

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.

Notation	Model
【SSeriesS】	WV-S1136, WV-S1536L, WV-S1536LN, WV-S1536LN-B, WV-S1536L-B, WV-S1536LNS, WV-S1536LTN, WV-S2136, WV-S2136-B, WV-S2136G, WV-S2136G-B, WV-S2136L, WV-S2136L-B, WV-S2136LG, WV-S2136LG-B, WV-S2236L, WV-S2236L-B, WV-S2236LG, WV-S2236LG-B, WV-S2536L, WV-S2536LG, WV-S2536LGN, WV-S2536LN, WV-S2536LTN, WV-S1536LT, WV-S2536LT, WV-S1136A, WV-S1536LA, WV-S1536LNA, WV-S1536LNA-B, WV-S1536LA-B, WV-S1536LNSA, WV-S1536LTNA, WV-S2136A, WV-S2136A-B, WV-S2136GA, WV-S2136GA-B, WV-S2136LA, WV-S2136LA-B, WV-S2136LGA, WV-S2136LGA-B, WV-S2236LA, WV-S2236LA-B, WV-S2236LGA, WV-S2236LGA-B, WV-S2536LA, WV-S2536LGA, WV-S2536LGNA, WV-S2536LNA, WV-S2536LTNA, WV-S1536LTA, WV-S2536LTA
【SSeriesH】	WV-S15700-V2L Series, WV-S15500-V3L Series, WV-S22600-V2L Series, WV-S25700-V2L Series, WV-S25500-V3L Series, WV-S25500-V3L Series, WV-S15500-F3L Series, WV-S22500-F3L Series, WV-S25500-F3L Series, WV-S15600-V2L Series, WV-S22700-V2L Series, WV-S22500-V3L Series, WV-S25600-V2L Series, WV-S15500-F6L Series, WV-S22500-F6L Series, WV-S25500-F6L Series
【fisheye】	WV-S4156, WV-S4176, WV-S4556L, WV-S4556LM, WV-S4576L, WV-S4576LM, WV-S4156A, WV-S4176A, WV-S4556LA, WV-S4556LMA, WV-S4576LA, WV-S4576LMA

Notation	Model
【Multi】	WV-S8543, WV-S8543G, WV-S8543L, WV-S8543LG, WV-S8543LN, WV-S8543NWV-S8544, WV-S8544G, WV-S8544L, WV-S8544LG, WV-S8544LN, WV-S8544N, WV-S8563L, WV-S8563LG, WV-S8563LN, WV-S8564L, WV-S8564LG, WV-S8564LN, WV-S8573L, WV-S8573LG, WV-S8573LN, WV-S8574L, WV-S8574LG, WV-S8574LN
【miniAI】	WV-S71300-F3, WV-S71300A-F3
【PTZ S】	WV-S65340-Z4K, WV-S65340-Z4N, WV-S65340-Z4N1, WV-S61302-Z4, WV-S65340-Z2K, WV-S65340-Z2N, WV-S65340-Z2N1, WV-S61301-Z2, WV-S65340-Z4G, WV-S65340-Z2G, WV-S61301-Z1, WV-S61300-ZY, WV-S61300-ZYG, WV-S61501-Z1, WV-S65302-Z2, WV-S65302-Z2G, WV-S65302-Z2-1, WV-S65301-Z1, WV-S65301-Z1G, WV-S65301-Z1-1, WV-S65301-Z1S, WV-S65300-ZY, WV-S65300-ZYG, WV-S65501-Z1, WV-S65501-Z1G
【PTZ U】	WV-U65302-Z2, WV-U65302-Z2G, WV-U61301-Z2, WV-U65301-Z1, WV-U65301-Z1G, WV-U61301-Z1, WV-U65300-ZY, WV-U65300-ZYG, WV-U61300-ZY, WV-U61300-ZYG
【PTZ PR】	WV-U61300-ZYPR
【Z4】	WV-S61302-Z4, WV-S65340-Z4, WV-S65340-Z4K, WV-S65340-Z4N, WV-S65340-Z4N1, WV-S65340-Z4G
【Z2】	WV-S61301-Z2, WV-S65340-Z2, WV-S65302-Z2, WV-U61301-Z2, WV-U65302-Z2, WV-S65340-Z2K, WV-S65340-Z2N, WV-S65340-Z2N1, WV-S65340-Z2G, WV-S65302-Z2G, WV-S65302-Z2-1, WV-U65302-Z2G
【Z1】	WV-S61301-Z1, WV-S65301-Z1, WV-U61301-Z1, WV-U65301-Z1, WV-S65501-Z1, WV-S61501-Z1, WV-S65301-Z1G, WV-S65301-Z1-1, WV-S65301-Z1S, WV-S65501-Z1G, WV-U65301-Z1G
【ZY】	WV-S61300-ZY, WV-S65300-ZY, WV-U61300-ZY, WV-U65300-ZY, WV-S61300-ZYG, WV-S65300-ZYG, WV-U65300-ZYG, WV-U61300-ZYG

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

- Firmware Ver.1.20 【SSeriesS】 (Except for WV-S1536LTN, WV-S2536LTN, WV-S2136G, WV-S2136LG, WV-S2236LG, WV-S2536LG, WV-S2536LGN)

No.	Functions	Item	Page
1	Add to the system log when recording stream fails to write	Status (Maintenance)	→1

- **Firmware Ver.1.20 【SSeriesS】** (Except for WV-S1536LTN, WV-S2536LTN, WV-S2136G, WV-S2136LG, WV-S2236LG, WV-S2536LG, WV-S2536LGN) (*continued*)

No.	Functions	Item	Page
2	Add a function to notify the user of writing failures in the recording stream with a unique alarm	Status (Maintenance)	→2
3	Add a note when the bit rate of the recording stream is set to a value exceeding recommended value	Image (Image/Audio)	→3
4	SDK version display	Software mng. (Ext. software)	→4
5	Extend authentication password for the destination of notification	Advanced (Network)	→5

- **Firmware Ver.1.31 【SSeriesS】**

No.	Functions	Item	Page
6	Change AI-VMD and AI People Detection to be pre-installed	Software mng.	→6
7	Add RAM capacity expansion mode	Software mng.(Ext. software)	→7
8	Add LLDP function	Advanced (Network)	→8

- **Firmware Ver.1.40 【SSeriesS】**

No.	Functions	Item	Page
9	Add SFTP periodic image transmission to “Event operation” of Easy Setup	Event action (Easy Setup)	→9
10	Add “SFTP periodic image transmission error” to “Save trigger” of SD memory card	SD memory card (Basic)	→10
11	Add link to SFTP settings in Camera action on alarm	Alarm	→11
12	Add SFTP image transmission function	Advanced (Network)	→12
13	Add SFTP periodic image transmission to “Schedule mode” of Schedule	Schedule	→13
14	Using the recording function is changed when the Ext. software mode is On	Advanced (Network)	→14
15	Change the initial value of “Overwrite” of SD memory card to On	SD memory card (Basic)	→15
16	Add NTP test function	Advanced (Network)	→16

▪ **Firmware Ver.1.40 【SSeriesS】** *(continued)*

No.	Functions	Item	Page
17	Add TLS settings to HTTPS	Advanced (Network)	→ 17
18	Add MQTT function	Advanced (Network)	→ 18
19	Add a system log when MQTT function fails	Status (Maintenance)	→ 19

▪ **Firmware Ver.1.41 【SSeriesS】**

No.	Functions	Item	Page
20	Add Genetec Stratocast Service*1	Network (Stratocast)	→ 20

*1 Except for WV-S1136A, WV-S1536LA, WV-S1536LNA, WV-S1536LNA-B, WV-S1536LA-B, WV-S1536LNSA, WV-S1536LTNA, WV-S2136A, WV-S2136A-B, WV-S2136GA, WV-S2136GA-B, WV-S2136LA, WV-S2136LA-B, WV-S2136LGA, WV-S2136LGA-B, WV-S2236LA, WV-S2236LA-B, WV-S2236LGA, WV-S2236LGA-B, WV-S2536LA, WV-S2536LGA, WV-S2536LGNA, WV-S2536LNA, WV-S2536LTNA, WV-S1536LTA, WV-S2536LTA.

▪ **Firmware Ver.2.10**

No.	Functions	Item	Page
21	Changed new GUI (Graphical User Interface) (Except【Multi】)	–	→ 21
22	Add AI-VMD alarm area information on TCP alarm notification	Notification (Alarm)	→ 22
23	Add Image transmission log on Status page	Status (Maintenance)	→ 23

▪ **Firmware Ver.2.10 【fisheye】**

No.	Functions	Item	Page
24	About removal of functions due to end of Internet Explorer support	–	→ 24
9	Add SFTP periodic image transmission to “Event operation” of Easy Setup	Event action (Easy Setup)	→ 9
10	Add “SFTP periodic image transmission error” to “Save trigger” of SD memory card	SD memory card (Basic)	→ 10
11	Add link to SFTP settings in Camera action on alarm	Alarm	→ 11
12	Add SFTP image transmission function	Advanced (Network)	→ 12

• Firmware Ver.2.10 【fisheye】 (continued)

No.	Functions	Item	Page
13	Add SFTP periodic image transmission to “Schedule mode” of Schedule	Schedule	→13
14	Using the recording function is changed when the Ext. software mode is On	SD memory card (Basic)	→14
15	Change the initial value of “Overwrite” of SD memory card to On	SD memory card (Basic)	→15
25	Changed the initial value of “Audio input encoding format”	Audio (Image/Audio)	→25
26	Add “Close (Continue)” and “Open (Continue)” to the operation setting values of [Terminal 1], [Terminal 2], and [Terminal 3] on the [Alarm] tab	Alarm	→26
27	Add alarm test function to the alarm	Alarm	→27
8	Add LLDP function	Advanced (Network)	→8
16	Add NTP test function	Advanced (Network)	→16
17	Add TLS settings to HTTPS	Advanced (Network)	→17
18	Add MQTT function	Advanced (Network)	→18
19	Add a system log when MQTT function fails	Status (Maintenance)	→19
28	Add log indications/error indications relating to Firmware Upgrade	System log (Maintenance)	→28

• Firmware Ver.2.20

No.	Functions	Item	Page
29	Add FTP to the communication protocol of the file transfer function【SSeriesS】【SSeriesH】 【fisheye】【miniAI】【PTZ S】【PTZ U】	Advanced (Network)	→29
30	Add SFTP periodic image transmission to “Event operation” of Easy Setup 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	Event action (Easy Setup)	→30
31	Change “SFTP periodic image transmission error” to “FTP/SFTP periodic image transmission error” in “Save trigger” of SD memory card. 〈SD memory card supported models only〉 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	SD memory card (Basic)	→31

• Firmware Ver.2.20 (continued)

No.	Functions	Item	Page
32	Change the link of “SFTP setup” to “FTP/SFTP setup” in Camera action on alarm 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	Alarm	→ 32
33	Add “FTP access to camera” to “Common” in Network setup 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	Network (Network)	→ 33
34	Change “SFTP periodic image transmission” to “FTP/SFTP periodic image transmission” in “Schedule” mode 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	Schedule	→ 34
35	Add the log related to FTP/SFTP to system log 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	System log (Others)	→ 35
36	Add Ext. software function 【PTZ U】	Extension software (Software mng.)	→ 36
37	Add Ext. software mode <SD memory card supported models only> 【PTZ U】	SD memory card (Basic)	→ 37
38	Add HTML initialization function 【SSeriesS】 【SSeriesH】【fisheye】【miniAI】【PTZ S】【PTZ U】	Default reset (Maintenance)	→ 38

• Firmware Ver.2.20 【miniAI】

No.	Functions	Item	Page
22	Add AI-VMD alarm area information on TCP alarm notification	Notification (Alarm)	→ 22
23	Add Image transmission log on Status page	Status (Maintenance)	→ 23

• Firmware Ver.2.30

No.	Functions	Item	Page
39	Add 2fps and 3fps to FTP/SFTP refresh interval, add 1920x1080 to pre-alarm resolution, expand image destination server to 2 locations 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【PTZ S】 【PTZ U】	Advanced (Network)	→ 39
40	Add 0.5s, 1s, 2s, 3s, and 4s to the alarm deactivation time 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【PTZ S】 【PTZ U】	Alarm	→ 40
41	Add schedule setting to switch image quality at sunrise and sunset 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【Multi】 【PTZ S】【PTZ U】	Schedule	→ 41
42	Add enable/disable setting to SNMP agent setting 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【Multi】 【PTZ S】【PTZ U】	SNMP (Network)	→ 42
43	Add corridor view mode to image capture mode 【fisheye】	Live image types -Image capture mode	→ 43
44	Add 1280x720 image capture size for Stream (1) and Stream (2) (4 mega pixel model only) 【Multi】	Stream Image/Audio - Image	→ 44
45	Add title edit icon next to camera title 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【Multi】 【PTZ S】【PTZ U】	“Live” page	→ 45

• Firmware Ver.2.32

No.	Functions	Item	Page
-	Add new model number: WV-S1136A, WV-S1536LA, WV-S1536LNA, WV-S1536LNA-B, WV-S1536LA-B, WV-S1536LNSA, WV-S1536LTNA, WV-S2136A, WV-S2136A-B, WV-S2136GA, WV-S2136GA-B, WV-S2136LA, , WV-S2136LA-B, WV-S2136LGA, WV-S2136LGA-B, WV-S2236LA, WV-S2236LA-B, WV-S2236LGA, WV-S2236LGA-B, WV-S2536LA, WV-S2536LGA, WV-S2536LGNA, WV-S2536LNA, WV-S2536LTNA, WV-S1536LTA, WV-S2536LTA, WV-S4156A, WV-S4176A, WV-S4556LA, WV-S4556LMA, WV-S4576LA, WV-S4576LMA For the above models, the previous firmware is not available earlier than Ver.2.32.	-	-

• Firmware Ver.2.33

No.	Functions	Item	Page
46	Add SD memory card file system format to the “SD memory card” settings 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【Multi】【PTZ S】【PTZ U】	Basic - SD memory card	→ 46

• Firmware Ver.2.40

No.	Functions	Item	Page
47	Fix frame rate not to be halved when setting GOP control “Advanced(Fixed GOP 60s w/1s key-frame)” 【Multi】	Image/Audio - Image	→ 47
48	Change the default of the preset sequence 【Multi】【PTZ S】	PTZ - Position	→ 48
49	Change the default of auto track data in video stream 【Multi】【PTZ S】	PTZ - Auto track data in video stream	→ 49

• Firmware Ver.2.40 (continued)

No.	Functions	Item	Page
50	Change the default setting for guest user to “Use” 【Multi】【PTZ S】	User authentication - Guest User	→ 50
51	Change the setting so that SNMP is not used in the default state (Off) 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【Multi】 【PTZ S】	Network	→ 51
52	About the effect of the maximum shutter setting on the auto track function 【fisheye】【miniAI】【SSeriesS】【SSeriesH】【Multi】 【PTZ S】	PTZ - Auto track setting screen PTZ - Auto track alarm setting screen	→ 52
53	About settings that are not applied when restoring setup data 【PTZ S】	Maintenance - Data	→ 53

• Firmware Ver.2.50

No.	Functions	Item	Page
54	Add SAN (Subject Alternative Name) entry field to CSR creation screen	Basic	→ 54
55	Change initial password for data encryption	Data encryption (User mng.)	→ 55
56	Change the names of HTTPS connection options / Change [TLS1.2] so that enable/disable are available	Advanced (Network)	→ 56
57	Add “Diag.” function to HTTP alarm notifications	Notification (Alarm)	→ 57
58	Add security-related settings function	User mng.	→ 58
59	Remove “MD5” from SNMP authentication	Advanced (Network)	→ 59
60	Remove “EAP-MD5” from the [EAP method] for IEEE 802.1X	IEEE 802.1X (User mng.)	→ 60
61	Improving H.265 displaying performance in “Live” page	–	→ 61

• Firmware Ver.2.60

No.	Functions	Item	Page
62	Add Auto position refresh	Cam. Function (PTZ)	→ 62

• Firmware Ver.2.70

No.	Functions	Item	Page
63	Changed the icon design of the buttons displayed on the Live page	“Live” page	→ 63
64	Changed the icon design of the buttons displayed on the JPEG playback page	“Playback” page	→ 64
65	Changed the icon design of the buttons displayed on the Stream playback page	“Playback” page	→ 65
66	Added Remote Monitoring connection function 【SSeriesS】【SSeriesH】【fisheye】【miniAI】【PTZ S】 【PTZ U】	Remote Monitoring (Network)	→ 66

• Firmware Ver.2.80

No.	Functions	Item	Page
67	Support for installation of server certificates in PKCS#12 format	Advanced (Network)	→ 67
68	Added [Host Name] to “IPv4 network” in Network settings	Network (Network)	→ 68
69	Added a link to the Detailed setting screen on the tablet device screen	Monitor images - Tablet device	→ 69

• Firmware Ver.2.84 (WV-U61300-ZYPR)

No.	Functions	Item	Page
–	New model number added WV-U61300-ZYPR	–	–
70	Add “Privacy Mode” button to camera control panel on “Live” page	Monitor images on a PC - About the “Live” page	→ 70
71	Configure alarm settings related to “Terminal 2”	Alarm	→ 71
72	Add setting of LED lighting control to “Terminal 2” in Alarm setting	Alarm	→ 72
73	Add “Privacy Mode On” and “Privacy Mode Off” to “Camera action on alarm” settings in Alarm setting	Alarm	→ 73
74	Add “Privacy Mode” to “Access Level” in user management	User mng.	→ 74

• Firmware Ver.2.84 (WV-U61300-ZYPR) (*continued*)

No.	Functions	Item	Page
75	Add "Privacy Mode" to "Schedule mode" settings in Schedule	Schedule	→ 75

• Firmware Ver.2.85

No.	Functions	Item	Page
76	Added [Mic input] button and [Audio output] button to the top of the Live page	"Live" page	→ 76
77	Added detailed settings for alarm types that link to HTTP alarm notifications	Notification (Alarm)	→ 77

• Firmware Ver.3.65

No.	Functions	Item	Page
78	Expanded the number of server certificates that can be installed on the HTTPS settings screen to a maximum of two	Advanced (Network)	→ 78
79	Added the checkbox "Apply "self-return time" to the return time after manual operation" when the Schedule [Operation mode] setting is set to "Auto pan" or "Preset sequence 1" 【PTZ S】【PTZ R】【PTZ B】	Schedule	→ 79
80	Added "Auto tracking area" to Auto track setting 【PTZ S】【PTZ R】	PTZ - Auto track setting screen	→ 80
81	Changed the test alarm notification for HTTP alarm notifications so that users can specify the Destination of Trap as well as the Trap Content	Notification (Alarm)	→ 81

1 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.

- 1 Add to the system log when recording stream fails to write

Category	Indication	Description
	<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.

2 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.

3 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.

4 SDK version display

(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.]

The firmware version and SDK version of the camera and ext. software have been added to the
software management screen.

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

[Installing the extension software](#)

Software mng.

Operation sched.

Control log

Unique information	
MPR ID	5A00-0106-450D-0001
Remaining ROM	85200 kbytes
Remaining RAM	47400 kbytes
SDK version	1.70
Firmware version	2.58

AI-VMD	Uninstall	
Software version	3.31	
Status	Before starting a trial	Registration >>
Setup menu	Setup >>	

AI Privacy Guard	Uninstall	
Software version	1.58	
Status	Before starting a trial	Registration >>
Setup menu	Setup >>	

AI Privacy Guard	Uninstall
Software version	1.58
Status	Operable
Setup menu	Setup >>

ファイルを選択

選択されていません

☐ Install new Ext. software

☒ AI-VMD....Upgrade

☐ AI Privacy Guard....Upgrade

☐ AI Privacy Guard....Upgrade

Execute

Use the latest edition of the extension software.

Please wait and do not operate the browser during install.

AI Processor Activation Key

Register the Registration Key

Set

*No dashes in between.

Unique information

[SDK version]

Display the version information of the SDK installed in the camera. If the ext. software you install requires a version number higher than the one shown here, the ext. software may not work properly.

[Software version]

The version information of the installed camera software will be displayed.

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.

5 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: " &

6 Change AI-VMD and AI People Detection to be pre-installed

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

Change the pre-installed Ext. software AI Video Motion Detection (“AI-VMD”) and AI Privacy Guard to AI-VMD and AI People Detection. Along with that, it is stated in “Note” that AI-VMD and AI People Detection are pre-installed.

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 and AI People Detection are already installed. For further information, refer to the respective operating instructions.
- The camera software upgrade will not change the installed Ext. software.

7 Add RAM capacity expansion mode

(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.]

RAM capacity expansion mode has been added to the software management screen. This mode increases the amount of RAM available to the Ext. software.

Unique information	
MPR ID	8108-8108-0010-8108
Remaining ROM	102288 bytes
Remaining RAM	51200 bytes
SDK version	1.00
Firmware version	2.00
RAM capacity expansion mode	☐ On ☒ Off

Unique information

[RAM capacity expansion mode]

Set On/Off whether to expand the RAM capacity.

Default: Off

Note

- When “RAM capacity expansion mode” is set to “On”, the recording function to SD memory card by this product cannot be used.
- If the minus is displayed in the “Remaining RAM” value, uninstall the ext. software or set the remaining RAM to “On”.
- Click the [Set] button to restart the product. After restarting, the product cannot be operated for about 2 minutes, same way as when the power is turned on.
- For information about the Ext. software that requires the “RAM capacity expansion mode” to be set to “On”, refer to our support website.

<https://i-pro.com/global/en/surveillance/i-pro-application-platform/application-list>

8 Add LLDP function

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

LLDP (Link Layer Discovery Protocol) has been added to [Advanced] of [Network]. Interoperability can be achieved by sending and receiving camera's device information to and from LLDP-compatible devices.

Network | **Advanced**

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

LLDP ☐ Enable ☒ Disable

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

Fabric Attach

Fabric Attach authentication key

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

Information on devices that can be connected via Fabric Attach is on our support website.
Note: It will not be displayed if not connected to the Internet.

- For use in Japan
https://i-pro.com/jp/ja/support_portal
- For use in a country other than Japan
<https://i-pro.com/global/en/surveillance/training-support/support>

Set

[LLDP]

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

Default: Disable

When set to "Enable", LLDP including TLVs with the checks in the table below will be sent.

End Of LLDPDU TLV	Chassis ID TLV	Port ID TLV	Time To Live TLV	Port Description TLV	System Name TLV	System Description TLV	System Capability TLV	Management Address TLV	IEEE802.3 Power via MDI TLV	Fabric Attach Element TLV
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Models that support PoE+ power supply will send LLDP including TLVs with the checks in the table below for PoE+ power supply even if set to "Disable".

End Of LLDPDU TLV	Chassis ID TLV	Port ID TLV	Time To Live TLV	Port Description TLV	System Name TLV	System Description TLV	System Capability TLV	Management Address TLV	IEEE802.3 Power via MDI TLV	Fabric Attach Element TLV
✓	✓	✓	✓						✓	

Fabric Attach

[Fabric Attach authentication key]

Enter the key to be used for Fabric Attach authentication. Note that this is valid only when “LLDP” is “Enable”.

Available number of characters: 0 – 32 characters (If Fabric attach authentication is not performed, leave it blank.)

Available characters: Alphanumeric characters

Default: None (blank)

Note

- Click the [Set] button to restart the product. After restarting, the product cannot be operated for about 2 minutes, just like when the power is turned on.
- For information about devices that can be connected using Fabric Attach, refer to our support website.

<https://i-pro.com/global/en/surveillance/training-support/support/technical-information>

9 Add SFTP periodic image transmission to “Event operation” of Easy Setup

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action])

With the addition of the SFTP function, SFTP periodic image transmission has been added to the “Event action” of Easy Setup.

Internet **Event action**

Configure the event action setting.
Specify the action to be taken when an alarm is detected and register the action in the schedule in order.

[Current settings]

Alarm	
Alarm condition	Off
Alarm	Off
Output terminal	Off
E-mail notification	Off

Schedule

Schedule	Off
----------	-----

[Notes]
• When the operating condition is changed, some settings will be cancelled. Confirm the settings after completing the setup.

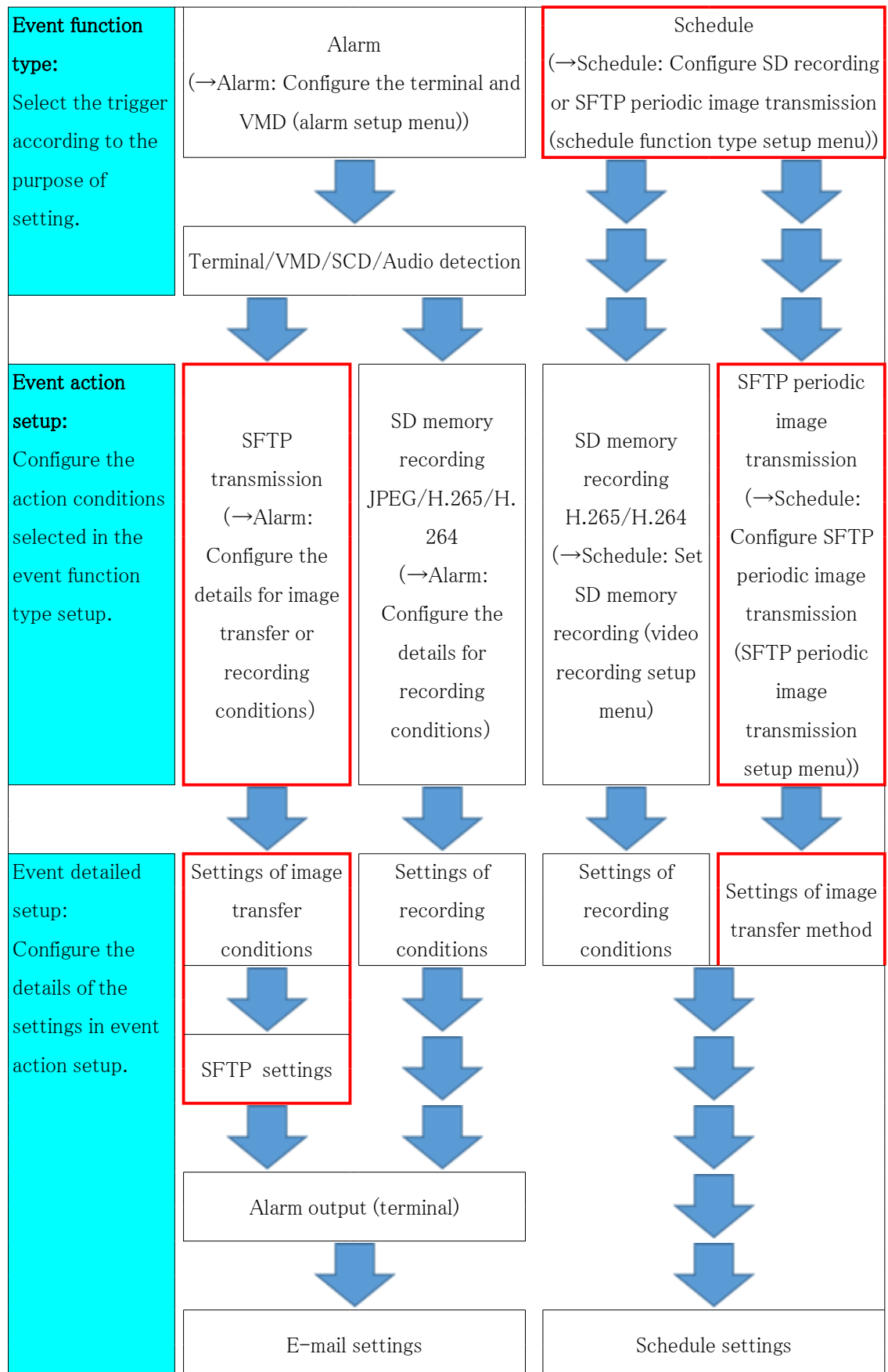
Next

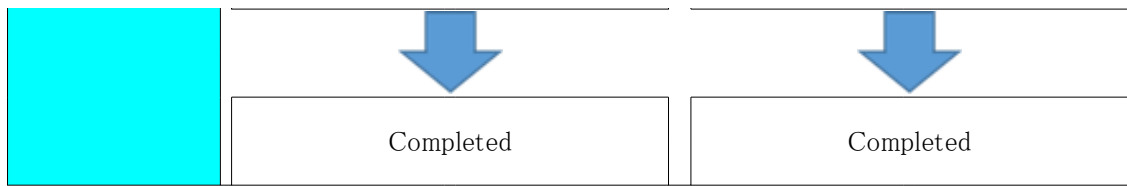
You can set event actions for SD schedule recording/SFTP periodic image transmission/alarm detection. Once the settings are completed in each setup menu, click the [Next] button to proceed. The setup flow is as follows.

Note

- If you click the [Next] button, the settings in the screen will be saved.

[Flow of event action setup](#)





Configure the schedule/alarm (event function type setup menu)

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]

- Configure the schedule/alarm (event function type setup menu))

Here, select the function type of the event.

Internet | **Event action**

Select an event that triggers the event action.
When it is needed to format the SD memory card, click the [Execute] button.

Trigger	Alarm ▼
SD memory card format	Execute

Next

[Trigger]

- **Alarm:** Select when setting the alarm detection settings.
- **Schedule:** Select during “SD memory recording” or “SFTP periodic image transmission”.
- **Default:** Alarm

[SD memory card format]

To format the SD memory card, click the [Execute] button.

Once you click the [Execute] button, the “Format” confirmation screen will be displayed.

If you click the [OK] button, the formatting will start.

Once the “Format” completion screen is displayed, press the button.

IMPORTANT

- All data saved on the SD memory card will be deleted when the SD memory card is formatted.
- Do not turn off the power of the camera during formatting.

[Next] button

If you select “Alarm”, and click the [Next] button, the alarm setup menu will be displayed.

(→ Alarm: Configure the terminal and VMD (alarm setup menu”))

If you select “Schedule”, and click the [Next] button, the schedule function type setup menu will be displayed. (→Schedule: Configure SD recording or “SFTP periodic image transmission (schedule function type setup menu)”)

Alarm: Configure the alarm function type (Alarm function type setup menu)

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]

- **Alarm: Configure the alarm function type (Alarm function type setup menu)**

Select the alarm function type as “SFTP transfer” or “SD memory recording”.

Configure “Recording format” of SD memory recording triggered by an alarm occurrence.

Internet **Event action**

Select an action to be taken when an alarm is detected.

Trigger	SFTP Transfer ▼
Recording format	Stream(1) ▼ (H.265/1920x1080)

Back Next

[Trigger]

- **SFTP transfer**: When an alarm occurs, performs SFTP Transfer of the JPEG image.
- **SD memory recording**: When an alarm occurs, records the image to the SD memory card.

Note

- “SFTP Transfer” for when an alarm occurs and “SFTP periodic image transmission” can both be performed simultaneously.
- If both “SFTP Transfer” for when an alarm occurs and “SFTP periodic image transmission” are set, “SFTP Transfer” will be given priority when an alarm occurs.

[Recording format]

Select the recording format by selecting from “JPEG(1)”, “JPEG(2)”, “Stream(1)”, “Stream(2)”, “Stream(3)” and “Stream(4)”.

[Next] button

If you select “SFTP Transfer” for “Trigger” and click the [Next] button, the SFTP transfer setup menu will be displayed. (→“Set SFTP transfer (SFTP transfer setup menu)”)

If you select “SD memory recording” for “Trigger”, select “JPEG(1)” or “JPEG(2)” for “Recording format”, and then click the [Next] button, the JPEG recording setup menu will be

displayed. (→Configure SD memory recording (JPEG) (JPEG recording setup menu))

If you select “SD memory recording” for “Trigger”, select “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” for “Recording format”, and then click the [Next] button, the video recording setup menu will be displayed. (→“Configure SD memory recording (H.265 or H.264) (video recording setup menu)”)

Note

- If you click the [Next] button, the setting items in the screen are saved.
- Even when the audio detection alarm is set, alarm recording onto the SD memory card will not be performed.

[Back] button

If you click the [Back] button the alarm setup menu will be displayed. (→Alarm: “Configure the terminal and VMD (alarm setup menu)”)

Alarm: Configure the details for image transfer or recording conditions

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action])

- Alarm: Configure the details for recording conditions)

(1) [Set SFTP transfer \(SFTP transfer setup menu\)](#)

SFTP transfer when an alarm is detected is set in this section.

Internet
Event action

Set the method of image transmission to the SFTP server when an alarm is detected.

SFTP alarm setting			
Alarm image SFTP transmission	☐ On ☒ Off		
Directory name			
File name	☒ Terminal 1 ☒ Terminal 2 ☒ Terminal 3 ☒ VMD ☒ SCD ☒ Audio detection * For alarms by the “Ext. software”, alarm images will be transmitted only by configuring the alarm image SFTP transmission.		
Pre alarm	Transmission interval 1fps	Maximum number of images 10 pic	Recording duration 0s
Post alarm	Transmission interval 1fps	Number of images 100 pics	Recording duration 100s
Image capture size	JPEG(2) (640x360)		

SFTP server setting	
SFTP server address	Example of entry: 192.168.0.10
Port number	22 (1-65535)
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rpbW6dnap6P743uiMV0cf0
User name	
Password	

Back
Next

Refer to [“12. Add SFTP image transmission function”](#) for information about how to set the above screen.

[Next] button

If you select “Alarm output” in the alarm setup menu and click the [Next] button, the alarm output setup menu will be displayed. (→“Alarm: Configure the output terminal”)

If you click the [Next] button in the alarm setup menu without selecting “Alarm output”, the mail setup menu will be displayed. (→“Alarm: configure the mail notifications and mail server”)

Note

- If you click the [Next] button, the setting items in the screen are saved.

[Back] button

If you click the [Back] button, the alarm function type setup menu will be displayed. (→“Alarm: Configure the alarm function type (Alarm function type setup menu)”)

Schedule: Configure SD recording or SFTP periodic image transmission (schedule function type setup menu)

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action] - Schedule: Configure SD recording or SFTP periodic image transmission (schedule function type setup menu))

Here, the schedule type is selected as “SD memory recording” or “SFTP periodic image transmission”.

Event action	
Select an action to be taken when an alarm is detected.	
Trigger	SD memory recording ▼
Recording format	Stream(1) ▼ (H.265/1920x1080)
BackNext	

[Trigger]

- **SD memory recording:** Records the H.265 (or H.264) image in the SD memory card at the scheduled time.
- **SFTP periodic image transmission:** Transmits the JPEG image to the SFTP server at the scheduled time.

[Recording format]

When “SD memory recording” is selected for “Trigger”, “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” can be selected for the recorded image.

[Next] button

If you select “SD memory recording” and click the [Next] button, the video recording setup menu will be displayed. (→“Schedule: Set SD memory recording (video recording setup menu)”)

If you select “SFTP periodic image transmission” and click the [Next] button, the SFTP periodic image transmission setup menu will be displayed. (→“Schedule: Configure SFTP periodic image transmission (SFTP periodic image transmission setup menu)”)

Note

- If you click the [Next] button, the setting items in the screen are saved.

[Back] button

If you click the [Back] button, the event function type setup menu will be displayed. (→ “Configure the schedule/alarm (event function type setup menu)”)

Note

- “SFTP periodic image transmission” and “SFTP img. trans.” for when an alarm occurs can both be performed simultaneously.
- If you select “SD memory recording”, the “SFTP periodic image transmission” setting will be canceled.

Schedule: Configure SFTP periodic image transmission (SFTP periodic image transmission setup menu)

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action])

The SFTP periodic image transmission is configured in this section.

- To configure SFTP periodic image transmission settings:

Internet

Event action

Configure the SFTP server information and the method of JPEG image transmission to the SFTP server.

SFTP periodic image transmission

SFTP periodic image transmission

☐ On

☒ Off

Directory name

File name

☒ Name w/time&date

☐ Name w/o time&date

Transmission interval

1s

Image capture size

JPEG(2) (640x360)

SFTP server setting

SFTP server address

Example of entry: 192.168.0.10

Port number

22 (1-65535)

Host key hash

SHA256:
Example of entry: dqVcdVZ/2ySO5tz/R6YR+rpbW6dnap6P743uiMV0cf0

User name

Password

Back

Set

Refer to [“12. Add SFTP image transmission function”](#) for information about how to configure the above screen.

[Set] button

“SFTP periodic image transmission” is displayed as “Off”.

Click the “Set” button to save the settings.

[Next] button

“SFTP periodic image transmission” is displayed as “On”.

If you click the [Next] button, the setup menu to set the SFTP periodic image transmission schedule will be displayed. (→“To configure SFTP periodic image transmission schedule settings”)

Note

- If you click the [Next] button, the setting items in the screen are saved.

[Back] button

If you click the [Back] button, the schedule function type setup menu will be displayed. (→

“Schedule: Configure SD recording or SFTP periodic image transmission (schedule function type setup menu)”)

- To configure SFTP periodic image transmission schedule settings:

Internet

Event action

Select "SFTP periodic image transmission" for "Schedule mode" of the schedule (1 - 5) to be registered, and set the recording schedule.
When "SFTP periodic image transmission" is not select for "Schedule mode", image transmission will not be performed.

Schedules

Schedule 1 (White) 	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00:00 - 00:00:00
Schedule 2 (Blue) 	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00:00 - 00:00:00
Schedule 3 (Green) 	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00:00 - 00:00:00
Schedule 4 (Red) 	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00:00 - 00:00:00
Schedule 5 (Black) 	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00:00 - 00:00:00

0:006:0012:0018:0024:00

Mon

Tue

Wed

Thu

Fri

Sat

Sun

The color of each schedule is not linked with the area color of "VMD area".
When "VMD permission" is set, the VMD functions in all the areas set with "VMD area".
"VMD permission" and "SCD permission" are required when assigning the period to be detected. Setting is not necessary when detection at any time.

Back

Set

35

Refer to “Configure the settings relating to the schedules [Schedule]” for information about how to set the above screen.

[Set] button

If you click the [Set] button, setup will be completed.

[Back] button

If you click the [Back] button, the SFTP periodic image transmission setup menu will be displayed.

(→“Schedule: Configure SFTP periodic image transmission (SFTP periodic image transmission setup menu)”)

Note

- SFTP periodic image transmission will not be performed when “SFTP periodic image transmission” is not selected in “Schedule mode”.

10 Add “SFTP periodic image transmission error” to “Save trigger” of SD memory card

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

With the addition of the SFTP function, “SFTP periodic image transmission error” has been added to the “Save trigger” of the Recording stream.

Recording stream

[Save trigger]

Select a trigger to save images on the SD memory card from the following.

- **SFTP periodic image transmission error:** Saves images when images have failed to transmit to the SFTP server by the SFTP periodic image transmission function. Available only for the “JPEG (1)” or “JPEG(2)” images.
- **Alarm input:** Saves images at an alarm occurrence.
- **Manual:** Saves images manually.
- **Schedule:** Saves images in accordance with the settings for “Schedule” (→“Configure the settings relating to the schedules [Schedule]”). Available only for the “Stream (1)”, “Stream(2)”, “Stream(3)”, or “Stream (4)” images.
- **Default:** Manual

If you have selected “Alarm input” in the [Save trigger], you can select the alarm type from the following:

- **Terminal 1:** Save the image when an alarm occurs in Terminal 1.
- **Terminal 2:** Save the image when an alarm occurs in Terminal 2.
- **Terminal 3:** Save the image when an alarm occurs in Terminal 3.
- **VMD:** Save the image when motion detection occurs.
- **SCD:** Save the image when SCD occurs.
- **Command alarm:** Save the image when a command alarm is entered.

Note

- When “Stream (1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” is selected for [Recording format], “SFTP 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.
- Alarm recording is not available for streams that are being distributed in a state where “Advanced (Fixed GOP 60s w/1s key-frame)” is selected for [GOP control].
- No image will be recorded at the time of an audio detection alarm occurrence.

11 Add link to SFTP settings in Camera action on alarm

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to the camera action on alarm occurrence [Alarm])

Click the [Alarm] tab on the “Alarm” page. (→“How to display the setup menu”, “How to operate the setup menu”) The settings related to the camera action on alarm can be configured in this section.

Camera action on alarm	
Alarm E-mail notification	E-mail server >>
Alarm image SFTP transmission	SFTP setup >>
Alarm image recording(SD memory card)	SD memory card setup >>
TCP alarm notification	TCP alarm notification >>
HTTP alarm notification	HTTP alarm notification setup >>
SNMP transmission upon alarm detection	To SNMP setting

Set

[Alarm E-mail notification]

Click “E-mail server >>” to display the setup menu that can configure the settings relating to E-mail notification when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to alarm E-mail notifications”)

[Alarm image SFTP transmission]

Click “SFTP setup >>” to display the setup menu that can configure the settings relating to SFTP transmission when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to SFTP transmissions of alarm images”)

[Alarm image recording (SD memory card)]

Click “SD memory card setup >>” to display the setup menu that can configure the settings relating to recording images on an SD memory card when an alarm occurs. The setup menu will be

displayed in a newly opened window. (→“Configure settings relating to recording to an SD memory card when an alarm occurs”)

[TCP alarm notification]

Click “TCP alarm notification >>” to display the setup menu that can configure the settings relating to transmitting TCP alarm notifications when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to TCP alarm protocol notification when an alarm occurs”)

[HTTP alarm notification]

Click “HTTP alarm notification setup >>” to display the setup menu that can configure the settings relating to transmitting HTTP alarm notifications when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to HTTP alarm notification when an alarm occurs”)

[SNMP transmission upon alarm detection]

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. (→“Configure settings relating to SNMP transmissions of alarm images”)

Configure settings relating to SFTP transmissions of alarm Images

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to the camera action on alarm occurrence [Alarm])

Click “SFTP setup >>” of “Camera action on alarm” on the [Alarm] tab of the “Alarm” page. (→“Configure the settings relating to the camera action on alarm occurrence [Alarm]”)

Refer to “[12. Add SFTP image transmission function](#)” for information on configuration for these settings.

11 Add link to SFTP settings in Camera action on alarm

SFTP alarm setting

Alarm image SFTP transmission	☐ On ☒ Off
Directory name	
File name	☒ Terminal 1☒ Terminal 2☒ Terminal 3 ☒ VMD☒ SCD☒ Command alarm☒ Audio detection * For alarms by the "Ext. software", alarm images will be transmitted only by configuring the alarm image SFTP transmission.
Pre alarm	Transmission interval Maximum number of images Recording duration 1fps 0 pic 0s
Post alarm	Transmission interval Number of images Recording duration 1fps 100 pics 100s
Image capture size	JPEG(2) (640x360)

SFTP server setting

SFTP server address	Example of entry: 192.168.0.10
Port number	22 (1-65535)
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rpbW6dnap6P743uiMV0cf0
User name	
Password	

Set

Close

12 Add SFTP image transmission function

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

SFTP (SSH File Transfer Protocol) function has been added to securely send images to the server by using SSH (Secure Shell) encrypted data stream. It has the following two transmission functions.

- Send images when an alarm occurs
- Send images periodically

Network

Advanced

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

SFTP alarm setting

Alarm image SFTP transmission	☐ On ☒ Off
Directory name	
File name	 ☒ Terminal 1 ☒ Terminal 2 ☒ Terminal 3 ☒ VMD ☒ SCD ☒ Command alarm ☒ Audio detection * For alarms by the "Ext. software", alarm images will be transmitted only by configuring the alarm image SFTP transmission.
Pre alarm	Transmission interval: 1fps Maximum number of images: 0 pic Recording duration: 0s
Post alarm	Transmission interval: 1fps Number of images: 100 pics Recording duration: 100s
Image capture size	JPEG(2) (640x360)

SFTP periodic image transmission

SFTP periodic image transmission	☐ On ☒ Off
Directory name	
File name	 ☒ Name w/time&date ☐ Name w/o time&date
Transmission interval	1s
Image capture size	JPEG(2) (640x360)

SFTP server setting

SFTP server address	 Example of entry: 192.168.0.10
Port number	22 (1-65535)
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rpbW6dnap6P743uiMV0cf0
User name	
Password	

Set

SFTP alarm

[Alarm image SFTP transmission]

Select “On” or “Off” to determine whether or not to transmit the alarm image to the SFTP server.

- **Default:** Off

[Directory name]

Enter the directory name where the alarm images are to be saved.

For example, enter “/ALARM” to designate the directory “ALARM” under the root directory of the SFTP server.

- **Available number of characters:** 1 – 256 characters
- **Unavailable characters:** “ & ;

[File name]

Enter the file name used for the alarm image to be transmitted to an SFTP server. The file name will be as follows.

File name: [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)”] + “Serial number”

- **Available number of characters:** 1 – 32 characters
- **Unavailable characters:** “ & * / : ; < > ? ¥ |
- **Terminal 1:** Transmit the image to the SFTP server when an alarm occurs in Terminal 1.
- **Terminal 2:** Transmit the image to the SFTP server when an alarm occurs in Terminal 2.
- **Terminal 3:** Transmit the image to the SFTP server when an alarm occurs in Terminal 3.
- **VMD:** Transmit the image to the SFTP server when motion is detected.
- **SCD:** Transmit the image to the SFTP server when SCD (scene change detection) occurs.
- **Audio detection:** Transmit the image to the SFTP server when audio detection occurs.
- **Command alarm:** Transmit the image to the SFTP server when a command alarm is entered.

[Pre alarm]

- **Transmission interval**

Select the update interval of images before an alarm occurs from the following.

When 30fps mode or 15fps mode is selected for [Image capture mode]:

0.1fps/ 0.2fps/ 0.33fps/ 0.5fps/ 1fps

When 25fps mode or 12.5fps mode is selected for [Image capture mode]:

0.08fps/ 0.17fps/ 0.28fps/ 0.42fps/ 1fps

- **Default:** 1fps

- **Maximum number of images**

Select the number of images to be transmitted from the following.

0pics/ 1pic/ 2pics/ 3pics/ 4pics/ 5pics/ 6pics*/ 7pics*/ 8pics*/ 9pics*/ 10pics*/ 20pics*/ 30pics*/ 40pics*/ 50pics*

- **Default:** 0 pics

- **Recording duration**

The recording duration, which changes according to the configured “Transmission interval” and “Maximum number of images”, of images recorded before an alarm occurs is displayed.

Note

- When “JPEG(1)” is selected for the capture size of the image to be transmitted, pre alarm is unavailable if the image capture size of “JPEG(1)” is “1920x1080”.
- When “On” is selected for “Image compression rate upon alarm detection”, only post alarm recorded images are compressed. Compression is not applied to pre alarm recorded images.
- When a selection with an asterisk (*) on the right of it is selected for “Maximum number of images” of [Pre alarm], the specified number of images may not be able to be sent depending on the image capture size and image quality. The following table shows the maximum number of images that can be sent for pre alarm.

Image capture size	Image quality									
	0	1	2	3	4	5	6	7	8	9
1280x960	5	6	7	8	10	10	10	20	30	40
1280x720	7	8	10	10	10	20	20	30	40	50
VGA	10	20	20	30	30	40	50	50	50	50
640x360	20	30	40	50	50	50	50	50	50	50
QVGA	40	50	50	50	50	50	50	50	50	50
320x180	50	50	50	50	50	50	50	50	50	50

[Post alarm]

- **Transmission interval**

Select the transmission interval for the alarm image transmission to the FTP server from the following.

When 30fps mode or 15fps mode is selected for [Image capture mode]:

0.1fps/ 0.2fps/ 0.33fps/ 0.5fps/ 1fps

When 25fps mode or 12.5fps mode is selected for [Image capture mode]:

0.08fps/ 0.17fps/ 0.28fps/ 0.42fps/ 1fps

- **Default:** 1fps

- **Number of images**

Select the number of images to be transmitted from the following.

1pic/ 2pics/ 3pics/ 4pics/ 5pics/ 6pics/ 7pics/ 8pics/ 9pics/ 10pics/ 20pics/ 30pics/ 50pics/

100pics/ 200pics/300pics/ 500pics/ 1000pics/ 1500pics/ 2000pics/ 3000pics

- **Default:** 100pics

- **Recording duration**

Approximate time to be taken to save the set “Number of images” with the set “Transmission interval” will be displayed.

- **[Image capture size]**

Select the image capture size of images transmitted when an alarm occurs from the following.

JPEG(1)/JPEG(2)

- **Default:** JPEG(2)

SFTP periodic image transmission

[SFTP periodic image transmission]

Select “On” or “Off” to determine whether or not to transmit images using the SFTP periodic image transmission function.

When “On” is selected, it is necessary to configure the settings of the SFTP server.

- **Default:** Off

IMPORTANT

- When using SFTP periodic image transmission, it is necessary to configure the schedule settings of SFTP periodic image transmission on the [Schedule] tab of the “Schedule” page. (→ “Configure the settings relating to the schedules [Schedule]”)

[Directory name]

Enter the directory name where the images are to be saved.

For example, enter “/img” to designate the directory “img” under the root directory of the SFTP server.

- **Available number of characters:** 1 – 256 characters
- **Unavailable characters:** “ & ;
- **Default:** None (blank)

[File name]

Enter the file name (name of the image file to be transmitted) and select the naming option from the following.

- **Name w/time&date:** File name will be [“Entered file name” + “Time and date (year/ month/ day/ hour/minute/ second)” + “Serial number (starting from 00)”].

- **Name w/o time&date:** File name will be the characters entered for “File name” only. When “Name w/o time&date” is selected, the file will be overwritten each time a file is newly transmitted.
- **Available number of characters:** 1 – 32 characters
- **Unavailable characters:** “ & ; : / * < > ? ¥ |
- **Default:** None (blank)

Note

- When “Name w/time&date” is selected, the file name will be [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)” + “Serial number (starting from 00)”] + “s” during summer time.

[Transmission interval]

Select the interval for the FTP periodic image transmission from the following.

1s/ 2s/ 3s/ 4s/ 5s/ 6s/ 10s/ 15s/ 20s/ 30s/ 1min/ 2min/ 3min/ 4min/ 5min/ 6min/ 10min/
15min/ 20min/ 30min/ 1h/ 1.5h/ 2h/ 3h/ 4h/ 6h/ 12h/ 24h

- **Default:** 1s

[Image capture size]

Select the image capture size of images to be transmitted from the following.

JPEG(1)/JPEG(2)

- **Default:** JPEG(2)

SFTP server

[SFTP server address]

Enter the IP address or the host name of the SFTP server.

- **Available number of characters:** 1 – 128 characters
- **Available characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

IMPORTANT

- When entering the host name for “SFTP server address”, it is necessary to configure the DNS settings on the [Network] tab of the “Network” page. (→“Configure the network settings [Network]”)

[Port number]

Enter a control port number to be used for the FTP server.

- **Available port number:** 1–65535
- **Default:** 22

The following port numbers are unavailable since they are already in use.

20, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 162, 443, 995, 10669, 10670

[Host key hash]

Enter the hash value of the public key of the SFTP server.

- **Available number of characters:** 43 – 44 characters
- **Available characters:** Alphanumeric characters, +, /, =

[User name]

Enter the user name (login name) to access the FTP server.

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

[Password]

Enter the password to access the FTP server.

- **Available number of characters:** 0 – 32 characters
- **Unavailable characters:** " &

13 Add SFTP periodic image transmission to “Schedule mode” of Schedule

(Operating Instructions - Configure the settings relating to the schedules [Schedule])

“SFTP periodic image transmission” was added to “Schedule mode” of the schedule setting.

[Schedule mode]

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.
- **Access permission:** Users whose access level is set to “2. Camera control” and “3. Live only” on the [User auth.] tab (→“Configure the settings relating to the user authentication [User auth.]”) can access the camera only in the period of schedule.
- **Recording to SD (Recording stream):** The SD recording will be performed at the designated time in the schedule. Further, the “Recording format” is enabled only when there is a stream.
- **Image adjust 1:** Scene 1: Images are set to the image settings of “Scene file 1” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.
- **Image adjust 2:** Scene 2: Images are set to the image settings of “Scene file 2” at the designated time in the schedule. When the designated time for the schedule finishes, images

are set to the image settings of “Scene file is not applied”.

- **Image adjust 3:** Scene 3: Images are set to the image quality settings of “Scene file 3” at the designated time in the schedule. Once designated time in the schedule is over, the image quality setting is set to “Scene file is not applied”.
- **Image adjust 4:** Scene 4: Images are set to the image quality settings of “Scene file 4” at the designated time in the schedule. Once designated time in the schedule is over, the image quality setting is set to “Scene file is not applied”.
- **SFTP periodic image transmission:** SFTP periodic image transmission will be performed at the designated time in the schedule.
- **E-mail permission:** While the schedule is set, e-mail notification is sent when alarm is input.
- **Reboot:** The camera reboots at the scheduled time. Can only be selected with Schedule 5.

Note

- Select “On” for “User auth.” on the [User auth.] tab of “User mng.” page (→ “Configure the settings relating to the user authentication [User auth.]”) and “Off” for “Host auth.” on the “Host auth.” page (→ “Configure the settings relating to the host authentication [Host auth.]”) to validate “Access permission”.
- When selecting “Recording to SD (Recording stream)”, select “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” for [Recording format] on the [SD memory card] tab and select “Schedule” for “Save trigger”. (→ [Save trigger] in “Configure the settings relating to the SD memory card [SD memory card]”)

14 Using the recording function is changed when the Ext. software mode is On

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

Even if the Ext. software mode is set to On, the recording function to SD memory card by this product function can be used.

[Ext. software mode]

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

- **On:** The Ext. software can use the SD memory card of this product.
- **Off:** The Ext. software cannot use the SD memory card of this product.

Default: Off

Note

- For information about the software, refer to our support website
<https://i-pro.com/global/en/surveillance/training-support/support/technical-information>
<Control No.: C0103>~>~
 - When the Ext. software mode is set from On to Off, it is recommended to format the SD memory card.
- When operating the Ext. software that uses an SD memory card, the operation of the recording function to the SD memory card cannot be guaranteed.

15 Change the initial value of “Overwrite” of SD memory card to On

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

[Overwrite]

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

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

16 Add NTP test function

(Operating Instructions - Configuring the network settings [Network] - Configure advanced network settings [Advanced] - Configure the settings relating to the NTP server)

Add a test function for time synchronization to check if it can communicate with NTP server.

Network

Advanced

SMTP(E-mail) | SFTP | NTP | UPnP | HTTPS | DDNS | SNMP | QoS | SRTP | MQTT | LLDP

NTP

Time adjustment	☒ Manual ☐ Synchronization with NTP server
NTP server address setting	Manual
NTP server address	Example of entry: 192.168.0.10
NTP port	123 (1-65535)
Time adjustment interval	1h
NTP test	Execute

Set

[NTP test]

Select “Synchronization with NTP server” for “Time adjustment”, set the NTP server information, and then click the “Execute” button. You can communicate with the NTP server, synchronize the time, and check the NTP operation.

Note

- If the NTP test succeeds, “NTP time correction has succeeded.” is displayed.
- If the NTP test fails, “NTP time correction has failed.” is displayed.
- When “Time adjustment” is set to “Manual”, the “Execute” button of NTP test is grayed out.
- When “Time adjustment” is set to “Synchronization with NTP server” and the “NTP server address” is not set, the “Execute” button for the NTP test will be grayed out.

17 Add TLS settings to HTTPS

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

Add TLS1.1, TLS1.2 and TLS1.3 selection items to the HTTPS connection method.

The screenshot shows the 'Advanced' tab of the Network settings interface. At the top, there are links for various protocols: SMTP(E-mail), SFTP, NTP, UPnP, HTTPS (highlighted in blue), DDNS, SNMP, QoS, SRTP, MQTT, and LLDP. Below these links is the 'HTTPS' section. It contains a 'Connection' dropdown menu currently set to 'HTTP'. A note states: 'When "HTTPS" is selected for "Connection", the maximum bandwidth(bit rate) is limited to 32Mbps.' Below the dropdown are three checkboxes for TLS versions: TLS1.1 (unchecked), TLS1.2 (checked), and TLS1.3 (checked). These checkboxes are highlighted with a red rectangle. Other settings include 'Select certificate' (Pre-installed), 'HTTPS port' (443), and a 'Pre-installed certificate' section with buttons for 'Download root certificate', 'CA Certificate', 'CRT key generate', 'Generate Certificate Signing Request', and 'CA Certificate install'. The 'CA Certificate install' button is disabled with the text 'ファイルを選択 選択されていません'. At the bottom, there is an 'Information' row showing 'Invalid' and buttons for 'Confirm' and 'Delete'. A large 'Set' button is at the very bottom.

[HTTPS – Connection]

Select the protocol used to connect the camera.

- **HTTP:** HTTP and HTTPS connections are available.
- **HTTPS:** Only the HTTPS connection is available.
- **Default:** HTTP

Select the TLS to use when HTTPS is selected.

- **TLS1.1:** Enable/Disable.
- **TLS1.2、 TLS1.3:** Always enabled and cannot be disabled.
- **Default:** TLS1.1: Disable、 TLS1.2: Enable, TLS1.3: Enable

Note

- To change to an HTTPS connection when HTTP is selected, perform HTTPS connection settings first.
The HTTPS connection will be available even if the setting is changed to HTTP afterwards.

18 Add MQTT function

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

MQTT (Message Queueing Telemetry Transport) has been added to “Advanced” of “Network”.

When an alarm occurs, the MQTT server can be notified of the event action by the alarm.

Network		Advanced	
SMTP(E-mail) SFTP NTP UPnP HTTPS DDNS SNMP QoS SRTSP MQTT LLDP			
MQTT settings		☐ On ☒ Off	
Server	Address		
	Port number	8883 (1-65535)	
	Protocol	MQTT over SSL	
	User name		
	Password		
Root CA certificate	Installation	ファイルを選択 選択されていません Execute	
	Information	Invalid Confirm Delete	
	Server certificate verification	☒ Enable ☐ Disable When the server certificate verification is enabled, it is necessary to install a root CA certificate.	
Notification setting		Enable/Disable	Notification string
Alarm	☐ Terminal 1		Topic /-PRO/NetworkCamera/Alarm/Terminal/1 Payload terminal alarm 1 QoS 1 ☐ Retain
	☐ Terminal 2		Topic /-PRO/NetworkCamera/Alarm/Terminal/2 Payload terminal alarm 2 QoS 1 ☐ Retain
	☐ Terminal 3		Topic /-PRO/NetworkCamera/Alarm/Terminal/3 Payload terminal alarm 3 QoS 1 ☐ Retain
	☐ VMD		Topic /-PRO/NetworkCamera/Alarm/VideoMotionC Payload VMD alarm QoS 1 ☐ Retain
	☐ Audio detection		Topic /-PRO/NetworkCamera/Alarm/AudioDetecti Payload audio QoS 1 ☐ Retain
	☐ Command alarm		Topic /-PRO/NetworkCamera/Alarm/Command Payload cmd QoS 1 ☐ Retain
Set			

[MQTT settings]

Set On/Off whether to enable/disable the MQTT function.

When set to On, or it is On when the camera starts up, it will connect to the set server.

When the set alarm occurs, the settings will be notified to the server.

Default: Off

Server

[Address]

Enter the IP address or host name of the MQTT server to be notified when an alarm occurs.

Available number of characters: 1 – 128 characters

Available characters: Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-)

Default: None (blank)

[Port]

Enter the port number of the MQTT server.

Available port number: 1 – 65535

Default: 8883

The following port numbers cannot be set because they are used by this product.

20, 21, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 162, 443, 554, 995, 10669, 10670

[Protocol]

Select the protocol to use when connecting to an MQTT server from MQTT over SSL/MQTT over TCP.

Default: MQTT over SSL

[User name]

Enter the user name to access the MQTT server.

Available number of characters: 0 – 32 characters

Unavailable characters: " & ; ¥

[Password]

Enter the password to access the MQTT server.

Available number of characters: 0 – 32 characters

Unavailable characters: " &

Root CA certificate**[Install]**

Install the root CA certificate issued by the certification authority.

In the “Open File Dialog” that appears when you click the [Choose File] button, select the root CA certificate file issued by the certification authority, and then click the [Execute] button to install the root CA certificate.

The data format of the root CA certificate is PEM format or DER format.

[Information]

The root CA certificate information is displayed.

Invalid: The root CA certificate is not installed.

Root CA certificate host name: Indicates that the certificate is installed.

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

[Delete] The CA certificate will be deleted with the button.

[Server certificate verification]

When [Protocol] is set to “MQTT over SSL” and [Server certificate verification] is set to “Enable”, the server certificate is verified using the root CA certificate registered during the SSL connection.

Default: Enable

Note

- When [Server certificate verification] is set to “Enable”, install the root CA certificate.

Notification setting**[Alarm]**

Check the alarm events to be notified to the MQTT server.

Terminal 1: Notifies the MQTT server when an alarm occurs at terminal 1.

Terminal 2: Notifies the MQTT server when an alarm occurs at terminal 2.

Terminal 3: Notifies the MQTT server when an alarm occurs at terminal 3.

VMD: Notifies the MQTT server when motion detection occurs.

Audio detection: Notifies the MQTT server when audio detection occurs.

Command alarm: Notifies the MQTT server when a command alarm is entered.

[Topic]

Set the MQTT topic name to be sent. Topics have a hierarchical structure separated by “/”.

Available number of characters: 1 – 128 characters

Available characters: Alphanumeric characters, "/"

Default :

Terminal 1: i-PRO/NetworkCamera/Alarm/Terminal/1

Terminal 2: i-PRO/NetworkCamera/Alarm/Terminal/2

Terminal 3: i-PRO/NetworkCamera/Alarm/Terminal/3

VMD: i-PRO/NetworkCamera/Alarm/VideoMotionDetection

Audio detection: i-PRO/NetworkCamera/Alarm/AudioDetection

Command alarm: i-PRO/NetworkCamera/Alarm/Command

[Payload]

Set the MQTT message payload.

Available number of characters: 1 – 128 characters

Available characters: Alphanumeric characters

Default :

Terminal 1: terminal alarm 1

Terminal 2: terminal alarm 2

Terminal 3: terminal alarm 3

VMD: VMD alarm

Audio detection: audio

Command alarm: cmd

[QoS]

Select the QoS level from 0, 1, 2. The communication quality improves in the order of $0 < 1 < 2$.

0: The message is delivered at most once with QoS0. There is no guarantee that the message will reach the server.

1: The message is delivered at least once with QoS1. The message is guaranteed to reach the destination, but may be duplicated.

2: The message is delivered exactly once with QoS2. It guarantees that the message arrives just once.

Default : 1

[Retain]

Check this box if you want the MQTT server to save the last notified message.

Default: Unchecked

19 Add a system log when MQTT function fails

(Operating Instructions - Others - About the displayed system log)

Add a system log when an error occurs in the MQTT function.

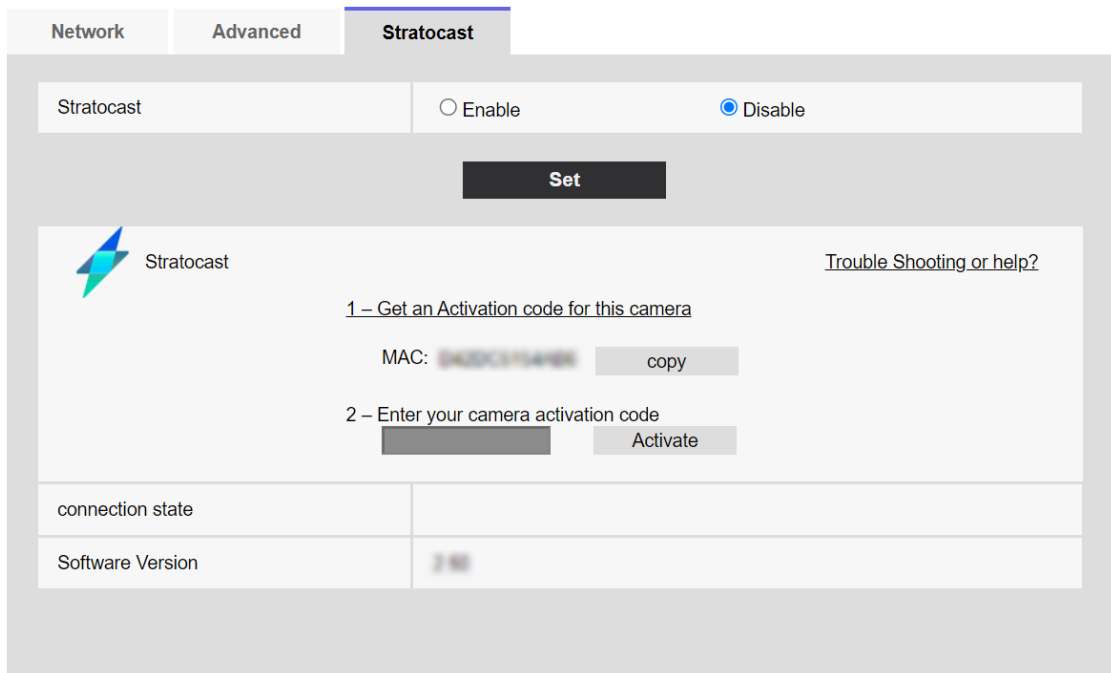
Error display related to MQTT

Category	Indication	Description
MQTT	<MQTT> Connection error	When the connection to the server fails, certification verification fails, or is disconnected (except for disconnections from the camera due to setting change)
	<MQTT> Notification error	When publishing to the server fails

20 Add Genetec Stratocast Service

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

Add settings for connecting to Genetec Stratocast.



Stratocast is a cloud-based video monitoring service provided by Genetec.
You can register the network camera on the cloud server and check the camera images.

[Stratocast]

Enables/disables the Stratocast connection function.
Enable: Enables the connection function to Stratocast.
Disable: Disables the connection function to Stratocast.
Default: Disable

Note

- When “Stratocast” is set to “Enable”, the [Stream encoding format] of [Stream (1)] is set to “H.264”.
- When “Image capture mode” is set to “4: 3 mode (12.5fps mode)” or “4: 3 mode (15fps mode)”, you cannot see live images in Stratocast.

[Trouble Shooting or help?]

The Stratocast help page will appear in your browser. This help site is Genetec web site.

[Get an Activation code for this camera]

The browser will launch and the Stratocast portal site will open. Enter the camera information in the portal site. Once completed, an Activation code will be displayed.

[Enter your camera activation code]

Enter the Activation code obtained from the Stratocast portal site.

[Connection state]

Indicates the connection status between the camera and Stratocast.

Activation Started: The connection to Stratocast has started.

Time Synchronization failed: Failed to connect to the Stratocast NTP server.

Registration failed: Failed to register the camera with the Enrollment service.

Device unregistered: The camera has been unregistered.

Device Registered: The camera has been registered with Stratocast.

Balancer failed: Failed to connect to Device Load Balancer.

Device Failed to Connect: Failed to connect to Stratocast.

Device Connected: The camera is connected to Stratocast.

Device Disconnected: The connection between the camera and Stratocast has been lost.

[Software Version]

The version of the camera firmware installed in the camera is displayed.

To register the Genetec Stratocast Service, follow the steps below.

1. Enable the Stratocast connection function.
 - Select “Enable” in “Stratocast” and click “Set”.

Note

Do not close this window until the camera registration to Stratocast is completed.

2. Log in to Stratocast.

- Click “1 – Get an Activation code for this camera” to connect to the Stratocast portal site with a browser.

- Log in using your registered Genetec account.
3. Follow the instructions on the Stratocast portal site to register the camera and obtain an Activation code.
- Follow the instructions on the Stratocast portal site screen to register the camera.
 - Confirm that the MAC address has been entered on the registration screen.
If the MAC address is not entered, enter the MAC address displayed on the camera browser.
(Click the "Copy" button to copy the MAC address to the clipboard.)
 - When registration is completed, the Activation code will be displayed.
4. Enter the displayed Activation code on the camera screen to start the Stratocast service.
- Return to the browser screen of the camera, enter the Activation code, and click the "Activate" button.
 - Return to the Stratocast portal screen and wait for Stratocast to process (about 5 minutes).
 - Follow the instructions on the Stratocast portal screen to start the service.

Note

- You can also start the camera registration from the Stratocast portal site. In this case, use the "Copy" button to enter the MAC address of the camera into the portal site.
- For information about Stratocast registration, click [Trouble Shooting or help?] on the camera screen to refer to the Stratocast help site.
- If video delays or connection errors occur, check the connection using the following methods.
 - Check if the network bandwidth is sufficient. A network bandwidth of 1 Gbps or more and a fixed line connection is recommended.
 - Make sure that the camera's LAN cable is not disconnected. Then turn off the camera, turn it on again, wait for a while, and then connect the camera to the network.
- For technical inquiries about Stratocast, please contact your sales representative.

Genetec™, Stratocast™ and  Stratocast are trademarks of Genetec Inc.

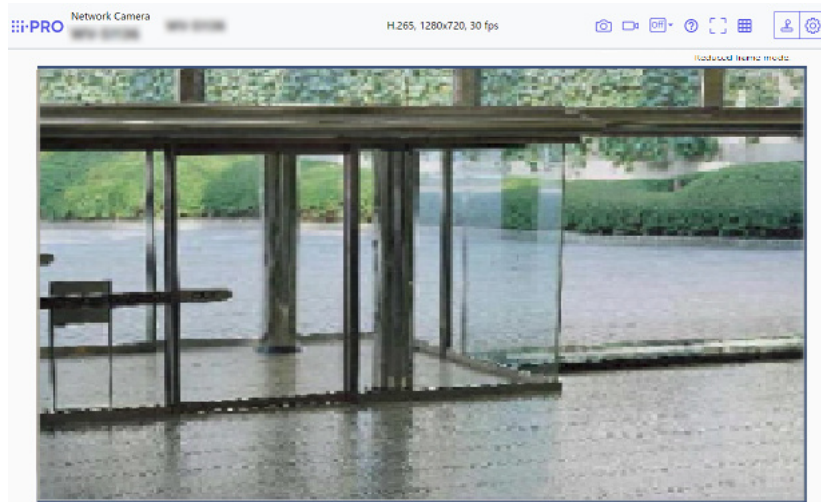
21 Changed new GUI (Graphical User Interface)

(Operating Instructions)

Changed to a new GUI. The “Set” menu of the GUI before change is displayed by clicking the “Settings”  button of the new GUI and then clicking the “Camera detailed setting”  button on the “Detailed setting” tab.

Refer to the following technical information website [New functions and addendum (New GUI)
<Control No.:C0324> for more information.

<https://i-pro.com/global/en/surveillance/training-support/support/technical-information>



22 Add AI-VMD alarm area information on TCP alarm notification

(Operating Instructions – Configure the alarm settings [Alarm] – Configuration of the settings relating to alarm notification [Notification] – Configure the settings relating to TCP alarm protocol)

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

Alarm

VMD area

SCD area

Audio detection

Notification

TCP alarm notification

HTTP alarm notification

TCP alarm notification	☐ On	☒ Off
Additional alarm data	☐ On	☒ Off
AI-VMD alarm area information	☒ On	☐ Off
Destination port	1818 (1-65535)	
Retry times	2	

[AI-VMD alarm area information]

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

- **Default:** On

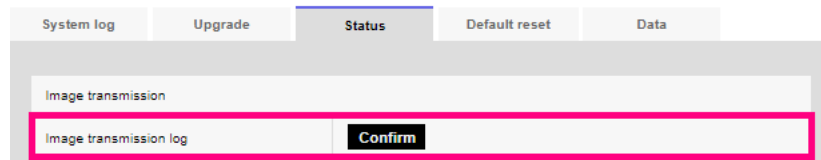
Note

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

23 Add Image transmission log on Status page

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

Add Image transmission log on Status page.



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

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

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

When the saved image transmission logs have reached the maximum number, the newer logs will overwrite the older image transmission logs. In this case, the oldest log is the first to be overwritten. The image transmission logs will be displayed in group of 100 logs each, and the logs will be saved even when the power of the camera is turned off.

<< Previous 100					
			1/2Page		Next 100 >>
No.	Time	Stream type	Connected user	IP address	Event
1	Jul/12/2022 22:38:11	Stream(1)	admin	192.168.0.6	Received start request
2	Jul/12/2022 22:12:11	Stream(1)	admin	192.168.0.6	Received stop request
3	Jul/12/2022 22:11:57	Stream(1)	admin	192.168.0.6	Received start request
4	Jul/12/2022 13:03:56	Stream(1)	admin	192.168.0.6	Received start request
5	Jul/11/2022 18:20:42	JPEG(2)	admin	192.168.0.6	Received start request
6	Jul/11/2022 18:20:40	JPEG(2)	admin	192.168.0.6	Received start request
7	Jul/11/2022 18:20:37	JPEG(2)	admin	192.168.0.6	Received start request
8	Jul/11/2022 18:20:16	JPEG(2)	admin	192.168.0.6	Received start request
9	Jul/11/2022 18:19:25	Stream(1)	admin	192.168.0.6	Received start request
10	Jul/08/2022 22:54:00	Stream(1)	admin	192.168.0.6	Received stop request
11	Jul/08/2022 22:53:55	Stream(1)	admin	192.168.0.6	Received start request
12	Jul/05/2022 00:53:24	Stream(1)	admin	192.168.0.6	Received start request
13	Jul/02/2022 15:23:41	Stream(1)	admin	192.168.0.6	Received stop request
Close					

[<< Latest 100]

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

[Next 100 >>]

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

[Number of pages display]

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

[<< Previous 100]

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

[No.]

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

[Time]

Time and date at the error occurrence will be displayed.

[Stream type]

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

* displays the number.

[Connected user]

The user of the image transmission will be displayed.

Note

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

[IP address]

The IP address of the image transmission will be displayed.

[Event]

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

Note

- A stop request may not be logged in the following cases.
 - When settings related to the stream are changed, such as the image mode, stream, or resolution
 - When moving to the setting screen from the Live image
 - When the Live image is closed
 - When the network is disconnected

24 About removal of functions due to end of Internet Explorer support

(Operating Instructions)

Microsoft ended support for the Web browser “Internet Explorer” on June 15, 2022. We have also terminated support for “Internet Explorer” for our cameras, and deleted the following functions that are only compatible with “Internet Explorer”.

No	Menu	Tab menu	Delete function
1	Live	—	“Viewer Software” button
2	Basic	Basic	“Status update mode” settings
3	Basic	Basic	“Status reception port” settings
4	Basic	Basic	“Viewer software (nwc4Ssetup.exe)” settings
5	Basic	Log	“Log”
6	Image or Image/Audio	Image	“Internet mode (over HTTP)” settings
7	Multi-screen	Multi-screen	“H.265(1)” or “H.264(1)” option for “Refresh interval”
8	Maintenance	Upgrade	“Viewer software installation counter”

25 Changed the initial value of “Audio input encoding format”

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

Due to the end of support for Internet Explorer, the initial value of [Audio input encoding format] on the [Audio] tab will be changed to “AAC-LC”.

[Audio input encoding format]

Select the audio input encoding format to be used in the “Live” page from G.726, G.711, or AAC-LC.

- **Default:** AAC-LC

Note

- With a web browser, you can receive calls only with AAC-LC.
- G.711 is available only when the “Mic Input (To PC)” is selected for “Audio transmission mode”.
- G.726 is always applied for the audio transmission encoding format.

26 Add “Close (Continue)” and “Open (Continue)” to the operation setting values of [Terminal 1], [Terminal 2], and [Terminal 3] on the [Alarm] tab

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

Alarm

[Terminal 1] [S4556] [S4156] [S4576]

Determine how to use terminal 1.

- **Off:** Not used.
- **Alarm input(TRM1):** Receives alarms. When “Alarm input” is selected, a pull-down menu for “Close” and “Open” is displayed.
 - **Close:** An alarm is detected when the terminal status is changed to “Close”.
 - **Open:** An alarm is detected when the terminal status is changed to “Open”.
 - **Close(Continue):** An alarm is detected when the terminal status is changed to “Close”.
When “Close” is selected for the terminal status, alarm detection will be performed regularly at a fixed interval set by “Alarm deactivation time”.
 - **Open(Continue):** An alarm is detected when the terminal status is changed to “Open”.
When “Open” is selected for the terminal status, alarm detection will be performed regularly at a fixed interval set by “Alarm deactivation time”.
- **Black & white input** [S4556] [S4576] : Receives the black & white switchover input. (When the input is set to On, the black & white mode is activated.)
- **Auto time adjustment:** Receives the time adjustment input. When the signal is received and if the clock is within 29 minutes $\pm$ the hour, the time will be adjusted to 00 minutes 00 seconds. During SD memory card recording, the time is not changed in operations which reset the time under 5 seconds. When “Auto time adjustment” is selected, a pull-down menu for “Close” and “Open” is displayed.
 - **Close:** The time is adjusted when the terminal status is changed to “Close”.
 - **Open:** The time is adjusted when the terminal status is changed to “Open”.
- **Default:** Off

[Terminal 2] [S4556] [S4156] [S4576]

- 26 Add “Close (Continue)” and “Open (Continue)” to the operation setting values of [Terminal 1], [Terminal 2], and [Terminal 3] on the [Alarm] tab
-

Determine how to use terminal 2.

- **Off:** Not used.
- **Alarm input(TRM2):** Receives alarms. When “Alarm input” is selected, a pull-down menu for “Close” and “Open” is displayed.
 - **Close:** An alarm is detected when the terminal status is changed to “Close”.
 - **Open:** An alarm is detected when the terminal status is changed to “Open”.
 - **Close(Continue):** An alarm is detected when the terminal status is changed to “Close”.
When “Close” is selected for the terminal status, alarm detection will be performed regularly at a fixed interval set by “Alarm deactivation time”.
 - **Open(Continue):** An alarm is detected when the terminal status is changed to “Open”.
When “Open” is selected for the terminal status, alarm detection will be performed regularly at a fixed interval set by “Alarm deactivation time”.
- **Alarm output:** Alarm output will be carried out according to the settings for “Output terminal” (Configure the settings relating to the output terminal [Alarm] [S4556] [S4156] [S4576]).
- **Default:** Off

[Terminal 3] [S4556] [S4156] [S4576]

Determine how to use terminal 3.

- **Off:** Not used.
- **Alarm input(TRM3):** Receives alarms. When “Alarm input” is selected, a pull-down menu for “Close” and “Open” is displayed.
 - **Close:** An alarm is detected when the terminal status is changed to “Close”.
 - **Open:** An alarm is detected when the terminal status is changed to “Open”.
 - **Close(Continue):** An alarm is detected when the terminal status is changed to “Close”.
When “Close” is selected for the terminal status, alarm detection will be performed regularly at a fixed interval set by “Alarm deactivation time”.
 - **Open(Continue):** An alarm is detected when the terminal status is changed to “Open”.
When “Open” is selected for the terminal status, alarm detection will be performed regularly at a fixed interval set by “Alarm deactivation time”.
- **AUX output:** AUX output will be supplied. The [AUX] buttons will be displayed on the “Live” page.
- **Default:** Off

IMPORTANT

- In order for the EXT I/O terminals to detect alarm inputs when the terminal status is changed from Open to Close (On) or from Close to Open (Off), about 100 ms or more is needed.

- 26 Add “Close (Continue)” and “Open (Continue)” to the operation setting values of [Terminal 1], [Terminal 2], and [Terminal 3] on the [Alarm] tab
-

Because alarms cannot be detected for about 5 seconds after a detection is made, alarm inputs received within about 5 seconds after an alarm is detected are not detected.

Note

- AUX is a camera terminal that allows users to operate (Open/Close) arbitrarily from the “Live” page.
For example, an operator can remotely control lights in a place where the camera is installed by connecting the terminal to the light controller.
- Refer to the Installation Guide for further information about input/output rating of each terminal.

27 Add alarm test function to the alarm

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

An alarm test function has been added to the alarm.

[Alarm test]

Click the [Execute] button to execute the alarm test function.

Note

- When the test alarm function is executed, the camera will detect a command alarm. This can be used to check the SD recording or notification to external devices triggered by alarm detection. Check the related settings using the system logs of this camera and the external device set as the notification destination.
- The test alarm function cannot be executed multiple times during the alarm deactivation time.

28 Add log indications/error indications relating to Firmware Upgrade

(Operating Instructions Others – About the displayed system log)

Added system logs for log indications/error indications relating to firmware upgrades.

Log indications relating to Firmware Upgrade

Category	Indication	Description
Firmware Upgrade	Upgrade successfully	Firmware Upgrade succeeded and the firmware versions (before/after) are logged.

Error indications relating to Firmware Upgrade

Category	Indication	Description
Firmware Upgrade	Upgrade failure (Time out: Shortage of communication bands)	Failed to upgrade the firmware due to timeout caused by lack of communication bandwidth. Check the communication environment and retry.
	Upgrade failure (File error: Incorrect selection of firmware file)	Failed to upgrade the firmware because an incorrect file was uploaded. Select the firmware of the camera and retry.
	Upgrade failure (Communication error: File damage)	Failed to upgrade the firmware because the file corrupted during the firmware file transfer. Check the communication environment and retry.

Category	Indication	Description
	Upgrade failure (Other error)	Undefined error occurred in the firmware upgrade process. Please wait for a while and retry.

29 Add FTP to the communication protocol of the file transfer function

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

Added FTP to the communication protocol of the file transfer function.

FTP (File Transfer Protocol) and SFTP (SSH File Transfer Protocol) are protocols for transferring files, and are used when sending images to a server.

SFTP allows you to securely transmit images to a server using an SSH (Secure Shell) encrypted data stream. It has the following two transmission functions.

- Send images when an alarm occurs
- Send images periodically

Network		Advanced	
SMTP(E-mail) FTP/SFTP NTP UPnP HTTPS DDNS SNMP QoS SRTP MQTT LLDP			
Transmission protocol	☐ FTP ☒ SFTP		
Alarm setting			
Alarm image transmission	☐ On ☒ Off		
Directory name			
File name	☒ Terminal 1 ☒ Terminal 2 ☒ Terminal 3 ☒ VMD ☒ SCD ☒ Auto track ☒ Command alarm ☒ Audio detection * For alarms by the "Ext. software", alarm images will be transmitted only by configuring the alarm image SFTP transmission.		
FTP transmission retry	☐ On ☒ Off		
Pre alarm	Transmission interval 1ips	Maximum number of images 0 pic	Recording duration 0s
Post alarm	Transmission interval 1ips	Number of images 100 pic	Recording duration 100s
Image capture size	JPEG(2) (640x360)		
Periodic transmission settings			
Periodic image transmission	☐ On ☒ Off		
Directory name			
File name	☒ Name w/time&date ☐ Name w/o time&date		
Transmission interval	1s		
Image capture size	JPEG(2) (640x360)		
SFTP server setting			
SFTP server address	Example of entry: 192.168.0.10		
Port number	22 (1-65535)		
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rbpW6dnep6P743uiMV0cf0		
User name			
Password			
FTP server setting			
FTP server address	Example of entry: 192.168.0.10		
User name			
Password			
Control port	21 (1-65535)		
FTP mode	☒ Passive ☐ Active		
Set			

- **[Transmission protocol]**

Select and set the protocol with the destination server from FTP/SFTP.

- **SFTP**: SFTP is used as the protocol for transmitting with the server.
- **FTP**: FTP is used as the protocol for transmitting with the server.
- **Default**: SFTP

IMPORTANT

- When “FTP” is selected in the protocol settings, FTP server authentication information (user names and passwords) may be leaked on the network when sending images to the FTP server.

Alarm setting

[Alarm image transmission]

Select “On” or “Off” to determine whether or not to transmit images when an alarm is detected.

- **On**: Transmits an image to the server when an alarm has occurred.
- **Off**: Does not transmit an image to the server when an alarm has occurred.
- **Default**: Off

[Directory name]

Enter the directory name where the alarm images are to be saved.

For example, enter “/ALARM” to designate the directory “ALARM” under the root directory of the server.

- **Available number of characters**: 1 – 256 characters
- **Unavailable characters**: “ & ;

[File name]

Enter the file name used for the alarm image to be transmitted to the server. The file name will be as follows.

- **File name**: [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)”] + “Serial number”
- **Available number of characters**: 1 – 32 characters
- **Unavailable characters**: “ & * / : ; < > ? ¥ |

When “On” is selected for [Alarm image FTP transmission], you can select the alarm type from the following.

Terminal 1-3 <Terminal input/output supported models only>

- **Terminal1**: Transmit the image to the server when an alarm occurs in Terminal 1.
- **Terminal2**: Transmit the image to the server when an alarm occurs in Terminal 2.
- **Terminal3**: Transmit the image to the server when an alarm occurs in Terminal 3.
- **VMD**: Transmit the image to the server when motion is detected.
- **SCD**: Transmit the image to the server when SCD (scene change detection) occurs.
- **Audio detection**: Transmit the image to the server when audio detection occurs.
- **Command alarm**: Transmit the image to the server when a command alarm is entered.

The following functions are unique for PTZ camera <【PTZ S】only>

- **Auto track**: Transmit the image to the server when an auto track occurs.

[FTP transmission retry]

Select “On” or “Off” to determine whether or not to resend failed FTP transmissions.

- **On**: If transmission fails, transmissions are resent until they are successfully sent.
- **Off**: If transmission fails, the image that failed to be sent is discarded and the next image is sent.
- **Default**: Off

Note

- When SFTP is selected in [Transmission protocol] settings, FTP transmission retry is unavailable.

[Pre alarm]

- **Transmission interval**

Select the transmission interval of images before an alarm occurs from the following.

When 60fps mode, 30fps mode or 15fps mode is selected for [Image capture mode]:

0.1fps/ 0.2fps/ 0.33fps/ 0.5fps/ 1fps

When 50fps mode, 25fps mode or 12.5fps mode is selected for [Image capture mode]:

0.08fps/ 0.17fps/ 0.28fps/ 0.42fps/ 1fps

- **Default**: 1fps

- **Maximum number of images**

Select the number of images to be transmitted from the following.

0pic/ 1pic/ 2pics/ 3pics/ 4pics/ 5pics/ 6pics/ 7pics/ 8pics/ 9pics/ 10pics/ 20pics/ 30pics/
40pics/ 50pics/

- **Default**: 0pic

- **Recording duration**

Approximate time to be taken to save the set “Maximum number of images” with the set “Transmission interval” will be displayed.

Note

- When “JPEG(1)” is selected for the capture size of the image to be transmitted, pre alarm is unavailable if the image capture size of “JPEG(1)” is **larger than** “1920x1080”.
- When “On” is selected for “Image compression rate upon alarm detection”, only post alarm recorded images are compressed. Compression is not applied to pre alarm recorded images.
- When a selection with an asterisk (*) on the right of it is selected for “Maximum number of images” of “Pre alarm”, the specified number of images may not be able to be sent depending on the image capture size and image quality. The following table shows the maximum number of images that can be sent for pre alarm.

Image capture size	Image quality									
	0	1	2	3	4	5	6	7	8	9
1280 x960	5	6	7	8	10	10	10	20	30	40
1280 x720	7	8	10	10	10	20	20	30	40	50
VGA	10	20	20	30	30	40	50	50	50	50
640x360	20	30	40	50	50	50	50	50	50	50
QVGA	40	50	50	50	50	50	50	50	50	50
320x180	50	50	50	50	50	50	50	50	50	50

[Post alarm]

- **Transmission interval**

Select the transmission interval for the alarm image transmission from the following.

When 60fps mode, 30fps mode or 15fps mode is selected for [Image capture mode]:

0.1fps/ 0.2fps/ 0.33fps/ 0.5fps/ 1fps

When 50fps mode, 25fps mode or 12.5fps mode is selected for [Image capture mode]:

0.08fps/ 0.17fps/ 0.28fps/ 0.42fps/ 1fps

- **Default:** 1fps

- **Number of images**

Select the number of images to be transmitted from the following.

1pic/ 2pics/ 3pics/ 4pics/ 5pics/ 6pics/ 7pics/ 8pics/ 9pics/ 10pics/ 20pics/ 30pics/ 50pics/
100pics/ 200pics/300pics/ 500pics/ 1000pics/ 1500pics/ 2000pics/ 3000pics

- **Default:** 1pic

- **Recording duration**

Approximate time to be taken to save the set “Number of images” with the set “Transmission interval” will be displayed.

[Image capture size]

Select the image capture size of images transmitted when an alarm occurs from the following.

JPEG(1)/JPEG(2)

- **Default:** JPEG(2)

Periodic image transmission settings

[Periodic image transmission]

Select “On” or “Off” to determine whether or not to transmit images using the periodic image transmission function.

When “On” is selected, it is necessary to configure the settings of the server.

- **On:** Performs periodic image transmission.
- **Off:** Does not perform periodic image transmission.
- **Default:** Off

IMPORTANT

- When using periodic image transmission, it is necessary to configure the schedule settings of FTP/SFTP periodic image transmission on the [Schedule] tab of the “Schedule” page. (→ “Configure the settings relating to the schedules [Schedule]”)

[Directory name]

Enter the directory name where the images are to be saved.

For example, enter “/img” to designate the directory “img” under the root directory of the server.

- **Available number of characters:** 1 – 256 characters
- **Unavailable characters:** “ & ;
- **Default:** None (blank)

[File name]

Enter the file name (name of the image file to be transmitted) and select the naming option from the following.

- **Name w/time&date:** File name will be [“Entered file name” + “Time and date (year/ month/ day/hour/ minute/ second)” + “Serial number (starting from 00)”].
- **Name w/o time&date:** File name will be the characters entered for “File name” only. When “Name w/o time&date” is selected, the file will be overwritten each time a file is newly transmitted.
- **Available number of characters:** 1 – 32 characters
- **Unavailable characters:** " & ; : / * < > ? ¥ |
- **Default:** None (blank)

Note

- When “Name w/time&date” is selected, the file name will be [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)” + “Serial number (starting from 00)” + “s” during summer time.

[Transmission interval]

Select the interval for the periodic image transmission from the following.

1s/ 2s/ 3s/ 4s/ 5s/ 6s/ 10s/ 15s/ 20s/ 30s/ 1min/ 2min/ 3min/ 4min/ 5min/ 6min/ 10min/
15min/ 20min/ 30min/ 1h/ 1.5h/ 2h/ 3h/ 4h/ 6h/ 12h/ 24h

- **Default:** 1s

[Image capture size]

Select the image capture size of images to be transmitted from the following.

JPEG(1)/JPEG(2)

- **Default:** JPEG(2)

SFTP server setting

Note

- When [Transmission protocol] is set to FTP, the SFTP server setting is unavailable

[SFTP server address]

Enter the IP address or the host name of the SFTP server.

- **Available number of characters:** 1 – 128 characters
- **Available characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

IMPORTANT

- When entering the host name for [SFTP server address], it is necessary to configure the DNS

settings on the [Network] tab of the “Network” page. (→ “Configure the network settings [Network]”)

[Port number]

Enter a control port number to be used for the SFTP server.

- **Available port number:** 1–65535
- **Default:** 22

The following port numbers are unavailable since they are already in use.

20, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 162, 443, 995, 10669, 10670

[Host key hash]

Enter the hash value of the public key of the SFTP server.

- **Available number of characters:** 43 – 44 characters
- **Available characters:** Alphanumeric characters, +, /, =

[User name]

Enter the user name (login name) to access the SFTP server.

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

[Password]

Enter the password to access the SFTP server.

- **Available number of characters:** 0 – 32 characters
- **Unavailable characters:** " &

FTP server setting

Note

- When [Transmission protocol] is set to SFTP, the FTP server setting is unavailable.

[FTP server address]

Enter the IP address or the host name of the FTP server.

- **Available number of characters:** 1 – 128 characters
- **Available characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

IMPORTANT

- When entering the host name for “FTP server address”, it is necessary to configure the DNS

settings on the [Network] tab of the “Network” page. (→“Configure the network settings [Network]”)

[User name]

Enter the user name (login name) to access the FTP server.

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

[Password]

Enter the password to access the FTP server.

- **Available number of characters:** 0 – 32 characters
- **Unavailable characters:** “ &

[Control port]

Enter a control port number to be used for the FTP server.

- **Available port number:** 1 – 65535
- **Default:** 21

The following port numbers are unavailable since they are already in use.

20, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 162, 443, 995, 10669, 10670

[FTP mode]

Select “Passive” or “Active” for the FTP mode.

Normally, select “Passive”. When it is impossible to connect after select “Passive”, try to connect after selecting “Active”.

- **Default:** Passive

30 Add SFTP periodic image transmission to “Event operation” of Easy Setup

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action])

By adding the FTP function to the SFTP function, “SFTP periodic transmission” in “Event action” of Easy Setup was changed to “FTP/SFTP periodic transmission”.

Internet **Event action**

Configure the event action setting.
Specify the action to be taken when an alarm is detected and register the action in the schedule in order.

[Current settings]

Alarm	
Alarm condition	Off
Alarm	Off
Output terminal	Off
E-mail notification	Off

Schedule	
Schedule	Off

[Notes]
• When the operating condition is changed, some settings will be cancelled. Confirm the settings after completing the setup.

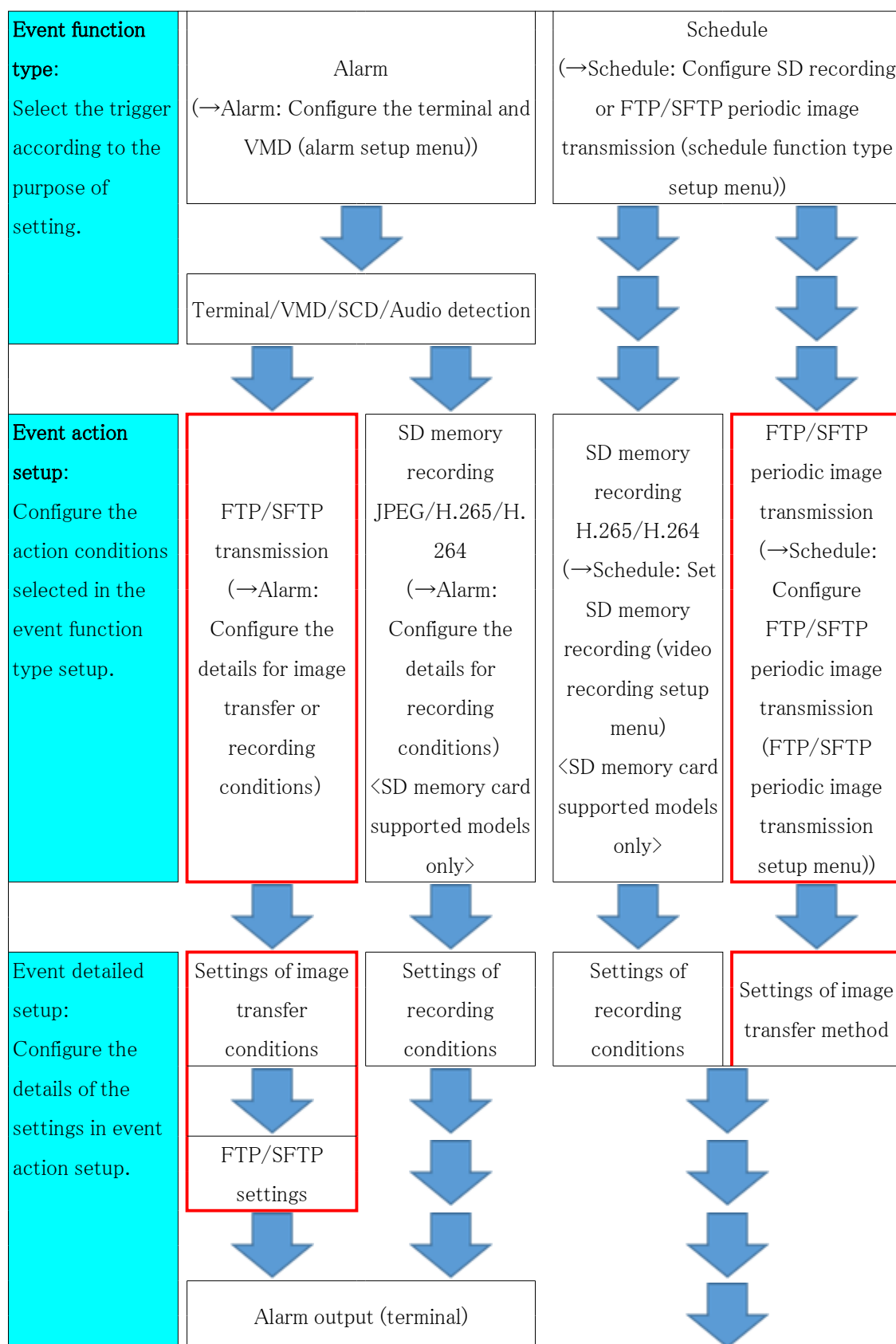
Next

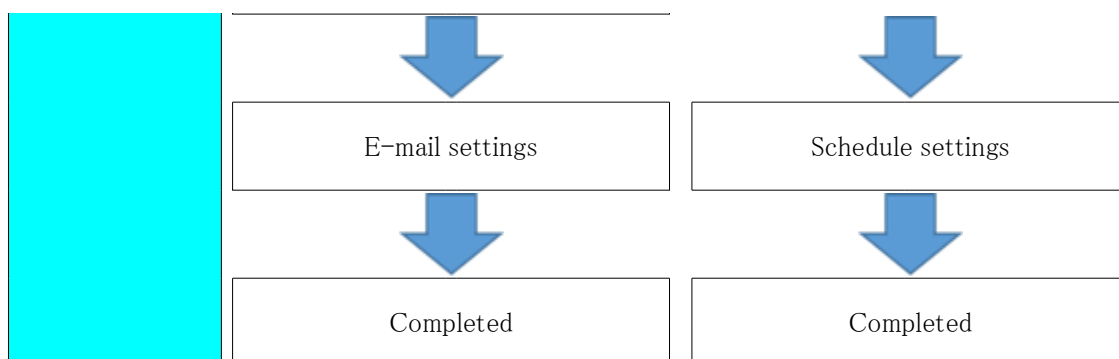
You can set event actions for SD schedule recording/FTP periodic image transmission/alarm detection. Once the settings are completed in each setup menu, click the [Next] button to proceed. The setup flow is as follows.

Note

- If you click the [Next] button, the settings in the screen will be saved.

[Flow of event action setup](#)





Configure the schedule/alarm (event function type setup menu)

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]—schedule/alarm (event function type setup menu))

Here, select the function type of the event.

[Trigger]

- **Alarm:** Select when setting the alarm detection settings.
- **Schedule:** Select during “SD memory recording” or “FTP/SFTP periodic image transmission”.
- **Default:** Alarm

[SD memory card format]

To format the SD memory card, click the [Execute] button.

Once you click the [Execute] button, the “Format” confirmation screen will be displayed.

If you click the [OK] button, the formatting will start.

Once the “Format” completion screen is displayed, press the button.

IMPORTANT

- All data saved on the SD memory card will be deleted when the SD memory card is formatted.
- Do not turn off the power of the camera during formatting.

[Next] button

To format the SD memory card, click the [Execute] button. If you select “Alarm”, and click the [Next] button, the alarm setup menu will be displayed. (→Alarm: Configure the terminal and VMD (alarm setup menu))

If you select “Schedule”, and click the [Next] button, the schedule function type setup menu will be displayed. Schedule: Configure SD recording or FTP periodic image transmission (schedule function type setup menu)

Alarm: Configure the terminal and VMD (alarm setup menu)**(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]—schedule/alarm (event function type setup menu))**

Here, select from “SD recording” or “FTP/SFTP transfer” in [Operating conditions] for the alarm type. Also select from each JPEG/each stream for [Recording compression method].

The screenshot shows the 'Event action' configuration screen. It has two tabs: 'Internet' and 'Event action', with 'Event action' being the active one. Below the tabs, the text 'Select an action to be taken when an alarm is detected.' is displayed. There are two main input areas. The first area is labeled 'Trigger' and contains a dropdown menu currently showing 'FTP/SFTP Transfer'. The second area is labeled 'Recording format' and contains a dropdown menu showing 'JPEG(2)' with '(640x360)' next to it. At the bottom of the screen, there are two buttons: 'Back' and 'Next'.

[Trigger]

- **SD memory recording:** When an alarm occurs, records the image to the SD memory card.
- **FTP/SFTP Transfer:** When an alarm occurs, FTP/SFTP transfer of the JPEG image.

Note

- “FTP Transfer” for when an alarm occurs and “FTP/SFTP periodic image transmission” can both be performed simultaneously.
- If both “FTP Transfer” for when an alarm occurs and “FTP periodic image transmission” are set, “FTP Transfer” will be given priority when an alarm occurs.
- The protocol used to send images with “FTP/SFTP transfer” when an alarm occurs can be set in the FTP/SFTP transfer settings. (→③ Set FTP/SFTP transfer (FTP/SFTP transfer setup menu))

[Recording format]

When “SD memory recording” is selected for [Trigger], “JPEG(1)”, “JPEG(2)”, “Stream(1)”,

“Stream(2)”, “Stream(3)”, or “Stream(4)” can be selected for the stream encoding format for the recorded image.

[Next] button

If you select “FTP Transfer” for [Trigger] and click the [Next] button, the FTP transfer setup menu will be displayed. (→③ Set FTP/SFTP transfer (FTP/SFTP transfer setup menu))

If you select “SD memory recording” for [Trigger], select “JPEG(1)” or “JPEG(2)” for [Recording format], and then click the [Next] button, the JPEG recording setup menu will be displayed. (→② Configure SD memory recording (JPEG) (JPEG recording setup menu)) <SD memory card supported models only>

If you select “SD memory recording” for [Trigger], select “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” for [Recording format], and then click the [Next] button, the video recording setup menu will be displayed. (→Configure SD memory recording (H.265 or H.264) (video recording setup menu)) <SD memory card supported models only>

Note

- If you click the [Next] button, the setting items in the screen are saved.
- Even when the audio detection alarm is set, alarm recording onto the SD memory card will not be performed. <SD memory card supported models only>

[Back] button

If you click the [Back] button the alarm setup menu will be displayed.
(→Alarm: Configure the terminal and VMD (alarm setup menu))

Alarm: Configure the details for images transfer or recording conditions

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]- Alarm: Configure the details for images transfer or recording conditions)

③Set FTP/SFTP transfer (FTP transfer setup menu)

FTP transfer when an alarm is detected is set in this section.

Internet		Event action	
Set the method of image transmission to the FTP/SFTP server when an alarm is detected.			
Transmission protocol	☐ FTP ☒ SFTP		
Alarm setting			
Alarm image transmission	☐ On ☒ Off		
Directory name			
File name	☒ Terminal 1 ☒ Terminal 2 ☒ Terminal 3 ☒ VMD ☒ SCD ☒ Auto track ☒ Audio detection * For alarms by the “Ext. software”, alarm images will be transmitted only by configuring the alarm image SFTP transmission.		
FTP transmission retry	☐ On ☒ Off		
Pre alarm	Transmission interval 1fps	Maximum number of images 10 pic	Recording duration 0s
Post alarm	Transmission interval 1fps	Number of images 100 pics	Recording duration 100s
Image capture size	JPEG(2) (640x360)		
SFTP server setting			
SFTP server address	Example of entry: 192.168.0.10		
Port number	22 (1-65535)		
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rpbW6dnap6P743uiMV0cf0		
User name			
Password			
FTP server setting			
FTP server address	Example of entry: 192.168.0.10		
User name			
Password			
Control port	21 (1-65535)		
FTP mode	☒ Passive ☐ Active		
Back		Next	

Refer to “[29. Add FTP to the communication protocol of the file transfer function](#)” for information

about how to configure the above screen” how to set the above screen.

[Next] button

If you select “Alarm output” in the alarm setup menu and click the [Next] button, the alarm output setup menu will be displayed. (→Alarm: Configure the output terminal) <Terminal input/output supported models only>

If you click the [Next] button in the alarm setup menu without selecting “Alarm output”, the mail setup menu will be displayed. (→Alarm: configure the mail notifications and mail server)

Note

- If you click the [Next] button, the setting items in the screen are saved.

[Back] button

If you click the [Back] button, the alarm function type setup menu will be displayed. (Alarm: Configure the alarm function type (Alarm function type setup menu)

Schedule: Configure SD recording or FTP/SFTP periodic image transmission (schedule function type setup menu)

(Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]– **Schedule: Configure SD recording or FTP/SFTP periodic image transmission (schedule function type setup menu)**

Here, the schedule type is selected as “SD memory recording” or “FTP/SFTP periodic image transmission”.

Internet	Event action
Select an action to be taken when an alarm is detected.	
Trigger	SD memory recording ▼
Recording format	Stream(1) ▼ (H.265/1920x1080)
BackNext	

[Trigger]

- **SD memory recording:** Records the H.265 (or H.264) image in the SD memory card at the scheduled time.

- **FTP/SFTP transfer:** Transmits the JPEG image to the FTP/SFTP server at the scheduled time

[Recording format]

When “SD memory recording” is selected for [Trigger], “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” can be selected for the recorded image.

[Next] button

If you select “SD memory recording” and click the [Next] button, the video recording setup menu will be displayed. (→Schedule: Set SD memory recording (video recording setup menu) <SD memory card supported models only>

If you select “FTP/SFTP periodic image transmission” and click the [Next] button, the FTP/SFTP periodic image transmission setup menu will be displayed. (→ Schedule: Configure FTP/SFTP periodic image transmission (FTP/SFTP periodic image transmission setup menu))

Note

- If you click the [Next] button, the setting items in the screen are saved.

[Back] button

If you click the [Back] button, the event function type setup menu will be displayed. (→Configure the schedule/alarm (event function type setup menu))

Note

- “FTP/SFTP periodic image transmission” and “FTP/SFTP img. trans.” for when an alarm occurs can both be performed simultaneously.
- If you select “SD memory recording”, the “FTP/SFTP periodic image transmission” setting will be canceled.

Schedule: Configure FTP/SFTP periodic image transmission (FTP/SFTP periodic image transmission setup menu)

((Operating Instructions - Use Easy Setup [Easy Setup] - Configure an event action [Event action]))

The FTP/SFTP periodic image transmission is configured in this section.

- To configure FTP/SFTP periodic image transmission settings;

Internet

Event action

Configure the FTP/SFTP server information and the method of JPEG image transmission to the FTP/SFTP server.

Transmission protocol	☐ FTP	☒ SFTP
-----------------------	---------------------------	---------------------------------------

Periodic transmission settings

Periodic image transmission	☐ On	☒ Off
Directory name		
File name		
	☒ Name w/time&date	☐ Name w/o time&date
Transmission interval	1s	
Image capture size	JPEG(2) (640x360)	

SFTP server setting

SFTP server address	
	Example of entry: 192.168.0.10
Port number	22 (1-65535)
Host key hash	SHA256:
	Example of entry: dqVcdVZ/2ySO5tz/R6YR+rpbW6dnap6P743uiMV0cf0
User name	
Password	

FTP server setting

FTP server address		
	Example of entry: 192.168.0.10	
User name		
Password		
Control port	21 (1-65535)	
FTP mode	☒ Passive	☐ Active

Back

Set

Refer to “[29. Add FTP to the communication protocol of the file transfer function](#)” for information about how to configure the above screen.

[Set] button

Displayed when “Periodical transmission” is “Off”. Click [Set] to save the settings.

[Next] button

This will be displayed when [Periodic transmission] is “On”. If you click the [Next] button, the FTP/SFTP periodic transmission schedule will be displayed. (→ Schedule: Configure FTP/SFTP periodic image transmission (FTP/SFTP periodic image transmission setup menu))

Note

- If you click the [Next] button, the setting items in the screen are saved.

[Back] button

If you click the [Back] button, the schedule function type setup menu will be displayed.

(→ Schedule: Configure SD recording or FTP/SFTP periodic image transmission (schedule function type setup menu))

- To configure FTP/SFTP periodic image transmission schedule settings:

Internet

Event action

Select "FTP/SFTP periodic image transmission" for "Schedule mode" of the schedule (1 - 8) to be registered, and set the recording schedule.
When "FTP/SFTP periodic image transmission" is not select for "Schedule mode", image transmission will not be performed.

Schedules

Schedule 1 (White)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 2 (Blue)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 3 (Green)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 4 (Red)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 5 (Black)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 6 (Yellow)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 7 (Light blue)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h
Schedule 8 (Purple)	Schedule mode	Off
	Time range	Mon Tue Wed Thu Fri Sat Sun 24h

0:00

8:00

12:00

18:00

24:00

Mon

Tue

Wed

Thu

Fri

Sat

Sun

The color of each schedule is not linked with the area color of "VMD area".
When "VMD permission" is set, the VMD functions in all the areas set with "VMD area".
"VMD permission", "SCDD permission" and "Auto track permission" are required to be set to specify a period of time where detection or tracking is to be performed. They are not required to be set when detection or tracking is to be performed regularly.
"Auto mode (auto track)" and "Auto track from the right-click menu" on the "Live" page are available even when it is out of the period specified in "Auto track permission".
If the camera direction is changed by other operation while the setting of preset position, auto pan, preset sequence or patrol is being performed, the camera will automatically move back to the previous preset position and resume the operation in 1 minute.

Back

Set

Refer to “Configure the settings relating to the schedules [Schedule]” for information about how to set the above screen.

[Set] button

If you click the [Set] button, setup menu will be displayed.

[Back] button

If you click the [Back] button, the FTP/SFTP periodic image transmission setup menu will be displayed.

(→Schedule: Configure FTP/SFTP periodic image transmission (FTP/SFTP periodic image transmission setup menu))

Note

- FTP/SFTP periodic image transmission will not be performed when “FTP/SFTP periodic image transmission” is not selected in “Operation mode”.

- 31 Change “SFTP periodic image transmission error” to “FTP/SFTP periodic image transmission error” in “Save trigger” of SD memory card. <SD memory card supported models only>
-

31 Change “SFTP periodic image transmission error” to “FTP/SFTP periodic image transmission error” in “Save trigger” of SD memory card. <SD memory card supported models only>

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

By adding the FTP function to the SFTP function, Change “SFTP periodic image transmission error” to “FTP/SFTP periodic image transmission error” in “Save trigger” of recording stream.

Recording stream

[Save trigger] button

Select a trigger to save images on the SD memory card from the following.

- **FTP/SFTP periodic image transmission error:** Saves images when images have failed to transmit to the FTP/SFTP server by the FTP/SFTP periodic image transmission function.
Available only for the “JPEG(1)” or “JPEG(2)” images.
- **Alarm input:** Saves images at an alarm occurrence.
- **Manual:** Saves images manually.
- **Schedule:** Saves images in accordance with the settings for “Schedule”. Available only for the “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” images.
- **Default:** Manual

If you have selected “Alarm input” in the [Save trigger], you can select the alarm type from the following:

Terminal1-3 <Terminal input/output supported models only>

- **Terminal 1:** Save the image when an alarm occurs in Terminal 1.
- **Terminal 2:** Save the image when an alarm occurs in Terminal 2.
- **Terminal 3:** Save the image when an alarm occurs in Terminal 3.
- **VMD:** Save the image when motion detection occurs.
- **SCD:** Save the image when SCD occurs.

- 31 Change “SFTP periodic image transmission error” to “FTP/SFTP periodic image transmission error” in “Save trigger” of SD memory card. <SD memory card supported models only>
-

- **Command alarm:** Save the image when a command alarm is entered.

The following functions are unique for PTZ camera <【PTZ S】only>

- **Auto track:** Save the image when an auto track occurs.

Note

- When “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” is selected for [Recording format], “FTP/SFTP 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.
- Alarm recording is not available for streams that are being distributed in a state where “Advanced(Fixed GOP 60s w/1s key-frame)” is selected for [GOP control].
- No image will be recorded at the time of an audio detection alarm occurrence.

32 Change the link of “SFTP setup” to “FTP/SFTP setup” in Camera action on alarm

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to the camera action on alarm occurrence [Alarm])

Click the [Alarm] tab on the “Alarm” page. (→“How to display the setup menu”, “How to operate the setup menu”) The settings related to the camera action on alarm can be configured in this section.

Camera action on alarm	
Alarm E-mail notification	E-mail server >>
Alarm image FTP/SFTP transmission	FTP/SFTP setup >>
Alarm image recording(SD memory card)	SD memory card setup >>
TCP alarm notification	TCP alarm notification >>
HTTP alarm notification	HTTP alarm notification setup >>
SNMP transmission upon alarm detection	To SNMP setting

Camera action on alarm

[Alarm E-mail notification]

Click “E-mail server >>” to display the setup menu that can configure the settings relating to E-mail notification when an alarm occurs. The setup menu will be displayed in a newly opened window.

(→“Configure settings relating to alarm E-mail notifications”)

[Alarm image FTP/SFTP transmission]

Click “FTP/SFTP setup >>” to display the setup menu that can configure the settings relating to FTP/SFTP transmission when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to FTP/SFTP transmissions of alarm images”)

[Alarm image recording (SD memory card)]

Click “SD memory card setup >>” to display the setup menu that can configure the settings relating to recording images on an SD memory card when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to recording to an SD memory card when an alarm occurs”)

[TCP alarm notification]

Click “TCP alarm notification >>” to display the setup menu that can configure the settings relating to transmitting TCP alarm notifications when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to TCP alarm protocol notification when an alarm occurs”)

[HTTP alarm notification]

Click “HTTP alarm notification setup >>” to display the setup menu that can configure the settings relating to transmitting HTTP alarm notifications when an alarm occurs. The setup menu will be displayed in a newly opened window. (→“Configure settings relating to HTTP alarm notification when an alarm occurs”)

[SNMP transmission upon alarm detection]

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.

Configure settings relating to FTP/SFTP transmissions of alarm images

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to the camera action on alarm occurrence [Alarm])

Click “FTP/SFTP setup >>” of “Camera action on alarm” on the [Alarm] tab of the “Alarm” page. (→“Configure the settings relating to the camera action on alarm occurrence [Alarm]”)

Refer to [“29. Add FTP to the communication protocol of the file transfer function”](#) for information about how to configure the above screen.

33 Add “FTP access to camera” to “Common” in Network setup

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

With the addition of FTP function, “FTP access to camera” was added to “Common” in Network setup.

Common	
HTTP port	80 (1-65535)
Line speed	Auto ▼
Max RTP packet size	☒ Unlimited(1500byte) ☐ Limited(1280byte)
HTTP max segment size(MSS)	Unlimited(1460byte) ▼
Bandwidth control(bit rate)	51200kbps ▼
Easy IP Setup accommodate period	☒ 20min ☐ Unlimited
FTP access to camera	☐ Allow ☒ Forbid
ONVIF® *ONVIF is a trademark of Onvif, Inc.	☒ On ☐ Off

[FTP access to camera]

Select “Allow” or “Forbid” to determine whether to allow or forbid the FTP access to camera.

- **Allow:** Allow to access FTP to the camera.
- **Forbid:** Forbid to access FTP to the camera.
- **Default:** Forbid.

IMPORTANT

- When accessing the camera from a PC, there is a possibility that authentication information (user names, passwords, etc.) will be leaked.

34 Change “SFTP periodic image transmission” to “FTP/SFTP periodic image transmission” in “Schedule” mode

(Configure the settings relating to the schedules [Schedule])

By changing the FTP/SFTP function of SFTP function, [SFTP periodic transmission] in “Schedule mode” of schedule setting was changed to [FTP/SFTP periodic transmission].

[Schedule mode]

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 input/output supported models only>
- **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.
- **Access permission:** Users whose access level is set to “2. Camera control” and “3. Live only” on the [User auth.] tab.
- **Recording to SD (Recording stream):** The SD recording will be performed at the designated time in the schedule. Further, the “Recording format” is enabled only when there is a stream.
<SD memory card supported models only>

- **Image adjust 1: Scene 1:** Images are set to the image settings of “Scene file 1” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.
- **Image adjust 2: Scene 2:** Images are set to the image settings of “Scene file 2” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.
- **Image adjust 3: Scene 3:** Images are set to the image quality settings of “Scene file 3” at the designated time in the schedule. Once designated time in the schedule is over, the image quality settings are set to “Scene file is not applied”.
- **Image adjust 4: Scene 4:** Images are set to the image quality settings of “Scene file 4” at the designated time in the schedule. Once designated time in the schedule is over, the image quality settings are set to “Scene file is not applied”.
- **FTP/SFTP periodic image transmission:** FTP/SFTP periodic image transmission will be performed at the designated time in the schedule.
- **E-mail permission:** While the schedule is set, e-mail notification is sent when alarm is input.
- **Reboot:** The camera reboots at the scheduled time. Can only be selected with Schedule 5 or Schedule 8.

The following functions are unique for PTZ camera <【PTZ S】only>

Position refresh: The camera position will be refreshed at the designated time in the schedule.

1-256: The camera will move to the selected position from the preset position at the designated time in the schedule.

Auto track permission: The auto track activation setting set on the [Auto track setting] tab will be permitted during the period of the schedule.

Auto pan: The camera will start the auto-panning operation set on the [Position] tab at the designated time in the schedule.

Patrol 1: The camera will start the patrol 1 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when “Patrol 1” is set.

Patrol 2: The camera will start the patrol 2 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when “Patrol 2” is set.

Patrol 3: The camera will start the patrol 3 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when “Patrol 3” is set.

Patrol 4: The camera will start the patrol 4 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when “Patrol 4” is set.

Preset sequence 1: The camera will start the preset sequence 1 operation set on the [Position] tab

at the designated time in the schedule. This is enabled only when “Preset sequence 1” is set.

Preset sequence 2: The camera will start the preset sequence 2 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when “Preset sequence 2” is set.

Preset sequence 3: The camera will start the preset sequence 3 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when “Preset sequence 3” is set.

Note

- Select “On” for “User auth.” on the [User auth.] tab of “User mng.” page (“Configure the settings relating to the user authentication [User auth.]”) and “Off” for “Host auth.” on the “Hostauth.” page (“Configure the settings relating to the host authentication [Host auth.]”) to validate “Access permission”.
- When selecting “Recording to SD(Recording stream)”, select “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” for [Recording format] on the [SD memory card] tab and select “Schedule” for [Save trigger]. ([Save trigger]) <SD memory card supported models only>

35 Add the log related to FTP/SFTP to system log

(Operating Instructions - Others - About the displayed system log)

Add a system log related to FTP/SFTP functions.

[Error display related to FTP/SFTP](#)

Category	Indication	Description
Server error	<u>Failed to find the server.</u>	• The server may be down. Contact the server administrator.
	<u>Failed to resolve the FTP serveraddress from DNS.</u>	• Server IP address may be incorrect. Check the IP address settings of the server again.
Connection error	User name or password isn't correct.	• The server may be down. Contact the server administrator. • The settings relating to the indicated item may be incorrect. Check if the settings are configured correctly.
	Failed to change the directory.	
	Host key verification error	
	Access not authorized	
	Failed to transmit the image	
	<u>File transfer error.</u>	
	<u>Passive mode error.</u>	
	<u>Log out failed.</u>	
Internal error	Undefined error.	• <u>An error occurred in the FTP/SFTP function.</u> <u>Check if the FTP/SFTP settings are configured correctly.</u>

36 Add Ext.software function (Operating Instructions – Settings)

The [Ext.software] menu have been added to the setup menu.

Software mng. Operation sched. Control log

Unique information	
MPR ID	XXXXXXXXXXXX
Remaining ROM	10228 bytes
Remaining RAM	57428 bytes
SDK version	1.00
Firmware version	2.00
RAM capacity expansion mode	☐ On ☒ Off

Set

• When "On" is set for the RAM capacity expansion mode, the function to record on the SD memory card will become unavailable.
 • "Off" is unavailable when the remaining RAM capacity is less than 51200 kbytes.
 • Refer to the following URL for extension software required to set "On" for the RAM capacity expansion mode.
 For use in Japan
<https://cwc.i-pro.com/pages/application-platform-list>
 For use in a country other than Japan
<https://i-pro.com/global/en/surveillance/i-pro-application-platform/application-list>

Choose File No file chosen

☒ Install new Ext. software **Execute**

Use the latest edition of the extension software.

Please wait and do not operate the browser during install.

[Ext. software]

Management of the extension software and the schedule setting are available. When the extension software is installed, a link for the screen of the extension software will displayed. (Perform management of the extension software and the schedule setting [Ext. software])

36.1 Perform management of the extension software and the schedule setting [Ext. software]

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, [Operation sched.] tab, and the [Control

log] tab.

36.2 Perform the installation, uninstallation and version upgrade of the extension software [Software mng.]

Click the “Software mng.” tab of the “Ext. software” page. (For menu display and how to operate, refer to “How to display the setup menu” and “How to operate the setup menu”.)

Installing the extension software

1 Save the extension software to be installed in the PC.

IMPORTANT

- Check [Remaining ROM] and [Remaining RAM] of the camera. If the Remaining ROM or RAM is not enough to install the extension software, it is necessary to uninstall the other extension software that is already installed. Refer to “[Uninstall] button” for how to uninstall the software.

2 Click the [Choose File] button and designate “Ext. software”.

3 Confirm that “Install new Ext. software” is selected and then click the [Execute] button.

Installation of the extension software will start. When the installation is completed, the name of the installed extension software will be added to the “Software mng.” screen.

IMPORTANT

- A space cannot be used in the name of the saving directory.
- Be sure to use the designated file (extension: ext).
- Do not turn off the power of the camera during the installation process.
- Do not perform any operation during the installation process and wait until it completes.

4 Obtain the registration key number and register the registration key.

Note

- Depending on the type of extension software, you may need to register the registration key. For information on how to obtain and register the registration key, refer to the instruction manual of the extension software.
- After registering the registration key, the camera will restart. After the camera restarts, make sure that the registration key is registered before setting the extension software.

“Software mng.” screen

The screenshot shows the 'Software mng.' screen with three tabs: 'Software mng.', 'Operation sched.', and 'Control log'. The 'Software mng.' tab is active, displaying a table of unique information and a section for RAM capacity expansion mode.

Unique information	
MPR ID	5108-8788-C375-4485
Remaining ROM	152288 bytes
Remaining RAM	37408 bytes
SDK version	1.00
Firmware version	2.00
RAM capacity expansion mode	☐ On ☒ Off

Set

• When "On" is set for the RAM capacity expansion mode, the function to record on the SD memory card will become unavailable.
 • "Off" is unavailable when the remaining RAM capacity is less than 51200 kbytes.
 • Refer to the following URL for extension software required to set "On" for the RAM capacity expansion mode.
 For use in Japan
<https://cwc-l-pro.com/pages/application-platform-list>
 For use in a country other than Japan
<https://l-pro.com/global/en/surveillance/l-pro-application-platform/application-list>

No file chosen

☒ Install new Ext. software

Use the latest edition of the extension software.

Please wait and do not operate the browser during install.

When the extension software is installed, unique information of the camera and the registration status of the extension software will be displayed. On this screen, the following operations are available.

- Uninstallation of the extension software
- Display of the registration status detail screen
- Display of the extension software setting screen
- Update of the extension software

Note

- Only one extension software can be installed.

Unique information**[MPR ID]**

This ID is required to install the extension software. This also has a device ID unique to each camera.

[Remaining ROM]

The remaining ROM capacity in the camera for the extension software will be displayed. If an extension software to be installed requires more capacity than the ROM capacity displayed here, installation of the extension software is unavailable.

[Remaining RAM]

The remaining RAM capacity in the camera for the extension software will be displayed. If an extension software to be installed requires more capacity than the RAM capacity displayed here, installation of the extension software is unavailable.

[SDK version]

Display the version information of the SDK installed in the camera. If the ext. software you install requires a version number higher than the one shown here, the ext. software may not work properly.

[Firmware version]

The version information of the installed camera software will be displayed.

[RAM capacity expansion mode]

Select On/Off to determine whether to perform the RAM capacity expansion mode.

Default : Off

Note

- When [RAM capacity expansion mode] is set to “On”, the recording function to SD memory card by this product cannot be used.
- If the minus is displayed in the [Remaining RAM] value, uninstall the ext. software or set the remaining RAM to “On”.
- Click the [Set] button to restart the product. After restarting, the product cannot be operated for about 2 minutes, same way as when the power is turned on.

Ext. software

[Uninstall] button

The installed extension software can be uninstalled.

[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.

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

Note

- 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.

[Status]

The installation status of the extension software will be displayed. When “Operable” is displayed, it is in a state that operation of the installed extension software is available.

[Setup>>] button

In case that the extension software has a unique screen such as a setting screen, it is possible to display the screen.

[Install new Ext. software]

When installing a new extension software is installed, select this and then select an extension software to be installed.

[Upgrade]

The version of the installed extension software can be upgraded by selecting the installed extension software and then clicking the [Execute] button.

36.3 Set a schedule of the extension software [Operation sched.]

Click the “Operation sched.” tab of the “Ext. software” page. (For menu display and how to operate, refer to “How to display the setup menu” and “How to operate the setup menu”.)

Software mng.

Operation sched.

Control log

Operating day of week

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Time table 1	☐	☐	☐	☐	☐	☐	☐
Time table 2	☐	☐	☐	☐	☐	☐	☐
Off	☐	☐	☐	☐	☐	☐	☐

[Time table 1]

	0:00	6:00	12:00	18:00	24:00	Operation content
1	00	00	-	00	00	Off
2	00	00	-	00	00	Off
3	00	00	-	00	00	Off
4	00	00	-	00	00	Off
5	00	00	-	00	00	Off
6	00	00	-	00	00	Off

[Time table 2]

	0:00	6:00	12:00	18:00	24:00	Operation content
1	00	00	-	00	00	Off
2	00	00	-	00	00	Off
3	00	00	-	00	00	Off
4	00	00	-	00	00	Off
5	00	00	-	00	00	Off
6	00	00	-	00	00	Off

Set

[Operating day of week]

Select “Time table 1”, “Time table 2” or “Off” for each day of the week.

[Time table 1] [Time table 2]

From the pull-down menu, select the start time and the end time of the schedule.

To set 24 hours per day, set [00:00] – [00:00]. On/Off option can be set at [Operation content].

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.

36.4 Check the control log of extension software [Control log]

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			
<< Previous 1001/2PageNext 100 >> <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.

37 Add Ext. software mode

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

[Ext.software mode] has been added to the SD memory card settings.

BasicSD memory cardOverlay image

Operating mode

SD memory card

☒ Use

☐ Not use

Ext. software mode

☐ On

☒ Off

Audio recording

☐ On

☒ Off

Remaining capacity notification

50%

Overwrite

☒ On

☐ Off

It is not available when "50/60fps" is selected for [Image capture mode].

SD memory card security

Additional info for detecting alteration

Setup >>

SD memory card password lock

Password

Set

Remove

Change

Status

Unlock

[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

- If you set the extension software mode from “On” to “Off”, formatting the SD memory card is recommended.
- If you are operating extension software that uses the SD memory card, the operation of recording to the SD memory card is not guaranteed.

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38 Add HTML initialization function

(Operating Instructions - Reset the settings/Reboot the camera [Default reset])

[Load the default HTML files (setup menu).] and [Reset to the default and load the default HTML files.] have been added to the [Default reset] tab.

The settings and the HTML data of the camera can be initialized and reboot of the camera can be performed on this page.

System log	Upgrade	Status	Default reset	Data
Reset to the default (Except the network settings)		Execute		
Load the default HTML files (setup menu).		Execute		
Reset to the default and load the default HTML files.		Execute		
Reboot		Execute		

[Reset to the default (Except the network settings)]

Click the [Execute] button to reset the settings to the default. Note that the network settings will not be reset.

It is impossible to operate the camera for about 3 minutes after the initialization.

[Load the default HTML files (setup menu).]

Click the [Execute] button to reset the HTML files to the default.

It is impossible to operate the camera for about 3 minutes after the initialization.

[Reset to the default and load the default HTML files.]

Click the [Execute] button to reset the settings of the camera and the HTML files to the default.

Note that the network settings will not be reset.

It is impossible to operate the camera for about 3 minutes after the initialization.

[Reboot]

Click the [Execute] button to reboot the camera.

It is impossible to operate the camera for about 2 minutes after rebooting the camera.

Note

- Refer to the supplied Installation Guide for more information about initializing the network settings.
- If “Diag.” of the alarm or e-mail notification function is selected, a notification of error will be sent to “Destination E-mail address” or to “Destination of notification” when an error such as no SD memory card insertion after the reboot or a locked SD memory card insertion occurs.

39 Add 2fps and 3fps to FTP/SFTP refresh interval, add 1920x1080 to pre-alarm resolution, expand image destination server to 2 locations

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

The following have been added to the communication protocol FTP/SFTP function of the file transfer function.

- Added 2fps, 3fps to refresh interval
- Added 1920x1080 to pre-alarm resolution
- Expanded image destination server to 2 locations

FTP (File Transfer Protocol) and SFTP (SSH File Transfer Protocol) are protocols for transferring files and are used to send images to a server.

SFTP allows you to securely send images to a server using data streams encrypted by SSH (Secure Shell).

There are two transmission functions below.

- Send images when an alarm occurs
- Send images periodically

39 Add 2fps and 3fps to FTP/SFTP refresh interval, add 1920x1080 to pre-alarm resolution, expand image destination server to 2 locations

Network

Advanced

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

Transmission protocol

☐ FTP ☒ SFTP

Alarm setting (Server 1)

Alarm image transmission

☐ On ☒ Off

Directory name

File name

☒ Terminal 1 ☒ Terminal 2 ☒ Terminal 3

☒ VMD ☒ SCD ☒ Auto track

☒ Command alarm ☒ Audio detection

* For alarms by the "Ext. software", alarm images will be transmitted only by configuring the alarm image SFTP transmission.

FTP transmission retry

☐ On ☒ Off

Pre alarm

Transmission interval

1fps

Maximum number of images

0 pic

Recording duration

0s

Post alarm

Transmission interval

1fps

Number of images

100 pics

Recording duration

100s

Image capture size

JPEG(2) (640x360)

Alarm setting (Server 2)

Alarm image transmission

☐ On ☒ Off

Directory name

File name

☐ Terminal 1 ☐ Terminal 2 ☐ Terminal 3

[FTP transmission retry] [Pre alarm] [Post alarm] [Image capture size] is the same as the [Alarm setting (Server 1)].

Periodic transmission settings

Periodic image transmission

☐ On ☒ Off

Directory name

File name

☒ Name w/time&date ☐ Name w/o time&date

Transmission interval

1s

Image capture size

JPEG(2) (640x360)

[Periodic image transmission] is available for [FTP Server 1], [SFTP Server 1].

[Transmission protocol]

Select and set the protocol with the destination server from FTP/SFTP.

- **SFTP**: SFTP is used as the protocol for transmitting with the server.
- **FTP**: FTP is used as the protocol for transmitting with the server.
- **Default**: SFTP

IMPORTANT

- When FTP is selected in the protocol settings, FTP server authentication information (user

names and passwords) may be leaked on the network when sending images to the FTP server.

[Alarm setting](#)

Alarm setting (server 1)

[Alarm image transmission]

Select “On” or “Off” to determine whether or not to transmit images when an alarm is detected.

- **On:** Transmits an image to the server when an alarm has occurred.
- **Off:** Does not transmit an image to the server when an alarm has occurred.
- **Default:** Off

[Directory name]

Enter the directory name where the alarm images are to be saved.

For example, enter “/ALARM” to designate the directory “ALARM” under the root directory of the server.

- **Available number of characters:** 1 – 256 characters
- **Unavailable characters:** " & ;

[File name]

Enter the file name used for the alarm image to be transmitted to the server. The file name will be as follows.

- **File name:** [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)”] + “Serial number”
- **Available number of characters:** 1 – 32 characters
- **Unavailable characters:** " & * / : ; < > ? ¥ |

When “On” is selected for [Alarm image FTP transmission], you can select the alarm type from the following.

- **Terminal1** <Terminal input/output supported models only>: Transmit the image to the server when an alarm occurs in Terminal 1.
- **Terminal2** <Terminal input/output supported models only>: Transmit the image to the server when an alarm occurs in Terminal 2.
- **Terminal3** <Terminal input/output supported models only>: Transmit the image to the server when an alarm occurs in Terminal 3.
- **VMD:** Transmit the image to the server when motion is detected.
- **SCD:** Transmit the image to the server when SCD (scene change detection) occurs.
- **Audio detection:** Transmit the image to the server when audio detection occurs.

- **Command alarm:** Transmit the image to the server when a command alarm is entered.
- **Auto track** <【PTZ S】only>: Transmit the image to the server when an auto track occurs.

[FTP transmission retry]

Select “On” or “Off” to determine whether or not to resend failed FTP transmissions.

- **On:** If transmission fails, transmissions are resent until they are successfully sent.
- **Off:** If transmission fails, the image that failed to be sent is discarded and the next image is sent.
- **Default:** Off

Note

- When SFTP is selected in [Transmission protocol] settings, FTP transmission retry is unavailable.
- When 2fps or 3fps is selected in [Refresh interval], FTP transmission retry is unavailable.

[Pre alarm]

- **Transmission interval**

Select the transmission interval of images before an alarm occurs from the following.

When 60fps mode, 30fps mode or 15fps mode is selected for [Image capture mode]:

0.1fps/ 0.2fps/ 0.33fps/ 0.5fps/ 1fps/ 2fps/ 3fps

When 50fps mode, 25fps mode or 12.5fps mode is selected for [Image capture mode]:

0.08fps/ 0.17fps/ 0.28fps/ 0.42fps/ 1fps/ 2fps/ 3fps

- **Default:** 1fps

- **Maximum number of images**

Select the number of images to be transmitted from the following.

0pic/ 1pic/ 2pics/ 3pics/ 4pics/ 5pics/ 6pics/ 7pics/ 8pics/ 9pics/ 10pics/ 20pics/
30pics/ 40pics/ 50pics/

- **Default:** 0 pic

- **Recording duration**

Approximate time to be taken to save the set [Maximum number of images] with the set [Transmission interval] will be displayed.

Note

- When “JPEG(1)” is selected for the capture size of the image to be transmitted, pre alarm is unavailable if the image capture size of “JPEG(1)” is larger than “1920x1080”.
- When “On” is selected for “Image compression rate upon alarm detection”, only post alarm recorded images are compressed. Compression is not applied to pre alarm recorded images.
- When a selection with an asterisk (*) on the right of it is selected for “Maximum number of

images” of “Pre alarm”, the specified number of images may not be able to be sent depending on the image capture size and image quality. The following table shows the maximum number of images that can be sent for pre alarm.

- If the refresh interval is higher than 1fps, the maximum number of pre-alarm images is 10.

Image capture size	Image quality									
	0	1	2	3	4	5	6	7	8	9
1920x1080	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>
1280x960	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	10	10	10	20	30	40
1280x720	<u>9</u>	<u>9</u>	10	10	10	20	20	30	40	50
VGA	10	20	20	30	30	40	50	50	50	50
640x360	20	30	40	50	50	50	50	50	50	50
QVGA	40	50	50	50	50	50	50	50	50	50
320x180	50	50	50	50	50	50	50	50	50	50

[Post alarm]

- **Transmission interval**

Select the transmission interval for the alarm image transmission from the following.

When 60fps mode, 30fps mode or 15fps mode is selected for [Image capture mode]:

0.1fps/ 0.2fps/ 0.33fps/ 0.5fps/ 1fps/ 2fps/ 3fps

When 50fps mode, 25fps mode or 12.5fps mode is selected for [Image capture mode]:

0.08fps/ 0.17fps/ 0.28fps/ 0.42fps/ 1fps/ 2fps/ 3fps

- **Default:** 1fps

- **Number of images**

Select the number of images to be transmitted from the following.

1pic/ 2pics/ 3pics/ 4pics/ 5pics/ 6pics/ 7pics/ 8pics/ 9pics/ 10pics/ 20pics/ 30pics/ 50pics/ 100pics/ 200pics/300pics/ 500pics/ 1000pics/ 1500pics/ 2000pics/ 3000pics

- **Default:** 100pics

- **Recording duration**

Approximate time to be taken to save the set “Number of images” with the set “Transmission interval” will be displayed.

Note

- If the resolution of the image to be transmitted is set to JPEG(1), and the JPEG(1) resolution is larger than “1920×1080”, the maximum refresh interval will be 1fps.
- If the refresh interval is higher than 1fps, the maximum number of pre-alarm images is 10.

[Image capture size]

Select the image capture size of images transmitted when an alarm occurs from the following.

JPEG(1)/JPEG(2)

- **Default:** JPEG(2)

Alarm setting (server 2) < Terminal input/output supported models only >

[Alarm image transmission]

Select “On” or “Off” to determine whether or not to transmit images when an alarm is detected.

- **On:** Transmits an image to the server when an alarm has occurred.
- **Off:** Does not transmit an image to the server when an alarm has occurred.
- **Default:** Off

[Directory name]

Enter the directory name where the alarm images are to be saved.

For example, enter “/ALARM” to designate the directory “ALARM” under the root directory of the server.

- **Available number of characters:** 1 – 256 characters
- **Unavailable characters:** “ & ;

[File name]

Enter the file name used for the alarm image to be transmitted to the server. The file name will be as follows.

- **File name:** [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)”] + “Serial number”
- **Available number of characters:** 1 – 32 characters
- **Unavailable characters:** “ & * / : ; < > ? ¥ |

When “On” is selected for [Alarm image FTP transmission], you can select the alarm type from the following.

- **Terminal1:** Transmit the image to the server when an alarm occurs in Terminal 1.
- **Terminal2:** Transmit the image to the server when an alarm occurs in Terminal 2.
- **Terminal3:** Transmit the image to the server when an alarm occurs in Terminal 3.

Note

- Terminals 1 to 3 of “Alarm setting (Server 2)” can be selected only when terminals 1 to 3 of “Alarm setting/Alarm setting (Server 1)” are not selected.
- “Alarm setting (Server 2) <only for models with terminal input/output>” uses [FTP transmission retry], [Pre alarm], [Post alarm], and [Image capture size] of “Alarm setting/Alarm setting (Server 1)”.

Periodic transmission settings

Periodic image transmission is available only for “Alarm setting/Alarm setting (Server 1)”.

[Periodic image transmission]

Select “On” or “Off” to determine whether or not to transmit images using the periodic image transmission function.

When “On” is selected, it is necessary to configure the settings of the server.

- **On:** Performs periodic image transmission.
- **Off:** Does not perform periodic image transmission.
- **Default:** Off

IMPORTANT

- When using periodic image transmission, it is necessary to configure the schedule settings of FTP/SFTP periodic image transmission on the [Schedule] tab of the “Schedule” page. (→ “Configure the settings relating to the schedules [Schedule]”)

[Directory name]

Enter the directory name where the alarm images are to be saved.

For example, enter “/ALARM” to designate the directory “ALARM” under the root directory of the server.

- **Available number of characters:** 1 – 256 characters
- **Unavailable characters:** “ & ;
- **Default:** None (blank)

[File name]

Enter the file name used for the alarm image to be transmitted to the server. The file name will be as follows.

- **File name:** [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)”] + “Serial number”
- **Available number of characters:** 1 – 32 characters
- **Unavailable characters:** “ & * / : ; < > ? ¥ |

- **Default:** None (blank)

Note

- When “Name w/time&date” is selected, the file name will be [“Entered file name” + “Time and date (year/ month/ day/ hour/ minute/ second)” + “Serial number (starting from 00)”] + “s” during summer time.
- If “Alarm setting 1” and “Periodic transmission settings” are set at the same time when an alarm occurs, “Alarm setting 1” will be performed when an alarm occurs.
- If “Alarm setting 2” and “Periodic transmission settings” are set at the same time when an alarm occurs, both “Alarm setting 2” and “Periodic transmission settings” will be performed when an alarm occurs.

[Transmission interval]

Select the interval for the periodic image transmission from the following.

1s/ 2s/ 3s/ 4s/ 5s/ 6s/ 10s/ 15s/ 20s/ 30s/ 1min/ 2min/ 3min/ 4min/ 5min/ 6min/ 10min/
15min/ 20min/ 30min/ 1h/ 1.5h/ 2h/ 3h/ 4h/ 6h/ 12h/ 24h

- **Default:** 1s

[Image capture size]

Select the image capture size of images to be transmitted from the following.

JPEG(1)/JPEG(2)

- **Default:** JPEG(2)

39 Add 2fps and 3fps to FTP/SFTP refresh interval, add 1920x1080 to pre-alarm resolution, expand image destination server to 2 locations

SFTP server 1 settings

SFTP server address	Example of entry: 192.168.0.10
Port number	22 (1-65535)
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rbpW6dnap6P743uiMV0cf0
User name	
Password	

FTP Server 1 setting

FTP server address	Example of entry: 192.168.0.10
User name	
Password	
Control port	21 (1-65535)
FTP mode	☒ Passive ☐ Active

SFTP server 2 settings

SFTP server address	Example of entry: 192.168.0.10
Port number	22 (1-65535)
Host key hash	SHA256: Example of entry: dqVcdVZ/2ySO5tz/R6YR+rbpW6dnap6P743uiMV0cf0
User name	
Password	

FTP server 2 settings

FTP server address	Example of entry: 192.168.0.10
User name	
Password	
Control port	21 (1-65535)
FTP mode	☒ Passive ☐ Active

Set

[SFTP server settings](#)

SFTP server 1 settings

SFTP server 2 settings < Terminal input/output supported models only >

Note

- When [Transmission protocol] is set to FTP, the SFTP server setting is unavailable.

[SFTP server address]

Enter the IP address or the host name of the SFTP server.

- **Available number of characters:** 1 – 128 characters
- **Unavailable characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

IMPORTANT

- When entering the host name for [SFTP server address], it is necessary to configure the DNS settings on the [Network] tab of the “Network” page. (→ “Configure the network settings [Network]”)

[Port number]

Enter a control port number to be used for the SFTP server.

- **Available number of characters:** 1–65535
- **Default:** 22

The following port numbers are unavailable since they are already in use.

20, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 162, 443, 995, 10669, 10670

[Host key hash]

Enter the hash value of the public key of the SFTP server.

- **Available number of characters:** 43 – 44 characters
- **Available characters:** Alphanumeric characters, +, /, =

[User name]

Enter the user name (login name) to access the SFTP server.

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

[Password]

Enter the password to access the SFTP server.

- **Available number of characters:** 0 – 32 characters
- **Unavailable characters:** " &

[FTP server setting](#)

FTP server 1 setting

FTP server 2 settings <Terminal input/output supported models only>

Note

- When [Transmission protocol] is set to SFTP, the FTP server setting is unavailable.

[FTP server address]

Enter the IP address or the host name of the FTP server.

- **Available number of characters:** 1 – 128 characters
- **Available characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

IMPORTANT

- When entering the host name for [FTP server address], it is necessary to configure the DNS settings on the [Network] tab of the “Network” page. (→ “Configure the network settings [Network]”)

[User name]

Enter the user name (login name) to access the FTP server.

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

[Password]

Enter the password to access the FTP server.

- **Available number of characters:** 0 – 32 characters
- **Unavailable characters:** " &

[Control port]

Enter a control port number to be used for the FTP server.

- **Available port number:** 1 – 65535
- **Default:** 21

The following port numbers are unavailable since they are already in use.

20, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 162, 443, 995, 10669, 10670

[FTP mode]

Select “Passive” or “Active” for the FTP mode.

Normally, select “Passive”. When it is impossible to connect after select “Passive”, try to connect after selecting “Active”.

- **Passive:** Sets the FTP mode to passive mode.
- **Active:** Sets the FTP mode to active mode.
- **Default:** Passive

40 Add 0.5s, 1s, 2s, 3s, and 4s to the alarm deactivation time

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to the camera action on alarm occurrence [Alarm])

0.5s, 1s, 2s, 3s, and 4s have been added to the alarm deactivation time.

Alarm

- [Alarm deactivation time]

Set the time during which no detection action is performed after an alarm is detected. For example, if the alarm is set to send email notifications to a mobile device or tablet device, this setting can be used to prevent too many emails from being sent. 0.5s, 1 – 600s.

Default : 5s

Alarm		VMD area	SCD area	Audio detection	Notification
Alarm					
Terminal 1	Off v				
Terminal 2	Off v				
Terminal 3	Off v				
VMD alarm	VMD >>				
SCD alarm	SCD >>				
Auto track alarm	Auto track setting >>				
Audio detection alarm	Audio detection >>				
Command alarm	Command alarm	☐ On ☒ Off			
	Reception port	8181 (1-65535)			
Alarm deactivation time		5 s (0.5s,1-600s)			
Alarm test		Execute			

41 Add schedule setting to switch image quality at sunrise and sunset

(Configure the settings relating to the schedules [Schedule])

A function to change the image quality according to the time of sunrise and sunset has been added to the schedule settings.

Schedule

Schedules

Schedule 1 (White)	Schedule mode	<Auto-Schedule> Daytime: Image
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00
Schedule 2 (Blue)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00
Schedule 3 (Green)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00
Schedule 4 (Red)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00
Schedule 5 (Black)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00

Scene settings linked to sunrise and sunset times [To scene setting \(image quality adjustment\)](#)

When using this function, set the time zone. [Basic settings >>](#)

Auto Scheduler (Manual/ City Selection)	Manual
Latitude	0.000000 (-90.000000 - 90.000000)
Longitude	0.000000 (-180.000000 - 180.000000)
Altitude	10 m(-500 - 9000)
Automatic calculation result	Sunrise time : Sunset time :
Sunrise time and sunset time correction	Sunrise time + 0 Minutes (-60 - 60) Sunset time + 0 Minutes (-60 - 60) The time of the automatic calculation result can be corrected between -60 minutes and +60 minutes.

Configure the settings relating to the schedules [Schedule]

On the Schedule page, set the following schedule items.

- 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
- Recording to SD (Recording stream)
- Scene file
- SFTP periodic image transmission
- E-mail permission
- Position refresh
- Preset position setting (1-64)
- <Auto Schedule>Daytime: Image Quality1 / Night: Image Quality 2 (Schedule 1 only)
- Reboot (Schedule 8 only)

The Schedule page consists only of the [Schedule] tab.

Up to 8 schedules can be set.

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): Alarm input (terminal alarm) will be allowed during the period of the schedule.

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

Alarm permission (Terminal alarm 3): Alarm input (terminal alarm) 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.

Access permission: Users whose access level is set to “2. Camera control” and “3. Live only” on the [User auth.] tab. (Configure the settings relating to the user authentication [User auth.]

Recording to SD (Recording stream): The SD recording will be performed at the designated time in the schedule. Further, the “Recording format” is enabled only when there is a stream.

Image Quality 1:Scene1 (Scene file 1) : Images are set to the image settings of “Scene file 1” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.

Image Quality 2:Scene1 (Scene file 2) : Images are set to the image settings of “Scene file 2” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.

Image Quality 3:Scene3 (Scene file 3) : Images are set to the image settings of “Scene file 3” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.

Image Quality 4:Scene4 (Scene file 4) : Images are set to the image settings of “Scene file 1” at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of “Scene file is not applied”.

SFTP periodic image transmission: SFTP periodic image transmission will be performed at the designated time in the schedule.

E-mail permission: While the schedule is set, e-mail notification is sent when alarm is input.

Position refresh: The camera position will be refreshed at the designated time in the schedule.

1-64: The camera will move to the selected position from the preset position at the designated time in the schedule.

<Automatic schedule> Daytime: Image Quality 1 / Night: Image Quality 2: At sunrise, the image quality is set to “Scene file 1”, and at sunset, the image quality is set to “Scene file 2”.

Only schedule 1 can be selected. This cannot be selected if the sunrise/sunset times have not been set. For the setting procedure, see “How to change the image quality based on the time of sunrise/sunset”.

Reboot: The camera reboots at the scheduled time. Can only be selected with Schedule 8.

Note

- Select “On” for “User auth.” on the [User auth.] tab of [User mng.] page (“Configure the settings relating to the user authentication [User auth.]”) and “Off” for [Host auth.] on the “Host auth.” page (“Configure the settings relating to the host authentication [Host auth.]”) to validate “Access permission”.
- When selecting “Recording to SD (Recording stream)”, select “Stream(1)”, “Stream(2)”, “Stream(3)”, or “Stream(4)” for [Recording format] on the [SD memory card] tab and select “Schedule” for “Save trigger”. ([Save trigger]).
- Schedule 1 “<Automatic schedule> Daytime: Image Quality 1/ Night: Image Quality 2” and

Schedules 2 to 8 “Image Quality 1: Scene 1 (Scene file 1)”, “Image Quality 2: Scene 2 (Scene file 2)”, “Image Quality 3: Scene 3 (Scene file 3)”, and “Image Quality 4: Scene 4 (Scene file 4)” cannot be selected at the same time.

2. Select the checkbox for the day of the week to set the schedule in “Schedule”.

Note

- If “<Auto Schedule> Daytime: Image Quality 1/ Night: Image Quality 2” is selected in Schedule 1, the time zone setting will be disabled.
3. To specify the time, click [▼] and set the time. If you do not want to set the time period, select “24h”.

Note

- If “<Auto Schedule> Daytime: Image Quality 1/ Night: Image Quality 2” is selected in Schedule 1, the time zone setting will be disabled.
4. Click the [Set] button after completing the settings.
→ The setting details are displayed at the bottom of the screen.

Note

- The colors displayed in Schedule 1 to Schedule 8 represent the colors of the lines displayed in the schedule column at the bottom of the screen.
- If the setting time for position refresh and image quality is set at the same time, the image quality will be applied after position refresh is completed.
- When the operation mode of Schedules 1 to 8 is set to “Off”, the following are always allowed to operate.
 - 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

How to change the image quality based on the time of sunrise/sunset

1. Set the sunrise/sunset times from [Scene settings linked to sunrise and sunset times].
[To scene setting (image quality adjustment)]
This is a link to the image quality adjustment for scene setting.

[Basic settings]

This is a link to the basic settings for setting the time zone.

[Auto Scheduler (Manual/City Selection)]

Select the input method for [Latitude], [Longitude], and [Altitude].

- Not used: Disable operation mode “<Auto Schedule> Daytime: Image Quality 1 / Night: Image Quality 2”.
- Manual: Manually enter [Latitude], [Longitude], and [Altitude].
- (City name): Displays a list of cities. The [Latitude], [Longitude], and [Altitude] of the selected city are entered and used for [Automatic calculation result].

Default: Not used

[Latitude]

Enter the latitude of the region of the camera you are using.

Input range: -180 to 180 (valid up to 6 decimal places)

Default: 0

[Longitude]

Enter the longitude of the region of the camera you are using.

Input range: -90 to 90 (valid up to 6 decimal places)

Default: 0

[Altitude]

Enter the altitude of the region of the camera you are using.

If left blank, it will be calculated as “10m”.

Input range: -500 to 9000 (m)

Default: 10

[Automatic calculation result]

The sunrise/sunset time is calculated from [Latitude], [Longitude], and [Altitude].

If you do not click the [Set] button, the calculation result will not be applied.

[Sunrise time and sunset time correction]

Perform time correction on the sunrise/sunset times in [Automatic calculation result] to determine the time applied for the image quality.

Input range: -60 to 60 (minutes)

Default: 0

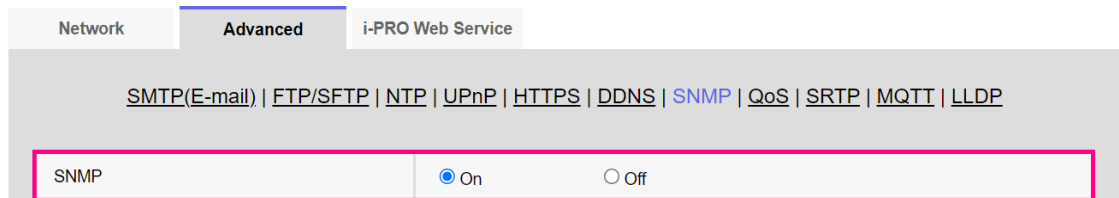
2. Click the [Set] button.
3. Configure the schedule settings.

For the setting procedure, see “Configure schedule settings [Schedule]”.

42 Add enable/disable setting to SNMP agent setting

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

“Enable/Disable” setting for “SNMP” has been added to “SNMP” in the “Advanced” tab of the Network page.



SNMP setting

- [SNMP setting]

Set whether to Enable/Disable the SNMP function

Default: Enable

Note

- If [SNMP setting] is set to “Disable”, [SNMP agent setting] and [SNMP trap setting] cannot be set.

43 Add corridor view mode to image capture mode

(Operating Instructions - About the live image types - About image capture mode)

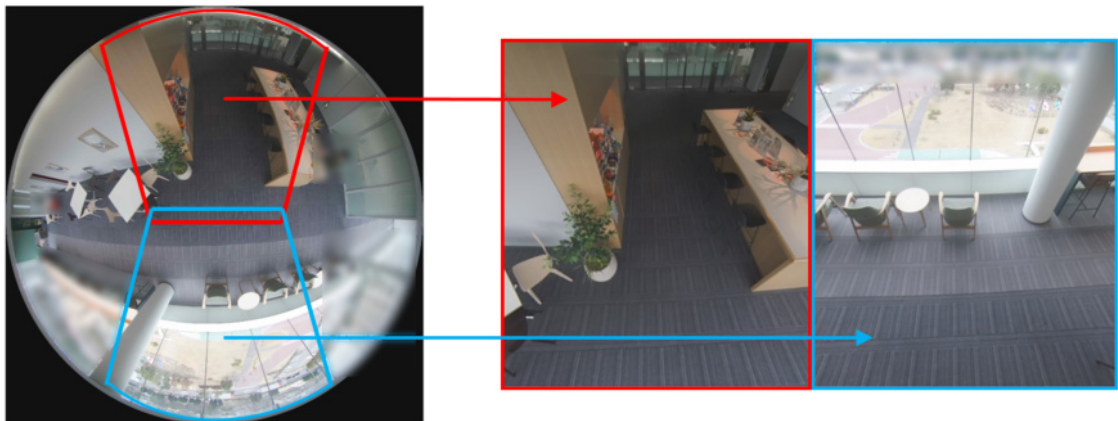
Corridor view is a function that corrects the distortion of the upper and lower parts of the fisheye image and displays them side by side.

“Corridor” and “Fisheye + Corridor” have been added to the image capture mode to display in corridor view.

43.1 Image types

Corridor view corrects the distortion of the upper and lower parts of the fisheye image and displays them on the left and right.

The center, left, and right areas of fisheye are blind spots and are not visible in the corridor view image.



43.2 About image capture modes

The resolutions and maximum frame rates that can be used for “Corridor” and “Fisheye + Corridor” are as follows. (Excluding multi-screen)

Image capture mode	Stream(1)	Stream(2)	JPEG(1)	JPEG(2)	Maximum frame rate
Corridor	2560×1440 【fisheye9M】 1920×1080 1280×720 640×360 320×180	1920×1080 【fisheye9M】 1280×720 640×360 320×180	2560×1440 【fisheye9M】 1920×1080 1280×720 640×360 320×180	1920×1080 【fisheye9M】 1280×720 640×360 320×180	30fps [‡] ／25fps 【fisheye5M】 15fps／12.5fps 【fisheye9M】
Fisheye + Corridor	Fisheye: 2992×2992 【fisheye9M】 2192×2192 1280×1280	Corridor [‡] : 1280×720 640×360 320×180	Fisheye: 2992×2992 2192×2192 1280×1280 640×640 320×320	Corridor: 1280×720 640×360 320×180	30fps [‡] ／25fps 【fisheye9M】 15fps／12.5fps 【fisheye5M】

[‡] Auto VIQS not available.

[‡] If “Audio out” is set to “Monitor out”, the maximum frame rate may drop.

43.2.1 Types of images that can be displayed by image capture mode type

The types of images that can be displayed in “Corridor” and “Fisheye + Corridor” are as follows.

Image capture mode type	Image capture mode	Image type	Corresponding installation location
1 monitor This type streams one type of image.	Corridor	Corridor	Ceiling
2 monitors This type streams two types of images.	Fisheye+Corridor	Fisheye+Corridor	Ceiling

- If the image capture mode type is “2 monitors”, “Stream (1)” will be fisheye, and “Stream (2)” will be Panorama, Double Panorama, Corridor, or Quad PTZ.

43.2.2 View images from mobile devices (including smartphones)

The resolutions that can be displayed from a mobile device for “Corridor” and “Fisheye +

Corridor” are as follows.

Image capture mode type	Image capture size
Corridor	1920×1080／1280×720／640×360／320×180
Fisheye+Corridor	For Fisheye: 2192×2192／1280×1280／640×640／320×320 For Corridor: 1280×720／640×360／320×180

43.2.3 Restrictions on JPEG images when streaming

When [Stream transmission] (→Stream (1), Stream (2)) is set to “On”, H.265 (or H.264) images are displayed according to the [Stream encoding format] setting. When set to “Off”, JPEG images are displayed.

JPEG images can be displayed even when [Stream transmission] is set to “On”. In this case, the refresh interval of JPEG images (30fps mode/25fps mode) is restricted as follows.

Model	Image capture mode	Stream transmission	
		On	Off
【fisheye9M】	Corridor	Max.5fps／4.2fps	Max.15fps／12.5fps
	Fisheye+Corridor	Max.5fps／4.2fps	Max.5fps／4.2fps
【fisheye5M】	Corridor	Max.5fps／4.2fps	Max.30fps／25fps
	Fisheye+Corridor	Max.5fps／4.2fps	Max.15fps／12.5fps

*The refresh interval of JPEG images may slow down depending on the network environment, PC performance, subject, resolution, image quality, and access number.

43.3 Play back images on the SD memory card

Regardless of the resolution of the images saved on the SD memory card, they will be displayed in the size determined according to the [Image capture mode] and [Recording format] settings on the playback page. Therefore, it may look grainy on the playback page.

Image capture mode	Video compression method	Playback size
Corridor	All	640×360
Fisheye+Corridor	「JPEG(1)」or「Stream(1)」	480×480
	「JPEG(2)」or「Stream(2)」	VGA

*While recording to the SD memory card, the playback refresh interval may slow down.

43.4 Set preset position

The preset position settings for “Corridor” and “Fisheye + Corridor” are the same as for “Double panorama” and “Fisheye + Double panorama” respectively.

For the initial position setting of the corridor image, you can adjust it by 90° to the left and right by clicking the [Position adjust] button. The left and right corridor images then move together.

43.5 Set motion detection

The motion detection settings when the image capture mode is Corridor are the same as for “Double panorama” except for the following.

- Two motion detection areas can be set for each of the left and right images (left: “1 (white)” “2 (blue)”, right: “3 (green)” “4 (red)”).
- When the entire area is selected, “1 (white)” and “3 (green)” of “Area” are set.

43.6 Set scene change detection

The scene change detection settings when the image capture mode is Corridor are the same as for “Double panorama” except for the following.

- You can set one scene change detection area for each of the left and right images (left: “white”, right: “green”).

44 Add 1280x720 image capture size for Stream (1) and Stream (2) (4 mega pixel model only)

(Operating Instructions - Configure the settings relating to images [Stream])

(Operating Instructions - Detailed Settings - Configure the settings relating to images and audio

[Image/Audio] - Configure the settings relating to Stream [Image])

Image		Image quality	Audio
Image capture mode		16:9 mode(60fps mode) ▼	
"Live" page (Initial display)			
Initial display stream		Stream(1) ▼	
Refresh interval (JPEG) *		5fps ▼	
JPEG			
JPEG(1)	Image capture size	1920x1080 ▼	
	Image quality	5 Normal ▼	
JPEG(2)	Image capture size	640x360	
	Image quality	5 Normal ▼	
Stream(1)			
Stream transmission		☒ On ☐ Off	
Stream encoding format		☒ H.265 ☐ H.264	
Image capture size		1280x720 ▼	
Transmission priority		Frame rate ▼	
Frame rate*		60fps * ▼	
Max bit rate (per client) *		3072kbps * ▼ 3072 kbps	
Image quality		Normal ▼	
Smart Coding	Smart VIQS	Off ▼	
	Smart P-picture control	☐ On ☒ Off	
	GOP control	Off ▼	
Refresh interval		1s ▼	
Transmission type		Unicast port (AUTO) ▼	
Unicast port1(Image)		32004 (1024-50000)	
Unicast port2(Audio)		33004 (1024-50000)	
Multicast address		239.192.0.20	
Multicast port		37004 (1024-50000)	
Multicast TTL/HOPLimit		16 (1-254)	

[Stream](#)

[Stream \(1\)/ Stream \(2\)](#)

[Image capture size]

Image capture mode	Stream(1)	Stream(2)
4 mega pixel [16:9] (30fps mode)	2688x1520	<u>1280x720</u>
4 mega pixel [16:9] (25fps mode)	2560x1440	640x360
	1920x1080	320x180
	<u>1280x720</u>	
4 mega pixel [16:9] (30fps Quad mode)	2688x1520	<u>1280x720</u>
4 mega pixel [16:9] (25fps Quad mode)	2560x1440	640x360
4 mega pixel [16:9] (30fps Stitching mode)	1920x1080	
4 mega pixel [16:9] (25fps Stitching mode)	<u>1280x720</u>	

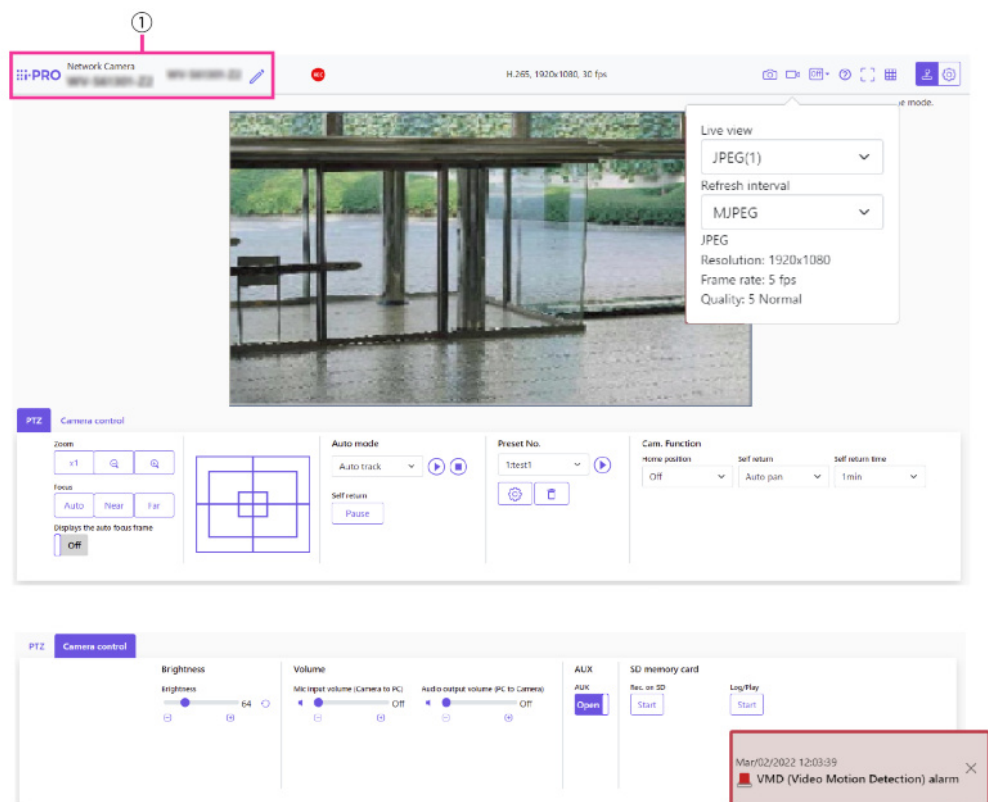
Note

- When “Image rotation” is set to “90° ” or “270° ” on the [Basic] tab, the image capture size of 320x180 cannot be set.
- When Stream (1) is 2688x1520 and Stream (2) is 1280x720, the frame rate is limited to a maximum of 15fps (maximum 12.5fps in 25fps mode).

45 Add title edit icon next to camera title

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

You can edit the camera title by adding a title edit icon next to the camera title, and then clicking it.



① Camera title

Displays the camera title entered in “Camera title” on the [Basic] tab. (→ [Camera Title])

If you click the icon, the camera title becomes a text box and you can edit the string.

46 Add SD memory card file system format to the “SD memory card” settings

(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 file system type has been added to [SD Memory Card File System Format].

BasicSD memory cardOverlay image

Operating mode

SD memory card

☐ Use☒ Not use

Ext. software mode

☒ On☐ Off

SD Memory Card File System Format

☐ FAT(FAT16/FAT32/exFAT)☒ ext(ext4)

Audio recording

☐ On☒ Off

Remaining capacity notification

50% ▾

Overwrite

☒ On☐ Off

* If [SD Memory Card File System Format] is set to [ext(ext4)], SD memory card can be used only from Ext. software.If SD memory card function is set to Use, set [FAT(FAT16/FAT32/exFAT)] to Set and then Execute [Format].

SD memory card security

Additional info for detecting alteration

Setup >>

SD memory card password lock

Password

SetRemoveChange

Status

Unlock

Recording stream

Recording format

Off ▾

Save trigger

Manual ▾

☒ Terminal 1☒ Terminal 2☒ Terminal 3

☒ VMD☒ SCD☒ Command alarm

* For alarms by the “Ext. software”, saving will be performed only by selecting “Alarm input”.

SD memory card information

Remaining capacity

16498MB/121910MB(Remaining capacity/Original capacity)

Format

Execute

Set

[Ext. software mode]

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

- **On:** The Ext. software can use the SD memory card of this product. In that case, you will not be able to use functions of this product such as recording to the SD memory card.
- **Off:** The Ext. software cannot use the SD memory card of this product.

Default: Off

Note

- For more information about the extension software, refer to our technical information website <Control No.:C0103>.

[SD memory card file system type]

You can select the file system format of the SD memory card. This can be selected only when “Ext.”

- FAT (FAT16/FAT32/exFAT): FAT formatted SD memory cards can be used.
- ext (ext4): ext formatted SD memory cards can be used.

IMPORTANT

- If you change [SD Memory Card File System Format], click the [Execute] button in [Format] to format the SD memory card.

Note

- When “ext(ext4)” is selected, the SD memory card can be used only with function extension software. Therefore, you will not be able to use functions such as recording video and audio to the SD memory card, or notification of remaining space in the SD memory card.
- When “ext(ext4)” is selected, the past information on the SD memory card will be deleted and cannot be displayed in the [Status] tab of the Maintenance page. (→Check the status [Status])
- When “ext(ext4)” is selected, the capacity of the SD memory card cannot be displayed.
(→ Setting SD Memory Card [SD Memory Card])
(→ Displaying the log list)
(→ Viewing images from a tablet device)

[Format]

To format the SD memory card, click the [Execute] button.

Format in the file format selected in [SD Memory Card File System Format].

Note

- When formatting an SD memory card with “ext(ext4)” selected for [SD Memory Card File System Format], formatting may take about 20 minutes until it is completed depending on the SD memory card.
- After formatting the SD memory card in ext format, check the operation of the extension software using the SD memory card.

47 Fix frame rate not to be halved when setting GOP control “Advanced(Fixed GOP 60s w/1s key-frame)”

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

The information in the notes has been changed due to the relaxation of frame rate restrictions during GOP control.

Stream(1)/Stream(2)

[Smart Coding] – [Smart VIQS]

Maintains high image quality in the area where there are objects (people’s heads, bodies, vehicles and two-wheel vehicles), and maintains low/medium image quality in other areas while transmitting images in a way that reduces the data volume.

- **Off:** Does not use Smart VIQS.
- **On(High):** Maintains high image quality in the area where there are objects (people’s heads, bodies, vehicles and two-wheel vehicles), and maintains low image quality in other areas while transmitting images in a way that reduces the data volume.
- **On(Low):** Maintains high image quality in the area where there are objects (people’s heads, bodies, vehicles and two-wheel vehicles), and maintains medium image quality in other areas while transmitting images in a way that reduces the data volume.

Default: Off

Note

- This feature can only be used for “Stream(1)”. When “On(High)” or “On(Low)” is selected, the settings for VIQS configured on the [Image quality] tab will be disabled.
- When Smart VIQS is set to On(High) or On(Low), the frame rate is limited up to 7.5 fps (up to 6.25 fps in the 12.5 fps mode) **【S857xL】** or up to 15 fps (up to 12.5 fps in the 25 fps mode) **【S854xL】** regardless of the set frame rate.

[Smart Coding] – [Smart P-picture control]

To reduce the data volume, generation of data (macroblocks) in areas other than where there are

objects (people’s heads, bodies, vehicles and two-wheel vehicles) will be limited as much as possible.

- **Off:** Does not use Smart P-picture control.
- **On:** To reduce the data volume, generation of p-picture data in areas other than where there are objects (people’s heads, bodies, vehicles and two-wheel vehicles) will be limited as much as possible.

Default: Off

Note

- This feature can only be used for “Stream(1)”. When “On” is selected, the settings for VIQS configured on the [Image quality] tab will be disabled.
- When “On” is selected, movement may not be smooth or noise may appear in areas where there are no objects (people’s heads, bodies, vehicles and two-wheel vehicles).
- When Smart P-picture control is set to On, the frame rate is limited up to 7.5 fps (up to 6.25 fps in the 12.5 fps mode) **【S857xL】** or up to 15 fps (up to 12.5 fps in the 25 fps mode) **【S854xL】** regardless of the set frame rate.

[Smart Coding] – [GOP control]

By using GOP control, the data volume can be reduced.

- When “H.265” is selected for [Stream encoding format]: Off/ Low(Variable GOP 1s-8s)/ Mid(Variable GOP 4s-16s)/ Advanced(Fixed GOP 60s w/1s key-frame)/ Frame rate control(Variable GOP 4s-16s w/frame rate control)
- When “H.264” is selected for [Stream encoding format]: Off/ Low(Variable GOP 1s-8s)/ Mid(Variable GOP 4s-16s)

Default: Off

IMPORTANT

- When “Low(Variable GOP 1s-8s)”, “Mid(Variable GOP 4s-16s)” or “Frame rate control (Variable GOP 4s-16s w/frame rate control)”, images can be recorded on the SD memory card only by “Manual” or “Schedule”.

Note

- When using GOP control, the refresh interval is increased when streaming H.265 (or H.264) images. For this reason, do not use it when the network environment has frequent errors.
- “Low(Variable GOP 1s-8s)”, “Mid(Variable GOP 4s-16s)”, and “Frame rate control(Variable GOP 4s-16s w/frame rate control)” are available only when “VBR” is selected for

[Transmission priority]. “Advanced(Fixed GOP 60s w/1s key-frame)” can be set regardless of [Transmission priority].

- By using “Low(Variable GOP 1s-8s)”, “Mid(Variable GOP 4s-16s)”, and “Frame rate control(Variable GOP 4s-16s w/frame rate control)”, the data volume can be reduced when there are no targets to be detected (people’s heads, bodies, vehicles and two-wheel vehicles) in the image. By using “Advanced(Fixed GOP 60s w/1s key-frame)”, the data volume can be reduced regardless of the presence/absence of targets to be detected.
- When “Frame rate control(Variable GOP 4s-16s w/frame rate control)” is selected, the frame rate will vary between 1fps and the value set in [Frame rate*] depending on the presence/absence of targets to be detected.
- When “Frame rate control(Variable GOP 4s-16s w/frame rate control)” is selected, the display may temporarily become slower or faster when changing frame rates.
- When “Low(Variable GOP 1s-8s)”, “Mid(Variable GOP 4s-16s)”, “Advanced(Fixed GOP 60s w/1s key-frame)” or “Frame rate control(Variable GOP 4s-16s w/frame rate control)” is selected, the bit rate will be limited.
- When GOP control is set to Low(Variable GOP 1s-8s), Mid(Variable GOP 4s-16s) or Frame rate control (Variable GOP 4s-16s w/frame rate control), the frame rate is limited up to 7.5 fps (up to 6.25 fps in 12.5 fps mode) **【S857xL】** or up to 15 fps (up to 12.5 fps in 25 fps mode) **【S854xL】** regardless of the set frame rate.

48 Change the default of the preset sequence

(Operating Instructions – Configure the settings relating to PTZ [PTZ] – Configure the settings relating to the positions [Position] – Configure the settings relating to the preset sequence (“Preset sequence” setup menu))

The default of the preset sequence setting has been changed to “All enabled”.

[Preset sequence setting](#)

Preset sequence setting

-Preset sequence 1

Select all	Cancel all							
☒	☒	1	☒	2	☒	3	☒	4
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☒	☒	221	☒	222	☒	223	☒	224
☒	☒	225	☒	226	☒	227	☒	228
☒	☒	229	☒	230	☒	231	☒	232
☒	☒	233	☒	234	☒	235	☒	236
☒	☒	237	☒	238	☒	239	☒	240
☒	☒	241	☒	242	☒	243	☒	244
☒	☒	245	☒	246	☒	247	☒	248
☒	☒	249	☒	250	☒	251	☒	252
☒	☒	253	☒	254	☒	255	☒	256

Set

Preset sequence 1, Preset sequence 2, Preset sequence 3

Preset sequences can be set.

- [Select all] button: Selects all preset positions.
- [Cancel all] button: Cancels all selections.
- 1 – 256: Enables/disables the corresponding preset position.
- [Set] button: Saves the setting of the created preset sequence.

Default: All are enabled (only registered preset positions operate)

49 Change the default of auto track data in video stream

(Operating Instructions – Configure the settings relating to PTZ [PTZ] – Configure the settings relating to auto track (“Auto track” setup menu) – [Auto track data in video stream])

The default for auto track data in video stream has been changed to “On (with live display)”.

[Auto track data in video stream]

Select from the following to determine whether to transmit image data to which SCD information is added and superimposed.

Off: Auto track data is not added to images.

On: Auto track data is added to images, but the outline of the tracking target is not displayed on the “Live” page.

On (with live display): Auto track data is added to images and an outline of the tracking target is displayed on the “Live” page.

Default: On (with live display)

50 Change the default setting for guest user to “Use”

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

The default for [Guest User] has been changed on the [User auth.] tab on the “User mng.” page.

- [Guest User]

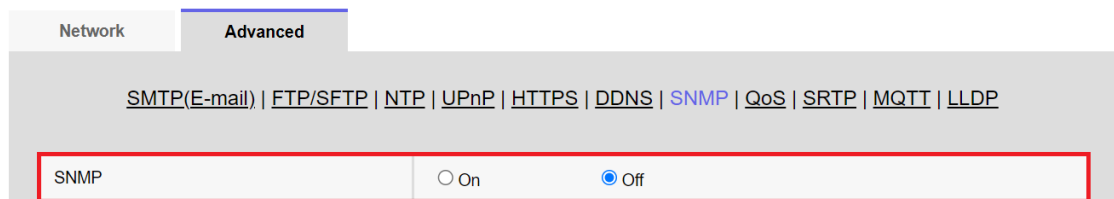
Select whether to set Guest User. If you select “Use”, you can set which functions are available or not for guest users for whom user authentication has not been performed.

Default: Use

51 Change the setting so that SNMP is not used in the default state (Off)

(Operating Instructions – Configuring the network settings [Network] – Configure the settings relating to SNMP)

The default “On/Off” in [SNMP] on the [Advanced] tab of the “Network” page has been changed to “Off”.



SNMP setting

- [SNMP setting]

Select whether to On/Off the SNMP function.

Default: Off

52 About the effect of the maximum shutter setting on the auto track function

(Operating Instructions – Configure the settings relating to PTZ [PTZ] – Configure the settings relating to auto track (“Auto track” setup menu))

(Operating Instructions – Configure the settings relating to PTZ [PTZ] – Configure the settings relating to auto track alarm (“Auto track alarm” setup menu))

The note description has been changed because the tracking performance of the auto track function may lower depending on the [Maximum shutter] setting.

Note

- Auto track setup is not available under the following conditions.
 - When “16:9 mode(60fps mode)”, “16:9 mode(50fps mode)”, “4:3 mode(15fps mode)” or “4:3 mode(12.5fps mode)” is selected for [Image capture mode]
- Under the following conditions, auto track setup is available, but the auto track performance will lower.
 - When [Maximum shutter] of [Image adjust] – [Light control mode] is set to “Max.2/30s”, “Max.4/30s”, “Max.6/30s”, “Max.10/30s”, or “Max. 16/30s”.
(For auto track, the “Max.1/30s” setting is recommended.)

53 About settings that are not applied when restoring setup data

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

A note description has been added regarding function settings that are not applied when settings data is restored.

Restore

- **[Setup data]**

Press the [Choose File] button and select the setup data files to restore.

Click the radio button to select whether to also restore network related settings.

Click the [Execute] button to start restoring. The camera will restart when restoration is complete, so do not perform operations until restoration is complete.

Make sure that the file name of the setup data used when restoring is “model name.dat” (the model name must be in lowercase letters and “WV-” is not required).

Default: Restore all settings except the network settings.

IMPORTANT

- If more than 5 minutes is required to restore the setup data, the restoration may have failed due to communication disconnections or other reasons. In this case, perform restoration again.

Note

- Restore operations for setup data are not applied to IEEE 802.1X related settings.
- Restore operations for setup data are not applied to the following network related settings.
 - [Line speed]
 - [Transmission data volume control (Bit rate)]
- Restore operations for setup data are not applied to UPnP related settings.
- Restore operations for setup data are not applied to HTTPS related settings (including CA Certificate and CRT key).
- Restore operations for setup data are not applied to extension software related settings.

54 Add SAN (Subject Alternative Name) entry field to CSR creation screen

(Operating Instructions – Configuring the network settings [Network] – Setting up HTTPS)

A SAN entry field has been added to the CSR creation screen.

- 1 Click the [Execute] button in [CA Certificate – Generate Certificate Signing Request].
→ The “CA Certificate – Generate Certificate Signing Request” screen is displayed.

CA Certificate - Generate Certificate Signing Request

Common Name		
Subject Alternative Name		
Country		
State		
Locality		
Organization		
Organizational Unit		
CRT key	RSA key size	2048bit
	Last modified	2023/12/22 13:15:41

OK Cancel

- 2 Enter the information for the certificate to be generated.

Item	Explanation	Available number of characters
[Host name]	Enter the camera address or the host name.	64 characters
[Subject Alternative Name]	Enter the domain name.	64 characters per domain Available number of domain registration: 8
[Country]	Enter the country code.	2 characters: Country code
[State]	Enter the name of the state.	128 characters
[Locality]	Enter the name of the locality.	128 characters
[Organization]	Enter the name of the organization.	64 characters

Item	Explanation	Available number of characters
[Organizational Unit]	Enter the name of the organizational unit.	64 characters
[CRT key]	Displays the key size of the current CRT key and the date/time it was generated.	–

Note

- When using a CA certificate, make sure you enter the information that is required by the certification authority you are applying to.
- For the [Host name], [State], [Locality], [Organization], and [Organizational Unit], you can enter the following characters:
0 to 9, A to Z, a to z, and the following symbols:
"–", ".", "_", ",", "+", "/", "(", ")"
- For the [Subject Alternative Name], you can enter the following characters:
0 to 9, A to Z, a to z, and the following symbols:
".", ":", "*", "–"
- When entering multiple domain names in [Subject Alternative Name], separate them with commas.

55 Change initial password for data encryption

(Operating Instructions - Configuring authentication [User mng.] – Configuring data encryption [Data encryption])

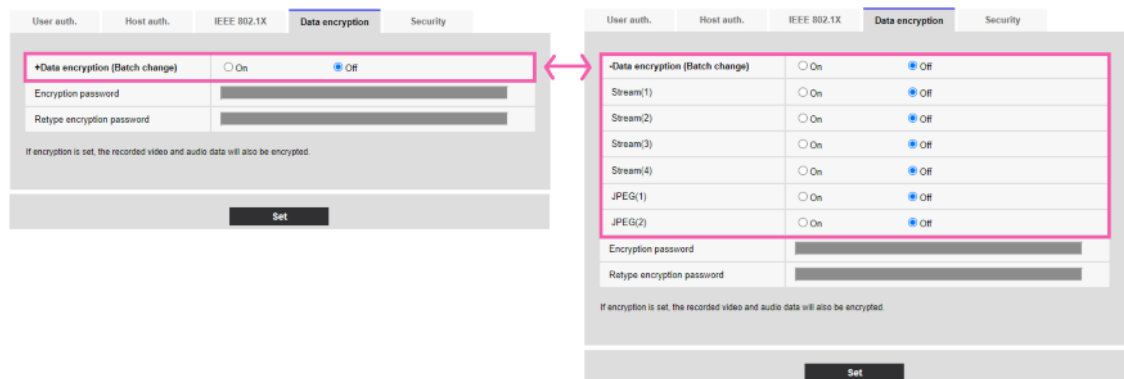
The initial password for data encryption has been changed to blank.

Click [Data encryption] on the “User mng.” page. (→ Display the setup menu “2.2.1 How to display the setup menu”, “2.2.2 How to operate the setup menu”)

Settings related to data encryption can be configured in this section.

For **[SSeriesS]**, **[SSeriesH]**, **[fisheye]**, **[miniAI]**, **[miniL]**, **[PTZ S]**, **[PTZ B]**, and **[PT]**, click the [+] on the left of the Setup screen to expand the items and display detailed settings.

Click the [-] on the left of each expanded item to return to the screen the state before the item was expanded.



- **[Data encryption (Batch change)]**

Use On or Off to set whether or not data encryption is enabled.

On: Enables data encryption. This encrypts Stream(1), Stream(2), Stream(3), Stream(4), JPEG(1), JPEG(2), and “AAC-LC” audio.

Off: Disables data encryption.

Default: Off

- **[Stream(1)][Stream(2)][Stream(3)][Stream(4)][JPEG(1)][JPEG(2)]**

Use On or Off to set whether or not data encryption is enabled individually for each of the following items:

Stream(1), Stream(2), Stream(3), Stream(4), JPEG(1), JPEG(2).

Default: Off

- [Encryption password],[Retype encryption password]

Set a password for data encryption.Available number of characters: 4 to 16 characters

Unavailable characters: “ &

Default: Blank

IMPORTANT

- When data encryption is set to “On”, it is recommended that the bit rate setting of the stream is 16 Mbps or less.
- When JPEG data encryption is set to “On”, you cannot display the images in a browser.
To display encrypted images, use one of our devices that supports encryption.
- Encrypted MP4 and JPEG images cannot be viewed on the browser’s replay page. Download the files to your PC and check them using a decryption tool.
For more information on decryption tools, refer to our technical information website <Control No.: C0310>.
- When Data encryption is set to “On”, you cannot select “16 Screens” from the “Layout” pull-down menu in “Multi-screen”.

For **【Multi】**

User auth.	Host auth.	System	IEEE 802.1X	Data encryption	Security
Data encryption					
Stream(1)		☐ On ☒ Off			
Stream(2)		☐ On ☒ Off			
Encryption password					
Retype encryption password					
If encryption is set, the recorded video and audio data will also be encrypted. Data encryption is available only for the stream(1) and stream(2).					
Set					

- [Stream(1)], [Stream(2)]

Use On or Off to set whether or not data encryption is enabled for Stream(1) and Stream(2).

Default: Off

- [Encryption password], [Retype encryption password]

Set a password for data encryption.

Available number of characters: 4 to 16 characters

Unavailable characters: “ &

Default: Blank

IMPORTANT

- JPEG images cannot be encrypted.
- When data encryption is set to "On", it is recommended that the bit rate setting of the stream is 64 Mbps or less.
- Encrypted MP4 images cannot be viewed on the browser's replay page (→1.6 Playing SD Memory Card Images). Download the files to your PC and check them using a decryption tool. For more information on decryption tools, refer to our technical information website <Control No.: C0310>.

56 Change the names of HTTPS connection options / Change [TLS1.2] so that enable/disable are available

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced] – Configure the HTTPS settings)

The names of connection options for HTTP and HTTPS have been changed.

[TLS1.2] has been changed so that it can now be enabled or disabled.

[HTTPS – Connection]

Sets the connection method to the camera.

HTTP & HTTPS: HTTP and HTTPS connections are available.

HTTPS: Only an HTTPS connection is available.

Default: HTTP & HTTPS

Select the TLS to be used for HTTPS connections.

TLS1.1, TLS1.2: Set enabled or disabled.

TLS1.3: This is always enabled and cannot be set to disabled.

Default: TLS1.1: Disable, TLS1.2: Enable, TLS1.3: Enable

Note

- When TLS1.1 is enabled, TLS1.2 is also enabled.
- When TLS1.2 is disabled, TLS1.1 is also disabled.
- When you change the TLS1.2 setting, you need to reboot the camera. After rebooting, you cannot perform operations for around 2 minutes, just as when the camera is turned on.

(Operating Instructions – Configuring the network settings [Network] - How to configure HTTPS settings)

The screenshot shows a web-based configuration interface for HTTPS settings. The interface is divided into several sections. At the top, there's a 'Connection' section with a dropdown menu set to 'HTTP & HTTPS'. Below this, there are checkboxes for 'TLS1.1', 'TLS1.2' (which is checked), and 'TLS1.3'. A note states: 'When connecting via "HTTPS", the maximum bandwidth(bit rate) is limited to 64Mbps.' Below the checkboxes, there's a 'Select certificate' dropdown menu set to 'Pre-installed'. Further down, there's an 'HTTPS port' field with the value '443' and a range '(1-65535)'. The next section is 'Pre-installed certificate', which includes a 'Download root certificate' button labeled 'Execute'. Below this is the 'CA Certificate' section, which contains three buttons: 'CRT key generate' (labeled 'Execute'), 'Generate Certificate Signing Request' (labeled 'Execute'), and 'CA Certificate install' (with a file selection button labeled 'ファイルを選択' and '選択されていません', and an 'Execute' button). At the bottom, there's an 'Information' section showing 'Invalid' status with 'Confirm' and 'Delete' buttons. A large 'Set' button is at the very bottom. Numbered callouts 1 through 6 point to specific elements: 1 points to the 'Connection' dropdown, 2 points to the 'Select certificate' dropdown, 3 points to the 'Download root certificate' button, 4 points to the 'CRT key generate' button, 5 points to the 'Generate Certificate Signing Request' button, and 6 points to the 'CA Certificate install' section.

- ① HTTPS connection settings (→ “2.10.3.3 Configuration of HTTPS connections”)
- ② Select certificate (→ “2.10.3.1 Select the certificate to use when accessing with HTTPS”)
- ③ Download root certificate (→ “2.10.3.2 Obtaining the root certificate”)
- ④ Generate CRT key (SSL encryption key) (→ “2.10.3.4 Generation of the CRT key (SSL encryption key)”)
- ⑤ Generation of CSR (Certificate Signing Request) (→ “2.10.3.5 Generation of CSR (Certificate Signing Request)”)
- ⑥ Install CA certificate (→ “2.10.3.6 Installation of the CA certificate”)

57 Add “Diag.” function to HTTP alarm notifications

(Operating Instructions – Configure the alarm settings [Alarm] – Configuration of the settings relating to alarm notification [Notification] – Configure the settings relating to HTTP alarms)

A “Diag.” function has been added to HTTP alarm notifications.

HTTP alarm notification

- [Address 1] to [Address 5]

Set by using the IP address or host name of the HTTP server that issues HTTP alarm notifications.

You can set up to five addresses that will receive the notifications.

Available characters: Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

Default: http://

Example of entry: http://IP address: port number or http://hostname:port number https://IP address: port number or https://hostname:port number

- “Alarm” field

When this is selected, an HTTP alarm notification is issued when an alarm occurs.

- “Diag.” filed

Select this to issue HTTP alarm notifications when the amount of free space remaining on the SD memory card is running low, when there is not enough free space on the SD memory card, when an SD memory card recognition error occurs, when an SD memory card write error occurs, and when the trial period for the function extension software will expire.

- [Delete] button

Click this button to delete all addresses, user names, passwords, and notification data set for that item.

- [User name]

Enter the user name used to access the HTTP server.

Available number of characters: 0 to 63 characters

Unavailable characters: “ & ; ¥

Default: Blank

- [Password]

Enter the password used to access the HTTP server.

Available number of characters: 0 to 63 characters

Unavailable characters: “ &

Default: Blank

Note

- Basic or Digest authentication is performed according to the authentication request from the HTTPs
- **[Notification data]**

Set the contents of the notification to be added after the HTTP server set in [Address 1] to [Address 5].

Available characters: Alphanumeric characters and symbols

Default: /cgi-bin/comalarm.cgi?CMD=01

58 Add security-related settings function

(Operating Instructions - Configuring authentication [User mng.])

The [Security] settings screen has been added to the [User mng.] menu. Settings related to security can be configured in this section.

User auth.

Host auth.

System

IEEE 802.1X

Data encryption

Security

Brute force attack countermeasures

Browser access blocking period	30 s (10-1000s)
Browser access block conditions	5 times (1-5times) / 10 s (1-100s)
SNMP access blocking period	30 s (10-1000s)
SNMP access blocking conditions	5 times (1-5times) / 10 s (1-100s)
Browser Access	☒ Enable ☐ Disable *If the browser access permission setting is set to "Disable", the browser will not be accessible.

Set

Security settings – [Security]

Brute force attack countermeasures

Configure settings related to brute force attack countermeasures.

If you enter the wrong user name or password the specified number of times and within the time set in [Blocking conditions], you cannot access your browser or SNMP/FTP for the period set in [Blocking period].

For example, when using the settings on the screen shown above ([Browser access blocking period]: 30s, [Browser access blocking conditions] (times): 5 times, [Browser access blocking conditions] (s): 10s), if your login attempt fails 5 times within 10 seconds, the login page will not be displayed for 30 seconds.

- **Browser access blocking period (s)**

Set the length of time the browser cannot be accessed.

Input range: 10 to 1000(s)

Default: 30(s)

- **Browser access blocking conditions – Input range (times)**

Set the conditions (number of failed attempts) before access to the browser is prohibited.

Input range: 1 to 5 (times)

Default: 5 (times)

- **Browser access blocking conditions – Input range (s)**

Set the conditions (specified length of time) before access to the browser is prohibited.

Input range: 1 to 100 (s)

Default: 10 (s)

- **【SSeriesS】【SSeriesH】【fisheye】【miniAI】【miniL】【PTZ S】【PTZ B】【PT】**

SNMP/FTP access blocking period (s)

Set the length of time the SNMP/FTP cannot be accessed.

Input range: 10 to 1000(s)

Default: 30(s)

- **【Multi】**

SNMP access blocking period (s)

Set the length of time the SNMP cannot be accessed.

Input range: 10 to 1000(s)

Default: 30(s)

- **【SSeriesS】【SSeriesH】【fisheye】【miniAI】【miniL】【PTZ S】【PTZ B】【PT】**

SNMP/FTP access blocking conditions – Input range (times)

Set the conditions (number of failed attempts) before access to the SNMP/FTP is prohibited.

Input range: 1 to 5 (times)

Default: 5 (times)

- **【Multi】**

SNMP access blocking conditions – Input range (times)

Set the conditions (number of failed attempts) before access to the SNMP is prohibited.

Input range: 1 to 5 (times)

Default: 5 (times)

- **【SSeriesS】【SSeriesH】【fisheye】【miniAI】【miniL】【PTZ S】【PTZ B】【PT】**

SNMP/FTP access blocking conditions – Input range (s)

Set the conditions (specified length of time) before access to the SNMP/FTP is prohibited.

Input range: 1 to 100(s)

Default: 10(s)

- **【Multi】**

SNMP access blocking conditions – Input range (s)

Set the conditions (specified length of time) before access to the SNMP is prohibited.

Input range: 1 to 100(s)

Default: 10(s)

Note

- If you want to use the browser access blocking function in [Brute force attack countermeasures], set [User auth.] to “On” on the [User auth.] tab.

- **Browser Access**

Set whether or not to enable/disable browser access.

Default: Enable

IMPORTANT

- If [Browser Access] is set to “Disable”, access to live images is disabled.
- To switch [Browser Access] from “Disable” to “Enable”, you need to initialize the setting data.

Refer to the camera’s Operating Instructions for details on initializing the settings.

59 Remove “MD5” from SNMP authentication

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced] – Configure the SNMP settings)

“MD5” has been removed from the SNMPv3 [Authentication].

SNMP agent setting

- [SNMPv3] – [Authentication]

Displays the SNMPv3 authentication method.

Note

- If you upgrade while “MD5” is set in [Authentication], the [Authentication] operates using “MD5”. Click the [Set] button to change [Authentication] to “SHA1”.
- [SNMPv3] – [Encryption method]

Select the SNMPv3 encryption method from DES or AES.

Default: DES

- [SNMPv3] – [Password]

Set a password for SNMPv3.

Available number of characters: Blank or 8 to 20 characters

Unavailable characters: “ &

60 Remove “EAP-MD5” from the [EAP method] for IEEE 802.1X

(Operating Instructions - Configuring authentication [User mng.] – Configuring IEEE 802.1X [IEEE 802.1X])

“EAP-MD5” has been removed from the [EAP method] for IEEE 802.1X.

- [EAP method]

Select the authentication method from “EAP-PEAP” or “EAP-TLS”.

Note

- If you upgrade while “EAP-MD5” is set in [EAP method], the [EAP method] operates using “EAP-MD5”. Click the [Set] button to change [EAP method] to the selected EAP method.

61 Improving H.265 displaying performance in "Live" page

High resolution and high frame rate display is possible on the "Live" page. For information about combination conditions of resolution, frame rate, bit rate and requirements of a PC, refer to our support website.

https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/knowledge-base/technical-information<Control No.: C0132>

62 Add Auto position refresh

(Operating Instructions - Configure the settings relating to PTZ [PTZ] - Configure the settings relating to camera action [Cam. Function])

“Auto position refresh” has been added to the [PTZ] of [Cam. Function]. Turning on the Auto position refresh, when the panning (turning) angle deviates by a certain amount, so that it will automatically shift to the positive position.

Cam. FunctionPositionAuto trackAuto track alarm setting

Basic settings

Home position	Off
Self return	Off
Self return time	1min
Upside-down	☐ On ☒ Off
Maximum optical zoom ratio	Unlimited
HD Extra optical zoom	☒ On ☐ Off
Digital zoom	☐ On ☒ Off
Camera position display	Pan·Tilt degree/Zoom ratio display
Operation mode display	☐ On ☒ Off
Tilt Angle	0°

Set

Advanced setting

Maximum optical zoom speed	High
Maximum panning/tilting speed	Unlimited
Pan/Tilt Operability	Profile1(Normal)
Focus distance	Unlimited
Double image reduction	☒ On ☐ Off
Auto position refresh	☐ On ☒ Off

Set

[Auto position refresh][Z4][Z2][Z1]

Turning on the Auto position refresh, when the panning (turning) angle deviates by a certain amount, so that it will automatically shift to the positive position.

[On]: Perform position refresh automatically.

[Off]: Not perform position refresh automatically.

Default: off

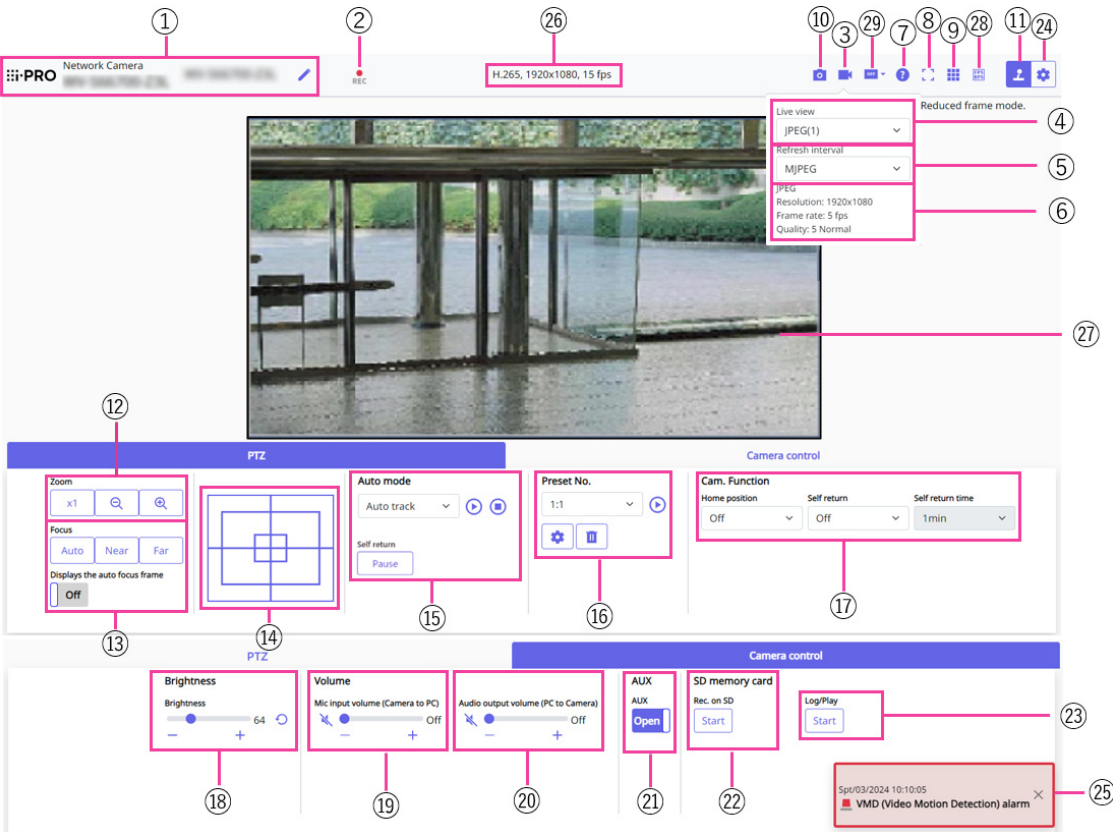
63 Changed the icon design of the buttons displayed on the Live page

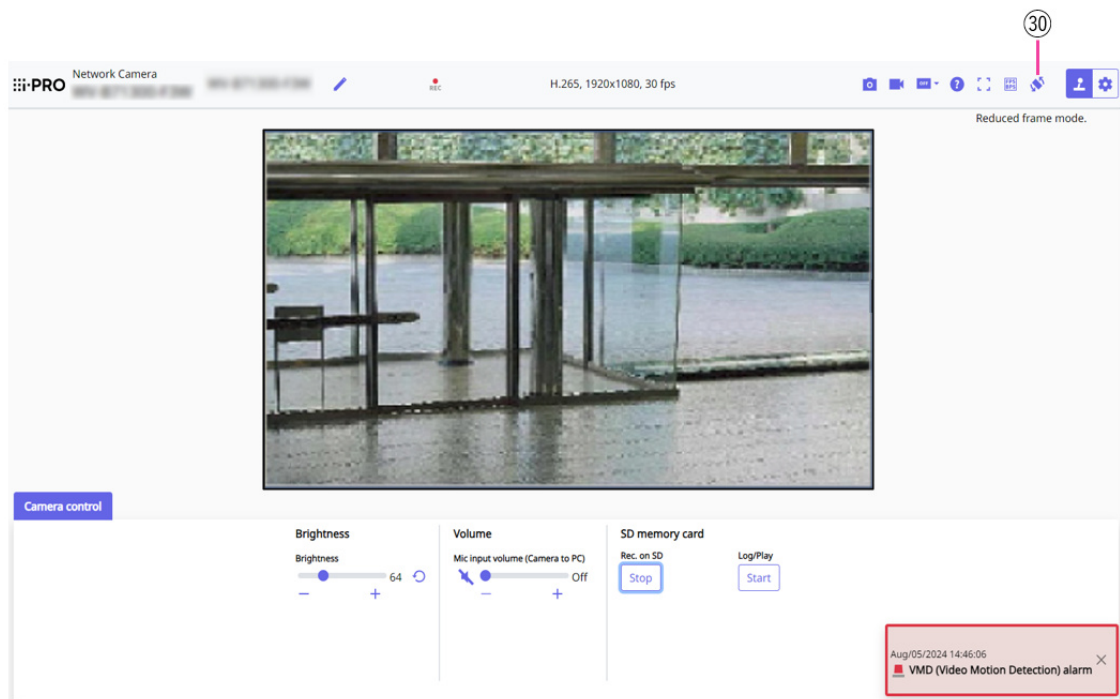
(Operating Instructions - Monitor images on a PC - About the “Live” page)

The icon design of the buttons displayed on the Live page has been changed.

Note

- This section displays all of the buttons shown on the Live page for all models. Check the Live page screen for your model.





① **Camera title**

The title of the camera entered in [Camera title] on the [Basic] tab is displayed.

If you click the icon, the camera title becomes a text box and you can edit the string.

② **SD save status display**

Displays the storage status on the SD Memory Card.

When saving starts, the SD save status indicator turns red. The LED turns OFF when saving stops.

This is displayed when the [Save trigger] in the Setup menu is set to [Manual] or [Schedule].

③ **Stream selection display Button**

You can toggle between displaying and hiding popup displays on the stream selection screen.

In the streaming selection window, you can set the [Live view] etc.

④ **Stream-[Live view] pull-down menu**

The image to be displayed in the main area can be selected from the following.

- [Stream(1)]/[Stream(2)]/[Stream(3)]/[Stream(4)]/[JPEG(1)]/[JPEG(2)]/[Multi-screen]

The main area images are displayed according to the settings in [Stream],[JPEG] and [Multi-screen].

You can also configure the [Initial display stream] of the [Image] tabs to show the first streams

that appear when you are accessing the cameras. Also the first stream displayed when you accessed the camera can be set from “Initial display stream” of the [Image] tab. For

“Multi-screen”, you can set the “Initial display” in the [Multi-screen] tab.

Note

- When the image capture size is larger than “1280×720”, the image may become smaller than the actual size depending on the window size of the web browser.

⑤ **Select Streams–[Refresh Rate] pull-down menu**

This pull-down menu is displayed only when the JPEG image is displayed. Select how the JPEG image is displayed.

- [MJPEG] Displays JPEG images consecutively (MJPEG: Motion JPEG).

Updates images in [Refresh interval : 1s]/[Refresh interval : 3s]/

[Refresh interval : 5s]/[Refresh interval : 10s]/[Refresh interval : 30s]/[Refresh interval :

60s]: JPEG format (still image) at specified intervals.

Note

- The JPEG format (still image) update interval may not be updated at the specified interval, depending on your network environment or PC.

⑥ **Stream–[View Stream Info]**

Displays the settings of the compression method, resolution, bit rate, frame rate, etc. of the live image being displayed.

Note

- Displays the value set in the stream. The actual bit rate and frame rate vary depending on your network environment and PC.

⑦ **Support Button**

Click the Support button to display our Technical Information website in a separate window.

Our technical information website includes technical information, FAQ (Frequently Asked Questions), etc.

⑧ **Full Screen button**

A new window opens displaying the full screen image.

⑨ **[Grid display] buttons**

You can switch the grid display ON/OFF that can be used to adjust the machine’s position when using the function extension software.

For the size of adjustments for each of the functional extensions we sell and provide, our technical information website<Control No.: C0320>It is listed.

⑩ **Snap shot button**

A snapshot (one still image) is acquired and the image is displayed in a separate window.

Right-click on the image to save the image using the web browser function.

⑪ **Camera Control Panel Display Button** ()

The camera control panel can be displayed or hidden. The camera control panel can be set to [Brightness], etc.

⑫ **PTZ panel-[Zoom] buttons**

Adjust the zoom manually.

-  : Adjust the zoom factor in the [Wide angle] direction.
-  : Zoom (magnification) 1.0 times.
-  : Adjust the zoom factor in the [Telescope] direction.

⑬ **PTZ panel-[Focus]**

Adjust the focus manually with the buttons.

- [Auto]: Automatically adjusts focus.
- [Near]: Adjust the focus to the [Near].
- [Far]: Adjust the focus to the [Far].
- [Displays the auto focus frame]: [On] and draw a frame on the image to adjust the focus (focus) to the frame.

Note

- The following subjects cannot be focused with auto focus. Focus manually.
 - A subject that is bright or reflects strong light
 - Subject over water droplets or dirty glass
 - Remote and nearby subjects mixed together
 - Subjects (white walls, etc.) without contrast
 - A horizontal subject, such as a blind-an oblique subject-a dark subject

⑭ **PTZ Panel-Control pad**

Left-click the pads and buttons to adjust the horizontal and vertical position of the image (pan tilt).

The faster the camera operates, the faster the outside of the pad is clicked.

You can also drag and adjust the mouse. Zoom and focus by right-clicking.

Clicking on the upper half of the pad in the upper and lower directions will zoom in the telephoto, and clicking on the lower half will zoom in the wide angle. Clicking on the left half in the left and right directions will bring the focus (focus) close to you, and clicking on the right half will bring it far away. You can also adjust the zoom by using the mouse wheel.

⑮ **PTZ panel-[Auto mode]**

Selecting Operation from the pull-down menu starts the selected operation.

When panning, tilting, zooming, or focusing is performed, or when the operation set in [Self return] or [Camera action on alarm] starts, it is also terminated.

- [Auto track]: Automatically tracks objects when they are detected.
- [Auto pan]: Automatically rotates the pre-set range between the start and end positions of the pan. The pivot operation continues even after the zoom and focus operations (when the [x1] button of the [Zoom] button is clicked, the pivot operation stops).
- [Preset sequence 1]/[Preset sequence 2]/[Preset sequence 3] moves the pre-registered preset positions from the lowest to the lowest.

Note

- If the content of [Self return] operates at the time set by [Self return time] during the auto mode operation, the auto mode operation stops.

⑩ PTZ-panel-[Preset]

Select the preset position from the pull-down menu and click the [Move] button to move the camera's orientation to the preset position registered beforehand.

[H] next to the number indicates [HomePosition]. Select [HomePosition] to move the orientation of the camera to the home position.

If [Preset ID (0 – 9,A – Z)] is registered, the position name is displayed next to the number.

⑪ PTZ-Panel-[Cam. Function]

[Home position]

The preset [Preset position] can be set as a [HomePosition]. When set to [HomePosition], [H] is displayed next to the preset position number.

Note

- If you want to move to the home position when the power is turned on, set [HomePosition] to [Self return].

[Self return]

When the time set by [Self return time] has elapsed after the manual operation is completed, the camera can automatically return to the operation mode set by the camera.

- Off:** Self return is not performed.
- Home position:** When the set time has passed, the camera will move to the home position automatically.
- Auto pan:** When the set time has passed, the camera will start the auto-panning operation.
- Preset sequence 1:** When the set time has passed, the camera will start the sequence 1

operation.

- **Preset sequence 2:** When the set time has passed, the camera will start the sequence 2 operation.
- **Preset sequence 3:** When the set time has passed, the camera will start the sequence 3 operation.
- **Patrol:** When the set time has passed, the camera will start the patrol.

Note

- If you want to perform the above operations when turning on the power, it is convenient to use the self-return function.
- The self-return function works even when the setting menu is displayed.
- [Patrol] can be set only when patrols are set.
- Only [Patrol 1] can be set for [Patrol]. [Patrol 2], [Patrol 3] and [Patrol 4] are unavailable.
- [Preset sequence] can be set only when preset sequence is set.

[Self return time]

After the manual operation is completed, select the time before returning to the operation set by [Self return].

⑱ Camera control panel-[Brightness]

It can be adjusted from 0 to 255.  Clicking the button brightens the image.  Click the button to darken the image.  Click the button to return to the default settings.

⑲ Camera control panel-[Transmission voice (from PC)]

This can only be set if [Audio transmission mode] is set to [Audio output] or [Interactive (Full-duplex)][Interactive(Half-duplex)] in the configuration menus.

 Buttons,  Click the button or move the volume cursor to adjust the voice volume in four steps: Off/weak/medium/strong.

Click the talk button to turn on/off the talking voice (from PC).

Note

- Transmission voice can only be used when connected with HTTPS.
- If [Interactive(Half-duplex)] is set while one user is talking, the other user's listening will be stopped and the earpiece button and the talk button will not be operable. If set to [Interactive(Full-duplex)], other users will not be able to use the call key.
- The maximum call duration per call is set on the [Audio] tabs of the video and audio pages. The call stops after the set continuous call time. If you want to make another call, click the call button.

- When the computer is restarted, the earpiece volume/voice volume changed by the volume cursor will return to the earpiece volume/voice volume set in the [Audio] tab of the image/voice page.
- On the screen, the volume cursor can be fine-tuned, but actually it is set to one of four levels of volume.

⑳ **Camera control panel-[Voice (on PC)]**

This item can be set in the following settings.

- If [Audio transmission mode] is set to [Mic input] or [Interactive(Full-duplex)] [Interactive (Half-duplex)]
 - If [Audio input encoding format] is set to [AAC-LC]
 - Buttons, +You can adjust the earpiece volume in four steps: [Off], [Low], [Middle], and [High] by clicking on buttons or by moving the volume cursor.
- Click the Listen button to turn on/off the earpiece voice (heard on PC).

Note

- When [Audio volume control mode] is set to [Adjust Mic input] in the Setup menu, the volume cursor is not displayed when using [Audio recording] or [Audio detection].
- When the computer is restarted, the earpiece volume changed by the volume cursor returns to the earpiece volume set in the [Audio] tabs of the setting menus.
- On the screen, the volume cursor can be fine-tuned, but actually it is set to one of four levels of volume.
- If you open multiple camera browsers simultaneously on the same PC, you cannot hear the sound of the camera browser opened later. Access and check one by one.
- If network communication is unstable, voice reception may be stopped. In this case, restart voice reception by turning on and off the earpiece button.

㉑ **Camera control panel-[AUX] buttons**

This setting is available only when [Terminal 3] of [Alarm] is set to [AUX output] in the Advanced menu.

- [Open]: The aux terminal is open.
- [Close]: The aux terminal closes.

Note

- The names of [AUX], [Open], and [Close] can be changed.

㉒ **SD memory card-[Rec. on SD]**

Clicking [Start] displays the log list and plays back the images stored on the SD Memory Card.

Please refer to the following for details of the log list and how to play back the image.

②③ **SD memory card-[Log/Play]**

This can only be set when [Save trigger] is set to [Manual save] on the [SD memory card] tabs.

You can manually save images to SD Memory Cards by clicking [Start]. To manually save images on the SD Memory Card, refer to the following.

②④ **[Set] buttons()**

You can view or hide the setting panel.

②⑤ **Alarm notification**

When an alarm is generated, it is displayed as a popup. Clicking the [X] button resets the output terminal and the display disappears.

Note

- The alarm notification is not linked to the alarm notification operation such as recording to the SD Memory Card or mail transfer. Check the respective operation settings.

②⑥ **View Stream Information**

Displays the compression method, resolution, and frame rate of live video.

②⑦ **Main area**

Displays the camera image.

The current date and time are displayed according to the set [Time display format] and [Date/time display format].

The set text is displayed on the screen. The number of lines is two.

When H.265 is displayed, when the bit rate is high, it may be displayed at the refresh interval.

In the main area, clicking the desired position for the center of the field angle moves the camera's direction to the center of the clicked position.

If you select the area you want to view by dragging the mouse, the camera will move to a position centered on the selected area and the zoom factor will be automatically adjusted.

You can also adjust the zoom in the mouse wheel operation.

Right-clicking in the main area starts automatic tracking of objects in the clicked position.

Depending on the object to be tracked and the surrounding environment, the watch may not operate properly.

Note

- Users with low access levels may temporarily change the display but do not affect the operation of the camera.

- When the shooting scene changes significantly depending on the PC, tiring (a phenomenon in which a part of the screen is misaligned) may occur due to constraints in the OS drawing process.
- When the data encryption function is enabled, the image cannot be viewed on the live screen. Use the corresponding equipment.
- When a high zoom factor image is displayed, the clicked position may not be the center of the image.
- As the tilt angle approaches 90 degrees, the difference between the specified position and the actual direction of movement will become larger, and the specified image angle may not be achieved.
- If the mouse is dragged to move to an angle that exceeds the rotational range of the camera, the camera moves to the position where it can be operated, and then the zoom factor is automatically adjusted.

②⑧ **Frame rate / bit rate display button**

Displays the frame rate and bit rate of the stream currently displayed in the live display.

Note

This button is not displayed if the live image meets any of the following conditions.

- JPEG stream display
- JPEG refresh interval
- Multi-screen

②⑨ **[Before/after image comparison switching] button**

Click the icon to acquire and display the still image. You can compare the acquired still images as images before changing the image quality setting.

1:1:Displays the acquired still image and the latest image in the same size.

1:2:Displays the acquired still image and the latest image side by side so that the latest image is twice the size.

Off:Only the latest image is displayed.

③⑩ **[Installation angle of view confirmation] button**

The [Installation angle of view confirmation] button is displayed when the initial installation angle of view is registered.

If you click the [Installation angle of view confirmation] button, an image showing the amount of deviation from the position when registering the installation angle of view, the pitch direction of the camera, and the roll direction is displayed in the main area.

It is a guide for returning to the original angle of view if it deviates from the angle of view at the time of installation.

Correct the angle of view while moving the camera in the pitch and roll directions.

: indicates the pitch direction.

: indicates the roll direction.

: indicates the position closely matches that when the installation angle of view was registered.

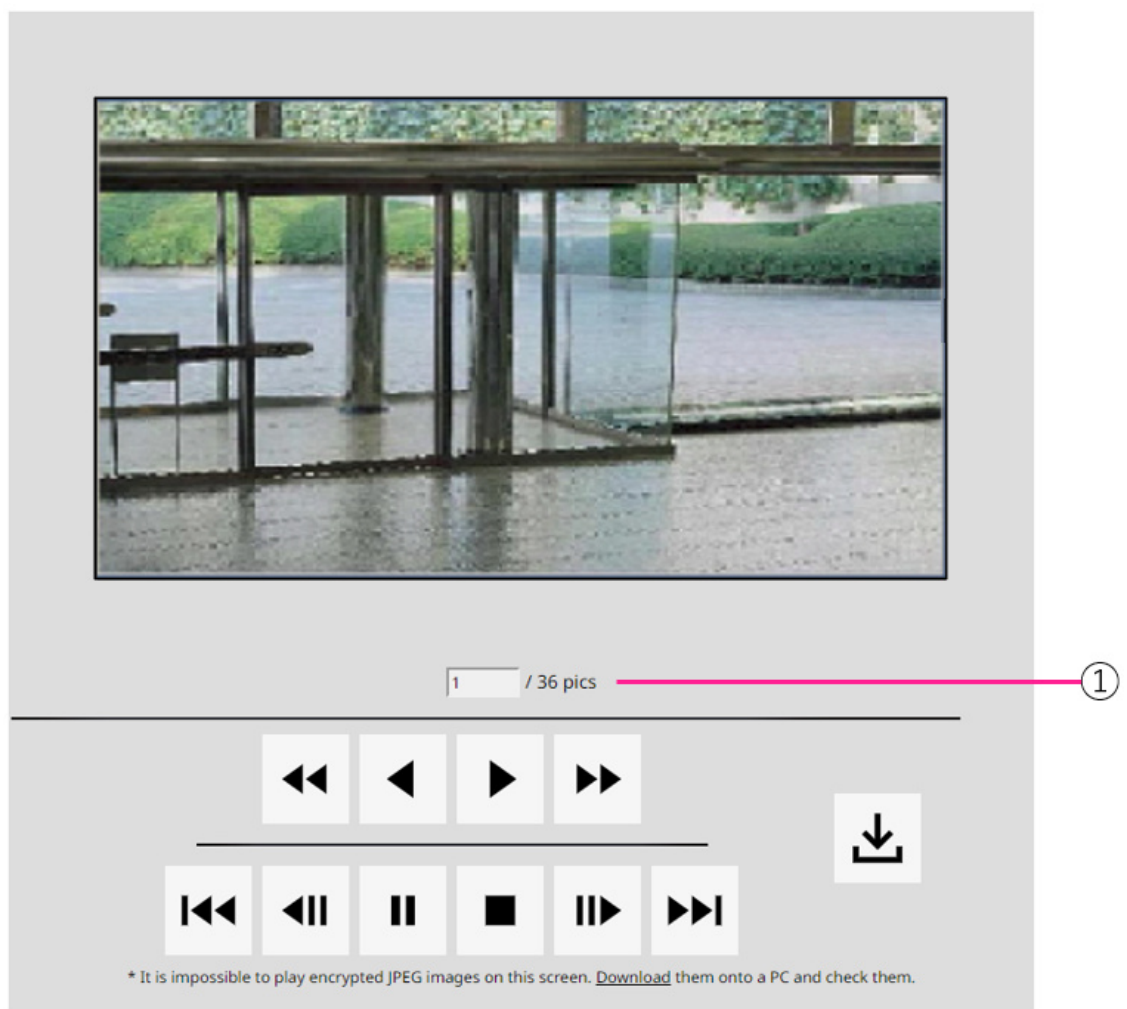
: indicates the position when the installation angle of view was registered.

: indicates how far the position has moved from when the installation angle of view was registered.

64 Changed the icon design of the buttons displayed on the JPEG playback page

(Operating Instructions - Playback of images on the SD memory card – Playback “JPEG(1)”/ “JPEG(2)” images saved to the SD memory card)

The icon design of the buttons displayed on the JPEG playback page has been changed.



① Number of images

When clicking a time and date listed on the log list window, total number of images associated with the clicked time and date, and the number of the currently displayed image will be displayed.

Note

- Enter the desired number of image and press the [Enter] key on the keyboard. The image of the designated number will be displayed.

◀◀ (REW) button

Each time the button is clicked, the playback speed will change.

When the ▶ button or the ◀ button is clicked during fast reverse playback, playback speed will return to the normal playback speed.

◀ (REV PLAY) button

Images will be played in reverse sequential order.

▶ (PLAY) button

When this button is clicked, images will be played in sequential order

▶▶ (FF) button

Each time the button is clicked, the playback speed will change.

When the ▶ button or the ◀ button is clicked during fast playback, playback speed will return to the normal playback speed.

⏮ (TOP) button

The first image will be displayed.

◀◀ (PREV. IMAGE) button

The previous frame will be displayed and paused when this button is clicked during playback.

Each time this button is clicked during pausing, the frame previous to the currently displayed frame will be displayed.

Note

- When the mouse button is held down while the mouse pointer is on this button, the image number will be decreased.

When the mouse button is released, the decreasing of the image number will stop and the image corresponding to the currently displayed number will be displayed.

⏸ (PAUSE) button

Playback will be paused when this button is clicked during playback.

Playback will resume when this button is clicked during pausing.

■ (STOP) button

Playback will stop and the “Playback” window will turn to the “Live” page.

▶▶ (NEXT IMAGE) button

The next frame will be displayed and paused when this button is clicked during playback.

Each time this button is clicked during pausing, the frame next to the currently displayed frame will be displayed.

Note

When the mouse button is held down while the mouse pointer is on this button, the image number will be increased.

When the mouse button is released, the increment of the image number will stop and the image number displayed at the moment when the mouse button is released will be displayed.

⏮(LAST) button

The last image will be displayed.

⬇(Download) button

The selected image will be downloaded onto the PC.

For the destination directory on the PC, check the setting of the browser being used.

The message window will be displayed to ask if it is OK to start download when the ★ button is clicked. Click the [OK] button.

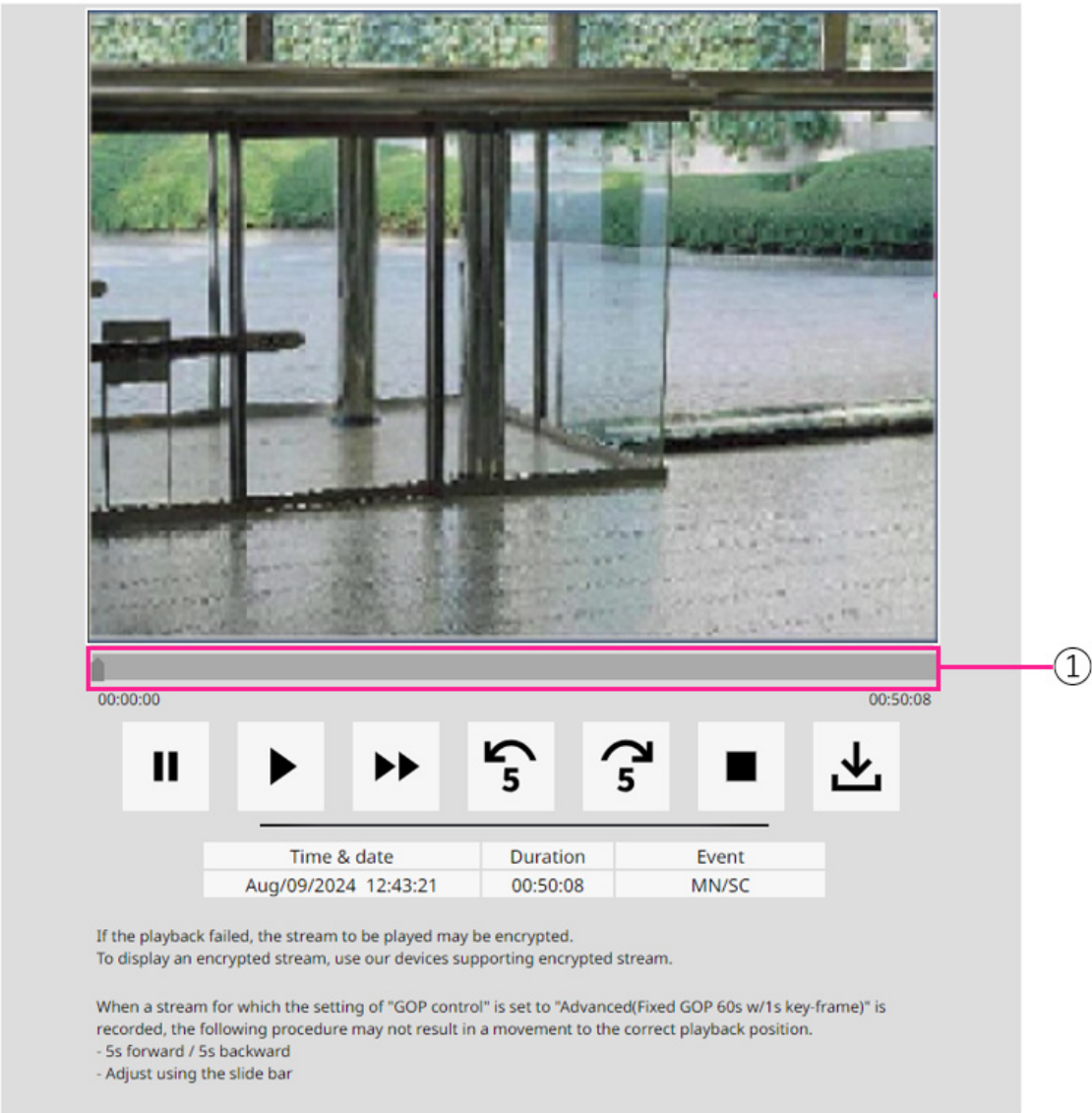
Note

- The image playing screen cannot be operated while downloading. Perform operations after the downloading is completed.
- When the [Cancel] button is clicked in the process of the download, the download will be canceled. In this case, video data already downloaded before clicking the [Cancel] button will be saved on the PC.
- Video data are saved in the files of approx. 60 MB. When the file size of video data is more than 60 MB, two or more files will be downloaded.
- It is possible to play back H.264 video data saved on the PC using such applications as Windows Media® Player. However, we are not liable for performance relating to these applications.
- Depending on the status of the SD memory card or Windows Media Player, H.264 video data cannot be played back.
- For information on H.265 video playback, refer to our technical information website No.: C0303>.

65 Changed the icon design of the buttons displayed on the Stream playback page

(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)

The icon design of the buttons displayed on the Stream playback page has been changed.



① Slider bar

By operating the slider bar, you can select where to start playing images from. The slider bar can only be used before playing images, or when playing is paused or stopped.

Note

- When the slide bar is moved to a certain point, the i-frame corresponding to this point will be designated.

Therefore, when a stream is being recorded in a state where “Advanced(FixedGOP60sw/1skey-frame)” is selected for “GOP control”, positions where the slide bar can be moved to will be in steps of 60 seconds

⏸ (PAUSE) button

Playback will be paused when this button is clicked during playback.

▶ (PLAY) button

When this button is clicked, recorded data will be played.

Note

- If audio is recorded, it can be played back, but the image and audio will not be synchronized. Therefore, images and audio may not always match. When data is being recorded to the SD memory card, audio may sound as if it is cutting out and the audio quality may be reduced.
- When recorded audio is played back, the refresh interval of live images and playback may become slow.
- Recorded audio is not played back when “Off” or “Interactive(Half-duplex)” is selected for “Audio transmission mode” on the [Audio] tab of the “Image/Audio” page.

⏮ (FF) button

Each time this button is clicked, the playback speed will change. When the ★ button is clicked during fast playback, playback speed will return to the normal playback speed.

Note

- The maximum speed of the fast playback varies depending on the setting of “Bit rate” – “Stream recording” of the SD memory card.
- Recorded audio will not be played back during fast playback.
- Displaying of images may become slower or the playback time may skip during the fast playback depending on the setting of “Bit rate” – “Stream recording”.

⏮ (5s backward) button

Each time this button is clicked, the recorded data goes back by 5 seconds and starts playing.

Note

- When a stream is being recorded in a state where “Advanced(FixedGOP60sw/1skey-frame)”

is selected for “GOP control”, clicking this button may skip back more than 5 seconds depending on the time when the corresponding i-frame is recorded.

 (5s forward) button

Each time this button is clicked, the recorded data goes forward by 5 seconds and starts playing.

Note

- When a stream is being recorded in a state where “Advanced(FixedGOP60sw/1skey-frame)” is selected for “GOP control”, clicking this button may skip back instead of forward depending on the time when the corresponding i-frame is recorded.

 (STOP) button

Playback will stop and the “Playback” window will turn to the “Live” page.

[Time & date]

Time and date when each log has been recorded will be displayed.

[Duration]

Displays the period of time that the data has been recorded on the SD memory card.

[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
- AT: Alarm detected by auto track alarm【PTZ S】
- 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

 (Download) button

The selected image will be downloaded onto the PC.

For the destination directory on the PC, check the setting of the browser being used.

The message window will be displayed to ask if it is OK to start download when the ★ button is clicked. Click the [OK] button.

Note

- The image playing screen cannot be operated while downloading. Perform operations after the downloading is completed.
- When the [Cancel] button is clicked in the process of the download, the download will be canceled. In this case, video data already downloaded before clicking the [Cancel] button will be saved on the PC.
- Video data are saved in the files of approx. 60 MB. When the file size of video data is more than 60 MB, two or more files will be downloaded.
- It is possible to play back H.264 video data saved on the PC using such applications as Windows Media® Player. However, we are not liable for performance relating to these applications.
- Depending on the status of the SD memory card or Windows Media Player, H.264 video data cannot be played back.
- For information on playing back H.265 video data, refer to our technical information website No.: C0303>.

66 Added Remote Monitoring connection function

(Operating Instructions – Configuring the network settings [Network])

A [Remote Monitoring] settings screen has been added to the [Network] menu. This allows the cameras to connect directly to Remote Monitoring.

Click [Remote Monitoring] on the Network page. (→Display the setup menu “2.2.1 How to display the setup menu”, “2.2.2 How to operate the setup menu”)

You can configure settings related to Remote Monitoring in this section.

NetworkAdvancedRemote Monitoring

Remote Monitoring

Remote Monitoring registration status	None	Registration status update
---------------------------------------	------	----------------------------

When you don't have a "Remote Monitoring" account yet, access the URL below and acquire an account



<https://rms.i-pro.com/login/service-agreement>

For more information on Remote Monitoring compatible cameras, please refer to the following support website https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/manual-2.html
If the "Remaining RAM" of the "Ext. software" is low, the "Remote Monitoring" cannot be executed due to insufficient memory. Please refer to the following support website for information on the extension software that can run simultaneously with the "Remote Monitoring".
https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/manual-2.html (2.2 Supported camera information)

Remote Monitoring registration setting

Remote Monitoring function	☐ Enable ☒ Disable
	☒ Set recommended values
Remote Monitoring registration mail address	
Remote Monitoring password	

Set

[Remote Monitoring function]

You can set the Remote Monitoring function (direct camera connection function) to Enable or Disable.

When set to Enable, or if it is already enabled when the camera starts, it will connect to the Remote Monitoring server (<https://rms.i-pro.com>)

This allows for video streaming to Remote Monitoring, playback and download of video data stored on the SD card, and receiving alarm notifications.

Default: Disable

Note

- When you select “Set recommended values”, the settings will be adjusted to values suitable for i-PRO Remo. connection, depending on the model.
- For details on the settings that will be adjusted when “Set recommended values” is selected, refer to the following link.

[CameraDirect-RemoteMonitoring_webguide_en](#)

[Remote Monitoring registration mail address]

The input field becomes available when you select “Enable” for the [Remote Monitoring function]. Before doing this, you need to access Remote Monitoring (<https://rms.i-pro.com>) to register your email address and set a password. Enter the email address here that you registered in Remote Monitoring.

Default: None (blank)

[Remote Monitoring password]

The input field becomes available when you select “Enable” for the [Remote Monitoring function]. Before doing this, you need to access Remote Monitoring (<https://rms.i-pro.com>) to register your email address and set a password. Enter the password here that you registered in Remote Monitoring.

Default: None (blank)

Setting up a direct camera connection

1. Select “Enable” for the [Remote Monitoring function] and enter your email address and password.

NetworkAdvancedRemote Monitoring

Remote Monitoring

Remote Monitoring registration status

None

Registration status update

When you don't have a "Remote Monitoring" account yet, access the URL below and acquire an account



<https://rms.i-pro.com/login/service-agreement>

For more information on Remote Monitoring compatible cameras, please refer to the following support website https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/manual-2.html

If the "Remaining RAM" of the "Ext. software" is low, the "Remote Monitoring" cannot be executed due to insufficient memory. Please refer to the following support website for information on the extension software that can run simultaneously with the "Remote Monitoring".

https://i-pro.com/products_and_solutions/en/RemoteMonitoring/en/html/RemoteMonitoring_webguide_en/manual-2.html (2.2 Supported camera information)

Remote Monitoring registration setting

Remote Monitoring function

☒ Enable

☐ Disable

☒ Set recommended values

Remote Monitoring registration mail address

Remote Monitoring password

.....

Set

2. Click the "Set" button.
- Check the alert message and click the OK button.

When [Remote Monitoring function] is set to "Enable", the settings in the following table will be adjusted and fixed, regardless of whether or not the checkbox is selected.

【SSeriesS】【SSeriesH】【miniAI】【PTZ S】【PTZ U】

Item	Remote Monitoring Enabled
Audio out	Audio

【SSeriesS】【SSeriesH】【miniAI】【PTZ S】【PTZ U】 (continued)

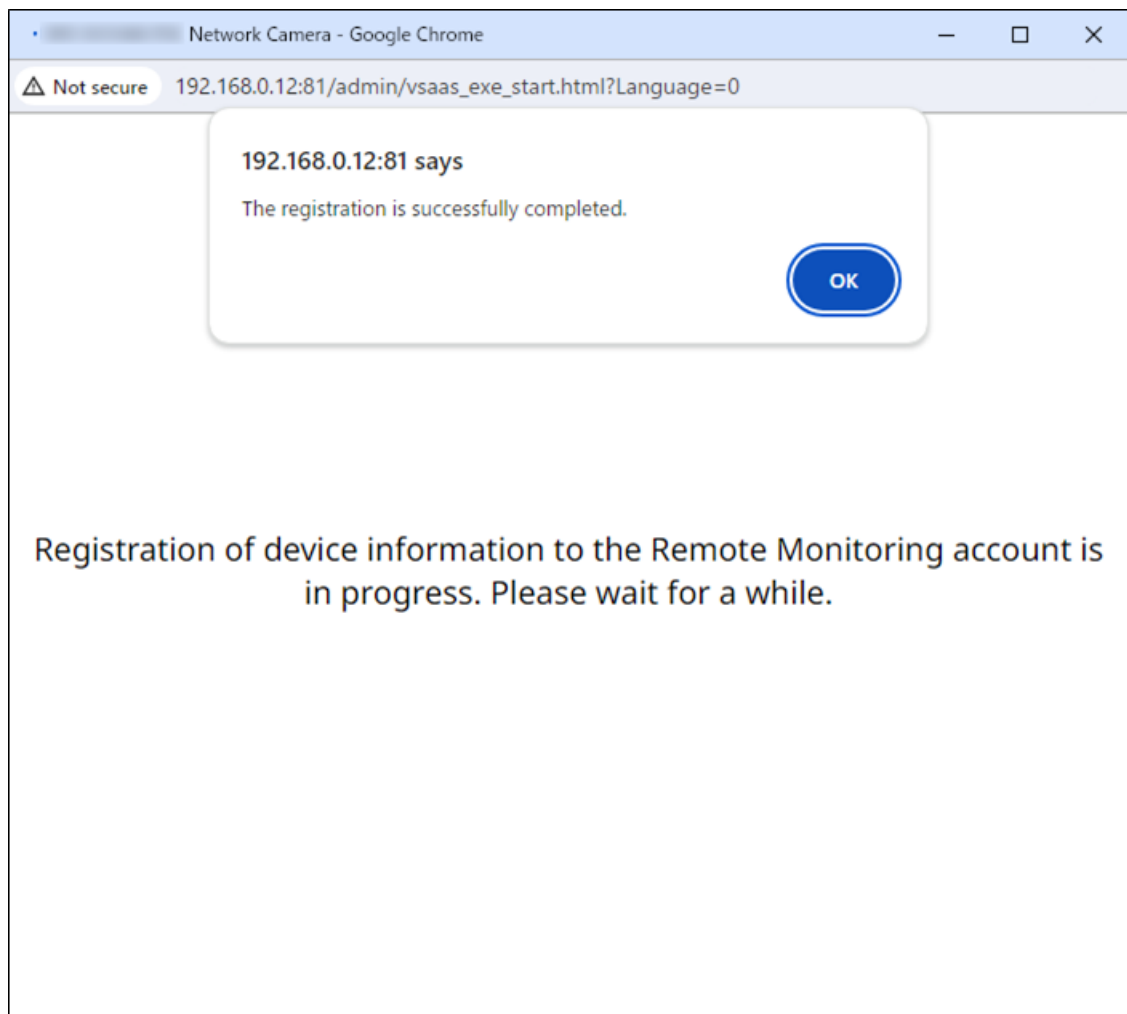
<u>SD Memory Card File System Format</u>	<u>FAT(FAT16/FAT32/exFAT)</u>
<u>Recording stream</u>	<u>Stream(1)</u>
<u>Image capture size of JPEG(1)</u>	<u>VGA (640x360)</u>
<u>Stream transmission of Stream(1), Stream(2)</u>	<u>On</u>
<u>Stream encoding format of Stream(1), Stream(2)</u>	<u>H.265</u>
<u>Image capture size of Stream(4)</u>	<u>VGA (640x360)</u>
<u>TCP alarm notification, Additional extended alarm information</u>	<u>On</u>

【fisheye】

Item	Remote Monitoring Enabled
<u>Audio output</u>	<u>Audio</u>
<u>SD Memory Card File System Format</u>	<u>FAT(FAT16/FAT32/exFAT)</u>
<u>Recording stream</u>	<u>Stream(1)</u>
<u>Image capture mode</u>	<u>Fisheye</u>
<u>Image capture size of JPEG(1)</u>	<u>320x320</u>
<u>Stream transmission of Stream(1), Stream(2)</u>	<u>On</u>
<u>Stream encoding format of Stream(1), Stream(2)</u>	<u>H.265</u>
<u>TCP alarm notification, Additional extended alarm information</u>	<u>On</u>

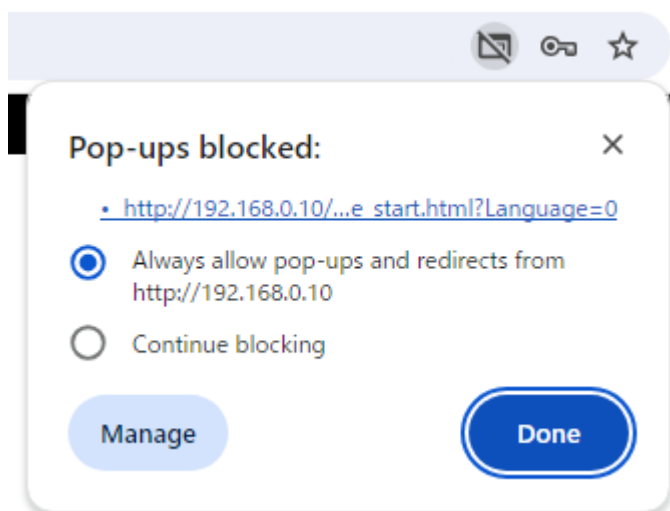
3. Registration complete

A popup window is displayed. The registration process takes approximately 20 seconds. Once registration is complete, "The registration is successfully completed" is displayed, and [Remote Monitoring registration status] will show either "Registered (No license is allocated)" or "Registered (License is allocated)."



If the popup is not displayed

If popups are blocked, a notification is displayed in the address bar indicating that the popup was blocked. Allow popups to be displayed. Once this is done, set the [Remote Monitoring function] to "Disable", then switch it back to "Enable", enter your email address and password, and then click the "Set" button.



When registration is complete, close the popup by clicking the "x" at the top-right. Next, click the "Registration status update" button to confirm that [Remote Monitoring registration status] shows either "Registered (License is allocated)" or "Registered (No license is allocated)."

Correcting an incorrectly entered email address or password

Set the [Remote Monitoring function] to "Disable", then switch it back to "Enable", enter the correct email address and password, and then click the "Set" button.

If registration fails

- Check that the network camera is connected to allows external connections.
- Check that the default gateway is set correctly in the "Network" settings.
- Check that the primary server address is set correctly if DNS is set to Manual in the "Network" settings.
- Check that the date and time in the "Basic" settings match the local standard time for the camera's location.
- Check that the model you are using supports Remote Monitoring.

Note

- For more information about the remote monitoring supported models, refer to our technical information website <Control No.:C0103>.
https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/knowledge-base/technical-information

Remote Monitoring supported browser

Use Google Chrome or Microsoft Edge to access the system. Firefox may not operate correctly.

67 Support for installation of server certificates in PKCS#12 format

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced] – Configure the HTTPS settings)

Added support for the installation of server certificates in PKCS#12 format. Differences in the screens related to this change are described in this section.

NetworkAdvancedRemote Monitoring

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

HTTPS

Connection

HTTP & HTTPS

When connecting via "HTTPS", the maximum bandwidth(bit rate) is limited to 32Mbps.

☐ TLS1.1 ☒ TLS1.2 ☐ TLS1.3

Select certificate

Pre-installed certificate

HTTPS port

443

(1-65535)

Pre-installed certificate

Download root certificate

Execute

Server Certificate

CRT key generate

Execute

Generate Certificate Signing Request

Execute

Server certificate or server certificate with private key

Installation

Choose File

No file chosen

Execute

Password (0 to 30 characters)

Server Certificate Information

ConfirmDelete

Server certificates are supported in PEM format (*.pem).
Server certificates including private keys must be in PFX format (*.pfx or *.p12).
Input password when server certificate of PFX format is encrypted.
Leave password blank when not encrypted.

Set

[HTTPS – Connection]

Sets the connection method to the camera.

HTTP & HTTPS: HTTP and HTTPS connections are available.

HTTPS: Only an HTTPS connection is available.

Default: HTTP & HTTPS

Select the TLS to be used for HTTPS connections.

TLS1.1, TLS1.2: Set enabled or disabled.

TLS1.3: This is always enabled and cannot be set to disabled.

Default: TLS1.1: Disable, TLS1.2: Enable, TLS1.3: Enable

Note

- When TLS1.1 is enabled, TLS1.2 is also enabled.
- When TLS1.2 is disabled, TLS1.1 is also disabled.
- When you change the TLS1.2 setting, you need to reboot the camera. After rebooting, you cannot perform operations for around 2 minutes, just as when the camera is turned on.

[HTTPS – Select certificate]

Select the certificate to be used with HTTPS.

Pre-installed certificate: Select a Pre-installed certificate.

Server Certificate: Select a Server Certificate. Only displayed when the Server Certificate is installed.

Default: Pre-installed certificate

[HTTPS – HTTPS port]

Designate the HTTPS port number to be used.

Available port number: 1–65535

Default: 443

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, 162, 554, 995, 1883, 8883, 10669, 10670, 32768–49151, 59000–61000

[Pre-installed certificate – Download root certificate]

Click the [Execute] button to download the root certificate for the pre-installed certificate. By installing the root certificate to your PC, you can get signature verification for the pre-installed certificate.

[Server Certificate – CRT key generate]

Generates the CRT key (SSL encryption key) used for the HTTPS protocol.

To generate the CRT key, click the [Execute] button to display “CRT key generate” dialog box.

[Server Certificate – Generate Certificate Signing Request]

When using the security certificate issued by CA (Certificate Authority) as the security certificate used for the HTTPS protocol, the CSR (Certificate Signing Request) will be generated.

To generate the CSR, click the [Execute] button to display the “Server Certificate – Generate Certificate Signing Request” dialog window.

[Server certificate or server certificate with private key – Installation]

Installs the Server Certificate (security certificate) issued by CA and displays the information of the installed Server Certificate (security certificate).

To install the Server Certificate (security certificate), click the [Choose File] button to display the [Open] dialog box, and select the file of the Server Certificate (security certificate) issued by CA, and click the [Execute] button.

If the Server Certificate (security certificate) is already installed, the file name of the installed Server Certificate (security certificate) will be displayed.

Note

- The server certificate being installed must be in PEM format (*.pem).
- When installing a server certificate that includes a private key, it must be in PFX format (.pfx or .p12).

[Server certificate or server certificate with private key – Password (0 to 30 characters)]

If a password is set for a server certificate in PFX format, enter the password. If no password is set, leave the field blank.

Available number of characters: 0 to 30 characters

[Server certificate or server certificate with private key – Server Certificate Information]

Displays the information of the Server Certificate (security certificate).

When the [Confirm] button is clicked, the registered information of the installed Server Certificate (security certificate) will be displayed in the “Server Certificate– Confirm” dialog box. If the Server Certificate (security certificate) is not installed, the content of the generated CSR file will be displayed.

When the [Delete] button is clicked, the installed Server Certificate (security certificate) will be deleted.

Note

- When a server certificate with a Subject Alternative Name that is longer than 65 characters is

installed, the [Subject Alternative Name] in the "Server Certificate Confirmation" dialog will be displayed blank.

IMPORTANT

- Before deleting the valid Server Certificate (security certificate), confirm that there is a backup file of the Server Certificate (security certificate) on the PC or another media. The backup file of the CA certificate (security certificate) will be required when installing the Server Certificate (security certificate) again.
- Deleting a server certificate in PFX format will also delete the private key. If you want to use the same server certificate, reinstall the server certificate in PFX format.

Note

- After changing the connection setting, access the camera again by after waiting a while according to the changed setting ("http://IP address of the camera" or "https://IP address of the camera").
- When the camera is accessed using the HTTPS protocol, the refresh interval and frame rate of images may be lower.
- When the camera is accessed using the HTTPS protocol, it may take time to display images.
- When the camera is accessed using the HTTPS protocol, the images may be distorted or audio may be interrupted.
- If you set the connectivity to [HTTPS], the maximum delivery is limited to 32Mbps.

68 Added [Host Name] to "IPv4 network" in Network settings

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

A [Host Name] option has been added to "IPv4 Network" in the Network settings.

NetworkAdvancedRemote Monitoring

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	☒ Auto ☐ Manual
Primary server address	0 . 0 . 0 . 0
Secondary server address	0 . 0 . 0 . 0
Host name	

IPv6 network

Manual	☐ On ☒ Off
IP address(IPv6)	
Default gateway	
DHCPv6	☐ On ☒ Off
Primary DNS server address	
Secondary DNS server address	

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

Note

- When "Auto(AutoIP)" is selected and the IP address cannot be obtained from the DHCP server, an IP address not used in the same network will be searched within 169.254.1.0 – 169.254.254.255.

[IP address(IPv4)]

When not using the DHCP function, enter the IP address of the camera. Do not enter an IP address already in use (for the PCs and the other network cameras).

Default: 192.168.0.10

Note

- Multiple IP addresses are unavailable even when using the DHCP function. Refer to the network administrator for further information about the settings of the DHCP server.

[Subnet mask]

When not using the DHCP function, enter the subnet mask of the camera.

Default: 255.255.255.0

[Default gateway]

When not using the DHCP function, enter the default gateway of the camera.

Default: 192.168.0.1

Note

- Multiple IP addresses for the default gateway are unavailable even when using the DHCP function.
Refer to the network administrator for further information about the settings of the DHCP server.

[DNS]

Determine how to set the address of the DNS server by selecting "Auto" (obtain the address automatically) or "Manual" (enter the address of the DNS server). When "Manual" is selected, it

is necessary to configure the settings for the DNS.

When using the DHCP function, it is possible to obtain the DNS address automatically by selecting "Auto".

Refer to the network administrator for further information about the settings.

Default: Auto

[Primary server address], [Secondary server address]

When "Manual" is selected for "DNS", enter the IP address of the DNS server.

Refer to the network administrator about the IP address of the DNS server.

[Host name]

Enter the host name to be used with the DHCP function.

Available number of characters: 1 to 64 characters

Available characters: Alphanumeric characters, the period (.), and the hyphen (-).

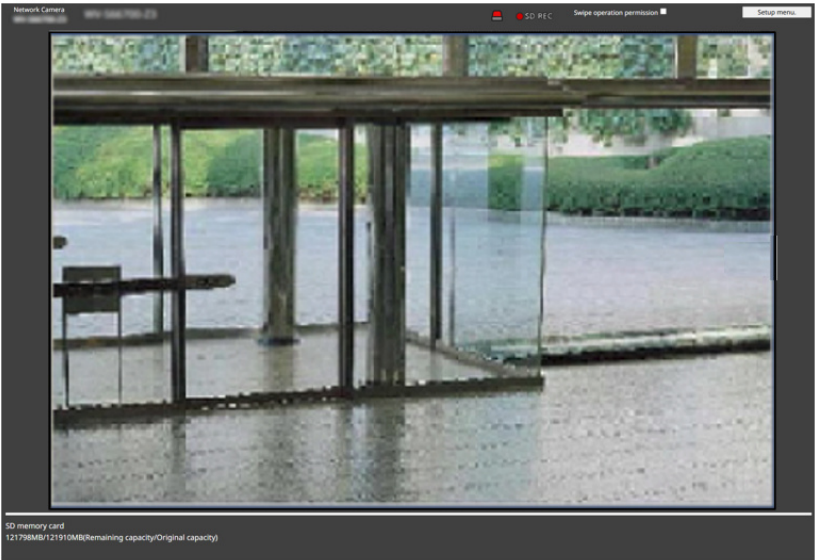
Default: i-PRO-[MAC address of your camera]

69 Added a link to the Detailed setting screen on the tablet device screen

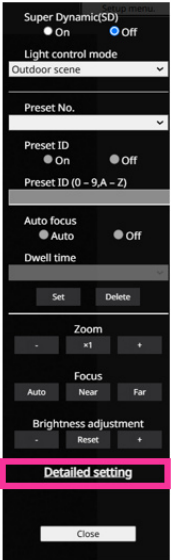
(Operating Instructions –Monitor images on a mobile terminal or tablet device —Monitor images on a tablet device)

A link to the Detailed setting screen has been added to the tablet device screen. Clicking the link to the Detailed setting screen opens it in a new tab.

This section provides an example using the PTZ camera screen.



Setup menu.



[Detailed setting] button

The Detailed setting screen is displayed in a new tab. (→About the setup menu window)

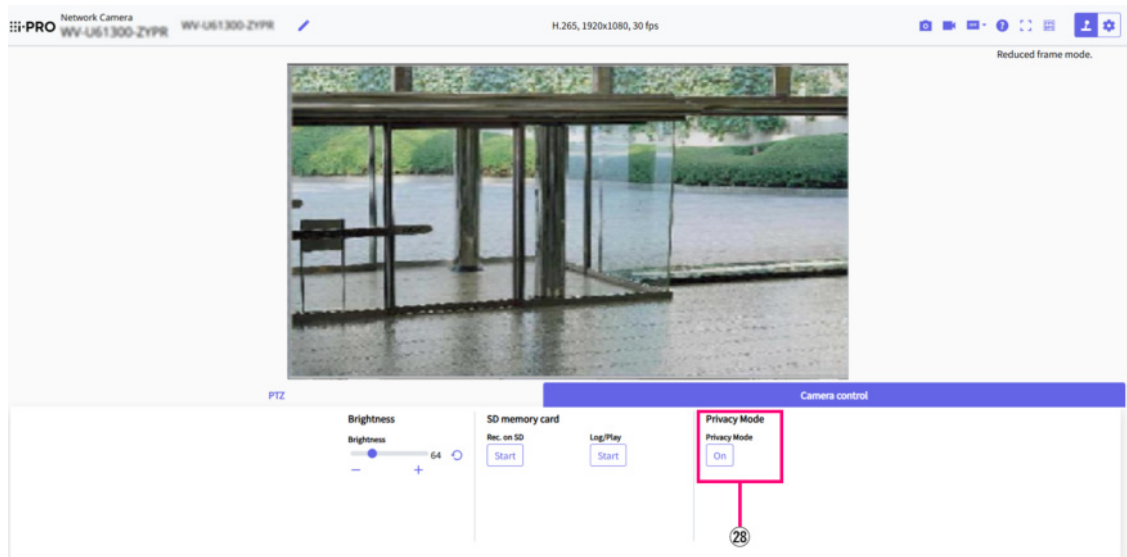
Note

- When accessing the advanced settings screen on a tablet device, some operations are not available, such as long-pressing zoom and focus does not work or the slide bar cannot be moved.

70 Add "Privacy Mode" button to camera control panel on "Live" page

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

A "Privacy Mode" button has been added to the camera control panel on the "Live" page. Pressing the "Privacy Mode" button temporarily pauses recording by panning and tilting the camera to point at the rear cover.



②8 Camera control panel – "Privacy Mode" button

Click the [On] button to temporarily pause recording by panning and tilting the camera to point at the rear cover. Click the [Off] button to resume recording by panning and tilting the camera to the home position.

Note

- When "Privacy Mode" is set to On, all pan, tilt, and zoom functions are unavailable.
If you want to use the pan, tilt, or zoom functions, set "Privacy Mode" to Off.
- When panning and tilting near the rear cover, the rear cover may appear in the video image.
- If the home position has not been set, clicking the [Off] button will not pan or tilt the camera.

71 Configure alarm settings related to "Terminal 2"

For WV-U61300-ZYPR, the alarm setting "Terminal 2" is dedicated to LED lighting control. "Terminal 2" setting in [Alarm] is fixed to "Alarm output (Privacy Mode: Off)", but it cannot be used as an alarm output function.

For this model, descriptions related to "Terminal 2" in the following chapters of the operations and settings in the Operating Instructions are not applicable.

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

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

(Operating Instructions – Configure the alarm settings [Alarm])

(Operating Instructions – Configure advanced network settings [Advanced])

(Operating Instructions – Configure the settings relating to the schedules [Schedule])

72 Add setting of LED lighting control to "Terminal 2" in Alarm setting

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

For WV-U61300-ZYPR, the alarm setting "Terminal 2" is dedicated to LED lighting control. The setting of LED lighting control has been added to the [Terminal 2] setting.

AlarmVMD areaSCD areaAudio detectionNotification

Alarm

Terminal 1	Off
Terminal 2	Alarm output(Privacy Mode:Off) On
Terminal 3	Off
VMD alarm	VMD >>
SCD alarm	SCD >>
Audio detection alarm	Audio detection >>
Command alarm	Command alarm
	Reception port
Alarm deactivation time	5 s (0.5s,1-600s)
Alarm test	Execute

[Terminal 2]

Determine how to use terminal 2.

Alarm output (Privacy Mode: Off): LED lighting control is performed when "Privacy Mode" is Off.

- **On:** LED lights up when "Privacy Mode" is Off.
- **Off:** LED does not light up regardless of On/Off of "Privacy Mode".
- **Blinking:** LED blinking when Privacy Mode is Off.

Default: On

73 Add "Privacy Mode On" and "Privacy Mode Off" to "Camera action on alarm" settings in Alarm setting

(Operating Instructions – Configure the alarm settings [Alarm] – Configure the settings relating to the camera action on alarm occurrence [Alarm])

"Privacy Mode On" and "Privacy Mode Off" have been added to the "Terminal alarm 1", "Terminal alarm 3", and "Command alarm" settings in the "Camera action on alarm" settings.

Camera action on alarm

Terminal alarm 1	Off
Terminal alarm 2	Off
Terminal alarm 3	Off
VMD alarm	Off
SCD alarm	Off
Audio detection alarm	Off
Command alarm	Off
	Preset per sender >>
Alarm E-mail notification	E-mail server >>
Alarm image FTP/SFTP transmission	FTP/SFTP setup >>
Alarm image recording(SD memory card)	SD memory card setup >>
TCP alarm notification	TCP alarm notification >>
HTTP alarm notification	HTTP alarm notification setup >>
SNMP transmission upon alarm detection	To SNMP setting

Set

Camera action on alarm

- [Terminal alarm 1]

Select an action to be taken when a terminal alarm 1 is detected from the following.

This setting is available when "Terminal 1" is selected for "Alarm input(TRM1)" of the [Alarm] tab.

- **Off:** Does not take any action even when a terminal alarm 1 is detected.
- **1-256:** If a previously registered preset position is selected, when a terminal alarm 1 is detected, the camera will move to that position.
- **Patrol 1:** When a terminal alarm 1 is detected, the camera will start the patrol.
- * If "Patrol 1" is not registered, it is not displayed on the screen.
- **Privacy Mode On:** Sets Privacy Mode to On when Terminal alarm 1 is detected.
- **Privacy Mode Off:** Sets Privacy Mode to Off when Terminal alarm 1 is detected.
- **Default:** Off

- **[Terminal alarm 2]**

Select an action to be taken when a terminal alarm 2 is detected from the following.

This setting is available when "Terminal 2" is selected for "Alarm input(TRM2)" of the [Alarm] tab.

- **Off:** Does not take any action even when a terminal alarm 2 is detected.
- **1-256:** If a previously registered preset position is selected, when a terminal alarm 2 is detected, the camera will move to that position.
- **Patrol 2:** When a terminal alarm 2 is detected, the camera will start the patrol.
- * If "Patrol 2" is not registered, it is not displayed on the screen.
- **Default:** Off

- **[Terminal alarm 3]**

Select an action to be taken when a terminal alarm 3 is detected from the following.

This setting is available when "Terminal 3" is selected for "Alarm input(TRM3)" of the [Alarm] tab.

- **Off:** Does not take any action even when a terminal alarm 3 is detected.
- **1-256:** If a previously registered preset position is selected, when a terminal alarm 3 is detected, the camera will move to that position.
- **Patrol 3:** When a terminal alarm 3 is detected, the camera will start the patrol.
- * If "Patrol 3" is not registered, it is not displayed on the screen.
- **Privacy Mode On:** Sets Privacy Mode to On when Terminal alarm 3 is detected.
- **Privacy Mode Off:** Sets Privacy Mode to Off when Terminal alarm 3 is detected.
- **Default:** Off

- **[VMD alarm]**

Select an action to be taken when a VMD alarm is detected from the following.

- **Off:** Does not take any action even when a VMD alarm is detected.
- **1-256:** If a previously registered preset position is selected, when a VMD alarm is detected, the camera will move to that position.
- **Patrol 1:** When a VMD alarm is detected, the camera will start the patrol.
* If "Patrol 1" is not registered, it is not displayed on the screen.
- **Default:** Off

- **[SCD alarm]**

Select an action to be taken when an SCD alarm is detected from the following.

- **Off:** Does not take any action even when an SCD alarm is detected.
- **1-256:** If a previously registered preset position is selected, when an SCD alarm is detected, the camera will move to that position.
- **Patrol 1:** When an SCD alarm is detected, the camera will start the patrol.
* If "Patrol 1" is not registered, it is not displayed on the screen.
- **Default:** Off

- **[Audio detection alarm]**

Select an action to be taken when a sound alarm is detected from the following.

- **Off:** Does not take any action even when a sound alarm is detected.
- **1-256:** If a previously registered preset position is selected, when a sound alarm is detected, the camera will move to that position.
- **Patrol 1:** When a sound alarm is detected, the camera will start the patrol.
* If "Patrol 1" is not registered, it is not displayed on the screen.
- **Default:** Off

- **[Command alarm]**

Select an action to be taken when a command alarm is detected from the following.

This setting is available when "On" is selected for "Command alarm".

- **Off:** Does not take any action even when a command alarm is detected.
- **1-256:** If a previously registered preset position is selected, when a command alarm is detected, the camera will move to that position.
- **Patrol 1:** When a command alarm is detected, the camera will start the patrol.
* If "Patrol 1" is not registered, it is not displayed on the screen.
- **Preset per sender:** By registering the sender's address for the command alarm and the preset position for that address, the camera will move to the preset position when an alarm is

detected from the command alarm.

Click "Preset per sender >>" to open a separate window for setting the preset positions per sender.

(→ Configure the settings relating to Preset per sender ("Preset per sender" setup menu))

- **Privacy Mode On:** Sets Privacy Mode to On when a Command alarm is detected.
- **Privacy Mode Off:** Sets Privacy Mode to Off when a Command alarm is detected.
- **Default:** Off

74 Add "Privacy Mode" to "Access Level" in user management

(Operating Instructions – Configure the settings relating to the authentication [User mng.] –

Configure the settings relating to the user authentication [User auth.]

Add "Privacy Mode" to "Access Level" in user management.

Access Level			
Access level	Camera control	Live only	Guest User
Live view selectable	☒	☐	☐
Listen	☒	☐	☐
Talk	☒	☐	☐
Refresh Rate	☒	☐	☐
Snap shot	☒	☐	☐
Playback of recording (Log disp.)	☒	☐	☐
Manual rec./Delete rec.	☒	☐	☐
Preset	☒	☐	☐
Pan/Tilt	☒	☐	☐
Zoom	☒	☐	☐
Focus	☒	☐	☐
Auto mode	☒	☐	☐
Brightness	☒	☐	☐
AUX	☒	☐	☐
Privacy Mode	☒	☐	☐
Preset positionSet	☐	☐	☐

Set

- [Access level]

Select the available functions based on the user access level (camera control, live view, guest user).

- **Default:**

- Camera control: Check marks are placed in all check boxes other than "Preset position

setting"

- Live only: All are not checked
- Guest User: All are not checked

Note

- If you have set "User authentication" to "Off", and "Guest User" to "Not use":
The "Access Level" item cannot be set. And, while all the live operation buttons are displayed, the [Setup] buttons require authentication.
- If you have set "User authentication" to "Off", and "Guest User" to "Use":
You can set the items for "Guest User".
- If you have set "User authentication" to "On":
You cannot set the items for "Guest User".

You can set the following functions.

Live view selectable	Selecting an image displayed in the live view setting permissions
Listen	Mic Input (To PC) (when listening on a PC) setting permissions (→ "Camera control panel - [Mic input volume (Camera to PC)]")
Talk	Audio output (From PC) (when talking from a PC) setting permissions (→ "Camera control panel - [Audio output volume (PC to Camera)]")
Refresh Rate	JPEG format image refresh interval setting permissions (→ "Stream information display")
Snap shot	Snap shot operation permissions (→ "Snap shot button")
Playback of recording (Log disp.)	Log operation permissions (→ [SD memory card] - [Log/Play])
Manual rec./Delete rec.	SD memory card save/delete permissions (→ [SD memory card] - [Rec. on SD])
Preset	Operation permissions for moving the preset positions (→ "PTZ panel - [Preset]")
Pan/Tilt	Pan/tilt operation permissions (→ "PTZ panel - Control pad/buttons")
Zoom	Zoom operation permissions (→ "PTZ panel - Control pad/buttons")

Focus	Focus operation permissions (→ "PTZ panel - Control pad/buttons")
Auto mode	Auto mode operation permissions (→ "PTZ panel - [Auto mode]")
Brightness	Brightness setting permissions (→ "Camera control panel - [Brightness]")
AUX	AUX setting permissions (→ "Camera control panel - [AUX] button")
<u>Privacy Mode</u>	<u>Privacy Mode operation permission (→ "Camera control panel - Privacy Mode button")</u>
Preset position setting	Operation authority for "Preset position setting" (→ "PTZ panel - [Preset]")

75 Add "Privacy Mode" to "Schedule mode" settings in Schedule

(Operating Instructions – Configure the settings relating to the schedules [Schedule])
"Privacy Mode" has been added to "Schedule mode" in Schedule.

Schedule

Schedules

Schedule 1 (White)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 2 (Blue)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 3 (Green)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 4 (Red)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 5 (Black)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 6 (Yellow)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 7 (Light blue)	Schedule mode	Off
	Time range	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00 : 00 - 00 : 00
Schedule 8 (Purple)	Schedule mode	Off
		☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

Set

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/SFTP periodic image transmission
- E-mail permission
- Position refresh
- Preset position (1-256)
- Auto track permission
- Auto pan
- Patrol
- Preset sequence
- Privacy Mode
- Reboot (Schedule 8 only)

The "Schedule" page has only the [Schedule] tab.

Up to 8 schedules can be set.

- 1 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.
- **Access permission:** Users whose access level is set to "2. Camera control" and "3. Live only" on the [User auth.] tab (→ "Configure the settings relating to the user authentication [User auth.]") can access the camera only in the period of schedule.
- **Recording to SD(Recording stream):** The SD recording will be performed at the designated time in the schedule. Further, the "Recording format" is enabled only when there is a stream.
- **Image adjust 1:** Scene 1: Images are set to the image settings of "Scene file 1" at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of "Scene file is not applied".
- **Image adjust 2:** Scene 2: Images are set to the image settings of "Scene file 2" at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of "Scene file is not applied".
- **Image adjust 3:** Scene 3: Images are set to the image quality settings of "Scene file 3" at the designated time in the schedule. Once designated time in the schedule is over, the image quality setting is set to "Scene file is not applied".
- **Image adjust 4:** Scene 4: Images are set to the image quality settings of "Scene file 4" at the designated time in the schedule. Once designated time in the schedule is over, the image quality setting is set to "Scene file is not applied".
- **FTP/SFTP periodic image transmission:** FTP/SFTP periodic image transmission will be performed at the designated time in the schedule.
- **E-mail permission:** While the schedule is set, e-mail notification is sent when alarm is input.
- **Position refresh:** The camera position will be refreshed at the designated time in the schedule.
- **1-256:** The camera will move to the selected position from the preset position at the designated time in the schedule.
- **Auto track permission :** The auto track activation setting set on the [Auto track setting] tab will be permitted during the period of the schedule.
- **Auto pan:** The camera will start the auto-panning operation set on the [Position] tab at the designated time in the schedule.
- **Patrol 1:** The camera will start the patrol 1 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 1" is set.

- **Patrol 2:** The camera will start the patrol 2 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 2" is set.
- **Patrol 3:** The camera will start the patrol 3 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 3" is set.
- **Patrol 4:** The camera will start the patrol 4 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 4" is set.
- **Preset sequence 1:** The camera will start the preset sequence 1 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Preset sequence 1" is set.
- **Preset sequence 2:** The camera will start the preset sequence 2 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Preset sequence 2" is set.
- **Preset sequence 3:** The camera will start the preset sequence 3 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Preset sequence 3" is set.
- **Privacy Mode:** Sets Privacy Mode to On at the scheduled time. Sets Privacy Mode to Off at the scheduled time.

Note

- Select "On" for "User auth." on the [User auth.] tab of "User mng." page (→ "Configure the settings relating to the user authentication [User auth.]") and "Off" for "Host auth." on the "Host auth." page (→ "Configure the settings relating to the host authentication [Host auth.]") to validate "Access permission".
- When selecting "Recording to SD(Recording stream)", select "Stream(1)", "Stream(2)", "Stream(3)", or "Stream(4)" for "Recording format" on the [SD memory card] tab and select "Schedule" for "Save trigger". (→ [Save trigger])
- In "Privacy Mode", Camera action on alarm or manual operations on the live view take priority over the schedule.
(→ [Add "Privacy Mode" button to camera control panel on "Live" page](#))
(→ [Add "Privacy Mode On" and "Privacy Mode Off" to "Camera action on alarm" settings in Alarm setting](#))

76 Added [Mic input] button and [Audio output] button to the top of the Live page

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

An audio [Mic input] button and a [Audio output] button have been added to the top of the Live page. You can turn audio listen/talk On/Off by clicking the [Mic input] button and the [Audio output] button.

This section uses PTZ camera screens as examples.



① [Mic input] button

Click the button to turn audio reception (Camera to PC) on/off.

Note

- If the network communication is unstable, audio input may stop. In this case, resume the mic input by turning the mic input button off and on.
- You can adjust the reception volume from the Camera control panel – [Mic input volume (Camera to PC)].

② [Audio output] button

Click the button to turn on/off the talk audio (PC to Camera).

Note

- Audio transmission is available only when connected with HTTPS.
- When a user is using the audio transmission function with “Interactive(Half-duplex)” selected, the receiver button and the transmission button will be inoperable for the other users. When “Interactive(Full-duplex)” is selected, the transmission button is inoperable for other users.
- The maximum duration of a single audio output is the audio output duration set in the [Audio] tab on the “Image/Audio” page. Audio output stops when the specified audio output duration has passed. To turn the audio transmission function on, click the [Audio

output] button again.

- You can adjust the audio output volume from the Camera control panel – [Audio output volume (PC to Camera)].

77 Added detailed settings for alarm types that link to HTTP alarm notifications

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to HTTP alarm notification)

Detailed settings have been added for alarm types that link to HTTP alarm notification settings. This function allows you to notify external devices of any data based on the results of the Ext. software function or the camera’s detection functions. This section uses the [Address 1] screen as an example.

Alarm

VMD area

SCD area

Audio detection

Notification

TCP alarm notification

HTTP alarm notification

HTTP alarm notification

Alarm

Diag.

Address 1

User name

Password

Notification data

☐

☐

http://

/cgi-bin/comalarm.cgi?CMD=01

Delete

-Detailed setting

HTTP request method

Alarm type to be linked

Alarm test

Copy settings to other notifications

GET

All

Execute

--Not been set--

Alarm Area No.

All

Copy

HTTP alarm notification

[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 number>

[Alarm] checkbox

When the checkbox is checked, the HTTP alarm notification will be provided upon an alarm occurrence.

[Delete] button

When this button is clicked, all configured information, including the address, user name, password, notification data, and Detailed setting, will be deleted.

[User name]

Enter the user name (login name) to access the HTTP server.

Available number of characters: 0 – 63 characters

Unavailable characters: " & : ; ¥

Default: None (blank)

[Password]

Enter the password to access the HTTP server.

Available number of characters: 0 – 63 characters

Unavailable characters: " &

Default: None (blank)

Note

- “Basic” or “Digest” authentication will be performed when receiving authentication request of the HTTP server.

[Notification data]

Enter the notification data to add after the destination HTTP server addresses set in [Address 1] – [Address 5].

Available characters: Alphanumeric characters

Default: /cgi-bin/comalarm.cgi?CMD=01

Note

- When the HTTP alarm function is enabled, leakage of the HTTP server authentication information (user name and password) may occur in the network at the time of HTTP alarm notification.
- For “Address 1” to “Address 5”, a total of 256 characters can be entered for the address

(including “http://”) and “Notification data”.

- Make sure to enter a slash (/) as the first character for “Notification data”.
- If the HTTP alarm notification fails, information about the failure will be added to the system log.
- Even if the [Set] button is clicked after deleting the contents of “Notification data”, “/cgi-bin/comalarm.cgi?CMD=01” will be set.

<Example>

When http://192.168.0.100 is set for the address and /cgi-bin/comalarm.cgi?CMD=01 is set for “Notification data”, an HTTP alarm notification such as http://192.168.0.100/cgi-bin/comalarm.cgi?CMD=01 will be executed.

[Detailed setting]

You can set detailed notification content for each notification address. Click the [+] button to display the [HTTP request method], [Alarm type to be linked], and [Alarm test] buttons.

[HTTP request method]

Set the HTTP request method for HTTP alarm notifications.

GET: Sends HTTP alarm notifications using GET.

POST: Sends HTTP alarm notifications using POST.

Default: GET

[HTTP request body]

Set the notification content for HTTP alarms. This setting is available when “POST” is selected as the [HTTP request method].

Available characters: 1-byte alphanumeric characters, and 1-byte symbols

Default: None (blank)

[Alarm type to be linked]

Set the alarm types to be linked.

All: Sends HTTP alarm notifications for all alarm triggers.

Terminal 1: Sends HTTP alarm notifications when an alarm occurs on terminal 1.

Terminal 2: Sends HTTP alarm notifications when an alarm occurs on terminal 2.

Terminal 3: Sends HTTP alarm notifications when an alarm occurs on terminal 3.

Command alarm: Sends HTTP alarm notifications when a command alarm is input.

VMD: Sends HTTP alarm notifications when motion detection occurs.

Auto track: Sends HTTP alarm notifications when auto tracking occurs.

Scene Change: Sends HTTP alarm notifications when a scene change occurs.

Audio detection: Sends HTTP alarm notifications when audio detection occurs.

<AI-VMD>: Sends HTTP alarm notifications when AI-VMD detection occurs. When <AI-VMD> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI-VMD and AI People Counting>: Sends HTTP alarm notifications when AI-VMD and AI People Counting occurs. When <AI-VMD and AI People Counting> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI People detection>: Sends HTTP alarm notifications when AI people detection occurs. When <AI People detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI Vehicle detection>: Sends HTTP alarm notifications when AI vehicle detection occurs. When <AI Vehicle detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI Occupancy detection>: Sends HTTP alarm notifications when AI occupancy detection occurs. When <AI Occupancy detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI Scene change detection>: Sends HTTP alarm notifications when AI Scene change detection occurs. When <AI Scene change detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

--Free entry of message ID (hexadecimal)--: Sends HTTP alarm notifications when an alarm corresponding to the message ID (hexadecimal) occurs.

Default: All

Note

- Settings displayed vary by model. Check by comparing with your model.
- For alarms corresponding to the message ID (hexadecimal), refer to our support website below.

For Ext. software alarms (refer to the "TCP alarm notification" section in each guide):

https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/device-integration/extension-software

[Camera No.]

Set the camera number to be linked.

Available range: All, 1 to 4

Default: All

Note

- This setting can only be set for [Multi].

[Alarm Area No.]

Set the area number of the alarm to be linked.

Available range: All, 1 to 16

Default: All

Note

- The Area No. that can be set varies depending on the alarm types to be linked.

[Alarm test]

Click the [Execute] button to execute the alarm test function.

Note

- When the test alarm function is executed, the device sends HTTP alarm notifications. This can be used to check the settings of the external device set as the notification destination.
- The test alarm function cannot be executed multiple times during the alarm deactivation time.

[Copy settings to other notifications]

Click the [Copy] button to copy all settings to the selected notification destination.

78 Expanded the number of server certificates that can be installed on the HTTPS settings screen to a maximum of two

(Operating Instructions – Configuring the network settings [Network] – Configure advanced network settings [Advanced] – Configure the HTTPS settings)

You can install up to two server certificates on the HTTPS settings screen.

[HTTPS – Connection]

Sets the connection method to the camera.

HTTP & HTTPS: HTTP and HTTPS connections are available.

HTTPS: Only an HTTPS connection is available.

Default: HTTP & HTTPS

Select the TLS to be used for HTTPS connections.

TLS1.1, TLS1.2: Set enabled or disabled.

TLS1.3: This is always enabled and cannot be set to disabled.

Default: TLS1.1: Disable, TLS1.2: Enable, TLS1.3: Enable

Note

- When TLS1.1 is enabled, TLS1.2 is also enabled.
- When TLS1.2 is disabled, TLS1.1 is also disabled.
- When you change the TLS1.2 setting, you need to reboot the camera. After rebooting, you cannot perform operations for around 2 minutes, just as when the camera is turned on.

[HTTPS – Select certificate]

Select the certificate to be used with HTTPS.

Pre-installed certificate: Select a Pre-installed certificate.

First server certificate host name: Select a server certificate. Displayed only when one or more server certificates are installed.

Second server certificate host name: Select a server certificate. Displayed only when two server certificates are installed.

Default: Pre-installed certificate

Note

- When you install server certificates with the same host name, the installation date and time information is displayed after the host name.

Display example: Host name (2025/11/10 12:34:56)

[HTTPS – HTTPS port]

Designate the HTTPS port number to be used.

Available port number: 1-65535

Default : 443

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, 162, 554, 995, 1883, 8883, 10669, 10670, 32768-49151, 59000-61000

[Pre-installed certificate – Download root certificate]

Click the [Execute] button to download the root certificate for the pre-installed certificate. By installing the root certificate to your PC, you can get signature verification for the pre-installed certificate.

[Server Certificate – CRT key generate]

Generates the CRT key (SSL encryption key) used for the HTTPS protocol.

To generate the CRT key, click the [Execute] button to display “CRT key generate” dialog box.

[Server Certificate – Generate Certificate Signing Request]

When using the security certificate issued by CA (Certificate Authority) as the security certificate used for the HTTPS protocol, the CSR (Certificate Signing Request) will be generated.

To generate the CSR, click the [Execute] button to display the “Server Certificate – Generate Certificate Signing Request” dialog window.

[Server certificate or server certificate with private key – Installation]

Installs the Server Certificate (security certificate) issued by CA and displays the information of the installed Server Certificate (security certificate).

To install the Server Certificate (security certificate), click the [Choose File] button to display the [Open] dialog box, and select the file of the Server Certificate (security certificate) issued by CA, and click the [Execute] button.

If the Server Certificate (security certificate) is already installed, the file name of the installed Server Certificate (security certificate) will be displayed.

Note

- The server certificate being installed must be in PEM format (*.pem).
- When installing a server certificate that includes a private key, it must be in PFX format (.pfx or .p12).
- You can install up to two server certificates, including server certificates that contain private keys.
- When you have two server certificates installed, you cannot install a new server certificate. If you want to install a new server certificate, delete one of the currently installed server certificates.

[Server certificate or server certificate with private key – Password (0 to 30 characters)]

If a password is set for a server certificate in PFX format, enter the password. If no password is set, leave the field blank.

Available number of characters: 0 to 30 characters

[Server certificate or server certificate with private key – Server Certificate Information]

Displays information about the Server Certificate (security certificate) for the host name selected in the pull-down menu.

After selecting a host name from the pull-down menu and clicking the [Confirm] button, the registration details of the Server Certificate (security certificate) corresponding to the host name are displayed in the "Server Certificate – Confirm" dialog. If the Server Certificate (security certificate) is not installed, the content of the generated CSR file will be displayed.

When the [Delete] button is clicked, the installed Server Certificate (security certificate) will be deleted.

Note

- When a server certificate with a Subject Alternative Name that is longer than 65 characters is installed, the [Subject Alternative Name] in the "Server Certificate Confirmation" dialog will be displayed blank.

IMPORTANT

- Before deleting the valid Server Certificate (security certificate), confirm that there is a backup file of the Server Certificate (security certificate) on the PC or another media. The backup file of the CA certificate (security certificate) will be required when installing the Server Certificate (security certificate) again.
- Deleting a server certificate in PFX format will also delete the private key. If you want to use the same server certificate, reinstall the server certificate in PFX format.

- 78 Expanded the number of server certificates that can be installed on the HTTPS settings screen to a maximum of two
-

Note

- After changing the connection setting, access the camera again by after waiting a while according to the changed setting (“http://IP address of the camera” or “https://IP address of the camera”).
- When the camera is accessed using the HTTPS protocol, the refresh interval and frame rate of images may be lower.
- When the camera is accessed using the HTTPS protocol, it may take time to display images.
- When the camera is accessed using the HTTPS protocol, the images may be distorted or audio may be interrupted.
- If you set the connectivity to [HTTPS], the maximum delivery is limited to 32Mbps.

79 Added the checkbox 'Apply "self-return time" to the return time after manual operation' when the Schedule [Operation mode] setting is set to "Auto pan" or "Preset sequence 1"

(Operating Instructions – Configure the settings relating to the schedules [Schedule])

A checkbox has been added for 'Apply "self-return time" to the return time after manual operation' that can only be set when you select "Auto pan" or "Preset sequence 1" in the Schedule [Operation mode] setting.

When you select the 'Apply "self-return time" to the return time after manual operation' checkbox, the return time when the PTZ orientation changes due to manual operation or other factors switches from 1 minute to the Self return time in the camera operation settings.

- 79 Added the checkbox 'Apply "self-return time" to the return time after manual operation' when the Schedule [Operation mode] setting is set to "Auto pan" or "Preset sequence 1"

The screenshot shows a 'Schedule' configuration window with a table of 8 schedules. Each schedule has a name, a color-coded icon, and two rows for configuration: 'Schedule mode' and 'Time range'. The 'Time range' row includes checkboxes for days of the week and a '24h' option, followed by time selection dropdowns. Two checkboxes are highlighted with pink boxes: 'Apply "self-return time" to the return time after manual operation' for Schedule 1 (Auto pan) and Schedule 2 (Preset sequence 1).

Schedule	Color	Schedule mode	Time range	Apply "self-return time" to the return time after manual operation
Schedule 1 (White)	White	Auto pan	☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat ☒ Sun ☐ 24h 09:00 - 17:00	☐
Schedule 2 (Blue)	Blue	Preset sequence 1	☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat ☒ Sun ☐ 24h 23:00 - 07:00	☐
Schedule 3 (Green)	Green	FTP/SFTP periodic image tr	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☒ Sat ☒ Sun ☒ 24h 00:00 - 00:00	
Schedule 4 (Red)	Red	SCD permission	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00	
Schedule 5 (Black)	Black	Off	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00	
Schedule 6 (Yellow)	Yellow	Off	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00	
Schedule 7 (Light blue)	Light blue	Off	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00	
Schedule 8 (Purple)	Purple	Off	☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun ☐ 24h 00:00 - 00:00	

Set

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.
- **Access permission:** Users whose access level is set to "2. Camera control" and "3. Live only" on the [User auth.] tab (→ "Configure the settings relating to the user authentication [User auth.]") can access the camera only in the period of schedule.
- **Recording to SD(Recording stream):** The SD recording will be performed at the designated time in the schedule. Further, the "Recording format" is enabled only when there is a stream.
- **Image adjust 1:** Scene 1: Images are set to the image settings of "Scene file 1" at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of "Scene file is not applied".
- **Image adjust 2:** Scene 2: Images are set to the image settings of "Scene file 2" at the designated time in the schedule. When the designated time for the schedule finishes, images are set to the image settings of "Scene file is not applied".
- **Image adjust 3:** Scene 3: Images are set to the image quality settings of "Scene file 3" at the designated time in the schedule. Once designated time in the schedule is over, the image quality setting is set to "Scene file is not applied".
- **Image adjust 4:** Scene 4: Images are set to the image quality settings of "Scene file 4" at the designated time in the schedule. Once designated time in the schedule is over, the image quality setting is set to "Scene file is not applied".
- **FTP/SFTP periodic image transmission:** FTP/SFTP periodic image transmission will be performed at the designated time in the schedule.
- **E-mail permission:** While the schedule is set, e-mail notification is sent when alarm is input.
- **Position refresh:** The camera position will be refreshed at the designated time in the schedule.
- **1-256:** The camera will move to the selected position from the preset position at the designated time in the schedule.
- **Auto track permission :** The auto track activation setting set on the [Auto track setting] tab will be permitted during the period of the schedule.

- **Auto pan:** The camera will start the auto-panning operation set on the [Position] tab at the designated time in the schedule.

- Apply "self-return time" to the return time after manual operation: Select the return time when the PTZ orientation changes due to manual operation or other factors from the following.

- Unselected:** The Auto pan return time during scheduled operation is fixed at 1 minute.

- Selected:** The Auto pan return time during scheduled operation is set to the "self-return time" in camera operation settings.

- **Patrol 1:** The camera will start the patrol 1 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 1" is set.

- **Patrol 2:** The camera will start the patrol 2 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 2" is set.

- **Patrol 3:** The camera will start the patrol 3 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 3" is set.

- **Patrol 4:** The camera will start the patrol 4 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Patrol 4" is set.

- **Preset sequence 1:** The camera will start the preset sequence 1 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Preset sequence 1" is set.

- Apply "self-return time" to the return time after manual operation: Select the return time when the PTZ orientation changes due to manual operation or other factors from the following.

- Unselected:** The Preset sequence 1 return time during scheduled operation is fixed at 1 minute.

- Selected:** The Preset sequence 1 return time during scheduled operation is set to the "self-return time" in camera operation settings.

- **Preset sequence 2:** The camera will start the preset sequence 2 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Preset sequence 2" is set.

- **Preset sequence 3:** The camera will start the preset sequence 3 operation set on the [Position] tab at the designated time in the schedule. This is enabled only when "Preset sequence 3" is set.

- **Privacy Mode:** Sets Privacy Mode to On at the scheduled time. Sets Privacy Mode to Off at the scheduled time.

Note

- Select "On" for "User auth." on the [User auth.] tab of "User mng." page (→ "Configure the settings relating to the user authentication [User auth.]") and "Off" for "Host auth." on the "Host auth." page (→ "Configure the settings relating to the host authentication [Host auth.]") to validate "Access permission".

- When selecting "Recording to SD(Recording stream)", select "Stream(1)", "Stream(2)",

- 79 Added the checkbox 'Apply "self-return time" to the return time after manual operation' when the Schedule [Operation mode] setting is set to "Auto pan" or "Preset sequence 1"
-

"Stream(3)", or "Stream(4)" for "Recording format" on the [SD memory card] tab and select "Schedule" for "Save trigger". (→ [Save trigger])

- In "Privacy Mode", Camera action on alarm or manual operations on the live view take priority over the schedule.

(→ [Add "Privacy Mode" button to camera control panel on "Live" page](#))

(→ [Add "Privacy Mode On" and "Privacy Mode Off" to "Camera action on alarm" settings in Alarm setting](#))

80 Added "Auto tracking area" to Auto track setting

(Operating Instructions – Configure the settings relating to PTZ [PTZ] – Configure the settings relating to auto track (“Auto track” setup menu))

Added a setting to determine whether or not auto tracking continues when the target moves outside the detection area.

Cam. Function

Position

Auto track

Auto track alarm setting



-Basic settings

Detection object

☒  Human

☒  Vehicle

☒  Bicycle

Object size

Small(1/4 of the image) ▾

Sensitivity

Middle ▾

Longest tracking time

Off(Unlimited) ▾

Auto track data in video stream

On with track video display ▾

Auto tracking area

☒ Full ☐ Defined

To use "Defined" for Auto tracking area, set the area in "Auto track activation setting (Area)"

Set

+Auto track activation setting

+Auto track activation setting (Area)

[Basic settings](#)

[Detection object]

Select types of objects to be detected. A selection of multiple types of objects is available.

- **Human:** Auto track will be performed when a human is detected.
- **Vehicle:** Auto track will be performed when a vehicle is detected.
- **Bicycle:** Auto track will be performed when a bicycle is detected.

[Object size]

Select an object size from the following.

Small(1/4 of the image): The tracking target is enlarged to about 1/4 the size (lengthwise) of the monitor screen.

Middle(1/2 of the image): The tracking target is enlarged to about 1/2 the size (lengthwise) of the monitor screen.

Large(3/4 of the image): The tracking target is enlarged to about 3/4 the size (lengthwise) of the monitor screen.

No size adjustment: Does not perform the zoom control during the auto track.

Default: Small(1/4 of the image)

Note

- The sizes described here are only a guide. Depending on the environment conditions and the tracking conditions the displayed size may be different from the expected size.
- Increasing the display size of the tracking target reduces the tracking capabilities.

[Sensitivity]

Select the tracking sensitivity from the following.

High/Middle/Low

Default: Middle

Note

- Reducing the sensitivity can help reduce false detections such as when a tree is swaying, but it will also reduce the tracking capabilities. On the other hand, increasing the sensitivity increases the tracking capabilities but also increases false detections. Match the settings according to where the camera is used.

[Longest tracking time]

Select the time that tracking will be forced to stop after it started auto tracking from the following.

Off(Unlimited)/ 10s/ 20s/ 30s/ 40s/ 50s/ 1min/ 2min/ 3min/ 5min/ 10min

Default: Off(Unlimited)

Note

- The camera will stop at a position at a point of time when the set longest tracking time has elapsed.

To return to auto mode, set the self return, and after tracking is finished, the self return time is counted and the camera returns to auto mode.

[Auto track data in video stream]

Select from the following to determine whether to transmit image data to which SCD information is added and superimposed.

Off: Auto track data is not added to images.

On: Auto track data is added to images, but the outline of the tracking target is not displayed on the "Live" page.

On (with live display): Auto track data is added to images and an outline of the tracking target is displayed on the "Live" page.

Default: On (with live display)

[Auto tracking area]

Select whether or not to continue auto tracking when the target moves outside the area.

Full: Auto tracking continues even if the target leaves the area.

Define: Auto tracking stops when the target leaves the area. After stopping, the camera automatically returns to the home position according to the self return settings.

Default: Full

81 Changed the test alarm notification for HTTP alarm notifications so that users can specify the Destination of Trap as well as the Trap Content

(Operating Instructions - Configure the alarm settings [Alarm] - Configure the settings relating to HTTP alarm notification)

The Alarm notification function from the HTTP alarm notification function allows users to specify the Destination of Trap as well as the Trap Content of test alarm notifications.

HTTP alarm notification

[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 number>

[Alarm] checkbox

When the checkbox is checked, the HTTP alarm notification will be provided upon an alarm occurrence.

[Diag.] checkbox

Select this to issue HTTP alarm notifications when the amount of free space remaining on the SD memory card is running low, when there is not enough free space on the SD memory card, when an SD memory card recognition error occurs, when an SD memory card write error occurs, and when the trial period for the function extension software will expire.

[Delete] button

When this button is clicked, all configured information, including the address, user name,

- 81 Changed the test alarm notification for HTTP alarm notifications so that users can specify the Destination of Trap as well as the Trap Content
-

password, notification data, and Detailed setting, will be deleted.

[User name]

Enter the user name (login name) to access the HTTP server.

Available number of characters: 0 – 63 characters

Unavailable characters: " & ; ¥

Default: None (blank)

[Password]

Enter the password to access the HTTP server.

Available number of characters: 0 – 63 characters

Unavailable characters: " &

Default: None (blank)

Note

- “Basic” or “Digest” authentication will be performed when receiving authentication request of the HTTP server.

[Notification data]

Enter the notification data to add after the destination HTTP server addresses set in [Address 1] – [Address 5].

Available characters: Alphanumeric characters

Default: /cgi-bin/comalarm.cgi?CMD=01

Note

- When the HTTP alarm function is enabled, leakage of the HTTP server authentication information (user name and password) may occur in the network at the time of HTTP alarm notification.
- For “Address 1” to “Address 5”, a total of 256 characters can be entered for the address (including “http://”) and “Notification data”.
- Make sure to enter a slash (/) as the first character for “Notification data”.
- If the HTTP alarm notification fails, information about the failure will be added to the system log.
- Even if the [Set] button is clicked after deleting the contents of “Notification data”, “/cgi-bin/comalarm.cgi?CMD=01” will be set.

<Example>

When http://192.168.0.100 is set for the address and /cgi-bin/comalarm.cgi?CMD=01 is set for

- 81 Changed the test alarm notification for HTTP alarm notifications so that users can specify the Destination of Trap as well as the Trap Content
-

“Notification data”, an HTTP alarm notification such as `http://192.168.0.100/cgi-bin/comalarm.cgi?CMD=01` will be executed.

[Detailed setting]

You can set detailed notification content for each notification address. Click the [+] button to display the [HTTP request method], [Alarm type to be linked], and [Alarm test] buttons.

[HTTP request method]

Set the HTTP request method for HTTP alarm notifications.

GET: Sends HTTP alarm notifications using GET.

POST: Sends HTTP alarm notifications using POST.

Default: GET

[HTTP request body]

Set the notification content for HTTP alarms. This setting is available when “POST” is selected as the [HTTP request method].

Available characters: 1-byte alphanumeric characters, and 1-byte symbols

Default: None (blank)

[Alarm type to be linked]

Set the alarm types to be linked.

All: Sends HTTP alarm notifications for all alarm triggers.

Terminal 1: Sends HTTP alarm notifications when an alarm occurs on terminal 1.

Terminal 2: Sends HTTP alarm notifications when an alarm occurs on terminal 2.

Terminal 3: Sends HTTP alarm notifications when an alarm occurs on terminal 3.

Command alarm: Sends HTTP alarm notifications when a command alarm is input.

VMD: Sends HTTP alarm notifications when motion detection occurs.

Auto track: Sends HTTP alarm notifications when auto tracking occurs.

Scene Change: Sends HTTP alarm notifications when a scene change occurs.

Audio detection: Sends HTTP alarm notifications when audio detection occurs.

<AI-VMD>: Sends HTTP alarm notifications when AI-VMD detection occurs. When <AI-VMD> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI-VMD and AI People Counting>: Sends HTTP alarm notifications when AI-VMD and AI People Counting occurs. When <AI-VMD and AI People Counting> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI People detection>: Sends HTTP alarm notifications when AI people detection occurs. When <A

- 81 Changed the test alarm notification for HTTP alarm notifications so that users can specify the Destination of Trap as well as the Trap Content
-

I People detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI Vehicle detection>: Sends HTTP alarm notifications when AI vehicle detection occurs. When <AI Vehicle detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI Occupancy detection>: Sends HTTP alarm notifications when AI occupancy detection occurs. When <AI Occupancy detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

<AI Scene change detection>: Sends HTTP alarm notifications when AI Scene change detection occurs. When <AI Scene change detection> is selected, an additional detailed settings pull-down menu for notification conditions is displayed.

—Free entry of message ID (hexadecimal)—: Sends HTTP alarm notifications when an alarm corresponding to the message ID (hexadecimal) occurs.

Default: All

Note

- Settings displayed vary by model. Check by comparing with your model.
- For alarms corresponding to the message ID (hexadecimal), refer to our support website below.
For Ext. software alarms (refer to the "TCP alarm notification" section in each guide):

https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/device-integration/extension-software

[Camera No.]

Set the camera number to be linked.

Available range: All, 1 to 4

Default: All

Note

- This setting can only be set for [Multi].

[Alarm Area No.]

Set the area number of the alarm to be linked.

Available range: All, 1 to 16

Default: All

Note

- 81 Changed the test alarm notification for HTTP alarm notifications so that users can specify the Destination of Trap as well as the Trap Content
-

- The Area No. that can be set varies depending on the alarm types to be linked.

[Alarm test]

Click the [Execute] button to execute the alarm test function.

Note

- When you run the Alarm test function, an HTTP test alarm is sent according to the current settings entered by the user. Use this to check the settings of the external device set as the Destination of Trap.
- The test alarm function cannot be executed multiple times during the alarm deactivation time.

[Copy settings to other notifications]

Click the [Copy] button to copy all settings to the selected notification destination.

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