Panasonic

Setup Instructions

Network Video Decoder

Model No. WJ-GXD400
WJ-GXD400/G

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

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

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

CONTENTS

Preface

This unit (WJ-GXD400, WJ-GXD400/G) is an IP-network-ready decoder.
This unit receives video and audio data through the IP network and provides the data to external devices such as monitors and speakers.
Images from up to 6 cameras can be simultaneously displayed with this unit. For major functions, refer to the Installation Guide.
Refer to "Readme.txt" on the provided CD-ROM for supported devices.

About the User Manuals

There are 2 sets of operating instructions for the WJ-GXD400, WJ-GXD400/G as follows.
 • Installation Guide: Explains how to install and connect devices.
 • Setup Instructions (PDF): Explains how to perform the settings of this unit using a PC via a network.

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

"WJ-GXD400" or "GXD400" shown in the instructions and llustrations used in these operating instructions indicate the WJ-GXD400, WJ-GXD400/G.
The screens used in these operating instructions show the case of NTSC model.
Refer to "Readme.txt" on the provided CD-ROM for further information including the dedicated software, its version, and compatible cameras.

System Requirements for a PC

It is recommended to perform the settings of this unit using a PC that meets the following system requirements.

OS:	Microsoft® Windows Vista® Business 32-bit
	Microsoft® Windows® XP Professional SP2*
	Microsoft® Windows® XP Home Edition SP2*
CPU:	Pentium® 4 3.0 GHz or faster
Memory:	1 GB or more (A minimum of 512 MB memory is required when using Microsoft® Windows® XP.)
Monitor:	Resolution: 1 024 x 768 pixels or more
	Color: 24-bit True color or better
Network interface:	A 100/1 000 Mbps network interface card must be installed.
Web browser:	Windows® Internet Explorer® 7.0
	Microsoft® Internet Explorer® 6.0 SP2*
Other:	It is necessary to read the operating instructions and use the software on the provided CD-ROM.
	Adobe® Reader®: It is necessary to read the operating instructions on the provided CD-ROM.

* Microsoft® Internet Explorer® 6.0 SP2 is required when using Microsoft® Windows® XP Home Edition SP2 or Microsoft® Windows® XP Professional SP2.
* Microsoft® Windows® XP Professional 64-bit Edition is not supported.

Note:
• When using a PC that does not meet the above requirements, displaying of images may become slow or the web browser may become inoperable.

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Abbreviations

The following abbreviations are used in these operating instructions.
Microsoft® Windows Vista® is described as Windows Vista.
Microsoft® Windows® XP Professional SP2 and Microsoft® Windows® XP Home Edition SP2 are described as Windows XP.

Network Security

As you will use this product connected to a network, your attention is called to the following security risks.
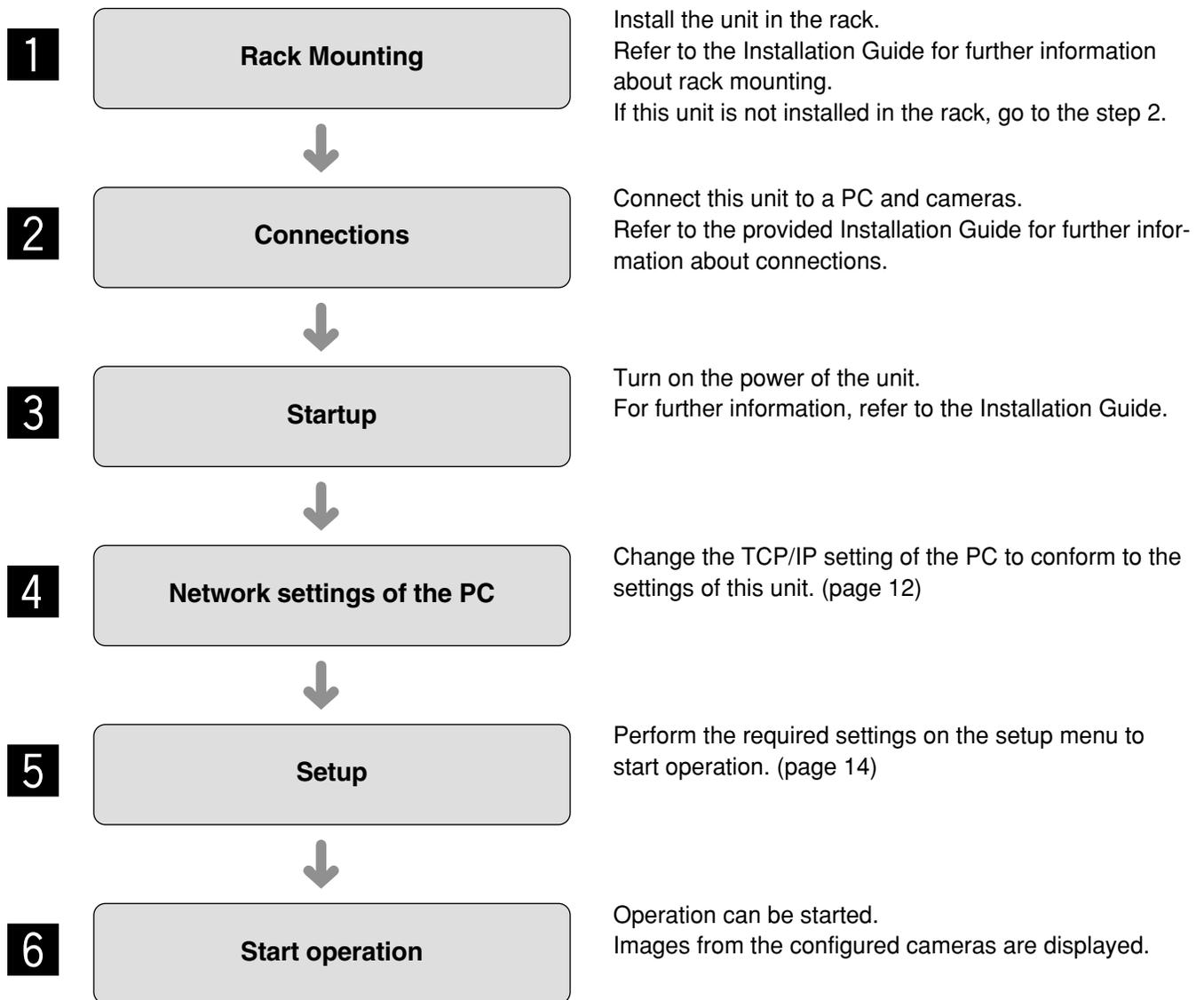- Leakage or theft of information through this product
- Use of this product for illegal operations by persons with malicious intent
- Interference with or stoppage of this product by persons with malicious intent

It is your responsibility to take precautions such as those described below to protect yourself against the above network security risks.
- Use this product in a network secured by a firewall, etc.
- If this product is connected to a network that includes PCs, make sure that the system is not infected by computer viruses or other malicious entities (using a regularly updated anti-virus program, anti-spyware program, etc.).
- Protect your network against unauthorized access by restricting users to those who log in with an authorized user name and password.
- Apply measures such as user authentication to protect your network against leakage or theft of information, including authentication information (user names and passwords) and DDNS server information.

Operation Flow

The operation flow of this unit is as follows.

1 | **Rack Mounting** — Install the unit in the rack.
Refer to the Installation Guide for further information about rack mounting.
If this unit is not installed in the rack, go to the step 2.

↓

2 | **Connections** — Connect this unit to a PC and cameras.
Refer to the provided Installation Guide for further information about connections.

↓

3 | **Startup** — Turn on the power of the unit.
For further information, refer to the Installation Guide.

↓

4 | **Network settings of the PC** — Change the TCP/IP setting of the PC to conform to the settings of this unit. (page 12)

↓

5 | **Setup** — Perform the required settings on the setup menu to start operation. (page 14)

↓

6 | **Start operation** — Operation can be started.
Images from the configured cameras are displayed.

Setup Menu Chart

Performing each setting on the setup menu should be completed in advance to operate this unit.
Refer to "Setup Window Call-up/Termination" (page 14) to display the setup menu.

Setup items	Description	Reference page
Basic		
Time & date		16
Date/time display format	Select a date display format.	
Time display format	Select a time display format.	
Time & date	Adjust the current time and date.	
Time zone	Specify the time zone.	
Summer time (daylight saving)	Choose whether or not to configure summer time.	
Summer time (daylight saving) table	Specify the summer time starting year, month, day, and time, and the summer time ending year, month, day and time.	
Default screen		18
Video/Audio output settings for the default screen	Choose whether or not to automatically obtain and display images when starting up this unit.	
Screen pattern	Select a screen pattern to be used when starting up this unit.	
Camera CH designation	Specify which part of the screen the image obtained and displayed at startup is assigned.	
Audio output	Choose whether or not to provide the audio output received from the camera when starting up this unit. The audio output is not provided when the compression method is set to JPEG.	
Language		19
Language	Select a display language for the web browser.	
Display		
OSD		20
Camera title	Specify the camera title position and adjust the position.	
Time & date	Specify the time & date position and adjust the position.	
Screen ID	Specify the screen ID position and adjust the position.	
Optional info.	Specify the optional information position and adjust the position.	
Screen ID	Enter a screen ID displayed on the small window.	
Time & date display	Choose whether or not to display the time of this unit.	
Border	Choose whether or not to display the border that splits the screen and select a border color.	
Display mode	Select a display mode, either the full mode or trimming mode.	

Setup items	Description	Reference page
Event		
Site alarm		22
Site alarm	Choose whether or not to activate the site alarm.	
Originating port number	Specify the port number to be used for receiving the site alarm.	
Alarm message display	Choose whether or not to display the alarm message.	
Output terminal	Choose whether or not to provide an alarm signal output from the output terminal when an alarm signal is received.	
Alarm reset timer	Specify the period from alarm occurrence to alarm cancellation.	
Error notification		23
Error notification	Choose whether or not to enable the error notification.	
Destination port	Specify the port number to which an error notification is transmitted when an error occurs.	
Retry times	Specify the retry number of the transmission to the PC when transmission to the PC ends in failure.	
Destination address	Specify the address to which an error notification is transmitted when an error occurs.	
Output terminal	Choose whether or not to provide an alarm signal output from the output terminal when an error notification is received.	
Schedule		
Timetable		24
Display pattern	Select a display pattern from the registered patterns.	
Schedule	Perform the settings for the schedules by designating a day of the week and time.	
Display pattern registration		25
Group	Select a number to be registered from the registered group numbers and group sequence numbers.	
Image display on a 6-screen	Select a number to be registered from the registered camera numbers and tour sequence numbers.	
Image display on a 3-screen (PSL)	Select a number to be registered from the registered camera numbers and tour sequence numbers.	
Image display on a 3-screen (PSR)	Select a number to be registered from the registered camera numbers and tour sequence numbers.	
Image display on a 1-screen	Select a number to be registered from the registered camera numbers and tour sequence numbers.	

Setup items	Description	Reference page
Camera		
NW camera setup		26
Camera	Select a number assigned to the camera whose information will be registered.	
Live image source	Obtain the information of the live image source.	
Address	Enter an IP address.	
HTTP port	Enter a HTTP port number.	
User name	Enter a user name.	
Password	Enter a password.	
Recorder/Encoder (Model no.)	Appears when information is obtained.	
Recorder/Encoder (Camera CH designation)	Select a camera channel according to the specified live image source.	
Camera title	Displays the camera title by obtaining the information when the camera title is specified. After obtaining the information, the camera title can be edited.	
Model no.	Appears when information is obtained.	
Compression	Select a compression method.	
Image capture size	Select a resolution. Is selectable when the compression method is set to JPEG.	
Transmission interval	Select an interval to update the image. Is selectable when the compression method is set to JPEG.	
Tour sequence		29
Camera no.	Select a registered camera.	
Preset camera no. (1-256)	Enter the preset position of the camera to be moved at step change.	
Dwell time	Select a dwell time.	
Group sequence		30
Screen pattern	Select a screen pattern.	
Group number	Select a group number from the registered groups.	
Dwell time	Select a dwell time.	
Registered pattern list		31
Screen pattern	Select a screen pattern.	
Registered camera	Select a registered camera.	
Server		
Proxy		32
Proxy	Choose whether or not to use a proxy server.	
Server address	Enter the proxy server address.	
Port number	Enter the port number of the proxy server.	
Exceptions	Enter the IP address of the camera that does not use the proxy server.	
NTP		33
Time adjustment	Select a time adjustment method for the NTP server.	
NTP server address	Enter the IP address or host name of the NTP server.	
Port number	Enter the port number of the NTP server.	
Time adjustment interval	Select an interval to update the time.	

Setup items	Description	Reference page
Network		
Basic - IPv4 network		
Network port		34
DHCP	Choose whether or not to use DHCP.	
IPv4 address	Specify the IP address of the IPv4 network.	
Subnet mask	Specify the net mask in accordance with the network rules.	
Default gateway	Configure the default gateway of the network.	
Maintenance port		34
IPv4 address	Specify the IP address of the IPv4 network.	
Subnet mask	Specify the net mask in accordance with the network rules.	
DNS	Select either automatic or manual manner to obtain the DNS server address.	
Primary server address	Specify the DNS server address.	
Secondary server address	Specify the DNS server address.	
HTTP port	Specify the HTTP port number.	
Line speed	Specify the line speed for data transmission.	
DDNS		36
DDNS	Choose whether or not to use DDNS.	
Host	Enter the host name to be used.	
User name	Enter the user name to log into the DDNS server.	
Password	Enter the password to log into the DDNS server.	
Access interval	Specify the interval to access the DDNS server to check the IP address and host name.	
User mng.		
User authentication		37
User authentication	Choose whether or not to perform user authentication when accessing this unit.	
User name	Enter a user name.	
Password	Enter a password.	
Retype password	Enter the password again to confirm the password entered into [Password].	
Access level	Assign the access level to the entered user name.	
User check	Displays the user registered under user authentication.	
Host authentication		39
Host authentication	Choose whether or not to perform host authentication when accessing this unit.	
IP address	Enter the IP address to permit accessing to this unit.	
Access level	Assign the access level to the entered user name.	
Host check	Displays the host (IP address) registered under host authentication.	

Setup items	Description	Reference page
Maintenance		
Product information - Version information		
Software version	Displays the software version.	41
Hardware version	Displays the hardware version.	41
Product information - MAC address		
Network port	Displays the MAC address of the network port.	41
Maintenance port	Displays the MAC address of the maintenance port.	41
Product information - Serial no.	Displays the serial number of the main unit.	
Product information - Internal thermal information		
Current temperature	Displays the temperature inside the main unit.	41
Highest temperature	Displays the highest temperature inside the main unit recorded since turning on the power of this unit.	41
Error log		
Error log	Displays the error occurrence date, time, and details.	42
Network log		
Network log	Displays the error occurrence date, time, and details.	42
Default reset		
Reset to the default (Except the network settings)	Initialize the setting data.	44
Reboot	Restart this unit.	44

Network Setup

Network Settings of the PC

The TCP/IP setting of the PC shall be changed to conform to the settings of this unit. The IP address of the PC shall be specified within the same subnet range as that of the network port of this unit to access this unit.
In these operating instructions, the settings are performed on Windows Vista as examples. Refer to the operating instructions of the respective OS for further information.
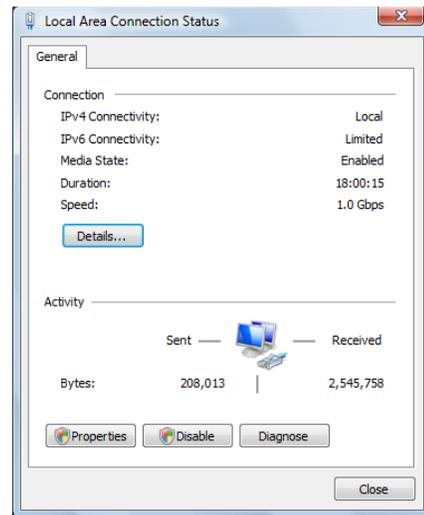
Example:

To use this unit with the default settings (IP address: 192.168.0.250), the IP address of the PC should be "192.168.0.XXX (XXX is a value between 2 and 254 except 250 (that is assigned to this unit)".

1 **Log in to the PC as an administrator.**

2 **On the taskbar, click "Start", and then click the "Control Panel".**
The control panel will be displayed.

3 **Click [View network status and tasks].**
The "Network and Sharing Center" window will be displayed.

4 **Click [View status].**
The "Local Area Connection Status" window will be displayed.
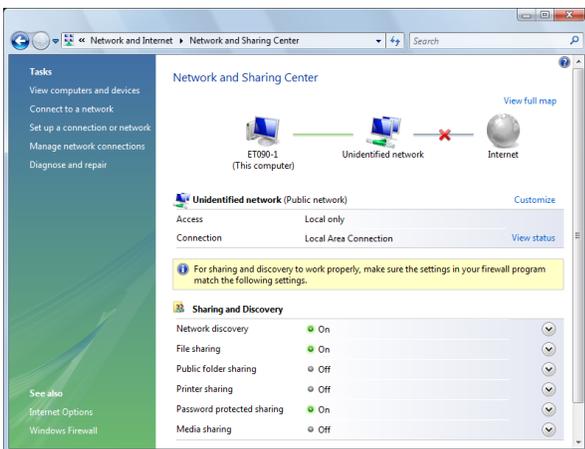
5 **Click "Properties".**
The "Local Area Connection Properties" window will be displayed.
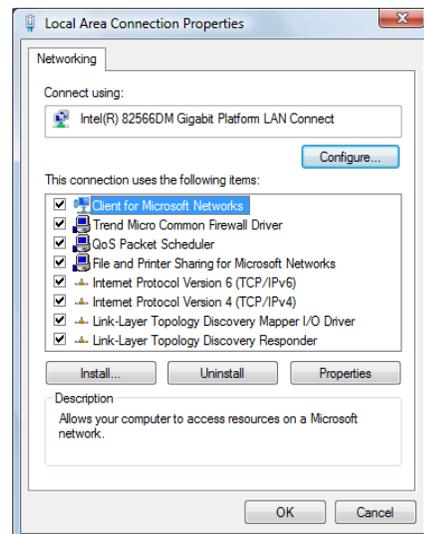
6 **Select "Internet Protocol Version 4 (TCP/IPv4)",
and then click "Properties".**
The "Internet Protocol Version 4 (TCP/IPv4)" window
will be displayed.

Note:
The "User Account Control" window will be displayed
depending on use or nonuse of a firewall.

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7 **Click "Use the following IP address" and enter
the IP address and the subnet mask.**
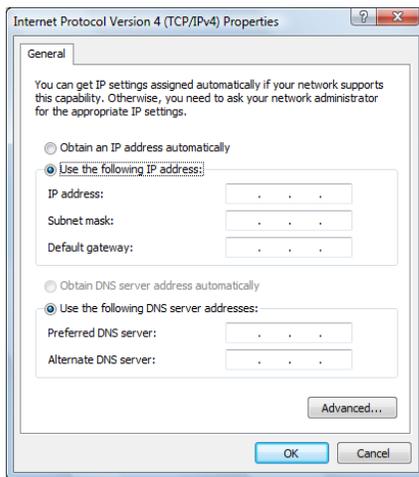

8 **Click the "OK" button and close the window.**

Setup Window

Setup Window Call-up/Termination

This unit can be operated using a web browser installed on the PC.

1 **Boot the PC.**

2 **Start the web browser.**

3 **Enter the IP address or URL assigned to this unit into the [Address] box, and then press the [Enter] key.**
The authentication window will be displayed.
Even if "User authentication" is set to "Off", the authentication window will be displayed.
Administration authentication is required to display the setup window.
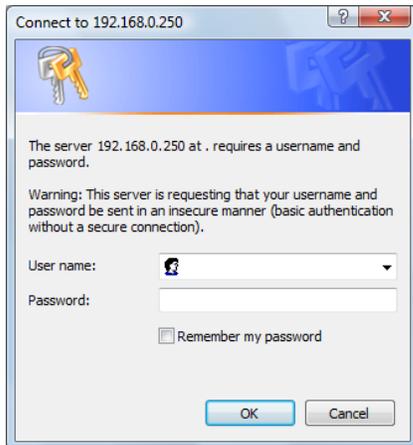
Important:
- Refer to a system administrator for the set IP address of this unit.
- If "Host authentication" is set to "On" (page 39), this unit cannot be accessed from the PC whose IP address has not been registered with this unit. Refer to a system administrator for further information.
- Do not attach "0" before the numbers when entering IP address.
  Example:
    ○ 192.168.0.50
    × 192.168.0.050

4 **Enter the user name and password registered on this unit. Click the [Login] button.**
The top page will be displayed.
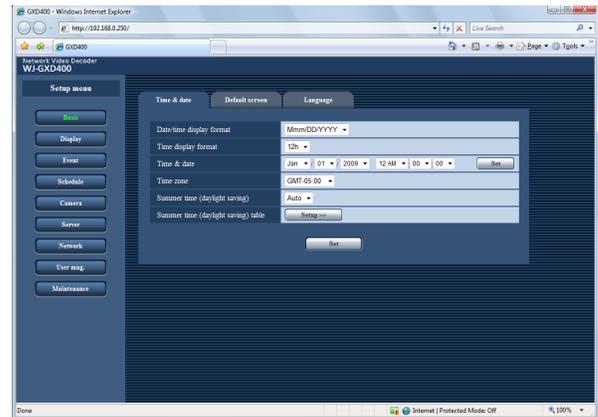
Important:
- Refer to a system administrator for the set user name and password.
- Refer to page 37 for the descriptions of how to register users.
- The default user name and password are as follows.
  User name: admin
  Password: 12345
- To enhance the security, change the password for an administrator before running the unit. It is recommended to change the password for the administrator periodically. Refer to page 37 for descriptions of how to change the password.
- When the unit is being operated without changing the user name and password, the pop-up window saying that it is recommended to change the password will be displayed.
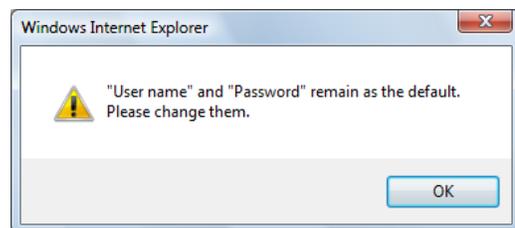
Major Operating Controls and Their Functions

Top Page
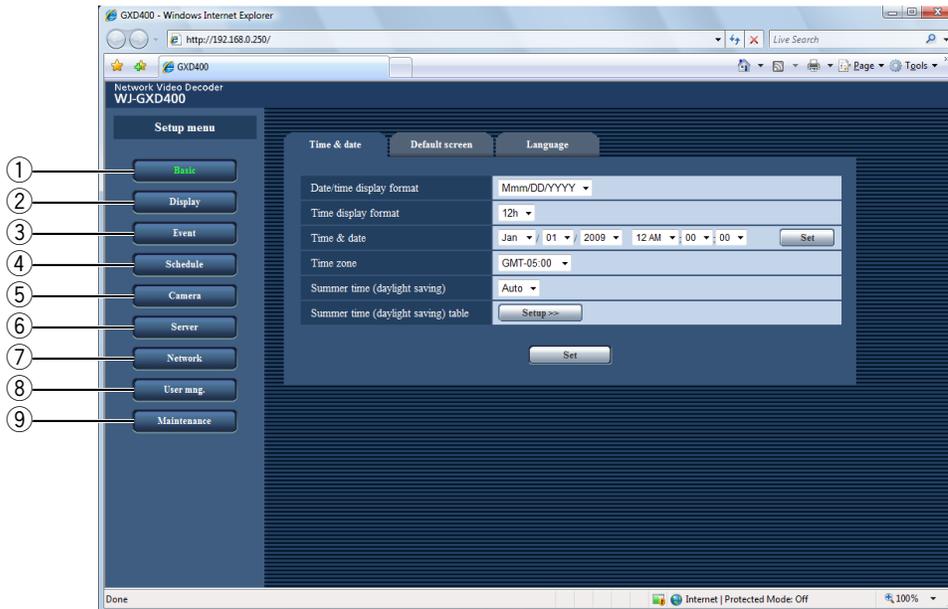
① **[Basic] button**
Performs the image and audio settings at time display or startup.

② **[Display] button**
Performs the settings relating to OSD.

③ **[Event] button**
Performs the action settings at event occurrence.

④ **[Schedule] button**
Performs the schedule settings to display images.

⑤ **[Camera] button**
Performs the settings relating to the network such as the camera IP addresses and port numbers and the settings of the sequential display.

⑥ **[Server] button**
Performs the settings relating to the proxy and NTP servers.

⑦ **[Network] button**
Performs the network settings such as settings of the IP address of this unit and gateway address.

⑧ **[User mng.] button**
Performs the settings for the user authentication/ host authentication to restrict access this unit from PCs.

⑨ **[Maintenance] button**
Displays and initializes the information of this unit.
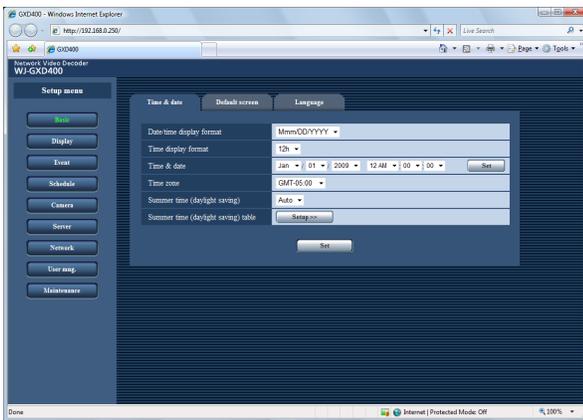
Basic

Perform the settings for the basic operations of this unit.

Time & date

The settings of date and time are performed.

1 **Click the [Basic] button on the setup menu.**

2 **Click the [Time & date] tab.**
The "Time & date" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ Date/time display format
Select a date format to be displayed from the following.
Example: (Ex. April 1, 2009)
DD/MM/YYYY: 01/04/2009
MM/DD/YYYY: 04/01/2009
DD/Mmm/YYYY: 01/Apr/2009
YYYY/MM/DD: 2009/04/01
Mmm/DD/YYYY: Apr/01/2009
Default: Mmm/DD/YYYY (NTSC model)
　　　　　DD/MM/YYYY (PAL model)

■ Time display format
Select a time display format to be displayed from the following.
(Example for 3 o'clock in the afternoon)
12h: 03:00:00PM
24h: 15:00:00
Default: 12h (NTSC model)
　　　　　24h (PAL model)

■ Time & date
Adjust the current time and date.
Select numbers for year, month, day, hour, minute and second, and click the [Set] button. This unit operates with the adjusted time from the moment of clicking.
2009-2035 (year)
/01-12 (month)
/01-31 (day)
/00-23 (hour)
/00-59 (minute)
/00-59 (second)

■ Time zone
Select the time zone of this unit.

■ Summer time (daylight saving)
Perform the settings for summer time from the following.
Out: Does not function.
Auto: Applies summer time in accordance with the setting of summer time. During summertime, the time will be displayed with an asterisk (*).
Default: Auto

■ Summer time (daylight saving) table

Set the start (On)/end (Off) date and time for summer time.

When the [Setup >>] button is clicked the following window will be displayed.

- Specify the summer time start date and time at [In] and summer time end date and time at [Out].
- Up to 10 times and dates for switching to summer time can be set.
- Click the [Set] button after completing the settings, and close the window by clicking the [×] button at the top right of the window.

Default screen

The video and audio outputs can be automatically obtained at starting this unit.

1 **Click the [Basic] button on the setup menu.**

2 **Click the [Default screen] tab.**
The "Default screen" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**
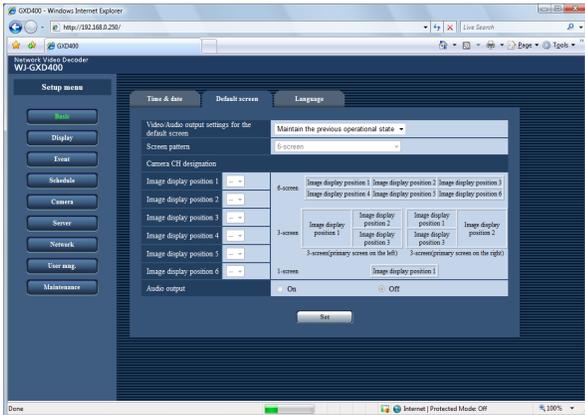
Setup items

■ Video/Audio output settings for the default screen
Determine whether or not to automatically obtain and display images when starting up this unit.
Apply the below settings: Selection of the screen pattern and camera allows user to obtain and display the configured image at starting this unit.
Maintain the previous operational state: The camera image displayed immediately before restarting this unit is obtained and displayed.
No output:
Default: Maintain the previous operational state

■ Screen pattern
Select a screen pattern to be used when starting up this unit.
6-screen/3-screen (primary screen on the left)/3-screen (primary screen on the right)/1-screen
Default: 6-screen

■ Camera CH designation
Specify which part of the screen the image obtained and displayed at startup is assigned.
Select cameras whose images are to be displayed at the image display positions 1 to 6.

■ Audio output
Select "On" or "Off" to determine whether or not to output the audio.

Important:
 • The audio output is not provided when the compression method is set to JPEG. The audio output is provided only at the default screen.
 • When the screen is split, the audio output is provided from the camera assigned to the image display position 1.


Notes:
 • Camera registration should be completed via [Camera] and [NW camera] before camera selection.
 • The audio output is available only from our (Panasonic i-pro series) cameras.
 • The audio output is provided only if the audio output setting has been performed at the camera side.
 • The schedule setting has higher priority if the schedule setting has been performed.
 • Audio output and image output may sometimes not be synchronized depending on the data (audio and image) reception timing.

Language

Select the display language for the web browser from the following.

3 **Perform the settings for each item.**

Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

1 **Click the [Basic] button on the setup menu.**

2 **Click the [Language] tab.**
The "Language" window will be displayed.
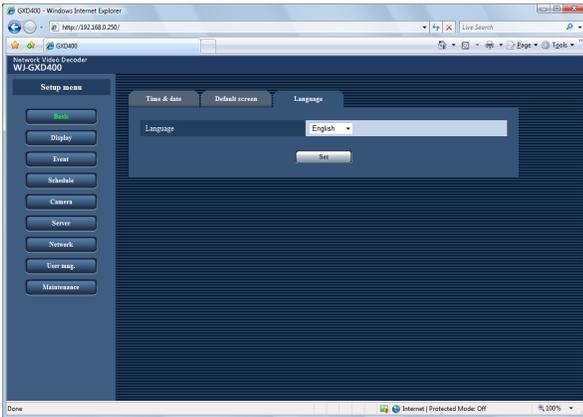
Display

OSD

The settings of information displayed on the screen are performed in this section.

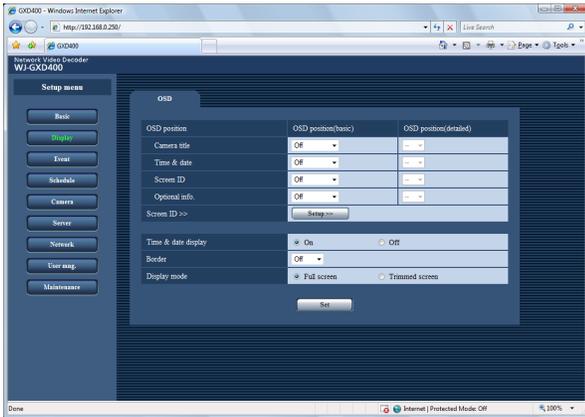**1 Click the [Display] button on the setup menu.**

2 Click the [OSD] tab.
The "OSD" window will be displayed.

3 Perform the settings for each item.
Refer to the following for further information about the settings for each item.

4 Click the [Set] button.

Setup items

■ OSD position
[Camera title]
Select a camera title position from the following.
Position: Off/Upper left/Upper right/Lower left/Lower right
Default: Off
Adjustment: --/+1/+2/+3/+4/-1/-2/-3/-4
Default: --

[Time & date]
Select a date and time position from the following:
Position: Off/Upper left/Upper right/Lower left/Lower right
Default: Off
Adjustment: --/+1/+2/+3/+4/-1/-2/-3/-4
Default: --

> **Note:**
> • If the date and time information is not provided from the camera, even selecting other than "Off" does not display date and time.

[Screen ID]
The settings of the screen ID in detail are performed on the "Screen ID setup" window. (Page 21)
Position: Off/Upper left/Upper right/Lower left/Lower right

Default: Off
Adjustment: --/+1/+2/+3/+4/-1/-2/-3/-4
Default: --

[Optional info.]
Select an optional information position from the following.
Position: Off/Upper left/Upper right/Lower left/Lower right
Default: Off
Adjustment: --/+1/+2/+3/+4/-1/-2/-3/-4
Default: --

> **Note:**
> • The sequence number is displayed during sequential display.

■ Time & date display
Select "On" or "Off" to determine whether or not to display the time and date of this unit.
Default: On

■ Border
Select a color of the screen splitting border from the following.
Off/Black/Gray/White
Default: Off

20

■ Display mode

Select either the "Full screen" or "Trimmed screen". When the display mode is toggled, restart this unit. If edges of an image are chipped in the full screen, change the mode to the trimmed screen.
**Default:** Full screen

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Important:
 • If the time & date or border is always displayed, the screen is susceptible to burn-in. Therefore, setting the time & date or border to Off is recommended.

Notes:
 • Displayed characters may be overlapped depending on the displayed position settings. If characters are overlapped, the pop-up window is displayed.
 • Check whether full resolution is available with the connected monitor.

[Screen ID]

A screen ID can be assigned to each split screen and displayed.

1 **Click the [Display] button on the setup menu.**

2 **Click the [OSD] tab in the setup menu.**
 The "OSD" window will be displayed.
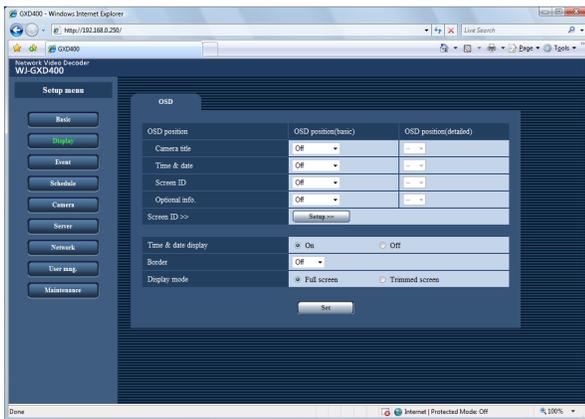
3 **Click the [Setup >>] tab in "Screen ID >>".**
 Refer to the following for further information about the settings for each item.

4 **Click the [Set] button in "Screen ID setup".**

Setup items

■ 6-screen

Select an information position to be displayed on the screen.*

■ 3-screen(primary screen on the left)

Select an information position to be displayed on the screen.*
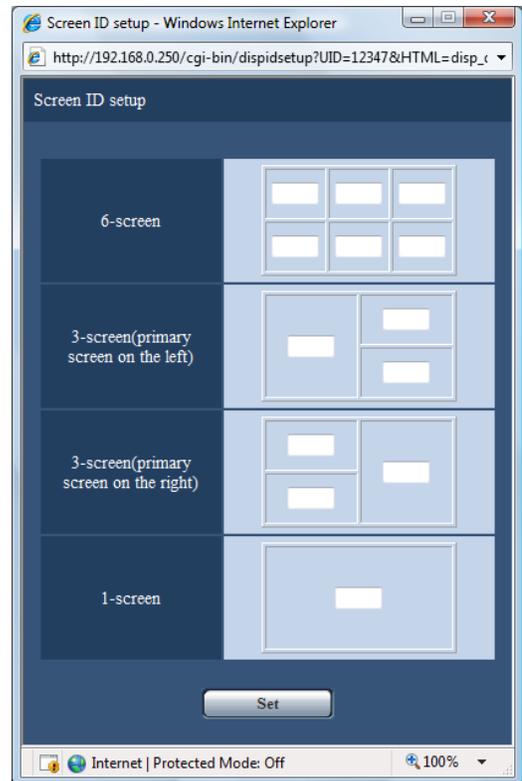
■ 3-screen(primary screen on the right)

Select an information position to be displayed on the screen.*

■ 1-screen

Select an information position to be displayed on the screen.*

* Up to 4 alphanumeric characters can be entered.

Event

When an event signal (alarm notification) is received from another network device, an alarm action starts in accordance with the setting.

Site alarm

The alarm action at site alarm occurrence can be specified.

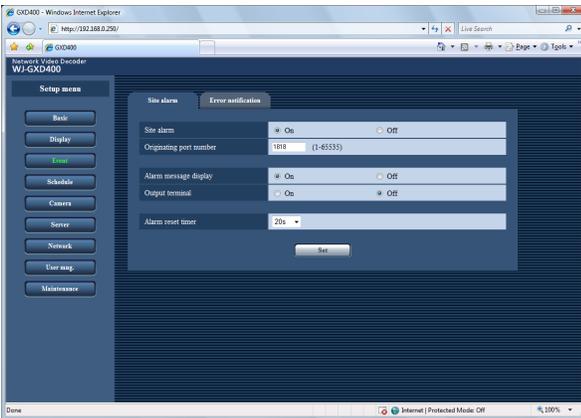**1** **Click the [Event] button on the setup menu.**

2 **Click the [Site alarm] tab.**
The "Site alarm" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ **Site alarm**
Select "On" or "Off" to determine whether or not to activate the site alarm.

■ **Originating port number**
Specify the port number to receive the site alarm signal.
Default: 1818

■ **Alarm message display**
Select "On" or "Off" to determine whether or not to display the message to notify event occurrence.

■ **Output terminal**
Select "On" or "Off" to determine whether or not to provide the alarm signal output at event occurrence.

■ **Alarm reset timer**
Select the period to cancel the alarm action.
Off/10s/20s/30s/1min/5min
Default: 20s

Error notification

When an error occurs, the setting to send the message to the previously registered addresses is performed.
Up to 3 destinations of notification can be registered.

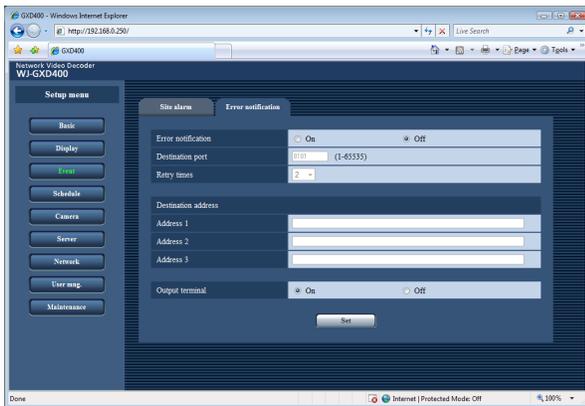**1** **Click the [Event] button on the setup menu.**

2 **Click the [Error notification] tab.**
The "Error notification" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ Error notification
Select "On" or "Off" to determine whether or not to activate the transmission of error notification.

■ Destination port
Specify the port number to which an error notification is transmitted when an error occurs.
Default: 8181

■ Retry times
Select the retry number of the transmission to the PC from the following.
1/2/3 ...29/30
Default: 2

■ Destination address 1 - 3
Specify the address to which an error notification is transmitted when an error occurs.
However, the following addresses are not available to register as a destination of error notification.
0.XXX.XXX.XXX/XXX.XXX.XXX.0/XXX.XXX.XXX.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)

■ Output terminal
Select "On" or "Off" to determine whether or not to provide the error notification signal output at error occurrence with this unit.

Schedule

The schedule setting is performed in accordance with the specified day of the week and time of the day.
It is possible to switch camera channels to be used to display images according to the set schedule.

Important:
- The audio output is not provided when the "Schedule" window is displayed for setup. The audio output is provided only at the default screen.

Timetable

Timetables are created for each day of the week, and a program is assigned to each timetable. Up to 6 timetables can be created for each day of the week.

1 **Click the [Schedule] button on the setup menu.**

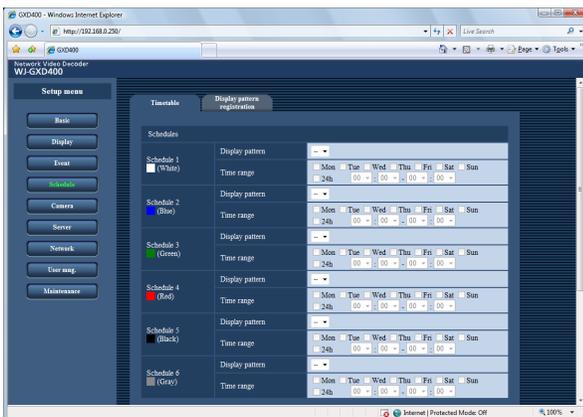**2** **Click the [Timetable] tab.**
   The "Timetable" window will be displayed.

3 **Perform the settings for each item.**
   Up to 6 schedule settings can be performed.
   Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ **Display pattern**
Select a registered display pattern from the following.
--/Display pattern 1/Display pattern 2/Display pattern 3/Display pattern 4
Default: --

■ **Schedule**
Perform the settings for the schedules by designating a day of the week and time.
Up to 6 schedule settings can be performed.
- Day unspecified: Check the "24h" checkbox.

Notes:
- Before display pattern selection, register the display pattern via [Schedule] and [Display pattern registration].
- Be sure to perform each schedule setting between 00:00 and 24:00.
- If two or more schedules coincide, a higher numbered schedule has a higher priority.
- The entered 1-week schedule is displayed with a band chart below the [Set] button.
- Even when it passed time of a timetable of the set schedule, displaying of images will continue according to the setting of the previous schedule until other schedule start displaying images.

Display pattern registration

1 **Click the [Schedule] button on the setup menu.**

2 **Click the [Display pattern registration] tab.**
The "Display pattern registration" window will be displayed.
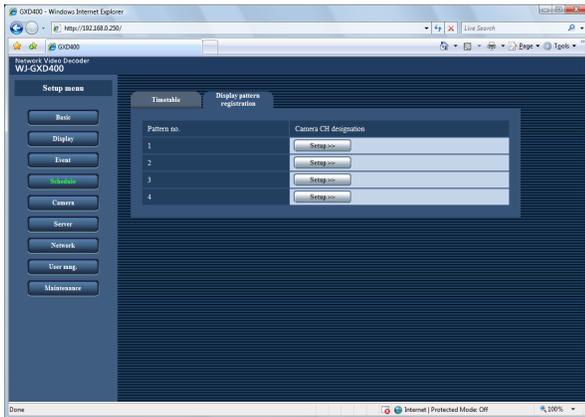
3 **Click the [Setup >>] button of [Pattern no.].**
The [Pattern no.: ○] window of [Display pattern registration] will be displayed.

4 **Perform the settings for each item.**
Determine whether to display images from cameras registered as a group or from the selected cameras. Configure the settings for the selected setting item. Refer to the following for further information about the settings for each item.

5 **Click the [Set] button.**

Setup items

■ Group
Select from the registered group numbers and group sequence numbers.

Note:
• Before selecting "Group setup", configure the settings of "Group setup" under "Camera" to register cameras as a group. When selecting "Group sequence", configure also the settings of "Group sequence" under "Camera" to register group sequences.

■ Image display on a 6-screen
Select cameras whose images are displayed on split screens.

■ Image display on a 3-screen (PSL)
■ Image display on a 3-screen (PSR)
■ Image display on a 1-screen
Select cameras whose images are displayed on split screens.

Note:
• Before selecting cameras independently, configure the settings of "Camera registration" under "Camera" to register cameras. When selecting "Tour sequence", configure also the settings of "Tour sequence" under "Camera" to register tour sequences.

25

Camera

The network settings (such as address and port number) of cameras, group settings, and the settings of sequential display are performed in this section.

Camera Registration

Registration and change of the network camera are performed. The list of the registered cameras is shown. In addition, the camera settings relating to the network such as IP address and port number are performed.

1 **Click the [Camera] button on the setup menu.**

2 **Click the [NW camera] tab.**
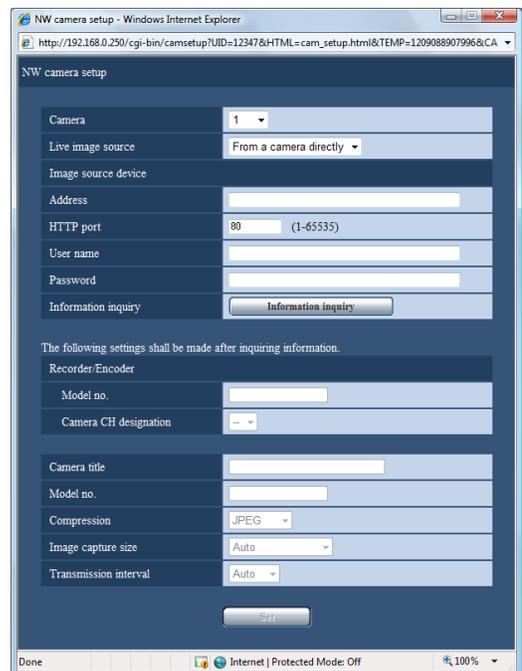The "Registered camera list" window will be displayed.
Refer to "Registered camera list" for the displayed contents.
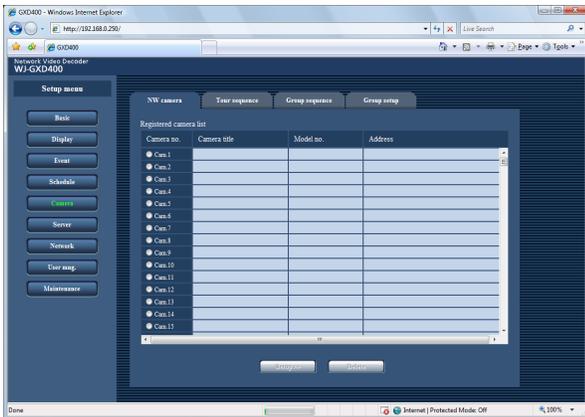
3 **Select the radio button of the camera number to be registered.**

4 **Click the [Set] button.**
The "NW camera setup" window will be displayed.

5 **Perform the settings for each item.**
Refer to the "NW camera setup" for information on how to configure the settings.

6 **Click the [Information inquiry] button.**
The information of the specified live image source is obtained.
Refer to the "Information inquiry list" for information on how to configure the settings.
Not all information can be obtained. Perform additional settings if necessary.

7 **Click the [Set] button.**

Note:
When the settings of the camera is edited after obtaining information, images may sometimes not be displayed correctly. In this case, obtain information again.

26

Setup items

■ Registered camera list
[Camera no.]
Displays the camera number. Up to 256 cameras can be registered.

[Camera title]
Displays the registered camera titles.

[Model no.]
Displays the model number of the registered camera/encoder.

[Address]
Displays the IP address of the registered camera/encoder.
When "Via a recorder" is selected for "Live image source", the IP address of the recorder will be displayed.

Note:
• To delete the information, select the camera number and click the [Delete] button.

■ NW camera setup
[Camera]
Select a camera number whose information is registered.

[Live image source]
Select a live image source.
From a camera directly/Encoder/Via a recorder
Default: From a camera directly

[Address]
Enter the IP address of the live image source.

[HTTP port]
Enter a HTTP port number.
Default: 80

[User name]
Enter the user name assigned to the device of a live image source when user authentication is set to "On" at the device.
Enter up to 32 alphanumeric characters.

[Password]
Enter the password assigned to the device of a live image source when user authentication is set to "On" at the device.
Enter up to 32 alphanumeric characters.

Important:
• When using a camera other than Panasonic i-pro series, select "Via a recorder" for "Live image source". In this case, select "JPEG" for "Compression".Refer to the operating instructions of the recorder in use for further information on how to configure the settings of the recorder.

■ Information list
[Model no. (Recorder/Encoder)]
Displays the model number of the recorder or encoder.
[Camera CH designation (Recorder/Encoder)]
Select camera channels of the device used as a live image source.
[Camera title]
Displays the camera title after obtaining the information if the camera title is assigned to the target device.
This item can be entered and edited.
Up to 16 characters in one byte/two bytes

[Model no.]
Displays the model number after information is obtained. When routed through the recorder, the model number of the camera/encoder connected ahead. When the camera is directly connected, the model number of the camera is displayed.

[Compression]
Select a compression method. The selectable compression method varies with the model of the camera whose information is obtained. When routed through the recorder, the compression method is decided depending on the device of the information source.
The compression method is selectable from the following:
JPEG/MPEG-4/H.264

[Image capture size*]
Select an image capture size. Image capture size can be selected only when "JPEG" is selected for "Compression".
Default: Auto

[Transmission interval]
Select a transmission interval when the compression method is set to JPEG.
The higher the value of ips (images per second) is, the shorter the transmission interval is.
Auto/0.1ips/0.2ips/0.3ips/0.5ips/1ips/2ips/3ips/
5ips/10ips/15ips/30ips
Default: Auto

For NP472/NW474/NS320 (NTSC model), the transmission interval is selectable from the following:
Auto/1ips/ 2ips/3ips/5ips/10ips/15ips/30ips
Default: Auto

Important:
- When "Via a recorder" is selected for "Live image source", the image capture size and the refresh interval will be dependent on the settings of the camera. The settings configured on the decoder will not be applied. Confirm that the settings of the recorder and the camera.
- When camera images via the recorder are displayed in the VGA size, the resolution of the camera shall be set to "VGA" or "QVGA".

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* The resolution is selectable from the following:
Auto/QVGA(320x240)/VGA(640x480)/768x576 /4 VGA(1280x960)
  Auto: Select a resolution in accordance with the screen size.
  QVGA(320x240): 320 x 240 pixels resolution
  VGA(640x480): 640 x 480 pixels resolution
  768x576: 768 x 576 pixels resolution
  4VGA(1280x960): 1280 x 960 pixels resolution
  The resolution varies with the model of the camera.

Notes:
- All options are displayed when the compression method supported by the target device is unknown.
- Images with the resolution of 4 VGA (1280 x 960) cannot be displayed in the reduced size of VGA (640 x 480).
- When trying to display images from a camera that can transmit two streams of H.264 or MPEG-4, this unit will automatically select either of streams according to the resolution setting. When the same resolution is set for both streams on the camera, stream 1 will automatically be selected.

Tour sequence

Camera images are automatically switched and displayed in a specified order.
The tour sequence function works with the preset positions of the camera.

Important:
- The audio output is not provided during the sequential display.
- When a sequence is performed with two or more devices, the JPEG and MPEG-4 formats shall not be used simultaneously with one camera.

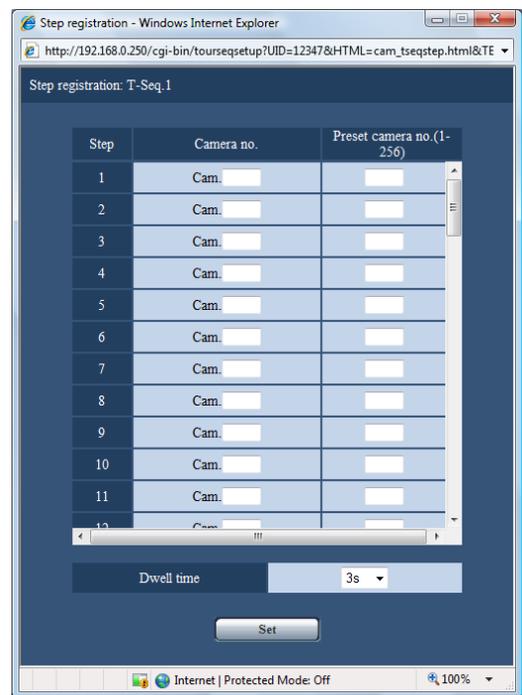**1** **Click the [Camera] button on the setup menu.**

2 **Click the [Tour sequence] tab.**
The "Tour sequence number" window will be displayed.
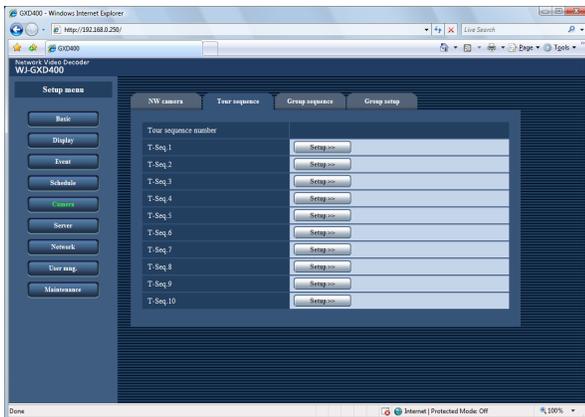
3 **Click the [Setup >>] button.**
The "Step registration" window will be displayed.

4 **Perform the settings for each item.**
Refer to the following for further information about the registrations for each item.

5 **Click the [Set] button.**

Setup items

■ **Step**
Displays the step number of the sequence. Up to 64 steps can be contained.

■ **Camera no.**
Select a registered camera.

■ **Preset camera no. (1-256)**
Enter a preset position number (blank, 1 to 256).

When no preset position number is entered (blank), the camera does not move to any preset position.

■ **Dwell time**
Select an interval time to go to the next sequential step from the following.
3s/5s/10s/15s/20s
**Default:** 3s

29

Group sequence

Live images from the camera/encoder/recorder on all the screens are simultaneously switched and displayed in the 3-screen/6-screen modes. The camera preset position cannot be selected during the group sequence.

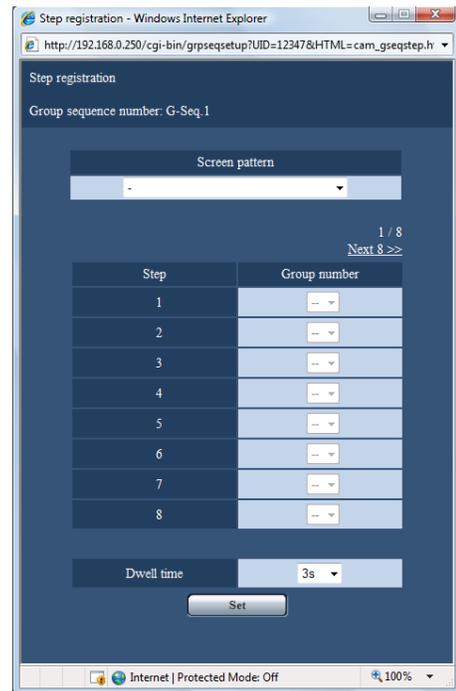**1** **Click the [Camera] button on the setup menu.**

2 **Click the [Group sequence] tab.**
The "Group sequence number" window will be displayed.
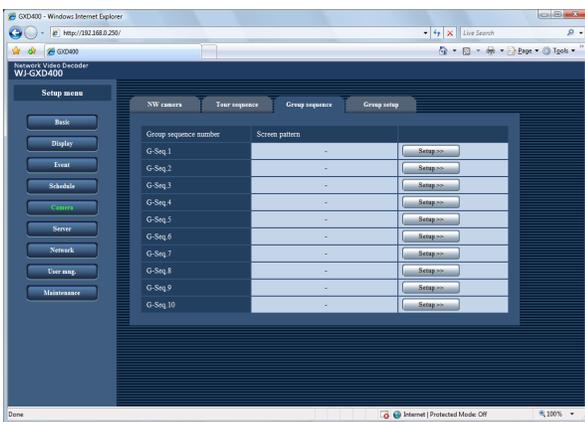
3 **Click the [Setup >>] button.**
The "Step registration" window will be displayed.

4 **Perform the settings for each item.**
Refer to the following for further information about the registrations for each item.

5 **Click the [Set] button.**
The specified values are stored.

Setup items

■ Screen pattern
Select a screen pattern.
6-screen/3-screen (primary screen on the left)/3-screen (primary screen on the right)

■ Step
Displays the step number of the sequence. Up to 64 steps can be contained.

■ Group number
Displays the registered camera group number.

■ Dwell time
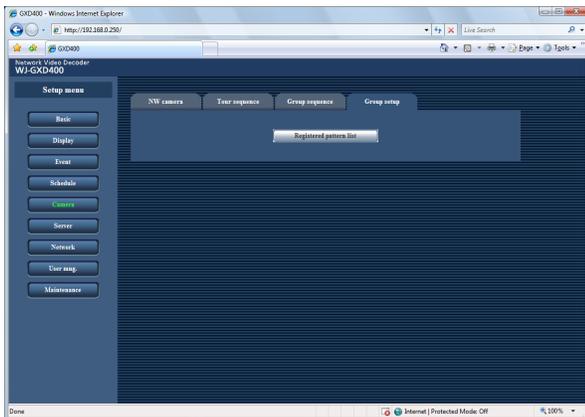Select an interval time to go to the next sequential step from the following.
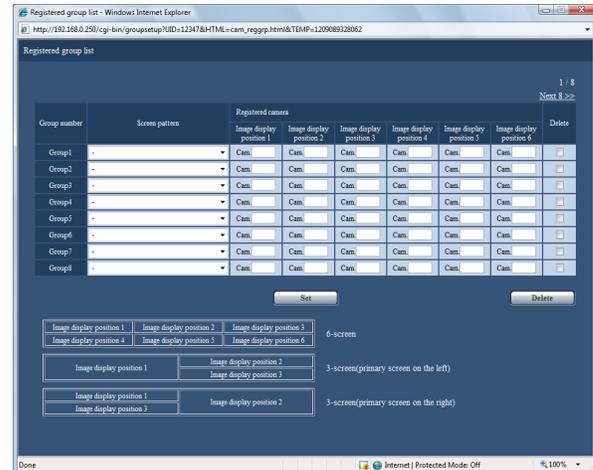3s/5s/10s/15s/20s

Note:
• Group registration should be completed via [Camera] and [Group setup] before group number selection.

Group setup

1 **Click the [Camera] button on the setup menu.**

2 **Click the [Group] tab.**
The "Group setup" window will be displayed.

3 **Click the [Registered pattern list] button.**
The "Registered pattern list" window will be displayed.

4 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

5 **Click the [Set] button.**

Setup items

■ **Group number**
Display a group number.

■ **Screen pattern**
Select a screen pattern.

■ **Registered camera - Image display position 1 - 6**
Assign the registered cameras to the display positions 1-6 on the screen.

■ **Delete**
Check the boxes of the group number to be deleted.
Click the [Delete] button.
To apply the deletion to the registered information, click the [Set] button.

Note:
• To view the image display position from the configured camera, see the reference information displayed below [Registered group list].
• When "Group Sequence" is selected, a camera image is displayed only in 1 position even though the camera CH is set to display the images in more than 1 position.
• Images with the resolution of 4 VGA (1280 x 960) cannot be displayed in the reduced size of VGA (640 x 480).

Server

Proxy

The proxy server settings can be performed with this menu.

1 **Click the [Server] button on the setup menu.**
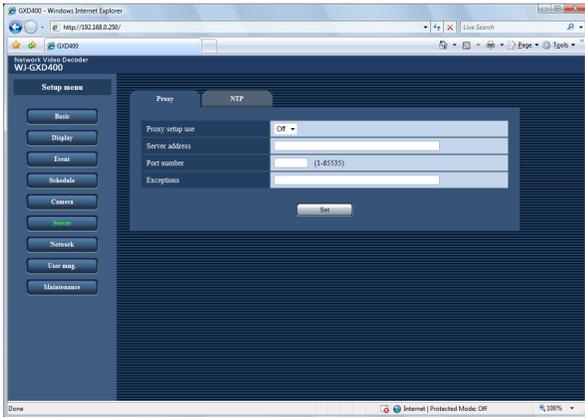
2 **Click the [Proxy] tab.**
  The "Proxy" window will be displayed.

3 **Perform the settings for each item.**
  Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ Proxy setup use
Select "On" or "Off" to determine whether or not to use the proxy server.
When "On" is selected, perform the following settings.

■ Server address
Enter the server name or IP address of the proxy server. *1
When entering a server name, it is necessary to use a DNS.
Up to 255 alphanumeric characters including hyphens (-) and periods (.) can be entered.

*1 The entry rules for the proxy server are shown below.
  • At IPv4 entry
    XXX.XXX.XXX.XXX (XXX indicates a value from 0 to 255.)
    However, the following addresses are not available.
      • 0.XXX.XXX.XXX/XXX.XXX.XXX.0/
        XXX.XXX.XXX.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)

■ Port number
Enter a port number of a proxy server.

■ Exceptions
Enter the set address of the network camera. Enter the IP address of the excluded camera.
Up to 128 alphanumeric characters including asterisks (*), semicolons (;) and periods (.) can be entered.
A semicolon (;) is used for dividing the addresses.
Entering "*" validates all numbers.

NTP Server

When time is adjusted with reference to the NTP (Network Time Protocol) server, the settings in this section are performed.

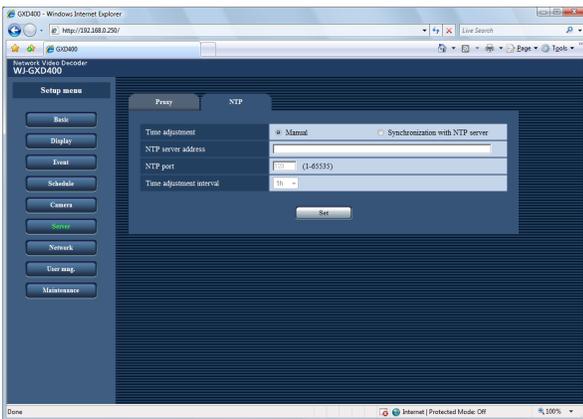**1** **Click the [Server] button on the setup menu.**

2 **Click the [NTP] tab.**
The "NTP" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ Time adjustment
Select a time adjustment method.
Manual: Manual adjustment
Synchronization with NTP server: Adjustment with use of the NTP server
Default: Manual

■ NTP server address
Enter the IP address or host name for the NTP server. When entering a server name, it is necessary to use a DNS.
The entry rules for the NTP server are shown below.
• At IPv4 entry
XXX.XXX.XXX.XXX (XXX indicates a value from 0 to 255.)
However, the following addresses are not available.
  • 0.XXX.XXX.XXX/XXX.XXX.XXX.0/
    XXX.XXX.XXX.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)

■ NTP Port
Enter a port number of the NTP server.
Default: 123

■ Time adjustment interval
Select an interval to update the time from the following.
1h/2h/3h.....23h/24h
Default: 1h

Network

Basic Settings

The network configuration for this unit is performed.

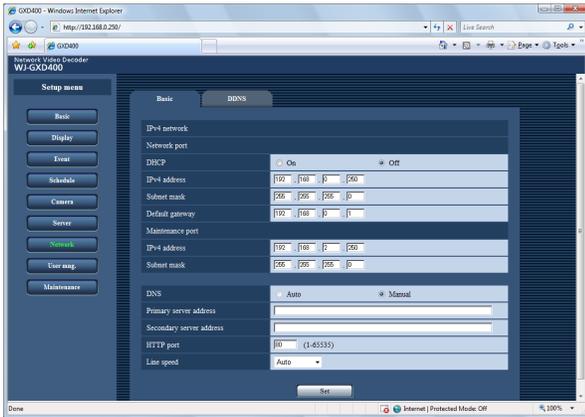**1** **Click the [Network] button on the setup menu.**

2 **Click the [Basic] tab.**
The "IPv4 network" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ IPv4 network - Network port
[DHCP]
Select "On" or "Off" to determine whether or not to use the DHCP function.
Default: Off

[IPv4 address]
Enter an IP address when "Off" is selected for "DHCP".
Default: 192.168.0.250

[Subnet mask]
Enter a subnet mask according to the network configuration when "Off" is selected for "DHCP".
Default: 255.255.255.0

[Default gateway]
Enter the IP address of the gateway according to the network environment when "Off" is selected for "DHCP".
Default: 192.168.0.1

■ Maintenance port
[IPv4 address]
Enter an IP address.
Default: 192.168.2.250

[Subnet mask]
Enter a subnet mask.
Default: 255.255.255.0

[DNS]
Select "Manual" or "Auto" to enable IP address searching by the host name using the DNS.
Selecting "Auto" is available only when "On" is selected for "DHCP" (using the DHCP server).
When "Manual" is selected for the DNS, enter the DNS server addresses in "Primary server address" and "Secondary server address".

[Primary server address]
Enter the IP address of the primary DNS server.

[Secondary server address]
Enter the IP address of the secondary DNS server.

[HTTP port]
A number from 1 - 65535 is available. Under normal conditions, assign 80 to the number.
Default: 80

Notes:
- Depending on the network settings of the LAN or Internet service provider, network communication may not be established if the http port number has been changed. In this case, refer to the administrator of the network.
- The following port numbers and the port numbers used for the site alarm settings are unavailable for the HTTP port number.
  20, 21, 23, 25, 42, 53, 67, 68, 69, 110, 123, 161, 162, 995, 10669, 10670

[Line speed]
The following are available for "Line speed".
Auto/1000M-Full/100M-Full/100M-Half/10M-Full/10M-Half
Default: Auto

Important:
- The network settings for each port (network port/maintenance port) should be configured with a different subnet.

DDNS Setup

The settings are performed to use the DDNS (Dynamic Domain Name System).
Use of the DDNS function provides access with "The host name registered with the DDNS server. nmdns.net". To receive the service, connection to the dedicated server is required.
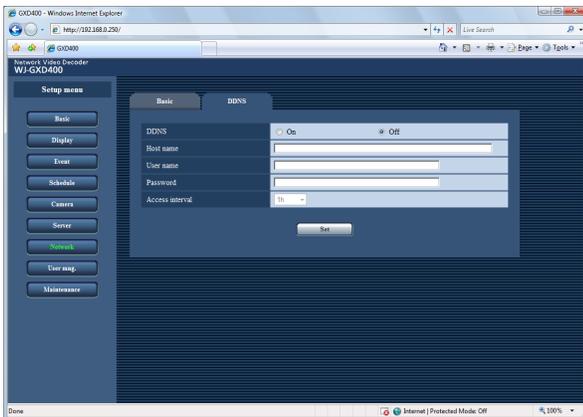
1 **Click the [Network] button on the setup menu.**

2 **Click the [DDNS] tab.**
The "DDNS" window will be displayed.

3 **Perform the settings for each item.**
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

Setup items

■ DDNS
Select "On" or "Off" to determine whether or not to use the DDNS (Dynamic Domain Name Server).
When "On" is selected, perform the following settings.
Default: Off

■ Host name
Enter a host name registered in the DDNS.
Enter up to 64 alphanumeric characters including hyphens (-) and periods (.).

■ User name
Enter a user name registered in the DDNS.
Enter up to 32 alphanumeric or symbolic characters except for colons (:) and semicolons (;).*1

■ Password
Enter a password respective to the entered user name.
Enter up to 32 alphanumeric characters. *1

■ Access interval
Select an interval to update the DNS from the following:
1min/10min/30min/1h/6h/24h
Default: 1h
*1 The following alphanumeric characters can be entered.
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 0 1 2 3 4 5 6 7 8 9 ! " # $ % ' ( ) * + , - . / :; < = > ? @ [\ ] ^ _ ` { | } ~

User Management [User mng.]

The settings for the user authentication/host authentication are performed to restrict access this unit from PCs.
It is possible to restrict access this unit from users/hosts (PCs) by registering users and hosts (PCs) who can access this unit in advance when "On" is selected for the user authentication and the host authentication.
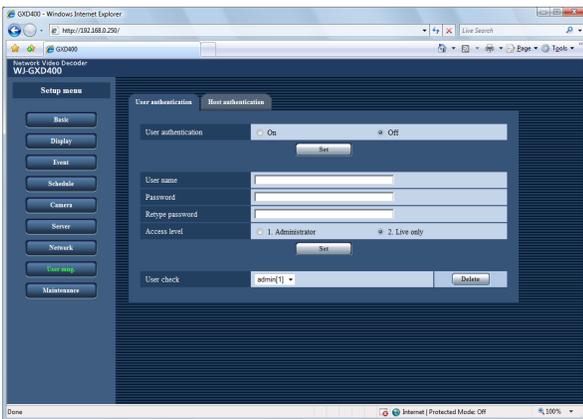
User authentication

The information settings (change of user name and password, access level, etc.) of the user that operates this unit are performed.
Up to 32 user information entries can be registered.

1 Click the [User mng.] button on the setup menu.

2 Click the [User authentication] tab.
The "User authentication" window will be displayed.

3 Perform the settings for each item.
The user name, password, password confirmation, and access level can be specified.
Refer to the following for further information about the settings for each item.

4 Click the [Set] button after completing the settings.

5 If user registration is continued, repeat the steps 3 and 4.

6 Select "On" or "Off" to determine whether or not to authenticate the user.
Refer to the following for further information about the settings for each item.

7 Click the [Set] button.

Setup items

■ User authentication
Select "On" or "Off" to determine whether or not to authenticate the user.

■ User name
Enter a user name.
Enter up to 32 alphanumeric characters.

■ Password
Enter a password.
Enter 4 to 32 alphanumeric characters for a password.

Notes:
- Set a unique password, not something that would be easily guessed by a third person. The password also should be memorable.
- To enhance the security, change the password for an administrator periodically.

■ Retype password
Reenter the password entered into [Password].

■ Access level
Select an access level.
Users whose access level is "Administrator" can access the setup menu.
The settings for "Live image display" are for functions that are not described in these operating instructions and they are for expansion of external control interface. It is impossible to access to the setup menu of these functions.
1. Administrator/2. Live only
Default: 2. Live only

■ **User check**

It is possible to check the user names registered for the user authentication.

To delete the displayed user, click the [Delete] button.

Important:
- When the user name already in use is selected and the [Set] button is clicked, it will be overwritten.

Deletion of user information [User check]

1 Click the [User mng.] button on the setup menu.

2 Click the [User authentication] tab.
The "User authentication" window will be displayed.

3 Click the [▼] button in "User check".
The user name registered under user authentication can be viewed.

4 Click the [Delete] button.
The user selected in "User check" can be deleted.

Host authentication

The information of a PC (host) is registered, which accesses this unit via a network such as a LAN.
Up to 32 hosts can be registered.

1 **Click the [User mng.] button on the setup menu.**

2 **Click the [Host authentication] tab.**
The "Host authentication" window will be displayed.
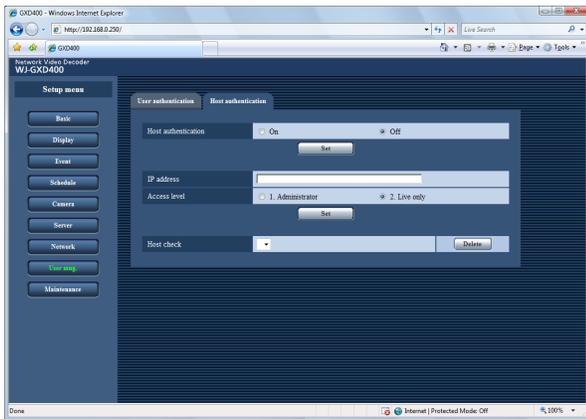
3 **Perform the settings for each item.**
Set the IP address and the access level.
Refer to the following for further information about the settings for each item.

4 **Click the [Set] button.**

5 **Select "On" or "Off" to determine whether or not to authenticate hosts.**

6 **Click the [Set] button.**

Setup items

■ Host authentication
Select "On" or "Off" to determine whether or not to authenticate the host.

■ IP address
Enter the IP address to permit accessing to this unit.
The host name cannot be specified.

■ Access level
Select an access level. The setup window can be accessed through the host with the administrator level. The settings for "Live image display" are for functions that are not described in these operating instructions and they are for expansion of external control interface. It is impossible to access to the setup menu of these functions.
1. Administrator/2. Live only
Default: 2. Live only

■ Host check
Displays the registered IP addresses by clicking [▼].
The display type of the IP address is "Registered IP address [access level]".
To delete the displayed IP address, click the [Delete] button.

Important:
 • The IP address and access level of the PC with access permission shall be registered before the setting of host authentication. If host authentication is set to "On" before registration, the PC cannot access to this unit.
 • Clicking the "Set" button after entry of the registered IP address provides overwriting of the IP address information (access level).

Deletion of host information

1 **Click the [User mng.] button on the setup menu.**

2 **Click the [Host authentication] tab.**
The "Host authentication" window will be displayed.

3 **Click the [▼] button in "Host check".**
The IP address registered under host authentication can be viewed.

4 **Click the [Delete] button.**
The IP address selected in [Host check] is deleted.

Maintenance

The conditions of this unit and the network can be checked.
The software and hardware versions, MAC address, serial number, and temperature inside the unit will be displayed.
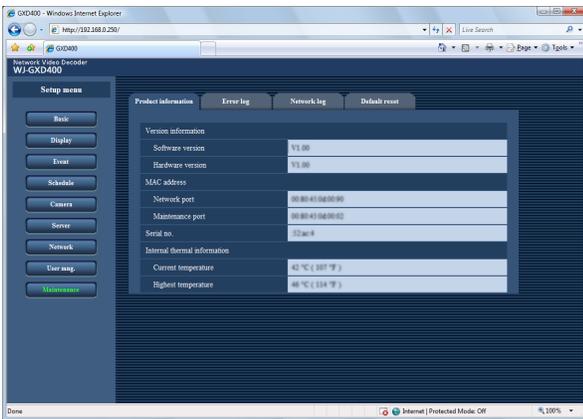
Product Information

1 **Click the [Maintenance] button on the setup menu.**

2 **Click the [Product information] tab.**
The "Product information" window will be displayed.

3 **Check the settings for each item.**
Refer to the following for further information about the settings for each item.

Setup items

■ **Version information**
[Software version]
Displays the software version.

[Hardware version]
Displays the hardware version.

■ **MAC address**
[Network port]
Displays the MAC address of the network port.

[Maintenance port]
Displays the MAC address of the maintenance port.

[Serial number]
Displays the serial number of the main unit.

■ **Internal thermal information**

[Current temperature]
Displays the temperature inside the main unit.

[Highest temperature]
Displays the highest temperature inside the main unit recorded since turning on the power of this unit.

Error Log

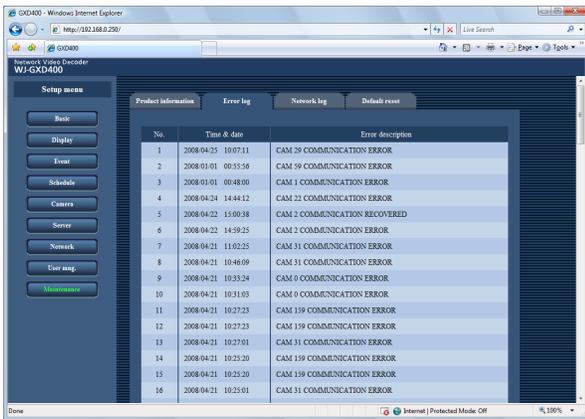The error logs (occurrence date and error details) will be displayed in list form.

1 Click the [Maintenance] button on the setup menu.

2 Click the [Error log] tab.
The "Error log" window will be displayed.

Note:
• Up to 100 error logs can be kept. When more than 100 error logs are filed, the older error logs will be overwritten by the newer error logs.

Network Log

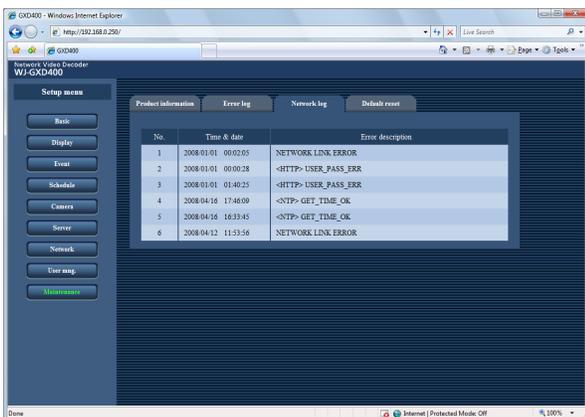The network error logs (occurrence date and error details) will be displayed in list form.

1 Click the [Maintenance] button on the setup menu.

2 Click the [Network log] tab.
The "Network log" window will be displayed.

Note:
• Up to 1 000 network error logs can be kept. When more than 1 000 error logs are filed, the older error logs will be overwritten by the newer error logs.


42

Error log list

The following are the descriptions about the contents of the error log and the network log.

Error	Error log	Network log
Restart	PWR ON	–
Reboot by the system error	SYSTEM REBOOT	–
Fan warning	FAN ERROR	–
Thermal error warning	THERMAL ERROR	–
Network link error	–	NETWORK LINK ERROR
Network camera error detection	CAM xxx COMMUNICATION ERROR	–
Network camera error recovery	CAM xxx COMMUNICATION RECOVERED	–
Password error for HTTP user name	–	<HTTP> USER_PASS_ERR
HTTP request invalid	–	<HTTP> REQUEST_ERR
Other errors for HTTP	–	<HTTP>OTHER_ERR
No response from an address of Panasonic alarm protocol	–	PANASONIC_ALM_RES_ERR
Other errors for a address of Panasonic alarm protocol	–	PANASONIC_ALM_OTHER_ERR
No response from the DDNS server	–	<DDNS>SVR_ERR
Password error for DDNS user name	–	<DDNS>USER_PASS_ERR
DDNS IP address update error	–	<DDNS>IP_ADD_UPDATE_ERR
Other error for DDNS	–	<DDNS>OTHER_ERR
Having IP address complete	–	<DHCP>IP_ADD_OK
DHCP IP address registration failure	–	<DHCP>IP_ADD_ENT_ERR
Synchronization with the NTP server complete	–	<NTP>GET_TIME_OK
Failed to resolve NTP server address from DNS	–	<NTP>SVR_ADD_ERR
Failed to adust the time	–	<NTP>SET_TIME_ERR
No response from the NTP server	–	<NTP>SVR_ERR
Time from the NTP server is invalid	–	<NTP>TIME_INVALID
Other error for NTP	–	<NTP>OTHER_ERR

Reset to the Default

1 **Click the [Maintenance] button on the setup menu.**

2 **Click the [Default reset] tab.**
The "Default reset" window will be displayed.
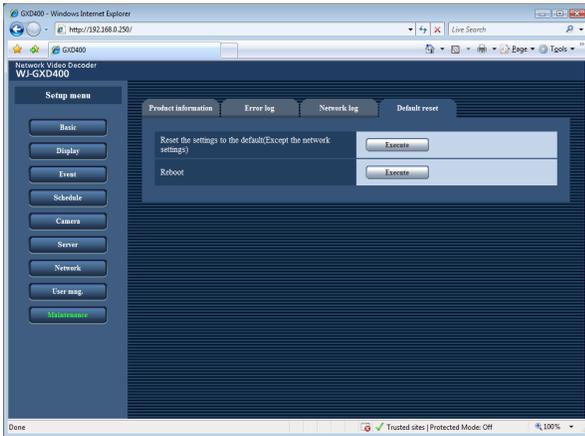
3 **Click the [Execute] button in "Reset the settings to the default".**
The confirmation window will be displayed.
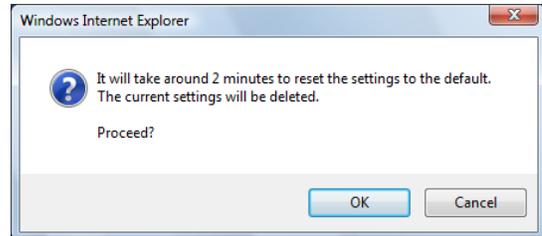
4 **Click the [OK] button.**
The setting data is initialized.

Important:
• The network settings are not initialized.

Restart this Unit

1 **Click the [Maintenance] button on the setup menu.**

2 **Click the [Default reset] tab.**
The "Default reset" window will be displayed.

3 **Click the [Execute] button in "Reboot" to restart this unit.**
It is impossible to operate this unit for approximately 1 minute immediately after the restart because initialization starts at the restart.

44

Viewing

Live Image Reception

Live images are received from the camera or encoder.
If a camera manufactured by other than Panasonic is used, live images will be received via the network disk recorder.
The following transmission methods (protocols) are supported depending on media types.
MPEG-4/H.264 Media transmission: RTP multicast/unicast
JPEG Media transmission: HTTP-Push

Note:
- When displaying images on a 6-screen, the maximum image capture size of each screen is VGA size. When the setting is configured in order to display images larger than VGA for each area of 6-screen, images may not be displayed properly.
- When displaying images on a 3-screen, images larger than VGA can be displayed in the primary screen. When the setting is configured in order to display images larger than VGA not for the primary screen or configured to display images on 2 or more screens, images may not be displayed properly.

Live Audio Reception

A live audio stream is received from the camera, encoder or recorder.
The live audio reception can handle 1 audio stream. Two or more audio streams cannot be handled.
The live audio reception is compliant with G. 726.

Important:
- The audio output is provided only at the default screen.
- The audio output is not provided when the schedule is displayed.
- The audio output is not provided when the compression method is set to JPEG.
- When receiving audio via a recorder, set the "Audio bit rate" setting of the camera to "32 kbps".

Note:
- The live audio reception dose not support the cameras manufactured by other than Panasonic. When the live audio reception is performed, use Panasonic cameras.
- Audio output and image output may sometimes not be synchronized depending on the data (audio and image) reception timing.

Change of Image and Screen Pattern

Refer to Schedule (page 24) for change of the image and screen pattern.

Screen Pattern

The images from up to 6 cameras can be displayed on 1 screen at the same time.
Images can be displayed with the pattern of 1-screen/3-screen/6-screen.

■ 1-screen

■ 3-screen (primary screen on the left)

■ 3-screen (primary screen on the right)

■ 6-screen

■ Border
The split border can be colored.
The border color is selectable from off, white, gray and black.

■ Alarm message display
• When this unit senses an alarm, the border of the image from the camera where the alarm is occurring is colored red.
• When an alarm occurs, the date, time, information of alarm source will be displayed.

■ Time & date
The date and time of this unit are displayed.

Time & date

Display Mode

There are 2 display modes, "Full screen" mode (full-resolution display) and the "Trimmed screen" mode (trimming mode).
Normally, select "Full screen". When the displayed images do not fit in the screen even by adjusting the display settings of the monitor in use, select "Trimmed screen". In the "Trimmed screen" mode, however, images to be displayed in each screen will also be trimmed.

Notes:
 • When displaying smaller images on a larger screen area e.g. displaying VGA images on a 4VGA screen area, the images are enlarged to fit to the screen size.
 • It is not possible to display larger images on a smaller screen area i.e. displaying 4VGA images on a VGA screen area.

Sequence

Camera images are automatically switched and displayed in a specified order.
There are two types of sequences: tour sequence and group sequence.

Tour sequence

A live image on a split screen (individual small screen) can be automatically switched and displayed in a specified order during displaying on a multi-screen (1-screen/3-screen/6-screen).
The scheduled timer can switch a sequence.

The following items can be specified in a sequence pattern.

Item	Description
Tour sequence number	Displays the number to identify the tour sequence to be specified.
Camera no.	Displays the camera number to be connected to this unit.
Preset camera no.(1-256)	Enter the preset position (1 to 256) of the camera to be moved at step change.
Dwell time	Select an interval time to go to the next sequential step. However, an interval time between each step shall be the same.

Group sequence

Live images on all the split screens can be automatically switched and displayed in a specified order during displaying on a multi-screen (3-screen/6-screen).
This function is available for live images from the camera, encoder and network disk recorder.

Operation will be restricted as follows.
- The screen pattern cannot be changed during a sequence operation.
- Image switching by the timer does not support preset positions.

The following items can be specified in a sequence pattern.

Item	Description
Group sequence number	Displays the number to identify the group sequence to be specified.
Screen pattern	Screen pattern (3-screen (primary screen on the left)/3-screen (primary screen on the right/6-screen)
Group number	Displays the group numbers in each step registered at default. A group sequence will be implemented by sequentially switching from step 1.
Dwell time	Select an interval time to go to the next sequential step (group). However, an interval time between each step shall be the same.

The following items can be specified in group information.

Item	Description
Group number	Displays the number to identify the camera group to be registered with this unit. Group 1 to Group 64 are available to assign numbers to groups.
Screen pattern	Screen pattern (3-screen (primary screen on the left)/3-screen (primary screen on the right/6-screen)
Camera number displayed at each image display position.	Select a number from camera numbers registered in the camera setup section.

Schedule

Images are displayed according to the previously specified schedule.
Up to 6 schedules can be registered (page 24).
The following items can be specified in a schedule.
- A day of the week
- Start time and end time
- Display pattern

The following items can be specified in a display pattern.
- Screen pattern
- Camera selection for each split screen

Site alarm

When this unit receives an alarm notification from another network device, the following are provided.

(1) Alarm message display
   The message of the alarm reception is displayed on the monitor.
   The following contents are displayed in the alarm message area of the monitor.
   • Time and date
   • Alarm source information

Note:
 • When two or more alarms are received, the messages are displayed in an overwriting manner.

   When an alarm is issued, which is related to the image displayed on the screen at that moment, the following information is displayed.
   • The alarm occurrence image is enclosed with a red border.

(2) Output terminal
   If the output terminal is set to [ON], the output terminal switches to [Active].

(3) Alarm indicator
   Lights up.

The following 2 methods are used to cancel an alarm. (Restoration from alarm)
(1) When the specified timeout period by timer-controlled passes

(2) When the contact input for restoration from alarm is provided

Error Notification

When device abnormality occurs or is detected, the following are provided.

(1) Transmission of error notification
   The information about the error of this unit is transmitted to other devices through the error notification.

(2) Message display
   The error message is displayed on the monitor.
   The error contents are displayed in the message area of the monitor.

Note:
 • When two or more errors occur, the messages are displayed in an overwriting manner.

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(3) Output terminal
   If the output terminal is set to [ON], the output terminal switches to [Active].

(4) Error indicators 1 and 2
   Blink

(5) Log
   Error occurrences and detected histories are recorded and stored.

Note:
 • When a new log is filed beyond the recordable capacity, stored error logs are deleted in chronological order.
   • Up to 100 error logs can be recorded.
   • Up to 1 000 network logs can be recorded.

Error operations

○: Yes, −: N/A

Description of error	Transmission of error notification	Error 1 indicator	Error 2 indicator	Output terminal	Message display
FAN warning	−	−	○	○	○
Thermal error warning	−	−	○	○	○
Network link error	−	○	−	○	○
Network camera error	○	−	○	−	−
Network camera error recovery	○	−	−	−	−

Troubleshooting

Check the following before requesting repair. Contact your dealer if a problem cannot be solved even after checking and trying the solution or a problem is not described below, and when having a problem with installations.

Problem	Check item/Remedy	Reference page
	• Is the Ethernet cable firmly connected to the 100BASE-TX/1000BASE-T port?	–
	• Is the connection indicator of the 100BASE-TX/1000BASE-T port lit? When it is not lit, connection to a LAN is not established or a network is not working correctly. Confirm that the connection indicator of the 100BASE-TX/1000BASE-T port is lit. Refer to a system administrator if it is not lit.	–
	• Is the power of this unit turned on? Check whether the power of this unit is turned on. Confirm that the OPERATE indicator is lit.	–
	Contact your system administrator to confirm that the valid IP address is set.	34
Cannot access from the browser.	• Is the valid IP address set? Refer to a system administrator for further information. Are you accessing the wrong IP address? Check the connection as follows: >ping "IP address of this unit" If there is reply from this unit, the connection is normal. If not, check the settings of the IP address and the subnet mask. • Set the mode switch No. 2 on the front panel to ON, perform initialization by restarting this unit with the reset switch, and return the IP address to "192.168.0.250". After initialization, set the mode switch No. 2 back to OFF. • Perform access from the maintenance port on the front panel. The default IP address of the maintenance port is "192.168.2.250".	Page 12 of the Installation Guide
	• Is the same IP address provided to other devices? Refer to a system administrator for further information.	12

Problem		Check item/Remedy	Reference page
Some contents are not displayed on the browser.	▶	• Reload the contents by pressing the [F5] key.	–
No live image is displayed.	▶	• Check the settings of [Camera] on the setup menu.	26
	▶	• Check the settings of [Basic] on the setup menu.	16
	▶	• Check the settings of IP address, subnet mask and default gateway for them.	34
	▶	• If "On" is selected for "Proxy", MPEG-4/H.264 images cannot be received or displayed. To view live images, select "Off" for "Proxy" or use JPEG images. MPEG/H.264 images are displayed when the device capturing the image is located in the same network as this unit regardless of whether the proxy setting is on or off.	32
	▶	• When trying to display MPEG-4/H.264 images via the Internet, images from the camera may not be displayed. Refer to the network administrator because of the effects of the network devices including router setting.	–
	▶	• When displaying images via a recorder, images from the specified camera channel of the specified recorder cannot be displayed on multiple screens simultaneously. Check the settings of "Default screen", "Display pattern registration" and "Camera".	18, 25, 26

Problem		Check item/Remedy	Reference page
No live image is displayed.	▶	• When other devices obtain images from the cameras and recorders, this product may fail to obtain and display images due to restrictions of the cameras and the recorders. • When displaying images on a 6-screen, the maximum image capture size of each screen is VGA size. When the setting is configured in order to display images larger than VGA for each area of 6-screen, images may not be displayed properly. • When displaying images on a 3-screen, images larger than VGA can be displayed in the primary screen. When the setting is configured in order to display images larger than VGA not for the primary screen or configured to display images on 2 or more screens, images may not be displayed properly.	–
	▶	• When the settings of the camera is edited after obtaining information, images may sometimes not be displayed correctly. In this case, obtain information again.	26
Refresh of live images is unstable. The web browser is disconnected. Network performance is poor.	▶	• The configured settings for transmission rate/recording rate may be beyond the maximum network performance. Lower the value/rate of the settings relating to the network such as the transmission rate from cameras.	34
	▶	• The line speed settings may be not the same between the unit and the hub, for example, 100M BASE-TX Full for the unit and 100M BASE-TX half, etc. Some hubs change the line speed automatically depending on the network traffic and it may cause configuration errors. Check the line speed settings of both the unit and the hub, and configure the line speed setting of both to conform them.	–
The password is forgotten.	▶	• Set the mode switch No. 1 on the front panel to ON, and perform initialization by restarting this unit with the reset switch (All the setting data is initialized at that time). After initialization, set the mode switch No. 1 back to OFF.	Page 12 of the Installation Guide

Problem		Check item/Remedy	Reference page
The audio output is not provided.	▶	• The audio output is not provided during the sequence display (tour sequence/group sequence). The audio output is not provided when the compression method is set to JPEG. • The audio output is provided only at the default screen. • The audio output is not provided when the schedule is displayed. • When receiving audio via a recorder, set the "Audio bit rate" setting of the camera to "32 kbps".	–
The resolution and transmission interval are not the same as the specified values.	▶	• The settings are recorder-dependent when images are downloaded via the recorder, which disables the settings of this unit. Check the settings of the recorder and camera.	27
The clock of the camera is not displayed.	▶	• If the date and time information is not provided with images from the camera, even selecting other than "Off" for [OSD] – [Time & date] does not display date and time.	20
The message "Cannot log-in." is displayed.	▶	• Multiple users cannot access concurrently. When other user is operating the setup menu, this message will be displayed. • When no operation is performed for a certain period (30 minutes) after launching the web browser, the user will be logged out forcibly. Access and log in again. • When the network communication is disconnected and not established for a certain period (90 seconds) after launching the web browser due to heavy network traffic, the user will be logged out forcibly.Check the network status and access later.	–
The message "Entered information is incorrect" is displayed at the settings of default screen, display pattern registration (schedule), or group setup (camera registration).	▶	• Is an unregistered camera selected? Check [NW camera]. • Is the area smaller than each area of 6-screen selected for images larger than VGA? Check [NW camera].	26 - 28