Panasonic

Operating Instructions (Additional Features) Network Camera Model No. BB-HCM381

Additional Feature table

The following features are added to the camera. Read both Operating Instructions manuals before starting to use the product.

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Additional Features	Contents	Page
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Trademarks

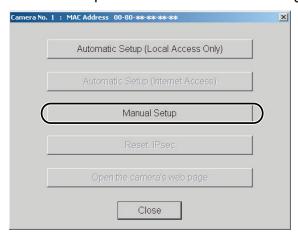
- Hotmail is either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- SD mark is a trademark of the SD Card Association.
- All other trademarks identified herein are the property of their respective owners.
- This software is based in part on the work of the Independent JPEG Group.

Abbreviations

• "Network Camera" is called "Camera" in this Operating Instructions.

Adding Manual Setup on the Initial Setting Window

Manual Setup is added on the initial setting window.



Digital Zoom Feature

A 42x magnifying capacity (a 21x optical zoom and a 2x digital zoom) can be operated with a mouse.

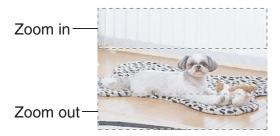
The 10x digital zoom feature can be used on the Multi Camera screen, and the Buffered Image screen (only while playing video).

There are two methods of increasing/decreasing the size of the object (only while playing video).

- Clicking the right mouse button
 Clicking the right mouse button on the upper third of the Single Camera
 screen zooms in, and clicking on the lower third of the Single Camera
 screen zooms out.
- 2. Rotating the mouse wheel Rotating the mouse wheel away from you zooms in, and rotating it towards you zooms out.

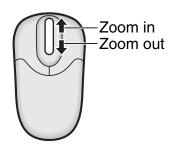
Clicking the right mouse button

Clicking the right mouse button on the upper third zooms in, and clicking on the lower third zooms out. Zooming in and out is also available by moving the mouse up with pressing the right mouse button, or moving the mouse down with pressing the right mouse button.



Rotating the mouse wheel

On a screen, rotating the mouse wheel away from you zooms in, and rotating it towards you zooms out.



Note

The performance of the mouse varies according to your OS.

When Zoom Control is disabled or enabled on Access Level

The zoom type is difference as follows.

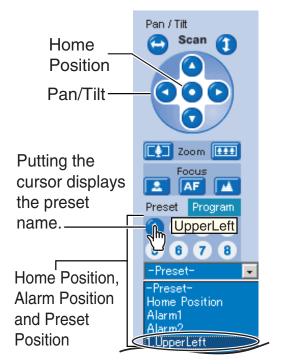
- When Zoom Control is disabled on Access Level
 A 10x digital zoom feature that described the previous page is can be used.
- When Zoom Control is enabled on Access Level
 A 42x optical zoom feature is can be used. The magnification will not be displayed.

Viewing the Image

- Click or select the home position, alarm position or registered preset position.
 - The camera takes each position, and the image is displayed.

Note

- The registered preset positions can be viewed on your mobile phone.
- The preset position may be developed into a gap.

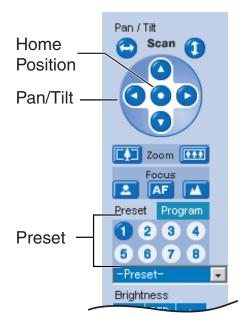


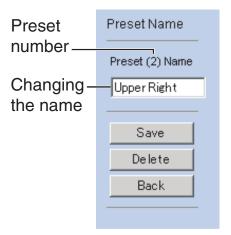
Changing or Deleting the Settings

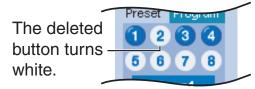
- **1.** Click [Program].
 - [Program] switches to [Cancel].
 Click [Cancel] to quit without saving changes.
- **2.** Pan and tilt the camera to a desired position.
 - When deleting, this step is not necessary.
- **3.** Zoom to the desired position.
- **4.** Adjust the focusing if necessary.
- **5.** Click the home position, alarm position or a preset number (1—20).
- **6.** Click [Save] after setting the preset name or click [Delete].
 - If you quit to change or delete settings, click [Back], and then [Cancel].
 - If "Success!" is displayed, click [Back].

Note

The home position or the alarm position cannot be deleted, and these position names cannot be changed either.







Changing the Name of Viewnetcam.com to "DynamicDNS", Moving the Position of Buffer/Transfer, and Adding the Menu

Changing to the name of "DynamicDNS", and moving Buffer/Transfer ,and adding the menu on the Setup window.



Basic

- (1) **DynamicDNS** Registers with the DynamicDNS service.
- (2) Camera Sets camera name, white balance, pan/tilt range, return to specified position and color night view settings.

Buffer/Transfer

- (3) **Trigger** Sets image buffer or transfer by timer or alarm or motion detection.
- (4) Motion Sets the threshold and the sensitivity.

 Detection
- **(5)** Alarm Log Sets the information to notify the log by e-mail.

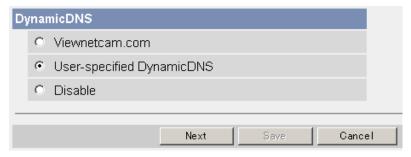
Advanced

(6) Image Display Sets resolution, image quality and refresh interval of Single Camera and Multi-Camera page, time stamp setting, language and banner.

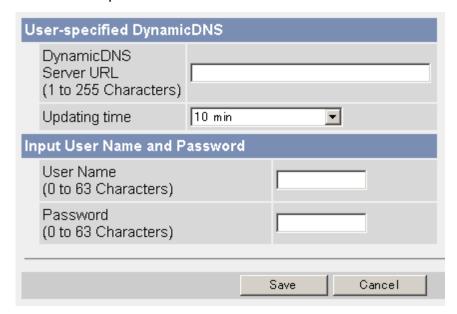
Registering User-specified DynamicDNS

DynamicDNS service is a service that allows you to assign an easy-to-remember name to the camera, similar to your favorite web site. DynamicDNS service also allows you to easily access the camera, even when your ISP changes the IP address. Panasonic Communications recommends you to register with it for the Internet access to the camera.

- 1. Click [DynamicDNS] on the Setup page.
- 2. Check [User-specified DynamicDNS], and click [Next].



- Clicking [Cancel] cancels your settings without saving changes.
- 3. Set each parameter.



- You can get DynamicDNS information from the DynamicDNS service industry company.
- 4. Click [Save] after finished.
 - New settings are saved.
 - When finished, "Success!" is displayed.
- **5.** Click [Go to DynamicDNS page].
 - The DynamicDNS page is displayed.

Note

- It may take several minutes for the registered URL to connect.
- Some DynamicDNS service is not connected.

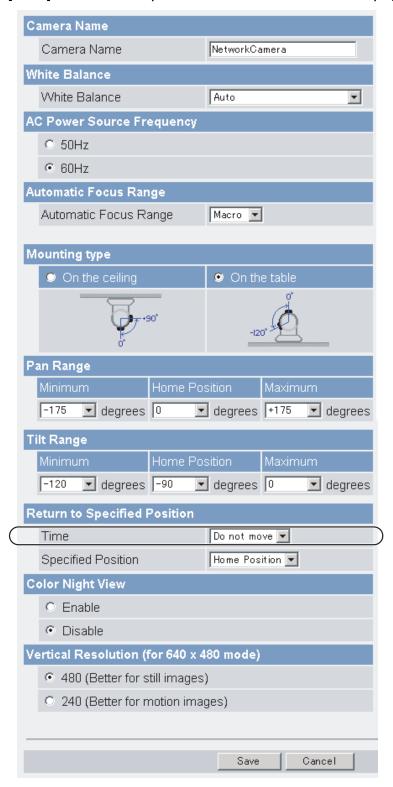
Confirming the Internet access

Due to the router specifications, the image may not be displayed even if you access the camera from your PC on the same LAN as the camera. In this case, access the camera in the following procedures.

- Accessing from the PC on another network
- Accessing from your mobile phone (see page 46)

[Time] on the Camera Page

[Time] of Return to Specified Position on the Camera page is changed.



Setting	Description	
Return to Specified Position	 If the camera is not operated during the specified per the camera turns to the specified position. The following settings are available. Time - Do not move, 10 s, 20 s, 30 s, 1 min, 5 mir min, 30 min, 1 h Specified Position - Home Position, Preset No.1–Alarm No.1, Alarm No.2 	
	<u>Note</u>	
	 If you did not set any presets, the camera cannot turn to the preset position. 	
	 When registering preset positions, set Time long enough to complete the registration process. If Time is set too short, the camera will return to the specified position while registering preset positions. 	

Procedures of Buffering or Transferring Images

The procedures from this page to page 34 are described about settings of the image buffer or transfer. See the procedures below to understand the general outline of the settings.

Buffer/Transfer by Timer (See the Buffering or Transferring Images by Timer section in the Operating Instructions.)

Buffer/Transfer by Alarm Signal (Page 13) Buffer/Transfer by Motion Detection Signal (Page 24)

Time Setting

Time Setting

Time Setting

Lens Position When Triggered Setting Lens Position When Triggered Setting

Image Setting

Image Setting

Image Setting

Image Buffer Frequency Setting

Image Buffer Frequency Setting

Image Buffer Frequency Setting

Transfer Method

(Select one from the lists.)

- No Transfer, No Memory Overwrite
- No Transfer, Memory Overwrite
- FTP
- E-mail

Transfer Method

(Select one from the lists.)

- No Transfer, No Memory Overwrite
- No Transfer, Memory Overwrite
- FTP
- E-mail

Transfer Method

(Select one from the lists.)

- No Transfer, No Memory Overwrite
- No Transfer, Memory Overwrite
- FTP
- E-mail

Save the settings to complete.

E-mail Notification When Triggered Setting

E-mail Notification When Triggered Setting

Save the settings to complete.

Save the settings to complete.

Changing Motion Detection Sensitivity (Page 35)

Notifying the Alarm Log (Page 38)

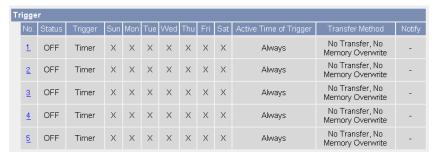
Notifying the Alarm Log (Page 38)

Buffering or Transferring Images by Alarm Signal

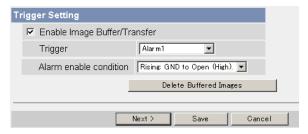
You can buffer the camera images, transfer to an FTP server or send E-mails using alarm as a trigger.

The Trigger page allows you to enable image buffer/transfer by E-mail or FTP.

- **1.** Click [Trigger] on the Setup page.
- 2. Click No. to enable Trigger.



3. Check [Enable Image Buffer/Transfer], select [Alarm 1 or 2] for trigger, select [Rising: GND to Open (High).] or [Falling: Open (High) to GND.] and click [Next>].



Note

- Click [Delete Buffered Images] to delete this buffered images.
- Click [Save] to save the settings.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Enable Image Buffer/Transfer	Check the box to enable the Trigger setting. Clear the box to disable it.
Trigger	 Selecting [Timer] enables the camera to buffer/transfer the image by timer. Selecting [Alarm 1 or 2] enables the camera to buffer/transfer the image by alarm signal. Selecting [Motion Detection] enables the camera to capture/transfer the images when the motion detects something.
Alarm enable condition	 Selecting the method of the detection for an alarm connected to the External I/O terminal. Select [Rising: GND to Open (High).] or [Falling: Open (High) to GND.]. [Rising: GND to Open (High).] is the state that GND pin and pin 1 or pin 2 is left open. [Falling: Open (High) to GND.] is the state that GND pin and pin 1 or pin 2 is short-circuited.

4. Set the time, and click [Next>].



Note

The timer works by an internal clock. Set the date and time before using timer buffer/transfer.

- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
A day of the week	Check the box to enable the day. Clear the box to disable it.
Active Time of Trigger	Select the [Always] option when you do not specify the time period. If you specify the time period, select the time period option and set the time period.

5. Set the Lens Position When Triggered setting, and click [Next>].



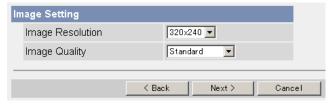
Note

If you enable the Lens Position When Triggered setting, buffer/transfer starts after the camera turns to the alarm position.

- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Lens Position When Triggered	Set [Move to alarm position] or Preset 1-20 to move the lens to the Home Position or the alarm position when the alarm signal is detected.

6. Set the image settings, and click [Next>].

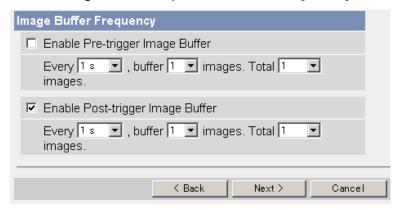


- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Image Resolution	• Select image resolution (640 x 480, 320 x 240 (default) or 160 x 120 pixels) to buffer or transfer.

Setting	Description
Image Quality	Select the image quality. [Favor Clarity] optimizes for good quality. [Standard] offers standard quality. (default) [Favor Motion] optimizes for enhanced motion. [Mobile Phone] is for a transfer to a mobile phone.
	<u>Note</u>
	640 x 480 pixels cannot be set for a transfer to a mobile phone.

7. Set the image buffer frequencies, and click [Next>].



Note

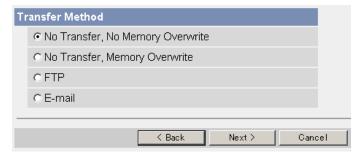
Due to the network environment, object, number of accesses, enabling IPsec, the camera may not record the numbers of images as you set. In this case, set the image buffer frequencies longer.

- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Enable Pre- trigger Image Buffer	Check the box to enable the setting. The camera buffers or transfers the image right before the alarm signal is detected.
	Set an interval, number of images to buffer and total number. The buffered images may not match the total number due to memory capacity, image resolution, image quality or what object you view.

Setting	Description
Enable Post- trigger Image Buffer	 Check the box to enable the setting. The camera buffers or transfers the image right after the alarm signal is detected. Set an interval, number of images to buffer and total number. The buffered images may not match the total number due to memory capacity, image resolution, image quality or what object you view.

8. Select the transfer method, and click [Next>].



- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

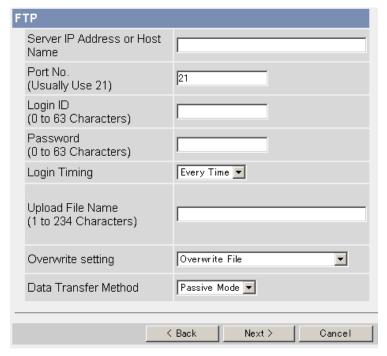
Note

If you transfer image by E-mail or FTP, confirm that the default gateway and DNS server addresses are assigned correctly.

Setting	Description
No Transfer, No Memory Overwrite	If the internal memory is full, the camera stops the buffer.
No Transfer, Memory Overwrite	If the internal memory is full, the camera deletes the old images, and continues to buffer the image.
FTP	The camera transfers the image to an FTP server (see page 18).
E-mail	The camera transfers the image by E-mail (see page 20).

When you set [FTP] for Transfer Method

Select [FTP], and click [Next>]. The following page is displayed.



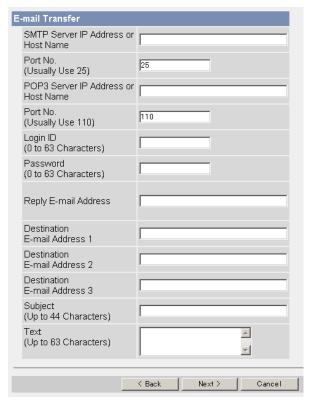
- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Server IP Address or Host Name ¹¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (1—255 characters). You can set IPv6 address.
Port No.	Enter a number (1—65535). Usually set to 21.
Login ID*2	If your ISP requires a login ID, set it (0—63 characters).
Password*2	If your ISP requires a password, set it (0—63 characters).
Login Timing	Select the login timing to an FTP server. If you set [One Time] during 1-minute transfer, the camera logs in to the server only once, and can reduce the time to log in or log out.
Upload File Name ⁻¹	Set the file name to save on an FTP server. Enter 1—234 characters. Entering "\" creates directories for a file. (E.g. NetworkCamera\image.jpg)
Overwrite Setting	 Selecting [Overwrite File] saves and overwrites the image on the server. Selecting [Save as New File with Time Stamp] saves the image attaching time stamps on the file name, and the images are not overwritten. (E.g. image20050101093020500.jpg) Underlined numbers are "9h30min20s500ms on January 1, 2005". The letter "s" is inserted after the day when referring to a summer time zone.
Data Transfer Method	Select [Passive Mode] normally. If FTP does not work, select [Active Mode] and check the operation.

¹ But [Space], ["], ['], [&], [<] and [>] are not available.
² But ["] is not available.

When you set [E-mail] for Transfer Method

Select [E-mail], and click [Next>]. The following page is displayed.



- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

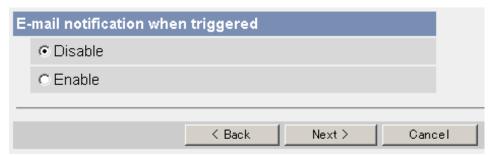
Note

- The camera works only with an SMTP (Simple Mail Transfer Protocol) server. It does not work with mail servers like "Hotmail®" using a web browser.
- The subject name by E-mail transfer uses only 24 h format. The file name is "image.jpg".
 - E.g. "image:20050101093020500".
 - Underlined numbers are "9h30min20s500ms on January 1, 2005". The letter "s" is inserted after the day when referring to a summer time zone.

Setting	Description
SMTP Server IP Address or Host Name ⁻¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (1—255 characters). You can set IPv6 address.
Port No.	• Enter a number (1—65535). Usually set to 25.
POP3 Server IP Address or Host Name ⁻¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (0—255 characters). You can set IPv6 address.
Port No.	Enter a number (1—65535). Usually set to 110.
Login ID ⁻²	• If your ISP requires a login ID to log in to a POP3 server, set it (0—63 characters).
Password ⁻²	• If your ISP requires a password to log in to a POP3 server, set it (0—63 characters).
Reply E-mail Address ²	Set the sender's E-mail address. We recommend you to set the administrator's E-mail address.
Destination E- mail Address ² 1—3	Set the destination E-mail address (up to 3).
Subject ⁻²	• Enter a subject with ASCII characters or characters in each language (0—44 characters for a 1-byte character and 0—22 characters for a 2-byte character).
Text	• Enter text with ASCII characters or characters in each language (0—63 characters for a 1-byte character and 0—31 characters for a 2-byte character). But ["] and [end-of-line] key are not available.

¹ But [Space], ["], ['], [&], [<] and [>] are not available.
² But ["] is not available.

9. After you confirm the settings and click [Next>], set E-mail notification and click [Next>].



• If you select [Enable], the E-mail Notification When Triggered page is displayed. Enter the settings seeing page 20 and page 21. When finished, click [Next>] and go to step 10.

Setting	Description
Disable	The camera does not send an E-mail notification when buffering or transferring image.
Enable	The camera sends an E-mail notification (up to 3 destinations) when buffering or transferring image.

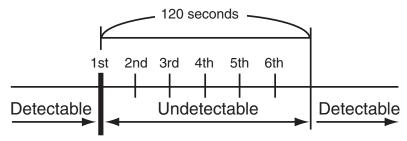
- 10. Click [Save] after confirming the settings.
 - New settings are saved.
 - When finished, "Success!" is displayed.

11. Click [Go to Trigger page].

• The Trigger page is displayed.

Note

- If you set a short interval to transfer image to a mobile phone, many E-mails may be sent to it leading to a large phone bill. Therefore, we recommend you to set a long interval. 1 image per minute frequency is recommended.
- Alarm transfer stops its operations until the camera finishes all transfers.
 For example, if the camera transfers 3 images per minute and 6 images in total, the alarm detection will be in the following operation.



An alarm signal is detected.

- If you are buffering images on the internal memory, the following operations also delete all buffered images.
 - Turning off the camera.
 - Saving the Date and Time page.
 - Restarting, updating firmware or resetting the camera to factory default.

Buffering or Transferring Images by Motion Detection Signal

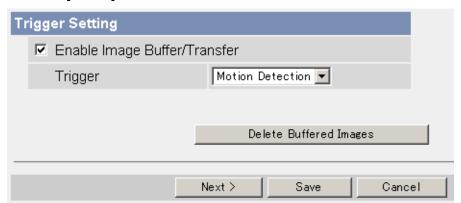
Camera has a Motion Detection feature that detects movement, such as people, based on the preset threshold and sensitivity of Camera. You can buffer the camera images, transfer to an FTP server or send E-mails using the Motion Detection function as a trigger.

The Trigger page allows you to enable image buffer/transfer by E-mail or FTP.

- **1.** Click [Trigger] on the Setup page.
- 2. Click [No.] to enable Trigger.



3. Check [Enable Image Buffer/Transfer], select [Motion Detection] for trigger, and click [Next>].



Note

- Click [Delete Buffered Images] to delete this buffered images.
- Click [Save] to save the settings.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Enable Image Buffer/Transfer	Check the box to enable the Trigger setting. Clear the box to disable it.

Setting	Description
Trigger	 Selecting [Timer] enables the camera to buffer/transfer the image by timer. Selecting [Alarm 1 or 2] enables the camera to buffer/transfer the image by alarm signal.
	Selecting [Motion Detection] enables the camera to capture/transfer the images when the motion detects something.

4. Set the time, and click [Next>].



Note

The timer works by an internal clock. Set the date and time before using timer buffer/transfer.

- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
A day of the week	Check the box to enable the day. Clear the box to disable it.
Active Time of Trigger	Select the [Always] option when you do not specify the time period. If you specify the time period, select the time period option and set the time period.

5. Set the image settings, and click [Next>].



Note

If you enable the Lens Position When Triggered setting, buffer/transfer starts after the camera turns to the Home Position, Preset No.1–20, or Alarm No.1–2.

- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Lens Position When Triggered	 Set [Move to alarm position] or Preset 1-20 to move the lens to the Home Position or the alarm position when the alarm signal is detected.

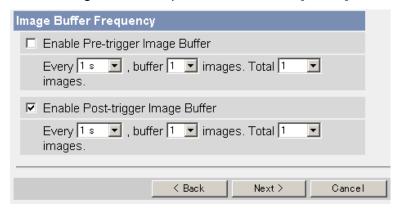
6. Set the image settings, and click [Next>].



- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Image Resolution	• Select image resolution (640 \times 480, 320 \times 240 (default) or 160 \times 120 pixels) to buffer or transfer.
Image Quality	 Select the image quality. [Favor Clarity] optimizes for good quality. [Standard] offers standard quality. (Default) [Favor Motion] optimizes for enhanced motion. [Mobile Phone] is for a transfer to a mobile phone.
	Note 640×480 pixels cannot be set for a transfer to a mobile

7. Set the image buffer frequencies, and click [Next>].



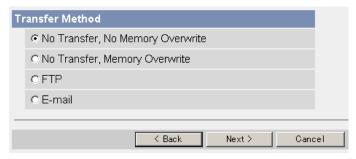
Note

Due to the network environment, object, number of accesses, enabling IPsec, the camera may not record the numbers of images as you set. In this case, set the image buffer frequencies longer.

- Clicking [Cancel] takes you back to the Trigger page without saving changes.
- Clicking [<Back] takes you back to the previous page.

Setting	Description
Enable Pre- trigger Image Buffer	Check the box to enable the setting. The camera buffers or transfers the image right before the motion detection signal is detected.
	Set an interval, number of images to buffer and total number. The buffered images may not match the total number due to memory capacity, image resolution, image quality or what object you view.
Enable Post- trigger Image Buffer	Check the box to enable the setting. The camera buffers or transfers the image right after the motion detection signal is detected.
	Set an interval, number of images to buffer and total number. The buffered images may not match the total number due to memory capacity, image resolution, image quality or what object you view.

8. Select the transfer method, and click [Next>].



- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

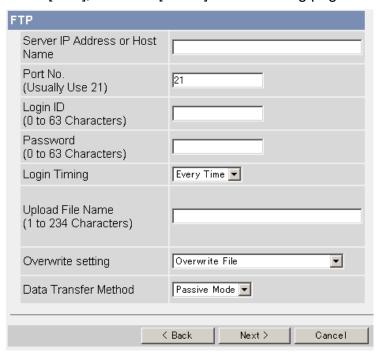
Note

If you transfer image by E-mail or FTP, confirm that the default gateway and DNS server addresses are assigned correctly.

Setting	Description
No Transfer, No Memory Overwrite	If the internal memory is full, the camera stops the buffer.
No Transfer, Memory Overwrite	If the internal memory is full, the camera deletes the old images, and continues to buffer the image.
FTP	The camera transfers the image to an FTP server (see page 29).
E-mail	The camera transfers the image by E-mail (see page 31).

When you set [FTP] for Transfer Method

Select [FTP], and click [Next>]. The following page is displayed.



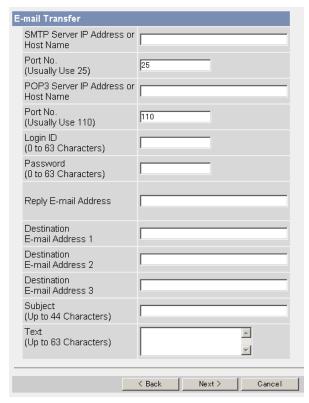
- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

Setting	Description
Server IP Address or Host Name ¹¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (1—255 characters). You can set IPv6 address.
Port No.	Enter a number (1—65535). Usually set to 21.
Login ID*2	If your ISP requires a login ID, set it (0—63 characters).
Password*2	If your ISP requires a password, set it (0—63 characters).
Login Timing	Select the login timing to an FTP server. If you set [One Time] during 1-minute transfer, the camera logs in to the server only once, and can reduce the time to log in or log out.
Upload File Name ⁻¹	Set the file name to save on an FTP server. Enter 1—234 characters. Entering "\" creates directories for a file. (E.g. NetworkCamera\image.jpg)
Overwrite Setting	 Selecting [Overwrite File] saves and overwrites the image on the server. Selecting [Save as New File with Time Stamp] saves the image attaching time stamps on the file name, and the images are not overwritten. (E.g. image20050101093020500.jpg) Underlined numbers are "9h30min20s500ms on January 1, 2005". The letter "s" is inserted after the day when referring to a summer time zone.
Data Transfer Method	Select [Passive Mode] normally. If FTP does not work, select [Active Mode] and check the operation.

¹ But [Space], ["], ['], [&], [<] and [>] are not available.
² But ["] is not available.

When you set [E-mail] for Transfer Method

Select [E-mail], and click [Next>]. The following page is displayed.



- Clicking [<Back] takes you back to the previous page.
- Clicking [Cancel] takes you back to the Trigger page without saving changes.

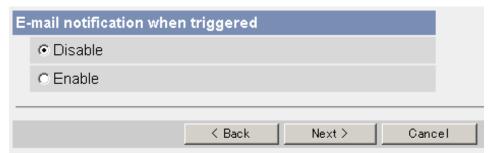
Note

- The camera works only with an SMTP (Simple Mail Transfer Protocol) server. It does not work with mail servers like "Hotmail" using a web browser.
- The subject name by E-mail transfer uses only 24 h format. The file name is "image.jpg".
 - E.g. "image:20050101093020500".
 - Underlined numbers are "9h30min20s500ms on January 1, 2005". The letter "s" is inserted after the day when referring to a summer time zone.

Setting	Description
SMTP Server IP Address or Host Name ⁻¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (1—255 characters). You can set IPv6 address.
Port No.	Enter a number (1—65535). Usually set to 25.
POP3 Server IP Address or Host Name ⁻¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (0—255 characters). You can set IPv6 address.
Port No.	Enter a number (1—65535). Usually set to 110.
Login ID ⁻²	If your ISP requires a login ID to log in to a POP3 server, set it (0—63 characters).
Password ⁻²	If your ISP requires a password to log in to a POP3 server, set it (0—63 characters).
Reply E-mail Address ²	Set the sender's E-mail address. We recommend you to set the administrator's E-mail address.
Destination E- mail Address ² 1—3	Set the destination E-mail address (up to 3).
Subject ⁻²	• Enter a subject with ASCII characters or characters in each language (0—44 characters for a 1-byte character and 0—22 characters for a 2-byte character).
Text	Enter text with ASCII characters or characters in each language (0—63 characters for a 1-byte character and 0—31 characters for a 2-byte character). But ["] and [end-of-line] key are not available.

¹ But [Space], ["], ['], [&], [<] and [>] are not available.
² But ["] is not available.

9. After you confirm the settings and click [Next>], set E-mail notification and click [Next>].



• If you select [Enable], the E-mail Notification When Triggered page is displayed. Enter the settings seeing page 31 and page 32.

Setting	Description
Disable	The camera does not send an E-mail notification when buffering or transferring image.
Enable	The camera sends an E-mail notification (up to 3 destinations) when buffering or transferring image.

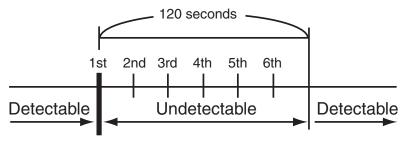
- **10.** Click [Save] after confirming the settings.
 - New settings are saved.
 - When finished, "Success!" is displayed.

11. Click [Go to Trigger page].

The Trigger page is displayed.

Note

- If you set a short interval to transfer image to a mobile phone, many E-mails may be sent to it leading to a large phone bill. Therefore, we recommend you to set a long interval. 1 image per minute frequency is recommended.
- Motion Detection transfer stops its operations until the camera finishes all transfers. For example, if the camera transfers 3 images per minute and 6 images in total, the Motion Detection will be in the following operation.



A Motion Detection signal is detected.

- If you are buffering images on the internal memory, the following operations also delete all buffered images.
 - Turning off the camera.
 - Saving the Date and Time page.
 - Restarting, updating firmware or resetting the camera to factory default.
 - Maximum number of buffered images change depending on resolution, image quality and what object the camera buffers. At the 320 x 240 pixels resolution and the standard quality, the camera buffers about 125 frames. (If 3 triggers are enabled [maximum 5 triggers], the internal memory capacity is divided into 3 sections. In this case, each trigger can buffer about 40 images.) See "3.11 File Size and Number of Buffered Images" on the Operating Instructions for the internal memory capacity.

Note

- A change due to light or wind may detect motions mistakenly.
- Motion detection level is changed depending on resolution, image quality, and object situation. Confirm the level by performing motion detection recording.
- Enabling Motion Detection delays the frame rate of the camera.
- Objects moving fast may not be detected.
- Motion Detection may not work in the dark.

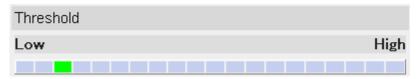
Setting the Motion Detection

The Motion Detection page allows you to adjust sensitivity of the Motion Detection.

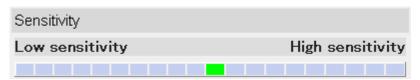
Threshold: If the threshold is set low, this function sensitively detects changes.

Sensitivity: If you set sensitivity high, amplitude of motion detection bar gets jumpy.

- **1.** Click [Motion Detection] on the Setup page.
- 2. Click the Motion Detection bar in Threshold to set the threshold level.



3. Click the Motion Detection bar in Sensitivity to set the sensitivity level.



- 4. Click [Save] to save the settings.
 - Clicking [Cancel] cancels your settings without saving changes.
- **5.** Click [Go to Motion Detection page].
 - The Motion Detection page is displayed.

Setting	Description
Threshold	Adjust the threshold for Motion Detection.
Sensitivity	If you set sensitivity high, amplitude of motion detection bar gets jumpy.

Note

The Motion Detection is disabled while zooming, panning and tilting.

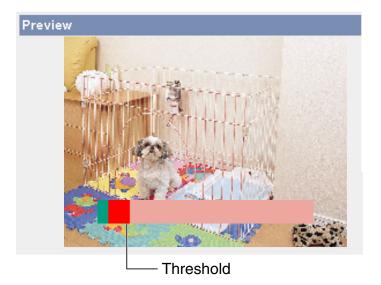
Preview

Display current threshold and detection level.

- The threshold is displayed by between green and red bar.
- The detection level is displayed by between dark and light color.

Note

Setting Threshold and Sensitivity is enabled after saving, and reflect to preview.



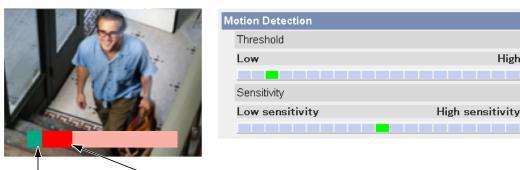
What is the threshold?

The threshold is a value for the camera to detect motions on the image during the motion detection buffering. Setting the threshold lower allows subtler changes to be detected. Setting the threshold higher allows bigger changes that might occupy half the image to be detected.

What is the sensitivity?

The sensitivity is the brightness change level for the camera to detect as the motion. The high sensitivity setting enables the camera to detect the slight brightness change. Lower the sensitivity to make the camera to detect only the big brightness change.

High

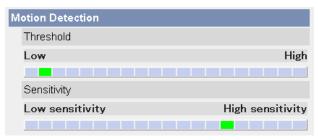


Detect motions When the level exceeds according to the threshold, the camera threshold. detects motions.

Note

Lowering the threshold and heightening sensitivity enable the camera easily to detect the trivial motion on the part of the image.





Note

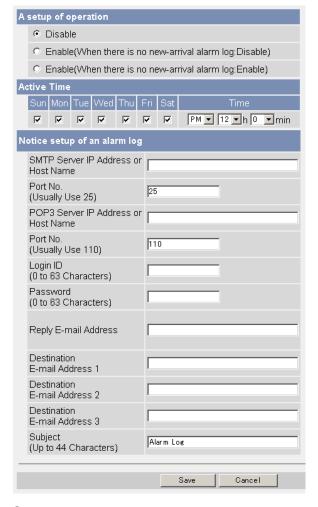
- The motion detection is activated by object outline's changes and the brightness changes. This feature is designed to alleviate false detections by overall brightness changes due to sunlight. But in this case, the camera may falsely detect the rapid brightness changes by the artificial light such as the fluorescent light. In other cases, motion detection by the Network Camera Recorder detects whole objects and brightness changes. The way to detect motion differs between the camera and Network Camera Recorder. Additionally, if the object's color is absorbed by the background color, the camera is hard to detect the motions.
- The detecting level depends on the object, resolution, or image quality.
 Confirm the condition on the Preview window with following the above procedure when setting the Motion Detection.

Notifying Setup of an Alarm Log

Once a day, an alarm log sent at a specified time can be checked. To enable Alarm Log, set Alarm 1, Alarm 2 or Motion Detection for Trigger Setting and check [Enable].

When Alarm Log is used, the DNS server address setting is required. (See "2.2 Connecting the Camera to Your IPv4 Network" or "2.3 Connecting the Camera to Your IPv6 Network" on the Operating Instructions.)

- Click [Alarm Log] on the Setup page.
 When selecting Alarm1, Alarm2 or Motion Detection in Trigger page, the Alarm log window is displayed.
- 2. Set each parameter.



- Click [Save].Clicking [Cancel] cancels your settings without saving changes.
- 4. Click [Go to Alarm Log page].

Note

When the camera restarts, alarm logs will be deleted.

- Alarm logs are deleted when resetting the camera to factory default.
- Alarm logs are deleted when you save new settings.

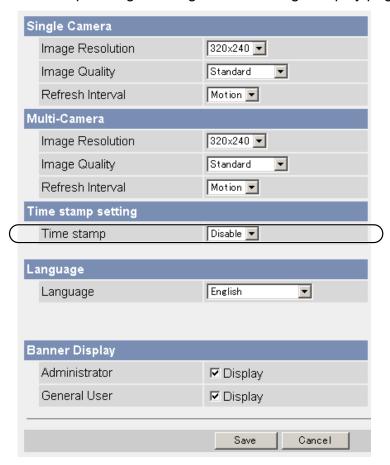
Setting	Description
A setup of operation	Alarm log operation can be set here.
Time	Set the date and time to send alarm logs via E-mail.
SMTP Server IP Address or Host Name ⁻¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (1—255 characters). An IPv6 address can be set.
Port No.	• Enter a number (1—65535). Usually set to 25.
POP3 Server IP Address or Host Name ⁻¹	 If you set the server IP address, set 4 digits (0—255) and 3 periods such as "192.168.0.253". But "0.0.0.0" and "255.255.255.255" are not available. Or set a host name (0—255 characters). An IPv6 address can be set.
Port No.	• Enter a number (1—65535). Usually set to 110.
Login ID ²	If your ISP requires a login ID to log in to a POP3 server, set it (0—63 characters).
Password ⁻²	If your ISP requires a password to log in to a POP3 server, set it (0—63 characters).
Reply E-mail Address ²	Set the sender's E-mail address. We recommend you to set the administrator's E-mail address.
Destination E-mail Address 1-3 ⁻²	Set the destination E-mail address (up to 3).
Subject ⁻²	• Enter a subject with ASCII characters or characters in each language (0—44 characters for a 1-byte character and 0—22 characters for a 2-byte character).

 $^{^{\}mbox{\tiny 1}}$ But [Space], ["], ['], [&], [<] and [>] are not available.

^{*2} But ["] is not available.

Changing the Time Stamp Setting

The Time stamp setting is changed on the Image Display page.



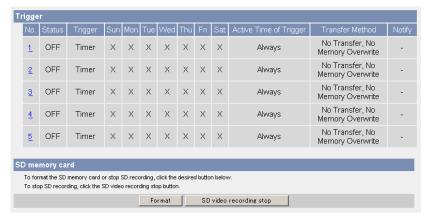
Setting	Description
Time stamp setting	You can display a time stamp on the upper left side of the image. Select from [Enable] or [Disable].
	 Note If you enable this feature, the time is also stamped on the buffered image. Set AM/PM format and 24H format on the Date and Time page.

Format the SD memory card

Before you record the camera image, you need to format the SD memory card.

Note

- You can confirm the SD memory capacity on the Status page.
- 1. Insert the SD memory card.
- **2.** Click [Trigger] on the Setup page.
- 3. Click [Format].



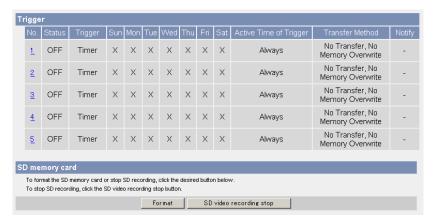
- **4.** Click [OK] on the confirmation window.
 - Format is complete.
- **5.** Click [Go to Trigger page].
 - The Trigger page is displayed.

Stop the SD Memory Recording

After you stop the SD memory recording, remove the SD memory card.

Note

- You can confirm the SD memory capacity on the Status page.
- If the camera is restarted, the SD memory recording starts again.
- If you remove the SD memory card and insert it again, the SD memory recording starts again.
- **1.** Click [Trigger] on the Setup page.
- 2. Click [SD video recording stop].



- **3.** Click [OK] on the confirmation window.
 - The SD memory recording is stopped.
- 4. Click [Go to Trigger page].
 - The Trigger page is displayed.

Note

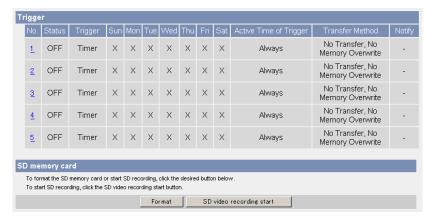
Ensure that recording has stopped before removing the SD memory card. Do not remove the SD memory card, nor restart or turn off the camera while recording images on the card. Doing so can cause a decrease in SD memory card capacity, data corruption or camera malfunction.

Start the SD Memory Recording

The SD memory recording can be started on the Trigger page.

Note

- You can confirm the SD memory capacity on the Status page.
- If the camera is restarted, the SD memory recording starts again.
- If you remove the SD memory card and insert it again, the SD memory recording starts again.
- **1.** Click [Trigger] on the Setup page.
- Click [SD video recording start].

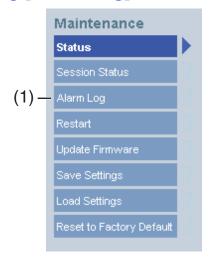


- 3. "SD video recording was started." is displayed.
 - The SD memory recording is stopped.
- **4.** Click [Go to Trigger page].
 - The Trigger page is displayed.

Note

Ensure that recording has stopped before removing the SD memory card. (See page 42) Do not remove the SD memory card, nor restart or turn off the camera while recording images on the card. Doing so can cause a decrease in SD memory card capacity, data corruption or camera malfunction.

Adding [Alarm Log] on the Maintenance Window



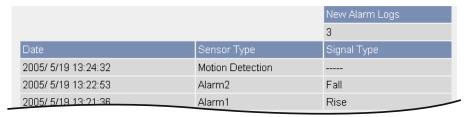
Maintenance

(1) Alarm Log Displays alarm logs.

Displaying Alarm Logs

Displays up to 50 Alarm Logs in order of time. Old logs will be overwritten by new one.

- 1. Click [Alarm Log] on Maintenance page.
- 2. Alarm Logs are displayed.



Note

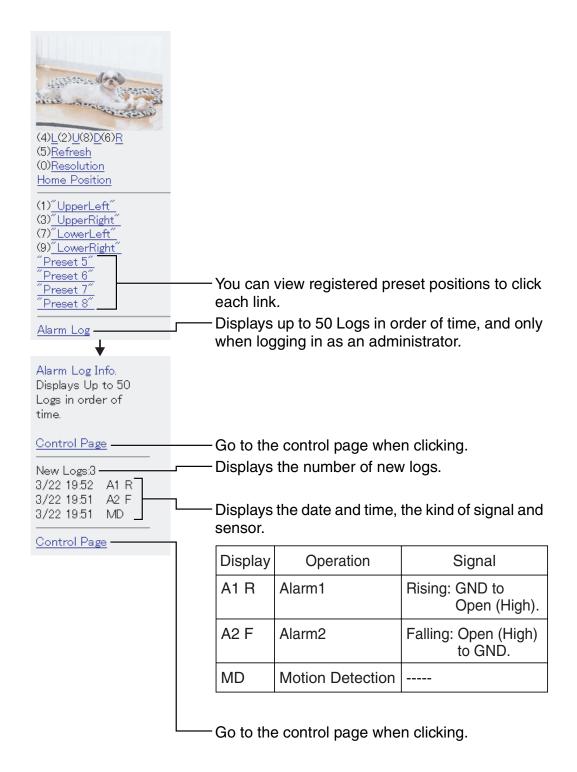
If the camera is restarted, all alarm logs are deleted.

Item	Description
New Alarm Logs	Displays the number of new alarm logs.
Date	Displays the date and time when the Alarm 1, 2, or Motion Detect were responded.
Sensor Type	Displays the Trigger Setting (Alarm 1, 2, or Motion Detection) on the Trigger page.

Item	Description
Signal Type	Displays the Alarm enable condition on the Trigger page when selected Alarm 1 or 2.

Viewing Still Images on Your Mobile Phone

You can view still images and registered preset positions over the Internet from a compatible mobile phone.



The information in this document is subject to change without notice.

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