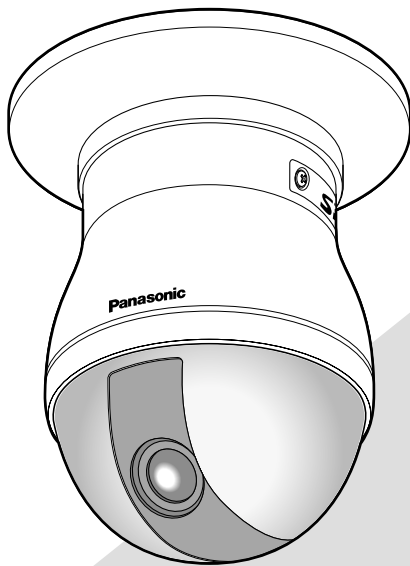


# Panasonic

## Network Camera

### Operating Instructions

Model No. **WV-NS950/G, WV-NS954E**  
**WV-NW960/G, WV-NW964E**



WV-NS950/G  
WV-NS954E



WV-NW960/G  
WV-NW964E



Before attempting to connect or operate this product,  
please read these instructions carefully and save this manual for future use.

The model number is abbreviated in some descriptions in this manual.

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# Preface

## About these operating instructions

There are 3 sets of operating instructions for the WV-NS950/NS954, WV-NW960/NW964 as follows.

- Installation Guide
- Operating instructions
- Setup Instructions
- WV-NS950/NS954 Network camera (for indoor use)
- WV-NW960/NW964 Network camera (for outdoor use)

\* The screens used in these Setup Instructions show the case of WV-NS954.

These operating instructions contain descriptions of how to operate this product\* using a PC via a network and of how to configure the settings.

Refer to the installation guide for descriptions of how to install this product and of how to connect to a network.

Adobe® Reader is required to read PDF. When the Adobe® Reader is not installed on the PC, download the latest Adobe® Reader from the Adobe web site and install it.

## Trademarks and registered trademarks

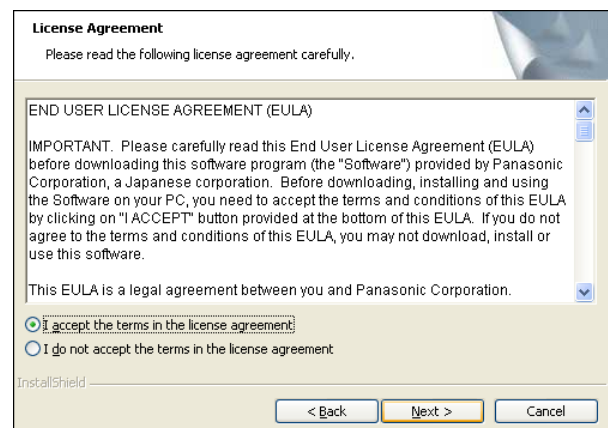
- Microsoft, Windows, Windows Vista, Internet Explorer, ActiveX and DirectX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Adobe and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- SD logo is a trademark.
- mini SD is a trademark.
- Other names of companies and product contained in these operating instructions may be trademarks or registered trademarks of their respective owners.

## Viewer software

- Images will not be displayed when the viewer software "Network camera View3" is not installed on the PC. This software can be installed directly from the camera or by double clicking "nwc3setup.exe" on the CD-ROM provided, and then following the on-screen instructions.

### Important:

- The default setting of "Automatic installation of Viewer software" is "ON". Follow the instructions on Setup Instructions when the message is displayed on the information bar of the browser.
- When the "Live" page is displayed for the first time, the install wizard of the ActiveX control required to display images from the camera will be displayed. Follow the instructions of the wizard.
- When the install wizard is displayed again even after completing the installation of the ActiveX, restart the PC.



- The viewer software used on each PC should be licensed individually. The number of installations of the viewer software from the camera can be checked on the [Upgrade] tab of the "Maintenance" page ( Setup Instructions). Refer to your dealer for the software licensing.

# Monitor images on a PC

The following are descriptions of how to monitor images from the camera on a PC.

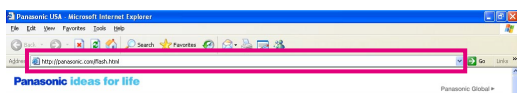
## Monitor images from a single camera

### Step 1

Start up the web browser.

### Step 2

Enter the IP address designated using the Panasonic IP setup software in the address box of the browser. (Example: `http://192.168.0.10`)



### Important:

- When the HTTP port number is changed from "80", enter "http://IP address of the camera + : (colon) + port number" in the address box of the browser, for example, "http://192.168.0.11:8080".
- When the PC is in a local network, configure the web browser to bypass the proxy server for the local address.

### Step 3

Press the [Enter] key on the keyboard.  
→ The "Live" page will be displayed.



### Important:

- When displaying multiple MPEG-4 images on a PC, images may not be displayed depending on the performance of the PC.
- When "ON" is selected for "VMD alarm" (Setup Instructions), the frame rate of MPEG-4 and JPEG (QVGA) images will become 15 fps at a maximum.

### Notes:

- When "ON" is selected for "User Authentication", the authentication window will be displayed before displaying live images for the user name and password entries. The default user name and password are as follows.

User name: admin

Password: 12345

When accessing the camera without changing the default password, the pop-up window saying that it is recommended to change the password will be displayed.

To enhance the security, change the password for the user "admin". It is recommended to change this password periodically.

- When "Unicast port (AUTO)" or "Unicast (MANUAL)" is selected for "Transmission type" of "MPEG-4 setup", up to 8 users can access the camera concurrently regardless of the image type (JPEG/MPEG-4) that the current access users are monitoring.

Depending on the set values for "Total bit rate" and "Max bit rate (per 1 client)", the maximum concurrent access number may be less than 8 users. When 8 users are concurrently accessing, the access limit message will be displayed for users who subsequently attempt to access. When "Multicast" is selected for "Transmission type" of "MPEG-4 setup", users who are monitoring MPEG-4 images will not be limited to access.

- When "ON" is selected for "MPEG-4 transmission" (Setup Instructions), an MPEG-4 image will be displayed. When "OFF" is selected, a JPEG image will be displayed. It is possible to display a JPEG image even when "ON" is selected for "MPEG-4 transmission". In this case, the refresh interval will be limited.
- The refresh interval for MPEG images is limited to 15 fps at the maximum even when a frame-rate-prioritized bit rate is selected at "Max bit rate (per 1 client)" of "MPEG-4 transmission".

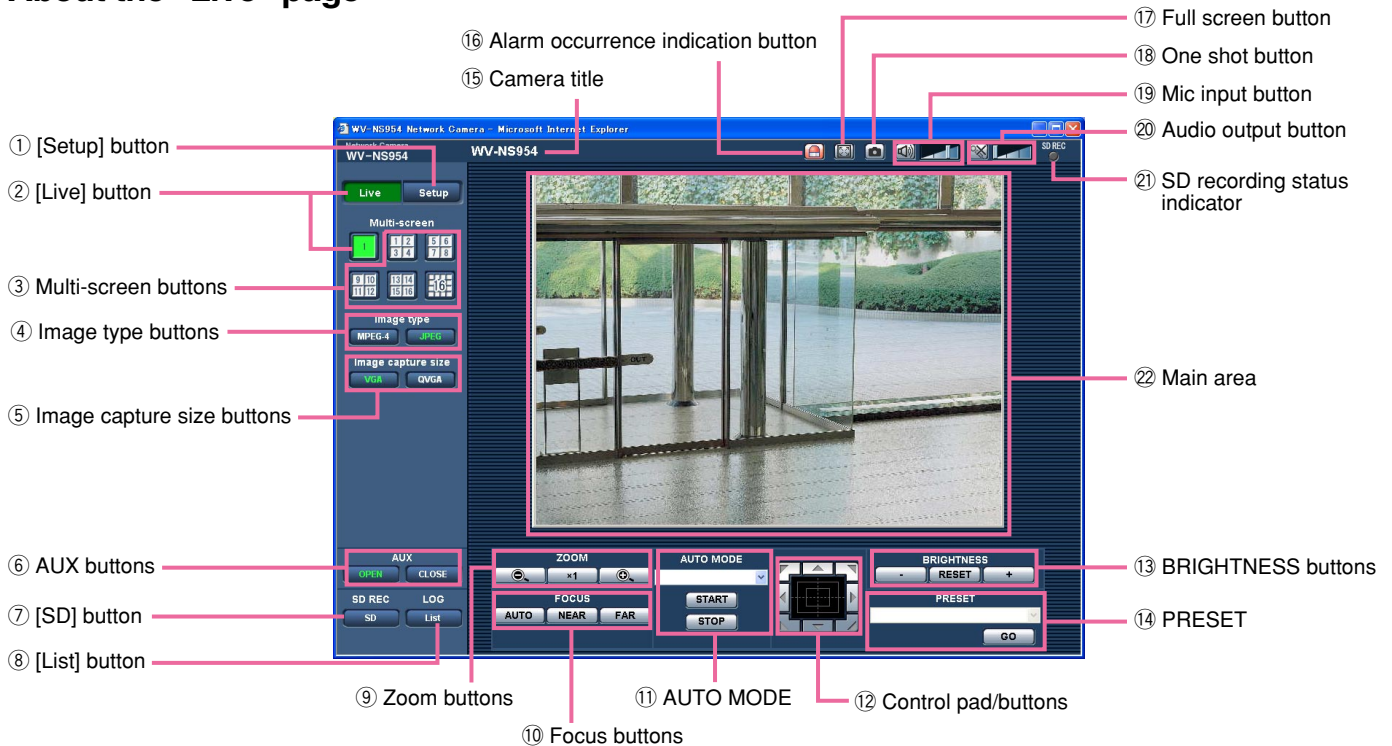
### <Refresh interval (MPEG-4)>

- When "ON" is selected for "MPEG-4 transmission"
  - JPEG (VGA): 5 fps
  - JPEG (QVGA): 10 fps
- When "OFF" is selected for "MPEG-4 transmission"
  - JPEG (VGA or QVGA): 30 fps

The refresh interval may be longer depending on a network environment, PC spec, photographic subject, access traffic, etc.

Refer to the following page for further information about the "Live" page.

## About the "Live" page



① **Setup** **[Setup] button (\*1)**  
Click this button to display the setup menu. The button will turn green and the setup menu will be displayed.

② **Live** **[Live] button**  
Click this button to display the "Live" page. The button will turn green and the "Live" page will be displayed.

③ **Multi-screen buttons**  
Images from multiple cameras can be displayed on a multi-screen by registering cameras on the setup menu. (☞ page 9)

④ **Image type buttons**  
**MPEG-4**: The letters "MPEG-4" on the button will turn green and an MPEG-4 image will be displayed. When "OFF" is selected for "MPEG-4 transmission" on the setup menu, the [MPEG-4] button will not be displayed. (☞ Setup Instructions)

**JPEG**: The letters "JPEG" on the button will turn green and JPEG image will be displayed.


⑤ **Image capture size buttons**  
These buttons will be displayed only when a JPEG image is displayed.


**VGA**: The letters "VGA" will turn green and images in the main area will be displayed in VGA size.

**QVGA**: The letters "QVGA" will turn green and images in the main area will be displayed in QVGA size.

## ⑥ AUX buttons (\*2)

These buttons will be displayed only when "Terminal alarm 3" is selected for "AUX output" on the setup menu. (☞ Setup Instructions)

 : The letters "OPEN" on the button will turn green and the status of AUX connector will be open.

 : The letters "CLOSE" on the button will turn green and the status of the AUX connector will be closed.

## ⑦ [SD] button (manual SD recording button) (\*2)

This button will be displayed only when "Manual" is selected for "Save trigger" on the setup menu.

(☞ Setup Instructions)

Click this button to manually record images on the SD memory card. Refer to page 10 for descriptions of how to manually record images on the SD memory card.


## ⑧ [List] button (\*1)


This button will become available only when "ON" is selected for "Save logs" on the setup menu (☞ Setup Instructions).


When this button is clicked, the log list will be displayed and images saved on the SD memory card can be played.

Refer to page 17 for further information about the log list and of how to play images on the SD memory card.


## ⑨ ZOOM buttons (\*2)


 : Click this button to adjust the zoom ratio to the WIDE side.


 : Click this button to set the zoom ratio to x1.

 : Click this button to adjust the zoom ratio to the TELE side.

## ⑩ Focus buttons (\*2)

 : Click this button to adjust the focus automatically.

 : Click this button to adjust the focus to the NEAR side.

 : Click this button to adjust the focus to the FAR side.

## ⑪ AUTO MODE (\*2)

Select an operation from the pull-down menu and click the [START] button. The selected operation will start.

Click the [STOP] button to stop the operation.

The selected operation will stop when the camera (panning/tilting/zooming/focusing) is operated or when an action that is to be taken according to the settings for "Self return" (☞ Setup Instructions) or for "Camera motion on alarm" (☞ Setup Instructions) starts.

**Auto track:** Automatically tracks an object in the shooting area.

---

### Notes:

- The auto track function works only when the size of the object is larger than 1/48 of the main area and also the contrast ratio between the object and the background is more than 5 %.
- The auto track function of this camera is the simplified function that tracks a moving object in the shooting area. It may be impossible to track a moving object in the following cases:
  - When there are multiple moving objects in the shooting area
  - When the contrast ratio between a moving object and the background is almost none
  - When an object moves quickly
  - When a moving object is too small or too big
  - When the shooting area is dark
  - When there is a flicker in the shooting area
  - When the zoom ratio is set to the TELE side, it may be difficult to obtain accuracy with the auto tracking function. It is recommended to use the auto tracking function with setting the zoom ratio to the WIDE side.

---

**Auto pan:** Automatically pans between the left position and the right position set in advance (☞ Setup Instructions).

Even when the camera is operated for zooming or focusing, the camera continues panning. (However, panning will stop when the zoom button (x1) is clicked.)

**Preset sequence:** Automatically moves to the preset positions (☞ Setup Instructions) orderly (start from the lowest preset position number).

**360 map-shot:** Moves 45° horizontally at a time and repeats 7 times to shoot images of each 45° position (45° x 8 = 360°), and then displays 8 thumbnail images of each 45° position (45° x 8 = 360°) on a newly opened window. When a thumbnail image is clicked, the camera moves to the respective position and live images will be displayed on the "Live" page.



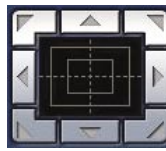
**Preset map-shot:** 8 thumbnail images of the preset position 1-8 (☞ Setup Instructions) will be displayed orderly on a newly displayed window. When a thumbnail image is clicked, the camera moves to the respective position and live images will be displayed on the "Live" page.

**Notes:**

- Do not operate the browser until all the thumbnail images are displayed and the camera returns to the original position (where the camera was when "360° map-shot" or "Preset map-shot" was carried out).
- When "360 map-shot" is carried out while the camera is moving (panning/tilting), images captured while panning/tilting may be displayed as the thumbnail display. In this case, stop the current operation and carry out "360 map-shot" again.
- When "Preset map-shot" is carried out with an unregistered preset position (among preset position 1-8), the thumbnail image of the preset position before the unregistered preset position will be displayed. In this case, the camera will not move when the thumbnail image is clicked. (For example, when preset position 3 is unregistered, the thumbnail image of preset position 2 will be displayed as the thumbnail image of preset position 3. The camera will not move when the thumbnail image of preset position 3 is clicked.)
- The camera will not always returns to the exactly same position where it was before "360° map-shot" or "Preset map-shot" was carried out. (It may sometimes be slightly different.)
- The window on which the thumbnail images are displayed will close when Clicking the following buttons that can switch the camera channel or reload images.  
[Live] button, multi-screen buttons, image type buttons ([MPEG-4]/[JPEG]), image capture size buttons ([VGA]/[QVGA]), full screen button, [Setup] button (☞ pages 5 - 7)  
To display the thumbnail images again, carry out "360° map-shot" or "Preset map-shot" again.

- Patrol 1:** Performs the registered patrol 1 operation.
- Patrol 2:** Performs the registered patrol 2 operation.
- Patrol 3:** Performs the registered patrol 3 operation.
- Patrol 4:** Performs the registered patrol 4 operation.

⑫ **Control pad/buttons (\*2)**



: Left-click on the control pad to adjust the horizontal/vertical position of the camera (panning/tilting). Panning/tilting speed will be faster if a clicked point gets farther from the centre point of the control pad.

It is also possible to pan/tilt the camera by dragging the mouse.  
Zoom and focus can be adjusted by right-clicking. When an upper/lower area of the control pad is right-clicked, the displayed image will be zoomed in/out on. When a left/right area is right-clicked, the focus will be adjusted to the NEAR/FAR side.  
Zoom can also be adjusted using the mouse wheel.

⑬ **BRIGHTNESS buttons (\*2)**



: The displayed image will be darker.



: The adjusted brightness will return to the default brightness.



: Image will be brighter.

**Note:**

When the BRIGHTNESS buttons are clicked while the camera is at the preset position, the adjusted brightness will automatically be registered for the current preset position.

⑭ **PRESET (\*2)**

Select a preset position from the pull-down menu and click the [GO] button. The camera will move to the selected preset position (☞ Setup Instructions). "H" next to the preset position number indicates the home position. When "Home position" is selected, the camera will move to the home position. When the preset ID is registered for a preset position, the registered preset ID will be displayed next to the preset position number.

⑮ **Camera title**

The camera title entered for "Camera title" on the [Basic] tab will be displayed. (☞ Setup Instructions)

⑯  **Alarm occurrence indication button (\*2)**

This button will be displayed and will blink when an alarm has occurred. When this button is clicked, the alarm output terminal will be reset and this button will disappear. (☞ Setup Instructions)

17  **Full screen button**


Images will be displayed on a full screen. To return to the "Live" page, press the [Esc] key. When displaying images on a full screen, the audio transmission button will become unavailable.


18  **One shot button**


Click this button to take a picture (a still picture). The picture will be displayed on a newly opened window. When right-clicking on the displayed image, the pop-up menu will be displayed. The displayed image can be saved on the PC by selecting "Save" from the pop-up menu. When "Print" is selected, printer output is enabled.

19  **Mic input button (\*3)**


Turns on/off the audio reception (hear audio from the camera on a PC). This button will be displayed only when "Mic input", "Interactive (full duplex)" or "Interactive (half duplex)" is selected for "Audio mode" on the setup menu.

( Setup Instructions)


When this button is clicked, the button will turn into the  button and audio from the camera will not be heard.


Audio volume can be adjusted (Low/Middle/High) by moving the volume cursor .

20  **Audio output button (\*3)**

Turns on/off the audio transmission (play audio from the PC on the camera speaker). This button will be displayed only when "Audio output", "Interactive (full duplex)" or "Interactive (half duplex)" is selected for "Audio mode" on the setup menu. ( Setup Instructions)

The button blinks while the audio transmission is being carried out except the case of setting to "Interactive (full duplex)".


When this button is clicked, the button will turn into the  button and audio from the PC will not be heard.

Audio volume can be adjusted (Low/Middle/High) by moving the volume cursor .

---

**Notes:**

- When a user is using the audio transmission function with "Interactive (full duplex)" selected, the receiver button and the transmission button will be inoperable for the other users. When "Interactive (full duplex)" is selected, the transmission button is inoperable for other users.

- Possible duration of audio transmission is up to 5 minutes per transmission. When 5 minutes have passed, the audio transmission function will be canceled and the audio reception function will automatically be turned on. To turn the audio transmission function on, click the transmission button again.
- When the camera is restarted, the adjusted volume level (for both the audio transmission and reception) will return to the level that had been set on the [Audio] tab on the setup menu. ( Setup Instructions)
- Actual volume level will change in three steps even though the volume cursor can be adjusted minutely.


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21  **SD recording status indicator**

The status of the SD recording can be checked with this indicator.


When the SD recording starts, this indicator will light red. When the SD recording stops, this indicator will go off.

This indicator will be displayed only when "Manual" is selected for "Save trigger" on the setup menu.

( Setup Instructions)

22 **Main area (\*2)**

Images from the camera will be displayed in this area.

The current time and date will be displayed at the selected position in the time and date format set on the setup menu. ( Setup Instructions).

Click a desired point in the main area on the "Live" page that is to be the centre of the angle of view.

The camera moves to adjust the position in order to set the clicked point as the centre.

When selecting an area in the main area by dragging the mouse, the selected area will be located at the centre of the main area.

In this case, the zoom ratio will be adjusted automatically.

Zoom can be adjusted using the mouse wheel.

---

**Notes:**

- When the displayed image is being zoomed in more than 30x, the clicked point may not always be located at the centre of the main area.
- When the mouse is dragged to move the camera beyond its operable range, the camera will move to the requested direction and will stop at the end of the operable range. Then, the zoom ratio of the displayed image will automatically be adjusted.



- When MPEG-4 image is being displayed, it may take time to display the frame border indicating an area selected by dragging the mouse.

---

**Important:**

When the camera position is moved inadvertently while the power of the camera is on, restart the camera (restart) or refresh the camera position (position refresh) on the [Initialization] tab of the "Maintenance" page (☞ Setup Instructions).

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- \*1 Only operable by users whose access level is "1. Administrator"
- \*2 Only operable by users whose access level is "1. Administrator" or "2. Camera control" when "ON" is selected for "User authentication" (☞ Setup Instructions).

- \*3 Operable by users who belong to the access level selected for "Authentication" on the [Audio] tab of the "Camera setup" page (☞ Setup Instructions).

Refer to Setup Instructions for further information about the access level.

---

**Note:**

When operated by a lower access level user, images displayed on the screen may be changed temporarily. This does not affect operation of the camera.

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## Monitor images from multiple cameras

Images from multiple cameras can be displayed on a multi-screen. Images from 4 cameras (up to 16 cameras) can be displayed simultaneously. To display images on a multi-screen, it is necessary to register cameras in advance. 4 cameras can be registered as a group and up to 4 groups (16 cameras) can be registered. (☞ Setup Instructions)

---

**Important:**

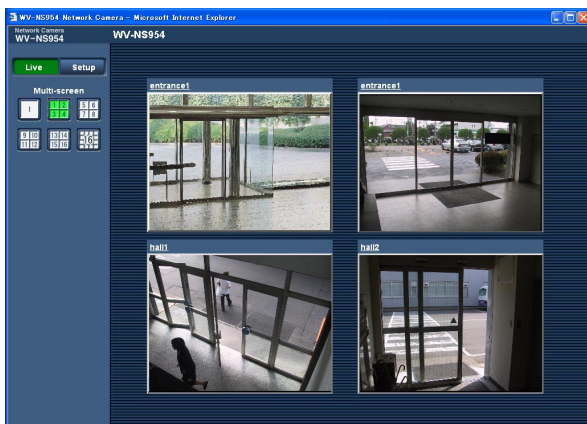
- When simultaneously displaying images from 16 cameras on a multi-screen, panning, tilting and zooming are unavailable.
  - Only JPEG images can be displayed on a multi-screen. Audio will not be heard.
  - When the power is turned off or the LAN cable is disconnected while displaying images, displaying images on a multi-screen from the "Live" page will become unavailable.
  - When displaying images on a multi-screen, panning/tilting/zooming by dragging the mouse are unavailable.
- 

**Step 1**

Click the desired [Multi-screen] button.

→ Images from the registered cameras will be displayed on a selected multi-screen (screen can be split up to 16 areas). The following are instructions when displaying on a 4-split screen.

- ① To display images on a single screen, click the [Live] button.
- ② Click a camera title. Live images from the camera corresponding to the clicked camera title will be displayed on the "Live" page of the newly opened window.

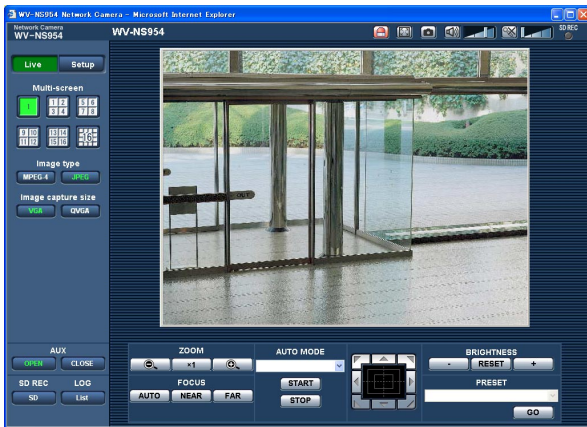


# Record images on the SD memory card manually

Images displayed on the "Live" page can be recorded on the SD memory card manually. This button is operable only when "Manual" is selected for "Save trigger" on the setup menu. (☞ Setup Instructions)  
Images recorded on the SD memory card can be copied onto the PC. (☞ Setup Instructions)

## Step 1

Display the "Live" page. (☞ page 5)



## Step 4

Click the [STOP] button to stop saving images on the SD memory card.

## Step 5

Click the [CLOSE] button to close the window.

## Step 2

Click the [SD] button in the "SD memory card" box.  
→ The SD recording window will open.



## Step 3

Click the [START] button to start recording images on the SD memory card. The SD recording status indicator will light red while images are being recorded on the SD memory card. The save interval (frame rate) can be configured on the [SD memory card] tab of the "Basic setup" page. (☞ Setup Instructions)

# Action at an alarm occurrence

The alarm action will be performed when the following alarms occur.

## Alarm type

**Terminal alarm:** When connecting an alarm device such as a sensor to the EXT I/O connector 1-3 of the camera, the alarm action (camera action at an alarm occurrence) will be performed when the connected alarm device is activated. Alarm action to be performed differs depending on the settings configured in the "Camera motion on alarm" section of the [Alarm] tab. (☞ Setup Instructions)

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

\* VMD stands for "Video Motion Detection".

**Command alarm:** When a Panasonic alarm protocol (☞ Setup Instructions) is received from the connected device via a network, the alarm action will be performed.

## Action at an alarm occurrence

**Display the [Alarm occurrence indication] button on the "Live" page. (☞ page 7)**

The alarm occurrence indication button will be displayed on the "Live" page at an alarm occurrence.

---

### Important:

When "Polling (30 sec)" is selected for "Alarm status update mode" (☞ Setup Instructions), the alarm occurrence indication button will be refreshed in 30-second intervals. For this reason, it may take a maximum of 30 seconds until the alarm occurrence indication button is displayed on the "Live" page at an alarm occurrence.

---

### Notify of alarm occurrences to the device connected to the alarm connector

It is possible to output signals from the alarm connector on the rear of the camera and sound the buzzer when an alarm occurs. The settings for the alarm output can be configured in the "Alarm output terminal" section of the [Alarm] tab of the "Alarm setup" page. (☞ Setup Instructions)

### Transmit an image onto a server automatically

An alarm image can be transmitted at an alarm occurrence to the server designated in advance. The settings required to transmit an alarm image to a server can be configured in the "Alarm image setup" section of the [Alarm] tab of the "Alarm setup" page (☞ Setup Instructions) and the [FTP] tab of the "Server setup" page (☞ Setup Instructions).

---

### Important:

Select "FTP error" for "Save trigger" on the [SD memory card] tab when using the SD memory card. When "Alarm input" or "Manual" is selected for "Save trigger", an alarm image will not be transmitted at an alarm occurrence to the FTP server.

---

### Notify of alarm occurrences by e-mail

Alarm mail (alarm occurrence notification) can be sent at an alarm occurrence to the e-mail addresses registered in advance. Up to 4 addresses can be registered as recipients of the alarm mail. An alarm image (still picture) can be sent with the alarm mail as an attached file. The settings for alarm mail can be configured in the "E-mail notification setup" section of the [Notification] tab of the "Alarm setup" page (☞ Setup Instructions) and the [Mail] tab of the "Server setup" page (☞ Setup Instructions).

### Notify of alarm occurrences to the designated IP addresses (Panasonic alarm protocol)

This function is available only when a Panasonic device, such as the network disk recorder, is connected to the system. When "ON" is selected for "Panasonic alarm protocol", the connected Panasonic device will be notified that the camera is in the alarm state. The settings for Panasonic alarm protocol can be configured in the "Panasonic alarm protocol" section of the [Notification] tab of the "Alarm setup" page. (☞ Setup Instructions)

# Transmit images onto an FTP server

---

Images can be transmitted to an FTP server. By configuring the following settings, transmission of images captured at an alarm occurrence or captured at a designated interval to an FTP server will become available.

---

**Important:**

- When using this function, set the user name and the password to access the FTP server to restrict users who can log into the FTP server.
  - To transmit images to the FTP server, select "Not use" for "SD memory card", or select "FTP error" for "Save trigger" on the [SD memory card] tab of the "Basic setup" page.
- 

## Transmit an alarm image at an alarm occurrence (Alarm image transmission)

An alarm image can be transmitted at an alarm occurrence to the FTP server. To transmit alarm images to an FTP server, it is necessary to configure the settings in advance.

The settings for the FTP server can be configured on the [FTP] tab of the "Server setup" page. (📖 Setup Instructions)  
The alarm image transmission function can be turned on/off in the "Alarm image setup" section of the [Alarm] tab of the "Alarm setup" page. (📖 Setup Instructions)

---

**Note:**

Depending on the network traffic, the number of the transmitted images may not reach the set number of images to be transmitted.

---

## Transmit images at a designated interval or period (FTP periodic transmission)

Images can be transmitted at a designated interval or period. To transmit images at a designated interval or period, it is necessary to configure the settings in advance.

The settings for the FTP server to which images are to be transmitted can be configured on the [FTP] tab of the "Server setup" page. (📖 Setup Instructions)

On the [FTP] tab of the "Network setup" page (📖 Setup Instructions), the FTP periodic transmission function can be turned on/off, and the settings relating to images to be transmitted and the settings relating to schedules (periods) can be configured.

---

**Notes:**

- Depending on the network line speed or the network traffic, images may not be transmitted at the exact designated interval or period.
  - When "ON" is selected for both the alarm image transmission function and the FTP periodic transmission function, the alarm image transmission function will be given priority over the FTP periodic transmission function. For this reason, images may not be transmitted at the exact designated interval or period if alarms occur frequently.
-

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## Save images on the SD memory card when images fail to transmit using the FTP periodic transmission function

Images that have failed to transmit using the FTP periodic transmission can be saved automatically on the SD memory card. Images saved on the SD memory card can be obtained from the [SD memory card] tab of the "Basic setup" page. (📖 Setup Instructions)

To use the SD memory recording function featured in Panasonic's network disk recorder, select "OFF" for "FTP periodic transmission" (📖 Setup Instructions) and "FTP error" for "Save trigger" (📖 Setup Instructions).

We make no guarantee for any damages of files on the SD memory card incurred by malfunction or error occurrence in files saved in the SD memory card regardless of what the cause may be.

### Save images on the SD memory card

By configuring the following settings, saving images that have failed to transmit to the FTP server using the FTP periodic transmission function will become available.

**SD memory card:** Use (📖 Setup Instructions)

**Save trigger:** FTP error (📖 Setup Instructions)

# Display the log list

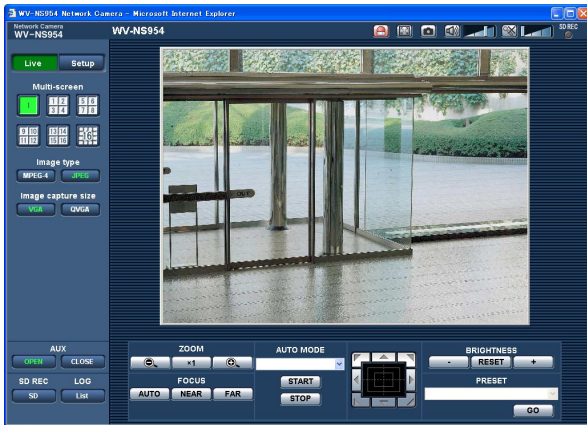
The following logs can be displayed in list form.

- Alarm log: Logs of the alarm occurrences such as time and date of the alarm occurrences and the alarm type will be displayed.
- Manual log: Logs filed when images have been recorded on the SD memory card will be displayed.
- FTP error log: Logs filed when the FTP periodic 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 setup" page (☞ Setup Instructions) respectively.

## Step 1

Display the "Live" page. (☞ page 4)



## Step 2

Click the [List] button.

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



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### Important:

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

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## Step 3

Click the desired log type listed below "LOG" to display the log list.

→ The log list of the selected log type will be displayed.

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### Note:

When saved images are on the SD memory card, clicking the time and date of the alarm occurrence will display the respective images. (☞ page 17)

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## Log list displayed in the log list window

### [Number of the listed logs]

Total number of the logs of the selected log type and a number of the log being displayed on the top of the log list will be displayed.

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#### Note:

Enter the desired log number and press the [Enter] key on the keyboard. The log of the designated number will be displayed on the top of the log list.

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### [TOP] button

Click this button to display the log listed on the top of the currently displayed log list.

### [Prev Page] button

Click this button to display the previous page of the log list.

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#### Note:

When the mouse button is held down while placing the mouse pointer on the [Prev Page] button, the displayed log number will be decremented.

When the mouse button is released, the decrement of the log number will stop and the log number displayed at the moment when the mouse button is released will be the top of the currently displayed page.

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### [Next Page] button

Click this button to display the next page of the log list.

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#### Note:

When the mouse button is held down while placing the mouse pointer on the [Next Page] button, the displayed log number will be incremented.

When the mouse button is released, the increment of the log number will stop and the log number displayed at the moment when the mouse button is released will be the top of the currently displayed page.

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### [LAST] button

Click this button to display the last log of the currently displayed log list.

### [Time & date]

Time and date when each log has been filed will be displayed.

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#### Notes:

- When "OFF" is selected for "Time display" (☰ Setup Instructions), time and date of alarm occurrence will be displayed in 24-hour format.

- **Alarm log:** Alarm occurrence time and date will be filed as a log.

**Manual log:** Time and date when recording of images onto the SD memory card started will be filed as a log. When recording are performed sequentially, logs will be filed every one hour.

**FTP error log:** Logs will be filed every one hour.

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### [EVENT]

The event type will be displayed.

The event types will be displayed only when displaying the alarm log list.

**TRM1:** Alarm by terminal alarm 1

**TRM2:** Alarm by terminal alarm 2

**TRM3:** Alarm by terminal alarm 3

**VMD:** Alarm by VMD alarm

**COM:** Alarm by command alarm

### [SD memory card]

Total capacity and remaining space of the SD memory card will be displayed.

There is no difference between this item and "SD card memory" on the [SD memory card] tab. (The same contents will be displayed.) (☰ Setup Instructions)

### [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.

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#### Important:

- When many images are saved on the SD memory card, it will take some time to complete the deletion.
- In the process of the deletion, only logs will be saved, and it is impossible to save images newly.
- 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.

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**[Download] button**

Click this button to download all logs of the selected log list as a file onto the PC.

**[CLOSE] button**

Click this button to close the log list window.

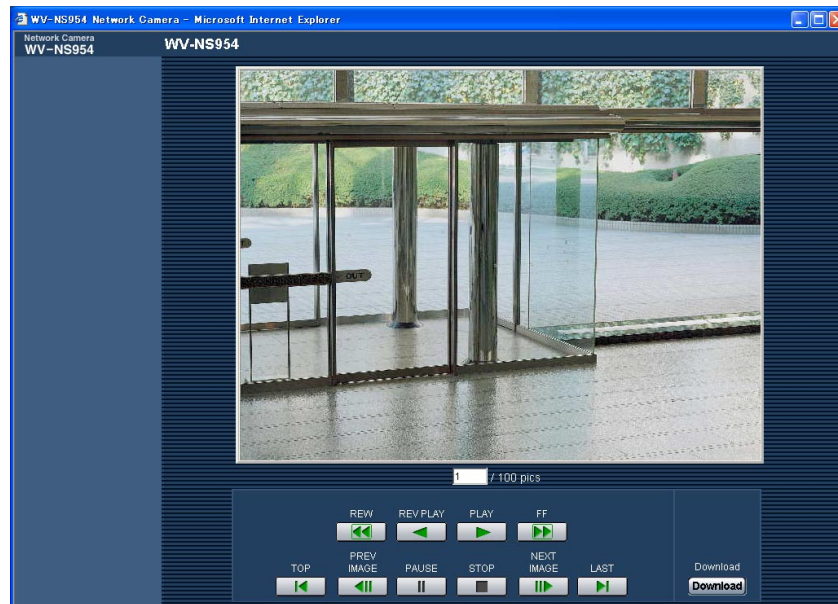
# Playback of images saved on the SD memory card

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

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## 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 size, the images will be played in VGA size on the "playback" page. Therefore, images may look coarse on the "playback" window.
  - 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 "Interval" setting on the [FTP] tab (☰ Setup Instructions) is "1 min" or less.
  - Before removing the SD memory card, make sure that "Not use" is selected for "SD memory card" (☰ Setup Instructions).
  - Playback/reverse playback will be performed without being affected by the "Frame rate" settings of images recorded on the SD memory card.
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## About the "playback" page

### [Number of the listed images]

When clicking a time and date listed on the log list window, total number of images associated with the clicked time and date, and the number of the currently displayed image will be displayed.

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### Note:

Enter the desired number of image and press the [Enter] key on the keyboard. The image of the designated number will be displayed.

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### [PLAY] button

When this button is clicked, images will be played in sequential order.

### [REV PLAY] button

Images will be played in reverse sequential order.

### [PAUSE] button

Playback will be paused when this button is clicked during playback. Playback will resume when this button is clicked during pausing.

### [STOP] button

Playback will stop and the "playback" window will turn to the "live" page.

### [NEXT IMAGE] button

The next frame will be displayed and paused when this button is clicked during playback.

Each time this button is clicked during pausing, the frame next to the currently displayed frame will be displayed.

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#### Note:

When the mouse button is being held while placing the mouse pointer on this button, the displayed image number will be incremented.

When the mouse button is released, the increment of the image number will stop and the image number displayed at the moment when the mouse button is released will be displayed.

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### [PREV IMAGE] button

The previous frame will be displayed and paused when this button is clicked during playback.

Each time this button is clicked during pausing, the frame previous to the currently displayed frame will be displayed.

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#### Note:

When the mouse button is held down while the mouse pointer is on this button, the image number will be decremented.

When the mouse button is released, the decrement of the image number will stop and the image number displayed at the moment when the mouse button is released will be displayed.

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### [FF]/[REW] buttons

Fast playback/fast reverse playback will be performed. Each time the button is clicked, the playback speed will change.

When the [PLAY]/[REV PLAY] button is clicked during fast playback/fast reverse playback, the playback speed will be x1.

### [TOP] button

The first image will be displayed.

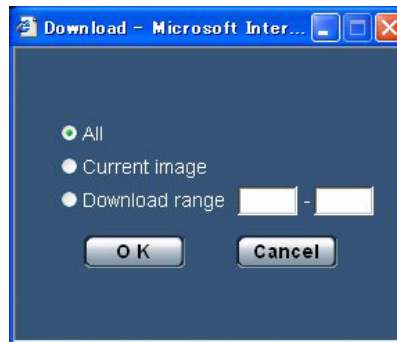
### [LAST] button

The last image will be displayed.

### [Download] button

The selected image will be downloaded onto the PC. Before downloading images, designate the destination directory in advance. (☞ Setup Instructions)

The following window will be displayed when the [Download] button is clicked.



**All:** All images saved at the selected time and date will be downloaded.

**Current image:** Only the currently displayed image will be downloaded.

**Download range:** Images in the designated range of number of images will be downloaded.

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#### Notes:

- When the [Cancel] button is clicked in the process of the download, the download will be canceled. In this case, images already downloaded before clicking the [Cancel] button will be saved on the destination directory.
  - Even when lower-case letters are used for "File name" (☞ Setup Instructions) that is used for the name of the image to be saved on the SD memory card manually or by an alarm input, the file name of downloaded images will be capitalized in uppercase when they are downloaded onto the PC.
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# About the network security of the camera

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## Equipped security functions

The following security functions are featured in this camera.

① **Access restrictions by the host authentication and the user authentication**

It is possible to restrict users from accessing the camera by setting the host authentication and/or the user authentication to "ON". (📖 Setup Instructions)

② **Access restrictions by changing the HTTP port**

It is possible to prevent illegal access such as port scanning, etc. by changing the HTTP port number. (📖 Setup Instructions)

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**Note:**

When user authentication (authentication error) has failed to pass 8 times within 30 seconds using the same IP address (PC), access to the camera will be denied for a while.

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**Important:**

Design and enhance security countermeasures to prevent leakage of information such as image data, authentication information (user name and password), alarm mail information, FTP server information, DDNS server information, etc.

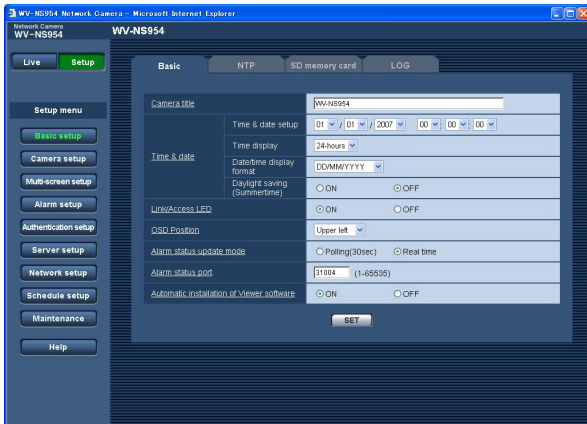
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# Viewing Help

If you want to know anything about operation or setup methods on screen, display the "Help" screen.

## Displaying the Help screen

### Setup screen



#### Step 1

Click the [Setup] button.

→ The setup screen is displayed.

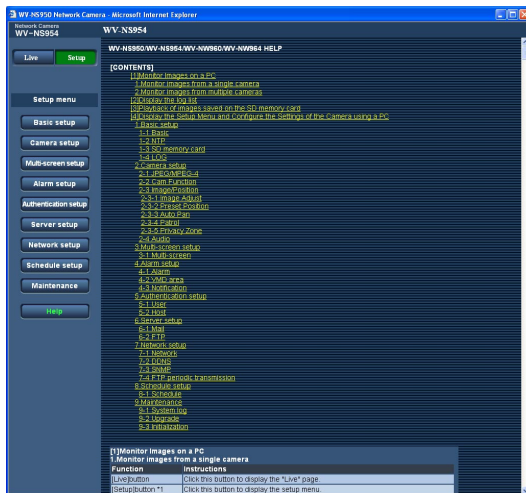
Clicking an underlined item will display the "Help" pop-window. If it is possible to configure the settings while displaying the "Help" pop-up window.

#### Step 2

Click the [Help] button.

→ The "Help" screen is displayed.

### Help screen



#### Step 3

Click the desired item to display a detailed explanation for the corresponding operation.



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Importer's name and address to follow EU rules:

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