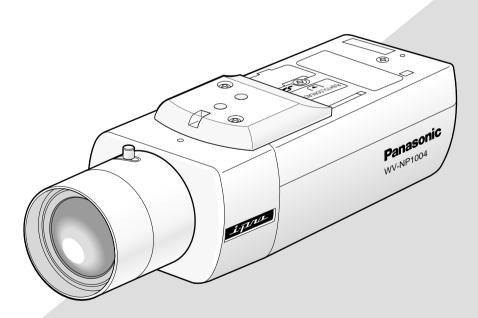# Panasonic

Network camera

Operating Instructions

Model Nos. **WV-NP1000**
WV-NP1004

SD™

(Lens is option.)

The illustration above is of the WV-NP1004.

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

The model numbers in these Operating Instructions are given without suffix.

Contents

Preface

About these operating instructions

There are 2 sets of operating instructions for the WV-NP1000/WV-NP1004 as follows.
- Operating Instructions (book)
- Operating Instructions (PDF, these operating instructions)

These operating instructions contain descriptions of how to operate this product using a PC via a network and of how to configure the settings. These operating instructions also contain descriptions of how to display the SETUP menu on the video monitor connected to the VIDEO OUT connector of the camera and of how to configure the settings on the SETUP menu using the operation buttons on the side of the camera.

Refer to the operating instructions (book) for descriptions of how to install this product and of how to connect to a network.

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

Note:
The images of the setup menus in these operating instructions are of the WV-NP1004.

Trademarks and registered trademarks

- Adobe, Adobe logos, and Acrobat are registered trademarks of Adobe Systems Incorporated in the U.S. and/ or other countries.
- SD logo is a trademark.
- Other names of companies and products contained in these operating instructions may be trademarks or registered trademarks of their respective owners.

Monitoring Images on a PC

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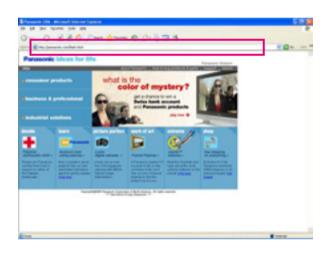
Monitor images from a single camera

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)
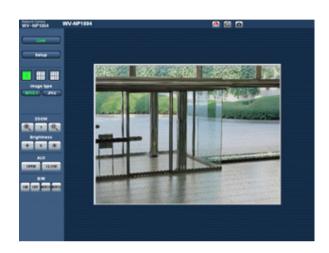
Important:
- When the HTTP port number is changed from "80", enter the IP address of the camera after "http://", for example "http://192.168.0.11".
- Configure the web browser to not use the proxy server. Refer to the network administrator when using the proxy server.

Step 3

Press the [Enter] key on the keyboard.
→ Live images will be displayed.

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
  To enhance the security, change the password for the user "admin". It is recommended to change this password periodically.
- When "Unicast" is selected for "Transmission type" (☞ page 24), up to 8 users can access the camera concurrently. When 8 users have been concurrently accessing already, the access limit message will be displayed for users who accessed subsequently.
- When "ON" is selected for "MPEG-4 transmission" (☞ page 24), MPEG-4 image will be displayed. When "OFF" is select, JPEG image will be displayed. It is possible to display JPEG image even when "ON" is selected for "MPEG-4 transmission". In this case, the refresh interval will be limited. The refresh interval may be longer depending on a network environment, PC spec, photographic subject, access traffic, etc.
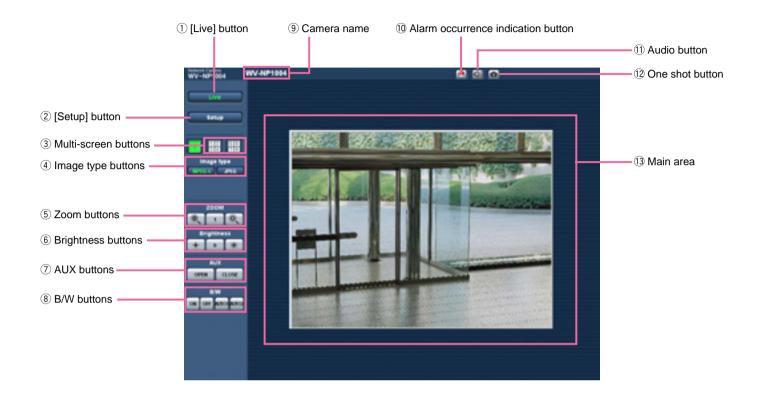
Refer to the following page for further information about the "Live" page.

About the "Live" page

① [Live] button　　⑨ Camera name　　⑩ Alarm occurrence indication button

⑪ Audio button

⑫ One shot button

② [Setup] button

③ Multi-screen buttons

④ Image type buttons

⑬ Main area

⑤ Zoom buttons

⑥ Brightness buttons

⑦ AUX buttons

⑧ B/W buttons

① **[Live] button**
Click this button to display the "Live" page. Refer to page 7 for descriptions of how to operate the "Live" page.

② **[Setup] button *1**
Click this button to display the setup menu.

③ **Multi-screen buttons**
Click the desired multiscreen (1-4 or 5-8) button to display images on a multiscreen.

④ **Image type buttons**
Click the desired button to change the image type to be displayed. The selected button will turn green.

⑤ **ZOOM buttons *2**
Click the desire button to zoom in/out the displayed image. To return the zoomed image to the original size, click the [1] button.

⑥ **Brightness buttons *2**
Adjust the brightness of images.

⑦ **AUX buttons *2**
Click the desired button to open/close the AUX connector.

⑧ **B/W buttons *2**
Click the desired button to switch colour of the displayed images between colour and B/W.

⑨ **Camera name**
The set camera name will be displayed.

⑩ **Alarm occurrence indication button *2**
This button will be displayed when an alarm occurred. When this button is clicked, the alarm output connector will be reset and this button will disappear. (☞ page 30)

⑪ **Audio button *3**
Click this button to turn on/off audio.

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⑫ **One shot button**
Click this button to take a picture (a still picture). The picture will be displayed on a newly opened window.

⑬ **Main area**
Images from the camera will be displayed in this area.

*1 Operable by only users whose access level is "1. Administrator"
*2 Operable by only users whose access level is "1. Administrator" or "2. Camera control" when "ON" is selected for "User authentication" (☞ page 35).
*3 The access level to operate this button can be changed by the settings of "Authentication" on the "Audio" tab. (☞ page 26)

Refer to page 35 for further information about the access level.

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Available operations when live images are displayed

*1 Operable by only users whose access level is "1. Administrator"
*2 Operable by only users whose access level is "1. Administrator" or "2. Camera control" when "ON" is selected for "User authentication" (☞ page 35).
*3 The access level to operate this button can be changed by the settings of "Authentication" on the "Audio" tab. (☞ page 26)
Refer to page 35 for further information about the access level.

Operation		Description
Display the setup menu *1	Setup	The letters "Setup" on the button will turn green and the setup menu will be displayed. To return to the "Live" page, click the [Live] button.
Display images on a multi-screen		Images from multiple cameras can be displayed on a multi-screen by registering cameras on the setup menu. (☞ page 9)
Display MPEG-4 image	MPEG-4	The letters "MPEG-4" on the button will turn green and 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. (☞ page 24)
Display JPEG image	JPEG	The letters "JPEG" on the button will turn green and JPEG image will be displayed.
Zoom in/out of image *2		The displayed image will be zoomed out.
	1	The zoomed image will return to the original size.
		The displayed image will be zoomed in.
Change brightness *2		Image will be darker.
	0	Image will be displayed with the standard brightness.
		Image will be brighter.
Open/close the AUX connector *2	OPEN	The AUX connector will open.
	CLOSE	The AUX connector will close.
Switch colour of the displayed images between colour and B/W *2	ON	Images will be displayed in B/W (black and white).
	OFF	Images will be displayed in colour.

Operation		Description
	AUTO1	Images will be automatically switched between colour and B/W according to brightness (illumination).
	AUTO2	Click this button when using the camera in the nighttime with near-infra red rays as light source.
Acknowledge alarm occurrences *2		This button will be displayed when an alarm occurred. When this button is clicked, the alarm output connector will be reset and this button will disappear. When "Latch" is selected for "Alarm output setup", the alarm output connector will be reset by clicking this button. (☞ page 30)
Turn on/off audio *3		When this button is clicked, the button will turn into the button and audio will not be heard.
		When this button is clicked, the button will turn into the button and audio will be heard.
	* The [Audio] button will be displayed only when "ON" is selected for "Mic mode" on the setup menu. (☞ page 26)	
Display a still picture (one shot)		When this button is clicked, a new window will open and the still picture (one shot) displayed on the "Live" page will be displayed on it. To save this picture on a PC, right-click on the image and select "Save image as…" on the displayed pop-up menu.

Monitor images from multiple cameras

Images from multiple cameras can be displayed on a multiscreen. Images from up to 4 cameras can be displayed simultaneously. To display images on a multiscreen, it is necessary to register cameras in advance. 4 cameras can be registered as a group and up to 2 groups (8 cameras) can be registered. (☞ page 27)
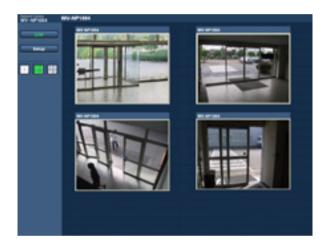
Important:
Select "OFF" for both the user authentication and the host authentication of the camera to be registered. (☞ pages 35 and 36)

Step 1

Click the [Multiscreen] button.

→ Images from the registered cameras will be displayed on a 4-split screen.

(1) To display images on a single screen, click the the [1] button or [Live] button.

(2) Click a camera name. Live images from the camera corresponding to the clicked camera name will be displayed on the "Live" page of the newly opened window.

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Action at an Alarm Occurrence

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

Alarm type

Terminal alarm: When connecting an alarm device such as a sensor to the alarm connector on the rear of the camera, the alarm action will be performed when the connected alarm device activated.

VMD alarm: When a motion is detected in the set VMD area, the alarm action will be performed. * VMD stands for "Video Motion Detection".

Command alarm: When received a command alarm from the connected device via a network, the alarm action will be performed.

Scene change detection alarm: When the camera lens is covered by something such as a cloth, or when the shooting direction of the camera is moved, the alarm action will be performed.

Action at an alarm occurrence

Display the [Alarm occurrence indication] button on the "Live" page. (☞ page 5)
The [Alarm occurrence indication] button will be displayed on the "Live" page at an alarm occurrence.

Note:
The [Alarm occurrence indication] button will be refreshed in 30 seconds 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 on the [Alarm] tab of the "Alarm setup" page. (☞ page 28)

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 alarm image to a server can be configured on the [Alarm] tab of the "Alarm setup" page (☞ page 28) and the [FTP] tab of the "Server setup" page (☞ page 38).

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. The settings for alarm mail can be configured on the [Notification] tab of the "Alarm setup" page (☞ page 33) and the [Mail] tab of the "Server setup" page ((☞ page 37).

Notify of alarm occurrences to the designated IP addresses (Panasonic alarm protocol)
This function is available only when 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 on the [Notification] tab of the "Alarm setup" page. (☞ page 33)

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 password to restrict users who can log into the FTP server.

Transmit an alarm image at an alarm occurrence (Alarm image FTP 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. (☞ page 38)
The alarm image FTP transmission function can be turned on/off on the [Alarm] tab of the "Alarm setup" page.
(☞ page 28)

Note:
Depending on the network traffic, 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 designate interval or period, 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. (☞ page 38)
On the [Alarm] tab of the "Alarm setup" page, 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.
(☞ page 29)

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 of the alarm image FTP transmission function and the FTP periodic transmission function, the alarm image FTP 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.

Save images on the SD memory card when failed to transmit images by the FTP periodic transmission function

Images failed to transmit by the FTP periodic transmission can be saved automatically on the SD memory card. To obtain the images saved on the SD memory card, use the Windows command prompt or FTP client software. The obtained images can be browsed on a PC.

Note:
We make no guarantee for any damages of files on the SD memory card incurred by mulfunction 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 which had been failed to transmit to the FTP server using the FTP periodic transmission function will become available.
About SD memory card: Use (☞ page 22)
File name: With time and date (☞ page 43)

Obtain images on the SD memory card

Access the camera using the Windows command prompt or FTP client software.
→ The window with the user name and password entry fields will be displayed.

Enter the user name whose access level is "1. Administrator" and its password.
→ Log in the camera.

Note:
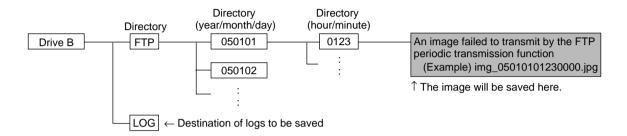The default user name with the access level "1. Administrator" and its password are as follows.
User Name: admin
Password: 12345

Move the current directory to drive B and obtain images.

Notes:
• When logging in the camera, the current directory will be drive D. Images on the SD memory card can be found in the "FTP" directory under drive B. Move to the "FTP" directory and obtain images.
  <Directory structure of drive B>

```
                      Directory        Directory
                      (year/month/day) (hour/minute)
          Directory
Drive B ──┤ FTP ├──── 050101 ──────── 0123 ────── An image failed to transmit by the FTP
                                       :           periodic transmission function
                      050102           :             (Example) img_05010101230000.jpg
                      :                             ↑ The image will be saved here.
                      :
          LOG ← Destination of logs to be saved
```

Example: To obtain the image (img_05010101230000.jpg) using the Windows command prompt
  1. Enter "c:\>ftp 192.168.0.10" and press the [Enter] key.
     → FTP connection will be established with "192.168.0.10".

  2. Log in by entering the user name and the password.

  3. Enter "ftp>cd B:\FTP\050101\0123" and press the [Enter] key.
     → The current directory will be "B:\FTP\050101\0123".

  4. Enter "ftp>bin" and press the [Enter] key.
     → The transfer mode will be set to the binary mode.

  5. Enter "ftp>get img_05010101230000.jpg" and press the [Enter] key.
     → The image will be obtained.

  6. Log out by entering "ftp>bye" and press the [Enter] key.

• It is possible to delete images on the SD memory card using the Windows command prompt, etc.

About the Network Security of the Camera

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. (☞ pages 35 and 36)

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.
(☞ page 40)

Note:
When failed to pass the user authentication (authentication error) using the same IP address (PC) for a certain times within 5 minutes, access to the camera will be denied for a while.

Display the Setup Menu and Configure the Settings of the Camera Using a PC

The following are descriptions of how to configure the settings on the SETUP menu.
The setup menu is operable by only users whose access level is "1. Administrator".

How to display the setup menu

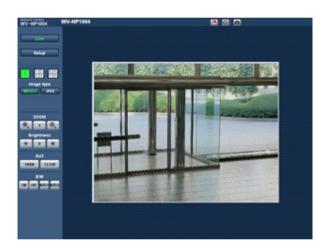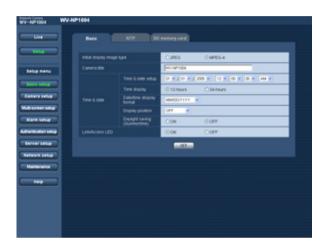**Step 1**

Display the "Live" page. (☞ page 5)

Step 2

Click the [Setup] button on the "Live" page.
→ The window with the user name and password entry fields will be displayed.

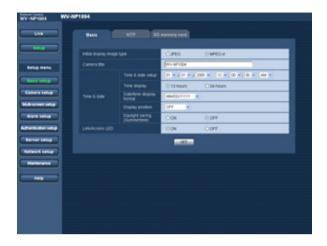Refer to the next page for further information about this menu.

Step 3

Click the [OK] button after entering the user name and the password.

→ Click this button to display the setup menu.

How to operate the setup menu

When completing the setting items in field A, click the [SET] button below field A (A-1). The edited setting items in field A will not be applied unless the [SET] button below field A (A-1) is clicked.
In the same manner above, click the [SET] button below field B (B-1) when completing the setting items in field B.

Step 1

Click the desired button in the frame on the left of the window to display the respective setup menu.
When there are tabs at the top of the setup page displayed in the frame on the right of the window, click the desired tab to display and configure the setting items relating to the name of the tab.

Step 2

Complete each setting item displayed in the frame on the right of the window.
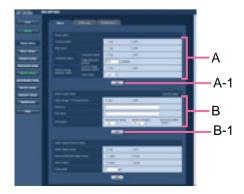
Step 3

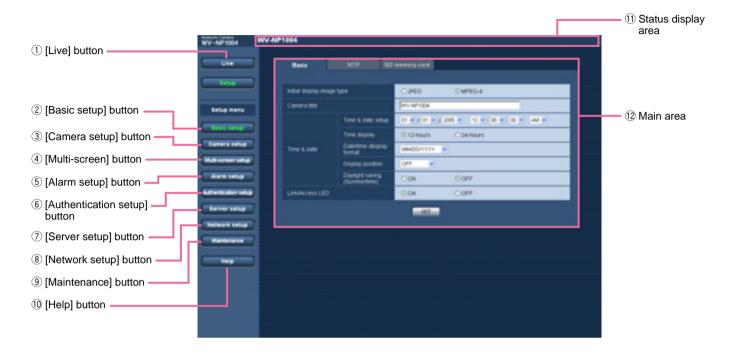After completing each setting item, click the [SET] button to apply them.

Note:
When there are two [SET] buttons or more on the page, click the respective button to the edited setting item.
<Example>

About the operation window

① [Live] button

② [Basic setup] button

③ [Camera setup] button

④ [Multi-screen] button

⑤ [Alarm setup] button

⑥ [Authentication setup] button

⑦ [Server setup] button

⑧ [Network setup] button

⑨ [Maintenance] button

⑩ [Help] button

⑪ Status display area

⑫ Main area

---

① **Live** **[Live] button**
Click this button to display the "Live" page.

② **Basic setup** **[Basic setup] button**
Click this button to display the "Basic setup" page.
The basic settings such as time and date, camera
name, and the settings relating to the NTP server
and the SD memory card can be configured on the
"Basic setup" page. Refer to page 19 for further
information.

③ **Camera setup** **[Camera setup] button**
Click this button to display the "Camera setup" page.
The settings relating images and audio such as
brightness and image quality can configured on this
page. Refer to page 23 for further information.

④ **Multi-screen setup** **[Multi-screen] button**
Click this button to display the "Multi-screen setup"
page. The cameras to be used for the multi-screen
display can be registered on the "Multi-screen setup"
page. Refer to page 27 for further information.

⑤ **Alarm setup** **[Alarm setup] button**
Click this button to display the "Alarm setup" page.
The settings relating to alarm occurrences such as
settings for the alarm action at an alarm occurrence,
the alarm occurrence notification, and the VMD area
settings can be configured on the "Alarm setup"
page. Refer to page 28 for further information.

⑥ **Authentication setup** **[Authentication setup] button**
Click this button to display the "Authentication setup"
page. The settings relating to the authentication
such as users and PCs restrictions for accessing the
camera can be configured on the "Authentication
setup" page. Refer to page 35 for further
information.

⑦ **Server setup** **[Server setup] button**
Click this button to display the "Server setup" page.
The settings relating to the mail server and the FTP
server to which the camera accesses can be
configured on the "Server setup" page. Refer to
page 37 for further information.

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⑧ **Network setup** **[Network setup] button**

Click this button to display the "Network setup" page. The network settings and the settings relating to DDNS (Dynamic DNS), SNMP (Simple Network management Protocol) and FTP (File Transfer Protocol) can be configured on the "Network setup" page. Refer to page 39 for further information.

⑨ **Maintenance** **[Maintenance] button**

Click this button to display the "Maintenance" page. System log check, firmware upgrade and initialization of the setup menu can be performed on the "Maintenance" page. Refer to page 46 for further information.

⑩ **Help** **[Help] button**

Click this button to display the "Help" page.

⑪ **Status display area**

The name of the camera whose settings currently being configured will be displayed.

⑫ **Main area**

Pages of each setup menu will be displayed. There are tabs for some setup menus.

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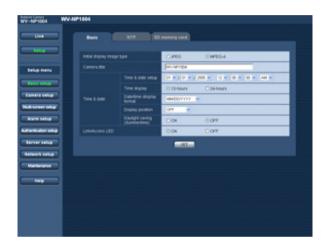# Configure the basic settings of the camera [Basic setup]

The basic settings such as time and date and camera name, and the settings relating to the NTP server and the SD memory card can be configured on the "Basic setup" page.
The "Basic setup" page has 3 tabs of the [Basic] tab, the [NTP] tab and the [SD memory card] tab.

Configure the basic settings [Basic]

Click the [Basic] tab on the "Basic setup" page.
The settings such as the camera name, time and date, etc. can be configured on this page.

[Initial display image type]
Select "JPEG" or "MPEG-4" to determine the type of images to be displayed when accessing the camera.
Default: MPEG-4

[Camera title]
Enter the name of the camera. Click the [SET] button after entering the name of the camera. The entered name will be displayed in the status display area.
Number of characters for the camera name: 0 - 20 characters
Default: WV-NP1000 (for the WV-NP1000)
　　　　　WV-NP1004 (for the WV-NP1004)

[Time and date setup]
Enter the current time and date. When "12-hours" is selected for "Time display", "AM" or "PM" can be selected.
Available range: 01/01/2005 0:00:00 –
　　　　　　　　12/31/2035 23:59:59
Default: 01/01/2005 0:00:00

Important:
Enter the current hour reflecting the selected time display format.

[Time display]
Select "12-hours" or "24-hours". Enter the current hour reflecting this setting when entering the current time and date for "Time and date setup".
Default: 24-hours

[Date/time display format]
Select a date/time display format.
When "01/04/2005 13:10:00" is set for "Time and date setup" after selecting "24-hours" for "Time display", time and date will be displayed as follows respectively.
DD/MM/YYYY: 01/04/2005 13:10
MM/DD/YYYY: 04/01/2005 13:10
DD/Mmm/YYYY: 01/Apr/2005 13:10
YYYY/MM/DD: 2005/04/01 13:10
Mmm/DD/YYYY: Apr/01/2005 13:10
Default: MM/DD/YYYY

[Display position]
Determine whether or not to display the shooting date and time, and the position of the date and time to be displayed.
OFF: No shooting date and time is displayed.
ON (Upper left): The shooting date and time will be displayed at the upper left corner of the image display area.
ON (Lower left): The shooting date and time will be displayed at the lower left corner of the image display area.
ON (Upper right): The shooting date and time will be displayed at the upper right corner of the image display area.
ON (Lower right): The shooting date and time will be displayed at the lower right corner of the image display area.
Default: OFF

[Daylight saving (Summertime)]
Select "ON" or "OFF" to determine whether or not to apply daylight saving time.
ON: Applies summer time. An asterisk (*) will be displayed on the left side of the displayed time and date.
OFF: Does not apply summer time.
Default: OFF

[Link/Access LED]
Select "ON" or "OFF" to determine whether or not to light the link LED, the access LED of the network connector, and the SD memory card error LED.
Select "ON" to check the network status by lighting the LEDs. Select "OFF" to turn off the LEDs at all times.
Default: ON

Note:
Link LED: When "ON" is selected, this LED will light when communication with the connected device is available.
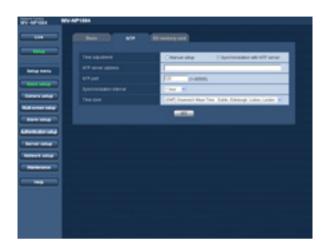**Access LED:** When "ON" is selected, this LED will light when accessing to a network.
SD memory card error LED: This LED will light when it is impossible to write data on the SD memory card.

Configure the settings relating to the NTP server [NTP]

Click the [NTP] tab on the "Basic setup" page. (☞ page 19)
The settings relating to the NTP server such as the NTP server address, port number, etc. can be configured on this page.

[Synchronization interval]
Select an interval (1 - 24 hours: in 1 hour intervals) of synchronization with the NTP server.
Default: 1 hour
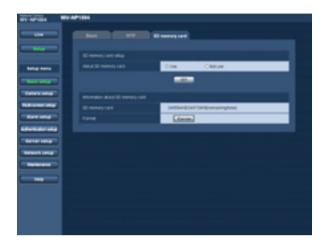
[Time zone]
Select a time zone according to the location where the camera is in use.
Default: (GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London

[Time adjustment]
Select the time adjustment method from the following.
Time adjusted by the selected method will be used as the standard time of the camera.
Manual setup: Time set on the [Basic] tab on the "Basic setup" page will be used as the standard time of the camera.
Synchronization with NTP server: Time automatically adjusted by synchronizing with NTP server will be used as the standard time of the camera.
Default: Manual setup

[NTP server address]
Enter the IP address or the host name of the NTP server.
Number of characters for the NTP server address: 1 - 128 characters
Default: (blank)

Important:
When entering the host name for "NTP server address", it is necessary to configure the DNS settings on the [Network] tab of the "Network setup" page. (☞ page 39)

[NTP port]
Enter a port number to be used for the NTP server.
Available port number: 1 - 65535
Default: 123

Configure the settings relating to SD memory card [SD memory card]

Click the [SD memory card] tab on the "Basic setup" page. (☞ page 19)
The settings relating to the SD memory card can be configured on this page.

[About SD memory card]
Select "Use" or "Not use" to determine whether or not to use the SD memory card.

Important:
- Before removing the SD memory card from the camera, it is necessary to select "Not use" first.
- After inserting the SD memory card, it is necessary to select "Use" to use the SD memory card.

[Information about SD memory card]
Available size and the total size of the SD memory card will be displayed.
Depending on the state of the SD memory card, the size indications will differ as follows.

Indication	Description
----------KB/----------KB	The SD card memory is not inserted, or failed to obtain available size due to an error, etc.

Note:
When the available size reached "0 KB", images will not be saved on the SD memory card. It is recommended to check the available size of the SD card memory periodically.

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

Important:
- Before formatting the SD memory card, it is necessary to select "Use" for "About SD memory card" on the [SD memory card] tab of the "Basic setup" page and "OFF" for "FTP periodic transmission" on the [FTP] tab of the "Network setup" page.
- Format the SD memory card only by clicking the [Execute] button on the setup menu. Otherwise, the following functions using the SD memory card may not work properly with this camera.
  - Save/obtain images when failed to transmit to the FTP server using the FTP periodic transmission function
  - Save/obtain the system logs
- It is recommended to use Panasonic's SD memory card. Otherwise, the camera may not work properly or performance deterioration may be caused.
- It is impossible to access the SD memory card in the process of formatting.
- All data saved on the SD memory card will be deleted when the SD memory card is formatted.
- Do not turn the power of the camera off in the process of formatting.
- After formatting the SD memory card, available size may be smaller than the total size since the default directory is automatically created in the SD memory card

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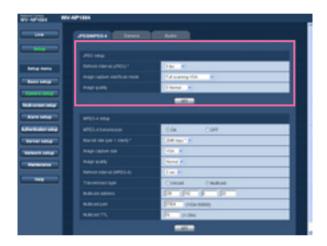# Configure the settings relating to images and audio [Camera setup]

The settings relating images and audio such as brightness and image quality of JPEG/MPEG-4 can configured on this page.
The "Camera setup" page has 3 tabs of the [JPEG/MPEG-4] tab, the [Camera] tab and the [Audio] tab.

Configure the settings relating to JPEG image [JPEG/MPEG-4]

Click the [JPEG/MPEG-4] tab on the "Camera setup" page.
Configure the settings such as "Refresh interval (JPEG)", "Image capture size" and "Image quality" on this page.
Refer to page 24 for further information about the settings relating to MPEG-4 images.

[Image capture size/Scan mode]
Select the image capture size and the resolution of JPEG from the following.
Partial scanning QVGA, Partial scanning VGA, Partial scanning 960x720, Full scanning QVGA, Full scanning VGA, Full scanning 1280x960
Default: Full scanning VGA

[Image quality]
Select image quality of JPEG images from the following.
0 Super fine/1 Fine/2/3/4/5 Normal/6/7/8/9 Low
Default: 5 Normal
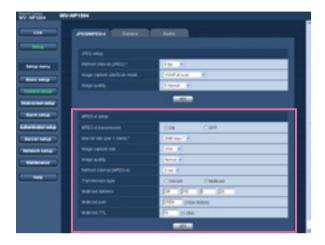
[Refresh interval (JPEG)*]
Select an interval to refresh the displayed JPEG image from the following.
0.1 fps/0.2 fps/0.33 fps/0.5 fps/1 fps/2 fps/3 fps/5 fps/
6 fps */10 fps */15 fps */25 fps *
Default: 5 fps

Note:
When "ON" is selected for "MPEG-4 transmission", the refresh intervals may be longer than the set value when the setting value with an asterisk (*) on the right is selected.
When the selected resolution for "Image capture size/resolution of JPEG" is "Full scan", the maximum refresh interval for JPEG will be 12.5 fps and the frame rate of the analog output will be 1/2.

Configure the settings relating to MPEG-4 image [JPEG/MPEG-4]

Click the [JPEG/MPEG-4] tab on the "Camera setup" page. (☞ page 23)
Configure the settings such as "Max bit rate (per 1 client)", "Image capture size" and "Image quality" on this page.
Refer to page 23 for further information about the settings relating to JPEG images.

[MPEG-4 transmission]
Select "ON" or "OFF" to determine whether or not to transmit MPEG-4 images.
ON: Transmits MPEG-4 images.
OFF: Does not transmit MPEG-4 images.
Default: ON

[Max bit rate (per 1 client)*]
Select a MPEG-4 bit rate per a client from the following.
64 kbps/128 kbps */256 kbps */512 kbps */1024 kbps*/
1536 kbps */2048 kbps */3072 kbps */4096 kbps *
Default: 2048 kbps *

Note:
The MPEG-4 bit rate is synchronized with "Total bit rate" on the [Network] tab of "Network setup" page. (☞ page 39)
For this reason, the bit rate may be lower than the value when the setting value with an asterisk (*) on the right is selected.

[Image capture size]
Select "QVGA" or "VGA" for the image capture size of MPEG-4 images.
Default: VGA

[Image quality]
Select image quality of MPEG-4 images from the following.
Fine/Normal/Low
Default: Normal

[Refresh interval (MPEG-4)]
Select an interval (1 - 5 seconds) to refresh the displayed MPEG-4 images.
If using the network environment with frequent error occurrences, images can be displayed quickly, and it is possible to diminish image distortions by setting a shorter refresh interval. However, the refresh interval (MPEG-4) may be longer than the set value.
Default: 3 sec

[Transmission type]
Select a MPEG-4 transmission type from the following.
Unicast: Up to 8 users can access a single camera concurrently.
Multicast: No concurrent access limitation for a camera.
Default: Unicast

[Multicast address]
Enter the multicast IP address.
Available range: 224.0.0.0 - 239.255.255.255
Default: 239.192.0.20

[Multicast port]
Enter the multicast port number (used to transmit MPEG-4 images from the camera).
Available port number: 1024 - 50000 (Only even numbers are available.)
Default: 37004

[Multicast TTL]
Enter the multicast TTL value.
Available value: 1 - 254
Default: 16

Important:
• Depending on the PC in use for monitoring, the multicast port number may be already in use. In this case, it may be impossible to monitor images. Change the multicast port number.
• When transmitting MPEG-4 image via a network, the transmitted image sometimes may not be displayed. In this case, refer to the network administrator.
• When two network interface cards or more are installed on the PC in use, the network interface card(s) not used for receiving images should be invalidated when displaying MPEG-4 images using the multicast port.
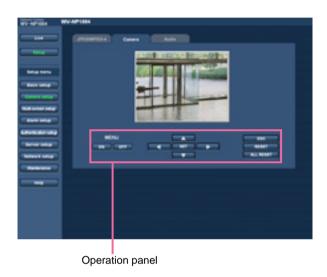

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Configure the camera settings such as image quality and brightness, etc. [Camera]

Click the [Camera] tab on the "Camera setup" page. (☞ page 23)
The following are descriptions of how to configure the settings relating to image quality and brightness, etc. Refer to the operating instructions (book) for further information about the setup items (camera setup page). Refer to page 49 for descriptions of how to operate the setup items (camera setup page).

Note:
The "Camera setup" page on the [Camera] tab can be displayed on a video monitor and can be configured using the operation buttons on the camera.

Operation panel

About the operation panel

Use the following buttons on the operation panel to operate the "Camera setup" page using a PC.

[ON] button:
Click this button to display the top page of the "Camera setup" page.

[OFF] button:
Click this button to close the "Camera setup" page.

[SET] button:
Click this button to move to the submenu.

[Left] button/ [Right] button:
Click these button to select the parameters.

[Down] button/ [Up] button:
Click these buttons to move the cursor.

[ESC] button:
Click this button to return to the previous page.

[RESET] button:
Click this button after moving the cursor onto the desired setup item to reset to the default setting.
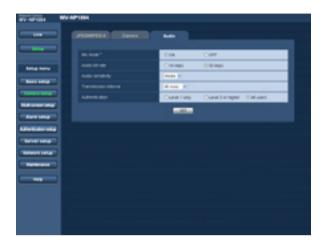
[ALL RESET] button:
By clicking the [ALL RESET] button after moving the cursor on "CAMERA RESET" on the "SPECIAL SETUP" page (☞ page 54), all the settings except the network settings can be reset to the default settings. However, the network settings will not be reset.

Note:
Refer to page 48 for descriptions of how to reset the network settings.

Configure the settings relating to audio [Audio]

Click the [Audio] tab on the "Camera setup" page. (☞ page 23)
The settings relating to audio can be configured on this page.

[Mic mode*]
Select "ON" or "OFF" to determine whether to turn on or off audio on a PC.
ON: Transmits audio from the camera to the PC. Audio can be heard with images on the PC. Images and audio will not be synchronized.
OFF: Does not transmit audio from the camera to the PC. Therefore, no settings and controls relating audio will be invalidated.
Default: ON

[Audio bit rate]
Select "16 kbps" or "32 kbps" for audio bit rate.
Default: 32 kbps

[Audio sensitivity]
Select the sensitivity of the built-in microphone of the camera from the following.
High/Middle/Low
Default: Middle

[Transmission interval]
Select an interval for audio transmission from the followings.
20 msec/40 msec/80 msec/160 msec
Default: 40 msec

[Authentication]
Select an access level for audio transmission from the following. Refer to page 35 for further information about the access level.
Level 1 only/Level 2 or higher/All users
Default: All users

Note:
Images and audio will not be synchronized.

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Configures the multi-screen settings [Multi-screen setup]

The cameras to be used for the multi-screen display can be registered on this page.
Refer to page 9 for descriptions of how to display images on a multi-screen.

[IP Address]
Enter the IP address or the host name of the camera to be used for the multi-screen. 4 cameras can be registered as a group and up to 2 groups (8 cameras) can be registered.

When the HTTP port number for the camera had been changed, enter as follows:
"IP address of the camera:port number", for example "192.168.0.10:8080".

Number of characters for the IP address: 1 - 128 characters

[Camera title]
The entered camera title will be displayed on a multi-screen.

Number of characters for the camera title: 0 - 20 characters

Configure the alarm settings [Alarm setup]

The settings relating to alarm occurrences such as settings for the alarm action at an alarm occurrence, the alarm occurrence notification, and the VMD area settings can be configured on this page.
The "Alarm setup" page has 3 tabs of the [Alarm] tab, the [VMD area] tab and the [Notification] tab.

Configure the settings relating to the alarm action [Alarm]

Click the [Alarm] tab on the "Alarm setup" page.
The settings relating to the alarm action can be configured on this page. Refer to pages 29 and 30 for further information about the settings relating to the alarm image and the alarm out connector.

[Terminal alarm]
Select "ON" or "OFF" to determine whether or not to receive the terminal alarm.
Default: OFF

[VMD alarm]
Select "ON" or "OFF" to determine whether or not to perform the alarm action using the VMD function. Refer to page 31 for further information about the VMD area settings.
Default: OFF

[Command alarm]
Select "ON" or "OFF" to determine whether or not to receive the command alarm.
The command alarm is the function that notifies of Panasonic protocol alarm from the other cameras.
When "ON" is selected, alarm actions will be performed between multiple cameras.
Default: OFF

[Originating port number]
Select a port number to be used to receive the command alarm.
Available port number: 1 - 65535
Default: 8181

[Scene change detection alarm]
Select "ON" or "OFF" to determine whether or not to perform the alarm action when the camera lens is covered by something such as a cloth, or when the shooting direction of the camera is moved.
Default: OFF

[Level setup]
Select the sensitivity of the scene change detection alarm function from the following.
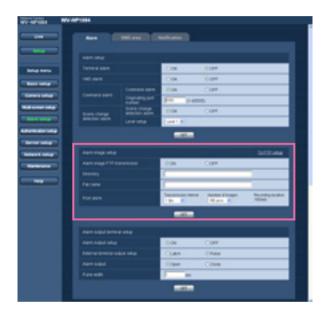Level 1/Level 2/Level 3
Default: Level 1

Configure the settings relating to the alarm image [Alarm image setup]

Click the [Alarm] tab on the "Alarm setup" page. (☞ page 28)
The settings relating to the alarm image to be transmitted to the FTP server can be configured on this page. The alarm image will be transmitted to the FTP server. To transmit alarm images to the FTP server, it is necessary to configure the settings in advance. (☞ page 38)
The settings for resolution and image quality on the "JPEG/MPEG-4" tab (☞ page 23) will be applied to alarm images.
Refer to pages 29 and 30 for further information about the settings relating to the alarm image and the alarm out connector.

[Transmission interval]
Select the transmission interval for the alarm image FTP transmission from the following.
0.1 fps/0.2 fps/0.33 fps/0.5 fps/1 fps
Default: 1 fps

[Number of images]
Select the number of images to be transmitted from the following.
10 pics/20 pics/30 pics/50 pics/100 pics/1000 pics/2000 pics/3000 pics/4000 pics/5000 pics
Default: 100 pics
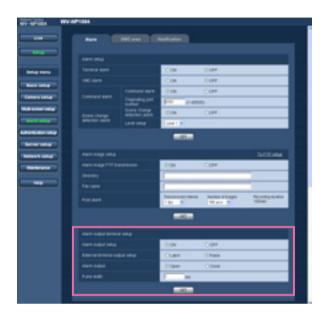
[Recording duration]
Approximate time to be taken to save the set "number of images" with the set "transmission interval" will be displayed.

[Alarm image FTP transmission]
Select "ON" or "OFF" to determine whether or not to transmit the alarm image to the FTP server.
Default: OFF

[Directory]
Enter the directory name where the alarm images are to be saved.
Number of characters for the directory name:
    0 - 256 characters

[File name]
Enter the file name used for the alarm image to be transmitted to the FTP server. The file name will be as follows.
["Entered file name" + "Time and date (year/month/day/hour/minute/second)"] + "Serial number"
Number of characters for the file name: 1 - 32 characters
Default: (blank)

Configure the settings relating to the alarm out connector [Alarm output setup]

Click the [Alarm] tab on the "Alarm setup" page. (☞ page 28)
The settings relating to the alarm out connector can be configured on this page. Refer to pages 29 and 30 for further information about the settings relating to the alarm image and the alarm out connector.

Note:
When "Close" is selected, the alarm signal will be output for around 1 minute when the power of the camera is turned on.

[Pulse width]
When "Pulse" is selected for "Alarm output", select an pulse width.
Available pulse width: 1 - 120 sec
Default: 1 sec

[Alarm output setup]
Select "ON" or "OFF" to determine whether or not to output the alarm signals to the alarm out connector when an alarm is detected.
Default: OFF

[External terminal output setup]
Select "Latch" or "Pulse" for the alarm out connector at an alarm occurrence.
Latch: When an alarm is detected, alarm output connector will be in the state selected for "Alarm output" until the [Alarm reset] button is clicked.
Pulse: When an alarm is detected, alarm output connector will be in the opposite state to the "Alarm output" setting for the period set for "Pulse width".
Default: Latch

[Alarm output]
Select "Open" or "Close" to determine whether to open or close the alarm output connector when output the alarm signals.
Open: The alarm out connector will open when output the alarm signals.
Close: The alarm out connector will close when output the alarm signals.
Default: Open

Set the VMD areas [VMD area]

Click the [VMD area] tab on the "Alarm setup" page. (☞ page 28)
The video motion detection areas can be set on this page.
When a motion is detected in the set area, the alarm action will be performed.

Note:

It will take around 5 minutes to start detection after the power is turned on.

Set the VMD areas

Step 1

Set the video motion detection area by dragging the mouse on the screen. When the [All areas] button is clicked, the whole area will become the VMD area, and "1 (White)" will be automatically applied to "Area".

→ The designated area will become the VMD area and the outline will be displayed. When 2 - 4 VMD areas are set, each area will be numbered in order. The areas will be identified by the respective outline colours.

Step 2

Select "ON" or "OFF" for "Status" of each VMD area. When the [SET] button is clicked after selecting "OFF", the outline will become the broken line and no alarm action will be performed even when a motion is detected in the area.

Step 3

Select "Detect" or "Mask" for "Type" of each VMD area. When "Mask" is selected, the respective VMD area will be shaded. Any motion will not be detected in the VMD area for which "Mask" is selected. Select "Mask" for the area where any motion is not to be detected.

Step 4

Select the detection sensitivity from the following. When "Mask" is selected for "Type", this setting will be invalid for the respective VMD area.
High/Middle/Low
Default: Middle

Step 5

Select the direction from the following. Only a motion that moves to the selected direction will be detected. When "Mask" is selected for "Type", this setting will be invalid for the respective VMD area.
None/Up/Down/Left/Right
Default: None

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Step 6

Select "ON" or "OFF" for "Light detection control".
When "ON" is selected, detection errors caused by turn-ing lighting on/off can be diminished.

Notes:
 • Complete prevention of detection error is not guar-anteed even if using this function.
 • When "ON" is selected, performance of the motion detection may be lower.

Step 7

Click the [SET] button after completing the settings.

Important:
The setting will not be applied unless the [SET] but-ton is clicked.

Delete the set VMD area

Step 1

Click the [DEL] button respective to the area to be delet-ed.
→ The outline of the area will disappear and the select-ed area will be deleted.

Step 2

Click the [SET] button after completing settings.

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Configure the settings relating to the mail notification [Notification]

Click the [Notification] tab on the "Alarm setup" page. (☞ page 28)
The settings relating to the alarm mail can be configured on this page. To notify of an alarm occurrence by e-mail, it is necessary to configure the settings of the mail server. (☞ page 37)

[E-mail notification]
Select "ON" or "OFF" to determine whether or not to notify of an alarm occurrence by e-mail at an alarm occurrence.
Default: OFF

[Address]
Enter the destination mail address. Up to 4 destination addresses can be registered.
To notify by e-mail, check the "Notification setup" check-box respective to the desired address. To delete the registered address, click the [DEL] button respective to the desired address.
Number of characters for the destination mail address: 3 - 128 characters

[Mail subject]
Enter the mail subject.
Number of characters for the mail subject: 0 - 50 characters

[Mail body]
Enter the mail body.
Number of characters for the mail body: 0 - 200 characters

Configure the settings relating to Panasonic alarm protocol [Panasonic alarm protocol setup]

Click the [Notification] tab on the "Alarm setup" page. (☞ page 28)
The settings relating to Panasonic alarm protocol can be configured on this page.

[Panasonic alarm protocol]
Select "ON" or "OFF" to determine whether or not to notify of an alarm occurrence by Panasonic alarm protocol when an alarm is detected.
Default: OFF

[Destination port]
Select a destination port of the Panasonic alarm protocol from the following.
Available port number: 1 - 65535
Default: 1818

[Retry times]
Select a retry time of Panasonic alarm protocol.
Available retry times: 1 - 30
Default: 2

[IP address]
Enter the destination IP address of the Panasonic alarm protocol from the following. Up to 8 destination addresses can be registered.
To notify by Panasonic alarm protocol, check the "Notification setup" checkbox respective to the desired IP address. To delete the registered IP address, click the [DEL] button respective to the desired IP address.

Configure the settings relating to the authentication [Authentication setup]

The settings relating to the authentication such as users and PCs (IP addresses) restrictions for accessing the camera can be configured on the "Authentication setup" page.
The "Authentication setup" page has 2 tabs of the [User] tab and the [Host] tab.

Configure the settings relating to the user authentication [User]

Click the [User] tab on the "Authentication setup" page.
The settings relating to the user authentication can be configured on this page. Up to 16 users can be registered.

[User authentication]
Select ON or OFF to determine whether or not to authenticate the user.
Default: OFF

[User name]
Enter a user name.
Number of characters for the user name: 1 - 32 characters
Default: (blank)

[Password] [Retype password]
Enter the password.
Number of characters for the password: 4 - 32 characters
Default: (blank)

Note:
When the user name already in use is entered and the [REG] button is clicked, the respective user information will be overwritten.

[Access level]
Select the access level of the host from the following.
1. Administrator: Allowed all available operations of the camera.
2. Camera control: Allowed to display images from the camera and to control the camera. The camera setting configuration is unavailable.
3. Live only: Only displaying live images is available. The camera setting configuration and camera control are unavailable.
Default: 3. Live only

Note:
By clicking [∨] of "User name check", the registered user can be selected and the selected user's information can be checked.
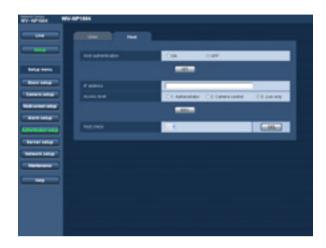The registered user will be displayed with the access level. (Example: admin [1])
To delete the registered user, click the [DEL] button after selecting the user to be deleted.

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Configure the settings relating to the host authentication [Host]

Click the [Host] tab on the "Authentication setup" page. (☞ page 35)
The settings to restrict PCs (IP address) to access the camera can be configured on this page.

[Host authentication]
Select ON or OFF to determine whether or not to authenticate the host.
Default: OFF

Important:
Before configuring the host authentication, it is necessary to register IP addresses of the PCs to be allowed to access the camera and determine their access levels. If "ON" is selected for "Host authentication" before registering the hosts (IP addresses), it will be impossible to access the camera.

[IP Address]
Enter the IP address of the PC to be allowed to access the camera.

Notes:
• When "IP address/subnet mask" is entered, it is possible to restrict PCs in each subnet.
• When the IP address already in use is entered and the [REG] button is clicked, the respective host information will be overwritten.

[Access level]
Select the access level of the host from the following.
1. Administrator/2. Camera control/3. Live only
Refer to page 35 for further information about the access level.
Default: 3. Live only

Configure the settings of the servers [Server setup]

The settings relating to the mail server and the FTP server can be configured on this page.
The "Server setup" page has 2 tabs of the [Mail] tab and the [FTP] tab.

Configure the settings relating to the mail server [Mail]

Click the [Mail] tab on the "Server setup" page.
The settings relating to the mail server used to send the alarm mail can be configured on this page.

[SMTP server address]*
Enter the IP address or the host name of the SMTP server used to send e-mails.
Number of characters for the SMTP server address:
   1 - 128 characters

[POP server address]*
When "POP before SMTP" is selected for "Authentication", enter the IP address or the host name of the POP server.
Number of characters for the POP server address:
   1 - 128 characters

---

* Important:
   When entering the host name for "POP server address", it is necessary to configure the DNS settings on the [Network] tab of the "Network setup" page. (☞ page 39)

[Authentication]
Select the authentication method to send e-mails from the following.
None: It is unnecessary to clear any authentication to send e-mails.
POP before SMTP: It is necessary to clear the POP server authentication first to use the SMTP server to send e-mails.
SMTP: It is necessary to clear the SMTP server authentication to send e-mails.
Default: None

[User name]
Enter the user name to access the server.
Number of characters for the user name: 1 - 32 characters

[Password]
Enter the password to access the server.
Number of characters for the password: 0 - 32 characters

[Sender mail address]
Enter the mail address of a sender.
Entered mail address will be displayed in the "From" (sender) line of the sent mails.
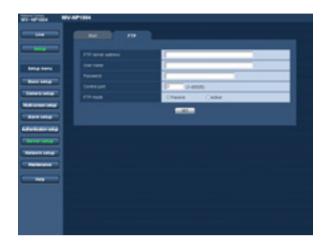**Number of characters for the sender address:**
   3 - 128 characters

Configure the settings relating to the FTP server [FTP]

Click the [FTP] tab on the "Server setup" page. (☞ page 37)
The settings relating to the FTP server used to transmit the alarm images can be configured on this page.

[FTP mode]
Select "Passive" or "Active" for the FTP mode.
Normally, select "Passive". When failed to establish the connection, select "Active".
Default: Passive

[FTP server address]
Enter the IP address or the host name of the FTP server.
Number of characters for the FTP server address:
1 - 128 characters

Important:
When entering the host name for "FTP server address", it is necessary to configure the DNS settings on the [Network] tab of the "Network setup" page. (☞ page 39)

[User name]
Enter the user name (login name) to access the FTP server.
Number of characters for the user name: 1 - 32 characters

[Password]
Enter the password to access the FTP server.
Number of characters for the password: 0 - 32 characters

[Control port]
Enter a control port number to be used for the FTP server.
Available port number: 1 - 65535
Default: 21

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Configuring the network settings [Network setup]

The network settings and the settings relating to DDNS (Dynamic DNS) and SNMP (Simple Network management Protocol) can be configured on this page.
The "Network setup" page has 3 tabs of the [Network] tab, the [DDNS] tab, the [SNMP] tab and the [FTP] tab.
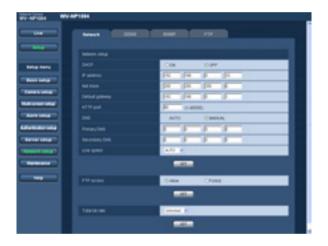
Configure the network settings [Network]

Click the [Network] tab on the "Network setup" page.
The following information is required to configure the network settings.
Contact the network administrator or your Internet service provider.
- IP address
- Net mask
- Default gateway (when using the gateway server/router)
- HTTP port
- Primary DNS, Secondary DNS (when using DNS)

[DHCP]
Select "ON" or "OFF" to determine whether or not to use the DHCP function.
Default: OFF

[IP address]
When not using the DHCP function, enter the IP address of the camera. Do not enter the IP address already in use (for the PCs and the other network cameras).
Default: 192.168.0.10

<Unavailable IP addresses>
 0.*.*.*
 ..*.0
 255.*.*.*
 ..*.255
 127.0.0.1
 Class D address (224.0.0.0 - 239.255.255.255)
 Class E address (240.0.0.0 - 255.255.255.255)

[Net mask]
When not using the DHCP function, enter the net mask of the camera.
Default: 255.255.255.0

[Default gateway]
When not using the DHCP function, enter the default gateway of the camera.
Default: 192.168.0.1

<Unavailable IP addresses for the default gateway>
 0.*.*.*
 ..*.0
 255.*.*.*
 ..*.255
 127.0.0.1
 Class D address (224.0.0.0 - 239.255.255.255)
 Class E address (240.0.0.0 - 255.255.255.255)

[HTTP port]
Assign the port numbers independently.
The following port numbers are unavailable since they are already in use.
Available port number: 1 - 65535
Default: 80

<Port numbers already in use>
20, 21, 23, 25, 42, 53, 67, 68, 69, 110, 123, 161, 162, 995, 10669, 10670

[DNS]
Select "AUTO" or "MANUAL" to determine whether or not to use the DNS. When "MANUAL" is selected, it is necessary to configure the settings for the DNS.
When using the DHCP function, it is possible to obtain the DNS address automatically by selecting "AUTO".
Refer to the network administrator for further information about the settings.
Default: MANUAL

[Primary DNS], [Secondary DNS]
When "MANUAL" is selected for "DNS", enter the IP address of the DNS. Refer to the network administrator about the IP address of the DNS.

[Line speed]
Select the line speed for data transmission from the followings. It is recommended to use with the default setting "AUTO".
AUTO/100MF (Mbps full-duplex)/100MH (Mbps half-duplex)/10MF (Mbps full-duplex)/10MH (Mbps half-duplex)
Default: AUTO

[FTP access]
Select "Allow" or "Forbid" to determine whether to allow or forbid the FTP access.
Default: Allow

[Total bit rate]
Select the total bit rate for data transmission from the followings.
64 kbps/128 kbps/256 kbps/512 kbps/1024 kbps/ 2048 kbps/4096 kbps/10 Mbps/Unlimited
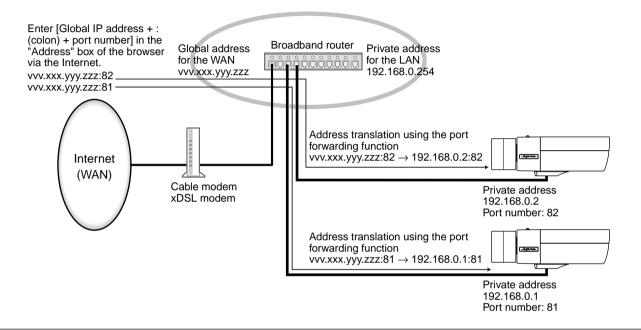**Default:** Unlimited

Notes:
• When selecting "64 kbps", select "OFF" for "Mic mode" on the "Audio" tab. (☞ page 26)
• When 64 kbps is selected, it is impossible to carry out the live-transmission of JPEG images and the FTP periodic transmission simultaneously.

Notes:
- The port forwarding function changes a global IP address to a private IP address, and "Static IP masquerade" and "Network Address Translation (NAT)" have this function. This function is to be set in a router.
- To access the camera via the Internet by connecting the camera to a broadband router, it is necessary to assign a respective port number for each camera and address translation by using the port forwarding function. For further information, refer to the operating instructions of the broadband router in use.
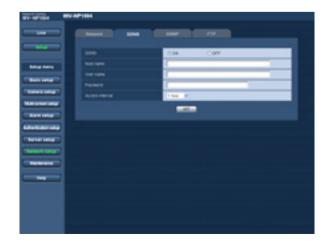

Configure the settings relating to DDNS [DDNS]

Click the [DDNS] tab on the "Network setup" page. (☞ page 39)

The settings relating to DDNS can be configured on this page.

When using the DDNS function, it is possible to access with "Host name registered in the DDNS server.nmdns.net".

To use the DDNS function, it is necessary to connect to the dedicated DDNS server. Refer to the web site for further information about the DDNS. Refer to the "Readme" file about the web site.

It is necessary to configure the host name, user name and password registered in the DDNS server.

[DDNS]

Select "ON" or "OFF" to determine whether or not to use the DDNS function.

Default: OFF

[Host name]

Enter the host name to be used.

Number of characters for the host name: 1 - 64 characters

[User name]

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

Number of characters for the user name: 1 - 32 characters

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[Password]
Enter the password to access the DDNS server.
Number of characters for the password: 0 - 32 characters
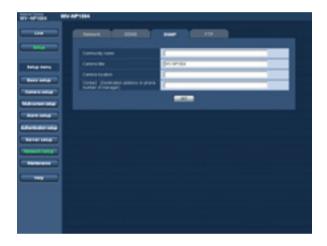   acters

[Access interval]
Select the interval to access the DDNS server to check
the IP address and the host name from the following.
1 min/10 min/30 min/1 hour/6 hours/24 hours
Default: 1 hour

Configure the settings relating to SNMP [SNMP]

Click the [SNMP] tab on the "Network setup" page. (☞ page 39)
The settings relating to SNMP can be configured on this page. It is possible to check the status of the camera by
connecting to the SNMP manager. When using the SNMP function, contact the network administrator.

[Camera location]
Enter the name of the location where the camera is
installed.
Number of characters for the camera location: 0 - 32
    characters
Default: (blank)

**[Contact (Destination address or phone number of
manager)]**
Enter the mail address or the phone number of the
SNMP manager.
**Number of characters for the destination address or
    the phone number of manager:** 0 - 255 characters
Default: (blank)

[Community name]
Enter the community name to be monitored.
Number of characters for the community name:
    0 - 32 characters
Default: (blank)

Important:
    When using the SNMP function, it is necessary to
    enter the community name. When no community
    name is entered, the SNMP function will not work.

[Camera title]
Enter a camera title to be used to manage the camera
with the SNMP function.
Number of characters for the camera title: 0 - 32
    characters
Default: WV-NP1000 (for the WV-NP1000)
        WV-NP1004 (for the WV-NP1004)

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Configure the settings relating to the FTP periodic transmission [FTP periodic transmission]

Click the [FTP] tab on the "Server setup" page. (☞ page 37)

The settings relating to the periodic transmission of images to an FTP server can be configured on this page. To transmit images to an FTP server periodically, it is necessary to configure the settings of the FTP server in advance. (☞ page 38)
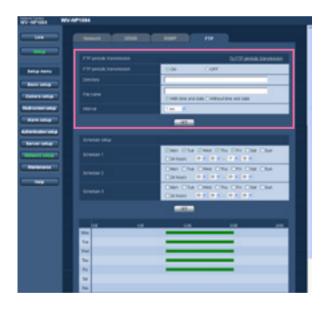
Refer to page 44 for descriptions of how to configure schedules of image transmission.

Important:
- 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 of the alarm image FTP transmission function and the FTP periodic transmission function, the alarm image FTP 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.

Note:
  Images failed to transmit by the FTP periodic transmission can be saved automatically on the SD memory card.

[FTP periodic transmission]
Select "ON" or "OFF" to determine whether or not to transmit images using the FTP periodic transmission function.
When "ON" is selected, it is necessary to configure the settings of the FTP server. (☞ page 38)
Default: OFF

[Directory]
Enter the directory name where the images are to be saved.
Number of characters for the directory name:
  0 - 256 characters
Default: (blank)

[File name]
Enter the file name (name of the image file to be transmitted) and select the naming option from the following.
With time and date: File name will be ["Entered file name" + "Time and date (year/month/day/hour/minute/second)" + "00"].
Without time and date: File name will be the characters entered for "File name" only. When "Without time and date" is selected, the file will be overwritten each time a file is transmitted newly.
Number of characters for the file name: 1 - 32 characters
Default: (blank)

[Interval]
Select the interval for the FTP periodic transmission from the following.
1 sec/2 sec/3 sec/4 sec/5 sec/6 sec/10 sec/15 sec/20 sec/30 sec/1 min/2 min/3 min/4 min/5 min/6 min/10 min/15 min/20 min/30 min/1 hour/1.5 hours/2 hours/3 hours/4 hours/6 hours/12 hours/24 hours
Default: 1 sec
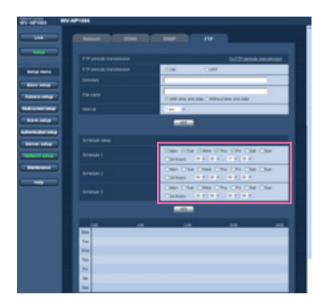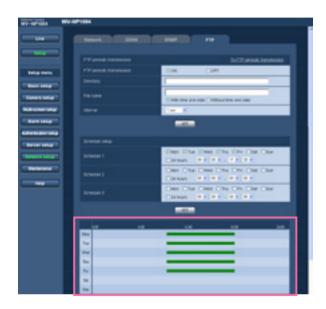
Configure the schedule settings of the FTP periodic transmission [Schedule setup]

Click the [FTP] tab on the "Server setup" page. (☞ page 37)
The schedule settings of the FTP periodic transmission can be configured on this page. Refer to page 38 for further information about the settings relating to the FTP periodic transmission.

How to configure the schedule settings

Step 1

Check the check box of the desired day of the week.
→ The selected day of the week will be validated for the schedule.

Step 2

To designate time, click [∨] and select the desired "hour" and "minute".
When not designating time, check the checkbox of "24 hours".
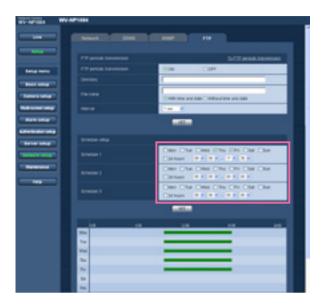
Step 3

Click the [SET] button after completing the settings.
→ The result will be displayed at the bottom of the window.

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How to delete the set schedule
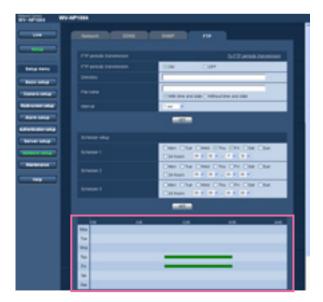
Step 1

Uncheck the check box of the set day of the week.

Step 2

Click the [SET] button after completing the settings.
→ The result will be displayed at the bottom of the window.

Maintenance of the camera [Maintenance]

System log check, firmware upgrade, and initialization of the setup menu can be performed on this page.
The "Maintenance" page has 3 tabs of the [System log] tab, the [Upgrade] tab and the [Initialization] tab.

Check the system log [System log]
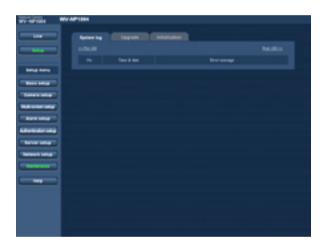
Click the [System log] tab of the "Maintenance" page.
Up to 4000 system logs can be saved on the SD memory card when the SD memory card is inserted after selecting "Use" for "About the SD memory card" on the [SD memory card] tab (☞ page 22).
When "Not use" is selected for "About the SD memory card", up to 100 system logs can be saved on the built-in memory of the camera.
When the saved system logs reached the maximum number, the older system logs will be overwritten by the newer logs. In this case, the oldest log is the first to be overwritten.
The system logs will be displayed in 100 logs each.

[Time & date]
Time and date at the error occurrence will be displayed.

[Error message]
The descriptions about the error will be displayed.
Refer to page 63 for further information about the system logs.

Upgrade the firmware [Upgrade]

Click the [Upgrade] tab of the "Maintenance" page. (☞ page 46)
The current firmware can be checked and upgraded to the latest version on this page. Contact the dealer for further information about the firmware upgrade.

[Model No.], [MAC address], [Firmware version], [IPL version], [DSP version]
Information of each item will be displayed.

How to upgrade the firmware

Step 1

Contact the dealer and download the latest firmware onto a PC.

Important:
A blank (space) cannot be used for the name of the directory where the downloaded firmware to be saved.

Step 2

Click the [Browse…] button and designate the downloaded firmware.

Step 3

Click the radio button respective to the desired option to determine whether or not to initialize the settings after completing the firmware upgrade.

Step 4

Click the [Upgrade] button.
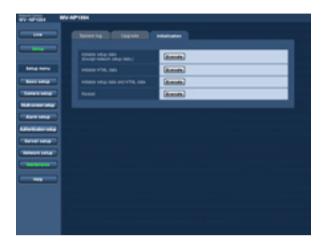
→ The confirmation window will be displayed. When "Do not reset the settings after completing the upgrade." was selected, the confirmation window will not be displayed.

Important:
- Upgrade the firmware using a PC in the same subnet as of the camera's.
- Follow the instruction of the dealer when upgrading the firmware.
- Use the designated file (extension:img) for the firmware upgrade.
- The name of the firmware to be used for upgrade should be "firmware.img".
- Do not turn the power of the camera off in the process of upgrade.
- Do not operate the web browser (including adjusting the window size) in the process of upgrade.
- The following network settings will not be initialized when upgrade the firmware after selecting "Reset to the default setting after completing the upgrade. (Except the network settings)".
  IP address, net mask, default gateway, HTTP port, ON/OFF for DHCP, SNMP setup

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Initialize/restart the camera [Initialization]

Click the [Initialization] tab of the "Maintenance" page. (☞ page 46)
Initialization of the settings and data of the camera and restarting of the camera can be performed on this page.

[Initialize setup data]
Click the [Execute] button to reset the settings to the default settings. However, the network settings will not be reset.
It is impossible to operate the camera for around 2 minutes after the initialization.

[Initialize HTML data]
Click the [Execute] button to reset the HTML files to the default settings. It is impossible to operate the camera for around 2 minutes after the initialization.

[Initialize setup data and HTML data]
Click the [Execute] button to reset the settings and the HTML files to the default settings. However, the network settings will not be reset.
It is impossible to operate the camera for around 2 minutes after the initialization.

[Restart]
Click the [Execute] button to restart the camera. It is impossible to operate the camera for around 2 minutes after the restart just as when the power is turned on.

Note:

Turn on the power of the camera while holding down the [INITIAL SET] button of the camera, and wait around 5 seconds without releasing the [INITIAL SET] button.
Wait around 30 seconds after releasing the button. The settings including the network settings will be initialized.

Configure the Camera Settings such as Image Quality, Brightness, etc.

The following are descriptions of how to configure the settings such as image quality, brightness, privacy zone and flange-back length, etc.
The settings can be configured in the following methods.
- Configure the settings using a PC
  The setting can be configured on the [Camera] tab of the "Camera setup" page. Refer to page 23 for further information.
- Configure the settings using the operation buttons on the camera
  The settings can be configured on the "CAMERA SETUP" page displayed on a video monitor connected to the video output connector. Refer to the operating instructions (book) for further information.

Note:
The illustrations below are the examples of the setup pages to be displayed on a video monitor.
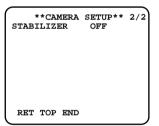

Configure the settings relating to the camera operations [CAMERA SETUP]

Configure the settings relating to camera operations. The settings can be configured on the "CAMERA SETUP" page.
Refer to the operating instructions (book) or page 25 for descriptions of how to display the "CAMERA SETUP" page.

CAMERA SETUP page

```
    **CAMERA SETUP** 1/2
CAMERA ID       OFF↲
ALC/ELC         ALC↲
SHUTTER         OFF
AGC             ON(HIGH)
SENS UP         OFF
SYNC            INT
WHITE BAL       ATW1↲
DNR             HIGH
BW MODE↲
PRIVACY ZONE    OFF
EL-ZOOM         OFF
```

```
    **CAMERA SETUP** 2/2
STABILIZER      OFF




   RET TOP END
```

[CAMERA ID]
Select "ON" or "OFF" to determine whether to enable or disable the camera title display. When "ON" is selected, the set camera title will be displayed. Refer to page 56 for descriptions of how to edit the camera title.
Default: OFF
Number of characters for the camera ID: 16 characters

[ALC/ELC]
Select the light control method from the following according to the lens in use.
Refer to page 57 for descriptions of how to compensate backlight.
ALC: Auto backlight compensation controls light amount according to brightness of subjects. When using an ALC lens, select this parameter.
ALC+: Auto backlight compensation and the electronic shutter control light amount according to brightness of subjects. When shooting bright subjects using an ALC lens, select this parameter.

Note:
When shooting under fluorescent lamps, flicker may occur.

ELC: When using a fixed iris lens, select this parameter.
Default: ALC

[SHUTTER]
Select the shutter speed.
The following will be available by changing the shutter speed.
When a fast shutter speed (up to 1/10000) is set, the camera can shoot a fast motion of a subject without out-of focus blur.
When shooting under fluorescent lamps (operating at 60 Hz), flicker may occur. When the faster shutter speed is set, flicker may be caused more frequently. By setting the shutter speed to "1/60" or "1/120", flicker caused by fluorescent lamps can be diminished.

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The following are available for the shutter speed.
When "Full scan" is selected for resolution:
OFF (1/12.5), 1/25, 1/50, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
When "Partial scan" is selected for resolution:
OFF (1/50), 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Default: 1/25

Notes:
- When "ALC+" or "ELC" is selected for "ALC/ELC", shutter speed selection is unavailable. The "---" indication will be displayed for the shutter speed.
- When a fast shutter speed is selected, sensitivity will become lower and smear may appear under a bright light source.

[AGC]
Select a method of gain adjustment from the following.
ON (HIGH)/ON (MID)/ON (LOW): When illuminance of subject becomes darker, gain will be automatically incremented and screen will become brighter. "HIGH", "MID" and "LOW" are indications of gain level.
OFF: Gain will not be incremented.
Default: ON (HIGH)

[SENS UP]
Adjust the sensitivity.
When using the sensitivity-up function, image will become brighter by amplified light intensity. When "FIX" is selected, amplification rate will be fixed. When "AUTO" is selected, amplification rate will change automatically according to illuminance of subject.
The following are available for the sensitivity-up.
OFF/X2 AUTO/X4 AUTO/X6 AUTO/X10 AUTO*/OFF/X2 FIX/X4 FIX/X6 FIX/X10 FIX*/X16 FIX*/X32 FIX*
* Available only when "Partial scan" is selected for resolution.
Default: OFF

Notes:
- When "1/30" is selected for "SHUTTER" (when "Full scan" is selected for resolution), "1/100" is selected for "SHUTTER" (when "Partial scan" is selected for resolution), or "ALC+" or "ELC" is selected for "ALC/ELC", only "AUTO" parameters are available. When selecting any of "1/25" - "1/120" for "SHUTTER", select a parameter for "SENS UP" after setting a parameter for "SHUTTER".

- When the sensitivity (amplification rate) is incremented, images on the screen may become noisy, may be washed out, or stripes may appear. This is not malfunction.
- When selecting a parameter except "OFF", "X2 AUTO" and "X2 FIX", select "FIX" or "PRESET" of "C/L ←→ B/W" or "MANUAL-ADJ" for the "BACK-FOCUS" setting. "ABF" and "AUTO" of "C/L ←→ B/W" are unavailable.

[SYNC]
2 types of synchronization method are applicable with this camera and one of them will be displayed.
(1) Multiplexed vertical drive (VD2)
(2) Internal sync (INT)
When multiplexed vertical drive signal (VD2) is input, synchronization method will automatically shift to "VD2".

[WHITE BAL]
Select a method of white balance adjustment from the following.
ATW1: Auto tracking white balance. The camera will constantly check colour temperature of light source and adjust white balance automatically. Manual adjustment is available for fine adjustment even after white balance is set automatically. (☞ page 58) Operating colour temperature range is approx. 2 700 K – 6 000 K. Under the following conditions, colour may not be faithfully processed.
- When shooting a subject of which major part is thick colour
- When shooting blue sky or sun at sunset
- When shooting a subject whose illuminance is too low
ATW2: Auto tracking white balance under a sodium lamp. The camera will adjust white balance automatically under a sodium lamp.
Operating colour temperature range is approx. 2 000 K – 6 000 K.
AWC: Auto white balance control suitable when shooting where light source is fixed and light intensity is constant. Operating colour temperature range is approx. 2 000 K – 10 000 K. When selecting "AWC", adjust white balance as follows.
Default: ATW1

**How to adjust white balance
(When "AWC" is selected "WHITE BAL")**
① Select "AWC" for "WHITE BAL", and then press the [Left] button to switch to "AWC→PUSH SW".
② Press the [SET] button to adjust white balance. The "PUSH SW" part will be highlighted in the process of the adjustment. When the highlighted indication returns to normal indication, adjustment of white balance is complete.
③ Press the [Right] button to select "AWC".
Refer to page 58 for descriptions of how to adjust white balance finely.

Note:
Operating colour temperature range is approx. 2 000 K – 10 000 K. When white balance is out of operating range or illuminance of subject is too low, white balance adjustment may not be complete. In this case, the "PUSH SW" part remains being highlighted.

[DNR]
When this function (digital noise reduction) is active, noise may be automatically reduced under a low illuminance. Select an effect level "LOW" or "HIGH" for the digital noise reduction.
LOW: Low level of noise reduction effect
LOW: High level of noise reduction effect
Default: HIGH

[BW MODE]
Configure the settings relating to the B/W mode.
Refer to page 59 for descriptions of how to configure the B/W mode setting.

[PRIVACY ZONE]
When there is a zone that is not to be displayed, set the zone as a privacy zone to not to display.
Up to 8 privacy zones can be set and the following are available to identify them on the screen.
ON (1): Display in grey colour
ON (2): Display in mosaic
OFF: Display without effect for identification purpose
Refer to page 60 for descriptions of how to set privacy zones.
Default: OFF

Note:
Privacy zones will not function just in the process of initialization just after turning the power on.

[EL-ZOOM]
Select "ON" or "OFF" to determine whether or not to use the electronic zoom.
ON: Use the electronic zoom. Images can be enlarged up to fivefold (x5).
Refer to page 61 for descriptions of how to adjust the electronic zoom.
OFF: Does not use the electronic zoom.
Default: OFF

[STABILIZER]
Select "ON" or "OFF" to determine whether or not to use the image stabilizer to prevent shaky images. It is effective to use this function when the camera is installed on a pole, etc.
ON: Image shake will be stabilized.
OFF: Image shake will not be stabilized.
Default: OFF

Important:
• When "ON" is selected, the angular field of view will become narrower and the resolution will be lower. When "ON" is selected, install the camera while checking the angular field of view and the resolution.
• The image stabilizer may sometimes not function for the following subject.
  • Dark subject
  • A subject whose brightness difference is almost none (white wall, etc.)
  • A subject that vibrates at high pitch such as mechanical vibration
  • A subject whose vibration amplitude is large

Configure the settings relating to the flange-back [BACK-FOCUS]

Select the method of the flange-back length adjustment and adjust the flange-back length minutely. The settings can be configured on the "BACK-FOCUS SETUP" page. Before adjusting the flange-back length, adjust the lens first. (☞ Operating instructions (book))
Refer to the operating instructions (book) for descriptions of how to display the "BACK-FOCUS SETUP" page.

<About the flange-back length adjustment>
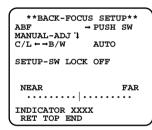The flange-back length is the distance between flange surface and the focal point.

Important:
- The "ABF" (auto back focus) function is for adjustment of the flange-back length at the installation, and for focus compensation when shifting between colour and B/W after the installation. This function is not supposed to be used for sequential action such as the auto focus function.
- It is necessary to adjust the flange-back length again when images become out-of-focus caused by aging of the lens and the environment change, etc.

Note:
The flange-back length adjustment can be performed using the operation buttons on the camera (☞ Operating instructions (book)).

<BACK-FOCUS SETUP page>

```
**BACK-FOCUS SETUP**
ABF        →PUSH SW
MANUAL-ADJ ⅂
C/L ←→B/W        AUTO

SETUP-SW LOCK OFF


 NEAR              FAR
.........|.........

INDICATOR XXXX
 RET TOP END
```

Notes:
- "ABF" is available only when "OFF", "X2 AUTO" or "X2 FIX" is selected for "SENS UP".
- "AUTO" of "C/L ←→ B/W" is available only when "OFF", "X2 AUTO" or "X2 FIX" is selected for "SENS UP".

[ABF]
When the [SET] button is pressed after moving the cursor onto "PUSH SW", the auto-back focus function will be activated and adjust automatically the flange-back length to a subject located at the centre of the screen.

[MANUAL-ADJ]
To adjust the flange-back length finely, press the [SET] button after moving the cursor onto "MANUAL-ADJ". The flange-back length can be adjusted manually using the [Left] and [Right] buttons.

Notes:
- The flange-back length position will set to the default position for the CS-mount by pressing both the [Left] and [Right] buttons for 2 seconds or more.
- A value displayed for "INDICATOR" is an indication for the flange-back length adjustment. When the value becomes larger, the displayed image will be sharper.

[C/L ←→ B/W]
Select a method of the flange-back length adjustment from the following.
AUTO: Adjusts the flange-back length automatically to correct out-of-focus which may be caused when switching between the colour image display and the BW image display.
PRESET: When switching between the colour mode and the B/W mode, the flange-back length position will move to the preset position of each mode. The latest adjusted flange-back length positions for each mode will be memorized automatically as the preset position.
FIX: The position will be fixed after adjusting the flange-back length manually or using the auto back focus function (ABF).
Default: AUTO

[SETUP-SW LOCK]
Select "ON" or "OFF" to determine whether or not to use the operation buttons on the camera for the flange-back length adjustment.
ON: The operation buttons on the camera are unavailable for the flange-back length adjustment.
OFF: The flange-back length can be adjusted using the operation buttons on the camera.
Default: OFF

Important:
• Adjust the flange-back length depending on a subject as follows.

Subject/shooting location/environment	Recommended adjustment method	
	Flange-back length adjustment	[C/L ←→ B/W] setting
Standard subject	[ABF]	"AUTO"
Moves frequently Illuminance changes largely Low illuminance Extremely bright or reflects light Through a window Location where the lens can get dirt easily Brightness difference is almost none (white wall, etc.) Having large depth Frickers continuously Parallel horizontal lines such as a roll-up door	Adjust finely with "MANUAL-ADJ" after using "ABF". [MANUAL-ADJ]	PRESET or FIX

• We assume no responsibility whatsoever for any damages resulting from the use of the auto back focus function.

Configure the settings on the "SPECIAL SETUP" page [SPECIAL SETUP]

Configure the settings relating to image quality can be configured on the "SPECIAL SETUP" page. The settings can be configured on the "SPECIAL SETUP" page.
Refer to the operating instructions (book) for descriptions of how to display the "SPECIAL SETUP" page.

SPECIAL SETUP page

```
    **SPECIAL SETUP**
CHROMA GAIN  ....|..160
AP GAIN      .....|.193
PEDESTAL     ...|...113
             -      +

PIX OFF"
CAMERA RESET →PUSH SW


 RET TOP END
```

[CHROMA GAIN]
Adjust the chroma level (colour density).
Colour density will be incremented when the cursor is moved to the "+" direction, and will be decremented when the cursor is moved to the "–" direction.
Adjust the chroma gain while monitoring a vector colour scope or a colour video monitor.

[AP GAIN]
Adjust the aperture level.
Images will be sharper when the cursor is moved to the "+" direction, and will be softer when the cursor is moved to the "–" direction. Adjust the aperture level while monitoring a colour video monitor.

Note:
Moire fringes (vertical interference pattern) may appear when shooting figures such in a carpet or drapes. In this case, move the cursor to the "–" direction to alleviate this problem.

[PEDESTAL]
Adjust the brightness of images.
Images will be brighter when the cursor is moved to the "+" direction, and will be darker when the cursor is moved to the "–" direction. Adjust the pedestal while monitoring an oscilloscope or a colour video monitor.

[PIX OFF]
Correct image defects (blemishes) such as scratches.
Up to 16 points can be corrected.
Refer to page 62 for descriptions of how to correct defects.

[CAMERA RESET]
Reset the settings edited on the [Camera] tab to the default settings.
Press simultaneously the [Left] button, [SET] button and [Right] button for around 2 seconds after moving the cursor onto "PUSH SW" of "CAMERA RESET". The settings will be reset to the default settings.

Configure the network settings [NETWORK]

Configure the network settings. When connecting the camera to a network, it is necessary to configure the network settings such as IP address, etc.
The settings can be configured on the "NETWORK SETUP" page.
Refer to the operating instructions (book) for descriptions of how to display the "NETWORK SETUP" page.

Note:
Before configuring the settings, refer to the network administrator or the Internet service provider for the following information.
- IP address
- Net mask
- Default gateway (when using the gateway server/router)
- HTTP port Number

NETWORK SETUP page

```
   **NETWORK SETUP**
DHCP     OFF
IP ADDR  192.168.  0. 10
NETMASK  255.255.255.128
GATEWAY  192.168.  0.  1

HTTP PORT NO.    80



 RET TOP END
```

The default network settings are as follows.
DHCP: OFF
IP ADDRESS: 192.168.0.10
NETMASK: 255.255.255.0
GATEWAY: 192.168.0.1
HTTP PORT NO.: 80

[DHCP]
Select "ON" or "OFF" to determine whether or not to use the DHCP function.

[IP ADDR]
When not using the DHCP function, enter the IP address of the camera.

[NETMASK]
When not using the DHCP function, enter the net mask of the camera.

[GATEWAY]
When not using the DHCP function, enter the default gateway of the camera.

[HTTP PORT NO.]
Assign the port numbers independently.

Note:
Refer to page 39 for further information about the network settings.

Configure the detailed settings

The following are descriptions of how to edit the camera title, adjust white balance, etc. on the detailed setup menu.

The camera title can be edited and displayed on the screen

The camera title can be edited and displayed on the screen. Up to 16 characters are available for the camera title.

Step 1

Select "ON" for "CAMERA ID" on the "CAMERA SETUP" page.

→ The camera ID edit page will be displayed.

```
CAMERA ID
0123456789
ABCDEFGHIJKLM
NOPQRSTUVWXYZ
()., '":;&#!?=
+-*/%$

SPACE POSI
RET TOP END RESET

................
↑
```

Entry (edit) area

Step 2

Move the cursor onto the desired character and press the [SET] button.

→ The selected character will be displayed at the bottom of the page.
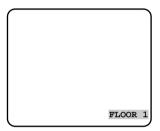
<About character entry>
- To edit the entered character, move the cursor onto the desired character and press the [SET] button. The arrow mark will move under the selected character. Enter the desired character for the selected character.
- To enter a blank (space), press the [SET] button after moving the cursor onto "SPACE".
- To delete all characters, press the [SET] button after moving the cursor onto "RESET".

Step 3

When completing the camera title edit, press the [SET] button after moving the cursor onto "POSI".

→ The camera title display position setting window will be displayed.

```
                    FLOOR 1
```

Step 4

Determine the position where the camera title is to be displayed, and press the [SET] button.

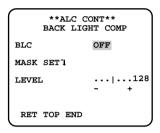→ The camera title and the display position will be applied.

Compensate backlight

Set an area where backlight is to be compensated.

Step 1

Select "ALC" for "ALC/ELC" on the "CAMERA SETUP" page.
→ The "ALC CONT" page will be displayed.

```
      **ALC CONT**
      BACK LIGHT COMP

BLC              OFF

MASK SET↲

LEVEL          ...|...128
                -      +


 RET TOP END
```

Step 2

Move the cursor onto "BLC" and select "ON" or "OFF".
ON: Backlight will be compensated automatically. (→ To step 6)
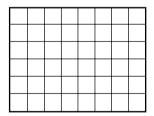**OFF:** Manually set an area where backlight is to be compensated. (→ To step 3)
Default: OFF

Step 3

Move the cursor onto "MASK SET" and press the [SET] button.
→ The mask setup window will be displayed.

Step 4

Mask a bright area on the screen. Press the [SET] button after selecting the desired area (selected area blinks) using the [Left], [Right], [Up] and [Down] buttons. When the selected area is masked, horizontal stripes and white fill will be displayed in the selected area alternately. When moving to the other area, the area will be displayed in white.
To mask the other areas, do the same procedures above.

<To cancel the mask setting>
Select the desired masked area and press the [SET] button.
To cancel the mask setting for all areas, press the [Left] and [Right] buttons for 2 seconds simultaneously.

Step 5

After completing the mask settings, press the [SET] button for around 2 seconds.
→ The "ALC CONT" page will be displayed.

Step 6

Move the cursor onto "LEVEL" and adjust the level using the [Left] and [Right] buttons.

Note:
To reset to the default settings, press the [Left] and [Right] buttons simultaneously for 2 seconds or more.
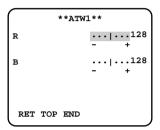
Adjust white balance finely

After adjusting white balance using the auto tracking white balance (ATW) function or the auto white balance control (AWC) function (☞ page 50), manually adjust white balance finely.

Step 1

Press the [SET] button after selecting any of "ATW1", "ATW2" and "AWC" for "WHITE BAL" on the "CAMERA SETUP" page.

→ The fine adjustment window will be displayed.

```
         **ATW1**

R              ...|...128
               -       +

B              ...|...128
               -       +


 RET TOP END
```

Step 2

Move the cursor onto "R" or "B" and adjust the level using the [Left] and [Right] buttons. "R" indicates red and "B" indicates blue. When the "I" cursor is moved to the "+" direction, red/blue gain will be incremented respectively. When the "I" cursor is moved to the "–" direction, red/blue gain will be decremented respectively.

Note:

To reset to the default settings, press the [Left] and [Right] buttons simultaneously for 2 seconds or more.
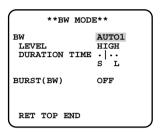

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Configure the B/W mode settings

Configure the settings relating to the B/W mode such as brightness at change between colour and B/W, waiting time to change to the B/W mode, etc.

Press the [SET] button after moving the cursor onto "BW MODE" on the "CAMERA SETUP" page.
→ The "BW MODE" page will be displayed.

```
     **BW MODE**

BW             AUTO1
 LEVEL         HIGH
 DURATION TIME .|..
               S  L

BURST(BW)      OFF


 RET TOP END
```

Move the cursor onto "BW" and select a parameter from the following.

AUTO1: Images will be automatically switched between colour and B/W according to brightness (illumination). When illuminance is low, images will be displayed in B/W. When illuminance is high, images will be displayed in colour.

AUTO2: Click this button when using the camera in the nighttime with near-infra red rays as light source.

EXT: Images will be displayed in B/W by making "DAY/NIGHT IN" terminal short-circuit.

ON: Images will be displayed in B/W.

OFF: Images will be displayed in colour.

Default: OFF

Note:
When shooting a constantly moving subject or when the screen is filled by similar colours, it may be difficult for the camera to judge where the light source is, since light source is simplistatically detected according to information from the CCD image sensor.
When "AUTO2" is selected, wavelength of light source should be 80 nm or more.

Move the cursor onto "LEVEL" and select a parameter from the following.

LOW: When illuminance around the camera is approx. 1 lx or less, images will be automatically displayed in B/W.

HIGH: When illuminance around the camera is approx. 5 lx or less, images will be automatically displayed in B/W.

Default: HIGH

Move the cursor onto "DURATION TIME" and select a parameter (wait time to switch between the colour mode and the B/W mode) from the following.
10 s - 30 s – 60 s – 300 s
(S)   (L)
Default: 30 sec

Move the cursor onto "BURST (BW)" and select "ON" or "OFF" to determine whether or not to output burst signals when displaying images in B/W.
ON: Output burst signals
OFF: Does not output burst signals
Default: ON

Notes:
• It is also possible to make the camera to adjust the flange-back length automatically to correct out-of-focus which may be caused when switching between the colour image display and the BW image display.
(☞ page 52)
• When displaying colour images in B/W, images may not be displayed correctly without burst signals depending on a monitor or a VTR. In this case, select "ON".
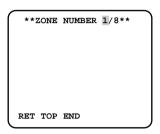
Set the privacy zone

When there is a zone that is not to be displayed, set the zone as a privacy zone to not to display.
Up to 8 privacy zones can be set.

Step 1

Move the cursor onto "PRIVACY ZONE" on the "CAM-ERA SETUP" page and press the [SET] button after selecting "ON (1)" or "ON (2)".
→ The zone number selection page will be displayed.
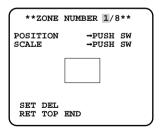
```
**ZONE NUMBER 1/8**




 RET TOP END
```

Step 2

Confirm that the cursor is on "1" of "1/8" displayed on the top of the page, and then press the [Left] button or [Right] button to select the desired zone number.
When an asterisk (*) is displayed next to the zone number, the selected zone number is already in use.

Step 3

After completing the zone number selection, press the [SET] button.
→ The zone setting page will be displayed.

```
**ZONE NUMBER 1/8**
POSITION      →PUSH SW
SCALE         →PUSH SW



 SET DEL
 RET TOP END
```

Notes:
- When selected the zone number already in use in step 3, images inside of the respective zone that is set on the zone setting window will be displayed. By performing steps 4 and 5, the set zone will be can-celled and a new zone will be set.
- To cancel the zone settings, press the [SET] button after moving the cursor onto "DEL".
  The zone settings will be cancelled.

Step 4

Move the cursor onto "POSITION" and press the [SET] button.

Step 5

Press the [SET] button after designating the desired position using the [Left], [Right], [Up] and [Down] but-tons.
→ The zone position will be set.

Step 6

Move the cursor onto "SCALE" and press the [SET] but-ton.

Step 7

Adjust the size of the zone by pressing the [Left], [Right], [Up] and [Down] buttons. Vertical size can be adjusted using the [Up] and [Down] buttons and hori-zontal size can be adjusted using the [Left] and [Right] buttons. Click the [SET] button after completing the set-tings.

Step 8

Move the cursor onto "SET" and press the [SET] button.
→ The privacy zone settings will be complete and the zone number selection page will be displayed.

Adjust the electronic zoom

Adjust the electronic zoom. The electronic zoom is operable using a remote controller.
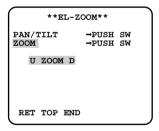
Select "ON" for "EL-ZOOM" on the "CAMERA SETUP" page.
→ The "EL-ZOOM" page will be displayed.

```
        **EL-ZOOM**

PAN/TILT     →PUSH SW
ZOOM         →PUSH SW




 RET TOP END
```

Move the cursor onto "ZOOM" and press the [SET] button.
→ Images to which zooming can be applied will be displayed.

```
        **EL-ZOOM**

PAN/TILT     →PUSH SW
ZOOM         →PUSH SW

   U ZOOM D


 RET TOP END
```

Adjust zooming level pressing the [Up] and [Down] buttons. After completing the adjustment, press the [SET] button.
→ The "EL-ZOOM" page will be displayed.

Move the cursor onto "PAN/TILT" and press the [SET] button.
→ Images to which panning/tilting can be applied will be displayed.

```
        **EL-ZOOM**

PAN/TILT     →PUSH SW
ZOOM         →PUSH SW
   U TILT D/L PAN R


 RET TOP END
```

Important:
   "PAN/TILT" is available only when images are zoomed in.

Adjust panning/tilting level pressing the [Left], [Right], [Up] and [Down] buttons. After completing the adjustment, press the [SET] button.
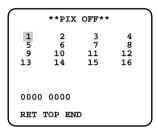→ The "EL-ZOOM" page will be displayed.

Correct image defects (blemishes) such as scratches

Image defects (blemishes) such as scratches can be corrected in the following method.

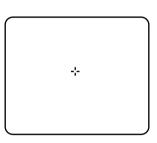Press the [SET] button after moving the cursor onto "PIX OFF" on the "SPECIAL SETUP" page.
→ The "PIX OFF" page will be displayed.

```
      **PIX OFF**

  1      2      3      4
  5      6      7      8
  9     10     11     12
 13     14     15     16


 0000 0000

 RET TOP END
```

Press the [SET] button after selecting a number (1 – 16) to be registered as a blemish compensation point.
→ The blemish compensation point setting window will be displayed.

```
                ┼
```

Press the [SET] button after moving the cross cursor (+) onto a centre point of the desired blemish point using the [Left], [Right], [Up] and [Down] buttons.
→ The designated blemish will be compensated and the blemish compensation point will be registered. The "PIX OFF" page will be displayed. An asterisk (*) will be displayed next to the respective number when registered. Coordination number of the registered point will be displayed.

Notes:
• To delete the registered blemish compensation point, move the cursor onto the respective blemish compensation number on the "PIX OFF" page and press the [SET] button. When the blemish compensation point setting window is displayed, press the [Left] and [Right] buttons for 2 seconds simultaneously. The "PIX OFF" page will be displayed. When the blemish compensation point is deleted, an asterisk (*) next to the number will disappear.
• When using a video servo type AF lens, adjust brightness darker before starting the blemish compensation.

About the Displayed System Log

Error indications relating to SMTP

Category	Cause	Description
POP3 server error	Authentication error	Entered user name or password may be incorrect. Check if the mail settings are configured correctly.
	Cannot connect to POP3 server	• The IP address of the server may be incorrect. Check if the IP address of the server is configured correctly. • The POP3 server may be down. Ask the network administrator.
SMTP server error	Authentication error	Entered user name or password may be incorrect. Check if the mail settings are configured correctly.
	Connection error to DNS server	• The designated IP address of the DNS may be incorrect. Check if the DNS settings are configured correctly. • The DNS server may be down. Ask the network administrator.
	Cannot connect to SMTP server.	• The IP address of the server may be incorrect. Check if the IP address of the server is configured correctly. • The SMTP server may be down. Ask the network administrator.
Internal error	Other error	An error occurred in the mail function. Check if the mail settings are configured correctly.

Error indications relating to FTP

Category	Cause	Description
FTP server error	Connection error to DNS server	The FTP server or DNS server may be down.
	Cannot connect to FTP server.	
Connection error	File transfer error	• The FTP server settings may be incorrect. • The settings relating to the indicated item may be incorrect.
	Passive mode error	
	Log out failed	
	Directory change failed	
	User name and password isn't correct.	
Internal error	Other error	The FTP server settings may be incorrect.

Error indications relating to DDNS

Category	Cause	Description
Connection error	Cannot connect to DDNS server.	• The designated IP address of the DDNS may be incorrect. Check if the DDNS settings are configured correctly. • The DDNS server may be down. Ask the network administrator.
	User name and password isn't correct.	Entered user name or password may be incorrect. Check if the DDNS settings are configured correctly.
	IP address updated failed.	IP address update error occurred in the DDNS server. Ask the network administrator.
Internal error	Other error	An error occurred in the DDNS function. Check if the DDNS settings are configured correctly.

Error indications relating to NTP

Category	Cause	Description
Connection error	Cannot connect to NTP server.	• The IP address of the server may be incorrect. Check if the IP address of the server is configured correctly. • The NTP server may be down. Ask the network administrator.
Internal error	Other error	• The designated IP address of the NTP server may be incorrect. Check if the NTP server settings are configured correctly. • The NTP server may be down. Ask the network administrator.

Other error

Category	Cause	Description
Time adjustment synchronizing with NTP succeeded.	Succeeded in the update. (NTP)	Time correction succeeded.

Troubleshooting

Before asking for repairs, check the symptoms with the following table

Contact your dealer if a problem cannot be solved even after checking and trying the solution or if the problem is not described below.

Symptom	Cause/solution	Reference pages
Cannot access from the browser.	• Is the LAN cable (category 5) is firmly connected to the network connector on the rear of the camera?	Operating instructions (book)
	• Is the link LED right by the network connector lit? When it is not lit, connection to a LAN may not be established or a network may be not working correctly. Check if the cables have any contact failure or if the wiring is correct or not.	Operating instructions (book)
	• Are the set IP addresses valid?	36, 55
	• Are you accessing the wrong IP address? Check the connection as follows: With the Windows command prompt, > ping "IP address set for the camera" When the WV-NP1000/WV-NP1004 replies, the camera is functioning normally. If not, turn off the power of the WV-NP1000/WV-NP1004 once, and proceed as follows (1) Change the IP address by using the "Panasonic IP Setup" software. (2) Initialize the camera by pressing the [INITIAL SET] button on the camera. The IP address will return to the default setting "192.168.0.10".	–
	• Is the same IP address provided to other devices? Are there contradictions between the address and the network subnet to be accessed? <When the camera and the PC are connected in the same subnet> Are the IP addresses of the camera and the PC set in a common subnet? Or is "Use Proxy Server" for the settings of the browser checked? When accessing the camera in the same subnet, it is recommended to enter the address of the camera in the "Don't Use Proxy For These Addresses" box. <When the camera and the PC are connected in the different subnet> Is the IP address of the default gateway set for the camera correct?	–

Symptom		Cause/solution	Reference pages
Cannot access from the browser.	▶	• Is the power of the camera on? Check if the power of the camera is turned on.	Operating instructions (book)
No image is displayed.	▶	• Is the viewer software installed on a PC? Install the viewer software on a PC.	Operating instructions (book)
	▶	• Is the lens cap detached? Check if the lens cap is detached.	–
Images are displayed blurry.	▶	• Aren't there dusts or dirt on the lens? Check if there are dust or dirt on the lens.	–
	▶	• Is the focus adjusted correctly? Check if the focus is adjusted correctly.	Operating instructions (book)
The image is not being refreshed.	▶	• Depending on the version of your browser, there might be difficulties refreshing the picture and operating the camera. It is recommended to use Internet Explorer 6.0 SP2.	Operating instructions (book)
	▶	• Depending on the traffic of the network or the concentration of access to the camera, there might be difficulties displaying the camera picture. Click the reload button of the browser to request the camera picture to be refreshed.	–
Images cannot be saved on the SD memory card.	▶	• Is the SD memory card inserted correctly?	Operating instructions (book)
	▶	• Is the SD memory card formatted?	21
	▶	• Isn't the write protect switch set to "LOCK"? When the write protect switch is set to "LOCK", available size/total size indication of the SD memory card will be "**********KB/**********KB".	–

Symptom		Cause/solution	Reference pages
Images cannot be saved on the SD memory card.	▶	• Check if the SD memory card is inserted firmly? Replace the SD memory card with a new one. (Generally, SD memory cards have a limited number of times to rewrite.) Contact your dealer if this problem is not solved even after replacing the SD memory card.	–
Flicker occurs. (The screen flickers.)	▶	• Is the camera used under fluorescent lamps operating at 60 Hz? By setting the shutter speed to "1/60" or "1/120", flicker caused by fluorescent lamps can be diminished.	49
Images from analog output are not smoothly displayed.	▶	• Isn't the resolution set to "Full scan"? When the selected resolution is "Full scan", the frame rate of the analog output will be 1/4.	23

Symptom	Cause/solution	Reference pages
When displaying MPEG4 images on two browser windows or more, images from two cameras or more are displayed in sequence on a single browser window.	• This may occur due to the display adapter and driver combination. When this occurred, update the driver of the display adapter to the latest version first. If updating the driver does not solve the problem, adjust the hardware acceleration as follows. 1. Right-click on the desktop and select "Properties" from the displayed pop-up menu. 2. Select "Settings" from "Display Properties", and then click the [Advanced] button. 3. Click the [Troubleshoot] tab and disable the DirectDraw acceleration by adjusting the level of "Hardware acceleration". 	–

When using a PC on which Windows XP Service Pack2 (SP2) is installed

The following may occur during operation when using a PC on which Windows XP Service Pack2 (SP2) is installed. Follow the instructions below when the following occurred. By performing the following solutions, other applications and the security level may not be affected.

The "Information Bar" expressed in the following symptom and solutions will be displayed just below the address bar only when there is information to communicate.

← Information Bar

Symptom		Solutions	Reference pages
The following message is displayed on the information bar. "Pop-up blocked. To see this pop-up or additional options, click here…"	▶	• Click the information bar and select "Always Allow Pop-ups from This Site…". The dialog window saying "Allow pop-ups from this site?" will be displayed. Click the "Yes" button.	–
Unnecessary status bar or scroll bar is displayed on the pop-up window.	▶	• Click "Internet Options" on the Tools menu of Internet Explorer, and then click the "Security" tab. Then, click the "Custom Level…" button to open the "Security Setting" window. Under "Miscellaneous", select "Enable" for "Allow script-initiated windows without size or position constraints". Click the "OK" button. The "Warning" window will be displayed. Click the "Yes" button.	–

Matsushita Electric Industrial Co., Ltd.
Osaka, Japan
http://www.panasonic.co.jp/global/