Installation Manual

DuraVision®
FDF2304W-IP

Color LCD Monitor

Important

Please read this Installation Manual, the Instruction Manual and the Setup Manual carefully to familiarize yourself with safe and effective usage.

• **The latest manual is available for download from our web site:**
  http://www.eizoglobal.com

About this manual

	Setup Manual	Describes precautions and setup processes from network camera connection to camera image display.
	Instruction Manual	Describes operation of network cameras and live image screen menus, etc.
	Installation Manual (this manual)	Describes network camera registration and function setup, monitor system setup, etc.

Notice for this monitor

This product is suited for displaying surveillance camera images.

This product has been adjusted specifically for use in the region to which it was originally shipped. If the product is used outside the region, it may not operate as specified in the specifications.

This product may not be covered by warranty for uses other than those described in this manual.

The specifications noted in this manual are only applicable when the following are used:
• Power cords provided with the product
• Signal cables specified by us

Only use optional products manufactured or specified by us with this product.

When installing the monitor in a rack, ensure that there is adequate space around the sides, back and top of the monitor.

If you place this product on a lacquer-coated desk, the color may adhere to the bottom of the stand due to the composition of the rubber. Check the desk surface before use.

It takes about 30 minutes for the performance of electrical parts to stabilize. Please wait 30 minutes or more after the monitor power has been turned on, and then adjust the monitor.

Monitors should be set to a lower brightness to reduce changes in luminosity caused by long-term use and maintain a stable display.

When the screen image is changed after displaying the same image for extended periods of time, an afterimage may appear. Use the screen saver or power save function to avoid displaying the same image for extended periods of time.

Periodic cleaning is recommended to keep the monitor looking new and to prolong its operation lifetime (For details, refer to the Instruction Manual.).

The LCD panel is manufactured using high-precision technology. Although, missing pixels or lit pixels may appear on the LCD panel, this is not a malfunction. Percentage of effective dots: 99.9994 % or higher.

The backlight of the LCD panel has a fixed lifetime. When the screen becomes dark or begins to flicker, please contact your local EIZO representative.

Do not press on the panel or edge of the frame strongly, as this may result in display malfunctions, such as interference patterns, etc. If pressure is continually applied to the panel, it may deteriorate or damage your panel. (If the pressure marks remain on the panel, leave the monitor with a black or white screen. The symptom may disappear.)

Do not scratch or press on the panel with any sharp objects, as this may result in damage to the panel. Do not attempt to brush with tissues as this may scratch the panel.

When the monitor is cold and brought into a room or the room temperature goes up quickly, dew condensation may occur on the interior and exterior surfaces of the monitor. In that case, do not turn the monitor on. Instead wait until the dew condensation disappears, otherwise it may cause some damage to the monitor.

Disclaimer

EIZO shall not be liable in any way to any person whatsoever for the occurrences described below.

1. Any incidental, special or consequential disruption or damage directly or indirectly arising in connection with this product.
2. Any loss, damage or cost resulting from misuse or neglect.
3. Any malfunction or failure occurring after unauthorized disassembly, repair or alteration regardless of its cause.
4. Any inconvenience, loss or damage caused by the inability to display images due to any reason or cause including malfunctions or failures in this product.
5. Any failure or consequential inconvenience, loss or damage due to malfunction or failure of a combined system that comprises this product and any third party products.
6. Any consequential claim for compensation or complaint based on privacy violation or any other reason by individuals or entities recorded in the surveillance images which are made public for/by whatever cause or used.
7. Any loss of registered data for whatever cause.

While this product displays camera surveillance images, the use of this product alone does not directly prevent crime.

Cautions for Network Use

Because this product is used by connecting to networks, the following risks apply

1. Leakage of information through this product.
2. Unauthorized operation of this product by a malicious third party.
3. Interference or suspension of the use of this product by a malicious third party.

In order to prevent the above described damage, it is the user's responsibility to implement adequate network security measures including the measures described below.
- Use this product with a safety-ensured network by using a firewall or other network security systems.
- Change the administrator password periodically.

CONTENTS

Chapter 1   Product overview

This color LCD monitor can display images from up to 16 network cameras[*1].
This manual describes network camera setup, monitor system setup and specifications, etc.
For information on setup, see "Chapter 2 Configuring from the monitor screen" (page 8) and "Chapter 3 Configuring from a Web Browser" (page 36).

*1   A type of camera which converts images into network signals and transmits the signals.

1-1.   Features

- 23.0″ wide format LCD
- Supports a resolution of 1920 × 1080
- LCD panel with wide field of view adopted
  IPS LCD panel with 178° horizontal and vertical viewing angles
- LED backlight LCD panel
  No mercury, a hazardous substance, is used.
- Receives input video signals from network cameras.
  - Compatible with video compression formats H.264 and MJPEG.
  - Up to 16 network cameras can be registered and displayed.
  - Images from multiple network cameras can be displayed simultaneously (1-/4-/8-/9-/16-screen display).
  - Network cameras can be controlled from the monitor.
  - Unicast and Multicast video signals can be displayed.
- Equipped with Easy Setup function
  Necessary settings for setup can be performed with a wizard.
- Compatible with ONVIF Profile S
- Provides display modes (DAY/NIGHT) suitable for surveillance camera images
- EIZO's unique "Smart" technology
  - Smart Resolution function
    This function adjusts the perceived resolution of the images so that the blurs are reduced and images are displayed vividly and clearly.
  - Smart Insight function
    This function analyzes the image and corrects the brightness for each pixel to make dark area of images visible.
  - Noise Reduction function
    This function reduces the amount of block noise that occurs due to video compression.
- Can be operated remotely with the remote control.
- You can register a network camera and configure the live image screen using your web browser
- You can have an alert displayed on the live image screen when communication with a network camera is lost.
- You can save the settings to a USB storage device and load the settings.
- A 2-year long-term warranty for 24-hour continuous use

1-2. System Configuration

You can communicate with network cameras, display video on the monitor, operate cameras, and so on.
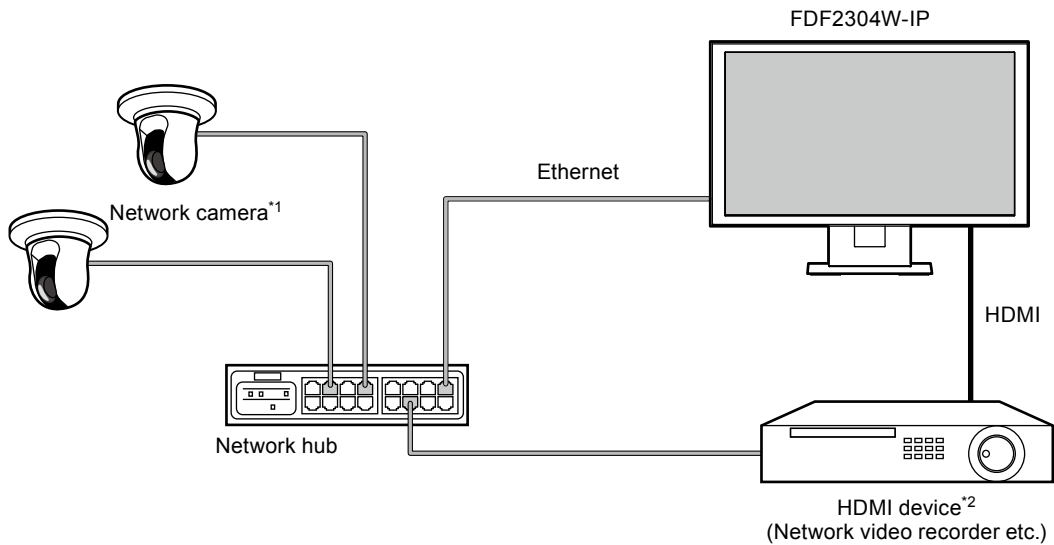
*1 Up to 16 network cameras can be registered.
*2 Use an HDMI device (e.g. network video recorder) if necessary.

1-3. Supported Network Cameras

This product supports the following network cameras:

- Panasonic i-pro series network cameras
- ONVIF Profile S-compatible network cameras

Attention

- Supported network cameras vary depending on the monitor's software version. Check the software version of the monitor you are using, then check our website (http://www.eizoglobal.com) for details on supported network cameras. For information on how to check the software version, see "2-6. Configuring System Settings" (page 22).
- For installation and settings of network cameras, also check the network camera's manual.

Chapter 2 Configuring from the monitor screen

You can configure and operate network cameras from the monitor screen. To configure from your web browser, see "Chapter 3 Configuring from a Web Browser" (page 36).

2-1. Before Configuration

To configure from the monitor screen, you need to be logged in to the system.
Configuration of this product is allowed only by ADMIN level users.
Be sure to log in to the system with a user account of this level.

Procedure

1. Press ⏻ on the front of the monitor or POWER on the remote control.
   The power indicator lights up blue and the live image screen is displayed.
   (For information on the live image screen, refer to the Installation Manual.)

2. Select 👤 (Login) under "System".
   The login screen is displayed.
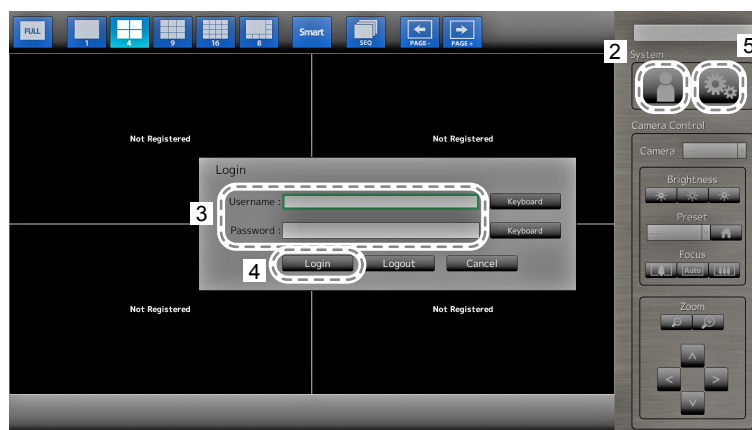
3. Enter a username and a password.
4. Select "Login".
   The display changes back to the live image screen.

5. Select ⚙ (Setting).
   The setting screen is displayed.
   (For information on the setting screen, see "2-2. Setting Screen" (page 9).

Note

- See "To enter characters" (page 10) for the character entry method.
- The following user information is set by default:
  - Username: "admin"
  - Password: "admin"
  - User Level: "ADMIN"
- For information on user settings, see "2-7. Setting User Information" (page 32).
- It is recommended that you log out after completing the setup, so as to prevent a third party from operating the network camera or altering the settings.

Attention

- When the monitor power is turned off while the user is logged in, the user is logged out from the system automatically. In such a case, you cannot display the web interface in your web browser.

2-2. Setting Screen

The setting screen is used for various settings such as network camera registration and monitor system settings.

● Basic operations
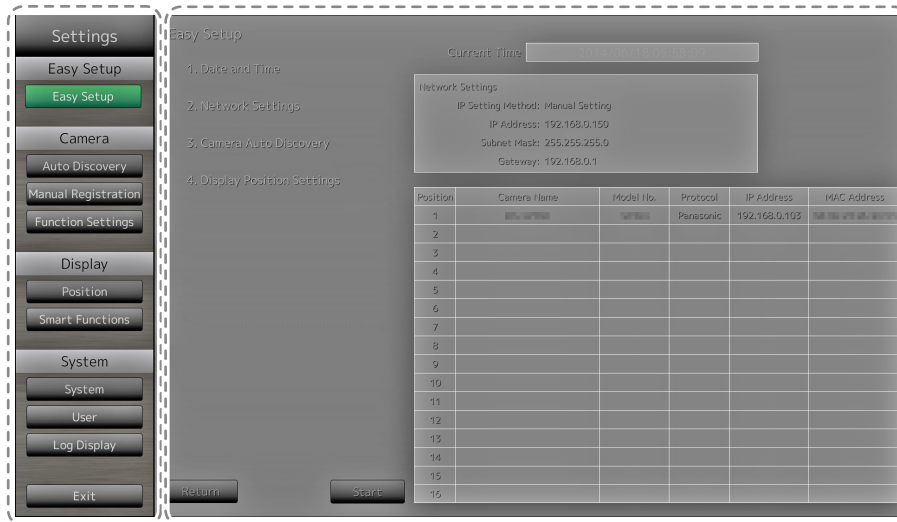
List of setting items   The setting screen of the selected item is displayed.

To select an item

Press the ∧ / ∨ / < / > buttons.

To confirm a selected item

Press ENTER.

To change a setting

• With setting buttons   Press ENTER.

• With list box
    1. Press ENTER.
      An option list is displayed.
    2. Select the setting with ∧ or ∨.
    3. Press ENTER.

To return to the previous menu level

Press RETURN.

> **Note**
> • When canceling a setting change in process, press RETURN.

To enter characters

1. Press ENTER.

   The text field is highlighted in green.

2. Press the number buttons (0 to 9).

   Press a button consecutively to change over to the character next in order. For the order of character entry, refer to the table shown below.

Button	Input characters								
0	0	-	_	:	.	/	(space)		
1	1								
2	a	b	c	A	B	C	2		
3	d	e	f	D	E	F	3		
4	g	h	i	G	H	I	4		
5	j	k	l	J	K	L	5		
6	m	n	o	M	N	O	6		
7	p	q	r	s	P	Q	R	S	7
8	t	u	v	T	U	V	8		
9	w	x	y	z	W	X	Y	Z	9

   To enter a new character, press ＞.

   To delete a character, press CLEAR.

3. Press ENTER.

Note

- Entering network addresses
  Network address text boxes are separated by [.] (a period mark).
  - When a three-digit number is entered, the cursor automatically moves to the next entry position.
  - When entering a two-digit or one-digit number, press ＞ to move to the next entry position.
  - When using a mouse, enter [.] (a period mark) to move to the next entry position.

To exit the setting screen

1. Select "Exit" from the list of setting items with ∨.

2. Press ENTER.

Attention

- While settings are being applied (registered) to the system, a "Setting" ("Registering") message is displayed. Do not turn off the monitor while the message is displayed. Otherwise, setting information may be lost.

2-3. Setting Network Cameras

● To automatically discover network cameras

Discover network cameras on the network automatically and register them to the system.

This procedure is for setting network cameras connected after performing "Easy Setup" upon initial startup of the monitor.

Attention

• Only the network cameras installed in the same subnet as the monitor are detected. If a network camera is installed in a different subnet, the camera must be registered manually (see "To manually register network cameras" (page 12)).

• When network cameras are not detected by automatic discovery, see "Chapter 4 Troubleshooting" (page 66).

• For information on "Easy Setup", refer to the Setup Manual.

Procedure

1. Select "Auto Discovery".
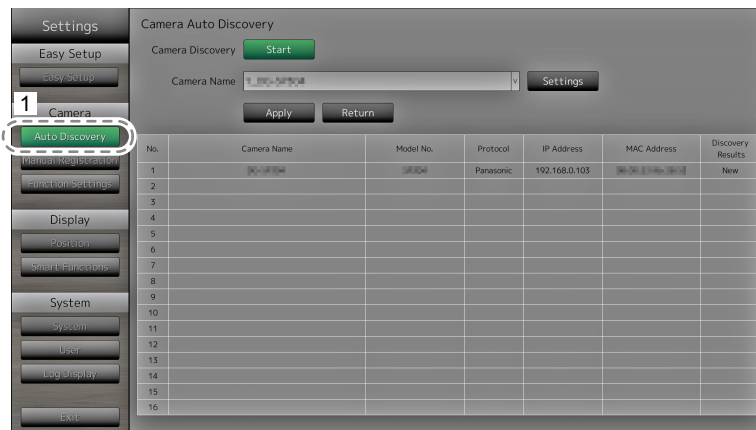
Displays registered cameras.

2. Select "Start" at "Camera Discovery".

The user authentication screen is displayed.
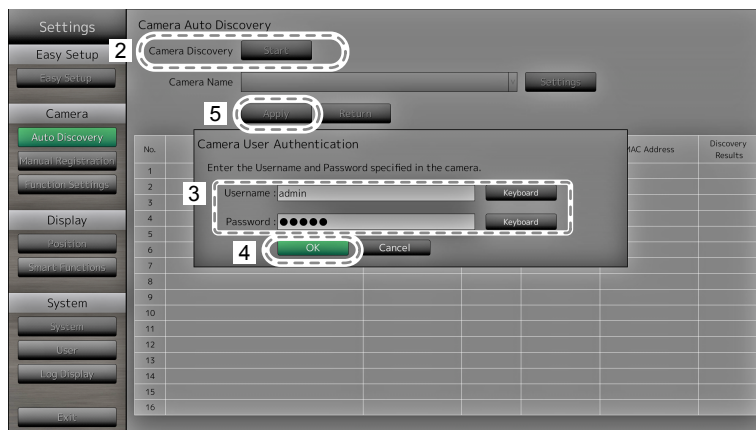
3. Enter the "Username" and "Password" specified in the network camera.

The following values are entered as the default settings:

- Username: "admin"
- Password: "12345"

These are the default settings for Panasonic network cameras. Change the settings if necessary. Please contact your administrator for the username and password.

4. Select "OK" and press ENTER.

    Automatic discovery is started and a "Searching" message is displayed.

    When the search is completed, the discovered network cameras are added to the list.

5. Select "Apply".

    The setting complete screen is displayed. Select "OK".

Note

When using a Panasonic network camera
- The settings of the newly detected network camera can be changed.
  Select the network camera whose settings you want to change at "Camera Name" and then select "Settings".
  Configure the items on the displayed setting screen. The items that can be configured differ depending on the
  camera.

- When registered automatically, the username, password and stream name for accessing the camera are
  set to the following values automatically. You can change the settings in "Manual Setting" (see "To manually
  register network cameras" (page 12).) Please contact your administrator for your username and password
  to access the network camera.
    - Username: "admin"
    - Password: "12345"
    - Stream: "2"
    - Channel: "1"
    - RS485 PTZ Control: "Off"[1]
        [1] Only set "RS485 PTZ Control" to "On" when connecting an external device to the network camera
              using a RS485 cable.

● To manually register network cameras

Register network cameras manually for cases described below.
- When a network camera is installed in a subnet differing from the subnet of the monitor.
- When settings such as network settings of a registered network camera have been changed.
- When registering a video encoder which supports multiple channels

Procedure

1. Select "Manual Registration".

    A list of network cameras currently registered is displayed.

2. Select the network camera to configure at "Camera Name".

    When registering a network camera installed in a subnet differing from the subnet of the monitor, select an
    available number (with no network camera registered). For a network camera that is already registered,
    select the network camera of which to change settings.

3. Select "Settings".

The network camera setting screen is displayed.
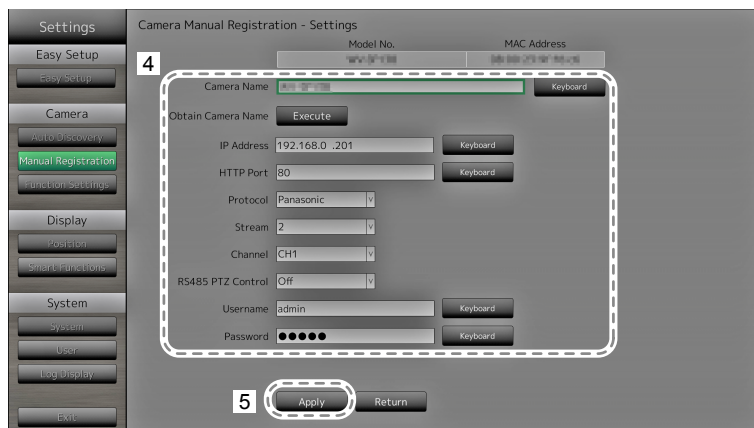
4. Configure the items.

For setting details, contact your system administrator.

Item	Detail	Setting range
Camera Name	Enter the camera name. When you select "Execute" for Obtain Camera Name, the camera automatically obtains the camera name. • Panasonic network camera: Camera title • Network camera compatible with the "ONVIF" protocol: Camera model number, manufacturer name, etc.	Alphanumeric characters (up to 24 characters)
IP Address	Enter the network camera IP address.	0.0.0.0 to 255.255.255.255
HTTP Port	Enter the network camera HTTP port number.	1 to 65535
Protocol	Select the protocol for controlling the camera.	ONVIF/Panasonic
Stream[*1]	Set the number of the stream for delivering camera images. Select a stream supported by the connected network camera.	1 to 4
Channel[*1]	Select the channel of the analog encoder. Set to "1" if the network camera does not support the channel function.	1 to 4
RS485 PTZ Control	Controls the brightness, automatic focus adjustment, pan, tilt and zoom for devices that are connected to the camera through a RS485 cable.	On/Off
Username, Password	Enter the username and password to use when accessing network cameras.	Alphanumeric characters and symbols (up to 32 characters)

*1   Cannot be set if using a network camera compatible with the "ONVIF" protocol.

5. Select "Apply".

The setting complete screen is displayed. Select "OK".

Attention
• If you want to change the set values using the remote control, press the CLEAR button, then enter the values (for details see "To enter characters" (page 10)).
• Depending on the network camera type, the "Model No." displayed on the setting screen may differ from when the camera is discovered automatically and when it is registered manually.
• Only set "RS485 PTZ Control" to "On" when connecting an external device to the network camera using a RS485 cable.

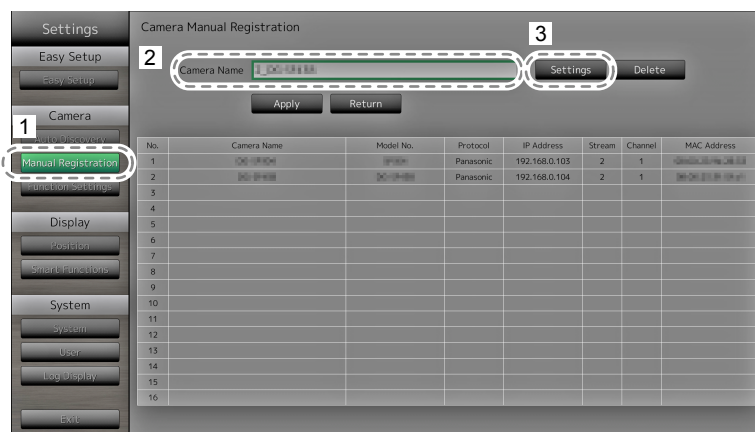**Note**
• With manual registration, network settings of a camera cannot be changed. When changing the network settings of a camera, check the network camera's manual.

● To set network camera functions

Set the network camera functions from the monitor.

Procedure

1. Select "Function Settings".

Displays current settings.
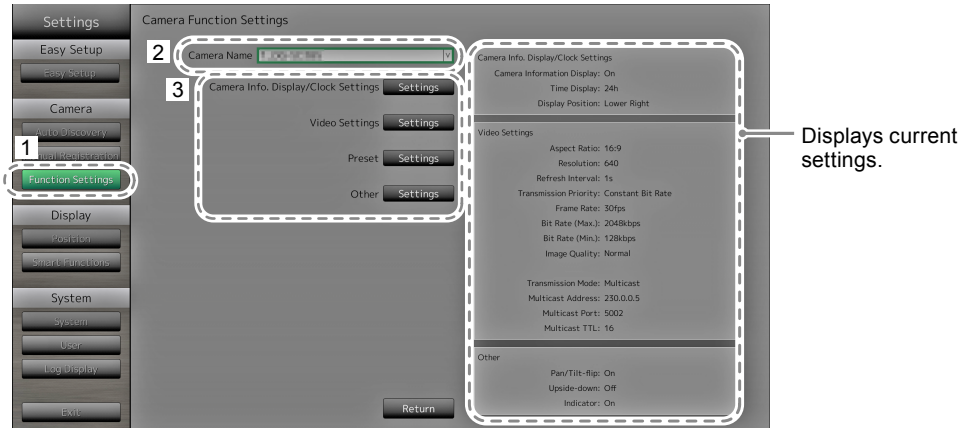
2. Select the network camera to configure at "Camera Name".
3. Select a function.

   The setting screen for the selected function is displayed.

Camera Information Display

Select to display or not display the camera information and time of the network camera settings on the camera images.

Attention

• Cannot be set if using a network camera compatible with the "ONVIF" protocol.
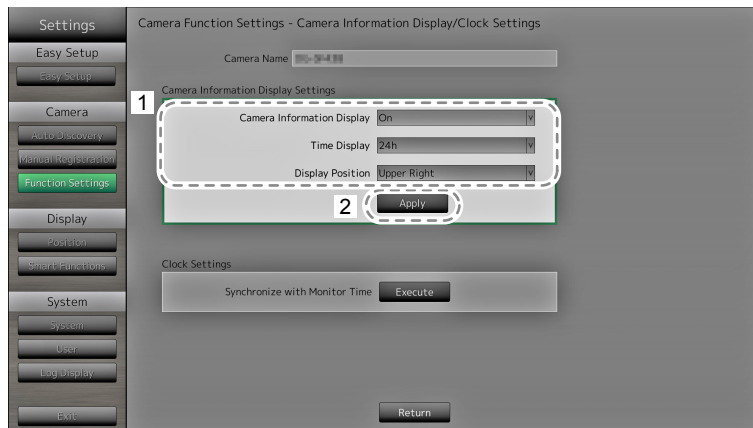
1. Configure the items.

Item	Detail	Setting range
Camera Information Display	Set whether or not to display camera information.	On/Off
Time Display	Set whether or not to display the time.	12h/24h/Off
Display Position	Set the display position of the camera information and time.	Upper Left/Upper Right/Lower Left/Lower Right

2. Select "Apply".

   The setting complete screen is displayed. Select "OK".

Clock Settings

1. Synchronizes the time of the network camera with the time of the monitor.
   Select "Execute" to synchronize the clock.

Video Settings

Set the Image Quality of transmitted images for the network camera.

Note

• This product supports H.264 and MJPEG (ONVIF only) video compression formats.

Attention

• When devices such as recorders are connected to a network camera, the display and recording of such devices may be affected.

When using a Panasonic network camera

1. Configure the items.

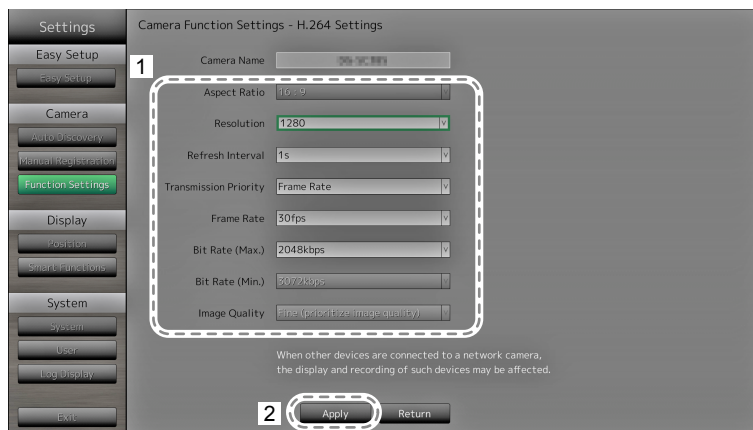| Item	Detail	Setting range
Aspect Ratio	Set the H.264 aspect ratio.[*1]	Camera imaging mode
Resolution	Set the H.264 resolution.	According to the camera specification
Refresh Interval	Set the refresh interval[*2] of H.264 images.	0.2s/0.33s/0.5s/1s/2s/3s/4s/5s
Transmission Priority	Set the transmission mode of H.264 images.	Constant Bit Rate/Frame Rate/Best Effort
Frame Rate	(When the mode is set to "Frame Rate" at "Transmission Priority".) Set the frame rate (image update interval) of H.264 images.[*3]	1fps/3fps/5fps/7.5fps/10fps/12fps/ 15fps/20fps/30fps
Bit Rate (Max.)	Set the maximum H.264 image bit rate.	64kbps/128kbps/256kbps/384kbps/ 512kbps/768kbps/1024kbps/ 1536kbps/2048kbps/3072kbps/ 4096kbps/8192kbps/
Bit Rate (Min.)	(When the mode is set to "Best Effort" for "Transmission Priority".) Set the minimum H.264 image bit rate.	64kbps/128kbps/256kbps/384kbps/ 512kbps/768kbps/1024kbps/ 1536kbps/2048kbps/3072kbps/ 4096kbps/8192kbps/
Image Quality	(When the mode is set to "Constant Bit Rate" or "Best Effort" for "Transmission Priority".) Set the H.264 image quality.	Low (prioritize motion)/Normal/Fine (prioritize image quality)

*1 When "1920" is selected for "Resolution", the aspect ratio is fixed to 16:9. The aspect ratio cannot be set when the network camera "Stream" is set to a value other than "1".

*2 For H.264 images, the differential data between the full screen frame data and previous frame are sent periodically. "Refresh Interval" refers to the interval for sending these full screen frame data. Shortening this interval improves the stability of image quality but also increases the load on the network. "Refresh Interval" refers to the interval at which the full screen data is transmitted. Shortening this interval improves the image quality but also increases the load on the network.

*3 The shorter the interval, the shorter the update interval and the smoother the display, but also the larger the load on the network.

2. Select "Apply".

The setting complete screen is displayed. Select "OK".

Attention

• To display the multicast stream of Panasonic network cameras, configure multicast on the camera.

• When you change the "Aspect Ratio", the camera imaging mode will be changed. Depending on the imaging mode, the image quality of other recording devices or display devices may be impacted. Check the impact of changes to the imaging mode before configuring the settings.

ONVIF Profile S-compatible network cameras
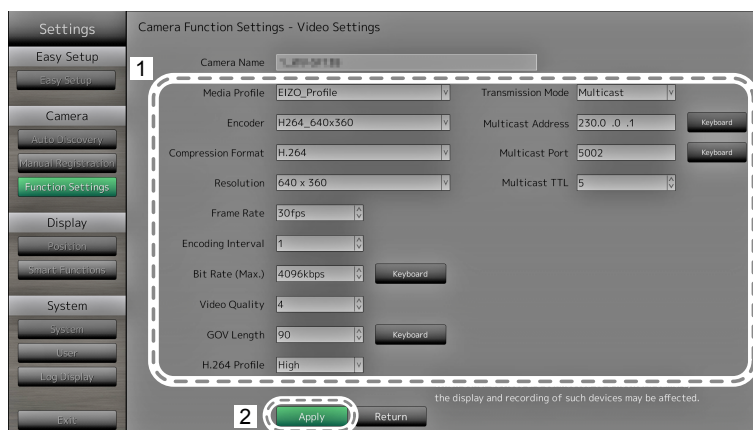
1. Configure the items.

Item	Detail	Setting range
Media Profile	Select the ONVIF image profile.	EIZO_Profile/camera profile
Encoder	Select the encoder settings of ONVIF images.	According to the camera specification
Compression Format	Select compression format of ONVIF images.	H.264/MJPEG
Resolution	Set the resolution of ONVIF images.	According to the camera specification
Frame Rate	Set the frame rate (image update interval) of ONVIF images.	1 to 30 fps
Encoding Interval	Set the encoder interval of ONVIF images.	According to the camera specification
Bit Rate (Max.)	Set the maximum ONVIF image bit rate.	0 to 8192 kbps
Video Quality	Set the ONVIF image quality. The higher the value, the higher the image quality.	According to the camera specification
GOV Length[*1]	Set the I-frame interval of ONVIF images.	According to the camera specification
H.264 Profile[*1]	Select a H.264 standard profile.	Baseline/Main/Extended/High
Transmission Mode	Select the transmission format of ONVIF images.	Unicast/Multicast
Multicast Address[*2]	Set the multicast address for multicast transmission of ONVIF images.	224.0.0.0 to 239.255.255.255
Multicast Port[*2]	Set the multicast port number for multicast transmission of ONVIF images.	1024 to 65534 even numbers only
Multicast TTL[*2]	Set the network TTL value for multicast transmission of ONVIF images.	According to the camera specification

*1 Displays when "H.264" is selected in "Compression Format".
*2 Displays when "Multicast" is selected in "Transmission Mode".

2. Select "Apply".

The setting complete screen is displayed. Select "OK".

Attention

• Depending on the network camera type, some set values may not be reflected. Check the specifications of the camera.
• When changes are made to the image quality settings such as resolution, this may impact on the image quality of other recording devices and display devices using the same "Encoder". Check the impact of changes to the image quality settings before configuring the settings.

Preset

Preset the shooting position and adjustment status of the network camera.

Displays images of the selected camera.
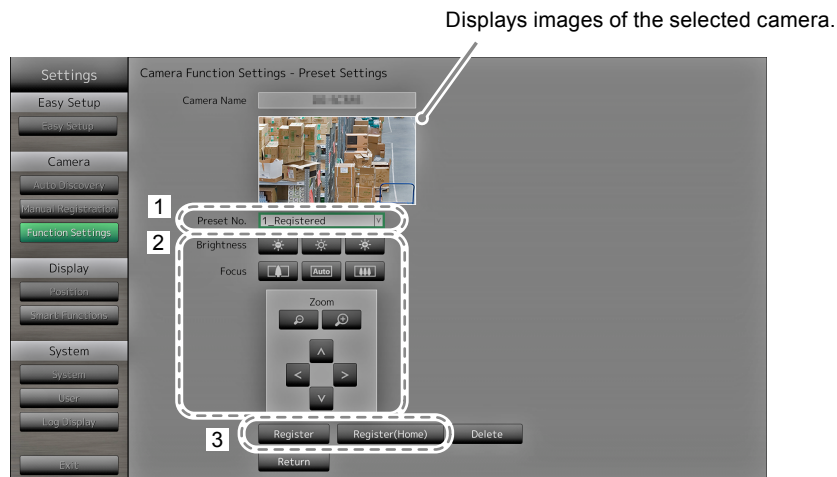
1. Select the number (1 to 256) to set for "Preset No".
2. Configure the items.

Item	Detail	Setting range
Brightness	Adjust the network camera brightness.	-
Focus	Adjust the network camera focus.	-
Zoom	Adjust the network camera display magnification.	-
Position	Adjust the network camera shooting position (pan/tilt).	-

3. Select "Register (Home)" for registering the selected number as the home position. For all other registrations, select "Register".

   The setting complete screen is displayed. Select "OK".

Attention

- Depending on the type of the network camera you are using, some functions may not be available.
- Depending on the network camera type, it may not be possible to register the brightness and focus settings.

Note

- After the setting is registered, the number displayed at "Preset No." changes from "Not Registered" to "Home" or "Registered".
- To clear a setting, select the number to clear at "Preset No." and then select "Delete". The data set for the number is deleted and the number status returns to the unregistered state.

Other

> **Attention**
> • Cannot be set if using a network camera compatible with the "ONVIF" protocol.
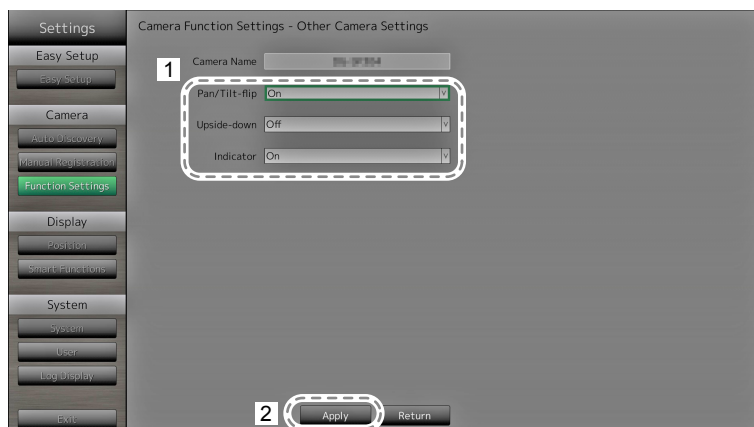
1. Configure the items.

Item	Detail	Setting range
Pan/Tilt-flip	Turn on/off the pan/tilt-flip function[*1].	On/Off
Upside-down[*2]	Turn on/off the network camera upside down function.	On/Off
Indicator	Turn on/off the network camera Indicator.	On/Off

*1 The pan/tilt-flip function reverses the pan/tilt direction automatically at high-speed when the network camera reaches the movement endpoint. This function allows the user to make pan/tilt operations without paying attention to movement endpoints.

*2 Check the network camera installation specifications before using the upside down function. Depending on the network camera type, it may not be possible to install the camera upside down even when the camera supports the upside down function.

2. Select "Apply".

The setting complete screen is displayed. Select "OK".

2-4. Setting Display Positions of Camera Images

Set the display position for images from the network camera.

Procedure

1. Select "Position".

Indicates the display positions on the monitor screen.
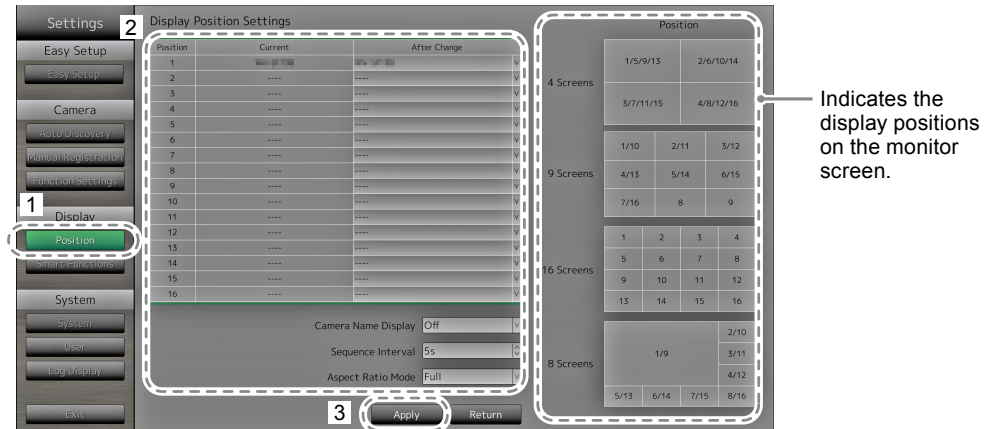
2. Configure the items.

Item	Detail	Setting range
Position	Select a position to display a camera image. Set the network camera to the number of the desired position for display.	-
Camera Name Display	Select to display or not display the camera name and time set on the monitor. (The camera name is displayed on the upper left of the image.)	On/Off
Sequence Interval	Set the interval for changing over the screen during sequential display.	5s to 60s
Aspect Ratio Mode	Set which aspect ratio to apply when the aspect ratio of the video delivered from the network camera and the aspect ratio of the monitor image display area differ.	Full/Aspect

3. Select "Apply".

   The setting complete screen is displayed. Select "OK".

Attention
- All registered network cameras must be configured. A network camera can only be set for one display position. When there are incorrect settings, "Apply" cannot be selected.

Note
- If it takes a while for images to be displayed during sequential display, set a higher value for "Sequence Interval".

2-5. Setting Smart Functions

Set Smart Functions for images from each camera.

Procedure

1. Select "Smart Functions".

Displays images of the selected network camera.
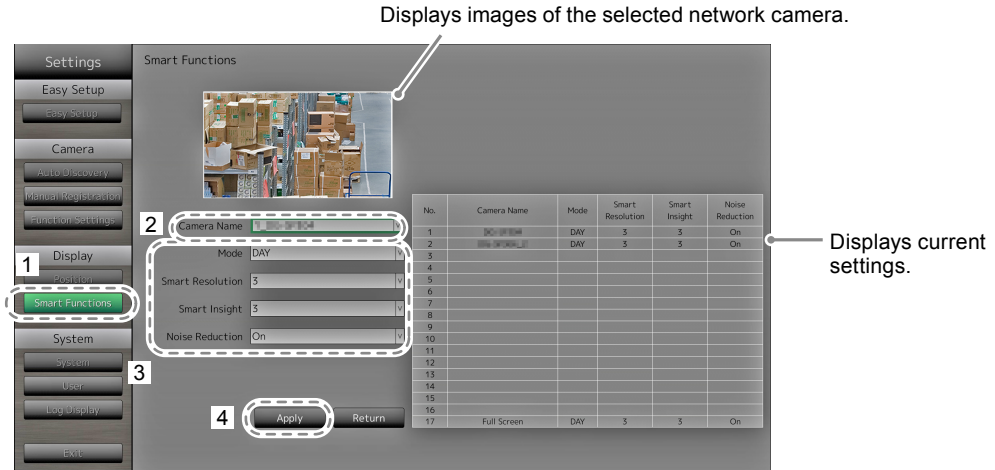

Displays current settings.

2. Select the network camera to configure at "Camera Name".

> **Attention**
>
> • For 1 Screen or 4 Screens layouts the settings of each network camera are applied. For 8 Screens, 9 Screens or 16 Screens layouts, the "17_Full Screen" settings are applied to all screens and the settings of each network camera are not applied.

3. Configure the items.

Item	Detail	Setting range
Mode	Select the display mode to apply to the images of the selected network camera. Set to "DAY" to apply a mode suitable for general images. Set to "NIGHT" to apply a mode suitable for monochrome images such as images taken at night.	DAY/NIGHT/Off
Smart Resolution	Adjusts the perceived resolution of the images so that the blurs are reduced and images are displayed vividly and clearly.	1 to 5/Off
Smart Insight	Makes dark areas of images visible by analyzing the image and correcting the brightness for each pixel. It is effective for images with dark area that are less visible and for bright environments.	1 to 5/Off
Noise Reduction	Reduces the amount of block noise that occurs due to video compression.	On/Off

4. Select "Apply".

The setting complete screen is displayed. Select "OK".

2-6. Configuring System Settings

Set the date, time and network information for this product.

Procedure

1. Select "System".

Displays current settings.
(E.g. software version)
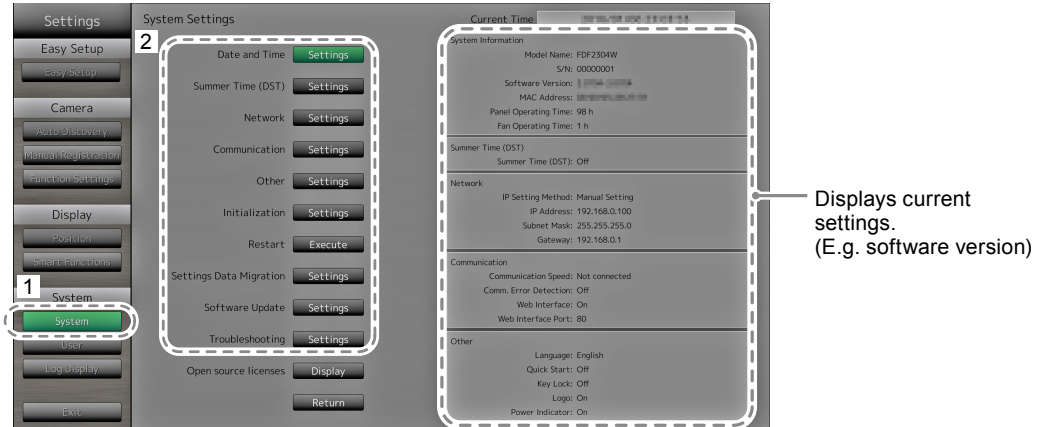
2. Select a setting.

The setting screen for the selected setting is displayed.

Date and Time

Set the current date and time.
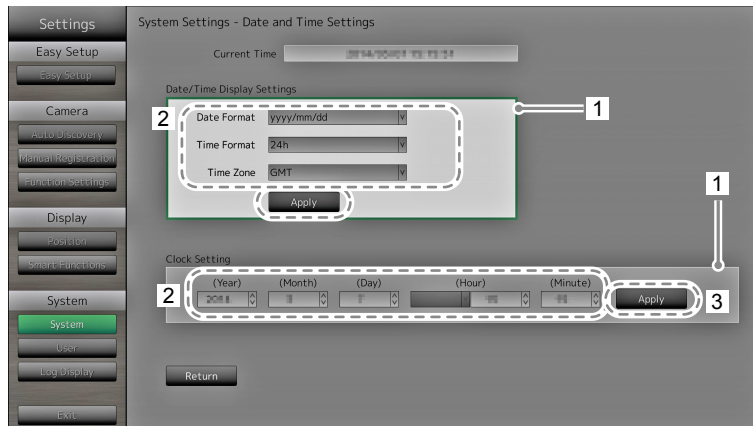
1. Select "Date/Time Display Setting" or "Clock Setting".
2. Configure the items.

Item	Detail	Setting range	
Date/Time Display Settings	Set the date display format, time display format, and time zone (time difference between GMT[*1]).	Date Format	yyyy/mm/dd, Mmm/dd/yyyy, dd/Mmm/yyyy, mm/dd/yyyy, dd/mm/yyyy
		Time Format	24h/12h
		Time Zone	GMT-12:00 to GMT+14:00
Clock Setting	Set the current time.	2010/1/1 0:00 to 2035/12/31 23:59	

*1   Greenwich Mean Time

3. Select "Apply".

The setting complete screen is displayed. Select "OK".

Note

• If the main power switch is turned off or the power cord is unplugged for one week or longer, the monitor's time and date will no longer be displayed accurately. In such a case, set the date and time again.

Summer Time (DST)

Apply or cancel the summer time setting (DST).

1. Configure the items.

Item	Detail	Setting range
Summer Time (DST)	Applies or cancels the summer time setting. Set to "On" to apply to summer time immediately. Set to "Off" to not apply to summer time. Set to "Auto" to apply to summer time automatically during the period designated by the start/end dates and times.	On/Off/Auto

2. Select "Apply".

The setting complete screen is displayed. Select "OK".

Network

Set network information.
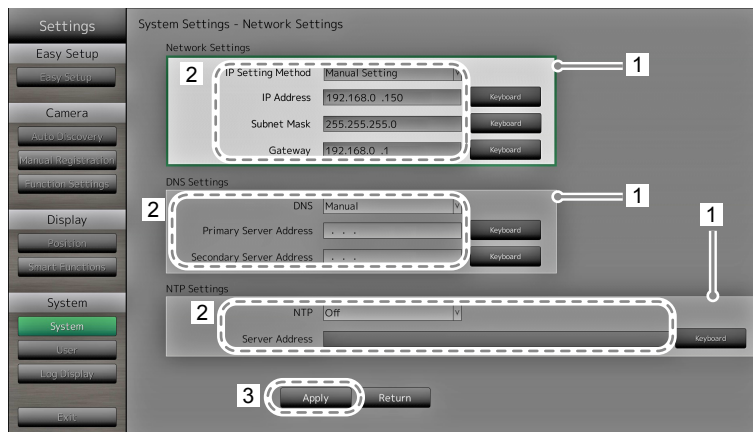
1. Select "Network Settings", "DNS Settings" or "NTP Settings".
2. Configure the items.

Item	Detail	Setting range	
Network Settings	Select the IP address setting method.	IP Setting Method	DHCP/Manual Setting
	If "Manual Setting" is selected, set the IP address, subnet mask and gateway.	IP Address, Subnet Mask, Gateway[*1]	0.0.0.0 to 255.255.255.255
DNS Settings	Set the DNS. (When "IP Address" of "Network Settings" is set to "Manual".)	DNS	Auto/Manual
	If you selected "Manual", set the primary server address and the secondary server address.	Primary Server Address, Secondary Server Address	0.0.0.0 to 255.255.255.255
NTP Settings	Set whether or not to use an NTP server.	NTP	On/Off
	If you selected "On", set the NTP server address.	Server Address	Alphanumeric characters and symbols

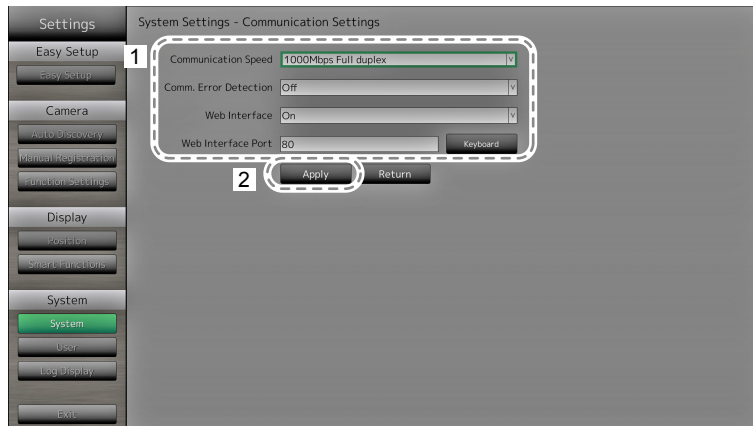*1   If your network environment does not include a gateway, you do not need to set the "Gateway" address. Use the default setting as is, or set as "0.0.0.0".

3. Select "Apply".
   The setting complete screen is displayed. Select "OK".

Communication Settings

The communication settings are used to configure the web interface function, detection of communication errors, and so on.

1. Configure the items.

Item	Detail	Setting range
Communication speed	Sets the communication speed between the monitor and network hub.	100Mbps Half duplex, 100Mbps Full duplex, 1000Mbps Full duplex
Communication Error Detection	You can set the following as the message to be displayed when receipt of image data stops. Comm. Error Detection On: Within several seconds after receipt of image data stops, an alert message in a red box will appear on the live image screen. When communication resumes, the alert is cleared and the image is displayed again. Comm. Error Detection Off: When approx. 20 seconds have elapsed after receipt of image data stops, a communication error message will appear.	On/Off
Web Interface	You can operate and configure the monitor from your web browser over the network.	On/Off
Web Interface Port	Sets the port of the web interface.	1 to 65535

2. Select "Apply".
   The setting complete screen is displayed. Select "OK".

Other

1. Configure the items.

| Item	Detail	Setting range
Language	Set the display language of the menu and the setting screen.	日本語 /English/Deutsch
Quick Start	Set the status of the system when turned off. When set to "On", part of the system remains running. When set to "Off", the system is shut down completely. By setting to "On", the startup time for this product can be reduced (approx. 10 seconds). However, do not turn off the main power of the monitor when Quick Start is set to "On" because part of the system remains running.	On/Off
Key Lock	Locks operations by the buttons on the front of the monitor.	On/Off
Logo	Set whether to display/hide the EIZO logo when the power is turned on[*1].	On/Off
Power Indicator	Set whether to turn of or off the power indicator (blue) while the monitor is on.	On/Off

*1   The rotating bar indicating that the system is starting up cannot be hidden.

2. Select "Apply".
   The setting complete screen is displayed. Select "OK".

Initialization

Initialize the system.
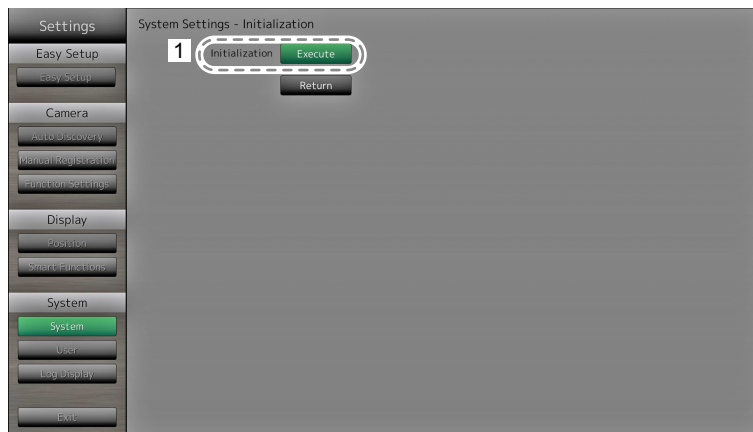
1. Select "Execute" for "Initialization".

   All settings are returned to default except for system logs, operation logs, the current time, time zone and summer time settings.

Restart

Restart the system.

1. Select "Execute" at "Restart".

Settings Data Migration

You can save the settings data to a USB storage device and load the data.

Load Settings Data

1. Connect a USB storage device to the USB downstream port of the monitor.
2. Select the settings data file.
3. Enter the password.

   The password is blank by default. Set the password as necessary.

4. Select "Execute". The settings data are loaded.
5. Select "Run" for "Remove USB Storage".

   When the Removing Complete screen is displayed, select "OK".

6. Remove the USB storage device.

   Attention
   • The settings data include the IP address of the monitor. Change the IP address of the monitor if loading settings data from another monitor.

Save Settings Data
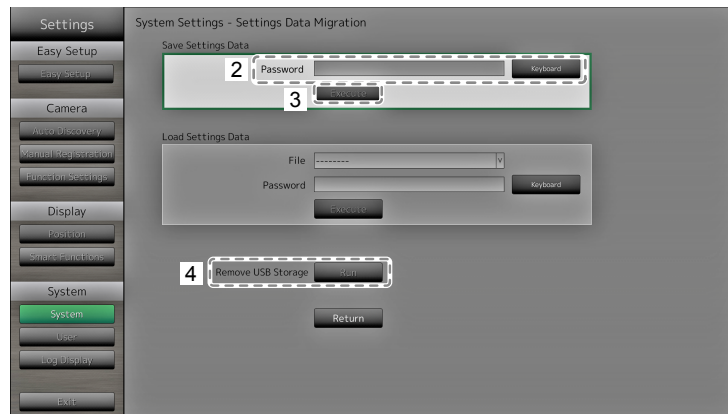
1. Connect a USB storage device to the USB downstream port of the monitor.

2. Enter the password.

   The password is blank by default. Set the password as necessary.

3. Select "Execute". The settings data are saved.

4. Select "Run" for "Remove USB Storage".

   When the Removing Complete screen is displayed, select "OK".

5. Remove the USB storage device.

Attention
- Some of the settings cannot be saved.
- If you forget the password that you specified when saving the data, you will no longer be able to load the settings.

Note
- Saved file name: Backupyyyymmdd.duraconf (yyyymmdd is the save date)

Software Update

You can select update files from the File Selection screen, and can both upgrade or downgrade software.

1. Download the update file from the EIZO website (http://www.eizoglobal.com), and save it to a USB storage device.
2. Connect a USB storage device to the USB downstream port of the monitor.

   The File Selection screen is displayed.
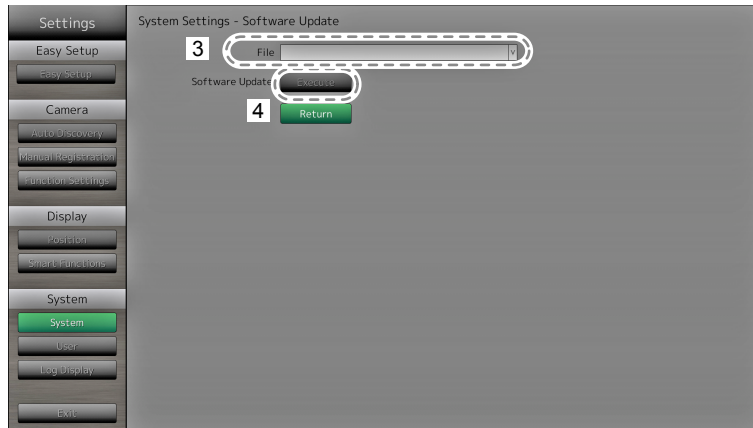
3. Select the update file.
4. Select "Execute".
5. The message saying "You must restart the system to update the software. Remove the USB storage and restart." appears.

   Remove the USB storage device.

6. Select "Restart" to restart the system.

   The software is updated.

Attention
- Do not turn off the power while the software is being updated.
- You cannot operate the remote control and SIGNAL and POWER buttons on the front of the monitor while the software is being updated.
- The following USB storage devices can be used with this product.
    - USB 2.0 standard flash drives
    - Supported format: FAT32
- Do not connect multiple USB storage devices simultaneously.

Note
- When you restart your system, a message indicating the success or failure of the software update will appear. The message will clear automatically after 60 seconds if "OK" is not clicked. However, this message will not appear if you do the update through your web browser.

Troubleshooting

Use this function when this product does not operate normally, such as when a connection cannot be established with a network camera or a communication error occurs. The network status can be checked using communication commands and past error contents can be checked by displaying the system log. In addition, system log data can be saved to a USB storage device.

Checking network connection status

Displays the connection check results.
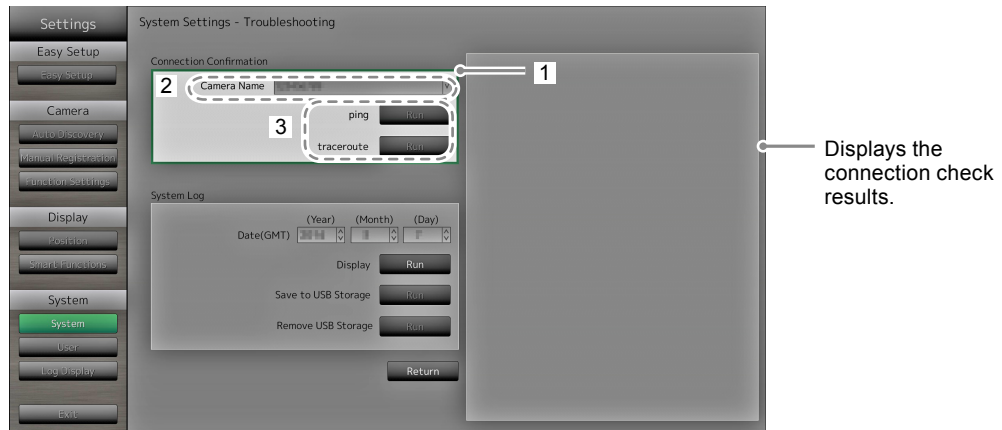
1. Select "Connection Confirmation".
2. Select the network camera to check the network connection of for "Camera Name".
3. Select "Run" for "ping" or "traceroute".
   Results are displayed in the area on the right side of the screen.

Displaying the system log
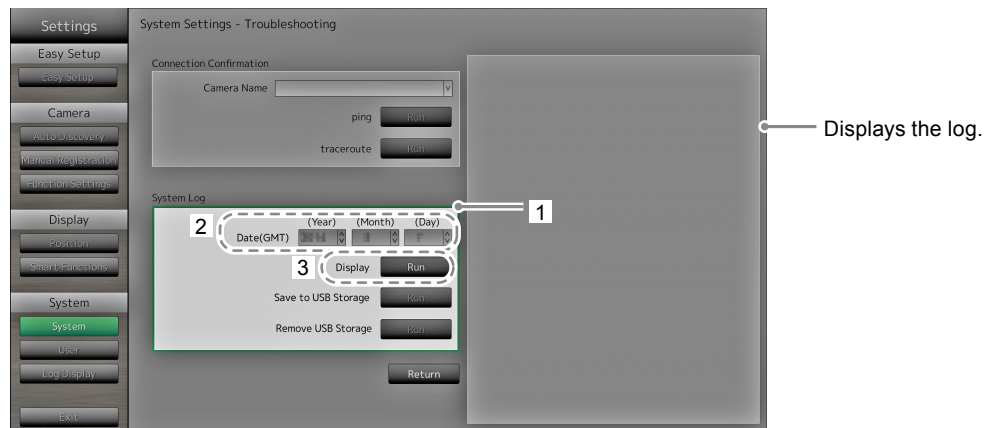
Displays the log.

1. Select "System Log".
2. Select the date (year/month/day) to display the log data of.
3. Select "Run" for "Display".
   The log data is displayed in the area on the right side of the screen.

Saving system log data

1. Connect a USB storage device to the USB downstream port on the back of the monitor.
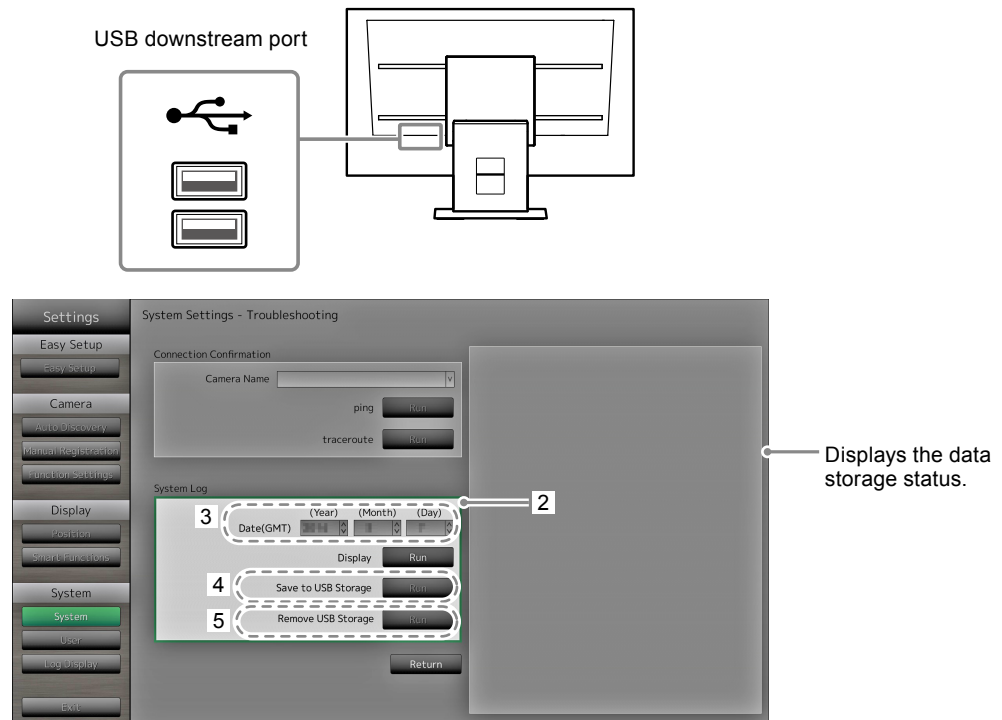
2. Select "System Log".
3. Select the date (year/month/day) of the log data to display.
4. Select "Run" for "Save to USB Storage".

   Data saving starts and a "Saving" message is displayed in the display area on the right side of the screen.

   When the saving complete screen is displayed, select "OK".

5. Select "Run" for "Remove USB Storage".

   When the removing complete screen is displayed, select "OK".

6. Remove the USB storage device.

Attention

• The following USB storage devices can be used with this product.
  - USB 2.0 standard flash drives
  - Supported format: FAT32
• Do not connect multiple USB storage devices simultaneously.

2-7. Setting User Information

Register, change or delete information (username, user level and password) on users that access this product.

Attention

- User information can be registered for up to 10 users. User information for a new user cannot be registered when there are already 10 users registered.
- Duplicate usernames cannot be registered.
- At least one user with a user level of "ADMIN" must be registered.
- You can use alphanumeric characters for the username, however, the following character is not allowed: " : ".

Note

- There are three user levels: " LIVE", "CAMERA CONTROL" and "ADMIN".
  The operable range of this product differs by each level.
 (√: Operable, -: Inoperable)

Operation Level	Menu display	Layout change over	Page change over	Smart Functions on/off	Login operation	Camera control	System settings
LIVE	√	√	√	√	√	-	-
CAMERA CONTROL	√	√	√	√	√	√	-
ADMIN	√	√	√	√	√	√	√

- The following user information is set by default:
  - Username: "admin"
  - Password: "admin"
  - User Level: "ADMIN"

- User information settings can be returned to default settings by the following procedure. Use this feature, for example, when you have forgotten the registered user information.
  1. Press POWER on the remote control to turn off the monitor.
  2. Press the buttons on the remote control in the following order (press the next button within five seconds).

     ＜ → ＜ → ＞ → ＞ → ∧ → ∧ → POWER

     When the reset confirmation screen is displayed, select "Execute".

     User information is cleared and the settings are returned to the default settings.

● To register new user information

Procedure
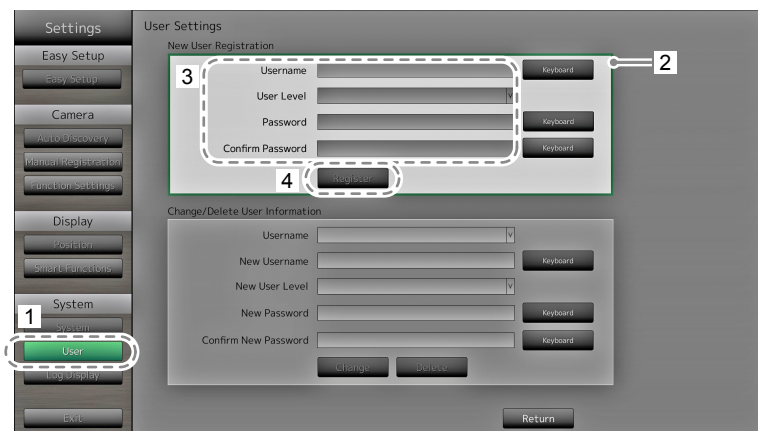
1. Select "User".

2. Select "New User Registration".
3. Set user information.
4. Select "Register".

   The setting complete screen is displayed. Select "OK".

● To change user information

Procedure
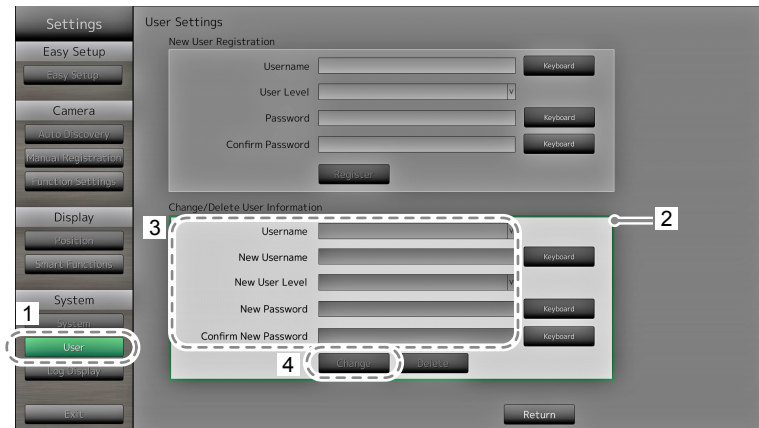
1. Select "User".

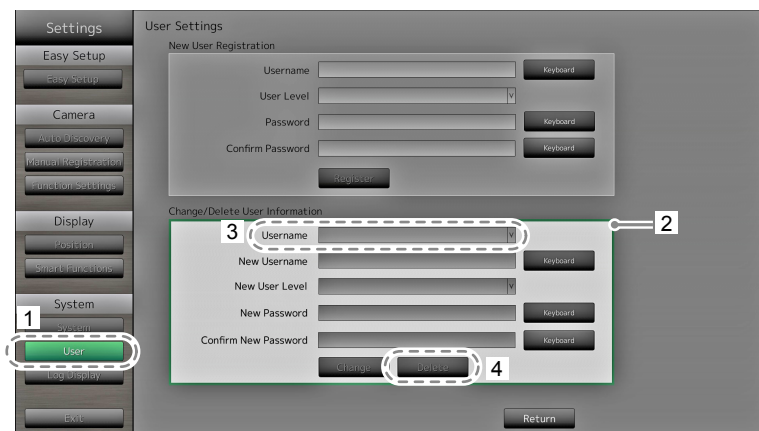2. Select "Change/Delete User Information".
3. Set user information.
4. Select "Change".

   The setting complete screen is displayed. Select "OK".

● To delete user information

Procedure

1. Select "User".

2. Select "Change/Delete User Information".
3. Select the user to delete at "Username".
4. Select "Delete".

   The setting complete screen is displayed. Select "OK".

2-8. Displaying Operation Logs

Operations of this product are recorded on logs. Past operation results can be checked by displaying the log. Also, log data can be saved to a USB storage device.

> **Note**
>
> • The following data are recorded on the log:
>   - Login information: The names of users who logged in to the system
>   - Camera operation results: Name of operated camera, operation details, operation results
>   - Date, time and details of changes confirmed by selecting "Apply" on setting screens
> • Logs older than two months are automatically deleted at 04:00:00 AM on the first day of every month.

● To display log data

Procedure

1. Select "Log Display".
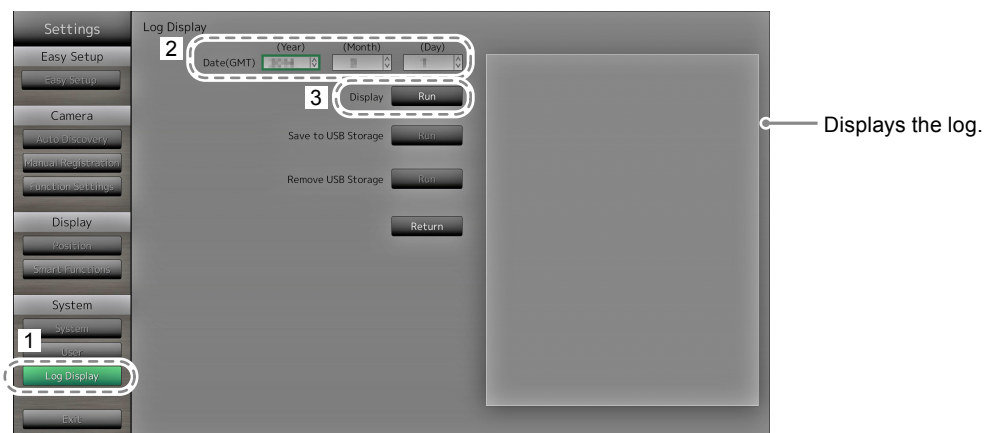
Displays the log.

2. Select the date (year/month/day) to display the log data of.
3. Select "Run" for "Display".

   The log data is displayed in the area on the right side of the screen.

● **To save log data**

<u>**Procedure**</u>

1. Connect a USB storage device to the USB downstream port on the back of the monitor.

USB downstream port

2. Select "Log Display".

Displays the data storage status.
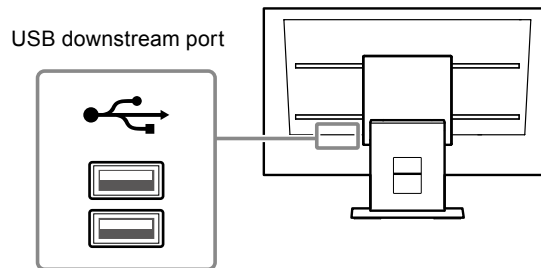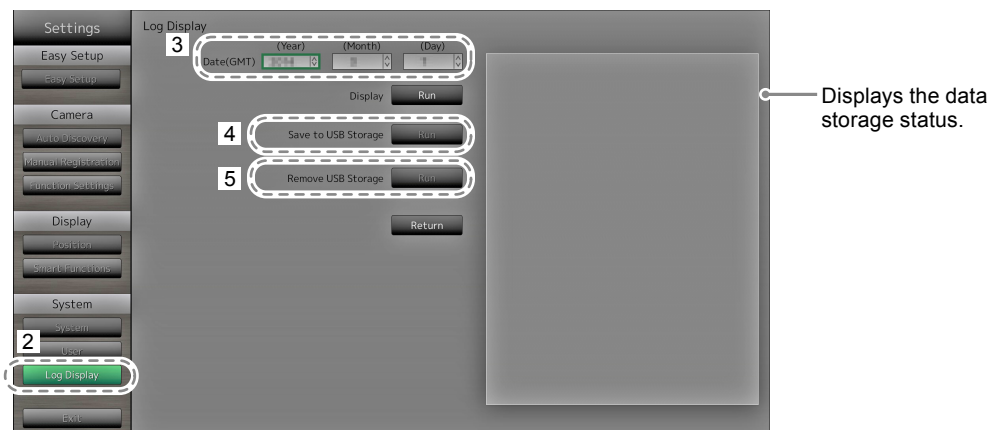
3. Select the date (year/month/day) of the data to save.
4. Select "Run" for "Save to USB Storage".

   Data saving starts and a "Saving" message is displayed in the display area on the right side of the screen.

   When the saving complete screen is displayed, select "OK".

5. Select "Run" for "Remove USB Storage".

   When the removing complete screen is displayed, select "OK".

6. Remove the USB storage device.

Attention

• The following USB storage devices can be used with this product. (This does not guarantee operation of the USB storage devices given below.)
  - USB 2.0 standard flash drives
  - Supported format: FAT32
• Do not connect multiple USB storage devices simultaneously.

Chapter 3　Configuring from a Web Browser

This product allows you to configure and operate network cameras from your web browser.
The setting screen contains the Monitor Settings and live image screen settings.

Note

• To configure from the monitor screen, see "Chapter 2 Configuring from the monitor screen" (page 8).

Attention

• It is recommended you use Internet Explorer 11 as your web browser.
• If you configure settings from a web browser, you will need to start up the monitor.
• You cannot display the web interface in your web browser when the monitor web interface is disabled in the settings. (For details, see "Network Settings" (page 55)).

3-1.　Before Configuration

To configure settings from a web browser, you need to log in from the web browser you are using. Login is allowed only when the level of the user accessing the product is ADMIN.

Procedure

1. Press ⏻ on the front of the monitor or POWER on the remote control.
   The power indicator lights up blue and the live image screen is displayed.
   (For information on the live image screen, refer to the Instruction Manual.)

2. Display the web browser on your PC.

3. Enter the following address to access.

   Address: http://Address of the monitors/ui[*1]
   *1　The default address for access is http://192.168.0.150/ui.

   The login screen is displayed.

4. Enter a username and a password.

5. Select "Login".
   Displays the Monitor Settings.

**Note**

• The following user information is set by default:
  - Username: "admin"
  - Password: "admin"
  - User Level: "ADMIN"
• For information on user settings, see "2-7. Setting User Information" (page 32).
• It is recommended that you log out after completing the setup, so as to prevent a third party from operating the network camera or altering the settings. Exit the web browser.

3-2. Setting Screen

The setting screen contains the Monitor Settings and live image screen settings.

The Monitor Settings are used for various settings such as basic information, network camera registration and monitor system settings. The live image screen settings are used for configuring the display, such as changing the live image screen layout.
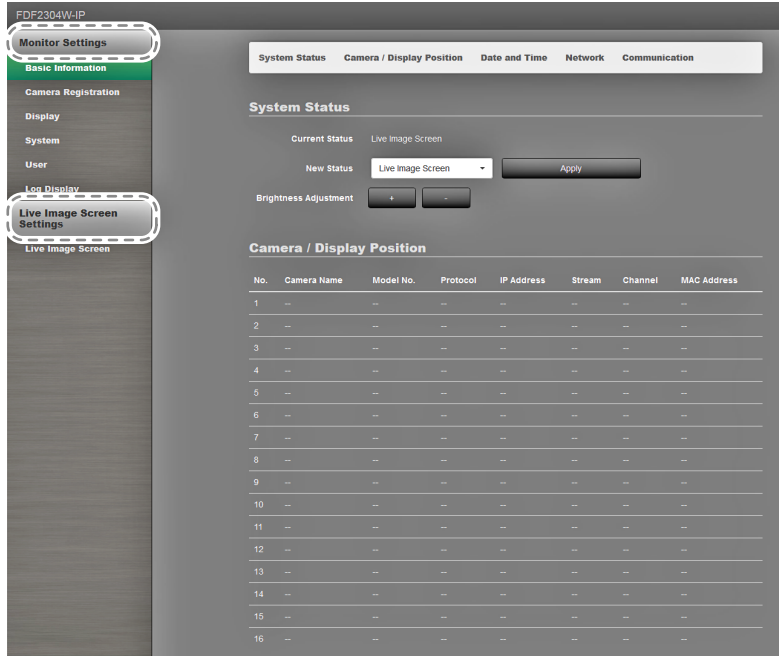
● Basic Operations

To select a setting item

• Click a setting item.
  When you select a setting item, it will be displayed in green. In the case of a list box, when you select a list item, it will be displayed in green.

To apply a setting item

• Click "Apply" or "Register".
  A "Setting Complete" or "Setting Failed" message is displayed. Click "OK" as required.

To exit the web browser

• Click [X] in the web browser. This exits the browser.

Note

• If auto discovery is in progress on the monitor, or the setting dialog box is displayed in the browser, operations in the browser will not be accepted and a busy status message will be displayed. Click "OK" to configure the settings again.
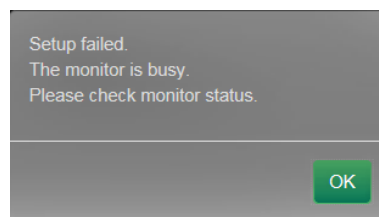
3-3. Basic Information

Display lists of the various settings acquired from the monitor.
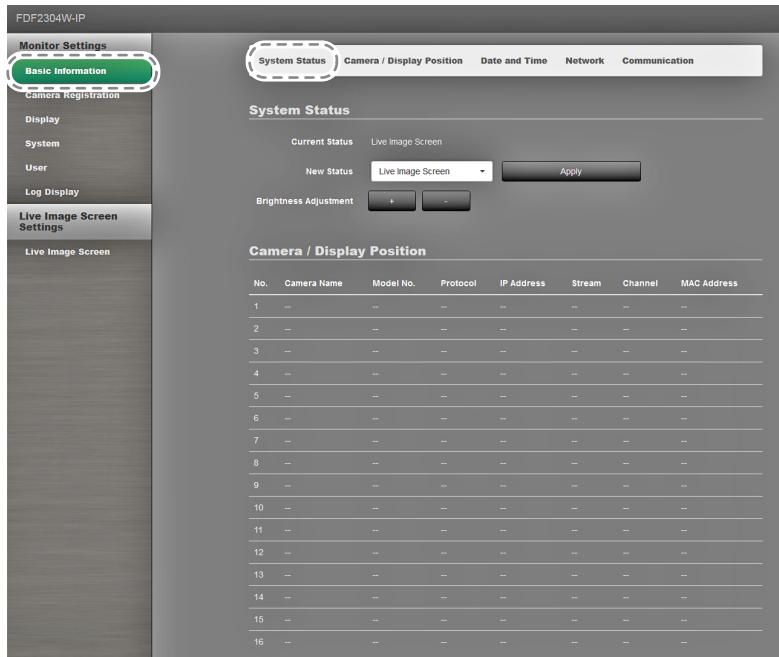
● System Status

Current Status

Displays the current status of the monitor. Also, you can transition the status of the monitor by changing the selection status.

1. Click ▼ next to "New Status" to select the status from the displayed list.
2. Click "Apply".
   The screen transitions to the selected state.
   The following statuses are displayed.

Item	Status
Live Image Screen	Transition to "Live Image Screen Settings"
HDMI Port Display	HDMI port display status, without screen transition
Quick Shutdown	Transition to Quick Shutdown status

Attention

• When Quick Shutdown is selected:
A setting error occurs and a "Quick Start is set to OFF. Run after setting Quick Start to ON." message is displayed.

Brightness setting

Adjusts the brightness of the monitor screen.

1. Click the brightness setting (＋ , ー).

   Changes the brightness of the monitor screen.

Note

• You can change the Brightness on the monitor screen in the same manner as when pressing the (BRIGHT＋ , BRIGHT-) buttons on the remote control. A "Setting Complete" or "Setting Failed" message will not display after changing the brightness.

● **Camera and Display Position/Date and TimeSettings/Network Settings/Communication Settings**

Displays the current settings status of the monitor. When configuring settings, click the link for the item name under an item. The screen transitions.

Attention

• For the basic information, the setting values for items other than the system status cannot be changed. When configuring an item, click the link for the item name under each item. The screen transitions to the applicable setting item screen.

3-4. Setting Network Cameras

"Camera Registration" is used to display a list of the network cameras currently registered for a monitor. You can add or change network cameras, and reflect network camera information, etc., onto the monitor.

Attention

- You can only change network cameras that are registered.
- This cannot be used to set network camera functions. For information on setting network camera functions, see "Chapter 2 Configuring from the monitor screen" (page 8).

● To automatically detect cameras

Discover network cameras on the network automatically and register them to the system.

Attention

- Only the network cameras installed in the same subnet as the monitor are detected. If a network camera is installed in a different subnet, the camera must be registered manually (see "To manually register network cameras" (page 12)).
- For information on "Easy Setup", refer to the Setup Manual.

Note

- The remaining number of cameras that can be added for registration is clearly indicated at the top of the camera detection screen.

Procedure

1. Select "Camera Registration".

   A screen displaying a list of the camera registration information appears.
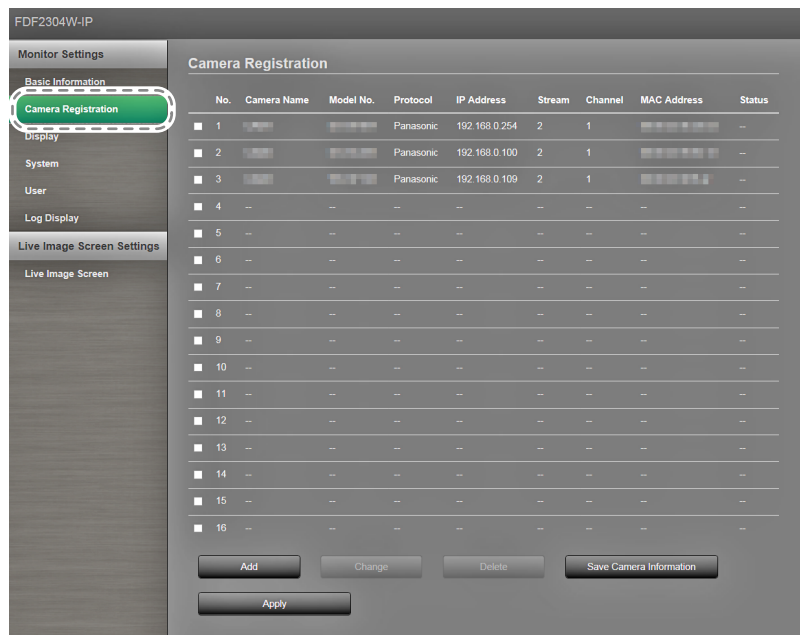
2. Select "Add".

3. Select "Auto Discovery".

    A "Camera detection will start" dialog box appears.

    Camera detection will start.
    Detection may take several minutes.
    Do you want to start camera detection?

    | OK | Cancel |
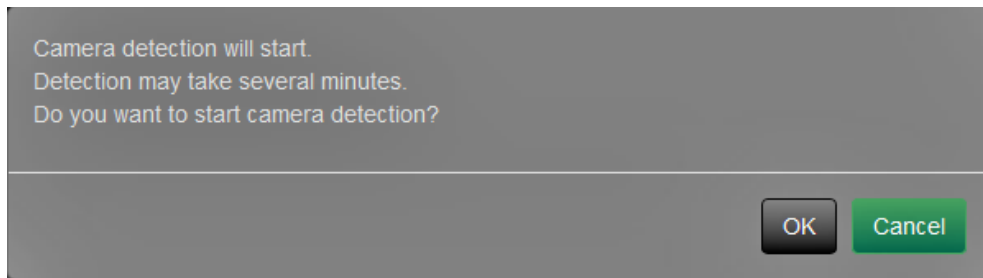
4. Select "OK".

    A "Searching" dialog box appears, and the detected cameras are displayed in the list of candidates for adding.

    Note
    - There is a web page link in the web page field of the list of detected cameras. When you click a link, a camera web page will open in a separate window. (Address: http://(IP address):(HTTP port))
    - If there are zero candidates in camera detection, nothing will display.
    - If "Cancel" is selected during camera detection, a list of cameras detected up to the time of canceling will be displayed.

5. Select a camera to be added from the list of candidates, and select "Add".
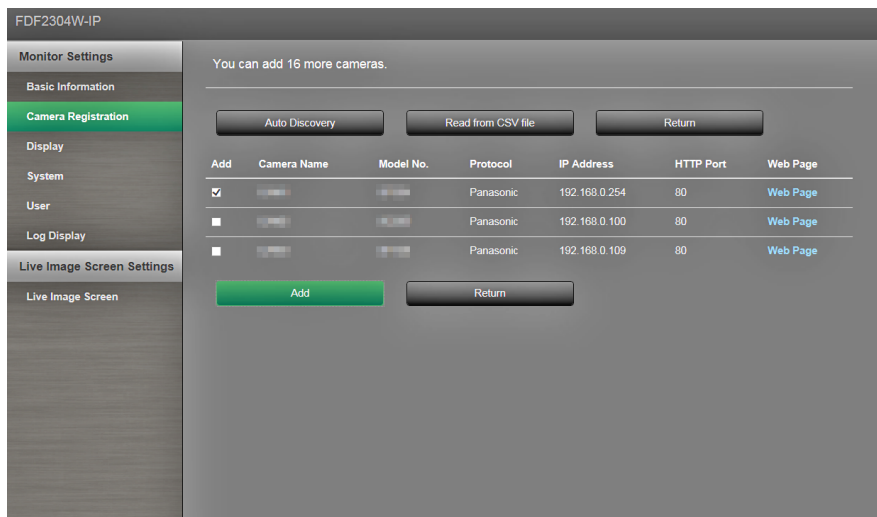
    FDF2304W-IP

Monitor Settings	You can add 16 more cameras.					
Basic Information						
Camera Registration	Auto Discovery	Read from CSV file		Return		
Display						
System	Add	Camera Name	Model No.	Protocol	IP Address	HTTP Port	Web Page
User	☑			Panasonic	192.168.0.254	80	Web Page
Log Display	☐			Panasonic	192.168.0.100	80	Web Page
Live Image Screen Settings	☐			Panasonic	192.168.0.109	80	Web Page
Live Image Screen	Add		Return			

6. Select "Return".

    Returns to the camera registration information list screen in step 1.

7. Select "Apply".

    A setting confirmation dialog box appears.

8. Select "OK" or "Cancel" as necessary.

● Reading CSV Files

The CSV file describing the camera candidates to be added can be read, and the cameras can be set as candidates for detection.

Procedure

1. Select "Camera Registration".

   A list of camera registration information appears.
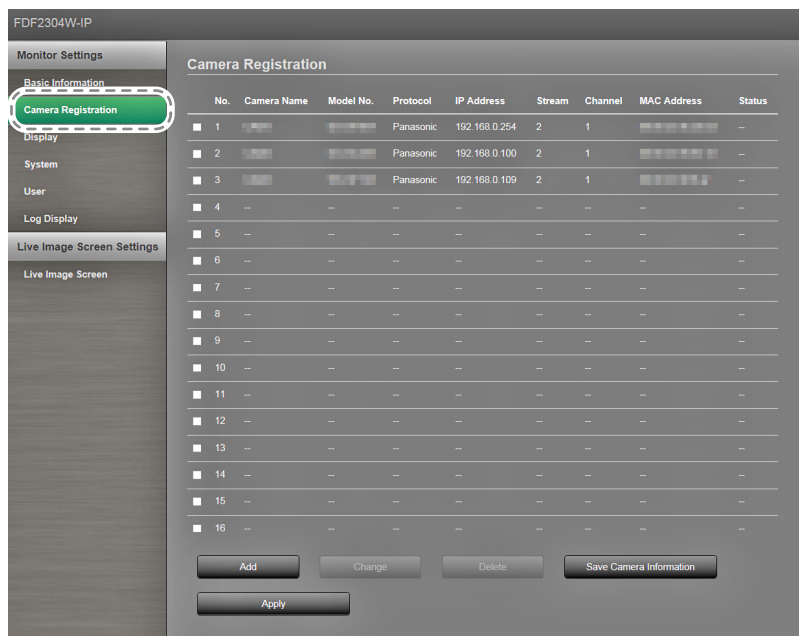
2. Select "Add".

3. Select "Read from CSV file".

   A file dialog box opens.

4. Select the CSV file that describes the camera information, and select "Open".

   A list of the candidate cameras appears.

Note

- Up to 255 candidate cameras can be read.
- The CSV files that can be read are as follows.
  - CSV files that are exported from the monitor or browser
  - CSV files created by the user
- For details on how to export CSV files, refer to "Save Camera Information" (page 48).
- When a user creates a CSV file, the following rules apply.
  - In line 1, enter the following as the item line: "CameraName, Protocol, IPAddress, HttpPort, UserName, PassWord".
  - The columns are in random order.
  - Input of the "UserName, PassWord" values is user-defined.
  - Only the specified string can be read for an item name.

---

5. Select a camera to be added from the list of candidates, and select "Add".
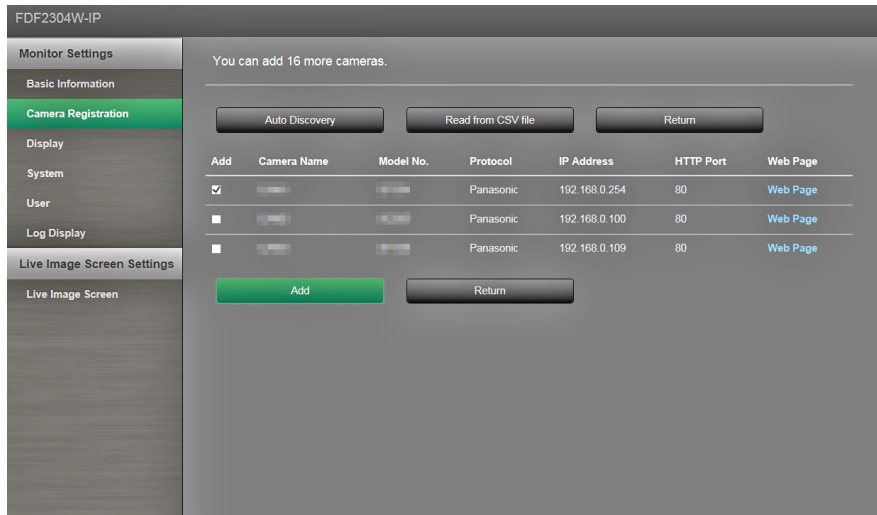
6. Select "Return".

   Returns to the camera registration information list screen in step 1.

7. Select "Apply".

   A setting confirmation dialog box appears.

8. Select "OK" or "Cancel" as necessary.

● Adding a Camera

You can add a camera to the camera registration information list by using the auto detection function and Read from CSV file function.

Procedure

1. Select "Camera Registration".

   A screen displaying a list of the network camera registration information appears.

2. Select "Add".

   The network cameras subject to adding are reflected onto the camera registration information list.

   (For details, see "To automatically detect cameras" (page 40) and "Reading CSV Files" (page 42))

3. Select "Return".

   Returns to the camera registration information list screen in step 1.

4. Select a camera to be added from the list of candidates, and select "Add".
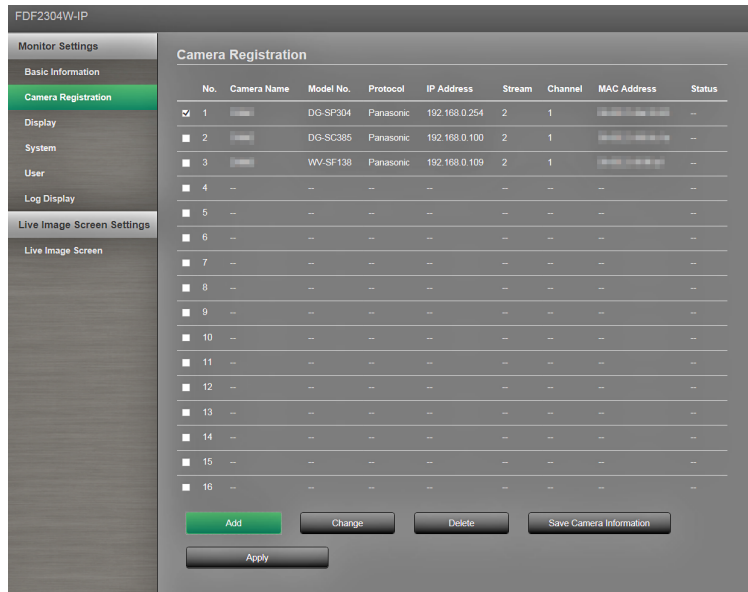
5. Select "Apply".

   A setting confirmation dialog box appears.

6. Select "OK" or "Cancel" as necessary.

● Changing Camera Information

You can change the contents of the registered information for cameras in the camera registration information list.

Attention

• If multiple selections are made for registration information of a network camera to be changed, the "Change" button will be disabled.

1. Select "Camera Registration".

   A screen displaying a list of the camera registration information appears.
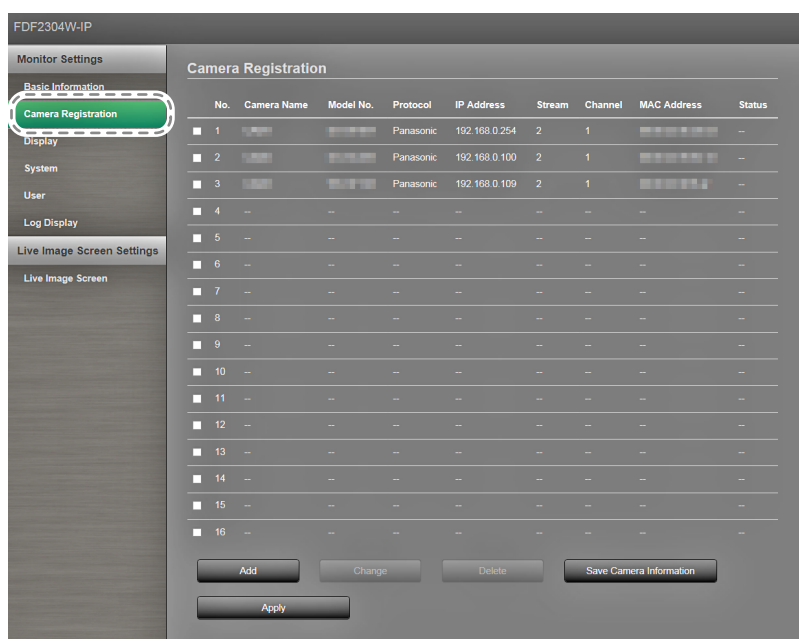
2. Check the number of the camera to be changed.

3. Select "Change".

   A "Camera Information Settings" dialog box appears.

Note

• When a registered camera is selected, a dialog box describing the applicable camera information appears. When an unregistered display position is selected, a dialog box with "Panasonic" selected in the "Protocol" item appears.

Item	Detail	Setting range
Camera Name	Can use alphanumeric characters, kana and kanji	0 to 24 characters
IP Address	If a new camera, leave blank	0.0.0.0 to 255.255.255.255

4. Set the changes, and select "OK".
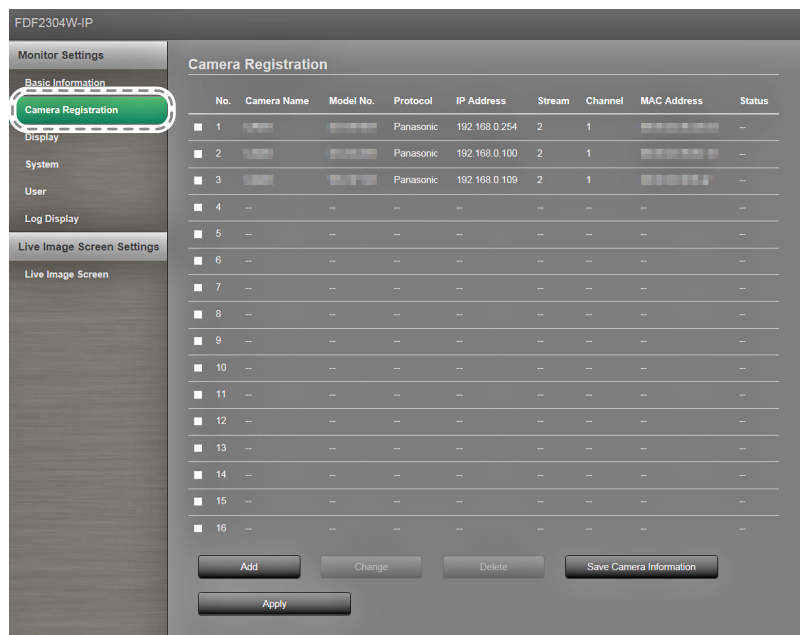
   Returns to the camera registration information list screen in step 1.

5. Select "Apply".

   A setting confirmation dialog box appears.

6. Select "OK" or "Cancel" as necessary.

Note

- The following message is displayed when acquisition of the "Obtain Camera Name" and "Obtain Profile" information fails. Obtain the information again.

  Communication Error

  Failed to obtain information from the camera.

  OK
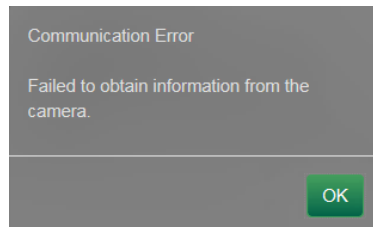
● Deleting Camera Information

You can delete the contents of the registered information for cameras.

1. Select "Camera Registration".

   A screen displaying a list of the camera registration information appears.
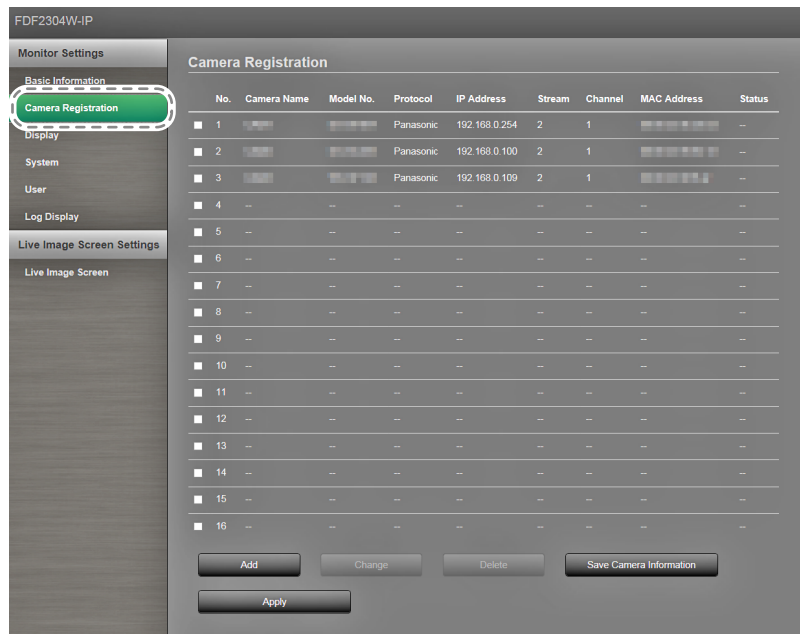
2. Check the number of the camera to be deleted.
3. Select "Delete".

   A setting confirmation dialog box appears.
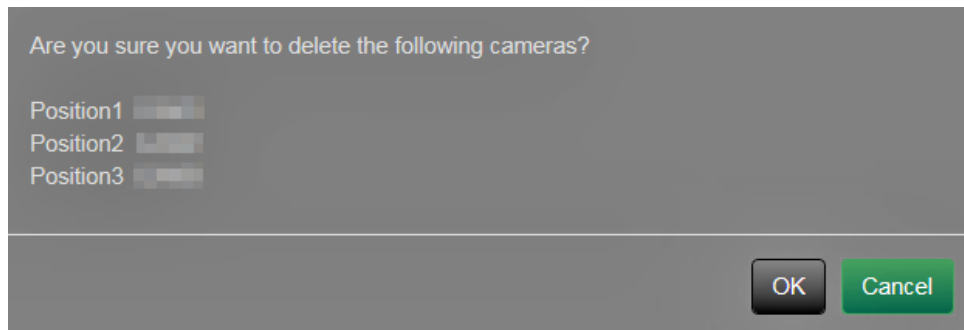
4. Select "OK" or "Cancel".
5. Select "Return".

   Returns to the screen that displays a list of the camera registration information.

6. Select "Apply".

   A setting confirmation dialog box appears.

7. Select "OK" or "Cancel" as necessary.

● Save Camera Information

You can save the information registered in the camera registration information list to a CSV file.
When you select "Save Camera Information", a CSV file describing the camera information displayed in the information list is exported.

File name: fdf2304wip_CameraInfo_yyyymmdd.csv
(yyyymmdd is the computer date and time.)

3-5. Setting Display Positions of Camera Images

You can configure settings such as the display positions of network cameras, and displaying camera names in the live image screen.

1. Select "Display" in the "Monitor Settings".

    The screen transitions to the Display Position Setting screen. A link for each setting item that can be configured in "Display" is located at the top of the screen.
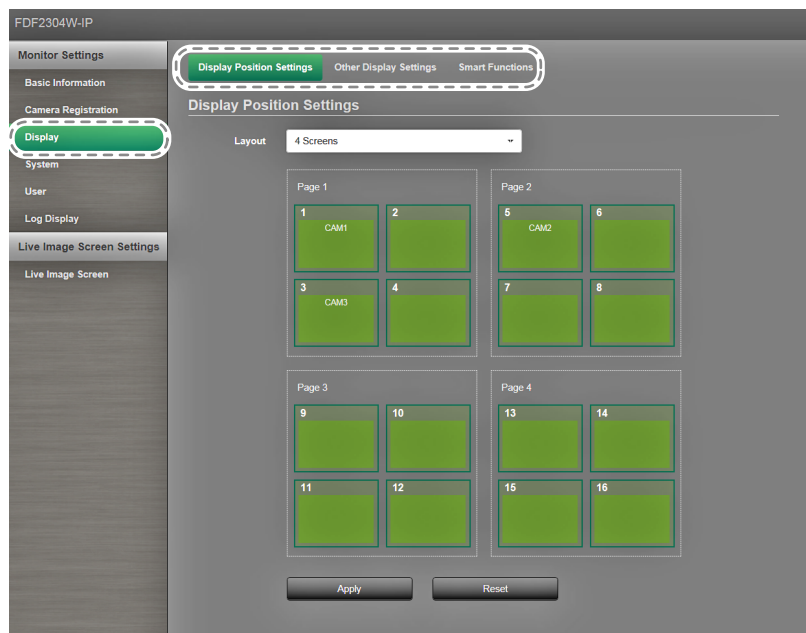
2. Select each setting item.

    The screen transitions to the selected setting item.

● Setting Display Positions

Set the positions for displaying network camera images.
You can switch the display positions of the source and destination camera images by dragging and dropping the camera within the page.

Attention
- All of the display positions of registered network cameras can be set.

Procedure

1. Select "Display Position Settings".

   The "Display Position Settings" screen appears.

   Each of the outer frames containing the number on the page are the camera display position[1], and the inner squares for the camera display position are the camera name[2] to be displayed.
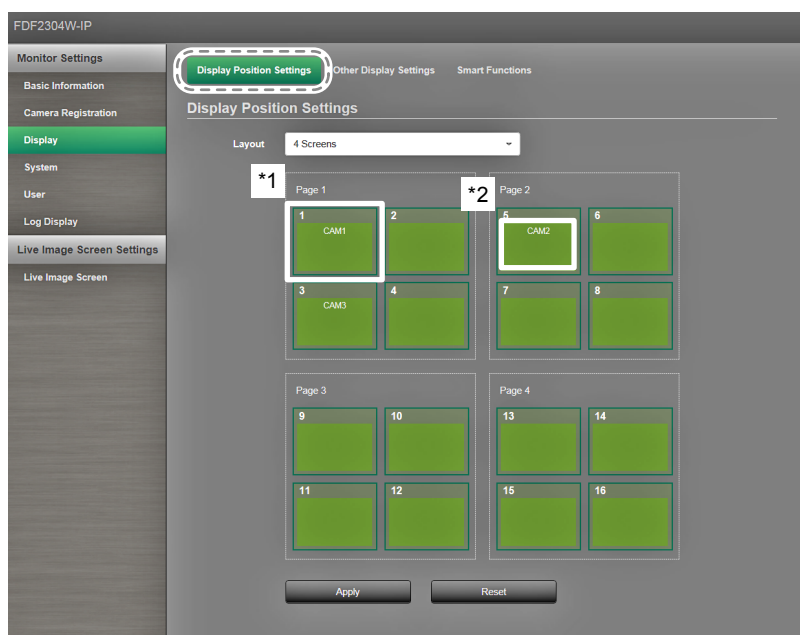
2. Select the display position layout from the list.

   Select the layout from the list box. The settings screen changes in accordance with the selected layout.

   Note
   - When you select a layout in the list box, the display in the Page changes to the selected state. You can set the display status while imaging.
   - The initial display position when the screen is transitioned is the display position currently set in the monitor.
   - You can switch the camera names in the inner squares by dragging and dropping them between the respective pages.

3. Drag a camera name and drop it on the position number where you want to display it.

The display positions of the source and destination camera images are switched.

Example) 4 screen layout

1. Drag display position 1 on Page 1 and drop it at display position 5 on page 2.
2. The display position 1 and display position 5 cameras are switched.
3. Only the camera name in the inner square is moved, without moving the display position of the camera image.

4. Select "Apply". The display positions of camera images are updated.

When you select "Reset", the information of the setting being changed is discarded, and becomes the current monitor display settings.

Note

• A camera web page link is embedded in frames that have been allocated a camera name. When you click it, a camera web page will open in a separate window (see "Adding a Camera" (page 43)).

● Other Display Settings

Set the items to be displayed in camera images.

Procedure

1. Select "Other Display Settings".

The "Other Display Settings" screen is displayed.
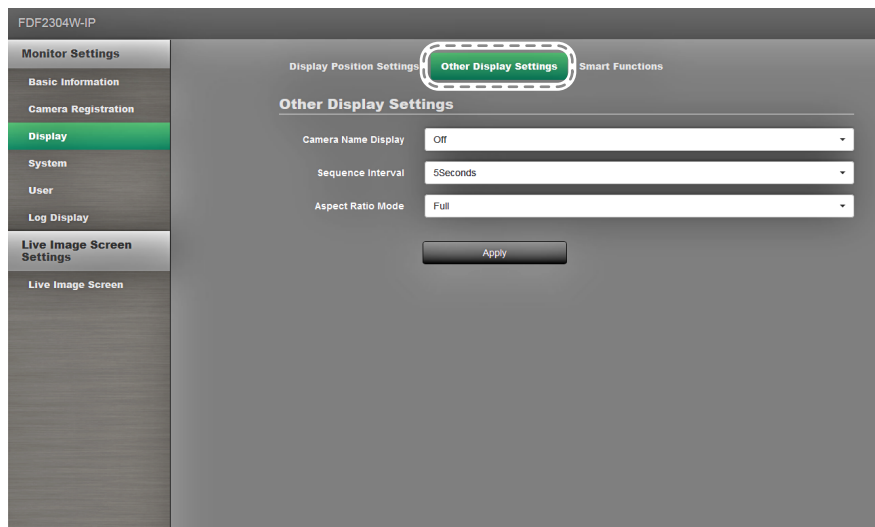
2. Configure the items.

Item	Detail	Setting range
Camera Name Display	Select to display or hide the camera name set on the monitor. (The camera name is displayed on the upper left of the image.)	On/Off
Sequence Interval	Set the interval for changing over the screen during sequential display.	5 to 60 seconds
Aspect Ratio Mode	Set which aspect ratio to apply when the aspect ratio of the video delivered from the network camera and the aspect ratio of the monitor image display area differ.	Full/Aspect

● Setting Smart Functions

Set Smart Functions for images from each camera.

> **Attention**
> • Information such as camera name will be displayed as a blank row for display positions that have not been allocated a camera. Each list box becomes invalid and will not be displayed.

Procedure

1. Select "Smart Functions".

   The "Smart Functions" screen appears.
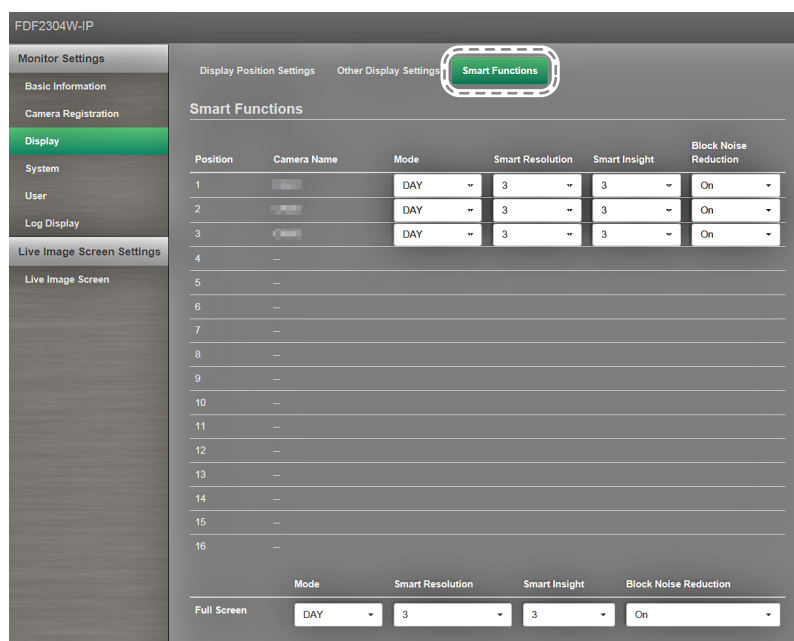
2. Set the camera of the applicable display position.

   > **Attention**
   > • For 1 Screen or 4 Screen layouts the settings of each network camera are applied. For 8 Screen, 9 Screen or 16 Screen layouts, the "Full Screen" settings are applied to all screens and the settings of each network camera are not applied.

3. Configure the items.

Item	Detail	Setting range
Mode	Select the display mode to apply to the images of the selected network camera. Set to "DAY" to apply a mode suitable for general images. Set to "NIGHT" to apply a mode suitable for monochrome images such as images taken at night.	DAY/NIGHT/Off
Smart Resolution	Adjusts the perceived resolution of images. Reduces blurring and displays images vividly and clearly.	1 to 5/Off
Smart Insight	Makes dark areas of images visible by analyzing the image and correcting the brightness for each pixel. This function is effective when for instance viewing images with dark areas that are not easily visible, or when using the monitor in a bright environment.	1 to 5/Off
Block Noise Reduction	Reduces the amount of block noise (noise from tessellated images).	On/Off

4. Select "Apply".

   The setting complete screen is displayed. Select "OK".

3-6. Configuring System Settings

Configure settings such as the date and time of this product, network settings, and maintenance.

Procedure

1. In the "Monitor Settings", select "System".

   A link for each setting item that can be configured in the system settings is located at the top of the screen.

2. Select each setting item.

   The screen transitions to the selected setting item.

● Date and Time

You can set the current date and time, and set summer time.

1. Select "Date and Time".

   The "Date and Time" screen is displayed.

Date/Time Display Settings

Set the current date and time.

1. Configure the items.

Item	Detail	Setting range
Date/Time Display Settings	Set the date display format, time display format, and time zone (time difference with GMT[*1]).	yyyy/mm/dd, Mmm/dd/yyyy, dd/Mmm/yyyy, mm/dd/yyyy, dd/mm/yyyy
Time Format		24h/12h
Time Zone		GMT-12:00 to GMT+14:00
Procedure		Manual/Synchronize with PC
Date and Time	Set the current time.	2010/1/1 0:00 to 2035/12/31 23:59

*1 Greenwich Mean Time

2. Select "Apply".

The setting complete screen is displayed. Select "OK".

Note

- When "Synchronize with PC" is selected in "Procedure", the current date and time setting information of the computer is sent to the monitor and synchronized.
- If the main power switch is turned off or the power cord is unplugged for one week or longer, the monitor's time and date display will no longer be displayed accurately.

Summer Time (DST)

Apply or cancel the summer time setting (DST).

1. Configure the items.

Item	Detail	Setting range
Summer Time (DST)	Applies or cancels the summer time setting. Set to "On" to apply summer time immediately. Set to "Off" to not apply summer time. Set to "Auto" to apply summer time automatically during the period designated by the start/end dates and times.	On/Off/Auto

2. Select "Apply".

   The setting complete screen is displayed. Select "OK".

● Network Settings

Set network information.

> **Attention**
> • When any one of the IP address settings/IP address/subnet mask/gateway is changed and "Apply" is selected, the warning message "The network settings will be changed" is displayed. Select "OK" or "Cancel" as necessary.

> The network settings will be changed.
> If the address is changed, you will need to access again.
> Are you sure you want to change the setting?
>
> OK   Cancel
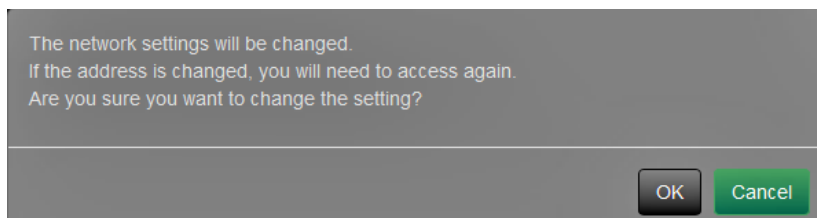
> Also, when you select "OK" for the warning message, a message requesting that you access again appears.

1. In "System", select "Network Settings".

   The "Network Settings" screen is displayed.

2. Configure the items.

Item	Detail	Setting range	
Network Settings	Select the IP address setting method.	IP Setting Method	DHCP/Manual Setting
	If "Manual Setting" is selected, set the IP address, subnet mask and gateway.	IP Address, Subnet Mask, Gateway[*1]	0.0.0.0 to 255.255.255.255
DNS Settings	Set the DNS. (When "IP Address" in "Network Settings" is set to "Manual".)	DNS	Auto/Manual
	If you selected "Manual", set the primary server address and the secondary server address.	Primary Server Address, Secondary Server Address	0.0.0.0 to 255.255.255.255
NTP Settings	Set whether or not to use an NTP server.	NTP	On/Off
	If you selected "On", set the NTP server address.	Server Address	Alphanumeric, symbols

*1 If your network environment does not include a gateway, you do not need to set the "Gateway". Use the default setting as is, or set as "0.0.0.0".

3. Select "Apply".

   The setting complete screen is displayed. Select "OK".

● Communication Settings

The communication settings are used to configure the web interface function, detection of communication errors, and so on.

1. In "System", select "Communication Settings".

    The "Communication Settings" screen is displayed.

2. Configure the items.

Item	Detail	Setting range
Communication Speed	Set the communication speed between the monitor and network hub.	100Mbps Half duplex, 100Mbps Full duplex, 1000Mbps Full duplex
Communication Error Detection	You can set the following as the message to be displayed when receipt of image data stops. Communication Error Detection On: Within several seconds after receipt of image data stops, an alert message in a red box will appear on the live image screen. When communication resumes, the alert is cleared and the image is displayed again. Communication Error Detection Off: When approx. 20 seconds have elapsed after receipt of image data stops, a communication error message will appear.	On/Off
Web Interface	You can operate and configure the monitor from your web browser over the network.	On/Off
Web Interface Port	Sets the port of the web interface[1]	1 to 65535

*1   When the web interface is enabled, you can set the port.

3. Select "Apply".

    The setting complete screen is displayed. Select "OK".

    Attention

    • When the web interface is disabled, you will not be able to configure the monitor settings from your web browser. When the web interface is disabled and "Apply" is selected, the following warning message appears.
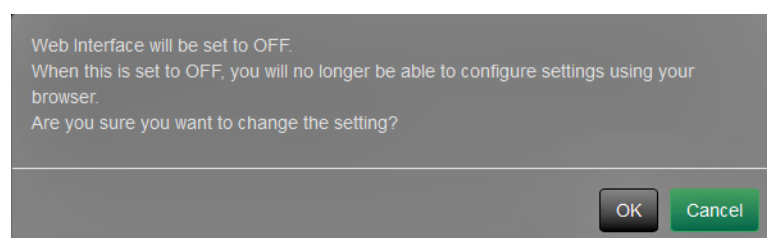
● Other System Settings

1. In "System", select "Other System Settings".

   The "Other System Settings" screen appears.

2. Configure the items.

Item	Detail	Setting range
Language	Set the display language of the menu and the setting screen.	日本語 /English/Deutsch
Quick Start	Set the status of the system when turned off. When set to "On", part of the system remains running. When set to "Off", the system is shut down completely. By setting to "On", the startup time for this product can be reduced (approx. 10 seconds). However, do not turn off the main power of the monitor when Quick Start is set to "On" because part of the system remains running.	On/Off
Key Lock	Locks operations by the buttons on the front of the monitor.	On/Off
Logo	Set whether to display/hide the EIZO logo when the power is turned on[1].	On/Off
Power Indicator	Set whether to turn of or off the power indicator (blue) while the monitor is on.	On/Off

*1   The rotating bar indicating that the system is starting up cannot be hidden.

3. Select "Apply".

   The setting complete screen is displayed. Select "OK".

● Maintenance

Perform system initialization, restarts, and software updates.

1. In "System", select "Maintenance".

    The "Maintenance" screen is displayed.
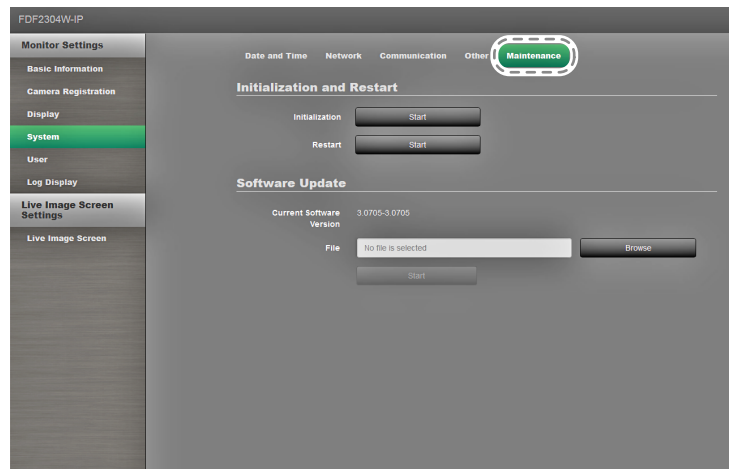
Initialization and Restart

Initialize the system

1. Select "Execute" for "Initialization".

    All settings are returned to default setting except for system logs, operation logs, the current time, time zone and summer time settings.
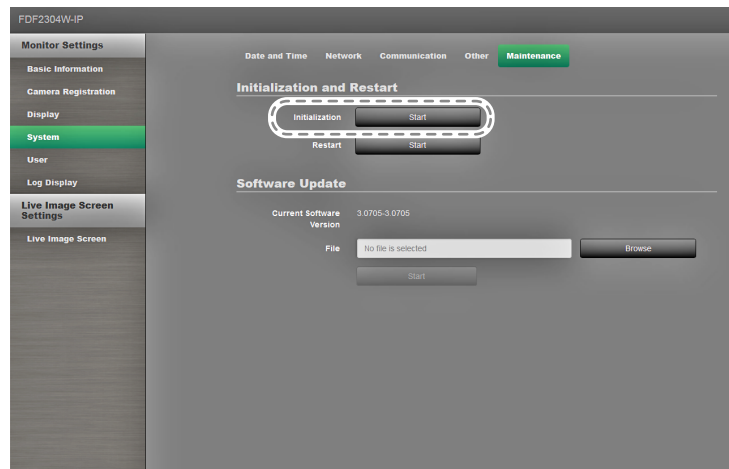
2. The following message appears.

    Select "OK" or "Cancel" in accordance with the response.
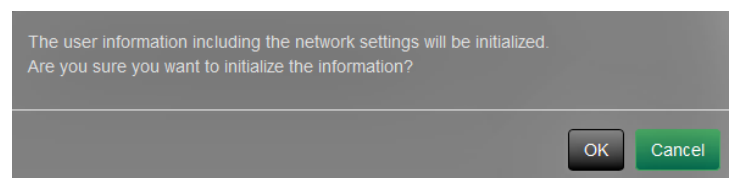
Restart the system

1. Select "Start" at "Restart".

   Restart the system.
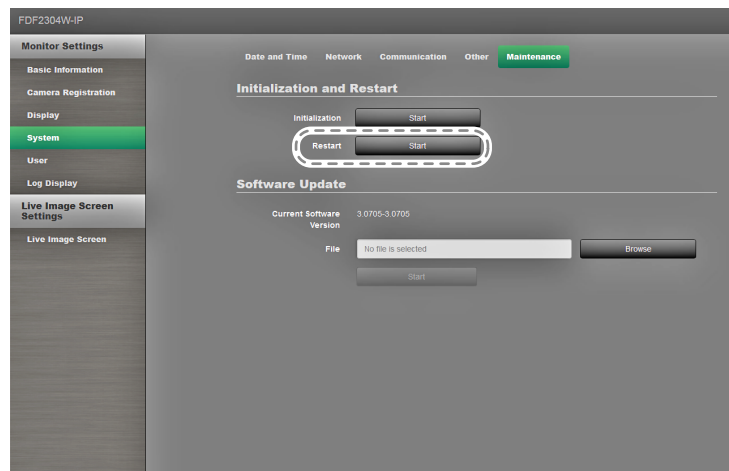
2. The following message appears.

   Select "OK" or "Cancel" in accordance with the response.
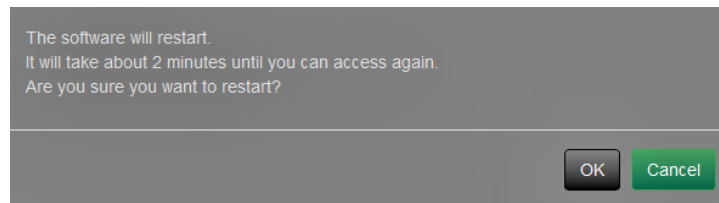
Software Update

You can both upgrade or downgrade the software.

1. In "System", select "Maintenance".

   The screen transitions to "Software Update".

2. Select "Browse".

   A file selection dialog box opens. Select the applicable file.

   Attention
   - The software will not be updated if a file is not selected, or a file other than an update file has been selected.
   - Perform software updates with the monitor screen displayed.
   ---

3. Select "Execute".

   The following message appears. Select "OK" or "Cancel" in accordance with the response.

   The software will be updated.
   The update will take about 5 minutes.
   Do not turn the power off while the update is in progress.
   Do you want to start the software update?

   OK   Cancel
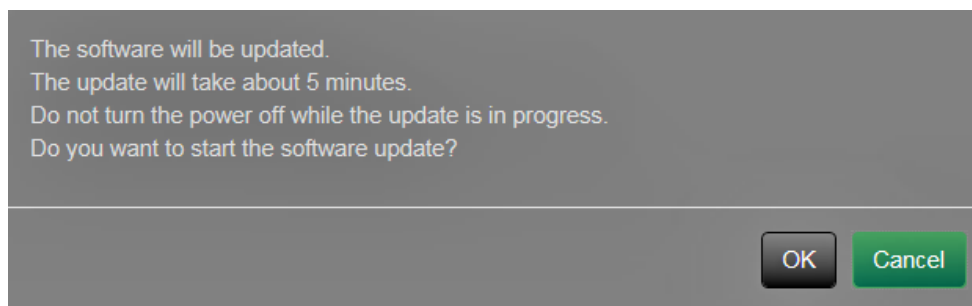
4. Select "OK".

   The update process starts, and the following message appears.

   The software is being updated.
   Do not turn the power off while the update is in progress.
   Close the browser, and wait 5 minutes before accessing again.

   OK
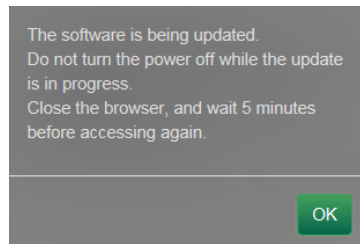
5. Select "OK". The software is updated.

   Close the web browser, and wait 5 minutes before accessing again.

   Note
   - You can select update files from the File Selection screen, and can perform upgrading or downgrading of software.
   - When you restart your system, a message indicating the success or failure of the software update will appear. The message will clear automatically after 60 seconds if "OK" is not selected. However, this message will not appear if you do the update through your web browser.

3-7. Setting User Information

Register, change or delete information (username, user level and password) on users that access this product.

> **Note**
> • For details, see

● Adding User Information
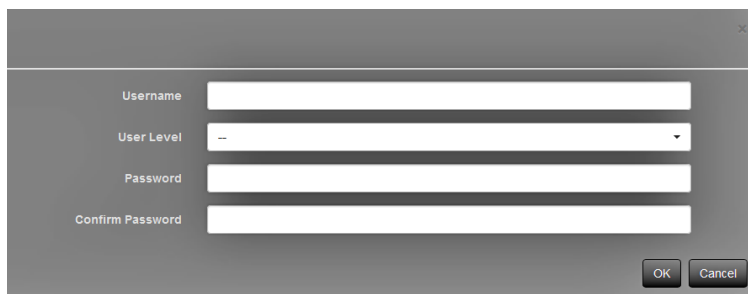
Procedure

1. Select "User".

   The "User Settings" screen is displayed.
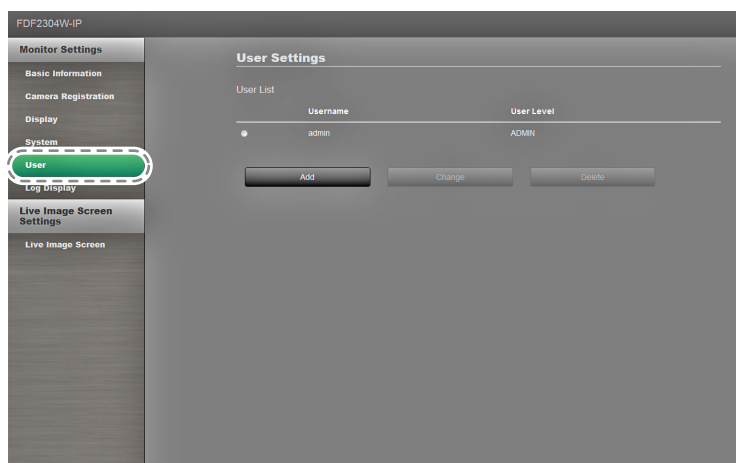
2. Select "Add".

   A dialog box for entering user information appears.

3. Set user information.
4. Select "OK".

   The setting complete screen is displayed. Select "OK".

● Changing User Information

Procedure
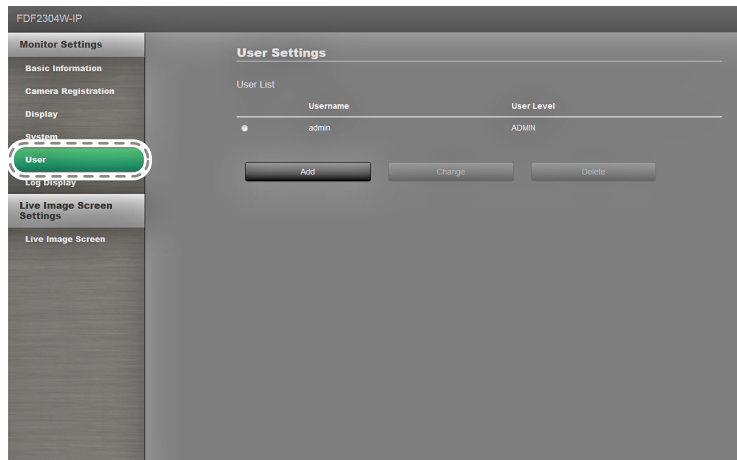
1. Select "User".

2. Select the user to be changed from the "User List".
3. Select "Change".

   A dialog box for entering user information appears.

4. Set user information.
5. Select "OK".

   The setting complete screen is displayed. Select "OK".

● To delete user information

<u>**Procedure**</u>

1. Select "User".
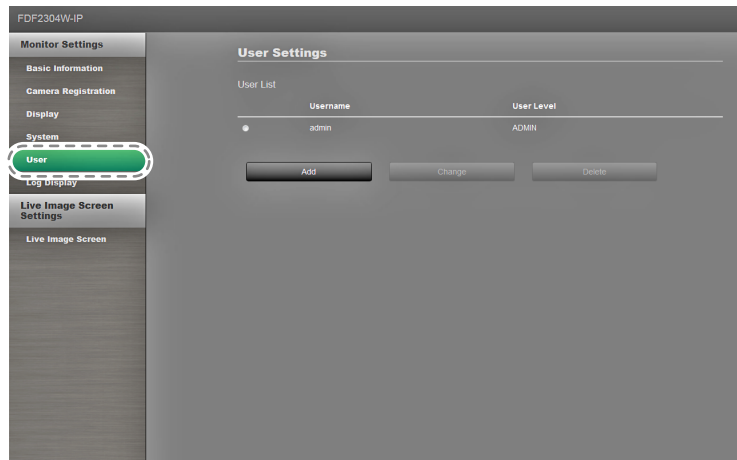
2. Select the user to be deleted from the "User List".
3. Select "Delete".
4. A "Are you sure you want to delete user xxx?" confirmation dialog box appears. Select "OK".
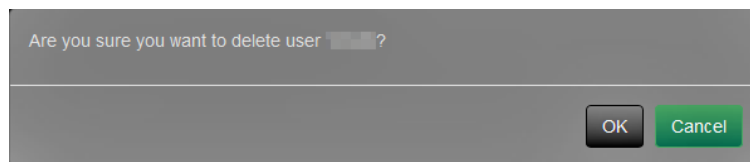
If you do not want to delete the user, select "Cancel".

5. The setting complete screen is displayed. Select "OK".

3-8. Displaying Operation Logs

Operations of this product are recorded on logs. Past operation results can be checked by displaying operation logs. You can also display system logs.

> **Note**
>
> • The following data are recorded on the log:
>   - Login information: The names of users who logged in to the system
>   - Camera operation results: Name of operated camera, operation details, operation results
>   - Date, time and details of changes confirmed by selecting "Apply" on setting screens
> • Logs older than two months are automatically deleted at 04:00:00 AM on the first day of every month.

● Displaying logs

Procedure

1. Select "Log Display".
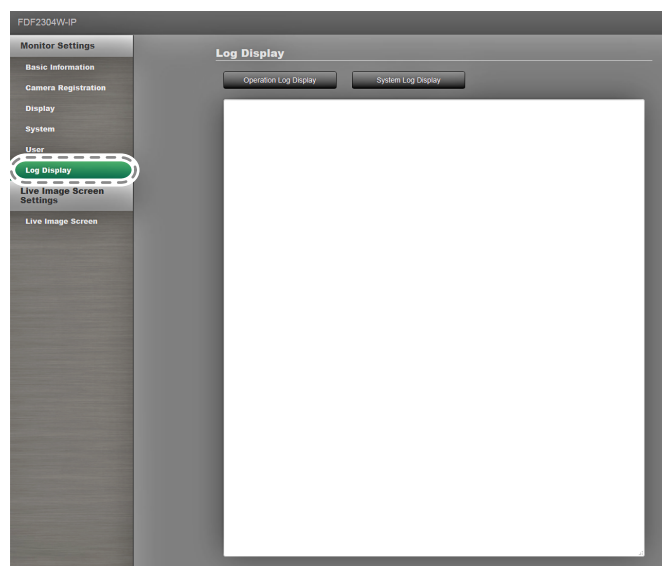
2. Select "Operation Log Display".
   The log data is displayed in the area at the bottom of the screen.

● Displaying the system log

Procedure

1. Select "Log Display".
2. Select "System Log Display".
   The log data is displayed in the area at the bottom of the screen.

3-9. Setting the Live Image Screen

The live image screen settings are used for configuring the display, such as changing the live image screen layout.
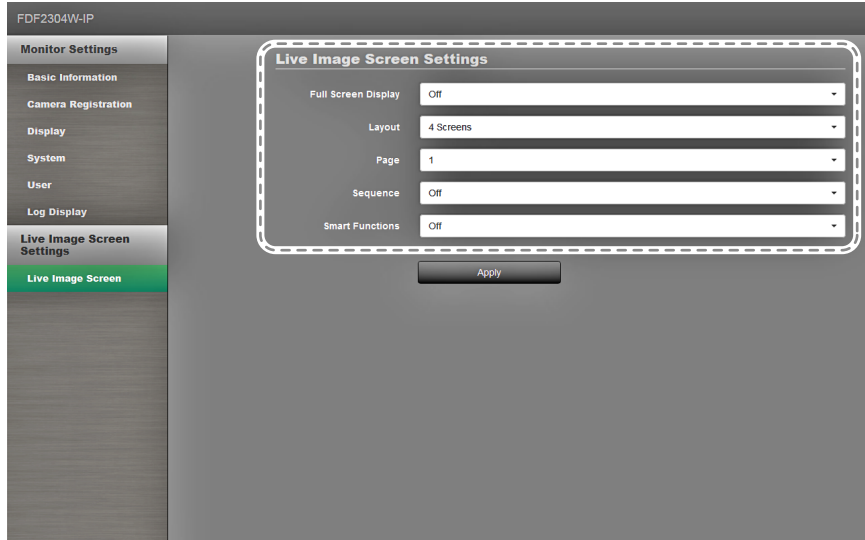
1. Select each setting item from the list box.

Item	Detail	Setting range
Full Screen Display	Displays/hides the menu of the live image screen.	On/Off
Layout	Changes the monitor screen layout. You can switch to 1 screen, 4 screen, 9 screen, 16 screen, or 8 screen layout.	1 Screen/4 Screens/ 9 Screens/16 Screens/ 8 Screens
Page	Changes over the page of camera images to display on the monitor.	1 to 16
Sequence	Turns the sequential display of camera images on or off.	On/Off
Smart Functions	Turns Smart Functions on or off.	On/Off

2. Select "Apply".
3. The setting completion screen appears. Select "OK".

Chapter 4   Troubleshooting

If a problem still remains after applying the suggested remedies, contact your local EIZO representative.

4-1.   Imaging problems

Problem	Possible cause and remedy
1. **The displayed images are not smooth (when camera images are being displayed).**	• Reduce the resolution and/or bit rate set for the network camera (see "Video Settings" (page 15)). • Check whether the used hubs and network cables are appropriate for handling the amount of information transmitted.
2. **The camera images are not displayed properly for about one or two minutes after the monitor power is turned on. (when camera images are being displayed)**	• When the main power is turned off and immediately back on, images may not be displayed properly for the first few minutes. However, the display will normalize after a few minutes.
3. **The time of the network camera and the time of the monitor do not match. (when camera images are being displayed)**	• Synchronize the time of the camera and the monitor through the setting screen (see "Clock Settings" (page 15)).
4. **Images are displayed upside down. (when camera images are being displayed)**	• Turn the network camera upside down through the setting screen (see "Other" (page 19)).
5. **When the orientation of the network camera is changed to the horizontal direction (pan motion), the camera moves in the opposite direction.**	• Turn the network camera upside down through the setting screen (see "Other" (page 19)).
6. **The settings set on the setting screen are not reflected on the camera images.**	• Check whether the setting details are within the setting range of the network camera.
7. **An error message "E**-**" is displayed at the camera image display area.**	• When "E00-00" is displayed: - Check whether a network cable is connected properly. - Check whether the network camera is turned on. • When "E00-01" is displayed: - A number of devices exceeding the allowable number of devices for simultaneous connection may be connected to the network camera. Disconnect other network devices accessing the camera or reduce the resolution of the camera (see "Video Settings" (page 15)). - The network camera may not be transmitting H.264 images. Check the settings of the camera. • When "E00-02" is displayed: - Network bandwidth may be overwhelmed or the display capability of this product may have been exceeded. Reduce the resolution and/or bit rate set for the network camera (see "Video Settings" (page 15)). • When a system error (E00-03) is displayed: - Restart the system.
8. **A "** Camera Control Error" message is displayed at the message display area.**	• The network camera may not be equipped with the function operated. Check the specifications of the camera.
9. **The screen is whitish or blackish (for HDMI input).**	• Change the "Color Space" setting (For details, refer to the Setup Manual.).

4-2. Setting Problems

Problem	Possible cause and remedy
1. **Network camera is not detected automatically.**	• In some cases, automatic discovery and camera IP address setting become inoperable when 20 or more minutes have passed since the network camera was started up. Restart the camera or register manually (see "To manually register network cameras" (page 12)). • Network cameras installed in subnets other than the monitor subnet cannot be discovered automatically. Register the camera manually. Auto discovery and camera operation may fail when the date and time of the network camera and monitor are not aligned. Use the software provided with the camera to adjust the date and time. • If using a network camera that is compatible with the "ONVIF" protocol, auto discovery cannot be performed if the ONVIF function is disabled on the camera. Check the settings of the camera.
2. **An IP address of an automatically discovered network camera cannot be changed.**	• In some cases, automatic discovery and camera IP address setting become inoperable when 20 or more minutes have passed since the network camera was started up. Restart the camera or register manually (see "To manually register network cameras" (page 12)). • If using anything other than a Panasonic network camera, network settings cannot be changed from this monitor.
3. **Only one camera is recognized when using a video encoder that supports multiple channels.**	• Manually register the number of channels that will be used. (see "To manually register network cameras" (page 12)).
4. **A communication error message is displayed when "Apply" is selected for network camera manual registration.**	• There may be a problem with network camera communication. Check the network connection status and camera registration details.
5. **Network camera does not respond to pan/tilt/zoom operations.**	• The network camera may not support pan/tilt/zoom functions. Check the specifications of the camera.
6. **Cannot register a new user.**	• Duplicate usernames cannot be registered. • Only up to 10 users can be registered. Check whether 10 users have already been registered (see "2-7. Setting User Information" (page 32)).
7. **Cannot delete a user.**	• There must be at least one user with a level of "ADMIN". A user cannot be deleted if the user is the only one registered with a level of "ADMIN". Check the registered user information (see "2-7. Setting User Information" (page 32)).
8. **Forgot username and password.**	• The information of usernames and passwords can be returned to default settings by pressing a combination of buttons on the remote control (see "2-7. Setting User Information" (page 32)).
9. **Cannot communicate with the camera.**	• Check the settings of the network camera and the monitor system. For details, contact your system administrator.
10. **Cannot save log data to a USB storage device.**	• This product supports only FAT32 format.
11. **The date and time are not displayed correctly.**	• If the main power switch is turned off or the power cord is unplugged for one week or longer, the monitor's time and date will no longer be displayed accurately (see "2-6. Configuring System Settings" (page 22)).

Chapter 5 Reference

5-1. List of setting items

Note

• The setting items and values differ according to the camera.

Setting item					Setting	Default setting
Easy Setup[*2]	Easy Setup	Date and Time	Date/Time Display Settings	Date Format	yyyy/mm/dd Mmm/dd/yyyy dd/Mmm/yyyy mm/dd/yyyy dd/mm/yyyy	yyyy/mm/dd
				Time Format	24h 12h	24h
				Time Zone	GMT-12:00 GMT-11:00 GMT-10:00 GMT-09:30 GMT-09:00 GMT-08:00 GMT-07:00 GMT-06:00 GMT-05:00 GMT-04:30 GMT-04:00 GMT-03:30 GMT-03:00 GMT-02:00 GMT-01:00 GMT GMT+01:00 GMT+02:00 GMT+03:00 GMT+03:30 GMT+04:00 GMT+04:30 GMT+05:00 GMT+05:30 GMT+05:45 GMT+06:00 GMT+06:30 GMT+07:00 GMT+08:00 GMT+08:45 GMT+09:00 GMT+09:30 GMT+10:00 GMT+11:00 GMT+11:30 GMT+12:00 GMT+12:45 GMT+13:00 GMT+14:00	(Depends on sales region)
			Date and Time Settings	Year	2010 to 2035	
				Month	1 to 12	
				Day	1 to 31 1 to 30 1 to 28 1 to 29	
				Hour	AM/PM (24h) 0 to 23 (12h) 1 to 12	
				Minute	0 to 59	

Setting item				Setting	Default setting
Easy Setup[2]	Easy Setup	Network Settings	IP Setting Method	DHCP Manual Setting	Manual Setting
			IP Address	0.0.0.0 to 255.255.255.255	192.168.0.150
			Subnet Mask	0.0.0.0 to 255.255.255.255	255.255.255.0
			Gateway	0.0.0.0 to 255.255.255.255	192.168.0.1
		Camera Auto Discovery	Camera Discovery		
		Display Position Settings			
Camera	Auto Discovery	Camera Discovery			
	Manual Registration	Camera Name		Alphanumeric characters (0 to 24 characters)	(None)
		IP Address		0.0.0.0 to 255.255.255.255	(None)
		HTTP Port		1 to 65535	(None)
		Protocol		Panasonic/ONVIF	(None)
		Channel		1 to 4	(None)
		Stream		1 to 4	(None)
		RS485 PTZ Control		On/Off	Off
		Username		Alphanumeric characters and symbols (0 to 32 characters)	admin
		Password		Alphanumeric characters and symbols (0 to 32 characters)	12345
	Function Settings[2]	Camera Info. Display/Clock Settings	Camera Information Display	On/Off	(According to the camera specification)
			Time Display	12h/24h/Off	(According to the camera specification)
			Display Position	Upper Left/Upper Right/Lower Left/Lower Right	(According to the camera specification)
			Synchronize with Monitor Time		
		Video Settings[2] (When using a Panasonic network camera)	Aspect Ratio	Camera imaging mode	(According to the camera specification)
			Resolution	According to the camera specification	(According to the camera specification)
			Refresh Interval	0.2s/0.33s/0.5s/1s/2s/3s/4s/5s	(According to the camera specification)
			Transmission Priority	Constant Bit Rate/Frame Rate/Best Effort	(According to the camera specification)
			Frame Rate	1fps/3fps/5fps/7.5fps/10fps/12fps/15fps/20fps/30fps	(According to the camera specification)
			Bit Rate (Max.)	64kbps/128kbps/256kbps/384kbps/512kbps/768kbps/1024kbps/1536kbps/2048kbps/3072kbps/4096kbps/8192kbps/	(According to the camera specification)
			Bit Rate (Min.)	64kbps/128kbps/256kbps/384kbps/512kbps/768kbps/1024kbps/1536kbps/2048kbps/3072kbps/4096kbps/8192kbps/	(According to the camera specification)
			Image Quality	Low (prioritize motion)/Normal/Fine (prioritize image quality)	(According to the camera specification)

Setting item				Setting	Default setting
Camera	Function Settings[2]	Video Settings[2] (ONVIF Profile S-compatible network cameras)	Media Profile	EIZO_Profile/ camera profile	(According to the camera specification)
			Encoder	According to the camera specification	(According to the camera specification)
			Compression Format	H.264/MJPEG	(According to the camera specification)
			Resolution	According to the camera specification	(According to the camera specification)
			Video Quality	According to the camera specification	(According to the camera specification)
			Frame Rate	1 to 30	(According to the camera specification)
			Encoding Interval	According to the camera specification	(According to the camera specification)
			Bit Rate (Max.)	0 to 8192	(According to the camera specification)
			GOV Length	According to the camera specification	(According to the camera specification)
			H.264 Profile	Baseline/Main/ Extended/High	(According to the camera specification)
			Transmission Mode	Unicast/Multicast	Unicast
			Multicast Address	224.0.0.0 to 239.255.255.255	(According to the camera specification)
			Multicast Port	1024 to 65535	(According to the camera specification)
			Multicast TTL	1 or higher	(According to the camera specification)
		Preset	Preset No.	1 to 256	(None)
			Brightness		
			Focus		
			Zoom		
			Pan/Tilt		
		Other	Pan/Tilt-flip	On/Off	(According to the camera specification)
			Upside-down	On/Off	(According to the camera specification)
			Indicator	On/Off	(According to the camera specification)
Display	Position	Position		1 to 16	(Current setting)
		Camera Name Display		On/Off	Off
		Sequence Interval		5s to 60s	5s
		Aspect Ratio Mode		Full Aspect	Full
	Smart Functions	Mode		DAY/NIGHT/Off	DAY
		Smart Resolution		1 to 5/Off	3
		Smart Insight		1 to 5/Off	3
		Noise Reduction		On/Off	On

Setting item					Setting	Default setting
System	System	Date and Time	Date/Time Display Settings	Date Format	yyyy/mm/dd Mmm/dd/yyyy dd/Mmm/yyyy mm/dd/yyyy dd/mm/yyyy	yyyy/mm/dd
				Time Format	24h 12h	24h
				Time Zone	GMT-12:00 GMT-11:00 GMT-10:00 GMT-09:30 GMT-09:00 GMT-08:00 GMT-07:00 GMT-06:00 GMT-05:00 GMT-04:30 GMT-04:00 GMT-03:30 GMT-03:00 GMT-02:00 GMT-01:00 GMT GMT+01:00 GMT+02:00 GMT+03:00 GMT+03:30 GMT+04:00 GMT+04:30 GMT+05:00 GMT+05:30 GMT+05:45 GMT+06:00 GMT+06:30 GMT+07:00 GMT+08:00 GMT+08:45 GMT+09:00 GMT+09:30 GMT+10:00 GMT+11:00 GMT+11:30 GMT+12:00 GMT+12:45 GMT+13:00 GMT+14:00	(Depends on sales region)
			Clock Setting	Year	2010 to 2035	
				Month	1 to 12	
				Day	1 to 31 1 to 30 1 to 28 1 to 29	
				Hour	AM/PM (24h) 0 to 23 (12h) 1 to 12	
				Minute	0 to 59	
		Summer Time (DST)	Summer Time (DST)		On/Off/Auto	Off
				Start	Month, Week, Day, Hour	(None)
				End	Month, Week, Day, Hour	(None)
		Network	Network Settings	IP Setting Method	DHCP/Manual Setting	Manual Setting
				IP Address	0.0.0.0 to 255.255.255.255	192.168.0.150
				Subnet Mask	0.0.0.0 to 255.255.255.255	255.255.255.0
				Gateway	0.0.0.0 to 255.255.255.255	192.168.0.1

Setting item					Setting	Default setting
System	System	Network	DNS Settings	DNS	Auto/Manual	Manual
				Primary Server Address	0.0.0.0 to 255.255.255.255	(None)
				Secondary Server Address	0.0.0.0 to 255.255.255.255	(None)
			NTP Settings	NTP	On/Off	Off
				Server Address	Alphanumeric characters and symbols	(None)
		Communication Settings	Communication Speed		100Mbps Half duplex, 100Mbps Full duplex, 1000Mbps Full duplex	(current setting)
			Communication Error Detection		On/Off	Off
			Web Interface		On/Off	On
			Web Interface Port		1 to 65535	80
		Other	Language		日本語 /English/ Deutsch	(Depends on sales region)
			Quick Start		On/Off	Off
			Key Lock		On/Off	Off
			Logo		On/Off	On
			Power Indicator		On/Off	On
		Settings Data Migration	Save Settings Data[2]			
			Load Settings Data[2]			
		Initialization				
		Software Update				
		Restart				
		Troubleshooting	Connection Confirmation	Camera Name		
				ping		
				traceroute		
			System Log	Date (GMT)		
				Display		
				Save to USB Storage		
				Remove USB Storage		
	User[1]	New User Registration	Username		Alphanumeric characters (1 to 16 characters)	(None)
			User Level		ADMIN/CAMERA CONTROL/LIVE	(None)
			Password		Alphanumeric characters (1 to 16 characters)	(None)
			Confirm Password		Alphanumeric characters (1 to 16 characters)	(None)
		Change/Delete User Information	Username		(Registered user)	
			New Username		Alphanumeric characters (1 to 16 characters)	(None)
			New User Level		ADMIN/CAMERA CONTROL/LIVE	(None)
			New Password		Alphanumeric characters (0 to 16 characters)	(None)
			Confirm New Password		Alphanumeric characters (0 to 16 characters)	(None)
	Log Display	Date (GMT)				
		Display				
		Save to USB Storage[2]				
		Remove USB Storage[2]				

*1 The following user information is set as the default setting:
   Username: "admin", Password: "admin", User Level: "ADMIN"

*2 This can only be set from the monitor screen. This is not available through your web browser.

Chapter 6   Glossary

Bit Rate

Displays the volume of data flowing across the network. Generally, the volume is expressed with the unit "bps" (bits per second) which indicates the number of data bits transmitted per second.

DNS (Domain Name Server)

A server used to convert addresses such as "www.eizoglobal.com" into IP addresses.

Firewall

A system to prevent invasion from external networks.

H.264

A format for compressing images. This method is widely used for image remote transmission and recording. The portion with movement is predicted based on the data of the frame immediately before and after, and only the differential data between frames is used. This enables efficient reduction of data, and is therefore widely used.

IP Address

An address that is allocated to a network device. Each network device is given an address. Unlike MAC addresses, IP addresses change according to the installation environment.

MAC (Media Access Control) Address

A Mac address is a 48bit identification number assigned to a network device. It is assigned statically, not duplicated, and uses a unique number for each network device.

Multicast

A network communication format in which multiple network devices receive a single stream. By having multiple network devices receive the same image at the same quality, the network load of transmitting devices can be reduced, however, it is necessary to have devices and configurations that support multicast.

MJPEG (Motion JPEG)

This is a method for compressing images. It is used for remote transmission and recording of images. Due to compression and decompression being performed for each frame, subsequent frames are not impacted even when data are missing from some frames. Therefore, this method is sometimes used in environments with poor signal quality. However, a downside is that the data volume is larger than that for the H.264 format.

NTP (Network Time Protocol)

A protocol for synchronizing the time and the network server.

ONVIF (Open Network Video Interface Forum)

This is a standard that allows interconnection between network cameras and network recorder equipment from different manufacturers.

ping

A command used to check the connection status with other network devices. Generally, it is judged that there is a problem in the network route when there is no response to ping requests, and the ping command is used for finding out the cause of the problem.

PoE (Power over Ethernet)

A technology to supply electricity using an Ethernet cable.

Port

A communication contact number for network communication. When multiple services are provided by one network device, allotting an individual port number for each service allows the device to provide multiple services simultaneously.

Resolution

The LCD panel consists of numerous pixels of specified size, which are illuminated to form images. This monitor consists of 1920 horizontal pixels and 1080 vertical pixels. At a resolution of 1920 × 1080, all pixels are illuminated as a full screen (1:1).

Subnet Musk

A subnet mask is a numeric value where the network address part identifying the subnet can be specified in an IP address.
(Subnet: a divided network when controlling a large network by dividing into multiple networks)

TCP/IP (Transmission Control Protocol/Internet Protocol)

The TCP/IP is one of the network protocols for network communication. Using the TCP/IP protocols allows communication in various OSes.

traceroute

A command used to check the routes used to connect with other network devices.

Unicast

A network communication format in which individual network devices perform one-to-one communication. Whereas an image quality that is suitable for each individual network device can be transmitted, the downside to this format is that transmitting devices place a high load on the network.

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