImagePilot Operation Manual are defined in the following pages.

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