

New functions and addendum

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

About notations

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

X4571L : WV-X4571L, WV-X4571LM

S4550L : WV-S4550L, WV-S4550LM

X4171 : WV-X4171

X4170 : WV-X4170

S4150 : WV-S4150

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

• Firmware Ver.1.40 **X4571L** **X4171** **X4170**

No.	Functions	Item (Page)	Page
1	"SD memory card password lock" added to "SD memory card security settings"	SD memory card(Basic)	3
2	Addition of "Wide dynamic range" function.	Image(Image adjust)	5

• Firmware Ver.1.20 **S4550L** **S4150** Ver.1.50 **X4571L** **X4171** **X4170**

No.	Functions	Item (Page)	Page
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• Firmware Ver.4.00

No.	Functions	Item (Page)	Page
13	Improvement of readability of Date/time and characters on screen.	Basic (Basic)	21
14	Change in encryption of the settings.	Data(Maintenance)	22

• **Firmware Ver.4.30**

No.	Functions	Item (Page)	Page
15	Change of [Viewer software (nwc4Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting	Basic (Basic)	23
16	Change of [Internet mode] default setting	Image(Image/Audio)	24
17	Enhanced the access restriction function of SNMP v1/v2	Advanced (Network)	25
18	Added "SNMP transmission upon alarm detection" to "Camera action on alarm"	Camera action on alarm (Alarm)	26
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• **Firmware Ver.4.80**

No.	Functions	Item (Page)	Page
20	Add a notify to the [SNMP trap setting]	Advanced (Network)	31
21	Add to the system log when recording stream fails to write	Maintenance (Status)	32
22	Add a function to notify the user of writing failures in the recording stream with a unique alarm	Notification (Alarm)	33
23	Add a note when the bit rate of the recording stream is set to a value exceeding recommended value	Image/Audio (Image)	34

• **Firmware Ver.5.00**

No.	Functions	Item (Page)	Page
24	Add a download function of Viewer software (nwc4Ssetup.exe)	Basic (Basic)	35

1. “SD memory card password lock” added to “SD memory card security settings” X4571L X4171 X4170

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

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

Basic		SD memory card		Log	
Operating mode					
SD memory card		<input type="radio"/> Use		<input checked="" type="radio"/> Not use	
Audio recording		<input checked="" type="radio"/> On		<input type="radio"/> Off	
Remaining capacity notification		50% ▼			
Overwrite		<input checked="" type="radio"/> On		<input type="radio"/> Off	
SD memory card security					
Additional info for detecting alteration				Setup >>	
SD memory card password lock	Password	Set Remove Change			
	Status	Unlock			
Recording stream 1					

[SD memory card password lock]

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

[Set]

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

SD memory card password lock(Set)	
Password	<input type="text"/>
Retype password	<input type="text"/>
Set	

[Password]/[Retype password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

Default: None (blank)

[Remove]

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

SD memory card password lock(Remove)	
Password	<input type="text"/>
Set	

[Password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

[Change]

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

SD memory card password lock(Change)	
Old password	<input type="password"/>
New password	<input type="password"/>
Retype new password	<input type="password"/>
<input type="button" value="Set"/>	

[Old password]/[New password]/[Retype new password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

[Status]

Display the configuration status of the password lock.

- **Lock:** A password is configured on the SD memory card, and the lock function is enabled.
- **Unlock:** The lock function is disabled.

Also display the password configuration status of SD memory card respectively.

Password is set.: The password is configured correctly.

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

Note

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

IMPORTANT

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

2. Addition of “Wide dynamic range” function. X4571L X4171 X4170

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

Configure the settings relating to image quality (“Image adjust” setup menu)

Addition of Wide dynamic range function, and combination of Wide dynamic range function and Super Dynamic function to become [Dynamic range mode].

*Any changes are updated immediately
Scene file is not applied

-Dynamic range mode	<div style="background-color: #444; color: white; padding: 2px;">Off</div> <div style="border: 2px solid red; background-color: #444; color: white; padding: 2px;">On(Wide dynamic range)</div> <div style="background-color: #444; color: white; padding: 2px;">On(Super Dynamic)</div>
Level	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <div style="display: flex; justify-content: space-between;"> — + </div> <div style="text-align: center;">28</div> </div> <div style="margin-left: 10px;">Reset</div> </div>
BLC/ HLC	<div style="background-color: #444; color: white; padding: 2px;">Off</div>
BLC level	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <div style="display: flex; justify-content: space-between;"> — + </div> <div style="text-align: center;">16</div> </div> <div style="margin-left: 10px;">Reset</div> </div>
HLC level	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <div style="display: flex; justify-content: space-between;"> — + </div> <div style="text-align: center;">16</div> </div> <div style="margin-left: 10px;">Reset</div> </div>
Mask area	<div style="display: flex; gap: 10px;"> <div style="background-color: #444; color: white; padding: 2px 10px;">Start</div> <div style="background-color: #444; color: white; padding: 2px 10px;">End</div> <div style="background-color: #444; color: white; padding: 2px 10px;">Reset</div> </div>
+Light control mode	<div style="background-color: #444; color: white; padding: 2px;">ELC</div>
+Day & Night(IR)	<div style="background-color: #444; color: white; padding: 2px;">Auto2(IR Light On)</div>
+White balance	<div style="display: flex; align-items: center;"> <div style="background-color: #444; color: white; padding: 2px;">ATW1</div> <div style="margin-left: 10px;">Set</div> </div>
+Intelligent auto	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"><input checked="" type="radio"/> On</div> <div><input type="radio"/> Off</div> </div>
+Detailed setting	
+Scene registration	
<div style="background-color: #444; color: white; padding: 5px 20px; display: inline-block;">Close</div>	

[Dynamic range mode]

Select “On(Wide dynamic range)”, “On(Super Dynamic)”, or “Off” to determine whether or not to activate Wide dynamic range function or Super Dynamic function.

On(Wide dynamic range): Activates Wide dynamic range function.

Wide dynamic range function corrects the brightness in images with contrast, and enables natural images to be checked.

On(Super Dynamic): Activates Super Dynamic function.

When there is contrast in images, this setting enables more faithful images to be created than when “On(Wide dynamic range)” is used.

For more information about Super Dynamic function, refer to the Operating Instructions.

Off: Stops the Super Dynamic function or Wide dynamic range function.

Default: Off

Note

- When “On(Super Dynamic)” is selected for “Dynamic range mode”, the frame rate is restricted to a maximum of 15fps.

- When “On(Super Dynamic)” is selected for “Dynamic range mode”, the following phenomenon may occur. Select “On(Wide dynamic range)” or “Off” in accordance with the usage environment.
 - When the visibility with backlight becomes worse depending on the brightness conditions of the surrounding area.
 - When there are afterimages in images.
- When “On(Super Dynamic)” or “On(Wide dynamic range)” is selected for “Dynamic range mode”, the following phenomenon may occur depending on the lighting conditions. Select “Off” in accordance with the usage environment.
 - When flickering appears or the color changes on the screen.
 - When noise appears in the brighter area on the screen.

Due to Addition of “Dynamic range mode” function, the following descriptions have been changed.

■2.5.5.1 Configure the settings relating to image quality (“Image adjust” setup menu) – [BLC/ HLC]

Old	New
Select from the following. When “On” is selected for “ <u>Super Dynamic(SD)</u> ” or when “On” is selected for “Intelligent Auto”, this setting is not available.	Select from the following. When “ <u>On(Wide dynamic range)</u> ” or “ <u>On(Super Dynamic)</u> ” is selected for “ <u>Dynamic range mode</u> ” or when “On” is selected for “Intelligent Auto”, this setting is not available.

■2.5.5.1 Configure the settings relating to image quality (“Image adjust” setup menu) – [Mask area]

Old	New
When mask area is set, the selected area is masked and you can adjust brightness. When “On” is selected for “ <u>Super Dynamic(SD)</u> ”, this setting is not available.	When mask area is set, the selected area is masked and you can adjust brightness. When “ <u>On(Wide dynamic range)</u> ” or “ <u>On(Super Dynamic)</u> ” is selected for “ <u>Dynamic range mode</u> ”, this setting is not available.

■2.5.5.1 Configure the settings relating to image quality (“Image adjust” setup menu) – Day & Night(IR) – [Level] X4571L

Old	New
Select the threshold illuminance level (brightness) to switch between the color mode and the black & white mode. The descriptions about the following threshold illuminance levels are given when “Off” is selected for “ <u>Super Dynamic(SD)</u> ”.	Select the threshold illuminance level (brightness) to switch between the color mode and the black & white mode. The descriptions about the following threshold illuminance levels are given when “Off” is selected for “ <u>Dynamic range mode</u> ”.

■2.5.5.2 Set mask areas – [Mask area]

Old	New
This explains how to mask an area of the image and adjust brightness. When setting the mask area, set “ <u>Super Dynamic(SD)</u> ” to “Off”.	This explains how to mask an area of the image and adjust brightness. When setting the mask area, set “ <u>Dynamic range mode</u> ” to “Off”.
2. Click “+” on the left of “ <u>Super Dynamic(SD)</u> ” to display the detailed <u>SD</u> menu.	2. Click “+” on the left of “ <u>Dynamic range mode</u> ” to display the detailed “ <u>Dynamic range mode</u> ” menu.

3. Change in restrictions on characters for password (Operating Instructions For administrator registration)

Administrator registration	
Enter the user name and password of the administrator.	
User name (1 to 32 characters)	<input type="text"/>
Password (8 to 32 characters)	<input type="password"/>
Retype password	<input type="password"/>
<input type="button" value="Set"/>	
<p>Note:</p> <p>(1) Distinguish between upper- and lower cases.</p> <p>(2) Entry of the following is not allowed as a user name: 2-byte characters, and 1-byte symbols " & ; \</p> <p>(3) Entry of the following is not allowed as a password: 2-byte characters, and 1-byte symbols " &</p> <p>(4) For the password, use three or more types of characters from upper- and lowercase alphabetic characters, numbers, and symbols.</p> <p>(5) Keep the user name and password at hand so as not to lose.</p> <p>(6) It is recommended to change the password periodically.</p> <p>(7) Set the password which does not include the user name.</p>	

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

Enter the administrator password.

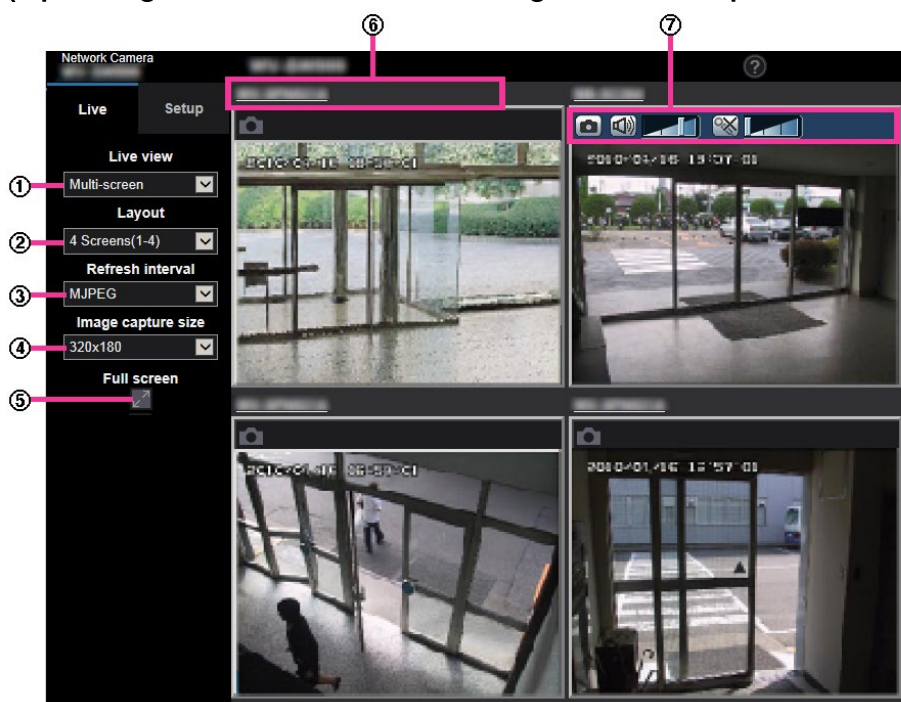
Available number of characters: 8 - 32 characters

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

Note

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

4. Description for video distribution method is added (Operating Instructions Monitor images from multiple cameras)



③ [Refresh interval] pull-down menu

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

For still images (JPEG), select the refresh interval (Refresh interval : 1s/Refresh interval : 3s/Refresh interval : 5s/Refresh interval : 10s/Refresh interval : 30s/Refresh interval : 60s) for camera images. When the 16 screen layout is used, Refresh interval : 1s cannot be selected.

Note

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

5. Change of authentication method default setting

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

User auth.	Host auth.	IEEE 802.1X	Data encryption
User auth.	<input type="radio"/> On	<input type="radio"/> Off	
Guest User	<input type="radio"/> Use	<input type="radio"/> Not use	
Authentication	Digest		
Set			

[Authentication]

Set the user authentication method.

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

IMPORTANT

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

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

6. “SD memory card password lock” added to “SD memory card security settings” S4550L S4150

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

Configure the settings relating to the SD memory card [SD memory card]

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

Basic		SD memory card		Log	
Operating mode					
SD memory card	<input type="radio"/> Use		<input checked="" type="radio"/> Not use		
Audio recording	<input checked="" type="radio"/> On		<input type="radio"/> Off		
Remaining capacity notification	50% <input type="button" value="v"/>				
Overwrite	<input checked="" type="radio"/> On		<input type="radio"/> Off		
SD memory card security					
Additional info for detecting alteration		<input type="button" value="Setup >>"/>			
SD memory card password lock	Password	<input type="button" value="Set"/>	<input type="button" value="Remove"/>	<input type="button" value="Change"/>	
	Status	<input type="button" value="Unlock"/>			

[SD memory card password lock]

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

[Set]

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

SD memory card password lock(Set)	
Password	<input type="text"/>
Retype password	<input type="text"/>
<input type="button" value="Set"/>	

[Password]/[Retype password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

Default: None (blank)

[Remove]

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

SD memory card password lock(Remove)	
Password	<input type="text"/>
<input type="button" value="Set"/>	

[Password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

[Change]

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

SD memory card password lock(Change)	
Old password	<input type="password"/>
New password	<input type="password"/>
Retype new password	<input type="password"/>
<input type="button" value="Set"/>	

[Old password]/[New password]/[Retype new password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

[Status]

Display the configuration status of the password lock.

- **Lock:** A password is configured on the SD memory card, and the lock function is enabled.
- **Unlock:** The lock function is disabled.

Also display the password configuration status of SD memory card respectively.

Password is set.: The password is configured correctly.

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

Note

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

IMPORTANT

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

7. User authentication function for host authentication is added

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

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

Note

When "On" is set for "User auth.":

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

When "Off" is set for "User auth.":

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

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

IMPORTANT

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

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

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

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

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

The screenshot shows the IEEE 802.1X configuration page. The 'IEEE 802.1X' tab is active. The 'IEEE 802.1X' toggle is set to 'On'. The 'EAP method' dropdown is set to 'EAP-TLS'. A red box highlights the 'CA Certificate', 'Private key or Client Certificate including private key', and 'Client Certificate' sections, which are labeled as 'EAP-TLS' settings. The 'Set' button is at the bottom.

User auth.	Host auth.	IEEE 802.1X	Data encryption
IEEE 802.1X			
IEEE 802.1X		<input checked="" type="radio"/> On <input type="radio"/> Off	
User name		<input type="text"/>	
Password		<input type="password"/>	
Retype password		<input type="password"/>	
CA Certificate	Certificate install	<input type="text"/> Browse...	Execute
	Information	not installed	Confirm Delete
Private key or Client Certificate including private key	Installation	<input type="text"/> Browse...	Execute
	Password (0 to 30 characters)	<input type="password"/>	
	Install status of private key	not installed	Delete
Client Certificate	Installation	<input type="text"/> Browse...	Execute
	Information	not installed	Confirm Delete
EAP method		EAP-TLS	

User name and password are required for EAP-MD5 or EAP-PEAP.
User name and installation of private key, client certificate and CA certificate are required for EAP-TLS.
PEM(*.pem) or DER(*.der) format are supported for CA certificate.
PEM(*.pem) or PFX(*.pfx) format is supported for client certificate and private key.
Input password for private key when private key or certificate of PFX format is encrypted. Leave password blank when not encrypted.

Set

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

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

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

EAP-MD5/EAP-PEAP

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

EAP-TLS

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

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

Note

- To delete each certificate, set [IEEE 802.1X] to "Off".

The following explains each setting.

[IEEE 802.1X]

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

- **Default:** Off

[User name]

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

- **Available number of characters:** 1 - 32 characters
- **Unavailable characters:** " & ; ¥

[Password]

[Retype password]

Enter the password to access the authentication LAN switch.

- **Available number of characters:** 4 - 32 characters
- **Unavailable characters:** " &

[CA Certificate] - [Certificate install]

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

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

■ Specification of CA Certificate

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

[CA Certificate] - [Information]

not installed: indicates that the certificate is not installed.

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

Expired: indicates that the certificate is expired.

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

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

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

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

■ Specification of private key and Client Certificate including private key

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

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

Enter the password if the private key is encrypted or the password is set for Client Certificate for the PFX method. Leave password blank when not encrypted.

Available number of characters: 0 - 30 characters

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

not installed: Private key is not installed.

installed: Private key is installed.

[Client Certificate] - [Install]

Install the Client Certificate.

If signed by the intermediate CA Certificate, install the Client Certificate including the intermediate CA Certificate.

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

■ Specification of Client Certificate

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

[Client Certificate] - [Information]

not installed: indicates that the certificate is not installed.

Certificate host name: indicates that the certificate is installed.

Expired: indicates that the certificate is expired.

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

[EAP method]

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

Example of CA Certificate check screen

CA Certificate - Confirm	
Common Name	Microsoft
Country	JP
State	Osaka
Locality	Kadoma
Organization	Microsoft
Organizational Unit	Development
<input type="button" value="Close"/>	

Example of Client Certificate check screen

Client Certificate - Confirm	
Common Name	Billboard
Country	JP
State	Osaka
Locality	Kadoma
Organization	Panasonic
Organizational Unit	Development
<div>Close</div>	

IMPORTANT

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

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

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

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

The screenshot shows the 'Network' tab of a configuration interface. It is divided into three sections: IPv4 network, IPv6 network, and Common. The 'Bandwidth control(bit rate)' option in the Common section is highlighted with a red rectangle. The 'Set' button is at the bottom.

IPv4 network	
Network Settings	Auto(Advanced) ▼
IP address(IPv4)	192 . 168 . . 198
Subnet mask	255 . 255 . 255 . 0
Default gateway	192 . 168 . 1 . 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 checked="" type="radio"/> On <input type="radio"/> Off
IP address(IPv6)	
Default gateway	
DHCPv6	<input checked="" type="radio"/> On <input 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)	51200 kbps ▼
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

Set

[Bandwidth control(bit rate)]

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

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

- **Default:** 51200kbps

10. Change of default setting of “Shaping of stream”

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

The default setting of “Shaping of stream” is changed.

The screenshot shows a web-based configuration interface for a network device. At the top, there are two tabs: 'Network' and 'Advanced', with 'Advanced' being the active tab. Below the tabs, there is a navigation bar with links: SMTP(E-mail), FTP, NTP, UPnP, HTTPS, DDNS, SNMP, and QoS. The main content area is titled 'Diffserv' and contains three input fields for DSCP values: 'Image DSCP(0-63)', 'Audio DSCP(0-63)', and 'Panasonic alarm protocol notification DSCP (0-63)', all set to '0'. Below these is the 'Shaping of stream' setting, which is highlighted with a red rectangle. It consists of a label 'Shaping of stream' and two radio buttons: 'On' (which is selected) and 'Off'. At the bottom of the interface is a 'Set' button.

[Shaping of stream]

Select On/Off to determine whether or not to control the H.265 (or H.264) image data so that it does not burst. It is effective in situations such as when a network device loses video data from the camera, but the video display may be delayed.

- **Off:** Disables the shaping of stream function.
- **On:** Enables the shaping of stream function.
- **Default:** Off

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

S4550L

S4150

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

System log	Upgrade	Status	Default reset	Data
<< Latest 100				
<< Previous 100		2/40Page		Next 100 >>
No.	Time & date	Description		

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

[<< Latest 100]

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

[Number of pages display]

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

12. “Login failure” indication added to the login-related display (Operating Instructions About the displayed system log)

Error indications relating to the login errors

Category	Indication	Description
Login failure	User name	<ul style="list-style-type: none">• The user name that has failed in login will be displayed when “On” is selected for “User auth.”.• If no user is registered, “Guest User” will be displayed.

13. Improvement of readability of Date/time and characters on screen (Operating Instructions Configure the basic settings of the camera [Basic]- Configure the basic settings [Basic])

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

[OSD] - [Character size]

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

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

IMPORTANT

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

Note

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

14. Change in encryption of the settings.

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

The screenshot shows the 'Data' tab in a camera's maintenance menu. It is divided into two main sections: 'Backup' and 'Restore'. In the 'Backup' section, there are three rows: 'Setup data', 'Scene file', and 'Logs'. Each row has an 'Execute' button to its right. The 'Setup data' row is highlighted with a red border. In the 'Restore' section, there are two rows: 'Setup data' and 'Scene file'. The 'Setup data' row has a radio button selection with two options: 'Restore all settings.' (selected) and 'Restore all settings except the network settings.' There is an 'Execute' button to the right of these options. The 'Scene file' row has a 'Browse...' button and an 'Execute' button. At the bottom of the screen, a message states: 'It will take around 2 minutes to complete restoring data. Please wait and do not operate the browser during this process.'

Backup	
Setup data	Execute
Scene file	Execute
Logs	Execute

Restore	
Setup data	<input checked="" type="radio"/> Restore all settings. <input type="radio"/> Restore all settings except the network settings. Execute
Scene file	Browse... Execute

It will take around 2 minutes to complete restoring data.
Please wait and do not operate the browser during this process.

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.

15. 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	Confirm
	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".

16. 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.

17. 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.

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)

18. 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.

(→ 19. Added “SNMP trap setting” to “SNMP”)

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

19. 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"/> 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]** X4571L S4550L X4171 S4150
 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]** X4571L S4550L X4171 S4150
 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]** X4571L S4550L X4171 S4150
 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]** X4571L S4550L X4171 S4150
 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]** X4571L S4550L X4171 S4150
 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]** X4571L S4550L X4171 S4150
 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] - [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

20. 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.

21. 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.

22. 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.

23. 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 8192 kbps or lower. Setting a value higher than 8192 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.

24. 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) when using Internet Explorer.

[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.