

## 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.
- This document is for the following models.  
WV-S3531L, WV-S3511L, WV-S3532LM, WV-S3512LM, WV-S3131L, WV-S3111L

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

### • Firmware Ver.4.00

No.	Functions	Item (Page)	Page
1	Addition of "Overlay Image" function.	Overlay (Image/Audio)	3
2	Improvement of readability of Date/time and characters on screen.	Basic (Basic)	6
3	Change in encryption of the settings.	Data(Maintenance)	7

### • Firmware Ver.4.30

No.	Functions	Item (Page)	Page
4	Change of [Viewer software (nwcV4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting	Basic (Basic)	8
5	Change of [Internet mode] default setting	Image(Image/Audio)	9
6	Enhanced the access restriction function of SNMP v1/v2	Advanced (Network)	10
7	Added "SNMP transmission upon alarm detection" to "Camera action on alarm"	Camera action on alarm (Alarm)	11
8	Added "SNMP trap setting" to "SNMP"	Advanced (Network)	12

### • Firmware Ver.4.60

No.	Functions	Item (Page)	Page
9	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)	16
10	Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network	Network (Network)	17
11	Add ONVIF® settings in Network	Network (Network)	18
12	Add the SRTP function to "Advanced" of "Network"	Advanced (Network)	19
13	Enable the HTTP alarm notification function to support the HTTPS communication and the Digest authentication	Notification(Alarm)	20
14	Add to the system log when authentication fails for the HTTP alarm notification function	System log(Others)	22

• **Firmware Ver.4.80**

No.	Functions	Item (Page)	Page
15	Add a notify to the [SNMP trap setting]	Advanced (Network)	23
16	Add to the system log when recording stream fails to write	Advanced (Network)	24
17	Add a function to notify the user of writing failures in the recording stream with a unique alarm	Maintenance (Status)	25
18	Add a note when the bit rate of the recording stream is set to a value exceeding recommended value	Image/Audio (Image)	26
19	Add a download function of Viewer software (nwcV4Ssetup.exe)	Basic (Basic)	27
20	Extend authentication password for the destination of notification	Network (Advanced)	28

• **Firmware Ver.4.90**

No.	Functions	Item (Page)	Page
21	Add LLDP function	Advanced (Network)	29

• **Firmware Ver.4.91**

No.	Functions	Item (Page)	Page
22	Add the function to set the date and time of the PC to the camera	Basic (Basic)	31
23	Change the initial value of "Overwrite" of SD memory card to On	SD memory card (Basic)	32
24	Add the supplementary explanation of On/Off of Internet mode to the setting screen	Image (Image/Audio)	33
25	Add NTP test functions	Advanced (Network)	34
26	Add TLS settings to HTTPS	Advanced (Network)	35

• **Firmware Ver.5.01**

No.	Functions	Item (Page)	Page
27	Removed SD memory card images acquisition function	SD memory card (Basic)	36
28	Add i-VMD alarm area information on TCP alarm notification	Notification(Alarm)	37
29	Add Image transmission log on Status page	Status (Maintenance)	38

# 1. Addition of “Overlay Image” function.

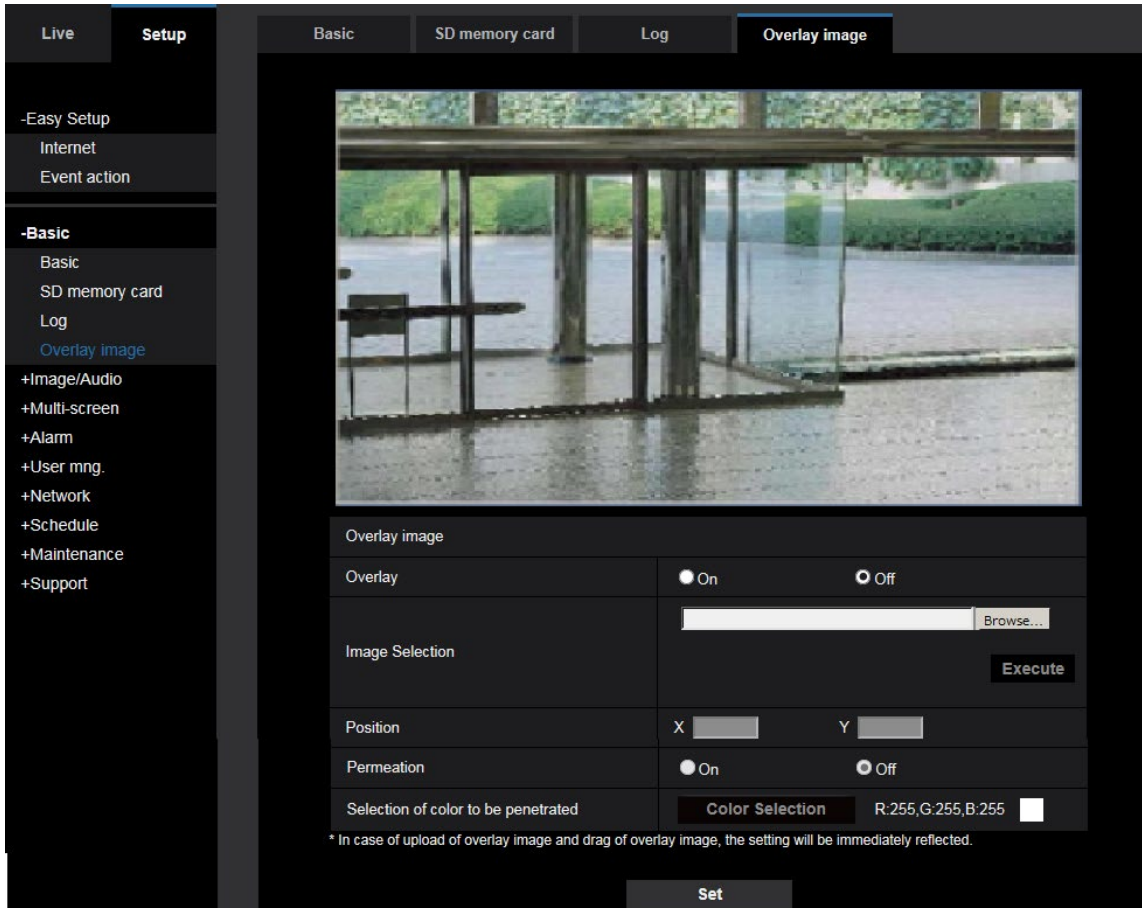
## (Operating Instructions Configure the basic settings of the camera [Basic])

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.



### [Overlay]

Select “On” or “Off” to determine whether to display an uploaded image overlaid.

**On:** Displays uploaded an image overlaid.

**Off:** Does not display uploaded an image overlaid.

**Default:** Off

### **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

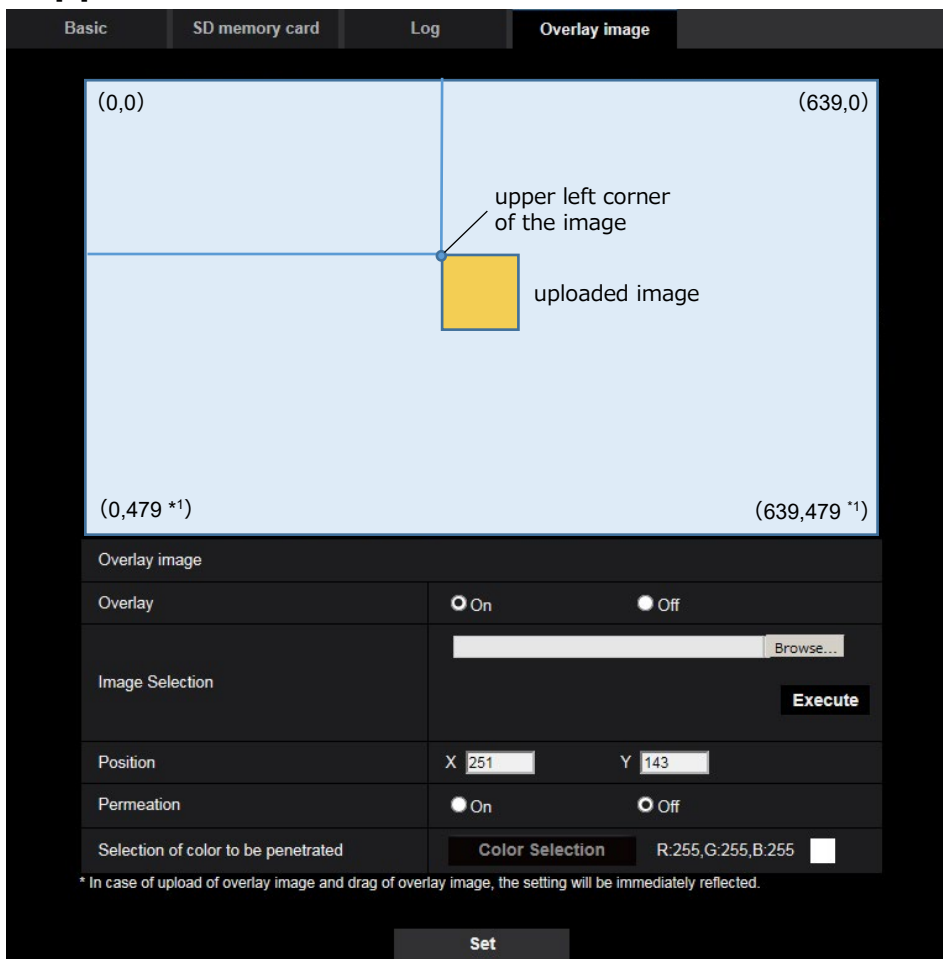
- Save image files in a folder whose name does not contain a space or two-bytes code. Uploading of an image saved in a folder whose name contains a space or two-bytes code is unavailable.

### 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]**

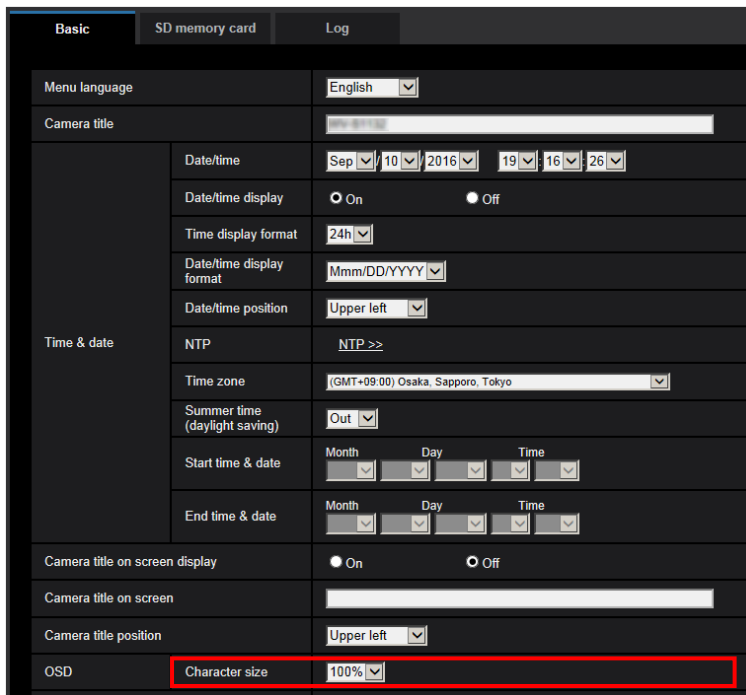
Select a color to be penetrated in the following procedure.

- 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.



## 2. 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.



Basic		SD memory card	Log	
Menu language		English		
Camera title				
Time & date	Date/time	Sep 10 2016 19:16:26		
	Date/time display	<input checked="" type="radio"/> On <input type="radio"/> Off		
	Time display format	24h		
	Date/time display format	Mmm/DD/YYYY		
	Date/time position	Upper left		
	NTP	NTP >>		
	Time zone	[GMT+09:00] Osaka, Sapporo, Tokyo		
	Summer time (daylight saving)	Out		
	Start time & date	Month	Day	Time
	End time & date	Month	Day	Time
Camera title on screen display		<input checked="" type="radio"/> On <input type="radio"/> Off		
Camera title on screen				
Camera title position		Upper left		
OSD	Character size	100%*		

### [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**

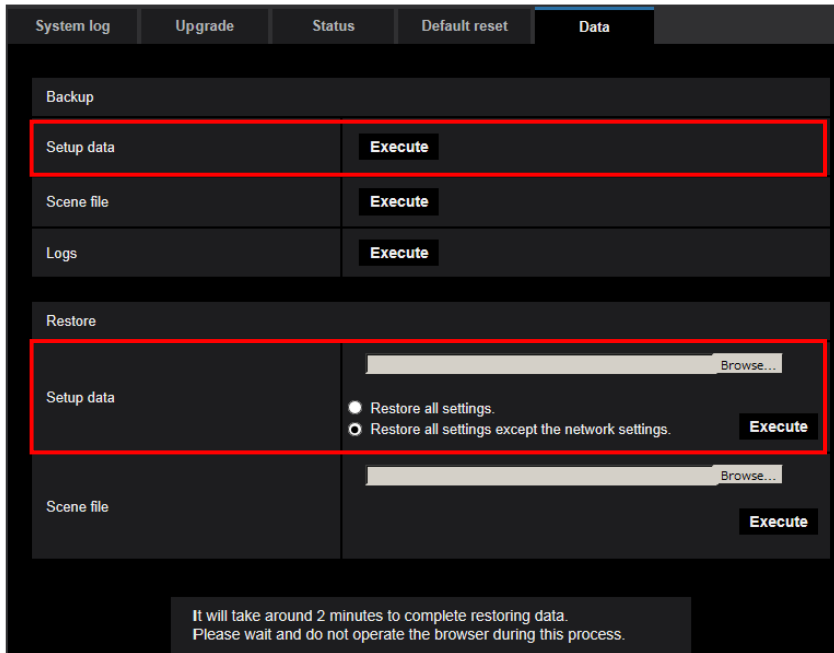
- If the settings for [Date/time position] and [Camera title position] are different, the frame rate may be lower than the specified value.
- If the settings for [Date/time position] and [Camera title position] are different, characters may be displayed incorrectly or overlapped depending on the [Character 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%”.

### 3. 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.

#### 4. Change of [Viewer software (nwc4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting (Operating Instructions Configure the basic settings of the camera [Basic]- Configure the basic settings [Basic])

Change of [Viewer software (nwc4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting.

Viewer software (nwc4Ssetup.exe)	Automatic installation	<input type="radio"/> On	<input checked="" type="radio"/> Off	
	Drawing method	<input type="radio"/> GDI	<input checked="" type="radio"/> Direct2D	
	Decoding Options	<input type="radio"/> Software	<input checked="" type="radio"/> Hardware	<b>Confirm</b>
	Smoother live video display on the browser (buffering)	<input checked="" type="radio"/> On	<input type="radio"/> Off	
	Frame Skip Options (When PC is Heavy Processing Load)	<input type="radio"/> Auto	<input checked="" type="radio"/> Manual	
	Contrast enhancement (RGB:0 to 255)	<input checked="" type="radio"/> On	<input type="radio"/> Off	

#### [Viewer software (nwc4Ssetup.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".



## 5. 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.

Stream(1)	
Stream transmission	<input type="radio"/> On <input checked="" type="radio"/> Off
Stream encoding format	<input type="radio"/> H.265 <input checked="" type="radio"/> H.264
Internet mode	<input type="radio"/> On <input checked="" type="radio"/> Off

### [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.

## 6. 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.

The screenshot shows a configuration interface with two tabs: 'Network' and 'Advanced'. The 'Advanced' tab is selected. Below the tabs is a navigation bar with links: SMTP(E-mail), FTP, NTP, UPnP, HTTPS, DDNS, SNMP (highlighted in yellow), and QoS. The main content area is titled 'SNMP agent setting' and contains a table of configuration options. The 'SNMP version' is set to 'SNMPv1/v2'. The 'SNMPv1/v2' section has a 'Community' field and a 'Manager address' field, which is highlighted with a pink border. The 'SNMPv3' section has 'User name (1 to 32 characters)', 'Authentication' (MD5 and SHA1), 'Encryption method' (DES and AES), and 'Password (8 to 16 characters)' fields.

SNMP agent setting		
SNMP version	SNMPv1/v2	
SNMPv1/v2	Community	
	Manager address	
SNMPv3	User name (1 to 32 characters)	
	Authentication	<input type="radio"/> MD5 <input type="radio"/> SHA1
	Encryption method	<input type="radio"/> DES <input type="radio"/> AES
	Password (8 to 16 characters)	

### • [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)

## 7. 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.

(→ 8. Added “SNMP trap setting” to “SNMP”)

Camera action on alarm	
Image compression rate upon alarm detection	<a href="#">Image compression rate upon alarm detection setup &gt;&gt;</a>
Alarm E-mail notification	<a href="#">E-mail server &gt;&gt;</a>
Alarm image FTP transmission	<a href="#">FTP setup &gt;&gt;</a>
Alarm image recording(SD memory card)	<a href="#">SD memory card setup &gt;&gt;</a>
Panasonic alarm protocol	<a href="#">Panasonic alarm protocol notification &gt;&gt;</a>
HTTP alarm notification	<a href="#">HTTP alarm notification setup &gt;&gt;</a>
SNMP transmission upon alarm detection	<a href="#">To SNMP setting</a>

## 8. 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		<input checked="" type="radio"/> On <input type="radio"/> Off
Destination of Trap	Address	<input type="text"/>
	Port number	<input type="text" value="162"/> (1-65535)
SNMPv2c	Community	<input type="text"/>
<b>Trap setting</b>		
	Enable/Disable	Trap string
SNMP Generic trap	<input type="checkbox"/> coldStart	<input type="text" value="cold start"/>
	<input type="checkbox"/> linkUp	<input type="text" value="linkup"/>
	<input type="checkbox"/> authenticationFailure	<input type="text" value="auth error"/>
Alarm	<input type="checkbox"/> VMD	<input type="text" value="VMD alarm"/>
	<input type="checkbox"/> Audio detection	<input type="text" value="audio"/>
	<input type="checkbox"/> Command alarm	<input type="text" value="cmd"/>
SD memory card	<input type="checkbox"/> Diag.	<input type="text" value="sd alarm"/>
Ext. software	<input type="checkbox"/> Alarm	<input type="text" value="alarm"/>

- **[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] - [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] - [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]**  
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]**  
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

**9. 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.

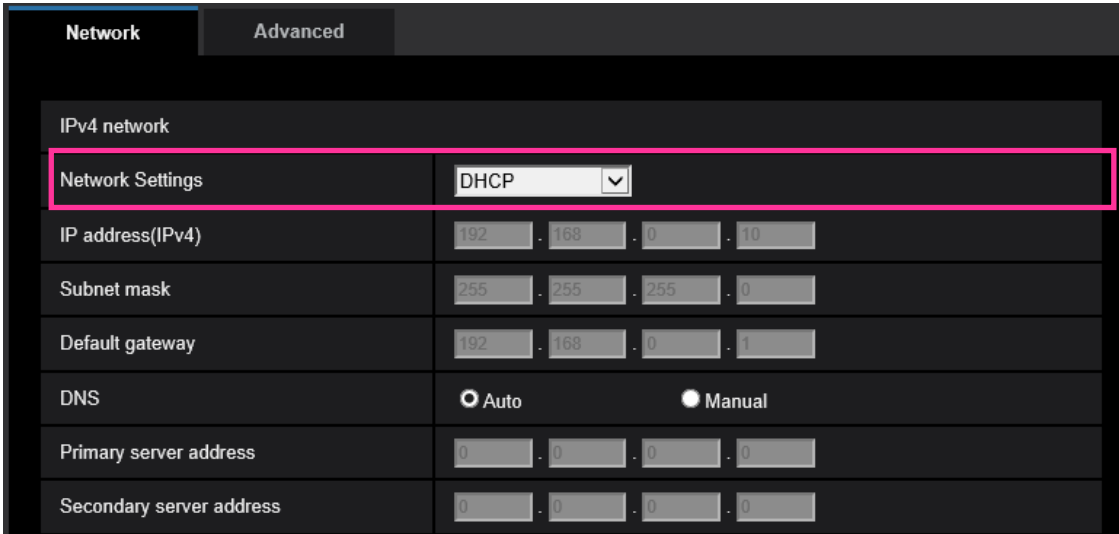
Setting items	Language of the browser	
	Languages other than Japanese	Japanese
Transmission priority	VBR	Frame rate
Image quality	3	Normal
Stream(1) -Max bit rate (per client)	<b>WV-S3531L, WV-S3532LM</b> <b>WV-S3131L</b> 6144kbps* <b>WV-S3511L, WV-S3512LM</b> <b>WV-S3111L</b> 4096kbps*	<b>WV-S3531L, WV-S3532LM</b> <b>WV-S3131L</b> 3072kbps* <b>WV-S3511L, WV-S3512LM</b> <b>WV-S3111L</b> 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*



## 10. 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.



The screenshot shows the 'Network' configuration page with the 'Advanced' tab selected. Under the 'IPv4 network' section, the 'Network Settings' dropdown menu is highlighted with a red box and set to 'DHCP'. Below this, the IP address is set to 192.168.0.10, the subnet mask to 255.255.255.0, and the default gateway to 192.168.0.1. The DNS settings are set to 'Auto'.

IPv4 network	
Network Settings	DHCP
IP address(IPv4)	192 . 168 . 0 . 10
Subnet mask	255 . 255 . 255 . 0
Default gateway	192 . 168 . 0 . 1
DNS	<input type="radio"/> Auto <input checked="" type="radio"/> Manual
Primary server address	0 . 0 . 0 . 0
Secondary server address	0 . 0 . 0 . 0

### 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

## 11. Add ONVIF® settings in Network

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

Add ONVIF® settings in the network settings.

Network	Advanced
IPv4 network	
Network Settings	DHCP
IP address(IPv4)	192 . 168 . 0 . 10
Subnet mask	255 . 255 . 255 . 0
Default gateway	192 . 168 . 0 . 1
DNS	<input type="radio"/> Auto <input checked="" type="radio"/> Manual
Primary server address	0 . 0 . 0 . 0
Secondary server address	0 . 0 . 0 . 0
IPv6 network	
Manual	<input type="radio"/> On <input checked="" type="radio"/> Off
IP address(IPv6)	
Default gateway	
DHCPv6	<input type="radio"/> On <input checked="" type="radio"/> Off
Primary DNS server address	
Secondary DNS server address	
Common	
HTTP port	80 (1-65535)
Line speed	Auto
Max RTP packet size	<input type="radio"/> Unlimited(1500byte) <input checked="" type="radio"/> Limited(1280byte)
HTTP max segment size(MSS)	Unlimited(1460byte)
Bandwidth control(bit rate)	51200kbps
Easy IP Setup accommodate period	<input type="radio"/> 20min <input checked="" type="radio"/> Unlimited
FTP access to camera	<input checked="" type="radio"/> Allow <input type="radio"/> Forbid
ONVIF® *ONVIF is a trademark of Onvif, Inc.	<input type="radio"/> On <input checked="" type="radio"/> Off
<b>Set</b>	

### [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

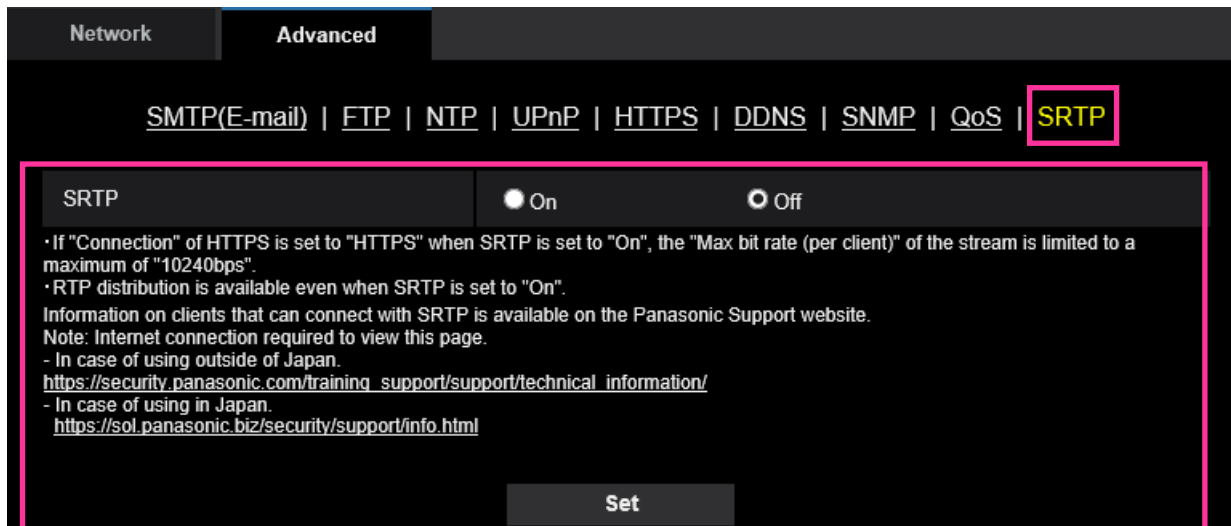
\*ONVIF is the trademark of ONVIF, Inc.

## 12. 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 the Panasonic Support website.  
<https://i-pro.com/global/en/surveillance/training-support/support/technical-information>
- <Control No.: C0318>

### 13. 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.

HTTP alarm notification		Alarm	
Address 1	<input type="checkbox"/>	<input type="text" value="http://"/>	<input type="button" value="Delete"/>
User name		<input type="text"/>	
Password		<input type="text"/>	
Notification data		<input type="text" value="/cgi-bin/comalarm.cgi?CMD=01"/>	
Address 2	<input type="checkbox"/>	<input type="text" value="http://"/>	<input type="button" value="Delete"/>
User name		<input type="text"/>	
Password		<input type="text"/>	
Notification data		<input type="text" value="/cgi-bin/comalarm.cgi?CMD=01"/>	
Address 3	<input type="checkbox"/>	<input type="text" value="http://"/>	<input type="button" value="Delete"/>
User name		<input type="text"/>	
Password		<input type="text"/>	
Notification data		<input type="text" value="/cgi-bin/comalarm.cgi?CMD=01"/>	
Address 4	<input type="checkbox"/>	<input type="text" value="http://"/>	<input type="button" value="Delete"/>
User name		<input type="text"/>	
Password		<input type="text"/>	
Notification data		<input type="text" value="/cgi-bin/comalarm.cgi?CMD=01"/>	
Address 5	<input type="checkbox"/>	<input type="text" value="http://"/>	<input type="button" value="Delete"/>
User name		<input type="text"/>	
Password		<input type="text"/>	
Notification data		<input type="text" value="/cgi-bin/comalarm.cgi?CMD=01"/>	

#### [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.

## 14. 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	<ul style="list-style-type: none"><li>Entered user name or password may be incorrect. Check if the HTTP alarm notification settings are configured correctly.</li></ul>

## **15. 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.

## 16. 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 than 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.	



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

(Operating Instructions “Others” – “Maintenance” - 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.

## 18. 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.

**19. 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.

## **20. 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:** " &

## 21. 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.

Network | **Advanced**

SMTP(E-mail) | FTP | NTP | UPnP | HTTPS | DDNS | SNMP | QoS | SRTP | **LLDP**

LLDP  Enable  Disable

When "Enable" is selected, [Fabric Attach] will also turn to "Enable" automatically.  
When a model that supports the PoE+ power is in use, connections to the PoE+ power will be detected even when "Disable" is selected for [LLDP].

Fabric Attach

Fabric Attach authentication key

When an authentication key is set on a device connected to Fabric Attach, set the same authentication key.

Information on devices that can be connected via Fabric Attach is on our support website.  
Note: It will not be displayed if not connected to the Internet.  
• For use in Japan  
[https://biz.panasonic.com/jp-ja/products-services\\_security\\_support\\_technical-information](https://biz.panasonic.com/jp-ja/products-services_security_support_technical-information)  
• For use in a country other than Japan  
<https://i-pro.com/global/en/surveillance/training-support/support/technical-information>

**Set**

### [LLDP]

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

**Default:** 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 on TLV	System Name TLV	System Description on 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 on TLV	System Name TLV	System Description on 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**

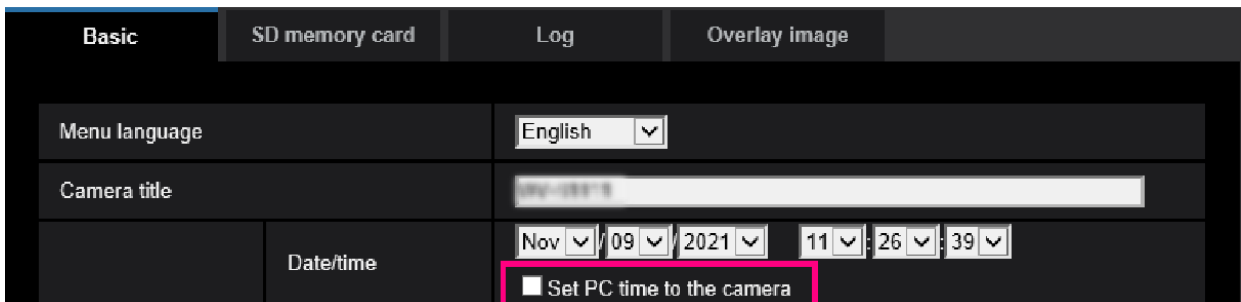
- Click the [Set] button to restart the product. After restarting, the product cannot be operated for about 2 minutes, just like when the power is turned on.

- 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>

## 22. 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.



Basic		SD memory card	Log	Overlay image
Menu language		English		
Camera title		[Input field]		
Date/time		Nov 09 2021 11:26:39		
		<input checked="" type="checkbox"/> Set PC time to the camera		

### [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)

## **23. 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.

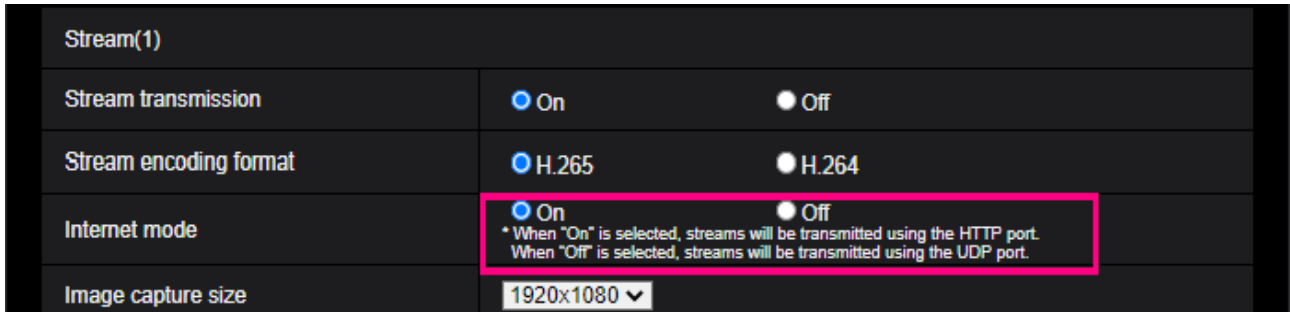
- **On:** Overwrites when the remaining capacity of the SD memory card becomes insufficient. (The oldest image is the first to be overwritten.)
- **Off:** Stops saving images on the SD memory card when the SD memory card becomes full.
- **Default:** On



## 24. 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.

## 25. 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	
Time adjustment	<input checked="" type="radio"/> Manual <input type="radio"/> Synchronization with NTP server
NTP server address setting	Manual
NTP server address	<input type="text"/> Example of entry: 192.168.0.10
NTP port	123 (1-65535)
Time adjustment interval	1h
NTP test	Execute

Set

### **[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.

## 26. 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.

The screenshot shows the 'Advanced' network settings page for HTTPS. At the top, there are tabs for 'Network' and 'Advanced', and a list of services: SMTP(E-mail), FTP, NTP, UPnP, HTTPS, DDNS, SNMP, QoS, SRTP, and LLDP. The 'HTTPS' section is active. The 'Connection' dropdown is set to 'HTTP', with a note: 'When "HTTPS" is selected for "Connection", the maximum bandwidth(bit rate) is limited to 16Mbps.' Below this, the TLS options are:  TLS1.1,  TLS1.2, and  TLS1.3. The 'Select certificate' dropdown is set to 'Pre-installed'. The 'HTTPS port' is 443. There are several 'Execute' buttons for 'Download root certificate', 'CRT key generate', 'Generate Certificate Signing Request', and 'CA Certificate install'. The 'CA Certificate install' button is next to a 'Browse...' button. At the bottom, there is an 'Information' section with 'Invalid' text and 'Confirm' and 'Delete' buttons. A 'Set' button is at the very bottom.

### [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:** Disable, **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.

## 27. Removed SD memory card images acquisition function

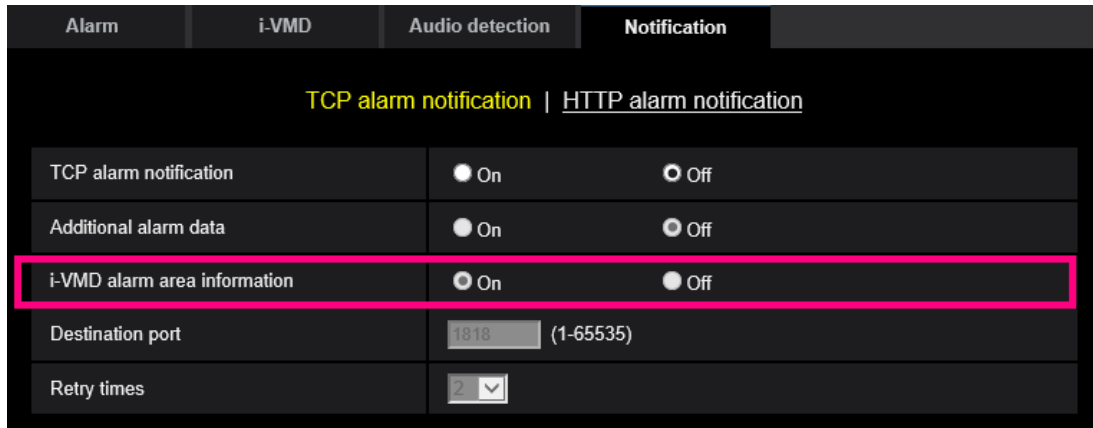
(Operating Instructions Configure the basic settings of the camera [Basic] -  
Configure the settings relating to the SD memory card [SD memory card])

Microsoft ended support for the Web browser "Internet Explorer" on June 15, 2022. We have also terminated support for "Internet Explorer" for our cameras, and deleted the "SD memory card images acquisition" function that is only compatible with "Internet Explorer".

Basic		SD memory card		Log		Overlay image			
Operating mode									
SD memory card		<input type="radio"/> Use		<input type="radio"/> Not use					
Audio recording		<input type="radio"/> On		<input type="radio"/> Off					
Remaining capacity notification		50%							
Overwrite		<input type="radio"/> On		<input type="radio"/> Off					
It is not available when "60fps" is selected for [Image capture mode].									
SD memory card security									
Additional info for detecting alteration				Setup >>					
SD memory card password lock		Password		Set		Remove		Change	
		Status		Unlock					
Recording stream 1									
Recording format		JPEG(2)		(VGA)					
Save trigger		FTP periodic image transmission error							
		<input checked="" type="checkbox"/> Terminal 1		<input checked="" type="checkbox"/> Terminal 2		<input checked="" type="checkbox"/> Terminal 3			
		<input checked="" type="checkbox"/> VMD		<input checked="" type="checkbox"/> Command alarm		<input checked="" type="checkbox"/> Audio detection			
Recording stream 2									
Recording format		Off							
Save trigger		Alarm input							
		<input checked="" type="checkbox"/> Terminal 1		<input checked="" type="checkbox"/> Terminal 2		<input checked="" type="checkbox"/> Terminal 3			
		<input checked="" type="checkbox"/> VMD		<input checked="" type="checkbox"/> Command alarm		<input checked="" type="checkbox"/> Audio detection			
SD memory card information									
Remaining capacity		-----MB/-----MB(Remaining capacity/Original capacity)							
Format		Execute							
<del>SD memory card images</del>									
<del>Access img.</del>		<del>Execute</del>							
Set									

## 28. Add i-VMD alarm area information on TCP alarm notification (Operating Instructions - Configure the alarm settings [Alarm] - Configuration of the settings relating to alarm notification [Notification] - Configure the settings relating to TCP alarm protocol)

Add i-VMD alarm area information on TCP alarm notification.



The screenshot shows a configuration interface with a dark theme. At the top, there are tabs for 'Alarm', 'i-VMD', 'Audio detection', and 'Notification'. The 'Notification' tab is active. Below the tabs, there are two links: 'TCP alarm notification' (highlighted in yellow) and 'HTTP alarm notification'. The main content area contains several settings:

TCP alarm notification	<input checked="" type="radio"/> On	<input type="radio"/> Off
Additional alarm data	<input type="radio"/> On	<input checked="" type="radio"/> Off
i-VMD alarm area information	<input checked="" type="radio"/> On	<input type="radio"/> Off
Destination port	<input type="text" value="1818"/> (1-65535)	
Retry times	<input type="text" value="2"/> ▼	

### [i-VMD alarm area information]

Determine whether or not to send notifications for i-VMD alarm detection area numbers with the TCP alarm protocol by selecting On/Off.

- **Default:** On

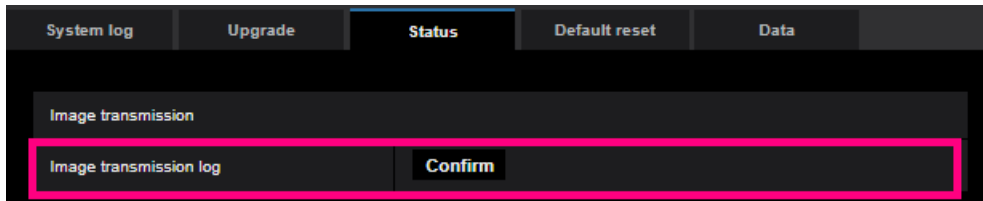
#### **Note**

- This setting is displayed if you have installed the extension software i-VMD.
- This setting is displayed if it is set to i-VMD in the alarm settings.

## 29. Add Image transmission log on Status page

(Operating Instructions - Maintenance of the camera [Maintenance] - Check the status [Status])

Add Image transmission log on Status page.



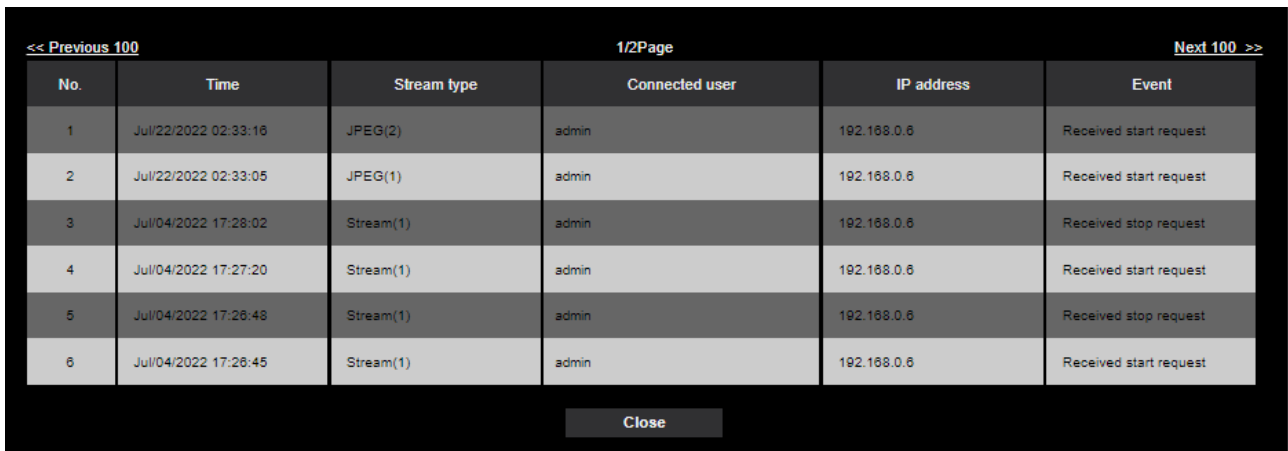
Click the “Confirm” button, to display the image transmission log in a separate window.

Up to 4,000 image transmission logs can be saved on the SD memory card when the SD memory card is inserted after selecting “Use” for “SD memory card” on the [SD memory card] tab ( Configure the settings relating to the SD memory card [SD memory card]).

When “Not use” is selected for “SD memory card”, up to 100 image transmission logs can be saved on the built-in memory of the camera.

When the saved image transmission logs have reached the maximum number, the newer logs will overwrite the older image transmission logs. In this case, the oldest log is the first to be overwritten.

The image transmission logs will be displayed in group of 100 logs each, and the logs will be saved even when the power of the camera is turned off.

The image shows a screenshot of a window displaying image transmission logs. At the top left, there is a navigation link '<< Previous 100'. At the top center, it says '1/2Page'. At the top right, there is a navigation link 'Next 100 >>'. Below this is a table with the following columns: 'No.', 'Time', 'Stream type', 'Connected user', 'IP address', and 'Event'. The table contains six rows of log entries. At the bottom center of the window, there is a 'Close' button.

No.	Time	Stream type	Connected user	IP address	Event
1	Jul/22/2022 02:33:16	JPEG(2)	admin	192.168.0.6	Received start request
2	Jul/22/2022 02:33:05	JPEG(1)	admin	192.168.0.6	Received start request
3	Jul/04/2022 17:28:02	Stream(1)	admin	192.168.0.6	Received stop request
4	Jul/04/2022 17:27:20	Stream(1)	admin	192.168.0.6	Received start request
5	Jul/04/2022 17:26:48	Stream(1)	admin	192.168.0.6	Received stop request
6	Jul/04/2022 17:26:45	Stream(1)	admin	192.168.0.6	Received start request

### [<< Latest 100]

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

### [Next 100 >>]

When clicking “Next 100 >>”, the next 100 image transmission logs will be displayed.

### [Number of pages display]

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

### [<< Previous 100]

When clicking “<< Previous 100”, the previous 100 image transmission logs will be displayed.

### [No.]

The serial number of the image transmission logs will be displayed.

**[Time]**

Time and date at the error occurrence will be displayed.

**[Stream type]**

The stream type (Stream(\*), JPEG(\*), SD memory card playback) of the image transmission logs will be displayed.

\* displays the number.

**[Connected user]**

The user of the image transmission will be displayed.

**Note**

- If "Off" is selected for [User auth.], "-" will be displayed.

**[IP address]**

The IP address of the image transmission will be displayed.

**[Event]**

Start requests, stop requests, and start errors (heavy access) of the image transmission will be displayed.

**Note**

·A stop request may not be logged in the following cases.

- When settings related to the stream are changed, such as the image mode, stream, or resolution
- When moving to the setting screen from the Live image
- When the Live image is closed
- When the network is disconnected