

Network Surveillance Server

User's Guide

Software Version 1.6.5 and Later

Before operating the unit, please read this manual thoroughly and retain it for future reference.

NSR-500 Series



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Further, the $\ensuremath{\mathbb{R}}$ or $\ensuremath{^{\text{TM}}}$ symbols are not used in the text.

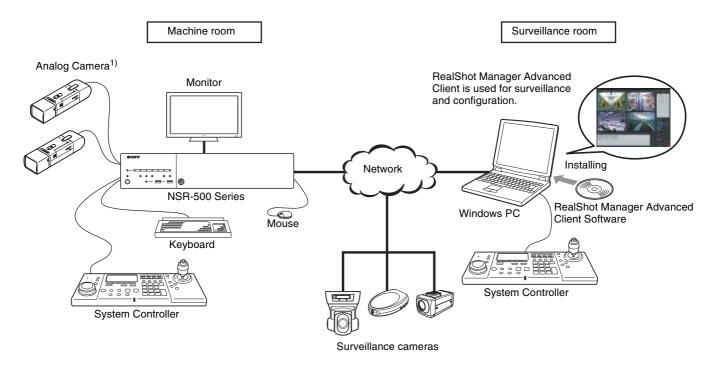
Before using the unit, be sure to read "END-USER LICENSE AGREEMENT" in this manual.

The product's specifications, and therefore the accuracy of this document, are subject to change without notice.

Introduction Chapter

Overview

The NSR-500 series is a network surveillance server for network cameras. The NSR series allows you to monitor and record JPEG, MPEG-4, and H.264 images from network cameras via the network. It also allows you to search and play back recorded images, making the NSR a truly versatile monitoring system.



1) The NSR requires an NSBK-EB05 (optional) expansion.

Control compatible cameras from remote locations

You can pan, tilt, and perform zoom operations of compatible cameras.

Compatible with analog cameras

You can monitor and record images from analog cameras by connecting them directly to the unit 1).

1) The NSR requires an NSBK-EB05 (optional) expansion.

Slim type (2U), space-saving 19-inch rack mounting model

With a purpose-built rack mounting kit, the unit can be installed in a standard universal pitch EIA 19-inch rack. For details on the rack mounting kit, contact your Sony dealer.

High reliability

The NSR supports redundant configurations such as RAID 5¹⁾ and performs with high reliability. In a RAID 5 configuration, for example, the system can continue functioning even if one of the hard disks develops a malfunction. The NSR also supports uninterruptible power supplies (UPS)²⁾, making them extremely reliable systems.

- RAID 5 is a system for dividing and storing data and parity (error correcting codes) onto more than one hard disk drive. Although this system allows continued operation should one of the hard disks malfunction, it does not guarantee restoration of lost data. In addition, due to high internal processing loads during reconstruction after you replace the malfunctioned hard disk, the unit may not be able to record images at the configured recording rate while reconstruction is in progress.
- 2) If the power turns off suddenly during operation, the data may be corrupted.

Protect data from power interruptions

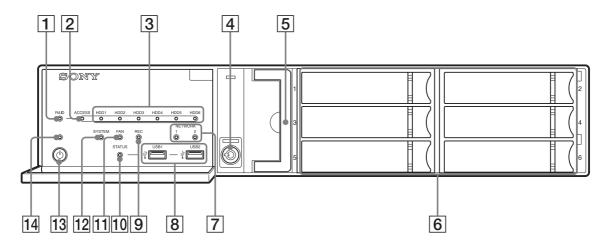
If the power supply is interrupted while the unit is in operation, data may be damaged. We recommend using an uninterruptible power supply (UPS).

Other features

- Custom layout support allows you to display images in a variety of different layouts in addition to standard 2 × 2 and 3 × 3 layouts.
- The NSR is capable of manual, scheduled, and alarm recording, among others.
- Run searches for recorded images by camera name, date, alarm, and other methods.
- Audio recording and playback¹⁾ are also supported from compatible cameras.
- If a video loss occurs due to the network connection being disrupted or an abnormal shutdown occurring, video can be recorded to the camera's Edge Storage, allowing you to retrieve the data later after the system is restored.
- 1) Optional audio amplifiers or speakers are required.

Features and Functions

Front (When the Front Cover and the HDD Cover are Opened)



1 RAID LED

Lights green when the RAID configuration is functioning properly.

Lights red if a fatal problem exists with the RAID due to an internal HDD failure, for example. Lights amber if the RAID is degraded or rebuilding.

2 ACCESS LED

Blinks green when the HDDs are accessed.

3 HDD LEDs (1 to 6)

Light green when the internal hard disk drives are functioning properly.

Light red when failures or other problem occurs. Also, light amber during the rebuilding of RAID.

4 Lock

Use this in conjunction with the supplied HDD cover key to lock the HDD cover.

When the HDD cover is locked, you cannot remove it. The fan unit is also locked when the HDD cover is locked.

When attaching the HDD cover, make sure the lock is the unlocked state before you attach the cover. You can distinguish the locked position from the unlocked position by looking at the lock, as illustrated below.

The HDD cover is locked

The HDD cover is unlocked





5 Fan unit

For details on maintenance, contact your Sony dealer.

6 HDDs

For details on maintenance, contact your Sony dealer.

7 NETWORK LEDs (1 and 2)

Light green when there is a link to the network. Blink amber when the network is being accessed.

8 • USB connectors (1 and 2)

Use these connectors to connect a USB mouse, USB keyboard, USB flash memory device, USB CD/DVD drive, or system controller (RM-NS1000) to the unit.

9 REC LED

Lights red when recording images.

10 STATUS LED

Indicates the recognition status of USB flash memory devices.

If a device is recognized, this lights green. If a device is not recognized, this lights red.

Caution

Do not remove the USB flash memory device while the LED is blinking.

11 FAN LED

Lights green when the internal fan is functioning properly. Lights red when a fan failure occurs.

12 SYSTEM LED

Blinks green while the unit is starting up and then changes to always on when the unit has started. During operation, this LED is lit green when the system is functioning normally. When a system error or other problem occurs, it lights red. If this LED is lit red, contact your Sony dealer.

13 Power switch

Press this to turn on the unit.

If you press the power switch during operation, the POWER LED blinks green for up to 3 seconds. Pressing the power switch again during this time turns off the unit.

If 3 seconds elapse without the power switch being pressed while the POWER LED is blinking, the unit does not turn off and operation continues.

Caution

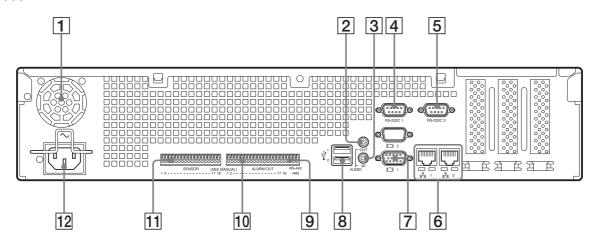
Pressing and holding down the power switch (approximately 5 seconds) turns off the unit forcefully.

14 POWER LED

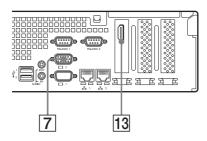
Lights green when the unit is turned on. If you press the power switch during operation, the POWER LED blinks green for up to 3 seconds.

Rear

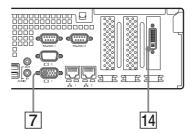
NSR-500



When NSBK-DH05 (optional) is mounted



When NSBK-EB05 (optional) is mounted



1 Fan

Caution

Take care not to obstruct the fan grille. If the grille is obstructed, heat may build up in the unit, leading to damage and/or fire.

2 AUDIO OUT (line output) connector (stereo)

Use these connectors to output audio to a peripheral audio device.

3 AUDIO IN (microphone input) connector (used for future expansion)

Use this connector to input audio from a peripheral audio device, such as a microphone.

Plug-In Power microphones are supported.

4 RS-232C 1 (UPS) connector

Use this connector to connect the control line of the uninterruptible power supply (UPS).

5 RS-232C 2 connector

Use this connector to connect analog cameras via the analog camera input cable.

This connector cannot be used at the same time as the $\boxed{9}$ RS-422/485 connector.

For pin assignment details and wiring diagrams for sensor inputs, refer to the Installation Manual (separate document).

6 \(\frac{1}{25}\) LAN connectors (1 and 2)

Use these connectors to connect 10Base-T, 100Base-TX, or 1000Base-T network cables.

LAN1: Network cameras¹⁾

LAN2: Network cameras¹⁾ (LAN2 can only be used when using a different segment from LAN1.)

 Connect remote clients to the network specified with the [Network Interface for Remote Client] setting (either LAN1 or LAN2) in the Server Configuration screen. For details, see "Configuring Settings Related to Servers" (page 18).

Caution

- Do not configure LAN connectors 1 and 2 to the same network segment.
- For details on using iSCSI storage, contact your Sony dealer.

CAUTION

- For safety, do not connect the connector for peripheral device wiring that might have excessive voltage to the following ports.
 - LAN1 connector
 - LAN2 connector
- Follow the instructions for the above ports.
- When you connect the LAN cable of the unit to peripheral device, use a shielded-type cable to prevent malfunction due to radiation noise.

7 Monitor connectors (1 and 2)

Use this connector to connect a monitor that supports analog RGB input.

Caution

If the optional NSBK-DH05 is installed, monitor connector 1 will not be available for use. Only monitor connector 2 will be available. Monitor connector 2 and the HDMI monitor connector cannot be used at the same time.

8 • USB connectors (1 and 2)

Use these connectors to connect a USB mouse, USB keyboard, USB flash memory device, USB CD/DVD drive, or system controller (RM-NS1000) to the unit.

9 RS-422/485 connector

Use this connector to connect analog cameras via the analog camera input cable.

This connector cannot be used at the same time as the $\boxed{5}$ RS-232C 2 connector.

For pin assignment details and wiring diagrams for sensor inputs, refer to the Installation Manual (separate document).

10 ALARM OUT (alarm output) connector

Use this connector to connect the alarm output lines. For connection details and a wiring diagram for alarm output, refer to the Installation Manual (separate document).

[11] SENSOR (sensor input) connector

Use this connector to connect the sensor input lines.

For connection details and wiring diagrams for sensor inputs, refer to the Installation Manual (separate document).

12 Power supply connector

Use this connector to connect the power cord.

13 HDMI monitor connector

Use this connector to connect a monitor that supports HDMI input.

Monitor connector 2 and the HDMI monitor connector cannot be used at the same time.

This connector can only be used when an NSBK-DH05 (optional) is mounted.

14 Analog camera cable input connector

Use this connector to connect the analog camera input cable.

This connector can only be used when an NSBK-EB05 (optional) is mounted.

CAUTION

When you connect the analog camera input cable of the unit to peripheral device, use the supplied cable to prevent malfunction due to radiation noise.

System Requirements

The hardware required in order to use this unit are as follows.

- Monitor¹⁾
- Sony network cameras^{2) 3)} or Sony analog cameras^{3) 4)}
- USB keyboard⁵⁾
- USB mouse⁶⁾
- · Network hub
- 1000Base-T/100Base-TX/10Base-T cable
- USB flash memory device⁷⁾
 USB CD/DVD drive⁸⁾
- 1) Computer displays that accept RGB input are supported.

The supported resolutions are as follows.

- Full High-Definition $(1,920 \times 1,080)$
- WUXGA $(1,920 \times 1,200)$
- Full Wide XGA $(1,360 \times 768)$
- $UXGA (1,600 \times 1,200)$
- SXGA (1,280 × 1,024) XGA (1,024 × 768)

When NSBK-DH05 (optional) is mounted

HDMI-compatible devices and computer displays that accept RGB input are supported.

The supported resolutions are as follows.

- Full High-Definition $(1,920 \times 1,080)$
- WUXGA $(1,920 \times 1,200)$
- Full Wide XGA $(1,360 \times 768)$
- UXGA $(1,600 \times 1,200)$
- SXGA $(1,280 \times 1,024)$
- $XGA (1,024 \times 768)$

However, WUXGA is not supported on HDMI-compatible

- 2) Contact your dealer for details about compatible Sony network cameras.
- 3) Refer to the release notes for details about compatible cameras from other manufacturers.
- 4) The NSR requires an NSBK-EB05 (optional) expansion.
- 5) Use a USB keyboard with a cable. However, keys other than the standard may not function. Wireless or infrared USB keyboards may also not function properly.
- 6) Use a USB mouse with a cable. Wireless or infrared USB mice may not function properly. Functions such as threebutton and wheel operations may also function improperly.
- 7) Required when backing up system information such as logs.
 - This unit supports USB 2.0, Mass Storage class devices. However, it does not support USB 2.0, Mass Storage class HDDs. Be aware that errors may still occur when writing data to a USB 2.0, Mass Storage class memory device, depending on the type of device used. If errors occur when writing data, use a USB flash memory device of a different type. Only FAT-format USB flash memory devices are supported.
- 8) The following restrictions apply.
 Supported media: CD-R, CD-RW, DVD-R, DVD+R, DVD+R DL
 - Format: ISO 9660 format (RockRidgeExtension/ JolietExtension)
 - Use blank media or media that has previously been written on using the NSR-500 series.
 - Media that has been written on using equipment other than the NSR-500 series is not supported.
 - USB 1.1/2.0 supported.

- We do not recommend using USB bus power. Use an AC power supply.
- We do not recommend using a USB hub.

Caution

Make sure that the connected network is secure when operating this unit.

Chapter

Administration Menu

Overview

The Administration Menu allows you to change settings that were configured with the Setup Wizard when you turned on the NSR for the first time, and also allows you to perform configurations and operations related to the server.

This chapter describes the following configurations and operations for the Administration Menu.

- "Displaying the Administration Menu" (page 12)
- "Changing Initial Settings with the Setup Menu" (page 13)
- "Configuring Settings Related to Servers" (page 18)
- "Installing Patch Files" (page 20)
- "Saving and Restoring Configuration Data" (page 21)
- "Exporting System Information" (page 24)

Note

For details on restart and shutdown procedures, see Chapter 3 "Shutting Down and Restarting the NSR" (page 32).

Displaying the Administration Menu

1 Enter the user name and password in the logon screen, and click [Administration Menu].



Note

If you are already logged on to the NSR, you can display the logon screen by clicking at the top right of the Main screen and logging off from the dialog box that appears.

The Administration Menu screen appears.



Changing Initial Settings with the Setup Menu

Use the Setup Menu to change settings that were configured with the Setup Wizard when you turned on the NSR for the first time.

Displaying Setup Menu

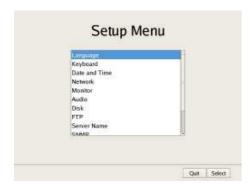
1 Click [Setup Menu] in the Administration Menu.



The menu items of the Administration Menu differ depending on the server and clients.

The Setup Menu appears.

2 Select the item you want to configure, and click [Select].



The screen corresponding to the item appears.

Details on Setting Items

Setting Items of Language Screen

Select the language to display on the screens, and click [OK].



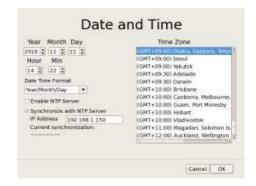
Setting Items of Keyboard Screen

Select the language of the USB keyboard connected to NSR, and click [OK].



Setting Items of Date and Time Screen

Configure the date and time of the equipment, and click [OK].



Year/Month/Day

Enter the date.

Hour/Min

Enter the time.

Date Time Format

Select the format for the date and time.

Enable NTP Server

Select the check box to enable the NTP server of NSR.

Caution

When the NTP server of NSR is enabled, enable [Synchronize with NTP Server] as well, and configure settings to obtain clock information from other NTP servers. If you do not configure the settings, the clock may deviate dramatically.

Synchronize with NTP Server

Select the check box to obtain the current time from another NTP server.

IP Address

Enter the IP address of the NTP server from which to obtain the information.

Current Synchronization

This displays the IP address of the NTP server from which the current information is being obtained.

Time Zone

Select the region to configure the date and time.

Note

There is no setting for enabling or disabling daylight saving time. If you select a time zone in which daylight saving time is observed, the clock is adjusted automatically for daylight saving time.

Setting Items of Network Device Menu Screen

The network settings consist of "General Setting" for setting general settings, and "Network Device 1 to 2" for setting LAN connectors.

Select the network you want to configure, and click [OK].



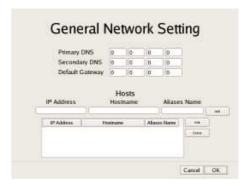
Caution

Connect the following devices to the LAN connectors. **LAN1:** Network camera¹⁾

- **LAN2:** Network cameras¹⁾ (LAN2 can only be used when using a different segment from LAN1.)
- 1) Connect remote clients to the network specified with the [Network Interface for Remote Client] setting (either LAN1 or LAN2) in the Server Configuration screen. For details on the Server Configuration screen, see "Configuring Settings Related to Servers" (page 18).

■Setting Items of General Network Screen

Configure each item, and click [OK].



Primary DNS

Enter the IP address for the primary DNS (Domain Name Server).

Do not enter this if there is no primary DNS, or if it is not required.

Secondary DNS

Enter the IP address for the secondary DNS. Do not enter this if there is no secondary DNS, or if it is not required.

Default Gateway

Enter the IP address for the default gateway. Do not enter this is if there is only a local network or there is no need to connect to another network.

Hosts

If host name registration is necessary, enter a combination of the IP address and host name, and click [Add] to add the host to the list.

■Setting Items of Network Device 1 to 2

Configure each item, and click [OK].



Configure the settings as follows in accordance with your environment.

To use a DHCP to obtain the address setting automatically: Select [DHCP].

To configure the address setting manually:

- ① Click [Static].
- 2 Enter the following address.

IP Address

Enter the IP address.

Caution

- Before you enter the IP address, make sure there is no machine that uses the same value on the same network. Even if a machine that uses the same value does exist, an error message will not be displayed. However, be careful because more than one machine using the same value will result in incorrect operation.
- Do not set an IP address that is prohibited under the IP address assignment rules.

Example: 224.0.0.0 to 255.255.255.255 0.0.0.0

127.0.0.1, etc.

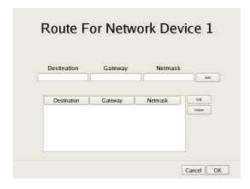
Netmask

Enter the subnet mask.

Route Setting

Click this when you need to configure the route to another network.

Configure the settings as follows on the Route For Network Device 1 screen that appears.



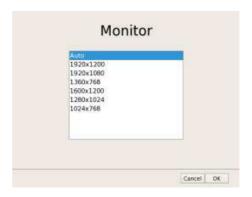
- ① Enter the address, gateway, and netmask of the other network to which to connect, and click [Add] to add the network to the list.

 For details, contact the administrator of the network to which you will connect.
- ② Click [OK].

Setting Items of Monitor Screen

Select the resolution of the monitor connected to the unit, and click [OK].

If you select [Auto], the maximum resolution of the connected monitor will be detected and selected automatically.



Setting Items of Audio Screen

Select the audio connector you want to use, and click [OK].

When using audio output from an HDMI monitor, select [HDMI]. ([HDMI] can only be selected when an optional NSBK-DH05 is installed.)



Caution

When removing an NSBK-DH05 from the main unit, be sure to check that AUDIO OUT is in use. If the NSBK-DH05 is removed from the main unit while [HDMI] is selected, audio will not be output from AUDIO OUT until it is reselected. In such cases, reselect [AUDIO OUT] in the Audio screen.

Setting Items of Disk Screen

Configure iSCSI settings.

Caution

Contact your Sony dealer when using iSCSI.

Setting Items of FTP Screen

Configure each of the items when you want to enable the FTP server, and click [OK].



Enable user to Get Data from Remote

This function is used for service and maintenance.

Enable user to Get Tools from Remote

Select the check box to enable remote client downloading of tools, operating manuals, and other documents using FTP.

This is enabled under default settings.

User Name

This displays the user name. The user name is "ftptool."

It cannot be changed.

Password

Enter the password. The default password is "ftptool."

Setting Items of Server Name Screen

Enter the server name of NSR, and click [OK].



Notes

- If you do not set a server name, a default name (e.g., NSR500_DB12) to which the last four digits of this unit's LAN1 MAC address is appended is set.
- Do not use spaces when entering the server name.

Setting Items of SNMP Screen

Configure each item related to SNMP, and click [OK].



Enable

Select this to enable the SNMP agent function.

Disable

Select this to disable the SNMP agent function.

Community

Enter the SNMP community name.

Contact

Enter the contact.

Normally, enter the mail address of the system administrator.

Location

Enter the installation location of NSR.

Name

Enter the name of the NSR unit.

Enable Trap

Select this to enable SNMP trap transmission.

Sink IP Address

Enter the destination IP address for SNMP traps.

Severity Level

Select the severity level for SNMP trap transmission. An SNMP trap will be sent when severity levels meet or exceed this setting.

For details on SNMP traps, contact your Sony dealer.

Setting Items of UPS Screen

Configure settings related to UPS, and click [OK].



Enable

Select this when using a UPS.

If this is selected, select the type of UPS to be used from a list of UPS.

Caution

If the power turns off suddenly during operation, the data may be corrupted.

Disable

Select this when not using a UPS.

Power off in XXX Seconds

Enter the time from when a power cut is detected until shutdown to start.

Caution

For details on automatic startup after power is restored, contact your dealer.

Setting Items of Auto Logon Screen

When you want to enable the auto logon function, select the [Enable Auto Logon] check box, and click [OK]. For details on the auto logon function, refer to "Logging On to the NSR" (page 25).



Setting Items of Serial Port (Analog Camera) Screen

Configure settings related to the analog camera connection.

Configure each item, and click [OK].

(This screen only appears when an optional NSBK-EB05 is installed.)



Serial standard (RS-485, RS-422, RS-232C)

Select the serial standard for connecting to the analog camera you want to control.

Baud rate

Select the communication baud rate.

Parity bit

Select the parity bit.

Character length

Select the character length.

Stop bits

Select the stop bits.

Setting Items of Video (Analog Camera) Screen

Select the video format for the analog camera to be connected, and click [OK].

(This screen only appears when an optional NSBK-EB05 is installed.)



Setting Items of Camera Auto Registration Screen

When you want to enable the camera auto registration function, select the [Display confirmation dialog box for automatic camera registration at startup] check box and click [OK]. If you select this check box, the Camera Automatic Registration screen appears when the unit starts up.



Configuring Settings Related to Servers

Configure these settings when, for example, you want to change the network settings to match the network environment of the users, or you want to centralize user administration when using multiple servers together.

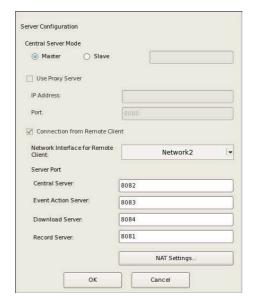
1 Click [Server Configuration] in the Administration Menu.



The menu items of the Administration Menu differ depending on the server and clients.

The Server Configuration screen appears.

2 Configure each item, and click [OK].



Central Server Mode

Set this if you want to manage multiple servers as one system¹⁾, or you want to connect from RealShot Manager Advanced (Client).

You can set one master server for uniformly managing users in the system, and multiple slave servers.

1) This is for when you want to perform common user management with multiple servers, or when you want to connect from RealShot Manager Advanced (Client).

Select [Master] or [Slave].

If you select [Slave], enter the master server address to which to connect.

If a server is changed from master to slave, the user information that was configured locally is discarded and the user information of the master is used. If you want to change this setting, basically change it immediately after installation.

If you change this setting, restart the system.

Use Proxy Server

Select the check box when using a proxy server for connecting to the slave servers and master server of the central server.

IP Address

Enter the IP address for the proxy server.

Port

Enter the port number for the proxy server.

Connection from Remote Client

Select the check box to connect from a remote client.

Network Interface for Remote Client

Select the network to use for the connecting with remote client.

Server Port

Central Server

Configure the port number for the central server.

Event Action Server

Configure the port number for the event action server.

Download Server

Configure the port number for the download server.

Record Server

Configure the port number for the record server.

NAT Settings

Displays the NAT Setting dialog box (page 19). Configure these settings when you want to connect to the server via an Internet connection, for example, from a client connected to an external network using a broadband router.

Caution

• When changing to [Slave], register a user other than "admin" on the master server, and use that user. The user level for the user must be "Level 5".

- When the central server mode or the server port is changed, a message appears and the system restarts.
- If you changed the network interface for the remote client, you must restart the system. When changing the server mode, be sure to change the network interface setting and restart the system beforehand.

Setting Items of NAT Setting Dialog Box

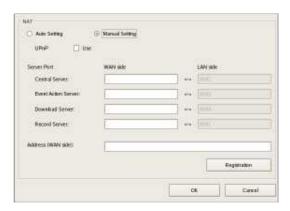
Configure port forwarding settings for broadband routers. If the router supports the UPnP function, you can use the UPnP function to configure the router settings.

- If you select [Auto Setting], all of the setting items will be configured automatically via UPnP. Select [Manual Setting] if you want to specify port numbers manually.
- Regardless of whether [Auto Setting] or [Manual Setting] is selected, router configuration is not necessary if the UPnP function is used.
- If you select [Manual Setting] and do not use the UPnP function, be sure to configure settings on the router side, and enter those same settings for the appropriate items in this dialog box.
- If you changed the network interface for the remote client, you must restart the system. When changing the server mode, be sure to change the network interface setting and restart the system beforehand.

This dialog box appears when you select [NAT Settings] on the Server Configuration screen (*page 18*). After configuring each setting, click [OK].

Note

These settings are not required if you do not intend to connect from clients on external networks.



Auto Setting

Automatically configures settings for the router.

UPnP

If you select [Auto Setting], the [Use] check box will be selected automatically.

Manual Setting

Specify port numbers and a global IP address. When you select this option, enter values for each setting item under [Server Port] and [Address (WAN side)].

UPnP

To use the UPnP function, select the check box next to [Use].

Server Port

Enter the WAN-side port number of the Central Server, Event Action Server, Download Server, and Record Server.

The LAN-side port numbers are only for display and cannot be configured.

Address (WAN side)

Enter a global IP address.

Registration

Registers your settings.

Note

When connecting from a client, the [Address] and [Central Server] under [Server Port] configured in the above will be used as the client logon server.

Caution

- To ensure Internet (WAN side) security, be sure to use the firewall function on your router or similar device, and confirm that the security for the configured port is enabled. 1)
- If security is not enabled via the router or similar device, there is a risk of the NSR being accessed by unauthorized users via the WAN side ports. To improve security, change the password regularly and configure other related settings. ²⁾ For details on changing the password, refer to "Changing the Password" (page 30).
- If unauthorized users log onto NSR, there is a risk of the following.³⁾
 - NSR settings may be changed.
 - Images from cameras and recorded images may be viewed and operated.
- Depending on your router and operating environment, connection from an external network may be disabled.
- For details on router security settings, refer to the operating instructions for the routers, or contact the manufacturer of each router.
- 2) Changing the password does not guarantee prevention of log on by unauthorized users.
- 3) Sony Corporation is not liable for any loss of profits incurred by the customer as a result of such occurrences. The customer is responsible for configuring appropriate settings and measures.

Installing Patch Files

Patch files distributed by Sony can be installed on the NSR.

A patch file is distributed when, for example, cameras supported by the NSR are added to the lineup and when new functions are added. We recommend installing patch files so that you can operate the unit with the latest software.

For details on patch file distribution, contact your Sony dealer.

1 Copy the patch file onto a USB flash memory device.

Caution

Do not change the file name or other aspects of the patch file.

Note

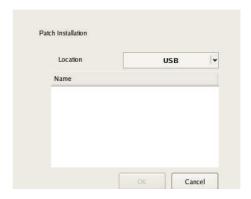
The USB flash memory only supports FAT32 format.

2 Click [Patch Installation] in the Administration Menu.



The Patch Installation screen appears.

3 Select the media on which the patch file is stored.



A list of patch file names appears.

4 Confirm a patch file name, and click [OK]. A confirmation message appears.

Confirm the content of the message, and click [Yes].

Caution

The NSR will automatically restart after installation of certain patch files. A confirmation screen will appear if restart is necessary. If you cannot stop your current operations, select [No] to cancel installation, and perform installation when restarting the NSR will not be a problem.

The following screen appears during installation of the patch file.



When installation is complete, the patch is applied.

After restarting the unit, you can check the software version under [Information] in the logon screen. Make sure that the software has been updated to the correct version.

Saving and Restoring Configuration Data

You can save the configuration data of NSR to external media, and restore saved configuration data.

Note

Configuration data consists of configurations for all NSR settings. You can quickly return to a previous configuration environment by restoring configuration data.

We recommend saving configuration data regularly each time you change settings or upgrade the software version, for example.

Saving Configuration Data

Generally, the settings configured in the Server Configuration screen in the Administration Menu of the logon screen and settings configured in the settings screen after logging on are stored as configuration data.

Caution

Note that the following information is not saved.

- · Recording records
- Log information
- 1 Click [Save Configuration] in the Administration Menu.



The menu items of the Administration Menu differ depending on the server and clients.

The Save Configuration screen appears.

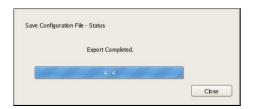
2 Select the media to save the configuration data, enter the file name for the configuration data, and click [OK].

You can use alphanumeric characters and some symbols (periods (.), hyphens (-), underscores (_)) when entering the file name.



A progress bar is displayed during the backing up of the configuration data, and the configuration data is saved when the backup is finished.

3 Click [Close].



Note

When saving of the configuration data finishes, the following files are created in the save location.

- <Configuration data save name>.item
- <Configuration data save name>_db.tar.gz
- <Configuration data save name>_img.tar.gz
- <Configuration data save name>_os.tar.gz
- <Configuration data save name>_preset.tar.gz
 Example: When the configuration data is saved under the name "Configuration001," files with the names shown below are created.

Configuration001.item

Configuration001_db.tar.gz

Configuration001_img.tar.gz

Configuration001_os.tar.gz

Configuration001_preset.tar.gz

Periodically Saving Configuration Data

You can periodically back up the database as a provision for when the database is lost due to unforeseen problems.

1 Click [Configuration] in the Save Configuration screen

The Database maintenance screen appears.

2 Select the [Weekly / Daily backup] check box, specify the day of the week and time to perform backup, and then click [OK].



Note

If you select the [Execute database maintenance at the next startup] check box, the database will be backed up and cleaned up at each startup. If a large volume of recorded data is stored, this process may take several minutes.

Restoring Configuration Data

Caution

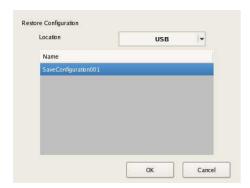
- Note that the following information is not restored.
 - Recording records
 - System settings other than [Camera Auto Registration]
 (Items of [Setup Menu] (page 13))
 - Logs
- The settings of the external storage itself cannot be restored, so it is necessary to configure them to the same settings as those at the time of saving.
- The configuration data cannot be restored if the first two digits of the current version (e.g.: "a.b" of "a.b.c" separated by ".") differ from those at the time of saving or the model differs.
- When the configuration data is restored, the recording operation performed up until that point is stopped automatically. If a recording schedule has been configured, recording resumes automatically after restoration. If manual recording was performed, it needs be started again.
- Click [Restore Configuration] in the Administration Menu.



The menu items of the Administration Menu differ depending on the server and clients.

The Restore Configuration screen appears.

2 Select the location where the configuration data is saved and the configuration data, and click [OK].



A confirmation message appears to notify you that this operation will restart the unit.

3 Click [OK].

A confirmation message appears.

4 Click [Yes].

A progress bar appears during restoring, NSR restarts when the process is finished, and the configuration data is restored.

If a problem occurs with the database

The following message appears. In such cases, the only operations that can be performed are shutdown and data restoration.



To restore configuration data

1 Click [Restore].

The following screen appears.

2 Click [OK].



Caution

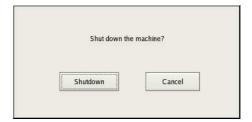
When configuration data is restored via the above message, the periodic backup data is restored. Be aware that additions and changes to information (including recording data) made after the backup cannot be accessed.

The configuration data is restored.

To skip configuration data restoration

Click [Shutdown].A confirmation message appears.

2 Click [Shutdown].



The unit shuts down.

Exporting System Information

You can save NSR system information as files onto external media.

Note

System information consists of NSR system configuration information and logs.

1 Click [Export System Information] in the Administration Menu.



The Export System Information screen appears.

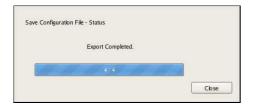
2 Select the media on which to save the system information, enter the file name, and then click [OK].

You can use alphanumeric characters and some symbols (periods (.), hyphens (-), underscores (_)) when entering the file name.



A progress bar is displayed during exporting of the system information, and the system information is saved when exporting is finished.

3 Click [Close].



Installing Licenses

You can install a license on the NSR to enable registration of additional cameras.

You can register up to 16 cameras normally, but this can be increased to up to 24 cameras.



Notes

- For details on licenses, refer to the NSBK-CL05 Installation Guide (PDF).
- For details on acquiring licenses, contact your Sony dealer.

Basic Operation



Overview

This chapter describes how to perform the following basic operations on the NSR, including logging on, using various windows, changing the password, and turning off the unit.

- "Logging On to the NSR" (page 25)
- "Basic Window Operations" (page 27)
- "Changing the Password" (page 30)
- "Logging Off" (page 31)
- "Locking the NSR" (page 31)
- "Shutting Down and Restarting the NSR" (page 32)
- "Viewing Version Information" (page 32)

Note

For details on settings related to devices, schedules, sensor inputs, and alarm outputs, see Chapter 4 "Application Settings" (page 33). For details on monitoring and search for and playing back recorded images, see Chapter 5 "Operation and Control" (page 97).

Logging On to the NSR

Before you can use the NSR, you must first log on.

Press the power switch on the front of the NSR to turn it on.

The startup screen appears, and the progress bar for software startup appears.



Note

The fan noise may be loud after turning on the unit. This is not a malfunction.

After startup, the logon screen appears.

2 Enter the user name and password, and click [Logon].



- If you log on with the [Auto-Logon] check box selected, the logon screen will not appear the next time you start the application, and you will be logged on automatically.
- To change the user that you are logged on as, first log off from the Main screen.
- To enable the auto logon function, configure it from the [Setup Menu] of the Administration Menu.

Caution

The selection status of the check box is applied each time you log on.

Therefore, you must log on once in order for an unselected status to be applied.

Note

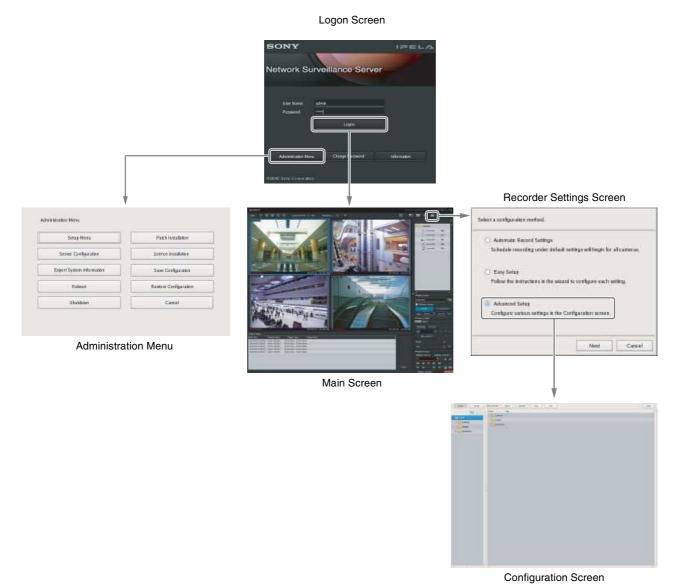
The first time you turn on the NSR, the administrator is the only user registered on the system. The default user name for the administrator is as follows.

User name: admin Password: admin

Basic Window Operations

This section provides a brief description of the basic operations for each screen.

The unit includes a Main screen for monitoring images, a configuration screen for configuring various settings, and an Administration Menu for performing configurations and operations related to the NSR unit.



Note

Click [Automatic Record Settings] or [Easy Setup] to register and configure cameras with a few simple operations. For details on the operating procedures, refer to the Installation Manual (separate document).

Administration Menu

When you click [Administration Menu] after entering your user name and password in the logon screen, the Administration Menu screen appears. Click each button to configure settings and perform operations related to the NSR unit.



For details on settings that can be configured from the Administration Menu, see Chapter 2 "Administration Menu" (page 12).

Main screen

In the Main screen, you can monitor live images from each monitor frame, and search for and play back recorded images. To switch between live image display and playback of recorded images, click the target monitor frame, and then click [LIVE] or [PLAYBACK] on the right side of the window.

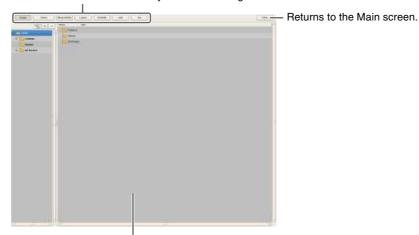


For details on monitoring and searching for and playing back recorded images, see Chapter 5 "Operation and Control" (page 97).

Configuration screen

Configure settings that are necessary for operating the NSR, such as camera registration, schedule settings, and user registration.

Click the button for the item you want to configure.



Setting items appear based on the button you clicked.

For details on setting items and how to configure them, see Chapter 4 "Application Settings" (page 33).

Changing the Password

You change the password for logging on to NSR.

Notes

- The password is extremely important to the security of this equipment. The first time you log in to NSR after purchasing the equipment, be sure to change the password before monitoring and configuring various settings. Take care to keep the password secure.
- When using a System Controller (RM-NS1000) for operations, create user names and passwords consisting only of numbers.
- Enter the user name and password on the Logon screen, and click [Change Password].



The Change Password dialog box appears.

2 Enter a new password, and click [OK].



Enter the same password again in [Confirm New Password].

The password is changed.

Note

If [Enable Auto Logon] is enabled, the logon screen will not appear during application startup, and you will be logged on automatically. To change the password while [Enable Auto Logon] is enabled, first log off from the Main screen.

Caution

When changing the password of an administrator or a user with "User Configuration" permission, be sure to memorize the new password.

Logging Off

1 Click on the Main screen.



The following screen appears.

2 Click [Logoff].



A logoff confirmation message appears.

3 Click [Logoff].

You are logged off the NSR, and the logon screen appears.

To log on again, enter the user name and password and click [Logon].

Locking the NSR

You can temporarily lock the screen in its current state. Use the lock function when you need to leave your seat during operation, for example.

1 Click o/ in the Main screen.



The following screen appears.

2 Click [Lock].



Operations are locked.

To unlock operations, enter the user name and password and click [Unlock].



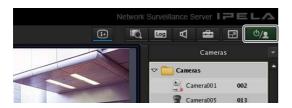
Note

Only the user that is currently logged on or a level 5 user can undo the lock function.

Shutting Down and Restarting the NSR

Always shut down or restart the NSR from the Main screen.

Click of the Main screen, and select [Shutdown] or [Reboot] from the menu that appears.



The following screen appears.

2 Click [Shutdown] or [Reboot].



A confirmation message appears.

3 Click [Shutdown] or [Reboot].

The NSR shuts down or restarts.

Note

Under normal conditions, the NSR shuts down or restarts after a few minutes. If the NSR does not shut down or restart after several minutes, shut it down manually by pressing the power switch on the front of the unit for about five seconds.

Viewing Version Information

1 Click [Information] in the logon screen.



Version information for the software appears.



Application Settings



Alarms and Events

You can configure sensor inputs, VMD, manual actions, and other triggers as alarms or events on the NSR, and record or execute actions in response. Although alarms and events are nearly identical in function, the following functions are enabled when you configure triggers of higher priority as alarms.

- When searching for recordings, you can search for alarms and events separately.
- Alarm logs are listed in the alarm history of the Main screen, and the ALARM lamp in the Main screen lights.
- A red frame appears around the monitor frame of the camera that triggered the alarm.
- Images from the camera that triggered the alarm appear in the hot spot.
- You can confirm alarms and events separately in the event/alarm log.

As shown in the table below, you can configure a recording or action for the source that will become the trigger. In addition, the trigger will be determined as an alarm depending on the configured recording or action.

Source to become	Recording/Action Corresponding to Event/Alarm			
trigger of event/alarm	Recording setting		Action setting	
evenivalanii	Event record	Alarm record	Camera action I/O	Client action
Sensor input	(event)	(alarm)	(alarm)	(event)
VMD • VMD (camera)	(event)	O (alarm)	O (alarm)	(event)
System alert	_	-	(alarm)	(event)
Manual action	_	_	O ¹⁾	O ¹⁾
Tamper detection	O ²⁾	O ²⁾	O ²⁾	O ²⁾
Audio detection	O ²⁾	O ²⁾	O ²⁾	O ²⁾

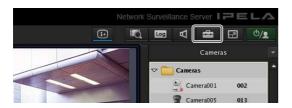
Source to become	Recording/Action Corresponding to Event/Alarm			
trigger of event/alarm	Recording setting		Action setting	
evenivalariii		-	Camera action I/O	Client action
Presence sensor	O ²⁾	O ²⁾	$\bigcirc^{2)}$	O ²⁾

- 1) An action is performed but is not determined to be an event or action.
- 2) Only for cameras equipped with these functions.

Displaying Configuration Window

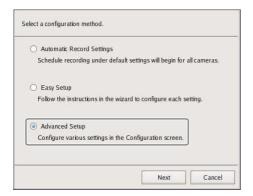
You can configure various settings in the Configuration window.

1 Click (Configuration) on the top right of the Main screen.



The Recorder Setting screen appears.

2 Select [Advanced Setup], and click [Next].



Note

Selecting [Automatic Record Settings] or [Easy Setup] allows you to register and configure cameras with a few simple operations. For details on Automatic Record Settings and Easy Setup, refer to the Installation Manual (separate document).

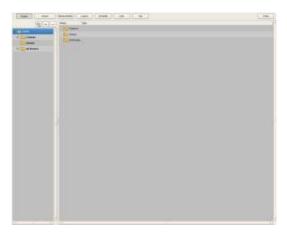
The Configuration window appears.

3 Click the button of the item you want to set at the top of the window.



The Configuration screen that corresponds to the button appears.

Example: When [Device] is clicked: The Device Configuration screen appears.



Registering Devices

You can register the devices to manage with NSR, and configure detailed settings for the operation of the devices.

There are the following way of registering devices.

- Registration Using Easy Setup
 Register cameras on the network automatically. For details on the operation, refer to the Installation Manual (separate document).
- Selecting Automatically Detected Cameras and Registering Them Simultaneously
 Detect the devices that exist on the same network as NSR automatically, select the cameras to register, and then register them simultaneously. For details on the operation, refer to the Installation Manual (separate document).
- Registering Devices Manually
 Specify the IP address of a device, and register the
 device individually. For details on the operation, refer to
 the Installation Manual (separate document).

Notes

- When using non-Sony IP cameras (network cameras) or ONVIF (Open Network Video Interface Forum) cameras, simultaneous registration through basic configuration and automatic detection is not possible. Register the cameras manually.
- Control protocol configuration is necessary to control pan, tilt, and zoom on an analog camera. For details, see "Configuring Control Protocols for Analog Cameras" (page 50).

Changing Registration Details

This section describes the procedure for changing the settings on the [General] tab of the Device Configuration screen.

The items on the [General] tab allow you set multiple cameras simultaneously.

Note

Some of the setting items differ depending on whether you are configuring the settings of one camera or the settings of multiple cameras simultaneously.

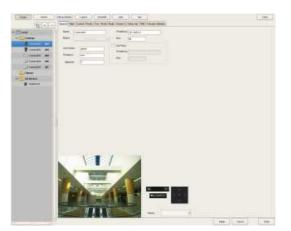
 A blank is displayed for setting items with which the setting state differs for each camera. If these setting items are saved as is, the corresponding setting items of each camera are not modified. Reselecting an item from a list or entering a numeral sets the new value for all of the cameras.

- If a common value cannot be set for multiple cameras, that setting item is unavailable. Change the combination of cameras to select, and then configure the setting.
- 1 Select the camera(s) you want to change the registration details of on the Device Configuration screen.

You can also select multiple cameras at once by holding down the Shift key or Ctrl key while selecting.

The camera registration details appear.

2 Click the [General] tab, and modify the settings of the items you want to change.



For details on each of the items, refer to "Setting Items of the [General] Tab" (page 38).
For details on Generic Camera, refer "Settings Required when Using SNC-CS20/CM120/DS10/DM110/DS60/DM160" (page 36).

3 After configuring each item, click [Apply].

The settings are changed.

Deleting Devices

Select the camera you want to delete on the Device Configuration screen.

You can also select multiple devices at once by holding down the Shift key or Ctrl key while selecting.

2 Click - (Delete).



A confirmation message appears.

3 Click [Yes].



The device is deleted.

Caution

- When a camera is deleted, "No Camera" is displayed in the monitoring window in the layout. When you register a camera in the default layout, the camera is assigned to the first empty ("No Camera") monitoring window available.
- If you delete a camera, you will no longer be able to find data recorded with that camera. The recorded data is not deleted at that time. The recorded data becomes target for deletion at the point in time when the criteria for deleting the recordings or overwriting the data in storage are met. For details, refer "Configuring Settings Related to Storage" (page 64).

Settings Required when Using SNC-CS20/CM120/DS10/DM110/DS60/DM160¹⁾

With the following six models 1) of camera, other functions are restricted depending on the setting values of the functions to be used. It is necessary to prioritize and select the functions you want to use before you configure various settings.

- SNC-CS20
- SNC-CM120
- SNC-DS10
- SNC-DM110
- SNC-DS60
- SNC-DM160

Flow when Using SNC-CS20/CM120/DS10/ DM110/DS60/DM160¹⁾

When using any of the above cameras, first select the combination of functions to use, and then configure various settings. First, you must select a combination of

functions and then perform the setup. When you select the combination of functions, the setting range for each item is determined automatically. Therefore, it is important to select the combination of functions carefully according to the intended use of the camera.

Select the combination of functions to use

 \downarrow

2 Configure the necessary settings in each setup screen

 \downarrow

3 Start operation

 Setting restrictions may also exist on future camera models. When using a camera for which the [Function Selection] tab appears, be sure to configure a combination of functions as you would with the above cameras

Caution

The available settings and setting value ranges will vary depending on the function combination. Be sure to configure the settings to match the intended operation.
 Example 1: When a certain codec is used, the motion detection function will not be available. Choose a combination with this codec only if motion detection function settings are not required.

Example 2: When a combination with an available setting value range of 1 to 50 has been selected, the available range on the respective setup screens will be limited to 1 to 50 even if the camera setting range is 1 to 100.

• Be sure to select the function combination first and then configure the settings. If you select or change the function combination after starting to configure settings, the available ranges for values will also change depending on the function combination, which may lead to earlier settings being altered.

Example: 70 was selected for an item with an available range of 1 to 100, but the available range later became 1 to 50 because of a function combination change, and the setting was altered to 25.

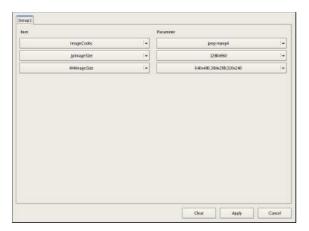
- After changing a setting, be sure to check all settings before starting operation. If the changed value is within the available range, there will be no problem, but if it is out of range, the setting will automatically be changed to a value within the range.
- 1 Click [Select Camera Function] on the [Function Selection] tab of the Device Configuration screen.



A screen for selecting the function combination to use with camera appears.

2 Select the function combination one line at a time in order from the top left, and click the [OK] button.

Select the function you want to set with [Item], and select the setting value with [Parameter].



Notes

- The control range is narrowed down based on your item selection sequence and parameters. The items and values selectable on subsequent lines will change accordingly.
- If you change a selected line, all lower lines will revert to the non-selected condition. Note that the function combination selected here determines the setting range for the various setup screens.
- **3** Configure the other items on the [General] tab.

Also configure the settings in each screen as necessary.

- **4** After completing the setting procedure, check all the settings to make sure they are set to appropriate values.
- **5** Start operation.

Registering Device Groups

You can set a device group for each floor or region that a device is installed in order to improve management efficiency. Also, you can set the permissions for the operations users and user groups can perform for each device group.

Registering a Device Group

Select [Group] in the tree on the left of the Device Configuration screen, and click + (Add) to add a group.



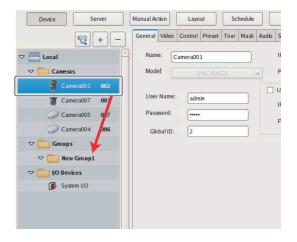
Notes

- When you want to create a sub-group below a group, select the upper group and click + (Add).
- When you want to rename a group, click a group name selected in the tree and then enter the new group name.

Next, add devices to the device group.

Adding Devices to a Group

Drag and drop the devices you want to belong to the group onto the icon of the group in the tree to add them to the group.



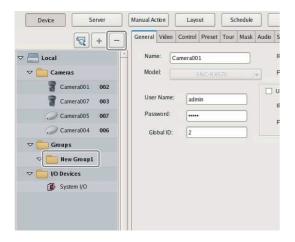
Removing Devices from a Group

Drag the icons of the devices you want to remove from the group outside of the tree.



Deleting a Group

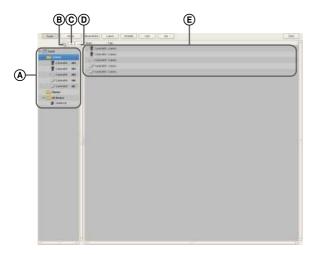
Select the group you want to delete in the tree, and click — (Delete) to delete the group.



Details of Each Screen

Setting Items of Device Configuration Screen

This screen displays a list of the devices registered to NSR. It is displayed by clicking [Device] in the Configuration screen.



A Tree Structure

This displays a list of the devices registered to NSR in a tree structure.

Selecting a device from the tree structure displays the items corresponding to the selected device in area $\textcircled{\textbf{E}}$.

B (Camera Auto Registration)

This displays the Camera Auto Registration dialog box for automatically searching for and registering cameras connected to the network.

© + (Add)

This displays the Add Device dialog box (page 41) for registering a device manually.

D _ (Delete)

This deletes a device.

Select the device you want to delete from the tree structure or device list, and click this button to delete the device.

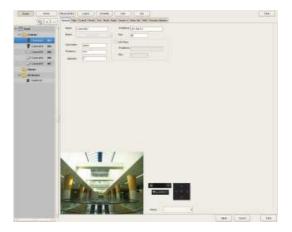
(E) Device List

This displays a list of the devices belonging to the device group selected in the tree structure on the left.

Setting Items of the [General] Tab

This tab allows you to change the settings of the device selected in the tree structure on the left.

After configuring each item, click [Apply] to save your settings.



Name

Enter up to 32 characters (excluding $\/:,;*?"<>\|[]$) to assign a name to the device to be added.

Model

This item displays the device type. It cannot be changed.

User Name

Enter the user name that is used for authentication and configured on the device.

Password

Enter the password that is used for authentication and configured on the device.

Caution

The user name and password for a device cannot be changed from NSR. To change them, access the device directly from a web browser. For details, refer to the instruction manual of the device to be used. If you change the user name and password for a device registered to NSR, you must also change the configurations in NSR.

Global ID

Enter a number for the global ID.

In NSR and RealShot Manager Advanced, cameras are managed by assigning IDs to the connected cameras individually.

In addition, in a system in which multiple servers are used, all the cameras connected to each server are assigned an ID that is unique within the system. You can use a global ID to specify the cameras to perform monitoring directly from RealShot Manager Advanced of a remote client without being aware of each server.

IP Address

Enter the IP address or the host name for the camera.

Caution

When specifying host names, be sure to configure DNS settings so that the host names can be resolved.

Port

Enter the port number on the camera side for when connecting with the camera. The default setting is "80."

Proxy

Set this when the camera will be accessed via a proxy server.

Enable

Select the check box, and configure the following items.

IP Address

Enter the IP address for the proxy server.

Port

Enter the port number for the proxy server.

Preview

This displays the images from the camera.

vlaaA

This saves the settings.

Cancel

This cancels the settings.

Close

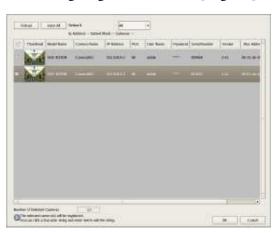
This closes the screen.

Setting Items of Multiple Camera Registration Dialog Box

This dialog box displays the results of the automatic search, and allows you to register the detected devices simultaneously.

It is displayed by selecting [Open Multiple Camera Registration Window] in the Camera Auto Registration dialog box, and clicking [OK].

After configuring each item, click [Register].



Caution

Analog cameras without input signals will not be detected with the automatic search.

Network

A list of the devices connected to the network selected in the drop-down menu is displayed.

Reload

This performs the automatic search again.

Take care because apart from the user name and password of the administrator, all of the values you entered up until now will be replaced with the results obtained with the automatic search.

Input All

This displays the Input All dialog box (page 40).

Show

This allows you to use the following conditions to narrow down the display of devices shown in the device list.

Unregistered Cameras

This displays only the devices that have not yet been registered to NSR.

Registered Cameras

This displays only the devices that have already been registered to NSR.

All Cameras

This displays all of the devices detected with the automatic search.

Device List

This displays a list of the devices detected with the automatic search.

Target

Select the check boxes of the devices to register to NSR.

Thumbnail

This displays thumbnail images from the camera. Images may not be displayed in some cases.

Model Name

This displays the type of device.

Camera Name

This displays the device name.

IP Address

This displays the IP address of the device.

Port

This displays the port number on the device side for when connecting with the device.

The default setting is "80."

User Name

Enter the user name for connecting to the device.

Password

Enter the password for connecting to the device.

Serial No.

This displays the serial number of the device.

Version

This displays the firmware version of the camera.

Mac address

This displays the MAC address of the device.

Network

This displays the network in which the device is corrected.

Caution

The user name and password for a device cannot be changed from NSR. To change them, access the device directly from a web browser. For details, refer to the instruction manual of the device to be used. If you change the user name and password for a device registered to NSR, you must also change the configurations in NSR.

Registration

This registers the devices with check marks to NSR, and closes the dialog box.

Cancel

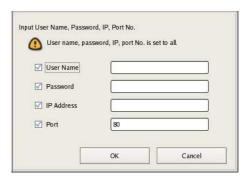
This cancels the registration and close the dialog box.

Setting Items of Input All Dialog Box

This dialog box allows you to simultaneously configure the same setting values to multiple selected devices for the following setting items when registering devices detected via automatic search.

It is displayed by clicking [Input All] in the Multiple Camera Registration dialog box (page 39).

Select the check boxes of the items you want to set, enter the setting values, and click [OK].



User Name

Enter the user name for connecting to the device. It can be up to 32 characters and consist of alphanumeric characters.

Password

Enter the password for connecting to the device. It can be up to 32 characters and ASCII characters (upper or lower case alphanumeric characters and symbols (! " # \$ % & '() * + , - . / : ; <=> ? @ [\]^_`{|}~)).

IP Address

Enter the IP address for the device.

When registering multiple devices simultaneously, IP addresses are configured sequentially, starting with the entered address.

Port

Enter the port number on the device side for when connecting with the device.

The default setting is "80."

OK

This reflects the setting values in the device list of the Multiple Camera Registration dialog box, and closes the dialog box.

Cancel

This cancels your settings, and closes the dialog box.

Setting Items of Add Device Dialog Box

Enter the setting items when registering a device manually. This dialog box is displayed by clicking + (Add) on the Device Configuration screen (page 38).

After configuring each item, click [OK].



Caution

Only the name can be configured for analog cameras.

Device Type

Select the model name for the camera.

Normally, select "Auto Connect."

When setting this manually, select the model name.

Enter up to 32 characters (excluding $\/:,;*?"<>:[]$) to assign a name to the camera to be added.

IP Address

Enter the IP address or the host name for the camera.

Port

Enter the port number on the camera side for when connecting with the camera. The default setting is "80."

Proxy

Set this when the camera will be accessed via a proxy server.

Enable

Select the check box, and configure the following items.

IP Address

Enter the IP address or the host name for the proxy server.

Port

Enter the port number for the proxy server.

User Name

Enter the user name for connecting to the device. It can be up to 32 characters and consist of alphanumeric characters.

Password

Enter the password for connecting to the device. It can be up to 32 characters and ASCII characters (upper or lower case alphanumeric characters and symbols (! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~)).

OK

This registers the device with the set values, and closes the dialog box.

Close

This cancels the registration, and closes the dialog box.



Configuring Camera Video Settings

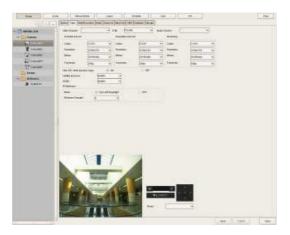
You can configure settings related to the images captured from a camera.

The setting items and selectable values differ depending on the camera. In addition, some functions may be limited depending on configurations. For details, refer to the manual for your camera.

1 Click [Device] at the top of the Configuration window, and select the camera for which you want to configure the settings for captured images.

The registration details of the selected camera appear.

2 Click the [Video] tab, and configure each item.



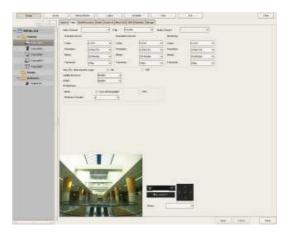
For details on each of the items, refer to "Setting Items of [Video] Tab" (page 42).

3 Click [Apply].

The settings are changed.

Setting Items of [Video] Tab

This tab allows you to change settings related to images captured from the camera selected in the tree on the left. After configuring each item, click [Apply] to save your settings.



Notes

- The setting items and selectable values differ depending on the camera.
- For details on settings for the SNC-XX600 series (XX represents two letters), see "Setting Items of [Video] Tab (for the SNC-XX600 series)" (page 44).

Caution

The following restrictions apply to Sony 360-degree hemispheric-view network cameras.

- Configure the installation type (ceiling, table, or wall) in the settings screen (via a web browser) for the camera side beforehand. It cannot be changed later.
- Images sent from the camera will always be handled as hemispheric view images.

Video Channel

In the case of a camera server with multiple channels (SNT series, etc.), the video channel to use is displayed.

E-Flip

Configure to enable the E-Flip function for flipping the top and bottom of images output from the camera.
E-Flip (Recorder) is the image flip function on NSR.
E-Flip (Camera) is the image flip function on the camera.

Caution

When the camera image is flipped due to a change in the E-Flip (Camera) setting, the display area will change. Be sure to reconfigure mask settings, motion detection settings, and preset positions.

Audio Channel

Select the analog camera audio channel to tie to the analog camera.

Note

You can only select from CH01 to CH04 for the audio channel. The audio of each channel can be used.

Schedule Record

Configure settings related to images for when scheduling recording.

Codec

Set the image codec for the camera.

Resolution

Select the resolution for the camera.

Image Quality (for JPEG)

Select the image quality for images of the camera.

Bitrate (for MPEG4 or H.264)

Select the bit rate for images of the camera.

Framerate

Select the frame rate for images of the camera.

Event/Alarm Record

Configure settings related to images for when recording an alarm or event.

Codec

Set the image codec for the camera.

Resolution

Select the resolution for the camera.

Image Quality (for JPEG)

Select the image quality for images of the camera.

Bitrate (for MPEG4 or H.264)

Select the bit rate for images of the camera.

Framerate

Select the frame rate for images of the camera.

Monitoring

Configure settings related to images for when monitoring.

Codec

Set the image codec for the camera.

Resolution

Select the resolution for the camera.

Image Quality (for JPEG)

Select the image quality for images of the camera.

Bitrate (for MPEG4 or H.264)

Select the bit rate for images of the camera.

Framerate

Select the frame rate for images of the camera.

Light Funnel

Select the mode to use when the camera has a light funnel function.

Note

The light funnel function may not be able to be used depending on the conditions. For details, check the user's guide for the camera.

Threshold

Select the brightness for when to switch to night mode.

Hold Time

Select the time for responding to changes in brightness.

View-DR/Wide dynamic range

Select whether the View-DR function is turned on or off for cameras equipped with this function.

Turning on the View-DR function allows the camera to improve the visibility of images, reducing overexposure and underexposure even in high-contrast environments, such as under backlighting, by combining the normal image with an image taken at high shutter speed.

Visibility Enhancer

If the camera is equipped with the Visibility Enhancer function, select [High], [Middle], [Low], or [Off] as the amount for the camera to automatically adjust the image brightness and contrast.

When you turn on the Visibility Enhancer function, the camera optimizes the contrast pixel-by-pixel, compensating for the overexposure of bright areas and for the underexposure of dark areas. This allows the camera to record a vivid image even in high-contrast environments, such as under backlighting.

If you do not want to use the Visibility Enhancer function, select [Off].

XDNR

If the camera is equipped with the XDNR function, select [High], [Middle], [Low], or [Off] as the strength of the noise reduction filter applied by the camera to reduce the amount of image noise.

When you turn on the XDNR function, the camera distinguishes between noise occurring in areas of the image without motion and those with motion, and performs the appropriate noise reduction on each for better image visibility.

This improves the effectiveness of the camera under lowlight conditions.

If you do not want to use the XDNR function, select [Off].

IR Illuminator

If the camera is equipped with the IR illuminator function, configure the operations of the infrared sensor.

Mode

Select [Sync with Day/Night] or [Off]. When [Sync with Day/Night] is selected, the infrared sensor operates in coordination with the switch between day and night.

If you do not want to use the infrared sensor, select [Off].

Maximum Strength

Select the maximum strength of the infrared beam. Six levels are available for the maximum strength, with 1 as the weakest and 6 as the strongest.

Edge Storage

Select this check box if the camera is equipped with an Edge Storage function and you want to download the images stored on the camera's Edge Storage.

When this function is enabled and a video loss occurs during a recording schedule or the unit restarts, video is recorded to the camera's Edge Storage, allowing you to retrieve the data later after the system is restored. In addition, the following settings on the camera will be configured automatically when this function is enabled.

Setting	Configuration	
Edge Storage	On	
Overwrite setting	Off	
Video recording	Video 1 or Video 2	
Audio recording	Off	
Recording duration	If Video 1: 1 second before alarm/event start, 10 seconds after alarm/event start If Video 2: 0 seconds before alarm/event start, 10 seconds after alarm/event start	
Recording mode	Alarm recording, Condition: 1, 1: Network disconnection, Monitoring IP: IP address of this unit	
Active time frame	Always	

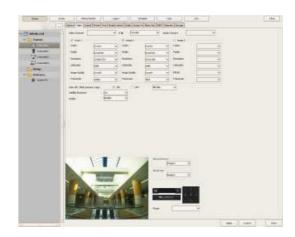
Caution

- A recording schedule must be configured to use this function.
- For details on the recommended values for the video settings, refer to the release notes for the camera.

Setting Items of [Video] Tab (for the SNC-XX600 series)

Configure each setting for [Video 1] to [Video 3], and specify the video codec to use for monitoring and manual recording.

After configuring each item, click [Apply] to save your settings.



Notes

- The setting items and selectable values differ depending on the camera. In addition, some functions may be limited depending on configurations. For details, refer to the manual for your camera.
- For details on supported cameras, refer to the release notes.

Video Channel

In the case of a camera server with multiple channels (SNT series, etc.), the video channel to use is displayed.

E-Flip

Configure to enable the E-Flip function for flipping the top and bottom of images output from the camera.
E-Flip (Recorder) is the image flip function on NSR.
E-Flip (Camera) is the image flip function on the camera.

Caution

When the camera image is flipped due to a change in the E-Flip (Camera) setting, the display area will change. Be sure to reconfigure mask settings, motion detection settings, and preset positions.

Audio Channel

Select the analog camera audio channel to tie to the analog camera.

Note

You can only select from CH01 to CH04 for the audio channel. The audio of each channel can be used.

Image 1 to Image 3

Configure video settings for [Image 1] to [Image 3].

Note

[Image 2] and [Image 3] cannot be configured for some cameras. For details, refer to the manual for your camera.

Codec

Set the image codec for the camera. Select JPEG or H.264.

Profile

Select Baseline, Main, or High for the profile when the selected codec is H.264.

Resolution

Select the resolution for the camera.

CBR/VBR

Select CBR (constant bit rate) or VBR (variable bit rate) for the bit rate.

Bitrate

Select the bit rate for the camera. This item can be selected when [Codec] is set to [H.264] and [CBR/VBR] is set to [CBR].

Image Quality

Select the image quality for the camera. This item can be selected when [Codec] is set to [H.264] and [CBR/VBR] is set to [VBR], or when [Codec] is set to [JPEG].

Framerate

Select the frame rate for images of the camera.

View-DR/Wide dynamic range

Select whether the View-DR function is turned on or off for cameras equipped with this function.

Turning on the View-DR function allows the camera to improve the visibility of images, reducing overexposure and underexposure even in high-contrast environments, such as under backlighting, by combining the normal image with an image taken at high shutter speed.

Visibility Enhancer

If the camera is equipped with a Visibility Enhancer function, select the degree to which the brightness and contrast is automatically adjusted.

When you turn on the Visibility Enhancer function, the camera optimizes the contrast pixel-by-pixel, compensating for the overexposure of bright areas and for the underexposure of dark areas. This allows the camera to record a vivid image even in high-contrast environments, such as under backlighting.

If you do not want to use the Visibility Enhancer function, select [Off].

XDNR

If the camera is equipped with an XDNR function, select the strength of the noise reduction filter that is applied by the camera to reduce the amount of image noise. When you turn on the XDNR function, the camera distinguishes between noise occurring in areas of the image without motion and those with motion, and performs the appropriate noise reduction on each for better image visibility.

This improves the effectiveness of the camera under lowlight conditions.

If you do not want to use the XDNR function, select [Off].

Manual Record

Select the video codec to use during manual recording.

Monitoring

Select the video codec to use during monitoring.

Note

The video codec used during schedule recording is selected in the Schedule Configuration screen.

Configuring Camera Operations

In NSR, you can configure the following settings for camera operations.

- "Configuring Preset Positions" (page 46)
 You can configure preset positions for the camera.
- "Configuring Camera Tours" (page 47)
 You can configure camera tours for sequentially moving a camera to the pan, tilt, and zoom positions specified for presets.
- "Configuring Control Protocols for Analog Cameras" (page 50)

You can configure settings for controlling the pan, tilt, and zoom on an analog camera.

Configuring Preset Positions

This section describes configuring camera preset positions.

These settings are only available for cameras with a function for configuring preset positions. The items and buttons on the [Preset] tab are unavailable for cameras without a function for configuring preset positions.

Caution

For Sony 360-degree hemispheric-view network cameras, preset positions cannot be configured from the unit. Configure preset positions from the remote client.

Configuring a New Preset Position

1 Click [Device] at the top of the Configuration window.

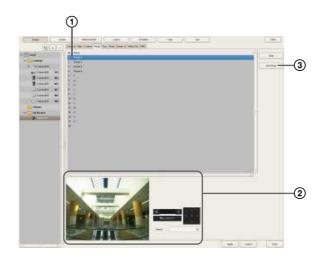


The Device Configuration screen appears.

2 Select the camera for which you want to configure the preset position, and click the [Preset] tab.

Images from the camera are displayed in the preview area.

3 Configure each item.



- ① Select the field of the position (position number) to create the preset, and enter the preset name.
- ② Confirm the images in the preview area while operating the pan, tilt, and zoom to adjust the camera position.

You can also select a preset, and move the camera to the preset position.

③ Click [Set preset].

The current camera position is stored as a preset.

When creating multiple presets, repeat Steps ① to

Note

The number of presets depends on the type of camera used. For details, refer to the manual for your camera.

4 When you have finished configuring the settings, click [Apply].

Changing Preset Settings

- 1 Select the camera for which you want to change the preset position, and click the [Preset] tab.
- **2** When changing the preset name, re-enter the preset name in the list at the top of the screen.
- **3** When changing the preset position, operate the pan, tilt, and zoom to adjust the camera position.
- 4 Click [Set preset].

The settings are changed.



Deleting Presets

- 1 Select the camera for which you want to delete the preset position, and click the [Preset] tab.
- 2 Select the preset to delete in the list at the top of the screen, and click [Clear].

The preset is deleted.

3 Click [Set Preset].

Configuring Camera Tours

You can configure camera tours for sequentially moving a camera to the pan, tilt, and zoom positions specified for presets.

Note

The tour function uses the built-in tour features on a camera. As a result, tour configuration information is stored on the camera.

Setting a New Tour

1 Click [Device] at the top of the Configuration window.

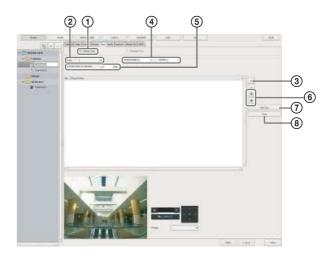


The Device Configuration screen appears.

2 Select the camera for which you want to configure the tour, and click the [Tour] tab.

Images from the camera are displayed in the preview area.

3 Configure each item.



- ① Select [Preset Tour].
- ② Select the number of the tour you want to configure.
- ③ Click + (Add), select the preset to add in the Select Preset dialog box that appears, and click [OK].



The preset is added to the list.

- (4) Enter the amount of time that the camera will remain at that position in [Stay Duration], and enter the speed (level) for moving the camera in [Speed]. For details on camera speeds (levels), refer to the user's guide for your camera.
- (5) In [Resume time on inactivity], configure the duration after which a tour resumes when it is interrupted by an operation.
- (6) When you want to change the preset order, select a preset in the list and click (Move preset of tour up one place) or (Move preset of tour down one place).
- (7) When you have finished configuring the presets, click [Set Tour].

8 Click [Test] to show and check the set tour.

Camera Tour Operation

In NSR, the camera tour function is achieved by configuring the same stay duration and speed for each position specified by a camera preset.

Notes

- The configured stay duration is applied to all preset positions, and the configured speed is applied to all preset movements.
- The camera tour appears with a name (P-1, P-2, ...) in the [Tour] list on the [Camera Control] pane of the Main screen.

Caution

Even if the values configured for the camera speed (level) are the same, actual speeds may differ depending on the models of camera. When configuring the settings of a tour, be sure to test the tour to confirm the operation.

Changing Settings

- 1 Select the camera(s) you want to change the registration details of on the Device Configuration screen.
- 2 Click the [Tour] tab, and modify the settings of the items you want to change.
- **3** Click [Set Tour].

The settings are changed.

Configuring Shadow Tours

For cameras equipped with the shadow tour function, you can record the motions of the camera, when operated remotely using a mouse or joystick, and configure them as a shadow tour.

You can configure up to four tour operations (S-1 to S-4).

Note

These tours use the tour function of the camera. As a result, the configured tour information is saved on the camera.

To Configure a New Tour

1 Click [Device] at the top of the Configuration screen.

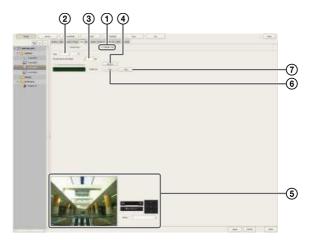


The Device Configuration screen appears.

2 Select the camera for which you want to configure a tour, and then click [Tour].

The camera image appears in the preview area.

3 Configure each of the setting items.



- ① Select [Shadow Tour].
- 2 Select the tour number you want to configure.
- 3 For [Resume time on inactivity], set the length of time to wait before resuming the tour after it is interrupted by an operation.
- 4 Click [Record] to start recording.
- (5) Adjust the camera position using the pan, tilt, and zoom operations while confirming the image in the preview area.

You can also select [Preset] to make the camera move to a preset position.

- 6 Click [Stop] to finish recording.
- Tclick [Test] to display and confirm the configured tour.

Notes

- Recording time may be limited depending on the camera specifications.
- If the recording time available on the camera is exceeded, recording will stop before you click [Stop].
- The shadow tour appears with a name (S-1to S-4) in the [Tour] list on the [Camera Control] pane of the Main screen.

Configuring Masks (Camera)

You can use the camera's built-in mask function to configure masks for hiding specific areas within images monitored by the camera. The mask function works in conjunction with the camera's pan, tilt, and zoom movements to constantly hide the specified areas. The mask function (camera) can only be used with Sony SNC-XX600 series (XX represents two letters) network cameras that support camera masks.

Notes

- A mask area configured for a camera with pan and tilt functions may shift when the camera is panned, tilted, or zoomed. When configuring the mask area, allow for approximately 10% (of the full image size) of additional space around the object you wish to mask. In addition, be sure to position the object you wish to mask in the center of the monitoring screen before configuring a mask area for a camera with pan and tilt functions.
- When configuring the mask settings from a client, be sure to preview the settings before configuring them.
- 1 Click [Device] at the top of the Configuration window.



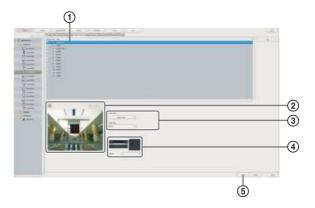
The Device Configuration screen appears.

2 Select the camera for which you want to configure the mask, and click the [Mask] tab.

Images from the camera are displayed in the preview area.

3 Configure each item.

For details on each of the items, refer to "Setting Items of [Mask (Camera)] Tab" (page 50).



- 1) Enter the name of the mask.
- 2 Select how the mask will be displayed.
- 3 Use these buttons to create the mask while checking the image in the preview area.
- 4 For a camera equipped with pan, tilt, and zoom functions, use these buttons to control the pan, tilt, and zoom of the camera, and to confirm whether the camera moves properly so as to hide the area you set.

You can also select a preset, and move the camera to the preset position.

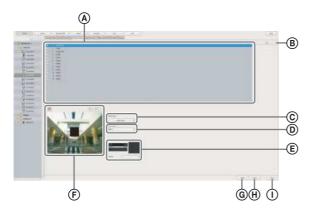
⑤ Click [Apply].The mask you created is added to the list.When creating multiple masks, repeat Steps ② to⑤.

Notes

- Setting changes will be applied immediately after you click [Apply].
- The number of masks that can be configured varies depending on the camera specifications.

Setting Items of [Mask (Camera)] Tab

After configuring each item, click [Apply].



(A) Mask List

This displays a list of the masks configured for the device selected in the tree structure.

B [Call] button

This can be used for cameras equipped with pan, tilt, and zoom functions.

Move the camera so that the configured mask is positioned in the center of the screen.

This button can only be used when the (Preview) button is clicked.

© Mask Type

Select how the mask will be displayed.

The mask types that can be selected vary depending on the camera.

If [Single color] is selected as the mask type, a list of color names appears.

E Pan, Tilt, and Zoom Toolbar

This is available when the camera is equipped with pan, tilt, and zoom functions.

Use the buttons to control the pan, tilt, and zoom of the camera, and check whether or not the camera moves correctly to hide a configured area.

You can also select a preset, and move the camera to the preset position.

Caution

- A mask area configured for a camera with pan, tilt, and zoom functions may shift when the camera is panned, tilted, or zoomed. When configuring the mask area, leave approximately 10% of additional space around the object you wish to mask.
- Images in the left and right or top and bottom areas of the preview image may not appear in some cases. In such cases, you can display the entire image by changing the resolution used for monitoring.

(F) Preview Area and Tool Buttons

Use these buttons to configure the mask while checking the image in the preview area.

(Create/Move Area)

Use this button to create a rectangular mask or move a mask by dragging with the mouse.

(Edit Points)

Use this button to edit points and create masks of complex quadrilateral shapes.

This button cannot be used for cameras equipped with pan, tilt, and zoom functions.

X (Remove Area)

Use this button to delete the selected mask.

(Refresh Image)

Use this button to refresh the still image that includes all the masks.

You can continue editing afterwards.

(Preview)

Use this button to display live images from the camera that includes the mask.

This allows you to confirm how the configured area will appear.

© Apply

This saves the settings.

(H) Cancel

This cancels the changes to the settings.

(I) Close

This closes the screen.

Configuring Control Protocols for Analog Cameras

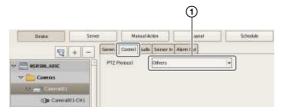
When an optional NSBK-EB05 is installed, configure the control protocols for the analog cameras to control the pan, tilt, and zoom on the cameras.

1 Click [Device] at the top of the Configuration window.

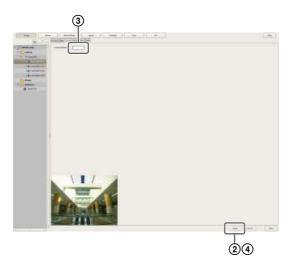


The Device Configuration screen appears.

2 Select the camera server or NSBK-EB05, and click the [Control] tab.



3 Configure each item.



- ① Select a protocol in accordance with the analog camera.
- ② Click [Apply].
- 3 Select [Control] for each channel, and configure the control number configured on the analog camera.
- 4 Click [Apply].
 Controlling the pan, tilt, and zoom on the analog camera becomes possible.

Notes

- Make sure that the serial port is configured according to the analog camera you are using. You can configure the serial port from the Setup Menu of the Administration Menu.
- The setting items that appear will differ depending on the registered camera server. Configure the settings as they appear for the device selected in the tree.

Configuring Network Camera Control

The pan and tilt speed is adjusted automatically according to the zoom level on Sony cameras. You can configure the pan and tilt speed on ONVIF-compliant cameras.

1 Click [Device] at the top of the Configuration window.



The Device Configuration screen appears.

2 Select the network camera, and click the [Control] tab.

For Sony cameras



For ONVIF-compliant cameras



3 For ONVIF-compliant cameras, adjust the pan and tilt speed using the slider, and click [Apply].

Configuring Audio

Configure settings for monitoring audio.

1 Click [Device] at the top of the Configuration window.

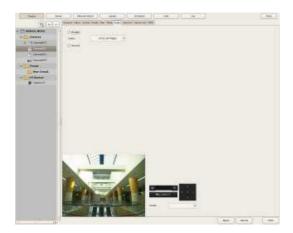


The Device Configuration screen appears.

2 Select the camera for which to enable audio, and click the [Audio] tab.



3 Configure each item, and click [Apply].



Enable

Select this check box to allow the NSR to receive audio from the camera.

To monitor audio, the microphone input on the camera must also be enabled.

Caution

If you clear the check box to disable audio and then play back a recording that was created while audio was enabled, the audio will not play back. To play back the audio in such cases, select the check box and re-enable audio first.

Codec

Specify the audio codec.

Record

Select this check box to record audio from the camera.

Settings Related to Monitoring

You can configure the following settings related to the monitor layout and camera images.

- "Configuring Monitor Layout Settings" (page 52) You can create multiple layouts according to your operating environment and objective.
- "Assigning Cameras to Monitor Frames" (page 58) You can assign a camera to each monitor frame.
- "Configuring Layout Tours" (page 58)
 You can sequentially switch the display of each display at a preset time.

Configuring Monitor Layout Settings

By setting the number and size of camera monitor frames, you can create a layout according to your operating environment and objective.

Notes

- When you register a camera, the layouts 2×2, 3×3, and 4×4 are created as the default layouts automatically. The size of the monitor frame cannot be changed for the default layout.
- Created layouts are saved on the NSR they are created on. For example, layouts created on a remote client (RealShot Manager Advanced Client Software) are saved on the remote client.

Creating a New Layout

1 Click [Layout] at the top of the Configuration window.



The Layout Configuration screen appears.

2 Select "Custom Layout A" or "Custom Layout B" from the [Layout] tree, and click + (Add).



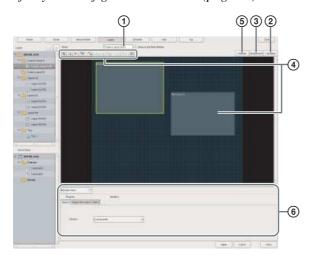
Note

"Custom Layout A" and "Custom Layout B" are preset layout groups. Use them according to your objective.

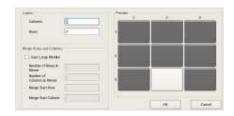
The area on the left side changes to the display for setting the layout.

3 Configure each item.

For details on each of the items, refer to "Setting Items of Layout Configuration Screen" (page 54).

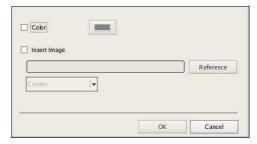


- ① Enter a name for the layout, as necessary. You can enter up to 32 characters.
- ② Set the number and layout of monitor frames. Click [Template], set each item in the Insert Template dialog box that appears, and click [OK].



For details on each of the items, refer to "Setting Items of Insert Template Dialog Box" (page 57)

③ Import an image such as a map or floor plan for the background, as necessary. Click [Background], set each item in the Insert Background Image dialog box that appears, and click [OK].



For details on each of the items, refer to "Setting Items of Insert Background Image Dialog Box" (page 57).

- 4 Move the monitor frames to determine their positions, as necessary.
 Move the monitor frames by dragging them with the mouse.
- (5) Set a hotspot monitor, as necessary.

 Click to select one monitor frame to specify as the hotspot monitor, and click [Hotspot].

 A hotspot monitor displays the same images as the camera monitor frame currently selected on the Main screen. To make images from the camera monitor frame easier to see, the hotspot monitor is specified to be larger than a regular camera monitor frame.
- **(6)** Configure each tab of [Property], as necessary. For details on the setting items of each tab, refer to "Setting Items of Property" (page 55).
- **4** After configuring each item, click [Apply]. The layout is created.

Changing Registration Details

- 1 Select the layout you want to change the registration details of on the Layout Configuration screen.
- **2** Reconfigure each item.
- **3** Click [Apply].

 The settings are changed.

Deleting Layouts

Note

Default layouts cannot be deleted.

Select the layout you want to delete from the [Layout] tree on the Layout Configuration screen, and click — (Delete).

A confirmation message appears.

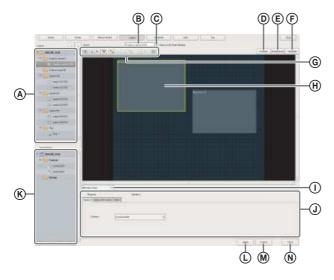
2 Click [Yes].

The layout is deleted.

Setting Items of Layout Configuration Screen

This screen is displayed by clicking [Layout] in the Configuration window.

After changing the settings, click [Apply] to save your settings.



A [Layout] Tree

This displays a list of the configured layouts in a tree structure

Selecting a layout from the tree displays the setting details in the area on the right.

+ (Add)

This creates a new layout.

Select "Custom Layout A" or "Custom Layout B," and click this button.

Note

"Custom Layout A" and "Custom Layout B" are preset layout groups. Use them according to your objective.

(Delete)

This deletes a layout.

Select the layout you want to delete from the tree, and click this button to delete the layout.



Default layouts cannot be deleted.

B Name

Enter the name of the layout. It can be up to 32 characters long.

© Show on the Main Window

Select the check box to enable this layout to be displayed on the Main screen.

D Hotspot

Set the hotspot monitor.

Click to select one monitor frame to specify as the hotspot monitor, and click this button.

If you set a hotspot monitor, when you click a certain monitor frame or an alarm is generated, images are displayed on the monitor frame set as the hotspot monitor. A hotspot monitor displays the same images as the camera monitor frame currently selected on the Main screen. To make images from the camera monitor frame easier to see, the hotspot monitor is specified to be larger than a regular camera monitor frame.

E Background

This displays the Insert Background Image dialog box (page 57) for importing an image such as a map or floor plan for the background.

F Template

This displays the Insert Template dialog box (page 57) for setting the number and layout of monitor frames.

© Tool Buttons

(Insert Image)

Use this button to display the Insert Image dialog box (page 57) for inserting an image.

(Insert Image Map)

Use this button to insert an image map.

You can assign an action to a specific area in the image background using an image map. When you click within this area, the assigned action is activated.

X (Remove Item)

Use this button to remove the selected item.

(Remove Assigned Cameras)

Use this button to remove the cameras assigned to the selected monitor frame.

(Bring to Front)

Use this button to move the selected image in front of all others.

(Bring Forward)

Use this button to move the selected image forward.

(Send Backward)

Use this button to move the selected image backward.



(Send to Back)

Use this button to move the selected image behind all others.



(Flip Horizontally)

Use this button to flip the selected image horizontally.



(Rotate)

Use this button to spin the selected image 90 degrees counterclockwise.



(Grid)

Use this button to display grid lines to assist in placing monitor frames and images.

(H) Monitor Frame

A monitor frame is created by dragging to any size in the configuration area of the layout and using a template.

This is used to monitor live images and play back recordings.

For each monitor frame, you can specify the camera that displays images.

By configuring a large monitor frame as a hotspot monitor, you can display a larger version of the same image that appears in the currently selected monitor frame.

① Actual Size/Window Size

When you are editing a layout and want to see the whole layout, select [Window Size].

When you want to confirm a layout at actual scale, select [Actual Size].

① Property Tabs

This displays tabs for configuring the advanced settings of the monitor frames, images, and image map. For details on the setting items of each tab, refer to "Setting Items of Property" (page 55).

(K) [Device] Tree

This displays a list of the devices registered to NSR in a tree structure.

When you are creating a layout, you can assign cameras by dragging and dropping them from the [Device] tree to monitor frames.

(L) Apply

This saves the settings.

M Cancel

This cancels the changes to the settings.

(N) Close

This closes the screen.

Setting Items of Property

■ When a monitor frame is selected:

• [General] Tab

Select the camera to assign to the monitor frame.

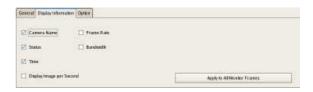


Camera

Select the camera to assign to the monitor frame.

• [Display Information] Tab

Select the check boxes for the items to display on the monitor frame.



Camera Name

This displays the name of the camera set on the Device Configuration window.

Status

This displays error messages, such as "NO CONNECTION."

This displays the current time.

Display Image per Second

This displays the speed at which camera images on the display are refreshed.

Frame Rate

This displays the import speed for camera images.

Bandwidth

This displays the amount of bandwidth to use for transferring images over a network connection.

Apply to All Monitor Frames

This applies the items with check marks to all monitor frames.

[Option] Tab

Select how the image size should appear when the size of the monitor frame changes.



Scale to Monitor Frame

Images are enlarged or reduced to fit the monitor frame.

Keep Aspect Ratio

This maintains the image aspect ratio, regardless of the size of the monitor frame.

Restrict the display image per second

This reduces the processing load on the system by limiting the display to only I-frames.

This function is only available for cameras on which MPEG4/H.264 has been selected for the codec.

Apply to All Monitor Frames

This applies the items with check marks to all monitor frames.

■When an image or image map is selected:

• [General] Tab

Configure settings related to the inserted image or image map.



File Name

Click [Reference], and specify the image file to insert.

Reload Original Size

This displays the image at the original size.

Transparent Color

This option allows you to set one color in the image as a transparent color.

Select the check box, click within the box, and specify the color to make transparent in the dialog box that appears.

[Action] Tab

Assign actions to the selected image or image map. If an action is assigned to the selected image or image map, clicking the mouse within the image performs the set action.



Click Action

Select the check box to enable an action, and select the action to perform.

• [Camera Select] Tab

Set the function for displaying an image of the specified camera in the specified monitor frame when you select the image or image map.



Camera Select

Select the check box to enable this function, and configure the following items.

Server

Select the remote server.

This item is displayed in the case of a client.

Camera

Select the camera to assign to the monitor frame.

Monitor Frame

Select the monitor frame to display the images of the camera.

[Highlight] Tab

Configure settings for the highlight function that displays flashing red frames around images in the layout during specified conditions.



Enable

Select this check box to enable the highlight function.

Alarm trigger only

Select this check box to highlight icons only when an alarm occurs.

Highlight OFF timing

Select the timing at which highlight display ends.

Alarm/Event trigger OFF

Highlight display ends when the alarm or event trigger ends.

Icon Click

Highlight display ends when you click the image.

Select trigger

Displays the [Select Trigger] dialog box (page 58) used for selecting triggers with which to initiate highlight display.

Trigger summary

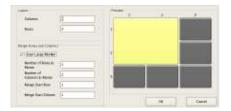
Displays a list of triggers selected in the [Select trigger] dialog box (page 58).

Setting Items of Insert Template Dialog Box

This dialog box creates a new layout.

It is displayed by clicking [Template] on the Layout Configuration screen (page 54).

After configuring each item, click [OK].



Layout

Set the number of camera monitor frames you want to display on the screen by specifying the number of columns and rows.

Columns

For the number of columns, enter the number of monitor frames to align horizontally.

Rows

For the number of rows, enter the number of monitor frames to align vertically.

Merge Rows and Columns

Select the check box when you set a screen that is larger than a regular monitor frame such as when using the screen as a hotspot monitor, and specify the rows and columns to preview while checking the preview area.

OK

This creates a layout in accordance with the set values, and closes the dialog box.

Cancel

This cancels your settings, and closes the dialog box.

Setting Items of Insert Background Image Dialog Box

This dialog box imports an image such as a map or floor plan for the background.

It is displayed by clicking [Background] on the Layout Configuration screen (page 54).

After configuring each item, click [OK].



Color

Select the check box to configure a color for the background.

If you select this check box, click within the box, and specify a color in the dialog box that appears.

Insert Image

Select the check box to insert an image for the background. If you select this check box, click [Reference], and specify the image data to insert.

Stretch

This stretches the image to fill the entire background.

Center

This displays the image in the center of the background.

OK

This inserts an image in accordance with the set values, and closes the dialog box.

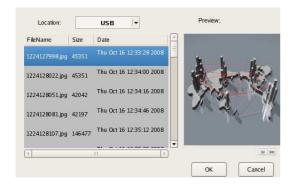
Cancel

This cancels your settings, and closes the dialog box.

Setting Items of Insert Image Dialog Box

This dialog box allows you to set the image file to insert. It is displayed by clicking on the Layout Configuration screen (page 54).

After configuring each item, click [OK].



Location

Select the media containing the image file, and select the image file.

When you select the media, a list of the stored image files appears.

Preview

This displays a preview of the image file selected in the list.

OK

This inserts the selected image, and closes the dialog box.

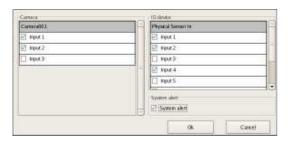
Cancel

This cancels your settings, and closes the dialog box.

Setting Items of Select trigger Dialog Box

Select the triggers with which to initiate highlight display. This dialog box appears when you click [Select trigger] in the [Highlight] tab (page 56).

Select the check boxes for triggers that will initiate highlight display, and click [OK].



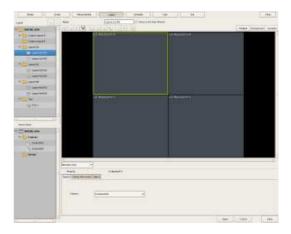
Assigning Cameras to Monitor Frames

Assign a camera for displaying images to each monitor frame.

- 1 Select a layout from the [Layout] tree on the Layout Configuration screen.
- **2** Assign the cameras to monitor frames.

The following methods are available for assigning cameras.

- Drag and drop a camera from the [Device] tree to a monitor frame.
- Select a monitor frame, and select a camera from the [General] tab at the bottom of the screen.



Configuring Layout Tours

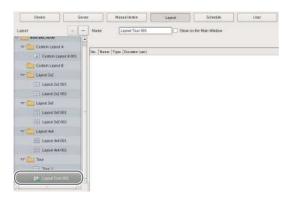
You can set a layout tour for sequentially switching the display shown on the display at a preset time during monitoring.

Creating a New Layout Tour

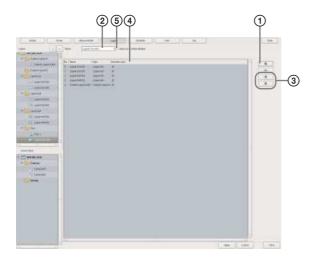
1 Select "Tour" from the [Layout] tree on the Layout Configuration screen, and click + (Add).



A layout tour is added to the tree.



2 Create a layout tour.





The layout is added to the list on the Layout Tour screen.

In the same way, add other layouts to display in the tour to the list.

- 2 Enter a name for the tour.
- (3) When you want to change the display order, select a layout in the list and click (Move layout of tour up one place) or (Move layout of tour down one place).

The layouts are displayed from the top of the list in order.

- 4 When you want to change the duration, click the box and enter the number of seconds.
- (5) Select the check box to enable this layout tour to be specified on the main window.
- **3** After configuring each item, click [Apply].

Changing Registration Details

- Select the layout you want to change the registration details of from the [Layout] tree on the Layout Configuration screen.
- **2** Reconfigure each item.
- **3** Click [Apply].

The settings are changed.

Deleting Layout Tours

1 Select the layout tour you want to delete from the [Layout] tree on the Layout Configuration screen, and click [-] (Delete).

A confirmation message appears.

2 Click [Yes].

The layout tour is deleted.

Configuring Motion Detection Settings

You can configure the motion detection and object detection functions for cameras on the NSR.

About Motion Detection and Object Detection

What is Motion Detection?

A function for detecting moving objects (such as people or cars).

What is Object Detection?

This function for detecting when a moving object has stopped (unattended) or when an object has moved from its original position (removed).

Caution

- When using the motion detection function, be sure to test it before operation.
- Object detection requires at least approximately 40 second initialization period before starting. Also, moving objects that have remained still for at least approximately 40 seconds are regarded as unattended.

Using the Motion Detection Function of the Camera (VMD (Camera))

To use the motion and object detection functions by camera (VMD (camera)), use the procedure below to configure the VMD (camera) pin, and motion detection and object detection areas.

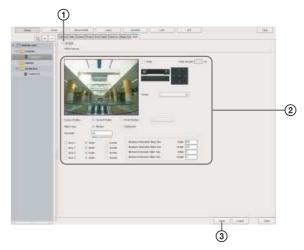
The setting items for the motion detection and object detection areas differ depending on the camera you are using.

1 Click [Device] at the top of the Configuration window.



The Device Configuration screen appears.

2 Configure each item on the [VMD] tab, and configure the motion detection area.



For details on each of the items, refer to "Setting Items of [VMD] Tab (VMD (Camera))" (page 60).

- ① Select the [Enable] check box.
- ② Configure the motion detection area while checking the preview.
- 3 Click [Apply].

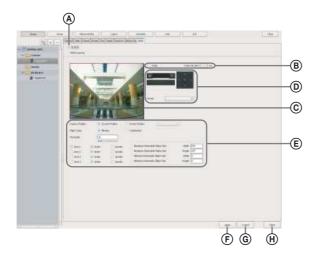
The motion detection area is configured.

Setting Items of [VMD] Tab (VMD (Camera))

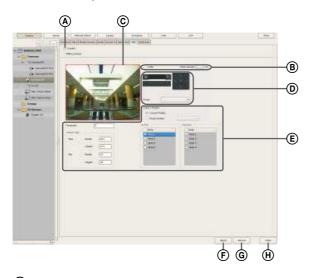
This tab is displayed by clicking [Device] in the Configuration window, and selecting the VMD tab. After changing the settings, click [Apply] to save your settings.

Notes

- For the NSBK-EB05, [VMD] appears instead of [VMD (Camera)] in the [VMD] tab.
- The setting item **(D)** differs depending on the camera you are using.



For the SNC-XX600 series (XX represents two letters)



A Enable

Select the check box to enable the motion detection function.

(B) Pulse

Select the check box when you wish to specify a pulse duration and input a pulse.

If you select this, enter a value for [Pulse Duration].

Pulse Duration

Enter the duration in milliseconds to sustain pulse input from the VMD (camera) pin once it is turned on.

© Preview

This displays the images from the camera.
Use the following procedure to create an area for detecting

• Click and drag the mouse over the image to create a motion detection area (red frame).

By dragging each edge of the area, you can change the size of the area.



For a camera equipped with pan, tilt, and zoom functions, use this to change the direction and zoom of the camera when configuring an area.

E Advanced settings

Configure advanced settings, as necessary.

Camera Position

Select the camera position to configure.

Current Position

Select this to process the same area on the screen, regardless of the direction the camera is facing.

Preset Position

Select this option when configuring settings for each preset.

If you select this, select a preset from the drop-down menu, and move the camera to that preset position. When the camera is moved to the preset position you specified, the settings for that position are enabled. The settings for one preset position cannot be used for another preset position.

Object Type

Select [Moving] or [Unattended].

The following items differ for [Moving] and [Unattended].

You can only configure one of [Moving] and [Unattended] within each screen.

This setting cannot be changed for the SNC-XX600 series (XX represents two letters). It will be fixed at [Moving].

When Moving:

Threshold

Enter a value for the threshold for motion detection. Lowering the threshold value increases sensitivity.

When Unattended:

Detection Time

Enter from 40 to 43200 (seconds) for the time from when an object stops moving until the object is detected as unattended and an alarm is triggered. The countdown is reset if the object starts moving again during the specified duration.

Caution

After an unattended object is detected (after the alarm occurs), another unattended object may not be detected for up to one minute.

Area 1 to Area 4

Select Active or Inactive for each detection area. For the SNC-XX600 series (XX represents two letters), select whether each area is enabled or disabled. The number of areas that can be configured varies depending on the camera model.

Minimum Detectable Object Size

Enter a minimum size for the object to be detected. Alternatively, configure the size by using the mouse to drag the minimum detectable object size setting frame (light blue). You can change the size by dragging each of the edges. The setting frame cannot be deleted.

Maximum Detectable Object Size

Enter a maximum size for the object to be detected. Alternatively, configure the size by using the mouse to drag the maximum detectable object size setting frame (blue). You can change the size by dragging each of the edges. The setting frame cannot be deleted.

F Apply

This saves the settings.

G Cancel

This cancels the changes to the settings.

(H) Close

This closes the screen.

Configuring Camera Tamper Detection and Audio Detection

Cameras equipped with the tamper detection function can be configured to detect tampering activity, such as a forced change in camera orientation or the application of spray paint to the camera lens. For cameras equipped with a sound pressure detection function, you can also configure settings for a function that allows you to detect when a sound that exceeds a specific level is picked up by a microphone connected to the camera.

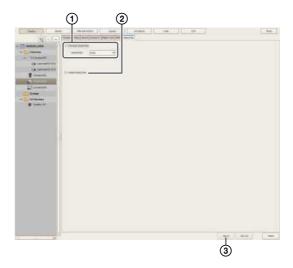
Configure this function when you want to use the alarm output upon detection of camera tampering activity as a coordinating alarm for other actions.

1 Click [Device] at the top of the Configuration screen.



The Device Configuration screen appears.

- 2 Select the camera from the [Device] tree structure on the left side of the screen.
- **3** On the [Detection] tab, configure each of the setting items.



① To configure the tamper detection function, select the [Tamper Detection] check box, and specify the sensitivity for detecting tampering activity on the camera.

You can select from [High], [Middle], or [Low].

② To configure the sound pressure detection function on the camera, select the [Audio detection] check box.

This item does not appear for Sony 360-degree hemispheric-view network cameras.

③ Click [Apply].

The camera tamper detection function is configured.

Configuring Edge Storage Settings

If the camera is equipped with an Edge Storage function, and you can configure settings for downloading the images stored on the camera's Edge Storage.

When this function is enabled and a video loss occurs during a recording schedule, video is recorded to the camera's Edge Storage, allowing you to retrieve the data later after the system is restored.

Note

You may need to adjust video settings to use the Edge Storage function. For details, refer to the release notes for the camera.

1 Click [Device] at the top of the Configuration screen.



The Device Configuration screen appears.

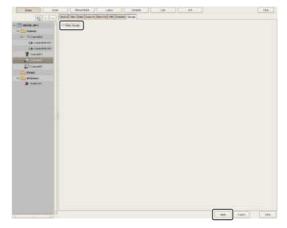
2 Select the camera from the [Device] tree structure on the left side of the screen.

You can also select multiple cameras at once by holding down the Shift key or Ctrl key while selecting.

Note

If you selected multiple cameras and one or more of the cameras do not support Edge Storage, the [Storage] tab will not appear.

3 On the [Storage] tab, select the [Edge Storage] check box, and click [Apply].



The Edge Storage function is configured.

Configuring Settings Related to Storage

You can configure settings for storage in the storage location for image data and audio data of cameras.

You can configure up to 32 storage items, and configure settings such as the maximum size of the recording file for each storage item.

In addition, there are the following modes for storage, and you can classify and save recording data.

• [Record Type] Mode

You can specify storage for each recording type, such as schedule recording and alarm recording.

• [Camera] Mode

You can specify storage for saving recording data for each camera.

Configuring Storage Settings

Add new storage, and specify the recording data to save to the storage.

Storage can be added as individual logical volumes.

Adding New Storage

1 Click [Server] at the top of the Configuration window.



The Server Configuration screen appears.

2 Select the server for which you want to set the storage from the [Server] tree on the left of the screen.



3 Click + (Add Storage) on the right of the list on the [Storage] Tab.



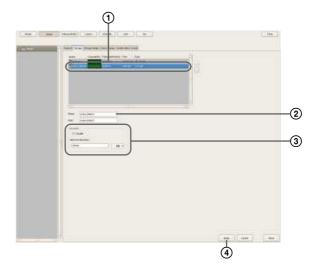
The Add Storage dialog box appears.

4 Select the location to add as storage, and click [OK].



The storage is added to the list.

5 Configure each item, and click [Apply].



For details on each of the items, refer to "Setting Items of the [Storage] Tab" (page 65).

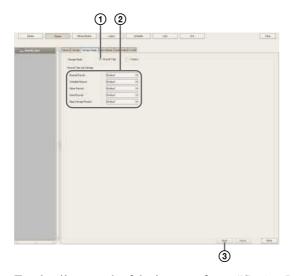
- ① Select the configured storage.
- 2 Enter a name for the storage.
- 3 Configure the settings related to overwriting data, as necessary.
- (4) Click [Apply]. The storage is added.

|||||||| Chapter 4 Application Settings

Configuring Storage for Each Recording Type ([Record Type] Mode)

You can specify storage for each recording type, such as manual recording, schedule recording, and alarm recording.

- 1 Select the server for which you want to configure storage from the [Server] tree, and click the [Storage Assign] tab.
- **2** Configure each item, and click [Apply].



For details on each of the items, refer to "Setting Items of [Storage Assign] Tab" (page 66).

- ① Select [Record Type].
- ② Select storage for each recording type.
- ③ Click [Apply]. Storage is set for each recording data.

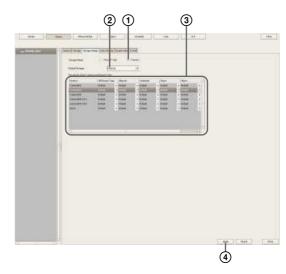
Configuring Storage for Each Camera ([Camera] Mode)

You can specify storage for saving recording data for each camera.

It is possible to save all recording data to one storage, and specify storage for saving for each recording type.

1 Select the server for which you want to configure storage from the [Server] tree, and click the [Storage Assign] tab.

2 Configure each item, and click [Apply].



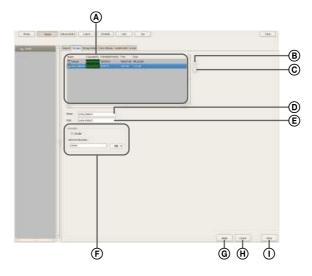
For details on each of the items, refer to "Setting Items of [Storage Assign] Tab" (page 66).

- ① Select [Camera].
- ② Select the default storage.
- 3 Select storage for each camera.
- (4) Click [Apply].

 Storage is set for each recording data.

Setting Items of the [Storage] Tab

This tab is displayed by clicking [Server] in the Configuration window, and clicking the [Storage] tab. After configuring each item, click [Apply].



A Storage List

This displays a list of the storage configured for the server selected in the [Server] tree.

Name

This displays the name of the storage.

Capacity (%)

This displays the capacity of the storage.

Free (%)

This displays the amount of free space as a percentage.

Free

This displays the amount of free space.

Total

This displays the total size of this storage.

B + (Add Storage)

This adds new storage.

© - (Delete Storage)

This deletes the storage selected in the list.

Caution

If you delete storage, all of the internal data will be lost.

D Name

Enter a name for the storage selected in the list.

(E) Path

This displays a location (path) for saving the recording data.

This item cannot be changed.

(F) Overwrite

Set this option to delete data from the oldest, regardless of how many days it has been stored, to ensure storage space is available.

Enable

Select the check box to enable the data overwrite function.

The data is deleted automatically beginning with files within the oldest record whenever the amount of free space of the storage will fall below a specified size.

Not to be less than

Enter the minimum limit for free space as a percentage or in gigabytes.

© Apply

This saves the settings.

(H) Cancel

This cancels the changes to the settings.

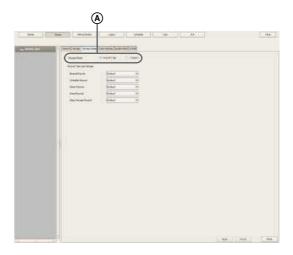
(I) Close

This closes the screen.

Setting Items of [Storage Assign] Tab

This tab is displayed by clicking [Server] in the Configuration window, and clicking the [Storage Assign] tab.

After configuring each item, click [Apply].



Storage Mode

Select the method for specifying recording data for saving to storage.

The setting items vary depending on this selection.

Record Type

Select this to specify storage for each recording type, such as schedule recording and alarm recording.

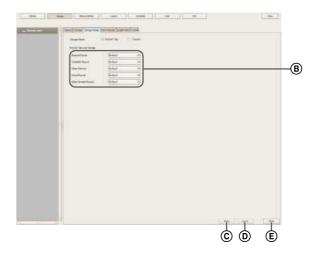
Camera

Select this to specify storage for saving recording data for each camera.

■To assign storage for each recording type

B Record Type and Storage

Select storage for each recording type.



Manual Record

Select storage for saving for manual recording.

Schedule Record

Select storage for saving for schedule recording.

Alarm Record

Select storage for saving for alarm recording.

Event Record

Select storage for saving for event recording.

Edge Storage Record

Select storage for saving the recorded data retrieved from the camera's Edge Storage.

© Apply

This saves the settings.

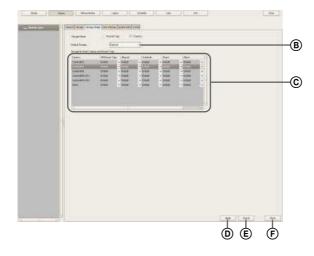
① Cancel

This cancels the changes to the settings.

(E) Close

This closes the screen.

■To assign storage for each camera



B Default Storage

Select the default save location for recording data.

© Storage for Each Camera and Record Type

Specify storage for each camera and recording type. Click the setting item, and select from the list that appears.

Camera

This displays a list of the cameras registered to NSR. This item cannot be changed.

All Record Type

Select storage for when recording the recording data of all recording types to one storage.

When specifying storage for each recording type, select [Select Each].

Manual Record

Select storage for saving for manual recording.

Schedule Record

Select storage for saving for schedule recording.

Event Record

Select storage for saving for event recording.

Alarm Record

Select storage for saving for alarm recording.

Edge Storage

Select storage for saving the recorded data retrieved from the camera's Edge Storage.

Apply

This saves the settings.

E Cancel

This cancels the changes to the settings.

(F) Close

This closes the screen.

Configuring Settings Related to Deleting Recording Data

There are the following methods for deleting recording data saved to storage.

• Data Overwriting (page 67)

Delete data from the oldest automatically, regardless of how many days it has been stored, to ensure storage space is always available.

• Cleanup (page 68)

Set the number of days to store recording data, and automatically delete data that exceeds that number of days.

• Deleting Manually (page 112)

Specify recording data for deletion manually.

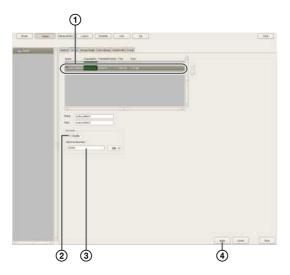
Data Overwriting

Delete data from the oldest automatically, regardless of how many days it has been stored, to ensure storage space is always available. You can set overwriting for each recording location.

Caution

• Estimate enough storage space to record the images you want to save before you configure the minimum value. However, if the minimum value is set low, the performance may be reduced. We recommend setting the value to 20% or more when an optional NSBK-DH05 will be installed, and to 10% or more when one will not be installed.

- When the data overwrite function is enabled and a file currently being played back falls under the conditions for deletion, playback of that file stops and the file is deleted.
- If data overwriting is performed for the recording data of a normal recording, multiple files within one record will be deleted at one time, which may result in only the recording of a certain camera being deleted at one time. Configuring the following setting allows you to more uniformly delete the recording data of multiple cameras.
 - In the recurrent schedule of the normal recording, insert at least a 1-second break each day.
 Example: Start time: 00:00:00 End time: 23:59:59
- 1 Select the server for which you want to configure storage from the [Server] tree, and click the [Storage] tab.
- **2** Configure each item, and click [Apply].



- ① Select the storage you want to configure.
- ② Select the [Enable] check box.
- 3 Enter the minimum limit for free space as a percentage or in gigabytes.
- (4) Click [Apply].

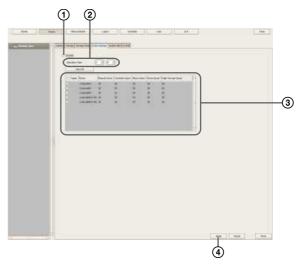
 Overwriting is configured.

Cleanup

To ensure storage space is available, set the number of days to store recording data, and automatically delete data that exceeds that number of days. You can configure the same number of storage days for all cameras, or configure the settings separately for each camera.

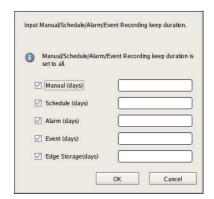
1 Select the server for which you want to configure storage from the [Server] tree.

2 Configure each item on the [Data Cleanup] tab, and click [Apply].



For details on each of the items, refer to "Setting Items of the [Data Cleanup] Tab" (page 69).

- ① Select the [Enable] check box.
- 2 Configure the time for performing the cleanup.
- ③ Select the check boxes of the cameras to be target for the cleanup, and configure the number of days to store each type of recording data. To configure the same settings for all cameras, click [Input All] and configure the number of storage days in the Input All dialog box that appears.

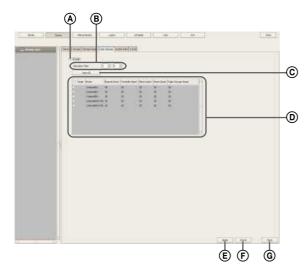


4 Click [Apply].
The cleanup is configured.

Setting Items of the [Data Cleanup] Tab

This tab is displayed by clicking [Server] in the Configuration window, and clicking the [Data Cleanup] tab.

After configuring each item, click [Apply].



A Enable

Select the check box to enable the cleanup function.

B Execution Time

Configure the time for executing the cleanup.

© Input All

Display the Input All dialog box for configuring the same settings for all cameras.

Cleanup Setting List

This displays a list of the cleanup settings.

Target

Select the check boxes of the cameras to be the targets for the cleanup.

Name

This displays a list of the names of the cameras registered to NSR.

Manual (days)

Enter the number of storage days for manual recording.

Schedule (days)

Enter the number of storage days for schedule recording.

Alarm (days)

Enter the number of storage days for alarm recording.

Event (days)

Enter the number of storage days for event recording.

Edge Storage (days)

Enter the number of storage days for Edge Storage recording.

E Apply

This saves the settings.

(F) Cancel

This cancels the changes to the settings.

© Close

This closes the screen.

Configuring Recording Schedules

You can configure a recording schedule for each camera to perform recording at regular intervals, and start recording when an alarm or event occurs.

There are the following types of schedule.

Schedule Recording (Normal Recording)
 This records images from cameras according to the set schedule.

· Alarm Recording

This begins recording only when an alarm occurs within the time set for the schedule.

• Event Recording

This begins recording only when an event occurs within the time set for the schedule.

You can use the following procedures to configuring schedules.

• Configuring Schedules Manually (page 70)
You can manually configure the durations for performing schedule recording, alarm recording, and event recording. The duration setting methods are "recurrent schedule," which allows you to repeat schedules weekly, and "date & time schedule," which allows you to specify specific dates and times to run schedules.

• Configuring Alarm Recording/Event Recording (page 72)

You can configure an alarm recording/event recording to begin recording only when an alarm or event occurs within the duration configured for the schedule.

Caution

Before you set alarm recording or event recording, configure the inputs that will be the alarm triggers and the motion detection function. For the setting procedure, refer to "Configuring Motion Detection Settings" (page 60) and "Configuring Sensor Inputs" (page 77).

Record Segmenting in Continuous Longterm Recording

When you record continuously over a long period (such as from 00:00 to 24:00 every day for a long time), the number of configuration files for a record may exceed 10,000¹). When this happens, the record is segmented, and subsequent data is recorded as a new record. If a record is

segmented, it will be displayed as a different record in searches and the like.

1) The number 10,000 is the total number of files since recording started. It includes files that are deleted with the cleanup and data overwrite functions.

The time period segmented will differ depending on the frame rate and resolution.

Example:

	Codec: Resolution: Frame rate: Image quality:	JPEG VGA 10 fps Level 5
Time until segmentation	Approx. 19 days	

When recording continuously over long periods, we recommend segmenting the record by setting a recording schedule that inserts a 1-second recording break each day. For details, refer to "Configuring Schedules Manually" (page 70).

Configuring Schedules Manually

You can manually configure the durations for performing schedule recording, alarm recording, and event recording.

Note

For details on settings such as the codec and frame rate for images captured from the camera during schedule recording, alarm recording, or event recording, refer to "Configuring Camera Video Settings" (page 42).

Configuring Recurrent Schedules

You can configure a recurrent schedule to repeat a schedule weekly.

Select the camera for which you want to configure the schedule from the [Schedule] tree of the Schedule screen.

You can also select multiple cameras at once by holding down the Shift key or Ctrl key while selecting. To display only the schedules that are common to all the cameras selected in the left camera tree, select the [Common Schedule Display] check box.



2 Click [Recurrent] to switch to recurrent view, and click [New Record].

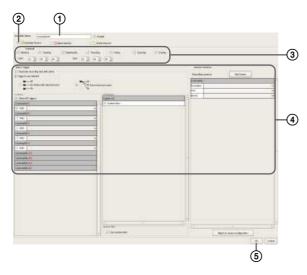


The New Record dialog box appears.

3 Configure each item, and click [OK].

The setting items differ depending on the type of schedule.

Screen example: When schedule recording



For details on each of the items, refer to "Setting Items of New Record Dialog Box" (page 75).

- 1) Enter a name for the schedule.
- ② Select the type of schedule.
- ③ Select the check boxes for the days you want to run the schedule, and configure a start time and end time for the schedule.
- (4) Configure each item, as necessary. For details on the setting procedure for alarm recording and event recording, refer to "Configuring Alarm Recording and Event Recording" (page 72).
- (5) Click [OK]. The schedule is created.
- **4** Click [Apply].

The schedule is saved.

For details on how to view the schedule, refer to "Setting Items of Schedule Screen" (page 74).

Configuring a Schedule for a Specific Date and Time

You can configure a schedule for a specific date and time to specify a date and time to run a schedule. The only difference from a recurrent schedule is the procedure for specifying a start and end date and time.

1 Select the camera for which you want to configure the schedule from the [Schedule] tree of the Schedule screen.

You can also select multiple cameras at once by holding down the Shift key or Ctrl key while selecting.



2 Click [Date Time] to switch to date and time view, and click [New Record].

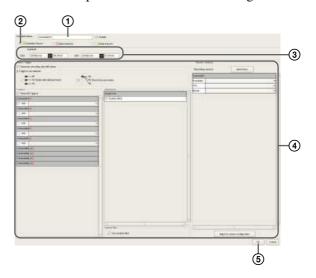


The New Record dialog box appears.

3 Configure each item, and click [OK].

The setting items differ depending on the type of schedule.

Screen example: When schedule recording



For details on each of the items, refer to "Setting Items of New Record Dialog Box" (page 75).

- 1) Enter a name for the schedule.
- ② Select the type of schedule.
- 3 Configure the start date and time and end date and time to apply the schedule.
- (4) Configure each item, as necessary. For details on the setting procedure for alarm recording and event recording, refer to "Configuring Alarm Recording and Event Recording" (page 72).
- (5) Click [OK]. The schedule is created.
- 4 Click [Apply].

The schedule is saved.

For details on how to view the schedule, refer to "Setting Items of Schedule Screen" (page 74).

Configuring Alarm Recording and Event Recording

You can configure alarm recording or event recording to begin recording only when an alarm occurs within the time set for the schedule.

For details, refer to "About Relationship Between Sensor and Camera when Alarm Occurs" (page 73).

1 Select the camera for which you want to configure the schedule from the tree in the Schedule screen.

You can also select multiple cameras at once by holding down the Shift key or Ctrl key while selecting.



2 Click [Recurrent] or [Date Time] to switch to the view of the schedule you want to configure, and click [New Record].

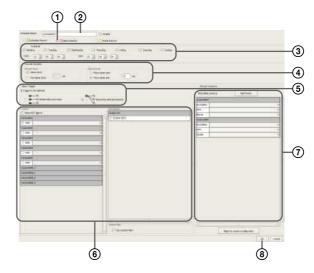


The New Record dialog box appears.

3 Configure each item, and click [OK].

The settings items differ depending on the type of schedule.

Screen Example: When alarm recording (recurrent schedule)



For details on each of the items, refer to "Setting Items of New Record Dialog Box" (page 75).

- ① Select [Alarm Record] or [Event Record].
- ② Enter a name for the schedule.
- 3 Configure the days and time to run the schedule, or configure the period to run the schedule.
- Specify a condition to start recording and a condition to end recording, and configure the recording duration.
- (5) In the case of event recording, select [Record by each event] or [Record by selected event].
 - When [Record by each event] is selected, the input pin of the selected camera itself is the trigger to begin recording.
 - When [Record by selected event] is selected, all set input pins are triggers, and recording begins on all selected cameras.

For details, refer to "About Relationship Between Sensor and Camera when Alarm Occurs" (page 73).

- (6) When [Record by each event] is selected, configure the input pin of the camera or I/O device that will be the trigger for alarm recording or event recording.
- 7 Configure the camera to record images.
- (a) Click [OK]. The schedule is created.
- 4 Click [Apply].

The schedule is saved.

For details on how to view the schedule, refer to "Setting Items of Schedule Screen" (page 74).

Changing Settings

- 1 Select the camera you want to change the settings of from the [Schedule] tree on the Schedule Configuration screen.
- **2** Switch to recurrent view or date view.
- 3 Select the time slot (recurrent view) or schedule (date view) for which you want to change the settings, and click [Edit].

The Schedule Configuration dialog box appears.

4 Reconfigure each item.

For details on each of the items, refer to "Setting Items of New Record Dialog Box" (page 75).

5 Click [Apply].

The settings are saved.

Deleting a Schedule

- 1 Select the schedule you want to delete from the [Schedule] tree on the Schedule Configuration screen.
- **2** Click [Remove].

A confirmation message appears.

3 Click [Yes].

The schedule is deleted.

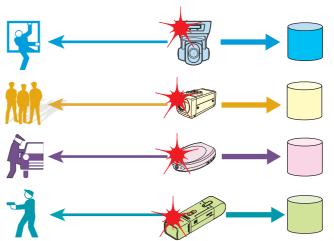
About Relationship Between Sensor and Camera when Alarm Occurs

When [Record by each event]:

The input pin of the selected camera itself triggers the beginning of recording.

For example, if camera A and camera B are selected as the cameras for recording images, and motion detection of camera A and sensor input of camera B are configured as the triggers, recording begins on camera A when motion detection occurs for camera A, and recording begins on camera B when sensor input turns on for camera B.

Recording begins on a camera whose input pin turns on.

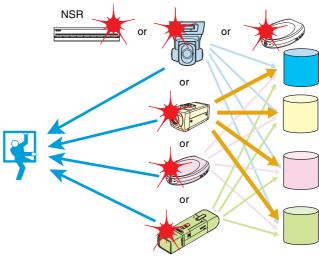


When [Record by selected event]:

All set input pins are configured as triggers to begin recording. Recording begins on all selected cameras regardless of which input pin turns on.

For example, if camera A and camera B are selected as the cameras for recording images, and motion detection of camera A and sensor input of camera B are configured as the triggers, recording begins on both cameras even when motion detection occurs for camera A and even when sensor input turns on for camera B.

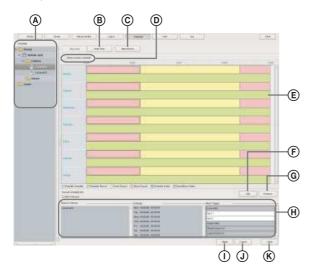
Recording begins on all selected cameras regardless of which input pin turns on.



Setting Items of Schedule Screen

This screen is displayed by clicking [Schedule] in the Configuration window.

Screen example: When recurrent schedule (recurrent view)



(A) [Schedule] Tree

This displays a list of the cameras.

Selecting cameras from the tree displays the configured schedule in the area on the right.

B Recurrent/Date and Time View Selection Button

Recurrent

Switches to recurrent view.

Date Time

Switches to date and time view.

© New Record

This displays the New Record dialog box (page 75) for creating a new schedule manually.

⑤ Show common schedule

Select the check box to display the schedules common to each of the cameras.

E Schedule View

This displays the details of the schedule.

When recurrent view:

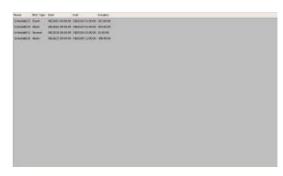
In this view, schedule items are color-coded by action for each day of the week.



- Guide lines are shown in 15-minute intervals, and by dragging the edges of each scheduled time slot, you can change the start and end times of the action.
 When you want to configure the time in detail, click [Edit] and make adjustments in the Schedule Configuration dialog box that appears.
- Selecting each time slot displays information such as the camera target for recording and the duration in area (H).

When date and time view:

In this view, a list of the schedules that have been configured are displayed.



• Selecting each schedule displays information such as the camera target for recording and the duration in area (H).

(F) Edit

This displays the Schedule Configuration dialog box for changing schedule settings.

© Remove

This deletes the selected schedule.

(H) Show Configuration Information

This displays the configuration information of the selected schedule.

① Apply

This saves the settings.

(J) Cancel

This cancels the changes to the settings.

K Close

This closes the screen.

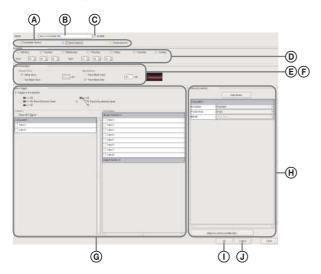
Setting Items of New Record Dialog Box

This dialog box is displayed by clicking [New Record] on the Schedule screen (page 75).

The items that are displayed differ depending on the type of recording.

After configuring each item, click [OK].

Screen Example: When alarm recording (recurrent schedule)



(A) Schedule Record/Alarm Record/Event Record Select the type of schedule to configure.

(B) Name

Enter the name of the schedule. It can be up to 32 characters long.

© Enable

Select the check box to enable this schedule.

O Schedule

The settings differ depending on whether you are configuring a recurrent schedule or a schedule for a specific date and time.

When recurrent schedule:

Select the check boxes for the days you want to run the schedule, and configure a start time and end time for the schedule.

The range that can be specified is 00:00:00 to 23:59:59 (hours/minutes/seconds).



When schedule for a specific date and time:

Configure the start date and time and end date and time to apply the schedule.



(E) Record Duration

This item is displayed in the case of alarm recording or event recording.

Set the record duration for when an event occurs.



Record Start

Select the timing for starting recording.

Alarm/Event Start

This starts recording when an alarm or event started (point in time the alarm signal became active).

Pre Alarm/Event Start

This goes back to record the images before an alarm or event started.

When this is selected, enter the period to go back to record within the range of 1 to 60 seconds.

Note

Pre alarm/event start recording cannot be performed for audio.

Stop Record

Select the timing for ending recording.

From Alarm/Event Start

This ends recording at the point in time a specified period of time elapses after an alarm or event started (point in time the alarm signal became active).

When this is selected, enter the period for after the alarm or event starts within the range of 1 to 3,600 seconds.

From Alarm/Even End

This ends recording when the specified duration has passed after the point in time the alarm or event ends (point in time the alarm is cancelled). If you select this option, enter a duration (1 to 3,600 seconds) for which recording continues after the alarm or event ends.

Note

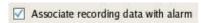
If the camera properties for alarm recording or regular recording are different from the camera properties for monitoring, the camera image will stop updating for several seconds when recording starts and stops. Be sure to confirm your settings before operation.

F Associate recording data with alarm

This item is displayed for schedule recording. Select the check box to associate the recording data with the alarm.

If you enable association and perform an alarm search, you can search for scheduled recordings that exist at the moment the alarm was triggered.

If you enable association, configure the input connectors of the camera or I/O device that will act as the alarm trigger.



© Alarm/Event Trigger

Select the relationship of the camera for recording and the sensor, and select the check box of the input to be the alarm/event trigger.

For details on the relationship of the camera and sensor, refer to "About Relationship Between Sensor and Camera when Alarm Occurs" (page 73).

Record by each alarm/event

The camera and sensor form a one-to-one relationship. Recording is started only for the camera of the sensor that detected the alarm/event.

Record by selected alarm/event

Multiple inputs can be set for the one camera that is the target for recording. Since recording can be started by an input signal (alarm/event) from an external device to an I/O device, it is also possible for the sensor of a device that is not set for the schedule to act as the trigger.

Camera

Select the check box of the input to be the alarm/event trigger.

When "Record by selected alarm/event" is selected, you can select multiple device inputs.

If the check box for "Show All Triggers" is selected, a list of all the triggers configured for NSR is displayed, so it is also possible for the sensors of devices not configured for the schedule to act as triggers.

Note

The input configured for each camera is displayed in the list. For the configuring inputs, refer to "Configuring Motion Detection Settings" (page 60) and "Configuring Sensor Inputs" (page 77).

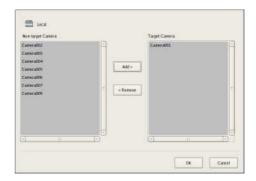
(H) Record Cameras

Add the camera to become the target for recording to the list, and configure settings related to images captured from the camera.

Add Device

This displays the Add Device dialog box for adding a device to the list.

Select the camera you want to add from the [Non-target Camera] list, click [Add] to move the camera to the [Target Camera] list, and click [OK].



Camera List

Select the image size, frame rate, and other items for images captured from the camera, as necessary.

Adjust to Camera Configuration

Match the values to those configured on the [Video] tab in "Device Configuration."

Note

When the time set for regular recording and alarm recording overlap, and the resolution for regular recording is set to 320×240 dpi and the resolution for alarm recording is set to 640×480 dpi, the resolution for images captured from the camera becomes 640×480 dpi. Normally, images captured from cameras use the maximum frame rate and resolution values for all actions during operation.

(I) OK

This creates a schedule in accordance with the set values, and closes the dialog box.

① Cancel

This cancels your settings, and closes the dialog box.

||||||| Chapter 4 Application Settings

Configuring Sensor Inputs

You can configure settings related to the sensor inputs incorporated in NSR and cameras, and Barionet (Barix I/O box) sensor inputs.

Sensor inputs can be specified and used for actions and schedule recording events.

Examples of sensor inputs:

Temperature, humidity, smoke, vibration, security, infrared, ultrasonic waves, etc.

You can configure the following settings for sensor inputs.

- "Changing Settings of Sensor Input Pins of NSR" (page 77)
- "Changing Settings of Sensor Input Pins of Camera" (page 77)
- "Changing Settings of Sensor Input Pins of Barionet" (page 78)
- "Adding Logical Sensor Input Pins to NSR" (page 78)
- "Deleting Logical Sensor Input Pins Created for NSR" (page 79)

Changing Settings of Sensor Input Pins of NSR

1 Click [Device] at the top of the Configuration window.

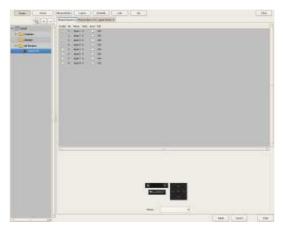


The Device Configuration screen appears.

2 Open [I/O Device] in the [Device] tree, and click to select [System I/O].



3 Configure each item on the [Physical Sensor In] tab, and click [Apply].



For details on each of the items, refer to "Setting Items of the [Sensor In] Tab" (page 79).

The sensor input settings are changed.

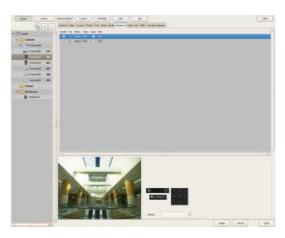
Changing Settings of Sensor Input Pins of Camera

1 Click [Device] at the top of the Configuration window.



The Device Configuration screen appears.

- 2 Select the camera you want to change the settings of the sensor input pins from the [Device] tree.
- **3** Configure each item on the [Sensor In] tab, and click [Apply].



For details on each of the items, refer to "Setting Items of the [Sensor In] Tab" (page 79).

The sensor input settings are changed.

Changing Settings of Sensor Input Pins of Barionet

Caution

- Barionet cannot be used via a proxy server.
- Manually perform device registration for Barionet before configuring the following settings.
- For details, refer to the operating manual for Barionet.
- Click [Device] at the top of the Configuration window.

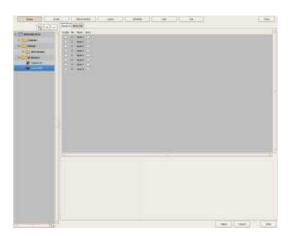


The Device Configuration screen appears.

Open [I/O Device] in the [Device] tree, and click to select [Barionet].



3 Configure each item on the [Sensor In] tab, and click [Apply].



For details on each of the items, refer to "Setting Items of the [Sensor In] Tab" (page 79).

The Barionet sensor input settings are changed.

Adding Logical Sensor Input Pins to NSR

The adding of a logical sensor input pin to NSR allows for linking with the external device via the network. The operation (on/off) of the added sensor input pin from the external device acts as a trigger to perform recording or an action.

1 Click [Device] at the top of the Configuration window.

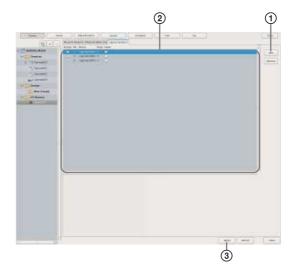


The Device Configuration screen appears.

2 Open [I/O Device] in the [Device] tree, and click to select [System I/O].



3 Add the logical sensor input pin on the [Logical Sensor In] tab.



For details on each of the items, refer to "Setting Items of the [Sensor In] Tab" (page 79).

- ① Click [Add].

 The logical sensor input pin is added to the list.
- ② Configure each item.

3 Click [Apply].

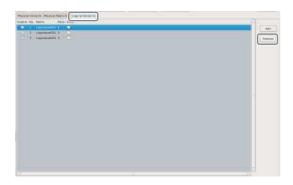
The logical sensor input pin is added.

Deleting Logical Sensor Input Pins Created for NSR

Note

The physical sensor input pins of NSR that exist by default cannot be deleted.

- 1 Open [I/O Device] in the [Device] tree, and click to select [System I/O].
- 2 Select the check boxes for the logical sensor input pins you want to delete in the [Logical Sensor In] tab, and click [Delete].



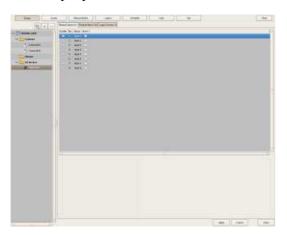
The logical sensor input pin is deleted.

Setting Items of the [Sensor In] Tab

You can configure sensor input pins.

After configuring each item, click [Apply] to save your settings.

This example describes the screen for configuring logical sensor input pins of the NSR.



Physical Sensor In

This displays a list of the sensor input pins configured for the device selected in the tree structure.

Enable

Select the check boxes to enable the pins for the sensor inputs.

Caution

To use sensor inputs, the sensor input pin settings on the device must also be enabled.

No

This displays the numbers of the sensor input pins. This item cannot be changed.

Name

Enter the names of the sensor inputs.

Pulse

Enter the duration to sustain pulse input once it is turned on within the range of 0 to 60,000 milliseconds. If pulses of short duration persist and there is a high frequency of on/off switching as a result of this configuration, multiple inputs may be grouped together as one pulse.

Note

The pulse setting can be used for the logical sensor input pins.

Invert

Select the check box to invert the pulse polarity. Example: Invert $ON \rightarrow OFF$ to $OFF \rightarrow ON$.

Add

This adds a logical sensor input pin to the list. This item is only displayed for the logical sensor inputs of "System I/O."

Delete

This deletes the selected sensor input pin from the list. This item is only displayed for the logical sensor inputs of "System I/O."

Configuring Alarm Output Settings

You can configure settings related to the alarm outputs incorporated in NSR and cameras, and Barionet (Barix I/O box) alarm outputs.

Outputs are used to transmit alarms to devices equipped with alarm input functions, such as warning lamps and door opening devices.

Example of Alarm Outputs:

Warning siren, warning lamp, light, door, etc.

You can configure the following settings for alarm outputs.

- "Changing Settings of Alarm Output Pins of NSR" (page 80)
- "Changing Settings of Alarm Output Pins of Camera" (page 80)
- "Changing Settings of Alarm Output Pins of Barionet" (page 81)

Changing Settings of Alarm Output Pins of NSR

1 Click [Device] at the top of the Configuration window.

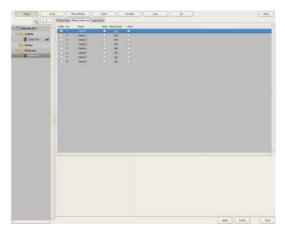


The Device Configuration screen appears.

2 Open [I/O Device] in the [Device] tree, and click to select [System I/O].



Configure each item on the [Physical Alarm Out] tab, and click [Apply].



For details on each of the items, refer to "[Alarm Out] Tab (I/O Device)" (page 81).

The alarm output settings are changed.

Changing Settings of Alarm Output Pins of Camera

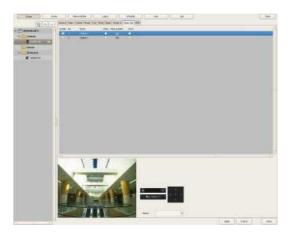
1 Click [Device] at the top of the Configuration window.



The Device Configuration screen appears.

2 Select the camera you want to change the settings of the alarm output pins from the [Device] tree.

3 Configure each item on the [Alarm Out] tab, and click [Apply].



For details on each of the items, refer to "[Alarm Out] Tab (Camera)" (page 82).

The alarm output settings are changed.

Changing Settings of Alarm Output Pins of Barionet

Caution

- To use the alarm outputs of Barionet, it is necessary to connect to Barionet from a web browser and enable the alarm output settings in advance.
- Barionet cannot be used via a proxy server.
- Manually perform device registration for Barionet before configuring the following settings.
- For details, refer to the operating manual for Barionet.
- 1 Click [Device] at the top of the Configuration window.

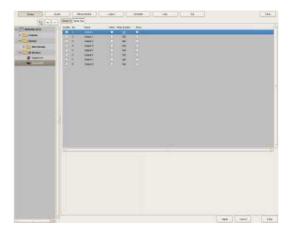


The Device Configuration screen appears.

2 Open [I/O Device] in the [Device] tree, and click to select [Barionet].



3 Configure each item on the [Alarm Out] tab, and click [Apply].



For details on each of the items, refer to "[Alarm Out] Tab (I/O Device)" (page 81).

The Barionet alarm output settings are changed.

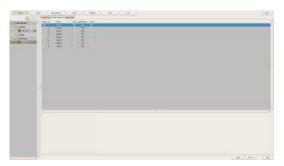
Setting Items of the [Alarm Out] Tab

[Alarm Out] Tab (I/O Device)

You can configure the alarm output pins of NSR and Barionet.

After configuring each item, click [Apply] to save your settings.

This example describes the screen for configuring alarm outputs of NSR.



Alarm Output Pin List

This displays a list of alarm output pins configured for the NSR or Barionet selected in the tree.

Enable

Select the check boxes to enable the pins for the alarm outputs.

No

This displays the numbers of the alarm output pins. This item cannot be changed.

Caution

To use alarm outputs, the alarm output pin settings on the device must also be enabled.

Name

Enter the names of the alarm outputs. They can be up to 32 characters long.

Pulse

Select the check box when you want to specify and enter a pulse interval. If you select this, enter the pulse interval in [Pulse Duration].

Pulse Duration

Enter the duration to sustain pulse output once it is turned on within the range of 0 to 60,000 milliseconds.

Invert

Select the check box to invert the polarity of the output pins.

Enabling invert does not change the state of the current output pins. If you turn the output pins on/off when they are in an inverted state, the actual output signal state is inverted to off/on.

Also, in the case of output pins of the NSR unit, state initialization is performed according to the invert setting at startup.

(When inverted: On at startup, When not inverted: Off at startup)

[Alarm Out] Tab (Camera)

You can configure the alarm output pins of the camera selected in the tree.

After configuring each item, click [Apply] to save your settings.



Alarm Output Pin List

This displays a list of the alarm output pins configured for the camera selected in the tree.

Enable

Select the check boxes to enable the pins for the alarm outputs.

No

This displays the numbers of the alarm output pins. This item cannot be changed.

Name

Enter the names of the alarm outputs. They can be up to 32 characters long.

Pulse

Select the check box when you want to specify and enter a pulse interval. If you select this, enter the pulse interval in [Pulse Duration].

Pulse Duration

Enter the duration to sustain pulse output once it is turned on within the range of 0 to 60,000 milliseconds.

Invert

Select the check box to invert the polarity of the output pins.

Enabling invert does not change the state of the output pins. If you turn the output pins on/off when they are in an inverted state, the actual output signal state is inverted to off/on.

Preview

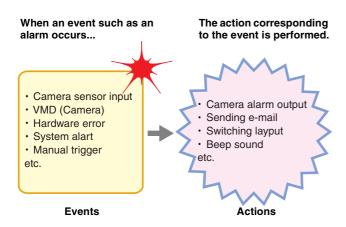
This displays the images captured from the camera.

||||||||| Chapter 4 Application Settings

Configuring Action Settings

In NSR, you can configure the action for when, for example, a sensor input, VMD (camera) or system alarm is detected, or for when a manual action is performed.

Relationship Between Events and Actions



There are the following way of configuring actions.

- Manual Actions (page 83)
 Configure an action for when a trigger occurs manually.
- Event/Alarm Actions (page 86)
 Configure an action for when an alarm or event occurs during a specified schedule period.

Manual Action

Configure an action for when a trigger occurs manually.

Registering a Manual Action

1 Click [Manual Action] at the top of the Configuration window.

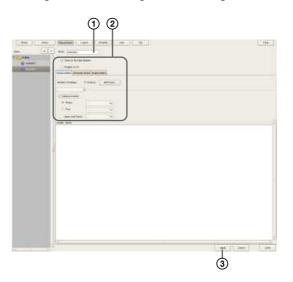


The Manual Action screen appears.

2 Click + (Add).



3 Configure the following items, and register the action.



For details on each of the items, refer to "Setting Items of Manual Action Screen" (page 84).

- 1 Enter a name for the action.
- 2 Configure each item.
- 3 Click [Apply].

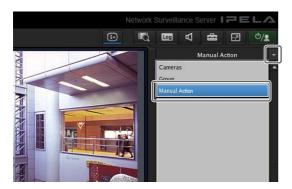
The action is registered.

Performing a Manual Action

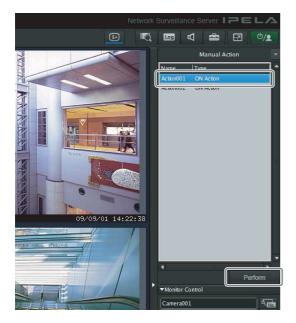
You can perform an action from the Manual Action toolbar in the main window.

1 Display the Manual Action pane in the main window.

Click in the pane at the top right of the screen, and select [Manual Action] from the menu that appears.



2 Select the action you want to perform, and click [Perform].



A confirmation message appears.

3 Click [OK].



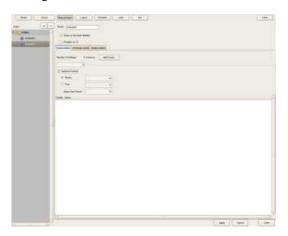
The action is performed.

Setting Items of Manual Action Screen

You can configure manual action settings.

The items that are displayed differ depending on the device for performing the action.

After configuring each item, click [Apply] to save your settings.



Name

Enter the name of the action. It can be up to 32 characters long.

Show on the Main Window

Select the check box to show this layout in the [Manual Action] pane of the main window.

Register as OFF Action

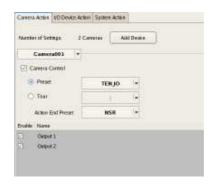
Select the check box to register an action as an off action. Off actions operate as shown below.

Tour: Stops the tour

Alarm Output: Turns off alarm output

Beep: Stops the beep

[Camera Action] Tab



Number of Settings

This displays the number of cameras target for the action.

[Add Device] Button

This displays a dialog box for adding a camera as a target for the action.

Camera Drop-down Menu

Select a camera.

Camera Control

Select the check box to perform an action for controlling the camera, and specify the control method.

Preset

This moves the camera to the specified preset position.

Tour

This performs the specified camera tour.

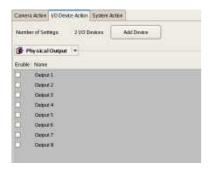
Action End Preset

Specify the preset position for when the action ends.

Pin List

Select the check boxes for the pins to be target for performing an action to change the pin state.

[I/O Device Action] Tab



Number of Settings

This displays the number of I/O devices target for the action.

[Add Device] Button

This displays a dialog box for adding an I/O device as a target for the action.

I/O Device Drop-down Menu

Select the I/O device.

Pin List

Select the check boxes of the pins for which to change the state.

[System Action] Tab



Send e-mail

Select the check box to send a notification by mail to a specified mail address.

E-mail Address

Enter an e-mail address.

Attach Camera Image

Select the check box to send a still image as a mail attachment.

If you select this, specify the camera for recording the still image.

Note

Images will not be attached for cameras on which the codec is MPEG4/H.264.

Each camera

Attach the still images recorded with the camera for which the event occurred.

For example, when motion detection of camera A and sensor input of camera B are configured as the triggers and motion detection occurs for camera A, the still images recorded with camera A are attached. When the sensor input of camera B turns on, the still images recorded with camera B are attached.

Specified camera

Record a still image with the specified camera.

Message

Enter the message of the mail. It can be up to 32 characters long.

Change Layout

Select the check box to change the monitor layout of monitor 1.

If you select this, select the monitor layout to display on monitor 1.

This item is only displayed for a server.

Beep

Select the check box to play a beep tone.

If you select this, select a beep tone type.

This item is only displayed for a server.

The beep sound is output for a predetermined duration from the device connected to the audio connector specified in the Audio screen of the Setup Wizard or the Setup Menu.

Apply

This saves the settings.

Cancel

This cancels the changes to the settings.

Event/Alarm Actions

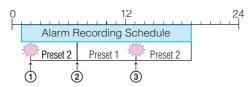
An action is performed if an alarm or event occurs within the duration set for a schedule. An action can be performed each time an alarm or event occurs, provided it occurs within the duration.

Caution

Even if the state changes as a result of an action being performing, the original state is not restored automatically.

Event/Alarm Action Example:

When an event/alarm action for moving the preset position to "Preset 2" if motion is detected by the VMD (camera) pin of camera 1:



- ① When the VMD (camera) pin detects motion, the action is performed and the preset position of camera 1 moves to "Preset 2."
- 2 The preset position is returned to "Preset 1" manually.
- (3) When the VMD (camera) pin detects motion within the duration, the action is performed again and the preset position of camera 1 moves to "Preset 2."

Registering an Event/Alarm Action

Configure a schedule for performing an action when an alarm or event occurs within the duration set for the schedule. An action can be performed each time an alarm or event occurs, provided it occurs within the duration.

1 Click [Schedule] at the top of the Configuration window.



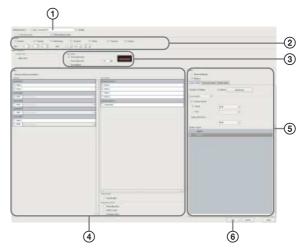
The Schedule Configuration screen appears.

- **2** Switch to recurrent view or date view.
- **3** Select [Action] in the tree, and select [New Action].



The New Action dialog box appears.

4 Configure each item, and click [OK].



For details on each of the items, refer to "Setting Items of New Action Dialog Box (Event/Alarm Action)" (page 87).

- 1) Enter a name for the event/alarm action.
- ② Select the check boxes for the days you want to run the event/alarm action, and configure a start time and end time for the event/alarm action.
- 3 Configure the timing for ending the action.
- (4) Configure the event that will be the trigger for the action.
- **⑤** Configure the action to perform.
- **6** Click [OK]. The event/alarm action is created.

5 Click [Apply].

The event/alarm action is saved.

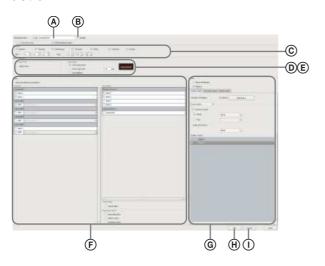
For details on how to view the schedule, refer to "Setting Items of Schedule Screen" (page 74).

Setting Items of New Action Dialog Box (Event/Alarm Action)

This dialog box is displayed by selecting [Action] from the tree in the Schedule Configuration screen, and then clicking [New Action].

After configuring each item, click [OK].

Screen example: When recurrent event/alarm action:



(A) Schedule Name

Enter the name of the event/alarm action. It can be up to 32 characters long.

(B) Enable

Select the check box to enable this event/alarm action.

© Schedule

The settings differ depending on whether you are configuring a recurrent event/alarm action or an event/alarm action for a specific date and time.

When recurrent event/alarm action:

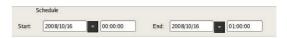
Select the check boxes for the days you want to run the event/alarm action, and configure a start time and end time for the event/alarm action.

The range that can be specified is 00:00:00 to 23:59:59 (hours/minutes/seconds).



When event/alarm action for a specific date and time:

Configure the start date and time and end date and time to apply the event/alarm action.



D Action Duration

Configure the duration for the action.

Action Start

This displays the timing for starting the action. This item cannot be changed.

Stop Action

Select the timing for ending the action.

From alarm start

This ends the action at the point in time a specified time elapses after the alarm started.

When this is selected, enter the period for after the alarm starts within the range of 1 to 3,600 seconds.

From alarm end

This ends the action at the point in time a specified time elapses after the alarm ends.

When this is selected, enter the period for after the alarm ends within the range of 1 to 3,600 seconds.

No Definition

The timing to end the action is not specified.

(E) Server

Select the remote server.

This item is displayed in the case of a client.

(F) Event

Configure the event that will be the trigger for the action.

Camera

Select the check box of the input pin to be the action trigger.

I/O Devices

Select the check box of the input pin to be the action trigger.

Note

The input configured for each camera and I/O device is displayed in the list. For the input pin settings, refer to "Configuring Motion Detection Settings" (page 60) and "Configuring Sensor Inputs" (page 77).

System Alert

Select the check box to use a system alert as the trigger.

System Alert

Select the check box to use a system alert as the trigger.

Emergency Event

Select the check boxes for the emergency events you want to use as triggers.

Recording Stop

Select the check box to use a recording stop event as the trigger.

VIDEO LOSS

Select the check box to use a VIDEO LOSS event as the trigger.

Hardware Error

Select the check box to use a hardware error event as the trigger.

G Action

Configure the action to perform.

Alarm Notification

Send an alarm notification for the configured trigger.

Actions

This performs the specified action.

[Camera Action] Tab



Number of Settings

This displays the number of cameras target for the action.

[Add Device] Button

This displays a dialog box for adding a camera as a target for the action.

Camera Drop-down Menu

Select a camera.

Camera Control

Select the check box to perform an action for controlling the camera, and specify the control method.

Preset

This returns the camera to the specified preset position.

Tour

This performs the specified camera tour.

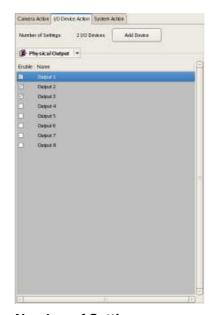
Action End Preset

Specify the preset position for when the action ends.

Pin List

Select the check boxes for the output pins to be target for performing an action to change the pin state.

[I/O Device Action] Tab



Number of Settings

This displays the number of I/O devices target for the action.

[Add Device] Button

This displays a dialog box for adding an I/O device as a target for the action.

I/O Device Drop-down Menu

Select the I/O device.

Pin List

Select the check boxes of the pins for which to change the state.

[System Action] Tab



Send e-mail

Select the check box to send a notification by mail to a specified mail address.

E-mail Address

Enter an e-mail address.

For details on mail notification settings, refer to "Configuring Mail Notification Settings" (page 90).

Attach Camera Image

Select the check box to send a still image as a mail attachment.

If you select this, specify the camera for recording the still image.

Note

If the codec of the camera is MPEG4/H.264, the image is not attached.

Each camera

Attach the still images recorded with the camera for which the event occurred.

For example, when motion detection of camera A and sensor input of camera B are configured as the triggers and motion detection occurs for camera A, the still images recorded with camera A are attached. When the sensor input of camera B turns on, the still images recorded with camera B are attached.

Specified Camera

Attach still images recorded with a specified camera.

Message

Enter the message of the mail. It can be up to 32 characters long.

Change Layout

Select the check box to change the monitor layout of monitor 1.

If you select this, select the monitor layout to display on monitor 1.

Beep

Select the check box to play a beep tone.

If you select this, select a beep tone.

The beep sound is output for a predetermined duration from the device connected to the audio connector specified in the Audio screen of the Setup Wizard or the Setup Menu.

Notify Emergency Event

Select the check box to enable notifications for the specified emergency events.

(H) OK

This creates an event/alarm action in accordance with the set values, and closes the dialog box.

(I) Cancel

This cancels your settings, and closes the dialog box.

Configuring Mail Notification Settings

When an event occurs, a notification can be sent by e-mail to a pre-registered mail address.

You can configure a mail address for each action. Specify the SMTP server and sender address here.

1 Click [Server] at the top of the Configuration window.

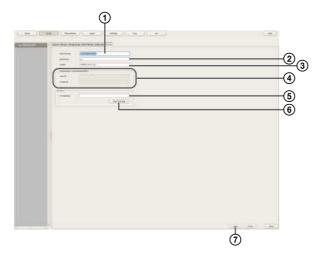


The Server Configuration screen appears.

2 Select the server for which you want to set the mail notification settings from the [Server] tree on the left of the screen.



3 Configure each item on the [E-mail] tab, and click [Apply].



- 1) Enter the address of the SMTP server.
- ② Enter the port number of the SMTP server.
- 3 Enter the mail address of the sender.
- (4) When using SMTP authentication, select the check box next to [Authentication], and then enter the user name and password for SMTP authentication.

- ⑤ Enter the mail address for sending test mail.
- **(6)** After you enter each address, click [Send Test Mail] and confirm that mail can be sent correctly.
- 7 Click [Apply].

||||| Chapter 4 Application Settings

Configuring System Alert Settings

A system alert (alarm) can be generated when camera video loss or insufficient disk space is detected. Configure the settings for the action to perform after a system alert is generated.

1 Click [Server] at the top of the Configuration window.

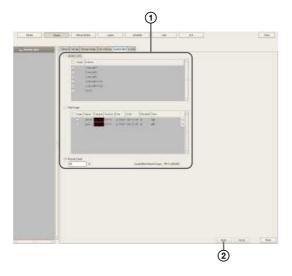


The Server Configuration screen appears.

2 Select the server for which you want to set the system alert settings from the [Server] tree on the left of the screen.



3 Configure the information to notify of in the system alert on the [System Alert] tab, and click [Apply].



For details on each of the items, refer to "Setting Items of the [System Alert] Tab" (page 91).

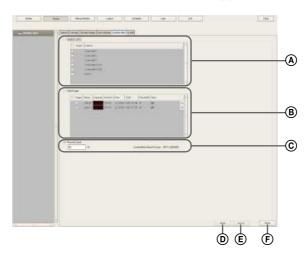
- ① Select the check boxes for the notification items, and configure each item.
- ② Click [Apply].
 The settings are saved.
- **4** Configure the action to perform after a system alert occurs.

For details on actions, refer to "Configuring Action Settings" (page 83).

Setting Items of the [System Alert] Tab

This tab is displayed by clicking [Server] in the Configuration window, and clicking the [System Alert] tab

After configuring each item, click [Apply].



(A) VIDEO LOSS

Select the check box to notify of the image signal becoming disconnected.

Note

Disconnection of the audio signal is not a target for detection.

Camera List

This displays a list of the video loss notification settings.

Target

Select the check boxes for the cameras to be target for notification.

Camera

This displays a list of the names of the cameras registered to NSR.

B Disk Usage

Select the check box to notify of insufficient remaining disk space.

Target Storage List

Select the check boxes for the storage to be target for notification.

Target

Select the check boxes for the storage to be target for notification.

Name

This displays the storage name of the target for notification.

Capacity

This displays the capacity of the storage.

Free (%)

This displays the amount of free space as a percentage.

Free

This displays the amount of free space in gigabytes.

Total

This displays the total size of the storage.

Threshhold

Specify the threshold value for the remaining space at which the notification will be sent.

Type

Specify GB or % for the threshold value type.

© Record Count

Select the check box to notify of the record count exceeding a specified amount.

If you select this check box, enter the percentage of the maximum record count that the current record count needs to reach for notification to be sent.

Current/Max. Record Count

This displays the current record count and the maximum record count.

Apply

This saves the settings.

E Cancel

This cancels the changes to the settings.

(F) Close

This closes the screen.

Caution

The recording errors and hardware errors of NSR are included in the system alerts, and notification always occurs regardless of the settings.

Configuring Emergency Event Settings

By selecting the [Recording Stop], [VIDEO LOSS], and [Hardware Error] check boxes in the event/alarm action settings screen, you can use those events as triggers. You can configure dialog boxes to appear in RealShot Manager Advanced (Client) to notify clients of emergency events when they occur.

To notify clients of emergency events, select the [Show Emergency Event Dialog] check box in the [System Action] tab, and configure the necessary settings on the client side

For details on the necessary settings on the client side, refer to the RealShot Manager Advanced User's Guide.

Caution

"Hardware errors" are errors that occur on the NSR-500. However, their notifications can only be received by RealShot Manager Advanced (Client).

Registering Users

You can register users in NSR, and set logon passwords and access permissions for each function. Five levels are provided for users ranging from the administrator level (Level 5) to the view level (Level 1). Permissions are granted as follows depending on the user level. You can also configure permissions individually for each user, as necessary.

Caution

- Only a user who has been granted the "User Configuration" permission can perform operations such as registering users and configuring user settings.
- If you forgot the passwords for all users with "User Configuration" permissions, the NSR must be formatted to enable password resetting. Current setting configurations and recordings will not be retained if the NSR is formatted.

User Levels and Permissions

You can set the following five levels for users.

- **Level 1:** Allowed to view monitoring and options windows.
- **Level 2:** In addition to the permissions of Level 1, allowed to perform basic operations including camera control such as panning, tilting, and zooming, and searching for and playing back recording images.
- **Level 3:** In addition to the permissions of Level 2, allowed to perform recording file operations such as managing logs, deleting and protecting files, and exporting.
- **Level 4:** In addition to the permissions of Level 3, allowed to configure device settings such as registering devices and creating layouts and schedules.
- **Level 5:** In addition to the permissions of Level 4, allowed to perform all operations including configuring settings and configuring menus as an administrator.

Permission	User Level				
	1	2	3	4	5
User Configuration	None	None	None	None	Yes
Administrator Menu Setting	None	None	None	None	Yes
Schedule Configuration	None	None	None	Yes	Yes
Device Configuration	None	None	None	Yes	Yes
Server Configuration	None	None	None	Yes	Yes
Layout Configuration	None	None	None	Yes	Yes
GUI Configuration	None	None	None	Yes	Yes

Permission	User Level				
	1	2	3	4	5
Manual Action Configuration	None	None	None	Yes	Yes
Manual Deletion/ Protection	None	None	Yes	Yes	Yes
Log Control	None	None	Yes	Yes	Yes
Export Control	None	None	Yes	Yes	Yes
Exit Server	None	None	Yes	Yes	Yes
Search & Playback	None	Yes	Yes	Yes	Yes
Camera Control	None	Yes	Yes	Yes	Yes
Output Control	None	Yes	Yes	Yes	Yes
Layout Control	None	Yes	Yes	Yes	Yes
Manual Record	None	Yes	Yes	Yes	Yes
Manual Action	None	Yes	Yes	Yes	Yes
Capture Control	None	Yes	Yes	Yes	Yes
Display Control	None	Yes	Yes	Yes	Yes
Alarm History Control	None	Yes	Yes	Yes	Yes
Exit Application	Yes	Yes	Yes	Yes	Yes

Configuring Default Access Permission

Normally, when you add a user, access permissions for all existing cameras are granted to the user. In addition, when you add a camera, access permission for that camera is granted to all existing users. If you disable the default access permission setting, access permissions will not be granted automatically when users or cameras are added. If you select [User] at the top of the tree in the User Configuration screen, the current setting will be displayed.

Caution

- Level 5 users will be granted access permissions automatically, regardless of the default access permission setting.
- Camera access permissions will be granted automatically regardless of this setting when adding devices or users via Easy Setup.

Registering a User

Register the user to use NSR, and configure the permissions.

1 Click [User] at the top of the Configuration window.



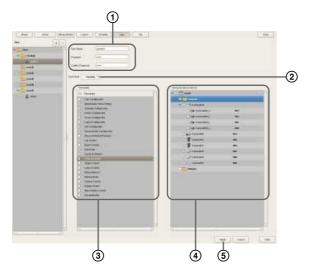
The User Configuration screen appears.

2 Select a level for the user you want to register in the [User] tree, and click + (Add).



The user is added to the tree.

3 Configure each item, and click [Apply].



For details on each of the items, refer to "Setting Items of the [User] Tab" (page 95).

① Enter the user name and password. They can be up to 32 characters long and ASCII characters (upper or lower case alphanumeric characters and symbols

- ② Change the user level, as necessary. Select "Custom" when you want to set the permissions individually.
- 3 Select the check boxes for the permissions to grant to the user.
- 4 To configure access permissions for each device, select the check boxes of the devices to which to grant access permissions.
- (5) Click [Apply].
 The settings are saved.

Note

If "Custom" is selected for the user level, the [Custom] tree is displayed.

Changing User Settings

- 1 Select the user you want to change the settings of from the [User] tree on the User Configuration screen.
- 2 Reconfigure the items you want to change.

 For details on each of the items, refer to "Setting Items of the [User] Tab" (page 95).
- **3** After configuring each item, click [Apply]. The settings are changed.

Deleting a User

- 1 Select the user you want to delete from the [User] tree on the User Configuration screen.
- **2** Click (Delete).



A confirmation message appears.

3 Click [Yes].

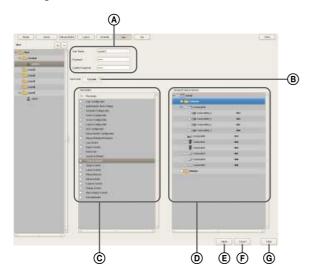
The user is deleted.

Setting Items of the [User] Tab

This tab allows you to register users and configure permissions.

It is displayed by clicking [User] in the Configuration window.

After configuring each item, click [Apply] to save your settings.



(A) User Name

Enter the user name. It can be up to 32 characters long and ASCII characters (upper or lower case alphanumeric characters and symbols (! " # \$ % & '() * +, -./:; <=>? @ [\]^_`{|} ~)).

Password

Enter the password. It can be up to 32 characters long and ASCII characters (upper or lower case alphanumeric characters and symbols (! " # \$ % & '() * + , - . / : ; < = > ? @ [\]^_` { | } ~)).

Confirm Password

Enter the same password again for confirmation.

(B) User Level

Select a user level.

Select "Custom" when you want to set the permissions individually.

© Permission

Select the check boxes for the permissions to grant to the user.

The following are the types of permissions that are available.

User Configuration

Allows you to configure or change user accounts in the User Configuration screen.

Administrator Menu Setting

Allows you to configure the various settings in the Setup Menu.

Schedule Configuration

Allows you to add or change schedules in the Schedule screen.

Device Configuration

Allows you to add or remove devices in the Device Configuration screen.

Server Configuration

Allows you to configure settings related to the server and network in the Server Configuration screen.

Layout Configuration

Allows you to register or change monitor layouts in the Layout Configuration screen.

GUI Configuration

Allows you to configure the rewind duration for quick playback in the GUI Configuration screen.

Manual Action Configuration

Allows you to configure the action for when a trigger is manually activated in the Manual Action screen.

Manual Deletion/Protection

Allows you to manually delete recorded images. You can also protect recorded images from being deleted due to cleanup, data overwrite, or unintentional operations.

Log Control

Allows you to export logs in the Log dialog box.

Export Control

Allows you to export recorded images.

Exit Server

Allows you to shut down or restart.

Search & Playback

Allows you to search or play back recorded data.

Camera Control

Allows you to control cameras in the Camera Control pane.

Output Control

Allows you to configure or change the [Device] - [Alarm Output] settings from the settings screen.

Layout Control

Allows you to change layouts.

Manual Record

Allows you to perform manual recording.

Manual Action

Allows you to execute manual actions.

Capture Control

Allows you to export monitored or recorded images as still images.

Display Control

Allows you to switch the Main screen to full screen display.

Alarm History Control

Allows you to clear alarm histories.

Exit Application

Allows you to lock operations.

D Servers/Cameras Access

Select the check boxes for the devices or servers that the user will be permitted to access.

E Apply

This saves the settings.

F Cancel

This cancels the changes to the settings.

© Close

This closes the screen.

Caution

If there is no permission to access a server, logging on to that server is not possible.

Configuring the Duration to Rewind for Quick Playback

When you click [PLAYBACK] in the Main screen, the selected monitor frame enters the playback state, and playback automatically starts after rewinding a specified duration. (This function is referred to as "quick playback.")

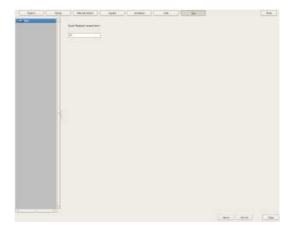
You can configure the duration to rewind for quick playback in the GUI Configuration screen.

Click [GUI] at the top of the Configuration screen.



The GUI Configuration screen appears.

2 Enter the duration to rewind for quick playback in seconds, and click [Apply].



The duration to rewind for quick playback is configured.

Note

You can set a time of 10 seconds or longer.

Operation and Control

Monitoring

You can monitor the live images currently being captured by the camera, as well as the audio from the camera. You can also perform monitoring using the layout tour function for sequentially switching the display shown on the display at a preset time.

This section describes the following monitoring operations.

- "Monitoring Live Images" (page 97)
- "Monitoring Using Layout Tours" (page 98)
- "Monitoring Audio from Cameras" (page 98)

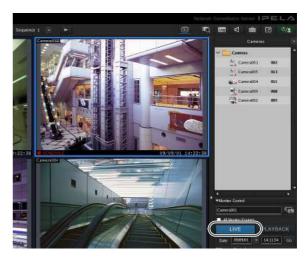
Note

To use the layout tour function, a layout tour needs to be configured in advance. For the configuration procedure, refer to "Configuring Layout Tours" (page 58).

Monitoring Live Images

You can monitor the images the camera is currently capturing in any monitor frame.

- 1 Click the monitor frame to display the live images on the Main screen.
- **2** Click [LIVE] on the Monitor Control pane.



Live images are displayed on the selected monitor frame.

For details on each of the items, refer to "Functions and Operating Procedure of Main Screen" (page 99).

Monitoring Images of a Different Camera

Select a camera on the Camera pane, and drag and drop it onto the monitor frame to switch to displaying the images of the selected camera.

You can also switch to the images of a selected camera by clicking to select a monitor frame, and then double-clicking a camera in the Camera pane.



Note

When the Camera pane is not displayed, click and select [Camera] from the menu that appears to switch to the Camera pane.



Changing the Layout

Select a layout on the [Layout] toolbar at the top of the Main screen to change the layout.



Monitoring Using Layout Tours

You can perform monitoring using the layout tour function for sequentially switching the display shown on the display at a preset time.

Note

To use the layout tour function, a layout tour needs to be configured in advance. For the configuration procedure, refer to "Configuring Layout Tours" (page 58).

1 Select a layout tour on the [Tour] toolbar at the top of the Main screen.



2 Click (Layout Tour Start).



The sequence operation starts.

If you click again, the layout tour ends.

Monitoring Audio from Cameras

If you are using a camera with support for audio input, you can monitor the audio input from the camera.

Select the monitor frame for which you want to monitor the audio to output audio from the camera assigned to the selected monitor frame.

If multiple monitor frames are selected, audio is only output from the camera of the one selected last.

Adjusting the Volume

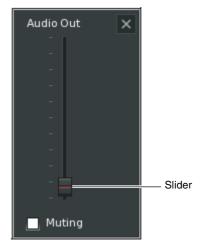
1 Click (Adjust Volume).



The Volume Control dialog box appears.

2 Adjust the volume with the slider, and click [OK].

When you want to disable the sound, select the [Muting] check box.



Note

In the disable state, audio is no longer output no matter which monitor frame you select.

Functions and Operating Procedure of Main Screen

On the Main screen, you can perform operations such as monitoring the live images captured from the current camera and playing back recorded images.



(A) [Layout] Toolbar

Use this to change the layout.

(2×2 Layout)

This switches to the 2×2 default layout.

(3×3 Layout)

This switches to the 3×3 default layout.

(4×4 Layout)

This switches to the 4×4 default layout.

(Custom A Layout)

This switches to the layout of the Custom A group.

(Custom B Layout)

This switches to the layout of the Custom B group.

Layout Menu

Select a layout from the drop-down menu.

B [Tour] Toolbar

This is used when executing a layout tour.

Tour Menu

Select a layout tour from the drop-down menu.

(Layout Tour Start/Stop)

This starts or stops the layout tour.

© (Display Information)

This displays or hides the information of the monitor frame configured in the layout settings.

(Search Recording Data)

This displays the Search window (page 110) for specifying search conditions.

(Open Log Window)

This displays the Log window (page 117) for displaying the recent log messages.

(Volume Control)

Adjust the volume for audio output from NSR.

The audio of the camera of the selected monitor frame is output.

(Configuration)

This displays the Configuration window (page 38) for configuring settings such as device registration and camera operation.

(Full Screen)

This displays the current layout (monitor arrangement) over the whole screen.

Switching to full screen hides the control buttons and other items.

(Cancel Full Screen)

This returns from the full screen display to the normal screen.

This button is displayed in full screen display when you align the cursor with the top-right corner of the screen.

You can also return to the normal screen by pressing the Esc key on the keyboard.

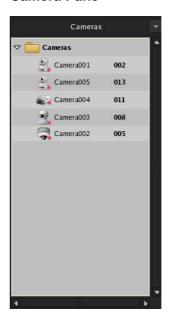
E ७/**1**

This allows you to log off, activate the lock, reboot, or shutdown.

© Camera/Groups/Manual Action Pane

Clicking displays a menu that allows you to switch to each of the panes.

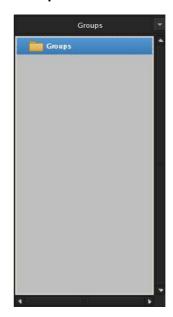
Camera Pane



This allows you select the camera for displaying images in the monitor frame.

Select a camera from the tree, and drag and drop it onto the monitor frame to switch to displaying the images of the selected camera.

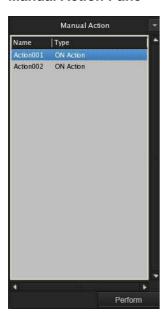
Groups Pane



This displays a camera list for each device group, and you can select the camera for which to display images in the monitor frame.

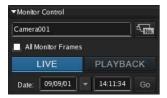
Select a camera from the tree, and drag and drop it onto the monitor frame to switch to displaying the images of the selected camera.

Manual Action Pane



This allows you to perform an action manually. Select an action from the list, and click [Perform].

(G) Monitor Control Pane



This allows you to switch between live images and recorded images.



This displays the name of the camera assigned to the selected monitor frame.

To change the camera assignment, click (Camera ID Select), enter the ID of the camera in the input box, and press the Enter key.

All Monitor Frames

If you select this check box, all monitor frames become applicable during live/playback switching and quick playback.

Note

The [All Monitor Frames] check box is only enabled when the total number of monitor frames in the layout is nine or less.



Click [LIVE] to monitor live images in the selected monitor frame, and [PLAYBACK] to play back recorded images.

Also, when you select a monitor frame, the button lights to indicate whether the state is live or playback. If you click [PLAYBACK], the selected monitor frame enters the playback state, returns to the time set in "GUI Configuration," and then starts playback automatically. (This function is called "quick playback.")



This allows you to specify a date and time for the playback position of the recorded images. Specify a date and time, and click [Go] to play back the recorded images from the specified position in the selected monitor frame.

(H) Camera Control Pane [Control] Tab



This allows you to control the images from the camera.

OPTICAL

This switches the camera to optical zoom mode.

DIGITAL

This displays the images enlarged or reduced on the monitor.

Wide-angle/Telephoto Zoom



This zooms images in the wide-angle and telephoto directions.

[W] is the wide-angle end (zoom out), and [T] is the telephoto end (zoom in).

Click between "W" and "T" to zoom to an absolute value.



If you click this button, you can perform pan, tilt, zoom, and centering with the mouse.

You can also use the following shortcut keys.

Shortcut keys	Operations		
Ctrl + Left-click	Moves the camera so that the selected point becomes at the center.		
Ctrl + Left-click and drag	Displays a red box, and releasing the mouse button enlarges the portion of the image inside the box to fill the window.		
Ctrl + Rotate the wheel forward ¹⁾	Zooms in.		
Ctrl + Rotate the wheel backward ¹⁾	Zooms out.		

1) Zooming in and zooming out in digital are not supported.

Pan/Tilt



This moves the camera up, down, left, or right.

Preset

This moves the camera to the selected preset position.

Tour

This performs the selected camera tour.

[Adjust] Tab



This allows you to adjust the images from the camera.

Focus



Select [AUTO] to always adjust the focus automatically.

You can click [-] or [+] to cancel the auto state, and adjust the focus manually. Adjust the focus in the [-] direction to focus on a subject that is close and adjust the focus in the [+] direction to focus on a subject that is far away.

Bright (EV)



Select [Full auto] to always adjust the brightness automatically. The backlight compensation turns on or off each time you click [BLC ON].

If you select [Shutter Priority], the shutter speed will remain fixed while the aperture is adjusted automatically.

If you select [Iris Priority], the aperture will remain fixed while the shutter speed is adjusted automatically.

You can click [-] or [+] to cancel the auto state, and adjust the brightness manually. Adjust the brightness in the [+] direction to make the images brighter and adjust the brightness in the [-] direction to make the images darker.

Note

For Sony 360-degree hemispheric-view network cameras, configure the BLC area in the settings screen (via a web browser) for the camera side based on installation conditions.

Day/Night



Select on (night mode) or off (day mode) when the camera has a day/night function.

|| || Chapter 5 Operation and Control

① Playback Control Pane



This is used when playing back recordings.

You can also export a recorded image as a file, and export one scene of the recorded images as a still image file.

Date and Time Indication



This displays the date and time that an image was recorded.



Click (Previous Alarm) to jump to the previous alarm in the recording data, and click (Next Alarm) to jump to the next alarm.

By dragging the slider, you can move the playback position to any point.

(Rewind)

This rewinds images.

Also, each click of the button changes the rewind speed as follows:

(Reverse Play)

Plays back images in reverse (at 1x speed).

(Pause)

This pauses playback.

(Play)

Plays back images (at 1x speed).

(Fast Forward)

This fast-forwards images.

Also, each click of the button changes the fast forward speed as follows:

(Slow Rewind)

This plays back images in reverse at slow speed (at 1/5x speed).

(Previous Frame)

This rewinds one frame.

(Next Frame)

This advances one frame.

(Slow Forward)

 $\overline{\text{This}}$ plays back images at slow speed (at 1/5x speed).

(Previous Recording)

This jumps to the previous recording.

(Next Recording)

This jumps to the next recording.

(Start Recording)

This starts recording images from the camera selected for the monitor frame.

(Stop Recording)

This stops manual recording.

Only manual recording can be stopped.

(Capture Still Image)

This exports one scene of recorded images as a still image file.

Still images are exported in JPEG format.

For details, refer to "Exporting Recorded Images as Still Images" (page 116).

(Export Recorded Image)

This exports a recorded image as a movie file. Video is exported in a native format (.cam file). Exported video can be played back with an application for playing CAM files.

① [ALARM] Lamp

ALARM ERROR

This is lit when an alarm has occurred.

[ERROR] Lamp

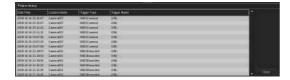


This is lit when an error has occurred.

K Expand/Collapse Pane Button

This displays or hides the pane section.

(L) Alarm History Pane



This displays the history of when alarms occurred. Click at the beginning of the title to display or hide the list.

You can also change the size of the pane by dragging the top of the pane with the mouse.

Clear

This clears the history.

M Monitor Frames

You can display live images and play back recorded images in each of the monitor frames.

To monitor live images, click a monitor frame and then click [LIVE].

To play back recorded images, click a monitor frame and then click [PLAYBACK].

When a Click Action is Configured

When an action is set for an image pasted in the layout or a monitor frame, the pointer changes if the mouse is held over the position of the specified object.

If you click the mouse at the place where the pointer changed, the action is executed.

Monitor Frame



A Camera Name

This displays the name of the camera.

B Bandwidth

This displays the amount of bandwidth used for transferring images over a network connection.

© Frame Rate

This displays the speed at which images are imported from the camera.

Display Images per Second

This display the speed at which the camera images are refreshed on the monitor.

E Time

This displays the current date and time during the monitoring and recording of live images, and the date and time at the time of recording when playing back recorded images.

(F) State

This displays the recording type (MANUAL, ALARM, SCHEDULE, or EVENT) during recording. During the playback of recorded images, the playback operation state (PAUSE, etc.) or playback speed (+1x, -0.2x, etc.) is displayed ("+" is used to indicate playback speed in the forward direction, and "-" to indicate playback in the reverse direction).

Notes

- In the monitor frame is set as the hotspot, the images of the corresponding camera are displayed in cases such as the following.
 - When the monitor frame is selected.
 - When there was a sensor input.
 - When an alarm, such as motion detection alarm occurred
- A red frame will appear around the camera image of a monitor frame when alarms, such as sensor input and motion detection, occur.
- For Sony 360-degree hemispheric-view network cameras, the hotspot image will be the hemispheric view image.

Switching a Monitor Frame to 1×1 View

Double-click on a monitor frame to switch the layout of that monitor frame to 1×1 view.

Double-click the monitor frame again to restore the original layout.

Note

If you switch to another layout or the layout is switched by an action or layout tour after switching to 1×1 view, double-clicking will not restore the original layout.

Controlling Cameras

When monitoring with a camera equipped with pan and tilt functions, you can monitor images from the camera while performing pan, tilt, and zoom operations on the Camera Control pane or with the mouse.

For details on the operating procedure of the Camera Control pane, refer to "Functions and Operating Procedure of Main Screen" (page 99).

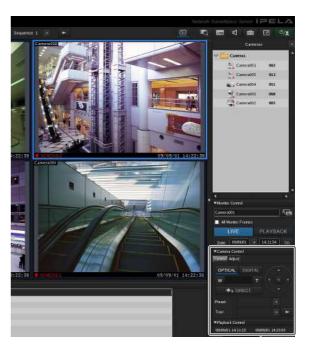
Notes

- Camera control is only enabled for network compatible cameras.
- The hemispheric view image will always be displayed for Sony 360-degree hemispheric-view network cameras, regardless of preset settings. Pan, tilt, and zoom operations cannot be performed.

Performing Pan, Tilt, and Zoom Operations

Using Camera Control Pane to Control Camera

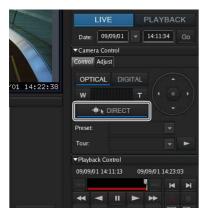
- 1 Select any monitor frame, and display the images of the camera you want to control.
- **2** Use the Camera Control pane to control the camera.



Using Mouse to Control Camera

By operating the mouse over the image displayed in a camera monitoring window, you can perform camera operations such as centering, panning, tilting, and zooming.

- Select any monitor frame, and display the images of the camera you want to control.
- 2 Click DIRECT on the Camera Control pane.



■Centering the Image

If you click the mouse on the image, the camera centers on the location that was clicked.



■Performing Pan, Tilt, and Zoom Operations

If you click and drag the mouse over the image, a red box appears.

When the mouse button is released, the camera moves until the portion of the image inside the red box fills the window.



■Performing Zooming In and Out Operations

When using a mouse with a scroll wheel, you can zoom in and out by rotating the wheel.

- Rotate the wheel forward to zoom in. 1)
- Rotate the wheel backward to zoom out. 1)
- 1) Zooming in and out with digital zoom is not supported.

Using Camera Presets

You can move the camera to preset positions stored on the camera.

Note

You can also configure a new preset. For the configuration procedure, refer to "Configuring Preset Positions" (page 46).

- 1 Select any monitor frame, and display the images of the camera you want to control.
- **2** Select a preset in [Preset] on the Camera Control pane.



The camera moves to the preset position.

Performing Camera Tours

You can perform "tours," in which the camera moves successively to preset pan, tilt, and zoom positions. The camera only stops at each preset position for the duration set in advance.

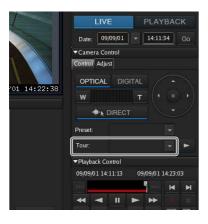
Using the shadow tour function, you can also perform tours of camera motions recorded manually.

Note

To use the camera tour or shadow tour functions, a camera tour or shadow tour must be configured beforehand. For details on configuring a tour, see "Configuring Camera Tours" (page 47) or "Configuring Shadow Tours" (page 48).

- **1** Select any monitor frame, and display the images of the camera you want to control.
- 2 Select a camera tour in [Tour] on the Camera Control pane, and click (Start Camera Tour).

Tours labeled P-1, P-2, etc. are camera tours and S-1 to S-4 are shadow tours.



The camera tour is performed.

Recording, Searching, and Playing Images

You can record live images, and search and play back recorded image data and audio data.

This section describes the following operations.

- "Recording Live Images" (page 107)
 You can record the images currently being captured by a camera.
- "Playing Recorded Images" (page 108)
 Simple operations are available for playing recorded images, including quick playback for automatically rewinding a specified amount of time and playing, specifying a date and time and playing, and playing from alarm history.
- "Searching Recorded Images" (page 109)
 You specify a date and time or type of recording to search for recorded images.
- "Playing Recorded Images from Search Results" (page 109)

You can play recorded images from Search Results.

Caution

If high processing loads or network delays occur during recording, some inconsistency may occur in the frame rate of the recorded images. When such images are played back, the image may appear to freeze or play quickly at some instants. However, these occurrences do not indicate dropped frames.

Note

The hemispheric view image will be recorded for Sony 360-degree hemispheric-view network cameras.

Recording Live Images

You can record the images currently being captured by a camera.

1 Select the monitor frame for which you want to record live images.

Note

If no live images are displayed, click [LIVE] on the Monitor Control pane.



2 Click (Start Recording) on the Playback Control pane.

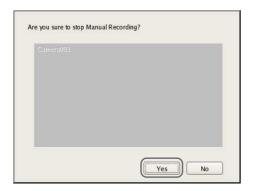


Recording starts.

Note

Recording continues even if you change the layout.

- **3** Click (Stop recording) to stop recording. A confirmation message appears.
- 4 Click [Yes].



Recording stops.

Playing Recorded Images

Simple operations are available for playing recorded images, including quick playback for automatically rewinding a specified amount of time and playing, specifying the playback position by date and time, and playing from alarm history.

Quick Playback

Clicking to select a monitor frame and then clicking [PLAYBACK] rewinds the recorded images by a preset amount of time, and plays them automatically.

Note

You can configure the rewind time for quick playback on the GUI Configuration screen (page 96).

Specifying a Date and Time and Playing

This allows you to specify a date and time for the playback position of the recorded images.

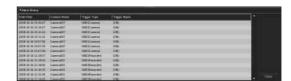
- 1 Click to select the monitor frame to which the camera of the recorded images you want to play is assigned.
- 2 Specify a date and time in [Date] in the Monitor Control pane, and then click [Go].



The image frame of the specified time appears.

Playing from Alarm History

- 1 Click to select the monitor frame of the recorded images you want to play.
- **2** Double-click the alarm history in the Alarm History pane.



The recorded images are played back.



Images will be played back using the hemispheric view for Sony 360-degree hemispheric-view network cameras.

Searching Recorded Images

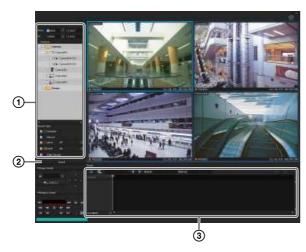
You can specify the recording type (schedule recording, manual recording, alarm recording, or event recording) and then search.

1 Click (Search for Recording Data) at the top of the Main screen.



The Search window appears.

2 Specify the search conditions, and click [Search].



For details on each of the items, refer to "Setting Items of Search Window" (page 110).

- ① Specify the search conditions.
- ② Click [Search].

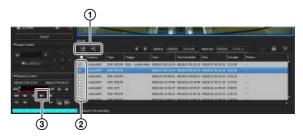
A list of search results is displayed (③). You can play recorded images from the search results. For details, refer to "Playing Recorded Images from Search Results" (page 109).

Playing Recorded Images from Search Results

You can play recorded images from the search results.

- 1 Search for the recorded images in the Search window.
- **2** Play the recorded images.

Screen example: List view



For details on each of the items, refer to "Search Results Display Area (List View)" (page 110) and "Search Results Display Area (Timeline View)" (page 111).

- ① Switch to the timeline view or list view, as necessary.
 - Clicking (List Mode) switches to the list view and clicking (Timeline Mode) switches to the timeline view.
- ② Select the check box of the recorded images you want to play.
- 3 Click Play).

The recorded images are played in the monitor frame.

You can perform operations such as enlarging, reducing, fast forwarding, and rewinding images on the Image Control pane and Playback Control pane.

Details of Search Window

Setting Items of Search Window

Specify the search conditions.

Configure each of the items and click [Search] to perform a search with the specified search conditions.



A Date and Time Specification Area



Specify a range of dates and times for which to search.

B Device Specification Area



Specify the devices for which to search. Select the check boxes of the devices for which to search in the tree.

© Recording Type



Select the check boxes of the recording types for which to search.

When you select the check boxes of [Alarm] and [Event], select the recording triggers from the drop-down menus.

Search Button

This performs a search with the specified conditions.

Search Results Display Area (List View)

In the list view, the list of search results is displayed. Depending on the item, you can click on a column title in the list to sort the list by the specified item. With each click, the sorting of the list switches between descending order and ascending order.



(List Mode)

This switches to the list view.

(Protect)

This protects the selected recordings.

(Unprotect)

This cancels protection for the selected recordings.

X (Delete)

This deletes the selected recordings.

© List of Search Results

When you want to playback recordings, select the check boxes of the corresponding cameras. The following information appears in the list.

Camera

Displays the camera name.

This item can be sorted.

Type

Displays the type of the recording (Manual/Schedule/Alarm/Event).

This item can be sorted.

Trigger

Displays the trigger of the recording.

This item can be sorted.

Start

Displays the start time of the recording. This item can be sorted.

Start Available

Displays the start time from which playback is available.

Due to a cleanup or data overwrite, older data may be deleted in order from the beginning of recordings.

End

Displays the end time of the recording.

Duration

Displays the length of the recording data.

Protect

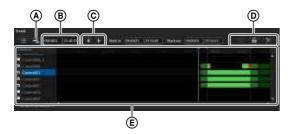
Displays "Protect" when the recording data is protected.

Search Results Display Area (Timeline View)

In the timeline view, each type of recording in the list of search results is displayed in a different color.

Note

Periods without recordings due to VIDEO LOSS will be displayed in gray.



(Timeline Mode)

This switches to the timeline view.

(B) Time Indication of Timeline

This indicates the current position (time) on the timeline.

© (Mark In)/ (Mark Out)

You can specify the exporting of a part of a recording found in a search.

Click (Mark In) or (Mark Out) to set the current playback position as the start point or end point.

The mark in or mark out position can also be moved by dragging and dropping.

(Protect)

This protects the selected recordings.

(Unprotect)

This cancels protection for the selected recordings.

X (Delete)

This deletes the selected recordings.

(E) List of Search Results

When you want to playback recordings, select the check boxes of the corresponding cameras.

The following information appears in the list.

Camera

Displays the name of the camera that made the recording.

White Line (Walker)

Indicates the current position (time) on the timeline. The white line can also be dragged to change its position. You can also move the white line by clicking the guide lines in the list title bar. (The white line moves to the position you click.)

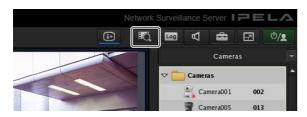
Deleting Recorded Images

You can search for the recorded images you want to delete, and then delete them manually.

Note

To ensure disk space is always available, you can configure a schedule to delete recorded images. For details, refer to "Configuring Settings Related to Deleting Recording Data" (page 67).

1 Click (Search for Recording Data) at the top of the Main screen.



The Search window appears.

2 Specify the search conditions, and click [Search].

For details on finding recorded images, refer to "Searching Recorded Images" (page 109).

Select the recorded images you want to delete, and click (Delete).

When List View



When Timeline View



Note

Protected recorded images cannot be deleted.

A confirmation message appears.

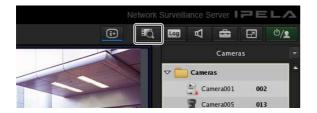
4 Click [Yes].

The recorded images are deleted.

Protecting Recorded Images

You can protect recorded images to prevent them from deletion by a cleanup, data overwrite, or unintentional operation.

1 Click (Search for Recording Data) at the top of the Main screen.



The Search window appears.

2 Specify the search conditions, and click [Search].

For details on finding recorded images, refer to "Searching Recorded Images" (page 109).

Select the recorded images you want to protect, and click (Protect).

When List View



When Timeline View



The recorded images are protected. In the list view, "Protect" is displayed for protected recordings.

Cancelling Image Protection

Select the recorded images for which you want to cancel protection in Step 3 above, and click (Unprotect).

Exporting Recorded Images

You can export saved recorded images as files. Video is exported in a native format (.cam file), and still images in JPEG format. Exported video can be played back with an application for playing CAM files.

Notes

- A hemispheric view will be exported for Sony 360-degree hemispheric-view network cameras.
- Exported images from Sony 360-degree hemisphericview network cameras can only be displayed in hemispheric view. If you want to adjust the angle during playback in Media File Player, export from a remote client.

Exporting Recorded Images

You can export saved recorded images as files. Export recorded images from the Main screen or Search window. You can specify part of the recorded images to be exported.

You can also enable password protection on recorded images when exporting them.

Exporting from the Main Screen

1 Select any monitor frame, and display the camera images you want to export.

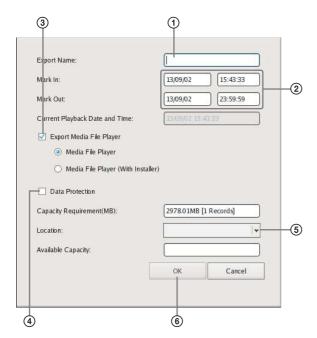
If you want to export recorded images that are currently playing, pause playback and then perform the procedure below.

2 Click (Export Recorded Image) on the [Playback Control] pane.



The Export dialog box appears.

3 Configure each item, and click [OK].



For details on each of the items, refer to "Setting Items of Export Dialog Box" (page 115).

- ① Enter the export name.
- ② Specify the start point (mark in) and end point (mark out) of the recorded images to export, as necessary.
- 3 Select the check box to also export Media File Player for viewing the exported files.
- 4 You can also enable password protection on recorded images when exporting them.
- **⑤** Select the media of the export location.
- (6) Click [OK].

 If the [Data Protection] check box was selected, a password entry dialog box will appear.
- ① Enter a password, and click [OK].

 Password entry will be required when playing password-protected files in Media File Player.

Notes

- Password protection cannot be enabled for still images.
- To play back multiple files at the same time in Media File Player, a common password must be configured.

Exporting starts.

The following screen appears during exporting to allow you to confirm the progress.



Notes

- If there is insufficient free space on the media, a warning message appears and exporting stops.
- If you click [Close] during exporting, you can return to the Main screen while continuing exporting.
- If you click [Abort], the export ends partway through, but the recorded images up until that point are exported.
- If you click (Export Recorded Image) after returning to the Main screen during exporting, the Exporting screen appears. You cannot start another export operation during exporting.
- The space displayed for [Capacity Requirement] in the Export dialog box is just a rough indication. Even if the space displayed for [Available Capacity] exceeds that displayed for [Capacity Requirement], the space of the media may occasionally be insufficient, resulting in the export failing.
- If files that are currently recording are exported, they
 may not be able to be played back normally. When
 exporting recordings that are currently recording,
 specify an end point (mark out) that is well beyond
 the current time.

When exporting ends, the following screen appears.

4 Click [Close].

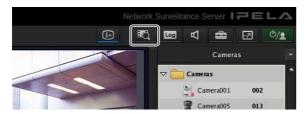


The Exporting screen closes.

Exporting from the Search Window

In the Search window, you can search for the recorded images you want to export, specify a start point (mark in) and end point (mark out), and then perform the export.

1 Click (Search for Recording Data) at the top of the Main screen.



The Search window appears.

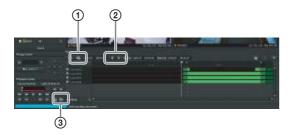
2 Specify the search conditions, and click [Search].

For details on finding recorded images, refer to "Searching Recorded Images" (page 109).

3 Click to select the recorded images you want to export in the list of search results.



4 Switch to the timeline view, specify the start point (mark in) and end point (mark out), and then perform the export.



- ① Click (Timeline) to switch to the timeline view.
- ② Specify the start point (mark in) and end point (mark out) on the timeline.

Click (Mark In) or (Mark Out) to set the current playback position as the start point or end point.

The mark in or mark out position can also be moved by dragging and dropping.

③ Click (Export Recording Data).

The Export dialog box appears. The subsequent procedure is the same as Step 3 of "Exporting Recorded Images" (page 113).

Setting Items of Export Dialog Box

This dialog box is displayed by clicking (Export Recorded Image) on the Main screen (page 99). After configuring each item, click [OK].



Export Name

Enter the export name.

Mark In

Enter a start point for the recorded images to be exported. You can also set a start point on the timeline of the Search window. If a mark in is set on the timeline of the Search window, that value is displayed automatically. You can adjust the value manually, as necessary.

Mark Out

Enter an end point for the recorded images to be exported. You can also set an end point on the timeline of the Search window. If a mark out is set on the timeline of the Search window, that value is displayed automatically. You can adjust the value manually, as necessary.

Current Playback Date and Time

This displays the date and time that the image currently displayed in the monitor frame was recorded.

Export Media File Player

Select the check box to also export Media File Player for viewing the exported files.

Capacity Requirement

This displays the space required for exporting the specified recorded images.

Location

Select the media of the export location.

Available Capacity

This displays the free space of the output location.

OK

This starts exporting.

Cancel

This cancels exporting, and closes the dialog box.

Exporting Recorded Images as Still Images

You can capture one scene of recorded or live images and export it as a still image file.

The image displayed in the monitor frame is exported as a still image file for Sony 360-degree hemispheric-view network cameras as well.

- 1 Select any monitor frame, and play the recorded images containing the scene you want to export.
- **2** Pause playback at the scene you want to export.
- 3 Click (Capture Still Image) on the Playback Control pane.



The Still Image Export dialog box appears.

4 Configure each item, and click [OK].



For details on each of the items, refer to "Setting Items of Still Image Export Dialog Box" (page 116).

- 1) Enter the file name.
- ② Select the media of the export location.
- 3 Click [Export].

The still image is exported.



If there is insufficient free space on the media, a warning message appears and exporting stops.

Setting Items of Still Image Export Dialog Box

This dialog box is displayed by clicking (Capture Still Image) on the Main screen. After configuring each item, click [OK].



File Name

Enter the file name.

If a file with the same name as the file name entered already exists at the export location, the file may be exported under a different file name.

Location

Select the output location for the export file.

Capacity Requirement

This displays the capacity required to export the specified still image.

Available Capacity (MB)

This displays the free capacity of the output location.

System Administration

This section describes the operations necessary for routine system administration.

- "Shutting Down and Restarting the NSR" (page 32)
- "Monitoring the Error Status" (page 117)
- "Exporting Log Files" (page 117)

Monitoring the Error Status

When an error occurs with NSR, you can confirm the error with the ERROR lamp in the Main screen or on the front of NSR.

The ERROR Lamp on the Main Screen

When an EMERGENCY level error is detected, the ERROR lamp at the bottom right of the Main screen lights.



Confirming the Error Content

You can view the log by clicking the ERROR lamp to display the Log dialog box.

You can also view the log by performing the following.

1 Click at the top of the Main screen.

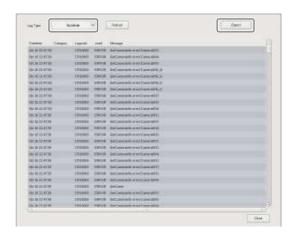


The Log dialog box appears.

2 Confirm the error content.

Select System, Event/Alarm, or Operation from [Log Type].

Specifying a log level allows you to filter the logs that are displayed.



When an Error Occurs with the Hardware

The LEDs on the front of the unit light according to the type of error that occurred.

For details, refer to the descriptions for each LED in "Features and Functions" (page 8).

Exporting Log Files

You can export the following log files.

- System logs
- Event and alarm logs
- Operation logs
- Detailed logs and system information
- 1 Click at the top of the Main screen.



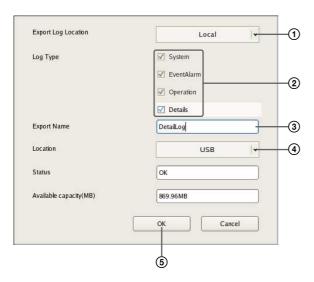
The Log dialog box appears.

2 Click [Export].



The Export dialog box appears.

3 Specify the logs you want to export, and click [OK].



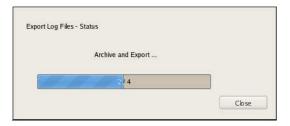
- ① Select the location in which to save the logs.
- ② Select the check boxes of the logs to export.

Notes

- Only users with "Administrator Menu Setting" permissions can select the [Details] check box. For details on permissions, refer to "Registering Users" (page 93).
- The files that are exported when [Details] is selected are identical to the files that are exported when using [Export System Information] in the Administration Menu.
- 3 Enter the file name.
- 4 Select the media of the export location.
- ⑤ Click [OK].

Exporting starts.

The following screen appears during exporting to allow you to confirm the progress.

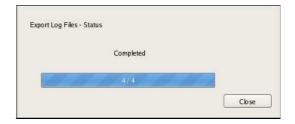


Note

If there is insufficient free space on the media, a warning message appears and exporting stops.

When exporting ends, the following screen appears.

4 Click [Close].



The Export screen closes.

Appendix Chapter

6

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