# New functions and addendum

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

# **About notations**

The following notations are used when describing the functions limited for specified models.

The functions without the notations are supported by all models.

SW559: WV-SW559, WV-SF549, WV-SF539, WV-SP509

**SW558**: WV-SW558, WV-SF548, WV-SF538, WV-SP508

**SW458**: WV-SW458, WV-SW458M, WV-SW458MA, WV-SF438

**SW598**: WV-SW598, WV-SC588

**SW158**: WV-SW158, WV-SF138

**SW397**: WV-SW397, WV-SW397A, WV-SC387

**SW598A**: WV-SW598A, WV-SC588A **SW397B**: WV-SW397B, WV-SC387A

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

# ·Firmware Ver.1.40 SW559 SW558 SW458

No.	Functions	Item (Page)	Page
1	Changes the name of "List" on the "Live" page	Log (Live)	5
2	Playback of H.264 data recorded on the SD memory card	ata recorded on the SD memory card Log (Live) JPEG/H.264 (Camera)	
3	Changes about "Time zone" and "Summer time"  Basic (Basic)  NTP (Server)		11
4	Addition of "Auto" in Language selection Basic (Basic)		12
5	Addition of "Monitor out" (NTSC/PAL switching) setting	Basic (Basic)	12
6	Addition of "Internet" function	Internet (Basic)	13
7	Addition of "Area" selection to the "DDNS" setting	Internet (Basic) DDNS (Network)	15
8	Perform pre alarm recording using the JPEG recording function	SD memory card (Basic)	16
9	Addition of "Permission level of viewing logs" setting	Log (Basic)	17
10	Addition of "Initial display stream on the browser" setting	JPEG/H.264 (Camera)	17
11	Addition of "Advanced VBR" to the "Transmission priority" of "H.264"	LJPEG/H 264 (Camera)	
12	Addition of "Advanced VBR" to the "H.264 recording"	JPEG/H.264 (Camera)	19
13	Addition of "6144kbps *" to "Max bit rate (per client) *"	dition of "6144kbps *" to "Max bit rate (per client) *"  JPEG/H.264 (Camera)	
14	Addition of "PAL monitor switch input" to the "Terminal" settings of "Alarm"		21
15	Addition of "Maximum file size" and "Pre alarm (recording) duration" to the "H.264 recording"	SD memory card (Basic) Alarm (Alarm)	23
16	Addition of "HTTP alarm notification"	Notification (Alarm)	24
17	Changes to an optional function of "Face detection outline display" and "Advanced func."	Live XML notification (Advanced function) Face detection (Advanced function)	26
18	Supports SSL Mail Server	E-mail (Server)	27
19	Addition of "Forcible black & white mode", "Forcible Super Dynamic" and "Forcible WDR" to the Schedule  Schedule (Schedule)		27
20	Addition of "Time past from the date of manufacture" to the Upgrade	Upgrade (Maintenance)	28
21	Changes about "Fog compensation"	Image adjust(Image/Audio)	29

# 

No.	Functions	Item (Page)	Page
22	Addition of "Portuguese" in [select language] pull-down menu on the Live page	Live	30
23	Addition of "Portuguese" in Language selection	Basic (Basic)	30
24	Change initial settings for the "Terminal" settings of "Alarm"	Alarm (Alarm)	30
25	Change the language of E-mail notification for [Diag.]	Notification (Alarm)	30

# Firmware Ver.1.50 (\$W559) (\$W558) (\$W458) (\$W598) (\$W598A) / Ver.1.70 (\$W397) (\$W397B)

No.	Functions	Item (Page)	Page
26	Addition of "Permission level of viewing logs" setting	Log (Basic)	31
27	Addition of "Image capture mode" settings	JPEG/H.264(Image/Audio)	31
28	Addition of "Light companyation(LLC)"	Image quality(Image/Audio)	38
20	Addition of "High light compensation(HLC)"	Image/Position(Image/Audio)	30
29	Changes the name of "Direction setting" function	Image/Position(Image/Audio)	39
30	Addition of ""Panning 0° direction setting"	Image/Position(Image/Audio)	40
31	Up/down angle adjustment function for Double	Image/Desition/Image/Audio)	44
31	Panorama	Image/Position(Image/Audio)	41
32	Addition of "Audio output duration" setting	n of "Audio output duration" setting Audio(Image/Audio)	
33	Addition of "Forcible black & white mode",	Sahadula (Sahadula)	42
33	"Forcible Super Dynamic" to "Schedule"	Schedule (Schedule)	43
34	Addition of "Alarm deactivation time" setting	Alarm (Alarm)	43
35	Addition of pre alarm to FTP alarm transmission	Alarm (Alarm)	44
36	Addition of "HTTP alarm notification"	Notification (Alarm)	45
37	Supports SSL Mail Server	E-mail (Server)	46
38	Addition of a support site link to the Upgrade screen	Upgrade(Maintenance)	47
39	Changes to image attachments for E-mail information	Notification (Alarm)	47

# Firmware Ver.1.60 (\$W559) (\$W558) (\$W458) (\$W598) (\$W598A) / Ver.1.70 (\$W397) (\$W397B)

No.	Functions	Item (Page)	Page
40	Changes Time zone settings	Basic (Basic)	48
40	Changes Time zone settings	NTP (Server)	40
11	Addition of "Upper center" and "Lower center" to the	Pagia (Pagia)	40
41	"Position" setting of "OSD"	Basic (Basic)	48
42	Warning outputs, usage information, and error information		40
42	display have been added for SD memory cards.	Status (Maintenance)	49
	Changes to connection information and warning display of	Precautions	
43	Changes to connection information and warning display of the power supply device	(Installation guide)	52
		System log (Maintenance)	

# ·Firmware Ver.1.80 SW598A SW397B

No.	Functions	Item (Page)	Page
44	Addition of "VBR" to the "Transmission priority" of "H.264"	JPEG/H.264(Image/Audio)	53
45	Addition of "Smart Coding mode" feature	JPEG/H.264(Image/Audio)	55

# Firmware Ver.1.90 (\$W559) (\$W558) (\$W458) (\$W598) (\$W158) (\$W397) (\$W598A) (\$W397B)

No.	Functions	Item (Page)	Page
46	Addition of "15s" and "25s" to the "Dwell time" of "Preset	Preset position	57
40	position"	(Image/Audio)	31
47	Addition of "0s", "1s", "2s", "3s", "4s", "15s" and "25s" to the	Auto non (Imago/Audio)	58
47	"Dwell time" of "Auto pan"	Auto pan (Image/Audio)	36
48	Addition of "Alarm area No." setting to the "Preset per	Dropot per conder(Alerm)	59
40	sender"	Preset per sender(Alarm)	59
49	Addition of "VBR" to the "Transmission priority" of "H.264"	JPEG/H.264(Image/Audio)	61
49	(Addition of models SW598 SW397 SW158)		61

# -Firmware Ver.2.46

No.	Functions	Item (Page)	Page
50	Addition of "Reboot" to the Schedule 5	Schedule (Schedule)	62

# 1. Changes the name of "List" on the "Live" page



On the "Live" page, the [List] button will be changed to the [List/Play] button.

# 2. Playback of H.264 data recorded on the SD memory card

# (Operating Instructions - Display the log list)

\* The other SD memory card models already support this function.

# Recording format of the SD memory card: JPEG

- Alarm log: Logs of the alarm occurrences such as time and date of the alarm occurrences and the alarm type will be displayed.
- Manual/Schedule log: Logs filed when images have been recorded manually or during the period of the schedule on the SD memory card will be displayed.
- FTP trans. error log: Logs filed when the FTP periodic image transmission function has failed will be displayed. Each log list can be displayed only when "On" is selected for "Save logs" on the [Log] tab of the "Basic" page respectively.

#### Note

• Refer to the provided operating instructions about the descriptions of the log list when "JPEG" is selected for "Recording format" of the SD memory card.

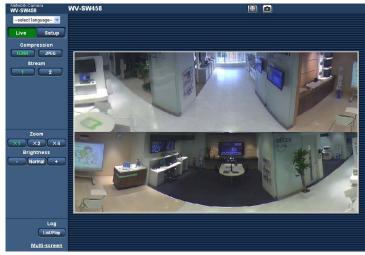
# Recording format of the SD memory card: H.264(1), H.264(2)

- Alarm log: Logs of the alarm occurrences such as time and date of the alarm occurrences, the image recording period and the alarm type will be displayed.
- Manual/Schedule log: Logs filed when images have been recorded manually or during the period of the schedule on the SD memory card, and the image recording period will be displayed.

# **IMPORTANT**

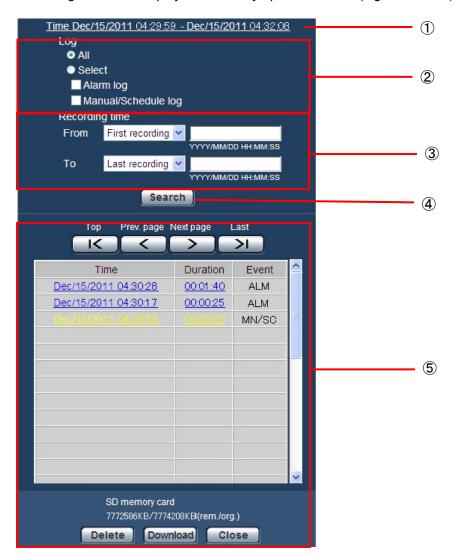
- When using SD memory cards to play recorded H.264 data using the play features (fast forward, rewind, etc.), we recommend using SDHC memory cards for best performance.
- If an SD memory card (not an SDHC memory card) is used, depending on the subject and settings, images may not be displayed smoothly when they are played.
- Changes to the time & date settings by browser operations, NTP, etc., may be limited during recording.
- When the time setting is moved forward during recording, the time is changed.
- When the time setting is moved back by less than 5 seconds during recording, the time is not changed.
- When the time setting is moved back by more than 5 seconds during recording, the time is changed. However, the recording is stopped and then started again.
- If the following settings are changed, displaying of the live image and recording are temporarily stopped.
- SD memory card settings
- Recording format settings
- Save trigger settings
- H.264 recording settings
- Image capture mode settings
- H.264(1) and H.264(2) settings
- When "VGA Quad streams [4:3]" is selected for "Image capture mode", SD memory cards cannot be used.

# 1. Display the "Live" page.



# 2. Click the [List/Play] button.

→ The log list will be displayed in a newly opened window (log list window).



# **IMPORTANT**

• Only a single user can operate the log list window. Other users cannot access the log list window.

#### ① Time

Displays the time period of the data recorded on the SD memory card.

# 2 Log display

Select a log type to display on the log list.

- All: All logs will be displayed.
- Select: Only the logs of the selected log type will be displayed.
- Alarm log: The log when an alarm is detected will be displayed.
- Manual/Schedule log: Manual and Schedule logs will be displayed.

Default: All

# ③ Recording time

Configure the time period of logs displayed on the log list.

- From: Configure the starting period of logs displayed on the log list.
- First recording: Displays from the first log recorded on the SD memory card.
- Today: Displays the logs recorded today.
- Yesterday: Displays the logs recorded yesterday.
- Last 7 days: Displays the logs recorded from 6 days ago to the present day.
- Last 30 days: Displays the logs recorded from 29 days ago to the present day.
- Date/time: Displays the logs recorded from the entered date and time on "Date/time" box.
- To: Configure the ending period of logs displayed on the log list when "First recording" or "Date/time" is selected for [From].
- Last recording: Displays to the last log recorded on the SD memory card.
- Date/time: Displays the logs recorded until the entered date and time on "Date/time" box.

# 4 [Search] button

Searches for logs according to the conditions specified in "Log display" and "Recording time".

The search result will be displayed on the log list.

#### 5 Log list

Displays the log search results.

You can play back recorded data by clicking on the time or duration of the recorded data displayed under [Time] and [Duration].

- [Top] button: Click this button to display the log listed at the top.
- [Prev. page] button: Click this button to display the previous page of the log list.
- [Next page] button: Click this button to display the next page of the log list.
- [Last] button: Click this button to display the log listed at the bottom.
- [Time&date]: Time and date when each log has been recorded will be displayed.

#### Note

- When "Off" is selected for "Time display format", the log occurrence times are displayed in 24 hour time format.
- The recording timing of logs is as follows.
- Alarm log: Alarm occurrence time and date will be filed as a log.
- Manual/Schedule log: Time and date when recording of images onto the SD memory card started manually or during the period of the schedule will be filed as a log. When images are recorded sequentially, logs will be filed every one hour. However, depending on the photographic subject and the setting used, logs may be filed in periods of over an hour.
- Depending on the subject and settings, the log time and the actual start time of recordings may not match.

- [Duration]: Displays the period of time that the data has been recorded on the SD memory card.
- [Event]: The event type will be displayed.
- ALM: Log by "Alarm"
- MN/SC: Log by "Manual/Schedule"
- [SD memory card]: Available capacity and the original capacity of the SD memory card will be displayed.

The displayed descriptions are the same descriptions displayed as "Remaining capacity" on the [SD memory card] tab.

• [Delete] button: Click this button to delete the currently displayed log list. When using the SD memory card, images associated with the log list will also be deleted.

#### **IMPORTANT**

- If there are too many recorded data files, it may take time to delete all of them. (When the total size is 1 GB, it may require about 1 hour.) Formatting the SD memory card can shorten the time to delete all the data
- In the process of the deletion, "Alarm" and "Manual/Schedule" can not be operated.
- Do not turn off the power of the camera until the deletion is complete. When the power of the camera is turned off in the process of the deletion, some images may remain on the SD memory card. In this case, click the [Delete] button on the same log list window used to delete the logs.
- [Download] button: Click this button to download all logs of the selected log list onto the PC.
- [Close] button: Click this button to close the log list window.

# (Operating Instructions - Playback of images on the SD memory card)

SW458 The other SD memory card models already support this function.

When clicking a time, a duration listed on the log list window, the "Live" page will turn to the "Playback" page. When images associated with the clicked log are on the SD memory card, the first image of them will be displayed.

#### Note

• When playing images saved on the SD memory card, it is necessary to select "Unlimited" for "Bandwidth control(bit rate)" of [Network] tab on the "Network" page.

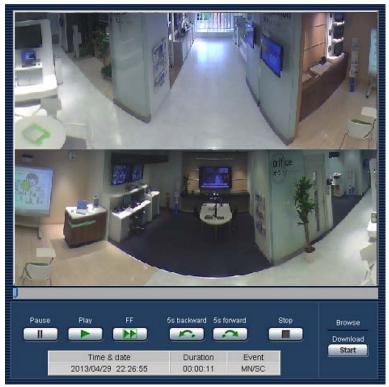
# **IMPORTANT**

- Refresh interval of images may become slow during playback or download.
- When many images are saved on the SD memory card, it may take time to display images on the "Playback" page.
- Even when the size of the images saved on the SD memory card is "QVGA", "1280x960" or "2048x1536", the images will be displayed in VGA size on the "Playback" page. When "16:9" is selected for the aspect ratio, Images will be displayed in an image capture size of "640x360", even "320x180", "1280x720", or "1920x1080" is selected. Therefore, images may look coarse on the "Playback" page.
- When playing images by selecting an FTP error log on the log list, images may not be played in order of images recorded on the SD memory card if they have been recorded on the SD memory card with selected value for the "Transmission interval" setting on the [FTP img. trans.] tab is "1min" or less.
- When "VGA Quad streams [4:3]" is selected for "Image capture mode", SD memory cards cannot be used.

# Recording format of the SD memory card: JPEG

Refer to the provided operating instructions about the descriptions of when "JPEG" is selected for "Recording format" of the SD memory card.

# Recording format of the SD memory card: 264(1),H.264(2)



- **[PAUSE] button**: Playback will be paused when this button is clicked during playback. Playback will resume when this button is clicked during pausing.
- [PLAY] button: When this button is clicked, recorded data will be played.
- [FF] button: Each time this button is clicked, the playback speed will change.

  When the [PLAY] 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 "Max bit rate" "H.264 recording" of the SD memory card.
- Depending on the subject and settings, images played in fast forward may not be displayed smoothly.
- [5s backward] button: Each time this button is clicked, the recorded data goes back by 5 seconds and starts playing.
- [5s forward] button: Each time this button is clicked, the recorded data goes forward by 5 seconds and starts playing.
- [STOP] button: Playback will stop and the "Playback" window will turn to the "Live" page.
- [Time]: 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.
- ALM: Log by "Alarm"
- MN/SC: Log by "Manual/Schedule"

#### **Browse**

• [Start] button: The selected image will be downloaded onto the PC.

Before downloading images, designate the destination directory in advance. (→ Operating Instructions - Configure the settings relating to the logs [Log])

The message window will be displayed to ask if it is OK to start download when the [Start] button is clicked. Click the [OK] button.

#### Note

- ·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 is saved in files of approx. 2 MB or 20 MB depending on the settings. When the file size of video data is more than the configured value, multiple files will be downloaded.
- ·It is possible to play back video data saved on the PC using such applications as QuickTime Player or Windows Media Player\*1. However, we are not liable for performance relating to these applications.
- Depending on the status of the SD memory card, QuickTime Player, or Windows Media Player, video data may not be able to be played back.
- ·When downloading data, the operation buttons on the "Playback" window cannot be operated.
- \*1 The supported operating system is Windows 8 and Windows 7 only.

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

\* The other SD memory card models already support this function.

When "H.264(1)" or "H.264(2)" is selected for the "Recording format", the camera can transmit H.264 images and The displaying of H.264 images on the "Live" page become available.

# (Operating Instructions Configure the settings relating to images and audio [Image/Audio] - Configure the settings relating to H.264 images [JPEG/H.264])

\* The other SD memory card models already support this function.

# [H.264(1)], [H.264(2)]

When "H.264(1)" is selected for "Recording format" on the [SD memory card] tab of the "Basic" page, the settings for "H.264(1)" on the [JPEG/H.264] tab of the "Image/Audio" page will be changed to the settings for "H.264(1) & recording".

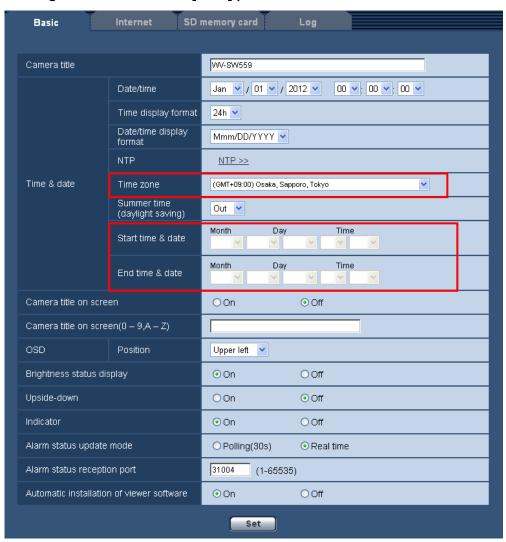
When "H.264(2)" is selected for "Recording format" on the [SD memory card] tab of the "Basic" page, the settings for "H.264(2)" on the [JPEG/H.264] tab of the "Image/Audio" page will be changed to the settings for "H.264(2) & recording".

# Note

- When "H.264(1)" or "H.264(2)" is selected for "Recording format", When "3072kbps", "4096kbps", "6144kbps", "8192kbps", "10240kbps", "12288kbps" or "14336kbps" is selected for "Max bit rate", "2048kbps" is set.
- When "H.264(1)" or "H.264(2)" is selected for "Recording format" on the [SD memory card] tab of "Basic" page, the "Transmission priority" can not changed to "Best effort".
  - \* Refer to the Operating Instructions provided with this product about the each settings.

# 3. Changes about "Time zone" and "Summer time"

(Operating Instructions Configure the basic settings of the camera [Basic] - Configure the basic settings [Basic], Configure the settings of the servers [Server] - Configure the settings relating to the NTP server [NTP])



■ Time zone moves to the Basic screen from the NTP screen and change the default setting

# [Time zone]

Select a time zone corresponding to the location where the camera is in use.

Default: (GMT+09:00) Osaka, Sapporo, Tokyo (P model)

(GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London (E model)

■ Change the default setting of "Start time & date" and "End time & date" of "Summer time (daylight saving)"

# [Start time & date] [End time & date]

When "Auto" is selected for "Summer time (daylight saving)", select the time & date for the start time and the end time (month, week, day of the week, time).

# Default:

- [Start time & date] None (blank) ( P model ), 03 Last Sun 1 AM ( E model )
- [End time & date] None (blank) ( P model ), 10 Last Sun 1 AM ( E model )

# 4. Addition of "Auto" in Language selection

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



#### [Language]

Select the language to initially display when the camera is accessed from the following.

Auto/English/Japanese/Italian/French/German/Spanish/Chinese/Russian

Auto: The language used by the browser is automatically selected. If the language used by the browser is not supported by the camera, English is selected.

**Default:** Auto ( P model ), English ( E model )

The language displayed on the "Live" page can also be changed except "Auto".

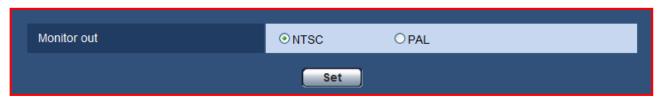
#### Note

When "Auto" is selected for "Language", the screen on cellular phones (http://IP address/mobile) is displayed in English. If you want the screen to be displayed in Japanese or Chinese, select "Japanese" or "Chinese" for "Language".

# 5. Addition of "Monitor out" (NTSC/PAL switching) setting

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

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#### [Monitor out]

Set the monitor output method.

NTSC/PAL

Default: NTSC ( P Model ), PAL ( E model )

#### Note

The monitor out connector for adjustment is provided only for checking the adjustment of the angular field of view on the video monitor when installing the camera or when servicing. It is not provided for recording/monitoring use.

# 6. Addition of "Internet" function

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

Functions have been added so that Internet settings can be easily performed.

Click the [Internet] tab of the "Basic" page. The settings relating to UPnP (Auto port forwarding), DDNS (Viewnetcam.com), and network settings for the Internet can be configured on this page.



# [UPnP (Auto port forwarding)]

Select "On" or "Off" to determine whether or not to use the port forwarding function of the router.

To use the auto port forwarding function, the router in use must support UPnP and the UPnP must be enabled.

**Default:** Off

#### Note

- Due to auto port forwarding, the port number may sometimes be changed. When the number is changed, it is necessary to change the port numbers registered in the PC and recorders, etc.
- The UPnP function is available when the unit is connected to the IPv4 network. IPv6 is not supported.
- To check if auto port forwarding is properly configured, click the [Status] tab on the "Maintenance" page, and check that the "Enable" is displayed for "Status" of "UPnP" When "Enable" is not displayed, refer to "Cannot access the camera via the Internet." In Troubleshooting.
- When the "UPnP (Auto port forwarding)" setting is changed, the "Auto port forwarding" setting under "UPnP" on the [Network] tab of the "Network" page also changes to the same setting.

# [Area]

Select the region where the camera is installed. If the camera is used outside of Japan, select "Global". If the camera is used in Japan, select "Japan".

Japan/Global

**Default:** Not selected

#### [Service]

Select the DDNS service to determine whether or not to use DDNS.

DDNS service that can be set by the settings of the [Area] changes as follows.

In case of selecting "Japan": Off, MIEMASUNET-PRO In case of selecting "Global": Off, Viewnetcam.com

Default: Off

By selecting "MIEMASUNET-PRO" or "Viewnetcam.com" and clicking the [Set] button, the registration window will be displayed in a newly opened window.

Follow the on-screen instructions to register. Refer to the website (http://www.viewnetcam.com/ , http://panasonic.biz/miemasu/pro/) for further information.

#### Note

• When the "DDNS" setting is changed, the "DDNS" setting on the [DDNS] tab of the "Network" page also changes to the same setting.

# [Recommended network setting for internet]

The recommended settings for connecting to the Internet are performed here.

By clicking the [Set] button, a dialog displaying how the following settings will change is displayed. Click the [OK] button after checking the settings to change the settings to the displayed values.

Following contents are set.

JPEG	Image capture size*5	VGA / 640x360*1, 2048x1536*2
H.264(1) Image capture size*5		VGA / 640x360*1, 1280x960*2
	Transmission priority	Best effort
	Max bit rate (per client) * (Max./Min.)	1024kbps / 128kbps, 1024kbps / 256kbps <sup>+2</sup>
	Internet mode (over HTTP)	On
H.264(2) *3	Image capture size*5	QVGA / 320x180*4
	Transmission priority	Best effort
	Max bit rate (per client) * (Max./Min.)	1024kbps / 128kbps
	Internet mode (over HTTP)	On
Network	Max RTP packet size	Limited(1280byte)
	HTTP max segment size(MSS)	Limited(1280byte)

<sup>\*1</sup> When "1.3 mega pixel [4:3]" is selected for "Image capture mode", "VGA" is used. When "1.3 mega pixel [16:9]" or "2 mega pixel [16:9]" is selected for "Image capture mode", "640x360" is used. \$\) \$\) \$\) \$\) \$\) \$\)

# SW559 SW558

\*5 Following contents are set. **SW458** 

\*4 When "1.3 mega pixel [4:3]" is selected for "Image capture mode", "QVGA" is used. When "1.3 mega pixel [16:9]" or "2 mega pixel [16:9]" is selected for "Image capture mode", "320x180" is used. \$\infty\$ \$\infty\$ \$\infty\$\$\$\$ \$\infty\$\$\$\$\$\$\$\$\$\$\$

Image capture mode	2M Panorama [16:9], 1M Panorama [16:9], 2M Double Panorama [16:9], 1M Double Panorama [16:9]	1.3M Fisheye [4:3], 1.3M Quad PTZ [4:3], 1.3M Single PTZ [4:3], Fisheye + Quad PTZ	Double Panorama + Quad PTZ, Double Panorama + Single PTZ, Panorama + Quad PTZ, Panorama + Single PTZ, 2M Double Panorama + Fisheye, 1M Double Panorama + Fisheye, 2M Panorama + Fisheye, 1M Panorama + Fisheye	3M Fisheye [4:3]	VGA Quad streams [4:3]
JPEG	640x360	VGA	640x360	2048x1536	Unavailable
H.264 (1)	640x360	VGA	640x360	1280 × 960	VGA
H.264 (2)	320x180	QVGA	QVGA	-	-

<sup>\*2</sup> When "3 mega pixel [4:3]" is selected for ""Image capture mode". SW559 SW558
When "3M Fisheye [4:3]" is selected for ""Image capture mode". SW458

<sup>\*3</sup> Transmission is unavailable when "3 mega pixel [4:3]" is selected for "Image capture mode".

- When "H.264(1)" is selected for "Recording format" on the [SD memory card] tab of the "Basic", page, "Transmission priority" of "H.264(1)" is not changed. When "H.264(2)" is selected, "Transmission priority" of "H.264(2)" is not changed.
- "Image capture size" is not changed, when "3 mega pixel [4:3]"( SW559 SW558) or "3M Fisheye [4:3]"( SW458) is selected for "Image capture mode".

"Max bit rate (per client) \*" is changed to Max. "1024kbps \*" and Min."256kbps \*".

# 7. Addition of "Area" selection to the "DDNS" setting

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



#### [Area]

Select the region where the camera is installed. If the camera is used outside of Japan, select "Global". If the camera is used in Japan, select "Japan".

Japan/Global

**Default:** None

# [Service]

Select the DDNS service to determine whether or not to use DDNS.

DDNS service that can be set by the settings of the [Area] changes as follows.

In case of selecting "Japan" : Off, MIEMASUNET-PRO, Miemasu.net, Dynamic DNS Update, Dynamic DNS Update(DHCP)

In case of selecting "Global": Off, Viewnetcam.com, Dynamic DNS Update, Dynamic DNS Update(DHCP) **Off:** Does not use the DDNS function.

Viewnetcam.com: Uses the "Viewnetcam.com" service.

MIEMASUNET-PRO: Uses the "MIEMASUNET-PRO" service.

Miemasu.net: Uses the "Miemasu.net" service.

Dynamic DNS Update: Uses Dynamic DNS Update (RFC2136 compliant) without the DHCP cooperation.

**Dynamic DNS Update(DHCP):** Uses Dynamic DNS Update (RFC2136 compliant) with the DHCP cooperation.

**Default: Off** 

By selecting "MIEMASUNET-PRO", "Miemasu.net" or "Viewnetcam.com" and clicking the [Set] button, the registration window will be displayed in a newly opened window.

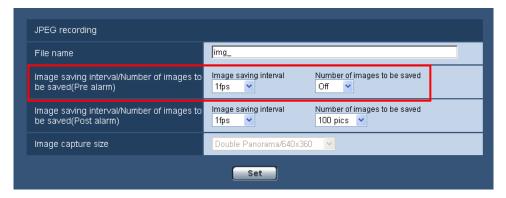
Follow the on-screen instructions to register. Refer to the website (http://www.viewnetcam.com/ , http://www.miemasu.net/ , http://panasonic.biz/miemasu/pro/) for further information.

#### Note

 When using Dynamic DNS Update (RFC2136 compliant), refer to the network administrator for whether or not to cooperate with the DHCP.

# 8. Perform pre alarm recording using the JPEG recording function (Operating Instructions - Configure the basic settings of the camera [Basic] - Configure the settings relating to the SD memory card [SD memory card])

\* The other SD memory card models already support this function.



# [Image saving interval/Number of images to be saved (Pre alarm)]

# [Image saving interval]

When "Alarm input" is selected for "Save trigger", select an interval (frame rate) of saving pre alarm images on the SD memory card from the following.

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

Default: 1fps

#### Note

• When "1920x1080" is selected for the image capture size of the JPEG images to be saved, "1fps" cannot be selected.

# [Number of images to be saved]

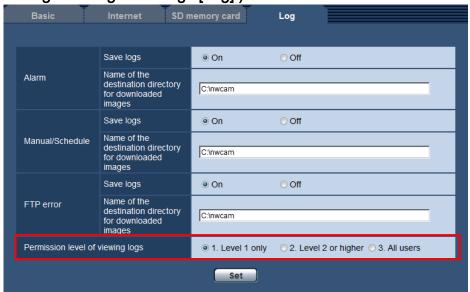
Select a number of pre alarm images to be saved on the SD memory card from the following. Off/ 1pic/ 2pics/ 3pics/ 4pics/ 5pics

Default: Off

# Note

- When "1920x1080" is selected for the image capture size of the JPEG images to be saved, "4pics" and "5pics" cannot be selected.
- When "3M Fisheye [4:3]" is selected for "Image capture mode", "Pre alarm" cannot be used.
- When "H.264(1)" or "H.264(2)" is selected for "Recording format", Pre alarm and Post alarm can be set on "H.264 recording" of [Alarm] tab.
- "Number of images to be saved" can be configured only when "Alarm input" is selected for "Save trigger".

# 9. Addition of "Permission level of viewing logs" setting



#### [Permission level of viewing logs]

User level settings for viewing and operating "Log" on the "Live" page can be configured.

- •1. Level 1 only: only Level 1 users can view and operate the "Log".
- •2. Level 2 or higher: only Level 1 and Level 2 users can view and operate the "Log".
- •3. All users: all users can view and operate the "Log".

However, only Level 1 and Level 2 users can delete logs, and only Level 1 users can view SD memory card folders.

Default: 1. Level 1 only

# 10. Addition of "Initial display stream on the browser" setting

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



#### [Initial display stream on the browser]

"Initial display stream on the browser" of [JPEG/H.264] tab on the "Image/Audio" page has been added.

Configure what type of images is initially displayed on the "Live" page.

H.264: Initially displays H.264 images on the "Live" page.

MPEG-4: Initially displays MPEG-4 images on the "Live" page.

JPEG: Initially displays JPEG images on the "Live" page.

Default: H.264

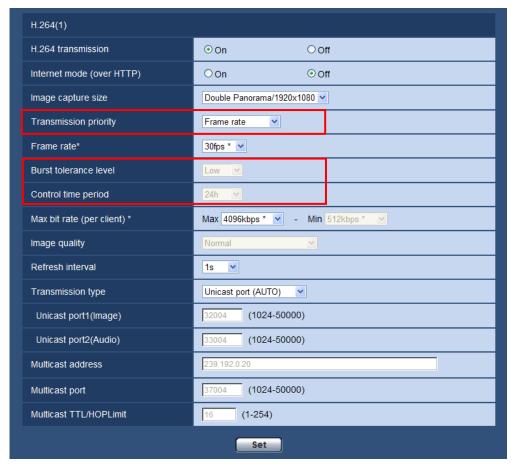
#### Note

- Even when "H.264" is selected, if "Off" is selected for "H.264 transmission", only JPEG images are displayed.
- This setting can not be changed when "Image capture mode" is set to "VGA Quad streams [4:3]". SW458

# 11. Addition of "Advanced VBR" to the "Transmission priority" of "H.264"

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] -Configure the settings relating to H.264 images [JPEG/H.264])

\$W458 \* The other models already support this function.



#### [Transmission priority]

Select a transmission priority for H.264 images from the following.

- Constant bit rate: H.264 images will be transmitted with the bit rate selected for "Max bit rate (per client) \*".
- Frame rate: H.264 images will be transmitted with the frame rate selected for "Frame rate".
- Best effort: In accordance with the network bandwidth, H.264 images will be transmitted with the bit rate varying between the maximum and minimum bit rates that are set for "Max bit rate (per client)\*".
- Advanced VBR: H.264 images will be transmitted with the frame rate selected for "Frame rate\*". Images are transmitted so that the average transmission rate during the period specified for "Control time period" becomes the bit rate selected for "Max bit rate (per client)\*".

**Default:** Frame rate

#### Note

• When "Frame rate" or "Advanced VBR" is selected for "Transmission priority", number of users who can access the camera may be limited more (may become less than 10).

#### [Burst tolerance level]

Select how much the bit rate can exceed "Max bit rate (per client)\*" by from the following. High/Middle/Low

**Default:** Low

#### Note

- This setting is only available when "Advanced VBR" is selected for "Transmission priority".
- Depending on the H.264 bit rate used, the burst bit rate may only change by a maximum of about x4 for "High", x2.5 for "Middle", and x1.5 for "Low"

# [Control time period]

Select the time period that the bit rate will be controlled for from the following. Images are transmitted so that the average transmission rate during the selected period becomes the bit rate selected for "Max bit rate (per client)\*".

1h/6h/24h/1week

Default: 24h

#### Note

• This setting is only available when "Advanced VBR" is selected for "Transmission priority".

# 12. Addition of "Advanced VBR" to the "H.264 recording"

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

**SW458** \* The other SD memory card models already support this function.



#### [Recording priority]

From the following, select a recording priority for H.264 images to be recorded.

- Constant bit rate: H.264 images will be recorded with the bit rate selected for "Max bit rate".
- Frame rate: H.264 images will be recorded with the frame rate selected for "Frame rate\*".
- Advanced VBR: H.264 images will be recorded with the frame rate selected for "Frame rate\*". Images are recorded so that the average transmission rate during the period specified for "Control time period" becomes the bit rate selected for "Max bit rate".

**Default:** Frame rate

# [Control time period]

Select the time period that the bit rate of images to be recorded will be controlled for from the following. Images are recorded so that the average bit rate during the selected period becomes the bit rate selected for "Max bit rate".

1h/6h/24h/1week

Default: 24h

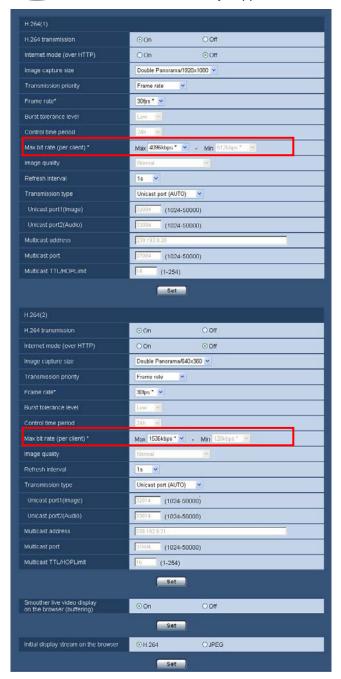
#### Note

• This setting is only available when "Advanced VBR" is selected for "Recording priority".

# 13. Addition of "6144kbps \*" to "Max bit rate (per client) \*"

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] - Configure the settings relating to H.264 images [JPEG/H.264])

\$W458 \* The other models already support this function.



# [Max bit rate (per client)\*]

Select an H.264 bit rate per a client from the following. When "Best effort" is selected for "Transmission priority", set the maximum and minimum bit rates.

64kbps/ 128kbps\*/ 256kbps\*/ 384kbps\*/ 512kbps\*/ 768kbps\*/ 1024kbps\*/ 1536kbps\*/ 2048kbps\*/ 3072kbps\*/ 4096kbps \*/ 6144kbps \*/ 8192kbps\*/ 10240kbps\*/ 12288kbps\*/ 14336kbps\*

#### Default:

- H.264(1): 4096kbps\*
- H.264(2): 1536kbps\*
- \* The range of bit rates that can be configured for H.264 bit rates differs depending on the "Image capture size".
- QVGA, VGA, 320x180, and 640x360: 64kbps 4096kbps \*
- 1280x960 and 1280x720: 256kbps\* 8192kbps \*
- 1920x1080: 512kbps\* 14336kbps\*

#### Note

- When "14336kbps" is selected, the number of users who can access H.264 images will be limited to "1". (Only a single user can access H.264 images.)
- The H.264 bit rate is restricted by "Bandwidth control(bit rate)" on the [Network] tab on the "Network" page. For this reason, the bit rate may be lower than the value when any value with an asterisk (\*) on the right is selected.

# 14. Addition of "PAL monitor switch input" to the "Terminal" settings of "Alarm" (Operating Instructions Configure the alarm settings [Alarm] - Configure the settings relating to the alarm action [Alarm])





# [Terminal 1]

Determine how to use terminal 1.

- · Off: Not used.
- Alarm input: 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".

- Black & white input: Receives the black & white switchover input. (When the input is set to On, the black & white mode is activated.)
- <u>PAL monitor switch input</u>: Switches the video format inputted to the output terminal of the adjustment monitor to PAL while the terminal status is changed to "Close".

Default: PAL monitor switch input ( P model ), Off ( E model )

# [Terminal 2]

Determine how to use terminal 2.

- Off: Not used.
- Alarm input: Receives alarms. When "Alarm input" is selected, a pull-down menu for "Close" and "Open" is displayed. 

  SW559
- 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".
- Alarm output: Alarm output will be carried out according to the settings for "Alarm output terminal setup"

Default: Off [Terminal 3]

Determine how to use terminal 3.

- · Off: Not used.
- Alarm input: Receives alarms. When "Alarm input" is selected, a pull-down menu for "Close" and "Open" is displayed. (\$\overline{8W559}\)
- 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".
- AUX output: AUX output will be supplied. The [AUX] buttons will be displayed on the "Live" page.

**Default:** Off

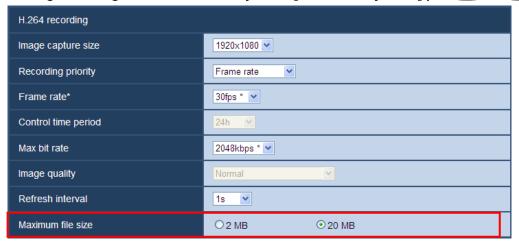
# **IMPORTANT**

• 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. 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.

- 15. Addition of "Maximum file size" and "Pre alarm (recording) duration" to the "H.264 recording"
- ■Addition of "Maximum file size" to the "H.264 recording"

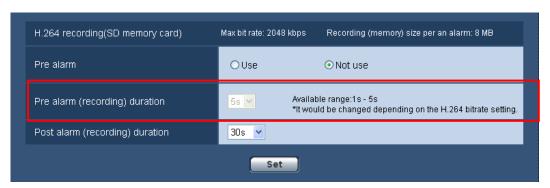


# [Maximum file size]

Select the maximum file size for recorded H.264 files (MP4 format).

2MB/20MB

Default: 20MB



# [Pre alarm (recording) duration]

Set the duration to save image data on the SD memory card before an alarm occurrence. 1s/ 2s/ 3s/ 4s/ 5s/ 8s/ 10s/ 15s/ 20s/ 25s/ 30s/ 40s/ 50s/ 60s/ 90s/ 120s

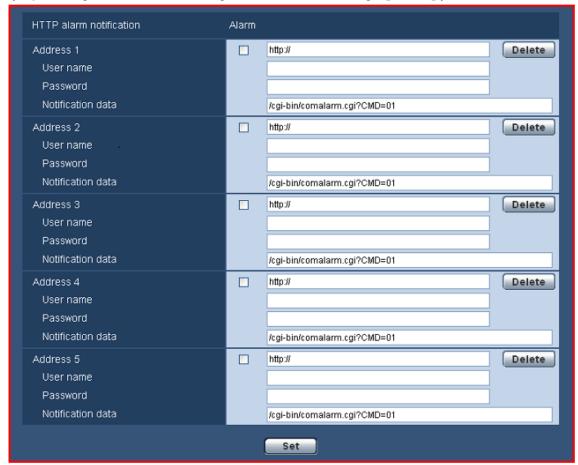
• Default: 5s

# Note

- "Pre alarm (recording) duration" setting is available only when "20MB" is selected for "Maximum file size" in the [SD memory card] tab.
- "Pre alarm (recording) duration" setting may be changed, when "Max bit rate" in the [SD memory card] tab is changed.
- When "2MB" is selected for "Maximum file size", "Pre alarm (recording) duration" cannot be configured and about 1 MB worth of data is recorded before an alarm occurrence.

# 16. Addition of "HTTP alarm notification"

# (Operating Instructions Configure the alarm settings [Alarm])



# [Address 1] - [Address 5]

Enter the IP address or the host name of the HTTP server. Up to 5 destination server addresses can be registered.

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

Default: http://

Entry example: "http://IP address: (colon) + port number" or "http://Host name: (colon) + port 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, and notification data, will be deleted.

# [User name]

Enter the user name to access the HTTP server.

**Available number of characters:** 0∼63 characters

Unavailable characters: " & : ; \

[Password]

Enter the password to access the HTTP server. **Available number of characters:** 0~63 characters

Unavailable characters: " &

# [Notification data]

Configure the notification data to be added to the end of the HTTP server configured in "Address".

Default: /cgi-bin/comalarm.cgi?CMD=01

# Note

- 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 "/" as the first character for "Notification data".
- Even if the [Set] button is clicked after deleting the contents of "Notification data", "/cgi-bin/comalarm.cgi?CMD=01" will be set.
- If an HTTP alarm fails to be notified, it is entered in the system log.

# <Example>

For example, when "192.168.0.100" is set for "Address" and "/cgi-bin/comalarm.cgi?CMD=01" is set for "Notification data", "http://192.168.0.100/cgi-bin/comalarm.cgi?CMD=01" alarm notification is executed.

# ■HTTP alarm notification error display

# (Operating Instructions About the displayed system log)

The following contents are entered in the system log.

Category	Indication	Description	
HTTP alarm	Failed to resolve	The DNS server settings may be incorrect.	
notification error	destination addr.	Check if the DNS settings are configured correctly.	
	from DNS.		
		The DNS server may be down.	
		Ask the network administrator.	
	Failed to find	The notification destination IP address may be incorrect.	
	destination of	Check if the notification destination IP address is configured	
	notification	correctly.	
		The notification destination may be down. Ask the network	
		administrator.	

# 17. Changes to an optional function of "Face detection outline display" and "Advanced func."

# **IMPORTANT**

• Face detection function that could be used before the upgrading can be continuously used even after upgrading.

# (Operating Instructions Monitor images on a PC - About the "Live" page)

The function that displays an outline on the faces detected with the Face detection function displayed on the "Live" page has been changed to an option function.

# ( Operating Instructions Configure the setting relating to the image recognition [Advanced func.] )

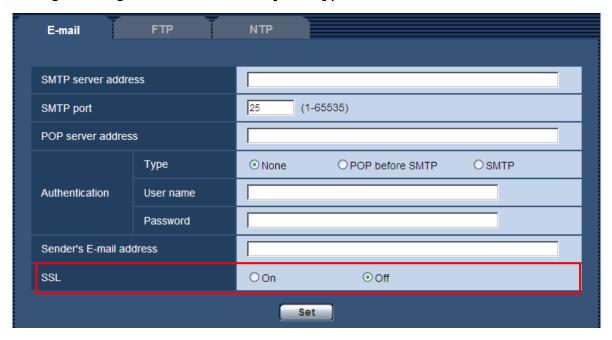


The Advanced func. menu has been changed to an optional function.

The Function expansion software is needed in order use the "Advanced func." function. For further information, refer to our website (http://security.panasonic.com/pss/security/kms/).

# 18. Supports SSL Mail Server

(Operating Instructions Configure the settings of the servers [Server] - Configure the settings relating to the E-mail server [E-mail] )



# [SSL]

Select "On" if you want to use SSL encryption when sending E-mail notifications for alarm occurrences or the "Diag." function of SD memory card. When "ON" is selected, because "Authentication Type" is automatically set to "SMTP", the "User name" and "Password" used for authentication must be configured

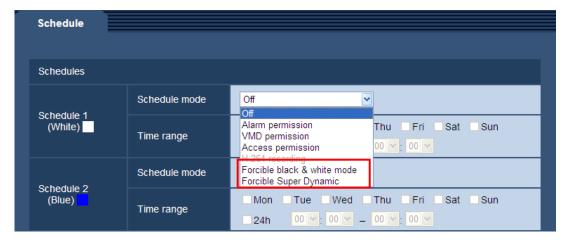
Default: Off

#### Note

- · SSL supports SMTP over SSL. STARTTLS is not supported
- Depending on the SMTP server used, SSL may not be supported.

# 19. Addition of "Forcible black & white mode", "Forcible Super Dynamic" to "Schedule"

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



# [Schedule mode]

The schedule settings for Alarm permission, VMD permission, Access permission, <u>H.264 recording</u>, <u>Forcible black & white mode</u>, and <u>Forcible Super Dynamic</u> can be configured on the "Schedule" page.

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

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

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

Access permission: Users whose access level is set to 2 and 3 on the [User auth.] tab can access the camera only in the period of schedule

H.264 recording: The SD recording will be performed at the designated time in the schedule.

\* The other models already support this function.

Forcible black & white mode: During the period of the schedule, "Day & Night(IR)" will be executed.

Forcible Super Dynamic: During the period of the schedule, "Super Dynamic" will be executed. The "Light control mode" of "Image adjust" is changed to "Outdoor scene".

Default: Off

#### Note

- Select "On" for "User auth." on the [User auth.] tab of "User mng." page and "Off" for "Host auth." on the "Host auth." page to validate "Access permission".
- When selecting "H.264 recording", select "H.264" for "Recording format" on the [SD memory card] tab and select "Schedule" for "Save trigger". **SW559 SW458**
- When "Super Dynamic" is switched to "On" from "Off", or to "Off" from "On", the image may be distorted temporarily.

# 20. Addition of [Time past from the date of manufacture]

(Operating Instructions Maintenance of the camera [Maintenance] - Upgrade the firmware [Upgrade])

	DHCPv6		
Viewer software installation counter		0	
Time past from the o	date of manufacture	1year(s) and 0 month(s)	

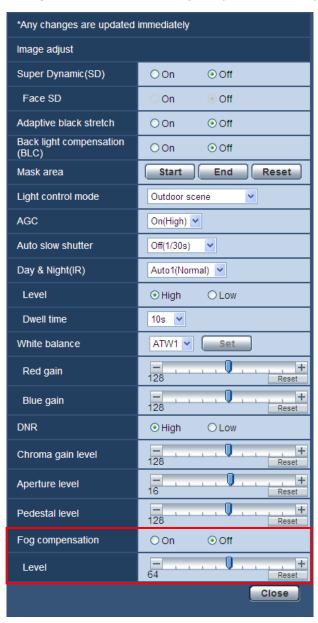
# [Time past from the date of manufacture]

Displays how much time has passed since the date of manufacture.

# 21. Changes about "Fog compensation"

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] - Configure the settings relating to image adjust, focus, back focus, extra optical zoom, privacy zone, VIQS, and lens distortion compensation [Image quality] - Configure the settings relating to image quality ("Image adjust" setup menu))

Change the location of the "Fog compensation" setup to the bottom of the "Image adjust" setup menu.



# 22 . Addition of "Portuguese" in [select language] pull-down menu on the Live page

(Operating Instructions Monitor images on a PC - About the "Live" page)

"Portuguese" is added in [select language] pull-down menu.



# 23. Addition of "Portuguese" in Language selection

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



# [Language]

Select the language to initially display when the camera is accessed from the following.

Auto/English/Japanese/Italian/French/German/Spanish/Chinese/Russian/Portuguese

**Auto:** The language used by the browser is automatically selected. If the language used by the browser is not supported by the camera, English is selected.

Default: Auto ( P model ), English ( E model )

The language displayed on the "Live" page can also be changed except "Auto".

# 24. Change initial settings for the "Terminal" settings of "Alarm"

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

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[Terminal 1]

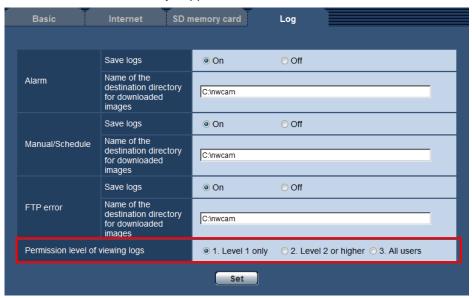
Default: Off

# 25 . Change the language of E-mail notification for [Diag.]

When the language except "Japanese" is selected for "Language" in [Basic] tab, E-mail body for [Diag.] is displayed in English. When "Japanese" is selected, it is displayed in Japanese.

# 26. Addition of "Permission level of viewing logs" setting

\* The other models already support this function.



# [Permission level of viewing logs]

User level settings for viewing and operating "Log" on the "Live" page can be configured.

- •1. Level 1 only: only Level 1 users can view and operate the "Log".
- •2. Level 2 or higher: only Level 1 and Level 2 users can view and operate the "Log".
- •3. All users: all users can view and operate the "Log".

However, only Level 1 and Level 2 users can delete logs, and only Level 1 users can view SD memory card folders.

Default: 1. Level 1 only

# 27. Addition of "Image capture mode" settings

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

-Configure the settings relating to images [JPEG/H.264] ) SW458

# [Image capture mode]

Select an image to be displayed on the "Live" page.

The following "Image capture mode" settings can be configured depending on the mounting position.

# <Ceiling>

2M Double Panorama [16:9]/ 1M Double Panorama [16:9]/ 1.3M Quad PTZ [4:3]/ 1.3M Single PTZ [4:3]/ Double Panorama + Quad PTZ/ Double Panorama + Single PTZ

#### <Wall>

2M Panorama [16:9]/ 1M Panorama [16:9]/ 1.3M Quad PTZ [4:3]/ 1.3M Single PTZ [4:3]/ Panorama + Quad PTZ/ Panorama + Single PTZ

#### <Ceiling/Wall>

3M Fisheye [4:3]/ 1.3M Fisheye [4:3]/ 2M Double Panorama + Fisheye/ 1M Double Panorama + Fisheye/ Fisheye + Quad PTZ/ 2M Panorama + Fisheye/ 1M Panorama + Fisheye

# <Ceiling>

VGA Quad streams [4:3]

Default: 2M Double Panorama [16:9]

# Note

• The types of images that can be displayed using the added "2M Double Panorama + Fisheye", "1M Double Panorama + Fisheye", "Fisheye + Quad PTZ", "2M Panorama + Fisheye", and "1M Panorama + Fisheye" image capture modes are as follows.

Image capture mode type	• • • • • • • • • • • • • • • • • • • •		Mounting positions
2 Monitor (Max. 15fps)	2M Double Panorama + Fisheye 1M Double Panorama + Fisheye	Double Panorama Fisheye	Ceiling
This type transmits 2 types of	Fisheye + Quad PTZ	Fisheye, Quad PTZ	Ceiling
images. A maximum of 15 fps transmissions are possible.	2M Panorama + Fisheye 1M Panorama + Fisheye	Panorama, Fisheye	Wall

• The following images can be transmitted with the added image capture modes.

Image capture mode	description	
2M Double Panorama + Fisheye	2 megapixel Double Panorama images (with an aspect ratio of 16:9) and 1.3 megapixel Fisheye images (with an aspect ratio of 4:3) can be transmitted at the same time.	
1M Double Panorama + Fisheye	1 megapixel Double Panorama images (with an aspect ratio of 16:9) and 1.3 megapixel Fisheye images (with an aspect ratio of 4:3) can be transmitted at the same time.	
Fisheye + Quad PTZ	1.3 megapixel Fisheye images (with an aspect ratio of 4:3) and 1.3 megapixel Quad PTZ images (with an aspect ratio of 4:3) can be transmitted at the same time.	
2M Panorama + Fisheye	2 megapixel Panorama images (with an aspect ratio of 16:9) and 1.3 megapixel Fisheye images (with an aspect ratio of 4:3) can be transmitted at the same time.	
1M Panorama + Fisheye	1 megapixel Panorama images (with an aspect ratio of 16:9) and 1.3 megapixel Fisheye images (with an aspect ratio of 4:3) can be transmitted at the same time.	

• The image capture sizes of images from the added image capture modes that can be displayed in the "Live" are as follows. (Excluding multi-screen.)

Image capture mode type	Image capture mode	JPEG	H.264(1)	H.264(2)
2M Double Panorama + Fisheye		Double Panorama : 1920×1080 640×360 320×180 Fisheye : 1280×960 VGA QVGA	Double Panorama : 1920×1080 640×360 320×180	Fisheye: 1280×960 VGA QVGA
(Max. 15fps)	1M Double Panorama + Fisheye	Double Panorama : 1280×720 640×360 320×180 Fisheye : 1280×960 VGA QVGA	Double Panorama : 1280×720 640×360 320×180	Fisheye: 1280×960 VGA QVGA

	Fisheye + Quad PTZ	Fisheye: 1280×960 VGA QVGA Quad PTZ: 1280×960 VGA QVGA	Fisheye : 1280×960 VGA QVGA	Quad PTZ : 1280×960 VGA QVGA
2 Monitor (Max. 15fps)	2M Panorama + Fisheye	Panorama : 1920×1080 640×360 320×180 Fisheye : 1280×960 VGA QVGA	Panorama : 1920×1080 640×360 320×180	Fisheye : 1280×960 VGA QVGA
	1M Panorama + Fisheye	Panorama : 1280×720 640×360 320×180 Fisheye : 1280×960 VGA QVGA	Panorama : 1280×720 640×360 320×180	Fisheye : 1280×960 VGA QVGA

• The image capture sizes of images from the added image capture modes that can be displayed on cellular phones are as follows.

Image capture mode type	Image capture mode	Image capture size
	2M Double Panorama + Fisheye	Fisheye, Quad PTZ :
	1M Double Panorama + Fisheye	VGA
2 Monitor (Max. 15fps)	Fisheye + Quad PTZ	QVGA Panorama, Double Panorama :
	2M Panorama + Fisheye	640×360
	1M Panorama + Fisheye	320×180

# Note

The types of images configured in the "Image capture size" of ""Live" page (Initial display)" are displayed.

• The image capture sizes of images from the added image capture modes that can be displayed on mobile terminals are as follows.

Image capture mode type	Image capture mode	Image capture size
2 Monitor (Max. 15fps)	2M Double Panorama + Fisheye	Fisheye, Quad PTZ : 1280×960
	1M Double Panorama + Fisheye	VGA QVGA
	Fisheye + Quad PTZ	1M Panorama, 1M Double Panorama : 1280×720
	2M Panorama + Fisheye	640×360 320×180
	1M Panorama + Fisheye	2M Panorama, 2M Double Panorama : 640×360 320×180

# Note

The types of images configured in the "Image capture size" of ""Live" page (Initial display)" are displayed.

# - JPEG images in the added image capture modes

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

The image capture sizes that can be selected for JPEG images are as follows.

Image capture mode type	Image capture mode	Recording format	Image capture size
	2M Double Panorama + Fisheye 2M Panorama + Fisheye	JPEG	When Double Panorama or Panorama is selected for "Image capture size" on ""Live" page (Initial display)": 1920×1080 640×360 320×180  When Fisheye is selected for "Image capture size" on ""Live" page (Initial display)": 1280×960 VGA QVGA
2 Monitor (Max. 15fps)	1M Double Panorama + Fisheye 1M Panorama + Fisheye	JPEG	When Double Panorama or Panorama is selected for "Image capture size" on ""Live" page (Initial display)": 1280×720 640×360 320×180  When Fisheye is selected for "Image capture size" on ""Live" page (Initial display)": 1280×960 VGA QVGA
Fis	Fisheye + Quad PTZ	JPEG	When Fisheye is selected for "Image capture size" on ""Live" page (Initial display)": 1280×960 VGA QVGA  When Quad PTZ is selected for "Image capture size" on ""Live" page (Initial display)": 1280×960 VGA QVGA

H.264 images in the added image capture modes

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

The image capture sizes that can be selected for H.264 images are as follows.

Image capture mode type	Image capture mode	Recording format	Image capture size
2 Monitor (Max. 15fps)	2M Double Panorama + Fisheye 2M Panorama + Fisheye 1M Double Panorama + Fisheye 1M Panorama + Fisheye	H.264(1): Double Panorama or Panorama H.264(2): Fisheye  H.264(1): Double Panorama, or Panorama H.264(2): Fisheye	H.264(1): 1920×1080 640×360 320×180 H.264(2): 1280×960 VGA QVGA H.264(1): 1280×720 640×360 320×180 H.264(2): 1280×960 VGA QVGA
	Fisheye + Quad PTZ	H.264(1) : Fisheye H.264(2) : Quad PTZ	H.264(1): 1280×960 VGA QVGA H.264(2): 1280×960 VGA QVGA

# - Self return in the added image capture modes

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] -Configure the settings relating to the camera operations [Cam. Function])

Self return can be configured when using the "Fisheye + Quad PTZ" image capture mode. The self return function can be used when Quad PTZ images are being displayed.

Image adjust, preset position, privacy zone, and VIQS settings in the added image capture modes
 ( Operating Instructions Configure the settings relating to images and audio [Image/Audio] -Configure the settings relating to image adjust, preset positions, privacy zone, and VIQS [Image/Position] )

# Image adjust:

Image quality can be adjusted.

Image quality adjustment is performed on fisheye images.

#### Preset position (Preset position setup menu):

Preset positions can be configured.

Settings can be configured when using the "Fisheye + Quad PTZ" image capture mode.

# Preset position (Initial position setup menu):

The initial position setting of panorama and double panorama images can be configured.

Settings can be configured when using the "2M Double Panorama + Fisheye", "1M Double Panorama + Fisheye", "2M Panorama + Fisheye", and "1M Panorama + Fisheye" image capture modes.

#### Privacy zone:

When there is a zone that you do not want to display, set the zone as a privacy zone not to be displayed. Privacy zone settings are performed on fisheye images.

# VIQS:

It is possible to enhance the image quality of the specified range within a shooting area (image).

When "2M Double Panorama + Fisheye", "1M Double Panorama + Fisheye", "2M Panorama + Fisheye", or "1M Panorama + Fisheye" is used for the image capture mode, VIQS can be configured for Double Panorama and Panorama images of H.264(1).

When "Fisheye + Quad PTZ" is used for the image capture mode, VIQS can be configured for Fisheye images of H.264(1).

# Alarm images in the added image capture modes

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

Select the capture size of images to be transmitted to the FTP server, images to be attached to the alarm E-mail, or images to be saved to the SD memory card.

Image capture mode type	Image capture mode	Image capture size	
2 Monitor (Max. 15fps)	2M Double Panorama + Fisheye	When Fisheye or Quad is selected for "Image capture size" on ""Live" page (Initial display)": 1280×960 VGA QVGA	
	2M Panorama + Fisheye	When Double Panorama or Panorama is selected for "Image capture size" on ""Live" page (Initial display)":	
	Fisheye + Quad PTZ	640×360 320×180  When "Alarm input" is selected to "Save trigger" of the SD memocard, the "1920x1080" size is all available.	
	1M Double Panorama + Fisheye	When Fisheye is selected for "Image capture size" on ""Live" page (Initial display)":     1280×960     VGA     QVGA	
	1M Panorama + Fisheye	When Double Panorama or     Panorama is selected for "Image     capture size" on ""Live" page (Initial     display)":     1280×720     640×360     320×180	

# - VMD area in the added image capture modes

(Operating Instructions Configure the alarm settings [Alarm] -Configure the VMD settings [VMD area])

VIQS areas used for detecting the movement of objects can be configured.

VIQS area settings with the added image capture modes are performed with Fisheye images.

Face detection\* in the added image capture modes

(Operating Instructions Configure the setting relating to the image recognition [Advanced func.]

-Configuration of the settings relating to the face detection [Face detection])

Face detection information is not added to Fisheye images of the "2M Double Panorama + Fisheye",

"1M Double Panorama + Fisheye", "Fisheye + Quad PTZ", "2M Panorama + Fisheye", and "1M Panorama + Fisheye" image capture modes.

- \* To use the "Face detection" functions, you need to install the extension software.
- Priority stream in the added image capture modes

(Operating Instructions Configure the settings relating to the authentication [User mng.] -Configure the settings relating to the priority stream [System])

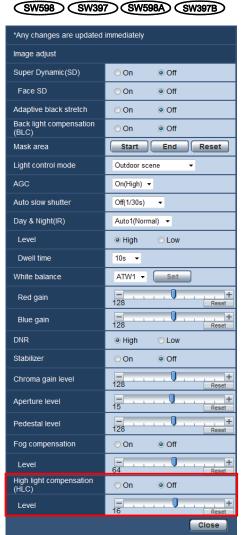
The description below is the configuration of the priority stream that can transmit images without deteriorating the image quality and refresh interval even when multiple users access concurrently. The image capture sizes of images that can be specified when priority stream is used can be selected from the following.

Image capture mode type	Image capture mode	Image capture size		
	2M Double Panorama + Fisheye	When Fisheye or Quad is selected for "Image capture size" on ""Live" page (Initial display)": 1280×960		
	2M Panorama + Fisheye	VGA QVGA  When Double Panorama or Panorama is selected for "Image		
2 Maniton (Mary 455m)	Fisheye + Quad PTZ	capture size" on ""Live" page (Initial display)": 1920×1080 640×360 320×180		
2 Monitor (Max. 15fps)	1M Double Panorama + Fisheye	When Fisheye is selected for "Image capture size" on ""Live" page (Initial display)":     1280×960     VGA     QVGA		
	1M Panorama + Fisheye	<ul> <li>When Double Panorama or Panorama is selected for "Image capture size" on ""Live" page (Initial display)": 1280×720 640×360 320×180</li> </ul>		

## 28. Addition of "High light compensation(HLC)"

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

- (Operating Instructions Configure the settings relating to images and audio [Image/Audio]
- Configure the settings relating to images and the preset positions [Image/Position] Configure the settings relating to image quality ("Image adjust" setup menu))



#### [High light compensation(HLC)]

Select "On" or "Off" to determine whether or not to activate the high light compensation function.

When the high light compensation function is activated, if there are bright lights (such as those from car headlights) at night, blown out highlights of subjects can be limited.

On: Activates the high light compensation function.

Off: Deactivates the high light compensation function.

Default: Off

#### [Level]

Adjust the HLC level.

The level of HLC will increase when the cursor is moved in the "+" direction, and decrease when

the cursor is moved in the "-" direction. Click the [Reset] button to reset to the default setting.

Default: 16

#### Note

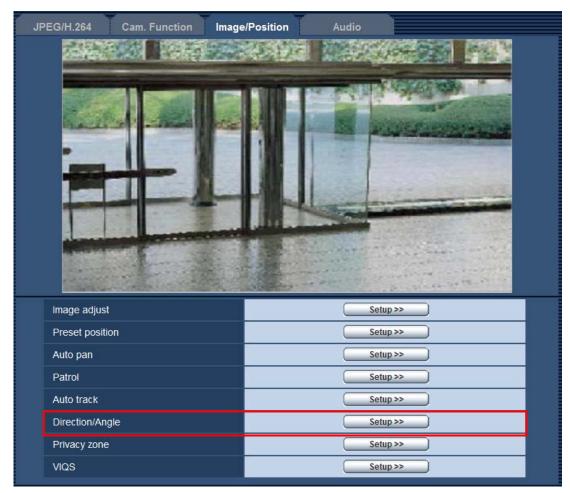
When "On" is selected for "Super Dynamic (SD)" or "Back light compensation (BLC)", this setting is not available

## 29. Changes the name of "Direction setting" function

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

- Configure the settings relating to images and the preset positions [Image/Position]
- Configure the settings relating to direction ("Direction" setup menu))





The name of [Direction setting] has been changed to [Direction/Angle setting].

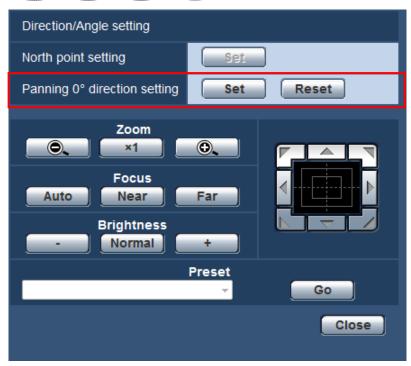
The [Setup>>] button has been changed to be active regardless of the state of the "Camera position display" setting ([Cam. Function] tag on the "Camera" page). However, the "North point setting" function is only available when "Direction display" is selected for the "Camera position display" setting.

## 30. Addition of " "Panning 0° direction setting"

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

- Configure the settings relating to images and the preset positions [Image/Position]
- Configure the settings relating to direction ("Direction" setup menu))

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#### ["Panning 0° direction setting]

Configure the Panning 0° direction setting. When the [Set] button is clicked after adjusting the angle of view with the control pad/buttons, the current direction of the pan becomes 0°. Click the [Reset] button to reset the setting to the default.

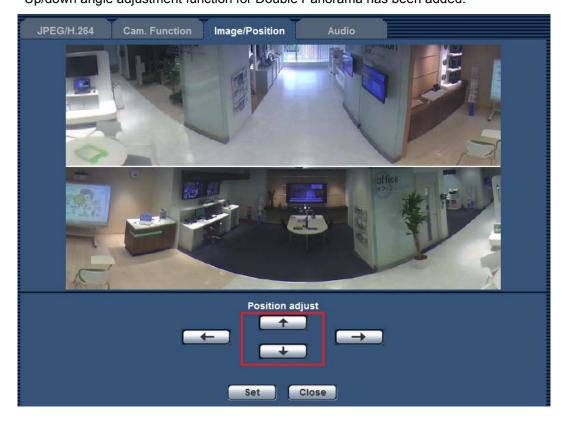
- The tilt 0°angle is not configured.
- Even if the Panning 0° direction is changed, there is no change to the preset positions already configured. The range of the auto pan setting and the actions of the patrol setting already configured are also not changed.
- Thumbnail images displayed before and after changing the Panning 0° direction for the 360 map-shot function are changed.

## 31. Up/down angle adjustment function for Double Panorama

(Operating Instructions Configure the settings relating to images and audio [Image/Audio] - Configure the settings relating to image adjust, preset positions, privacy zone, and VIQS [Image/Position] - Configure the preset positions (Initial position setup menu)) 

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Up/down angle adjustment function for Double Panorama has been added.



#### [Position adjust] buttons

- :Images are displayed adjusted to the left. The top and bottom panorama images move together.
- :Images are displayed adjusted to the right. The top and bottom panorama images move together.
- :Images are displayed adjusted to the upward. The top and bottom panorama images move
- together.
  : Images are displayed adjusted to the downward. The top and bottom panorama images move together.

#### [Set] button

Saves the adjusted screen position.

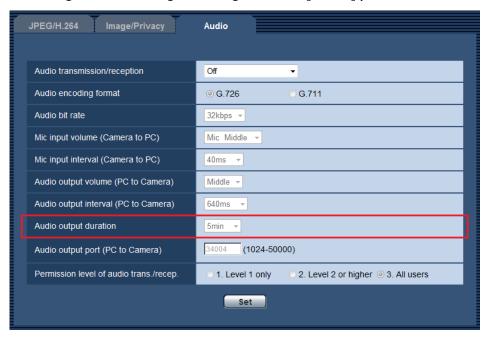
#### Note

• Adjusting the up/down angle may reduce image quality. Therefore we recommend making adjustments while checking images.

## 32. Addition of "Audio output duration" setting

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

- Configure the settings relating to audio [Audio] )



#### [Audio output duration]

Configure the maximum duration for each time audio is outputted.

1min/2min/3min/5min/10min/20min/30min/1h

Default: 5min

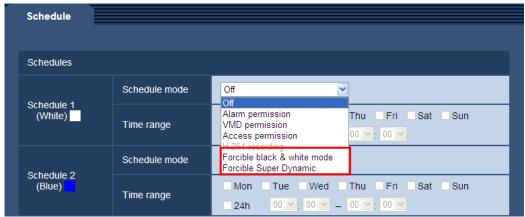
#### Note

• Audio output stops when the specified time has passed. To turn the audio transmission function on, click the Audio output button again.

# 33. Addition of "Forcible black & white mode", "Forcible Super Dynamic" to "Schedule"

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

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The number of models that support the "Forcible black & white mode" and "Forcible Super Dynamic" functions in [Schedule mode] of the "Schedule" settings has been increased. SW598A SW397B

Refer to "19.Addition of "Forcible black & white mode", "Forcible Super Dynamic" to "Schedule" " for further information about the functions and settings.

## 34. Addition of "Alarm deactivation time" setting

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



#### [Alarm deactivation time]

Configure the duration that detections won't be made after an alarm is detected. For example, by using this function you can prevent mail from being sent too often when mail notifications are configured to be sent to cellular phones when an alarm is detected.

5s/10s/30s/1min/3min/5min/10min

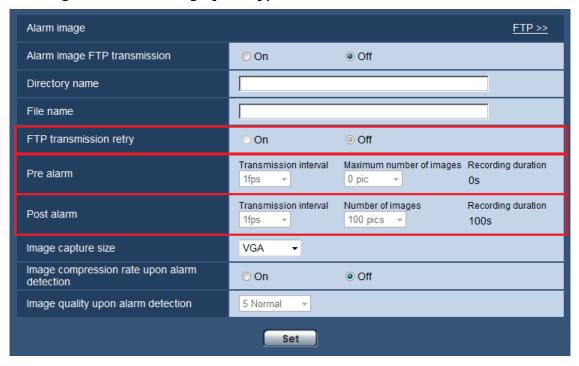
#### Default: 5s

#### Note

 The duration that alarm detections are not made can be managed for each type of alarm. For example, during the time when detections for command alarms are not made, detections for VMD alarm can be made.

### 35. Addition of pre alarm to FTP alarm transmission

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



#### [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

## [Pre alarm] •Transmission interval

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

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

Default: 1fps

#### · Maximum number of images

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

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

Default: Opic

#### Recording duration

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

#### [Post alarm]

#### ·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/ 1500pics/ 2000pics/ 3000pics

Default: 100pics

\* 1500pics has been added as a selection.

#### Note

- 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.

Unit: number of images

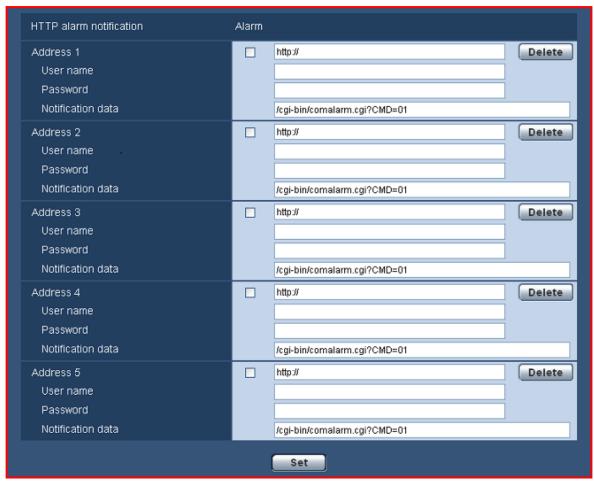
onit. Humber of images											
					Image	quality					
		0	1	2	3	4	5	6	7	8	9
Image	1280x960	5	6	7	8	10	10	10	20	30	40
	1280x720	7	8	10	10	10	20	20	30	40	50
	VGA	10	20	20	30	30	40	50	50	50	50
capture	640x360	20	30	40	50	50	50	50	50	50	50
Size	QVGA	40	50	50	50	50	50	50	50	50	50
	320x180	50	50	50	50	50	50	50	50	50	50

### 36. Addition of "HTTP alarm notification"

(Operating Instructions Configure the alarm settings [Alarm])

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\* The other models already support this function.



The number of models that support the HTTP alarm notification function has been increased.

Refer to "16.Addition of "HTTP alarm notification" " for further information about the functions and settings.

## 37. Supports SSL Mail Server

\* The other models already support this function.



#### [SSL]

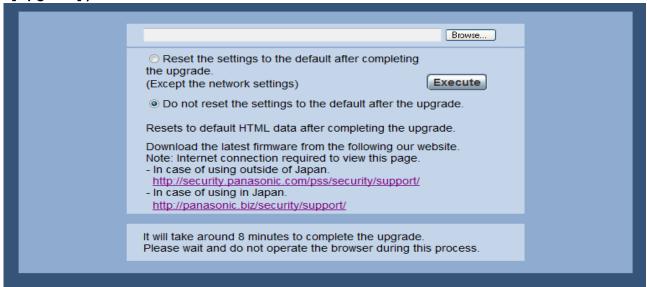
Select "On" if you want to use SSL encryption when sending E-mail notifications for alarm occurrences or the "Diag." function of SD memory card. When "ON" is selected, because "Authentication Type" is automatically set to "SMTP", the "User name" and "Password" used for authentication must be configured

Default: Off

- SSL supports SMTP over SSL. STARTTLS is not supported
- Depending on the SMTP server used, SSL may not be supported.

## 38. Addition of a support site link to the Upgrade screen

(Operating Instructions Maintenance of the camera [Maintenance] - Upgrade the firmware [Upgrade])



A link for support information for network cameras is displayed.

- For use in other countries except Japan http://security.panasonic.com/pss/security/support/
- For use in Japan http://panasonic.biz/security/support/

The support information is displayed when the link is clicked.

#### Note

• It is necessary to connect to the Internet to display the support information.

## 39. Changes to image attachments for E-mail information

(Operating Instructions Configure the alarm settings [Alarm] - Configuration of the settings relating to the E-mail notification [Notification])



"Alarm image attachment" can now be activated (set to "On") even if "H.264(1)" or "H.264(2)" is selected for "Recording format" ([SD memory card] tab of the "Basic" page).

#### <u>Note</u>

• The settings for "Image capture size" of the "Alarm image" section on the [Alarm] tab will be applied to the size of the image to be attached. However, images cannot be attached if "1280x960" or "1280x720" is selected for "Image capture size".

## 40. Changes Time zone settings

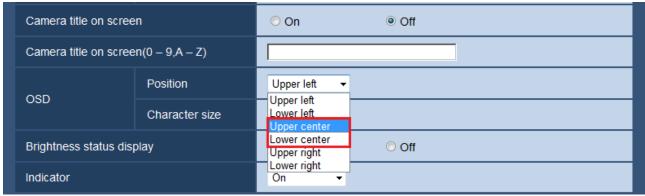
(Operating Instructions Configure the basic settings of the camera [Basic] - Configure the basic settings [Basic], Configure the settings of the servers [Server] - Configure the settings relating to the NTP server [NTP])

The Time Zone values have been reviewed and updated to include information current as of October 2014.

City	Before	After	
Caracas	GMT-04:00	GMT-04:30	
Georgetown	GMT-03:00	GMT-04:00	
Minsk	GMT+02:00	GMT+03:00	
Sri Jayawardenepura Kotte	GMT+06:00	GMT+05:30	
Magadan	GMT+11:00	GMT+10:00	

# 41. Addition of "Upper center" and "Lower center" to the "Position" setting of "OSD"

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



#### [Position]

Select the position where the time and date and a character string to be displayed on the image of the "Live" page.

**Upper left:** The above information will be displayed at the upper left corner of the main area on the "Live" page.

Lower left: The above information will be displayed at the lower left corner of the main area on the "Live" page.

Upper center: The above information will be displayed at the upper center of the main area on the "Live" page.

Lower center: The above information will be displayed at the lower center of the main area on the "Live" page.

Upper right: The above information will be displayed at the upper right corner of the main area on the "Live" page.

**Lower right:** The above information will be displayed at the lower right corner of the main area on the "Live" page.

Default: Upper left

# 42. Warning outputs, usage information, and error information display have been added for SD memory cards

(Operating Instructions Configure the alarm settings [Alarm] - Configure the settings relating to the alarm output terminal [Alarm], Maintenance of the camera [Maintenance] - Check the status [Status])

\*Only the model corresponding to an SD memory card

#### ■Addition of SD memory card error outputs

Warnings can output from the alarm output terminal if an error occurs for the SD memory card or if operations have reached a fixed state.



#### Alarm output terminal setup

#### [SD memory card error]

\* Only for models that have alarm output terminals.

Select On or Off to determine whether or not to output signals from the alarm output terminal when an error is detected for the SD memory card.

SD memory card error condition: SD memory card error (write error, read error, etc),

total use time over 6 years, and number of overwrites over 2000 times

On: When an error status is detected, the signals from an alarm output terminal is outputted and the "Alarm occurrence indication" button on the "Live" page blinks.

Off: Deactivates the warning status detection.

#### Default: Off

In order to be able to configure "Alarm output terminal setup", "Alarm output" must be selected for

[Terminal2] of the [Alarm] setting.



\* 4P alarm cable (accessory) example
(Differs depending on the camera model)

ALARM IN3, AUX OUT (gray) (Terminal 3)

ALARM IN2, ALARM OUT (red) (Terminal 2)

ALARM IN1, DAY/NIGHT IN (green) (Terminal 1)

#### **IMPORTANT**

• In order to be able to correctly use this function, format the SD memory card with the camera before using it. (When using Ver.1.30 or later of the software.)

- The alarm output terminal and the SD memory card errors use the same alarm output terminal.
- · A signal is outputted to the alarm output terminal when either an alarm or SD memory card error occurs.
- When an SD memory card error is detected, the "Alarm occurrence indication" button on the "Live" page blinks. If you click on the "Alarm occurrence indication" button, the button will be hidden.

- Output signals from the alarm output terminal for [SD memory card error] differ depending on the settings of [Alarm output type].
- When "Latch" is selected: Even after you click the "Alarm occurrence indication" button and it disappears, output signals from the alarm output terminal will continue as long as the cause of the [SD memory card error] is not resolved.
- When "Pulse" is selected: Even after you click the "Alarm occurrence indication" button and it disappears, output signals from the alarm output terminal will continue as long as the cause of the [SD memory card error] is not resolved. However, if the time period specified for [Pulse width] is exceeded, output signals from the alarm output terminal will be stopped.

#### ■Addition of SD memory card usage information/error information displays

SD memory card information and usage status, and error information is displayed on the status window in the [Status] tab of the "Maintenance" page.

SD memory card				
Model no.		SU08G		
Serial no.		C07A787C		
Remaining capacity		7737322KB/7741440KB(Remaining capacity/Original capacity)		
Total use time		384 min (0days)		
Number of o	overwrite times	0		
No.	Time & date	Description		
1	Oct/20/2014 19:07:02	<sd> Write-protect ON (Locked card)</sd>		

#### [Model no.]

Displays the model number of the SD memory card.

If model number information could not be obtained, "Read error" is displayed. If the SD memory card is not used, "Not use" is displayed. In other cases "Unknown" is displayed.

#### [Serial no.]

Displays the serial number of the SD memory card.

If model number information could not be obtained, "Unknown" is displayed.

#### [Remaining capacity]

Displays the remaining capacity and total capacity of the SD memory card.

This is the same information that is displayed in [Remaining capacity] of the SD memory card information on the [SD memory card] tab of the "Basic" page.

#### [Total use time]

Displays the length of time that SD memory card has been inserted into and used with the camera.

If the length of time that the SD memory card has been used for cannot be obtained, "Unknown" is displayed. "Total use time" is updated once per hour.

#### [Number of overwrite times]

Displays the number of overwrite times as calculated from the total capacity of the SD memory card, the number of times the camera has written files to the SD memory card, and the file sizes.

If the number of overwrite times cannot be calculated, "Unknown" is displayed.

#### Note

Because the overwrite time values are just estimates calculated by the camera, they may differ to the actual number of overwrite times.

#### [No] / [Time & date] / [Description] of the log

Displays the log related to the SD memory card.

Category	Indication	Description
SD memory card <sd> Format</sd>		Successfully formatted the SD memory card.
	<sd> Format error</sd>	Error occurred when formatting the SD memory card.
	<sd> Write-protect</sd>	A write-protected SD memory card is inserted.
	ON (Locked card)	
	<sd> Detection error</sd>	The SD memory card could not be correctly recognized.
	<sd> Write error</sd>	An error occurred when writing to the SD memory card.
	<sd> Read error</sd>	An error occurred when reading from the SD memory card.
	<sd> Delete error</sd>	An error occurred when deleting data from the SD memory
		card.
	<sd> File system error</sd>	An error occurred in File system of the SD memory card.
	<sd> Undefined error</sd>	An error other that the ones above has occurred for the SD
		memory card.

#### **IMPORTANT**

- In order to be able to correctly use this function, format the SD memory card with the camera before using it. (When using Ver.1.30 or later of the software.)
- When using SD memory cards that have been used on other devices such as PCs, the correct information may not be able to be displayed.
- Up to 30 SD memory card logs can be saved to the built-in memory of the camera. When the saved system logs have reached the maximum number, the newer logs will overwrite the older system logs.
- SD memory card logs are erased if the power of the camera is turned off.

# 43. Changes to connection information and warning display of the power supply device

(Installation guide Precautions, Operating Instructions Maintenance of the camera [Maintenance] - Check the system log [System log], About the displayed system log)

\*WV-SW598, WV-SW397, WV-SW397A, SW598A, SW397B

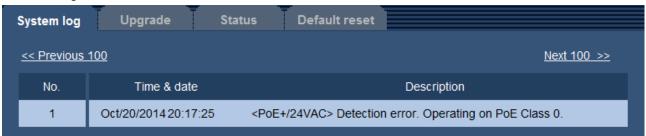
The warning display for when the correct power supply device is not connected has change from the OSD to the [System log] tab on the "Maintenance" page. If a warning is displayed, check that the power supply supports PoE+ (IEEE802.3at compliant), or use an AC 24 V power supply.

#### Before changes

CAUTION:
POWER SUPPLY IS ONLY
INTENDED FOR USE OF
POE+(CLASS4) HUB
-IEEE802.3AT COMPLY
OR
AC24V MIN3.0A CLASS2
SUPPLY

Warning display of OSD

#### After changes



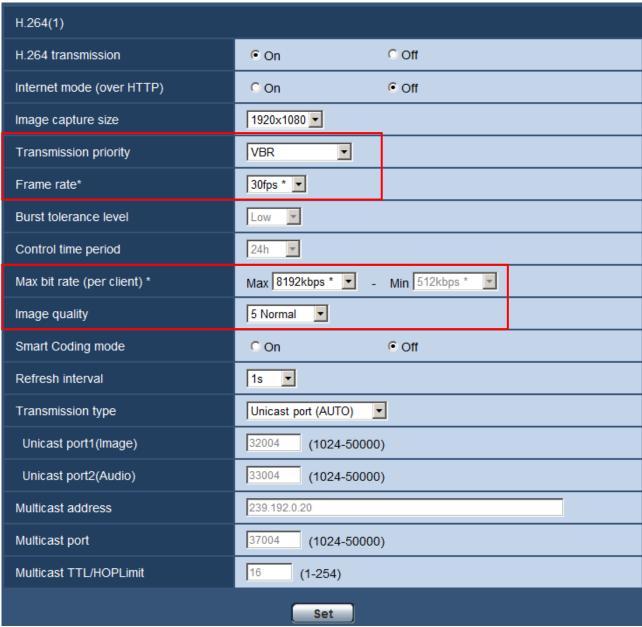
[System log] tab on the "Maintenance" page

Logs related to power supply connection information/warning displays in the System log

Category	Indication	Description
Power supply	<poe+ 24vac=""> Hardware</poe+>	A connection with an AC 24 V power supply or a PoE+ power
	detection is detected.	supply detected with hardware detection method was
	Operating on PoE+/24VAC.	detected.
	<poe+> Software detection</poe+>	A connection with a PoE+ power supply detected with
	on LLDP is detected.	software detection method was detected.
	Operating on PoE+.	
	<poe+ 24vac=""> Detection</poe+>	A connection with an AC 24 V power supply or a PoE+ power
	error. Operating on PoE	supply could not be detected. Check that the PoE+ power
	Class 0.	supply being used supports PoE+ (IEEE802.3at compliant),
		or use an AC 24 V power supply.

## 44. Addition of "VBR" to the "Transmission priority" of "H.264"

\*SW598 SW397 SW158 support by software version 1.90.



#### [Transmission priority]

Select a transmission priority for H.264 images from the following.

- Constant bit rate: H.264 images will be transmitted with the bit rate selected for "Max bit rate (per client) \*".
- VBR: H.264 images will be transmitted with the frame rate selected for "Frame rate" while preserving the image quality level selected for "Image quality". Images will be transmitted at a variable bit rate, up to the maximum bit rate selected for "Max bit rate (per client)\*". Image quality is maintained at a constant, and recording size will vary depending on the "Image quality" setting and the type of subject. If you want to calculate the recording size ahead of time, select "Advanced VBR".
- Frame rate: H.264 images will be transmitted with the frame rate selected for "Frame rate\*".
- Best effort: In accordance with the network bandwidth, H.264 images will be transmitted with the bit rate varying between the maximum and minimum bit rates that are set for "Max bit rate (per client)\*".

• Advanced VBR: H.264 images will be transmitted with the frame rate selected for "Frame rate\*". Images are transmitted so that the average transmission rate during the period specified for "Control time period" becomes the bit rate selected for "Max bit rate (per client)\*".

**Default:** Frame rate

#### Note

- When "Frame rate" or "Advanced VBR" is selected for "Transmission priority", number of users who can access the camera may be limited more (may become less than 10).
- When "VBR is selected for "Transmission priority", "Max bit rate (per client)\*" should be adjusted for the adequate image quality on the condition of that the image change of subject is big.

#### [Frame rate\*]

Select the frame rate for H.264 images from the following.

1fps / 3fps / 5fps \* / 7.5fps \* / 10fps \* / 12fps \* / 15fps \* / 20fps \* / 30fps \*

Default: 30fps \*

#### Note

- This setting is only available when "Transmission priority" is set to "Constant frame rate", "Advanced VBR", or "VBR".
- "Frame rate \*" is limited to "Max bit rate (per client) \*". For values indicated by "\*", the actual frame rate may be lower than the selected value. When "Transmission priority" is set to "VBR", images may freeze periodically depending on the values selected for "Max bit rate (per client) \*" and "Image quality". After changing these settings, confirm the transmitted images.

#### [Max bit rate (per client)\*]

Select an H.264 bit rate per a client from the following.

When "Best effort" is selected for "Transmission priority", set the maximum and minimum bit rates. 64kbps/ 128kbps\*/ 256kbps\*/ 384kbps\*/ 512kbps\*/ 768kbps\*/ 1024kbps\*/ 1536kbps\*/ 2048kbps\*/ 3072kbps\*/ 4096kbps \*/ 6144kbps \*/ 8192kbps\*/ 10240kbps\*/ 12288kbps\*/ 14336kbps\*

#### Default:

- H.264(1): 4096kbps\*
- H.264(2): 1536kbps\*
- \* The range of bit rates that can be configured for H.264 bit rates differs depending on the <u>"Transmission</u> priority" and "Image capture size".

## When "Transmission priority" is set to "Constant bit rate", "Constant frame rate", "Advanced VBR", or "Best effort"

- QVGA, VGA, 320x180, and 640x360: 64kbps 4096kbps \*
- 800x600: 128kbps \*- 4096kbps \* **SW397 SW397B**
- 1280x960 and 1280x720: 256kbps\* 8192kbps \*
- 1920x1080: 512kbps\* 14336kbps\* **SW598 SW598A SW158**

#### When "Transmission priority" is set to "VBR"

- QVGA, VGA, 320x180, and 640x360: 64kbps 14336kbps \*
- 800x600: 128kbps \*- 14336kbps \* **SW397 SW397B**
- 1280x960 and 1280x720: 256kbps\* 14336kbps \*
- 1920x1080: 512kbps\* 14336kbps\* **SW598 SW598A SW158**

#### Note

• When "14336kbps" is selected, the number of users who can access H.264 images will be limited to "1". (Only a single user can access H.264 images.)

• The H.264 bit rate is restricted by "Bandwidth control (bit rate)" on the [Network] tab on the "Network" page. For this reason, the bit rate may be lower than the value when any value with an asterisk (\*) on the right is selected.

#### [Image quality]

Select the quality for H.264 images from the following.

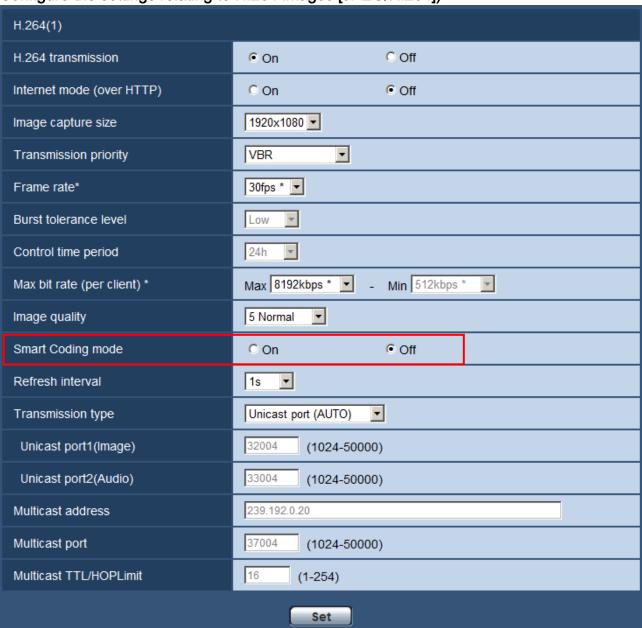
- "Constant bit rate", "Best effort": Low (Motion priority)/ Normal/ Fine (Image quality priority)
- "VBR": 0 Super fine / 1 Fine / 2 / 3 / 4 / 5 Normal / 6 / 7 / 8 / 9 Low

**Default: Normal** 

#### Note

• This setting is available when "Transmission priority" is set to "Constant bit rate", "Best effort", or "VBR".

## 45. Addition of "Smart Coding mode" feature



#### [Smart Coding mode]

You can turn stream transmission adjustment on and off.

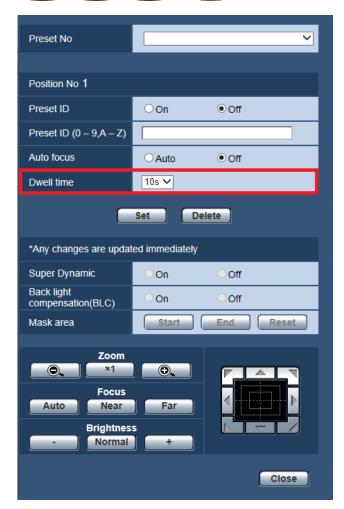
This allows you to reduce the amount of data transmitted when there is little motion in the image.

Default: Off

- This setting is available when "Transmission priority" is set to "VBR".
- When "Smart Coding mode" is set to "On", the maximum refresh interval becomes 8s.
- When "Smart Coding mode" is changed from "On" to "Off", the "Refresh interval" setting returns to the "Off" value
- When "Smart Coding mode" is set to "On", motion detection area 4 (red) is disabled.
- Turning Smart Coding mode to "On" will make refresh interval variable between 1s and 8s. If only I-frame is used for playback and display, the display interval will change.

46. Addition of "15s" and "25s" to the "Dwell time" of "Preset position" (Operating Instructions Configure the settings relating to images and audio [Image/Audio] -Configure the settings relating to images and the preset positions [Image/Position] -Configure the settings relating to the preset positions ("Preset position" setup menu)) 

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#### [Dwell time]

Select a dwell time (duration the camera stops for at each preset position) for the preset sequence operation. 5s/ 10s/ 15s/ 20s/ 25s/ 30s

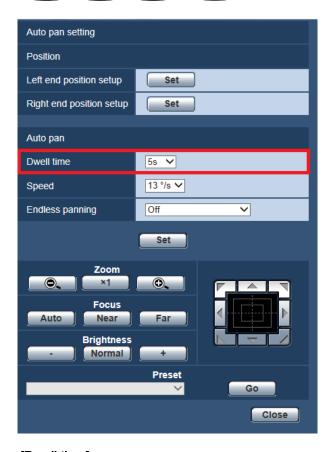
Default: 10s

# 47. Addition of "0s", "1s", "2s", "3s", "4s", "15s" and "25s" to the "Dwell time" of "Auto pan"

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

- -Configure the settings relating to images and the preset positions [Image/Position]
- -Configure the settings relating to the auto pan function ("Auto pan" setup menu))

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#### [Dwell time]

Select a dwell time at the start point and the end point from the following.

0s/ 1s/ 2s/ 3s/ 4s/ 5s/ 10s/ 15s/ 20s/ 25s/ 30s

Default: 5s

## 48. Addition of "Alarm area No." setting to the "Preset per sender"



When "Alarm area No. action" is on, the camera will move to the preset position only when the "Alarm area No." conforms with that notified from Sender's address of command alarm.

#### [Sender's address 1] - [Sender's address 8]

Set the sender's IP address for the command alarm, and the preset position for that address. Up to 8 notification addresses can be set.

[Auto track cooperation] checkbox: When the checkbox is selected, auto tracking starts after the direction of the camera moves to the preset position.

#### [On/Of] (Alarm area No. action)

Select "On" or "Off" to determine whether or not to perform "Alarm area No. action".

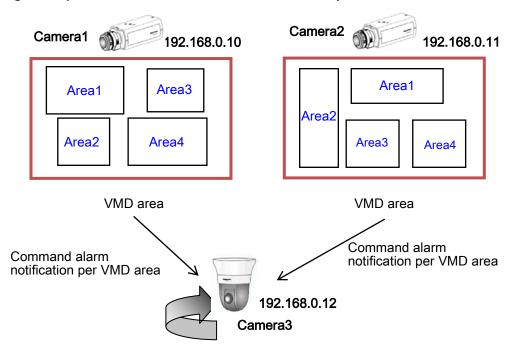
## <u>Default : off</u> [Alarm area No.]

Available range: 1-4

Default: 1

- •You need to conform the settings, "Preset per sender" -"Alarm area No." of this camera and "Notification" —"Destination of notification" —"Notification per VMD area" of the camera which send command alarm to this camera.
- Fixed Dome, Fixed and 360-degree Network Cameras have "Notification per VMD area" function. Dome and Pan/tilt Network Cameras do not have this function. For further information, refer to Operating Instructions of each camera.

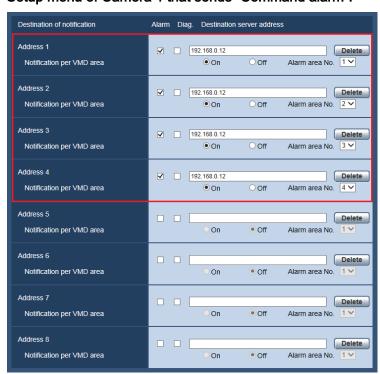
## Operation example of "Alarm area No. action" (Setting example of the camera 1 and the camera 3)



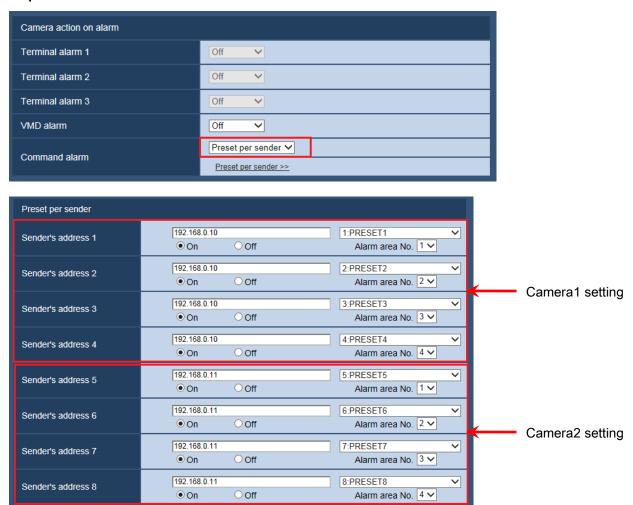
#### The example of the settings of "Alarm area No. action"

Command alarm from Camera1( Area1): Camera3 Preset Position1 Command alarm from Camera1( Area2 ): Camera3 Preset Position2 Command alarm from Camera1( Area3): Camera3 **Preset Position3** Command alarm from Camera1( Area4 ): Camera3 **Preset Position4** Command alarm from Camera2( Area1 ): Camera3 Preset Position5 Command alarm from Camera2( Area2 ): Camera3 **Preset Position6** Command alarm from Camera2( Area3 ): Camera3 Preset Position7 Command alarm from Camera2( Area4 ): Camera3 **Preset Position8** 

#### Setup menu of Camera 1 that sends "Command alarm".



Setup menu of Camera 3 that receives "Command alarm".

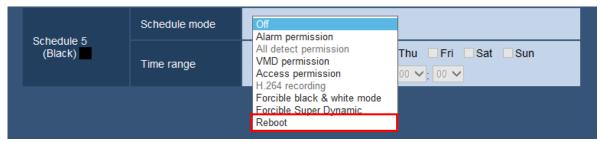


## 

Refer to "44. Addition of "VBR" to the "Transmission priority" of "H.264"".

### 50.Addition of "Reboot" to "Schedule 5"

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



#### [Schedule mode]

The schedule settings for Alarm permission, VMD permission, Access permission, H.264 recording, Forcible black & white mode, Forcible Super Dynamic and Reboot can be configured on the "Schedule" page.

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

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

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

Access permission: Users whose access level is set to 2 and 3 on the [User auth.] tab can access the camera only in the period of schedule.

H.264 recording: The SD recording will be performed at the designated time in the schedule.

Forcible black & white mode: During the period of the schedule, "Day & Night(IR)" will be executed.

**Forcible Super Dynamic:** During the period of the schedule, "Super Dynamic" will be executed. The "Light control mode" of "Image adjust" is changed to "Outdoor scene".

**Reboot:** The camera will reboot at the designated time in the schedule. It is impossible to operate the camera for about 2 minutes after rebooting the camera.

Default: Off

- Select "On" for "User auth." on the [User auth.] tab of "User mng." page and "Off" for "Host auth." on the "Host auth." page to validate "Access permission".
- When selecting "H.264 recording", select "H.264" for "Recording format" on the [SD memory card] tab and select "Schedule" for "Save trigger".
- When "Super Dynamic" is switched to "On" from "Off", or to "Off" from "On", the image may be distorted temporarily.