

Instructions for Use

CuratOR® MIR-1

4K Medical Imaging Recorder

Important

Please read this Instructions for Use carefully before use to familiarize yourself with how to use the product properly. Please retain this manual for future reference.

SYMBOLS

This manual and this product use the safety symbols below. They denote critical information. Please read them carefully.

\triangle	Failure to abide by the information in a WARNING may result in serious injury and can be life threatening.
WARNING	
CAUTION	Failure to abide by the information in a CAUTION may result in moderate injury and/or property or product damage.
\triangle	Indicates a warning or caution.
	Indicates a prohibited action.

This product has been adjusted specifically for use in the region to which it was originally shipped.

If operated outside this region, the product may not perform as stated in the specifications.

No part of this manual may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, or otherwise, without the prior written permission of EIZO Corporation.

EIZO Corporation is under no obligation to hold any submitted material or information confidential unless prior arrangements are made pursuant to EIZO Corporation's receipt of said information. Although every effort has been made to ensure that this manual provides up-to-date information, please note that EIZO product specifications are subject to change without notice.

PRECAUTIONS

Important

This product has been adjusted specifically for use in the region to which it was originally shipped. If operated outside this region, the product may not perform as stated in the specifications.

To personal safety and proper maintenance, please read carefully the "PRECAUTIONS" section and the caution statements on the unit.

Location of Caution Statement



Note

- A label with the following information is attached to the bottom of the main unit. The label is attached as described above in the "Location of Caution Statement".
 - The manufacturer, model name, and rated voltage of this product
- Caution statement

Symbols on the product

Symbol	This symbol indicates
0	Main power switch: Press to turn the product's main power off.
	Main power switch: Press to turn the product's main power on.
Ф	Power button: Press to turn the product's power on or off.
~	Alternating current
A	Alerting electrical shock hazard
\triangle	CAUTION
\bigvee	Equipotentiality
Z	Crossed-out wheeled bin marking (product): the product should not be disposed of as unsorted waste but must be sent to separate collection facilities for recovery and recycling in EU.
A	Crossed-out wheeled bin marking (battery): batteries shall be collected separately in the EU.

Symbol	This symbol indicates
CE	CE marking: EU conformity mark in accordance with the provisions of Council Directive and/or Regulation (EU).
•••	Manufacturer
	Date of manufacture
RXonly	Caution: Federal law (USA) restricts this device to sale by or on the order of a licensed healthcare practitioner.
EU Importer	Importer in the EU
UK	UKCA marking: Mark signifying compliance with UK regulations
UK Responsible Person	UK Responsible Person
CH REP	Authorised representative in Switzerland
EC REP	Authorised representative in the European Community
IDU	Unique Device Identifier
MD	Medical Device *The applicability to medical devices varies by country.
**	Recycling symbol for corrugated cardboard used for packaging
	Recycling symbol
20) PAP	Material labeling of corrugated cardboard based on the European Packaging Waste Directive
2	Maximum stacking limit (the number in the symbol varies according to the product.)
<u> </u>	This side up
Ť	Keep dry
Ţ	Fragile
(i)	Refer to the Instructions for Use.

WARNING



∕!\ WARNING

If the unit begins to emit smoke, smells like something is burning, or makes strange noises, disconnect all power connections immediately and contact your EIZO representative for

Attempting to use a malfunctioning unit may result in fire, electrical shock, or equipment damage.



WARNING

Do not disassemble or modify the unit.

Opening the cabinet may result in electrical shock or burn by high-voltage or hightemperature parts. Modifying the unit may result in fire or electrical shock.



WARNING

Refer all servicing to qualified service personnel.

Do not attempt to service this product yourself as opening or removing covers may result in fire, electrical shock, or equipment damage.



WARNING

Keep foreign objects or liquids away from the unit.

Metal parts, flammable materials, or liquids accidentally falling into the cabinet may result in fire, electrical shock, or equipment damage.



If an object or liquid falls/spills into the cabinet, unplug the unit immediately. Have the unit checked by a qualified service engineer before using it again.

WARNING

Place the unit properly at a sturdy and stable place.

Follow the Instructions for Use and place the unit properly in a location that is secure and reinforced. If the unit is not placed in a proper location, it may drop or fall over, resulting in personal injury or equipment damage.

If the unit falls, disconnect the power immediately and ask your local EIZO representative for advice. Do not continue using a damaged unit. Using a damaged unit may result in fire or electrical shock.

∕!\ WARNING

Use the unit in an appropriate location.

Otherwise, fire, electrical shock, or equipment damage may result.

- · Do not place outdoors.
- Do not place in any form of transportation (ships, aircraft, trains, automobiles, etc.).
- Do not place in dusty or humid environments.
- Do not place in locations where water may be splashed on the screen (bathrooms, kitchens, etc.)
- Do not place in locations where steam comes in direct contact with the screen.
- · Do not place near heat generating devices or humidifiers.
- · Do not place in locations where the product is subject to direct sunlight.
- · Do not place in environments with inflammable gas.
- · Do not place in environments with corrosive gases (such as sulfur dioxide, hydrogen sulfide, nitrogen dioxide, chlorine, ammonia, and ozone).
- · Do not place in environments with dust, components that accelerate corrosion in the atmosphere (such as sodium chloride and sulfur), conductive metals, and so



/!\ WARNING

Keep the plastic packing bags away from babies and children.

The plastic packing bags may cause suffocation.



WARNING

Use the enclosed power cord and connect to the standard power outlet in your country.

Be sure to use within the rated voltage of the power cord. Otherwise, fire or electric shock may

Power supply: 100-240 Vac 50/60 Hz



WARNING

To disconnect the power cord, grasp the plug firmly and pull.

Tugging on the cord may damage and result in fire or electrical shock.









WARNING

The equipment must be connected to a grounded main outlet.

Failure to do so may result in fire or electric shock.



Use the correct voltage.

- The unit is designed for use with a specific voltage only. Connection to another voltage than specified in this "Instructions for Use" may cause fire, electric shock, or equipment damage. Power supply: 100-240 Vac 50/60 Hz
- Do not overload your power circuit, as this may result in fire or electric shock.

WARNING

Handle the power cord with care.

Do not place heavy objects on the power cord, or pull or tie the power cord. Using a damaged power cord may result in fire or electrical shock.



WARNING

The operator should not touch the patient while touching the product.

This product has not been designed to be touched by patients.





✓ WARNING

Never touch the plug and power cord if it begins to thunder.

Touching them may result in electrical shock.





WARNING

Do not connect devices that perform medical operations such as diagnosis or treatment to the back of the product.

In the unlikely event that the product breaks down, it may interfere with medical treatment.





/!\ WARNING

Be careful when handling batteries

Incorrect use may cause ruptures, fluid leaks, and burns.

- Do not swallow batteries. There is a risk of chemical reactions causing harm. If you accidentally swallow a battery, consult your doctor immediately.
- · This product includes coin/button cell batteries. Coin/button cell batteries can cause severe internal injuries within two hours and can be fatal.
- · If battery liquid gets on skin or clothing, wash it off with clean water.
- · If battery fluid gets in your eyes, rinse immediately with clean water and consult your doctor.
- · Do not disassemble, heat, wet, or short-circuit the batteries.
- · Do not recharge primary batteries.



WARNING

Keep batteries out of reach of children

Accidental swallowing of batteries may cause suffocation or poisoning. If swallowed, consult a doctor immediately. If the battery compartment does not close securely, discontinue use of the product and keep it out of reach of children.

This product is not suitable for use where children may be present.

CAUTION



Check the operational state before use.

Make sure that the input signal is displayed on the screen and that recording can be done by performing a recording test before using the unit. For information on how to perform a recording test, see Recording Test [> 48].

♠ CAUTION

Cables/cords with built-in fastening features should be used in a secured manner.

If they are not fixed securely, cables/cords may disconnect, and operations may be disrupted.

CAUTION

Disconnect cables and remove accessories when moving the unit.

Otherwise, the cables or accessories may become detached when moving, resulting in injury.

CAUTION

Do not block the ventilation holes on the front bottom and back of the product

- · Do not place any objects on the ventilation slots.
- Do not install the unit in a place with poor ventilation or inadequate space.
- Do not use the unit laid down or upside down.

Blocking the ventilation slots prevents proper airflow and may result in fire, electrical shock, or equipment damage.



CAUTION

Do not touch the power plug with wet hands.

Touching them may result in electrical shock.





♠ CAUTION

Do not place any objects around the power plug.

This is to facilitate disconnecting the power plug in case of a problem to avoid fire or electrical shock.



∕ CAUTION

Do not subject the product to impact due to dropping it or any other causes.

Using the adapter after it has been subjected to impact may result in fire or electrical shock.



CAUTION

Periodically clean the area around the power plug and the ventilation slots on the front bottom and back of the product.

Dust, water, or oil adhered to this area may result in fire.

! CAUTION

Unplug the unit before cleaning it.

Cleaning the unit while it is plugged into a power outlet may result in electrical shock.

CAUTION

If you plan to leave the unit unused for an extended period of time, disconnect the power plug from the wall socket after turning off the power switch for the safety and the power saving.

CAUTION

Dispose of this product in accordance with the laws of the locality or country of residence.

! CAUTION

For users in the territory of the EEA and Switzerland:

Any serious incident that has occurred in relation to the device should be reported to the Manufacturer and the Competent Authority of the Member State in which the user and/or patient is established.

Notice for This Product

Indications for Use

This product is intended to record 4K video and still images from endoscopic/laparoscopic camera systems, surgical microscope and other compatible medical imaging systems. This product can save video and still images to an internal SSD, a portable USB drive, optical disk of external DVD drive or to a compatible network server. The recorded images can be used for the patient record, training or education. The recorder is suitable for use in hospital operating rooms, medical imaging centers, surgical centers, clinics, doctor's offices and similar healthcare environments.

Attention

- This product and the images and video recorded with this product are not intended for diagnostic use
- This product may not be covered by warranty for uses other than those described in this manual.
- The specifications stipulated in this manual are only applicable when the enclosed power cord is used.
- · Only use EIZO accessories products specified by EIZO with this product.

Precautions for Use

- Internal components of the product may deteriorate over extended periods of time. Periodically check that they are operating normally.
- Dew condensation may form on the surface or interior of this product when it is brought
 into a cold room, when the temperature suddenly rises, or when it is moved from a cold
 room to a warm room. In that case, do not turn the product on. Instead wait until the dew
 condensation disappears, otherwise it may cause some damage to the product.
- Please pay close attention to copyright laws when it comes to recording images, video, and audio.
- This product has a built-in SSD. Data such as images, video, and audio recorded with this product is stored on the internal SSD and are automatically deleted starting with the oldest (only if the Auto-delete function is turned on). If you want to store recorded data for a long time, please store it in a separate storage such as a server.
- Please manage this device properly to prevent data stored on the internal SSD from leaking. Please take measures to prevent theft and unauthorized use by third parties.
- When using network functions for the first time or changing network settings, check the risks such as the load on the server and network path.
- · Precautions when using the touch panel
 - During touch operation

Be careful of the following points when performing touch operations. Otherwise, malfunctions or mis-operations may occur.

- Do not strongly press, scratch, or poke the touch panel.
- Do not touch the touch panel with hard objects such as ballpoint pens or metals.
- Do not attach labels or other items to the touch panel or let objects come into contact with it.

Protection of Personal Information

Images that can identify individuals recorded using this product fall under personal information as stipulated in the "Act on the Protection of Personal Information." Please handle images properly in accordance with the law.

Cybersecurity Warnings and Responsibilities

- Please take the following measures to protect products and information assets from cyber attacks.
 - Prevent unauthorized physical access to products or data stored on (external) storage devices by third parties.
 - Use this product on a secure network using a firewall or similar.
 - Manage passwords so that they are not leaked.
- If EIZO Corporation or its distributor instructs to update the software, update it immediately. Use software update data provided by EIZO Corporation or through its distributors.
- This product allows you to set a logon password. If you forget the administrator user password, you will not be able to recover your data. Be careful not to lose your password.
- If you forget the password, contact your local EIZO representative. (Recovery will require resetting the product. At that time, all data, settings, and user information stored within this product will be deleted.)
- This product is equipped with a function to encrypt and store patient information. If you
 forget the password that was set during encryption, you will not be able to recover the
 data. Be careful not to lose your password.
- Encryption of patient information can be disabled. When disabling, the administrator is responsible for ensuring in advance that the data storage and access network are properly secured.
- This product can be configured to automatically log on when the product starts without entering a username and password. When setting up auto logon, the administrator is responsible to take measures to prevent unauthorized access.
- The DICOM MWL function does not support encrypted communication. Make sure your network is properly protected before use.
- Enable the Web API function only when needed, and use it with appropriate security precautions.

Cleaning

- Periodic cleaning is recommended to keep the product looking new and to prolong its operation lifetime.
- Gently wipe off any dirt on the product with a small amount of water or a soft cloth dampened with a mild detergent diluted in water.

Attention

- Never use a thinner, benzene, wax, or abrasive cleaner as they may damage the product.
- Use of alcohol or other chemicals for disinfection may lead to cracks, changes in gloss, discoloration, fading, or deterioration of display image quality. Be careful of the following points when using the product.
 - Do not let chemicals come into direct contact with the product.
 - Do not use wet wipers that have been impregnated with chemical solution, as they may contain a lot of liquid.
 - Do not allow chemicals to enter gaps or the interior of the product.
- For more information on cleaning and disinfection, please refer to our web site. How to check: Access www.eizoglobal.com and type "disinfect" in the site search box to search.

Disinfection with chemicals

Use a soft cloth lightly moistened with a cleaning solution to gently wipe.
 When disinfecting the product, it is recommended to use chemicals that have been tested by EIZO (see the table below). Note that even if these chemicals are used, there is no guarantee that the product will not be damaged or deteriorated.

Category	Chemical type	Product example
Alcohol-based	Rubbing ethanol (ethyl alcohol)	Ethanol
Alcohol-based	Isopropanol	Isopropyl alcohol (IPA)
Chlorine	Sodium hypochlorite	Purelox
Biguanide	Chlorhexidine gluconate	Hibitane solution
Alcohol-based	Benzalkonium chloride	Welpas
Aldehyde-based	Glutaral	Sterihyde
Aldehyde-based	Glutaral	Cidex Plus28
Amphoteric surfactant	Alkyldiaminoethylglycine hydrochloride	Satenidin solution
Ammonia	Ammonia	Ammonia water
Quaternary ammonium salt	Benzalkonium chloride	Zalkonin solution
Quaternary ammonium salt	Benzethonium chloride	Bezeton solution
Oxidizing agent	Hydrogen peroxide	Oxydol

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1 Introduction

1.1 Features

1.1.1 Video Recording Capabilities

- Supports 60 Hz recording with 4K resolution
- The 2CH simultaneous recording function supports 2-channel simultaneous recording (CH1/CH2) via SDI and HDMI
 - When using 2CH simultaneous recording, the maximum resolution is limited to FHD. All recording operations and settings are shared.
- Supports H.264 and H.265 video compression standards
 The video compression method achieves a compression ratio that is approximately twice that of the conventional international standard H.264/AVC, and is compatible with H.265/HEVC, which is the successor standard. Compression standards can be selected based on the playback and editing method of recorded surgical images.

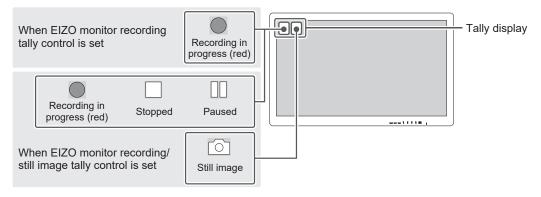
1.1.2 Input/Output

- Equipped with a BNC (12G-SDI) port and an HDMI® port that supports 4K
- Support for loop-through output Support for SDI and HDMI loop-through output.

1.1.3 Operations

- Touch panel monitor with good visibility
 A 5.0-inch touch panel monitor is mounted on the front.
 Intuitive operations are possible by touching the screen.
- · Tally display function

When using an EIZO CuratOR series monitor, a tally (recording status indicator) can be displayed on the screen when recording. Icons representing the operational status of this unit is displayed. (The specific icons displayed vary depending on the monitor.)



1.1.4 Data management

- · Supports simultaneous recording to external storage When recording video to the internal SSD, it is simultaneously recorded to networkattached storage (hereafter "NAS") devices or storage devices connected to the USB port (up to two devices). If you connect a NAS or USB storage device and then start recording, there is no need to transfer data after recording.
- Power failure protection function Equipped with a circuit to maintain operation for a certain period of time and safely completes recording even if power is interrupted when recording is in progress. This prevents data from being corrupted.
- · Auto-delete function When the auto-delete function is "On" and the available space on the internal SSD falls below a certain threshold, older data will be automatically deleted. This prevents recording from being interrupted due to insufficient space on the internal SSD when recording is in progress.

1.1.5 Network Connectivity

- · DICOM® MWL function By connecting to a network, patient information can be obtained from the DICOM MWL server and reflected in recorded data. You will need to purchase and register an additional license to use the features. If you are using the DICOM MWL function, see Cybersecurity Warnings and Responsibilities [▶ 11].
- Supports remote control via web API By connecting to a network, you can control the recorder, including starting and stopping recording. This feature is disabled by default.

1.2 Package Contents

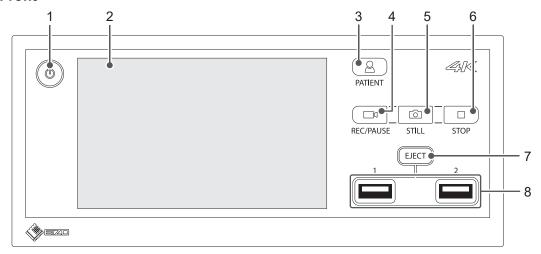
Check that all of the following items are included in the package.

Note

- It is recommended that the box and packing materials be stored so that they can be used to move or transport this product.
- · Recorder main unit
- HDMI cable (2.0 m)
- Power cord (2.0 m)
- HDMI cable clamp x 3
- Power cord clamp x 1
- Instructions for Use (this document)

1.3 Controls and Functions

1.3.1 Front

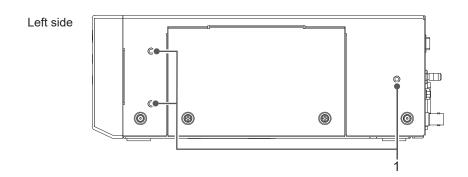


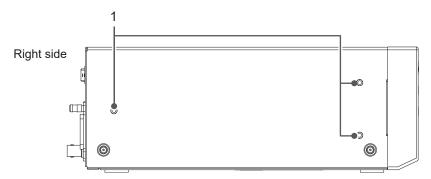
1. "POWER" button	If you press this button while the main power switch on the back is on, the power will turn on and the touch panel monitor and each button will light up.
	The indicator color of the "POWER" button (() will change according to the operational status of the product.
	Green: Operating Orange: Standby Off: Main power is off
2. Touch panel monitor	Perform settings for each item on the touch panel monitor.
	On screens with text input, a software keyboard is displayed.
3. "PATIENT" button	Press this button to display the screen for setting patient information.
	If DICOM settings are disabled ^{⁴1} , press this button to move to the "Patient Information" screen.
	If DICOM settings are enabled ⁻¹ , press this button to move to the "MWL Search" screen.
4. "REC/PAUSE" button	Press this button to go to the recording screen and start recording.
	During recording, and the elapsed recording time are displayed on the touch panel monitor. Pressing this button during recording will temporarily pause the recording. While paused, is displayed on the touch panel monitor. Pressing it again will resume recording.
5. "STILL" button	Press this button to capture still images.
	Once captured, the image taken by the still image capture or is displayed on the touch panel monitor for a certain period of time.
6. "STOP" button	Press this button to stop recording.
	After recording is stopped, is displayed on the touch panel monitor for a certain period of time.

7. "EJECT" button	Press this button to make the USB storage device removable.
	When it is ready for removal, the message "The device can now be safely removed." is displayed on the touch panel monitor. When the product is accessing the USB storage, the "Unable to eject the USB storage device because it is being accessed." message is displayed on the touch panel monitor, and the removal process is canceled.
8. USB port (USB 5Gbps)	Connects an external hard disk or USB storage such as an SSD and uses it to export recorded data. You can also connect a USB storage device containing an update file to perform a software update. USB storage devices connected via a USB hub are not supported.

^{*1} For information on enabling or disabling DICOM settings, see DICOM [▶ 81].

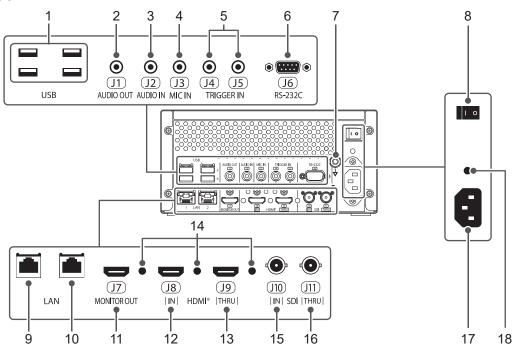
1.3.2 Sides





1. Rack mounting holes	There are 3 locations on the left and right.
	When installing on a rack, etc., secure it with screws.
	For the size and depth of the screw holes, see Rack Mounting
	[▶ 29].

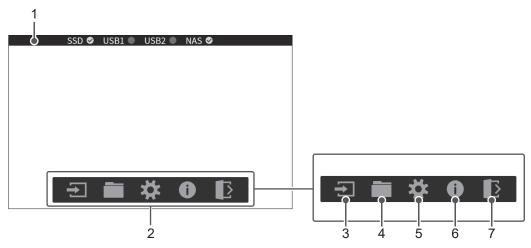
1.3.3 Back



1. l	USB port (USB2.0)	Connects an USB input devices such as a keyboard, mouse, or barcode reader.
2. /	Audio output port (J1)	This port is used for playing back sound during playback. Connects external devices such as speakers.
3. /	Audio input port (J2)	Connects an audio signal output device such as a camera with a microphone. Line input is available. Simultaneous recording with the microphone input port (J3) is not supported.
1	Microphone input port (J3)	Connects a microphone or other audio signal output device. Simultaneous recording with the audio input port (J2) is not supported.
	Trigger input port (J4) (J5)	Connects a trigger output device such as foot switch or endoscope CCU.
6. I	RS-232C port (J6)	When an EIZO CuratOR series monitor is connected to this port, the tally display function can be used.
7. I	Equipotential terminal	This terminal is used to equalize the electrical potential between equipment. Connects an equipotential plug.
8. 1	Main power switch	Turns the main power on or off.
		: On O: Off
9. I	LAN1 port	Connects to a network. You can use functions that require a network
10. I	LAN2 port	connection, such as saving recorded data to a NAS.
	HDMI output port	Connects an external monitor for checking the playback video.
((Monitor OUT) (J7)	Only 1920 x 1080 resolution is supported.
		Audio output is not supported.
12. I	HDMI input port (J8)	Connects a video signal output device such as a surgical field camera. Voice input is not supported.
	HDMI output port (pass- through) (J9)	Outputs the signal input to the HDMI input port without processing.
	HDMI cable clamp mounting hole	Attach the clamp to prevent the HDMI cable from disconnecting.
15. \$	SDI input port (J10)	Connects a video signal output device such as a surgical field camera. Voice input is not supported.

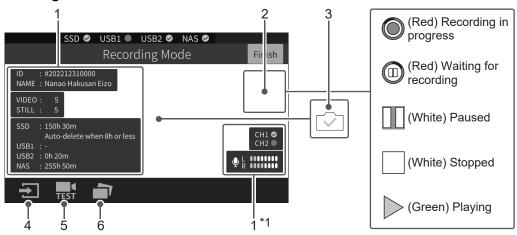
16. SDI output port (pass-through) (J11)	Outputs the signal input to the SDI input port without processing.
17. Power input port	Connects the supplied power cord.
18. Power cord clamp mounting hole	Attaches the clamp that prevents the power cord from disconnecting.

1.3.4 Home Screen



1.	Status bar	A status bar is displayed on top of the touch panel monitor. The connection status of the internal SSD and external storage device, along with the current date and time are displayed. For information on the external storage device connection status, see Connecting an External Storage Device [43].
2.	Home screen menu	When you log in, the Home screen menu will be displayed.
3.	Switch signal	Switches the input signal used for recording (SDI/HDMI).
		When the 2CH simultaneous recording function is enabled, the signal (SDI/HDMI) displayed on the touch panel monitor is switched.
4.	Recording list	Press this button to go to "Recording List."
5.	Settings	Press this button to go to "Settings."
		Attention
		This button is enabled only when the logged-in user type is "Administrator."
6.	Information	Press this button to go to "Information."
		You can check the device information and current settings for this product.
7.	Logout	Press this button to log out and move to the login screen.

1.3.5 Recording Mode Screen



1.	Overlay display (information display)	Displays patient information, number of recorded files, remaining storage capacity, CH1/CH2 video input signal status, and input volume from connected audio signal devices. Touch a display frame to show/hide the corresponding information. If you touch outside the display frame, you can show/hide all of the information. The display of remaining storage during recording is an estimate. Since it is calculated using the maximum expected value, it may differ from the actual remaining space.
2.		Shows the recording/playback status.
	status display	When the 2CH simultaneous recording function is enabled, the recording icon is displayed if either CH1 or CH2 is recording. The elapsed recording time is shown separately for CH1 and CH2.
3.	Still image capture status display	Displays the still image capture status (see Screen Display [▶ 70]).
4.	Switch signal	Switches the input signal used for recording (SDI/HDMI).
		When the 2CH simultaneous recording function is enabled, the signal (SDI/HDMI) displayed on the touch panel monitor is switched.
5.	Video recording test	Press this button to start "Recording Test."
6.	Record details	Press this button to go to "Recording Details."

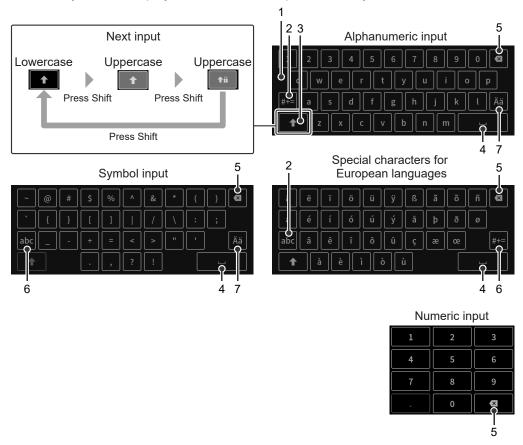
^{*1} The input volume is displayed only when recording audio. The CH1/CH2 input video signal status is displayed only when the 2CH simultaneous recording function is enabled.

Note

• Overlay and status display icons are not saved in recorded data.

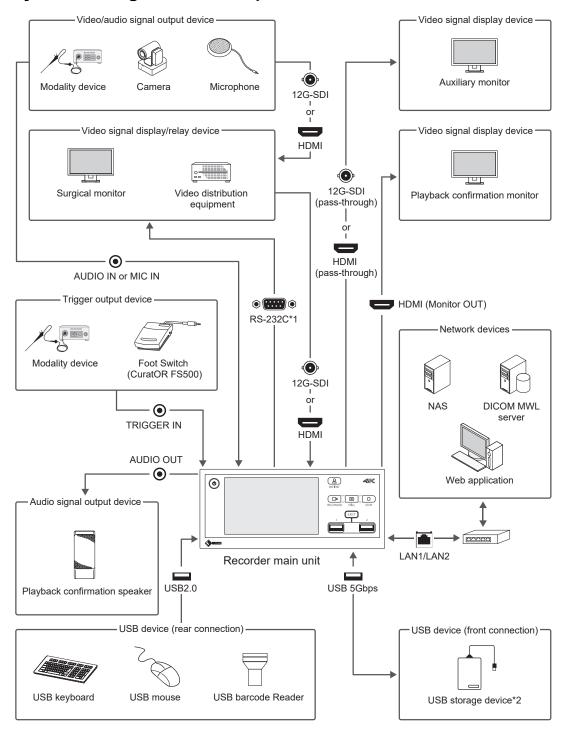
1.3.6 Software Keyboard

A software keyboard is displayed for fields that require text entry.



1.	Software keyboard	The software keyboard has four types of displays: "alphanumeric input," "symbol input," "special characters for European languages," and "numeric input." If only numbers can be entered, "numeric input" is displayed; otherwise, "alphanumeric input" is displayed.
		You can switch between "alphanumeric input," "symbol input" or "special characters for European languages" using [#4], [abc] or [A].
		Input using a USB keyboard or barcode reader is also accepted.
2.	Switch to symbol input	Press this key to switch to "symbol Input."
3.	Shift	Press this key once to switch the next input character to uppercase.
		At this time, each letter on the keyboard is displayed in capital letters.
		If you press it again, it will switch to continuous uppercase, and a key mark will appear on the Shift key.
		Pressing it once more will return the input to lowercase.
4.	Space	Press this key to insert a space.
5.	Backspace	Press this key to delete the previous character one by one.
6.	Switch to alphanumeric input	Press this key to switch to "alphanumeric input."
7.	Switch to special characters for European languages	Press this key to switch to "special characters for European languages."

1.4 System configuration example



Can only be used when connecting an EIZO CuratOR series monitor.

Attention

• Use all devices connected to this product that conform to IEC60601-1, IEC60950-1, IEC60065, or other IEC/ISO standards.

Use a USB 5Gbps SSD/HDD or higher.

2 Setup

2.1 Installation

2.1.1 Installation conditions

- Place it in a stable place that is secure and reinforced.
- Be sure to turn off the power supply, follow safety precautions, and install it in an appropriate location.
- Do not place it in the following places:
 - Hot or cold places
 - The operating environment temperature are 0 °C to 40 °C.
 - Places with high humidity
 The operating environment humidity is 20% to 80% R.H. (no condensation).
 - Near devices generating strong magnetic fields such as transformers or motors
 - Near devices generating radio waves such as transceivers or mobile phones
 - Near television or radio transmission stations emitting powerful radio waves
 - Places affected by fluorescent tubes or window reflections
 - Under unstable lighting (where flickering occurs)
 - Near laser light
 - Near high-voltage lines and tracks
 - Dusty or sandy places
 - Vibrating places
 - Places where water droplets are likely to occur
 - Places with high levels of vapor or oil
 - Special environments such as flammable atmospheres
 - Locations where radiation, X-rays, salt damage, or corrosive gases occur
 - Locations where chemicals are used, such as pools or hot springs
- · Install the unit horizontally. Please do not place it vertically.
- · Place it on a flat surface where it will not fall.
- · Do not place anything on top of the touch panel.

2.1.2 Rack Mounting

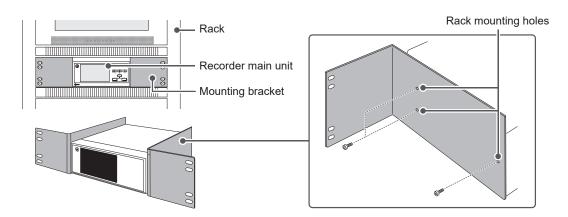
When attaching to a rack, remove the rubber feet on the bottom if necessary.

Use mounting holes on the sides (3 places on the left and right).

The mounting hole size is M4 (maximum depth 16.3 mm). Always use screws that meet these specifications to prevent damage to the product.

Attention

• Do not stack items on top of this product when mounted on a rack.



2.2 Connection

2.2.1 Connecting Cables

For more information, see 1.4 System configuration example [27].

Connect a video signal output device such as a camera.
 Connect to the HDMI input port or SDI input port according to the video signal output device to be connected.

Attention

- For the connection cable, please use the included cable, separately sold optional accessories, or products designated by EIZO.
- · When connecting to an HDMI input port, install a clamp (accessory) to prevent it from falling out.
- When connecting to the SDI input port, use a cable compatible with 12G-SDI.
- To avoid tripping hazards, route the connection cables away from where people may walk.
- Do not plug or unplug the connection cables while the product is turned on.

Note

- For information about the compatible resolutions of the monitor, see 9.2 Compatible Resolutions
 [> 99].
- Connect a video signal display device such as a monitor.
 When connecting a video signal display device such as a monitor, connect to an HDMI output port or SDI output port according to the video signal display device to be connected.

Attention

- For the connection cable, please use the included cable, separately sold optional accessories, or products designated by EIZO. When connecting to the SDI output port, use a cable compatible with 12G-SDI. When connecting an EIZO CuratOR series monitor via RS-232C, use a straight cable.
- When connecting to an HDMI output port, install a clamp (accessory) to prevent it from falling out
- When using the tally function, connect via RS-232C. For more information, see External Device Control [> 80].
- Do not plug or unplug the connection cables while the product is turned on.
- Connect a microphone or other audio signal output device.
 When connecting a microphone or other audio signal output device, connect it to the audio input port or the microphone input port depending on the audio signal output device to be connected.

Attention

- Do not plug or unplug the connection cables while the product is turned on.
- 4. Connect to a network (optional). If necessary, a LAN cable can be connected to the LAN1/LAN2 port of the product to connect it to the network of the facility, allowing recorded data to be stored on the NAS and software updates to be performed via the NAS.

Attention

- Please use a Category 5e or higher LAN cable.
- Network settings are required. For more information, see Network [76].
- Connect other external devices.When connecting a USB keyboard, connect it to the USB port on the back of the recorder.

Note

- When connecting a USB mouse, connect it to the USB port on the back of the recorder. You can
 perform operations similar to those on the touch panel monitor.
- When connecting a barcode reader, connect it to the USB port on the back of the recorder. A separate setting is required. For more information, see Barcode Reader [> 69].
- If connecting trigger output devices like a footswitch, connect them to the trigger input port on the back of the recorder body. A separate setting is required. For more information, see Trigger Input [> 79].
- 6. Connects the power cord.

Attention

• Be sure to use the supplied power cord and attach the clamp (accessory) to prevent it from falling out.

2.2.2 Turning On/Off the Power

To turn on the power, turn on the main power switch on the back of the recorder. The touch panel monitor lights up and the login screen is displayed. To turn off the power, press the "POWER" button (③) on the front panel. The power is turned off and the unit goes into standby mode. Then turn off the main power switch on the back panel.

Attention

- If the "POWER" button (③) is pressed while the following processes are being performed, a "Unable to shut down" message is displayed, and the power cannot be turned off.
 - Recording mode screen is displayed
 - Software update in progress
 - Internal SSD access in progress (recording, data deletion, formatting)
 - External storage access in progress (simultaneous recording, data copying, formatting)

2.3 Settings

2.3.1 Registering Users

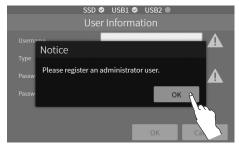
You must register at least one administrative user to use this product.

You can register up to 30 users.

Registering an administrator user

When starting this product for the first time, follow these steps to register an administrator user.

1. Check the "Please register an administrator user." message and press "OK."



2. Enter "Username," "Password," "Password (Confirmation)" and press "OK." See User [> 73] for details about each field.

Attention

 Please manage your password appropriately. For more information, see Cybersecurity Warnings and Responsibilities [> 11].

Note

Use the software keyboard or a USB keyboard to enter text. For information on how to operate
the software keyboard, see Software Keyboard [> 26].



The administrator user is registered.

To register a user, see Registering users [▶ 32].

To use this product with auto login, see Setting up auto login [33].

Registering users

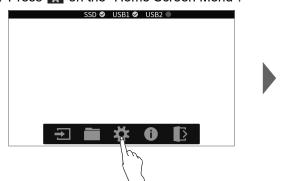
You can register users.

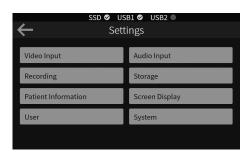
Attention

- User registration can only be performed by users with administrative rights.
- · The same username cannot be registered.
- 1. On the login screen, enter "Username" and "Password" with administrative rights and press "Login".



2. Press on the "Home Screen Menu".







4. In "User List", press "Add" and enter the user information for each field. See User [> 73] for details about each field.

Note

• Use the software keyboard or a USB keyboard to enter text. For information on how to operate the software keyboard, see Software Keyboard [> 26].





Press "OK". Press in the upper left corner and return to "User" to complete the registration.

Setting up auto login

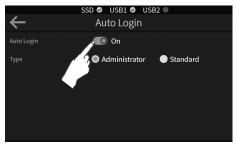
By setting auto login, you can skip the login process.

Attention

- If you enable auto login, you will not be prompted to enter your username and password when starting the product, and you will be automatically logged in. Operational security risks will increase, so please be careful. For more information, see Cybersecurity Warnings and Responsibilities [> 11].
- · Auto login settings can only be performed by users with administrative rights.
- On the login screen, enter "Username" and "Password" with administrative rights and press "Login."
- 2. Press on the "Home Screen Menu."
- 3. In "Settings," press "User" and then "Auto Login."



4. In "Auto Login," set to "On."



Press — in the upper left corner and return to "User" to complete the setting.

Note

- When auto login is set to "On," the default setting for the user type is "Standard," but you can change it as needed.
- For information on user types, see User Information Type [> 73].

2.3.2 Setting the Language

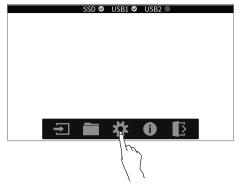
You can set the display language and input language with a USB connected keyboard.

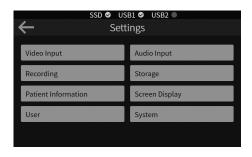
Attention

• The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.

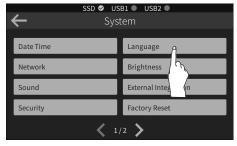
Setting the display language

1. Press on the "Home Screen Menu".





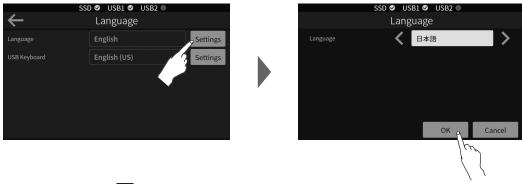
2. In "Settings", press "System" and then "Language".



3. In "Language", press "Settings" to select the display language.

Note

• You can select from Japanese, English, German, French, Spanish, Italian, or Simplified Chinese.



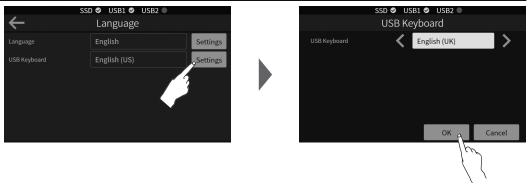
Press "OK". Press in the upper left corner and return to "System" to complete the registration.

Set the USB keyboard language

- 1. Press 🗱 on the "Home Screen Menu".
- 2. In "Settings", press "System" and then "Language".
- 3. In "USB Keyboard", press "Settings" to select the USB keyboard.

Note

• You can select Japanese, English (US), English (UK) or German.



4. Press "OK".

The notification message "Changing these settings requires a system restart. Are you sure you want to continue?" appears on the screen.



Press "Yes" in the notification message, restart, and the settings are complete.

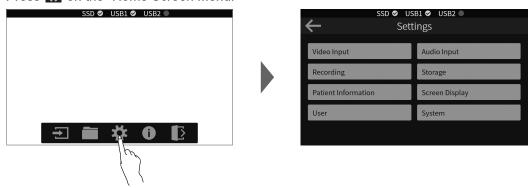
2.3.3 Setting the Current Time and Time Zone

If NTP is set, the date and time will be synchronized by communicating with the NTP server when the power is turned on. For more information about NTP settings, see Network [> 76].

When date/time synchronization is not used/available, follow the steps below to set it manually.

Attention

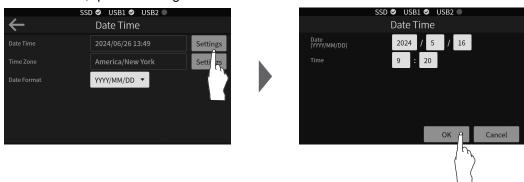
- The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.
- 1. Press 🗱 on the "Home Screen Menu."



2. In "Settings," press "System" and then "Date Time."



3. In "Date Time," press "Settings" and enter each field.



Note

Use the software keyboard or a USB keyboard to enter text. For information on how to operate
the software keyboard, see Software Keyboard [26].

Press "OK."

4. In "Time Zone," press "Settings" and select "Region," "City."



Press "OK."

5. In "Date Format," select "YYYY/MM/DD," "MM/DD/YYYY," or "DD/MM/YYYY."



After completing the selection, press in the upper left corner and return to "System" to complete the setting.

2.3.4 Setting the Video Input Signal

In the "Home Screen Menu," press to switch the input signal you want to record. Select either "SDI" or "HDMI."

You can also set the input signal from The in the "Home Screen Menu." The following describes the setup procedure using The in the "Home Screen Menu."

Attention

• The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.

Note

- When the 2CH simultaneous recording function is enabled, the signal (SDI/HDMI) displayed on the touch panel monitor is switched.
- 1. Press 🗱 on the "Home Screen Menu."
- 2. In "Settings," press "Video Input."
- 3. In "Video Input," select either "SDI" or "HDMI" according to the interface of the device to be connected.

When recording an HDMI signal, you can set the compatibility. For more information, see Video Input [> 61].

After completing the selection, press in the upper left corner and return to "Settings" to complete the setting.

Note

• When the 2CH simultaneous recording function is enabled, "SDI" is assigned to "CH1" and "HDMI" is assigned to "CH2" for each input signal.

2.3.5 Test Run

When you have completed the settings, perform a test run.

For more information, see 3 Operation Flow [39].

2.3.6 Other

Attention

• The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.

Please configure the following and other settings as needed. For more information, see 5.1 List of Settings [> 60].

- Setting the Audio Input Signal (see Audio Input [▶ 62])
- Configuring Network Settings (see Network [▶ 76])
- Configuring Simultaneous Recording Settings (see Recording Destination [64])
- Set the 2CH simultaneous recording function (see 2CH Simultaneous Recording [65])
- Using the Tally Function of the Monitor (see External Device Control [▶ 80])
- Using Barcode Input (see Barcode Reader [▶ 69])
- Using Trigger Inputs (see Trigger Input [▶ 79])
- Using the Web API (see Web API [81])
- Using DICOM Settings (see DICOM [▶ 81])

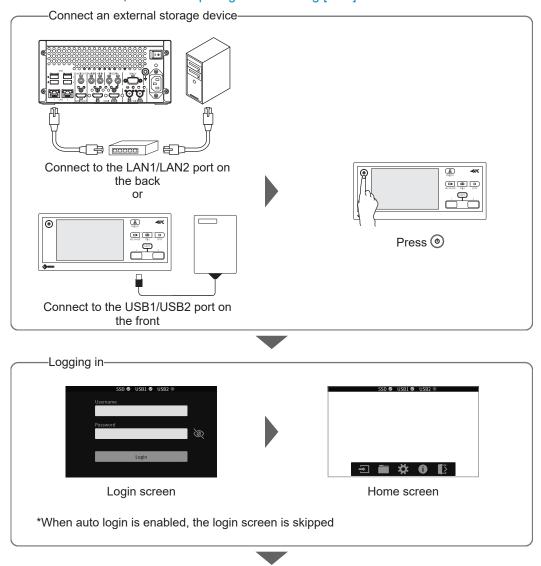
3 Operation Flow

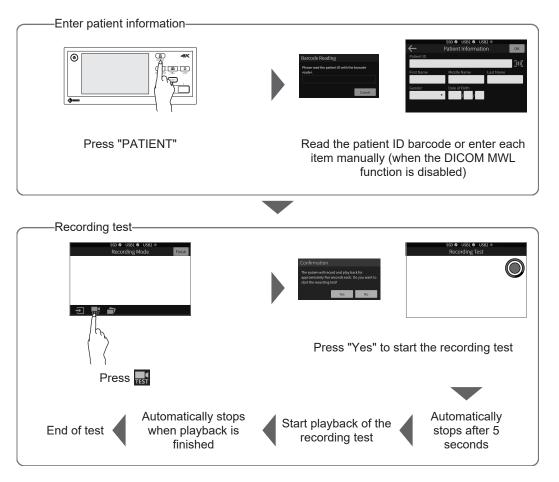
This chapter describes the operational flow when using the buttons on the front of the product to record/playback/capture still images while viewing the touch panel monitor.

3.1 Operation Flow

3.1.1 Step 1: Preparing for Recording

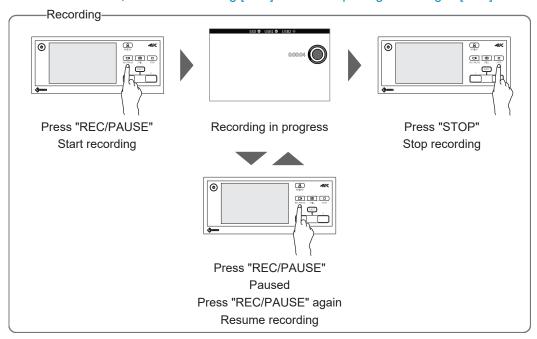
For more information, see 4.1 Preparing for Recording [43].

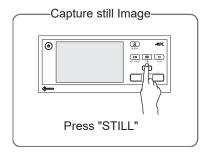




3.1.2 Step 2: Recording and Capturing Still Images

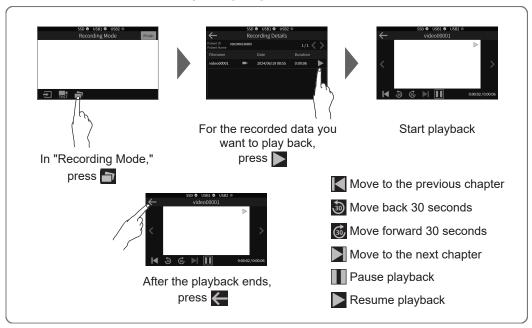
For more information, see 4.2 Recording [▶ 49] and 4.3 Capturing Still Images [▶ 51].





3.1.3 Step 3: Playback

For more information, see 4.4 Playback [52].

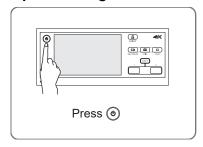


3.1.4 Step 4: Exiting Recording Mode

For more information, see 4.5 Exiting Recording Mode [54].



3.1.5 Step 5: Turning Off the Power



4 Recording/Playback

4.1 Preparing for Recording

4.1.1 Connecting an External Storage Device

Connect when recording data to a NAS or USB storage device at the same time as the internal SSD.

Attention

- Before connecting to the recorder, make sure that the NAS or USB storage works properly. Also, do not connect devices infected with viruses (including possible infections). It may cause the recorder to malfunction, etc.
- · Recorded data includes personal information such as patient information. Please manage your NAS or USB storage device appropriately.

Note

· By setting both NAS and USB storage, you can simultaneously record to the internal SSD, NAS, and USB storage.

Connecting a NAS

1. Connect the LAN1/LAN2 port on the back of the recorder to the network to enable communication with the NAS.

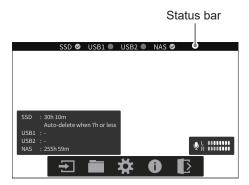
Attention

· The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.

Note

- Even if "Recording Destination" is set to "SSD Only," you can copy the data to the NAS after recording. For more information, see Copying Recorded Data to External Storage Device [> 58].
- 2. Press the "POWER" button to turn on the power.
- 3. On the login screen, enter "Username" and "Password" with administrative rights and press "Login."

4. Refer to Network [▶ 76] and Recording Destination [▶ 64], and confirm that the NAS is enabled and that the NAS is set to record simultaneously. If it is not set, please set it. The status bar shows the status of the internal SSD and NAS.



- - There is enough free space.
- (yellow light)
 - Free space is running low.
 - Delete recorded data to free up space.
- (blinking green) / (blinking yellow)
 Accessing
- − **⊗** (gray display)
 - The NAS is connected but is not mounted.
 - Please review the network connection and network / NAS settings.
- (gray display)
 - The NAS is not connected.

Connecting a USB storage device

Attention

- · The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.
- 1. Connect the USB storage device to the USB port on the front of the recorder.

Attention

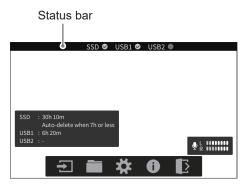
- · USB storage devices containing an encryption application cannot be used.
- Use a USB storage device that has been confirmed to be compatible with the recorder. Please check our website (www.eizo-or.com) for compatibility information between recorders and USB storage devices.
- When connected to the USB port on the back of the recorder, it is not recognized as USB storage. Reconnect it to the USB port on the front of the recorder.
- USB storage devices connected via a USB hub are not supported.
- · USB storage devices with USB 2.0 or lower are not recommended due to slower transfer speeds. Connect a USB storage device with a speed of USB 5Gbps or higher.
- · Storages formatted other than exFAT/NTFS are not supported.

Note

- If there are multiple partitions on the USB storage, the recording data is written to the first partition.
- Even if no USB storage is connected or if "Recording Destination" is set to "SSD Only," you can still copy the data to a USB storage device after recording. For more information, see Copying Recorded Data to External Storage Device [▶ 58].
- 2. Press the "POWER" button to turn on the power.
- 3. On the login screen, enter "Username" and "Password" with administrative rights and press "Login."

4. Refer to USB Storage [▶ 66] and Recording Destination [▶ 64], and confirm that the USB storage is enabled and that the USB storage is set to record simultaneously. If it is not set, please set it.

The status bar shows the status of the internal SSD and USB storage.



- - There is enough free space.
- (yellow light)
 - Free space is running low.
 - Delete recorded data to free up space.
- (blinking green) / (blinking yellow)
 Accessing
- (gray display)
 - The USB storage device is connected to the recorder but is not mounted. Format the USB storage device using the USB storage format function of this product.
- (gray display)

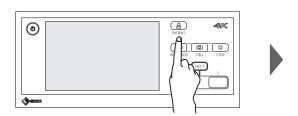
The USB storage is not connected or the removal process has been completed.

4.1.2 Entering Patient Information

Register your patient ID, patient name (last name, middle name, first name), gender, and date of birth.

Note

- You can skip entering patient information here and enter it later. For more information, see Changing Patient Information [▶ 57].
- Use the software keyboard or a USB keyboard to enter text. For information on how to operate the software keyboard, see Software Keyboard [> 26].
- 1. Press the "PATIENT" button.





- 2. Enter "Patient ID," "Name*1," "Sex*2," "Date of Birth*3."
- *1 Enter the name of the patient in the "Last Name", "Middle Name", and "First Name" fields using up to 64 characters.
- *2 Select the gender of the patient from "Male" / "Female" / "Other".
- *3 Select the year(Western calendar)/month/day.

Note

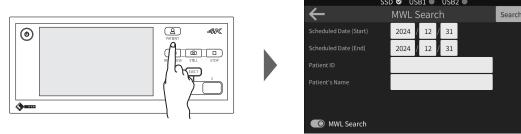
- · You can change settings for the number of characters and digits that can be entered. For more information, see Patient Information [68].
- "Name," "Sex," and "Date of Birth" can be omitted. "Patient ID" can be omitted if the "Required Input" setting is set to "Off." For more information, see ID Input [68].

After entering the information, press "OK" in the upper right corner to complete the settings. "Recording Mode" is displayed on the screen, and you can record and capture still images linked to patient information.

Using the DICOM MWL search

When DICOM settings are enabled, patient information can be obtained from DICOM MWL servers via a network. To enable DICOM settings, make sure that all of the following conditions are met.

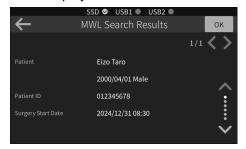
- Check that the DICOM MWL license is registered in "Extension Options" (see Extension Options [87]).
- Check that "DICOM MWL" is set to "On" under "DICOM" in "External Integration" (see DICOM [▶ 81]).
- 1. Press the "PATIENT" button.



2. Enter search criteria such as "Scheduled Date (Start)," "Scheduled Date (End)," "Patient ID," "Patient's Name."

Note

- · If "MWL Search" is set to "Off," the screen will return to the patient information screen. In that case, the information entered on the screen will be deleted.
- 3. Press the "Search" button to display the search results.



4. Press "OK" to complete the settings. "Recording Mode" is displayed on the screen, and you can record and capture still images linked to patient information.

4.1.3 Recording Test

You can check if the recording function is working properly.

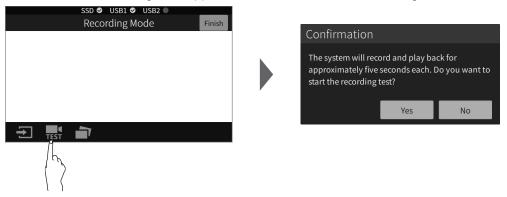
When a recording test is performed, it will record for 5 seconds and then automatically play back the recording.

When the 2CH simultaneous recording function is enabled, CH1 and CH2 are played back in that order.

Attention

- The data recorded during the recording test cannot be retrieved or played back after the test is completed.
- 1. In "Recording Mode," press 🚟.

A "Confirmation" message will appear to indicate start of the recording test.



2. Press "Yes."

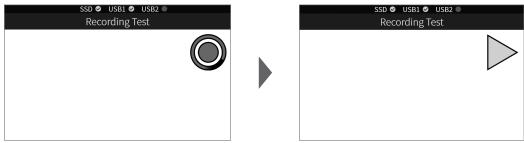
If the 2CH simultaneous recording function is enabled and there is a problem with the input signal, a "Confirmation" message will be displayed. Check the message.

3. Start the recording test.

"Recording Test" is displayed, and the recording will begin.

After recording for 5 seconds, it will automatically play back. When the 2CH simultaneous recording function is enabled, CH1 and CH2 are played back in that order. Check if the recording was performed correctly. When a speaker is connected to the audio output port (J1), sound is also played.

When the playback ends, it returns to "Recording Mode."



To start recording directly from "Recording Mode" after performing the recording test, press the "REC/PAUSE" button.

4.2 Recording

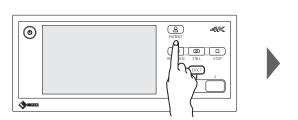
There are two recording methods: recording using button operations and recording using the trigger input. This section describes the procedure for recording using button operations.

Note

- · If you want to store recorded data for a long time, please periodically store it in a separate storage such as a server. Use a NAS or USB storage device to move data. For more information, see Copying Recorded Data to External Storage Device [58].
- When the auto-delete function for recorded data is "On" and the available space on the internal SSD falls below a certain threshold, older data will be automatically deleted. For more information, see Storage [66].
- If you do not use the auto-delete function for recorded data, set the auto-delete function to "Off." For more information, see Storage [66].
- When the 2CH simultaneous recording function is enabled, recording operations are performed for the CH1 and CH2 video inputs. Recording files are saved separately.
- For information on recording with the trigger input, see Trigger Input [> 79].
- 1. Prepare for recording. For more information, see 4.1 Preparing for Recording [\ 43].

Note

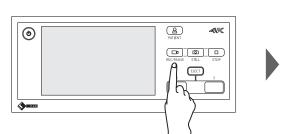
- · If you start recording without setting patient information, you can edit patient information after exiting recording mode.
- For information on pre-setting patient information, see 5.1 List of Settings [60].
- If you press "OK" on the patient information screen, a notification message is displayed depending on how much time is left in the recording. When the auto-delete function for recorded data is "On," the time that can be recorded until auto-delete begins is displayed. If it is "Off," the time until recording stops is displayed.





2. Press the "REC/PAUSE" button.

The recording starts. While recording is in progress,
will appear on the touch panel monitor.





Attention

- Recording is paused when there is no signal or when an unsupported signal is input. After making the adjustment, make sure that the cables are correctly connected.
- When the 2CH simultaneous recording function is enabled, recording will still occur for the input with a supported signal even if the other input has no signal or an unsupported signal.
- If the monitor connected to the HDMI signal pass-through port (J9) is turned on during recording, the recording may be temporarily paused and the recorded data split, depending on the specifications of the connected device.
- If tally control fails while in recording mode, a notification message is displayed. Check the connection. For more information, see External Device Control [> 80].

Note

• The remaining time between the internal SSD and connected storage is displayed based on the current settings. You can check the current settings by going to ☐ "Current Settings" in the "Home Screen Menu." If you want to change the setting, see Recording [▶ 63].

To pause recording, press the "REC/PAUSE" button. To resume the paused recording, press the "REC/PAUSE" button again. You can also capture still images during recording.

3. To stop recording, press the "STOP" button. Recording stops and "Recording Mode" is displayed.

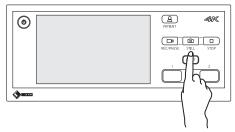
4.3 Capturing Still Images

You can save a scene of an image as a still image file at any time.

There are two methods for capturing still images: by button operations and by using the trigger input. This section describes the procedure for capturing still images using button operations.

Note

- · When the 2CH simultaneous recording function is enabled, still image operations are performed for the CH1/CH2 video inputs. Still image files are saved individually.
- For information on capturing still images with the trigger input, see Trigger Input [> 79].
- · Still images are saved in JPEG or TIFF format. The size of still images that can be acquired depends on the video resolution settings. For more information, see Recording [63].
- 1. In the scene where you want to capture a still image, press the "STILL" button. Captured still images are displayed on the touch panel monitor for a fixed period of time.



When the 2CH simultaneous recording function is enabled, CH1/CH2 images are displayed side by side on the external monitor. For more information, see Screen Display [▶ 70].

Attention

· When the 2CH simultaneous recording function is enabled, a still image will be captured from the channel with a supported signal, even if the other channel has no signal or an unsupported

Note

- The display time for captured still images can be set between 1 and 5 seconds. For more information, see Screen Display [▶ 70].
- · If the captured still image display is off, a still image capture status icon will appear in the center of the monitor for a fixed period.
- When the auto-delete function for recorded data is "On" and the available space on the internal SSD falls below a certain threshold, older data will be automatically deleted. For more information, see Storage [66].

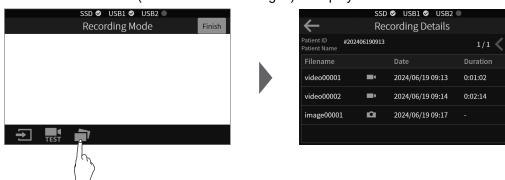
4.4 Playback

After the recording is stopped, you can play back the recorded data stored on the internal SSD.

Still image data can also be displayed.

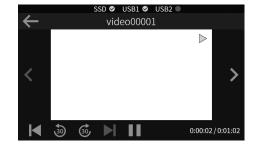
Attention

- If you want to check the recorded audio, connect a speaker to the audio output port (J1) and play back the recorded data.
- Recorded data stored on a USB storage device or NAS cannot be played back or displayed on the recorder.
- When the 2CH simultaneous recording function is enabled, recorded data is saved as individual
 video files or still image files for each channel. This product cannot play back 2 channels
 simultaneously. By using the MIR Browser (sold separately), it is possible to play 2 channels
 simultaneously.
- 1. If recording is in progress, press the "STOP" button.
- In "Recording Mode," press .
 A list of recorded data (recorded and still images) is displayed.



3. Press for the recorded data you want to play back. The recorded data is played back.





- ■: Pause playback
- Resume playback Resume playback of the paused video. During playback, it switches to
- ightharpoonup in the seconds is a second in the second in Move back 30 seconds. If the elapsed playback time is less than 30 seconds, it will move to the beginning of the video file.
- 6 : Move forward 30 seconds Move forward 30 seconds. If the remaining time is less than 30 seconds, it will move to the end of the video file and pause.
- : Move to the next chapter*1 Move to the chapter behind the current position. Retains playback settings (play or pause) even after moving.
- Move to the previous chapter Move to the chapter before the current position. Retains playback settings (play or pause) even after moving.
- : Move to the next recorded data Move to the recorded data behind the current position.
- : Move to the previous recorded data Move to the recorded data in front of the current position.

When playback is finished, press 🗲 to return to "Recording Details."

Note

Recorded data can also be selected and played back from the recording list. For more information, see Playing Back Recordings from the Recording List / Displaying Still Images [**>** 58].

A chapter is a break embedded in a video file to allow the video to be played from a specific position. Chapters are set when still images are captured or when recording is paused.

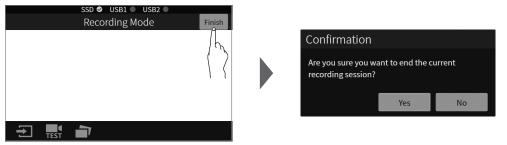
4.5 Exiting Recording Mode

Once the surgery or examination is complete, and you have finished recording and capturing still images based on the registered patient information, save the recording data.

In "Recording Details," press ←.



2. In "Recording Mode," press "Finish" in the upper right corner.



3. Press "Yes" to exit recording mode.

Video files, still image files, and CCX files (files containing patient information, etc.) are saved as recorded data. When saving is complete, you will return to the "Home Screen Menu."

Attention

- If an external storage device is connected, "Exporting to external storage..." message is displayed until the export is complete. Please wait until the export is finished.
- A CCX file is generated and saved to the external storage device when you exit recording mode.
 For this reason, even if you have finished recording and exporting, do not remove the external storage device while in recording mode.

Note

- You can also exit the recording mode by pressing the "PATIENT" button.
 - If DICOM settings are disabled, the screen will transition to the "Patient Information" screen (see Entering Patient Information [> 46]).
 - If DICOM settings are enabled, the screen will transition to the "MWL Search" screen (see Using the DICOM MWL search [> 47]).
 - For information on enabling or disabling DICOM settings, see DICOM [▶ 81].
- The recording time is calculated periodically from the remaining storage space and displayed on the screen.
- The maximum recording time per file is 24 hours. Files are automatically split after 24 hours of recording.

File names of recorded data

- Directory
 The folder name set in "Recording Folder" (see Recording Folder [▶ 65]).
- Video file
 Video + 5-digit sequential number (starting with "00001")^{*1}. If the file is split, a 4-digit

- sequential number starting from "0001" is appended to the end. Example: video00001 (when splitting a file: video00001-0001)
- Video file (when 2CH simultaneous recording is enabled) Video + 5-digit sequential number (starting with "00001")*1 + " ch1" or " ch2." If the file is split, a 4-digit sequential number starting from "0001" is appended to the end. Example: video00001 ch1 (when splitting a file: video00001_ch1-0001)
- Still image file Image + 5-digit sequential number (starting with "00001")*1 Example: image00001
- Still image file (when 2CH simultaneous recording is enabled) Image + 5-digit sequential number (starting with "00001")*1 + " ch1" or " ch2" Example: image00001 ch1
- CCX file*2 Will have the same name as the folder name set in "Recording Folder" (see Recording Folder [65]). If "[Patient ID]/[Date]/" is selected, the folder name will be [Patient ID] [Date and Time1.
- File names may not be sequentially numbered if recording or still image capture is performed when no signal or an unsupported signal is input, or if files are split due to signal changes.
- *2 Generated only when exporting to an external storage device. You can view the data using MIR Browser (sold separately) or ADMENIC Browser.

4.6 Operating Recorded Data

You can search, check, change, copy, and delete recorded data stored on the internal SSD of the recorder. Operation is not possible while in recording mode.

Note

· Use the software keyboard or a USB keyboard to enter text. For information on how to operate the software keyboard, see Software Keyboard [26].

4.6.1 Searching by Specifying Conditions

You can search recorded data by specifying conditions such as patient ID, patient name, and recording date.

Attention

- · Uppercase and lowercase letters are not distinguished.
- · Multiple search conditions cannot be set simultaneously.
- 1. Press on the "Home Screen Menu".
- 2. Select the "Recording List" search box. The software keyboard appears.





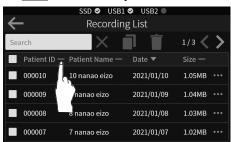
Specify and enter the search conditions, then press "Confirm".
 Record data corresponding to the input value is displayed using Patient ID/ Patient name / Date / Size as search targets.

4.6.2 Sorting the List of Recorded Data

You can switch the display order according to Patient ID/ Patient name / Date / Size. Press the header part of the list to switch the order.

Note

- · By default, the record dates are displayed in descending order, starting with the newest.
- If there are multiple records with the same patient name, when sorted by patient name, they are displayed in descending order starting with the newest one on the recorded date.
- You can switch between ascending and descending order by pressing the header part of the list with "Recording List".
 - If the current sort order is the same as the item you pressed, it switches between ascending and descending order.
 - Patient ID or Patient Name will switch to ascending order.
 - Date or Size will switch to descending order.
- 1. Press on the "Home Screen Menu".
- 2. In "Recording List", press for the item you want to sort.

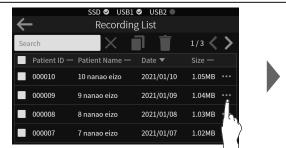


4.6.3 Checking the Details of Recorded Data

- 1. Press on the "Home Screen Menu".
- 2. In "Recording List", press for the recorded data you want to check in detail. "Recording Details" is displayed.

Note

- "Recording Details" is displayed in the order in which the recordings were saved.
- · Video data and still images are displayed in a list.





4.6.4 Changing Patient Information

If you omitted patient information input before starting recording, or if you need to correct it, you can change the patient information from "Recording List."

Attention

- · Even if patient information is changed, it will not be reflected in the recorded data saved on the external storage device. Copy the data as needed.
- 1. Press on the "Home Screen Menu."
- 2. Press of the recorded data for which you want to change patient information.
- 3. In "Recording Details" of the recorded data, press



- 4. To make changes, press "Edit" in the upper right corner.
 - For records with manually entered patient information, proceed to step 5.



 If DICOM settings are enabled for a record with DICOM MWL information, the screen will transition to the "MWL Search" screen. Go to step 6.

Note

· Records with DICOM MWL information can only be edited when DICOM settings are enabled.

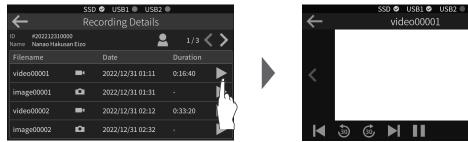


- 5. Enter the item to change and press "OK" in the upper right corner. If patient information entry was omitted, enter the information in all fields. After the changes are completed, a "Confirmation" message for editing patient information is displayed. Press (in the upper left corner and to return to the "Recording Details."
- 6. Search for patient information (see Using the DICOM MWL search [▶ 47]). Select the appropriate patient information and press "OK" in the upper right corner. A "Confirmation" message for editing patient information will appear. Press 🗲 in the upper left corner and to return to the "Recording Details."

4.6.5 Playing Back Recordings from the Recording List / Displaying Still Images

- 1. Select on the "Home Screen Menu".
- Press for the recorded data (video or still image) you want to play back.
- 3. From the list in "Recording Details", press for the recorded data you want to play back.

The recorded data is played back.



After playing, press to return to "Recording Details".

4.6.6 Copying Recorded Data to External Storage Device

Recorded data stored on the internal SSD can be selected from "Recording List" and copied to the external storage device.

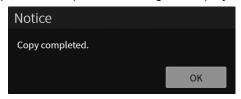
0:00:08 / 0:16:40

- 1. Press on the "Home Screen Menu."
- 2. In "Recording List," check the recorded data you want to copy and press .

 You can select multiple recorded data. A "Confirmation" message for the copy destination is displayed.



3. Select the external storage device to which you want to save the file and press "OK." A "Copy in progress..." message is displayed until the copy is complete. If you want to cancel the copy process, press "Cancel." Once the copy is complete, a completion message is displayed.



4. Press "OK" to return to "Recording List."

Attention

To remove the USB storage device from the recorder, press the "EJECT" button. You will be
able to remove it when the "The device can now be safely removed." message is displayed.

4.6.7 Deleting Recorded Data

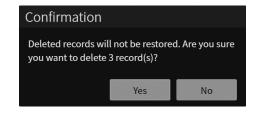
You can delete recorded data stored on the internal SSD by selecting "Recording List."

Attention

- · Recorded data that is deleted cannot be restored.
- 1. Select on the "Home Screen Menu."
- 2. In "Recording List," check the recorded data you want to delete and press 🗍. You can select multiple data to delete. A "Confirmation" message is displayed to confirm the data deletion.

If you want to delete all data, place a check mark on the header. All data will be selected.

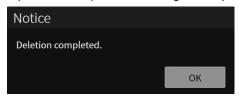




3. Press "Yes" to start the deletion.

A "Deletion in progress..." message is displayed until the deletion is complete. If you want to cancel the deletion process, press "Cancel."

Once the deletion is complete, a completion message is displayed.



4. Press "OK" to return to "Recording List."

Note

- When the auto-delete function for recorded data is "On" and the available space on the internal SSD falls below a certain threshold, older data will be automatically deleted. For more information, see Storage [66].
- If you do not use the auto-delete function for recorded data, set the auto-delete function to "Off." For more information, see Storage [66].

5 Settings

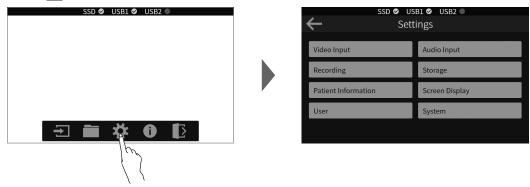
This chapter explains the functions that can be adjusted/set from "Settings" in the "Home Screen Menu".

Attention

• The Settings menu can only be accessed by users with administrative rights. You must log in as a user with administrative rights or automatically log in as an administrator.

5.1 List of Settings

1. Press 🗱 on the "Home Screen Menu".

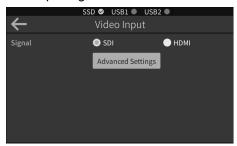


- 2. Press the setting you want to configure and make the necessary settings.
 - Video Input (see Video Input [▶ 61])
 - Audio Input (see Audio Input [▶ 62])
 - Recording (see Recording [▶ 63])
 - Storage (see Storage [▶ 66])
 - Patient Information (see Patient Information [▶ 68])
 - Screen Display (see Screen Display [▶ 70])
 - User (see User [▶ 73])
 - System (see System [▶ 75])

After completing the settings, press in the upper left corner. The settings are saved and you will return to "Settings".

5.1.1 Video Input

Configure settings for the video input signal.



Signal

Settings: "SDI" / "HDMI"

You can switch the input signal used for recording. Select either "SDI" (default setting) or "HDMI" depending on the interface of the device to be connected.

When the 2CH simultaneous recording function is enabled, the selection is disabled, and "SDI" is fixed to "CH1" and "HDMI" to "CH2" as the input channels.

Attention

· Audio input from "SDI" and "HDMI" inputs is not supported. If recording is required, connect an audio signal output device to the audio input port (J2) or microphone input port (J3). For more information, see Audio Input [62].

Note

• The video input signal is displayed live on the touch panel monitor.

Video Input Details - HDMI - Compatibility

Settings: "3840x2160 60Hz" / "3840x2160 30Hz" / "1920x1200 60Hz"

Set when you want to switch the EDID of the HDMI signal. Try changing this setting if the input signal is not displayed correctly or the intended display does not show. A reboot is required for the settings to take effect.

- "3840x2160 60Hz" (default setting) Displays and records at up to 4K 60Hz. When the pass-through output monitor does not support 4K 60Hz, it will be set to "1920x1200 60Hz".
- "3840x2160 30Hz"

This is used when unable to display or record correctly at "3840x2160 60Hz" due to compatibility issues with the connected devices. When the pass-through output monitor does not support 4K 30Hz, it will be set to "1920x1080 60Hz".

"1920x1200 60Hz" Switches the upper limit to WUXGA.

5.1.2 Audio Input

Configure the audio input signal.



Source

Settings: "Off" / "Microphone" / "Audio"

You can switch the audio input signal type. Select according to the device to be connected.

- "Off" (default setting)
 Select this when not recording audio.
- "Microphone"
 Select this when connecting an audio signal output device such as a microphone to the microphone input port (J3) for recording.
- "Audio"
 Select this when recording audio using a device that outputs an audio signal, such as a camera with a built-in microphone, connected to the audio input port (J2).

Attention

- · Audio input from "SDI" and "HDMI" inputs is not supported.
- · Simultaneous audio recording of "Microphone" and "Audio" is not supported.

Note

- When "Microphone" or "Audio" is selected, it cannot be muted. If you want to mute the sound, select "Off."
- If you want to turn audio recording on/off when recording a video, change the audio signal output device settings.
- When the 2CH simultaneous recording function is enabled, the same sound is recorded on CH1 and CH2.

Sensitivity

Settings: "1" - "10"

Set the input sensitivity for audio input between 1 and 10. If the recording volume is low, increase the sensitivity. Note that increasing the sensitivity makes it easier for noise to enter. (Default setting: "5")

- "1": Lowest sensitivity.
- "10": Highest sensitivity.

5.1.3 Recording

Configure settings related to recording.



Resolution

Settings: "Native" / "1920x1080"

You can switch the recording resolution.

When the 2CH simultaneous recording function is enabled, the resolution of CH1/CH2 is fixed as "1920x1080."

- "Native" (default setting) Select this when you want to record at the resolution of the input signal.
- "1920x1080"

For input signals larger than 1920x1080, the video is recorded at a resolution no greater than 1920x1080 while maintaining the original aspect ratio. Input signals of 1920x1080 or less are recorded at their original resolution.

Video

Displays the current "Format," "Encoding" and "Quality."

When the 2CH simultaneous recording function is enabled, CH1 and CH2 share the same video settings. Video input from both channels is recorded and saved as separate video files. Even if one channel has no signal or an unsupported signal, recording will proceed for the channel receiving a supported signal.

Video - Format

Settings: "MP4" / "TS"

The format can be switched.

- "MP4" (default setting)
 - A format that is compatible with a wide range of playback environments.

A format that allows unconverted extraction using the MIR Browser (sold separately).

Video - Encoding

Settings: "H.264" / "H.265"

You can switch the encoding method.

- "H.264" (default setting)
 - This is a commonly used encoding method. Recorded data can be played back on commercially available computers.
- "H.265"

This method has a higher compression ratio than H.264. Therefore, while reducing the capacity of recorded data is possible, playback of recorded data on commercial computers may require installation of dedicated software.

Video - Quality

Settings: "High Quality" / "Standard" / "Prioritize Recording Time"

You can switch the video quality.

- "High Quality"
 Select this option when image quality is a priority.
- "Standard" (default setting)
 This setting takes into account the balance between image quality and recording time.
- "Prioritize Recording Time"
 Select this when the recording time is a priority.

Video - Recording Time (per 1TB)

It is calculated based on the remaining storage capacity and current settings. The estimated time that can be recorded per TB is displayed for each resolution (3840x2160 and 1920x1080).

When the 2CH simultaneous recording function is enabled, the estimated recording time for two channels at 1920x1080 resolution is displayed.

Still Image

The current "storage method" is displayed. The resolution of still images depends on the video resolution settings.

When the 2CH simultaneous recording function is enabled, still images are captured from the CH1/CH2 video input and saved as separate files. Even if one channel has no signal or an unsupported signal, a still image of the channel with the support signal input will be taken.

Still Image - Format

Settings: "JPEG" / "TIFF"

- "JPEG" (default setting)
 - This is a highly compressed format. The file size of still image data will be reduced but there will be a decrease in image quality.
- "TIFF"

There is no degradation in image quality. Select this option when image quality is a priority.

Recording Destination

Settings: "SSD and External Storage" / "SSD Only"

You can configure external storage, such as a NAS or USB storage device, as a recording destination alongside the internal SSD.

- "SSD and External Storage" (default setting)
 Select to record to a USB storage device or NAS alongside the internal SSD.
 In the case of NAS, configure the network settings and enable the NAS (see Network [> 76]).
 - In the case of USB, configure the USB storage settings and enable USB storage (see USB Storage [66]).
- "SSD Only"
 Select to record to the internal SSD only.

Recording Folder

Settings: "[Date]/" / "[Patient ID]/[Date]/" / "[Patient ID] [Date]/"

You can change the folder naming convention used when exporting recorded data to external storage.

"[Date]/" (default setting)

A directory named YYYYMMDD-HHMMSS^{*1} is created.

"[Patient ID]/[Date]/"

A YYYYMMDD-HHMMSS*1 directory will be created under the patient ID directory.

• "[Patient ID] [Date]/"

A directory named <Patient ID>_YYYYMMDD-HHMMSS*1 is created.

2CH Simultaneous Recording

Settings: "On" / "Off"

You can switch between recording a single video input or recording two video inputs simultaneously.

A system restart is required when changing this setting.

• "On"

Enables the 2CH simultaneous recording function. Select this when using two video inputs. 4K video input is downscaled to FHD resolution for recording.

• "Off" (default setting)

Disables the 2CH simultaneous recording function. Select this when using a single video input. Recording in 4K resolution is supported.

Note

- When the 2CH simultaneous recording function is enabled, the following settings will change.
 - Each input signal is fixed as "SDI" for "CH1" and "HDMI" for "CH2."
 - CH1 and CH2 resolution is fixed as "1920x1080."
 - Two video inputs can be previewed on an external monitor using PinP or PbyP mode.

^{*1} Indicates the date and time when the export begins.

5.1.4 Storage

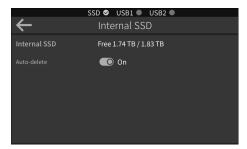
Set the auto-delete function of the internal SSD and format the USB storage device. This product is equipped with a built-in SSD auto-delete function to prevent recording from stopping due to insufficient storage space during recording.

Attention

- The internal SSD cannot be formatted with "Storage." Perform it from "Settings" "System" "Factory Reset." For more information, see Factory Reset Internal SSD [▶ 84].
- When connected to the USB port on the back of the unit, it is not recognized as USB storage.
 Also, USB storage devices connected via a USB hub are not supported. Connect directly to the USB port on the front of the recorder.
- USB storage devices with USB 2.0 or lower are not recommended due to slower transfer speeds. Connect a USB storage device with a speed of USB 5Gbps or higher.
- If you format the USB storage device, all data on the USB storage device will be erased and cannot be restored.

Internal SSD

You can check the free space and total capacity of the internal SSD, and turn the autodelete function on and off.



Internal SSD - Internal SSD

Displays the free space and total capacity of the internal SSD.

Internal SSD - Auto-delete

Settings: "On" / "Off"

"On" (default setting)

When the free space on the internal SSD falls below a certain value, it is automatically deleted from the old data.

"Off"

Recording stops when the internal SSD runs out of free space.

USB Storage

You can disable USB storage, check the free space and total capacity of the connected USB storage, and format it.



USB Storage - USB Storage

Settings: "On" / "Off"

Select to enable/disable USB storage.

• "On" (default setting): Enabled

· "Off": Disabled

USB Storage - Management - USB1 / USB2

Displays the USB1 or USB2 product name, USB standard, and free space and total capacity. When the USB storage is not connected or not mounted, it will display "-."

USB Storage - Management - USB1 / USB2 - Format

Settings: "exFAT" / "NTFS"

Formats the USB storage device with the selected file system.

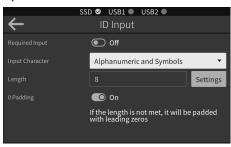
- "exFAT" (default setting) Access is possible on Windows and Mac machines.
- "NTFS" Windows standard format

5.1.5 Patient Information

Configure settings related to patient information.

ID Input

Settings for manual entry of patient information.



ID Input - Required Input

Settings: "On" / "Off"

• "On"

Requires the patient ID to be entered.

"Off" (default setting)
 Sets entering the patient ID to be optional.

ID Input - Input Character

Settings: "Alphanumeric and Symbols" / "Numeric"

Sets the input characters to only be switched between alphanumeric symbols and numbers.

- "Alphanumeric and Symbols" (default setting)
- "Numeric"

ID Input - Length

Settings: "4" - "20"

Press "Settings" to move to the screen for entering the number of digits.

Sets the maximum number of digits for the patient ID to be between 4 and 20 digits. (default setting: 8)

ID Input - 0 Padding

Settings: "On" / "Off"

Enables/disables 0 padding.

• "On" (default setting)

If the ID does not meet the specified number of digits, 0 is appended.

Barcode Reader

Configure settings to read patient IDs using a barcode reader. Connect a barcode reader to the USB port on the back of the recorder.



Barcode Reader - Barcode Reader

Settings: "On" / "Off"

• "On"

Allows barcode readers to be used to enter patient IDs. A barcode input dialog box is displayed when entering patient information.

• "Off" (default setting)

Barcode Reader - Start Position

Settings: "1" - "999"

Press "Settings" and set between 1 and 999 digits. (default setting: "1")

For example, if you want to accept as input the 10th character or later in a string of characters read from a bar code, enter 10.

Barcode Reader - Length

This cannot be set with "Barcode Reader". If you want to change the setting, set the number of digits in "ID Input".

Test Barcode Reader - Read

Press this key to start the barcode reader test.

Read the patient ID barcode using a barcode reader.

Test Barcode Reader - Reading Result

The test string read by the barcode reader is displayed as is.

Test Barcode Reader - Analysis Result

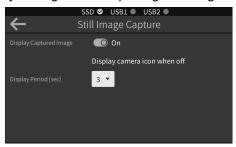
The parsed string is displayed based on the "Start Position" setting for "ID Input", "Length" and "Barcode Reader".

5.1.6 Screen Display

Configure settings for still image capture and external monitor display.

Still Image Capture

Configure the screen display settings when capturing still images.



Still Image Capture - Display Captured Image

Settings: "On" / "Off"

• "On" (default setting)

When a still image is captured, the image captured during the still image capture is displayed on the monitor for a certain period of time.

"Off"

When a still image is captured, the still image capture status display icon is displayed on the monitor for a fixed period of time. To capture continuously, set this to "Off."

Still Image Capture - Display Period (sec)

Settings: "1" - "5"

Set the display time of the captured image between 1 and 5 seconds.

This cannot be set when it is "Off." (Default setting: "3")

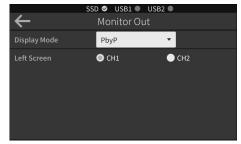
Monitor Out

Configure settings related to the external monitor display.

When the 2CH simultaneous recording function is disabled



When the 2CH simultaneous recording function is enabled



Monitor Out - Display Mode

Settings: "Single" / "PbyP" / "PinP"

When the 2CH simultaneous recording function is enabled, you can switch "Display Mode."

· "Single"

When the 2CH simultaneous recording function is disabled, the setting is fixed as "Single" and the video is displayed in the center of the screen.

When the 2CH simultaneous recording function is enabled, you can switch "Signal."

"PbyP" (default setting)

If you select "PbyP" and input multiple signals to the monitor, you can display multiple windows side-by-side.

You can switch the signal displayed on "Left Screen."

If you select "PinP" and input multiple signals to the monitor, you can display them in the parent screen and child screen.

You can switch the signal displayed on the "Parent Screen," "Size" of "Child Screen," and "Position" of "Child Screen."

Monitor Out - Signal

Settings: "CH1" / "CH2"

When the 2CH simultaneous recording function is enabled and "Display Mode" is set to "Single," this option appears and allows you to switch channels. An external monitor displays video from the selected channel. If still image display is enabled, the captured image from the selected channel is displayed on the left side of the built-in and external monitors.

 "CH1" (default setting) Select when you want to display video or images from a device connected to the SDI input terminal (J10).

"CH2"

Select when you want to display video or images from a device connected to the HDMI input terminal (J8).

Monitor Out - Left Screen

Settings: "CH1" / "CH2"

When the 2CH simultaneous recording function is enabled and "Display Mode" is set to "PbyP," this option appears and allows you to switch channels. An external monitor displays video from the selected channel on the left side. If still image display is enabled, the captured image from the selected channel is displayed on the left side of the built-in and external monitors.

 "CH1" (default setting) Select when you want to display video or images from a device connected to the SDI input terminal (J10) on the left side of the external monitor.

"CH2"

Select when you want to display video or images from a device connected to the HDMI input terminal (J8) on the left side of the external monitor.

Monitor Out - Parent Screen

Settings: "CH1" / "CH2"

When the 2CH simultaneous recording function is enabled and "Display Mode" is set to "PinP," this option appears and allows you to switch channels. An external monitor displays video from the selected channel on the parent screen. If still image display is enabled, the captured image from the selected channel is displayed on the left side of the built-in and external monitors.

 "CH1" (default setting) Select when you want to display video or images from a device connected to the SDI input terminal (J10) on the parent screen of the external monitor.

Select when you want to display video or images from a device connected to the HDMI input terminal (J8) on the parent screen of the external monitor.

Monitor Out - Child Screen - Size

Settings: "Large" / "Medium" / "Small"

When the 2CH simultaneous recording function is enabled and "Display Mode" is set to "PinP," the display appears, allowing you to switch the display size of the child screen.

- "Large"
- "Medium" (default setting)
- "Small"

Monitor Out - Child Screen - Position

Settings: "Upper Left" / "Upper Right" / "Lower Left" / "Lower Right"

When the 2CH simultaneous recording function is enabled and "Display Mode" is set to "PinP," the display appears, allowing you to switch the position of the child screen.

- "Upper Left"
- "Upper Right"
- "Lower Left"
- "Lower Right" (default setting)

5.1.7 User

Configure settings related to users.

User List

The username and type of registered users are displayed. Press "Add" to register users. You can register up to 30 people.



User Information - Username

Set the username to be between 1 to 16 alphanumeric characters.

The same username cannot be registered.

#, &,:, /, <, >, \," are not allowed.

User Information - Type

Settings: "Administrator" / "Standard"

Set the user type. At least one "Administrator" user is required.

- "Administrator" All functions can be used, including settings.
- "Standard" (default setting) Recording and playback functions are available.

User Information - Password

Set the password to be between 8 to 32 characters. It must contain at least one uppercase letter, one lowercase letter, and one number each.

Passwords are case-sensitive.

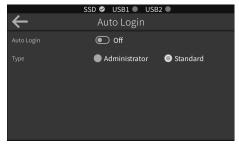
You cannot include a backslash (\).

User Information - Password (Confirmation)

Enter your password again.

Auto Login

Configure settings related to auto login.



Auto Login - Auto Login

Settings: "On" / "Off"

Set auto login when the product starts.

• "On"

Enables auto login.

"Off" (default setting)

Disables auto login. Log in at the login screen.

Auto Login - Type

Settings: "Administrator" / "Standard"

Select the type of user for auto login.

• "Administrator"

All functions can be used, including settings.

• "Standard" (default setting)

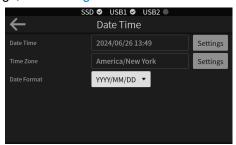
Recording and playback functions are available.

5.1.8 System

Configure settings related to the system.

Date Time

You can set the date/time, time zone, and date format of the recorder. Manually set the date and time fields for year (Western calendar) /month/day/hour/minute. For information about how to configure the settings, see Setting the Current Time and Time Zone [> 36].



Date Time - Date - Year

Settings: "2022" - "2050"

Date Time - Date - Month

Settings: "1" - "12"

Date Time - Date Time - Date - Day

Settings: "1" - "31"

Date Time - Date Time - Time - Hour

Settings: "0" - "23"

Date Time - Date Time - Time - Minute

Settings: "0" - "59"

Date Time - Time Zone - Region

Set the region where this product will be used.

Date Time - Time Zone - City

Set the city where this product will be used.

Date Time - Time Zone - Time Difference

The time difference between the set "Region" and "City" and UTC (Coordinated Universal Time) is displayed. Regions with daylight saving time will show standard time differences.

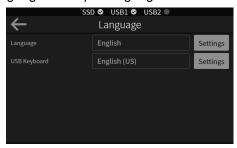
Date Time - Date Format

Settings: "YYYY/MM/DD" / "MM/DD/YYYY" / "DD/MM/YYYY"

Set the date display format.

Language

You can set the display language and input language with a USB connected keyboard.



Language - Language

Settings: "Japanese" / "English" / "German" / "French" / "Spanish" / "Italian" / "Simplified Chinese"

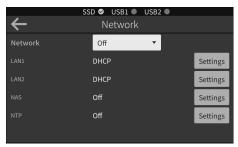
Sets the display language.

Language - USB Keyboard

Settings: "Japanese" / "English (US)" / "English (UK)" / "German" Set the language for the USB keyboard.

Network

Set the following when using a function connected to a network, such as simultaneously recording recorded data from a recorder to a NAS.



Network - Network

Settings: "Off" / "LAN1" / "LAN2" / "LAN1 & LAN2"

Enables/disables the network.

• "Off"

Disables the network.

• "LAN1"

Enables the network for the LAN1 port.

• "LAN2"

Enables the network for the LAN2 port.

"LAN1 & LAN2"

Enables the networks for the LAN1 and LAN2 ports.

Network - LAN1 / LAN2 - IP Address - Setting Method

Settings: "DHCP" / "Manual"

Set how to set up the network.

"DHCP"

Select this if you want to configure the network settings automatically using DHCP.

· "Manual"

Select this to configure network settings manually.

Network - LAN1 / LAN2 - IP Address - IP Address

Settings: "0.0.0.1" - "255.255.255.254"

If "Setting Method" is "Manual," set the IP address.

Enter the IPv4 address. IPv6 is not supported.

Network - LAN1 / LAN2 - IP Address - Subnet Mask

Settings: "0.0.0.1" - "255.255.255.254"

If "Setting Method" is "Manual," set the subnet mask address.

Network - LAN1 / LAN2 - IP Address - Gateway

Settings: "0.0.0.1" - "255.255.255.254"

If "Setting Method" is "Manual," set the gateway address.

Network - LAN1 / LAN2 - DNS - Primary

Settings: "0.0.0.1" - "255.255.255.254"

Set the primary server address.

Network - LAN1 / LAN2 - DNS - Secondary

Settings: "0.0.0.1" - "255.255.255.254"

Set the secondary server address.

Network - NAS - NAS

Settings: "On" / "Off"

Enables/disables the NAS.

Network - NAS - Server Address

If "NAS" is "On." set the server address to be between 2 and 64 characters.

You can set either a domain name or an IP address.

If the URL for the shared folder is "\ComputerName\Shared\Folder." enter "ComputerName" as the server address.

Network - NAS - Shared Folder

If "NAS" is "On," set the shared folder path of the server to be between 1 and 64 characters.

If the URL for the shared folder is "\ComputerName\Shared\Folder," enter "Shared\Folder" for the shared folder.

Network - NAS - Username

Set the NAS username to be between 0 and 64 characters.

If "NAS" is "Off," the set username is erased.

Network - NAS - Password

Set the NAS password to be between 0 and 64 characters.

If "NAS" is set to "Off," the set password will be erased.

Network - NTP - NTP

Settings: "On" / "Off"

Enables/disables the NTP.

Network - NTP - Server Address

Set the NTP server address to be between 2 and 64 characters.

You can set either a domain name or an IP address.

Brightness

The brightness of the built-in monitor can be adjusted in five levels from 1 to 5.



Brightness - Screen Brightness

Settings: "1" - "5"

Set between 1 and 5. (Default setting: 4)

- "1": Darkest.
- "5": Brightest.

Sound

You can set whether to play sound from the recorder when operating the touch panel monitor or when an error occurs.



Note

- When the operation sound of the touch panel monitor, main unit buttons, and trigger input is unnecessary, turn off "Operation Sound."
- If you do not want to export alert sounds for errors, warnings, and notifications, turn off "Alert Sound."
- If you want to check the recorded audio, connect a speaker to the audio output port (J1) and play back the recorded data.

Sound - Operation Sound

Settings: "On" / "Off"

You can turn on/off the operation sounds. (default setting: "On")

Press "Test" to test the operation sound that plays when operating the touch panel monitor.

Sound - Alert Sound

Settings: "On" / "Off"

You can turn on/off the alarm sounds. (default setting: "On")

Press "Test" to sound an alert when an error occurs.

External Integration

Configure settings related to external integration.

Trigger Input

Set the following when you want to control the recorder with a foot switch or similar device. You can configure the type of control for the connected device.



Note

· For information on trigger input port specifications, contact your dealer or local EIZO representative.

Trigger Input - Trigger 1

Settings: "Not Used" / "Still Image"

Configure the settings for the device connected to the trigger input terminal (J4).

- "Not Used" (default setting)
- "Still Image"

You can capture still images using trigger control.

Trigger Input - Trigger 2

Settings: "Not Used" / "Record/Stop" / "Record While On/Paused"

Configure the settings for the device connected to the trigger input terminal (J5).

- "Not Used" (default setting)
- · "Record/Stop"

You can start or stop recording using trigger control. Each time you execute trigger control, it toggles between recording and stopping.

· "Record While On/Paused"

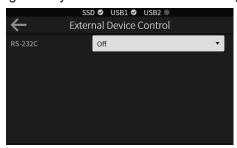
Recording is performed while the trigger input is on, and paused while it is off. When a foot switch is connected, recording will be initiated while the foot switch is pressed, and it will pause when the foot is released from the switch.

Attention

- When "Record While On/Paused" is selected, recording cannot be paused or stopped with the recorder buttons while recording is being performed by the trigger input.
- "Record While On/Paused" only accepts operations while in recording mode.

External Device Control

Set the following when using the tally function of the monitor during recording.



External Device Control - RS-232C

Settings: "Off" / "EIZO Monitor Recording Tally Control" / "EIZO Monitor Recording/Still Tally Control"

Displays an icon indicating the operating status of this unit on the EIZO CuratOR series monitor screen during recording. (The specific icons displayed vary depending on the monitor.)

To use this feature, connect an EIZO CuratOR series monitor to the RS-232C port on the back of the recorder and select either "EIZO Monitor Recording Tally Control" or "EIZO Monitor Recording/Still Tally Control."

- · "Off" (default setting)
- "EIZO Monitor Recording Tally Control"
 Displays the recording status (recording in progress) icon on the EIZO CuratOR series monitor screen during recording. "Tally Position" is fixed as "Upper Left."
- "EIZO Monitor Recording/Still Tally Control"
 During recording, icons for the recording status (recording in progress, pause, or stop) and still image capture status are displayed on the EIZO CuratOR series monitor screen.

Note

• When the 2CH simultaneous recording function is enabled, an icon indicating the recording status (recording, paused, or stopped) is displayed if either channel is recording.

External Device Control - Tally Position

Settings: "Upper Left" / "Lower Left" / "Upper Right"

When "EIZO Monitor Recording/Still Tally Control" is selected, set the display position of the icon to be displayed during tally control.

Press "Test" and check the connection.

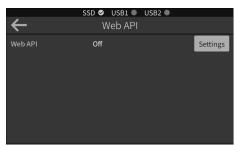
When it works correctly, a notification message "Succeeded to control EIZO monitor's tally." is displayed.

Note

· If it does not function properly or the connection fails, check whether the monitor supports tally control and whether it is connected via RS-232C with the power turned on. If you are unsure whether your monitor supports tally control, please contact your local EIZO representative.

Web API

Configure this setting when connecting to a network to control the recorder, such as for recording.



Attention

• Network settings are required. For more information, see Network [76].

Note

· For information on commands and other information, contact your dealer or local EIZO representative.

Web API - Web API

Settings: "On" / "Off"

Enables/disables the Web API. (default setting: "Off")

Web API - LAN

Settings: "LAN1" / "LAN2" / "LAN1 & LAN2"

Selects the LAN to be used when the Web API is enabled. (default setting: "LAN1")

Web API - Protocol

Settings: "HTTPS" / "HTTP & HTTPS"

Selects the protocol If the Web API is enabled. (default setting: "HTTPS")

Web API - Authentication

Settings: "On" / "Off"

If the Web API is enabled, set whether authentication is required. (default setting: "On") If authentication is required, set it to "On."

DICOM

Configure the settings to retrieve patient information from a DICOM MWL server over the network and apply it to the recorded data.

You will need to purchase and register an additional license to use the features.

Registration is performed in the extension options (see Extension Options [87]).



Attention

• Network settings are required. For more information, see Network [76].

Note

 For information on purchasing additional licenses, contact your dealer or local EIZO representative.

DICOM MWL

Displays whether DICOM MWL is enabled or disabled.

Communication

Configure communication settings.

Communication - DICOM MWL

Setting value: "On" / "Off"

Enables/disables the DICOM MWL function.

• "On"

Enables the DICOM MWL function.

• "Off" (default setting)

Disables the DICOM MWL function.

You can check the DICOM connection status using the "Verify" button.

Note

• If the connection fails, check the network connection and the "Communication" settings.

Communication - AE Title

Set "AE Title" to be between 1 and 16 alphanumeric characters. (default setting: MIR1 serial number)

Communication - Server AE Title

Set "Server AE Title" to be between 1 and 16 alphanumeric characters.

Communication - Server Address

Set "Server Address" to be between 2 and 64 alphanumeric characters.

You can set either a domain name or an IP address.

Communication - Port

Set the port number between 1 and 65535. (default setting: 104)

Modality

Configure settings related to modality.

Modality - Modality

Set "Modality" using up to 16 alphanumeric characters. (default setting: ES)

If entered in lowercase, it will be converted to uppercase.

\, *, ? are not allowed.

Modality - Scheduled Station AE Title

Set "Scheduled Station AE Title" using up to 16 alphanumeric characters.

\, *, ? are not allowed.

Patient's Name

Configure settings related to patient name.

Patient's Name - Patient's Name Component

Select the settings for the patient name components.

- "1st Component Group" (default setting)
- "2nd Component Group"
- "3rd Component Group"

Patient's Name - Phonetic Name

Select the patient name settings.

- "Not Used" (default setting)
- "1st Component Group"
- "2nd Component Group"
- "3rd Component Group"

Security

You can switch encryption of the information file between "TripleDES," "AES256," or "Off."



Note

· Information leading to personal identification, such as patient ID, patient name, and date of birth, is subject to encryption.

Security - Information File Encryption - Encryption Method

Settings: "TripleDES" / "AES256" / "Off"

Set CCX file encryption when exporting to external storage device.

- "TripleDES" (default setting)
 Compatibility with ADMENIC Browser is emphasized (encryption is performed using a key (fixed value) within the system).
- "AES256"
 Encryption strength is higher than "TripleDES", and security is emphasized (encryption is based on a password set by the user).
- "Off"
 Encryption is not performed.

Security - Information File Encryption - Password

If "Encryption Method" is "AES256," set the password to be between 8 to 32 characters. It must contain at least one uppercase letter, one lowercase letter, and one number each.

The password set here will be used in MIR Browser (sold separately).

Attention

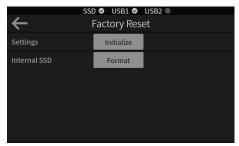
 If you forget your password, you will not be able to recover your data. Be careful not to lose your password.

Security - Information File Encryption - Password (Confirmation)

Enter your password again.

Factory Reset

This will initialize settings and format the internal SSD.



Factory Reset - Settings

Press "Initialize" to reset the settings to the factory values.

Once the settings have been initialized, a reboot will be performed automatically.

Attention

 Data on the internal SSD is not erased when the settings are initialized. Please format the internal SSD when erasing data. For more information, see Factory Reset - Internal SSD [▶ 84].

Factory Reset - Internal SSD

Press "Format" to format the internal SSD and delete all recorded data.

Once the formatting has been completed, a reboot will be performed automatically.

Attention

· When formatting, all data on the internal SSD is erased and cannot be restored.

Software Update

You can update the software used in this product. Software updates are performed via external storage device where the update file has been saved.

When updating via NAS, copy to the shared folder specified in NAS settings, and when updating via USB storage, copy to the root folder of the first partition.

Please download the update file from our website (www.eizo-or.com) in advance.

When using a NAS, connect the NAS to the LAN1/LAN2 port on the back of the recorder and check that the NAS is enabled in the network settings.

When using USB storage, connect the USB storage containing the copied update file to the USB port on the front of the recorder.



Attention

- Connect the USB storage device directly to the USB port on the front of the recorder. Connections via a USB hub are not supported.
- · Software versions cannot be downgraded.
- · Do not turn off the power while the software is being updated. Also, do not remove the external storage device.
- The file extension of the update file is "mirup."
- The settings will inherit the settings before the software update.
- · Default values will be set for functions that are added through software updates. Change the settings as needed.

Note

You can check information on the current version from "Software Update" or "Information" -"Device Information."

Software Update - Current Version

Displays the current software version.

Software Update - Software Update File List

Displays the software update files in the connected external storage device. In the case of USB storage, the search target is the root folder of the first partition, and in the case of NAS. the shared folder specified in the NAS settings. The file name and location of the update files are displayed. File name extensions are not displayed.

Press > to display the "Confirmation" message for software updates. Press "Yes" to perform the software update. While the software is being updated, the light on the "POWER" button (③) flashes orange, and a "Update in progress..." message is displayed. After that, a "Reboot in progress..." message is displayed, and a reboot will be performed automatically. After the software update is complete, the light on the "POWER" button (③) turns green.

Log

You can export logs and setting value information to external storage device.

When exporting to a NAS, connect the NAS to the LAN1/LAN2 port on the back of the recorder and check that the NAS is enabled in the network settings. The files are exported to the shared folder specified in the NAS settings.

To export to a USB storage device, connect the USB storage device to the USB port on the front of the recorder.



Log - Output Destination

Settings: "USB1" / "USB2" / "NAS"

Select the external storage device to which you want to export the log.

If there is a problem with this product, please export the log file and send it to EIZO when making an inquiry.

Log - Filename

Date(YYYYMMDD) CuratOR MIR-1 serial number(8 digits).log.tar

Press "File Output" to export the log and setting value information to the selected external storage device.

When the export is complete, a "Notice" message is displayed.

License Information

This product uses a number of open source software and manages licenses.

You can export the managed license information to an external storage device.

When exporting to a NAS, connect the NAS to the LAN1/LAN2 port on the back of the recorder and check that the NAS is enabled in the network settings. The files are exported to the shared folder specified in the NAS settings.

To export to a USB storage device, connect the USB storage device to the USB port on the front of the recorder.



License Information - Output Destination

Settings: "USB1" / "USB2" / "NAS"

Select the external storage device to which you want to export license information.

License Information - Filename

CuratOR_MIR-1_LICENSE.txt

Press "File Output" to export license information to the selected external storage device.

When the export is complete, a "Notice" message is displayed.

Extension Options

You can display, register, or delete registered licenses.

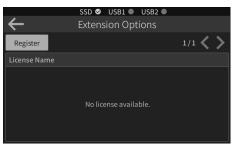
Displays whether the license configured as an extension is enabled or disabled.

For time-limited licenses that are currently active, they become invalid after the expiration date.

The license will not be deleted even if the settings are initialized.

Press ••• to view detailed license information.

Press 🗍 to delete the registered license. If you select "Yes," the license will be deleted and the system will reboot.



Extension Options - Register

Displays the extended license files found in the connected external storage.

When you press and select "Yes," the extended license will be enabled.

A reboot is performed after the settings are completed.

Extension Options - Extension Options Details

The enabled features, license files, license expiration dates, and ID information are displayed.

- · "License Name"
 - Displays the license name.
- · "Function"
 - Displays the enabled features.
- · "Display Text"
 - Displays license information.
- · "Expiration Date"

If there is an expiration date, the start date and end date are displayed. If the expiration date has expired, an expired icon will be displayed.

If there is no expiration date, "-" is displayed.

· "License ID"

Displays ID information.

Calibration

Calibrate the touch panel.

Calibration here refers to the function of adjusting the accuracy of the touch panel.

Please calibrate when the button/item that responds to the touch position is misaligned, or if touch operations do not work.

When the "Confirmation" message to start calibration appears, press "Yes."

Touch the center of the crosshairs displayed on the touch panel monitor to adjust. Crosshairs are displayed in the order of upper left > upper right > lower left > lower right.

A message to perform calibration is displayed.

If you press "Yes," the settings are completed and a reboot will be performed automatically.

Press "Cancel" to discard the settings and return to "System."

6 Information

6.1 Displaying Setting Information

1. Press i on the "Home Screen Menu."



"Information" is displayed.

- 2. In "Information," press the item you want to display.
 - "Device Information" (see Device Information [▶ 89])
 - "Current Settings" (see Current Settings [▶ 89])
 - "Input Signal" (see Input Signal [▶ 90])
 - "Network" (see Network [▶ 90])
 - "Logged-in User" (see Logged-in User [▶ 90])
 - "Storage" (see Storage [▶ 90])
 - "Extension Options" (see Extension Options [▶ 91])
 - "DICOM"*1 (see DICOM [▶ 91])

Device Information

Model

Displays the model name.

S/N

Displays the serial number.

Version

Displays the software version.

Usage Time

Displays the total usage time.

Current Settings

Video Input

Displays the type of signal to be recorded.

· Audio Input

Displays the type of audio input source.

Resolution

Displays the recording resolution.

Displays the format, encoding, and image quality.

· Still Image

Displays the format.

^{*1} Displayed only when a license is registered in the extension options. (see Extension Options [87]).

Input Signal

Input Signal (SDI / HDMI / CH1 (SDI) / CH2 (HDMI))

When the 2CH simultaneous recording function is disabled, information about the SDI or HDMI signal is displayed.

When the 2CH simultaneous recording function is enabled, information for CH1 (SDI) and CH2 (HDMI) is displayed.

Displays the resolution, frame rate, and scan method.

If there is no signal, "-" will be displayed. If the signal is not supported, "Unsupported Signal" will be displayed.

Network

LAN1

Displays the connection status and IP address of LAN1.

• MAC Address (LAN1)

Displays the MAC address of LAN1.

LAN2

Displays the connection status and IP address of LAN2.

· MAC Address (LAN2)

Displays the MAC address of LAN2.

NTP

The date and time of the last successful NTP sync is displayed.

Logged-in User

Username

Displays the username.

In the case of auto login, "<Auto Login>" is displayed.

• Type

Displays the user type.

Storage

Internal SSD

Internal SSD

Displays the free space and total capacity of the internal SSD.

USB Storage

Attention

- USB storage information can only be displayed when USB storage is enabled. For more information, see USB Storage [▶ 66].
- USB1 / USB2

Displays the USB1 or USB2 product name, USB standard, and free space and total capacity.

Format

Performs USB formatting (see USB Storage - Management - USB1 / USB2 - Format [67]).

NAS

Attention

- NAS storage information can only be displayed when the NAS is enabled. For more information, see Network [▶ 76].
- · Server Address

Displays the server address.

· Shared Folder

Displays the shared folder.

· Capacity

Displays the free space and total capacity of the NAS.

Extension Options

The enabled features, license files, license expiration dates, and ID information are displayed.

Press ••• to view detailed license information.

· "License Name"

Displays the license name.

• "Function"

Displays the enabled features.

"Display Text"

Displays license information.

· "Expiration Date"

If there is an expiration date, the start date and end date are displayed. If the expiration date has expired, an expired icon will be displayed.

If there is no expiration date, "-" is displayed.

· "License ID"

Displays ID information.

DICOM

Attention

- · DICOM settings are displayed only when a DICOM MWL license is registered as an extension option (see Extension Options [▶ 87]).
- DICOM MWL

Displays whether the DICOM MWL function is enabled or disabled.

7 Maintenance

7.1 Saving Recorded Data

Check the free space on the internal SSD regularly. For more information, see Internal SSD [▶ 66].

Recorded data can be copied from "Recording List" to a NAS or USB storage device. For more information, see Copying Recorded Data to External Storage Device [> 58].

Recorded data on the internal SSD can be deleted by selecting "Recording List." For more information, see Deleting Recorded Data [> 59].

7.2 Software Update

Connect a NAS to the LAN1/LAN2 port on the back of this product or a USB storage device to the front of the product and update the software from "System" > "Software Update."

"Software Update" shows a list of current versions and updated files. For more information, see Software Update [> 85].



8 Troubleshooting

8.1 If No Video is Output

Images are not displayed on the screen of the main unit

- · Check whether the power cord is connected properly.
- · Turn the main power switch on.
- Press the "POWER" button (
- Is the light on the "POWER" button ((a)) green? If the light is orange, press the "POWER" button (1) to turn on the power.
- Is the power on for the video signal output device connected to the product?
- Check whether the signal cable is connected properly. Make sure that the correct input port is selected for the input signal (see Video Input [61]).
- · Check whether the input signal is configured to meet the resolution and vertical scan frequency requirements of the product (see 9.2 Compatible Resolutions [99]).
- · If using an HDMI signal, try changing the compatibility setting in "Video Input Details" (see Video Input Details - HDMI - Compatibility [▶ 61]).

Video is not displayed on the external monitor

- · Is the monitor connected to the product turned on?
- · Check that the connected monitor is not faulty.
- Check whether the video input signal cable is connected properly. Make sure the input port that matches the video input signal is selected (see Video Input [61]).
- Make sure that the connected monitor supports the signal that this product can display (see 9.2 Compatible Resolutions [▶ 99]).
- If using an HDMI signal, try changing the compatibility setting in "Video Input Details" (see Video Input Details - HDMI - Compatibility [▶ 61]).
- Make sure that the video output port of the recorder and the monitor of the output destination are properly connected. If it is not displayed, try switching the connected output ports (pass-through output port and Monitor OUT port).

The video is displayed at a different resolution than the intended resolution

- If using an HDMI signal, try changing the compatibility setting in "Video Input Details" (see Video Input Details - HDMI - Compatibility [▶ 61]).
- Is the video signal output device connected to the product set up properly?

8.2 Touch Panel Problems

Touch operation is disabled

- Turn off the main power and then turn it on again.
- Is the light on the "POWER" button (
) green?
- · Check that there are no stickers or other objects attached to the area around the touch panel. If there are any stickers or other objects attached, the touch panel may not operate properly.

There is a gap between the touch position and the responsive buttons

Please perform calibration (see Calibration [▶ 88]).

8.3 Recording Problems

Unable to record

 The internal SSD may be running out of free space. Please delete unnecessary recorded data from "Recording List".

The internal SSD runs out of space

• If the auto-delete function is set to "On," old data will be automatically deleted when the free space on the internal SSD falls below a certain value (see Internal SSD [66]).

NAS is not recognized or recording data cannot be stored to NAS

- Check the NAS network settings (see Network [▶ 76]).
- Check if the NAS is enabled (see Network NAS NAS [▶ 77]).
- Check the free space on the NAS (see NAS [> 91]).
- · Make sure that the password set on the NAS has not changed.
- · Check that the permissions of the user authenticated to the NAS include write access.

USB storage not recognized or recording data cannot be saved to USB storage device

- Check if the USB storage is enabled (see USB Storage [66]).
- Check if the USB storage device has been confirmed to be compatible with the product.
 Check our website (www.eizo-or.com) for compatibility information between this product and USB storage.
- Check the free space on the USB storage (see USB Storage [66]).
- Try switching to a different USB port. The USB storage device can only save recorded data when connected to the USB port on the front of the recorder. If it is connected to the USB port on the back, reconnect it to the USB port on the front.
- Try formatting the USB storage with the USB format function of this product. (This
 product is not compatible with FAT32 format USB storage devices.)
- This product does not support connecting USB storage via a USB hub. If you are using a USB hub to connect the USB storage device, remove the USB storage device from the USB hub and connect it directly to the recorder.

Simultaneous exporting to an external storage device is not possible during recording

- Connect the USB storage or NAS before entering "Recording Mode."
- Check that "Recording Destination" in "Recording" is set to "SSD and External Storage" (see Connecting an External Storage Device [▶ 43]).

The USB storage device is not recognized in a Mac machine

When using on a Mac, select "exFAT" in the USB storage format function to format the
product. When formatting, all data stored on the USB storage will be erased. Make sure
it is safe to erase the data before formatting.

The USB storage capacity appears to be smaller than it is

• If the USB storage is separated by multiple partitions, the capacity will appear smaller. Format the device using the USB storage format function of the product before using it. When formatting, all data stored on the USB storage will be erased. Make sure it is safe to erase the data before formatting.

USB transfers are slow

Use a USB storage device with a speed of USB 5Gbps or higher (SSD recommended).

No audio output

- Check that "Source" in "Audio Input" is set to "Microphone" or "Audio." If it is set correctly, try adjusting the sensitivity (see Audio Input [▶ 62]).
- Make sure that an audio signal output device is connected to the audio input port (J2) or microphone input port (J3). Check that the settings are correct in "Audio Input" (see Audio Input [62]).

Recorded audio cannot be played back

 Make sure that an external device such as a speaker is connected to the audio output port (J1).

8.4 Other Problems

The screen of the main unit is too bright or too dark

· Set the brightness in the Settings screen.

Trigger input is not working

 Make sure it is connected to the trigger input port. It does not work when it is connected to a line port.

Check that the settings are correct in "Trigger Input" (see Trigger Input [▶ 79]).

ID cannot be read by barcode reader

- Make sure the barcode reader mode is set to Keyboard.
- If the barcode reader is connected to the USB port on the front of the recorder, reconnect it to the USB port on the back.

Even if the ID is read with a barcode reader, the ID is not confirmed

- · If you enter the Enter key as the terminal code in the barcode reader settings, the Enter input operation is unnecessary.
- · If you do not set a termination code, type "Enter" on a USB keyboard or software keyboard.

Recorded files cannot be played back on computer

 If "H.265" is selected in the video encoding method field, an H.265 codec must also be installed on the playback computer.

If your computer does not support H.265 playback, select "H.264".

The recording file is interrupted

• If the video signal is interrupted or changed, the video will be interrupted in order to recreate the recorded file. The file is similarly recreated when signal switching etc. are performed using a signal switcher or the like.

The tally is not displayed even when "EIZO Monitor Recording Tally Control" or "EIZO Monitor Recording/Still Tally Control" is enabled

- Check if the monitor supports tally display. If you have any questions, contact your local EIZO representative.
- Check that the recorder and monitor are connected with a straight RS-232C cable.

The light on the "POWER" button (((a)) flashes green or orange

- · The lamp flashes green during startup or shutdown.
- The lamp flashes orange while the software is being updated.
- In other cases, the product may be malfunctioning. Please contact your local EIZO representative. When making inquiries, please indicate the flashing pattern (green one time, orange two times, etc.).

"Unsafe internal temperature detected. Please refrain from using the device until the temperature drops. Continued use will cause a forced shutdown." message appears on the screen of the main unit

 This product has a built-in cooling fan. If you see this message, the fan may not be working properly. Please contact your local EIZO representative.

If you cannot remember your password

Please contact your local EIZO representative.

9 Specifications

9.1 Specifications

9.1.1 Video Input

Ports	HDMI x 1, 12G-SDI (BNC) x 1
Resolution	Maximum 3840 x 2160

9.1.2 Video Output

Pass-through ports	HDMI x 1, 12G-SDI (BNC) x 1
Monitor OUT port	HDMI (1920 x 1080) x 1

9.1.3 Recording

Video compression formats	H.264, H.265
Video file format	MP4, TS
Still image compression formats	JPEG, TIFF
Still image file formats	JPEG, TIFF

9.1.4 Audio Recording

Audio format	AAC

9.1.5 Power

Input	100 – 240 VAC ±10 %, 50 / 60 Hz, 0.70 – 0.35 A
Maximum power consumption	68 W or less
Standby mode	7 W or less (when HDMI signal is input)

9.1.6 Physical Specifications

Dimensions (W x H x D)	220.0 mm x 107.2 mm x 300.0 mm
Net weight	Approx. 3.8 kg

9.1.7 Touch Panel

Size	5.0 inch
Detection method	Resistive film type

9.1.8 USB (Front)

Ports	Downstream	USB-A (USB 5Gbps) x 2
Standard		USB Specification Revision 3.1 Gen 1
Communication speed		5 Gbps, 480 Mbps, 12 Mbps, 1.5 Mbps
Power supply		Max. 900 mA per port

9.1.9 USB (Back)

Ports	Downstream	USB-A (USB 2.0) x 4
Standard		USB Specification Revision 2.0
Communication speed		480 Mbps, 12 Mbps, 1.5 Mbps
Power supply		Max. 500 mA per port

9.1.10 Audio Input

Ports		Line input (3-pole 3.5 mm mini jack) x 1
		Microphone input (3-pole 3.5 mm mini jack) x 1
Sampling rate		48 kHz
Form	Line input	Analog stereo
	Microphone input	Analog mono

9.1.11 Audio Output

Speakers	Built-in
Ports	3-pole 3.5 mm mini jack x 1

9.1.12 Network

Ports	RJ-45 (LAN adapter)
Wired LAN	IEEE802.3ab (1000BASE-T)
	IEEE802.3u (100BASE-TX)
	SMB (supports encrypted communication and user authentication)

9.1.13 Other

RS-232C	D-Sub 9 pin x 1
Trigger input	3-pole 3.5 mm mini jack x 2

9.1.14 Operating Environmental Requirements

Temperature	0 °C – 40 °C
Humidity	20 % – 80 % R.H. (no dew condensation)
Air pressure	540 hPa – 1060 hPa

9.1.15 Transport / Storage Conditions

Temperature	-20 °C – 60 °C	
Humidity	10 % – 90 % R.H. (no dew condensation)	
Air pressure	200 hPa – 1060 hPa	

9.2 Compatible Resolutions

The product supports the following resolutions. (\checkmark : Supported, -: Not supported)

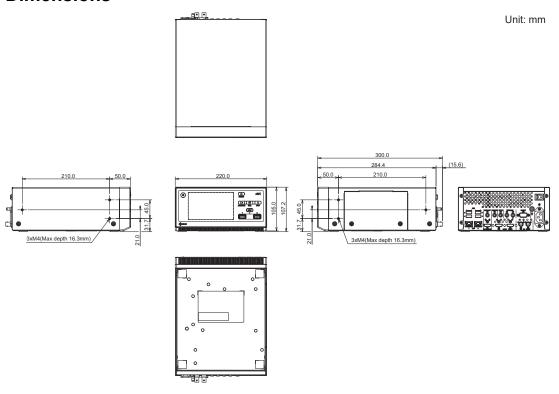
Resolution	Scan format	Vertical scan	НДМІ	input	SDI input
		frequency(Hz)	HDMI	DVI*1	
800 x 600	Progressive	60.317	√	✓	-
1024 x 768	Progressive	60.004	√	√	-
1280 x 768	Progressive	59.870	√	√	-
1280 x 1024	Progressive	60.020	√	√	-
1600 x 1200	Progressive	60.000	√	√	-
1920 x 1200	Progressive	59.950	√	√	-
1280 x 720	Progressive	25.000	√	-	✓
1280 x 720	Progressive	30.000	√	-	✓
1280 x 720	Progressive	29.970	√	-	✓
1280 x 720	Progressive	59.940	√	-	✓
1280 x 720	Progressive	60.000	√	✓	✓
1920 x 1080	Interlaced	59.940	√	-	✓
1920 x 1080	Interlaced	60.000	√	-	✓
1920 x 1080	Progressive	59.940	√	-	√*²
1920 x 1080	Progressive	60.000	√	✓	√*²
1280 x 720	Progressive	50.000	✓	-	✓
1920 x 1080	Interlaced	50.000	√	-	✓
1920 x 1080	Progressive	50.000	√	-	√*²
1920 x 1080	Progressive	25.000	√	-	✓
1920 x 1080	Progressive	29.970	✓	-	✓
1920 x 1080	Progressive	30.000	√	-	✓
3840 x 2160	Progressive	25.000	√	-	✓
3840 x 2160	Progressive	29.970	√	-	✓
3840 x 2160	Progressive	30.000	√	-	✓
3840 x 2160	Progressive	50.000	√	-	√*²
3840 x 2160	Progressive	50.000	√*3	-	-
3840 x 2160	Progressive	59.940	√	-	√*²
3840 x 2160	Progressive	59.940	√*3	-	-
3840 x 2160	Progressive	60.000	√	-	√*²
3840 x 2160	Progressive	60.000	√*3	-	-

^{*1} Using a DVI-HDMI converter cable

^{*2} Only YCbCr422 supports 10 bit.

^{*3} Supports YCbCr420.

9.3 Dimensions



9.4 Accessories

The following accessories are available separately.

Medical Imaging Viewer and Management Software	MIR Browser
Foot switch	FS500

9.4.1 Medical imaging viewing/management software (CuratOR MIR Browser)

CuratOR MIR Browser is software for managing and utilizing videos and still images created with EIZO CuratOR MIR-1.

Operating Environment

os	Windows 10 64-bit
	Windows 11
CPU	Intel® Core processors
	*10th generation (Comet Lake) and later
Memory	8 GB or more
Screen resolution	1920 x 1080 or higher

9.4.2 Foot Switch (CuratOR FS500)

The CuratOR FS500 is an exclusive product for EIZO CuratOR MIR-1.

- Precautions when using the foot switch (CuratOR FS500) Be careful of the following points. Failure to do so may cause malfunction.
 - Please use it in accordance with the product specifications.
 - Do not place anything on top of the foot switch.
 - Do not carry the product while holding the cable.
 - Do not place or drop objects on the cable.
 - Avoid putting excessive stress on the plug connection.
 - Disconnect the connection ports from the recorder unit before cleaning or maintenance.
 - Do not remove or disassemble the cover.

Specifications

Physical specifications

Dimensions (W x H x D)	73.0 mm x 30.5 mm x 103.0 mm
Net weight	Approx. 260 g

Operating Environmental Requirements

Temperature	0 °C – 40 °C
Humidity	20 % – 80 % R.H. (no dew condensation)
Air pressure	800 hPa – 1060 hPa

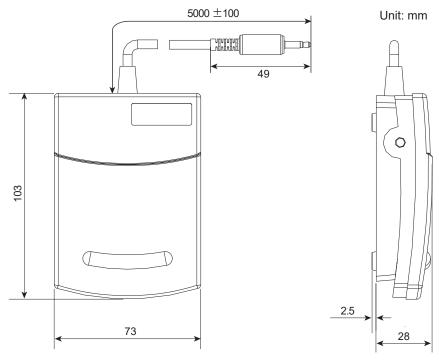
Transport / Storage Conditions

Temperature	-20 °C – 60 °C
Humidity	10 % – 90 % R.H. (no dew condensation)
Air pressure	200 hPa – 1060 hPa

Other

Ports	3-pole 3.5 mm mini jack	
Cable length	5 m	
Protection rating	IPX8	

Dimensions



Disinfection with chemicals

• When disinfecting footswitches, we recommend using chemicals that have been tested by us (see the table below). Note that even if these chemicals are used, there is no guarantee that the product will not be damaged or deteriorated.

Category	Chemical type	Product example
Alcohol-based	Rubbing ethanol (ethyl alcohol)	Ethanol
Alcohol-based	Isopropanol	Isopropyl alcohol (IPA)

Appendix

Trademark

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

The SuperSpeed USB Trident Logo is a registered trademark of USB Implementers Forum, Inc.



Intel is a trademark of Intel Corporation in the United States and/or other countries.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Mac is a trademark of Apple Inc.

DICOM is the registered trademark of the National Electrical Manufacturers Association for its standards publications relating to digital communications of medical information.

ADMENIC is a registered trademark of Carina Systems, Co. Ltd. in Japan and other countries.

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Licenses

This product contains open source software. If open source software that is licensed under the terms of the GPL (GNU GENERAL PUBLIC LICENSE) is included, EIZO will distribute the source code corresponding to the GPL software on a CD-ROM or other medium at actual cost for at least three years after purchase to any individual or organization that contacts EIZO through the contact information below, in accordance with the terms of the GPL license. In addition, if the source code includes material licensed under the terms of the LGPL (GNU LESSER GENERAL PUBLIC LICENSE) or MPL (Mozilla Public License), the source code will be distributed in the same manner as the GPL described above.

Contact information: www.eizoglobal.com/contact/index.html

Except for open source software licensed under GPL/LGPL or otherwise, the software contained in this product may not be transferred, copied, disassembled, decompiled, or reverse engineered. In addition, export of any software contained in this product in violation of export laws and regulations is prohibited.

License information for the open source software used in this product is available at www.eizoglobal.com/support/oss/.

This product is included in the scope of rights of one or more patent claims posted at the following URL.

patentlist.hevcadvance.com

This product includes software created by Independent JPEG Group.

Medical Standard

- It shall be assured that the final system is in compliance to IEC60601-1 requirement.
- Power supplied equipment can emit electromagnetic waves, that could influence, limit or result in malfunction of the product. Install the equipment in a controlled environment, where such effects are avoided.

Classification of Equipment

Type of protection against electric shock: Class I

EMC class: IEC60601-1-2 Group 1 Class B
 Classification of medical device (EU): Class I

· Mode of operation: Continuous

IP Class: IPX0

^{*}Contact your local EIZO representative.

EMC Information

MIR-1 has the capability to record images and video captured by medical equipment.

Environments of Intended Use

The MIR-1 is intended to be used in the following environments.

 Professional healthcare facility environments such as clinics and hospitals (including use in the vicinity of high-frequency surgical equipment such as electrosurgical knives).

The following environments are not suitable for using the MIR-1.

- · Home healthcare environments
- · In the vicinity of short-wave therapy equipment
- · RF shielded room of the medical equipment systems for MRI
- · In shielded location Special environments
- · Installed in vehicles including ambulances
- · Other special environments

/ WARNING

• The MIR-1 requires special precautions regarding EMC and need to be installed. You need to carefully read EMC Information and the "PRECAUTIONS" section in this document, and observe the following instructions when installing and operating the product.

⚠ WARNING

 The MIR-1 should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it will be used.

MARNING

• When using a portable RF communication equipment, keep it 30 cm (12 inches) or more away from any part, including cables, of the MIR-1. Otherwise, degradation of the performance of this equipment could result.

№ WARNING

 Anyone who connects additional equipment to the signal input part or signal output parts, configuring a medical system, is responsible that the system complies with the requirements of IEC60601-1-2.

♠ WARNING

Images may be distorted if the product is used near a device such as high-frequency surgical
equipment. Check in advance to ensure that no problems occur during use.

WARNING

 Do not touch the signal input/output connectors while using the MIR-1. It may affect the displayed image.

• Be sure to use cables that satisfy the following requirements.

Use of cables that do not satisfy the requirements could result in increased electromagnetic emissions, reduced electromagnetic immunity of this equipment, and incorrect operation.

Cable	Max. cable length	Shielding
AC Cord	2 m	Unshielded
BNC cable (SDI)	30 m	Shielded
HDMI cable	2 m	Shielded
RS-232C cable	3 m	Shielded
USB cable	3 m	Shielded
LAN cable	30 m	Shielded
Audio cable	2.1 m	Unshielded
TRIGGER IN port cable	5 m	Unshielded

Technical Descriptions

Electromagnetic emissions

The MIR-1 is intended for use in the electromagnetic environment specified below.

The customer or the user of the MIR-1 should assure that it is used in such an environment.

Emission test	Complian ce	Electromagnetic environment - Guidance	
RF emissions	Group 1	The MIR-1 uses RF energy only for its internal function.	
CISPR11		Therefore, its RF emission are very low and are not likely to cause any interference in nearby electronic equipment.	
RF emissions CISPR11	Class B	The MIR-1 is suitable for use in all establishments, including domestic establishments and those directly connected to the	
Harmonic emissions IEC61000-3-2	Class D	public low-voltage power supply network that supplies buildings used for domestic purposes.	
Voltage fluctuations / flicker emissions IEC61000-3-3	Complies		

Electromagnetic immunity

The MIR-1 has been tested at the following compliance levels (C) according to the testing requirements (T) for Professional healthcare facility environments specified in IEC60601-1-2.

The customer or the user of the MIR-1 should assure that MIR-1 is used in the following environment.

Immunity test	Test level (T)	Compliance level (C)	Electromagnetic environment - Guidance	
Electrostatic discharge (ESD)	±8 kV contact discharge	±8 kV contact discharge	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be a least 30 %.	
IEC61000-4-2	±15 kV air discharge	±15 kV air discharge		
Electrical fast	±2 kV power lines	±2 kV power lines	Mains power quality should be	
transients / bursts IEC61000-4-4	±1 kV input / output lines	±1 kV input / output lines	that of a typical commercial or hospital environment.	
Surges	±1 kV line to line	±1 kV line to line	Mains power quality should be	
IEC61000-4-5	±2 kV line to ground	±2 kV line to ground	that of a typical commercial or hospital environment.	
Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11	$0~\%~U_{\scriptscriptstyle T}~(100~\%~dip~in~U_{\scriptscriptstyle T})~0.5~cycles~and~1~cycle$	$0~\%~U_{\scriptscriptstyle T}~(100~\%~dip~in~U_{\scriptscriptstyle T})~0.5~cycles~and~1~cycle$	Mains power quality should be that of a typical commercial or hospital environment. If the user	
	70 % U _T (30 % dip in U _T) 25 cycles / 50 Hz	70 % U _T (30 % dip in U _T) 25 cycles / 50 Hz	of the MIR-1 requires continued operation during power mains interruptions, it is recommended	
	0 % $U_{\scriptscriptstyle T}$ (100 % dip in $U_{\scriptscriptstyle T}$) 250 cycles / 50 Hz	0 % U_T (100 % dip in U_T) 250 cycles / 50 Hz	that the MIR-1 be powered from an uninterruptible power supply or a battery.	
Power frequency magnetic fields IEC61000-4-8	30 A/m (50 / 60 Hz)	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.	
			The product should be kept at least 15 cm away from the source of power frequency magnetic fields during use.	

Immunity test	mmunity test Test level (T)		Electromagnetic environment - Guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the MIR-1, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended separation distance
Conducted disturbances induced	3 Vrms 150 kHz to 80 MHz	3 Vrms	d = 1.2√P
by RF fields IEC61000-4-6	6 Vrms ISM bands between 150 kHz and 80 MHz*1	6 Vrms	d = 1.2√P
Radiated RF fields IEC61000-4-3	3 V/m 80 MHz – 2.7 GHz	3 V/m	d = 1.2√P, 80 MHz – 800 MHz
IEC61000-4-3	OU MINZ = 2.7 GNZ		d = 2.3√P, 800 MHz – 2.7 GHz
			Where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and "d" is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey ² , should be less than the compliance level in each frequency range ³ .
			Interference may occur in the vicinity of equipment marked with the following symbol.
			((<u>\(\(\)\)</u>))

Note

- U_T is the a.c. mains voltage prior to application of the test level.
- At 80 MHz and 800 MHz, the higher frequency range applies.
- These guidelines regarding conducted interference induced by RF fields or radiated RF fields may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

^{*1} The ISM (Industrial, Scientific, and Medical) bands between 150 kHz and 80 MHz are 6.765 MHz to 6.795 MHz, 13.553 MHz to 13.567 MHz, 26.957 MHz to 27.283 MHz, and 40.66 MHz to 40.70 MHz

^{*2} Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the MIR-1 is used exceeds the applicable RF compliance level above, the MIR-1 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the MIR-1.

^{*3} Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable or mobile RF communication equipment and the MIR-1

The MIR-1 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the MIR-1 can suppress electromagnetic interference by maintaining a minimum distance (30 cm) between portable and mobile RF communications equipment (transmitters) and the MIR-1. The MIR-1 has been tested at the following compliance levels (C) for the required test levels (T) of immunity to the proximity electromagnetic fields in the following RF communication services.

	1	T	1	1	ĺ
Test frequency (MHz)	Bandwidth*1 (MHz)	Service*1	Modulation*2	Test level (T)*3 (V/m)	Compliance level (C) (V/m)
385	380 – 390	TETRA 400	Pulse modulation*2 18 Hz	27	27
450	430 – 470	GMRS 460, FRS 460	FM ±5 kHz deviation 1 kHz sine	28	28
710	704 – 787	LTE Band 13, 17	Pulse modulation*2	9	9
745		217 Hz	217 Hz		
780]				
810	800 – 960	GSM 800 / 900,	Pulse modulation*2	28	28
870		TETRA 800,	18 Hz		
930		iDEN 820 CDMA 850, LTE Band 5			
1720	1700 – 1990	GSM 1800;	Pulse modulation*2	28	28
1845		CDMA 1900; GSM 1900;	217 Hz		
1970		DECT; LTE Band 1, 3, 4, 25; UMTS			
2450	2400 – 2570	Bluetooth®, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation*2 217 Hz	28	28
5240	5100 – 5800	WLAN 802.11 a/n	Pulse modulation*2	9	9
5500			217 Hz		
5785					

^{*1} For some services, only the uplink frequencies are included.

^{*2} The carrier wave is modulated using a 50 % duty cycle square wave signal.

^{*3} Test levels were calculated based on maximum power and a separation distance of 30 cm.

The customer or the user of the MIR-1 can help prevent interference caused by the proximity magnetic field by maintaining a minimum distance (15 cm) between RF transmitters and the MIR-1. The MIR-1 has been tested at the following compliance level (C) for the requirement test level (T) of proximity magnetic field immunity.

Test frequency	Modulation	Test level (T) (A/m)	Compliance level (C) (A/m)
134.2 kHz	Pulse modulation*1	65	65
	2.1 kHz		
13.56 MHz	Pulse modulation*1	7.5	7.5
	50 kHz		

^{*1} The carrier wave is modulated using a 50 % duty cycle square wave signal.

The MIR-1 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. For other portable and mobile RF communication equipments (transmitters), minimum distance between portable and mobile RF communications equipment (transmitters) and MIR-1 as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of	Separation distance according to frequency of transmitter (m)			
transmitter (W)	150 kHz – 80 MHz d = 1.2√P	80 MHz – 800 MHz d = 1.2√P	800 MHz – 2.7 GHz d = 2.3√P	
0.01	0.12	0.12	0.23	
0.1	0.38	0.38	0.73	
1	1.2	1.2	2.3	
10	3.8	3.8	7.3	
100	12	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance "d" in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note

- At 80 MHz and 800 MHz, the separation distance for a higher frequency range must be applied.
- These guidelines regarding conducted interference induced by RF fields or radiated RF fields may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Information for Radio Interference

For U.S.A., Canada Only
FCC Supplier's Declaration of Conformity

We, the Responsible Party

Company: EIZO Inc.

Address: 5710 Warland Drive, Cypress, CA 90630

Phone: (562) 431-5011

declare that the product Trade name: EIZO Model: CuratOR MIR-1

is in conformity with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note

Use the specified cable below so as to keep interference within the limits of a Class B digital device.

- AC Cord
- · Shielded Signal Cable

Canadian Notice

This Class B information technology equipment complies with Canadian ICES-003. Cet équipement informatique de classe B est conforme à la norme NMB-003 du Canada.

LIMITED WARRANTY

EIZO Corporation (hereinafter referred to as "EIZO") and distributors authorized by EIZO (hereinafter referred to as the "Distributors") warrant, subject to and in accordance with the terms of this limited warranty (hereinafter referred to as the "Warranty"), to the original purchaser (hereinafter referred to as the "Original Purchaser") who purchased the product specified in this document (hereinafter referred to as the "Product") from EIZO or Distributors, that EIZO and Distributors shall, at their sole discretion, either repair or replace the Product at no charge if the Original Purchaser becomes aware within the Warranty Period (defined below) that the Product malfunctions or is damaged in the course of normal use of the Product in accordance with the description in the instruction manual of the Product (hereinafter referred to as the "User's Manual").

The period of this Warranty is two (2) years from the date of purchase of the Product (hereinafter referred to as the "Warranty Period").

EIZO and Distributors shall bear no liability or obligation with regard to the Product in relation to the Original Purchaser or any third parties other than as provided under this Warranty.

EIZO and Distributors will cease to hold or store any parts (excluding design parts) of the Product upon expiration of five (5) years after the production of the Product is discontinued.

In repairing the Product, EIZO and Distributors will use renewal parts which comply with our QC standards. If the unit cannot be repaired due to its condition or the stockout of a relevant part, EIZO and Distributors may offer the replacement by a product with equivalent performance instead of repairing it.

The Warranty is valid only in the countries or territories where the Distributors are located. The Warranty does not restrict any legal rights of the Original Purchaser.

Notwithstanding any other provision of this Warranty, EIZO and Distributors shall have no obligation under this Warranty whatsoever in any of the cases as set forth below:

- Any defect of the Product caused by freight damage, modification, alteration, abuse, misuse, accident, incorrect installation, disaster, adherent dust, faulty maintenance and/ or improper repair by third party other than EIZO and Distributors;
- 2. Any incompatibility of the Product due to possible technical innovations and/or regulations;
- 3. Any defect of the Product caused by external equipments;
- 4. Any defect of the Product caused by the use under environmental conditions not anticipated by EIZO;
- 5. Any deterioration of the attachments of the Product (e.g. cables, User's Manual, CD-ROM, etc.);
- 6. Any deterioration of the consumables, and/or accessories of the Product (e.g. batteries, remote controller, touch pen, etc.);
- 7. Any exterior deterioration or discoloration of the Product;
- 8. Any deformation, discoloration, and/or warp of the exterior of the Product;
- 9. Any defect of the Product caused by placement in a location where it may be affected by strong vibrations or shocks;
- 10. Any deterioration or malfunction of the cooling fan caused by adherent dust.

To obtain service under the Warranty, the Original Purchaser must deliver the Product, freight prepaid, in its original package or other adequate package affording an equal degree of protection, assuming the risk of damage and/or loss in transit, to the local Distributor. The Original Purchaser must present proof of purchase of the Product and the date of such purchase when requesting services under the Warranty.

The Warranty Period for any replaced and/or repaired product under this Warranty shall expire at the end of the original Warranty Period.

EIZO OR DISTRIBUTORS ARE NOT RESPONSIBLE FOR ANY DAMAGE TO, OR LOSS OF, DATA OR OTHER INFORMATION STORED WITHIN THE PRODUCT RETURNED TO EIZO OR DISTRIBUTORS FOR REPAIR.

EIZO AND DISTRIBUTORS MAKE NO FURTHER WARRANTIES, EXPRESSED OR IMPLIED, WITH RESPECT TO, INCLUDING, WITHOUT LIMITATION, THE PRODUCT AND ITS QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE.

IN NO EVENT SHALL EIZO OR DISTRIBUTORS BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGE WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFIT, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT OR IN ANY CONNECTION WITH THE PRODUCT, WHETHER BASED ON CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, EVEN IF EIZO OR DISTRIBUTORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IN NO EVENT SHALL EIZO OR DISTRIBUTORS BE LIABLE FOR ANY CLAIMS FOR DAMAGES RESULTING FROM THE ILLEGAL OR UNAUTHORIZED DISCLOSURE OR USE OF ANY VIDEO DATA STORED WITHIN THE PRODUCT.

THIS EXCLUSION ALSO INCLUDES ANY LIABILITY WHICH MAY ARISE OUT OF THIRD PARTY CLAIMS AGAINST THE ORIGINAL PURCHASER. THE ESSENCE OF THIS PROVISION IS TO LIMIT THE POTENTIAL LIABILITY OF EIZO AND DISTRIBUTORS ARISING OUT OF THIS LIMITED WARRANTY AND/OR SALES.

After-sales service

If you have questions about support for this product, please contact your local EIZO representative.

When requesting a repair

When repairing, maintaining, or inspecting, please delete the data and setting information stored within this product in advance to prevent information leakage. To remove it, format the internal SSD using the features included in this product (see Factory Reset - Internal SSD [> 84]). Before deleting, back up your data if necessary. If you are unable to delete data due to a malfunction, contact your local EIZO representative.

Note

• If the internal SSD is faulty, the light on the "POWER" button ((*)) on the front of the recorder flashes in the order of green one time to orange four times.

If it is under warranty

We will repair or replace the faulty part in accordance with the provisions of the warranty card.

If the warranty period has passed

We will explain the scope of repairs (service details), approximate repair costs, repair periods, repair procedures, etc.

What to let us know when requesting repairs

- · Your name, contact address, phone number/fax number
- · Date of purchase, name of dealer
- Model name and serial number (The serial number is an 8-digit number displayed on the label on the bottom of the main unit. Example: S/N 12345678)
- Usage environment (model name, model number, etc.) of the device connected to this
 product
- · Details of the failure or anomaly (as detailed as possible)
- Error code (if displayed on the screen)

Disposal

When disposing of this product and accessories, they are treated as industrial waste, so
please dispose of it in accordance with the regulations of the region or local government
where this product is being used. In addition, this product has a built-in lithium primary
battery. When disposing the product, please outsource disposal to an industrial waste
disposal company that handles batteries.



The symbol indicates that batteries shall be collected separately in the EU.

Manufacturer of internal batteries

Panasonic Energy Co., Ltd.

- 1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
- When disposing, it is necessary to completely delete personal data (patient information, images of affected areas, etc.) stored within this product in order to prevent personal information leakage. It is recommended that internal SSDs be formatted (see Factory Reset Internal SSD [> 84]) using the features included in this product, and then take

steps to make them unrecoverable, such as physically destroying them. If it is difficult to completely delete the data, please contact your local EIZO representative.







153 Shimokashiwano, Hakusan, Ishikawa 924-8566 Japan

EC REP
Carl-Benz-Straße 3, 76761 Rülzheim, Germany

EIZO Limited UK Responsible Person

1 Queens Square, Ascot Business Park, Lyndhurst Road, Ascot, Berkshire, SL5 9FE, UK

EIZO AG

CH REP

Moosacherstrasse 6, Au, CH-8820 Wädenswil, Switzerland

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