

New functions and addendum

- This document contains descriptions of how to set the new functions and their restrictions.
Refer also to the Operating Instructions of this product.
- Depending on the model used, the screens shown in the explanations may differ to the actual camera screens.
- This document is for the following models.
WV-X1551LN, WV-X2551LN, WV-X2251L, WV-X1571LN, WV-X2571LN, WV-X2271L

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

•Firmware Ver.1.30

No.	Functions	Item (Page)	Page
1	Added "Control log" to "Extension Software"	Ext. software	2
2	Added "Ext. software mode" to "SD memory card"	SD memory card	3

•Firmware Ver.1.40

No.	Functions	Item (Page)	Page
3	Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network	Network (Network)	4
4	Add ONVIF® settings in Network	Network (Network)	5
5	Add the SRTP settings in "Advanced" of "Network"	Advanced (Network)	6
6	Enable the HTTP alarm notification function to support the HTTPS communication and the Digest authentication	Notification(Alarm)	7
7	Add to the system log when authentication fails for the HTTP alarm notification function	System log(Others)	9

•Firmware Ver.1.50

No.	Functions	Item (Page)	Page
8	Add to the system log when recording stream fails to write	Maintenance (Status)	11
9	Add a function to notify the user of writing failures in the recording stream with a unique alarm	Maintenance (Status)	12
10	Add a note when the bit rate of the recording stream is set to a value exceeding recommended value	Image/Audio (Image)	13
11	SDK version display	Ext. software (Software mng.)	14
12	Expanded functionality of camera title on screen	Basic (Basic)	16
13	Change AI-VMD and AI Privacy Guard to be pre-installed	Ext. software	18

14	Change the default values of the schedule setting screen of the ext. software	Ext. software (Operation sched.)	19
15	Add AI-VMD related alarms as an event in the log list	Loglist	20
16	Add AI-VMD related logs to SD memory card play screen events	SD memory card	21
17	Add an audio detection alarm	Alarm	22
18	Add audio detection to event types	Easy Setup (Event function)	23
19	Add audio detection to alarm settings	Easy Setup	24
20	Add "Note" regarding audio detection to [Save trigger] of SD memory recording	Basic (SD memory card)	25
21	Add a link to audio detection settings in alarm settings	Alarm (Alarm)	26
22	Add audio detection settings	Alarm (Audio detection)	27
23	Add audio detection as a notification event for the destination of notification	Network (Advanced)	29
24	Add audio detection to SNMP trap notification events	Network (Advanced)	31
25	Add audio detection permission to schedule settings	Schedule	32
26	Add grid display function to the live page	Live page	33
27	Add a grid display function to the zoom/focus adjustment page	Image/Audio (Image quality)	34
28	Extend authentication password for the destination of notification	Network (Advanced)	35
29	Add "Note" regarding the registering the registration key	Ext. software (Software mng.)	36

1. Added “Control log” to “Extension Software”

(Operating Instructions Perform management of the extension software and the schedule setting [Ext. software])

The control log about the extension software will be displayed.

Up to 200 control logs can be saved on the built-in memory of the camera.

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

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

Software mng.	Operation sched.	Control log			
<div><< Previous 1001/2PageNext 100 >></div> <table><thead><tr><th>No.</th><th>Time & date</th><th>Description</th></tr></thead></table>			No.	Time & date	Description
No.	Time & date	Description			

[Next 100 >>]

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

[Number of pages display]

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

[<< Previous 100]

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

[No.]

The serial number of the control log will be displayed.

[Time & date]

Time and date at the error occurrence will be displayed.

[Description]

The descriptions about the control log will be displayed.

For further information about the control logs, refer to our website below.

https://security.panasonic.com/training_support/support/info/ <Control No.: C0317>

2. Added “Ext. software mode” to “SD memory card”

(Operating Instructions Configure the settings relating to the SD memory card [SD memory card])

Basic		SD memory card		Log	
Operating mode					
SD memory card		<input type="radio"/> Use		<input type="radio"/> Not use	
Ext. software mode		<input type="radio"/> On		<input type="radio"/> Off	
Audio recording		<input type="radio"/> On		<input type="radio"/> Off	
Remaining capacity notification		50% ▼			
Overwrite		<input 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			

[Ext. software mode]

Set this setting to “On” when the installed extension software uses the SD memory card in this product.

- **On:** The extension software can use the SD memory card in this product.
In this case, recording on the SD memory card using the functions of this product will become unavailable.
- **Off:** The extension software cannot use the SD memory card in this product.
- **Default:** Off

Note

For further information about the extension software, refer to our website below.

https://security.panasonic.com/training_support/support/info/ <Control No.: C0103>

3. 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 a web interface for network configuration. At the top, there are two tabs: 'Network' (selected) and 'Advanced'. Below the tabs, there is a section titled 'IPv4 network'. Inside this section, a red rectangle highlights the 'Network Settings' row, which has a dropdown menu set to 'DHCP'. Below this, there are several rows for IP configuration: 'IP address(IPv4)' with fields for 192, 168, 0, and 10; 'Subnet mask' with fields for 255, 255, 255, and 0; 'Default gateway' with fields for 192, 168, 0, and 1; 'DNS' with radio buttons for 'Auto' (selected) and 'Manual'; 'Primary server address' with fields for 0, 0, 0, and 0; and 'Secondary server address' with fields for 0, 0, 0, and 0.

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 checked="" type="radio"/> Auto <input 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

4. 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 type="radio"/> Allow <input checked="" 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

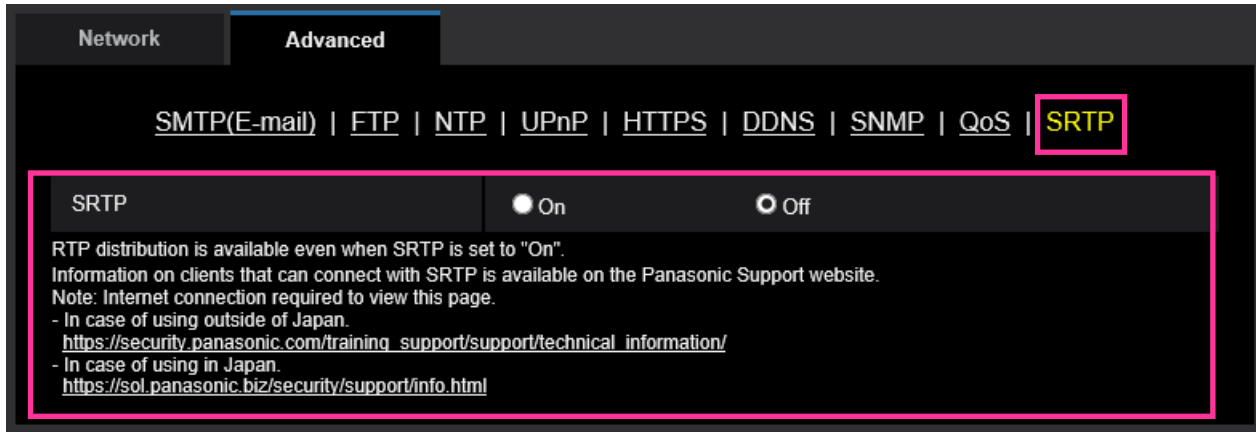
*ONVIF is the trademark of ONVIF, Inc.

5. Add the SRTP settings in "Advanced" of "Network"

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

The SRTP settings 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

- 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://security.panasonic.com/training_support/support/technical_information/<Control No.: C0318>

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

(Operating Instructions – Perform management of the extension software and the schedule setting [Ext. software] - Perform the installation, uninstallation and version upgrade of the extension software [Software mng.])

If the SDK version of the camera is older than the ext. software, a message will be displayed to that effect.

Software mng.

Operation sched.

Control log

Unique information

MPR ID	4700-0106-4E35-09B4
Remaining ROM	140400 kbytes
Remaining RAM	57600 kbytes
SDK version	1.40
Firmware version	1.00

AI-VMD

Uninstall

Software version	2.10	
Status	Before the trial starts	Registration >>
Setup menu	Setup >>	

AI Privacy Guard

Uninstall

Software version	1.00	
Status	Before the trial starts	Registration >>
Setup menu	Setup >>	

AI Processor Activation Key

Uninstall

Software version	1.00
Status	Operable
Setup menu	Setup >>

Install new Ext. software

AI-VMD...Upgrade

AI Privacy Guard...Upgrade

Jpeg Sample Application...Upgrade

Execute

Please wait and do not operate the browser during install.

AI Processor Activation Key

Register the Registration Key		Set
-------------------------------	--	-----

*No dashes in between.

[SDK version]

[Software version]

14

Extension software

[Version]

If you have installed ext. software, the version information of the installed ext. software is displayed along with the version information of the SDK installed in the ext. software.

If the version information of the SDK embedded in the camera is less than the version number required by the ext. software, the ext. software may not operate properly.

Note

• For ext. software that does not have SDK version information installed, the SDK version information will not be displayed.

12. Expanded functionality of camera title on screen

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

Change the maximum amount of text that can be displayed for Camera title on screen. Add transparent display function to date/time & Camera title on screen, and add character size options.

[Camera title on screen]

Enter a character string to be displayed on the image.

Available number of characters: 0 - 40 characters

Available characters: 0-9, A-Z, a-z and the following marks.

! " # \$ % & ' () * + , - . / : ; = ?

Default: None (blank)

Note

- “Camera title on screen” can be set with up to 2 lines.

[OSD] - [Display style]

Select “Transparent” or “Opaque” for “Display style”.

- **Transparent:** Date/time and camera title on screen will be displayed with transparent letters.

- **Opaque:** Date/time and camera title on screen will be displayed with opaque letters (white letters on black background).

Default: Transparent

Note

- When “Opaque” is selected, the opaque black part may be set wider than the section where date/time and camera title on screen are displayed depending on the character size and number of characters.

[OSD] - [Character size]

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

- **50%:** Displays in 50% of the standard size.

- **75%:** Displays in 75% of the standard size.

- **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, characters may be cut off or hard to read.

After completing the settings, confirm the result on the “Live” page.

Note

- Even when “50%” or “75%” is set, OSD will be displayed in the standard size (100%) when displaying 640x360 or 320x180 images.

13. Change AI-VMD and AI Privacy Guard to be pre-installed

(Operating Instructions - Perform management of the extension software and the schedule setting [Ext. software])

The AI motion detection function ("AI-VMD") and AI privacy guard, which were previously ext. software, are now pre-installed. Also, add that AI-VMD and AI Privacy Guard will be pre-installed in the "Note".

Management of the extension software and the schedule setting can be performed on the "Ext. software" page. The "Ext. software" page has the [Software mng.] tab and the [Operation sched.] tab.

Note

- AI-VMD (WV-XAE200W) and AI Privacy Guard (WV-XAE201W) are pre-installed. For details, please refer to the respective instruction manuals.
- If your camera software version is less than 1.50, then upgrading to 1.50 or later will also install AI-VMD (WV-XAE200W) and AI Privacy Guard (WV-XAE201W).

14. Change the default values of the schedule setting screen of the ext. software

(Operating Instructions - Perform management of the extension software and the schedule setting [Ext. software] - Set a schedule of the extension software [Operation sched.])

AI-VMD and AI Privacy Guard, which were previously ext. software, are now pre-installed. Also, AI-VMD will be initially displayed in the schedule setting screen of the ext. software.

How to set the schedules

1. Select software for which an operation schedule is set from the extension software list.
2. At [Operating day of week], select a day of week and a time table where the operation schedule is to be set.
3. Specify a period of time on "Time table 1" and "Time table 2" where the schedule is to be executed. To execute for 24 hours, specify the period of time as [00:00] - [00:00].
4. Click the [Set] button after completing the settings.

Note

• When you open the schedule setting window of the ext. software, "AI-VMD" is selected as the default setting. Available AI-VMD [Operation details] settings are Off, Detect 1, and Detect 2. For details, refer to the instruction manual of AI-VMD (WV-XAE200).

15. Add AI-VMD related alarms as an event in the log list

(Operating Instructions – Display the log list)

Add AI-VMD related alarms to events that cause a log to occur.

⑤ Log list

- **[Event]:** The event type will be displayed.
 - **MN/SC:** Log by “Manual/Schedule”
 - **TRM1:** Alarm by alarm input to Terminal 1
 - **TRM2:** Alarm by alarm input to Terminal 2
 - **TRM3:** Alarm by alarm input to Terminal 3
 - **VMD:** Alarm by VMD alarm
 - **SCD:** Alarm by SCD alarm
 - **COM:** Alarm by command alarm
 - **INT:** Intruder Alarm by AI-VMD
 - **LOI:** Loitering Alarm by AI-VMD
 - **DIR:** Direction Alarm by AI-VMD
 - **CLD:** Cross Line Alarm by AI-VMD
 - **FTP:** Logs saved from FTP periodic image transmission errors

Note

- INT/LOI/DIR/CLD will be displayed at a AI-VMD alarm occurrence.

16. Add AI-VMD related logs to SD memory card play screen events (Operating Instructions - Playback of images on the SD memory card - Playback “Stream(1)”/“Stream(2)”/“Stream(3)”/“Stream(4)” images saved to the SD memory card)

Add AI-VMD related alarms to display of events that cause a log to occur.

① Slider bar

- **[Event]:** The event type will be displayed.
 - **MN/SC:** Log by “Manual/Schedule”
 - **TRM1:** Alarm by alarm input to Terminal 1
 - **TRM2:** Alarm by alarm input to Terminal 2
 - **TRM3:** Alarm by alarm input to Terminal 3
 - **VMD:** Alarm by VMD alarm
 - **SCD:** Alarm by SCD alarm
 - **COM:** Alarm by command alarm
 - **INT:** Intruder Alarm by AI-VMD
 - **LOI:** Loitering Alarm by AI-VMD
 - **DIR:** Direction Alarm by AI-VMD
 - **CLD:** Cross Line Alarm by AI-VMD

Note

- INT/LOI/DIR/CLD will be displayed at a AI-VMD alarm occurrence.

17. Add an audio detection alarm

(Operating Instructions – Action at an alarm occurrence – Alarm type)

A new audio detection function has been added. Also, an audio detection alarm will be added to the alarm types.

Terminal alarm: When an alarm device such as a sensor is connected to the alarm input terminal, an alarm operation is performed when the connected alarm device operates.

- **Terminal alarm:** When connecting an alarm device such as a sensor to the alarm input terminal of the camera, the alarm action will be performed when the connected alarm device is activated.

- **VMD alarm:** When motion is detected in the set VMD area, the alarm action will be performed.

*VMD stands for “Video Motion Detection”.

- **SCD alarm:** This function triggers an alarm action when observed a change in the state of a subject such as by covering the camera with a cloth, a cap or others, or by changing the camera direction largely.

- **Command alarm:** When a Panasonic alarm protocol is received from the connected device via a network, the alarm action will be performed.

- **Audio detection alarm:** When the configured audio detection level is exceeded, the alarm action will be performed.

- **Alarm notification from the extension software:** In case that the extension software having an alarm function is installed, an alarm action will be taken when an alarm is issued by the alarm function of the extension software.

For further information about the extension software, refer to our website

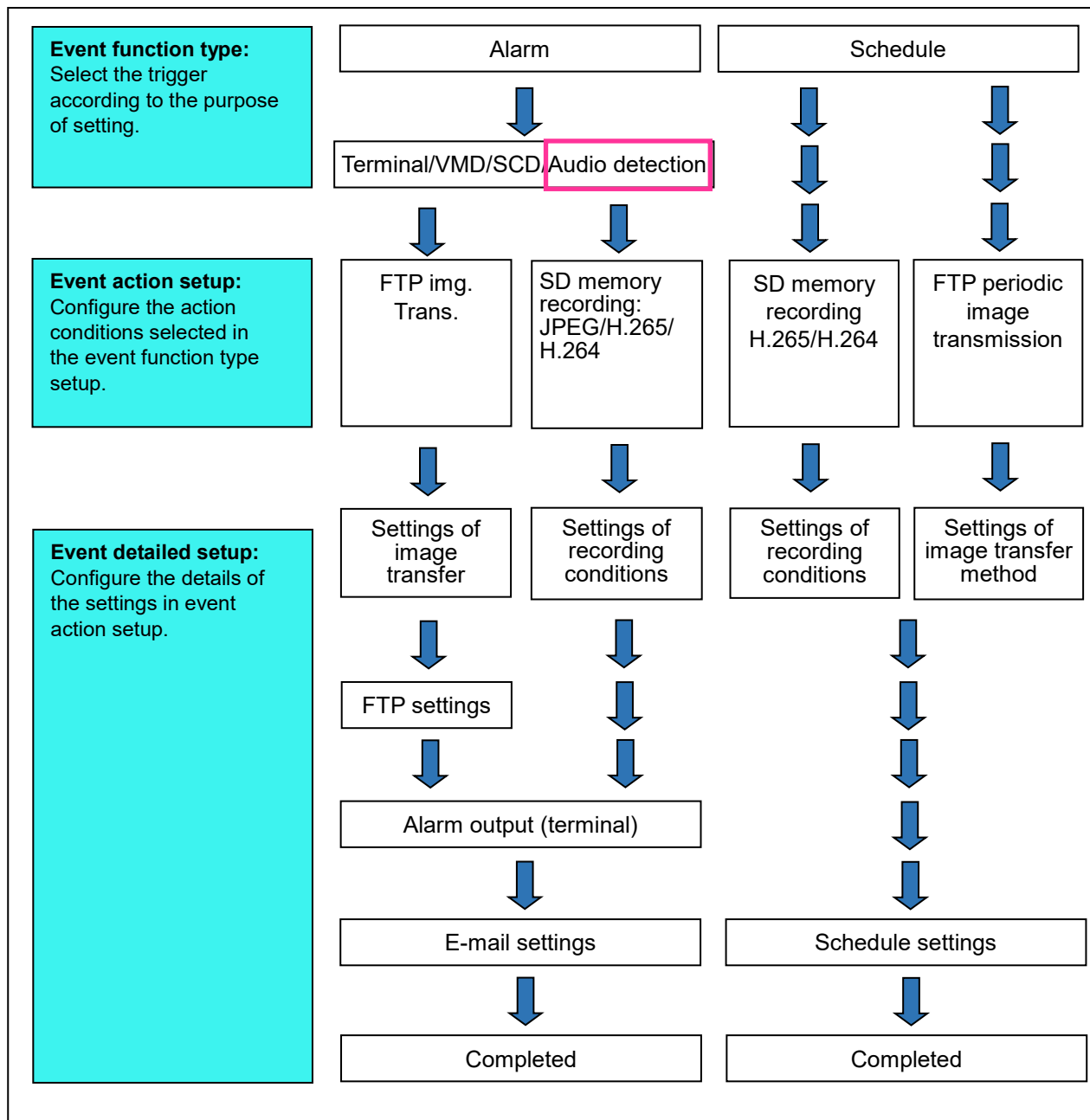
(https://security.panasonic.com/training_support/support/info/ <Control No.: C0103>)

18. Add audio detection to event types

(Operating Instructions – Use Easy Setup [Easy Setup] – Configure the schedule/alarm (event function type setup menu)

A new audio detection function has been added. Also, audio detection will be added to the "Event behavior setting flow".

Flow of event action setup



19. Add audio detection to alarm settings

(Operating Instructions – Use Easy Setup [Easy Setup] – Alarm: Configure the terminal and VMD (alarm setup menu)

A new audio detection function has been added. Also, an audio detection alarm On/Off will be added to the alarm types.

Internet | Event action

Configure the alarm condition to be used for the alarm detection.
The whole area of area 1 is to be set as the detection area for the motion detection alarm.
The whole area is to be set as the detection area for SCD alarm.

Alarm	
Terminal 1	Off
Terminal 2	Off
Terminal 3	Off
VMD alarm	<input checked="" type="radio"/> On <input type="radio"/> Off
SCD alarm	<input checked="" type="radio"/> On <input type="radio"/> Off
Audio detection alarm	<input checked="" type="radio"/> On <input type="radio"/> Off
Alarm deactivation time	5 s (5-600s)

Next Back

Alarm

- [VMD alarm]

On: If the VMD area is not configured, the entire region is configured. To configure the VMD area, use the [VMD area] tab on the “Alarm” page.

Off: Disables all VMD states

Default: Off

- [SCD alarm]

On: If the SCD area is not configured, the entire region is configured. To configure the SCD area, use the [SCD area] tab on the “Alarm” page.

Off: Disables all SCD states

Default: Off

- [Audio detection alarm]

On: Uses audio detection alarms. All of the detection targets for AI audio classification will be selected.

Off: Does not use audio detection alarms.

Default: Off

20. Add "Note" regarding audio detection to [Save trigger] of SD memory recording

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

A new audio detection function has been added. However, it should be noted that no recording will be made to the SD memory card even if an audio detection alarm occurs.

Recording stream

[Save trigger]

Note

When "Stream(1)", "Stream(2)", "Stream(3)", or "Stream(4)" is selected for "Recording format", "FTP periodic image transmission error" is unavailable.

- To enable alarms to occur, alarm settings must be configured in advance on the [Alarm] tab.
- When "JPEG(1)" or "JPEG(2)" is selected for "Recording format", "Schedule" is unavailable.
- When connected with our network disk recorder, "Save trigger" may be displayed in a gray-out state as "Network failure". To change the setting of "Save trigger" after disconnecting the recorder, set "Not use" for "SD memory card" once and then set "Use" again.
- Even if [Save trigger] is set to [Alarm input], in the case of an alarm with audio detection, images will not be saved to the SD memory card.

21. Add a link to audio detection settings in alarm settings

(Operating Instructions – Configure the alarm settings [Alarm] - Configure the settings relating to the alarm action [Alarm])

A new audio detection function has been added. Also, a link will be added to the audio detection settings in the alarm settings.

The screenshot shows the 'Alarm' settings page with tabs for 'Alarm', 'VMD area', 'SCD area', 'Audio detection', and 'Notification'. The 'Alarm' tab is active. It contains a table with the following rows:

Alarm	
Terminal 1	Off
Terminal 2	Off
Terminal 3	Off
VMD alarm	VMD >>
SCD alarm	SCD >>
Audio detection alarm	Audio detection >>
Command alarm	Command alarm <input checked="" type="radio"/> On <input type="radio"/> Off
	Reception port 6181 (1-65535)
Alarm deactivation time	5 s (5-600s)

The 'Audio detection alarm' row is highlighted with a red rectangle.

Alarm

- **[VMD alarm]**

When clicking “VMD >>”, the [VMD area] tab of the “Alarm” page will be displayed.

- **[SCD alarm]**

When clicking “SCD”, the [SCD area] tab of the “Alarm” page will be displayed.

- **[Audio detection alarm]**

When clicking “Audio detection”, the [Audio detection] tab of the “Alarm” page will be displayed.

- **[Command alarm]**

Select “On” or “Off” to determine whether or not to receive the command alarm.

The command alarm is the function that provides notification of a Panasonic protocol alarm from the other cameras. When “On” is selected, alarm actions will be performed between multiple cameras.

Default: Off

22. Add audio detection settings

(Operating Instructions – Configure the alarm settings [Alarm] - Configure the settings relating to audio detection [Audio detection])

A new audio detection function has been added. With that, a tab will be added to the alarm page to configure the audio detection settings.

Click the [Audio detection] tab on the “Alarm” page. The settings relating to audio detection can be configured in this section.

IMPORTANT

- The alarm occurrence indication button will be displayed when sound is detected by the audio detection function.
- The alarm occurrence notification button is also displayed when the alarm input is accepted by the terminal alarm or when the command alarm is accepted.
- Depending on the network environment, notification may be delayed.
- The audio detection feature is not suitable to be used in situations where high reliability is constantly required (such as a prevention system). We are not responsible for any accidents or damages that may occur.

Alarm VMD area SCD area **Audio detection** Notification

Audio detection ☒ On ☐ Off

Detection sensitivity Middle

AI analytics target ☐ Gunshot ☐ Yell ☐ Vehicle horn ☐ Glass break ☐ Other

* Various functions working with Audio detection alarm do not work while this page is open.
After setting, close this page.

Set

• [Audio detection]

Select “On” or “Off” to determine whether or not to perform audio detection.

On: Performs audio detection.

Off: Does not perform audio detection.

Default: Off

- **[Detection sensitivity]**

Adjust the sensitivity of Volume from “Low”, “Middle”, or “High”.

Default: Middle

- **[AI analytics target]**

Select the detection target for AI audio classification.

- **Gunshot:** Detects sound of gunshots, sound of explosions, impulsive sound and plosive sound.

- **Yell:** Detects screams and yells.

- **Vehicle Horn:** Detects car horns.

- **Glass Break:** Detects sound of glass breaking.

- **Other:** Detects other sounds than Gunshot, Yell, Vehicle Horn, Glass Break.

Note

- In the following cases, sounds to be detected may not be detected.

- When the duration of Yell, Vehicle Horn or Glass Break is shorter than 1 second

- When the difference between the sound to be detected and noise is less than 6dB

- When raindrops directly hit the camera or microphone

- When multiple sounds of different types occurred at the same time, an alarm notification as triggered by only one type among these types will be provided.

23. Add audio detection as a notification event for the destination of notification

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

A new audio detection function has been added. Also, add audio detection to the notification events of the notification destination, and add an audio detection alarm to the alarm events entered in the email body.

• [Address 1] - [Address 4]

Enter the destination E-mail address. Up to 4 destination E-mail addresses can be registered.

Available number of characters: 3 - 128 characters

Available characters: Alphanumeric characters, the at sign (@), the period (.), the underscore (_), and the hyphen (-).

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

Terminal 1: Notify by e-mail when an alarm occurs in Terminal 1.

Terminal 2: Notify by e-mail when an alarm occurs in Terminal 2.

Terminal 3: Notify by e-mail when an alarm occurs in Terminal 3.

VMD: Notify by e-mail when motion is detected.

SCD: Notify by e-mail when SCD has occurred.

Command alarm: Notify by e-mail when a command alarm is entered.

Audio detection: Notify by e-mail when audio detection has occurred.

Diag.:

- 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

• [E-mail body(alarm)]

Enter the E-mail body.

Available number of characters: 0 - 50 characters

Cause of alarm: The cause of alarm %p% is added in the e-mail body. %p% is replaced by the cause of alarm and sent.

- For VMD alarm: "VMD"
- For SCD alarm: "SCD"
- For terminal alarm: Terminal name set in "Terminal 1", "Terminal 2", and "Terminal 3" of "Terminal name". (Example: If the name of Terminal 1 is "Terminal1", it is "Terminal1")
- For command alarm: "CMD"
- For audio detection alarm (AI audio classification, Gunshot): "Audio detection Gunshot"
- For audio detection alarm (AI audio classification, Yell): "Audio detection Yell"
- For audio detection alarm (AI audio classification, Vehicle Horn): "Audio detection Vehicle Horn"
- For audio detection alarm (AI audio classification, Glass Break): "Audio detection Glass Break"
- For audio detection alarm (AI audio classification, Other): "Audio detection"

Occurrence time: The time of occurrence %% will be added to the e-mail body. %% will be replaced by the time of occurrence of the alarm (HH:MM:SS) and sent.

- **Default:**

- Cause of alarm: Checked
- Occurrence time: Checked
- E-mail body: The %p% alarm was occurred at %t%.

24. Add audio detection to SNMP trap notification events

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

A new audio detection function has been added. Also, audio detection alarm settings will be added to the SNMP trap settings.

SNMP trap setting

• [Alarm] - [VMD] - [On/Off]

When the check box is checked, a trap will be sent at the time when a video motion detection is activated.

Default: Not checked (Off)

• [Alarm] - [VMD] - [Trap string]

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

Available number of characters: 0 - 20 characters

Available characters: 0-9, A-Z, a-z and the following marks.

! " # \$ % & ' () * + , - . / : ; = ?

Default: VMD alarm

• [Alarm] - [Audio detection] - [On/Off]

When the check box is checked, a trap will be sent at the time when an audio detection alarm occurs.

Default: Not checked (Off)

• [Alarm] - [Audio detection] - [Trap string]

Set the string of characters to be used for the trap of [Audio detection].

Available number of characters: 0 - 20 characters

Available characters: 0-9, A-Z, a-z and the following marks.

! " # \$ % & ' () * + , - . / : ; = ?

Default: audio

• [Alarm] - [Command alarm] - [On/Off]

When the check box is checked, a trap will be sent at the time when a command alarm occurs.

Default: Not checked (Off)

• [Alarm] - [Command alarm] - [Trap string]

Set the string of characters to be used for the trap of [Command alarm].

Available number of characters: 0 - 20 characters

Available characters: 0-9, A-Z, a-z and the following marks.

! " # \$ % & ' () * + , - . / : ; = ?

Default: cmd

Note

• In order for SNMP trap notification to work when an alarm occurs, the alarm operation must be configured.

To make settings related to alarm operation, refer to "Configure the alarm settings [Alarm]" in the Operating Instructions.

25. Add audio detection permission to schedule settings

(Operating Instructions – Configure the settings relating to the schedules)

A new audio detection function has been added. Also, audio detection permission settings will be added to the schedule settings.

On the “Schedule” page, it is possible to configure the settings relating to schedules as follows.

- Alarm permission (Terminal alarm 1, 2, 3)
- Alarm permission (Terminal alarm 1)
- Alarm permission (Terminal alarm 2)
- Alarm permission (Terminal alarm 3)
- VMD permission
- SCD permission
- Audio detection permission
- Access permission
- SD memory recording
- Scene file
- FTP periodic image transmission
- Allow e-mail transmission (Schedule 5 only)
- Reboot (Schedule 5 only)

The “Schedule” page has only the [Schedule] tab

1 Select an action to be assigned to the schedule from “Schedule mode”.

“Off” is selected at the default.

Off: No action will be taken for the respective schedule.

Alarm permission (Terminal alarm 1, 2, 3): Alarm input (terminal alarm) will be allowed during the period of the schedule.

Alarm permission (Terminal alarm 1): Terminal 1 alarm input will be allowed during the period of the schedule.

Alarm permission (Terminal alarm 2): Terminal 2 alarm input will be allowed during the period of the schedule.

Alarm permission (Terminal alarm 3): Terminal 3 alarm input will be allowed during the period of the schedule.

VMD permission: The video motion detection (VMD) function will be active during the period of the schedule.

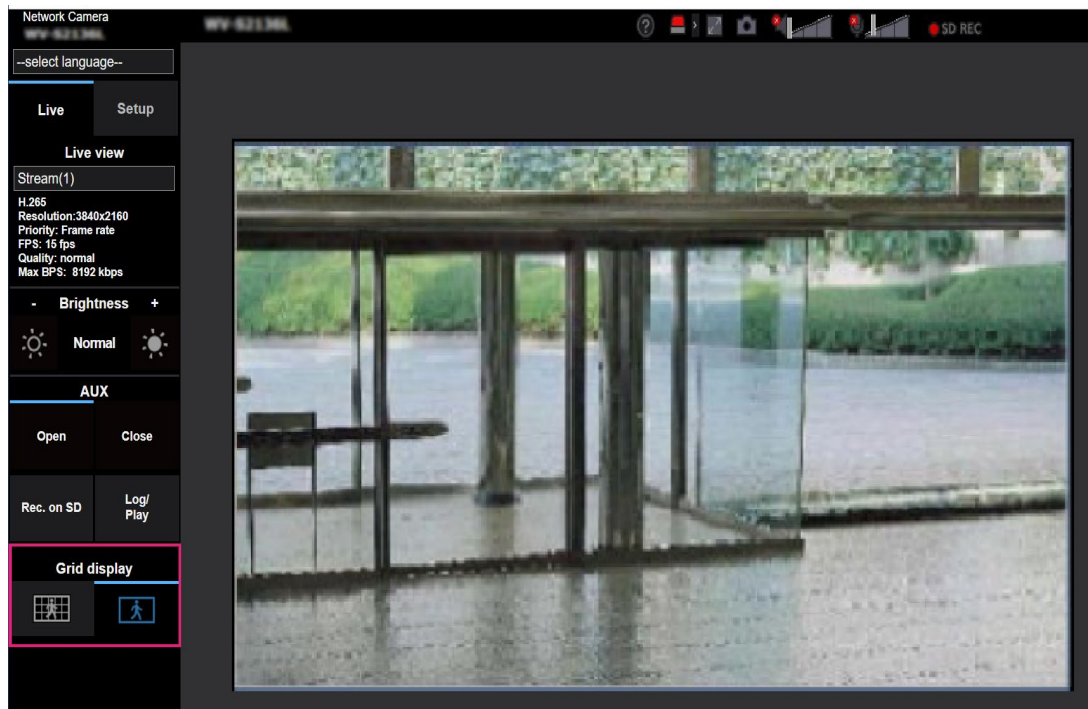
SCD permission: The scene change detection (SCD) function will be active during the period of the schedule.

Audio detection permission: The audio detection function will be active during the period of the schedule.

26. Add grid display function to the live page

(Operating Instructions – Monitor images on a PC – About the “Live” page)

Add a grid display function to the live page when accessed by browsers other than Internet Explorer (IE).



- **[Grid display] buttons**

Select On/Off to determine whether or not to use the grid display for position adjustment of this product when using the extension software.

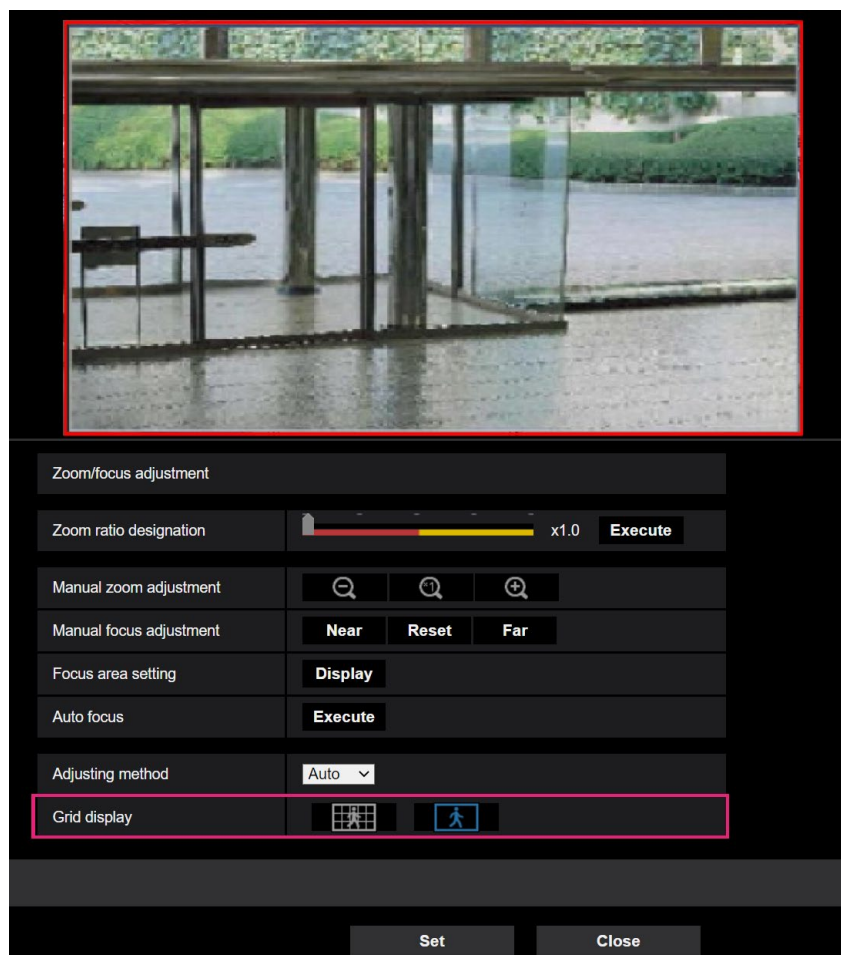
For further information about the grid adjustment, refer to our support website below.

https://security.panasonic.com/training_support/support/technical_information/

<Control No.: 0320>

27. Add a grid display function to the zoom/focus adjustment page (Operating Instructions – Configure the settings relating to images and audio [Image/Audio] – Configure the settings relating to image adjust, zoom/focus, privacy zone, VIQS, and lens distortion compensation [Image quality] - Adjust the zoom and focus)

Add a grid display function to "Zoom/Focus Adjustment" in the "Image Quality" tab of the Image/Audio page.



- **[Grid display] buttons**

Select On/Off to determine whether or not to use the grid display for position adjustment of this product when using the extension software.

For further information about the grid adjustment, refer to our support website below.

https://security.panasonic.com/training_support/support/technical_information/

<Control No.: 0320>

28. 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: " &

29. Add “Note” regarding the registering the registration key (Operating Instructions – Perform management of the extension software and the schedule setting [Ext. software] - Perform the installation, uninstallation and version upgrade of the extension software [Software mng.]

Add to "Note" a note that the unit will restart after registering the registration key.

Installing the extension software

4 Acquire a registration key and then register the registration key.

Note

- Depending on the type of the extension software, registration of the registration key will be required. Refer to the operating instructions of the extension software for how to acquire and register a registration key.
- After registering the registration key, the camera will be reboot. After rebooting the camera, check that the registration key is registered, and setting the extension software.