

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-X6533LN, WV-S6532LN

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

• Firmware Ver.4.20

No.	Functions	Item (Page)	Page
1	Addition of "Pan/Tilt Operability" setting to the "Cam. Function"	Cam. Function (Image/Audio)	3

• Firmware Ver.4.30

No.	Functions	Item (Page)	Page
2	Change of [Internet mode] default setting	Image(Image/Audio)	4
3	Enhanced the access restriction function of SNMP v1/v2	Advanced (Network)	5
4	Added "SNMP transmission upon alarm detection" to "Camera action on alarm"	Camera action on alarm (Alarm)	6
5	Added "SNMP trap setting" to "SNMP"	Advanced (Network)	7

• Firmware Ver.4.60

No.	Functions	Item (Page)	Page
6	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)	11
7	Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network	Network (Network)	12
8	Add ONVIF® settings in Network	Network (Network)	13
9	Add the SRTP function to "Advanced" of "Network"	Advanced (Network)	14
10	Enable the HTTP alarm notification function to support the HTTPS communication and the Digest authentication	Notification(Alarm)	15
11	Add to the system log when authentication fails for the HTTP alarm notification function	System log(Others)	17

• **Firmware Ver.4.80**

12	Add a notify to the [SNMP trap setting]	Advanced (Network)	18
13	Add to the system log when recording stream fails to write	Advanced (Network)	19
14	Add a function to notify the user of writing failures in the recording stream with a unique alarm	Maintenance (Status)	20
15	Add a note when the bit rate of the recording stream is set to a value exceeding recommended value	Image/Audio (Image)	21
16	Add a download function of Viewer software (nwcV4Ssetup.exe)	Basic (Basic)	22
17	Extend authentication password for the destination of notification	Network (Advanced)	23

• **Firmware Ver.4.91**

No.	Functions	Item (Page)	Page
18	Add the function to set the date and time of the PC to the camera	Basic (Basic)	24
19	Change the initial value of "Overwrite" of SD memory card to On	SD memory card (Basic)	25
20	Add the supplementary explanation of On/Off of Internet mode to the setting screen	Image (Image/Audio)	26
21	Add NTP test functions	Advanced (Network)	27
22	Add TLS settings to HTTPS	Advanced (Network)	28
23	Add LLDP function	Advanced (Network)	29

• **Firmware Ver.5.01**

No.	Functions	Item (Page)	Page
24	Removed SD memory card images acquisition function	SD memory card (Basic)	31
25	Add i-VMD alarm area information on TCP alarm notification	Notification(Alarm)	32

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

(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.

Image	Cam. Function	Image/Position	Audio
Home position	<input type="text" value="Off"/>		
Self return	<input type="text" value="Off"/>		
Self return time	<input type="text" value="1min"/>		
Upside-down	<input type="radio"/> On	<input type="radio"/> Off	
HD Extra optical zoom	<input type="radio"/> On	<input type="radio"/> Off	
Digital zoom	<input checked="" type="radio"/> On	<input type="radio"/> Off	
Number of Privacy zone	<input type="radio"/> 8	<input type="radio"/> 32	
Privacy zone	<input type="text" value="Filling"/>		
Camera position display	<input type="text" value="Pan-Tilt degree/Zoom ratio display"/>		
Operation mode display	<input checked="" type="radio"/> On	<input type="radio"/> Off	
Tilt Angle	<input type="text" value="-30 °"/>		
Focus distance	<input type="radio"/> Unlimited	<input checked="" type="radio"/> Limited	
Pan/Tilt Operability	<input type="text" value="Profile1(Normal)"/>		

[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)

2. 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.

3. 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 for 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 includes 'Community' and 'Manager address' (highlighted with a pink box). The 'SNMPv3' section includes 'User name (1 to 32 characters)', 'Authentication' (MD5 and SHA1), 'Encryption method' (DES and AES), and 'Password (8 to 16 characters)'.

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)

4. 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.

(→ 5. Added “SNMP trap setting” to “SNMP”)

Camera action on alarm	
Terminal alarm 1	<input type="text" value="Off"/>
Terminal alarm 2	<input type="text" value="Off"/>
Terminal alarm 3	<input type="text" value="Off"/>
VMD alarm	<input type="text" value="Off"/>
Audio detection alarm	<input type="text" value="Off"/>
Command alarm	<input type="text" value="Off"/>
	Preset per sender >>
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 >>
SNMP transmission upon alarm detection	To SNMP setting

5. 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"/>	
Trap setting		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"/> Terminal 1	<input type="text" value="terminal alarm 1"/>	
	<input type="checkbox"/> Terminal 2	<input type="text" value="terminal alarm 2"/>	
	<input type="checkbox"/> Terminal 3	<input type="text" value="terminal alarm 3"/>	
	<input type="checkbox"/> VMD	<input type="text" value="VMD alarm"/>	
	<input type="checkbox"/> Auto track	<input type="text" value="auto track 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] - [Terminal 1] - [Enable/Disable]**
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]**
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]**
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]**
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]**
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]**
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]**
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]**
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]**
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

6. 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)	6144kbps*	3072kbps*
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*

7. 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'.

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

8. 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
Set	

[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

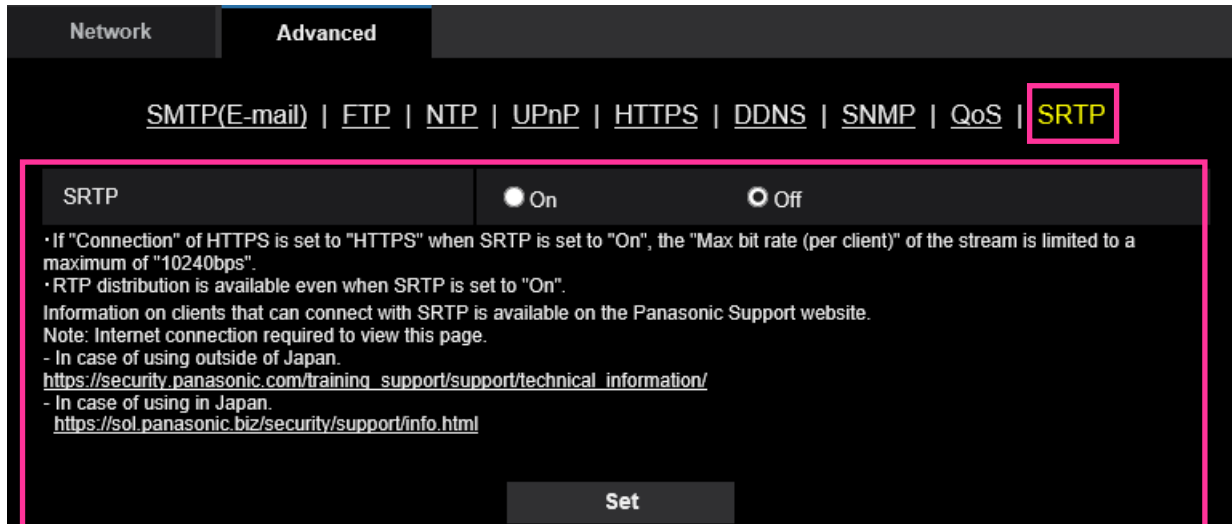
*ONVIF is the trademark of ONVIF, Inc.

9. 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>

10. 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.

11. 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">Entered user name or password may be incorrect. Check if the HTTP alarm notification settings are configured correctly.

12. 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.

13. 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.	

14. 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.

15. 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.

**16. Add a download function of Viewer software (nwc4Ssetup.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 (nwc4Ssetup.exe).

[Viewer software (nwc4Ssetup.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.

17. 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]**

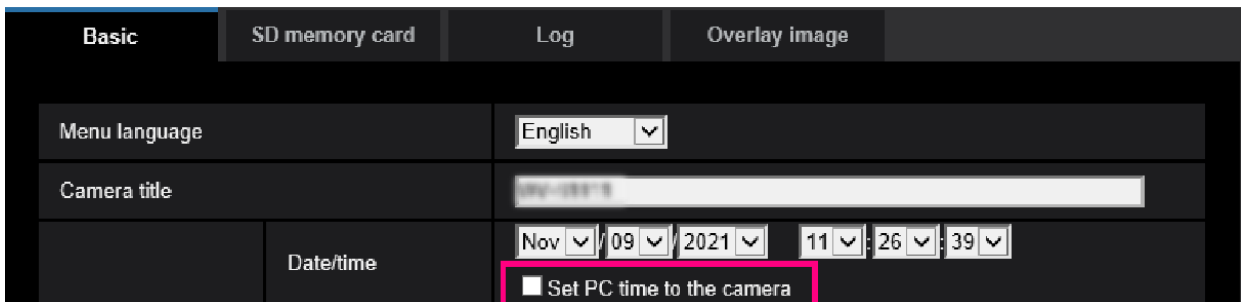
Enter the password to access the server.

Available number of characters: 0 - 128 characters

Unavailable characters: " &

18. 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)

19. 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]

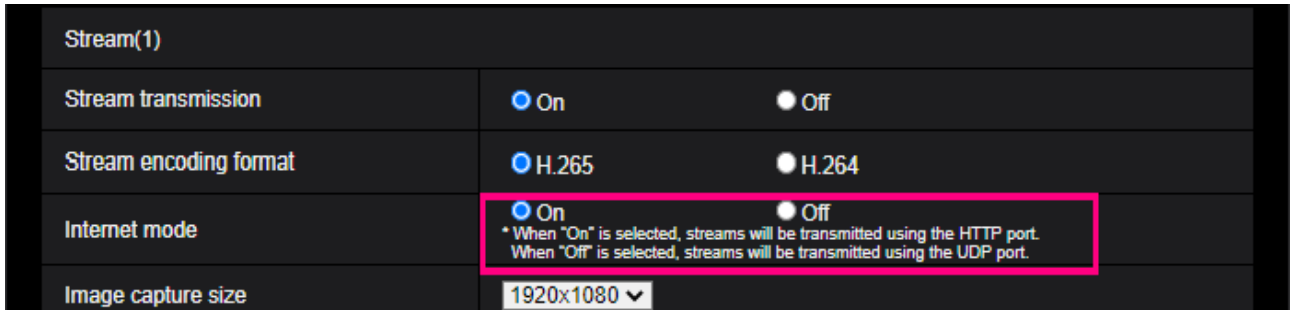
Determine whether or not to overwrite when the remaining capacity of the SD memory card becomes insufficient.

- **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

20. 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.

21. 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.

22. 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. The 'Connection' dropdown is set to 'HTTP'. Below it, the TLS options are: TLS1.1, TLS1.2, and TLS1.3. The 'Pre-installed certificate' is set to 'Pre-installed'. The 'HTTPS port' is 443. There are 'Execute' buttons for 'Download root certificate', 'CRT key generate', 'Generate Certificate Signing Request', and 'CA Certificate install'. The 'Information' field shows 'Invalid' with 'Confirm' and 'Delete' buttons.

[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.

23. 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
• 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>

24. Removed SD memory card images acquisition function

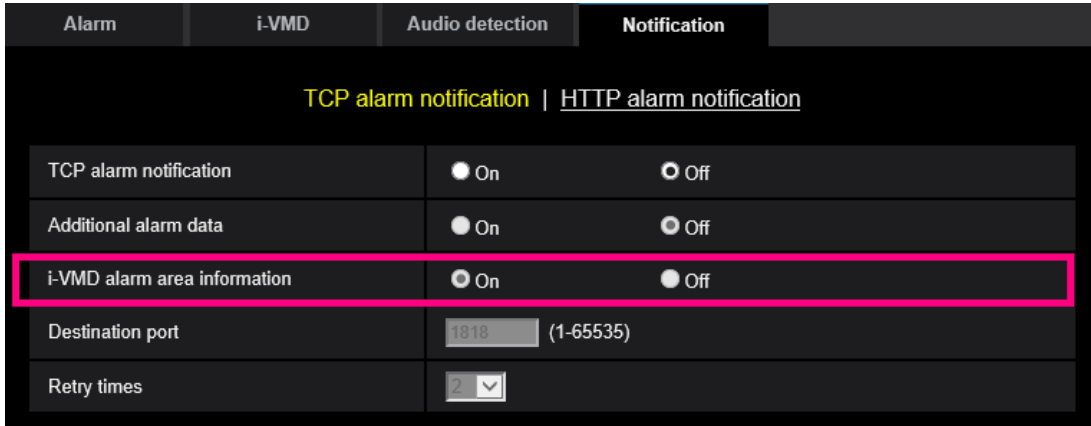
(Operating Instructions Configure the basic settings of the camera [Basic] -
Configure the settings relating to the SD memory card [SD memory card])

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					
SD memory card images									
Access img.				Execute					
Set									

25. 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 page for TCP alarm notification. At the top, there are tabs for 'Alarm', 'i-VMD', 'Audio detection', and 'Notification'. 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 checked="" type="radio"/> On	<input type="radio"/> Off
i-VMD alarm area information	<input type="radio"/> On	<input checked="" type="radio"/> Off
Destination port	<input type="text" value="1818"/> (1-65535)	
Retry times	<input type="text" value="2"/> <input type="button" value="v"/>	

[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.