New functions and addendum

・This document contains descriptions of how to set the new functions and their restrictions.
It is recommended to read them while referring to the Operating Instructions provided with this product together.
・Depending on the model used, the screens shown in the explanations may differ to the actual camera screens.
・The model number is abbreviated in some descriptions in this manual.

About notations

The following notations are used when describing the functions limited for specified models.
The functions without the notations are supported by all models.

S11x2 : WV-S1132, WV-S1112
S11x1 : WV-S1131, WV-S1111
S15x1 : WV-S1531LTN, WV-S1531LN, WV-S1531LNS, WV-S1511LN
S25x1 : WV-S2531LTN, WV-S2531LN, WV-S2511LN
S22x1 : WV-S2231L, WV-S2211L
S21x1 : WV-S2131L, WV-S2131, WV-S2111L
S21x0 : WV-S2130, WV-S2110
S113x : WV-S1132, WV-S1131
S111x : WV-S1112, WV-S1111
S153x : WV-S1531LTN, WV-S1531LN, WV-S1531LNS
S151x : WV-S1511LN

S253x : WV-S2531LTN, WV-S2531LN
S251x : WV-S2511LN
S223x : WV-S2231L
S221x : WV-S2211L
S213x : WV-S2131L, WV-S2131, WV-S2130
S211x : WV-S2111L, WV-S2110
X6531 : WV-X6531N, WV-X6531NS
X6511 : WV-X6511N
S6530 : WV-S6530N
S6131 : WV-S6131
S6111 : WV-S6111
S6130 : WV-S6130

Due to software upgrade, the following functions have been added and changed to this product.

・Firmware Ver.1.20

S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

No.	Functions	Item (Page)	Page
1	Addition of “IEEE 802.1X” function.	User mng.	6
2	Addition of “SNMPv3” function.	Advanced(Network)	7
3	Addition of “1280x720” setting to Stream(3).	Image(Image/Audio)	9

・Firmware Ver.1.40

S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

No.	Functions	Item (Page)	Page
4	“Data encryption” added to “User mng.” menu	User mng.	11
5	[--FREE ENTRY--] added to [Max bit rate (per client)*]	Image(Image/Audio)	13
6	"On (Advanced)" added to [Smart coding]	Image(Image/Audio)	14
7	Support for 256 GB SDXC memory cards	SD memory card(Basic)	15

・Firmware Ver.1.70

No.	Functions	Item (Page)	Page
8	Add “Support” menu	-	16

・Firmware Ver.1.80

No.	Functions	Item (Page)	Page
9	“SD memory card password lock” added to “SD memory card security settings” S11x2 S11x1 S15x1 S25x1 S21x1 S6530 S6130	SD memory card(Basic)	17

・Firmware Ver.1.90

No.	Functions	Item (Page)	Page
10	Change in restrictions on characters for password	For administrator registration	20
11	Description for video distribution method is added	Monitor images from multiple cameras	21
12	[Drawing method], [Decoding Options], [Frame Skip Options (When PC is Heavy Processing Load)] are added to Viewer software	Basic (Basic)	22
13	Change of authentication method default setting	User auth. (User mng.)	24
14	User authentication function for host authentication is added	Host auth. (User mng.)	25
15	“EAP-TLS” is added to the EAP method for IEEE 802.1X	IEEE 802.1X(User mng.)	26
16	Change of default setting of “Bandwidth control(bit rate)”	Network (Network)	30
17	“Reboot” added to “Schedule”	Schedule	31
18	Add [<< Latest 100], [Number of pages display] in [Systemlog] S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x	System log(Maintenance)	32

19	Encryption of the settings	Data(Maintenance)	33
20	“Login failure” indication added to the login-related display	About the displayed system log	34

・Firmware Ver.4.00

No.	Functions	Item (Page)	Page
21	Made Stream(3) available when “On” is set for [Stabilizer].	Basic (Basic)	35
22	Addition of “Overlay Image” function.	Overlay (Image/Audio)	36
23	"On(Frame rate control)" added to [Smart coding] – [GOP control]	Image(Image/Audio)	39
24	Addition of “VIQS” function. S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x	Image quality(Image/Audio)	40
25	Description for [Pan/tilt-flip] is added. S6530 S6130	Cam. Function (Image/Audio)	44
26	Improvement of readability of Date/time and characters on screen.	Basic (Basic)	45
27	Change in encryption of the settings.	Data(Maintenance)	46

・Firmware Ver.4.10

No.	Functions	Item (Page)	Page
28	Addition of “Alarm area No.” setting to the “Preset per sender” X6531 X6511 S6530 S6131 S6111 S6130	Preset per sender(Alarm)	47

・Firmware Ver.4.20

No.	Functions	Item (Page)	Page
29	Addition of “Pan/Tilt Operability” setting to the “Cam. Function” X6531 X6511 S6530 S6131 S6111 S6130	Cam. Function (Image/Audio)	51

・Firmware Ver.4.30

No.	Functions	Item (Page)	Page
30	Change of [Viewer software (nwcv4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x	Basic (Basic)	52
31	Change of [Internet mode] default setting	Image(Image/Audio)	53
32	Change of [Maximum gain] default setting of “Light control mode” S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x	Image quality(Image/Audio)	54
33	Enhanced the access restriction function of SNMP v1/v2	Advanced (Network)	55

34	Added “SNMP transmission upon alarm detection” to “Camera action on alarm”	Camera action on alarm (Alarm)	56
35	Added “SNMP trap setting” to “SNMP”	Advanced (Network)	57

・Firmware Ver.4.60

No.	Functions	Item (Page)	Page
36	Change the default value of each stream-related setting item depending on the language setting of the browser selected at the time of administrator registration	Image(Image/Audio)	62
37	Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network	Network (Network)	63
38	Add ONVIF® settings in Network	Network (Network)	64
39	Add the SRTP function to "Advanced" of "Network"	Advanced (Network)	65
40	Enable the HTTP alarm notification function to support the HTTPS communication and the Digest authentication	Notification(Alarm)	66
41	Add to the system log when authentication fails for the HTTP alarm notification function	System log(Others)	68

・Firmware Ver.4.80

No.	Functions	Item (Page)	Page
42	Add a notify to the [SNMP trap setting]	Advanced (Network)	69
43	Add to the system log when recording stream fails to write	Status (Maintenance)	70
44	Add a function to notify the user of writing failures in the recording stream with a unique alarm	Notification(Alarm)	71
45	Add a note when the bit rate of the recording stream is set to a value exceeding recommended value	Image(Image/Audio)	72
46	Add a download function of Viewer software (nwcv4Ssetup.exe)	Basic (Basic)	73
47	Extend authentication password for the destination of notification	Advanced (Network)	74

・Firmware Ver.4.90

S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

No.	Functions	Item (Page)	Page
48	Add LLDP function	Advanced (Network)	75

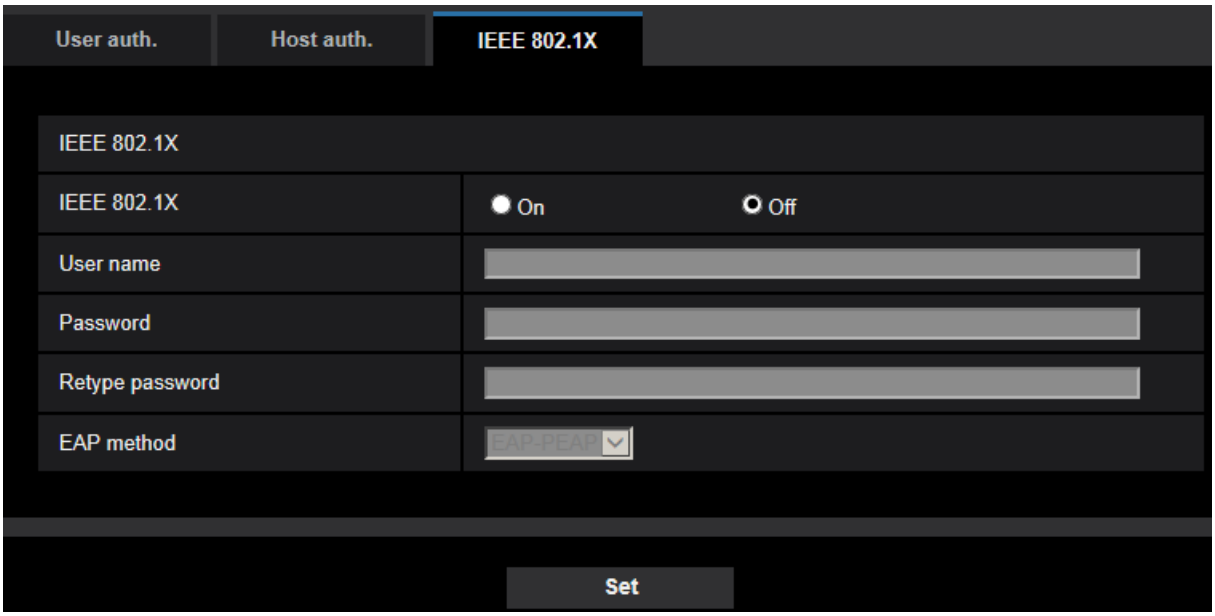
・Firmware Ver.4.91

No.	Functions	Item (Page)	Page
49	Add the function to set the date and time of the PC to the camera	Basic (Basic)	77
50	Change the initial value of “Overwrite” of SD memory card to On	SD memory card (Basic)	78
51	Add the supplementary explanation of On/Off of Internet mode to the setting screen	Image (Image/Audio)	79
52	Add NTP test functions	Advanced (Network)	80
53	Add TLS settings to HTTPS	Advanced (Network)	81
54	Add LLDP function X6531 X6511 S6530 S6131 S6111 S6130	Advanced (Network)	82

1. Addition of “IEEE 802.1X” function.

[IEEE 802.1X] tab of the “User mng.” page has been added.

This function can be used when building a secure network using authentication LAN switches. Refer to the network administrator for information on authentication LAN switches.



Click [IEEE802.1X] tab on the “User mng.” page.

[IEEE 802.1X]

Select On/Off to determine whether or not to perform port authentication using IEEE 802.1X.

• **Default:** Off

[User name]

Enter the user name to access the authentication LAN switch.

• **Available number of characters:** 1-32 characters

• **Unavailable characters:** Alphanumeric characters " & : ; ¥

[Password] [Retype password]

Enter the password to access the authentication LAN switch.

• **Available number of characters:** 4-32 characters

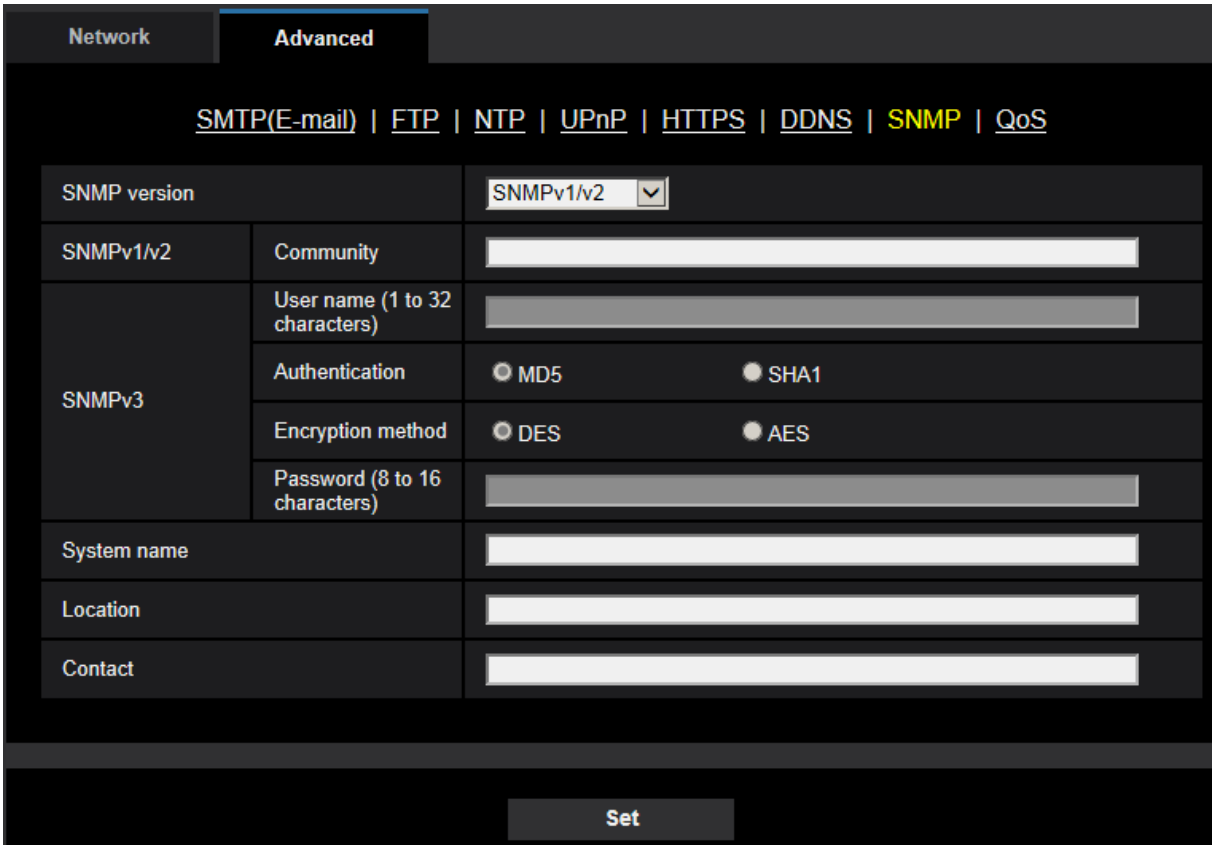
• **Unavailable characters:** Alphanumeric characters " &

[EAP method]

Select the authentication method as EAP-MD5 or EAP-PEAP.

2. Addition of “SNMPv3” function.

(Operating Instructions Configuring the network settings [Network] - Configure advanced network settings [Advanced] - Configure the settings relating to SNMP)



[SNMP version]
Select the SNMP version to be used.
- **SNMPv1/v2:** SNMPv1/v2 is activated.
- **SNMPv3:** SNMPv3 is activated.
- **SNMPv1/v2/v3:** SNMPv1/v2/v3 is activated.
- **Default:** SNMPv1/v2

[SNMPv1/v2] - [Community]
Enter the community name to be monitored.
- **Available number of characters:** 0 - 32 characters
- **Default:** None (blank)

IMPORTANT
- When using the SNMP function, it is necessary to enter the community name. When no community name is entered, the SNMP function will not work.

[SNMPv3] - [User name]
Set the SNMPv3 user name.
- **Available number of characters:** Empty field or 1-32 characters
- **Unavailable characters:** " & : ; ¥

[SNMPv3] - [Authentication]
Select the SNMPv3 authentication method from MD5/SHA1.
- **Default:** MD5

[SNMPv3] - [Encryption method]

Select the SNMPv3 encryption method from DES/AES.

• **Default:** DES

[SNMPv3] - [Password (8 to 32 characters)]

Set the SNMPv3 password.

• **Available number of characters:**

– If the authentication method is MD5: Empty field or 8-16 characters

– If the authentication method is SHA1: Empty field or 8-20 characters

• **Unavailable characters:** " &

[System name]

Enter a system name to be used to manage the camera with the SNMP function.

• **Available number of characters:** 0 - 32 characters

• **Default:** None (blank)

[Location]

Enter the name of the location where the camera is installed.

• **Available number of characters:** 0 - 32 characters

• **Default:** None (blank)

[Contact]

Enter the E-mail address or the phone number of the SNMP manager.

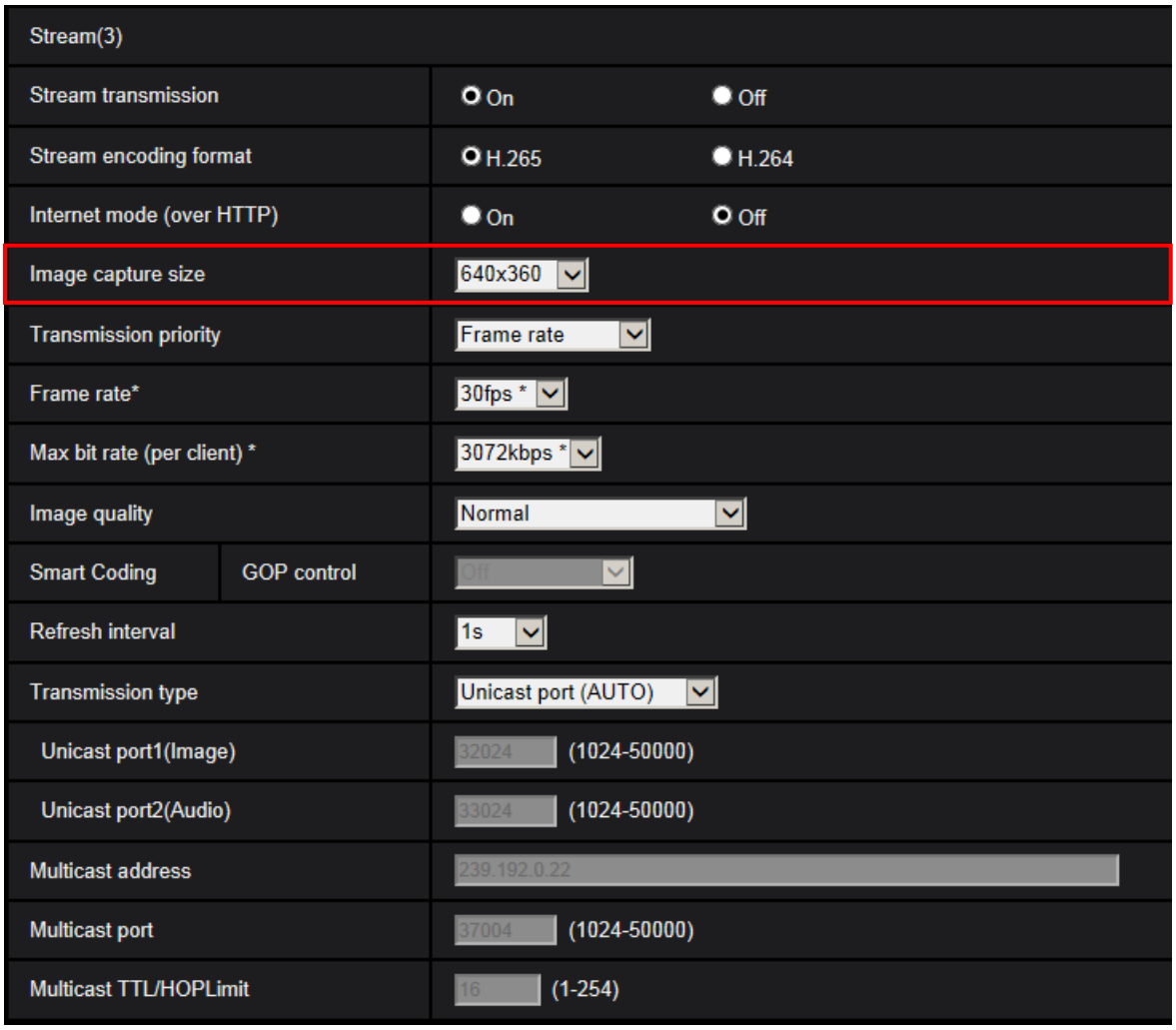
• **Available number of characters:** 0 - 255 characters

• **Default:** None (blank)

3. Addition of “1280x720” setting to Stream(3)

(Operating Instructions Configure the settings relating to images and audio [Image/Audio]

- Configure the settings relating to Stream [Image])



S113x S153x S253x S223x S213x

Image capture mode	Stream(1)	Stream(2)	Stream(3)	Stream(4)
2 mega pixel [16:9] (30fps mode)	1920 x 1080 1280 x 720 640 x 360 320 x 180	1920 x 1080 1280 x 720 640 x 360 320 x 180	1280 x 720 640 x 360 320 x 180	640 x 360 320 x 180
2 mega pixel [16:9] (60fps mode)	1920 x 1080 1280 x 720	1920 x 1080 1280 x 720 640 x 360 320 x 180	1280 x 720 640 x 360 320 x 180	640 x 360 320 x 180
3 mega pixel [4:3] (30fps mode)	2048 x 1536 1280 x 960 800 x 600 VGA 400 x 300 QVGA	1280 x 960 800 x 600 VGA 400 x 300 QVGA	VGA 400 x 300 QVGA	VGA 400 x 300 QVGA

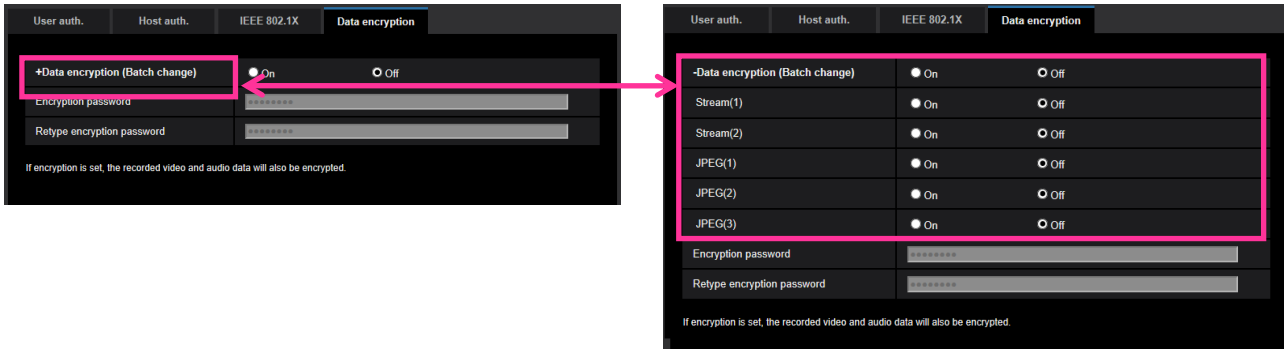
S111x S151x S251x S221x S211x

Image capture mode	Stream(1)	Stream(2)	Stream(3)	Stream(4)
1.3 mega pixel [16:9] (30fps mode)	1280 x 720 640 x 360 320 x 180	1280 x 720 640 x 360 320 x 180	1280 x 720 640 x 360 320 x 180	640 x 360 320 x 180
1.3 mega pixel [16:9] (60fps mode)	1280 x 720	1280 x 720 640 x 360 320 x 180	1280 x 720 640 x 360 320 x 180	640 x 360 320 x 180
1.3 mega pixel [4:3] (30fps mode)	1280 x 960 800 x 600 VGA 400 x 300 QVGA	1280 x 960 800 x 600 VGA 400 x 300 QVGA	VGA 400 x 300 QVGA	VGA 400 x 300 QVGA

4. “Data encryption” added to “User mng.” menu

[Data encryption] was added to the “User mng.” page.
Click the [Data encryption] tab in the “User mng.” page.

Click the “+” mark on the left of the setup menu to expand the respective item, and enable detailed settings.
Click the “-” mark on the left of an expanded item to return to the screen displayed before the item was expanded.



[Data encryption (Batch change)]
Select “On” or “Off” to determine whether or not to activate data encryption.
On: Activates data encryption. Encrypts Stream(1), Stream(2), JPEG(1), JPEG(2), JPEG(3), and “AAC-LC” audio.
Off: Deactivates data encryption.
Default: Off

[Stream(1)], [Stream(2)], [JPEG(1)], [JPEG(2)], [JPEG(3)]
Select “On” or “Off” independently for Stream(1), Stream(2), JPEG(1), JPEG(2), and JPEG(3) to determine whether or not to activate data encryption.
Default: Off

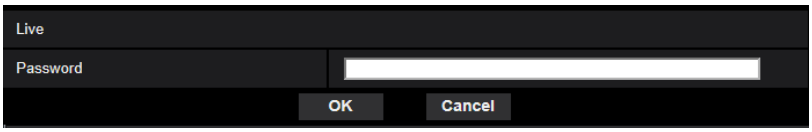
[Encryption password], [Retype encryption password]
Set the password for data encryption.
Available number of characters: 4 - 16 characters
Unavailable characters: " &

IMPORTANT
•The initial password is displayed in "MAC address" on the [Upgrade] screen. When using data encryption, make sure to change the password.
•If you set data encryption to “On”, “Stream(3)” and “Stream(4)” become “Off”.
•When the image capture mode is “3 mega pixel [4:3](30fps mode)” and data encryption is “On”, 2048x1536 JPEG or stream cannot be selected.
•If you set data encryption to “On”, the upper limit of the possible bit rate for stream transmissions will be limited to maximum 16 Mbps.
•If you set data encryption to “On”, the snap shot button on the “Live” page will be hidden.
•If you set data encryption to “On” for JPEG, images cannot be monitored using a cellular phone/mobile terminal. Additionally, the [Refresh interval] pull-down on the “Live” page is not displayed for JPEG with data encryption set to “On”.

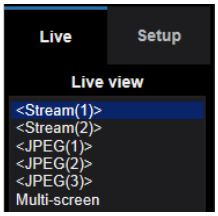
•Data encrypted JPEG cannot be viewed on the browser's "Playback" page. Download it to a PC and use the decryption tool to confirm it.
Refer to our website (https://i-pro.com/global/en/surveillance/training-support/support/technical-information) for further information about the decryption tool.
•If you set data encryption to "On", audio on the [Audio detection] screen will become inaudible.

Note

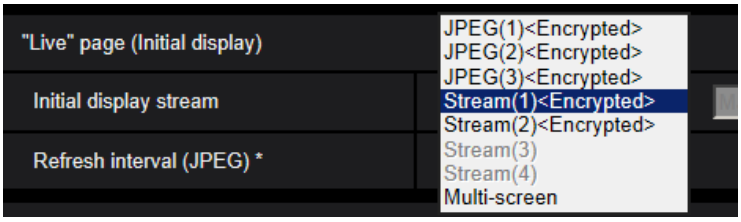
•In order to view streams with data encryption set to "On", you must install the viewer software.
•If you confirm streams with data encryption set to "On" on the "Live" page, password entry for decryption is displayed. If you correctly enter the "Encryption password" that was set, you will be able to view images. When "Mic input", "Interactive(Full-duplex)", or "Interactive(Half-duplex)" is selected for [Audio transmission mode], only audio may be played until the password is entered.



•Streams that have data encryption enabled for them are wrapped in <> in the [Live view] pull-down menu. Additionally, streams that have data encryption enabled for them are indicated by <Encrypted> in the setup menu pull-down menu.
Example: When Stream(1) and JPEG(3) are data encrypted
•[Live view] pull-down menu on the "Live" page



•Pull-down menu in the setup menu

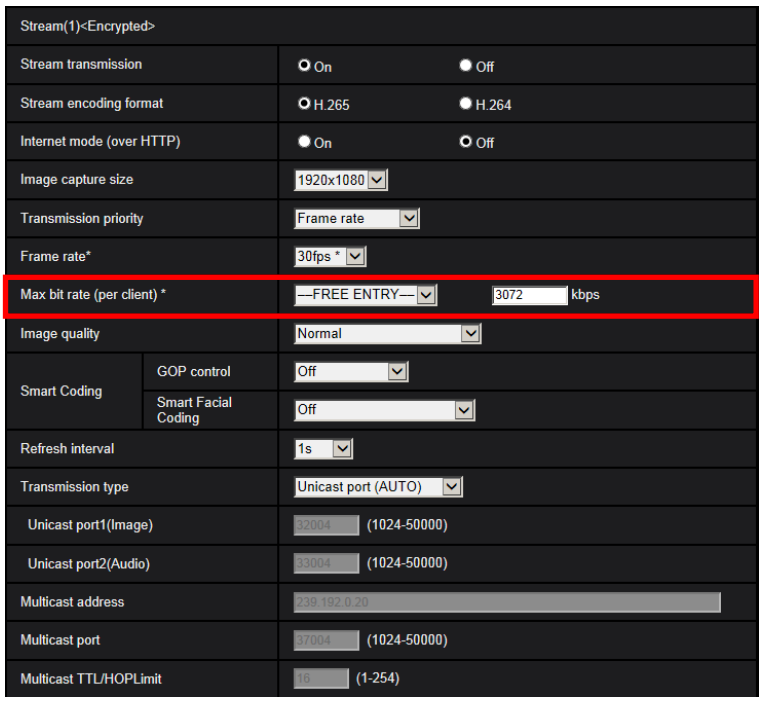


•When [Data encryption (Batch change)] is "On", "AAC-LC" audio is data encrypted ("G.726" and "G.711" are not data encrypted). To encrypt both the image and audio, set [Data encryption (Batch change)] to "On" and set [Audio input encoding format] to "AAC-LC".
•For encrypted MP4 files and JPEG images, you can use the decryption tool to confirm the images.

5. [--FREE ENTRY--] added to [Max bit rate (per client)*]

(Operating Instructions　Configure the settings relating to images and audio [Image/Audio]
Configure the settings relating to Stream [Image])

When setting “Max bit rate (per client)*” of Stream(1) – (4), in addition to selecting an item from the pull-down menu, you can now set the item freely.



[Max bit rate (per client)*]

64kbps/ 128kbps */ 256kbps */ 384kbps */ 512kbps */ 768kbps */ 1024kbps */ 1536kbps */ 2048kbps */ 3072kbps */ 4096kbps */ 6144kbps */ 8192kbps */ 10240kbps */ 12288kbps */ 14336kbps */ 16384kbps */ 20480kbps */ 24576kbps */ --FREE ENTRY--

When “--FREE ENTRY--” is selected, you can freely enter the bit rate.

Note

The range that can be configured differs depending on the “Transmission priority” and “Image capture size”.

When “Constant bit rate”, “Frame rate”, or “Best effort” is selected for “Transmission priority”

QVGA, 400x300, VGA, 320x180, and 640x360 : 64kbps - 4096kbps

800x600 : 64kbps - 4096kbps

1280x960 and 1280x720*1 : 128kbps - 8192kbps

1920x1080*1: 256kbps - 12288kbps S113x S153x S253x S223x S213x

2048x1536 : 512kbps - 16384kbps S113x S153x S253x S223x S213x

When “VBR” is selected for “Transmission priority”

QVGA, 400x300, VGA, 320x180, and 640x360 : 64kbps - 12288kbps

800x600 : 64kbps - 12288kbps

1280x960 and 1280x720*1 : 128kbps - 12288kbps

1920x1080*1 : 256kbps - 24576kbps S113x S153x S253x S223x S213x

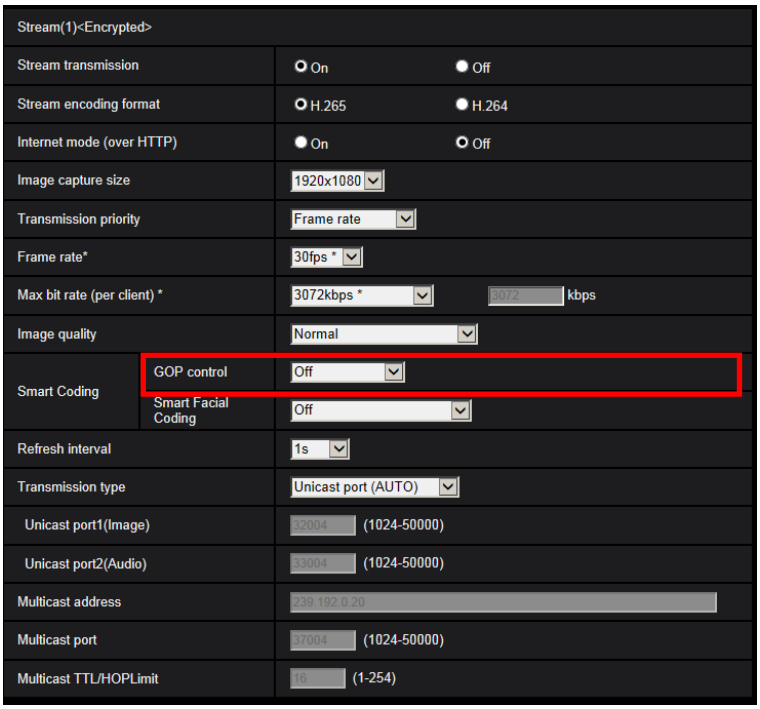
2048x1536 : 512kbps - 24576kbps S113x S153x S253x S223x S213x

*1 When 60fps mode is selected, settings up until 24576kbps can be configured.

6. “On(Advanced)” added to [Smart coding]

(Operating Instructions　Configure the settings relating to images and audio　[Image/Audio]　Configure the settings relating to Stream [Image])

Previously “Smart Coding” was only available for Stream(1) – (4) when the [Transmission priority] was “VBR”; now “Smart Coding”-“GOP control” can be set to “On(Advanced)” even when “VBR” is not selected.



[Smart Coding] - [GOP control]

By using “GOP control”, the transmission data volume can be reduced when there is little motion in the image.

When “H.265” is selected as the “Stream encoding format”: Off/On(Low)/On(Mid)/On(Advanced)

When “H.264” is selected as the “Stream encoding format”: Off/On(Low)/On(Mid)

Default:　Off

IMPORTANT

・If "On(Low)", "On(Mid)", or "On(Advanced)" is selected, data cannot be recorded to the SD memory card.

Note

- “On(Low)”/”On(Mid)” are only available when [Transmission priority] is “VBR”.
- “On(Advanced)” is available regardless of [Transmission priority].

7. Support for 256 GB SDXC memory cards

S11x2 S11x1 S25x1 S22x1 S21x1

(Operating Instructions Configure the basic settings of the camera [Basic] Configure the settings relating to the SD memory card [SD memory card])

The upper limit for supported SD memory cards is 256 GB.

Compatible SD memory card (option)

Manufactured by Panasonic (SD speed class 4 or higher)
miniSD and microSD cards cannot be used.
SDXC memory card: 64 GB, 128 GB, 256 GB
SDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB
SD memory card: 2 GB

8. Add “Support” menu

Methods for accessing the Panasonic support website are explained on the “Support” page.

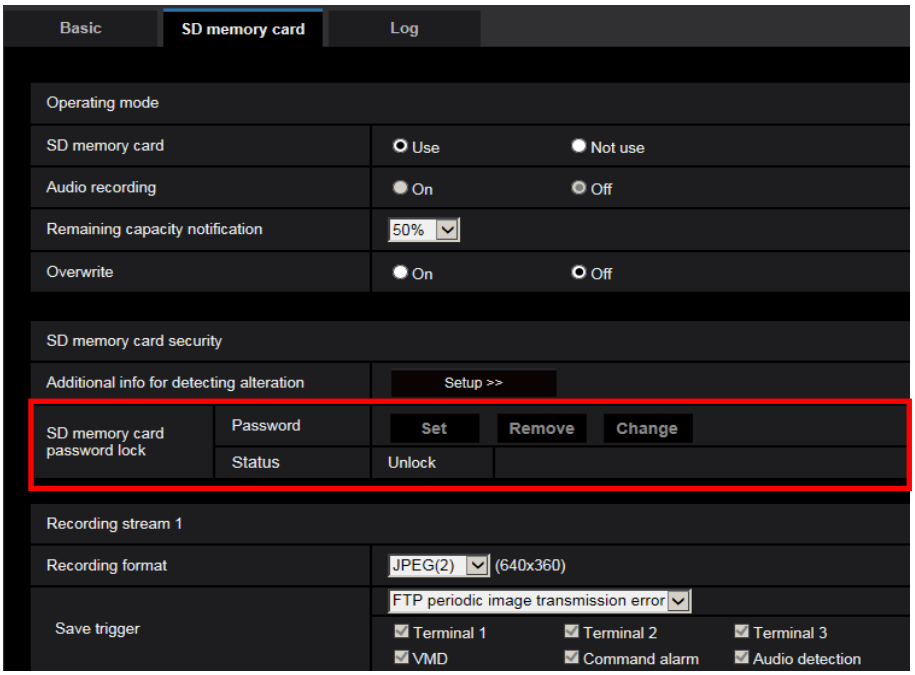
To access the Panasonic support website from a web browser, click the link for the support page.
To access from a cellular phone/mobile terminal, scan the “Data Matrix” or "QR Code" * with your cellular phone/mobile terminal to display the Panasonic support website.
If you cannot display the website, access the Panasonic website (https://i-pro.com/global/en/surveillance/training-support/support/qr-sp-select).

* The word "QR Code" is a registered trademark of DENSO WAVE INCORPORATED in Japan and other countries.

9. “SD memory card password lock” added to “SD memory card security settings” S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 S6530 S6130

(Operating Instructions Configure the basic settings of the camera [Basic] Configure the settings relating to the SD memory card [SD memory card])

[SD memory card password lock] function added to SD memory card security setting.



[SD memory card password lock]

Configure a password for the SD memory card. When configuring a password, devices other than the camera will be unable to write to or read the SD memory card. If the SD memory card is stolen or lost, the risk of recorded data being leaked can be reduced.

[Set]

When an SD memory card with no configured password is inserted, a password can be configured using the [Set] button.

[Password]/[Retype password]

Enter the password.

Available number of characters: 4 - 16 characters

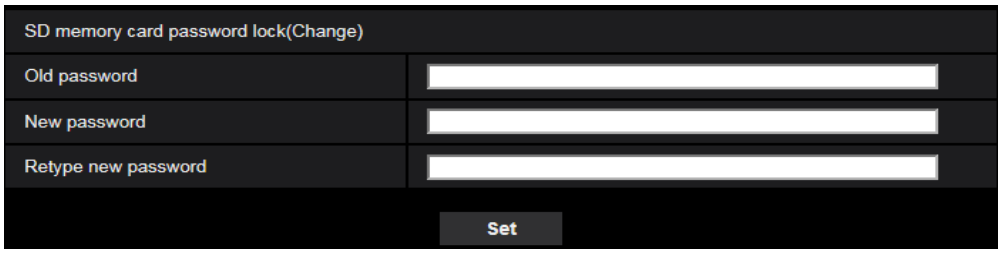
Unavailable characters: " &

Default: None (blank)

[Remove]
When an SD memory card with a configured password is inserted, the password can be removed using the [Remove] button.

[Password]
Enter the password.
Available number of characters: 4 - 16 characters
Unavailable characters: " &

[Change]
When an SD memory card with a configured password is inserted, the password can be changed using the [Change] button.



[Old password]/[New password]/[Retype new password]
Enter the password.
Available number of characters: 4 - 16 characters
Unavailable characters: " &

[Status]
Display the configuration status of the password lock.
• **Lock:** A password is configured on the SD memory card, and the lock function is enabled.
• **Unlock:** The lock function is disabled.

Also display the password configuration status of SD memory card respectively.
Password is set.: The password is configured correctly.
• **Error(Unsupported SD memory card):** A card that does not support password lock is inserted. Check that an SDHC memory card or SDXC memory card is inserted.
• **Error(Password mismatch):** The SD memory card cannot be used because the password configured for the SD memory card and the password configured for the camera do not match. Check that the passwords are correct.

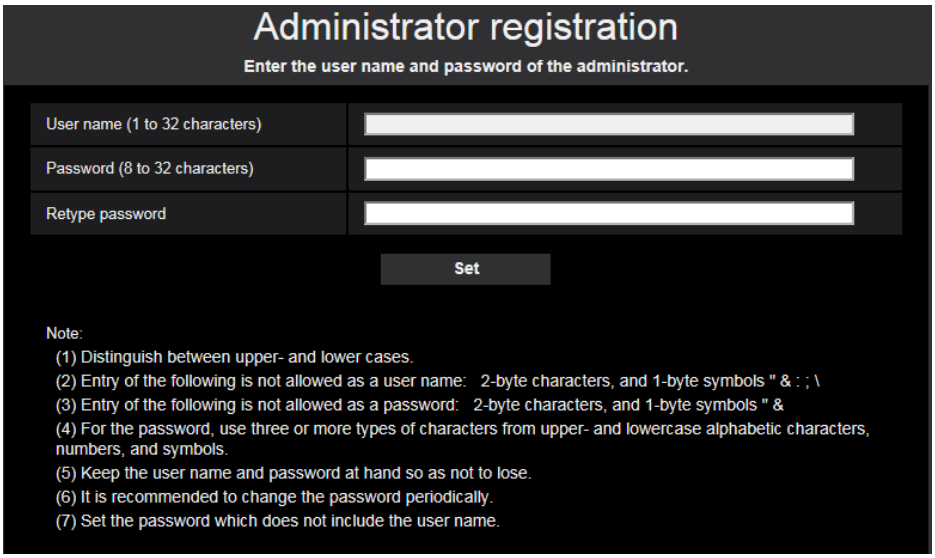
Note
• The password lock function supports only SDHC memory cards and SDXC memory cards.
• If you will use the SD memory card on a device other than the camera with password lock configured, remove the password using the password lock remove button before removing the SD memory card.
The password cannot be removed on devices (such as PCs) other than the camera.
• When the “Status” of “SD memory card password lock” is “Lock”, if an SD memory card with no configured password is inserted, the password is automatically configured to the SD memory card.

IMPORTANT

- If you forget the configured password, the password cannot be removed. The SD memory card with the configured password will become unusable, so manage passwords with great care.
- If you forget the configured password and you want to replace the SD memory card with a new one, perform the following step to set the “Status” of “SD memory card password lock” to “Unlock” before replacing the SD memory card.
  – Initialize settings from the “Maintenance” page.

10. Change in restrictions on characters for password

(Operating Instructions　For administrator registration)



[Password (8 to 32 characters)]/[Retype password]

Enter the administrator password.

Available number of characters: 8 - 32 characters

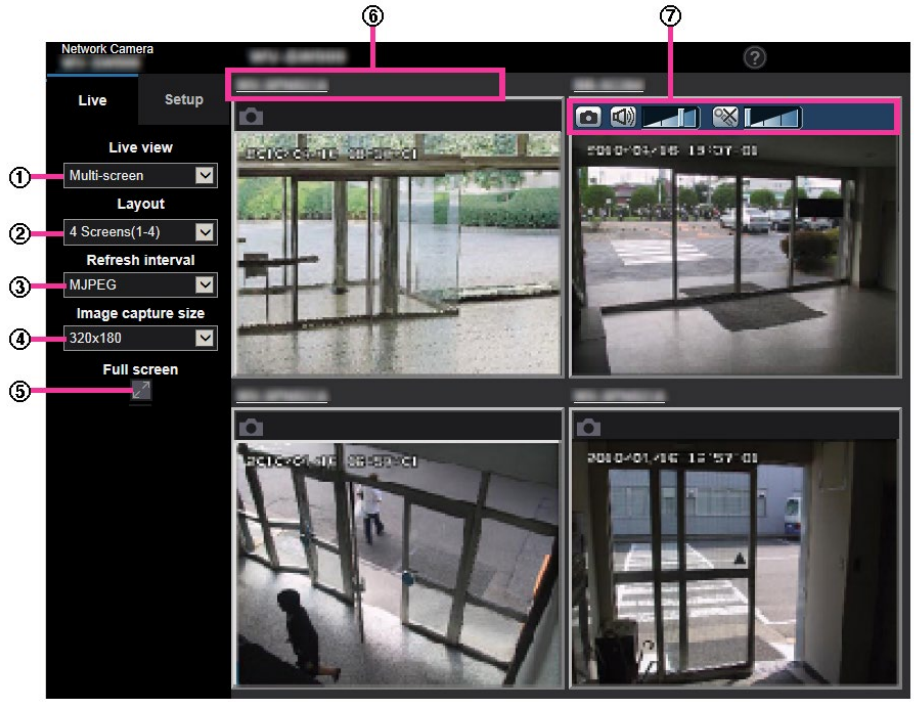
Unavailable characters: 2-byte characters, and 1-byte symbols " &

Note

- Distinguish between upper- and lower cases.
- Use three or more types of characters from upper- and lowercase alphabetic characters, numbers, and symbols.
- Set the password which does not include the user name.

11. Description for video distribution method is added

(Operating Instructions　Monitor images from multiple cameras)



③ [Refresh interval] pull-down menu

Select from the pull-down menu and switch between video (H.265/H.264/MJPEG) and still images (JPEG).

For still images (JPEG), select the refresh interval (Refresh interval : 1s/Refresh interval : 3s/Refresh interval : 5s/Refresh interval : 10s/Refresh interval : 30s/Refresh interval : 60s) for camera images.

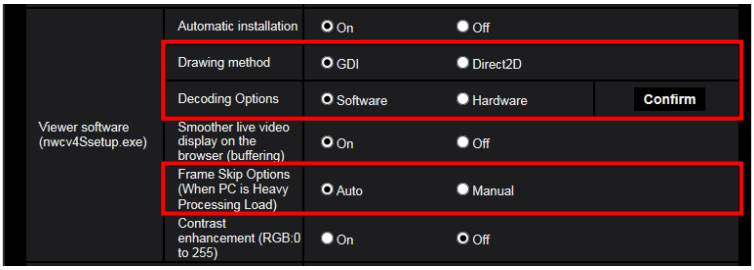
When the 16 screen layout is used, Refresh interval : 1s cannot be selected.

Note

- When “On” is selected for Stream(1), “H.265” or “H.264” can be selected.
- When “H.265” is selected, H.264 or MJPEG video may be displayed depending on the settings of the connected camera.
- When “H.264” is selected, H.265 or MJPEG video may be displayed depending on the settings of the connected camera.

12. [Drawing method], [Decoding Options], [Frame Skip Options (When PC is Heavy Processing Load)] are added to Viewer software

(Operating Instructions Configure the basic settings of the camera [Basic]- Configure the basic settings [Basic])



[Viewer software (nwcv4Ssetup.exe)] - [Drawing method]

Perform image display settings when displaying camera images with the viewer software.

- **GDI:** The drawing method generally used in Windows.
- **Direct2D:** Can reduce choppy drawing of images.
- **Default:** GDI

IMPORTANT

- Use “Direct2D” with a computer that has the latest graphic driver version installed to it.
- When using “Direct2D”, set “Smoother live video display on the browser (buffering)” to “On”. If “Off” is selected for “H.264 Smoother live video display on the browser (buffering)”, “Direct2D” may not be very effective.

Note

- If your computer’s operating system is Windows 7 and the Aero function is disabled, “Direct2D” may not be very effective.
- When “Direct2D” is selected for “Drawing method”, video may not be displayed or the displayed image may be seen as it is partially corrupted depending on the PC in use.
- Refer to the Panasonic support website for information of PCs for which “Direct2D” is selectable.
  Panasonic website
  (https://i-pro.com/global/en/surveillance/training-support/support/technical-information <Control No.: C0313>)

[Viewer software (nwcv4Ssetup.exe)] - [Decoding Options]

Select the decoding method for H.265/H.264 images on the “Live” page.

- **Software:** Decoding is performed by software.
- **Hardware:** Uses the Hardware Acceleration (QSV/DXVA) function that performs fast decoding.
- **Default:** Software

IMPORTANT

- “Hardware” may not be able to be used depending on the computer used.
  One of the following messages is displayed when the [Confirm] button is clicked.
  – The hardware decode is available for both H.265 and H.264 on your PC.
  → Depending on your PC environment, images may not be able to be outputted. In this case, select “Software” for “Decoding Options”.
  – The hardware decode is available for H.264 on your PC, but unavailable for H.265 on your PC.
  → Depending on your PC environment, images may not be able to be outputted. In this case, select “Software” for “Decoding Options”.
  – “The hardware decode is not available on your PC.”
  → Select “Software” for “Decoding Options”.

Note

- When “Hardware” is selected for “Decoding Options”, video may not be displayed or the displayed image may be seen as it is partially corrupted depending on the PC in use.
- Refer to the Panasonic support website below for information of PCs for which “Hardware” is selectable.
  Panasonic website
  (https://i-pro.com/global/en/surveillance/training-support/support/technical-information
  <Control No.: C0313>)

[Viewer software (nwcv4Ssetup.exe)] - [Frame Skip Options (When PC is Heavy Processing Load]

Perform settings to display camera images on the viewer software.

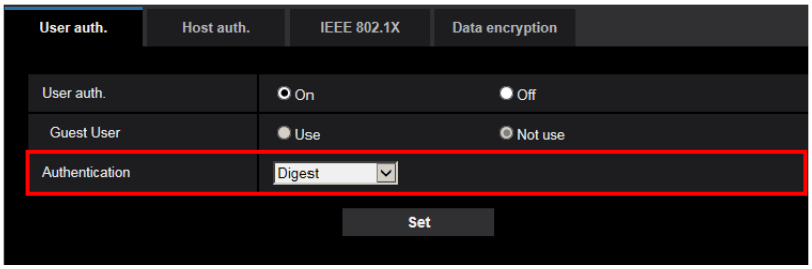
- **Auto:** If there is a delay in displaying images from the camera, the delay can be resolved by automatically skipping frames.
- **Manual:** If there is a delay in displaying images from the camera, frames are not skipped automatically.
- **Default:** Auto

Note

- When “Manual” is selected, “Off”, “1 Frame Skip”, “2 Frames Skip”, “4 Frames Skip”, “6 Frames Skip”, or “8 Frames Skip” can be selected for frame skip by right-clicking on the “Live” page. The value selected here will revert to “Off” when the browser is closed.

13. Change of authentication method default setting

(Operating Instructions Configure the settings relating to the authentication [User mng.] - Configure the settings relating to the user authentication [User auth.])



[Authentication]

Set the user authentication method.

- **Digest or Basic:** Uses “Digest or Basic” authentication.
- **Digest:** Uses “Digest” authentication.
- **Basic:** Uses “Basic” authentication.
- **Default:** Digest

IMPORTANT

■About the system devices (Panasonic network disk recorder and others)

- When connection with a system device cannot be established, upgrade the system device.
- For information on upgrading system devices, refer to the following web site:
  https://i-pro.com/global/en/surveillance/training-support/support/technical-information
  <Control No.: C0701>
- Support may already be ended for some system devices (discontinuation). In such a case, it may be possible to connect by setting “Basic” for the authentication method of the user authentication.

14. User authentication function for host authentication is added

(Operating Instructions Configure the settings relating to the authentication [User mng.]- Configure the settings relating to the host authentication [Host auth.])

After the host authentication, execute the user authentication according to the setting of the "User auth." (On/Off) to allow the access subject to the authentication.

Note

When “On” is set for “User auth.”:

The user authentication is required when connecting to this camera using an IP address set as the host authentication.

When “Off” is set for “User auth.”:

The user authentication is not required when connecting to this camera using an IP address set as the host authentication.

However, if accessing to the outside of the access level, the user authentication is required.

IMPORTANT

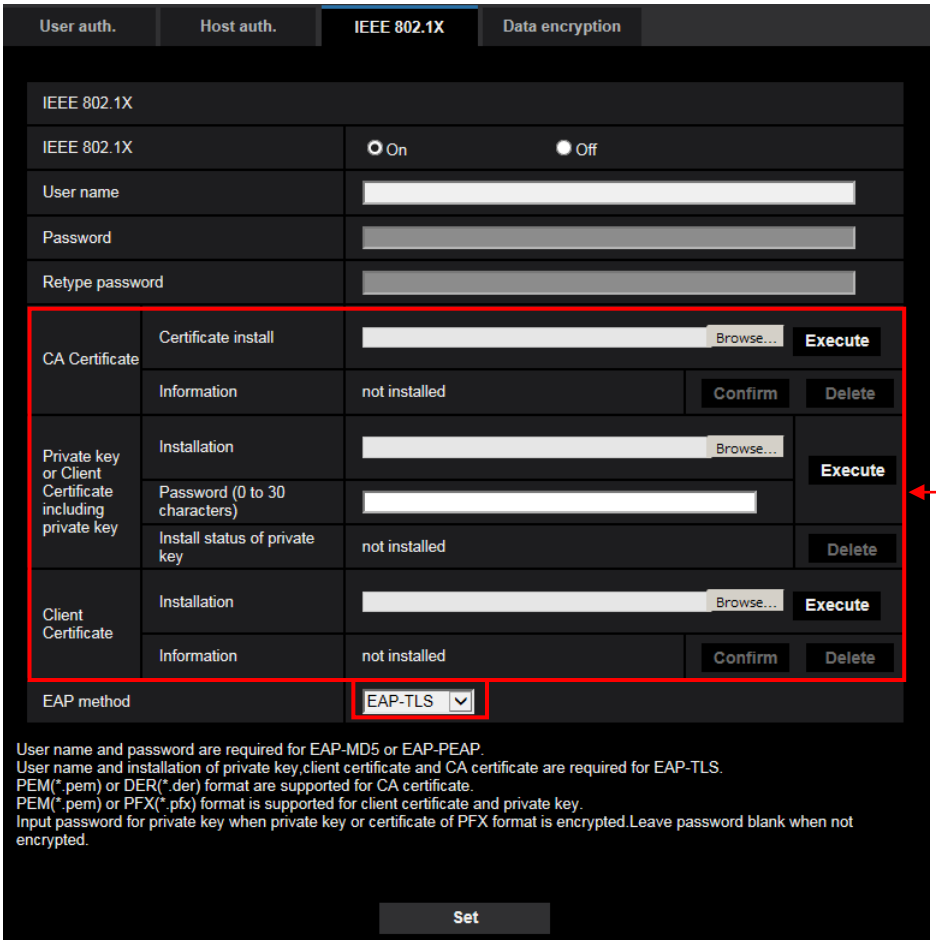
- With the host set by an old version, the user authentication is not required within the access level even if the “User auth.” is “On”.

For the host set by an old version, asterisk (*) will be displayed at the beginning of the IP address in the “Host check” field.

15. “EAP-TLS” is added to the EAP method for IEEE 802.1X

(Operating Instructions Configure the settings relating to the authentication [User mng.]- Configure IEEE 802.1X [IEEE 802.1X]

“EAP-TLS” is added to the EAP method for IEEE 802.1X, and the settings (CA Certificate, private key, Client Certificate) are added.



“EAP-TLS” settings

This function can be used to configure a secure network environment using the authentication LAN switch. Contact your network administrator for how to configure the authentication LAN switch and each setting.

Set up in the following procedure since the procedure differs depending on the EAP method.

If “On” is already selected for “IEEE 802.1X”, start setup once selecting “Off” for “IEEE 802.1X”.

EAP-MD5/EAP-PEAP

1. Select “On” for “IEEE 802.1X”.
2. Select “EAP-MD5” or “EAP-PEAP” for “EAP method”.
3. Click the [Set] button after entering the user name, the password, and confirming the password.

EAP-TLS

1. Click the [Browse] button of “CA Certificate” - “Certificate install”. Then, select a CA Certificate and click the [Execute] button. The host name (Common Name) designated when created the certificate will be displayed at [Information].
2. Click the [Browse] button of “Private key or Client Certificate including private key”, and select a private key or Client Certificate that includes Private key.
3. Enter the password if the private key is encrypted or the password is set for Client Certificate for the PFX method. Leave password blank when not encrypted.

4. Click the [Execute] button to start installation.
   “installed” will be displayed for “Install status of private key”.
   In the case of selecting Client Certificate including the private key, “installed” will be displayed for “Client Certificate” - “Information” as well.
5. When the private key is installed in step 2, select a Client Certificate after clicking the [Browse] button of “Client Certificate”, and then click the [Execute] button. “installed” will be displayed for “Information”
6. Select “On” for “IEEE 802.1X”. Then, select “EAP-TLS” for “EAP method”.
7. Enter the user name registered to the server in “User name”. Then, click the [Set] button.
   If no user name is registered to the server, enter an arbitrary user name.
   “Password” and “Retype password” can be left blank.

Note

• To delete each certificate, set [IEEE 802.1X] to “Off”.

The following explains each setting.

[IEEE 802.1X]

Select “On” or “Off” to determine whether or not to perform port authentication using IEEE 802.1X.

• **Default:** Off

[User name]

Enter the user name accessing to the authentication LAN switch or the user name registered to the server. If no user name is registered to the server, enter an arbitrary user name.

• **Available number of characters:** 1 - 32 characters

• **Unavailable characters:** " & : ; ¥

[Password]

[Retype password]

Enter the password to access the authentication LAN switch.

• **Available number of characters:** 4 - 32 characters

• **Unavailable characters:** " &

[CA Certificate] - [Certificate install]

Install the root CA Certificate. Do not include the intermediate CA Certificate.

Installation is possible only when “Off” is selected for “IEEE 802.1X”.

■Specification of CA Certificate

Item	Specifications	Remarks
Data format	Format: PEM or DER	Extension: pem or der
Max. number of certificates included in the PEM format	1 pc.	
Max. size of certificate	Approx. 10 Kbyte	

[CA Certificate] - [Information]

not installed: indicates that the certificate is not installed.

CA certificate host name: indicates that the certificate is installed.

Expired: indicates that the certificate is expired.

The details of CA Certificate can be checked with the [Confirm] button.

[Private key or Client Certificate including private key] - [Install]

Install the private key or Client Certificate that includes private key.

Installation is possible only when “Off” is selected for “IEEE 802.1X”.

■Specification of private key and Client Certificate including private key

Item	Specifications	Remarks
Data format	Format: PEM or PFX	Extension: pem or pfx
Key size [bit]	1024 /1536 /2048 /3072 /4096	
Max. number of certificates included in the PEM format	6 pc.	
Max. size of certificate (including intermediate CA Certificate)	Approx. 10 Kbyte	

[Private key or Client Certificate including private key] - [Password]
Enter the password if the private key is encrypted or the password is set for Client Certificate for the PFX method. Leave password blank when not encrypted.
Available number of characters: 0 - 30 characters

[Private key or Client Certificate including private key] - [Install status of private key]
not installed: Private key is not installed.
installed: Private key is installed.

[Client Certificate] - [Install]
Install the Client Certificate.
If signed by the intermediate CA Certificate, install the Client Certificate including the intermediate CA Certificate.
Installation is possible only when “Off” is selected for “IEEE 802.1X”.

■Specification of Client Certificate

Item	Specifications	Remarks
Data format	Format: PEM	Extension: pem
Max. number of certificates included in the PEM format	6 pc.	
Max. size of certificate (including intermediate CA Certificate)	Approx. 10 Kbyte	

[Client Certificate] - [Information]
not installed: indicates that the certificate is not installed.
Certificate host name: indicates that the certificate is installed.
Expired: indicates that the certificate is expired.
The details of Client Certificate can be checked with the [Confirm] button.

[EAP method]
Select the authentication method from EAP-MD5, EAP-PEAP or EAP-TLS.

Example of CA Certificate check screen

Example of Client Certificate check screen

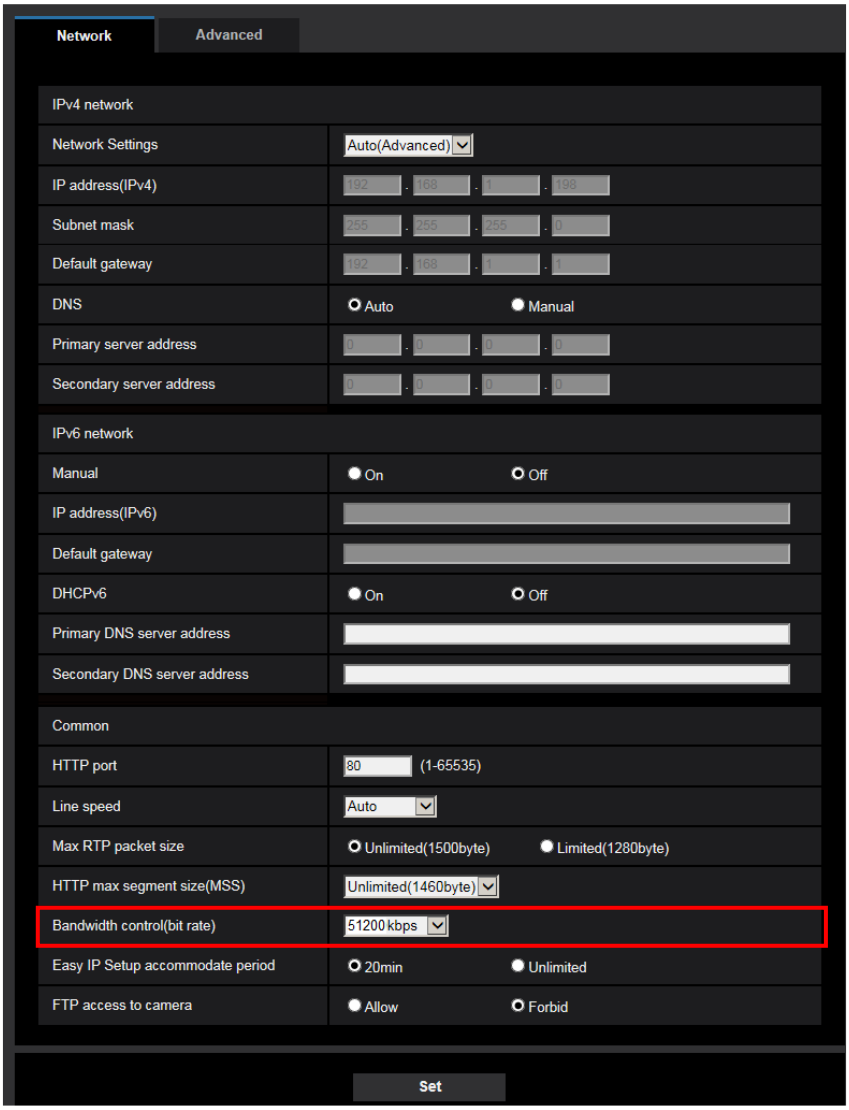
IMPORTANT

- After selecting “On” for “IEEE 802.1X”, if access to the camera fails for some reason, connect to a switch or port without authentication. It disables IEEE 802.1X, and enables access to the camera.
- If the Client Certificate includes intermediate CA Certificate, the Client Certificate needs to come first, then the intermediate CA Certificate.
- When a certificate over 10 Kbyte is installed, no error will be displayed during installation. However, an error may occur at the time of connection.

16. Change of default setting of “Bandwidth control(bit rate)”

(Operating Instructions Configuring the network settings [Network]- Configure the network settings [Network])

Change of default setting of “Bandwidth control(bit rate)”



[Bandwidth control(bit rate)]

Select the total bit rate for data transmission from the following.

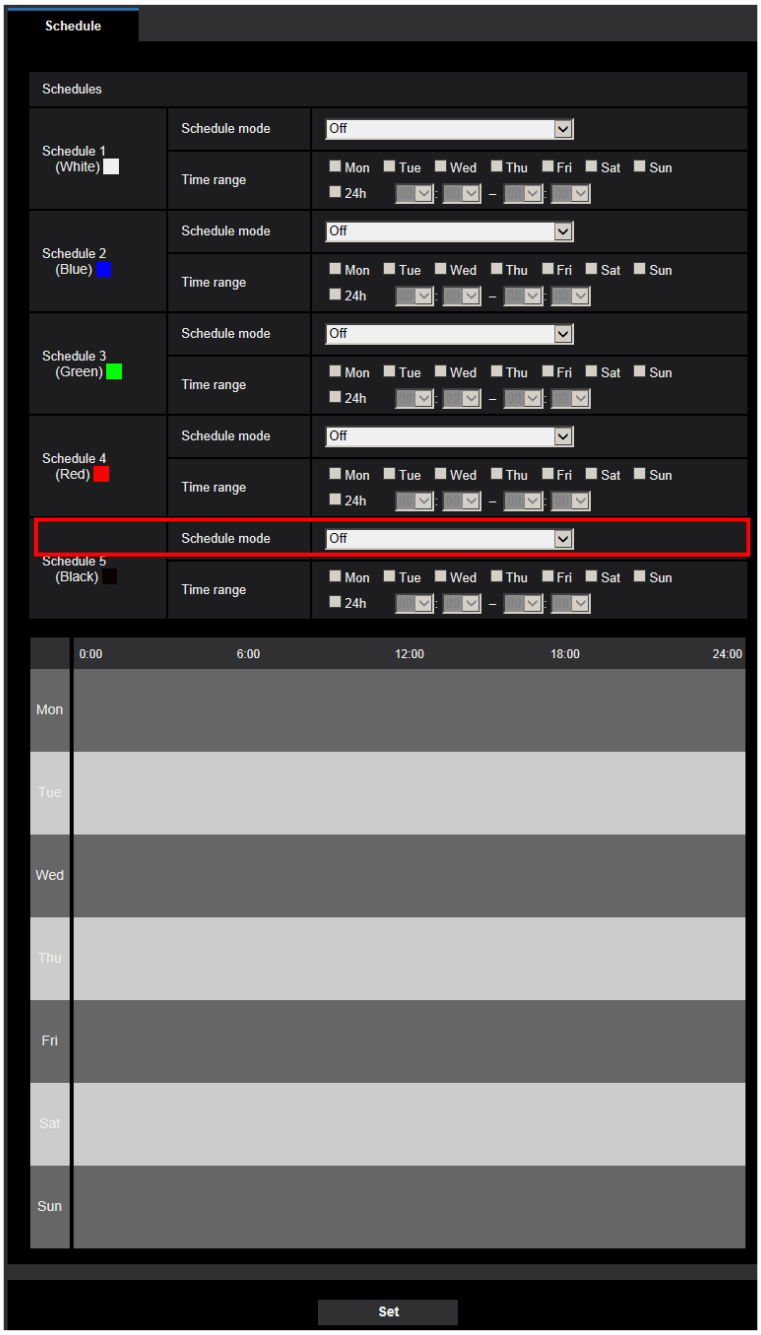
Unlimited/ 64kbps/ 128kbps/ 256kbps/ 384kbps/ 512kbps/ 768kbps/ 1024kbps/ 2048kbps/ 4096kbps/ 6144kbps/ 8192kbps/ 10240kbps/ 15360 kbps/ 20480kbps/ 25600kbps/ 30720kbps/ 35840kbps/ 40960kbps/ 51200kbps

• **Default:** 51200kbps

17. “Reboot” added to “Schedule”

(Operating Instructions Configure the settings relating to the schedules [Schedule])

The camera reboot function is added to “Schedule”.

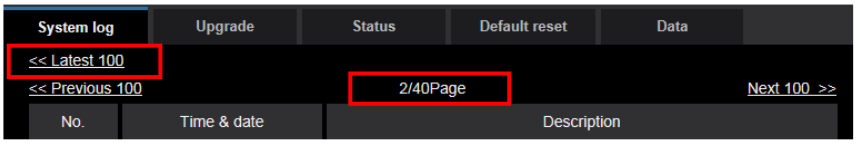


Reboot: The camera reboots at the scheduled time. Can only be selected with Schedule 5.

18. Add [<< Latest 100], [Number of pages display] in [Systemlog]

S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

(Operating Instructions Maintenance of the camera [Maintenance]- Check the system log [System log])



The following items will be displayed when using an SD memory card.

[<< Latest 100]

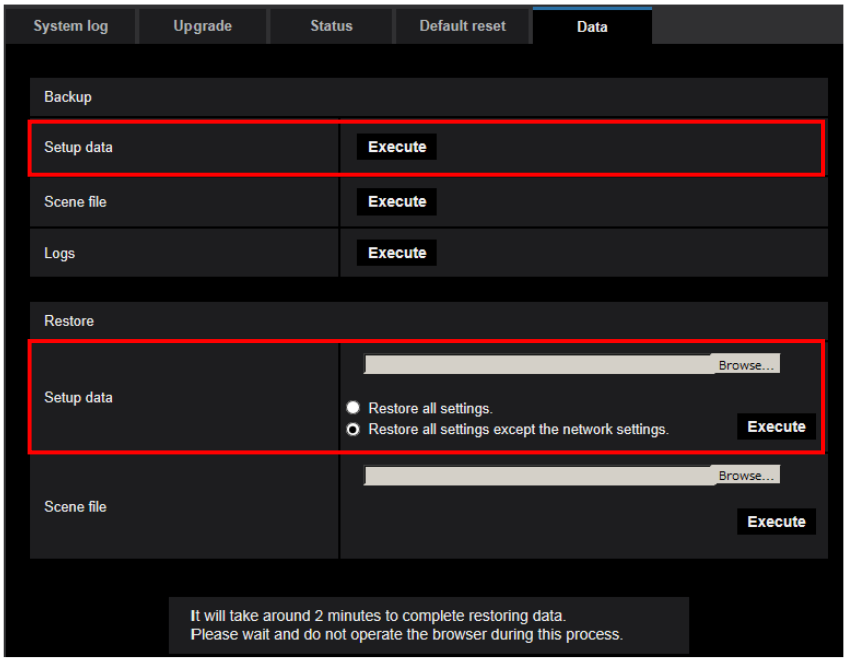
When clicking “<< Latest 100”, the latest 100 system logs will be displayed.

[Number of pages display]

The currently opened page will be displayed in the “page/total page” format.

19. Encryption of the settings

(Operating Instructions Maintenance of the camera [Maintenance] - Settings data/backing up or restoring logs [Data])



Backup

[Setup data]

Click the [Execute] button to backup the setup data of the camera to a PC.

Note

- The settings backed up after this version of software will be encrypted. Therefore, if using the software of older version, the settings cannot be restored.

20. “Login failure” indication added to the login-related display

(Operating Instructions About the displayed system log)

Error indications relating to the login errors

Category	Indication	Description
Login failure	User name	• The user name that has failed in login will be displayed when “On” is selected for “User auth.”. • If no user is registered, “Guest User” will be displayed.

21. Made Stream(3) available when “On” is set for [Stabilizer].

(Operating Instructions　Configure the basic settings of the camera [Basic]- Configure the basic settings [Basic])

When “On” is set for [Stabilizer], Stream(3) was unavailable. Now, Stream (3) is available even when “On” is selected for [Stabilizer]

IMPORTANT

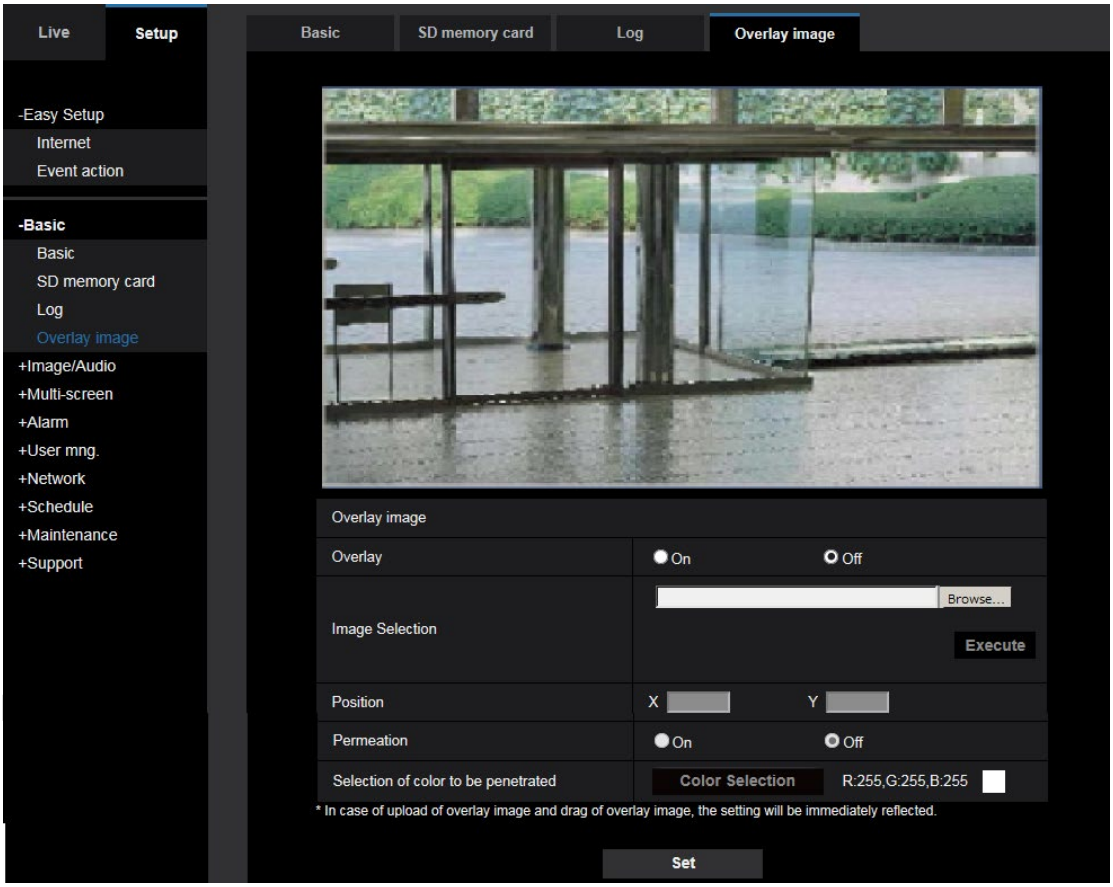
• If “On” is selected for “Stabilizer”, “Stream(4)” becomes “Off”.

22. Addition of “Overlay Image” function.

(Operating Instructions　Configure the basic settings of the camera [Basic])

Added the "Overlay image" function to the “Basic” page.
The “Overlay image” function is a function that superimposes an image uploaded to the camera onto a live image and display it as an overlaid image.

Click the [Overlay image] tab on the “Basic” page.
The settings relating to the “Overlay image” function can be configured on this page.



IMPORTANT

• When “On” is set for [Overlay], an overlaid image will be recorded during the SD memory card recording.

Note

• If “Character size” of “OSD” is “150%” or “200%”, “Overlay image” is not selectable.

[Image Selection]

Upload an image file to be overlaid to the camera in the following procedure.
1) Click the [Reference] button and select an image file saved on the PC.
2) Click the [Run] button to upload the selected image to the camera.
When the image is uploaded, the uploaded image will be displayed overlaid on the display.

Image files with the following specification are available for the overlay display.
Image format: 8-bit bitmap (BMP: Windows format)
Image size: 24 pixels × 24 pixels - 512 pixels × 512 pixels
File size: 257 KB or less

Note

• Save image files in a folder whose name does not contain a space or two-bytes code. Uploading of an image saved in a folder whose name contains a space or two-bytes code is unavailable.

IMPORTANT

• Do not turn off the power of the camera or operate the camera during uploading of an image file.
• The uploaded image to be displayed will be reduced in size depending on the resolution of live image. Since the uploaded image could sometimes be displayed with low image quality, check the live image page if images are displayed overlaid.
• The images to be uploaded will be saved when they are uploaded.

[Position]

The display position of the uploaded image (upper left corner of the image) will be displayed with [X] and [Y] coordinates.

*1 In case that [4:3] is set for [Image capture mode] When [16:9] is set for [Image capture mode], [Y] will be “359”

There are following two methods to change the display position of the uploaded image.
• Drag and drop the currently displayed uploaded image using the mouse.
• Enter coordinates to [X] and [Y] and then click the [Set] button.

Available numbers:

- When [4:3] is set for [Image capture mode]:
  X: 0 – (639 minus the horizontal length of the uploaded image)
  Y: 0 – (479 minus the vertical length of the uploaded image)

- When [16:9] is set for [Image capture mode]:
  X: 0 – (639 minus the horizontal length of the uploaded image)
  Y: 0 – (359 minus the vertical length of the uploaded image)

Default: Center of live image

Note

- A red frame indicating the display position will be displayed during dragging of the uploaded image.
- Coordinates that make the uploaded image out of the setting screen are unavailable to set.
- When an uploaded image is moved by mouse operation, the display position will be saved even if the [Set] button is not clicked.
- If an uploaded image is moved to the edge of the screen, there may be a gap between the image and the screen edge.

IMPORTANT

- After changing the settings of [Image capture mode] or [Image rotation], check the display position of the uploaded image. When the display position is deviated, configure the display position setting again.
  If the uploaded image is to be displayed out of the setup screen, the initial display position (center of the live image) will be restored.

[Permeation]

Select “On” or “Off” to determine whether the color selected at [Selection of color to be penetrated] is to be transparent.

On: Gives transparency to the color selected at [Selection of color to be penetrated].

Off: Does not give transparency to the color.

Default: Off

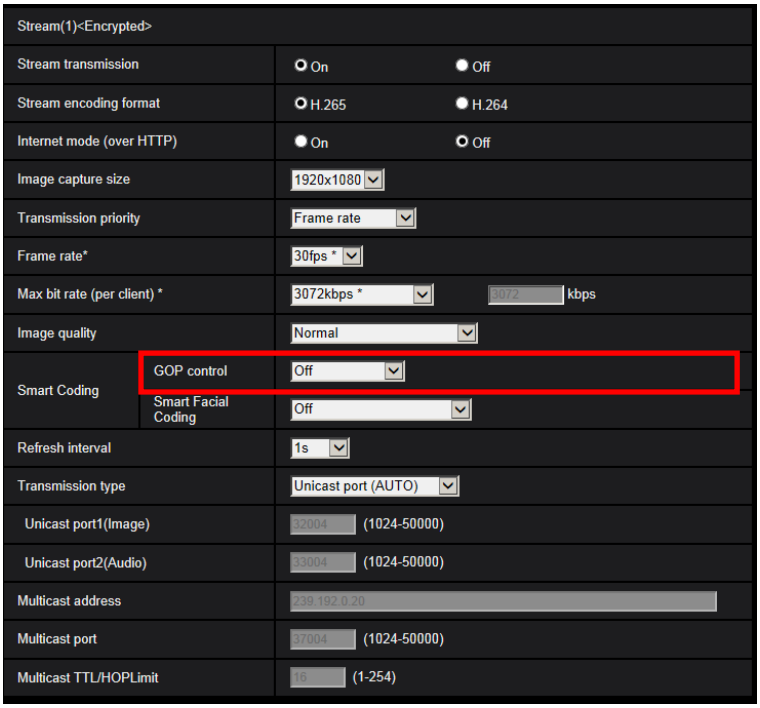
[Selection of color to be penetrated]

Select a color to be penetrated in the following procedure.

1) Click the [Color Selection] button. A sub window displaying the uploaded image will be displayed.
2) Click a color to be penetrated in the displayed image. The selected color and RGB values will be displayed.
3) Click the [Close] button to close the sub window.
4) Click the [Set] button lastly. The selected color will be penetrated.

23. "On (Advanced)" added to [Frame rate control]

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] Configure the settings relating to Stream [Image])



[Smart Coding] - [GOP control]

By using “GOP control”, the transmission data volume can be reduced when there is little motion in the image.

- **When “H.265” is selected as the “Stream encoding format”:** Off/On(Low)/On(Mid)/ On(Advanced)/On(Frame rate control)
- **When “H.264” is selected as the “Stream encoding format”:** Off/On(Low)/On(Mid)
- **Default:** Off

IMPORTANT

- When “On(Low)”, “On(Mid)”, “On(Advanced)”, or “On(Frame rate control)” is selected, recording to an SD memory card cannot be performed.

Note

- When using “GOP control”, the refresh interval is increased when streaming H.265 (or H.264) images. For this reason, do not use it when the network environment has frequent errors.
- “On(Low)”/“On(Mid)”/“On(Frame rate control)” can be selected only when “VBR” is selected for “Transmission priority”. “On(Advanced)” can be selected regardless of the “Transmission priority” setting.
- When “On(Frame rate control)” is selected, the frame rate is lowered bit by bit if there is no change in the image. The frame rate ranges from 1 fps to the value set in [Frame rate*].
- With “On(Frame rate control)” selected, the frame rate is reverted to the value set in [Frame rate*] if change in the image is detected while the frame rate is low.

X6531 X6511 S6530 S6131 S6130 S6111

- During pan/ tilt/ zoom/ focus operation, the effect of the smart coding may not be obtained.

24. Addition of “VIQS” function.

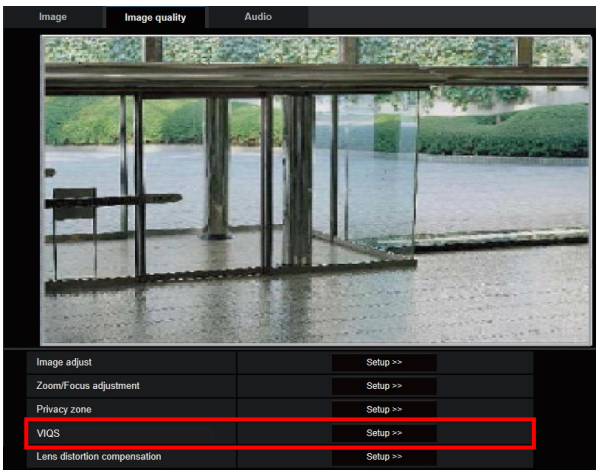
S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

(Operating Instructions Configure the settings relating to images and audio [Image/Audio]

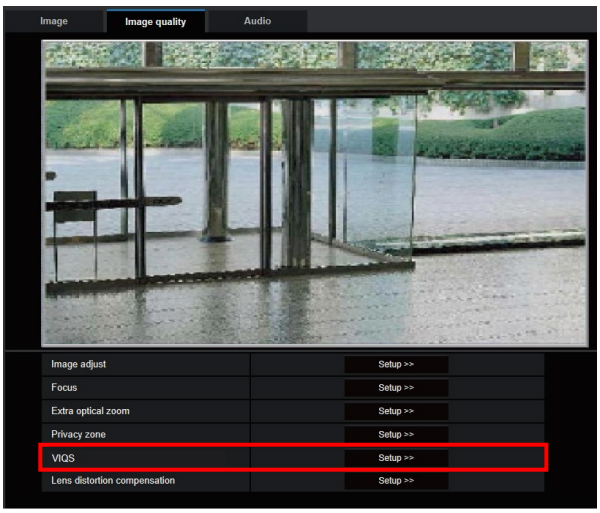
- Configure the settings relating to image adjust, zoom/focus, privacy zone, VIQS, and lens distortion compensation [Image quality]）

Click the [Image quality] tab on the “Image/Audio” page.
When the [Setup>>] button of each setting item is clicked, the detailed settings menu will be displayed in a newly opened window. The detailed settings can be configured while monitoring images displayed on the [Image quality] tab.
The settings relating to image adjust, zoom/focus, extra optical zoom, back focus, focus, privacy zone, VIQS, and lens distortion compensation can be configured in this section.

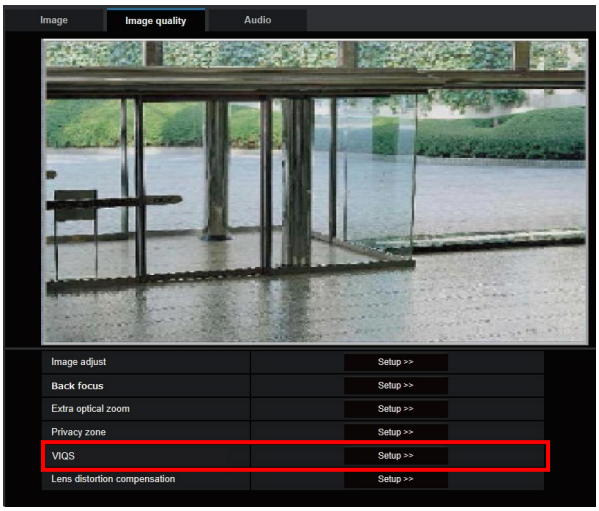
S153x S253x S223x S213x (excluding WV-S2130)



S151x S251x S221x S211x (WV-S2130)



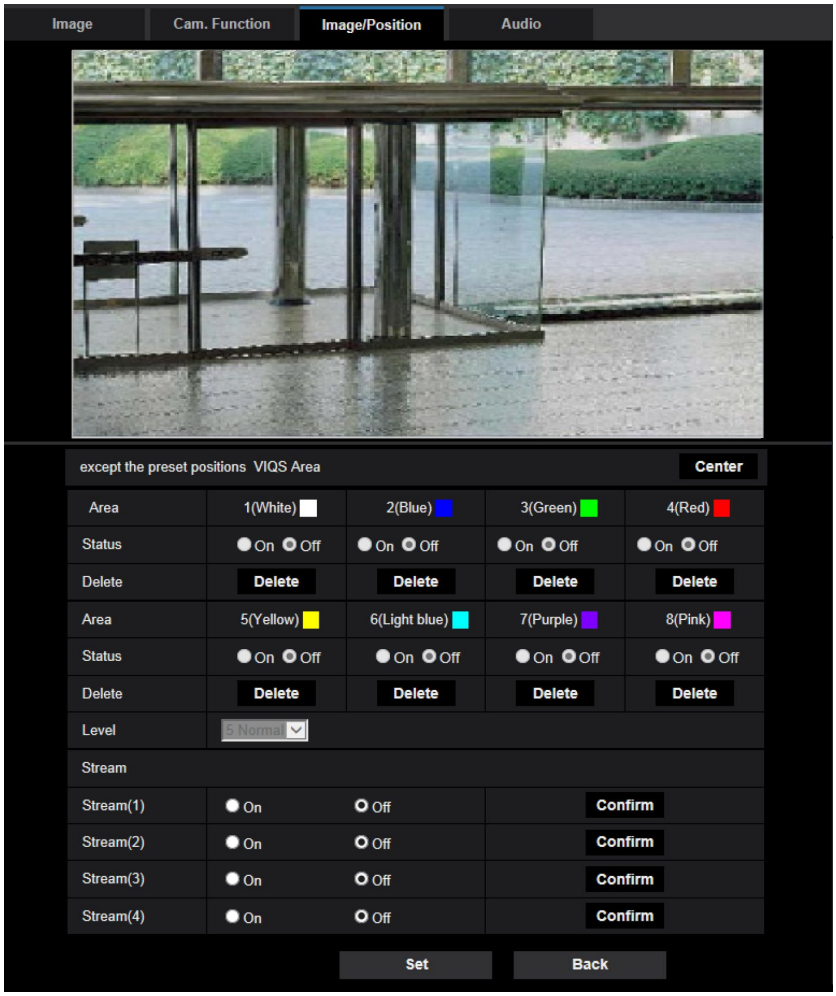
S113x S111x



[VIQS]
Click the [Setup>>] button to display the setup menu that can configure the settings relating to VIQS.
The setup menu will be displayed.

Configure the VIQS setting

Click the [Setup>>] button of “VIQS” on the [Image quality] tab of the “Image/Audio” page.
The items related to VIQS can be configured with this menu.
VIQS is an abbreviation of Variable Image Quality on Specified area and is a feature that enables you to change the images of a specified area.
It is possible to enhance the image quality of the specified range within a shooting area (image).
It is also possible to moderate the image data size by lowering the image quality of other areas.
The VIQS setting is available only for H.265 (or H.264) images.
Up to 8 VIQS areas can be set.
To check the image after configuring VIQS, when H.265 (or H.264) images are selected under “Stream”, you can check the image by pressing the [Confirm] button. You can also check by displaying an H.265 (or H.264) image on the “Live” page.



[Area]
When selecting a VIQS area in the screen, it will be numbered as area 1. (Subsequent areas will be numbered in the order of selection.)

[Center]
When the [Center] button is clicked, the whole area will become the VIQS area, and “1(White)” will be automatically applied to “Area”.

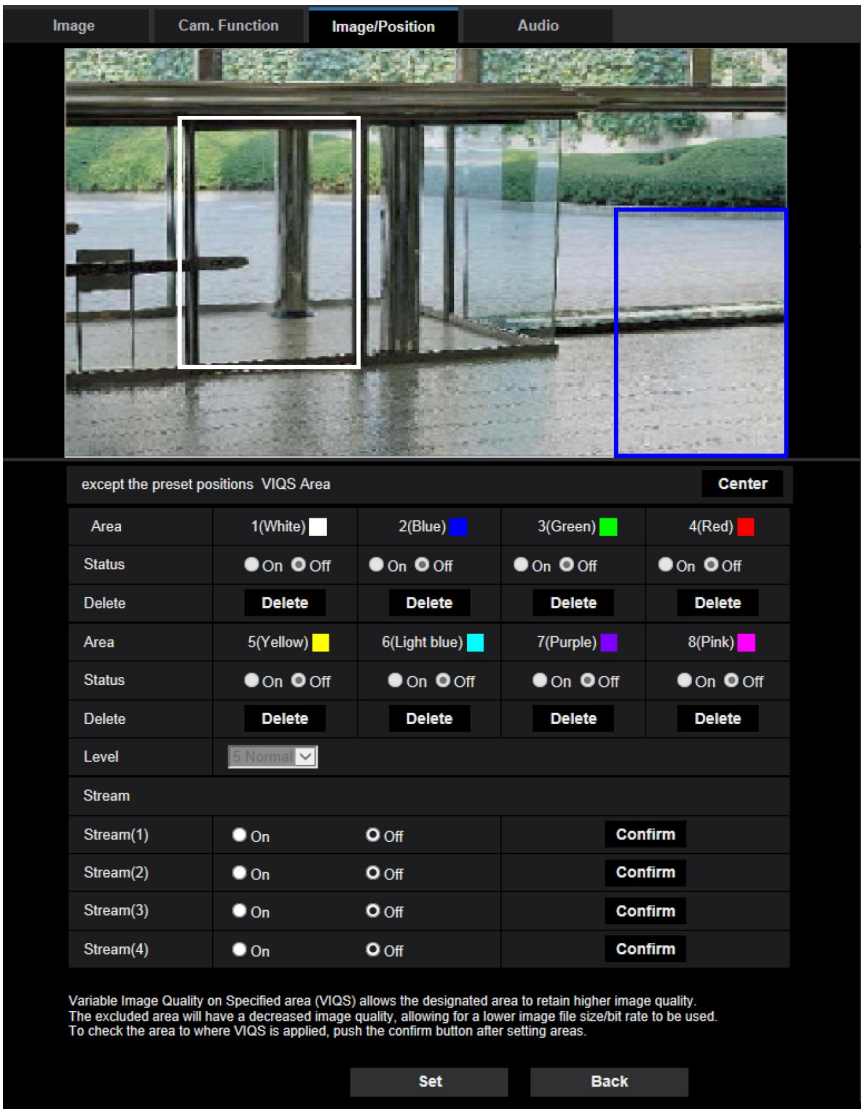
[Status]
Select “On” or “Off” to determine whether or not to use the VIQS area.
• **On:** The VIQS area will be set.
• **Off:** Does not set the VIQS area.
• **Default:** Off

[Delete] button
Deletes the VIQS area. Click the button to delete the VIQS area.

[Level]
Configure the difference level in the image quality between specified areas and non-specified areas. The greater the difference level, the more the image quality of the non-specified area is reduced. This makes it possible to moderate the image data size.
0 Min./ 1/ 2/ 3/ 4/ 5 Normal/ 6/ 7/ 8/ 9 Max.
• **Default:** 5 Normal

Configure the VIQS area

The VIQS area is specified by following the steps below.
1. Drag the mouse on the screen to specify the area (up to 8 areas).
   → The specified area is set to area “1(White)”, and the outline is displayed.
   The areas are set in the area number order from number 1. The color next to the area number show the color of the corresponding outline.



2. Configure the difference level in the image quality between specified areas and non-specified areas. The greater the difference level, the more the image quality of the non-specified area is reduced. This makes it possible to moderate the image data size.
3. Select “On”/“Off” to activate/deactivate a distributed image of “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)”.
4. Click the [Set] button.
   → This unit is updated with the setting contents. Click the [Delete] button corresponding to the area to be deleted.
5. Click the [Confirm] button.
   → The image (“Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)”) that the [Confirm] button was pressed for is displayed. When a window is newly opened and about 3 seconds pass, the currently outputted bit rate can be confirmed with the configured VIQS.

IMPORTANT

- No setting contents are determined unless the [Set] button is clicked.
- To check the image after configuring VIQS, display an H.264 or H.265 image on the “Live” page, or press the [Confirm] button under “Stream”.
- The outputted bit rate changes depending on the subject. Confirm the bit rates with actual subjects used when operating the camera.
- When using “Smart Facial Coding”, “VIQS Area” cannot be enabled.

Note

- When using “GOP control”, the refresh interval is increased when streaming H.265 (or H.264) images. For this reason, do not use it when the network environment has frequent errors.
- “On(Low)”/“On(Mid)”/“On(Frame rate control)” can be selected only when “VBR” is selected for “Transmission priority”. “On(Advanced)” can be selected regardless of the “Transmission priority” setting.
- When “On(Frame rate control)” is selected, the frame rate ranges from 1 fps to the value set in [Frame rate*] depending on the size of image changes.
- When “On(Frame rate control)” is selected, the display may temporarily become slower or faster when changing frame rates.

25. Description for [Pan/tilt-flip] is added S6530 S6130

(Operating Instructions Configure the settings relating to images and audio [Image/Audio]

- Configure the settings relating to the camera operations [Cam. Function])

[Pan/tilt-flip]

Select the pan/tilt-flip setting from the following:

- **On:** In the manual operation, when the camera is fully panned or tilted (reaches right below), the camera automatically pans at high speed to the reverse direction and continues operation without stopping at the pan- or tilt-endpoint.
- **Off:** Pan/tilt-flip does not work.
- **Default:** On

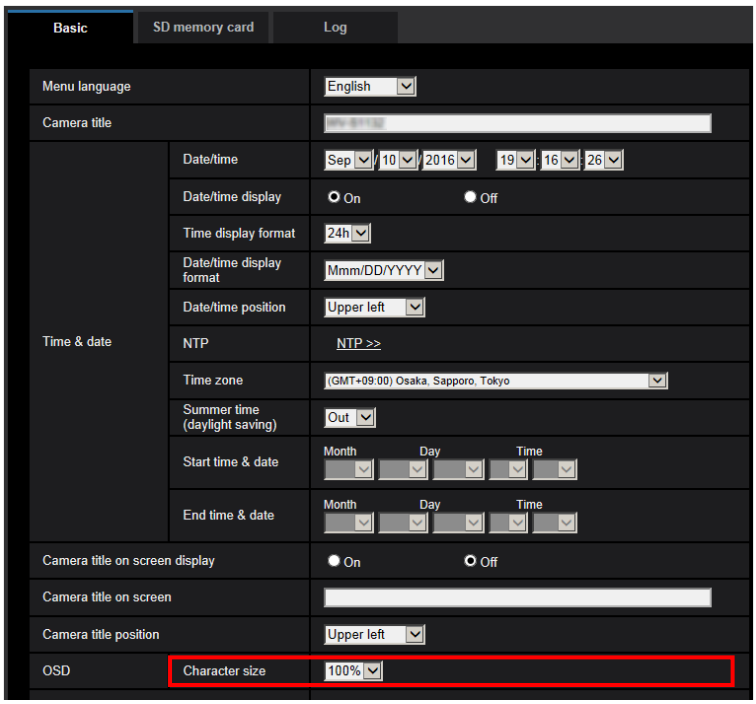
Note

- At TELE side, a partially invisible section may be generated when using the Pan/tilt-flip function.
- Click a desired point in the main area on the “Live” page that is to be the center of the angle of view. The camera will move to adjust the position in order to set the clicked point as the center. At this time, the camera continues to operate without stopping at the pan- or tilt-endpoint.
- During flip operation, the flipping image will be displayed.

26. Improvement of readability of Date/time and characters on screen

(Operating Instructions Configure the basic settings of the camera [Basic]- Configure the basic settings [Basic])

[100%*] was added to [OSD] - [Character size] in order to improve readability.



[OSD] - [Character size]

Select the character size of the date and time as well as text displayed in the image.

- **100%*:** Character size is displayed at 150% for resolutions less than VGA. Characters are displayed with standard size for resolutions larger than VGA.
- **100%:** Displays in the standard size.
- **150%:** Displays in 150% of the standard size.
- **200%:** Displays in 200% of the standard size.
- **Default:** 100%*

IMPORTANT

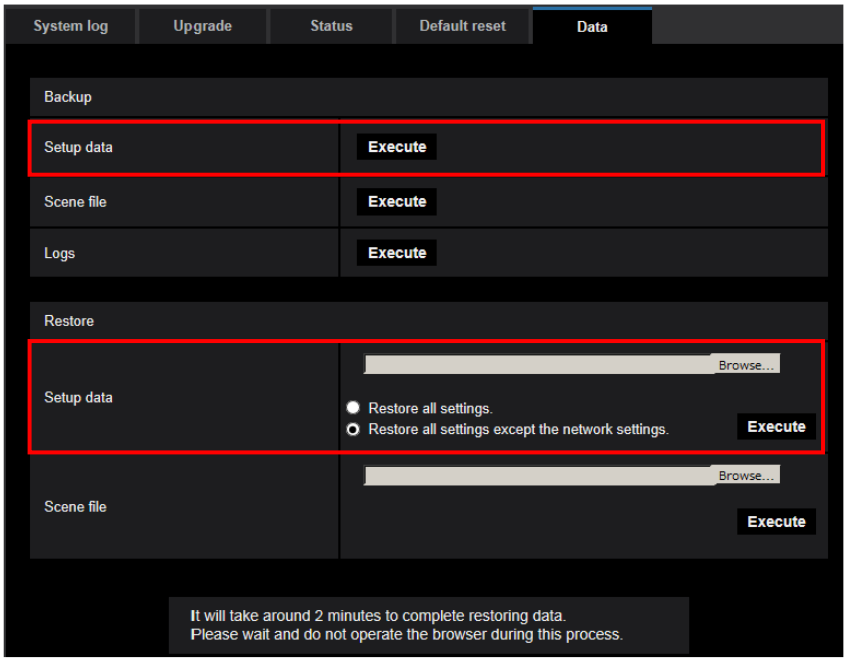
- If the settings for [Date/time position] and [Camera title position] are different, the frame rate may be lower than the specified value.
- If the settings for [Date/time position] and [Camera title position] are different, characters may be displayed incorrectly or overlapped depending on the [Character size] setting and the number of characters used. After completing the settings, confirm the result on the “Live” page.
- If “150%” or “200%” is selected for [Character size], the frame rate may be lower than the specified value.
- Depending on the setting and the numbers of characters used for [Character size], and the setting and image capture size of images for [Image rotation], characters displayed on the screen may be cut off. After completing the settings, confirm the result on the “Live” page.

Note

- If “Overlay“ is “On”, “Character size” cannot be set to “150%” or “200%”.

27. Change in encryption of the settings.

(Operating Instructions Maintenance of the camera [Maintenance] - Settings data/backing up or restoring logs [Data])



Backup

[Setup data]

Click the [Execute] button to backup the setup data of the camera to a PC.

Note

- Encryption of the settings has been changed after this version. Therefore, if you revert the software to the previous version, the settings cannot be restored.

28. Addition of “ Alarm area No.” setting to the “Preset per sender”

X6531 X6511 S6530 S6131 S6111 S6130

(Operating Instructions Configure the alarm settings [Alarm] -Configure the settings relating to the camera action on alarm occurrence [Alarm] -Configure the settings relating to Preset per sender (“Preset per sender” setup menu))

"Preset per sender" allows you to move to a Preset position corresponding to Alarm area No. 1 to 4 of the Sender's address.

[Sender's address 1] - [Sender's address 8]
Set the sender's IP address for the command alarm, and the preset position for that address. Up to 8 notification addresses can be set.
[Auto track cooperation] checkbox: When the checkbox is selected, auto tracking starts after the direction of the camera moves to the preset position.

[On/Of] (Alarm area No. action)
Select “On” or “Off” to determine whether or not to perform “Alarm area No. action”.
When “Alarm area No. action” is on, the camera will move to the preset position only when the “Alarm area No.” conforms with that notified from Sender's address of command alarm.
Default : off

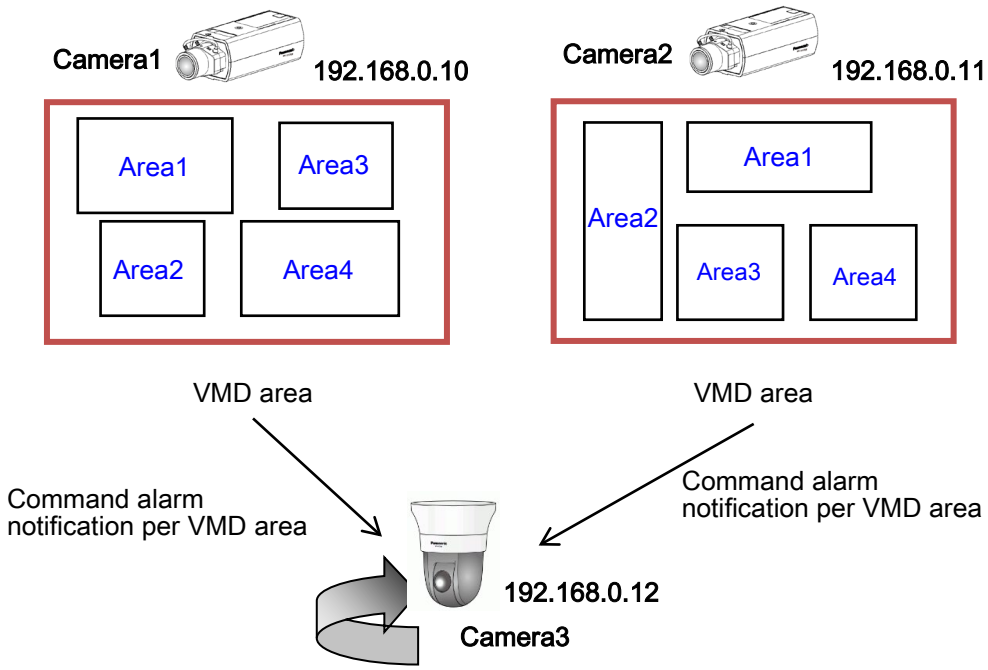
[Alarm area No.]
Available range: 1-4
Default : 1

[Close] button
Click this button to close the “Preset per sender” setup menu.

Note

- You need to conform the settings, “Preset per sender” -“Alarm area No.” of this camera and “Notification” –“Destination of notification” –“Notification per VMD area” of the camera which send command alarm to this camera.
- Fixed Dome, Fixed and 360-degree Network Cameras have “Notification per VMD area” function. Dome and Pan/tilt Network Cameras do not have this function. For further information, refer to Operating Instructions of each camera.

Operation example of “Alarm area No. action”

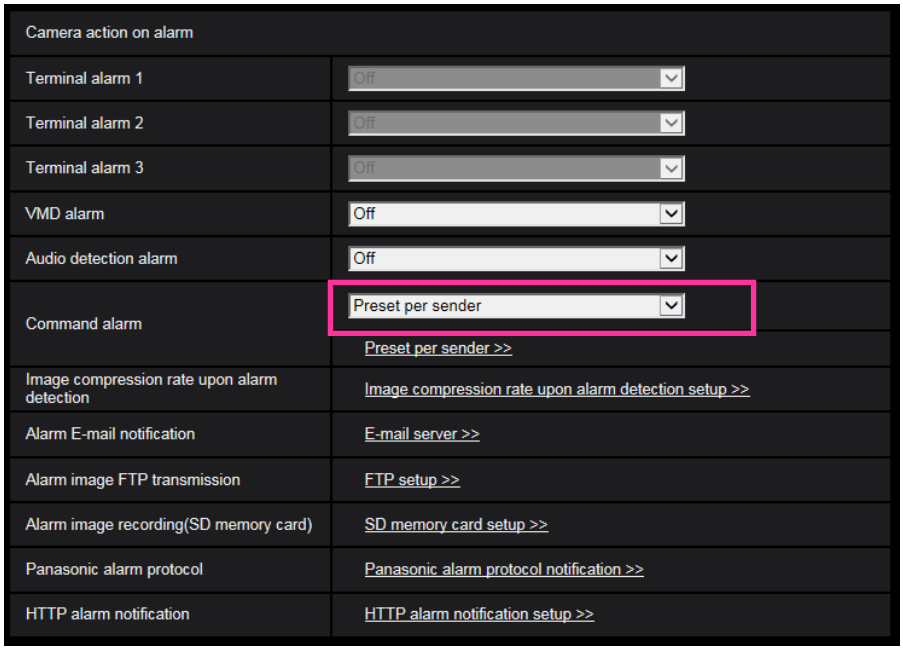


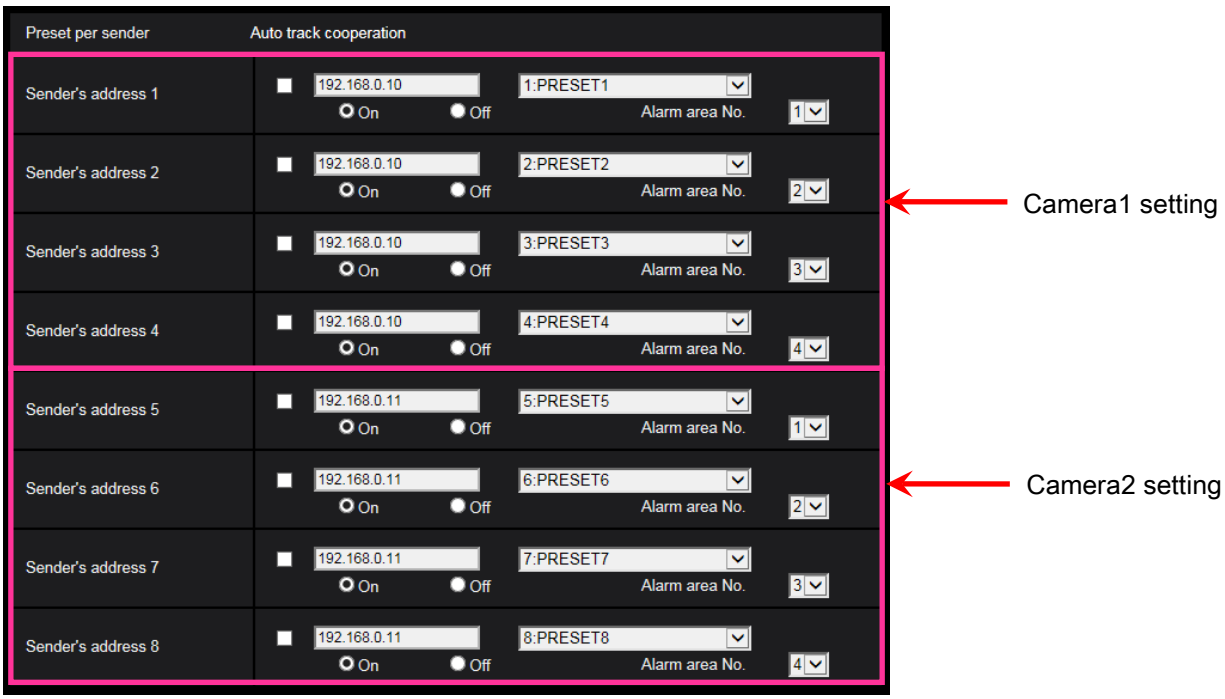
The example of the settings of “Alarm area No. action”

Command alarm from Camera1(Area1): Camera3 Preset Position1
Command alarm from Camera1(Area2): Camera3 Preset Position2
Command alarm from Camera1(Area3): Camera3 Preset Position3
Command alarm from Camera1(Area4): Camera3 Preset Position4
Command alarm from Camera2(Area1): Camera3 Preset Position5
Command alarm from Camera2(Area2): Camera3 Preset Position6
Command alarm from Camera2(Area3): Camera3 Preset Position7
Command alarm from Camera2(Area4): Camera3 Preset Position8

Setup menu of Camera 1 that sends “Command alarm”. (The setting of Camera 2 is the same.)

Setup menu of Camera 3 that receives “Command alarm”.




Preset per sender
Auto track cooperation
Sender's address 1
192.168.0.10
1:PRESET1
On
Off
Alarm area No.
1
Sender's address 2
192.168.0.10
2:PRESET2
On
Off
Alarm area No.
2
Sender's address 3
192.168.0.10
3:PRESET3
On
Off
Alarm area No.
3
Sender's address 4
192.168.0.10
4:PRESET4
On
Off
Alarm area No.
4
Sender's address 5
192.168.0.11
5:PRESET5
On
Off
Alarm area No.
1
Sender's address 6
192.168.0.11
6:PRESET6
On
Off
Alarm area No.
2
Sender's address 7
192.168.0.11
7:PRESET7
On
Off
Alarm area No.
3
Sender's address 8
192.168.0.11
8:PRESET8
On
Off
Alarm area No.
4
Camera1 setting
Camera2 setting

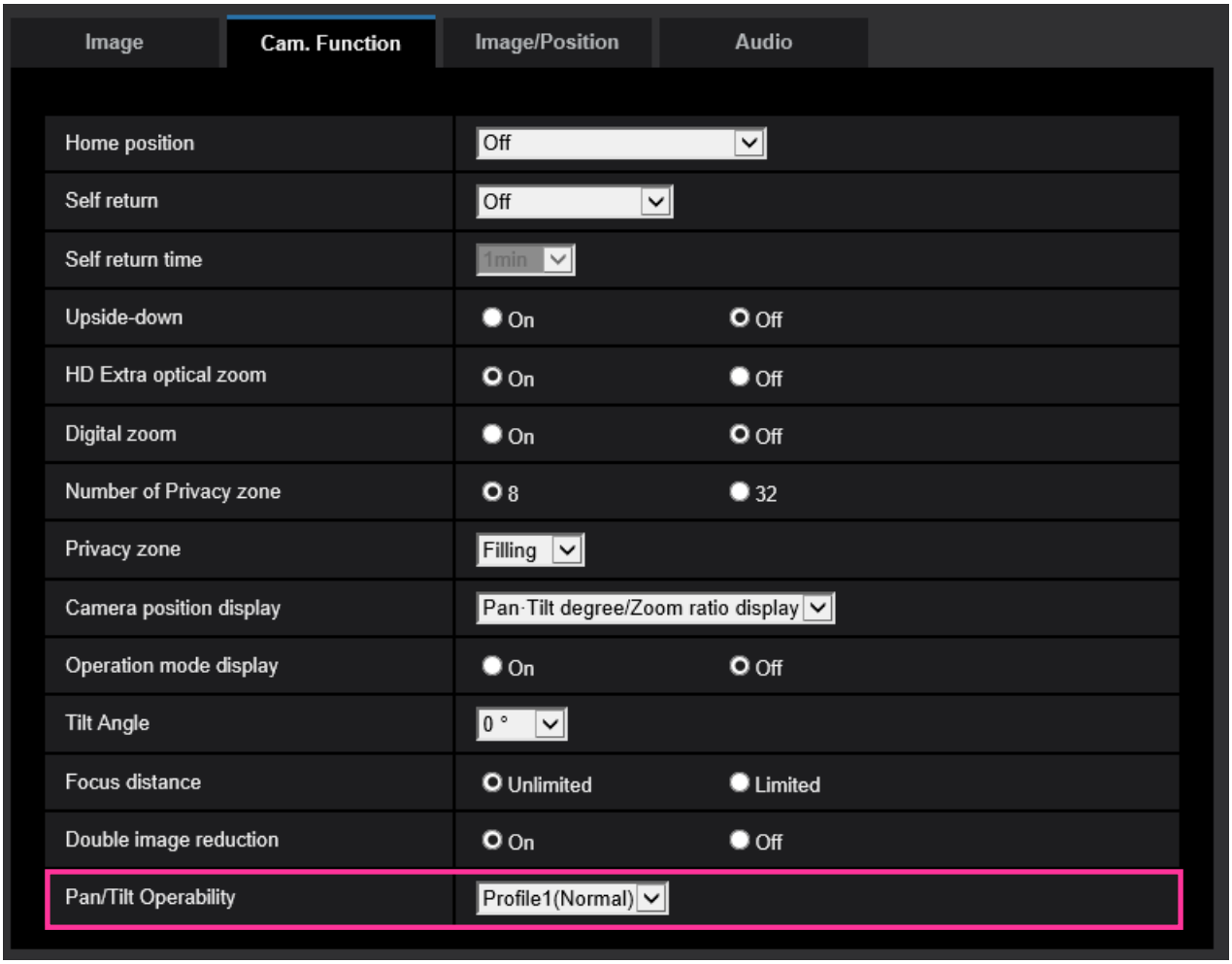
29. Addition of “Pan/Tilt Operability” setting to the “Cam. Function”

X6531 X6511 S6530 S6131 S6111 S6130

(Operating Instructions Configure the settings relating to images and audio [Image/Audio]

- Configure the settings relating to the camera operations [Cam. Function])

Add the "Pan/Tilt Operability" selection function to the camera operating setting.



[Pan/Tilt Operability]

The operability when pan / tilt is operated using the joystick can be selected.

Profile1(Normal) : Select this setting for Panasonic systems starting with "WV-" or "WJ-".

Profile2 : Operability in the low speed range can be improved.

Select this setting when the camera movement is not good in the low speed range.

Profile3 : Operability in the middle and high speed range can be improved.

Select this setting when the camera speed is too high in middle and high speed range.

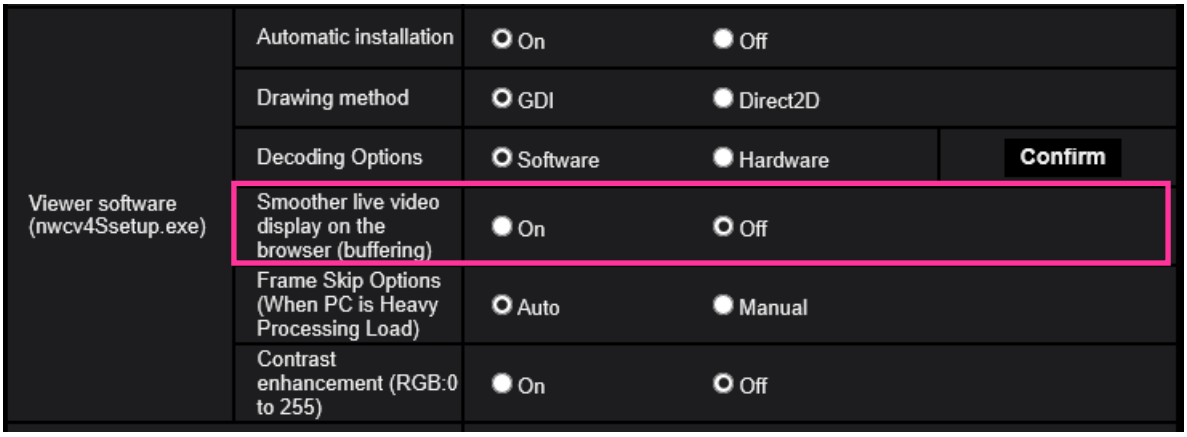
Default : Profile1(Normal)

30. Change of [Viewer software (nwcv4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting

S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

(Operating Instructions Configure the basic settings of the camera [Basic]- Configure the basic settings [Basic])

Change of [Viewer software (nwcv4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting.



[Viewer software (nwcv4Ssetup.exe)] - [Smoother live video display on the browser (buffering)]
Perform settings to display camera images on the viewer software.

- **On**: Images are temporarily stored on the computer and are displayed smoother.
- **Off**: Images are displayed in real-time and are not stored on the computer.
- **Default**: Off

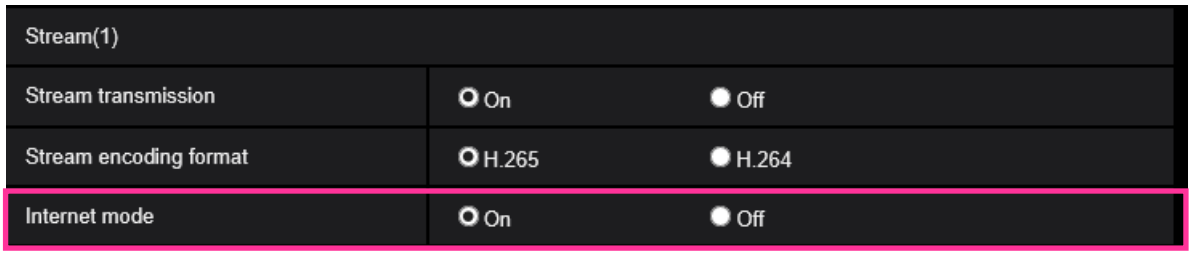
Note

- If the image is not displayed smoothly, set to “On”.

31. Change of [Internet mode] default setting

(Operating Instructions　Configure the settings relating to images and audio　[Image/Audio]　Configure the settings relating to Stream [Image])

Change of [Internet mode] default setting.



[Internet mode]

Select “On” when transmitting H.265 (or H.264) images via the Internet. It is possible to transmit stream without changing the broadband router settings configured for JPEG image transmission.

• **On**: H.265 (or H.264) images and audio will be transmitted using the HTTP port. Refer to [HTTP port] for further information about the HTTP port number settings.

• **Off**: H.265 (or H.264) images and audio will be transmitted using the UDP port.

• **Default**: On

Note

• When “On” is selected, only “Unicast port (AUTO)” will be available for “Transmission type”.

• When “On” is selected, it may take time to start displaying stream images.

• When “On” is selected, stream images may not be displayed depending on the number of the concurrent access user and audio data availability, etc.

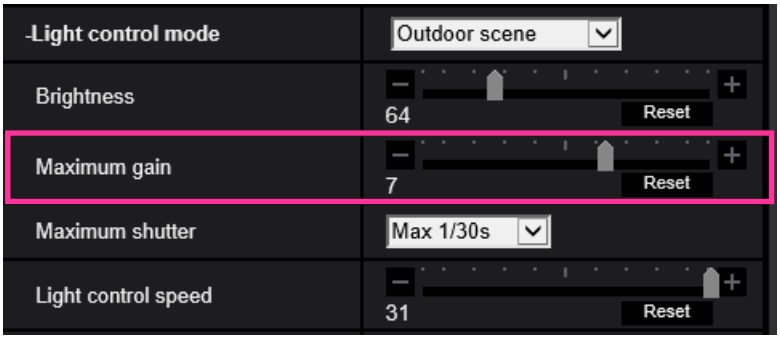
• When “On” is selected, only IPv4 access is available.

32. Change of [Maximum gain] default setting of “Light control mode”

S113x S111x S153x S151x S253x S251x S223x S221x S213x S211x

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] Configure the settings relating to image adjust, zoom/focus, privacy zone, and lens distortion compensation [Image quality])

Change of [Maximum gain] default setting of “Light control mode”



[Maximum gain]

Adjusts the maximum gain. When the luminance of the subject becomes darker, gain will be automatically increased and screen will become brighter. If you increase the gain, the noise may also increase.

If you move the slider in the “+” direction, the maximum gain will increase.

If you move the slider in the “-” direction, the maximum gain will decrease.

Click the [Reset] button to reset to the default setting.

• **Default**: 7

Note

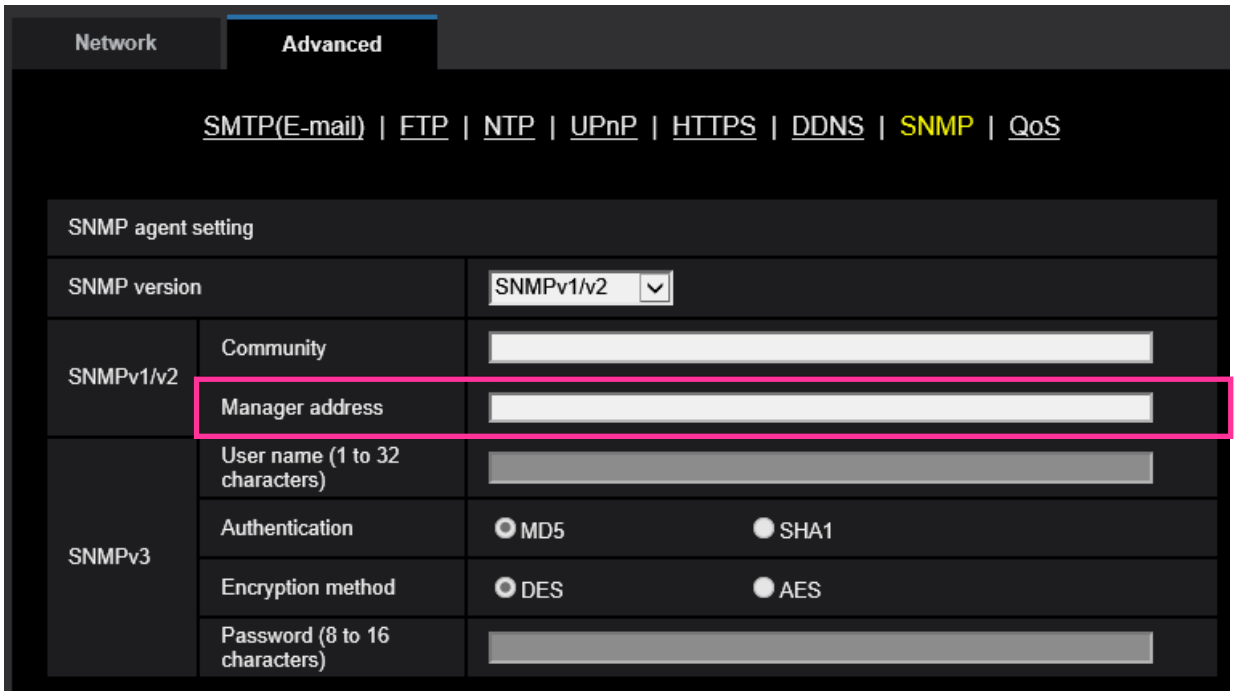
• If you initialize the camera or reset [Maximum gain] after upgrading from an older version of firmware, the setting value will change (Initial value 7), and the image may become dark in the low light environment.

If you want to make it brighter, increase the setting value of [Maximum gain].

33. Enhanced the access restriction function of SNMP v1/v2

(Operating Instructions “Configuring the network settings” [Network]
- “Configure advanced network settings” [Advanced]
- “Configure the settings relating to SNMP”)

The address range setting of the SNMP manager that receives requests from the camera is newly added.



• **[Manager address]**

Enter the IP address of the SNMP manager from which requests are to be permitted when the SNMP version is v1 or v2. When left blank, requests from all IP addresses will be permitted.

Note

• When “IP address/subnet mask” is entered, it is possible to restrict IP address of SNMP manager from which request is permitted by subnet.
For example, when “192.168.0.1/24” is entered, all requests from the SMNP managers in the range from “192.168.0.1” to “192.168.0.254” will be permitted.

Available number of characters: 0 - 128 characters
Available characters: Alphanumeric characters, the colon (:), the period (.) and the slash (/).
Default: None (blank)

34. Added “SNMP transmission upon alarm detection” to “Camera action on alarm”

(Operating Instructions “Configure the alarm settings” [Alarm] - “Configure the settings relating to the camera action on alarm occurrence”)

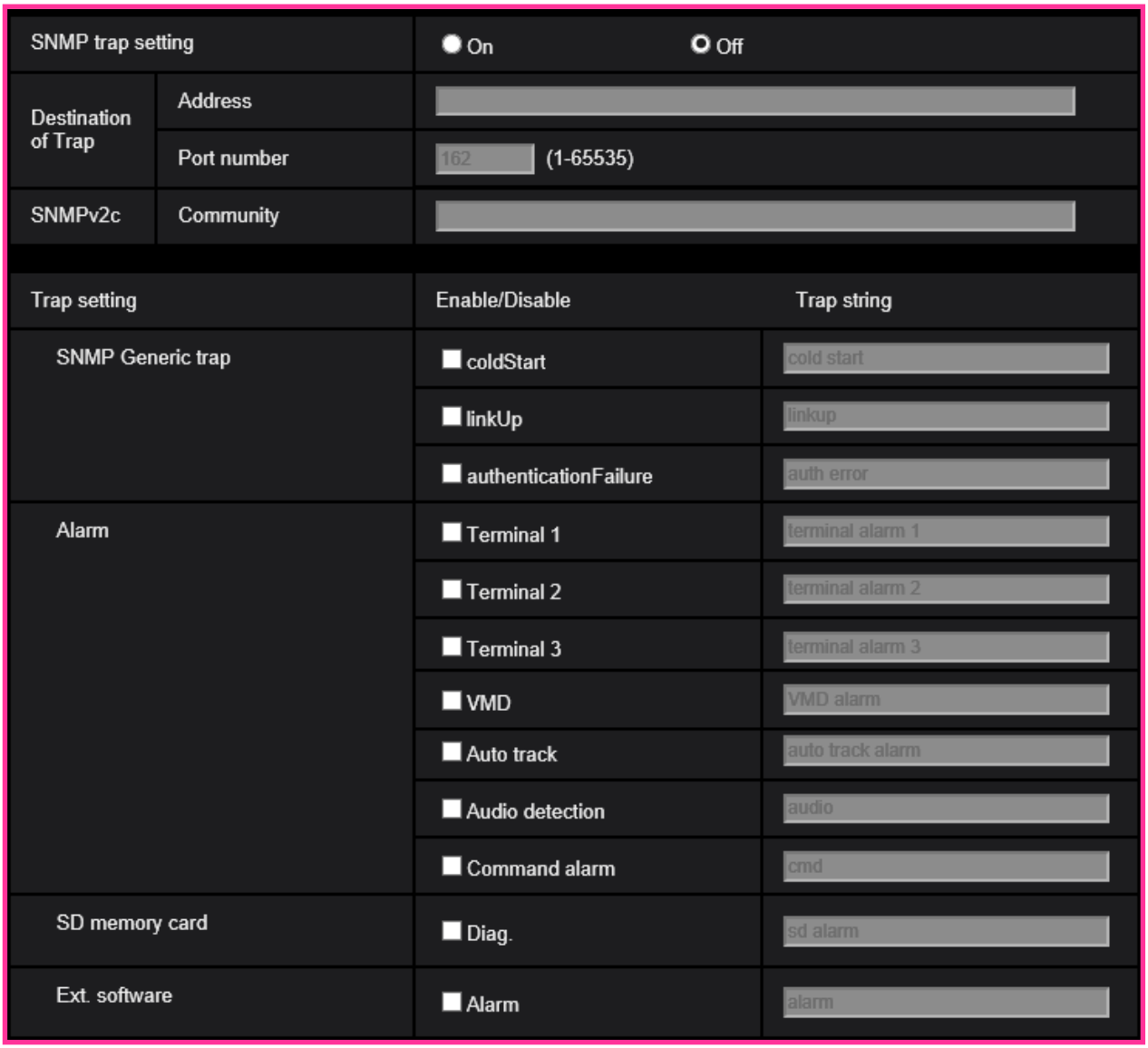
“SNMP transmission upon alarm detection” is newly added to the settings relating to the camera action on alarm.
Click “To SNMP setting” to display the setup menu that can configure the settings relating to SNMP transmission when an alarm occurs. The setup menu will be displayed in a newly opened window.
(→ 35. Added “SNMP trap setting” to “SNMP”)

Camera action on alarm	
Image compression rate upon alarm detection	Image compression rate upon alarm detection setup >>
Alarm E-mail notification	E-mail server >>
Alarm image FTP transmission	FTP setup >>
Alarm image recording(SD memory card)	SD memory card setup >>
Panasonic alarm protocol	Panasonic alarm protocol notification >>
HTTP alarm notification	HTTP alarm notification setup >>
Preset action upon alarm detection	Preset action on alarm >>
SNMP transmission upon alarm detection	To SNMP setting

35. Added “SNMP trap setting” to “SNMP”

(Operating Instructions “Configuring the network settings” [Network] - “Configure advanced network settings” [Advanced] - “Configure the settings relating to SNMP”)

“SNMP trap setting” is newly added to the settings relating to SNMP.
Configure settings relating to SNMP trap when an alarm occurs.



• [SNMP trap setting]
Set On/Off of the SNMP trap.
Default: Off

• [Destination of Trap] - [Address]
Enter the destination address of the SNMP trap.
Available number of characters: 0 - 128 characters
Available characters: Alphanumeric characters, the colon (:) and the period (.).
Default: None (blank)

• **[Destination of Trap] - [Port number]**
Enter the port number of the destination address of the SNMP trap.
Available port number: 1 - 65535
Default: 162
The following port numbers are unavailable since they are already in use.
20, 21, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 443, 554, 995, 10669, 10670, 59000 - 61000

• **[SNMPv2c] - [Community]**
Enter the community name of the destination address of the SNMP trap.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: None (blank)
IMPORTANT
• When using the SNMP trap function, it is necessary to enter the community name.
When no community name is entered, the SNMP trap function will not work.

• **[SNMP Generic trap] - [coldStart] - [Enable/Disable]**
When the check box is checked, a trap (SNMPv2-MIB::coldStart) will be sent.
Default: Not checked (Disable)

• **[SNMP Generic trap] - [coldStart] - [Trap string]**
When a camera startup trap is to be extended and sent, set the string of characters of the extended trap.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: cold start

• **[SNMP Generic trap] - [linkUP] - [Enable/Disable]**
When the check box is checked, a trap (SNMPv2-MIB:: linkup) will be sent at the time when the camera is linked up.
Default: Not checked (Disable)

• **[SNMP Generic trap] - [linkUP] - [Trap string]**
When a camera linkup trap is to be extended and sent, set the string of characters of the extended trap.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: linkup

• **[SNMP Generic trap] - [authenticationFailure] - [Enable/Disable]**
When the check box is checked, a trap (SNMPv2-MIB::coldStart) will be sent at the time when an SNMP authentication error occurs.
Default: Not checked (Disable)

• **[SNMP Generic trap] - [authenticationFailure] - [Trap string]**
When a SNMP authentication error occurrence trap is to be extended and sent, set the string of characters.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: auth error

• **[Alarm] - [Terminal 1] - [Enable/Disable]**

S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

When the check box is checked, a trap will be sent at the time when an alarm occurs in terminal 1.
Default: Not checked (Disable)

• **[Alarm] - [Terminal 1] - [Trap string]**

S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

Set the string of characters to be used for the trap of [Terminal 1].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: terminal alarm 1

• **[Alarm] - [Terminal 2] - [Enable/Disable]**

S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

When the check box is checked, a trap will be sent at the time when an alarm occurs in terminal 2.
Default: Not checked (Disable)

• **[Alarm] - [Terminal 2] - [Trap string]**

S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

Set the string of characters to be used for the trap of [Terminal 2].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: terminal alarm 2

• **[Alarm] - [Terminal 3] - [Enable/Disable]**

S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

When the check box is checked, a trap will be sent at the time when an alarm occurs in terminal 3.
Default: Not checked (Disable)

• **[Alarm] - [Terminal 3] - [Trap string]**

S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

Set the string of characters to be used for the trap of [Terminal 3].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: terminal alarm 3

• **[Alarm] - [VMD] - [Enable/Disable]**

When the check box is checked, a trap will be sent at the time when a video motion detection is activated.
Default: Not checked (Disable)

• **[Alarm] - [VMD] - [Trap string]**

Set the string of characters to be used for the trap of [VMD].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: VMD alarm

• **[Alarm] - [Auto track] - [Enable/Disable]**
X6531 X6511 S6530 S6131 S6111 S6130

When the check box is checked, a trap will be sent at the time when an auto track is activated.
Default: Not checked (Disable)

• **[Alarm] - [Auto track] - [Trap string]**
X6531 X6511 S6530 S6131 S6111 S6130

Set the string of characters to be used for the trap of [Auto track].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: auto track alarm

• **[Alarm] - [Audio detection] - [Enable/Disable]**
When the check box is checked, a trap will be sent at the time of an audio detection is activated.
Default: Not checked (Disable)

• **[Alarm] - [Audio detection] - [Trap string]**
Set the string of characters to be used for the trap of [Audio detection].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: audio

• **[Alarm] - [Command alarm] - [Enable/Disable]**
When the check box is checked, a trap will be sent at the time when a command alarm occurs.
Default: Not checked (Disable)

• **[Alarm] - [Command alarm] - [Trap string]**
Set the string of characters to be used for the trap of [Command alarm].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: cmd

• **[SD memory card] - [Diag.] - [Enable/Disable]**
S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

When the check box is checked, a trap will be sent in the following cases.
– When a notification of the remaining capacity of SD memory card has been provided
– When the SD memory card has become full
– When the SD memory card cannot be recognized
Default: Not checked (Disable)

• **[SD memory card] - [Diag.] - [Trap string]**
S11x2 S11x1 S15x1 S25x1 S22x1 S21x1 X6531 X6511 S6530 S6131 S6111 S6130

Set the string of characters to be used for the trap of [Diag.]
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: sd alarm

• **[Ext. Software] - [Alarm] - [Enable/Disable]**

When the check box is checked, a trap will be sent at the time when an alarm occurs in the extension software.

Note

• This setting will not be displayed if the extension software is not installed.

Default: Not checked (Disable)

• **[Ext. Software] - [Alarm] - [Trap string]**

Set the string of characters to be used for the trap of [Ext. software].

Note

• This setting will not be displayed if the extension software is not installed.

Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: alarm

36. Change the default value of each stream-related setting item depending on the language setting of the browser selected at the time of administrator registration

(Operating Instructions “Configure the settings relating to images and audio” [Image/Audio] – “Configure the settings relating to Stream” [Image])

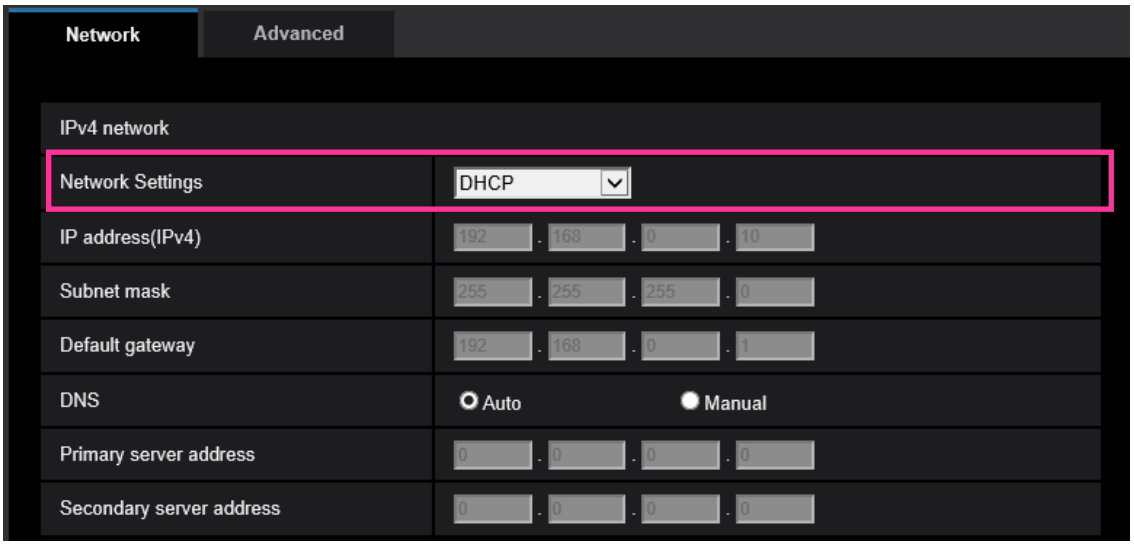
The default settings of some of the stream-related settings vary as follows depending on the language setting of the browser selected at the time of administrator registration.

Setting items	Language of the browser	
	Languages other than Japanese	Japanese
Transmission priority	VBR	Frame rate
Image quality	3	Normal
Stream(1) -Max bit rate (per client)	FHD model : 6144kbps* HD model : 4096kbps*	FHD model : 3072kbps* HD model : 2048kbps*
Stream(2) -Max bit rate (per client)	3072kbps*	1536kbps*
Stream(3) -Max bit rate (per client)	2048kbps*	1024kbps*
Stream(4) -Max bit rate (per client)	2048kbps*	1024kbps*

37. Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network

(Operating Instructions “Configuring the network settings” [Network]-“Configuring the network settings” [Network])

Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network.



IPv4 network

[Network Settings]

Select the method of how to configure the IP address from the following.

- **Static:** The IP address is configured by entering manually on “IP address(IPv4)”.
- **DHCP:** The IP address is configured using the DHCP function.
  If the camera cannot acquire an IP address from the DHCP server, set the IP address to 192.168.0.10.
  After that, once an IP address is acquired from the DHCP server, change it to that IP address.
- **Auto(AutoIP):** The IP address is configured using the DHCP function. When the DHCP server is not found, the IP address is automatically configured.
- **Auto(Advanced):** Using the DHCP function, network address information is referred to, and an unused IP address is configured to the camera as a static IP address. The configured IP address is automatically determined within the subnet mask range by the camera. When the DHCP server is not found, the IP address is set to 192.168.0.10.
- **Default:** DHCP

38. Add ONVIF® settings in Network

(Operating Instructions “Configuring the network settings” [Network]-“Configuring the network settings” [Network])

Add ONVIF® settings in the network settings.

[ONVIF®]

Set the ONVIF to On/Off.

On: Enables the access from the ONVIF camera.

Off: Disables the access from the ONVIF camera.

Default: On

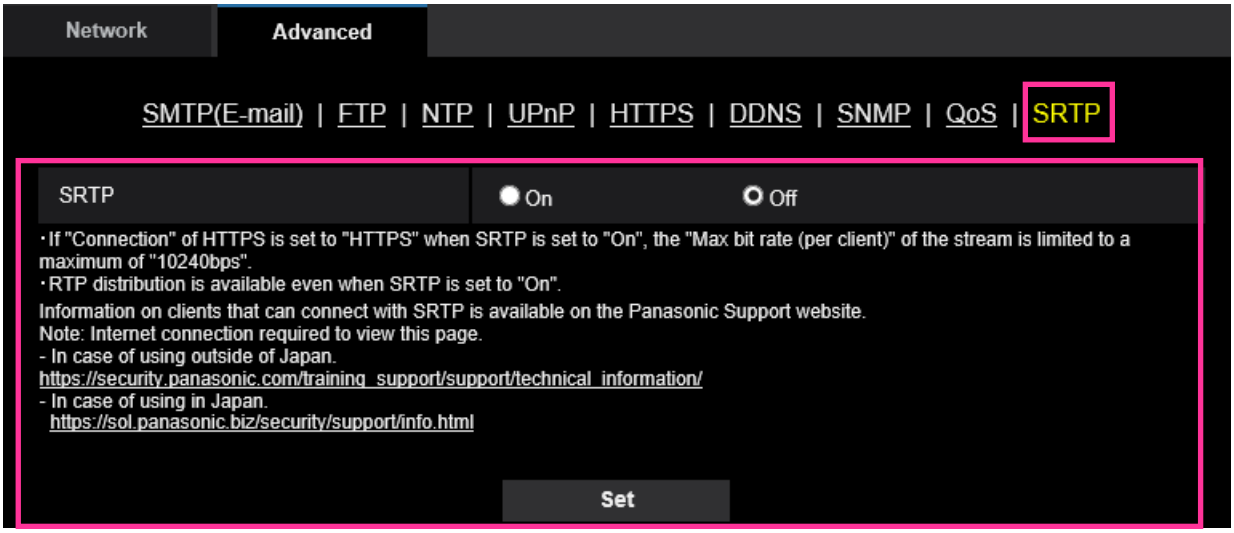
*ONVIF is the trademark of ONVIF, Inc.

39. Add the SRTP function to "Advanced" of "Network"

(Operating Instructions “Configuring the network settings” [Network] - “Configure advanced network settings” [Advanced])

The SRTP function has been added to "Advanced" of "Network".

The Secure Real-time Transport Protocol (SRTP) can encrypt the "Real-time Transport Protocol (RTP)" for real-time playback of data such as voice and video, thus increasing the security of communication.



[SRTP]

On/Off the SRTP function.

On: Enables the SRTP distribution on SRTP-compatible clients.

Off: Disables the SRTP distribution on SRTP-compatible clients.

Default: Off

Note

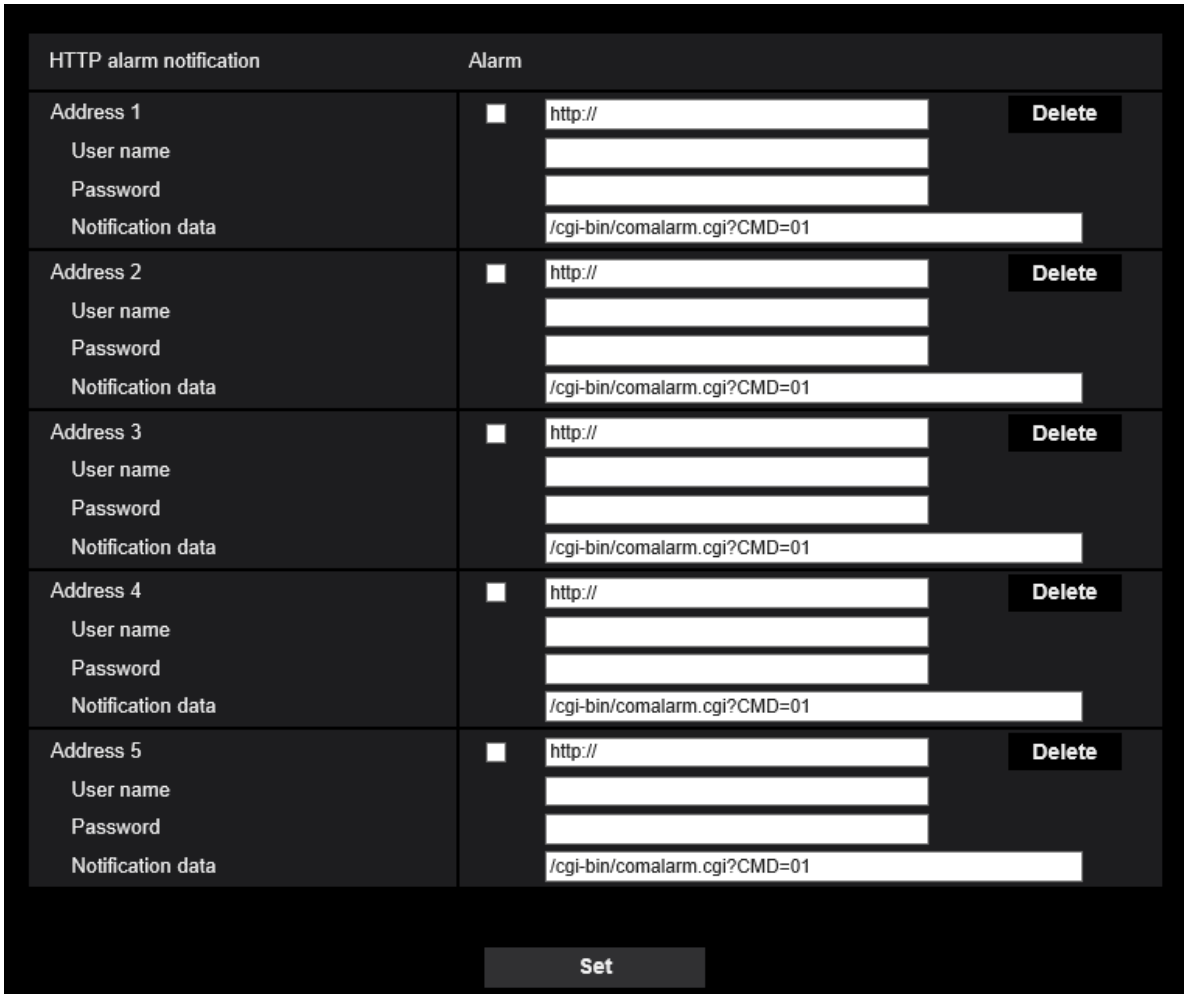
- If "Connection" of HTTPS is set to "HTTPS" when SRTP is set to "On", the "Max bit rate (per client)" of the stream is limited to a maximum of "10240bps".
- RTP distribution is available even when SRTP is set to "On".
- Information on clients that can connect with SRTP is available on our support website.
  https://i-pro.com/global/en/surveillance/training-support/support/technical-information
  <Control No.: C0318>

40. Enable the HTTP alarm notification function to support the HTTPS communication and the Digest authentication

(Operating Instructions “Configure the alarm settings” [Alarm] – “Configuration of the settings relating to alarm notification” [Notification] – “Configure the settings relating to HTTP alarm notification”)

The HTTP alarm notification function is now supporting the HTTPS communication and Digest authentication.

- **HTTPS Communication**: Implement alarm notification over HTTPS communication by entering https:// in [Address].
- **Digest authentication**: Support Digest authentication with the HTTP server.



[Address 1] - [Address 5]

Enter the destination IP address or host name of the HTTP alarm notification. Up to 5 destination server addresses can be registered.

- **Available characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).
- **Default:** http://

Example of entry: “http://IP address of the HTTP server + : (colon) + port number” or
http://Host name: (colon)+ port number
“https://IP address of the HTTP server + : (colon) + port number” or
https://Host name: (colon)+ port number

[User name]
Enter the user name (login name) to access the HTTP server.
• **Available number of characters:** 0 - 63 characters
• **Unavailable characters:** " & : ; ¥
[Password]
Enter the password to access the HTTP server.
• **Available number of characters:** 0 - 63 characters
• **Unavailable characters:** " &
Note
• Basic authentication or Digest authentication is performed on authentication request of the HTTP server.

41. Add to the system log when authentication fails for the HTTP alarm notification function

(Operating Instructions “Others” – “About the displayed system log”)

When the HTTP server user authentication fails, an error is added to "Error indications relating to HTTP alarm notification".

Category	Indication	Description
HTTP alarm notification	Authentication error	• Entered user name or password may be incorrect. Check if the HTTP alarm notification settings are configured correctly.

42. Add a notify to the [SNMP trap setting]

(Operating Instructions Configure the network settings [Network] - Configure advanced network settings [Advanced])

Add the notifications to [SNMP trap settings].

Note

• In order to activate SNMP trap notifications for when alarms occur, alarm operation settings are required.

For information on settings related alarm operations, refer to Configure the alarm settings [Alarm] in Operating Instructions.

43. Add to the system log when recording stream fails to write

(Operating Instructions “Others” – “Maintenance” - Check the status [Status])

A system log has been added for errors in the write process of the recording stream to the log related to SD memory cards.

Category	Indication	Description
SD memory card	<SD>Format	Successfully formatted the SD memory card.
	<SD>Format error	Error occurred when formatting the SD memory card.
	<SD> Write-protect ON (Locked card)	A write-protected SD memory card is inserted.
	<SD> Detection error	The SD memory card could not be correctly recognized.
	<SD> Write error	An error occurred when writing to the SD memory card.
	<SD> Read error	An error occurred when reading from the SD memory card.
	<SD> Delete error	An error occurred when deleting data from the SD memory card.
	<SD> File system error	An error occurred in File system of the SD memory card.
	<SD> Undefined error	An error other that the ones above has occurred for the SD memory card.
	<SD> An abnormality occurs in continuity of the SD memory recording. Check the recording bit rate setting of the SD memory recording.	An error occurred when writing to the SD memory card.
	<SD> An error occurs in the SD memory card. Check the status of the SD memory card.	The SD memory card write process still generates data loss. Make sure that the SD memory card is properly recognized. If the card is not recognized, reboot the unit, or remove and reinsert the SD memory card to check.

44. Add a function to notify the user of writing failures in the recording stream with a unique alarm

(Operating Instructions Configure the alarm settings [Alarm]) – Configuration of the settings relating to alarm notification［Notification］– Configure the settings relating to Panasonic alarm protocol)

Add the write processing error of the recording stream to the occurrence condition of the Panasonic alarm protocol notification of “Diag.”

Panasonic alarm protocol

• ［Panasonic alarm protocol］

Select “On” or “Off” to determine whether or not to provide notification by Panasonic alarm protocol according to the settings for the “Alarm” and “Diag.” checkboxes of “Destination of notification” below.

- When an alarm is detected (“Alarm”)
- When a notification of the remaining capacity of the SD memory card has been provided (“Diag.”)
- When the SD memory card has become full (“Diag.”)
- When the SD memory card cannot be recognized (“Diag.”)
- When there is a write error on the SD memory card (“Diag.”)

Default: Off

Destination of notification

• [Address 1] - [Address 8]

Enter the destination IP address or host name of the Panasonic alarm protocol from the following.

Up to 8 destination server addresses can be registered.

[Alarm] checkbox: When the checkbox is checked, the Panasonic alarm notification will be provided upon an alarm occurrence.

[Diag.] checkbox: When the checkbox is checked, notification using Panasonic alarm protocol will be provided in the following cases.

– When notification of the remaining capacity of the SD memory card has been provided

– When the SD memory card has become full

– When the SD memory card cannot be recognized

– When the SD memory card cannot be written

[Destination server address]: Enter the destination server address or host name.

Available characters: Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

To delete the registered destination server address, click the [Delete] button respective to the desired destination server address.

45. Add a note when the bit rate of the recording stream is set to a value exceeding recommended value

(Operating Instructions “Image/Audio” - Configure the settings relating to Stream [Image])

Add the statement that it is possible that an error may occur in the continuity of SD memory card recording, if you set a bit rate that exceeds the recommended value in “Note” of “Max bit rate (per client) *”.

[Max bit rate (per client)*]:

Note

• The bit rate for “Stream” is restricted by “Bandwidth control (bit rate)” on the [Network] tab on the “Network” page. When a value with “*” attached is set, images may not be streamed.

• It is recommend that the bit rate setting of the stream to be 6144 kbps or lower. Setting a value higher than 6144 kbps may cause abnormalities in the continuity of the recorded video.

• When the refresh interval is too short, the actual bit rate may exceed the set bit rate depending on the subject.

• Depending on the number users connecting at the same time or the combination of features used, the bit rate may be lower than the configured value. Check the transmission of images after changing settings.

46. Add a download function of Viewer software (nwcv4Ssetup.exe)

(Operating Instructions Configure the basic settings of the camera [Basic] - Configure the basic settings of the camera [Basic])

Add the download function of Viewer software (nwcv4Ssetup.exe).

[Viewer software (nwcv4Ssetup.exe)] - [Download]
Click the [Execute] button to download the viewer software with the installer to a PC. Follow the on-screen instructions and install the software by executing the downloaded file.

47. Extend authentication password for the destination of notification

(Operating Instructions – Configure the network settings [Network] – Configure advanced network settings [Advanced] - Configure the settings related to sending E-mails)

The number of characters that can be entered for the authentication password of the destination of notification has been expanded to 128 characters.

- **[Authentication − Password]**

Enter the password to access the server.

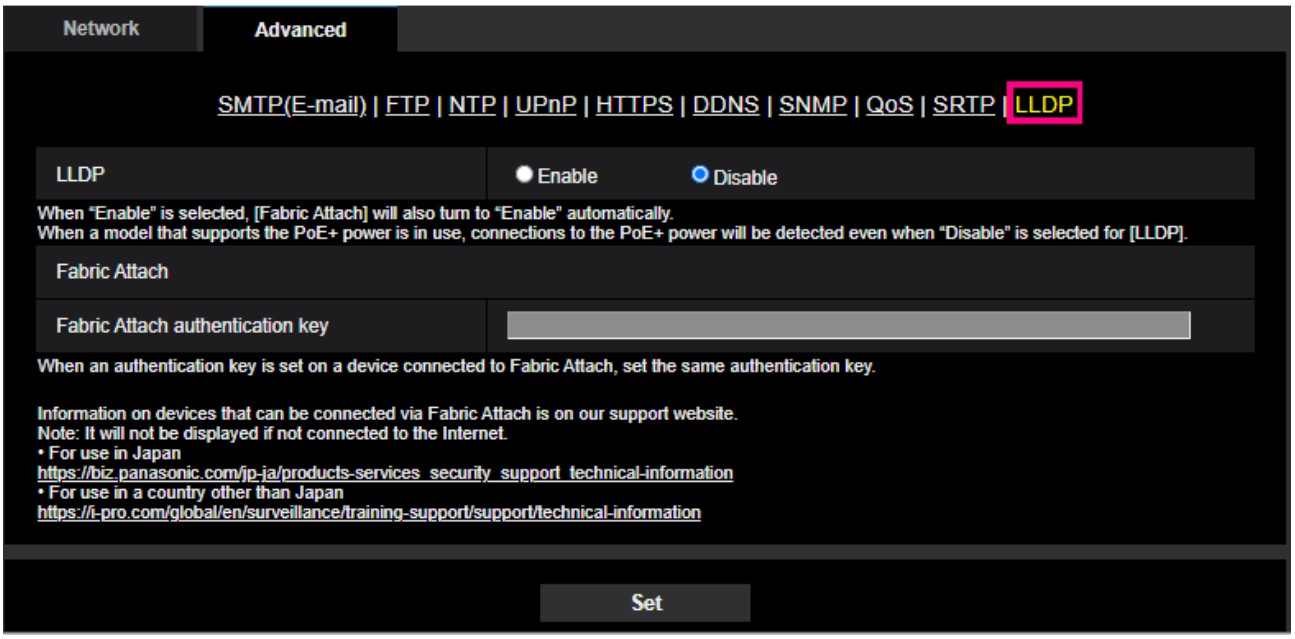
Available number of characters: 0 - 128 characters

Unavailable characters: " &

48. Add LLDP function

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced])

LLDP (Link Layer Discovery Protocol) has been added to [Advanced] of [Network]. Interoperability can be achieved by sending and receiving camera's device information to and from LLDP-compatible devices.



[LLDP]

Enable/Disable whether to enable the LLDP function and Fabric Attach.

Defalut: Disable

When set to “Enable”, LLDP including TLVs with the checks in the table below will be sent.

End Of LLDPDU TLV	Chassis ID TLV	Port ID TLV	Time To Live TLV	Port Description TLV	System Name TLV	System Description TLV	System Capability TLV	Management Address TLV	IEEE802.3 Power via MDI TLV	Fabric Attach Element TLV
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Models that support PoE+ power supply will send LLDP including TLVs with the checks in the table below for PoE+ power supply even if set to "Disable".

End Of LLDPDU TLV	Chassis ID TLV	Port ID TLV	Time To Live TLV	Port Description TLV	System Name TLV	System Description TLV	System Capability TLV	Management Address TLV	IEEE802.3 Power via MDI TLV	Fabric Attach Element TLV
✓	✓	✓	✓						✓	

Fabric Attach

[Fabric Attach authentication key]

Enter the key to be used for Fabric Attach authentication. Note that this is valid only when “LLDP” is “Enable”.

Available number of characters: 0 - 32 characters (If Fabric Attach authentication is not performed, leave it blank.)

Available characters: Alphanumeric characters

Default: None (blank)

Note

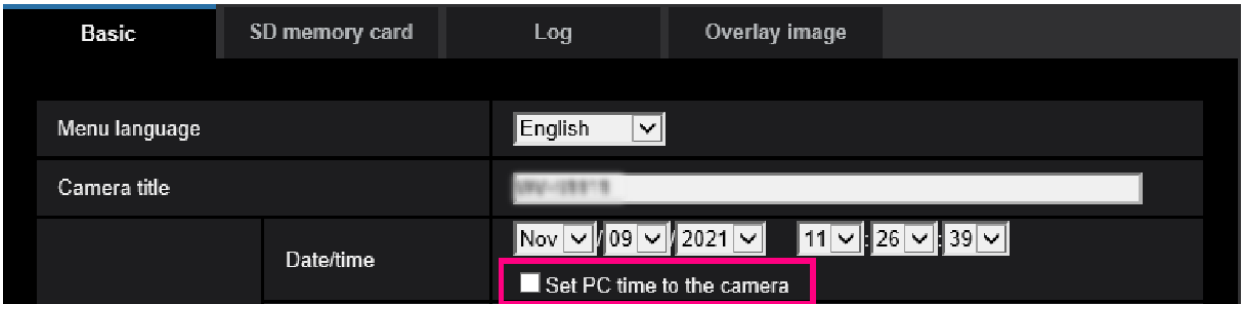
・Click the [Set] button to restart the product. After restarting, the product cannot be operated for about 2 minutes, just like when the power is turned on.

・For information about devices that can be connected using Fabric Attach, refer to our support website.
https://i-pro.com/global/en/surveillance/training-support/support/technical-information

49. Add the function to set the date and time of the PC to the camera

(Operating Instructions – Configure the basic settings of the camera [Basic]) – Configure the basic settings [Basic])

Add the function to set the date and time of the PC to the camera in the date and time setting.



[Date/time]

Enter the current time and date. When “12h” is selected for “Time display format”, “AM” or “PM” can be selected.

Check the “Set PC time to camera” checkbox and click the [Set] button to get the date and time of the PC and set it in this product.

• **Available range:** Jan/01/2013 00:00:00 - Dec/31/2035 23:59:59

IMPORTANT

• Use an NTP server when the more accurate time & date setting is required for the system operation. (→Configure the settings relating to the NTP server)

50. Change the initial value of “Overwrite” of SD memory card to On

(Operating Instructions – Configure the basic settings of the camera [Basic]) – Configure the settings relating to the SD memory card [SD memory card])

[Overwrite]

Determine whether or not to overwrite when the remaining capacity of the SD memory card becomes insufficient.

• **On:** Overwrites when the remaining capacity of the SD memory card becomes insufficient. (The oldest image is the first to be overwritten.)

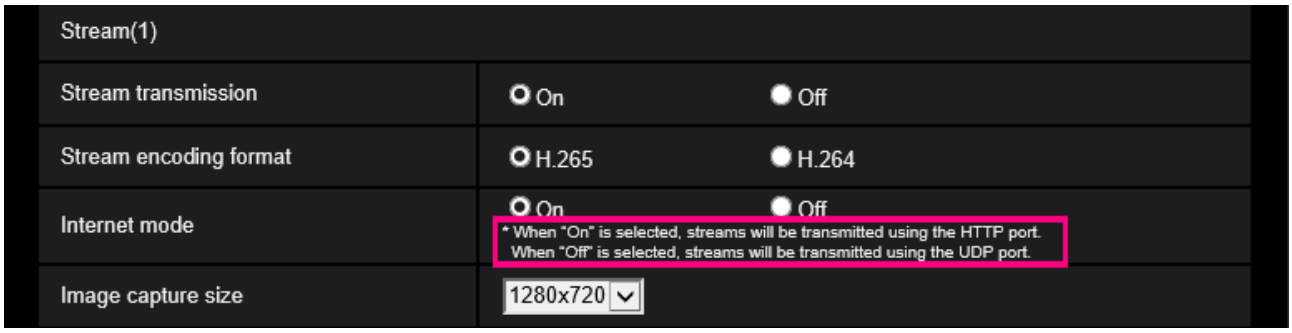
• **Off:** Stops saving images on the SD memory card when the SD memory card becomes full.

• **Default:** On

51. Add the supplementary explanation of On/Off of Internet mode to the setting screen

(Operating Instructions – Configure the settings relating to images and audio [Image/Audio] – Configure the settings relating to Stream [Image])

Add the supplementary explanation of On/Off of Internet mode setting.



[Internet mode]

Select “On” when transmitting H.265 (or H.264) images via the Internet. It is possible to transmit stream without changing the broadband router settings configured for JPEG image transmission.

- **On:** H.265 (or H.264) images and audio will be transmitted using the HTTP port. Refer to [HTTP port] for further information about the HTTP port number settings.
- **Off:** H.265 (or H.264) images and audio will be transmitted using the UDP port.
- **Default:** On

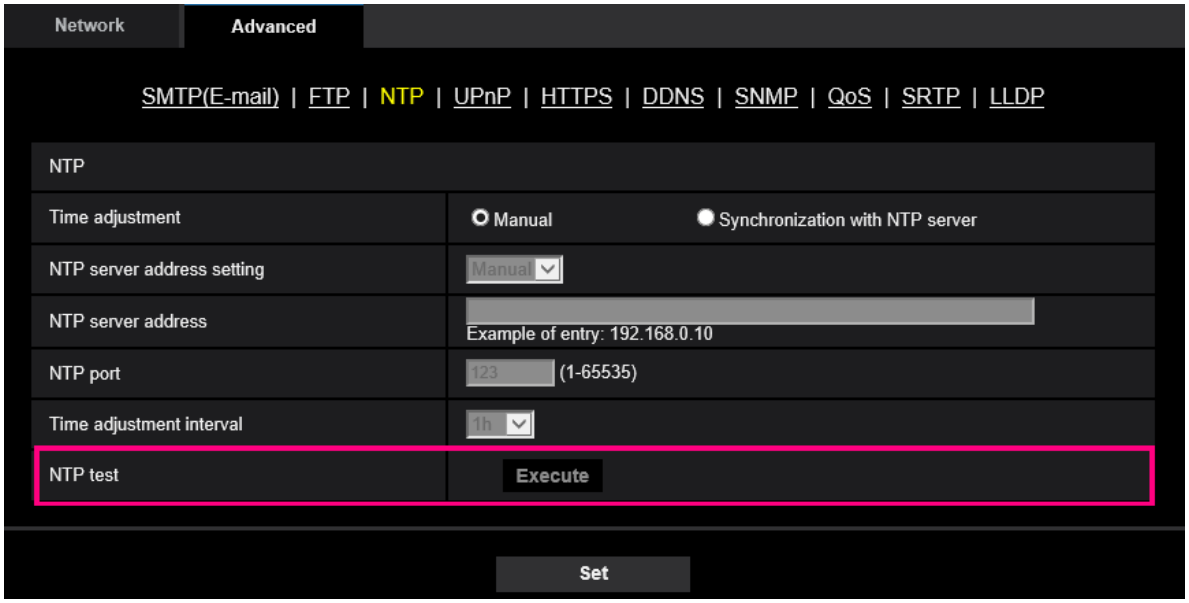
Note

- When “On” is selected, only “Unicast port (AUTO)” will be available for “Transmission type”.
- When “On” is selected, it may take time to start displaying stream images.
- When “On” is selected, stream images may not be displayed depending on the number of the concurrent access user and audio data availability, etc.
- When “On” is selected, only IPv4 access is available.

52. Add NTP test function

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced] – Configure the settings relating to the NTP server)

Add a test function for time synchronization to check if it can communicate with NTP server.



[NTP test]

Select “Synchronization with NTP server” for “Time adjustment”, set the NTP server information, and then click the “Execute” button. You can communicate with the NTP server, synchronize the time, and check the NTP operation.

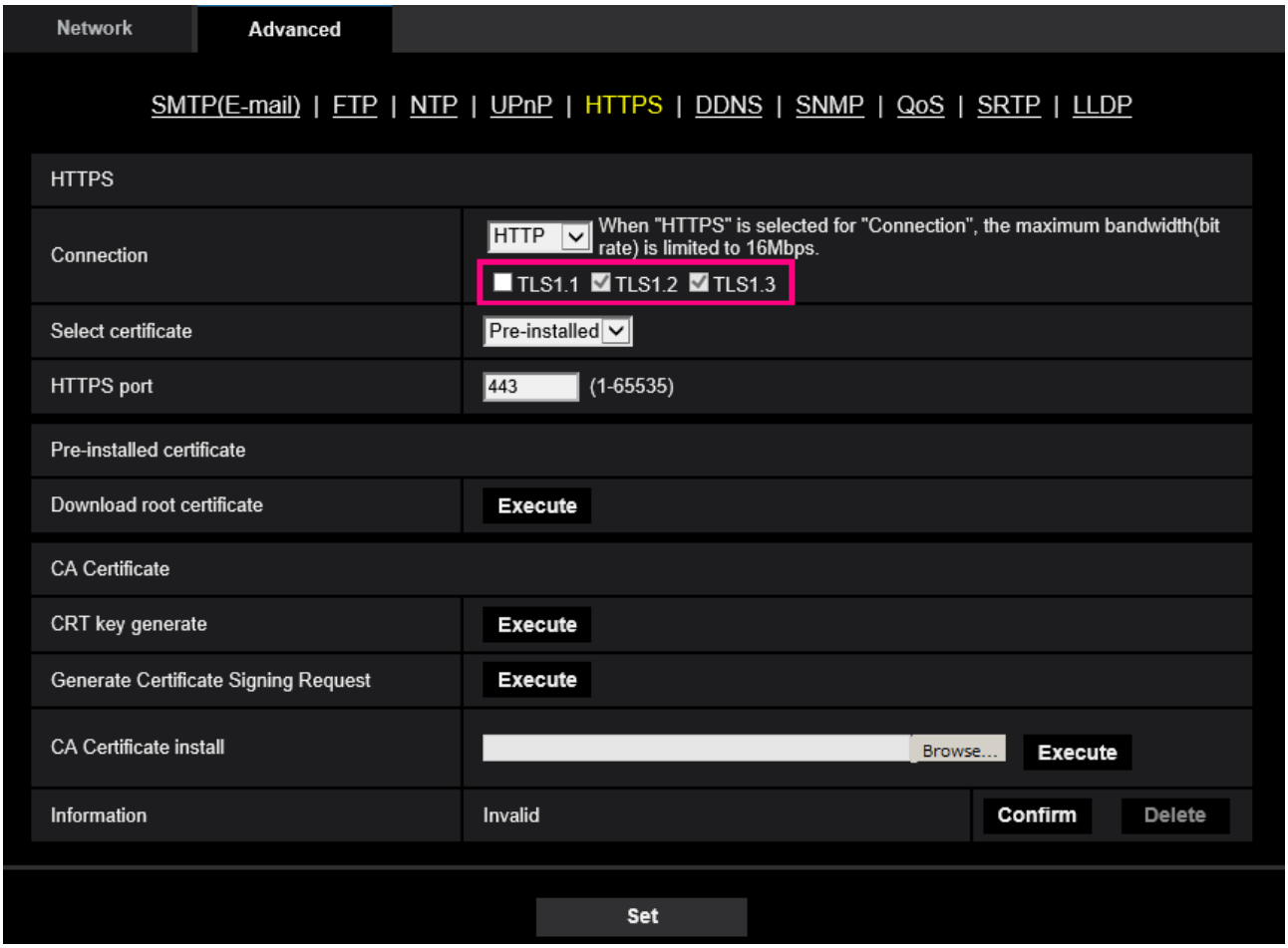
Note

・If the NTP test succeeds, “NTP time correction has succeeded.” is displayed.
・If the NTP test fails, “NTP time correction has failed.” is displayed.
・When “Time adjustment” is set to “Manual”, the “Execute” button of NTP test is grayed out.
・When “Time adjustment” is set to “Synchronization with NTP server” and the “NTP server address” is not set, the “Execute” button for the NTP test will be grayed out.

53. Add TLS settings to HTTPS

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced] – Configure the HTTPS settings)

Add TLS1.1, TLS1.2 and TLS1.3 selection items to the HTTPS connection method.



[HTTPS - Connection]

Select the protocol used to connect the camera.

- **HTTP:** HTTP and HTTPS connections are available.
- **HTTPS:** Only the HTTPS connection is available.
- **Default:** HTTP

Select the TLS to use when HTTPS is selected.

- **TLS1.1**: Enable/Disable.
- **TLS1.2**, **TLS1.3**: Always enabled and cannot be disabled.
- **Default: TLS1.1**:Disabe、**TLS1.2**: Enable, **TLS1.3**: Enable

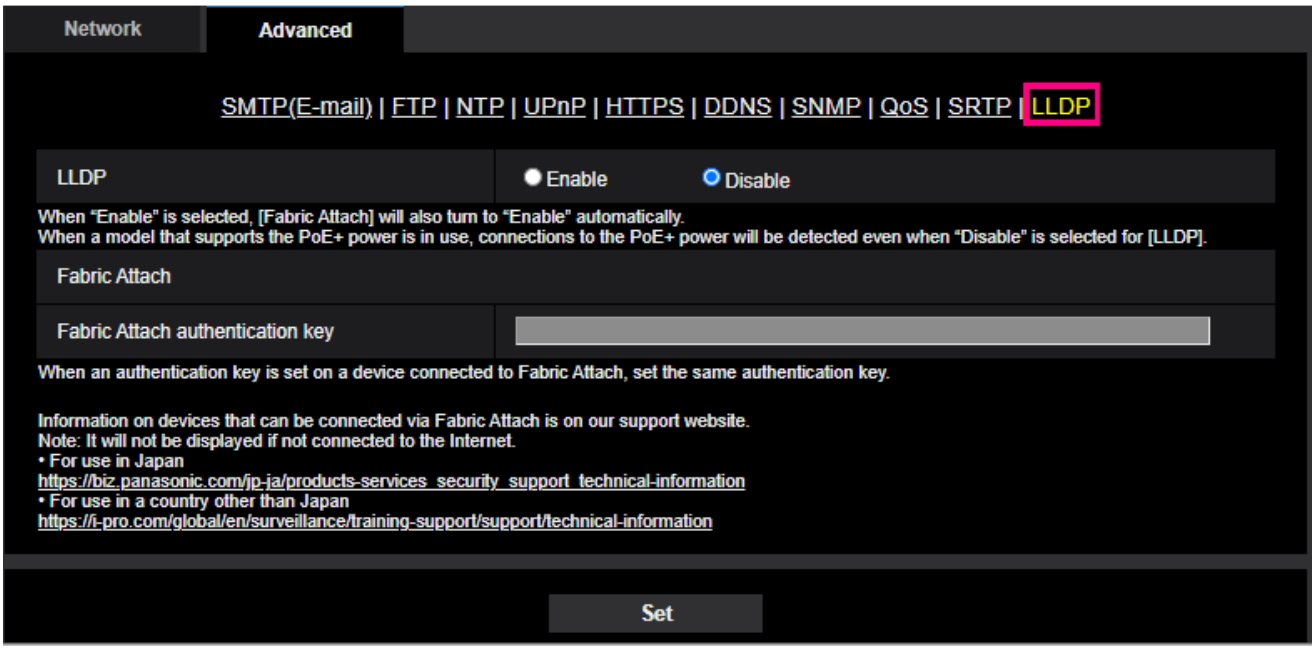
Note

- To change to an HTTPS connection when HTTP is selected, perform HTTPS connection settings first. The HTTPS connection will be available even if the setting is changed to HTTP afterwards.

54. Add LLDP function X6531 X6511 S6530 S6131 S6111 S6130

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced])

LLDP (Link Layer Discovery Protocol) has been added to [Advanced] of [Network]. Interoperability can be achieved by sending and receiving camera's device information to and from LLDP-compatible devices.



[LLDP]

Enable/Disable whether to enable the LLDP function and Fabric Attach.

Defalut: Disable

When set to “Enable”, LLDP including TLVs with the checks in the table below will be sent.

End Of LLDPDU TLV	Chassis ID TLV	Port ID TLV	Time To Live TLV	Port Description TLV	System Name TLV	System Description TLV	System Capability TLV	Management Address TLV	IEEE802.3 Power via MDI TLV	Fabric Attach Element TLV
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Models that support PoE+ power supply will send LLDP including TLVs with the checks in the table below for PoE+ power supply even if set to “Disable”.

End Of LLDPDU TLV	Chassis ID TLV	Port ID TLV	Time To Live TLV	Port Description TLV	System Name TLV	System Description TLV	System Capability TLV	Management Address TLV	IEEE802.3 Power via MDI TLV	Fabric Attach Element TLV
✓	✓	✓	✓						✓	

Fabric Attach

[Fabric Attach authentication key]

Enter the key to be used for Fabric Attach authentication. Note that this is valid only when “LLDP” is “Enable”.

Available number of characters: 0 - 32 characters (If Fabric Attach authentication is not performed, leave it blank.)

Available characters: Alphanumeric characters

Default: None (blank)

Note

・Click the [Set] button to restart the product. After restarting, the product cannot be operated for about 2 minutes, just like when the power is turned on.

・For information about devices that can be connected using Fabric Attach, refer to our support website.
https://i-pro.com/global/en/surveillance/training-support/support/technical-information