

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)	2
2	Addition of "Wide dynamic range" function.	Image(Image adjust)	4

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

No.	Functions	Item (Page)	Page
3	Change in restrictions on characters for password	For administrator registration	6
4	Description for video distribution method is added	Monitor images from multiple cameras	7
5	Change of authentication method default setting	User auth. (User mng.)	8
6	"SD memory card password lock" added to "SD memory card security settings" S4550L S4150	SD memory card(Basic)	9
7	User authentication function for host authentication is added	Host auth. (User mng.)	11
8	"EAP-TLS" is added to the EAP method for IEEE 802.1X	IEEE 802.1X(User mng.)	12
9	Change of default setting of "Bandwidth control(bit rate)"	Network (Network)	16
10	Change of default setting of "Shaping of stream"	Advanced (Network)	17
11	Add [<< Latest 100], [Number of pages display] in [Systemlog] S4550L S4150	System log(Maintenance)	18
12	"Login failure" indication added to the login-related display	About the displayed system log	19

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.

The screenshot shows the camera's settings interface. At the top, there are three tabs: 'Basic', 'SD memory card', and 'Log'. The 'SD memory card' tab is selected. Below the tabs, there are several settings sections. The 'SD memory card security' section is highlighted with a red box. It contains a table with the following content:

SD memory card password lock	Password	Set	Remove	Change
	Status	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.

The screenshot shows the 'SD memory card password lock(Set)' screen. It has a dark background with white text. There are two input fields: 'Password' and 'Retype password'. Below these fields is a 'Set' button.

[Password]/[Retype password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

Default: None (blank)

[Remove]

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

The screenshot shows the 'SD memory card password lock(Remove)' screen. It has a dark background with white text. There is a single input field labeled 'Password'. Below this field is a 'Set' button.

[Password]

Enter the password.

Available number of characters: 4 - 16 characters

Unavailable characters: " &

[Change]

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

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> <div>Off</div> <div style="border: 2px solid red; padding: 2px;">On(Wide dynamic range)</div> <div>On(Super Dynamic)</div> </div> <div>ected, n of 15fps.</div>	
Level	<div> <div>—</div> <div>28</div> <div>+</div> <div>Reset</div> </div>	
BLC/ HLC	<div>Off</div> <div>▼</div>	
BLC level	<div> <div>—</div> <div>16</div> <div>+</div> <div>Reset</div> </div>	
HLC level	<div> <div>—</div> <div>16</div> <div>+</div> <div>Reset</div> </div>	
Mask area	<div>Start</div> <div>End</div> <div>Reset</div>	
+Light control mode	<div>ELC</div> <div>▼</div>	
+Day & Night(IR)	<div>Auto2(IR Light On)</div> <div>▼</div>	
+White balance	<div>ATW1</div> <div>▼</div> <div>Set</div>	
+Intelligent auto	<div> <input checked="" type="radio"/> On <input type="radio"/> Off </div>	
+Detailed setting		
+Scene registration		
<div>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.

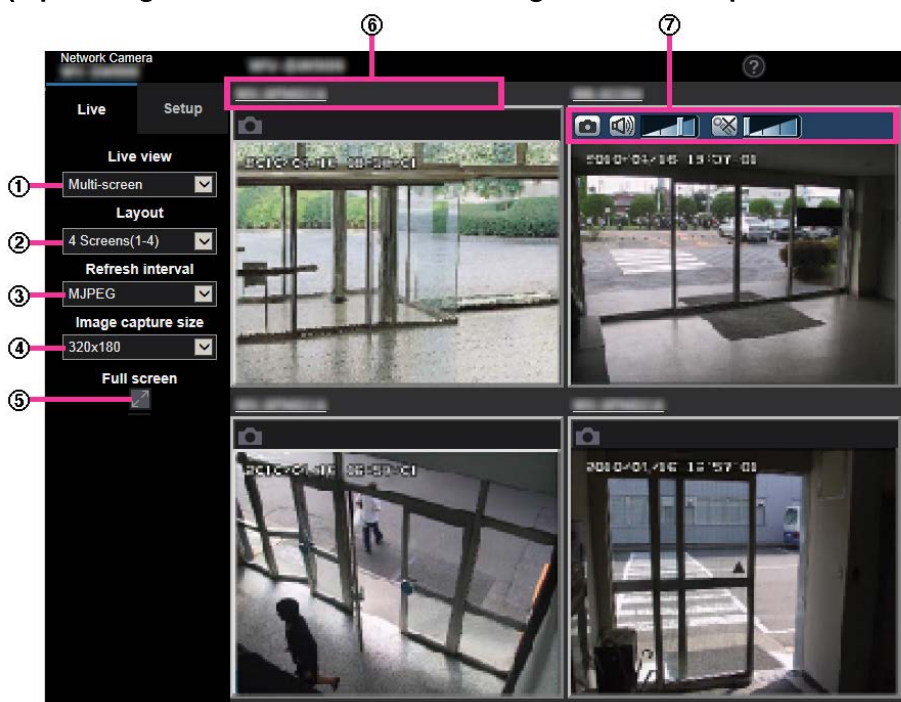
Available number of characters: 8 - 32 characters

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 checked="" type="radio"/> On	<input type="radio"/> Off	
Guest User	<input checked="" type="radio"/> Use	<input type="radio"/> Not use	
Authentication	<div>Digest</div>		
<div>Set</div>			

[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% ▼				
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			

[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.

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 displays the IEEE 802.1X configuration page. At the top, there are tabs for 'User auth.', 'Host auth.', 'IEEE 802.1X' (selected), and 'Data encryption'. Below the tabs, the 'IEEE 802.1X' section is active. It includes a toggle switch for 'IEEE 802.1X' set to 'On'. There are input fields for 'User name', 'Password', and 'Retype password'. A red box highlights the 'CA Certificate', 'Private key or Client Certificate including private key', and 'Client Certificate' sections. The 'CA Certificate' section has a 'Certificate install' row with a 'Browse...' button and an 'Execute' button, and an 'Information' row showing 'not installed' with 'Confirm' and 'Delete' buttons. The 'Private key or Client Certificate including private key' section has an 'Installation' row with a 'Browse...' button and an 'Execute' button, a 'Password (0 to 30 characters)' row, and an 'Install status of private key' row showing 'not installed' with a 'Delete' button. The 'Client Certificate' section has an 'Installation' row with a 'Browse...' button and an 'Execute' button, and an 'Information' row showing 'not installed' with 'Confirm' and 'Delete' buttons. Below the red box, the 'EAP method' dropdown is set to 'EAP-TLS'. At the bottom, there is a 'Set' button. A red arrow points to the 'Execute' button in the 'Private key or Client Certificate including private key' section with the label '“EAP-TLS” settings'.

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.

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. “installed” will be displayed for “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	Panasonic
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.

Network	
Advanced	
IPv4 network	
Network Settings	Auto(Advanced) ▼
IP address(IPv4)	192 . 168 . 1 . 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 tabs for '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 'QoS' link is highlighted in yellow. 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' option, which is highlighted with a red rectangular box. 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.