Panasonic

Digital Disk Recorder

Network Operating Instructions

Model No. WJ-RT416 Series

WJ-RT416 is shown above.

This manual covers the models: WJ-RT416K, WJ-RT416V, WJ-RT416VK, WJ-RT416/G, WJ-RT416K/G, WJ-RT416V/G and WJ-RT416VK/G.

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.

DVD MULTI RECORDER

RW DVD+ReWritable

COMPACT disc ReWritable Ultra Speed

CONTENTS

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Preface

The Digital Disk Recorder WJ-RT416 is designed for use within a surveillance system. The digital disk recorder is a recording device using a hard disk drive to record pictures of surveillance cameras instead of using videotapes so that pictures recorded by repeated overwriting will not experience deterioration of the recorded picture quality.
Up to 16 cameras can be connected directly with this unit and it is possible to record images from them. It is also possible to display images from multiple cameras (multi-screen), to display images from a camera to camera sequentially (sequential display), and to operate the connected cameras using the recorder.
Configuration of the settings of the recorder can be made using the monitoring software, and operation of the recorder can be made using the monitoring software and a web browser.
The following models are described as "WJ-RT416" in these operating instructions.
  • WJ-RT416K: No built-in HDD is provided
  • WJ-RT416:   Built-in HDD x1
  • WJ-RT416VK: Built-in DVD drive x1, no built-in HDD is provided
  • WJ-RT416V: Built-in DVD drive x1, built-in HDD x1

Monitoring software

The monitoring software consists of the following.

RT4Client
The principal functions of the monitoring software can be operated using the RT4Client. To use the monitoring software, start the RT4Client first.
The following are the functions of the RT4Client.
  • Displaying of live images from the cameras (normal display, frame display, sequential display)
  • Control of the cameras (setup, operation)
  • Playback of recorded images on the recorder
  • Configuration of the settings of the recorder
  • Operation of the recorder
  • Reception of an event occurrence notification from the recorder and displaying of images recorded by the alarm recording
  • Download of recorded images on the recorder
  • Download of data from the recorder (log, language file, setup data, etc.)
  • Upload of data to the recorder (language file, firmware, setup data, etc.)
  • Remote talk

RT4Viewer
Recorded images downloaded on the HDD of the PC can be played using the RT4Viewer. The RT4Viewer can start using the interface of the RT4Client.
The functions of the RT4Viewer:
  • Playback of downloaded recorded images
  • Alteration check of data
  • File conversion to Windows Media format

Web browser

The following are available functions using a web browser.
  • Displaying live images from the cameras
  • Control of the cameras (panning/tilting, zooming, focusing, moving the camera to the preset position, etc.)
  • Playback of recorded images on the recorder
  • Download of recorded images on the recorder

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About These Operating Instructions

There are 2 sets of operating instructions for the WJ-RT416 as follows.
 • Network Operating Instructions (PDF) (this document)
 • Installation Guide (book)

These "Network Operating Instructions" contain descriptions of how to configure the required settings to operate the recorder and descriptions for how to operate the recorder using a PC via a network (operating a web browser or the monitoring software).
Refer to the "Installation Guide" for descriptions about installation/connection, and descriptions of how to operate the recorder using the buttons on the front panel of the recorder.
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.
The illustrations of the setup menus in these operating instructions are of the NTSC model.

System Requirements for a PC

It is recommended to install this software on a PC that meets the following system requirements. If installing on a PC that does not meet the following system requirements, it may cause problems such as slow imaging or the software becomes inoperable.

OS	Microsoft® Windows® XP Professional SP2*
	Microsoft® Windows® XP Home Edition SP2*
	*: Tested and confirmed full compatibility with the English edition. Full compatibility with other language editions cannot be guaranteed.
Computer	IBM PC/AT Compatible
CPU	Pentium® 4 3.0 GHz or faster
Memory	512 MB or more
Graphic memory	256 MB or more
Display driver	Overlay compatible
Monitor	1 024 x 768 pixels or more, 24-bit True color or better
Network Interface	10/100 Mbps Network interface card must be installed
Web browser	Microsoft® Internet Explorer® 6.0 SP2
Plug-in	Microsoft® Windows Media® Player 9 Series or later
Others	DirectX® 8.0a or later
	CD-ROM Drive: 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.

Notes:
 • When the graphic memory is less than 32 MB, the monitoring software can access only four camera channels concurrently. (When the graphic memory is less than 64 MB, the monitoring software can access only six camera channels concurrently.)
 • When the overlay control is not enabled for the display driver, the monitoring software may not start.
 • The monitoring software may not start depending on the version of the display driver. In this case, upgrade the display driver to the latest version.

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Abbreviations

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

MPEG-4 Visual patent portfolio license

This product is licensed under the MPEG-4 Visual patent portfolio license for the personal and non-commercial use of a consumer for (i) encoding video in compliance with the MPEG-4 Visual Standard ("MPEG-4 Video") and/or (ii) decoding MPEG-4 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed by MPEG LA to provide MPEG-4 Video. No license is granted or shall be implied for any other use. Additional information including that relating to promotional, internal and commercial uses and licensing may be obtained from MPEG LA, LLC.
See http://www.mpegla.com.

Operation using the Monitoring Software

Installation

Step 1

Insert the provided CD-ROM into the CD-ROM drive of the PC.

Step 2

Double-click "Setup.exe" on the CD-ROM.
→ The install program will be launched and the wizard will be displayed.

Step 3

Install the software by following instructions displayed on the monitor.
Select the display language and the television system for "Language Type" in the process of the installation.
When starting installation after selecting the standard installation, a new folder will be created. (The directory path is "C:\Program Files\Panasonic\RT4 Monitoring Software".) When the installation is completed, the program will be added to the "Start" menu. The shortcut icon will also be created on the desktop.

Important:
When using Windows$^®$ XP Professional or Home Edition SP2, the "Windows Security Alert" window may be possible to be displayed.
In this case, click the "Unblock" button on the displayed "Windows Security Alert" window. When clicked the "Block" button accidentally, do the following.
 1. Click [Security Center] on the "Control Panel".
 2. Click the [Exceptions] tab.
 3. Check if the checkbox of the monitoring software is checked or not.
    When the checkbox is checked, click the [OK] button.
Other applications and the security level may not be affected by these operations.
When this software is installed or started up, the user shall have "administrative" privileges.

Uninstallation of the monitoring software

Step 1

Open "Add or Remove Programs" in "Control Panel".
→ The "Add or Remove Programs" window will be displayed.

Step 2

Select "RT4 Monitoring Software", and then click the [Change/Remove] button.
The uninstall program will be launched and the wizard will be displayed.

Start the RT4Client

Select "RT4Client" from the "Start" menu ("Start" - "All Programs" - "Panasonic" - "RT4 Monitoring Software" - "RT4Client") or double-click the shortcut icon of the RT4Client on the desktop.

→ The monitoring software will start and the operation window will be displayed.

Operation window

When starting the monitoring software, the operation window will be displayed.
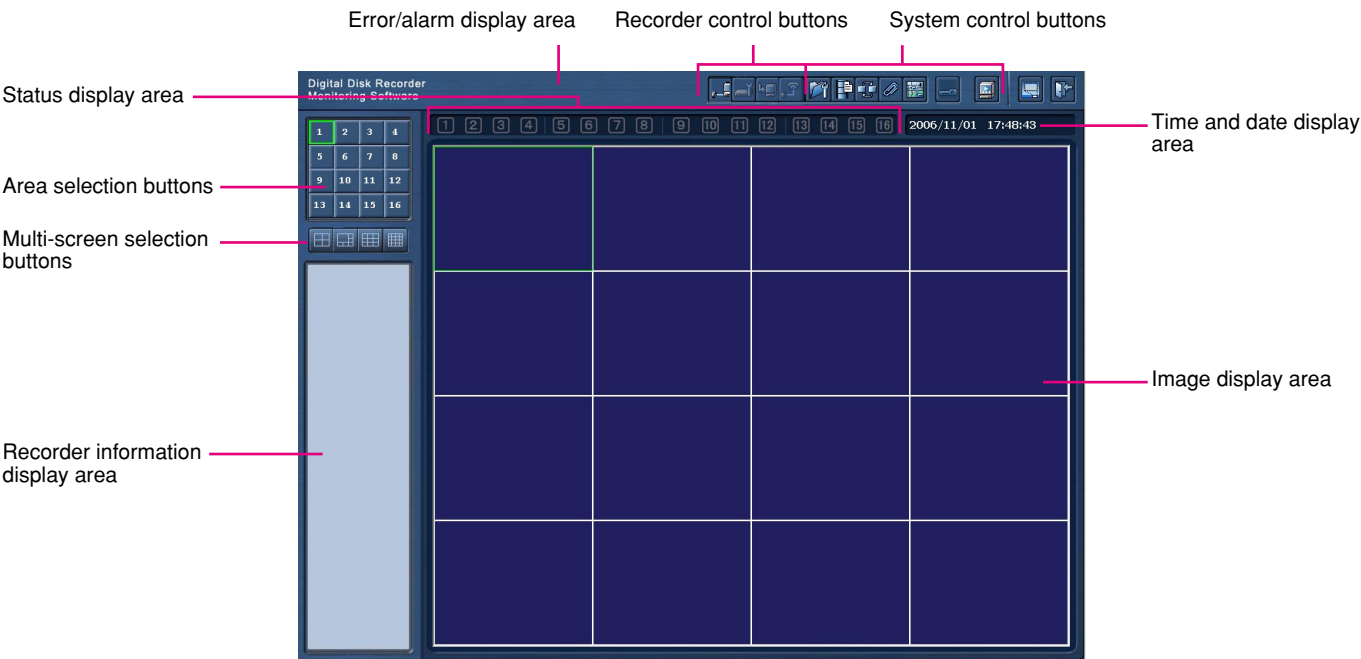
Image display area

Live images from the cameras and recorded images on the recorder will be displayed in this area. The area number is assigned as shown in the illustration below. The selected area will be displayed with a yellow frame.

Area selection buttons

The clicked area will be displayed on a 1-screen. (☞ page 17)

Multi-screen selection buttons

Click the desired multi-screen selection button. The selected multi-screen will be displayed in the image display area.

Status display area

The status icons will be displayed to indicate the statuses of each area. Refer to page 17 for further information about the status icons.

Error/alarm display area
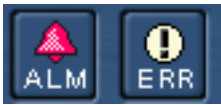
The status of the current login recorder will be displayed with the error status icons and the alarm status icon.
When the [ALM] icon is clicked, the alarm will be reset, and the displayed icon will disappear.
Refer to the operating instructions of the recorder for further information about the alarm reset.

Recorder control buttons
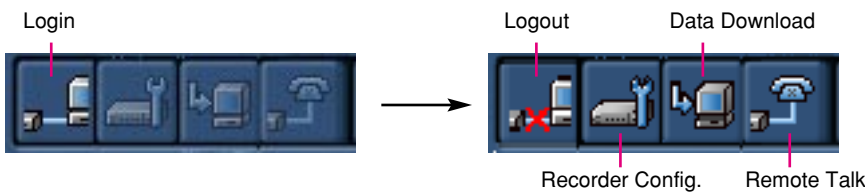
Login/logout the recorder, operation of the recorder, download of recorded images and remote talk between the PC and the recorder can be made using these buttons.
Some operations cannot be made if logged in the recorder not as "Manager". Refer to the installation guide for further information about the operation restriction differences between the user levels. Refer to page 19 for how to log in the recorder.
The following are available using the recorder control buttons.
  • Login/logout (☞ page 19)
  • Configurations of the recorder (☞ page 35)
  • Download of recorded images (☞ page 47)
  • Remote talk (start/end) (☞ page 48)

System control buttons
Starting of each function of the monitoring software, displaying of the setup menu, etc. can be made using these buttons.
The following are available using the system control buttons.
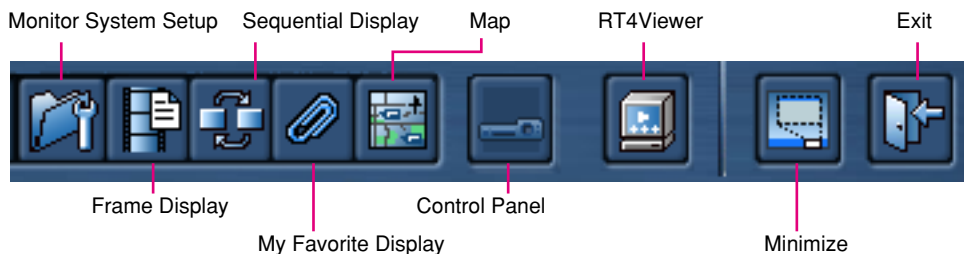
  • Configuration of the settings of the monitoring software (☞ page 49)
  • Frame display (Function to display only I-Frame of MPEG-4 stream) (☞ page 30)
  • Sequential display (Function to display images from a camera to camera sequentially at the interval set in advance) (☞ page 32)

- Favorite display (Function to display images from the camera registered as a favorite in advance) (☞ page 33)
- Map display (Function to display images from the camera by clicking the camera icon on the map) (☞ page 34)
- Control panel (☞ page 25)
- RT4Viewer (☞ page 57)
  The viewer software (RT4Viewer) that can play recorded images downloaded onto the PC will start
- Minimize
  This software will be minimized to the system tray.
- Exiting of the software
  This software will be closed.

Time and date display area
Time and date of the PC will be displayed.

Recorder information display area
When logging in the recorder, the following recorder information will be displayed. Information of only one of the following (except the recorder name) can be displayed simultaneously. When the information title is clicked, the respective information will be displayed.
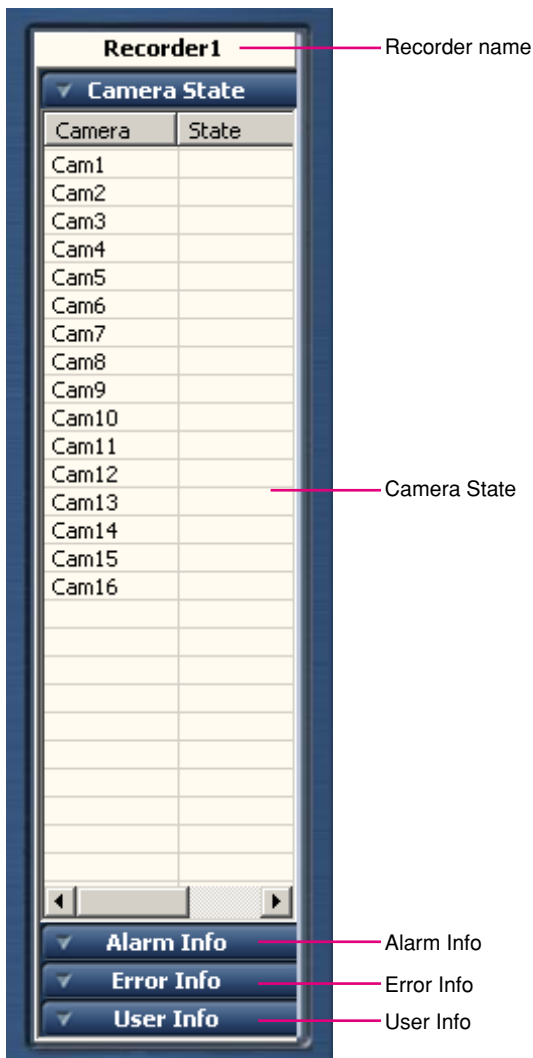
Recorder name
Name of the current login recorder will be displayed.

Camera State
The status of the camera connected to the current login recorder will be displayed.
- Camera (camera name)
- State (camera status)
  Blank: No signal
  Live: The recorder is not in the process of recording, or not connected to a network.
  Manual: The recorder is in the process of the manual recording.
  Timer: The recorder is in the process of the timer recording.
  Alarm: The recorder is in the process of the alarm recording.
  Monitor: The recorder is on a network.
  Manual + Monitor: The recorder is in the process of the manual recording and is also on a network.
  Timer + Monitor: The recorder is in the process of the timer recording and is also on a network.
  Alarm + Monitor: The recorder is in the process of the alarm recording and is also on a network.

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Alarm Info

History of alarm occurrences (occurred after logging in the recorder only) of the current login recorder will be displayed.
The display style is the same as the display style of the alarm log of the recorder.

Error Info

History of error occurrences (occurred after logging in the recorder only) of the current login recorder will be displayed.
The display style is the same as the display style of the error log of the recorder.

User Info

User information of users who is currently accessing the recorder will be displayed.
 • IP Address
 • Type
    Monitor: User is monitoring live images.
    Control: User is being logged in the recorder using the monitoring software.
    Backup: User is downloading recorded images from the recorder.
    Talk: User is transmitting/receiving audio to/from the recorder.
    Frame: User is displaying images with the frame display.
    Netplay: User is playing recorded images on the recorder.
 • User name
 • Login time

Settings relating to the connection with the recorder

Before operating on the operation window, configure the network settings between the PC and the recorder.

Click the [Monitor System Setup] button.
The pop-up menu will be displayed.
Select "Recorder Setup" under "Monitor System Config".
The "Recorder Setup" window will be displayed.
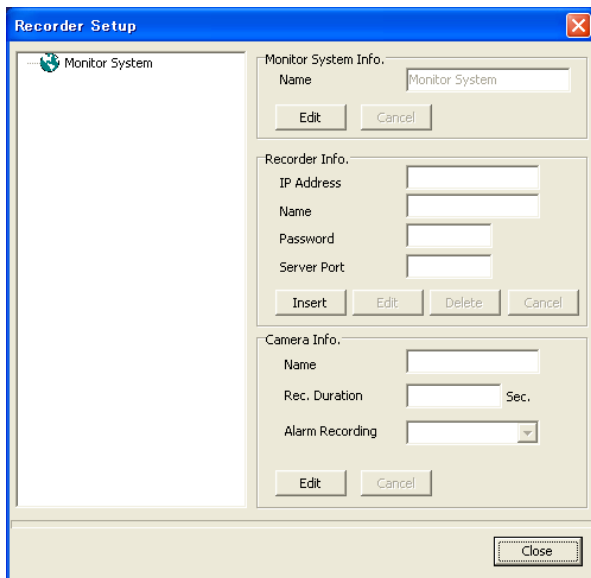
Step 1

Click the [Insert] button in the "Recorder Info." section, and then register the recorder information.
The password is arbitrary.

Important:
 • Operable functions of the recorder vary depending on the user level. Depending on the settings of the recorder, it is possible to restrict users to monitor images from the cameras by setting the password of the user level "Viewer" or "Operator".
 By setting the password of the user level "Viewer", it is possible to restrict users to operate the cameras. (Users whose user level is "Manager" can configure the settings of the cameras.)
 The default password is different according to the user level as follows.
 Manager1:   12345678
 Operator1:   123456
 Viewer1:   1234
 • To enhance the security, change the password before running the recorder. It is recommended to change the password periodically. Refer to page 70 of the installation guide for how to change the password.

Notes:
 • The default of "Server Port" of the recorder is "2000", and of "IP Address" is "192.168.0.250".
 • Up to 12 characters can be entered for "Name".

Step 2

Click the [OK] button.

Step 3

Click the [Close] button.

Note:
 Refer to the installation guide of the recorder for further information about the connection works of the recorder and the PC.

Configure the Network Settings

With the following network environment, it is not necessary to configure the network settings. It is possible to configure the settings or operate the recorder using the monitoring software after completing the connection.
IP Address: 192.168.0.2 - 192.168.0.249, 192.168.0.251 - 192.168.0.254
Subnet Mask: 255.255.255.0
Gateway Address: 192.168.0.1
When the network settings are different from the settings above, configure the network settings of the recorder and the PC.

Configure the network settings of the recorder

Use the buttons on the front panel of the recorder to conform the network settings to the network environment of the PC.
Refer to the installation guide of the recorder for further information about the network settings (The "Configure the network settings [Network Setup]" section under the "Configure the settings relating to communication with other devices [Communication Setup]" chapter in the descriptions of "Setup Menu").

Configure the network settings of a PC

Change the TCP/IP setting of the PC to conform to the settings of the recorder.
It is required to set the IP address of the PC to "192.168.0.XX (a number from 2 to 254 except 250)" to access the recorder.

Screenshot 1
Start just after the PC is started up.

Step 1
On the taskbar, click "Start", and then click the "Control Panel".

Important:
    Log in to the PC as an administrator.

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Screenshot 2

The control panel will be displayed.
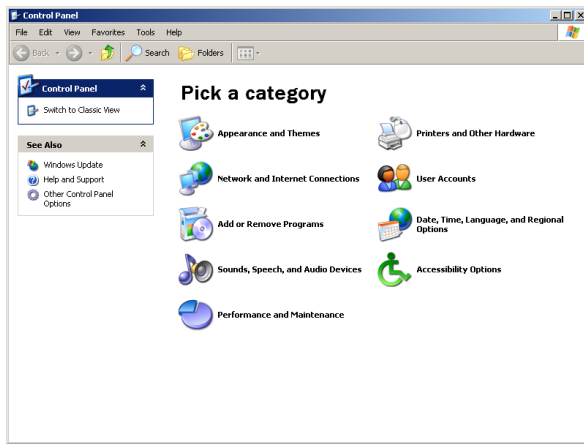
Step 2

Click the "Network and Internet Connections" icon.

Screenshot 3

The "Network and Internet Connections" window will be displayed.
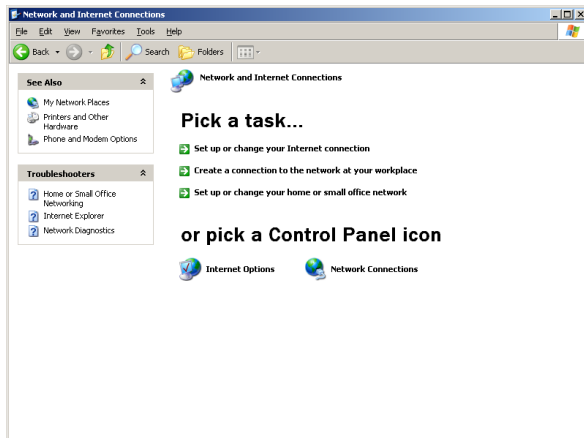
Step 3

Click "Network Connections".

Screenshot 4

The "Network Connections" window will be displayed.
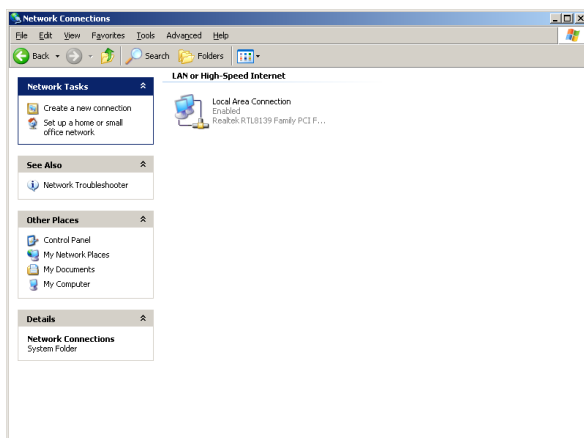
Step 4

Double click "Local Area Connection".

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Screenshot 5

The "Local Area Connection Status" window will be displayed.
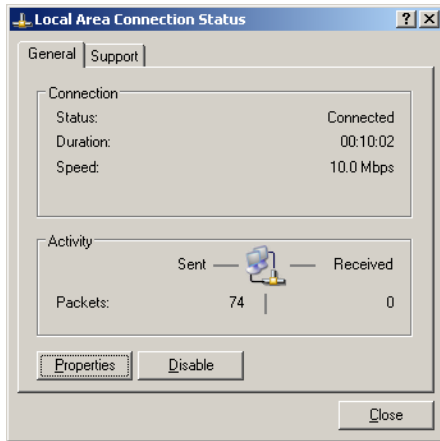
Screenshot 6

The "Local Area Connection Properties" window will be displayed.

Screenshot 7

The "Properties" window of "Internet Protocol (TCP/IP)" will be displayed.

Step 5
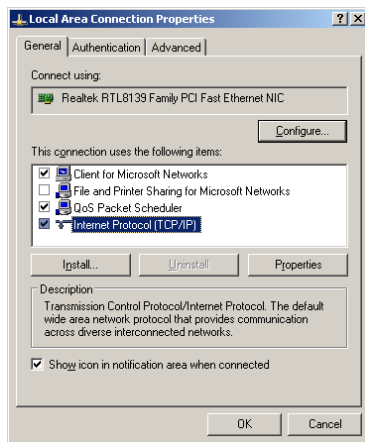
Click "Properties".

Step 6

Click "Internet Protocol (TCP/IP)", and then click "Properties".
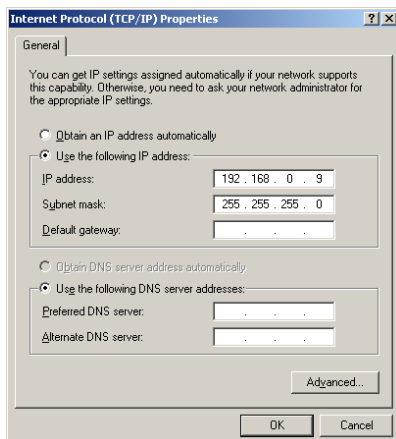
Step 7

Click "Use the following IP address" and enter the IP address and the subnet mask as follows;
- IP Address: 192.168.0.9
- Subnet Mask: 255.255.255.0

Step 8

Click the "OK" button and close the window.

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Monitor Live Images

It is possible to display live images on a 1-screen or a multi-screen in the image display area.
To monitor live images from the cameras, select the desired camera connected to the recorder first.

Screenshot 1

Start operation when the operation window is being displayed.
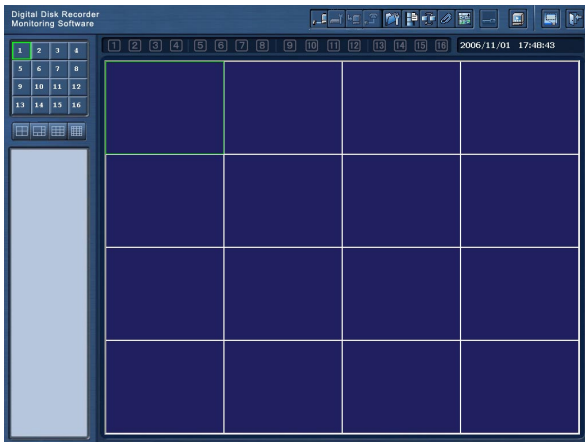
Screenshot 2

The pop-up menu will be displayed.
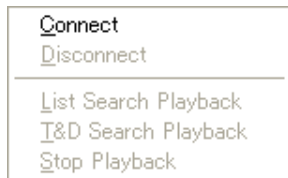
Screenshot 3

The "Connect" window will be displayed.
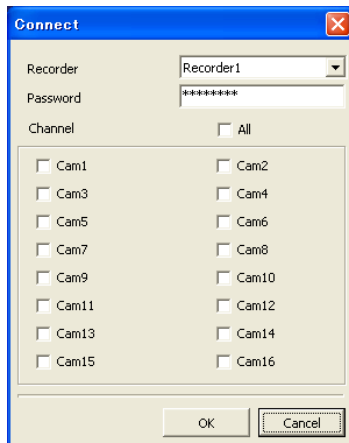
Step 1

Right-click on a blank area in the image display area.

Step 2

Select "Connect".

Step 3

Select the recorder to access and the desired camera channel.

Notes:
• Only the recorders registered in advance can be selected on the "Connect" window. Refer to page 12 for further information.
• The password registered when registered the recorder will be entered automatically.
• When displaying images from 5 or more camera channels of the same recorder, or when displaying recorded images in an area on a multi-screen, only I-frame will be displayed in all areas on a multi-screen and audio may not be heard.

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Click the [OK] button.
→ The connection status window will be displayed. When the connection is established, images from the selected camera will be displayed in the selected area in the image display area.

Switch the image display area between a 1-screen and a multi-screen

Display images on a 1-screen in the image display area
Click the desired area selection button.
→ The selected area will be displayed on a 1-screen in the image display area. The image display area will be switched to a 1-screen by clicking one of the area selection buttons when a multi-screen is displayed in the image display area.
The area selection buttons will change as follows to indicate the current status.

(a) 1 : This area is displayed in the image display area and currently selected.

(b) 1 : This area is displayed in the image display area and currently not selected.

(c) 1 : This area is not displayed in the image display area, or currently being used for the sequential display.

Display images on a multi-screen in the image display area
Click the desired multi-screen selection button.
→ The selected multi-screen will be displayed in the image display area.

⊞ (4-screen):   Each time this button is clicked, the displayed area will change as follows.
             1 - 4 → 5 - 8 → 9 - 12 → 13 - 16 → 1 - 4 → ⋯
⊞ (6-screen):   Each time this button is clicked, the displayed area will change as follows.
             1 - 6 → 7 - 12 → 1 - 6 → 7 - 12⋯

⊞ (9-screen):   Areas 1 - 9 will be displayed in the image display area.

⊞ (16-screen): Areas 1 - 16 will be displayed in the image display area.

Check the status of the camera
The status of the camera respective to the area can be check with the displayed icon.

1 (No icon):   Displaying of live images or playback of recorded images are available in this area.

⬚ : Live images from the camera are being displayed in this area. When this icon is blinking, images in the sequential display are being displayed in this area.

⬚ : Recorded images are being played in this area.

⚠ : The camera respective to this area is in the alarm status.

💾 : Live images or recorded images currently being displayed are being saved. When this icon is blinking, images are being recorded by the alarm recording. Refer to pages 49 and 50 for further information about the alarm recording.

Temporarily change color of text displayed in the image display area

When right-clicking on the text displayed on the image display area, the pop-up menu will be displayed.
Select "White", "Magenta" or "Bright Green" to change the color of the text temporarily.

Control the cameras

The camera from which images are being displayed in the image display area can be controlled using the control panel (☞ page 25). When displaying images on a 1-screen or on a 4-screen, it is also possible to pan/tilt the camera by clicking on the image displayed in the image display area. Refer to page 27 for further information.

Disconnect the connection with camera

Screenshot 1

Start operation when the operation window is being displayed.
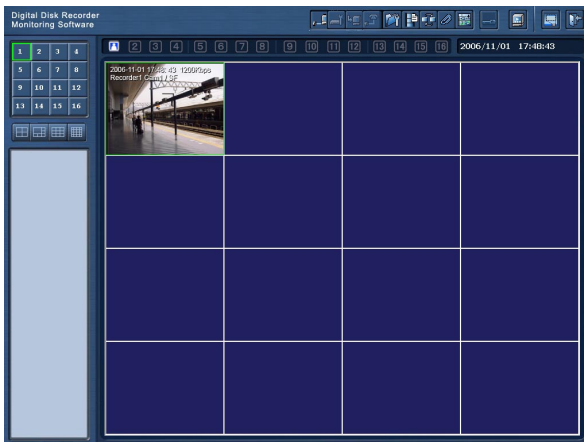
Step 1

Right-click on the displayed image that is from the camera to be disconnected.

Screenshot 2
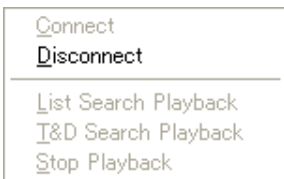
The pop-up menu will be displayed.

Step 2

Select "Disconnect".
→ The connection with the selected camera will be disconnected.

Login to the recorder

To perform playback of images recorded on the recorder, download, operation of the recorder (display of each log, display of information, manual recording operation, alarm output terminal control), it is necessary to log in to the recorder as "Manager (Manager1 - Manager4)".
To perform recorder operation (setting configurations, maintenance) or to use the remote talk function, it is necessary to log in as "Manager1".
Log in to the recorder as follows.

Screenshot 1

Click the [Login] button.
→ The "Login" window will be displayed.
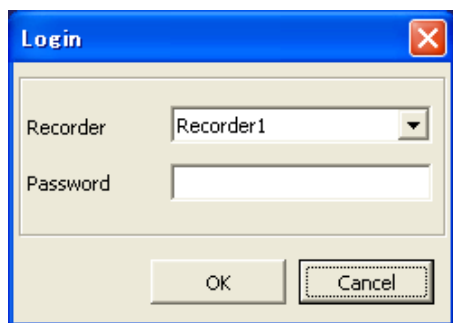
Important:
  Depending of the firewall setting of Windows XP SP2, recorder information may sometimes not be displayed. Refer to page 7 for further information.

Step 1

Select the desired recorder and enter the password of the user level "Manager".

Note:
  Only the recorders registered in advance can be selected on the "Login" window. Refer to page 12 for further information.

Step 2

Click the [OK] button.
→ The connection status window will be displayed. When the connection is established, the recorder information (☞ page 10) will be displayed on the left side of the operation window.
  The [Login] button 🔲 on the operation window will also change to the [Logout] button 🔲. Click this button to log out of the recorder.

Play recorded images on the recorder

Recorded images can be played from the search result window. It is possible to search recorded images to be played by designating multiple search filters (List Search) or by designating the start time and date of recording (Time & Date Search).
To play recorded images, log in the recorder as "Manager". Refer to page 19 for how to log in the recorder.

Important:
It is impossible to play recorded image which is currently being played or copied on the recorder.

Note:
When displaying images from 5 or more camera channels of the same recorder, or when displaying recorded images in an area on a multi-screen, only I-frame will be displayed on a multi-screen (audio may not be heard when displaying live images).

Play recorded images from the search result window displayed after searching with the designated search filters (List Search Playback)

Screenshot 1

Start operation when the operation window is being displayed.

Screenshot 2

The pop-up menu will be displayed.

Step 1

Right-click on a blank area in the image display area.

Step 2

Select "List Search Playback".

Screenshot 3

The "List Search" window will be displayed.

Step 3

Set the desired search filter.

Camera
Check the radio button of the desired camera channel to be searched.

Screenshot 4

The search result window will be displayed.

Filtering

Off:	Searches without filtering
Manual:	Searches for only images recorded by the manual recording
Timer:	Searches for only images recorded by the timer recording
Alarm:	Searches for only images recorded by the alarm recording (triggered by a terminal input, VMD and a command alarm reception)
Terminal:	Searches for only images recorded by the alarm recording triggered by a terminal input
VMD:	Searches for only images recorded by the alarm recording triggered by VMD
Com:	Searches for only images recorded by the alarm recording triggered by a command alarm reception

Start/End
Designate the time period to be searched by entering the start and end time and date.

Step 4

When the search filters are set, click the [OK] button.

Step 5

Select the desired recorded images to be played.

Note:
It is possible to select multiple search results by clicking them while pressing the [Ctrl] key on the keyboard.

Step 6

Click the [Play] button.
→ Playback of the selected recorded images will start in the area selected in step 1.

Refer to page 29 for how to perform playback operations using the control panel.

Note:
The latest 5 000 recorded images will be displayed in the list form.

Play recorded images from the search result window displayed after searching by designating the start time of recording (Time & Date Search Playback)

Screenshot 1

Start operation when the operation window is being displayed.
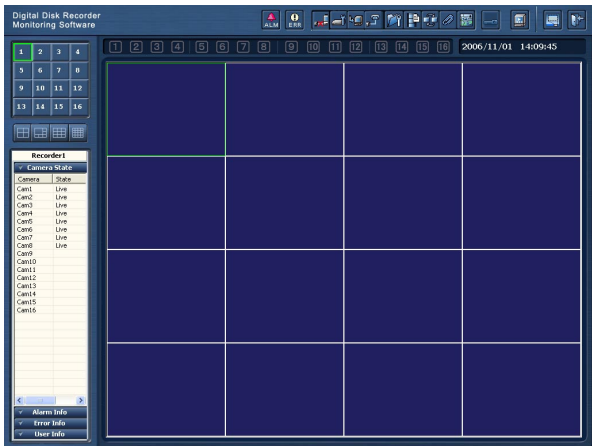
Step 1

Right-click on a blank area in the image display area.

Screenshot 2

The pop-up menu will be displayed.
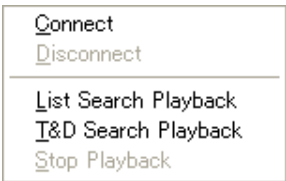
Step 2

Select "T&D Search Playback".

Screenshot 3

The "T&D Search Playback" window will be displayed.
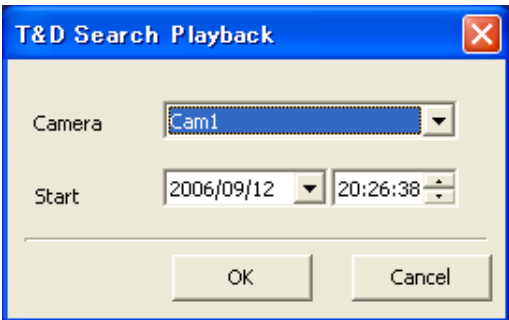
Step 3

Set the following items.

Camera
Select the desired camera to be searched.

Start
Enter the start time and date for the search.

Step 4

When completing the settings, click the [OK] button.

Playback of images recorded in the designated time and date will start in the area selected in step 1.

Operations during playback can be made using the control panel. Refer to page 29 for further information.

Notes:
- When no recorded image was found at the designated time and date, playback will start from the next record.
- When there is no recorded image at all, playback will not start.

Stop playback

When playback is stopped, the connection with the recorder will also be disconnected.

Screenshot 1

Start operation when the operation window is being displayed.
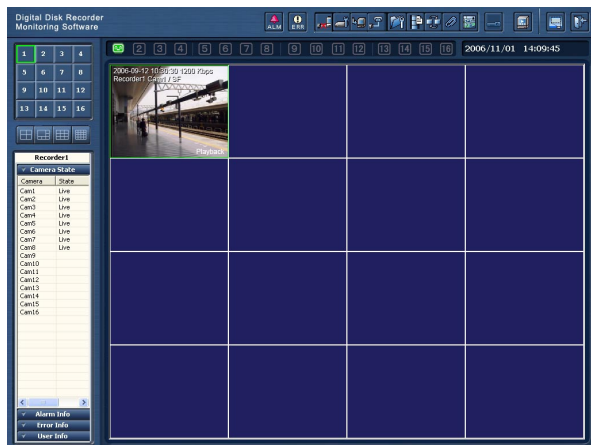
Step 1

Right-click on the area where recorded images are being played.

The pop-up menu will be displayed.

```
Connect
Disconnect

List Search Playback
T&D Search Playback
Stop Playback
```

Select "Stop Playback".
→ Playback will stop and the connection with the
　recorder will be disconnected.

Control panel

Control of the camera such as panning/tilting, saving an image, image capturing and operation of the setup menu of the camera can be made using the control panel. Operation during playback of recorded images can also be made using the control panel.

Note:
The following operations can be made both when displaying live images and when playing recorded images.
- Saving an image on the PC
- Capturing of images from the camera
- Muting audio
- Displaying of images from the camera on a full screen

Display the control panel

When the [Control Panel] button is clicked, the control panel will be displayed.
When displaying on a full screen, right-click on the screen and select "Control Panel" from the pop-up menu.

Capture   Full Screen

Mute

Real Time Save

Close the control panel

Click the [×] button at the right top of the control panel or click on somewhere out of the selected area.
→ The control panel will be closed.

Save the image currently being displayed on the PC

Click the [Real Time Save] button ▣.
→ The image currently displayed will be saved.
The [Real Time Save] button will change as follows to indicate the current status.

▣ : The [Real Time Save] button is operable.
▣ : In the process of saving of the image.
▣ : The [Real Time Save] button is inoperable.

The saved image will be stored the "Mpeg" folder in the directory selected in the "Choose Directory" section on the "Advanced Setup" window.
The "Advanced Setup" window can be displayed by selecting "Advanced Setup" under "Monitor System Config" from the pop-up menu displayed when the [Monitor System Setup] button is clicked.

Capture the images currently being displayed

When the [Capture] button 📷 is clicked, the image currently being displayed will be captured as a still picture and saved.
The [Capture] button will change as follows to indicate the current status.

📷 : The [Capture] button is operable.
📷 : The [Capture] button is inoperable.

The captured image will be stored the "Picture" folder in the directory selected in the "Choose Directory" section on the "Advanced Setup" window.
The "Advanced Setup" window can be displayed by selecting "Advanced Setup" under "Monitor System Config" from the pop-up menu displayed when the [Monitor System Setup] button is clicked.

Note:
   It is impossible to capture the recorded image when playback is being stopped.

Muting audio

When the [Mute] button 🔊 is clicked, audio will be muted.
The [Mute] button will change as follows to indicate the current status.

🔊 : Audio is not muted.
🔇 : Audio is being muted.

Display images from the camera on a full screen

When the [Full Screen] button ⬛ is clicked, the images currently being displayed will be displayed on a full screen. When clicking the [Full Screen] button while displaying images on a 4-screen the 4-screen will be enlarged to fit to the screen. When clicking the [Full Screen] button while displaying images on a 1-screen or on a multi-screen except 4-screen, the selected area will be displayed on a 1-screen and be enlarged to fit to the screen.
To return to the previous size, click the [Full Screen] button again or press the [Esc] button on the keyboard.

Control the cameras

It is possible to operate the camera while displaying images.

Note:

To control the camera, configure the settings such as the communication type between the camera and the recorder, protocol, etc. Refer to the installation guide of the recorder for how to configure the required settings of the recorder.

Refer to the operating instructions of the camera for how to configure the required settings of the camera.

Depending on the models of the connected cameras, it may be impossible to control the camera or some functions may be not available.

Panning/tilting, zooming, focusing, preset position operation

Click the buttons on the right side of the control panel to control the camera.

Panning/tilting: Moves the camera horizontally (◄►)/vertically (▼▲)
Zooming: Zooms in/out of images (+: TELE, –: WIDE)
Focusing: Adjusts the focus (+: FAR, –: NEAR)
AF: Adjusts the focus automatically
Preset position: Moves the camera to the preset position registered in advance

---

Notes:

• When "Home" is selected for "Preset position", the camera will move to the home position (only when controlling Panasonic's camera). Refer to the operating instructions of the camera for how to configure the related settings.

• It is also possible to pan/tilt the camera by clicking on the image displayed in the image display area (only when displaying images from Panasonic's camera on a 1-screen or on a 4-screen). The camera moves to position the clicked point as the center point of its image.

Brightness, auto function

When the [◄] button is clicked, the extension panel with the buttons will be displayed on the left side of the control panel.
Brightness and auto function can be operated with these buttons. To close the displayed extension panel, click the [◄] button again.

Auto   Click this button to display/close the extension panel.
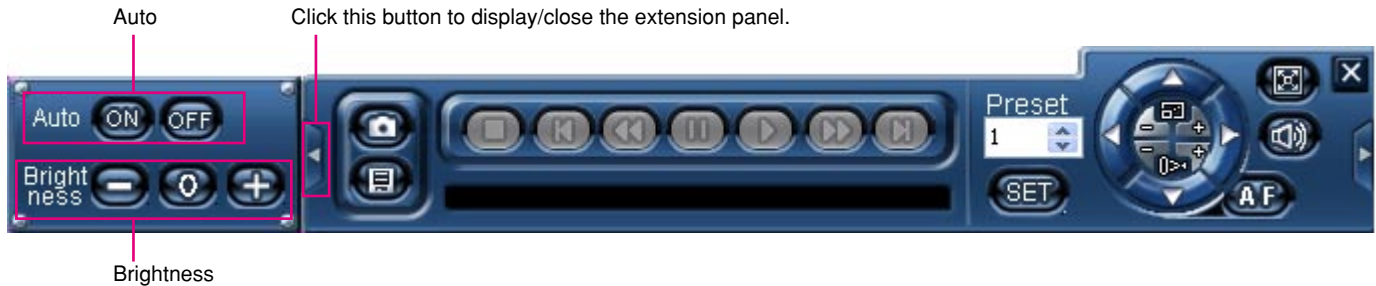
Brightness

Brightness: Adjusts the iris of the lens
Auto: Moves the camera with an auto function set in advance

Operation of the setup menu of the camera

When the [►] button is clicked, the extension panel with the buttons will be displayed on the right side of the control panel.
Operation of the setup menu of the camera is available with these buttons. To close the displayed extension panel and the setup menu of the camera, click the [►] button again.

Click this button to display/close the extension panel.   ESC   SET

Reset   ▼▲◄►   All Reset

SET: Determines the setting, moves to the submenu
ESC: Moves to the parent page
▼▲◄►:   Moves the cursor, changes the parameter
Reset: Displays the special menu (Refer to the operating instructions of the camera in use for further informa-
           tion about the special menu.)
All Reset: Resets the settings of the setup menu of the camera to the default

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Operations during playback

Operations during playback can be made using the control panel. Refer to page 25 for how to display the control panel.

Fast reverse playback   Pause   Play/Frame by frame playback   Fast forward playback

Stop   Previous record   Next record

Playback point slider
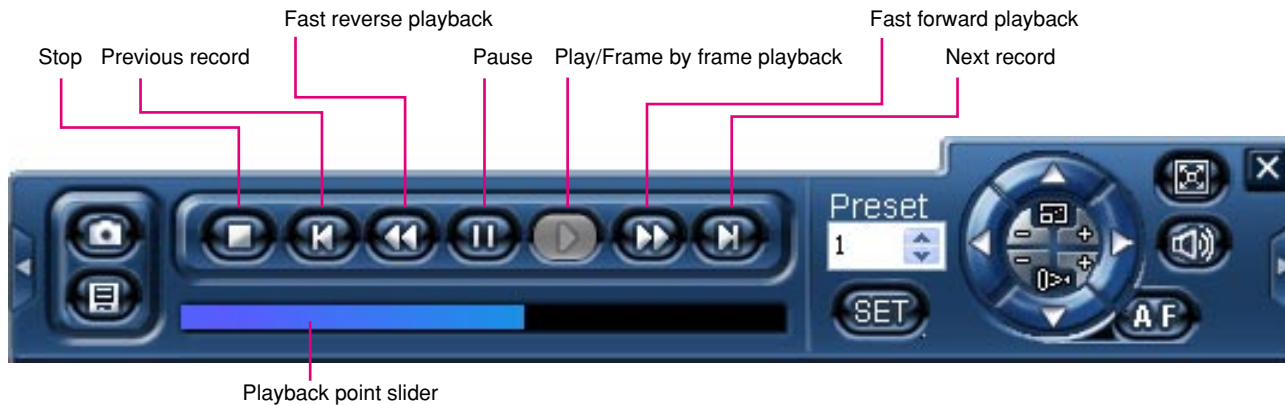
[Stop] button:	Click this button to stop playback.
[Previous record] button:	It is possible to select the previous record by clicking this button when multiple results have been selected on the search result window.
[Fast reverse playback] button:	Fast reverse playback speed will alternately change between "2x" and "4x" each time the fast reverse playback button is clicked.
[Pause] button:	Click this button to pause playback. Click this button again to release pausing and resume the playback.
[Play/frame by frame playback] button:	Click this button to start playback. When this button is clicked during pausing, the next frame will be displayed.
[Fast forward playback] button:	Fast forward playback speed will change in the following order each time the fast playback button is clicked: $1x \rightarrow 2x \rightarrow 4x \rightarrow 1/4x \rightarrow 1/2x \rightarrow 1x \rightarrow 2x \dots$
[Next record] button:	It is possible to select the next record by clicking this button when multiple results have been selected on the search result window.
Playback point slider:	The current playback point will be indicated by the pointer. It is possible to designate a playback point by clicking the desired playback point.

Other available operations when displaying live images

When displaying live images, the following display functions are available.
- Frame display
- Sequential display
- Favorite display
- Map display

These display function can be started by clicking the respective button of the system control buttons.

Frame display

Live images from the camera will be displayed in the frame play. Display interval can be set by configuring "I Frame Interval" on the "Common Setup" tab of the "Recording/Event Setup" window (☞ page 36).
The default of "I Frame Interval" is "4". (The frame display switches the displayed image at 4 seconds interval.)

Important:
When the value set for "I Frame Interval" is changed, it also affects recording.

 Screenshot 1

Click the [Frame display] button.
→ The "Frame Display" window will be displayed.
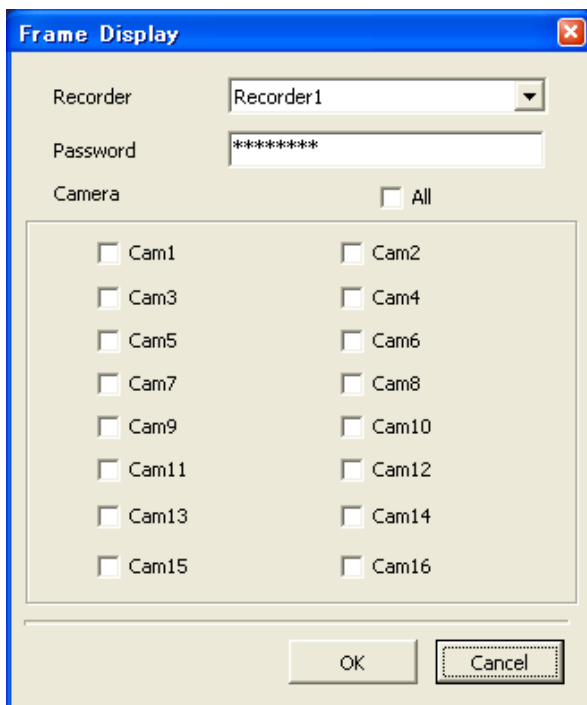
 Step 1

Select the desired recorder and the cameras, and then click the [OK] button.
The password registered when registered the recorder will be entered automatically.

Note:
Only the recorders registered in advance can be selected on the "Frame Display" window. Refer to page 12 for further information.

The frame display will start.
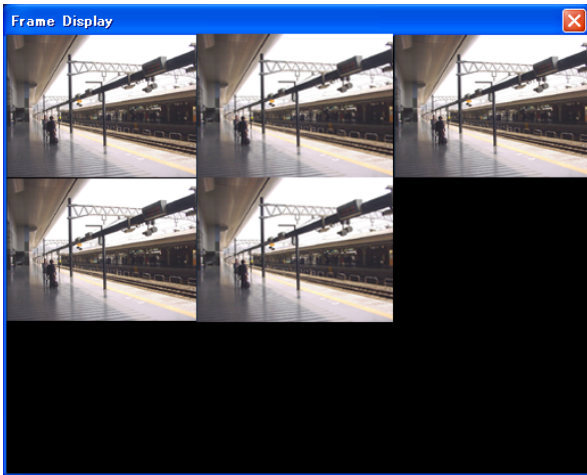
Number of areas in the image display area will change depending on a number of the selected cameras.

Number of the selected cameras	Image display
1	Single screen
2 - 4	4-screen
5 - 9	9-screen
10 - 16	16-screen

When right-clicking on the displayed image, the following pop-up menu will be displayed.

- Stop Frame Display: Stops the frame display
- Full Screen: Display the selected image on a full screen
- Default Screen: Returns to the multi-screen from the full screen display

To exit from the frame display, click the [×] button at the right top of the window.

Notes:
- When 5 cameras are selected, the frame display will start on a 9-screen as shown is the image of "Screenshot 2".
- When the resolution setting (Field/SIF) for the selected cameras are set differently, frame display works only for the cameras whose resolution setting is the same as one for the youngest camera number.

  When the selected cameras and their resolution settings are as table 1 below, "Cam 1" and "Cam 4" are available for the frame display since the resolution setting of "Cam 4" is same as of the youngest camera number "Cam 1".

Camera number	Resolution
Cam 1	Field
Cam 2	SIF
Cam 3	SIF
Cam 4	Field

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Sequential display

The displayed images from multiple cameras will be switched automatically.
To start the sequential display, configure the settings relating to the sequential display in advance. Refer to page 52 for how to configure the settings relating to the sequential display.

Screenshot 1

When clicking the [Sequential display] button, the pop-up menu will be displayed.

Normal Sequential Display
My Favorite Sequential Display
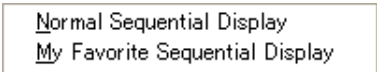
Step 1

Select "Normal Sequential Display" or "My Favorite Sequential Display".

Important:
When images are currently being displayed, disconnect all the connections.
When it is necessary to disconnect all the connections to continue operation, the message window will be displayed.
Click the [OK] button to disconnect all the connection to continue operation.

Screenshot 2

The password entry window will be displayed.

Sequential Display	
Recorder	Password
Recorder1	********
OK	Cancel
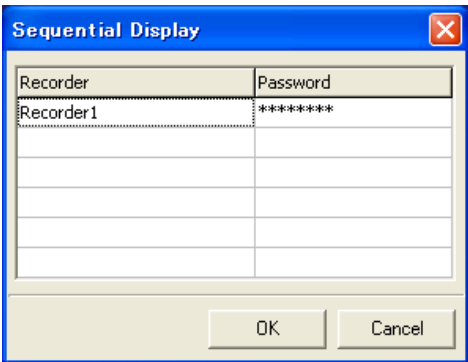
Step 2

The password registered when registered the recorder will be entered automatically.
Click the [OK] button.
→ The sequential display will start.

Step 3

To stop the sequential display, click the [Stop sequential display] button. When the sequential display starts, the [Sequential display] button 🔲 will change to the [Stop sequential display] button 🔲.

Important:
• When the alarm recording starts during the sequential display, the sequential display will stop. The sequential display will start when the alarm recording ends.
• The sequential display will stop when an error occurs in the connection between the recorder and the PC.
• Other functions, such as the frame display and switching of the image display area, are unavailable during the sequence display.

Favorite Display

It is possible to register a camera channel as a "favorite" and assign it to the desired area.
Refer to page 51 for how to register a camera channel as a "favorite".

Screenshot 1

Click the [My Favorite Display] button.
→ The "My Favorite Display" window will be displayed.
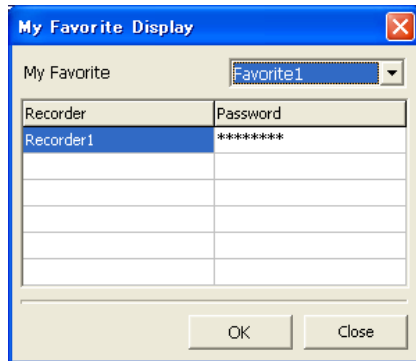
Step 1

Select the desired "favorite", and then click the [OK] button.
The password registered when registered the recorder will be entered automatically.
→ Images from the registered camera channel as "favorite" will be displayed in the assigned area.

Important:
• When images are currently being displayed, disconnect all the connections.
  Click the [OK] button to disconnect all the connection to continue operation.
• When the camera of which the camera channel registered as a favorite is not connected, images may not be displayed as configured on the "My Favorite Display Setup" window.

Map display

It is possible to display the diagram of the camera location arrangement (map). Camera connection can be established on the map.
Configure the settings relating to the map display in advance (☞ page 53).

Screenshot 1

Click the [Map] button.
→ The "Map" window will be displayed.
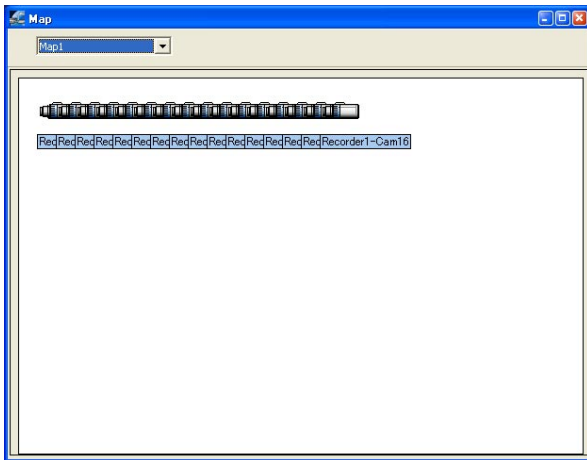
Step 1

The camera icons will be displayed in the "Map" window.

📷 indicates the camera that is available for live image monitoring.

📷 indicates the camera that is not available for live image monitoring. (Not connected)

When clicking on 📷, the pop-up menu will be displayed. When selecting "Connect" from the pop-up menu, the connection window will be displayed.
Enter the password, and then click the [OK] button.
→ Connection with the selected camera will be established and live image monitoring will become available.

When clicking on 📷 and selecting "Disconnect" from the displayed pop-up menu, live image monitoring will become unavailable.
Other map can be selected from the pull-down menu.

Step 2

To exit from the map display, click the [×] button at the right top of the "Map" window.

Recorder operation

The following operations of the recorder are available using this software.
- Configuration of the settings of the recorder
- Check of each log of the recorder
- Check of the system information and disk information of the recorder
- Start/stop of the manual recording using this software
- Determination whether to enable or disable the alarm output from the AUDIO IN/ALARM OUT terminal on the rear of the recorder
- Reboot of the recorder
- Download/upload of the setup data from/to the recorder
- Download/upload of the language data from/to the recorder
- Firmware update of the recorder

To operate the recorder, log in the recorder first. (☞ page 19)
When clicking the [Recorder Config.] button, the pop-up menu will be displayed.
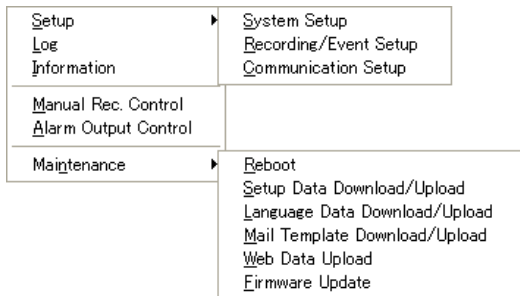
Note: Available operations differ depending on the login user.

Configuration of the settings of the recorder System Setup (Setup – System Setup)

Configure the basic settings relating the system of the recorder.

Screenshot 1

Select "System Setup" under "Setup" from the pop-up menu.
→ The "System Setup" window will be displayed.
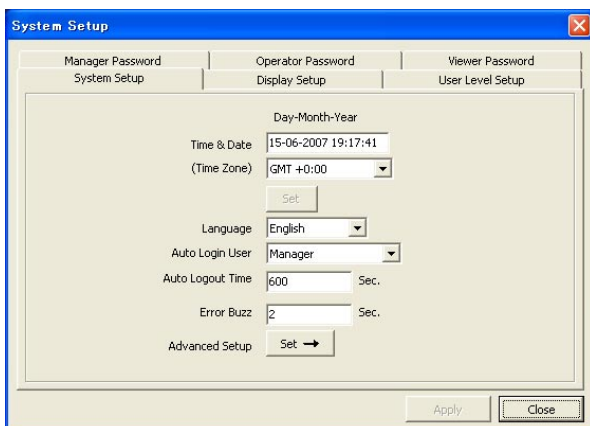
Step 1

The setup items on the "System Setup" window are the same as the items on the setup menu ("System Setup", "Display Setup", "User Level Setup", "Manager Password", "Operator Password" and "Viewer Password") of the recorder.
Refer to the installation guide of the recorder for further information about the setup items.

Notes:
- The camera title (up to 10 alphanumeric characters) can be set on the "Display Setup" tab.
- The camera title should be named in the language selected for "Language" on the "System Setup" tab.

Step 2

When completing the settings, click the [Apply] button.

Recording/Event Setup (Setup – Recording/Event Setup)

Configure the basic settings relating recordings and the event action of the recorder.

Screenshot 1

Select "Recording/Event Setup" under "Setup" from the pop-up menu.
→ The "Recording/Event Setup" window will be displayed.
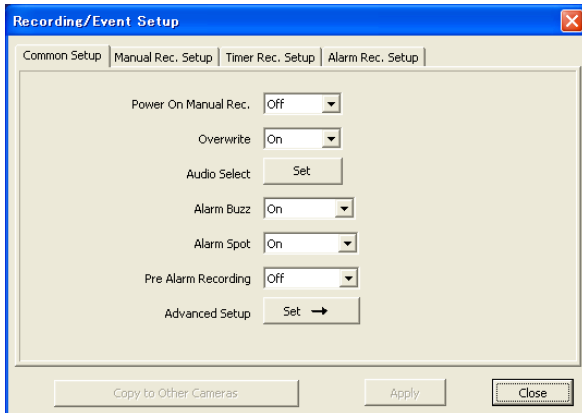
Step 1

The setup items on the "Recording/Event Setup" window are the same as the items on the setup menu ("Recording Setup" and "Event Setup") of the recorder. Refer to the installation guide of the recorder for further information about the setup items.

Step 2

When completing the settings, click the [Apply] button.

Note:
To copy and apply the configured settings to all camera channels, click the [Apply] button after clicking the [Copy to all camera channels] button. The settings to be copied vary according to the settings. Refer to the installation guide of the recorder for further information.

Communication Setup (Setup – Communication Setup)

Configure the basic network settings of the recorder.

Screenshot 1

Select "Communication Setup" under "Setup" from the pop-up menu (☞ page 35).
→ The "Communication Setup" window will be displayed.
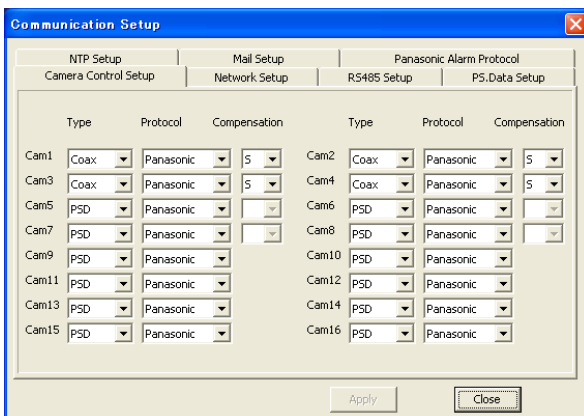
Step 1

The setup items except the settings on the [NTP Setup] tab on the "Communication Setup" window are the same as the items on the setup menu ("Camera Control Setup", "Network Setup" and "RS485 Setup") of the recorder. Refer to the installation guide of the recorder for further information about the setup items.
Refer to the following for how to configure the settings on the [NTP Setup] tab.

Step 2

When completing the settings, click the [Apply] button.

Note:
• The setting of compensation (cable loss) will be ignored when receiving any alarm from cameras during communication setup.
• When the compensation is not set to "S", stop recording before changing the settings.

[NTP Setup] tab
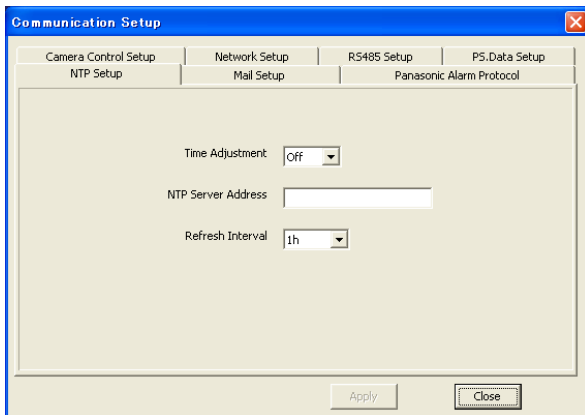
■ **Time Adjustment**
Select "On" or "Off" to determine whether or not to
adjust time by synchronizing with the NTP server.
Default: Off

■ **NTP Server Address**
Enter the NTP server address when "On" is selected for
"NTP Synchronization".
Enter up to 128 alphanumeric characters (including
hyphens (-), periods (.) and underscores (_)).

■ **Refresh Interval**
Select an interval of time inquiry to the NTP server from
the following.
1h, 2h, 6h, 12h, 24h
Default: 1h

[Mail Setup] tab

Configure the settings to use together with the alarm mail and warning report mail functions of the recorder (☞ operating instructions of the recorder).

[Screenshot: Communication Setup window with tabs "Camera Control Setup", "Network Setup", "RS485 Setup", "PS.Data Setup", "NTP Setup", "Mail Setup", "Panasonic Alarm Protocol". Fields: Send to Address with Address 1-4, SMTP Server Address, POP Server Address, Authentication (Off/POP before SMTP/SMTP radio buttons), User Name, Password, From Address, Mail Subject. Columns TRM/VMD/COM/ERR with checkboxes. SMTP Port 25. Apply and Close buttons.]

■ Send to Address

Enter the mail addresses of the recipient of the alarm mail and the warning report mail of the recorder.
Enter the mail addresses of the recipients for "Address1" - "Address4".
Enter up to 255 alphanumeric characters including hyphens (-), periods (.), at mark (@) and underscores (_).
Up to 4 destinations can be registered.
Check the desired mail type (TRM/VMD/COM/ERR) to be sent.
TRM: Terminal input
VMD: Video motion detection
COM: Command alarm reception
ERR: Error occurrence

■ SMTP Server Address

Enter an IP address or a name of the SMTP server to send e-mails. To enter an SMTP server name, it is necessary to select "Manual" or "Auto" for "DNS".
Enter up to 128 alphanumeric characters including hyphens (-) and periods (.).

■ SMTP Port

Enter a port number of the SMTP server.
Default: 25

Important:
Do not change the SMTP port number unless sending mails using the submission port (port number: 587).

■ POP Server Address

When selecting "POP before SMTP" for "Authentication", enter the IP address of the POP server.
Entry of a POP server name is available only when selecting "Manual" or "Auto" for "DNS".
Enter up to 128 alphanumeric characters including hyphens (-) and periods (.).

■ Authentication

Select an authentication method to send mails from the following.
Off: Do not authenticate.
POP before SMTP: Requires POP server authentication before sending emails.
SMTP: Requires SMTP server authentication before sending emails.
Default: Off

■ User Name

Enter a user name (login name) to access the server.
Enter up to 32 alphanumeric characters and marks except (&) and blank (space).

■ Password

Register a password to access the server. Enter up to 32 alphanumeric characters marks except (&) and blank (space).

■ From Address

Enter the mail address of a sender. Entered mail addresses will be displayed in the "From" (sender) line.
Enter up to 255 alphanumeric characters including hyphens (-), periods (.), at mark (@) and underscores (_).

■ Mail Subject

Enter the mail subject.
Enter up to 50 characters.

[Panasonic Alarm Protocol] tab

Configure the settings to provide notifications of event/error information to the PC.

■ **Port Number**
Enter a port number to be used to transmit a Panasonic alarm protocol to the PC.
Default: 1818

■ **Destination Address**
Enter the address of the recipient. Enter the IP address or host name for "Address1" - "Address4".
Enter up to 128 alphanumeric characters including hyphens (-), periods (.) and underscores (_).
Up to 4 destinations can be registered.

Check of each log of the recorder (Log)

It is possible to check the alarm log, error log, operation log, access log and network log of the recorder.
The contents of each log are the same as the contents that can be checked on the SETUP MENU (Maintenance).
Refer to the installation guide of the recorder for further information.
It is also possible to save each log on the PC in the CSV format by clicking the [Save] button.
Select "Log" from the pop-up menu (☞ page 35).
→ The "Log" window will be displayed.
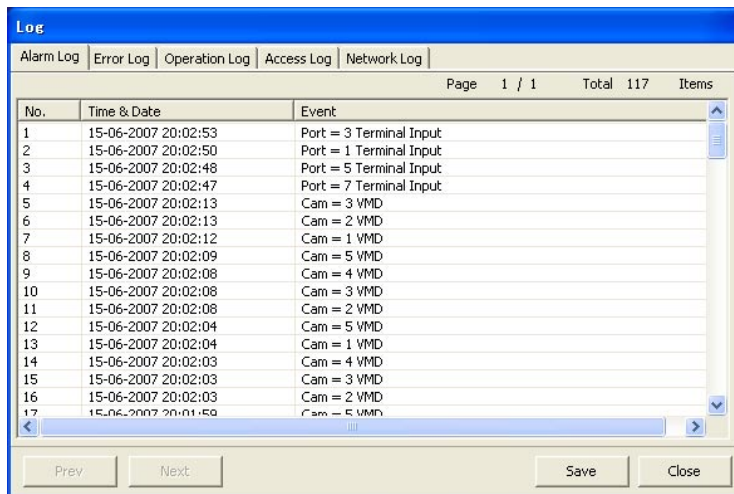
[Network log] tab
It is possible to check logs about the network error occurrences (time and date of the network error occurrence and event).

Note:
Up to 100 error logs can be kept. When more than 100 event logs are filed, the older event logs will be overwritten by the newer event logs. In this case, the oldest log is the first to be overwritten.

The descriptions of the network logs are as follows.

SMTPPOP3ATTEST_ERR	POP3 authentication error
SMTPPOP3SVR_ERR	Failed to find POP3 server
SMTPPOP3ADD_ERR	Failed to resolve POP3 server address
SMTPATTEST_ERR	SMTP authentication error
SMTPSVR_ERR	Failed to find SMTP server
SMTPSVRADD_ERR	Failed to resolve SMTP server address
SMTPOTHER	Other errors for SMTP
DNSOTHER	Other errors for DNS
NTPGETTIME_OK	Synchronization with the NTP server complete
NTPSVRADD_ERR	Failed to resolve NTP server address
NTPSVRRES_ERR	No response from the NTP server
NTPOTHER	Other errors for NTP
DHCPIPADDUPDATE_ERR	DHCP IP address update failure
DHCPIPADD_LOST	DHCP lost
DHCPOTHER	Other errors for DHCP

Check of the system information and disk information of the recorder (Information)

It is possible to check the system information and the disk information of the recorder.
Select "Information" from the pop-up menu (☞ page 35).
→ The "Information" window will be displayed.
Check the desired information on this window.

Type	Information
Firmware Version	
MAC Address	
Video Format	
Optional Board	Coax1
Current Temperature	32 deg C / 89 deg F
Highest Temperature	50 deg C / 122 deg F(2007-10-15 20:16:58)
Web Data	
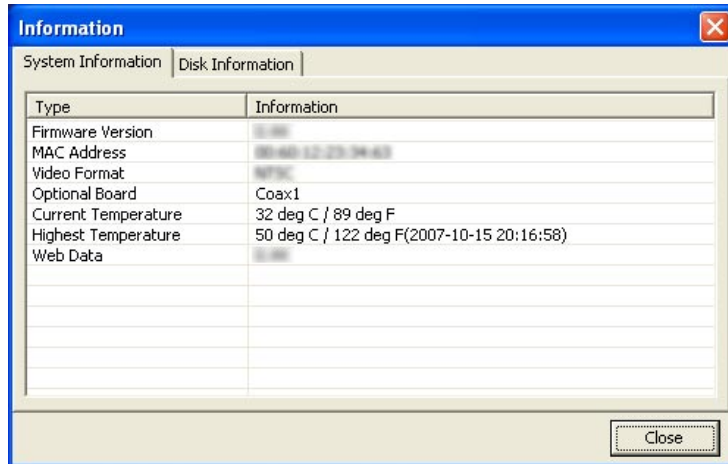
Start/stop of the manual recording using this software (Manual Rec. Control)

It is possible to start and stop the manual recording using this software.

Screenshot 1

Select "Manual Rec. Control" from the pop-up menu
(☞ page 35).
→ The "Manual Rec. Control" window will be displayed.

Step 1

Select "On" or "Off" to start or stop the manual recording.

On: Starts the manual recording using this software.
Off: Stops the manual recording using this software.

Step 2

Click the [Apply] button.
→ The selected operation will be carried out.

Determination whether to enable or disable the alarm output from the AUDIO IN/ALARM OUT terminal on the rear of the recorder (Alarm Output Control)

It is possible to determine whether to enable or disable the alarm output from the AUDIO IN/ALARM OUT terminal on the rear of the recorder.

Screenshot 1

Select "Alarm Output Control" from the pop-up menu (☞ page 35).
→ The "Alarm Output Control" window will be displayed.

Alarm Output Control

Alarm Output
- Output1 ☐ On
- Output2 ☐ On
- Output3 ☐ On
- Output4 ☐ On
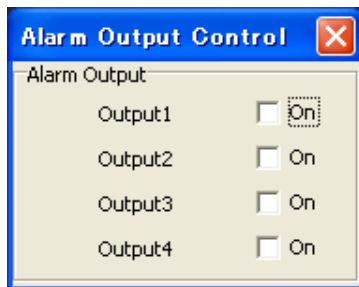
Step 1

Check the desired checkbox respective to the terminal from which the alarm output signal is to be output. Uncheck the checkbox to stop outputting the alarm output signal.

Step 2

To close from the "Alarm Output Control" window, click the [×] button at the right top of the window.

Reboot of the recorder (Maintenance – Reboot)

Select "Reboot" under "Maintenance" from the pop-up menu (☞ page 35).
→ The confirmation window will be displayed.

When the [OK] button on the confirmation window is clicked, the reconfirm window will be displayed. Click the [OK] button on the reconfirm window to reboot the recorder. Connect to the recorder again after the reboot since the connection between the recorder and the PC will be disconnected in the process of the reboot.

Important:
Before rebooting the recorder, make sure that the recorder is not in the process of recording, playback and copying.

Download/upload of the setup data from/to the recorder Setup Data Download/Upload (Maintenance – Setup Data Download/Upload)

Select "Setup Data Download/Upload" under "Maintenance" from the pop-up menu (☞ page 35).
→ The "Setup Data Download/Upload" window will be displayed.
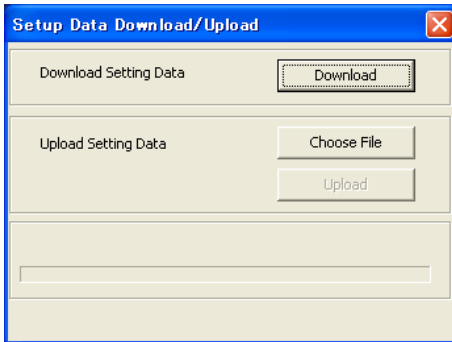
Download the setup data

Step 1
Click the [Download] button.
→ The "Save…" window will be displayed.

Step 2
Designate the directory in which the setup data is to be downloaded (default name: RT4Set.bin), and then click the [Save] button.
→ Download of the setup data will start.

Upload the setup data

Step 1
Click the [Choose File] button, and then select the setup data to be uploaded.

Step 2
Click the [Upload] button.
→ Upload of the setup data will start.

Note:
The settings on the [Network setup] tab of the "Communication Setup" window will not be overwritten even when the setup data is uploaded.

Download/upload of the language data from/to the recorder Language Data Download/Upload (Maintenance – Language Data Download/Upload)

It is possible to download/upload the customized language data from/to the recorder. The default language of the custom language is English.
Select "Language Data Download/Upload" under "Maintenance" from the pop-up menu (☞ page 35).
→ The "Language Data Download/Upload" window will be displayed.
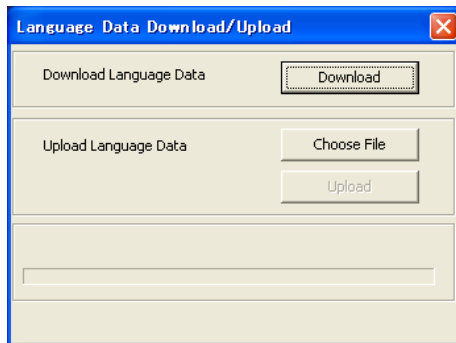
Download the language data

Step 1
Click the [Download] button.

Step 2
Designate the directory in which the language data is to be downloaded (default name: RT4Lang.txt), and then click the [Save] button.
→ Download of the language data will start.

Upload the language data

Click the [Choose File] button, and then select the language data to be uploaded.

Step 1
Click the [Upload] button.
→ Upload of the language data will start.

Notes:
- Available characters for the custom language are as follows. (Some characters may not be displayed.)
  - Basic Latin, Latin Extended-A, Cyrillic
- Depending on the number of characters, it may fail to upload of the custom language data.
- The character code of a file to be uploaded shall be UTF-8.
- It is recommended to save the current data as a backup before uploading the language data since it will be over-written when the language data is uploaded.
  It is also recommended to save it before upgrading the firmware since it will be reset to the default.

Download/upload of the mail template (Maintenance - Mail Template Download/Upload)

It is possible to download/upload the template of mail to be used for notification mail of event/error occurrence.
Select "Mail Template Download/Upload" under "Maintenance" from the pop-up menu (☞ page 35).
→ The "Mail Template Download/Upload" window will be displayed.
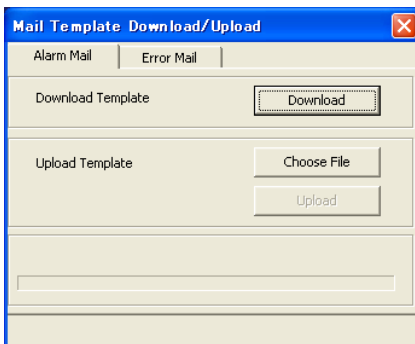
Download the mail template
Click the [Alarm Mail] tab or the [Error Mail] tab.
Click the [Download] button and click the [Save] button after designating the destination folder.
→ Download of the mail template will start.

Upload the mail template
Click the [Alarm Mail] tab or the [Error Mail] tab.
Click the [Choose File] button and select the template to be uploaded.
Then, click the [Upload] button.
→ Upload of the mail template will start.

Notes:
• Refer to page 81 for how to edit the contents of the mail.
• It is recommended to download and save the original file as a backup before uploading the template since it will be overwritten when the template is uploaded.
  It is also recommended to download and save it before upgrading the firmware since it will be reset to the default.

Upload web data to the recorder

To upload web data to be used when accessing the recorder using a web browser, do the following.
Select "Web Data Upload" under "Maintenance" from the pop-up menu (☞ page 35).
The following window will be displayed.

Screenshot 1
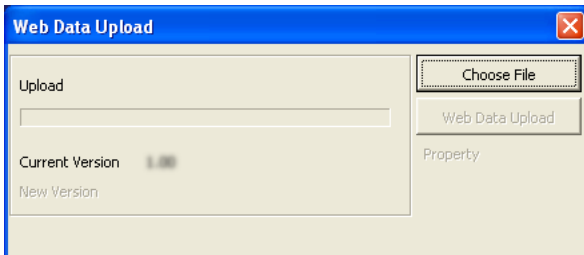
Step 1

Click the [Choose File] button, and then select the web data to be uploaded.
→ The file information (the file size and the updated time and date) and the version will be displayed.

Step 2

Click the [Web Data Upload] button.
→ Upload of the web data will start.

Firmware update of the recorder Firmware Update (Maintenance – Firmware Update)

Select "Firmware Update" under "Maintenance" from the pop-up menu (☞ page 35).

Screenshot 1
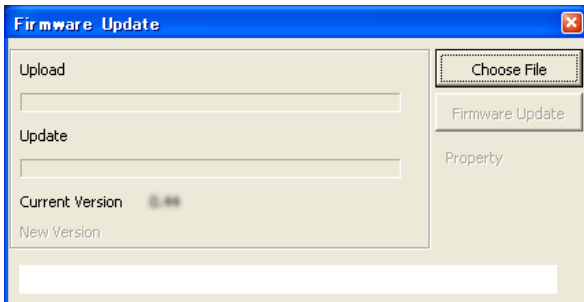
Step 1

Click the [Choose File] button, and then select the update file.
→ The file information (the file size and the updated time and date) and the version will be displayed.

Step 2

Click the [Firmware Update] button.
→ Update of the firmware will start.

To validate the updated firmware, reboot the recorder.

Important:
Before rebooting the recorder, make sure that the recorder is not in the process of recording, playback and copying.

Download recorded images from the recorder

It is possible to search the desired recorded images to download by designating the camera channels, recording type, and the start time and the end time of recording.

Screenshot 1

Click the [Data Download] button. (☞ page 9)
→ The "Data Download" window will be displayed.
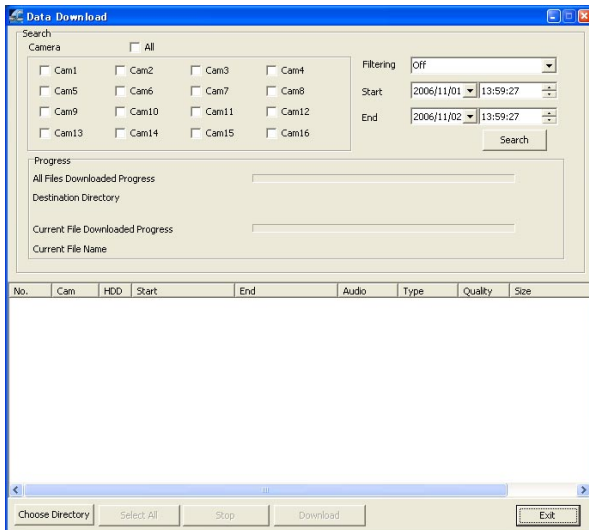
Step 1

Set the following search filters.

Camera: Select the camera channels.
To select all the camera channels, check the "All" checkbox.

Filtering: Select the recording type.
- Off: Searches without filtering
- Manual: Searches for only images recorded by the manual recording
- Timer: Searches for only images recorded by the timer recording
- Alarm: Searches for only images recorded by the alarm recording (triggered by a terminal input, VMD and a command alarm reception)
- Terminal: Searches for only images recorded by the alarm recording triggered by a terminal input
- VMD: Searches for only images recorded by the alarm recording triggered by VMD
- Com: Searches for only images recorded by the alarm recording triggered by a command alarm reception

Start: Enter the recording start time and date.
End: Enter the recording end time and date.

Step 2

Click the [Search] button.

Note:
The latest 5 000 recorded images will be displayed in the list form.

The result list will be displayed in the "Data Download" window.
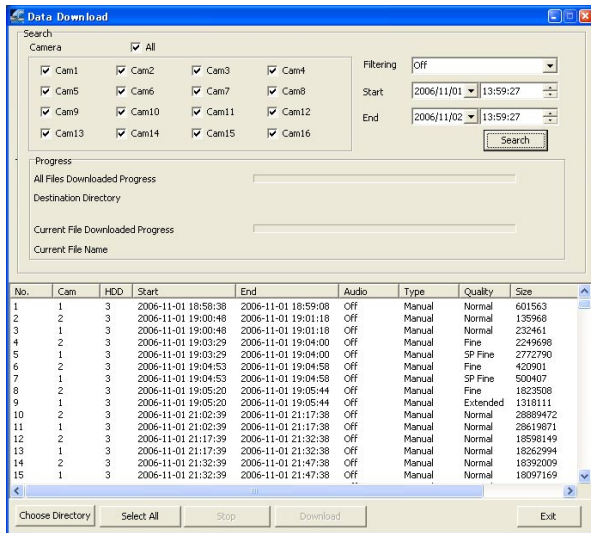
Step 3

Click the [Choose Directory] button, and then designate the directory in which recorded images are to be downloaded.

Step 4

Select the desired recorded images from the result list. To select all of the listed recorded images, click the [Select All] button.

Note:

It is possible to select multiple search results by clicking them while pressing the [Ctrl] key on the keyboard.

Step 5

Click the [Download] button.
→ Download will start.

Step 6

To close the "Data Download" window, click the [Exit] button.

Important:
- The file name of the recorded images to be downloaded cannot be edited.
- It is impossible to download recorded images which is currently being played or copied on the recorder or which is currently being played using the software.

Remote Talk

It is possible to communicate with the login recorder using audio. To communicate using audio, connect a speaker and a microphone to both the recorder and the PC.
Click the [Remote Talk] button.
→ Remote talk will start.

When remote talk starts, the [Remote Talk] button 🎤 will change to the [Stop Remote Talk] button 🎤. To stop remote talk, click the [Stop Remote Talk] button 🎤.

Important:
- The volume level of remote talk can be adjusted by the "Sound and Audio Device" control panel of Windows.
- When starting the remote talk while playing recorded images on the PC, audio of the remote talk and of playback may be heard simultaneously. When muting audio using the [Mute] button (☞ page 26), only audio of playback will be muted.

Configure the settings of the monitoring software (Monitor System Config)

When clicking the [Monitor System Setup] button, the pop-up menu will be displayed.

```
Monitor System Config    ▶    Recorder Setup
Monitor System Version         My Favorite Display Setup
Language                       Sequential Display Setup
                               Map Setup
                               Advanced Setup
```
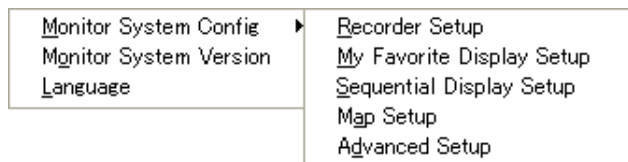
Recorder Setup (Monitor System Config – Recorder Setup)

The following operations can be made on the "Recorder Setup" window.
- Registration of the recorder to be operated using this software
- Edit of the recorder information
- Edit of the camera information

Screenshot 1

Select "Recorder Setup" under "Monitor System Config" from the pop-up menu.
→ The "Recorder Setup" window will be displayed.
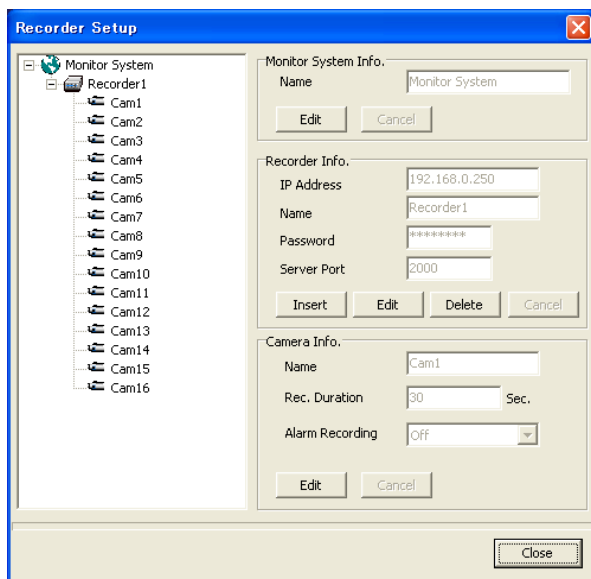
Step 1

Configure the settings on the "Recorder Setup" window. Refer to the following for further information about the setup items on the "Recorder Setup" window.

Step 2

When completing the configuration, click the [Close] button.

Setup items

■ **Tree view of the recorders and the cameras**
   operable using the monitoring system
The names of the recorders and the camera channels
will be displayed. When the icon is clicked, the informa-
tion of the respective device will be displayed on the
right of the window.

■ **Monitor System Info.**
The name of the monitoring system will be displayed.
Edit the name of the monitoring system.
Click the [Edit] button, and then edit the name of the
monitoring system. To apply the edited name, click the
[OK] button.

■ **Recorder Info.**
Adding/deletion of a recorder to/from the monitoring
system and edit of the recorder information can be
made.

<Add a recorder to the monitoring system>
Refer to page 12 for how to add a recorder to the moni-
toring system.

<Edit the recorder information>
Click the desired recorder icon, and then click the [Edit]
button. Edit "IP Address", "Name", "Password" or
"Server Port". To apply the edited item, click the [OK]
button.

<Delete the recorder from the monitoring system>
Click the desired recorder icon, and then click the
[Delete] button. Click the [OK] button on the displayed
confirmation window to delete the recorder from the
monitoring system.

■ **Camera Info.**
Edit of the information and the alarm recording duration
of the selected camera can be made. Click the desired
camera icon, and then click the [Edit] button.
Edit "Name" (up to 12 characters) or "Rec. Duration".
To apply the edited item, click the [OK] button.
Images recorded by the alarm recording will be stored
the "Mpeg" folder in the directory selected in the
"Choose Directory" section on the "Advanced Setup"
window.

Important:
• The same camera channel name cannot be applied
  to two or more camera channels when they are con-
  nected to the same recorder.
• Before editing "Name" of "Camera Info.", make sure
  that images from the camera channel currently edit-
  ing are not being displayed.

Rec. Duration: Select the recording duration of the
   alarm recording using this software from among 10 -
   999 seconds.
   Alarm images recorded by the alarm recording using
   this software can be saved on the PC. (The alarm
   recording starts when the recorder detects an alarm
   occurrence.)
   The default is "30" (sec.).

Alarm Recording: Select a camera channel to be used
   for recording when an alarm occurs in the camera
   channel respective to the currently selected camera
   icon in the tree view on the "Recorder Setup" win-
   dow.
   The default is "Off".

Important:
• It is impossible to configure/edit the settings of the
  current login recorder.
• The alarm recording will start only when being
  logged in the recorder.
• Depending on the timing to start recording images,
  the first several seconds of the recorded image may
  not be played on the RT4Viewer.

My Favorite Display Setup (Monitor System Config – My Favorite Display Setup)

Assign the desired camera channel to the desired area as a "favorite". Up to 10 favorites (Favorite1 – Favorite10) can be registered.

Screenshot 1

Select "My Favorite Display Setup" under "Monitor System Config" from the pop-up menu (☞ page 49).
→ The "My Favorite Display Setup" window will be displayed.
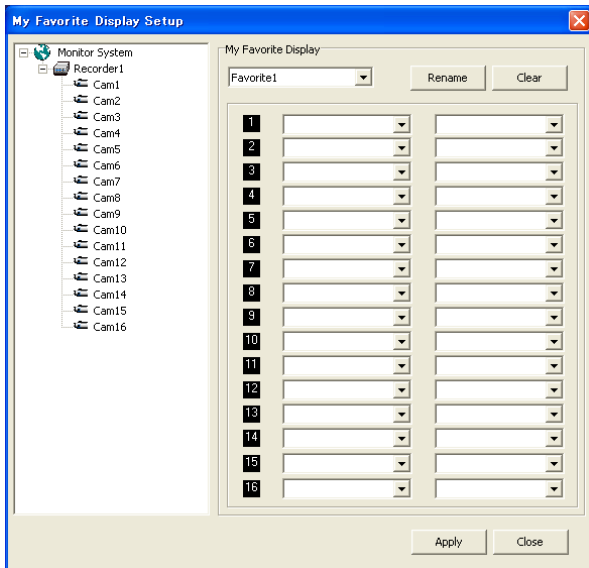
Step 1

Select the favorite name (Favorite1 – Favorite10) from the pull-down menu.

Step 2

Select the recorder to access and the desired camera channels to be assigned to each area.
It is also possible to assign the desired camera channel by dragging the desired camera icon in the tree view onto the desired area icon.

Step 3

To cancel all of the assignments, click the [Clear] button.
To edit the name of the favorite, click the [Rename] button.
→ The "Rename" window will be displayed.
Enter the new name and click the [Apply] button.
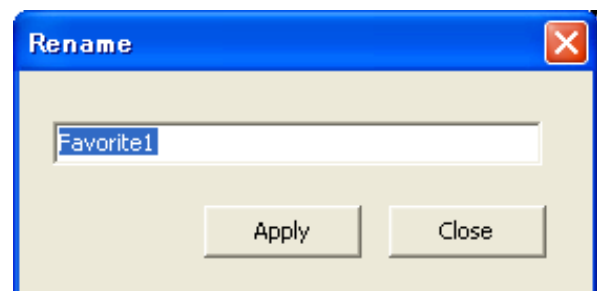
Step 4

Click the [Apply] button on the "My Favorite Display Setup" window.

Sequential Display Setup (Monitor System Config – Sequential Display Setup)

Configure the settings relating to the sequential display.

Screenshot 1

Select "Sequential Display Setup" under "Monitor System Config" from the pop-up menu (☞ page 49).
→ The "Sequential Display Setup" window will be displayed.
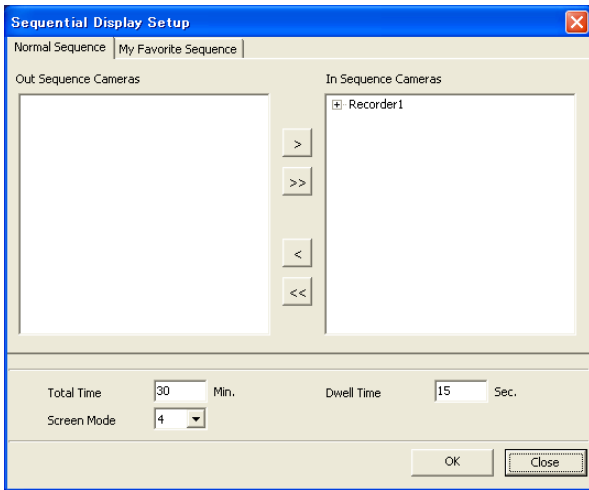
Step 1

The "Sequential Display Setup" window contains 2 tabs; the "Normal Sequence" tab and the "My Favorite Sequence" tab.

On the "Normal Sequence" tab, the settings for the sequential display using the cameras connected to the registered recorder can be configured.

On the "My Favorite Sequence" tab, the settings for the sequential display using the cameras registered as "favorite" can be configured.

"Total time", "Dwell Time" and "Screen Mode" are the common settings to be applied to the both of them.

Refer to the following for further information about the setup items.

Step 2

When completing the settings, click the [OK] button.
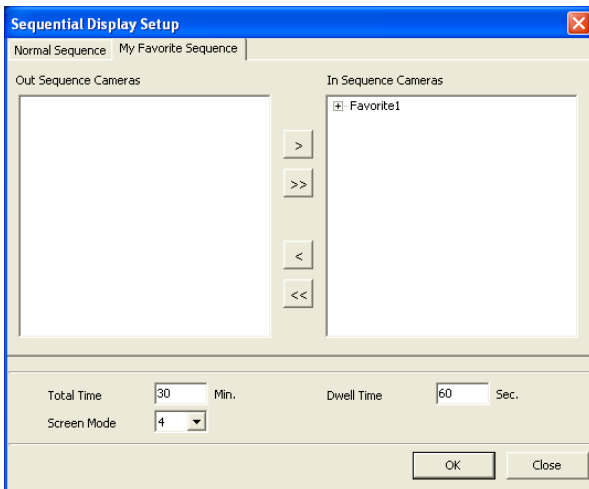
Setup items

■ Out Sequence Cameras

■ In Sequence Cameras
To not use a specified camera for the sequential display, select the camera not to be used, and then click the [<] button. To not use all the cameras for the sequential display, click the [<<] button.
To use the camera in the "Out Sequence Cameras" list for the sequential display, select the camera in the "Out Sequence Cameras" list, and then click the [>] button.
To use all of the cameras in the "Out Sequence Cameras" list for the sequential display, click the [>>] button.

■ Total Time
Set the total time of the sequential display to 0 - 999 minutes. When "0" is entered, the sequential display will not stop until manually stopped.
The default is 30 minutes.

■ Dwell Time
Set the dwell time (interval of switching from a camera channel to the next camera channel) to 15 - 999 seconds.
The default is 60 seconds.

■ Screen Mode
Select a screen mode to be used for the sequential display from 1, 4, 9 and 16.
The default is 4 (4-screen).

Map Setup (Monitoring System Config – Map Setup)

Set a map (diagram of the camera location arrangement) used for the map display.
When remotely operating the recorder, the map offers a visual way of understanding the camera locations.

Screenshot 1

Select "Map Setup" under "Monitor System Config" from the pop-up menu (☞ page 49).
→ The "Map Setup" window will be displayed.
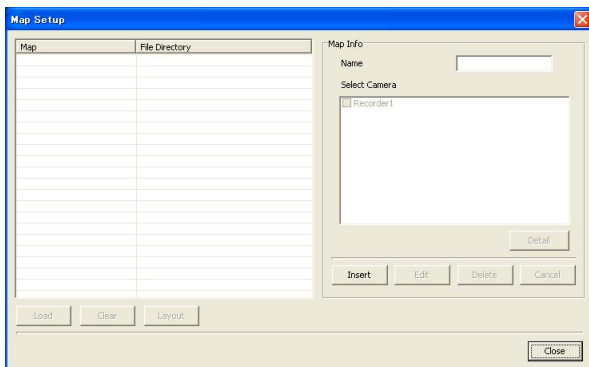
Notes:
• When no name is registered before clicking the [OK] button, the setting cannot be made.
• It is impossible to locate the same camera on multiple maps.

Step 1

Click the [Insert] button and enter a name in the "Name" box.
Then, select the cameras to be displayed on the map. When the checkbox of the recorder name is checked, all of the cameras connected to the recorder will be selected.
To select independently, select them on the following window to be displayed when the [Detail] button is clicked. After selecting the cameras to be displayed on the map, click the [OK] button.
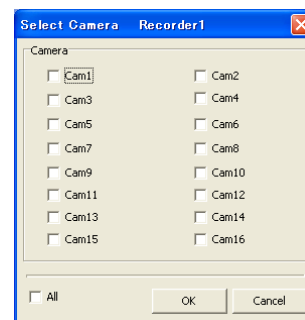
The map will be created.
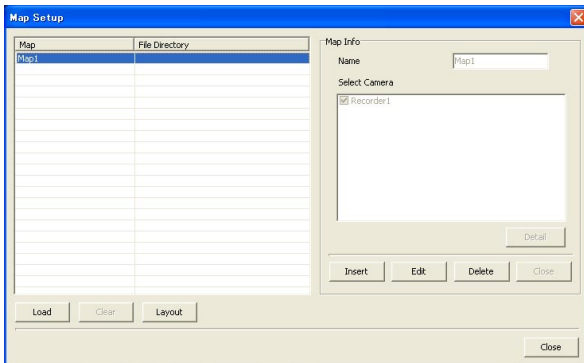
The "Map Edit" window will be displayed.
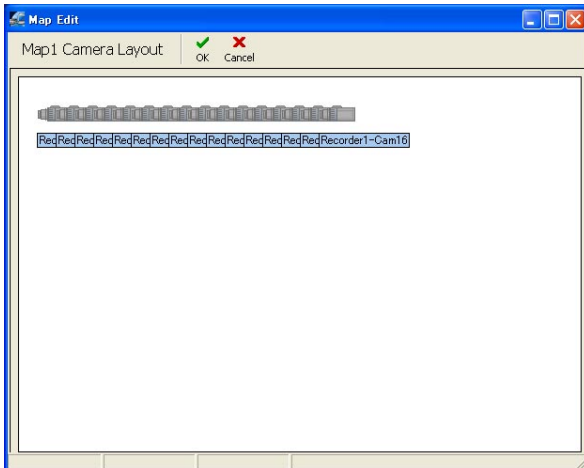
Step 2

Select the created map displayed in the "Map" column, and then click the [Load] button to apply the background image.
For example, a schematic image of inside a bank, a supermarket, etc.
The background image should be a bitmap image (bmp) or a jpeg image (jpeg).
To cancel the applied background image, click the [Clear] button.

Step 3

Click the [Layout] button.

Step 4

Locate each of the camera icons onto the actual positions on the background image.

Step 5

Click the [OK] button.
→ The "Map Edit" window will close.

Step 6

Click the [Close] button on the "Map Setup" window.

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Advanced Setup (Monitoring System Config – Advanced Setup)

Configure the advanced setup on the "Advanced Setup" window.

→ The "Advanced Setup" window will be displayed.
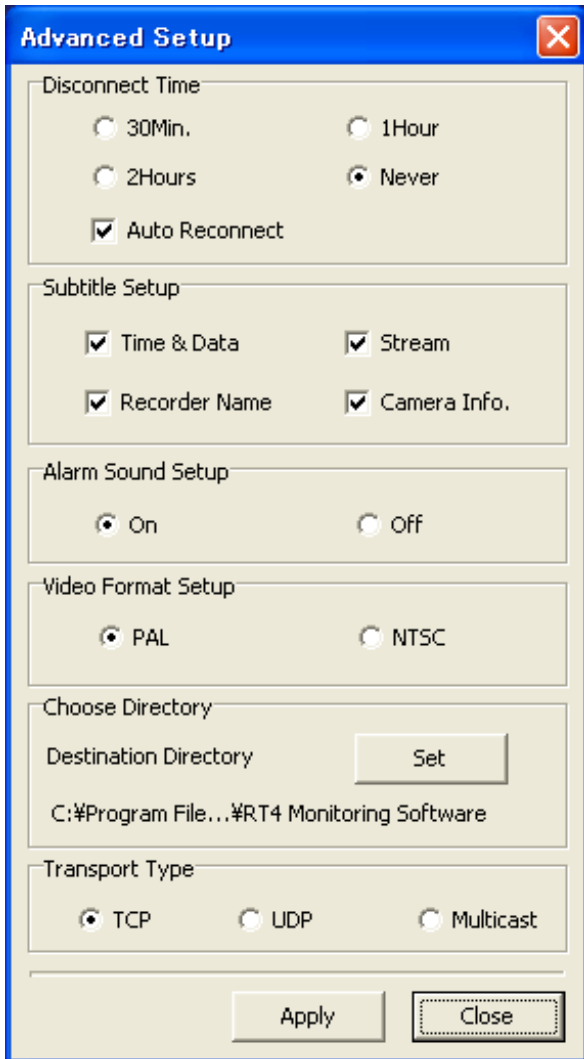
Step 1

Configure the following setup items.

■ Disconnect Time

The live image will be disconnected when no operation of the PC has been made for the selected duration.
The following are available for "Wait Time".
30Min, 1Hour, 2Hours, Never
When the "Auto Reconnect" checkbox is checked, the disconnected live image will be automatically connected again within 5 minutes even when the recorder is disconnected due to a connection error, etc.
Default: Never (Auto Reconnect ON)

■ Subtitle Setup

Information to be displayed on the monitor can be selected.
Check the desired checkbox to display the respective information.
Time & Date: When displaying live images, the current time and date will be displayed. When displaying recorded images, the recording time and date will be displayed.
Stream: The speed of image transmission will be displayed.
Recorder Name: The recorder name will be displayed.
Camera Info.: The camera name and the set image quality will be displayed.
Default: All checkboxes are checked

■ Alarm Sound Setup

Select "On" or "Off" to determine whether or not to sound the alarm buzzer (will be heard from the PC speaker) when the software receives an alarm notification.
Default: On

■ **Video Format Setup**
Select a video format.

■ **Choose Directory**
Designate the directory in which downloaded recorded images or captured images are to be stored.

■ **Transport Type**
Select "TCP" or "UDP" "Multicast" for the communications protocol.
Default: TCP

The following is added to "■ Transport Type".

Important:
    When selecting "UDP", only one recorder can be connected to the PC.

Step 2
When completing the settings, click the [Apply] button.

Monitor System Version

Select "Monitor System Version" from the pop-up menu (☞ page 49).
The current version of the monitoring software will be displayed.

Language

Select "Language" from the pop-up menu (☞ page 49).
(The current display language has been selected during the process of the installation.)
Select the display language from the following.
    Chinese, Custom, English, Japanese
The default language of the custom language is English.
It is possible to customize the characters to be displayed by editing the "Cst.ini" file in the "RT4 Monitoring Software" folder. (The directory path is "C:\Program Files\Panasonic\RT4 Monitoring Software".)

Notes:
 • Depending on the language setting of Windows, the customized characters may not be displayed correctly. Do not edit any files other than the "Cst.ini" file.
 • When editing of the file is complete, save it with UTF-8 character code.

Playback downloaded recorded images using the RT4Viewer

It is possible to search and play the downloaded recorded images.

Start the RT4Viewer

Select "RT4Viewer.exe" from the "Start" menu ("Start" - "All Programs" - "Panasonic" - "RT4 Monitoring Software" - "RT4Viewer") or click the [RT4Viewer] button.
→ The RT4Viewer will start and the "RT4Viewer" window will be displayed.

Notes:
- It is possible to copy the viewer software together with recorded images when copying recorded images from the recorder to the connected external recording device. For further information, refer to the installation guide of the recorder.
- When using the downloaded viewer software, "Search File(S)" under "File" on the menu bar is unavailable.

Menu bar — File(F) Tool(T) Language(L) Help(H)

Image display area

Playback list display area

Playback point slider

Playback control buttons

Play/Frame by frame play   Stop   Next record   Original playback speed   Save   Capture   Mute   Volume control

Pause   Previous record

Property display area

Playback speed slider
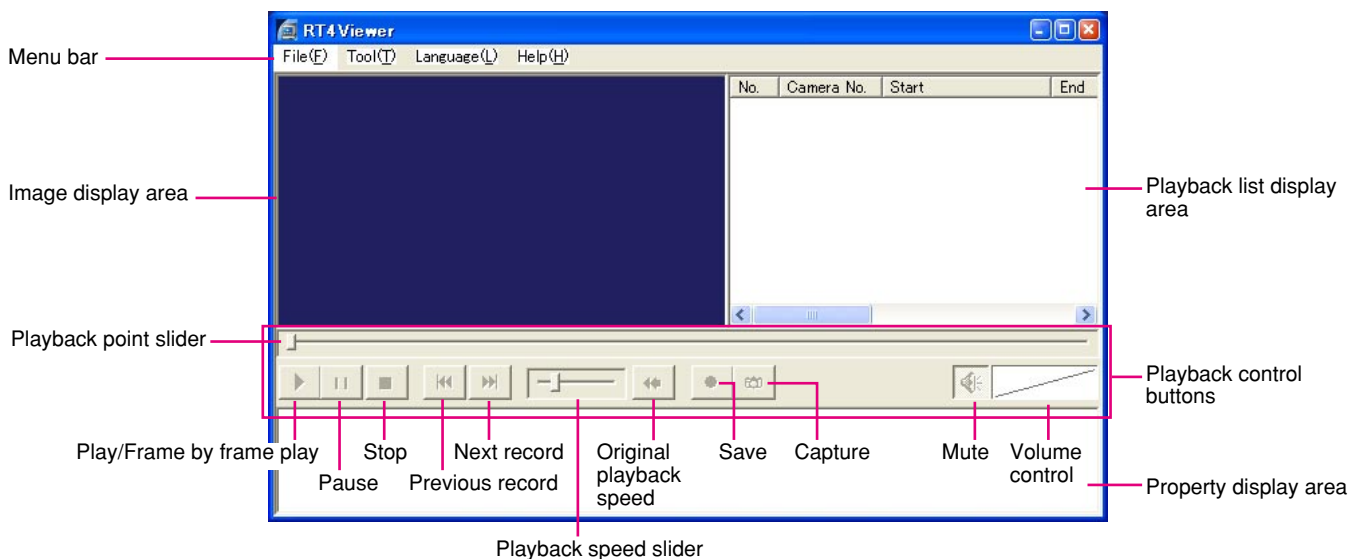
■ File
The following menus are under the "File(F)" menu.
Open File(O): Open a file (downloaded recorded image). (☞ page 59)
Search File(S): Search for a file (downloaded recorded image). When "Search File" is selected, the "Search File" window will be displayed. (☞ page 60)
Full Screen(W): Downloaded recorded images will be played on a full screen.
Exit(X): Exit the RT4Viewer.

■ Tool
The following menu is under the "Tool(T)" menu.
Alteration Detection(A): Check whether the downloaded recorded image selected in the playback list display area has been altered or not.
File Conversion (F): Recorded image will be converted into a file in Windows Media format.

■ Language
Select the display language from the following.
Japanese, English, Simplified Chinese, Custom
The default language of the custom language is English.

■ Help
The current version of the RT4Viewer will be displayed.

■ Image display area
Downloaded recorded images will be played in this area.
It is possible to temporarily change color of text displayed in the image display area by right-clicking on the text and select the desired color from displayed pop-up menu.

■ Playback list display area
Downloaded recorded images will be displayed in the list form. The following information will be displayed.
Camera channel, start time, end time, event type, image quality, with or without audio, MAC address, altered or not altered

■ Playback control buttons
Playback point slider: The current playback point will be indicated by the pointer. It is possible to designate a playback point by clicking the desired playback point.

Play/Frame by frame play button: Playback will start. When this button is clicked during pausing, the next frame will be displayed.

Pause button: Playback will pause.

Stop button: Playback will stop.

Previous record button: Start playback of the previous record.

Next record button: Start playback of the next record.

Playback speed slider: Adjust the playback speed.

Original playback speed button: Reset the adjusted playback speed to the original playback speed.

Save button: Save the recorded image currently being played.

Capture button: Capture the image currently being displayed as a still picture.

Mute button: Mute audio.

Volume control slider: Click to adjust the audio volume.

■ Property display area
The following information of the downloaded recorded image currently being played will be displayed.
Camera channel, start time, end time, image quality, event type, playback speed

---

Notes:
 • When using the viewer software copied on a DVD-R or a CD-R, the "Mpeg" folder or the "Capture" folder will be created on the desktop by clicking the [Save] button or the [Capture] button respectively.
 • When playing a file consisted of only I-frames, adjustment of the playback speed is unavailable.

Playback downloaded recorded images

Select "Open File(O)" under "File(F)" on the menu bar.
→ The file selection window will be displayed.

Select the desired file to be played and click the [Play] button. Playback of the selected file will start in the image display area.
Control the playback image using the playback control buttons. To display on a full screen, select "Full Screen" under "File" on the menu bar or double-click on the image currently being played. To return to the previous size, double-click on the image currently being played again.
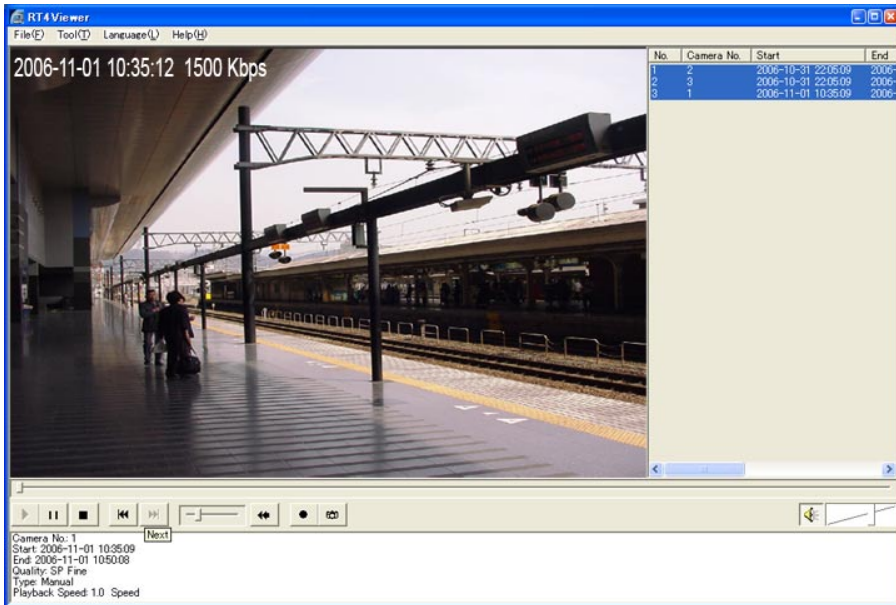
Search and play

Screenshot 1

Select "Search File(S)" under "File(F)" on the menu bar.
→ The "Search File" window will be displayed.
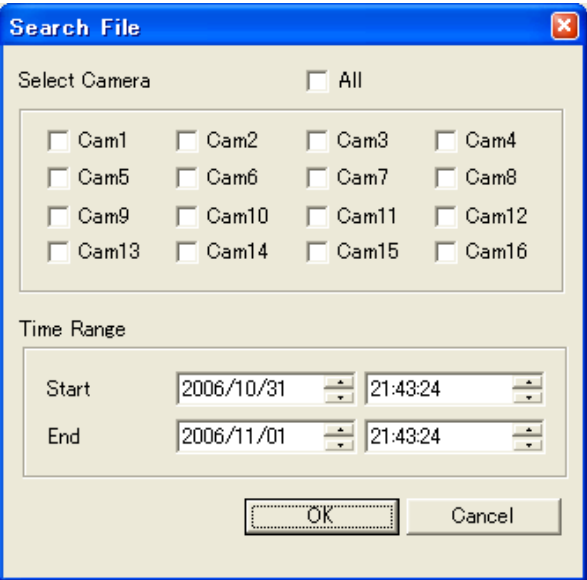
Step 1

Set the desired search filter.

■ Select Channel

Check the checkbox of the desired camera channel to be searched.
To select all the camera channels, check the "All" checkbox.

■ Time Range

Designate the time range to be searched by designating the recording start time and the end time.

Step 2

Click the [OK] button.

Screenshot 2

The search result will be displayed in the playback list display area.
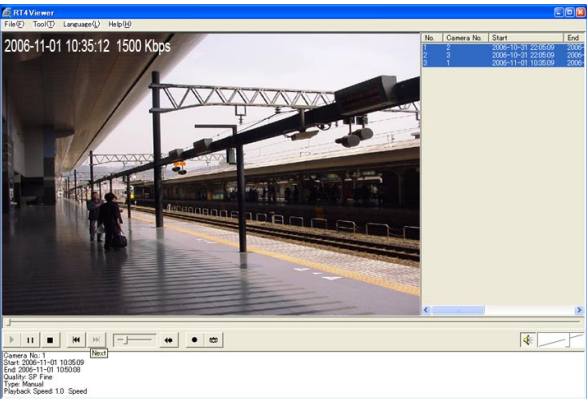
Step 3

Select the desired recorded image from the list, and then click the play button.
→ Playback will start.

Alteration check

Check whether the downloaded recorded image selected in the playback list display area has been altered or not.
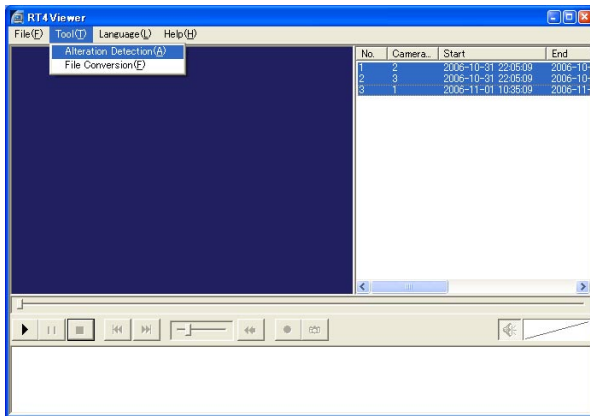
Step 1

Stop playback and select "Alteration Detection(A)" under "Tool(T)" on the menu bar.
→ The confirmation window will be displayed.

Step 2

Click the [OK] button.
→ Alteration check will start. When completing the alteration check, the message window will be displayed.

Step 3

Click the [OK] button.

Screenshot 2

The result of the alteration check will be displayed in the "Alteration" column of the playback list display area.
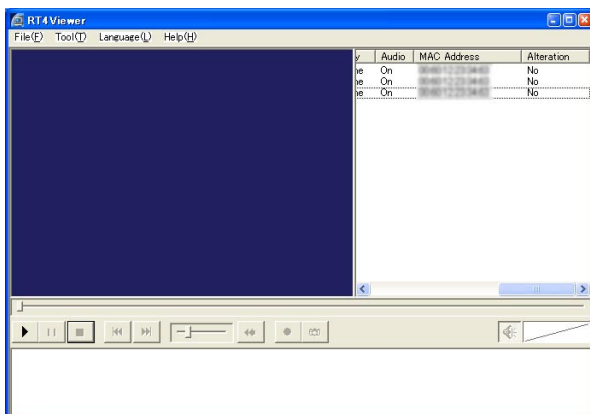
Step 4

Check the result.

Yes: Altered
No: Not altered
-: Undefined

Notes:
- When other file is opened, the result will be cleared.
- The result of alteration check will be "Yes" for files created by saving the image currently being displayed on the PC (☞ page 25), using the alarm recording function (☞ page 50), or saving the recorded image currently being played (☞ page 58).

Convert the file format

It is possible to convert the file format (extension: *rt4) into Windows Media format.

Create a file in Windows Media format

Select "File Conversion" under "Tool".
→ The "File Conversion" window will be displayed.
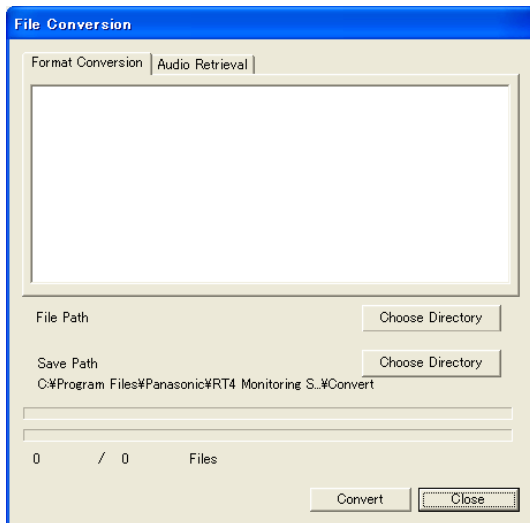
Step 1

Click the [File Conversion] tab.

Step 2

Select the folder in which the file to be converted is located by clicking the [Choose Directory] button of "File Path".
Then, select the file to be converted from the displayed list.

Step 3

Designate the destination folder of the converted file by clicking the [Choose Directory] button of "Save Path".

Step 4

Click the [Convert] button.
→ File conversion" will start.
When clicking the [Cancel] button in the process of the file conversion, conversion will be canceled.

Note:
A single-frame image file cannot be normally converted.

Create an audio file in WAV format

Click the [Audio Retrieval] tab on the "File Conversion" window.
Perform steps 2 - 4 in the same manner of "Create a file in Windows Media format".

Note:
An audio file cannot be created from a file that does not contain audio data.

Operation using the Web Browser

Configure the Network Settings

With the following network environment, it is not necessary to configure the network settings. It is possible to configure the settings or operate the recorder using the monitoring software after completing the connection.
IP Address: 192.168.0.2 - 192.168.0.249, 192.168.0.251 - 192.168.0.254
Subnet Mask: 255.255.255.0
Gateway Address: 192.168.0.1
When the network settings are different from the settings above, configure the network settings of the recorder and the PC.

Configure the network settings of the recorder

Use the buttons on the front panel of the recorder to conform the network settings to the network environment of the PC.
Refer to the installation guide of the recorder for further information about the network settings (The "Add the recorder to a broadband WAN (Wide Area Network" section under "Connection with a PC" (☞ page 50))).

Configure the network settings of a PC

Change the TCP/IP setting of the PC to conform to the settings of the recorder.
Refer to page 13 for further information.

Display the operation window

To display the operation window to operate the recorder from the web browser installed on the PC, proceed as follows.

Start just after the PC is started up.

Step 1

After the browser starts, enter the IP address set to the recorder in the address box, and press the enter key.

Important:
• Refer to a system administrator for the IP address.
• Do not attach "0" before the numbers when entering IP address.
  Example
  Correct: 192.168.0.50
  Wrong: 192.168.0.050
• If a message is displayed on the information bar, see page 86.

Screenshot 2

The authentication window will be displayed.
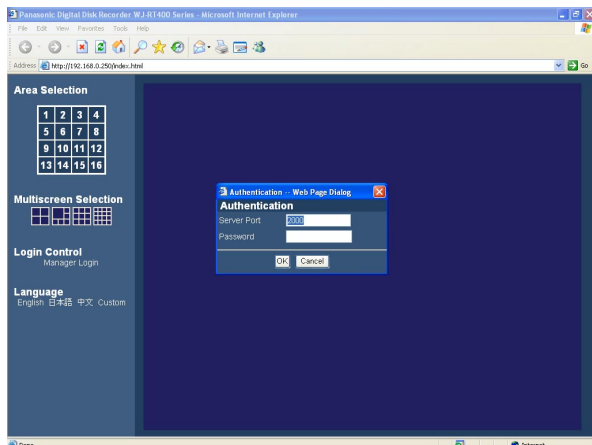
Step 2

Enter the server port number and password registered on the recorder.

Important:
• Operable functions of the recorder vary depending on the user level. Depending on the settings of the recorder, it is possible to restrict users to monitor images from the cameras by setting the password of the user level "Viewer" or "Operator".
  By setting the password of the user level "Viewer", it is possible to restrict users to operate the cameras. The default password is different according to the user level as follows.
  Manager1: 12345678
  Operator1: 123456
  Viewer1: 1234
• To enhance the security, change the password before running the recorder. It is recommended to change the password periodically. Refer to page 68 of the installation guide for how to change the password.
• Only a single web browser can be started on a single PC. When multiple web browsers are started on the PC, it may not work correctly.
• It is impossible to operate a web browser and the monitoring software (RT4Client) simultaneously.

Screenshot 3

The operation window will be displayed.
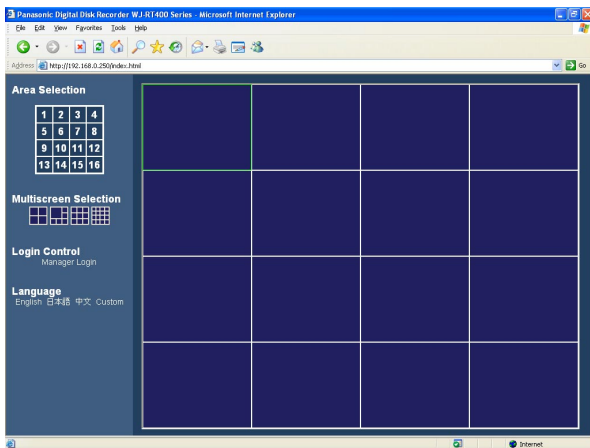
Step 3

Click the buttons or right-click on the image display area for operations.

Important:

If a message is displayed on the information bar, see page 86.

Notes:

• When the top page is displayed for the first time, the install wizard of the ActiveX control required to display images from the camera will be displayed. Follow the instructions of the wizard.

• When the install wizard is displayed again even after completing the installation of the ActiveX, restart the PC.

• To delete the installed ActiveX, use "RT4WebClear. bat" on the provided CD-ROM.
When double-clicking "RT4WebClear.bat", the dialog box asking to confirm the deletion of the installed files will be displayed.
Press the[y] key on the keyboard, and then press the [Enter] key to proceed the deletion.

• To delete the installed ActiveX, use "RT4WebClear. bat" on the provided CD-ROM.
When double-clicking "RT4WebClear.bat", the dialog box asking to confirm the deletion of the installed files will be displayed.
Press the [y] key on the keyboard, and then press the [Enter] key to proceed the deletion.

Operation window
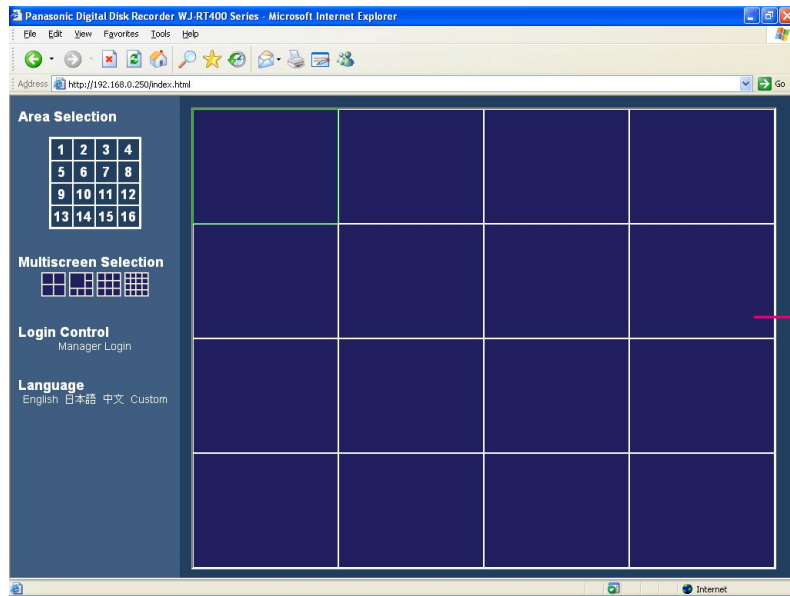
Image display area

Image display area

Live images from the cameras and recorded images on the recorder will be displayed in this area. The area number is assigned as shown in the illustration below. The selected area will be displayed with a yellowish green frame.

Area selection buttons

The clicked area will be displayed on a 1-screen.

Multi-screen selection buttons

Images from up to 16 cameras can be displayed on a multi-screen.
Click the desired multi-screen selection button. The selected multi-screen will be displayed in the image display area.

Login Control

Click to log in to the recorder. It is necessary to log in to the recorder to play/download recorded images.

Language

Select and change the display language.

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Monitor Live Images

It is possible to display live images on a 1-screen or a multi-screen in the image display area.
To monitor live images from the cameras, select the desired camera connected to the recorder first.

Screenshot 1
Start operation when the operation window is being displayed.

Screenshot 2
The pop-up menu will be displayed.

Step 1
Right-click on a blank area in the image display area.

Step 2
Select "Connect".

The "Connect" window will be displayed.

Connect

Camera   □ All
 □ Cam1   □ Cam2
 □ Cam3   □ Cam4
 □ Cam5   □ Cam6
 □ Cam7   □ Cam8
 □ Cam9   □ Cam10
 □ Cam11   □ Cam12
 □ Cam13   □ Cam14
 □ Cam15   □ Cam16

              OK   Cancel
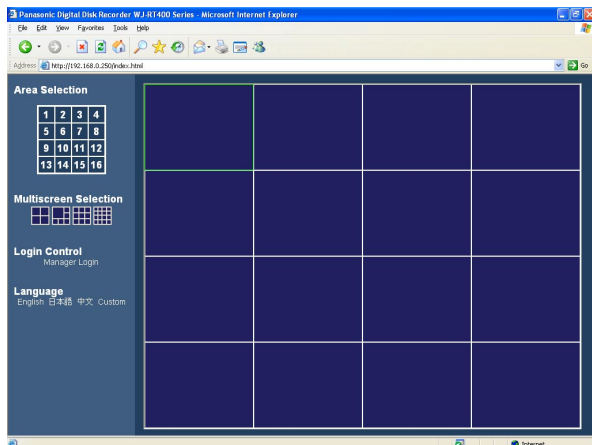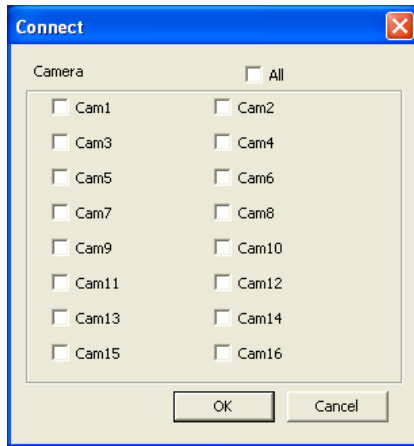
Step 3

Select the desired camera channels.

Step 4

Click the [OK] button.

→ When the connection is established, images from the selected camera will be displayed in the selected area in the image display area. When 2 camera channels or more have been selected, images from the second and the following cameras will be displayed in blank areas of the image display area in order.

Notes:
 • The current time and date of the recorder and the camera channel number will be displayed on live images.
 • When displaying images from 5 or more camera channels of the same recorder, or when displaying recorded images in an area on a multi-screen, only I-frame will be displayed in all areas on a multi-screen and audio may not be heard.

Switch the image display area between a 1-screen and a multi-screen

Display images on a 1-screen in the image display area

Click the desired area selection button.
→ The selected area will be displayed on a 1-screen in the image display area. The image display area will be switched to a 1-screen by clicking one of the area selection buttons when a multi-screen is displayed in the image display area.

Display images on a multi-screen in the image display area

Click the desired multi-screen selection button.
→ The selected multi-screen will be displayed in the image display area.

⊞ (4-screen): Each time this button is clicked, the displayed area will change as follows.
　　　　　　 1 - 4 → 5 - 8 → 9 - 12 → 13 - 16 → 1 - 4 → ⋯
⊞ (6-screen):　Each time this button is clicked, the displayed area will change as follows.
　　　　　　　 1 - 6 → 7 - 12 → 1 - 6 → 7 - 12⋯

⊞ (9-screen):　Areas 1 - 9 will be displayed in the image display area.

⊞ (16-screen): Areas 1 - 16 will be displayed in the image display area.

Temporarily change color of text displayed in the image display area

When right-clicking on the text displayed on the image display area, the pop-up menu will be displayed.
Select "White", "Magenta" or "Bright Green" to change the color of the text temporarily.

Control the cameras

The camera from which live images are being displayed in the image display area can be controlled using the camera control window.
To display the camera control window, select the desired camera channel by clicking on the area in which the desired live images are being displayed, and then double-click on the selected area.

Note:
　To control the camera, configure the settings such as the communication type between the camera and the recorder, protocol, etc. Refer to the installation guide of the recorder for how to configure the required settings of the recorder.
　Refer to the operating instructions of the camera for how to configure the required settings of the camera.
　Depending on the models of the connected cameras, it may be impossible to control the camera or some functions may be not available.
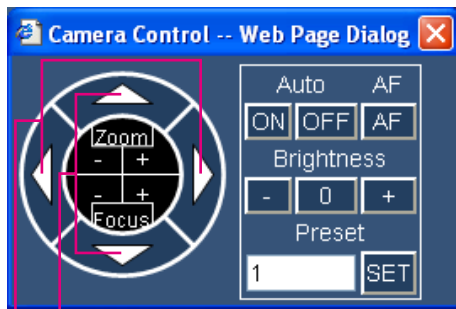
Panning   Tilting

Panning/tilting: Moves a camera horizontally/vertically.
Zooming: Zooms in/out of images. (+: Tele, -: Wide)
Focus: Adjusts the focus. (+: Far, -: Near)
AF: Adjusts the focus automatically.
Brightness: Adjusts the iris (brightness) (-: Dark, 0: Reset, +: Bright)
Auto: Moves a camera with an auto function set in advance.
Preset action: Moves a camera to the preset position registered in advance.

Note:
    When "0" is entered for "Preset", the camera will move to the home position (only when controlling Panasonic's
    camera). Refer to the operating instructions of the camera for how to configure the related settings.

Disconnect the connection with camera

Screenshot 1

Start operation when the operation window is being displayed.

Step 1

Right-click on the displayed image that is from the camera to be disconnected.
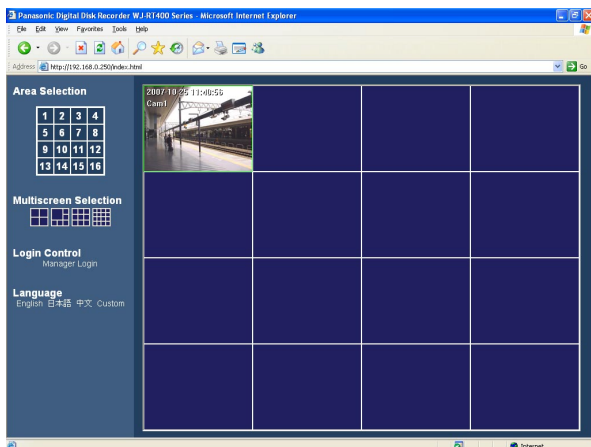
Screenshot 2

The pop-up menu will be displayed.

Connect	
Disconnect	
List Search Playback	
T&D Search Playback	
Stop Playback	
Disconnect on All Areas	
Data Download	
Text Color	▶

Step 3

Select "Disconnect".

→ The connection with the selected camera will be disconnected.

Note:

When "Disconnect on All Areas" is selected, all cameras from which the currently displayed images (live/playback) will be disconnected.

Login to the recorder

To perform playback or download of images recorded on the recorder, it is necessary to log in to the recorder as "Manager (Manager1 - Manager4)".

Click the [Manager Login] button under "Login Control".
→ The "Login" window will be displayed.
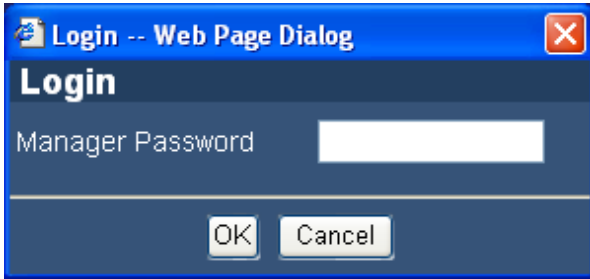
Enter the manager password.

Click the [OK] button.
→ When the connection is established, the [Manager Login] button on the operation window will change to the [Manager Logout] button. Click this button to log out of the recorder.

Play recorded images on the recorder

Recorded images can be played from the search result window. It is possible to search recorded images to be played by designating multiple search filters (List Search) or by designating the start time and date of recording (Time & Date Search).
To play recorded images, log in the recorder as "Manager". Refer to page 19 for how to log in the recorder.

Important:
- The recorder can transmit recorded images of 4 camera channels.
- When the recorder is in the process of the playback image transmission, only I-frames of live images will be transmitted.
- It is impossible to play recorded image which is currently being played or copied on the recorder.

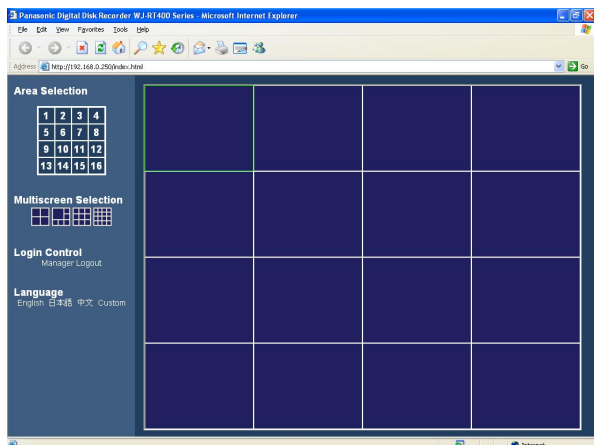## Play recorded images from a result list displayed after searching with the designated search filters (List Search Playback)

Screenshot 1
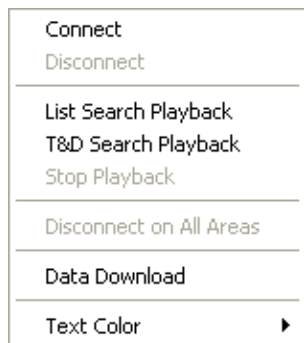Start operation when the operation window is being displayed.

Step 1
Right-click on a blank area in the image display area.
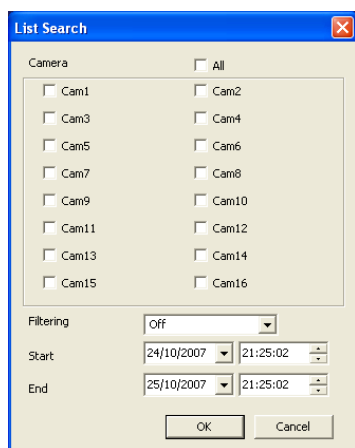
Screenshot 2
The pop-up menu will be displayed.

Step 2
Select "List Search Playback".

Screenshot 3

The "List Search" window will be displayed.

Step 3

Set the desired search filter.

Camera
Check the radio button of the desired camera channel to be searched.

Screenshot 4

The search result window will be displayed.

Filtering

Off: Searches without filtering

Manual: Searches for only images recorded by the manual recording

Timer: Searches for only images recorded by the timer recording

Alarm: Searches for only images recorded by the alarm recording (triggered by a terminal input, VMD and a command alarm reception)

Terminal: Searches for only images recorded by the alarm recording triggered by a terminal input

VMD: Searches for only images recorded by the alarm recording triggered by VMD

Com: Searches for only images recorded by the alarm recording triggered by a command alarm reception

Start/End
Designate the time period to be searched by entering the start and end time and date.

Step 4

When the search filters are set, click the [OK] button.

Step 5

Select the desired recorded images to be played.

Notes:
• t is possible to select multiple search results by clicking them while pressing the [Ctrl] key on the keyboard.
• The latest 5 000 recorded images will be displayed in the list form.

Step 6

Click the [Play] button.
→ Playback of the selected recorded images will start in the area selected in step 1.
Operations during playback can be made using the control panel. Refer to page 76 for further information.

Play recorded images from the search result window displayed after searching by designating the start time of recording (Time & Date Search Playback)

Connect
Disconnect

List Search Playback
T&D Search Playback
Stop Playback

Disconnect on All Areas

Data Download

Text Color ▶
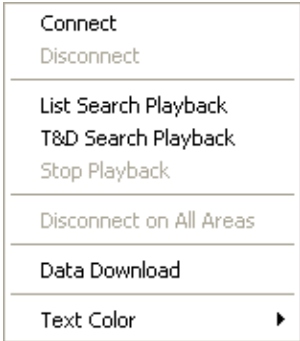
Step 1

Select "T&D Search Playback".

Screenshot 2

The "T&D Search Playback" window will be displayed.

T&D Search Playback

Camera   Cam1

Start   25/10/2007   21:37:23

OK   Close
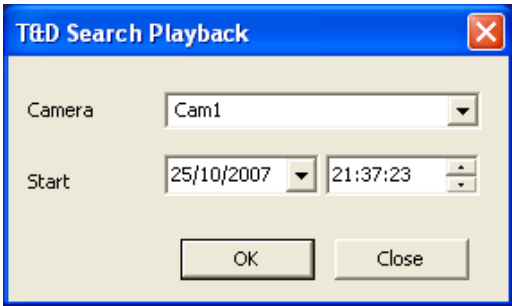
Step 2

Set the following items.

Camera
Select the desired camera to be searched.

Start
Enter the start time and date for the search.

Step 3

When completing the settings, click the [OK] button.

Screenshot 3

Playback of images recorded in the designated time and date will start in the area selected in step 1.
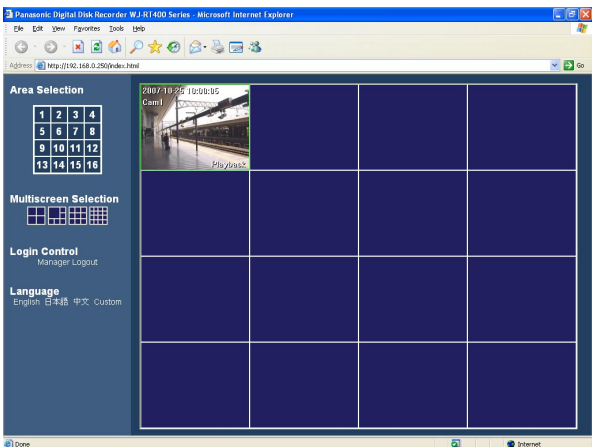
Step 4

Operations during playback can be made using the control panel. Refer to page 76 for further information.

Notes:
• When no recorded image was found at the designated time and date, playback will start from the next record.
• When there is no recorded image at all, playback will not start.

Operations during playback

Operations during playback can be made using the control panel.
To display the playback control panel, select the desired camera channel by clicking on the area in which the desired recorded images are being played, and then double-click on the selected area.

[Stop] button: Click this button to stop playback and disconnect the connection with the recorder.

[Previous record] button: It is possible to select the previous record by clicking this button when multiple results have been selected on the search result window.

[Fast reverse playback] button: Click this button to start fast reverse playback.
Fast reverse playback speed will alternately change between "2x" and "4x" each time the fast reverse playback button is clicked.

[Pause] button: Click this button to pause playback. Click the [Play] button again to release pausing and resume the playback.
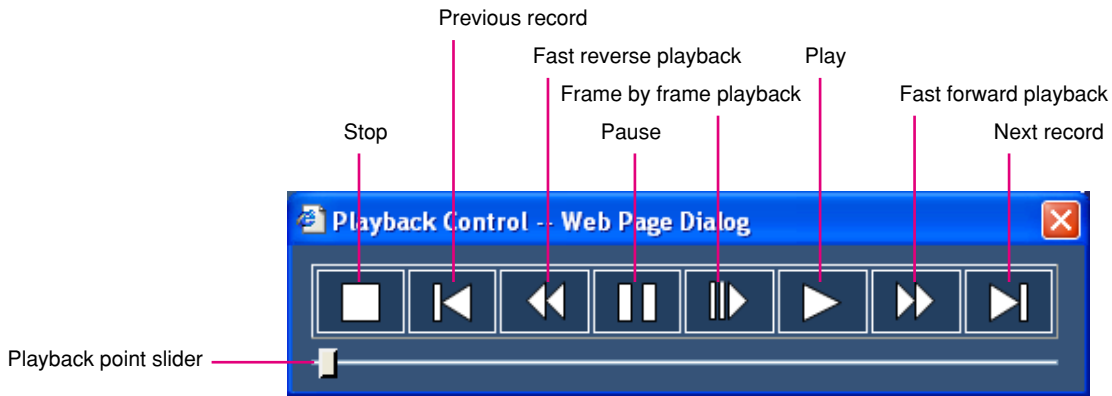
[Frame by frame playback] button: When this button is clicked during pausing, the next frame will be displayed.

[Play] button: Click this button to start playback.

[Fast forward playback] button: Click this button to start fast forward playback.
Fast forward playback speed will change in the following order each time the fast forward playback button is clicked:
$1x \rightarrow 2x \rightarrow 4x \rightarrow 1/4x \rightarrow 1/2x \rightarrow 1x \rightarrow 2x...$

[Next record] button: It is possible to select the next record by clicking this button when multiple results have been selected on the search result window.

Playback point slider: The current playback point will be indicated by the pointer. It is possible to designate a playback point by dragging the slider to the desired playback point.

Stop playback

When playback is stopped, the connection with the recorder will also be disconnected.

Start operation when the operation window is being displayed.
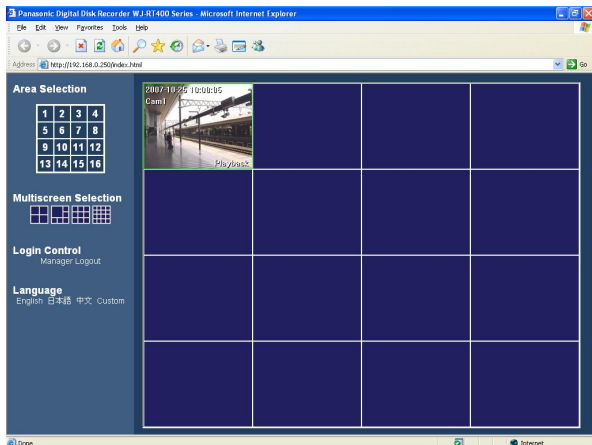
Right-click on the area where recorded images are being played.

The pop-up menu will be displayed.
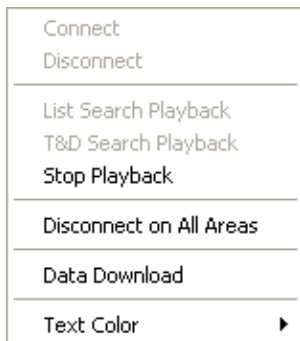
Select "Stop Playback".

→ Playback will stop and the connection with the recorder will be disconnected.

Notes:
• When "Disconnect on All Areas" is selected, all cameras from which the currently displayed images (live/playback) will be disconnected.
• It is also possible to stop playback and disconnect the connection with the recorder clicking the [Stop] button of the playback control panel.

Download recorded images from the recorder

It is possible to search the desired recorded images to download by designating the camera channels, recording type, and the start time and the end time of recording.

Screenshot 1

Start operation when the operation window is being displayed.
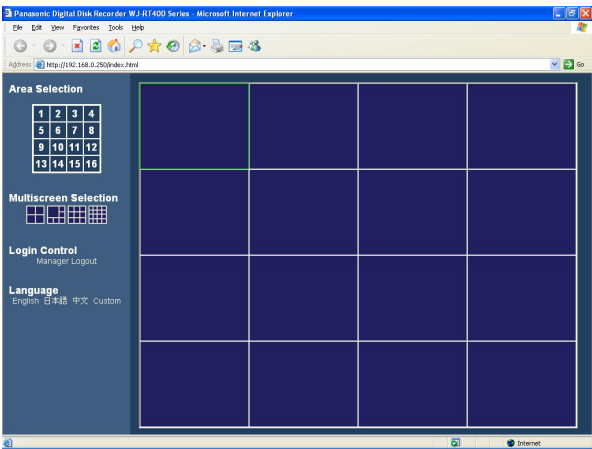
Screenshot 2

The pop-up menu will be displayed.

Step 1

Right-click on the area where recorded images are being played.

Step 2

Select "Data Download".

Screenshot 3

The "Data Download" window will be displayed.
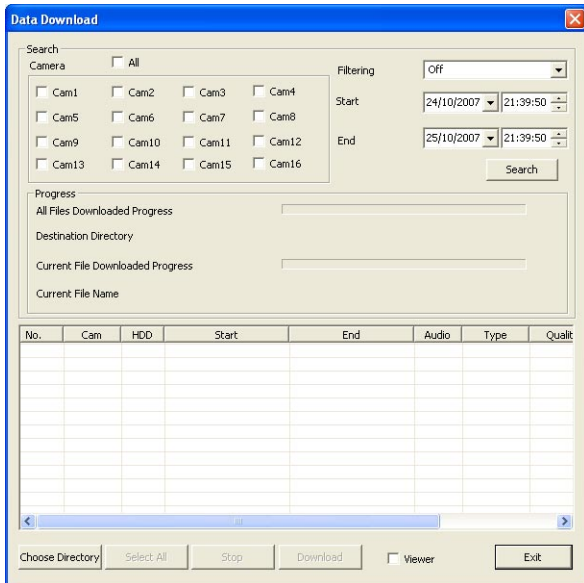
Step 3

Set the following search filters.
Camera: Select the camera channels.
To select all the camera channels, check the "All" checkbox.

Screenshot 4

The result list will be displayed in the "Data Download" window.

Filtering: Select the recording type.
• Off: Searches without filtering
• Manual: Searches for only images recorded by the manual recording
• Timer: Searches for only images recorded by the timer recording
• Alarm: Searches for only images recorded by the alarm recording (triggered by a terminal input, VMD and a command alarm reception)
• Terminal: Searches for only images recorded by the alarm recording triggered by a terminal input
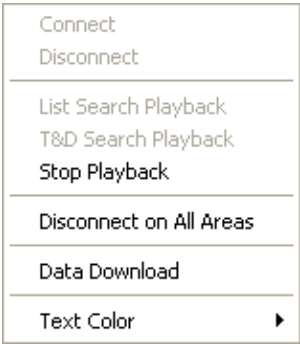• VMD: Searches for only images recorded by the alarm recording triggered by VMD
• Com: Searches for only images recorded by the alarm recording triggered by a command alarm reception
Start: Enter the recording start time and date.
End: Enter the recording end time and date.

Step 4

Click the [Search] button.

Note:
> The latest 5 000 recorded images will be displayed in the list form.

Step 5

Click the [Choose Directory] button, and then designate the directory in which recorded images are to be downloaded.

Step 6

Select the desired recorded images from the result list.
To select all of the listed recorded images, click the [Select All] button.

Note:
> It is possible to select multiple search results by clicking them while pressing the [Ctrl] key on the keyboard.

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Click the [Download] button.

→ Download will start. When the [Download] button is clicked after checking the "Viewer" checkbox, the "Viewer" folder will be created in the designated directory and the viewer software will be downloaded into it. Refer to page 57 for how to operate the viewer software.

Step 8

To close the "Data Download" window, click the [Exit] button.

Important:
• The file name of the recorded images to be downloaded cannot be edited.
• It is impossible to download recorded images which is currently being played or copied on the recorder or which is currently being played using the monitoring software.

Language

Select the display language from the following.
English, Japanese, Chinese, Custom
The default language of the custom language is English.
Contact your dealer for how to customize the characters to be displayed.

Important:
When the display language is changed while being logged in, the user will forcibly be logged out, and then the newly selected display language will be applied.

Notification by E-Mail

Alarm Mail Notification

Contents of the alarm mail:

Alarm Occurred
       Alarm Date: xx-xxx-xxxx xx:xx:xx xx:xx (Example: 2007-07-01 10:00)
       Alarm Scene: Displays an IP address and an alarm number (Example: 192.168.000.250 (No.1)).
       Cause: Displays descriptions of the alarm (Example: Terminal).

Contents of the error mail:

Status Report
       Date: xx-xxx-xxxx xx:xx:xx xx:xx (Example: 2007-07-01 10:00)
       Scene: Displays an IP address.
       Status: Displays descriptions of the trouble/error.

Edit the contents of the mail

It is possible to edit the contents of the mail that notifies of the trouble/event occurrence with the time and date of the trouble/event occurrence. To edit the alarm mail, do the following.

Edit the contents using text editing software and save in the text format.
Depending on the item (time and date at an event occurrence, cause of alarm, address, etc.) to be displayed, the characters to be entered will be different. Refer to the following list of characters to be replaced when editing the contents of the mail. Save the edited mail contents with the file extension ".tmpl".

Note: Refer to page 45 for how to download/upload the mail template.

List of characters to be replaced

Item to be displayed	Display style of entered characters	Display format/description
Date when the alarm occurred	%#05100000	Follows to the setting configured on the setup menu. Example: When selecting "mmm-dd-yyyy", it will be "Mar-27-2006".
Time when the alarm occurred	%#05000400	24-hour display (fixed)
Mail address of the sender	%#05000500	
IP address of RT416	%#05000700	Example: 192.168.0.66
Cause of alarm	%#05000800	Terminal: Alarm triggered by a terminal input VMD: Alarm triggered by a video motion detection Command: Alarm triggered by a command alarm reception
Alarm number	%#05000900	Displays the alarm number with 2-digit number (01 - 16)
Cause of error	%#05002000	Thermal Error: Thermal error Fan=x Error: Fan error (x indicates the fan number) HDD Full: No available disk space (when overwrite is not permitted) HDD=x Access Error : HDD error (X indicates the HDD number.) HDD=x SMART: HDD S.M.A.R.T. warning (X indicates the HDD number.) Cam=xx Video Loss: Video loss (xx indicates the camera number Cam=xx Get Signal: Video signal recovered (xx indicates the camera number) Password Error: Password error No Disk: No available HDD

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 a problem is not described below, and when having a problem with installations.

Symptom	Cause/solution	Reference pages
Cannot access from the browser.	• Is the Ethernet cable firmly connected to the 10BASET/100BASE-TX port? Confirm the cable is firmly connected.	–
	• Is the connection indicator of the 10BASE-T/ 100BASE-TX 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 10BASET/100BASE-TX port is lit. Refer to a system administrator if it is not lit.	–
	• Is the valid IP address set? Refer to a system administrator for further information.	63
	• 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.	–
	• Is the same IP address provided to other devices? Refer to a system administrator for further information.	63
	• Are there contradictions between the address and the network subnet to be accessed? When this unit and the client PC are in the same subnet, are the IP addresses of this unit and the client PC set in same subnet? Or is "Use Proxy Server" for the settings of the browser checked? When accessing this unit in the same subnet, entering the address of this unit in the "Don't Use Proxy For These Addresses" box is recommended.	63

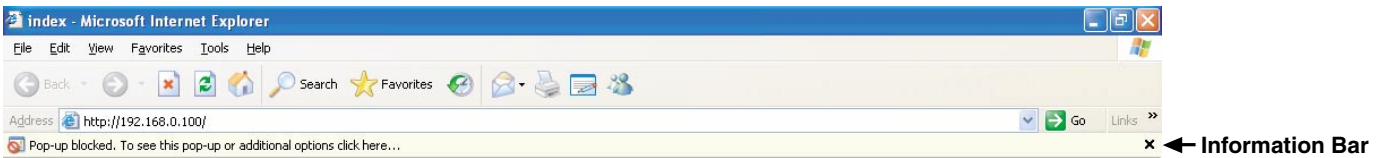| Symptom	Cause/solution	Reference pages
Cannot establish the connection Cannot configure the settings Cannot operate the recorder	▶ • Is the LAN cable firmly connected to the network port? Confirm that the cord is firmly connected.	–
	▶ • Is the connection indicator of the 10BASE-T/-100BASE-TX port 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 10BASE-T/100BASE-TX port is lit. Refer to a system administrator if it is not lit.	Refer to the installation guide.
	▶ • Is the valid IP address set? Refer to a system administrator for further information.	63
	▶ • Is the same IP address provided to other devices? Refer to a system administrator for further information.	–
	▶ • Are there contradictions between the address and the network subnet to be accessed? When this unit and the client PC are in the same subnet, are the IP addresses of this unit and the client PC set in same subnet? When accessing this unit in the same subnet, entering the address of this unit in the "Don't Use Proxy For These Addresses" box is recommended.	–
The image refresh is very slow, or not be refreshed.	▶ • The image refresh interval may become longer and the speed of fast playback may become slow when the amount of data to be transmitted or the load to be processed by the recorder is large.	–
	▶ • When the PC in use does not meet the system requirement, the image refresh interval may become longer and the speed of fast playback may become slow.	5
	▶ • It may be caused by heavy network traffic or narrow bandwidth.	–

Symptom		Cause/solution	Reference pages
Audio is interrupted or repeated. The video output is ahead of the audio output.	▶	• Depending on the network traffic, audio may be interrupted or repeated.	–
	▶	• If the PC in use that does not meet the system requirements, audio may be interrupted.	5
	▶	• The video output may be ahead of the audio output depending on the operating conditions of the PC to be used. The audio output can be synchronized to the video output temporarily by clicking another image display area and clicking your target area again.	–
Cannot use the system control buttons	▶	• Check the login status.	19
Cannot play the downloaded image file	▶	• To play the downloaded image file, use the RT4Viewer.	57
Cannot play recorded images on the recorder	▶	• The network traffic may be heavy or the bandwidth is getting narrower.	–
Noise appears in the images when playing on RT4Viewer.	▶	• Close all applications except RT4Viwer.	–
It takes some time to start playback after the search.	▶	• The hard disk in which the images to be played are stored may be in the stand-by mode. It may take some time for the hard disk to resume from the stand-by mode and start playback. This is not malfunction.	–
Cannot perform frame by frame playback.	▶	• The first operation of frame by frame playback may sometimes not start depending on the playback operation just previously made. Click the [Frame by frame play] button again.	29, 76

Symptom		Cause/solution	Reference pages
Live images are displayed with distortion.	▶	• Live images may be displayed with distortion depending on network traffic conditions when UDP or Multicast is selected for transmission.	–
	▶	• Live images may be displayed with distortion when the recorder is used for copying.	–
No information is displayed in the recorder information display area of the RT4Client. No alarm/error notification is provided to the RT4Client.	▶	• Is the UDP port "999" of the router that is connected to the PC open? Refer to the "Connection with a PC" section of the installation guide.	–
There are difficulties to operate the camera.	▶	• The camera may become slow to react when the network traffic is heavy or when the bandwidth is narrow.	–
	▶	• The camera may become slow to react when the load to be processed by the recorder is large.	–
The displayed images are not fit into the frame border.	▶	• Images may not be displayed properly when "120 dpi" is set for the dpi setting. Right-click on the desktop and select "Properties" from the displayed pop-up menu. Click the [Advanced] button on the "Settings" tab page of the displayed window, and then change the dpi setting.	–

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.	–
The following message is displayed on the information bar. "This site might require the following Active X control: 'wvasetup.exe' from 'Panasonic Corporation Click here to install..."	▶	• Click the information bar and select "Install ActiveX Control…". The "Security Warning" window will be displayed. Click the [Install] button on the displayed "Security Warning" window.	–

Symptom		Solutions	Reference pages
An 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.	–

For U.S. and Canadian fields:

Panasonic System Networks Company of America,
Unit of Panasonic Corporation of North America
www.panasonic.com/business/
For customer support, call 1.800.528.6747
Three Panasonic Way, Secaucus, New Jersey 07094 U.S.A.

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3 Canada
(905)624-5010
www.panasonic.ca

For European and other fields:

Panasonic Corporation
http://panasonic.net

Importer's name and address to follow EU rules:

Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg F.R.Germany