

Intelligent Monitoring Software

User's Guide

Software Version 1.6 and Later

RealShot Manager Advanced

IPELA

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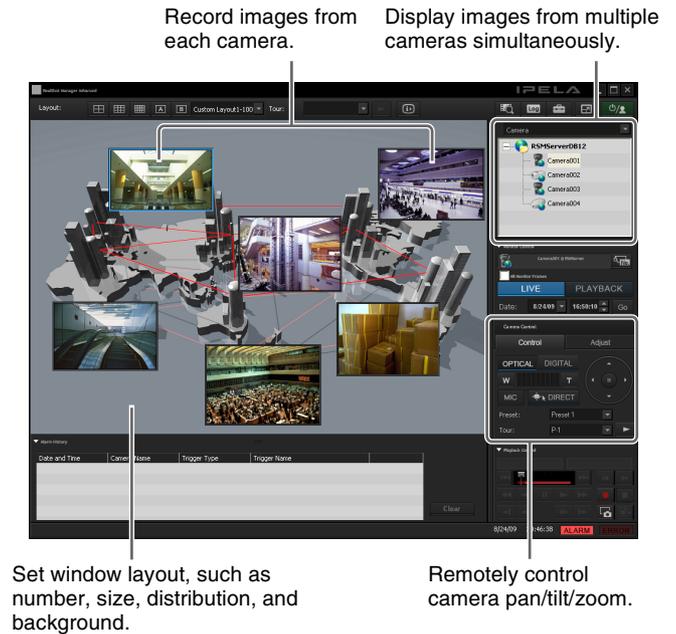
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Features of RealShot Manager Advanced

RealShot Manager Advanced is a software application used to monitor network cameras (IP cameras) in a multipoint monitoring system. By installing RealShot Manager Advanced on a computer and making a few easy settings, it is possible to manage multiple network cameras over a network, monitor images, search and play back recordings, and control cameras, among other operations. RealShot Manager Advanced has the following features.

Simultaneous Image Display for Multiple Network Cameras

Images from multiple network cameras can be displayed on the RealShot Manager Advanced screen at the same time. Layout of the camera monitoring windows displayed on the RealShot Manager Advanced screen, such as number, size, and distribution, can be freely configured according to your operating environment and objective. In addition, existing data, such as maps and floor plans, can be imported and used for the screen background. Camera controls such as pan, tilt, and zoom can be performed by accessing cameras individually from the camera monitoring windows.



Detailed Recording Schedule and Diverse Recording Modes

You can configure a recording schedule for individual cameras or for multiple cameras to record images. Cameras can also be configured to begin recording when an alarm, such as a motion detection or an external sensor, is triggered. In addition, it is possible to record images manually from the camera monitoring window. Playback of recorded images uses the same controls as a video or DVD player, and it is also possible to playback an image while recording it.

Detailed Settings for Camera Management and Control

Camera groups can be configured for effective camera management, such as one for each area or floor where cameras are installed. For each camera, properties such as image quality and resolution can be configured, and camera controls such as pan, tilt, and zoom can be performed directly when an alarm or event occurs. Camera positions can also be preset and recalled when necessary.

Motion Detection by Software

RealShot Manager Advanced can be used to perform motion detection.

Because the recording schedule can be configured to switch the motion detection setting by the hour, a variety of applications are possible, such as having the setting switch automatically between daytime and nighttime monitoring.

In addition, RealShot Manager Advanced supports camera-based motion detection and object detection functions.

Filtering Functions Using Camera Metadata

Precise alarm processing is made possible by performing various types of filtering using the image processing results sent from the camera in the form of object information metadata. Because filtering can be applied to metadata that has already been recorded, you can also search for areas of interest after recording is finished.

Other Features

- Supports JPEG, MPEG4, or H.264 formats. (But compatibility depends on which image compression formats are supported by the camera.)
- Audio from a camera microphone or other audio input device can be monitored, recorded, and played back.
- For each camera, the storage location for recordings can be specified.
- Multiple recordings can be played back simultaneously by specifying a playback start time.
- Automatic optimization of the database without interruption in operations allows for extended periods of continuous use. (This version of RealShot Manager Advanced uses PostgreSQL for database management.)
- With RealShot Manager Advanced, 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.

Caution

- Real Shot Manager Advanced supports the RM-NS1000 System Controller.
- RealShot Manager Lite has limited support for some functions, such as the number of cameras that can be connected. For details, see “*Limitations of RealShot Manager Lite*” (page 10).
- With RealShot Manager Advanced (Server), up to 32 licensed cameras can be connected. However, because connecting the maximum number of cameras may adversely affect system performance, depending on your hardware and operating environment, be sure to test your system before operating RealShot Manager Advanced.

- The RealShot Manager Advanced license is a fixed-type license, permanently associated with the computer on which RealShot Manager Advanced (Server) is installed. Make sure to decide which computer will have RealShot Manager Advanced (Server) installed before purchasing a license. Also, if you change your hardware configuration after acquiring a license, the license file may become invalid. In that case, consult the local Sony dealer where you purchased your license.

Operating Environment

For details on the operating environments and devices supported by RealShot Manager Advanced, refer to the software release notes.

Software

RealShot Manager Advanced includes the following software to be used according to your intended purposes.

- **RealShot Manager Advanced (Server)**

Operates as a server and allows you to control and operate up to 32 cameras via a network. You can use all of the functions of RealShot Manager Advanced to monitor images and search and play back recordings. The computer on which RealShot Manager Advanced (Server) is installed requires a license that corresponds to the number of cameras connected.

- **RealShot Manager Lite**

Operates as a server and allows you to perform basic functions for controlling cameras, monitoring images, and searching and playing back recordings. However, there are some limitations on functions and the number of cameras that can be connected. For details, refer to “*Limitations of RealShot Manager Lite*” (page 10). RealShot Manager Lite does not require the purchase of a license.

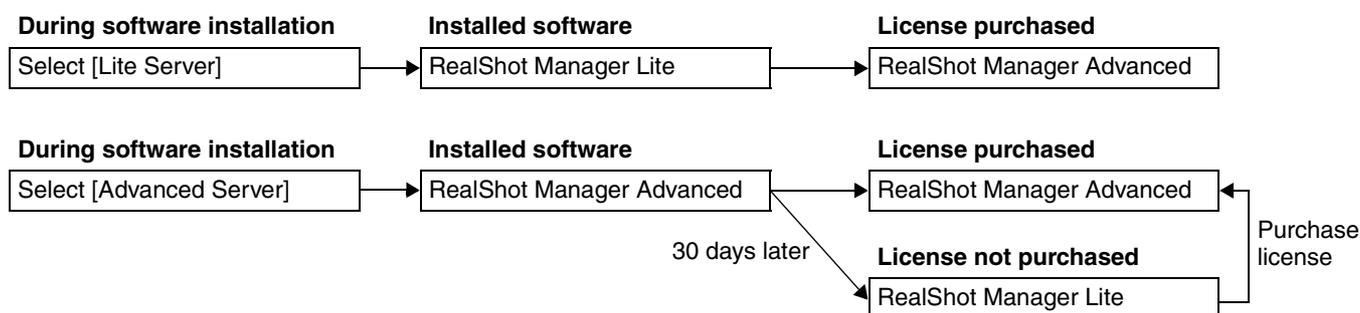
- **RealShot Manager Advanced (Client)**

Operates as a remote client for RealShot Manager Advanced (Server), RealShot Manager Lite, the NSR-1000 series, and the NSR-500 series. RealShot Manager Advanced (Client) does not require the purchase of a license.

RealShot Manager Advanced (Server) and RealShot Manager Lite

You must select which software to install during installation. However, you can upgrade RealShot Manager Lite to RealShot Manager Advanced (Server), even after installation.

The relationship between RealShot Manager Advanced (Server) and RealShot Manager Lite after installation is as follows.



Notes

- If 30 days elapse after installing RealShot Manager Advanced (Server) and it downgrades to RealShot Manager Lite, the number of cameras and functions available will become limited. For details, refer to “*Limitations of RealShot Manager Lite*” (page 10).
- Setting configurations are transferred when RealShot Manager Lite is upgraded to RealShot Manager Advanced (Server).
- For details on purchasing licenses, consult your local Sony dealer. We recommend purchasing a license within 30 days of installing the software.

Limitations of RealShot Manager Lite

The function limitations of RealShot Manager Lite are as follows.

Function	RealShot Manager Lite	RealShot Manager Advanced (Server)
Maximum number of cameras	9	32
Supported cameras	Supports Sony cameras only ¹⁾	Supports non-Sony cameras ¹⁾
Central server mode ²⁾ (master/slave)	No	Yes
Video Motion Detection (Recorder)	No	Yes
Video Motion Filter (motion detection using metadata)	No	Yes
Object search ³⁾	No	Yes
Alarm output	No	Yes
Manual action	No	Yes
Network drive	No	Yes
Edge Storage	No	Yes

Yes: Supported No: Not supported

- 1) RealShot Manager Lite also does not support other devices from other manufacturers. If you want to use audio devices from other manufacturers, for example, use RealShot Manager Advanced.
- 2) This function is used when you want to perform common user management operations with multiple servers (NSR-1000 series, NSR-500 series, and RealShot Manager Advanced (Server)), or when you want to connect from RealShot Manager Advanced (Client).
- 3) This search function uses the Video Motion Detection (Recorder) and Video Motion Filter functions to search images that have already been recorded.

Limitations when Connecting to the NSR-500 Series from RealShot Manager Advanced (Client)

The following settings and functions cannot be used when connecting to NSR-500 series units, as they are not available on these units.

Settings and functions

- Video Motion Filter (VMF) settings¹⁾
- Video Motion Detection (VMD) (recorder) settings
- Mask settings
- Object search
- Some Normal search functions²⁾

- 1) If the VMF settings on a camera that includes VMF detection functions are configured, that VMF detection can be used as a trigger in the VMF settings for VMD (camera).
- 2) VMF and VMD (recorder) searches cannot be performed for alarm recording and event recording.

Example System Layouts

With RealShot Manager Advanced, you can construct the following system layouts according to the scale and intended use of your system.

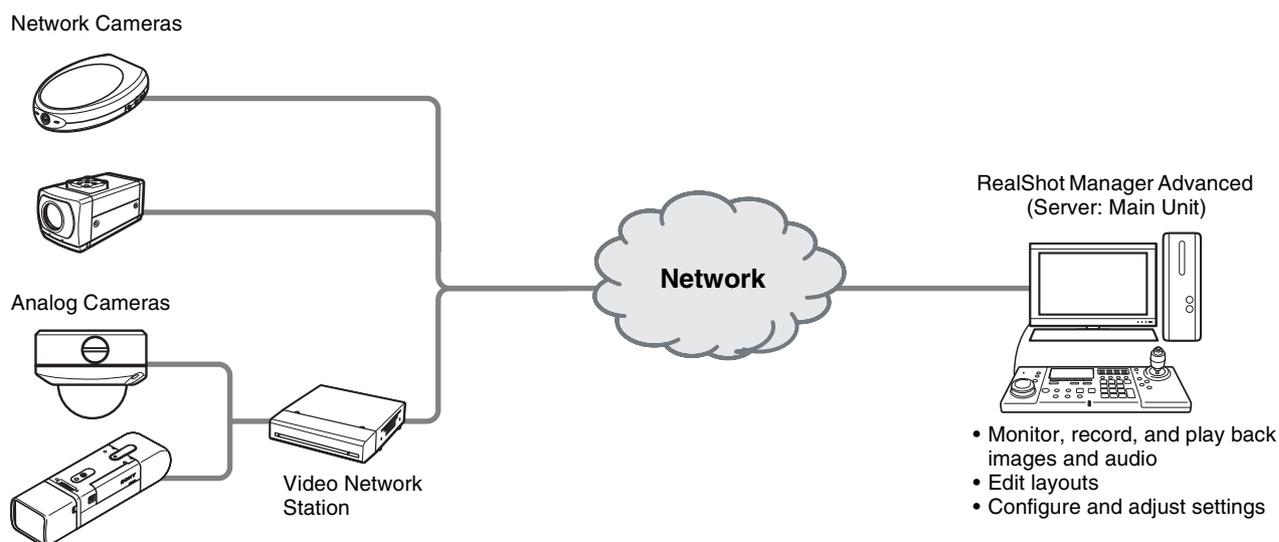
Only content that is unique to RealShot Manager Lite is referred to as “RealShot Manager Lite” in this document. Content that is common between the different versions is referred to as “RealShot Manager Advanced”.

Caution

When a camera is registered with and operated by RealShot Manager Advanced on one computer, do not register the same camera with another RealShot Manager Advanced, NSR-1000 series, or NSR-500 series running from a different computer or attempt to connect to it from a different Web browser.

Example System Layout 1

What follows is the most basic system layout. All settings and operations are performed from a computer on which RealShot Manager Advanced (Server) has been installed.

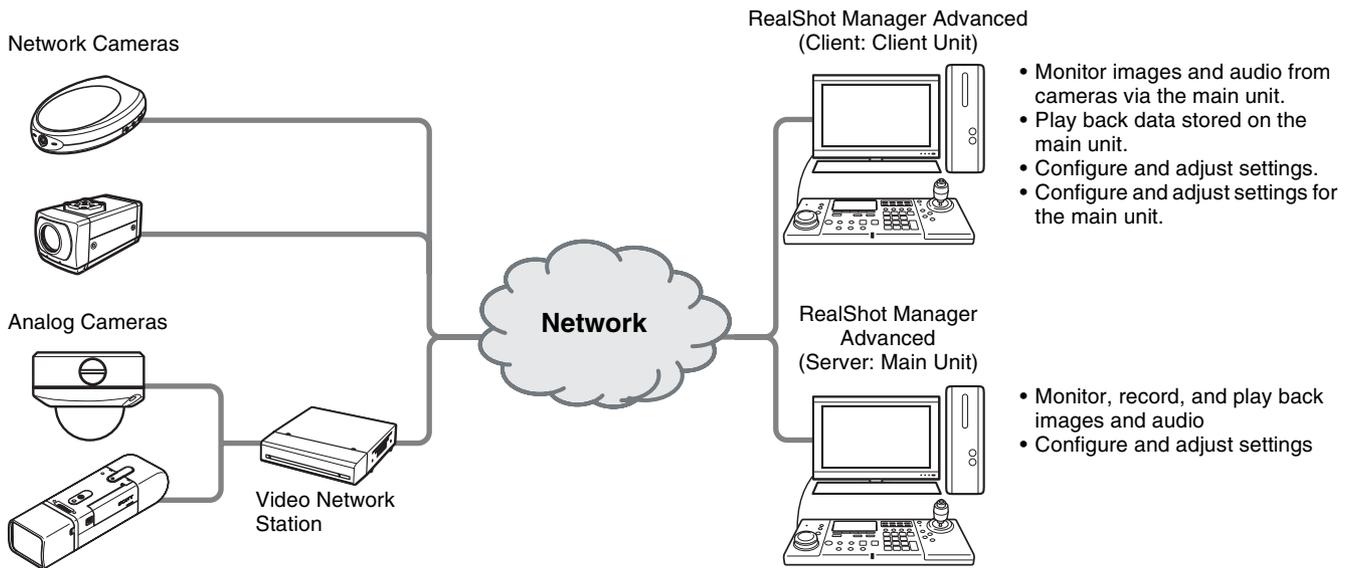


Notes

- A single camera can only be connected to one RealShot Manager Lite or one RealShot Manager Advanced (Server). In addition, RealShot Manager Advanced (Server) must have a license that corresponds to the number of cameras to be connected.
- Real Shot Manager Advanced supports the RM-NS1000 System Controller.

Example System Layout 2

With this system layout, you can share recording data and camera monitoring between multiple computers by installing the version of RealShot Manager Advanced suited to your needs on each computer.

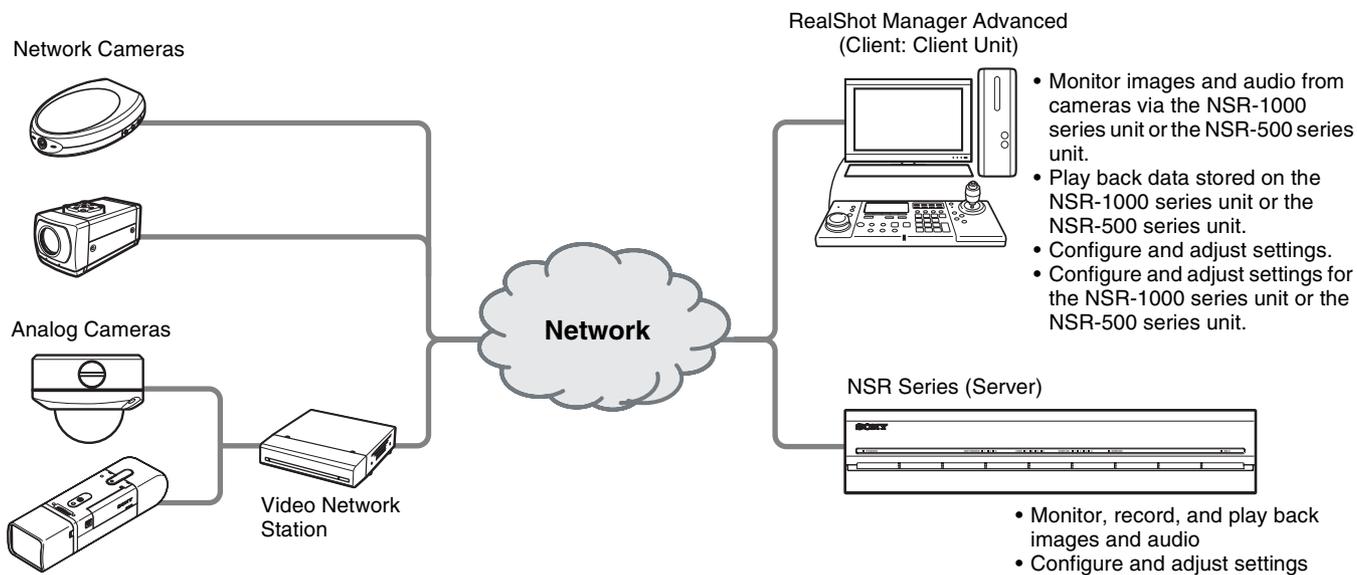


Notes

- There must be a computer on which RealShot Manager Advanced (Server) has been installed on the same network.
- The RealShot Manager Advanced (Server) installed on the computer must have a license that corresponds to the number of cameras to be connected.
- When using a system layout that includes RealShot Manager Advanced (Server) and RealShot Manager Advanced (Client), you must configure master server settings and create users for RealShot Manager Advanced (Server). For details on necessary settings, refer to “*Configuring Settings Related to Servers*” (page 26) and “*Registering Users*” (page 104).
- Increasing the number of clients connected to the RealShot Manager (Server) will increase the processing load of the server.
- Real Shot Manager Advanced supports the RM-NS1000 System Controller.

Example System Layout 3

This is an example layout for using RealShot Manager Advanced as a remote client for the NSR-1000 series, and the NSR-500 series. With this system layout, you can install RealShot Manager Advanced (Client) on the remote client computer, and share recording data and camera monitoring between the client and the NSR-1000 series, or the NSR-500 series acting as the master server.



Note

To use RealShot Manager Advanced as a remote client for the NSR-1000 series or the NSR-500 series, you must configure the master server settings and create users on the NSR-1000 series unit or the NSR-500 series unit. For details on the necessary settings, refer to the Installation Manual and User's Guide for the NSR-1000 series or the NSR-500 series.

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Overview

This chapter describes how to perform the following basic operations that include starting and exiting the application, using the various windows, and changing passwords.

- Logging On to the RealShot Manager Advanced (page 16)
- Basic Window Operations (page 18)
- Changing the Password (page 21)
- Logging Off (page 22)
- Viewing Version Information (page 22)

Note

For details on settings related to devices, schedules, sensor inputs, and alarm outputs, see Chapter 4 “*Application Settings*” (page 32). For details on monitoring and search for and playing back recorded images, see Chapter 5 “*Operation and Control*” (page 109).

Starting and Stopping RealShot Manager Advanced

Starting RealShot Manager Advanced

- 1 Click the [Start] menu, select [All Programs], point to [RealShot Manager Advanced], and then click [RealShot Manager Advanced].

The screen that appears will differ depending on your configuration.

The following procedure describes what to do when the logon screen appears.

Notes

- When RealShot Manager Advanced is configured for Auto-Logon, the Main screen appears.
- When the Camera Auto Registration screen appears, you can select whether RealShot Manager Advanced will automatically search for and register cameras. For details on Camera Auto Registration, refer to the Installation Guide (PDF).

- 2 Log on.

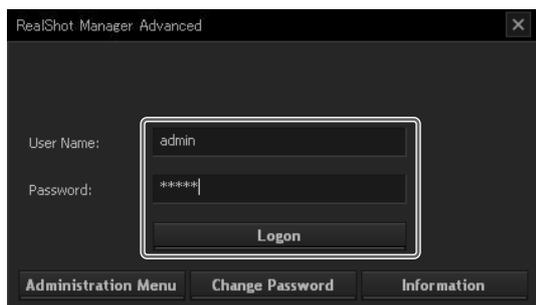
The screen that appears will differ for RealShot Manager Advanced (Server) and RealShot Manager Advanced (Client).

For RealShot Manager Advanced (Server)

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

Default user name: admin

Default password: admin



For RealShot Manager Advanced (Client)

Enter the following information, and click [Logon].

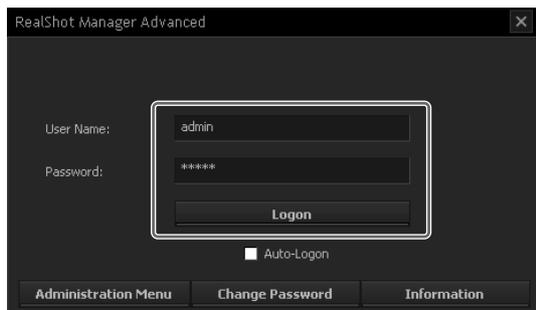
Logon Server: Master server IP address.

Specify the central server value configured on the server for the port. The default value is “8082.”

If the server IP address is “192.168.1.1,” specify “192.168.1.1:8082” as shown below.

User Name: User name configured on the server.

Password: Password configured on the server.



- 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.

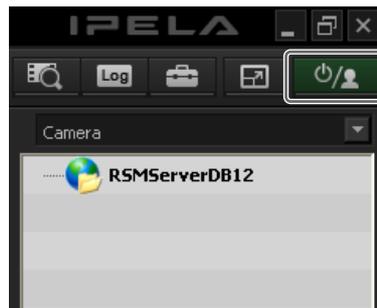
Caution

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.

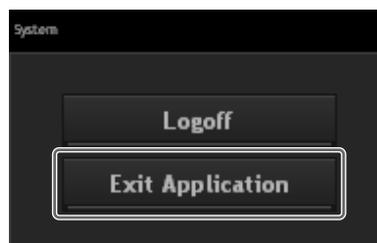
Stopping RealShot Manager Advanced

- 1 Click  at the top right of the Main screen.



The following screen appears.

- 2 Click [Exit Application].



RealShot Manager Advanced exits.

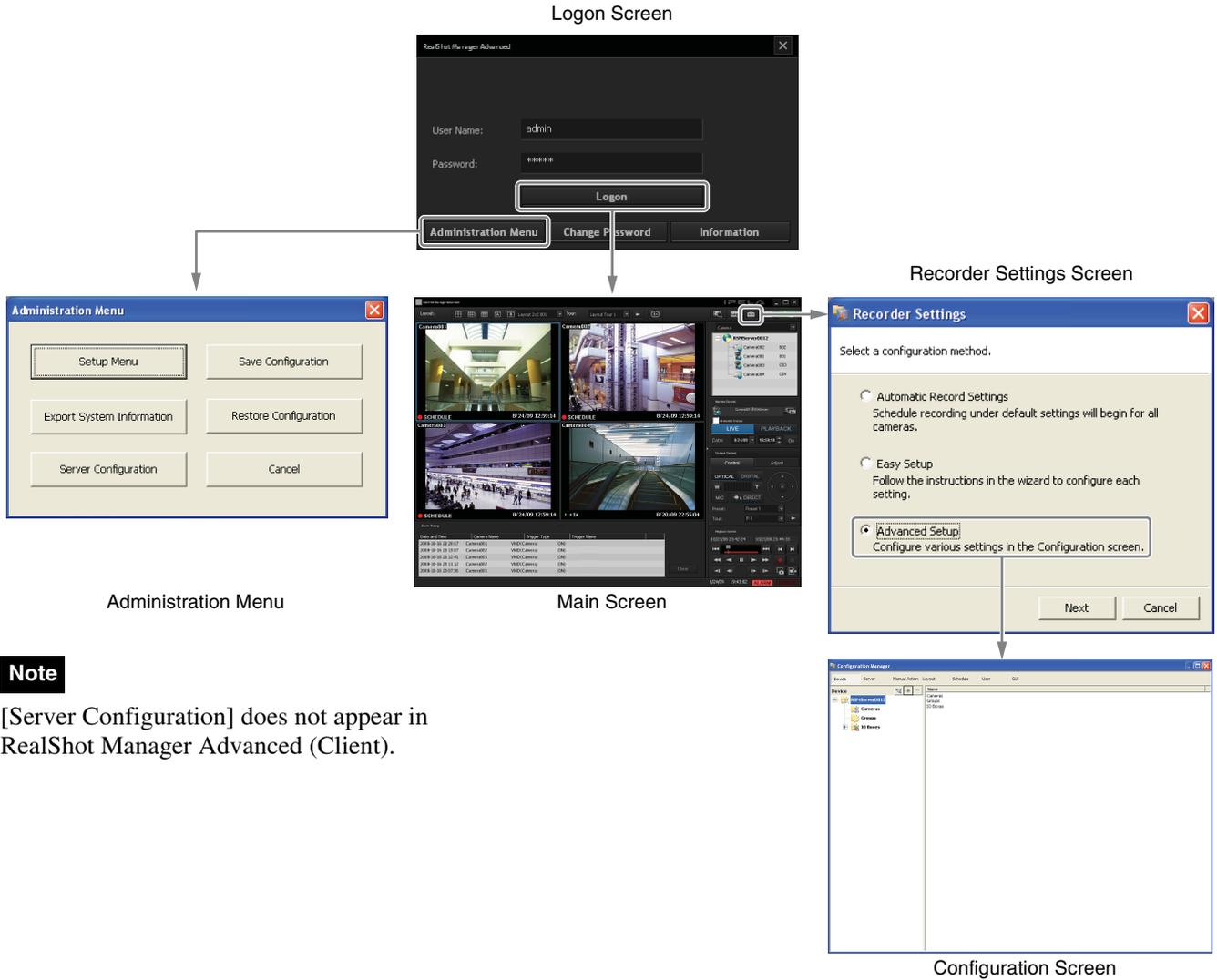
Caution

When user management is configured, only users granted the “Exit Application” permission can exit RealShot Manager Advanced. If you have configured user management, exit RealShot Manager Advanced after logging on as a user with the “Exit Application” permission. Please take care when configuring user management, because if no users are granted the “Exit Application” permission, RealShot Manager Advanced cannot be exited.

Basic Window Operations

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

RealShot Manager Advanced 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 server.



Note

[Server Configuration] does not appear in RealShot Manager Advanced (Client).

Note

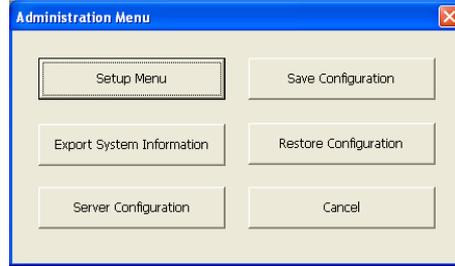
The Recorder Settings screen does not appear in RealShot Manager Advanced (Client).

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 Guide (PDF).

Administration Menu

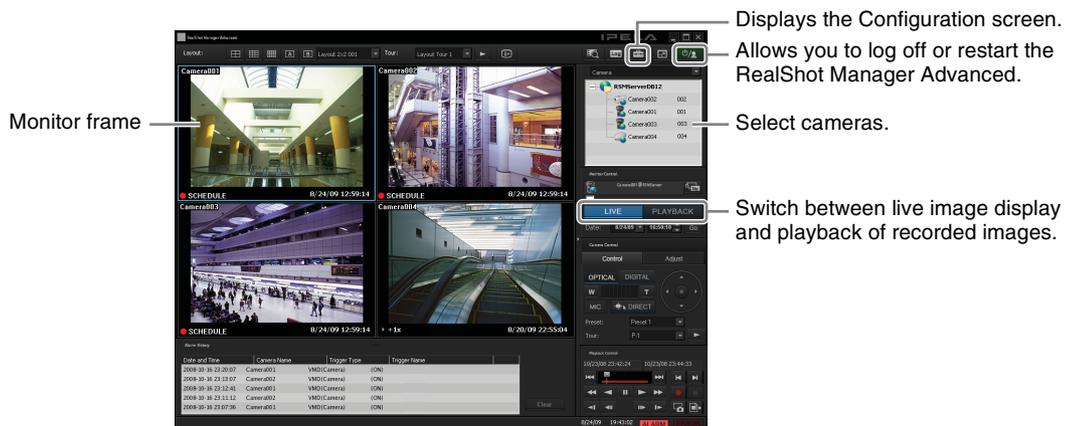
When you click [Administration Menu] in the logon screen, the Administration Menu screen appears. Click each button to perform various configurations and operations for the RealShot Manager Advanced.



For details on settings that can be configured from the Administration Menu, see Chapter 3 “Administration Menu” (page 23).

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.

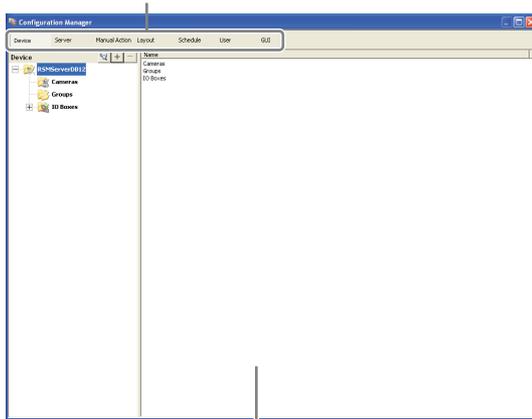


For details on monitoring and searching for and playing back recorded images, see Chapter 5 “Operation and Control” (page 109).

Configuration screen

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

Click the button for the item you want to configure.



Returns to the Main screen.

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 32).

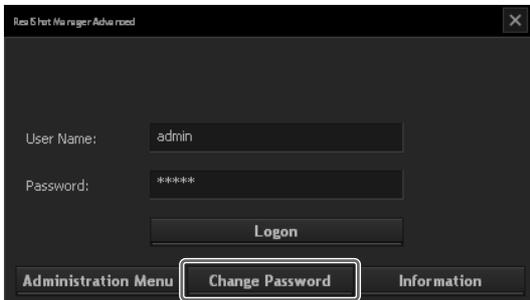
Changing the Password

You change the password for logging in to RealShot Manager Advanced.

Note

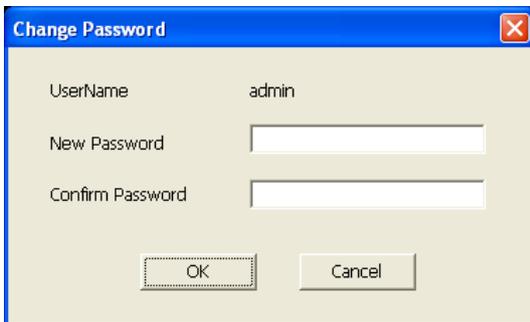
- The password is extremely important to the security of this equipment. The first time you log on to RealShot Manager Advanced after purchasing the equipment, be sure to change the password before monitoring and configuring various settings. Take care to keep the password secure.
- When using a System Controller (RM-NS1000) for operations, create user names and passwords consisting only of numbers.

- 1 Enter the user name and password in 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 Password].

The password is changed.

Note

When [Auto-Logon] is enabled, the logon screen will not appear when you start the application, and you will be logged on automatically. To change the password when [Auto-Logon] is enabled, log off from the Main screen and then log on again.

Caution

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

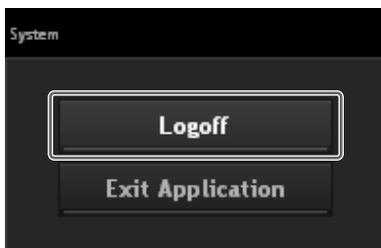
Logging Off

- 1 Click  in the Main screen.



The following screen appears.

- 2 Click [Logoff].

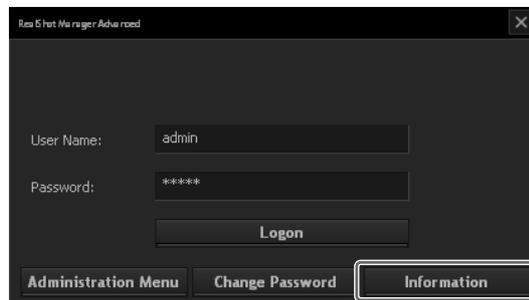


You are logged off the RealShot Manager Advanced, and the logon screen appears.

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

Viewing Version Information

- 1 Enter the user name and password in the logon screen, and click [Information].



Version information for the software appears.



Notes

- In addition to the version number, the version information screen also displays information required for licensing the software, such as the Serial Number and the number of connected cameras.
- If you install RealShot Manager Advanced and do not purchase a license within 30 days, the software switches to RealShot Manager Lite and function limitations are applied. During the trial period, this screen also displays the number of days remaining for you to use the full functionality of RealShot Manager Advanced.

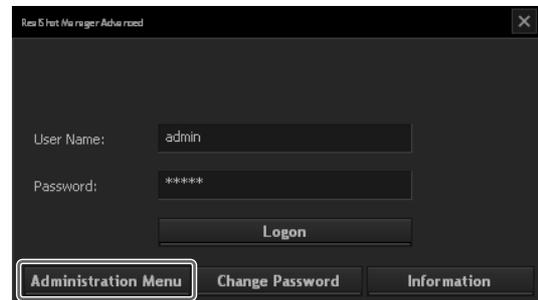
Overview

The Administration Menu 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 23)
- “Changing Initial Settings with the Setup Menu” (page 24)
- “Configuring Settings Related to Servers” (page 26)
- “Saving and Restoring Configuration Data” (page 29)
- “Exporting System Information” (page 31)

Displaying the Administration Menu

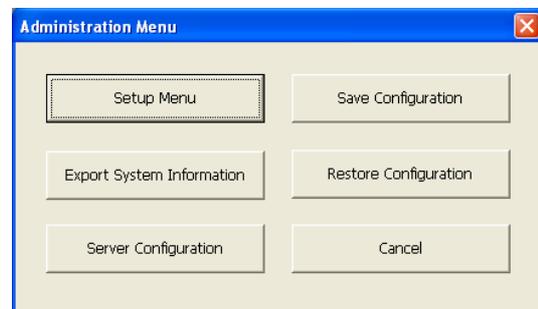
- 1 Enter the user name and password in the logon screen, and click [Administration Menu].



Note

If you are already logged on to the RealShot Manager Advanced, 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.



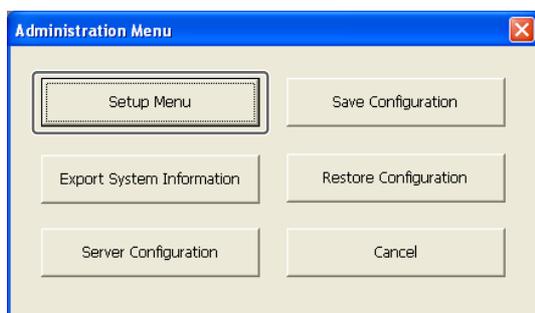
Changing Initial Settings with the Setup Menu

You can change the following settings from the Setup Menu.

- Display language for screens
- Dual monitor configuration
- Server names
- Auto logon function On/Off
- Auto camera registration function On/Off
- Network drive configuration

Displaying Setup Menu

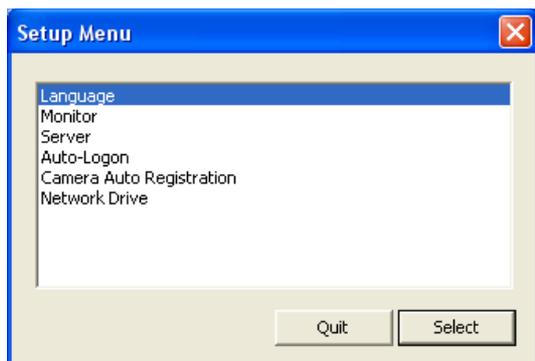
- 1 Click [Setup Menu] in the Administration Menu.



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.

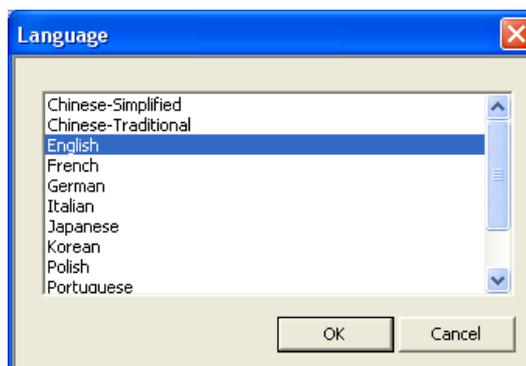
Note

[Server], [Camera Auto Registration], and [Network Drive] do not appear in RealShot Manager Advanced (Client).

Details on Setting Items

Setting Items of Language Screen

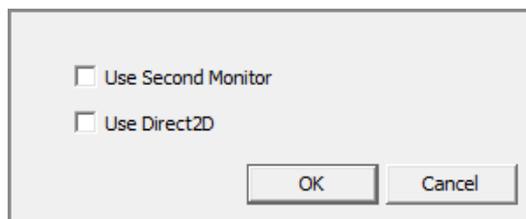
Select the language to display on the screens, and click [OK].



Setting Items of Monitor Screen

If the second display setting is enabled on your Windows operating system, you can display the hotspot monitor for the monitor frames on the second display.

When you want to connect and use two monitors, select the [Use Second Monitor] check box.



If image rendering is not smooth with higher frame rates such as 60 fps, you can use the Direct2D function to improve the rendering performance. To enable the Direct2D function, select the [Use Direct2D] check box and click [OK].

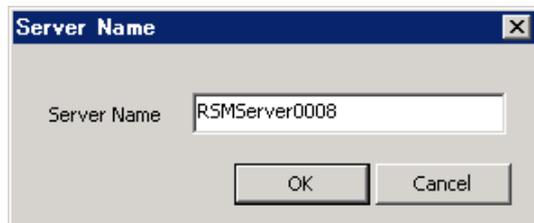
Caution

- This check box will not appear in operating environments that do not support the Direct2D function.
- Depending on the operating environment, enabling this option may not produce the desired results or may affect performance in other ways. Be sure to test the function before beginning actual operations.

Setting Items of Server Name Screen

(Does not appear in RealShot Manager Advanced (Client).)

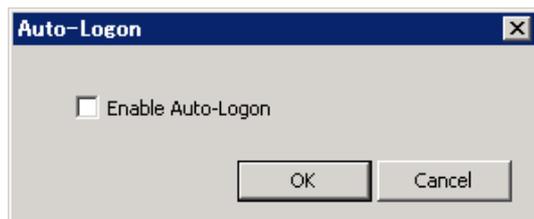
Enter the server name of RealShot Manager Advanced (Server), and click [OK]. When you connect to the server from a client, the name configured here appears as the remote server name.



If you do not set a server name, RealShot Manager Advanced appends the last four digits of the MAC address of the computer on which it is installed to a default name, such as “RSMServerDB12”.

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].



Setting Items of Camera Auto Registration Screen

(Does not appear in RealShot Manager Advanced (Client).)

If 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].

Selecting this check box causes the Camera Auto Registration screen to appear when RealShot Manager Advanced starts.



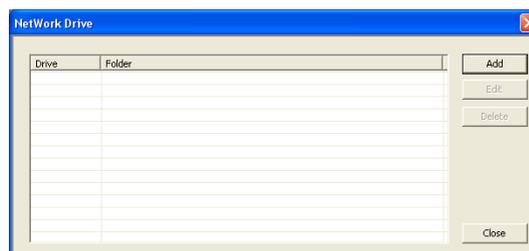
Setting Items of Network Drive Screen

(Does not appear in RealShot Manager Advanced (Client).)

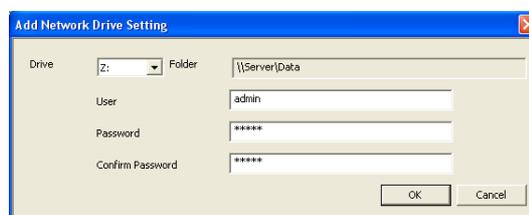
If you want to use a network drive as the storage location for recorded data, configure the network drive as follows. By configuring the network drive, you can configure storage locations to the network drive in the [Storage] tab of the Server Configuration screen.

You must perform the “Map Network Drive” function in Windows before configuring these settings. To configure [Storage] tab settings or export recordings on RealShot Manager Advanced (Server), you must select the [Reconnect at logon] check box and assign the corresponding network drive in Windows.

- 1 Click [Add].



- 2 Configure each item, and click [OK].



Drive

Select the letter assigned to the network drive. You can select from among the network drives that have not yet been registered to the Network Drive screen.

As this drive is used for accessing recorded data, a different folder cannot be assigned for it later.

Folder

Displays the shared folder name assigned to the drive.

User

Enter the user name to be used for accessing the folder. Specify a user name that possesses sufficient access permissions for creating subfolders and reading/writing data to the folder.

We recommend specifying a permanent specialized account, rather than a personal user account.

Password

Enter the password to be used for accessing the folder.

Confirm Password

Reenter the same password for confirmation.

Note

If the password for accessing the network drive has changed, click [Edit] in the Network Drive screen, and change the password.

When using network drives

- In comparison to a local drive, the stability of recording to and playback from a network drive is more susceptible to network environment conditions. Before using the network drive, verify the bandwidth and stability of the network.
- We recommend enabling the disk capacity notification setting in the system alert settings. By doing so, you can receive notifications when network errors occur and connection to the storage becomes impossible. For details on system alerts, refer to “*Configuring System Alert Settings*” (page 103).
- Network drive configurations are applied after you restart the system.

Caution

When using RealShot Manager Advanced in a Windows XP or Windows Server 2003 environment, you must change the RealShot Manager Advanced service account as follows.

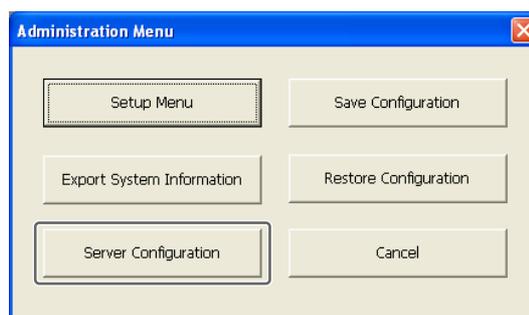
- ① Create an account with administrator privileges.
- ② Open “Control Panel” – “Administrative Tools” – “Services.”
- ③ Click “RSM Record Server,” and configure the account with administrator privileges in the “Log On” tab.
- ④ Restart the computer.

Configuring Settings Related to Servers

(Does not appear in RealShot Manager Advanced (Client).)

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 RealShot Manager Advanced, NSR-1000 series, and NSR-500 series together.

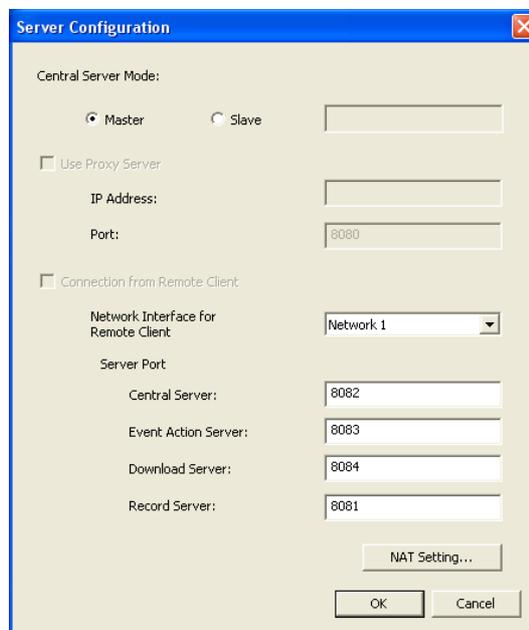
- 1 Click [Server Configuration] in the Administration Menu.



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

(Does not appear in RealShot Manager Lite.)

Set this if you want manage multiple NSR-1000 series, NSR-500 series, and RealShot Manager Advanced (Server) as one system¹⁾.

In system configurations with multiple servers, configure one master server to uniformly manage users, and configure all remaining servers as 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 for that server is discarded and the user information of the master is used.

If you want to change this setting, basically change it immediately after installation.

When you change this setting, the computer will restart.

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 or host name for the proxy server.

Port

Enter the port number for the proxy server.

Connection from 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 Setting

Displays the NAT Setting dialog box (page 27).

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.

The following dialog box appears when [Slave] is selected for Central Server Mode.

- 3 Enter a user name and password to connect to the master server, and click [OK].



Caution

- To change to [Slave], register a user other than “admin” on the master server, and enter that user name and password. 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.

This dialog box appears when you select [NAT Setting] on the Server Configuration screen (page 26). After configuring each setting, click [OK].

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

- When using Internet (WAN side) security, be sure to use the firewall function on your router or similar device to 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 RealShot Manager Advanced (Server) or RealShot Manager Lite being accessed from WAN-side ports. To maintain security, change the password regularly and configure other settings to prevent unauthorized users from logging on.²⁾ For details on changing the password, refer to the “*Changing the Password*” (page 21).
- If unauthorized users log onto RealShot Manager Advanced (Server) or RealShot Manager Lite, there is a risk of the following.³⁾
 - RealShot Manager Advanced (Server) or RealShot Manager Lite 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.

1) 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.

Saving and Restoring Configuration Data

You can save the configuration data of RealShot Manager Advanced to external media, and restore saved configuration data.

Note

Configuration data consists of configurations for all RealShot Manager Advanced settings. You can restore settings quickly after your computer fails and you have to reinstall the software, for example, 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

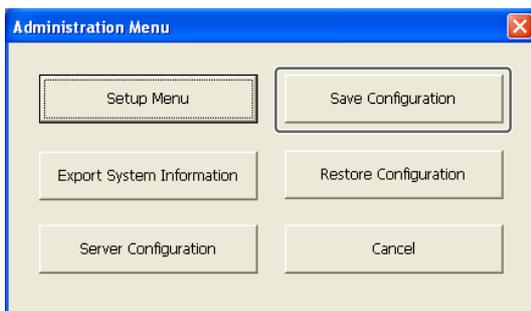
Generally, the settings configured in the Server Configuration screen in the Administration Menu of the logon screen and settings configured in the settings screen after logging on are stored as configuration data.

Caution

Note that the following information is not saved.

- Recording records
- Log information

- 1 Click [Save Configuration] in the Administration Menu.

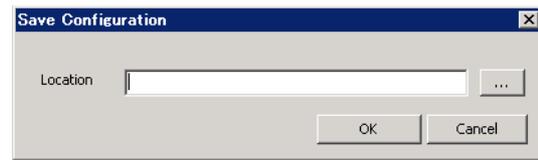


The menu items of the Administration Menu differ depending on the server and clients.

The Save Configuration screen appears.

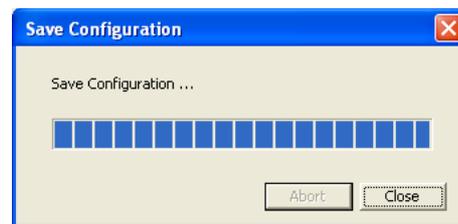
- 2 Specify a location to store the configuration data, and click [OK].

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

```
version.item
gui.dump
rec.dump
cs.dump
eac.dump
eas.dump
rmsystem.conf
syslog.conf
```

Restoring Configuration Data

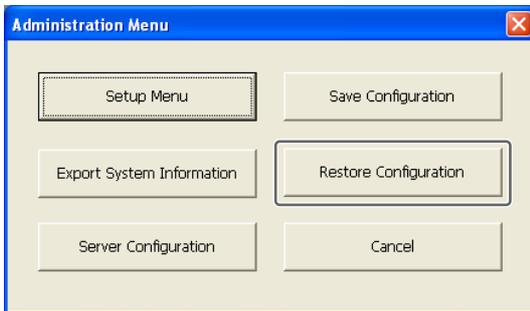
Caution

- Note that the following information is not restored.
 - Recording records
 - Logs
- 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. Example:

Version when saved	Current version	Restoration enabled
Version 1.1.0	Version 1.1.1 or 1.1.2	Yes
Version 1.1.0	Version 1.2.0	No
Version 1.1.0	Version 2.0.0	No

- 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 to be started again.

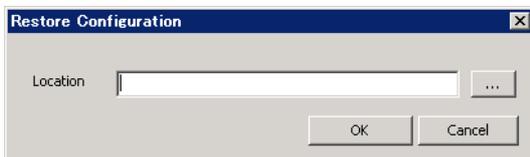
- 1 Click [Restore Configuration] in the Administration Menu.



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 click [OK].



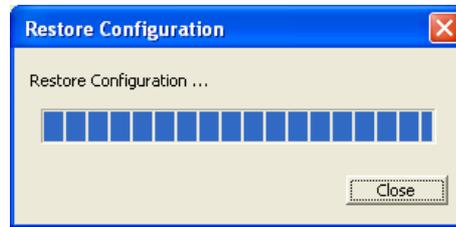
A confirmation message appears.

- 3 Click [OK].



A progress bar appears during restoration of the configuration data.

- 4 Click [Close].



The configuration data is restored, and the application restarts.

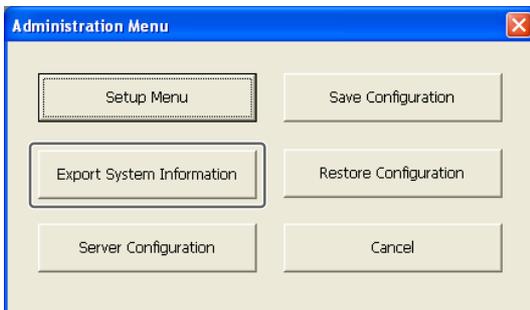
Exporting System Information

You can save RealShot Manager Advanced system information as files onto external media.

Note

System information consists of RealShot Manager Advanced system configuration information and logs.

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

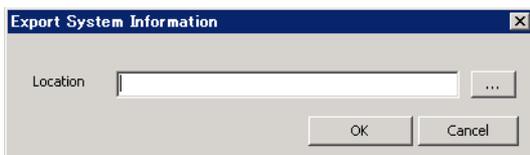


The items that appear in the Administration Menu vary depending on the server and client.

The Export System Information screen appears.

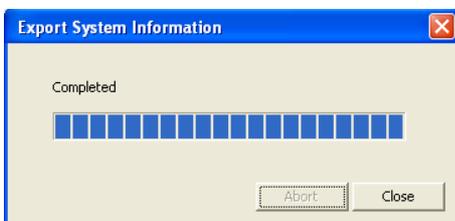
- 2 Select the location on which to save the system information, enter the file name, and then click [OK].

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



Alarms and Events

You can configure sensor inputs, VMD, manual actions, and other triggers as alarms or events on the RealShot Manager Advanced, 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 trigger of event/alarm	Recording/Action Corresponding to Event/Alarm			
	Recording setting		Action setting	
	Event record	Alarm record	Camera action I/O	Client action
Sensor input	<input type="radio"/> (event)	<input type="radio"/> (alarm)	<input type="radio"/> (alarm)	<input type="radio"/> (event)
VMD				
• VMD (camera)	<input type="radio"/> (event)	<input type="radio"/> (alarm)	<input type="radio"/> (alarm)	<input type="radio"/> (event)
• VMD (recorder)				
• VMF				
System alert	–	–	<input type="radio"/> (alarm)	<input type="radio"/> (event)
Manual action	–	–	<input type="radio"/> ¹⁾	<input type="radio"/> ¹⁾

1) An action is performed but is not determined to be an event or action.

Displaying Configuration Window

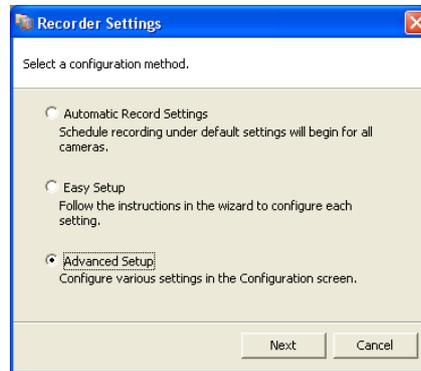
You can configure various settings in the Configuration window.

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



The Recorder Settings screen appears.

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

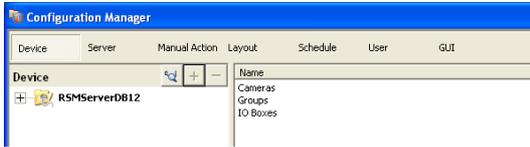


Note

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 Guide (PDF).

The Configuration window appears.

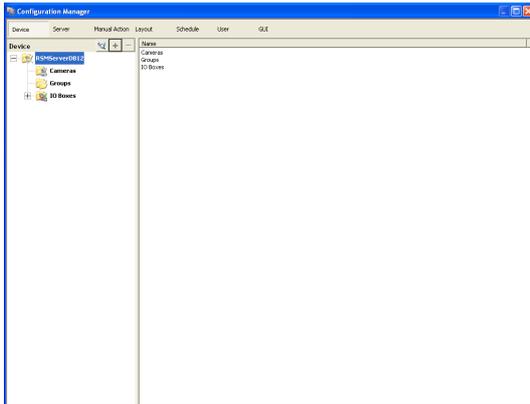
- Click the button of the item you want to set at the top of the window.



The configuration screen that corresponds to the button appears.

Example: When [Device] is clicked:

The Device Configuration screen appears.



If you click [Configuration] in RealShot Manager Advanced (Client), the Device Configuration screen appears. The Recorder Settings screen does not appear.

Note

In a master/slave system configuration, a portion of the information for user settings and other settings is managed by the master server.

Therefore, this portion of the setting information cannot be changed when the master server is not running.

Registering Devices

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

There are the following way of registering devices.

- Register a camera on the network automatically**
 For details on automatic camera registration, refer to the Installation Guide.
- Selecting Automatically Detected Cameras and Registering Them Simultaneously (page 33)**
 Detect the devices that exist on the same network as RealShot Manager Advanced automatically, select the cameras to register, and then register them simultaneously.
- Registering Devices Manually (page 35)**
 Specify the IP address of a device, and register the device individually.

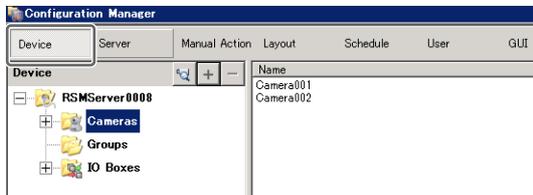
Notes

- 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 53).
- Automatic registration of cameras can only be performed on the server. These operations cannot be performed from a client.

Selecting Automatically Detected Cameras and Registering Them Simultaneously

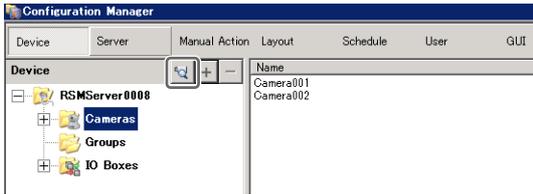
You can detect the devices that exist on the same network as RealShot Manager Advanced automatically, select the cameras to register, and then register them simultaneously. You can also configure the IP addresses and port numbers of the cameras during registration. Entering the administrator ID and password of cameras enables you to register the devices.

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



The Device Configuration screen appears.

- 2 Select [Cameras] in the camera tree, and click (Multiple Registration).



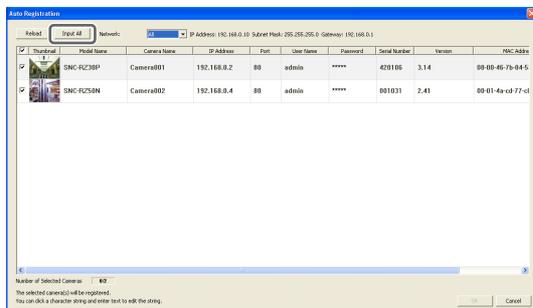
The Camera Registration dialog box appears. The Camera Registration dialog box displays a list of the results of the automatic search.

When you want to configure settings such as the user name and password of the administrator and the IP addresses for the devices, proceed to Step 4. When you want register the devices with the information from the automatic search as is, proceed to Step 5.

- 3 Configure each item.

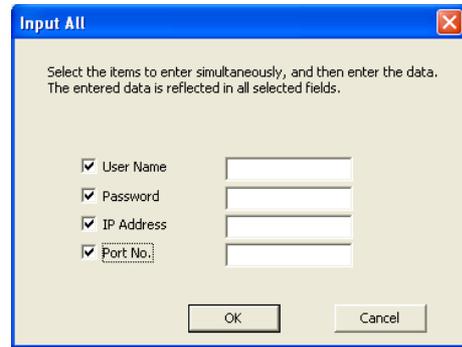
Enter the administrator user name and password. It is possible to enter the setting values individually, but the following shows how to enter the same setting values for multiple devices simultaneously.

- ① Select the check boxes of the devices for which you want to enter setting values, and click the [Input All] button.



The Input All dialog box appears.

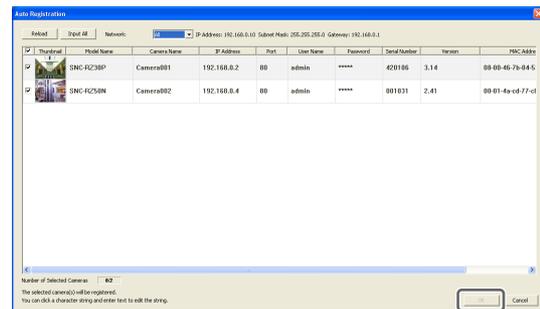
- ② Select the check boxes of the items you want to enter, enter the necessary information, and click [OK].



For details on each of the items, refer to “Setting Items of Input All Dialog Box” (page 41).

The dialog box closes, and the Multiple Camera Registration dialog box reappears.

- 4 Select the check boxes of the devices you want to register, and click the [Register] button.

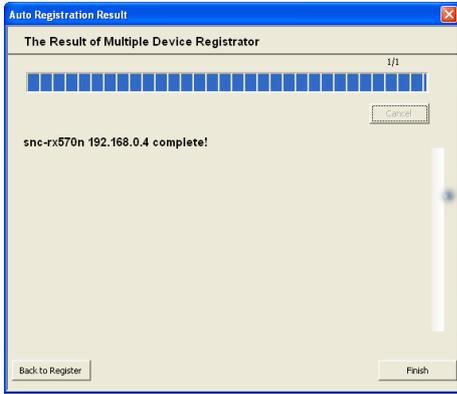


Caution

If you click the [Reload] button, the automatic search is performed 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.

When registration completes, the following screen appears.

5 Click [Finish].

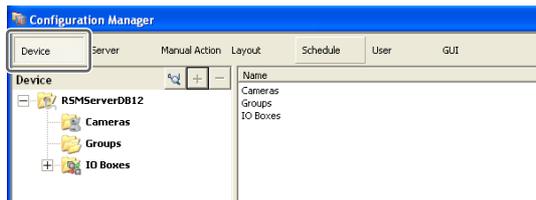


The devices are registered to RealShot Manager Advanced.

Registering Devices Manually

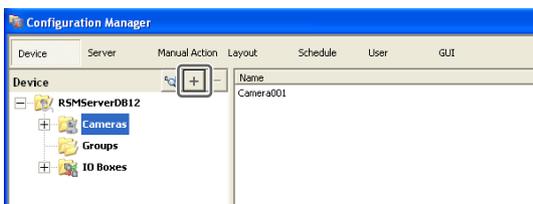
Specify the IP address of a device to register the device individually.

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



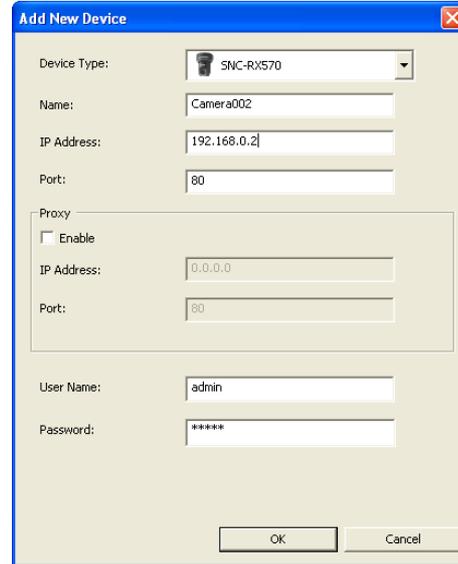
The Device Configuration screen appears.

2 Click **+** (Add).



The Add Device dialog box appears.

3 Configure each item, and click [OK].



For details on each of the items, refer to “*Setting Items of Add Device Dialog Box*” (page 42).

When registering a camera server (SNT series, etc.):

The following dialog box appears.

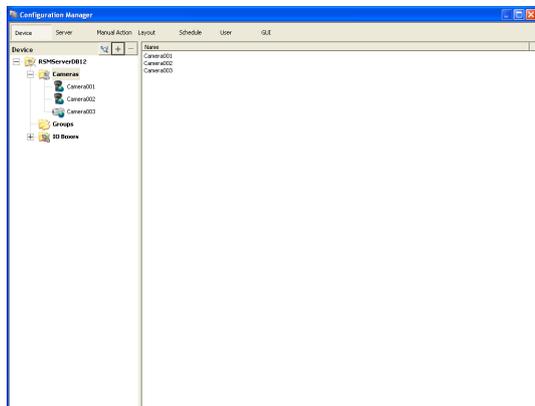
Select the channel to use, and click [OK].



Notes

- A check is performed to determine whether the maximum number of registered cameras has been exceeded during processing. If the maximum number has been exceeded, a warning message appears to notify you and processing stops.
- If registration for a camera fails, start your Web browser and connect directly to the camera to confirm that images from the camera are displayed. In addition, use the IP address you entered in the Web browser for the camera’s IP address.

The device is registered to RealShot Manager Advanced, and is added to the list.



Caution

If you specify an IP address and port number that duplicates that of an already registered device, a warning appears and the device cannot be registered.

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 to 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.

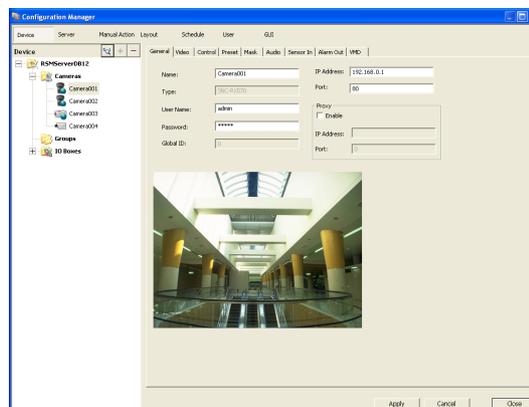
- A blank is displayed for setting items with which the setting state differs for each camera. If these setting items are saved as is, the corresponding setting items of each camera are not modified. Reselecting an item from a list or entering a numeral sets the new value for all of the cameras.
- If 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 39).

For details on Generic Camera, refer “*Settings Required when Using SNC-CS20/CM120/DS10/DM110/DS60/DM160*” (page 37).

- 3 After configuring each item, click [Apply].

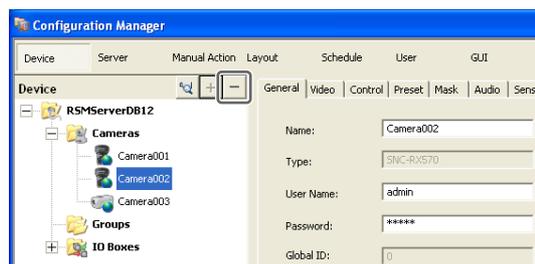
The settings are changed.

Deleting Devices

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

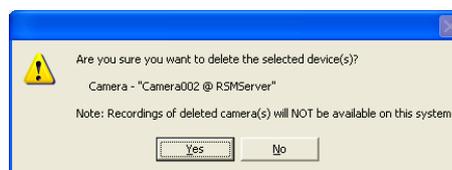
You can also select multiple devices at once by holding down the Shift key or Ctrl key while selecting.

- 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 under the 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 75).

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

With the following six models¹⁾ 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.

1 Select the combination of functions to use



2 Configure the necessary settings in each setup screen



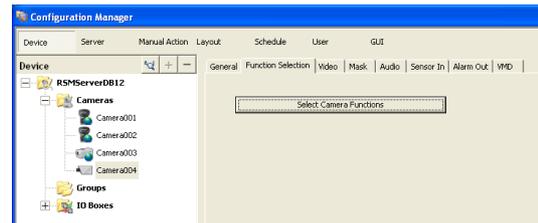
3 Start operation

1) 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.

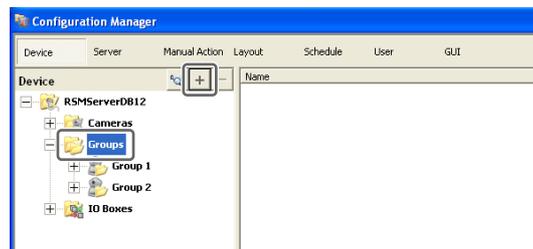
- 5** Start operation.

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.

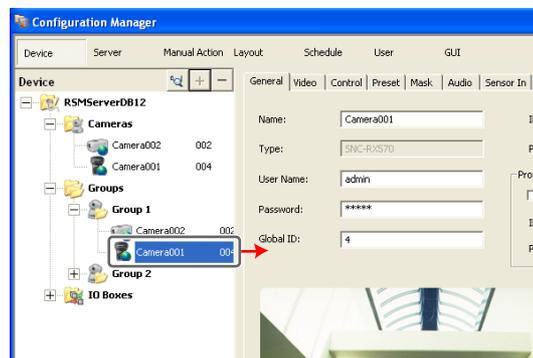
Adding Devices to a Group

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

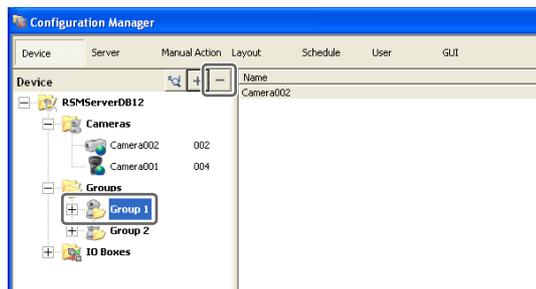
Drag the icons of the devices you want to remove from the group outside of the tree.



Deleting a Group

Select the group you want to delete in the tree, and click

 (Delete) to delete the group.

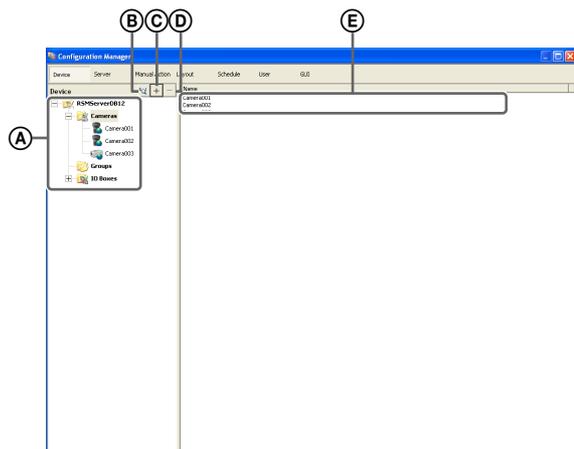


Details of Each Screen

Setting Items of Device Configuration Screen

This screen displays a list of the devices registered to RealShot Manager Advanced.

It is displayed by clicking [Device] in the Configuration screen.



A Tree Structure

This displays a list of the devices registered to RealShot Manager Advanced in a tree structure.

Selecting a device from the tree structure displays the items corresponding to the selected device in area **E**.

B (Camera Auto Registration)

This displays the Camera Auto Registration dialog box (page 34) for automatically searching for and registering cameras connected to the network.

C (Add)

This displays the Add Device dialog box (page 42) 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.

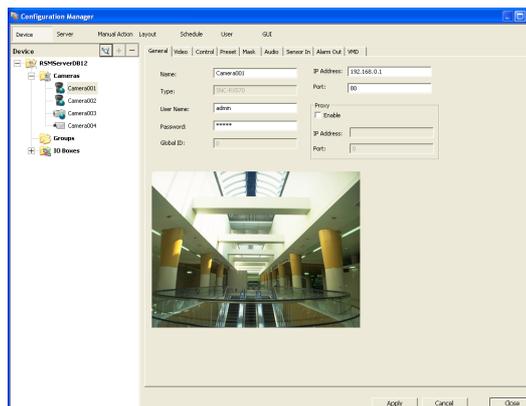
E Device List

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.

Type

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

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 (! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~)).

Caution

The user name and password for a device cannot be changed from RealShot Manager Advanced. To change them, access the device directly from a Web browser. If you change the user name and password for a device registered to RealShot Manager Advanced, you must also change the configurations in RealShot Manager Advanced.

Global ID

Enter a number for the global ID.

In NSR-1000 series, NSR-500 series, and RealShot Manager Advanced, cameras are managed by assigning IDs to the connected cameras individually.

In addition, in a system in which multiple NSR-1000 series, NSR-500 series, and RealShot Manager Advanced are used as servers, 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.

Apply

This saves the settings.

Cancel

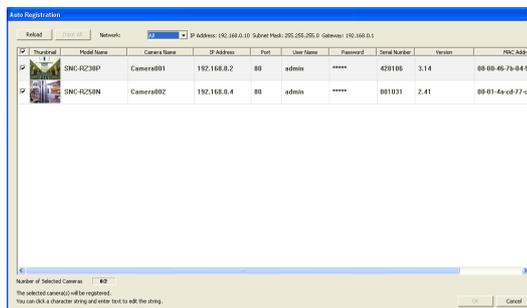
This cancels the settings.

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 (*page 34*), and clicking [OK].

After configuring each item, click [Register].

**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 41*).

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 RealShot Manager Advanced.

Registered Cameras

This displays only the devices that have already been registered to RealShot Manager Advanced.

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.

Reference

Select the check boxes of the devices to register to RealShot Manager Advanced.

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 connected.

Caution

The user name and password for a device cannot be changed from RealShot Manager Advanced. 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 RealShot Manager Advanced, you must also change the configurations in RealShot Manager Advanced.

Registration

This registers the devices with check marks to RealShot Manager Advanced, and closes the dialog box.

Cancel

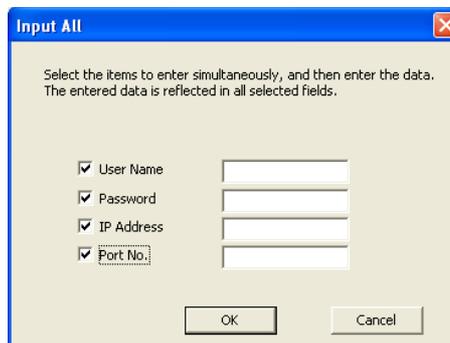
This cancels the registration and close the dialog box.

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 40).

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 No.

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 39). 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.

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

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.

Cancel

This cancels the registration, and closes the dialog box.

Configuring Camera Video Settings

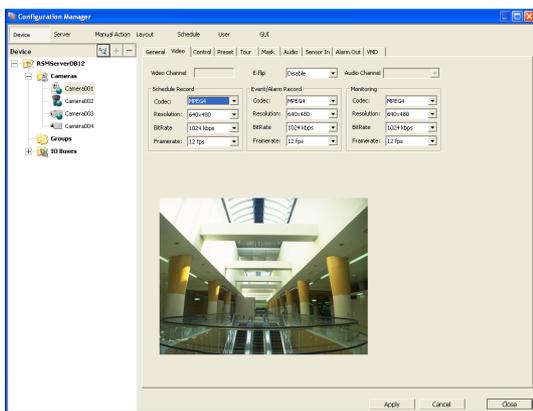
You can configure settings related to the images captured from a camera.

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.



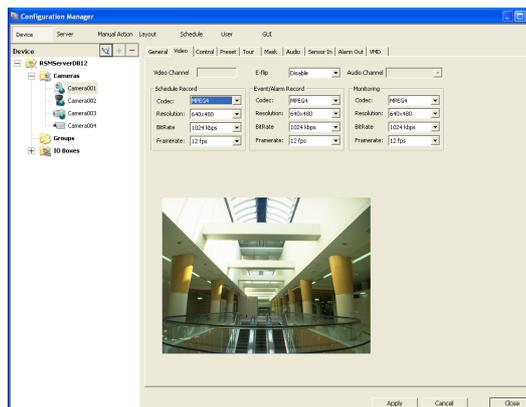
For details on each of the items, refer to “*Setting Items of [Video] Tab*” (page 43).

- 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 45).

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 RealShot Manager Advanced. E-Flip (Camera) is the image flip function on the camera.

Audio Channel

Select the analog camera audio channel to assign to an analog camera. You can apply a single channel configuration to multiple analog cameras.

Schedule Record

Configure settings related to images for when scheduling recording.

Codec

Set the image codec for the camera. Select JPEG, MPEG4 or H.264.

Image Size

Select the resolution for the camera.

Image Quality (for JPEG)

Select the image quality for images of the camera.

Bit Rate (for MPEG4 or H.264)

Select the bit rate for images of the camera.

Frame Rate

Select the frame rate for images of the camera.

Alarm/Event Record

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

Codec

Set the image codec for the camera. Select JPEG, MPEG4 or H.264.

Image Size

Select the resolution for the camera.

Image Quality (for JPEG)

Select the image quality for images of the camera.

Bit Rate (for MPEG4 or H.264)

Select the bit rate for images of the camera.

Frame Rate

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. Select JPEG, MPEG4 or H.264.

Image Size

Select the resolution for the camera.

Image Quality (for JPEG)

Select the image quality for images of the camera.

Bit Rate (for MPEG4 or H.264)

Select the bit rate for images of the camera.

Frame Rate

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

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 low-light 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	Image 1 or Image 2
Audio recording	Off
Recording duration	If Image 1: 1 second before alarm/event start, 10 seconds after alarm/event start If Image 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

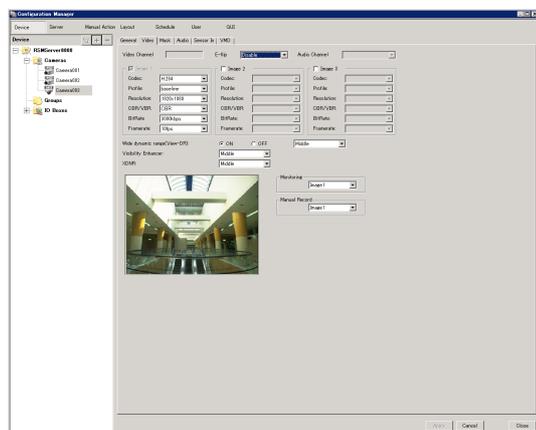
Caution

- 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 [Image 1] to [Image 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 RealShot Manager Advanced. E-Flip (Camera) is the image flip function on the camera.

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.

Image Size

Select the resolution for the camera.

CBR/VBR

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

Bit Rate

Select the bit rate for images of the camera.

Frame Rate

Select the frame rate for images of the camera.

Wide dynamic range (View-DR)

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].

Monitoring

Select the video codec to use during monitoring.

Manual Recording

Select the video codec to use during manual recording.

Note

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

Configuring Camera Operations

In RealShot Manager Advanced, you can configure the following settings for camera operations.

- **Configuring Preset Positions** (*page 46*)
You can configure preset positions for the camera.
- **Configuring Masks** (*page 49*)
You can configure the areas to mask for the camera.
- **Configuring Control Protocols for Analog Cameras** (*page 53*)
You can configure settings for controlling the pan, tilt, and zoom on an analog camera.

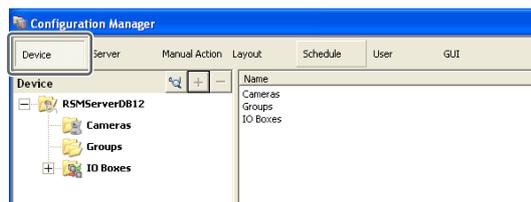
Configuring Preset Positions

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.

Configuring a New Preset Position

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

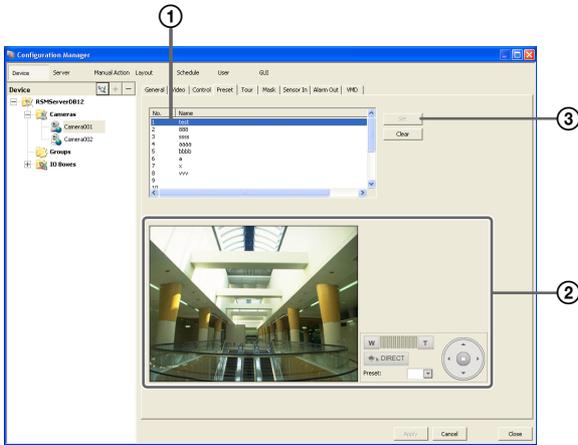


The Device Configuration screen appears.

- 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 ③.

Note

The number of presets depends on the type of camera used. For details, refer to the user's guide 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

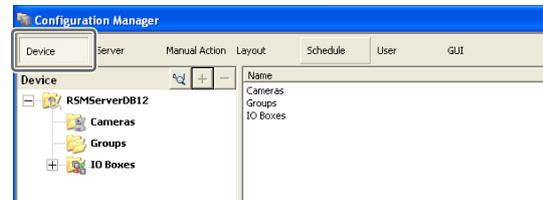
You can configure camera tours for sequentially moving a camera to the pan, tilt, and zoom positions specified for presets.

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.

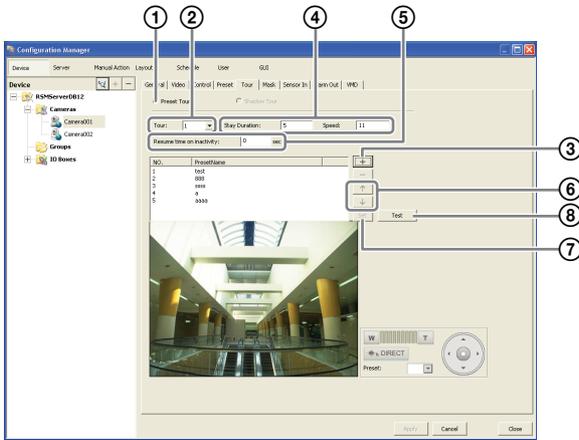


The Device Configuration screen appears.

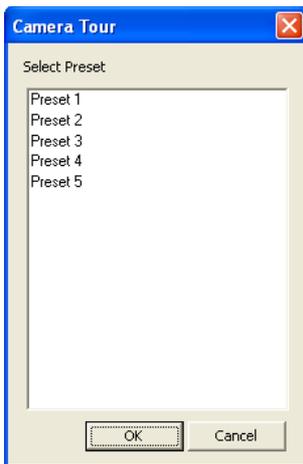
2 Select the camera for which you want to configure the tour, and click the [Tour] tab.

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].

⑧ Click [Test] to display and confirm the configured tour.

Camera Tour Operation

In RealShot Manager Advanced, 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.

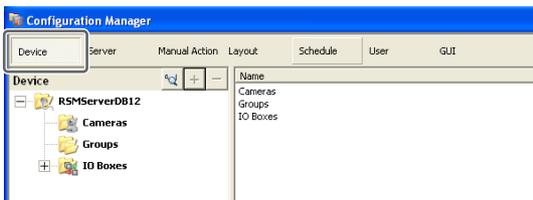
You can configure up to four tour operations (S-1 to S-4).

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.

- ⑦ Click [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-1 to S-4) in the [Tour] list on the [Camera Control] pane of the Main screen.

Configuring Masks (Recorder)

You can use the RealShot Manager Advanced'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 works in conjunction with pan, tilt, and zoom movements only on Sony network cameras.

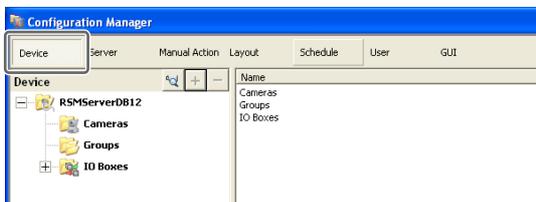
Caution

Even if you change the masks for the camera that is recording, the settings will not be reflected in the current recording file. If you want to change the masks, make the changes before you start recording.

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.

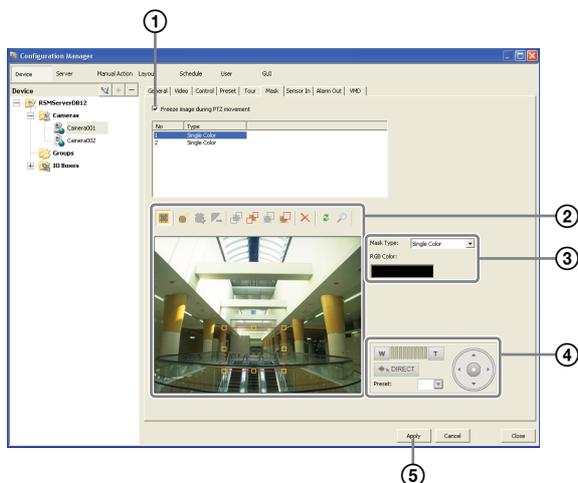
- 2 Select the camera for which you want to configure the mask, and click the [Mask] tab.

Images from the camera are displayed in the preview area.

- 3 Configure each item.

You can configure up to 10 masks.

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



- ① If necessary, select [Freeze image during PTZ movement] to stop mask rendering during pan, tilt, and zoom movement.
- ② Use these buttons to create and edit the mask while checking the image in the preview area.
- ③ Select how the mask will be displayed. Masks can be filled with a single color or a pattern.
- 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. To display this toolbar, click .

- ⑤ Click [Apply].

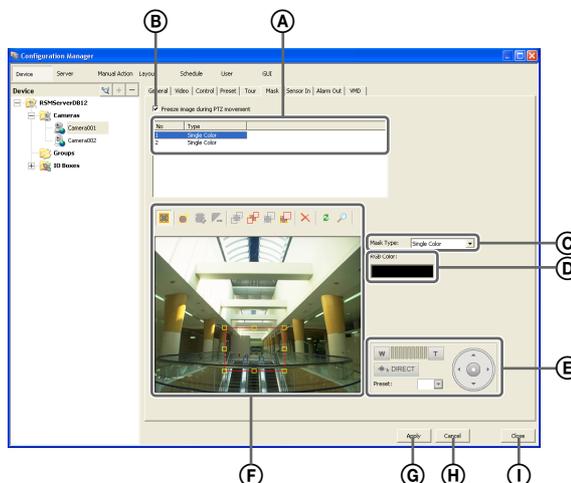
The mask you created is added to the list.

When creating multiple masks, repeat Steps ② to

- ⑤.

Setting Items of [Mask (Recorder)] 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 Freeze image during PTZ movement

Select this check box when you want to stop mask rendering during pan, tilt, and zoom movement. If you pan, tilt, or zoom the camera while configuring a mask area, the mask moves accordingly, but the movement of the mask may lag somewhat behind the pan, tilt, or zoom movement. Selecting this check box to stop mask rendering during pan, tilt, and zoom movement allows you to accurately configure the mask area.

C Mask Type

Select how the mask will be displayed.

Masks can be filled with a single color or a pattern.

- If you selected [Single Color], specify a fill color for the mask in the dialog box that appears.
- If you selected [Random Noise], you can also specify a masking level.

Caution

For [Gaussian Blur] and [Mosaic], because the blur size (in pixels) does not shift as the image is zoomed, zoom out as far as possible before setting a mask with these patterns. Otherwise, the mask will not be visible until the image is zoomed in.

D Data

The parameters that correspond to the type of mask are displayed.

Example: Single color	Select the color with the color bar
Gaussian blur	Radius
Mosaic	Delta X/Delta Y
Random noise	Amplitude

Ⓔ Pan, Tilt, and Zoom Toolbar

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

To display this toolbar, click .

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.

Ⓕ Preview Area and Tool Buttons

Use these buttons to create and edit 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 add/delete edit points and to create masks of complex shapes.

(Add Point)

Use this button to divide a line at a specific location. You can also add an edit point to a mask by clicking a line while holding down the Ctrl key.

(Remove Point)

Use this button to decrease the number of lines by one. You can also remove an edit point from a mask by clicking an edit point while holding down the Ctrl key.

(Bring to Front)

Use this button to move the selected mask to the top of a stack of overlapping masks.

(Send to Back)

Use this button to move the selected mask to the bottom of a stack of overlapping masks.

(Bring Forward)

Use this button to move the selected mask up one level in a stack of overlapping masks.

(Send Backward)

Use this button to move the selected mask down one level in a stack of overlapping masks.

(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.

The mask displays will be cleared so that only frames appear for the mask areas, and you can continue editing.

(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.

Ⓗ Cancel

This cancels the changes to the settings.

Ⓘ Close

This closes the screen.

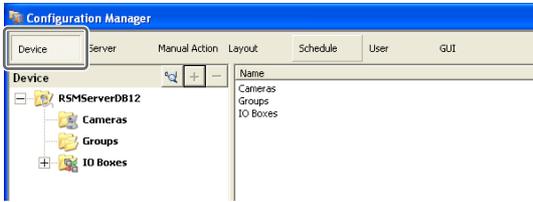
Configuring Masks (Camera)

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.



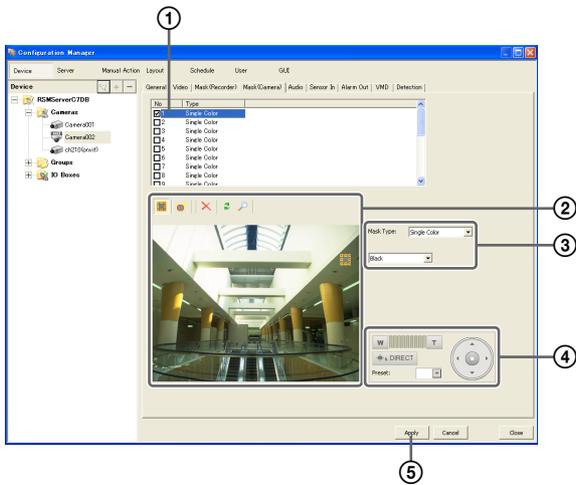
The Device Configuration screen appears.

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 52).



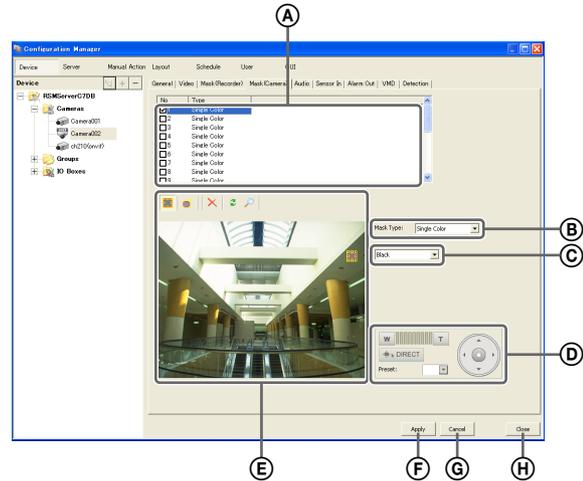
- ① Enter the name of the mask.
- ② Select how the mask will be displayed.
- ③ Use these buttons to create the mask while checking the image in the preview area.
- ④ For a camera equipped with pan, tilt, and zoom functions, use these buttons to control the pan, tilt, and zoom of the camera, and to confirm 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 to ⑤.

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 Mask Type

Select how the mask will be displayed.
The mask types that can be selected vary depending on the camera.

C Data

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

D 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.

E 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.

**(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.

F Apply

This saves the settings.

G Cancel

This cancels the changes to the settings.

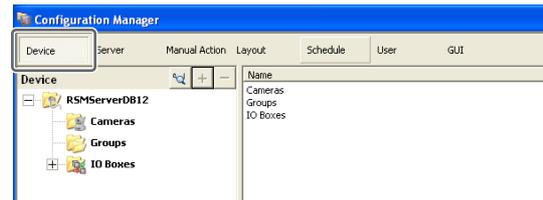
H Close

This closes the screen.

Configuring Control Protocols for Analog Cameras

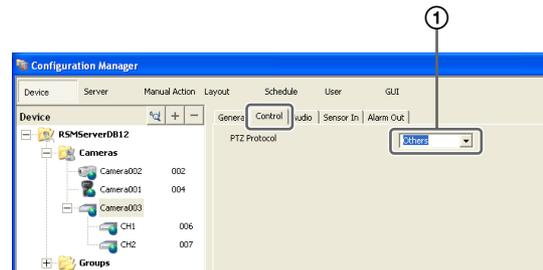
When using a camera server or when controlling the pan, tilt, and zoom on a connected analog camera from an NSR-1000 series on which NSR-1050H or NSBK-A16/A16H (option) is installed or an NSR-500 series on which NSBK-EB05 (option) is installed, configure the control protocol of the connected analog camera.

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

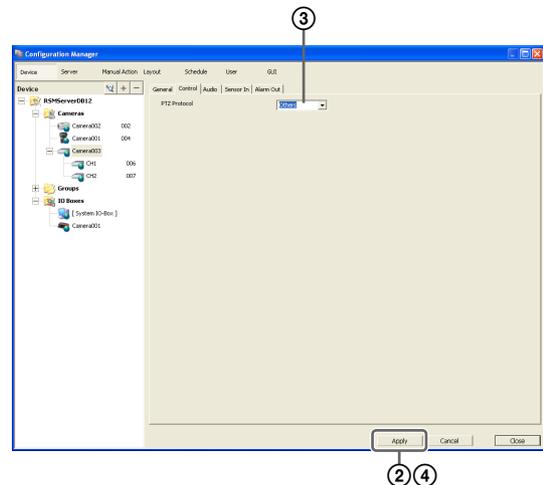


The Device Configuration screen appears.

- 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 settings of 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.

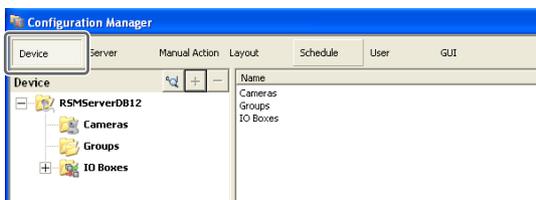
Note

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.

Configuring Network Camera Control

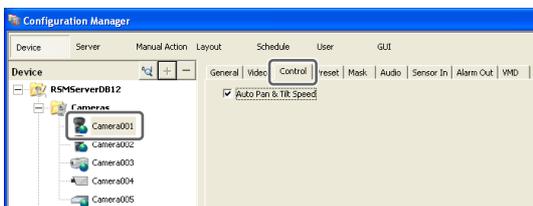
You can configure settings to control pan and tilt speed based on the zoom level of the camera.

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

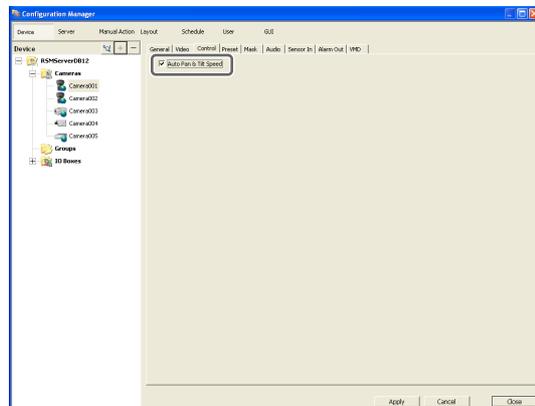


The Device Configuration screen appears.

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



- 3 Select the [Auto Pan & Tilt Speed] check box, and click [Apply].

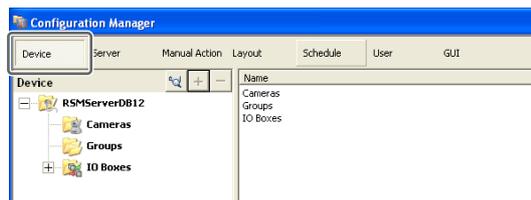


Pan and tilt speed will be controlled based on the zoom level of the camera.

Configuring Audio

Configure settings for monitoring audio.

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

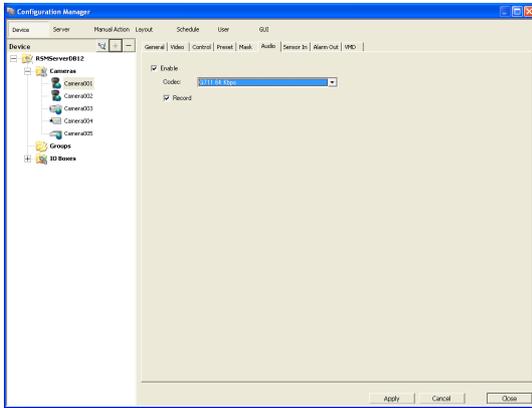


The Device Configuration screen appears.

- 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 RealShot Manager Advanced 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.

Audio from the camera can now be monitored.

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 55)**
You can create multiple layouts according to your operating environment and objective.
- **Assigning Cameras to Monitor Frames (page 61)**
You can assign a camera to each monitor frame.
- **Configuring Layout Tours (page 62)**
You can sequentially switch the display of each display at a preset time.

Configuring Monitor Layout Settings

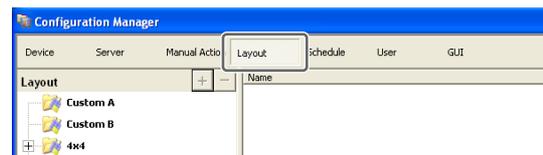
By setting the number and size of camera monitor frames, you can create a layout according to your operating environment and objective.

Notes

- When you register a camera, the layouts 2x2, 3x3, and 4x4 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 computer they are created on. For example, layouts created on the server are saved on the server.

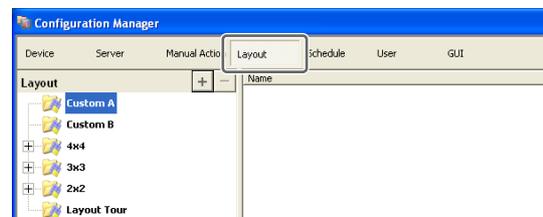
Creating a New Layout

- 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).



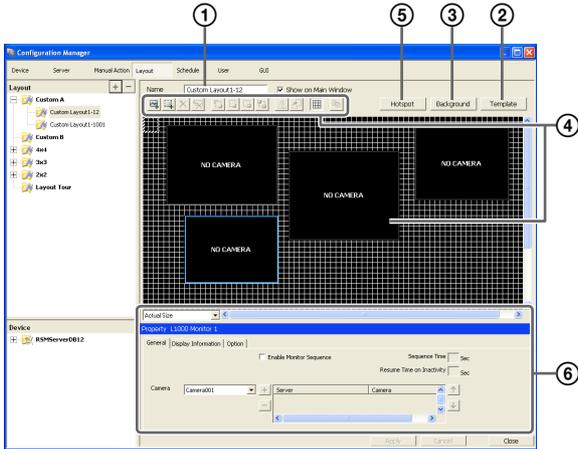
Note

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

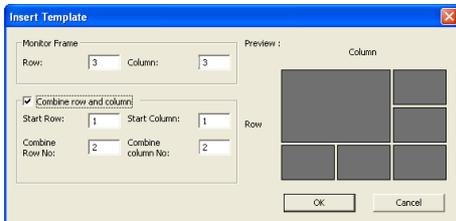
The area on the left side changes to the display for setting the layout.

3 Configure each item.

For details on each of the items, refer to “*Setting Items of Layout Configuration Screen*” (page 57).

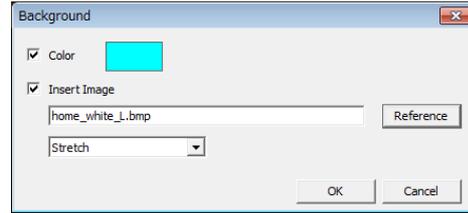


- 1 Enter a name for the layout, as necessary. You can enter up to 32 characters (16 non-ASCII characters).
- 2 Set the number and layout of monitor frames. Click [Template], set each item in the Insert Template dialog box that appears, and click [OK].



For details on each of the items, refer to “*Setting Items of Insert Template Dialog Box*” (page 60).

- 3 Import an image such as a map or floor plan for the background, as necessary. Click [Insert Background Image], 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 Background Dialog Box*” (page 61).

- 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 [Properties], as necessary. For details on the setting items of each tab, refer to “*Setting Items of Properties*” (page 58).

- 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.

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

A confirmation message appears.

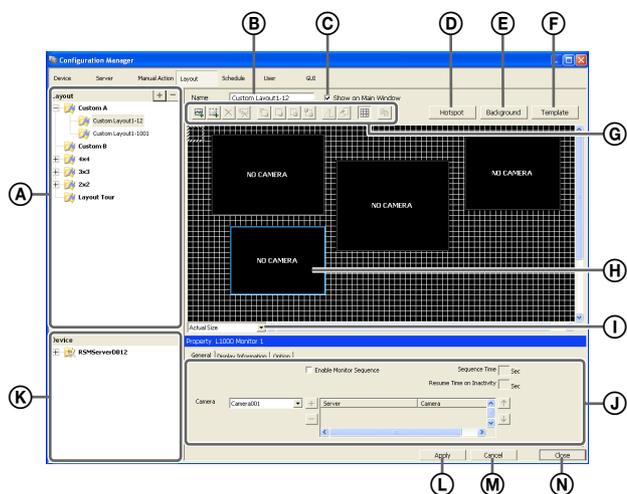
- 2 Click [OK].

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.

Note

Default layouts cannot be deleted.

B Name

Enter the name of the layout. It can be up to 32 characters long (16 non-ASCII characters).

C Show on the Main Window

Select the check box to enable this layout to be displayed on the main window.

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 Background dialog box ([page 61](#)) for importing an image such as a map or floor plan for the background.

F Template

This displays the Insert Template dialog box ([page 60](#)) for setting the number and layout of monitor frames.

G Tool Buttons

(Insert Image)

Use this button to display the Open dialog box 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.

(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 clockwise.

(Grid)

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

(Copy)

Use this button to copy and paste the selected item.

(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.

(I) Actual Size/Adjust to Window Size

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

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

(J) Properties 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 Properties*” (page 58).

(K) [Device] Tree

This displays a list of the devices registered to RealShot Manager Advanced 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 Properties**■ When a monitor frame is selected:****• [General] Tab**

Select the camera to assign to the monitor frame.

**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 Sequence

Select this check box to enable monitor sequence.

If you select this check box, configure the following monitor sequence setting items.

Note

The monitor sequence function sequentially displays images from specified cameras at a specified interval in one of the monitor frames.

Be aware that network bandwidth use will increase due to the constant reception of image signals from all the specified cameras, even when images are not displayed.

Sequence Time

Enter the duration for which camera images will be displayed.

Resume Time on Inactivity

Enter the duration after which the sequence will resume when a sequence is interrupted by an operation.

+ (Add)

Adds the camera selected in [Camera] to the camera list.

- (Delete)

Deletes the camera selected in the camera list.

Camera List

This is a list of cameras to display in the sequence. Images are displayed in order, starting with the camera at the top of the list and at the interval specified in [Sequence Time].



Moves the camera selected in the camera list one position up.



Moves the camera selected in the camera list one position down.

• **[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.”

Time

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.

VMD

This displays the object frame for Video Motion Detection (Recorder).

VMF

Select the Video Motion Filter information to display in the monitor frame.

Object Frame

This displays the object frame.

Alarm Object Frame

This displays the object frame detected as an alarm.

Filter Frame

This displays the filter frame.

Inactive Area Frame

This displays the inactive area frame.

Object ID

This displays the object ID.

Object Duration

This displays the duration that an object was recognized as moving, or the duration that an object was recognized as unattended or removed.

Filtered Count

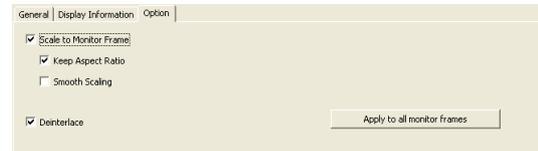
This displays the number of times the filter conditions are satisfied.

Apply to All Monitor Frames

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

• **[Options] 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.

Smooth Scaling

This enlarges or reduces images smoothly. It can improve the image quality when enlarging or reducing images.

Deinterlace

This reduces stripes caused by interlace. This function is only enabled when the device is an NSBK-A16/A16H and 2CIF is selected for the resolution.

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

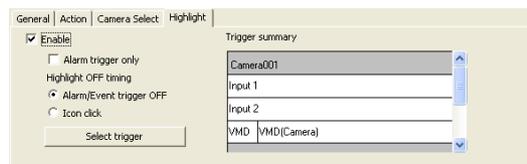
Select the camera to assign to the monitor frame.

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.

If you clear this check box, highlight display will start when an alarm or event 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 61*) used for selecting triggers with which to initiate highlight display.

Summary of Trigger

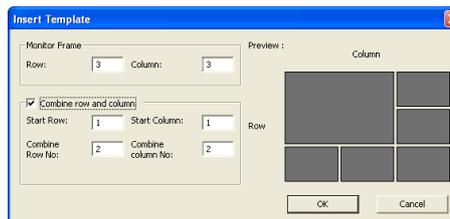
Displays a list of triggers selected in the [Select Trigger] dialog box (*page 61*).

Setting Items of Insert Template Dialog Box

This dialog box creates a new layout.

It is displayed by clicking [Apply Template] on the Layout Configuration screen (*page 57*).

After configuring each item, click [OK].



Layout

Set the number of camera monitoring windows 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 monitoring windows to align horizontally.

Rows

For the number of rows, enter the number of monitoring windows 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

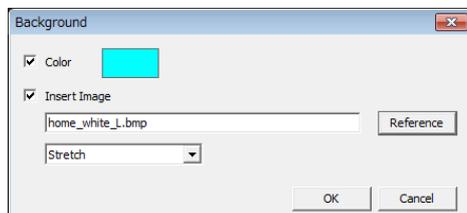
This cancels your settings, and closes the dialog box.

Setting Items of Background 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 57*).

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.

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.

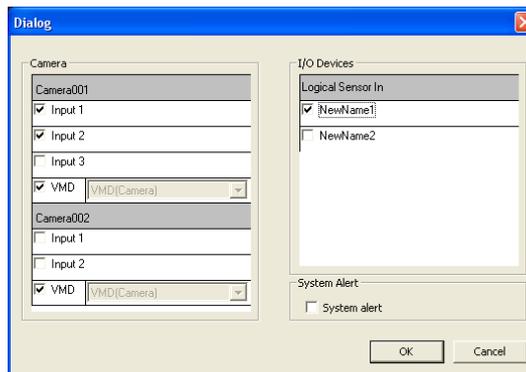
Cancel

This cancels your settings, and closes the dialog box.

Setting Items of 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 60*).

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



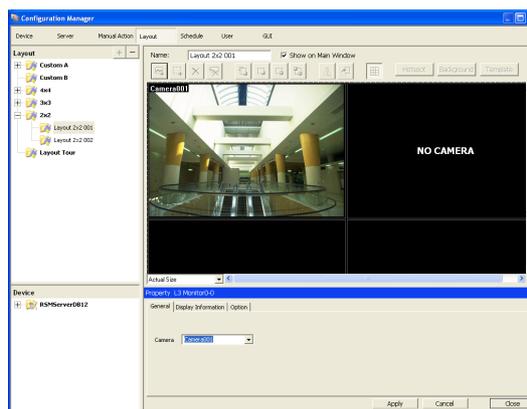
Assigning Cameras to Monitor Frames

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 a Second Monitor

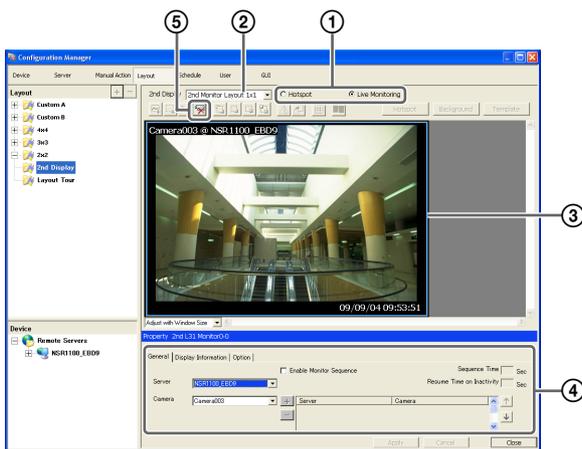
When a second monitor is installed, select the layout to use for the second monitor and configure settings related to monitor frames.

The second monitor can be used as a hotspot monitor or for live image monitoring.

Note

The 1x1, 2x2, 3x3, and 4x4 layouts are provided in advance for a second monitor.

- 1 Select [2nd Display] from the [Layout] tree on the Layout Configuration screen.
- 2 Configure each item.



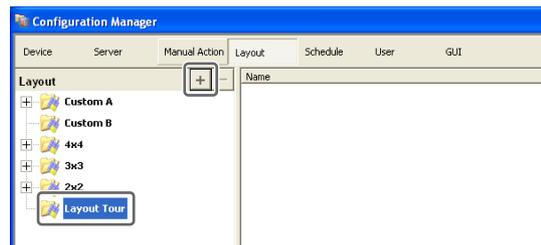
- 1 Select [Hotspot] or [Live Monitoring].
 - 2 Select the layout to use.
 - 3 If you selected [Live Monitoring], assign cameras to the monitor frames.
For details on the setting items, refer to “[General] Tab” (page 58) of “When a monitor frame is selected”.
To cancel camera assignments, click the delete button 5.
 - 4 Configure settings related to monitor frames, as necessary.
For details on the setting items, refer to “[Display Information] Tab” (page 59) and “[Options] Tab” (page 59) of “When a monitor frame is selected.”
- 3 Click [Apply].
- The settings are saved.

Configuring Layout Tours

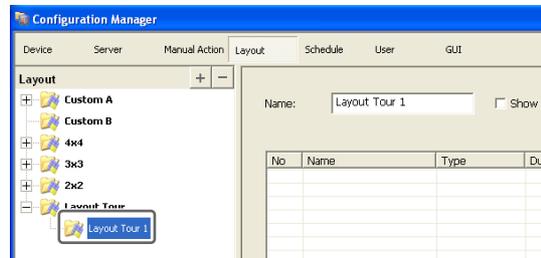
You can set a layout tour for sequentially switching the display shown on the display at a preset time during monitoring.

Creating a New Layout Tour

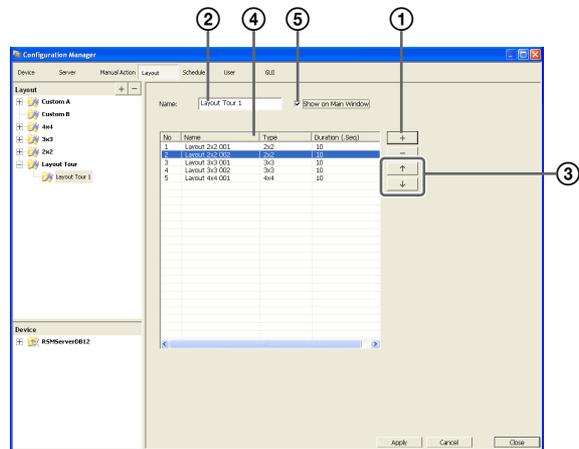
- 1 Select [Layout Tour] from the [Layout] tree on the Layout Configuration screen, and click + (Add).



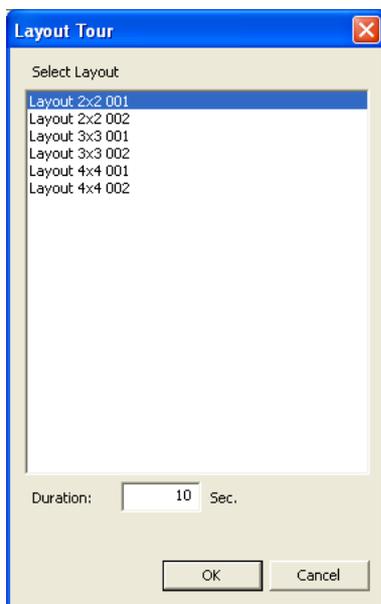
A layout tour is added to the tree.



- 2 Create a layout tour.



- Click **+** (Add) on the right of the list, specify the layout and duration (seconds) in the Layout Tour dialog box that appears, and click [OK].



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.

- Enter a name for the tour.
- 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.
- When you want to change the duration, click the box and enter the number of seconds.
- Select the check box to enable this layout tour to be specified on the main window.

- 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.
- Reconfigure each item.
- Click [Apply].

The settings are changed.

Deleting Layout Tours

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

A confirmation message appears.

- Click [OK].

The layout tour is deleted.

Configuring Motion Detection Settings

Motion detection is a function for detecting motion and objects from camera images or camera image metadata. In RealShot Manager Advanced, you can set one of the following types of motion detection functions for each device.

- **VMD (Recorder)** (page 65)
This is RealShot Manager Advanced's own motion detection function.
- **VMD (Camera)** (page 67)
This a function that uses a camera to detect motion and objects.
- **VMF (page 71)**
This is a function that uses metadata to detect motion.

Note

Although both a camera and RealShot Manager Advanced are equipped with motion detection functions, you can reduce the load on the RealShot Manager Advanced system by using the motion detection function of the camera (VMD [camera]). Decide which one to use in accordance with the number of cameras registered and the operation configuration for recording and monitoring.

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).

What is Motion Detection by Camera Image Metadata?

A function for detecting specific motion phenomena by applying a Video Motion Filter (VMF), consisting of motion detection criteria, to the motion-related metadata generated within the camera (no images are used, as detection is performed by metadata only). With motion detection by metadata, you can apply filters not only to metadata delivered in real time from the camera, but also to recorded metadata.

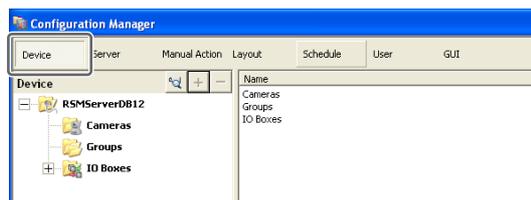
Caution

- 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 RealShot Manager Advanced (VMD (Recorder))

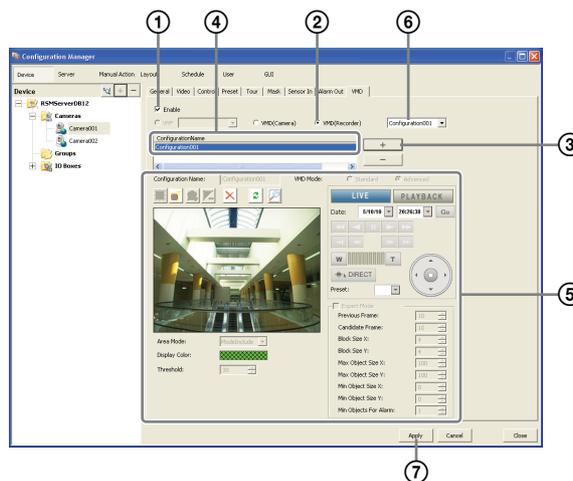
Configure the motion detection function to use in RealShot Manager Advanced.

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



The Device Configuration screen appears.

- 2 Select the camera from the [Device] tree.
- 3 Configure each item on the [VMD] tab.



For details on each of the items, refer to “Setting Items of [VMD] Tab (VMD (Recorder))” (page 65).

- 1 Select the [Enable] check box.
- 2 Select [VMD (Recorder)].
- 3 Click **+** (Add).
An area configuration is added.

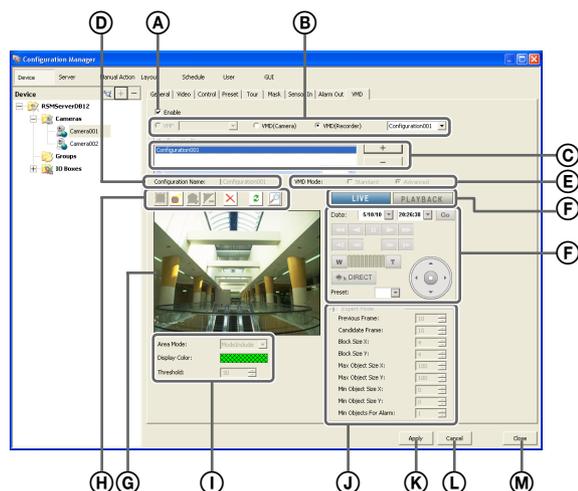
- ④ Select the area configuration to configure.
- ⑤ Create and edit the motion detection area while checking the preview.
- ⑥ Select the configuration to use as the standard area configuration.
The standard area configuration is used for monitoring, manual recording, and the like at times other than for alarm recording schedules.
- ⑦ Click [Apply].

The motion detection area is configured, and the VMD (recorder) setting is added to the list.

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

This tab is displayed by clicking [Device] in the Configuration window, and selecting [VMD (Recorder)] on the VMD tab.

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



- ① **Enable**
Select the check box to enable the motion detection function.
- ② **Type of Motion Detection Function**
Select [VMD (Recorder)] here.
The following setting items differ depending on the motion detection function that is selected here.
Select the area configuration to use as the standard area configuration in the drop-down menu.
The standard area configuration is used for monitoring, manual recording, and the like at times other than for alarm recording schedules.

③ Area Configuration List

This displays a list of the area configurations that are configured for this camera.

+ (Add)

This adds a new configuration.

- (Delete)

This deletes the selected configuration.

④ Configuration Name

Enter a name for the area configuration.

The name you enter here is used when configuring an alarm recording schedule to be triggered by movement in the motion detection area.

⑤ VMD Mode

Select the Advanced mode or Standard mode.

Always verify your operating environment first, because performance may vary depending on the mode.

- The Standard mode can perform motion detection simultaneously with more cameras than the Advanced mode.
- The Advanced mode offers better detection accuracy.
- Note that when the VMD mode is changed, the default values for [Previous Frame] and [Candidate Frame] are configured for each mode.

⑥ Image Controls

These control the images displayed in the preview area.

The operating procedure is the same as that of the Main screen. Refer to “*Functions and Operating Procedure of Main Screen*” (page 111).

⑦ Preview

This displays live images or recorded images.

⑧ Tool Buttons

Create and edit the motion detection area while checking the image in the preview.

(Create/Move Area)

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

(Edit Points)

Use this button to move the position of points and to create areas of complex shape.

(Add Point)

Use this button to divide a line at a specific location. You can also add an edit point to an area by clicking a line while holding down the Ctrl key.

(Remove Point)

Use this button to decrease the number of lines by one. You can also remove an edit point from an area by clicking an edit point while holding down the Ctrl key.

✖ (Remove Area)

Use this button to delete the selected area.

↻ (Refresh Image)

Use this button to refresh the still image.

🔍 (Preview)

Use this button to display a live image from the camera that includes the video motion detection areas.

This allows you to confirm how detection occurs in the configured areas.

① Area Mode

Select whether to detect motion inside or outside the configuration area.

To detect motion inside the configuration area, select [Include], and to detect motion everywhere outside the configuration area, select [Exclude].

Display Color

Click the box, and select a color for the motion detection frame in the dialog box that appears.

Threshold

Set a value from 1 to 100 as the threshold for motion detection.

Ⓜ Expert Mode

Select the check box to configure advanced settings.

If this check box is selected, the following items can be configured.

Previous Frame

Specify the number of frames for the number of images to compare as a basis for determining that an object has moved.

Using the specified frames, RealShot Manager Advanced delegates frames as candidates for detection and performs noise reduction.

Caution

Setting this number high facilitates noise reduction, but processing speed decreases as a result of the increase in the processing load.

Candidate Frame

Based on this value, RealShot Manager Advanced configures the number of times a determination needs to be made for a candidate image to be detected as moving.

Block Size X

Specify the horizontal length of the detection area in pixels.

Increasing this value allows easier detection of horizontal movement.

Block Size Y

Specify the vertical length of the detection area in pixels.

Increasing this value allows easier detection of vertical movement.

Max Object Size X

Specify the maximum horizontal length of the object as a percentage.

Max Object Size Y

Specify the maximum vertical length of the object as a percentage.

Min Object Size X

Specify the minimum horizontal length of the object as a percentage.

Min Object Size Y

Specify the minimum vertical length of the object as a percentage.

Min Objects For Alarm

Specify the minimum number of detected objects for sending notification of an alarm.

Ⓚ Apply

This saves the settings.

Ⓛ Cancel

This cancels the changes to the settings.

Ⓜ Close

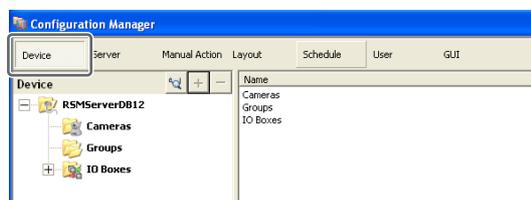
This closes the screen.

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.

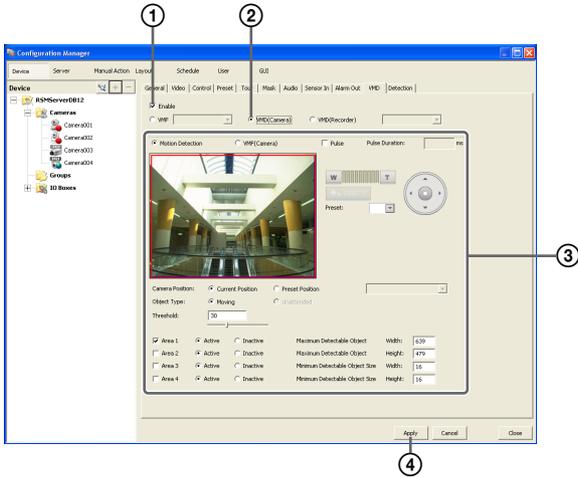
The setting items for the motion detection and object detection areas differ depending on the camera you are using.

- 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 67).

- ① Select the [Enable] check box.
- ② Select [VMD (Camera)].
- ③ Configure the motion detection area while checking the preview.
- ④ Click [Apply].

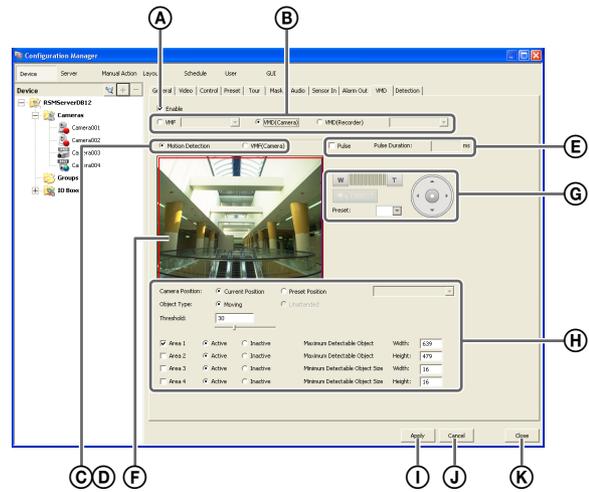
The motion detection area is configured.

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

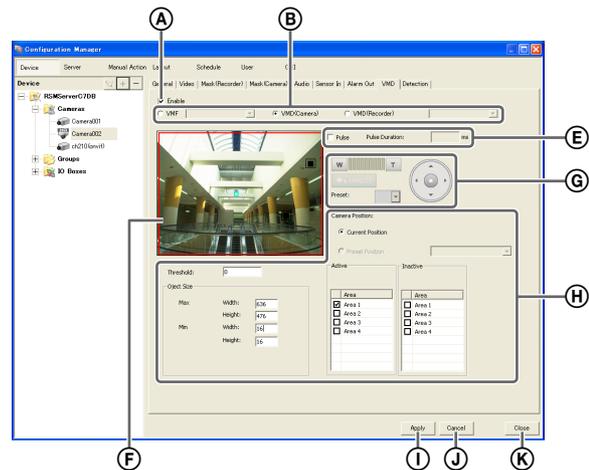
This tab is displayed by clicking [Device] in the Configuration window, and selecting [VMD (Camera)] on the VMD tab. After changing the settings, click [Apply] to save your settings.

Notes

- When an NSBK-EB05 (option) is installed on the NSR-500 series, [VMD] appears instead of [VMD (Camera)] in the [VMD] tab.
- The setting items ③ and ④ differ depending on the camera you are using.



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



- Ⓐ Enable**
Select the check box to enable the motion detection function.
- Ⓑ Type of Motion Detection Function**
Select [VMD (Camera)] here.
The following setting items differ depending on the motion detection function that is selected here.
- Ⓒ Motion Detection**
Performs camera-based motion detection or object detection.
When you select this option, configure settings such as the motion detection area on this screen.
This setting cannot be changed for the SNC-XX600 series (XX represents two letters). It will be fixed at [Moving].

D VMF (Camera)

If the camera is equipped with VMF detection functions, select this to enable motion detection using the VMF configured on the camera. When this is selected, be sure to configure the VMF setting in the camera-side settings screen (Web browser).

This setting cannot be changed for the SNC-XX600 series (XX represents two letters).

E 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

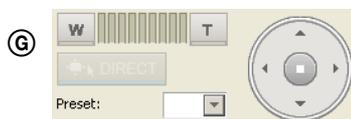
Enter the duration in milliseconds to sustain pulse input from the VMD (camera) pin once it is turned on.

F Preview

This displays the images from the camera.

Use the following procedure to create an area for detecting motion or objects.

- Click and drag the mouse over the image to create a motion detection or object detection area (red frame). By dragging each edge of the area, you can change the size of the area.
- Enter pixel values in the [Active Area] boxes to set the motion detection 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.

H 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.

- **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.

I Apply

This saves the settings.

J Cancel

This cancels the changes to the settings.

K Close

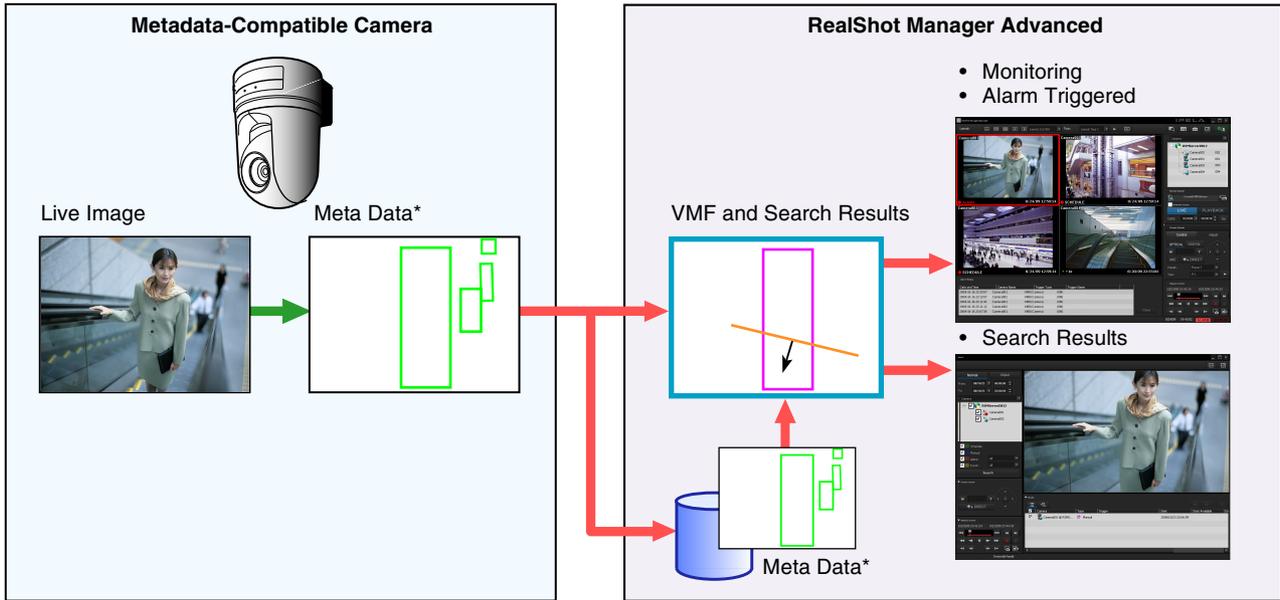
This closes the screen.

Detecting Motion by Metadata (VMF)

If the camera supports motion detection metadata, configure settings related to the VMF (Video Motion Filter) to use for motion detection by metadata. VMF is a filter for detecting specific motion phenomena from motion-related metadata generated within the camera.

There are VMFs for motion and object detection, and up to three VMFs can be managed together as one VMF package. The filters in a VMF package can be combined either sequentially, whereby each filter must be satisfied in sequential order to trigger an alarm, or in parallel, whereby satisfying any one filter is sufficient to trigger an alarm.

Overview of Motion Detection by Camera Image Metadata



* Metadata includes time and camera information, and location, type, and status of motion.

Notes

- To perform motion detection and object detection using metadata, a camera that supports motion detection by metadata is required.
- When using VMF motion detection with the [Existing] filter type, the alarm state is maintained after object detection for as long as the object continues to be present. As a result, if a second alarm is triggered in this state, alarm recording will not start.
- When an object is detected as unattended with VMF object detection, this status (an object frame appears) remains for about 3 hours. However, when the object is detected as an alarm object, the alarm status (an alarm object frame appears) ends after about 10 seconds.
- A VMF package can only process the live camera image of one camera at a time.
- When metadata is recorded, either motion detection metadata or object detection metadata is selected, based on the VMF being applied at the start time of recording. The order of priority is determined as follows:

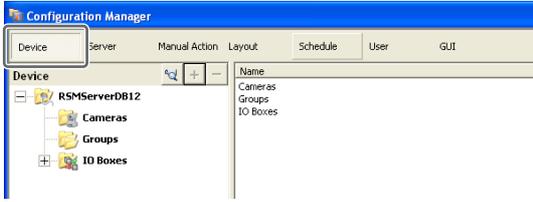
- ① If something has been specified in the alarm recording schedule, priority is determined by whether the VMF package is for motion detection or object detection.
- ② If a VMF package is not specified, priority is determined based on the default package.
- ③ If a default package is not specified either, the metadata is recorded as motion detection metadata.

- If you change a package specification while recording is in progress, that package recording will not be enabled until the next time recording starts. In addition, if you enable VMF from a disabled VMF setting while recording is in progress, metadata will not be recorded until the next time recording starts.

Caution

Object detection requires an approximately 40 second initialization period before starting. Also, moving objects that have remained still for approximately 40 seconds are regarded as unattended. These times may be extended depending on the circumstances.

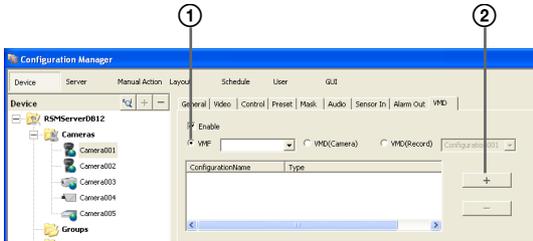
1 Click [Device] at the top of the Configuration window.



The Device Configuration screen appears.

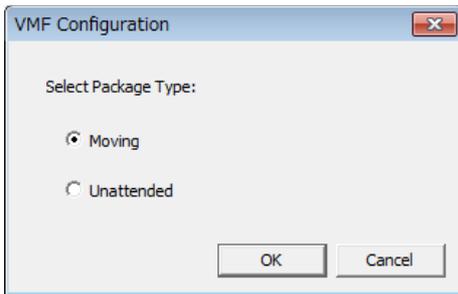
2 Select the camera that will be the target for processing from the [Device] tree.

3 Add the VMF package.



1 Select the [VMF] check box.

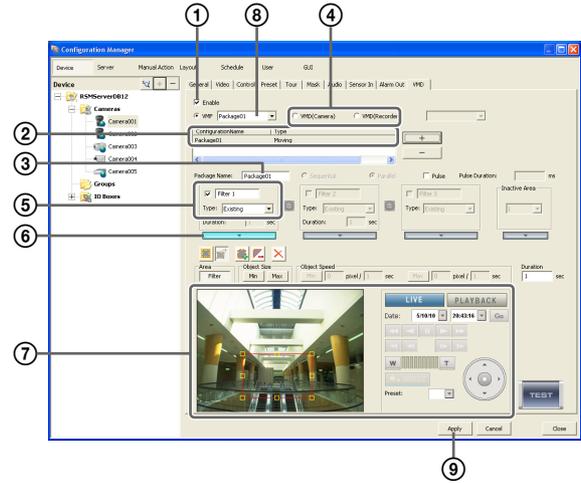
2 Click **+** (Add), select whether to add a motion package or object package from the Select Package Type dialog box that appears, and click [OK].



The package is added.

4 Configure each item, and configure the VMF package.

A VMF package consists of a combination of up to three filters (motion detection criteria), with advanced settings for each filter, and up to six inactive areas. Follow the procedure below to configure filters and inactive areas.



For details on each of the items, refer to “Setting Items of [VMD] Tab (VMF)” (page 71).

- 1 Select the [Enable] check box.
- 2 Select the package to configure.
- 3 Change the package name, as necessary.
- 4 Select how the filters are combined ([Sequential] or [Parallel]).

Note

For sequential configurations, be sure to configure two or more filters.

Caution

To switch between sequential and parallel, the  button for each filter and inactive area must be turned off. When a button is  (On), click to set it to  (Off).

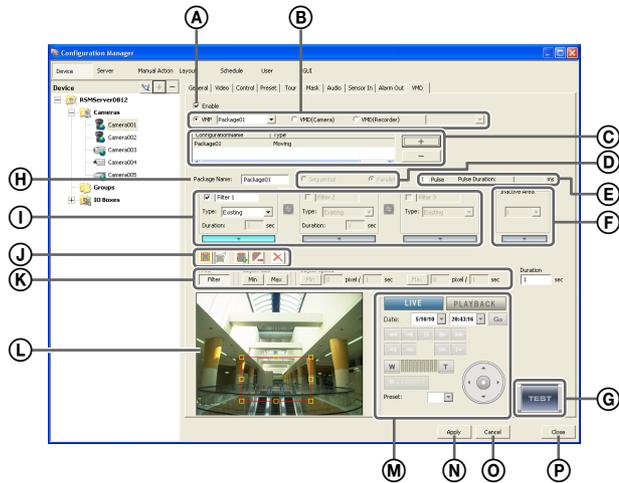
- 5 Set the filter name and filter type.
- 6 Click  to set the button to  (On). When the button is  (On), the criteria can be set.
- 7 Configure the criteria while checking the preview. Repeat Steps 5 to 7 to configure the remaining filters and inactive areas in the same way.
- 8 Select the package to use as the default package. The default package is used for monitoring, manual recording, and the like at times other than for alarm recording schedules by VMF.

⑨ Click [Apply].

Setting Items of [VMD] Tab (VMF)

This tab is displayed by clicking [Device] in the Configuration window, and selecting [VMF] on the VMD tab.

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



① Enable

Select the check box to enable the motion detection function.

② Type of Motion Detection Function

Select [VMF] here.

The following setting items differ depending on the motion detection function that is selected here.

In the drop-down menu, select the package to use as the default package.

The default package is used for monitoring, manual recording, and the like at times other than for alarm recording schedules by VMF.

③ VMF Package List

This displays a list of the VMF packages configured for this camera.

(Add)

This displays the Select Package Type dialog box for adding a new VMF package.

(Delete)

This deletes the selected VMF package.

④ Sequential

Select this option to detect specific phenomena by applying the filters in sequential order.

The filters are applied sequentially from the left.

When this option is selected, you can set the time and sequence in which to apply the filters.

[Sequential] cannot be specified when setting an object detection package.

Parallel

Select this option to detect specific phenomena by applying all detection criteria simultaneously.

Caution

To switch between sequential and parallel, the

button for each filter and inactive area must be turned off. When a button is (On), click to set it to (Off).

⑤ 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 in milliseconds the duration to sustain the moving or non-moving status of an object as detected by VMF.

⑥ Inactive Area Frame

Configure the inactive area frame.

Set the button to (On), and create an inactive area in the area of ④.

Clicking the button switches it between

(On) and (Off).

⑦ TEST (Preview)

Click this button to confirm the operation of the filtering used in the configured package.

⑧ Package Name

Enter a name for the package.

① Filter 1

Select the check box in front of the filter name to enable the filter.

You can change the filter name, as necessary.

Type

Select the filter type.

The filters that can be set differ depending on the package type (“Moving” or “Unattended”).

■ For “Moving” packages Appearance

This detects the appearance of objects that match the detection criteria within the configured area.

Even if the moving object remains in the area after alarm detection, the alarm ends after one second.

Disappearance

This detects the disappearance of objects that match the detection criteria within the configured area.

Existing

This detects when objects that match the detection criteria remain within the configured area.

Capacity

This detects when the number of objects that match the detection criteria has exceeded the specified number within the configured area.

Passing

This detects when objects that match the detection criteria cross a configured line.

**■ For “Unattended” packages
Unattended/Removed**

This detects non-motion or when an object has been removed.

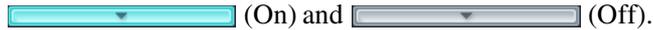
Duration

When [Sequential] is selected, this option allows you to enter in seconds the duration to apply the filter on the left (before moving to the next filter).



Set the button to  (On), and create a filter in the area of .

Clicking the button switches it between



This switches the order of the filters on the left and right.

Ⓝ Tool Buttons

Create and edit the filter and inactive area while checking the image in the preview.

Notes

- Up to eight vertices can be set for a convex polygonal area.
- When the filter type is set to [Passing], set the direction along which to detect the object’s passing. After setting the end points, click near the center of the line to set the arrow indicating the direction of passage. With each click, the orientation of the arrow changes as follows: both directions → right direction → left direction → both directions...

**(Create/Move Area)**

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

**(Edit Points)**

Use this button to move the position of points and to create areas of complex shape.

**(Add Point)**

Use this button to divide a line at a specific location. You can also add an edit point to an area by clicking a line while holding down the Ctrl key.

**(Remove Point)**

Use this button to decrease the number of lines by one. You can also remove an edit point from an area by clicking an edit point while holding down the Ctrl key.

**(Remove Area)**

Use this button to delete the selected area.

Ⓚ Area

Enabling [Filter] allows you to draw a frame or lines for the filter using drag and drop operations.

Object Size

Set the size for the object to be detected.

Min

This sets a minimum size for the object to be detected. Enable [Min], and then drag the red frame that appears on the configuration screen with your mouse to adjust the size of the frame.

Max

This sets a maximum size for the object to be detected. Enable [Max], and then drag the red frame that appears on the configuration screen with your mouse to adjust the size of the frame.

Object Speed

Set the speed for the object to be detected.



Click [Min], and enter a minimum speed for the object to be detected.

When you draw a line segment on the configuration screen by dragging the mouse, a value is entered in the [pixel] box. Set how many seconds it should take to move that distance.

In the default state, the minimum speed is set to the minimum value for the system.

To return the value to the minimum value once the setting has been changed, click the figure that indicates the speed, and then click [Min].



Click [Max], and enter a maximum speed for the object to be detected.

When you draw a line segment on the configuration screen by dragging the mouse, a value is entered in the [pixel] box. Set how many seconds it should take to move that distance.

In the default state, the maximum speed is set to the maximum value for the system.

To return the value to the maximum value once the setting has been changed, click the figure that indicates the speed, and then click [Max].

■ Duration (When [Existing] and [Unattended/Removed] Filter Types)

When using the [Existing] filter type, enter the amount of time for RealShot Manager Advanced to wait before triggering an alarm, after an object is detected as moving. The default value is 1.

When using the [Unattended/Removed] filter type, enter the amount of time for RealShot Manager Advanced to wait before triggering an alarm, after an object is detected as unattended.

Notes

- Object detection requires approximately 40 seconds to initialize before starting.
- When an object is detected as unattended, it continues to be recognized as a non-moving object for about 3 hours, and the object frame continues to be displayed.

■ Capacity (When [Capacity] Filter Type)

Enter the maximum number of objects that can be detected in the configured area before an alarm is triggered.

■ Collision (When [Passing] Filter Type)

Select the object's center of gravity, or which side of the object will trigger an alarm when it crosses the configured line.

Ⓒ Preview

This displays live images or recorded images.

Ⓜ Image Controls

These control the images displayed in the preview area. The operating procedure is the same as that of the Main screen. Refer to “*Functions and Operating Procedure of Main Screen*” (page 111).

Ⓝ Apply

This saves the settings.

Ⓞ Cancel

This cancels the changes to the settings.

Ⓟ Close

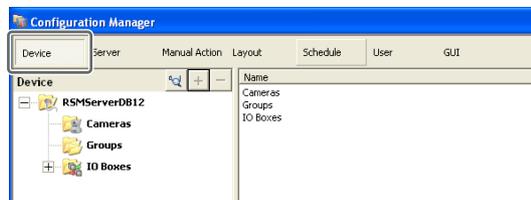
This closes the screen.

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.

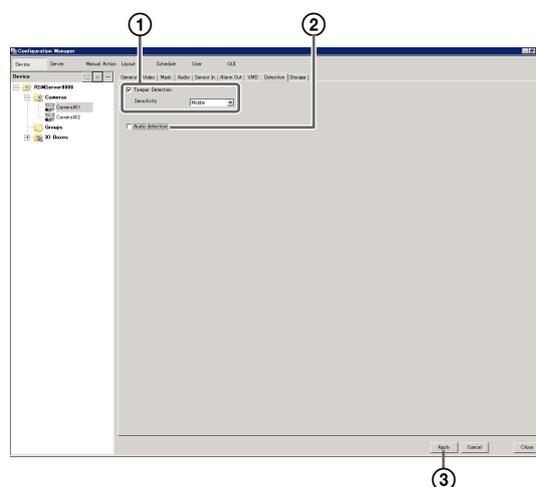
Configure this function when you want to use the alarm output upon detection of camera tampering activity as a coordinating alarm for other actions .

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



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].

Depending on the camera model, you may not be able to specify tamper detection levels.

- ② To configure the sound pressure detection function on the camera, select the [Audio detection] check box.
- ③ Click [Apply].
The camera tamper detection function and the audio detection function are configured.

Configuring Edge Storage Settings

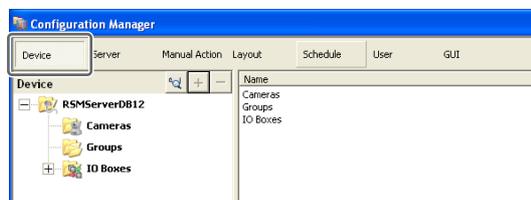
If the camera is equipped with an Edge Storage function, and you can configure settings for downloading the images stored on the camera's Edge Storage.

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.

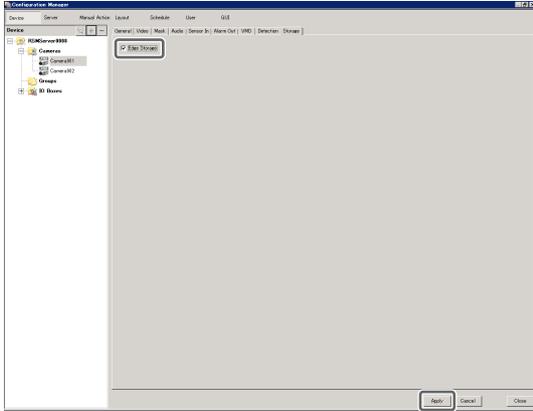
- 2 Select the camera from the [Device] tree structure on the left side of the screen.

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.

Notes

- To prevent decrease in performance, we recommend configuring the system area and storage as separate drives or in different partitions.
- To use a network drive, the network drive must be configured using the Setup Menu beforehand. For details, refer to “*Changing Initial Settings with the Setup Menu*” (page 24).

Configuring Storage Settings

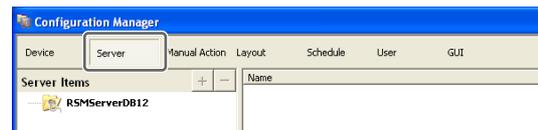
Add new storage, and specify the recording data to save to the storage.

Adding New Storage

Note

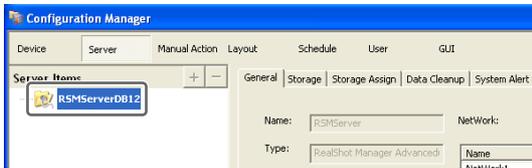
You cannot add or delete storage on NSR-1000 series, NSR-500 series, or RealShot Manager Advanced (Server) from RealShot Manager Advanced (Client).

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

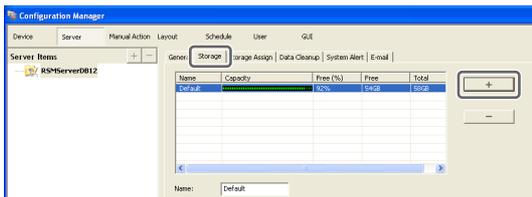


The Server Configuration screen appears.

- 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.



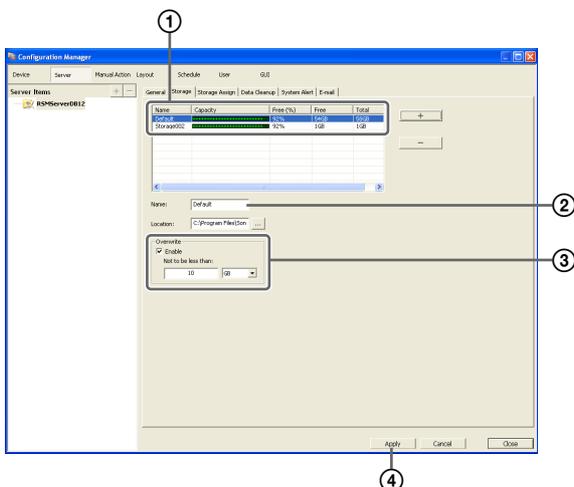
The Add Storage dialog box appears.

- 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].



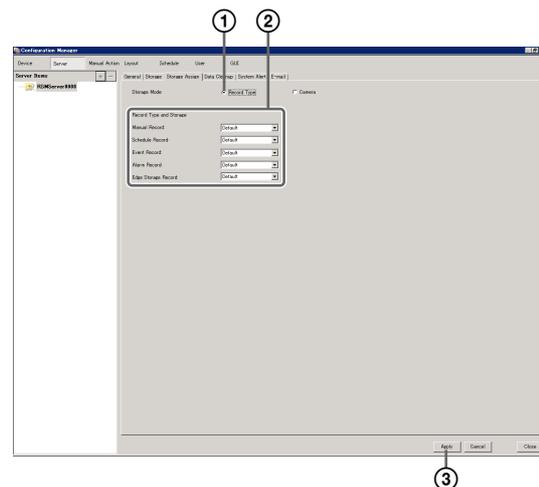
For details on each of the items, refer to “*Setting Items of the [Storage] Tab*” (page 77).

- 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.

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 78).

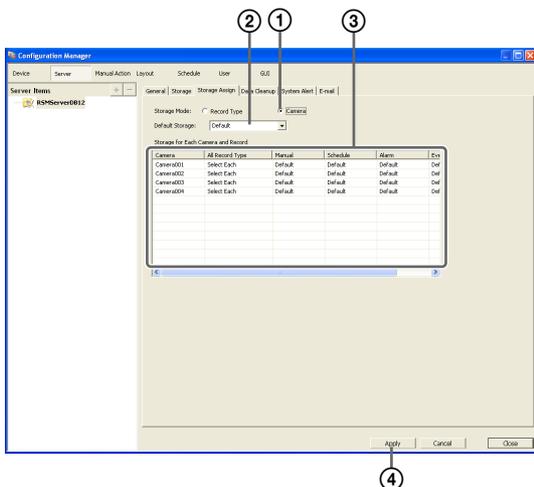
- 1 Select [Record Type].
- 2 Select storage for each recording type.
- 3 Click [Apply].
Storage is set for each recording data.

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].

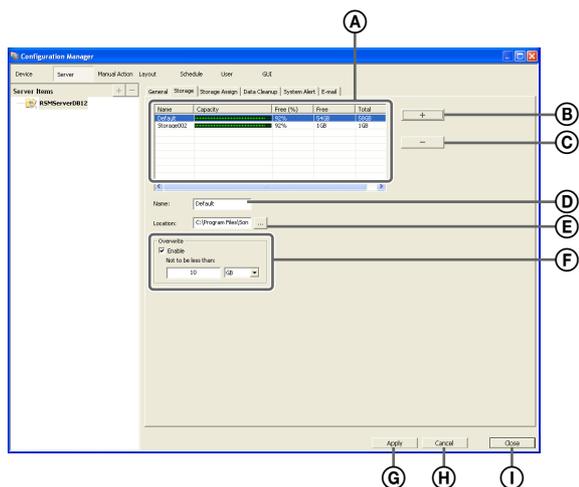


For details on each of the items, refer to “*Setting Items of [Storage Assign] Tab*” (page 78).

- 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.

C - (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. If you are using a network drive, specify a different partition as the storage location for each server to ensure proper storage management.

E Location

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.

G Apply

This saves the settings.

H Cancel

This cancels the changes to the settings.

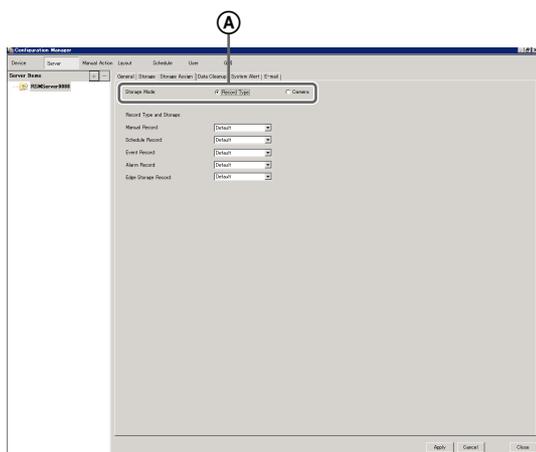
I Close

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].

**A Storage Mode**

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

The setting items vary depending on this selection.

Record Type

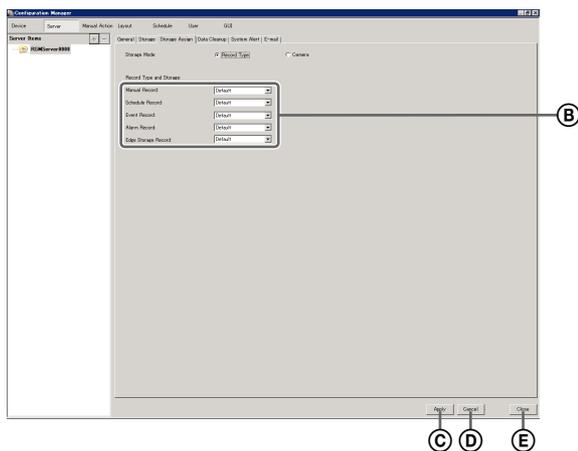
Select this to specify storage for each recording type, such as schedule recording and alarm recording.

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.

C Apply

This saves the settings.

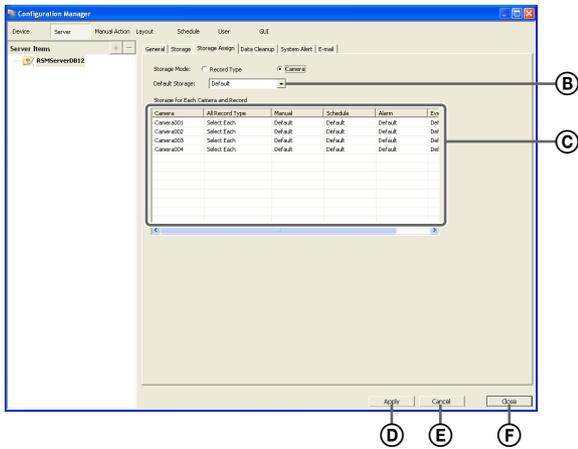
D Cancel

This cancels the changes to the settings.

E Close

This closes the screen.

■ To assign storage for each camera



Ⓑ Default Storage

Select the default save location for recording data.

Ⓒ Storage for Each Camera and Record

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 RealShot Manager Advanced. 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

Select storage for saving for manual recording.

Schedule

Select storage for saving for schedule recording.

Alarm

Select storage for saving for alarm recording.

Event

Select storage for saving for event recording.

Edge Storage

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

Ⓓ Apply

This saves the settings.

Ⓔ Cancel

This cancels the changes to the settings.

Ⓕ 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 79)

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

• Cleanup (page 80)

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

• Deleting Manually (page 125)

Specify recording data for deletion manually.

Data Overwriting

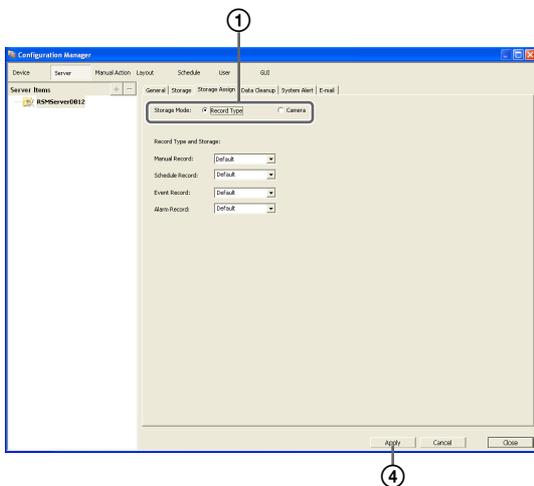
Delete data from the oldest automatically, regardless of how many days it has been stored, to ensure storage space is always available. You can set overwriting for each recording location.

Caution

- Estimate enough storage space to record the images you want to save before you configure the minimum value.
- 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.
- You cannot configure a recurrent schedule that straddles 00:00:00 AM.
 - If you want to configure a start time of 23:00:00 and an end time of 01:00:00, configure a separate schedule at 00:00:00 as follows.
 - Example: Start time: 23:00:00 End time: 23:59:59
 - Start time: 00:00:00 End time: 01:00:00
- 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
- Configuring a schedule that straddles 00:00:00 AM is also not possible when inserting 1-second breaks. Configure a separate schedule at 00:00:00.

- 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].

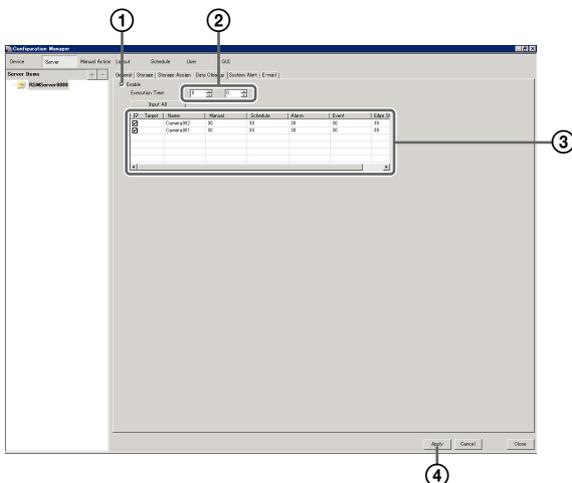


- ① Select the storage you want to configure.
- ② Select the [Enable] check box.
- ③ Enter the minimum limit for free space as a percentage or in gigabytes.
- ④ Click [Apply].
Overwriting is configured.

Cleanup

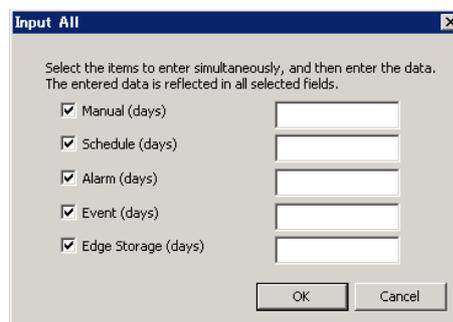
To ensure storage space is available, set the number of days to store recording data, and automatically delete data that exceeds that number of days. You can configure the same number of storage days for all cameras, or configure the settings separately for each camera.

- 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 80).

- 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.

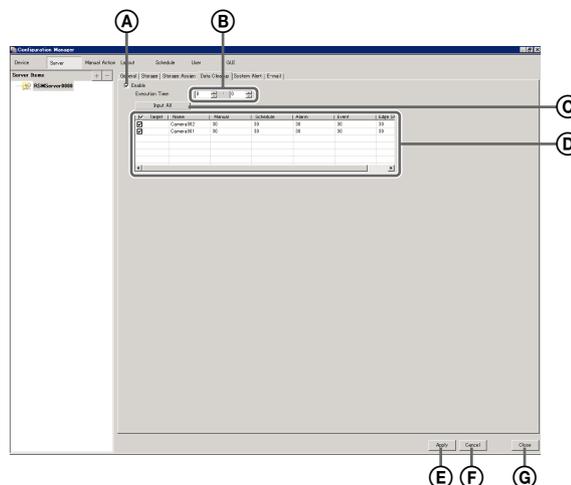


- ④ Click [Apply].
The cleanup is configured.

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.

Camera

This displays a list of the names of the cameras registered to RealShot Manager Advanced.

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.

Ⓔ Apply

This saves the settings.

Ⓕ 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 82)**
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 84)**
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 64) and “Configuring Sensor Inputs” (page 89).

Record Segmenting in Continuous Long-term 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:

Conditions	Codec: JPEG
	Resolution: VGA
	Frame rate: 10 fps
	Image quality: 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 82).

Configuring Schedules Manually

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

Note

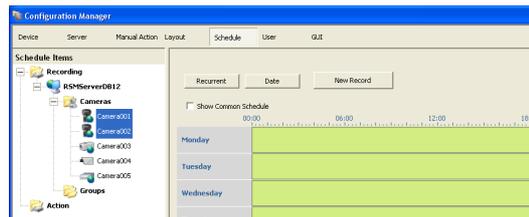
For details on settings such as the codec and frame rate for images captured from the camera during schedule recording, alarm recording, or event recording, refer to “*Configuring Camera Video Settings*” (page 43).

Configuring Recurrent Schedules

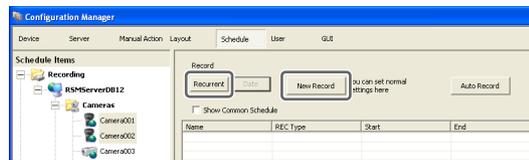
You can configure a recurrent schedule to repeat a schedule weekly.

- 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. 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].

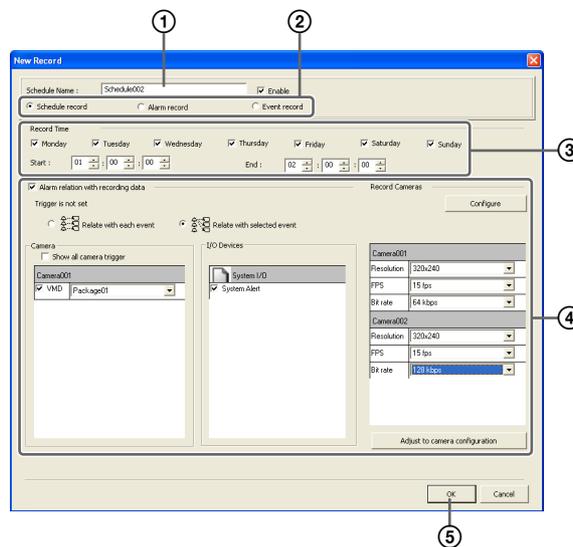


The New Record dialog box appears.

- 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 87).

- 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 84).

- ⑤ Click [OK].
The schedule is created.

4 Click [Apply].

The schedule is saved.

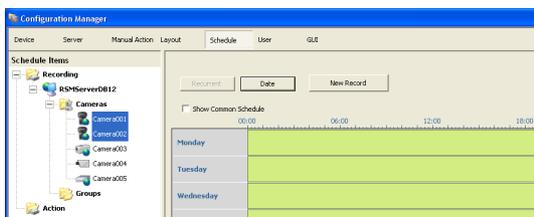
For details on how to view the schedule, refer to “*Setting Items of Schedule Screen*” (page 86).

Configuring a Schedule for a Specific Date and Time

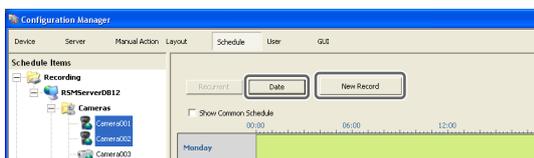
You can configure a schedule for a specific date and time to specify a date and time to run a schedule. The only difference from a recurrent schedule is the procedure for specifying a start and end date and time.

- 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] to switch to date and time view, and click [New Record].

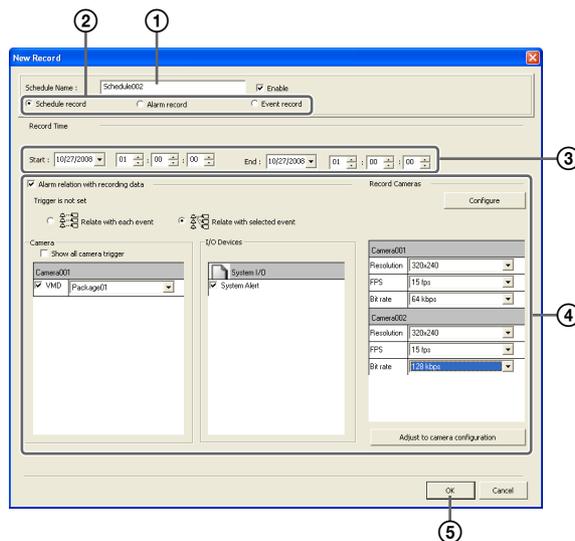


The New Record dialog box appears.

- 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 87).

- 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 84).
- 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 86).

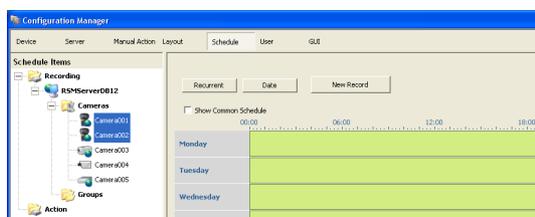
Configuring Alarm Recording and Event Recording

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

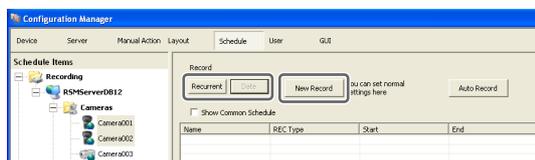
For details, refer to “*About Relationship Between Sensor and Camera when Alarm Occurs*” (page 85).

- 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] to switch to the view of the schedule you want to configure, and click [New Record].

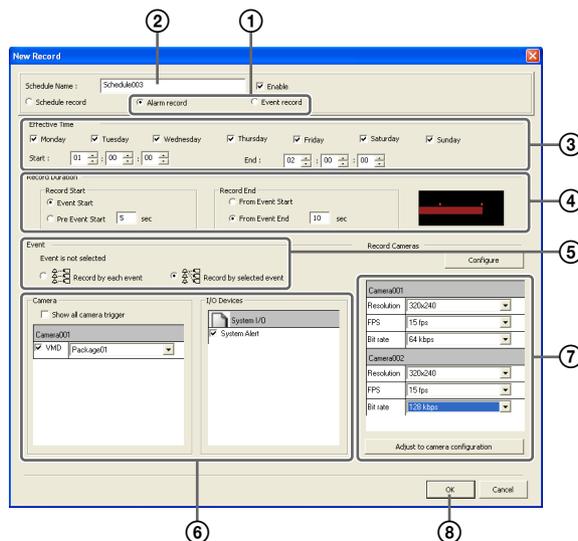


The New Record dialog box appears.

- 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 87).

- 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.
 - 4 Specify a condition to start recording and a condition to end recording, and configure the recording duration.
 - 5 In the case of alarm recording, select [Record by each alarm] or [Record by selected alarm].
 - When [Record by each alarm] is selected, the input pin of the selected camera itself is the trigger to begin recording.
 - When [Record by selected alarm] 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 85).
- 6 When [Record by each alarm] is selected, configure the input pin of the camera or I/O device that will be the trigger for alarm recording. If you selected [Event Record], replace all instances of “alarm” with “event” when performing steps 5 and 6.

⑦ Configure the camera to record images.

⑧ 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 86).

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 87).

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 [OK].
The schedule is deleted.

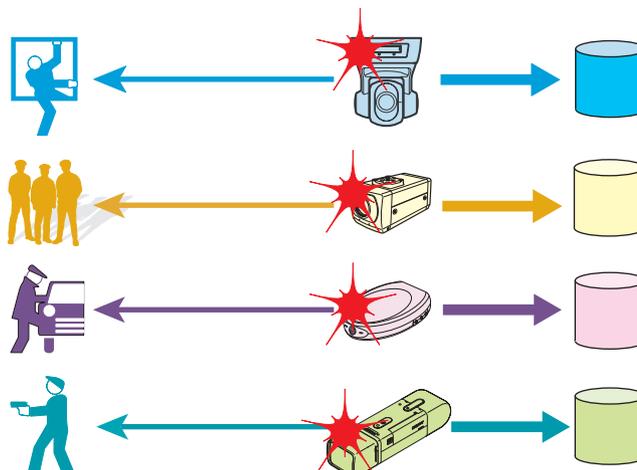
About Relationship Between Sensor and Camera when Alarm Occurs

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.

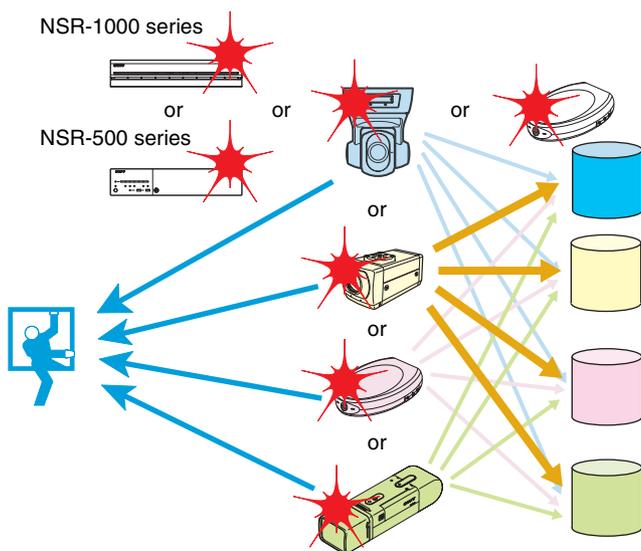
Recording begins on a camera whose input pin turns on.



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.



Ⓚ Close

This closes the screen.

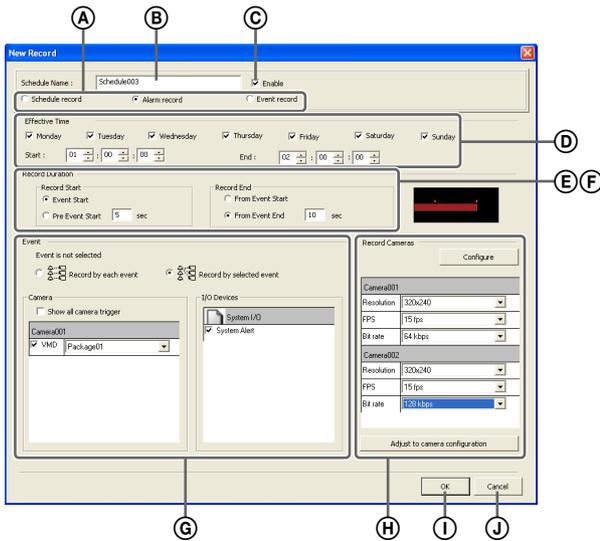
Setting Items of New Record Dialog Box

This dialog box is displayed by clicking [New Record] on the Schedule screen (page 87).

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)



Ⓐ Schedule Record/Alarm Record/Event Record

Select the type of schedule to configure.

Ⓑ Name

Enter the name of the schedule. It can be up to 32 characters long (16 non-ASCII characters).

Ⓒ Enable

Select the check box to enable this schedule.

Ⓓ 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.



Ⓔ 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.

Record End

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/Event 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 relation with recording data

G 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 85).

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.

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 Trigger” is selected, a list of all the triggers configured for RealShot Manager Advanced 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 64) and “*Configuring Sensor Inputs*” (page 89).

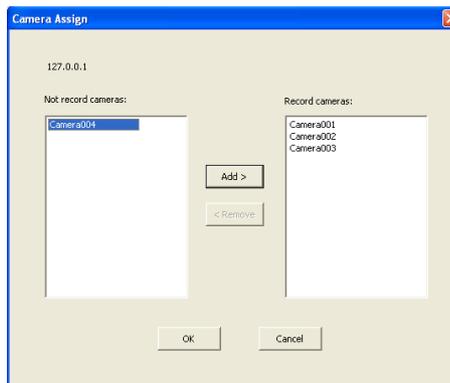
H Record Camera

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(s)] list, click [Add] to move the camera to the [Record Camera(s)] list, and click [OK].

**Camera List**

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

When the camera for recording is an SNC-XX600 series (XX represents two letters) camera, select one of [Image 1] to [Image 3] which are configured in the [Video] tab in “Device Configuration.”

Adjust to Camera Configuration

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

This button does not function for the SNC-XX600 series (XX represents two letters).

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.

J Cancel

This cancels your settings, and closes the dialog box.

Configuring Sensor Inputs

You can configure settings related to the sensor inputs incorporated in RealShot Manager Advanced 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.

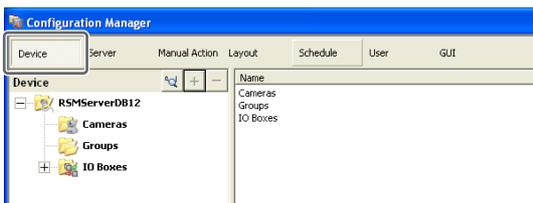
You can configure the following settings for sensor inputs.

- Adding Logical Sensor Input Pins to RealShot Manager Advanced (page 89)
- Changing Settings of Sensor Input Pins of Camera (page 90)
- Changing Settings of Sensor Input Pins of Barionet (page 90)
- Deleting Logical Sensor Input Pins Created for RealShot Manager Advanced (page 91)

Adding Logical Sensor Input Pins to RealShot Manager Advanced

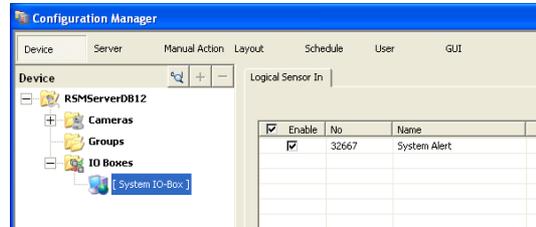
The adding of a logical sensor input pin to RealShot Manager Advanced allows for linking with the external device via the network. The operation (on/off) of the added sensor input pin from the external device acts as a trigger to perform recording or an action.

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

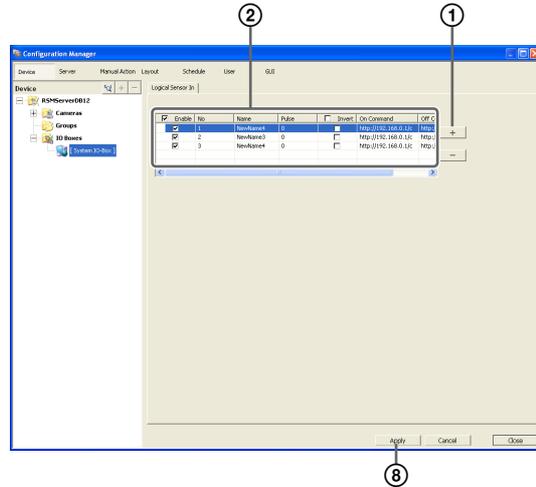


The Device Configuration screen appears.

- 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.



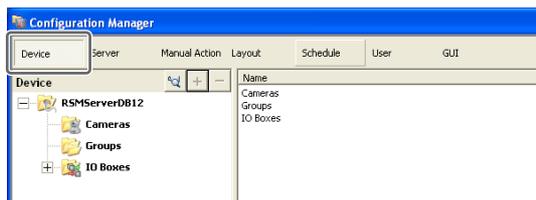
For details on each of the items, refer to “Setting Items of the [Sensor In] Tab” (page 91).

- 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.

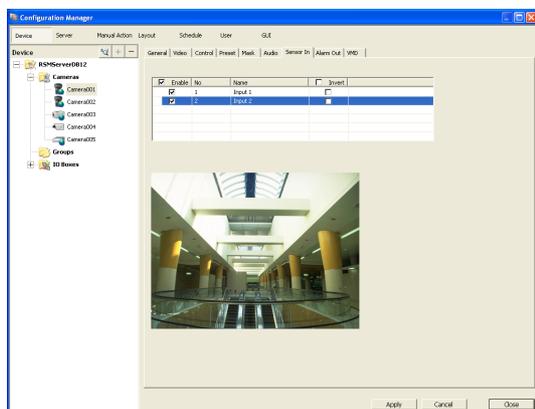
Changing Settings of Sensor Input Pins of Camera

- 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 91).

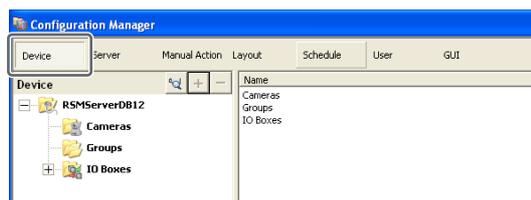
The sensor input settings are changed.

Changing Settings of Sensor Input Pins of Barionet

Caution

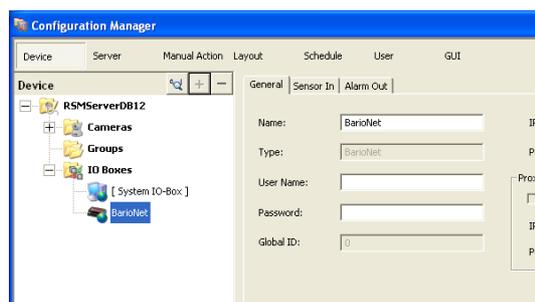
- Barionet cannot be used via a proxy server.
- Manually perform device registration for Barionet before configuring the following settings.
- For details, refer to the operating manual for Barionet.

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

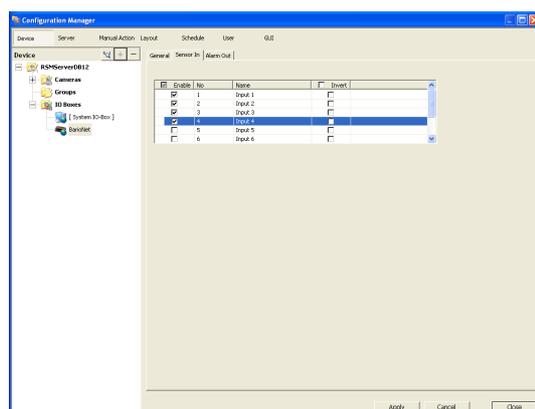


The Device Configuration screen appears.

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



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



For details on each of the items, refer to “*Setting Items of the [Sensor In] Tab*” (page 91).

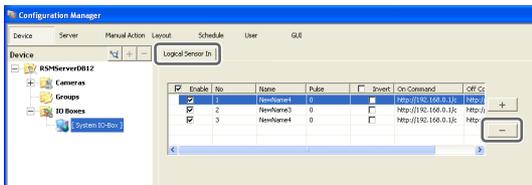
The Barionet sensor input settings are changed.

Deleting Logical Sensor Input Pins Created for RealShot Manager Advanced

Note

The logical sensor input pins of RealShot Manager Advanced that exist by default cannot be deleted.

- 1 Open [IO Boxes] in the [Device] tree, and click to select [System IO-Box].
- 2 Select the logical sensor input pins you want to delete in the [Logical Sensor In] tab, and click  (Delete).

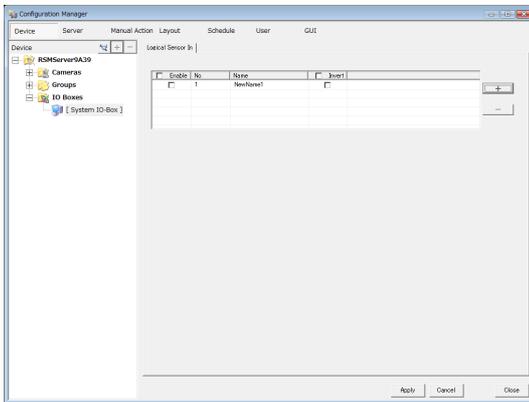


The logical sensor input pin is deleted.

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 RealShot Manager Advanced.



Sensor Input Pin List

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.

Invert

Select the check box to invert the pulse polarity. Example: Invert ON → OFF to OFF → ON.

+ (Add)

This adds a logical sensor input pin to the list.

This item is only displayed for the logical sensor inputs of “System IO-Box.”

- (Delete)

This deletes the selected sensor input pin from the list.

This item is only displayed for the logical sensor inputs of “System IO-Box.”

Configuring Alarm Output Settings

You can configure settings related to the alarm outputs incorporated in RealShot Manager Advanced 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:

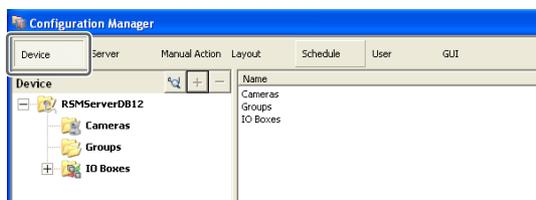
Warning siren, warning lamp, light, door, etc.

You can configure the following settings for alarm outputs.

- Changing Settings of Alarm Output Pins of Camera (page 92)
- Changing Settings of Alarm Output Pins of Barionet (page 92)

Changing Settings of Alarm Output Pins of Camera

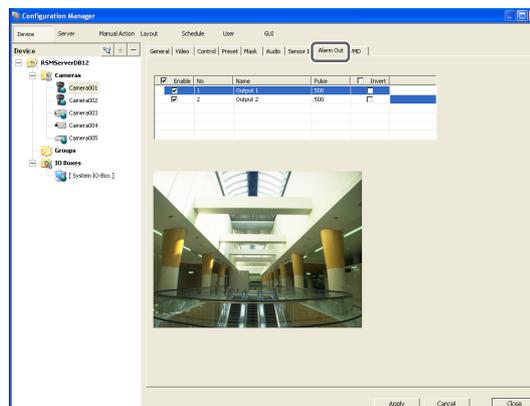
- 1 Click [Device] at the top of the Configuration window.



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 94).

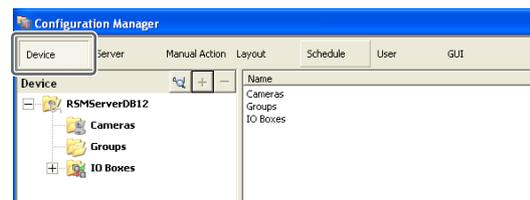
The alarm output settings are changed.

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.

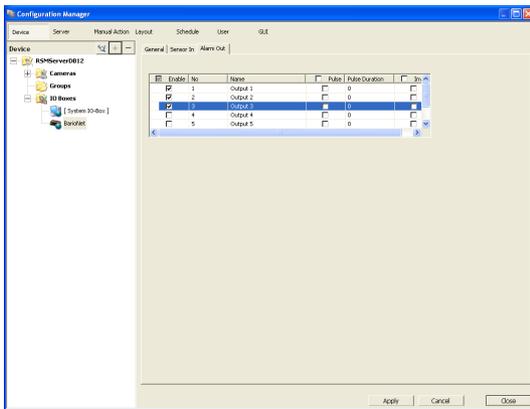


The Device Configuration screen appears.

- 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].



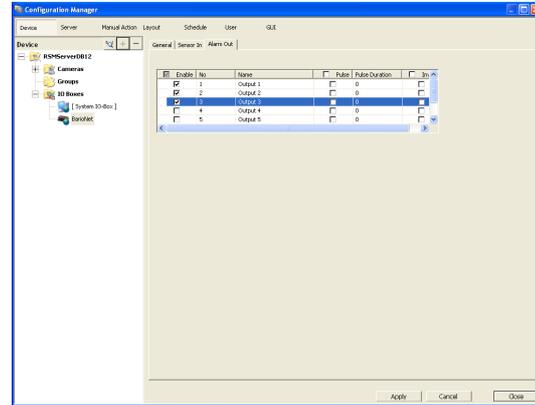
For details on each of the items, refer to “[Alarm Out] Tab (I/O Device)” (page 93).

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



Alarm Output Pin List

This displays a list of alarm output pins configured for the RealShot Manager Advanced or Barionet selected in the tree.

Enable

Select the check boxes to enable the pins for the alarm outputs.

Caution

To use alarm outputs, the alarm output pin settings on the device must also be enabled.

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 (16 non-ASCII characters).

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

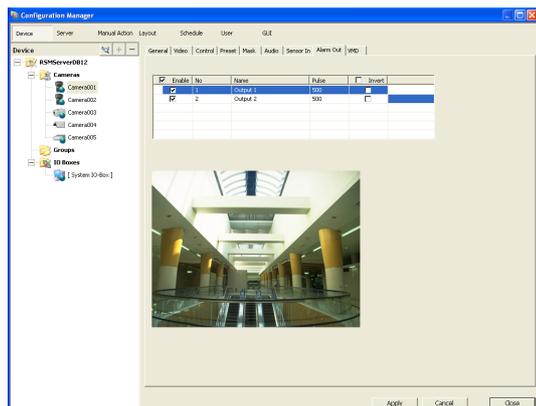
Select the check box to invert the polarity of the current output pins.

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.

[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. (Non-ASCII characters count as two characters.)

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.

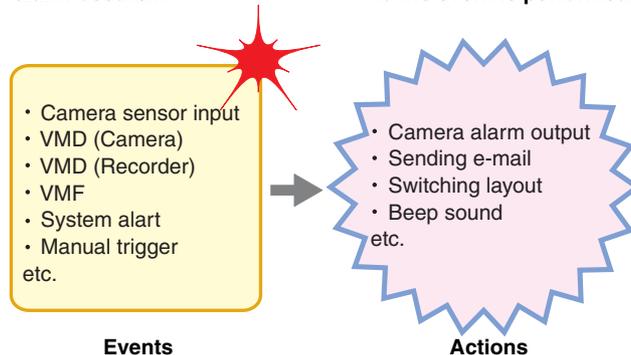
Configuring Action Settings

In RealShot Manager Advanced, you can configure the action for when, for example, a sensor input, VMD (camera), VMD (recorder), VMF, or system alarm is detected, or for when a manual action is performed.

Relationship Between Events and Actions

When an event such as an alarm occurs...

The action corresponding to the event is performed.



There are the following way of configuring actions.

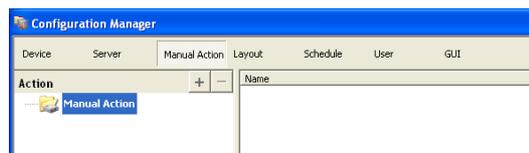
- **Manual Actions (page 94)**
Configure an action for when a trigger occurs manually.
- **Event/Alarm Actions (page 97)**
Configure an action for when an alarm or event occurs during a specified schedule period.

Manual Action

Configure an action for when a trigger occurs manually.

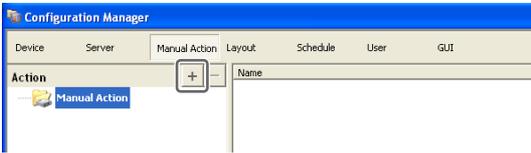
Registering a Manual Action

- 1 Click [Manual Action] at the top of the Configuration window.

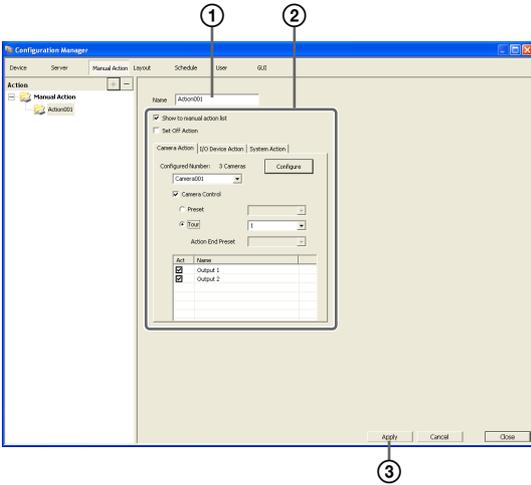


The Manual Action screen appears.

- 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 96).

- ① Enter a name for the action.
- ② Configure each item.
- ③ Click [Apply].

The action is registered.

Performing a Manual Action

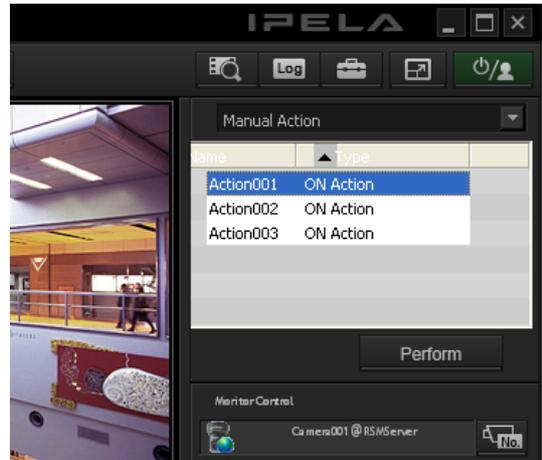
You can perform an action from the Manual Action toolbar in the main window.

- 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].



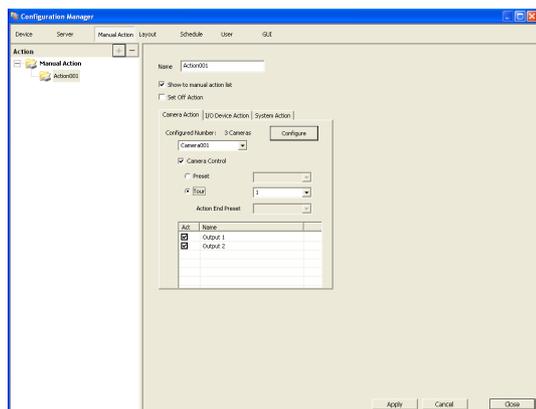
The action is performed.

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 (16 non-ASCII characters).

Show on the Main Window

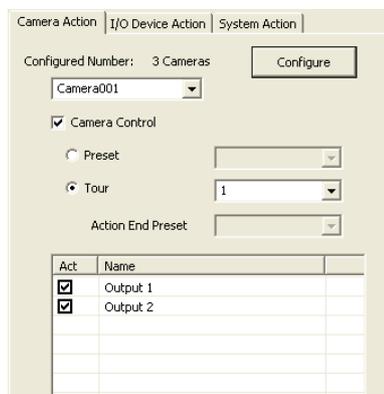
Select the check box to show this action in the Manual Action pane of the main window.

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 returns the camera to the specified preset position.

Tour

This performs the specified camera tour.

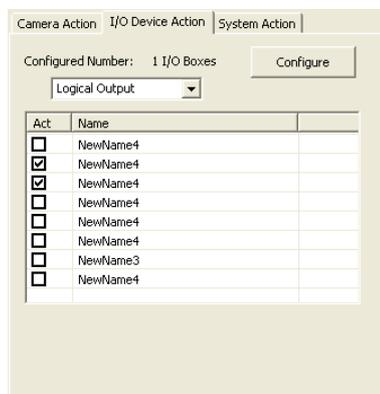
Action End Preset

Specify the preset position for when the action ends.

Pin List

Select the check boxes for the 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

Screen example: For servers

Send e-mail

Select the check box to send a notification by mail to a specified mail address.

For details on mail notification settings, refer to “*Configuring Mail Notification Settings*” (page 102).

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

If the codec of the camera is MPEG4/H.264 or masking is set for the camera, the image is not 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 (16 non-ASCII characters).

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 type.

Notes

- [Change Layout] and [Beep] only appears in RealShot Manager Advanced (Server).

- You must configure an action to stop the beep tone. Pre-define an action for stopping the beep that is triggered by a manual or sensor input event.

[Client Action] Tab (Client only)

The [Client Action] tab only appears in RealShot Manager Advanced (Client).

Change Layout

Select the check box to change the monitor layout. If you select this, select the monitor layout to display on monitor 1.

Beep

Select the check box to play a beep tone type. If you select this, select a beep tone.

Note

You must configure an action to stop the beep tone. Pre-define an action for stopping the beep that is triggered by a manual or sensor input event.

Apply

This saves the settings.

Cancel

This cancels the changes to the settings.

Event/Alarm Actions

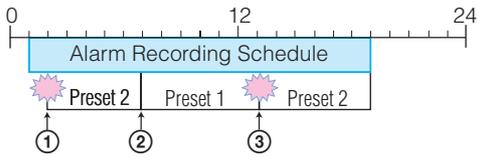
An action is performed if an alarm or event occurs within the duration set for a schedule. An action can be performed each time an alarm or event occurs, provided it occurs within the duration.

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:

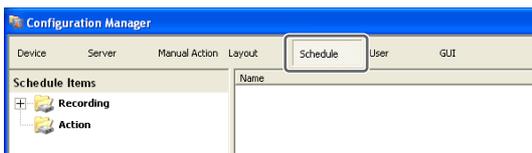


- ① When the VMD (camera) pin detects motion, the action is performed and the preset position of camera 1 moves to “Preset 2.”
- ② The preset position is returned to “Preset 1” manually.
- ③ When the VMD (camera) pin detects motion within the duration, the action is performed again and the preset position of camera 1 moves to “Preset 2.”

Registering an Event/Alarm Action

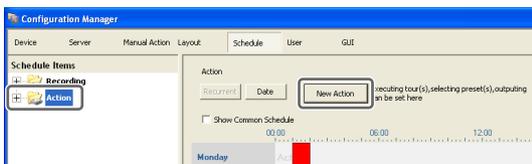
Configure a schedule for performing an action when an alarm or event occurs within the duration set for the schedule. An action can be performed each time an alarm or event occurs, provided it occurs within the duration.

- 1 Click [Schedule] at the top of the Configuration window.



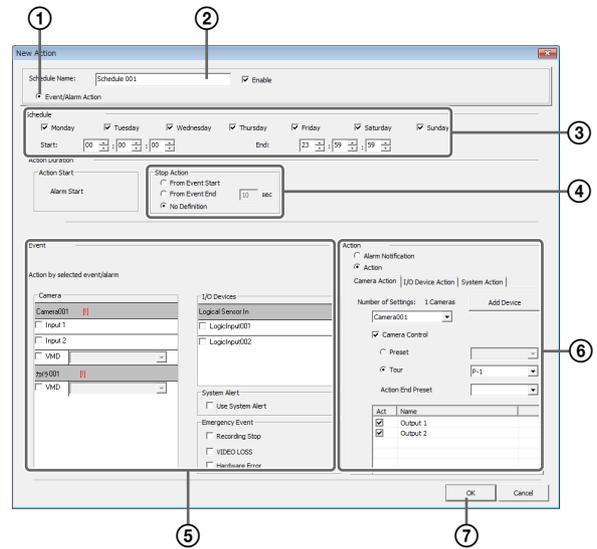
The Schedule Configuration screen appears.

- 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 98).

- ① Select [Event/Alarm Action].
- ② Enter a name for the event/alarm action.
- ③ 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.
- ④ Configure the timing for ending the action.
- ⑤ Configure the event that will be the trigger for the action.
- ⑥ Configure the action to perform.
- ⑦ Click [OK].
The event/alarm action is created.

- 5 Click [Apply].

The event/alarm action is saved.

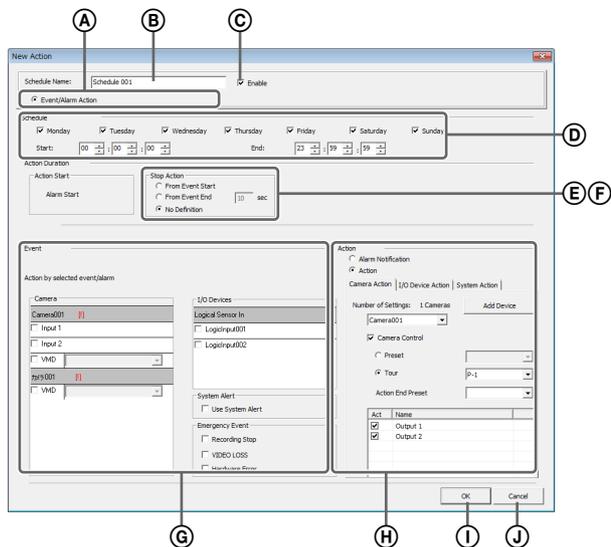
For details on how to view the schedule, refer to “*Setting Items of Schedule Screen*” (page 86).

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 Action and Event/Alarm Action

Select the type of event/alarm action to configure. The setting items vary depending on this selection.

B Name

Enter the name of the event/alarm action. It can be up to 32 characters long (16 non-ASCII characters).

C Enable

Select the check box to enable this event/alarm action.

D 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.



E Action Duration

Configure the duration for the action.

Event Start

This displays the timing for starting the action. This item cannot be changed.

Action End

Select the timing for ending the action.

From Event Start

This ends the action at the point in time a specified time elapses after the event started.

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

From Even End

This ends the action at the point in time a specified time elapses after the event ends.

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

No Definition

The timing to end the action is not specified.

F Server

Select the remote server.

This item is displayed in the case of a client.

G 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 Device

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 64) and “*Configuring Sensor Inputs*” (page 89).

System Alert

Select the check boxes for the system alerts you want to use as triggers.

Use System Alerts

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.

Stop Recording

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.

Note

Both S and E cannot be configured at the same time for a single action schedule.

Create an action schedule for each event.

(H) Action

Configure the action to perform.

Alarm Notification

Send an alarm notification for the configured trigger.

Action

This performs the specified action.

[Camera Action] Tab

Act	Name
<input type="checkbox"/>	Output 1
<input type="checkbox"/>	Output 2

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

Act	Name
<input checked="" type="checkbox"/>	NewName4
<input checked="" type="checkbox"/>	NewName4
<input checked="" type="checkbox"/>	NewName4
<input type="checkbox"/>	NewName4
<input type="checkbox"/>	NewName4
<input type="checkbox"/>	NewName4
<input type="checkbox"/>	NewName4
<input type="checkbox"/>	NewName3
<input type="checkbox"/>	NewName4

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.

For details on mail notification settings, refer to “Configuring Mail Notification Settings” (page 102).

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

If the codec of the camera is MPEG4/H.264 or masking is set for the camera, 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 (16 non-ASCII characters).

Change Layout

Select the check box to change the monitor layout. 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.

Notify Emergency Event

Select the check box to enable notifications for the specified emergency events.

Note

[Change Layout] and [Beep] only appears in RealShot Manager Advanced (Server).

[Client Action] Tab

Note

The [Client Action] tab only appears in RealShot Manager Advanced (Client).



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.

ⓘ OK

This creates an event/alarm action in accordance with the set values, and closes the dialog box.

⌵ 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.

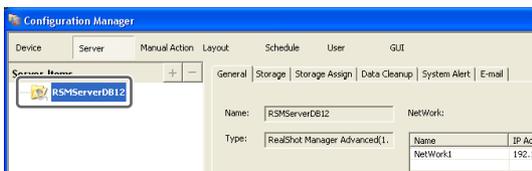
You can configure a mail address for each action. Specify the SMTP server and sender address here.

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

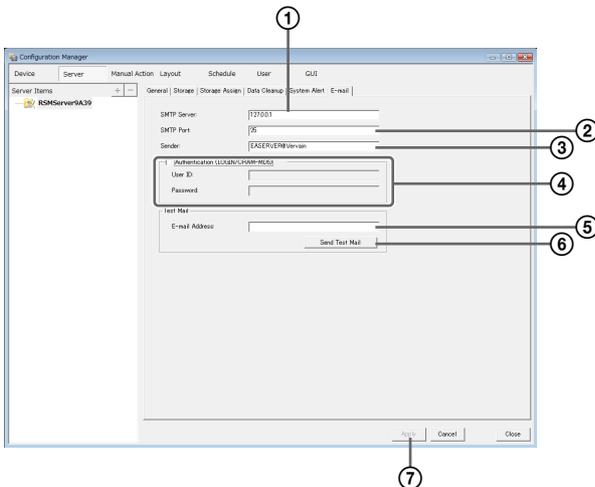


The Server Configuration screen appears.

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 (LOGIN/CRAM-MD5)], and then enter the user name and password for SMTP authentication.

⑤ Enter the mail address for sending test mail.

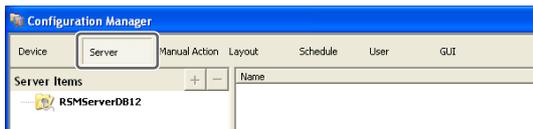
⑥ After you enter each address, click [Send Test Mail] and confirm that mail can be sent correctly.

⑦ Click [Apply].

Configuring System Alert Settings

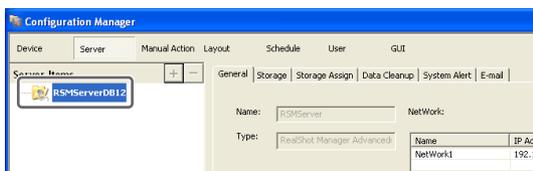
A system alert (alarm) can be generated when camera video loss or insufficient disk space is detected. Configure the settings for the action to perform after a system alert is generated.

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

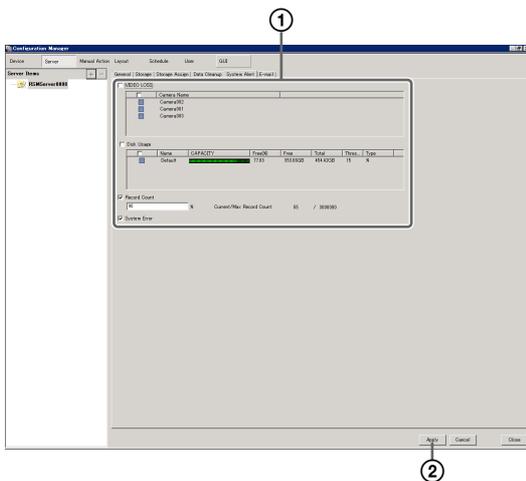


The Server Configuration screen appears.

- 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 103).

- ① Select the check boxes for the notification items, and configure each item.
- ② Click [Apply].
The settings are saved.

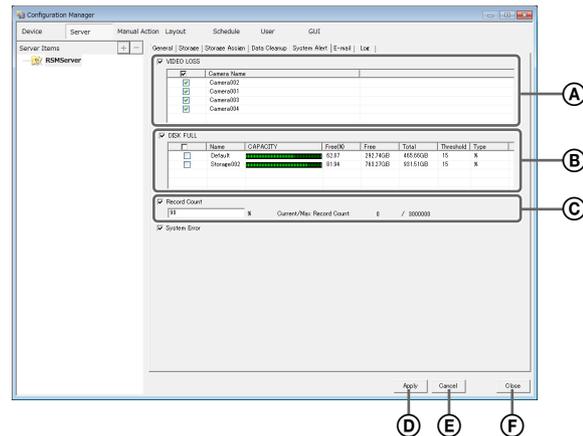
- 4 Configure the action to perform after a system alert occurs.

For details on actions, refer to “Configuring Action Settings” (page 94).

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].



① VIDEO LOSS

Select the check box to notify of the image signal becoming disconnected.

Note

Disconnection of the audio signal or disconnection of an NSBK-A16/A16H video 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 Name

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

② DISK FULL

Select the check box to notify of insufficient disk space and disabled access to storage.

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.

Threshold

Specify the threshold value for the remaining space at which the notification will be sent.

Type

Specify the units for the threshold value.

Ⓒ 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.

Ⓔ Cancel

This cancels the changes to the settings.

Ⓕ Close

This closes the screen.

Caution

The recording errors and hardware errors of NSR-1000 series, and NSR-500 series are included in the system alerts, and notification always occurs regardless of the settings.

Registering Users

You can register users in RealShot Manager Advanced, and set login 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, you must uninstall the software and reinstall it. Current setting configurations are not retained when the software is reinstalled.

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
Manual Action Configuration	None	None	None	Yes	Yes
Manual Deletion/Protection	None	None	Yes	Yes	Yes

Permission	User Level				
	1	2	3	4	5
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

Registering a User

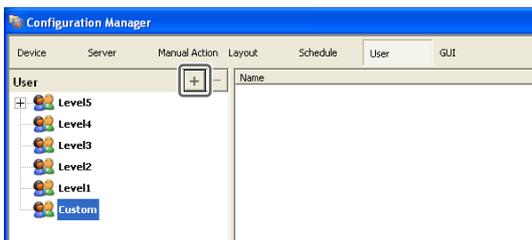
Register the user to use RealShot Manager Advanced, and configure the permissions.

- 1 Click [User] at the top of the Configuration window.



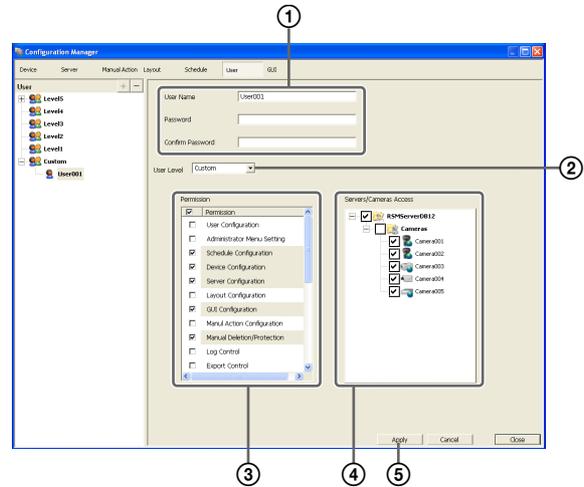
The User Configuration screen appears.

- 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 106).

- 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.

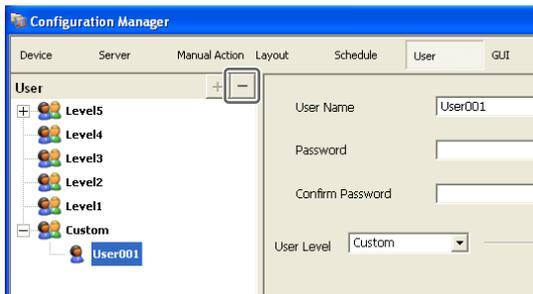
For details on each of the items, refer to “*Setting Items of the [User] Tab*” (page 106).

- 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.

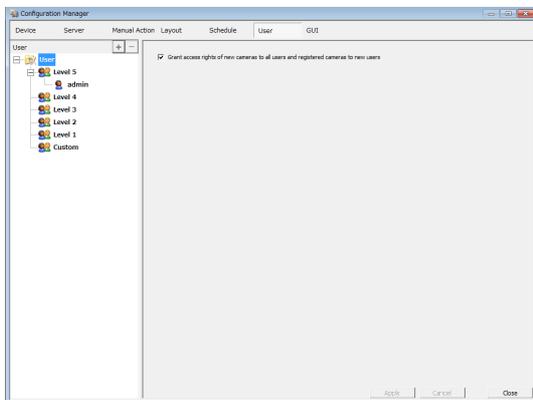
- 3 Click [OK].
- The user is deleted.

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.

Note

Level 5 users will be granted access permissions automatically, regardless of the default access permission setting.



- 1 In the User Configuration screen, select [User] at the top of the tree.

The [Grant access rights of new cameras to all users and registered cameras to new users] setting appears.

- 2 Enable or disable the default access permission setting.

Select the [Grant access rights of new cameras to all users and registered cameras to new users] check box to enable the setting, and clear the check box to disable the setting.

- 3 Click [Apply].

Note

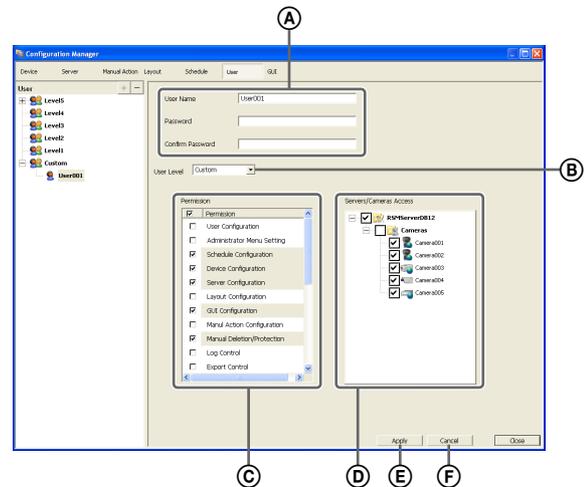
Camera access permissions will be granted automatically regardless of this setting when devices or users are added via Easy Setup.

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

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.

Ⓑ 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 is an example of 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 the server from the NSR series unit.

Notes

- The NSR series cannot be shut down or restarted remotely.
- RealShot Manager Advanced Server, Client, and Lite can be shut down or restarted remotely.

Search & Playback

Allows you to search or play back recorded data.

Camera Control

Allows you to control cameras in the Camera Control pane.

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.

Alarm History Control

Allows you to clear alarm histories.

Exit Application

Allows you to exit the application.

Ⓓ Servers/Cameras Access

Select the check boxes for the devices or servers that the user will be permitted to access.

Ⓔ Apply

This saves the settings.

Ⓕ Cancel

This cancels the changes to the settings.

Caution

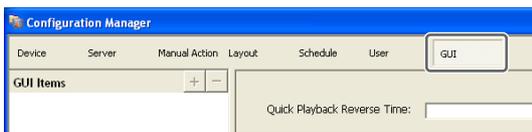
If there is no permission to access a server, logging on to that server is not possible.

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.”)

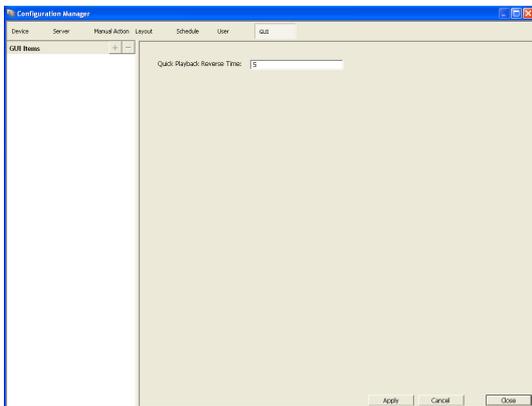
You can configure the duration to rewind for quick playback in the GUI Configuration screen.

- 1 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.

Emergency Event Notification via Dialog Boxes

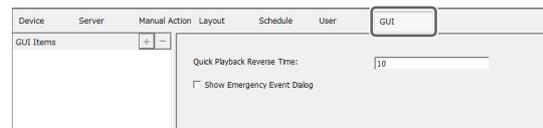
When a specified emergency event occurs, you can enable notification of the event via dialog boxes.

You can configure emergency event notifications in the GUI Configuration screen.

Note

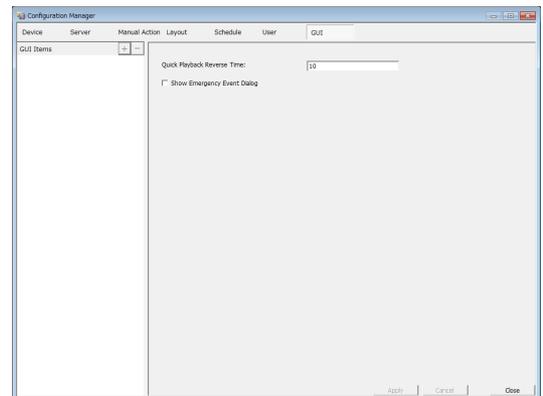
Dialog box notifications will only occur when you are logged on.

- 1 Click [GUI] at the top of the Configuration screen.



The GUI Configuration screen appears.

- 2 Select the [Show Emergency Event Dialog] check box to enable notification of emergency events via dialog boxes, and click [Apply].



Appears only in RealShot Manager Advanced (Client).

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 109)
- Monitoring Using Layout Tours (page 110)

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 62).

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.



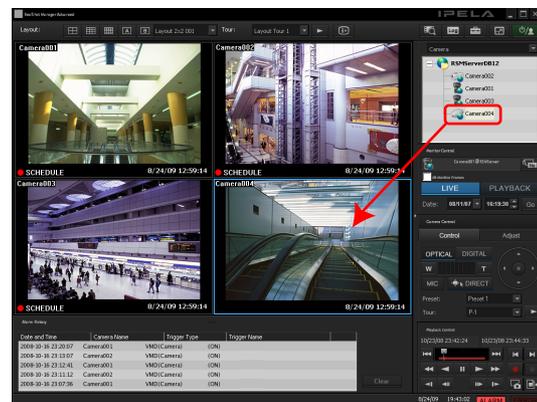
Live images are displayed on the selected monitor frame.

For details on each of the items, refer to “Functions and Operating Procedure of Main Screen” (page 111).

Monitoring Images of a Different Camera

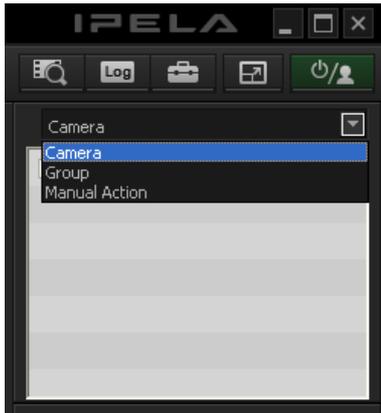
Select a camera on the Camera pane, and drag and drop it onto the monitor frame to switch to displaying the images of the selected camera.

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.



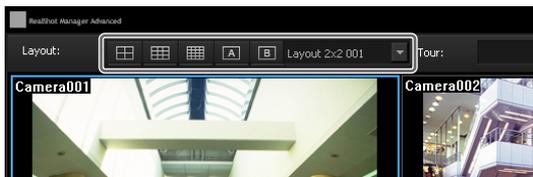
Note

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.



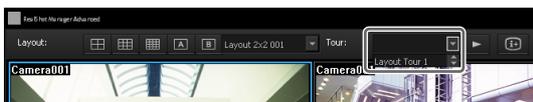
Monitoring Using Layout Tours

You can perform monitoring using the layout tour function for sequentially switching the display shown on the display at a preset time.

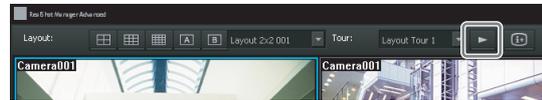
Note

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 62).

- 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.

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.

(2x2 Layout)

This switches to the 2x2 default layout.

(3x3 Layout)

This switches to the 3x3 default layout.

(4x4 Layout)

This switches to the 4x4 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.

C (Display Information)

This displays or hides the information of the monitor frame configured in the layout settings.

D (Search Recording Data)

This displays the Search window (*page 122*) for specifying search conditions.

(Open Log Window)

This displays the Log window (*page 130*) for displaying the recent log messages.

(Configuration)

This displays the Configuration window (*page 39*) 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.



This allows you to log off, or exit the application.

F **Camera/Group/Manual Action Pane**

Clicking  displays a menu that allows you to switch to each of the panes.

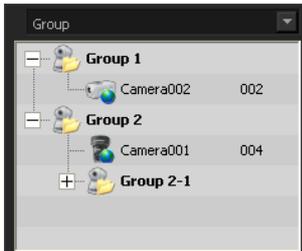
Camera Pane



This allows you to 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.

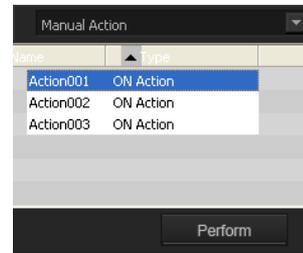
Groups Pane



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, monitoring and quick playback of live images will be applied to all monitor frames.

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.

Ⓜ Monitor 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.



This allows you to output audio inputs from the microphone of the computer on which RealShot Manager Advanced installed, through the speakers of the camera selected on the Main screen.

When you select a camera with audio output capabilities, the MIC button is enabled and you can press this button to toggle audio upload on and off.

Caution

- You can only output audio from one selected camera.
- You cannot output audio from multiple cameras simultaneously.
- Only cameras that exist on the same segment as the computer can output the audio.
- On and off settings for audio output must be configured on the camera settings page (Web browser).

- When specifying a camera using a host name, be sure to use a name that can be resolved on that computer.



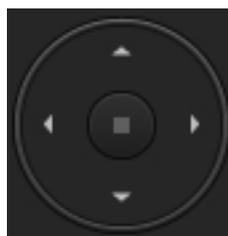
If you click this button, you can perform pan, tilt, zoom, and centering with the mouse.

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	Zooms in. ¹⁾
Ctrl + Rotate the wheel backward	Zooms out. ¹⁾

1) Zooming in and out with digital zoom is not supported.

Pan/Tilt



This moves the camera up, down, left, or right.

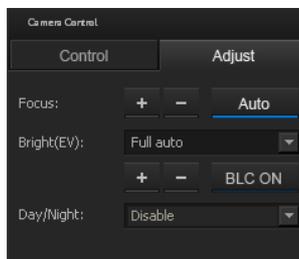
Preset

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)



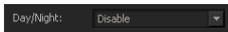
Select [Full Auto] to always adjust the brightness automatically. The backlight compensation turns on or off each time you click [BLC ON].

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.

The [-] and [+] buttons are enabled when the auto state is canceled. Adjust the brightness in the [+] direction to make the images brighter and adjust the brightness in the [-] direction to make the images darker.

Day/Night



Select day mode or night mode for cameras equipped with a day/night function.

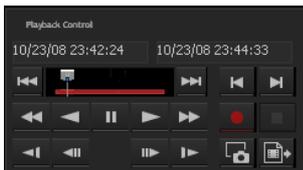
When [Day Mode] is selected, the camera operates in day mode.

When [Night Mode] is selected, the camera operates in night mode.

When [Auto] is selected, the camera operates in day mode under normal conditions. The camera automatically enters night mode under dark conditions.

When [Disable] is selected, the day/night function is disabled.

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).

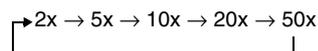
When metadata is recorded and a Video Motion Filter is configured, images play back simultaneously (at 1x speed only).

If data includes audio, the audio will only play back during 1x speed playback.

(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)

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 129).

(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.

Ⓝ [ALARM] Lamp

This is lit when an alarm has occurred.
The [ALARM] lamp will turn off if you click the [Clear] button in the Alarm History pane to clear the history.

[ERROR] Lamp

This is lit when an error has occurred.
Clicking the [ERROR] lamp will open the log window. By viewing the content of the error, the [ERROR] lamp will turn off. If you leave the [ERROR] lamp in its lit state, server error notifications to the client will continue.

Ⓚ Expand/Collapse Pane Button

This displays or hides the pane section.

Ⓛ [Alarm History] Display Pane

Date and Time	Camera Name	Trigger Type	Trigger Name
2008-10-16 23:20:07	Camera001	VMD(Camera)	(ON)
2008-10-16 23:13:07	Camera002	VMD(Camera)	(ON)
2008-10-16 23:12:41	Camera001	VMD(Camera)	(ON)
2008-10-16 23:11:12	Camera002	VMD(Camera)	(ON)
2008-10-16 23:07:36	Camera001	VMD(Camera)	(ON)

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.

Ⓜ 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].

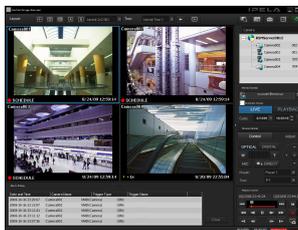
When a Click Action is Configured

When an action is set for an image pasted in a layout or a monitor frame and the mouse is held over the position of the specified object, the pointer changes.

If you click the mouse at the place where the pointer changed, the action is executed.

Second Monitor (Monitor 2)

If two monitors are connect to the computer, the 1×1, 2×2, 3×2, 3×3, or 4×4 monitor layout that was specified is displayed on the monitor connected to monitor connector 2. You can also use monitor 2 as the hotspot monitor.

Screen of Monitor 1**Screen of Monitor 2**

The displayed images are the same as those of the monitor frame selected in monitor 1. However, if sensor input or motion detection occurred, the images of the corresponding camera are displayed.

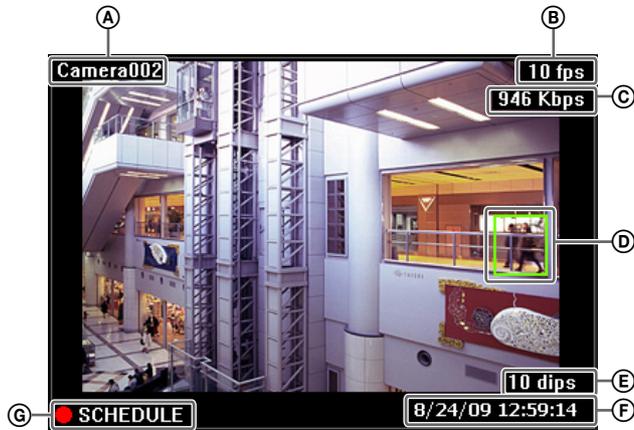
The operation when two monitors are connected is as described below.

- The selected image or the image of the camera with which there was a sensor input or motion detection is displayed on an available monitor frame in order from top left, top right, bottom left, and bottom right.
- If the same image is already displayed in a monitor frame, it is not displayed in another monitor frame.

Notes

- The setting operation is not possible for monitor 2.
- Displaying images on monitor 2 may reduce the display performance of monitor 1.

Monitor Frame



- A Camera Name**
This displays the name of the camera.
- B Frame Rate**
This displays the speed at which images are imported from the camera.
- C Bandwidth**
This displays the amount of bandwidth used for transferring images over a network connection.
- D Object frame:**
This displays the object frame for Video Motion Detection (Recorder) or VMF.
- E Display Images per Second**
This displays the speed at which the camera images are refreshed on the monitor.
- F 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.
- G 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 speed in the reverse direction).

Notes

- If 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 a motion detection or VMF package alarm occurred.
- When a sensor input, motion detection, or VMF package alarm occurs, and the monitor frame is displaying images from the camera to which the alarm is being input or images from the camera on which the alarm is occurring, a red frame will appear around the monitor frame.

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.

Hiding Various Information

By clicking , you can switch between displaying and hiding the information in monitor frames.

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 on the left side of the screen 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 111).

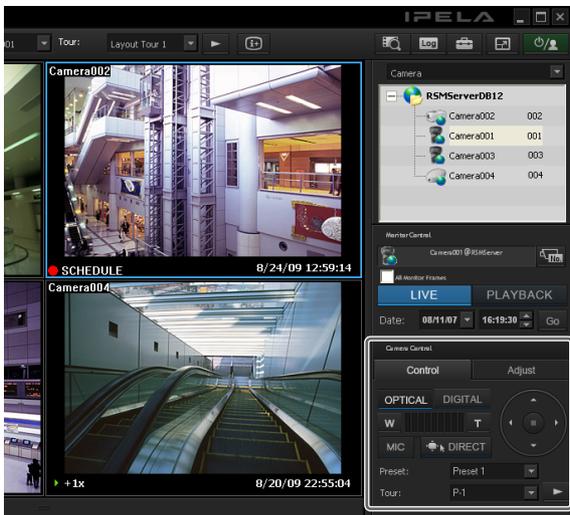
Notes

- Camera control is only enabled for network compatible cameras.
- If multiple monitor frames are selected at once, the camera of the monitor frame that was selected last becomes the target for control.

Performing Pan, Tilt, and Zoom Operations

Using Camera Control Pane to Control Camera

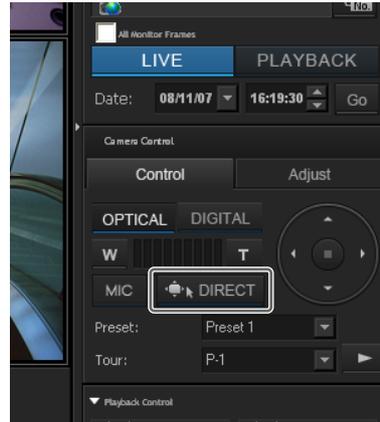
- 1 Select any monitor frame, and display the images of the camera you want to control.
- 2 Use the Camera Control pane to control the camera.



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.

- 1 Select any monitor frame, and display the images of the camera you want to control.
- 2 Click  on the Camera Control pane.



Centering the Image

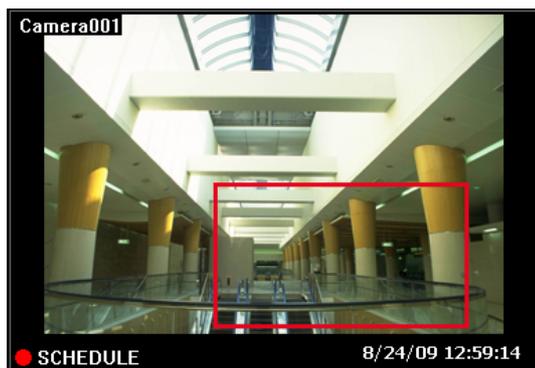
If you click the mouse on the image, the camera centers on the location that was clicked.



■ 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 zooming out in digital are 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 49).

- 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 119*)
You can record the images currently being captured by a camera.
- Playing Recorded Images (*page 119*)
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 (Alarm/Event/Post VMD) (*page 120*)
You specify a date and time or type of recording to search for recorded images.
- Playing Recorded Images from Search Results (*page 121*)
You can play recorded images from Search Results.

Recording Live Images

You can record the images currently being captured by a camera.

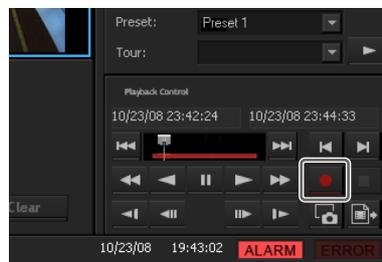
- 1 Select the monitor frame for which you want to record live images.

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.

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

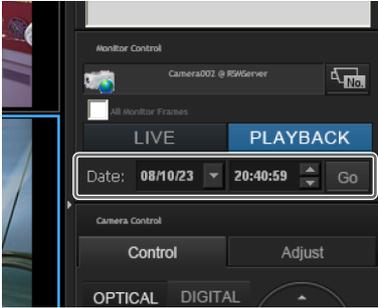
You can configure the rewind time for quick playback on the GUI Configuration screen (*page 108*).

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.

- 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

- Click to select the monitor frame of the recorded images you want to play.
- Double-click the alarm history in the Alarm History pane.

Date and Time	Camera Name	Trigger Type	Trigger Name
2008-10-16 23:20:07	Camera001	VMD(Camera)	(ON)
2008-10-16 23:19:07	Camera002	VMD(Camera)	(ON)
2008-10-16 23:12:41	Camera001	VMD(Camera)	(ON)
2008-10-16 23:11:12	Camera002	VMD(Camera)	(ON)
2008-10-16 23:07:36	Camera001	VMD(Camera)	(ON)

The recorded images are played back.

Searching Recorded Images

There are the following types of search.

- **Normal Search**

You can specify the recording type (schedule recording, manual recording, alarm recording, or event recording) and then search.

- **Object Search**

You can search for previously recorded images using the VMD (recorder) motion detection function and VMF function.

Normal Search

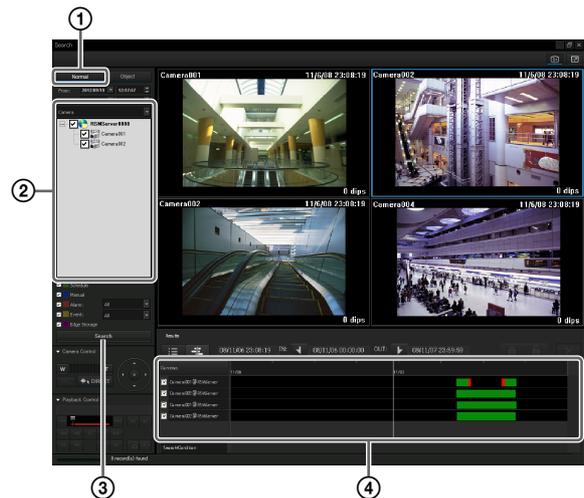
You can specify the recording type (schedule recording, manual recording, alarm recording, or event recording) and then search.

- Click  (Search for Recording Data) at the top of the Main screen.



The Search Window appears.

- Specify the search conditions, and click [Search].



For details on each of the items, refer to “*Setting Items of Search Window (Normal)*” (page 122).

- Click [Normal].

- Specify the search conditions.

- Click [Search].

A list of search results is displayed (④).

You can play recorded images from the search results. For details, refer to “*Playing Recorded Images from Search Results*” (page 121).

Object Search

You can search for previously recorded images using the VMD (recorder) motion detection function and VMF function.

- 1 Specify the search conditions and click [Search] in the Search Window.



For details on each of the items, refer to “Setting Items of Search Window (Object)” (page 122).

- 1 Click [Object].
- 2 Select [VMF] or [VMD (Recorder)].
- 3 Specify the search conditions.
- 4 Click [Search].
A list of search results is displayed (5).

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



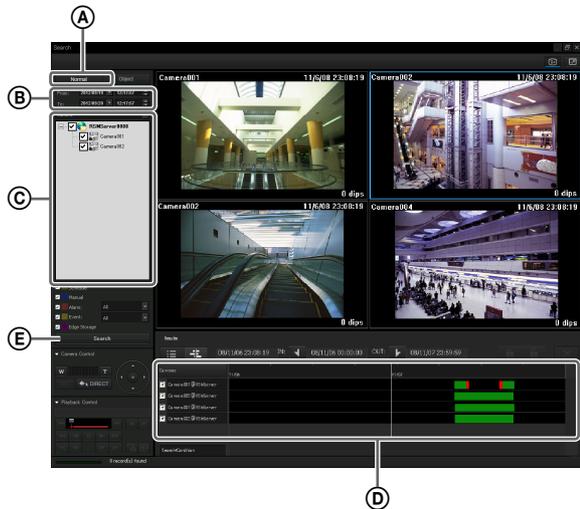
For details on each of the items, refer to “Search Results Display Area (List View)” (page 124) and “Search Results Display Area (Timeline View)” (page 125).

- 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 (Normal)

Specify the search conditions for a normal search. Configure each of the items and click [Search] to perform a search with the specified search conditions.



A [Normal] Tab

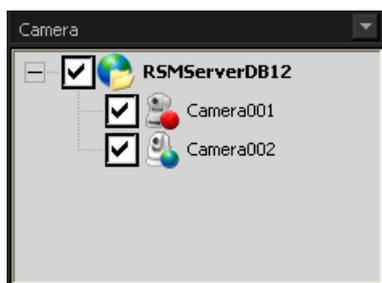
Select this to specify the recording type (schedule recording, manual recording, alarm recording, or event recording) and then search.

B Date and Time Specification Area



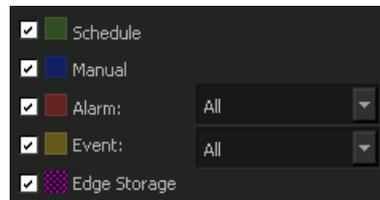
Specify a range of dates and times for which to search.

C Device Specification Area



Specify the devices for which to search. Select the check boxes of the devices for which to search in the tree.

D Recording Type



Select the check boxes of the recording types for which to search.

When you select the check box of [Alarm] or [Event], select the recording triggers from the drop-down menus.

E Search Button

This performs a search with the specified conditions.

Setting Items of Search Window (Object)

Specify the search conditions for an object search. Configure each of the items and click [Search] to perform a search with the specified search conditions.



A [Object] Tab

Select this to search with motion detection of VMD (recorder), or apply filters (VMF: Video Motion Filter) consisting of motion/object search conditions to search for the corresponding recordings.

B Date and Time Specification Area



Specify a range of dates and times for which to search.

Ⓒ Device Specification Area



Specify the device for which to search. Only one device and channel can be selected. Select the check boxes of the devices for which to search in the tree.

Ⓓ Object Search Type



Select the type of motion detection to use for the search.

Ⓔ Object Search Settings

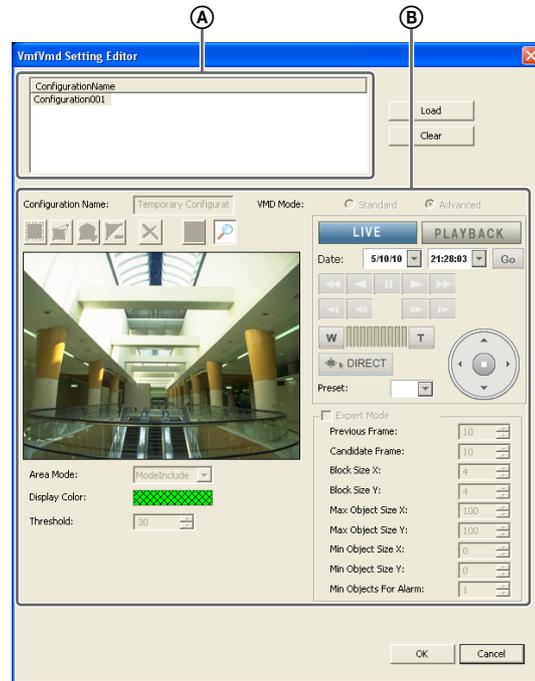
Click [Edit] to display a dialog box for configuring advanced search conditions according to the type of motion detection selected in [Object Search Type].

Ⓕ Search Button

This performs a search with the specified conditions.

Setting Items of Object Search Configuration Dialog Box (VMD)

Specify the search conditions in detail for when searching with the motion detection function of VMD (recorder). This dialog box is displayed when [VMD] is selected in the [Object Search Type] (page 122) of the Search window, and then [Edit] is clicked. After configuring each item, click [OK].



Ⓐ Configuration Name

Select the configuration to use for the search, and click [Load]. The loaded settings are reflected in the items of “Ⓑ.”

Ⓑ Motion Detection Area Configuration Area

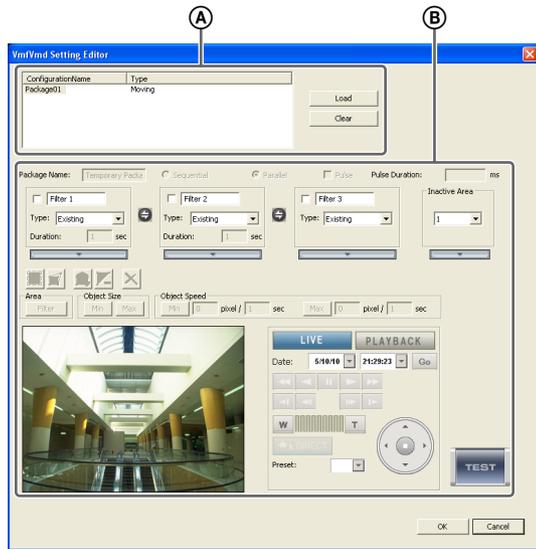
Configure the motion detection areas. The configuration procedure is the same as that for [VMD (Recorder)] in the Device Configuration window. For details on each of the items, refer to “Setting Items of [VMD] Tab (VMD (Recorder))” (page 65).

Setting Items of Object Search Configuration Dialog Box (VMF)

Specify the search conditions in detail for when applying filters (VMF: Video Motion Filter) consisting of motion/object search conditions to search for the corresponding recordings.

This dialog box is displayed when [VMF] is selected in the [Object Search Type] (page 122) of the Search window, and then [Edit] is clicked.

After configuring each item, click [OK].



A Configuration Name

Select the VMF package to use for the search, and click [Load].

The loaded settings are reflected in the items of “B.”

B VMF Package Configuration Area

Configure the setting items of the VMF package. The configuration procedure is the same as that for [VMF] in the Device Configuration window. For details on each of the items, refer to “Setting Items of [VMD] Tab (VMF)” (page 71).

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.



A (List Mode)

This switches to the list view.

B (Protect)

This protects the selected recordings.

(Unprotect)

This cancels protection for the selected recordings.

(Delete)

This deletes the selected recordings.

C 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

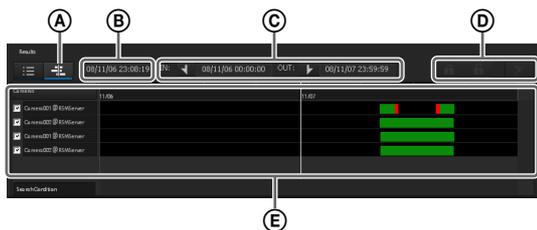
Displays the length of the recording data.

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.



- A** **(Timeline Mode)**
This switches to the timeline view.
- B** **Time Indication of Timeline**
This indicates the current position (time) on the timeline.
- C** **(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.
- D** **(Protect)**
This protects the selected recordings.
- (Unprotect)**
This cancels protection for the selected recordings.
- (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.)

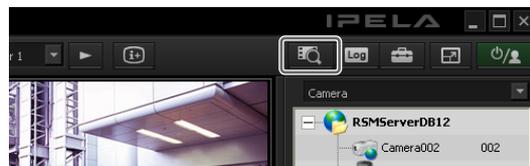
Deleting Recorded Images

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 79).

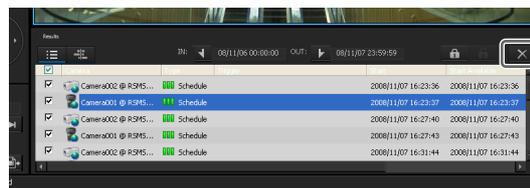
- 1 Click (Search for Recording Data) at the top of the Main screen.



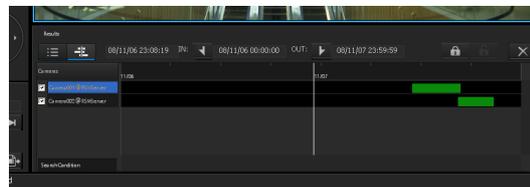
The Search Window appears.

- 2 Specify the search conditions, and click [Search].
For details on finding recorded images, refer to “*Searching Recorded Images*” (page 120).
- 3 Select the recorded images you want to delete, and click (Delete).

When List View



When Timeline View



Note

Protected recorded images cannot be deleted.

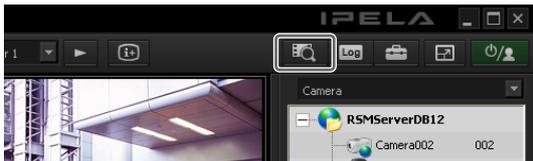
A confirmation message appears.

- 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.



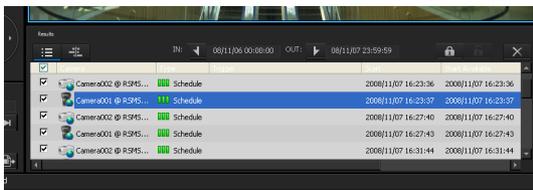
The Search Window appears.

- 2 Specify the search conditions, and click [Search].

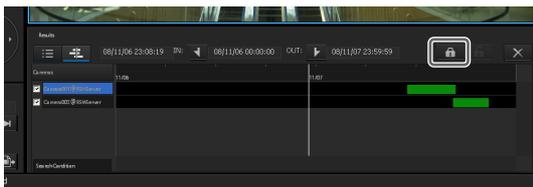
For details on finding recorded images, refer to “Searching Recorded Images” (page 120).

- 3 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

- Multiple items cannot be exported at the same time.
- When using a network drive in a Windows XP or Windows Server 2003 environment, you cannot export recorded images on the network drive from a client. When exporting recorded images on a network drive in a Windows XP or Windows Server 2003 environment, perform the export operation from the server.

Exporting Recorded Images

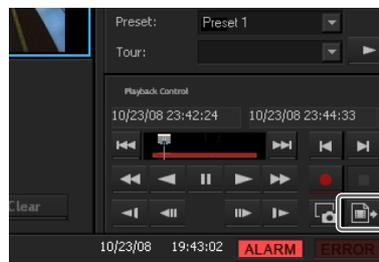
You can export saved recorded images as files. Export recorded images from the Main screen or Search window. You can specify part of the recorded images to be exported.

Exporting from the Main Screen

- 1 Select any monitor frame, and display the camera images you want to export.

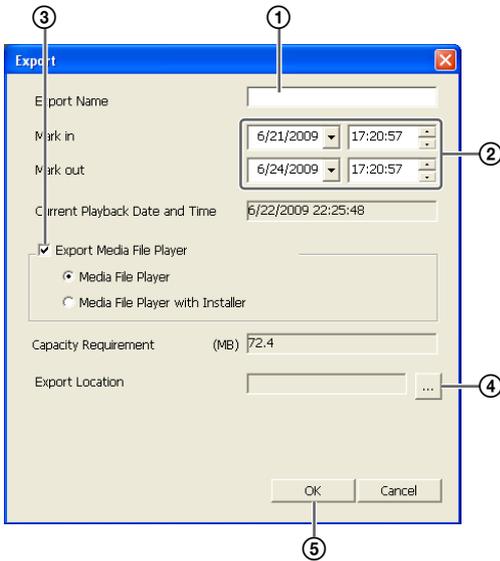
If you want to export recorded images that are currently playing, pause playback and then perform the procedure below.

- 2 Click  (Export Recorded Image) on the Playback Control pane.



The Export dialog box appears.

3 Configure each item, and click [OK].

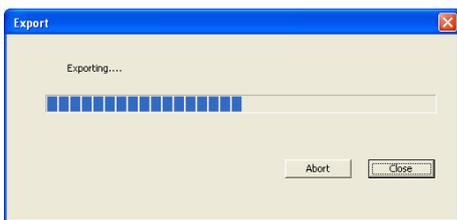


For details on each of the items, refer to “*Setting Items of Export Dialog Box*” (page 128).

- 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 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.



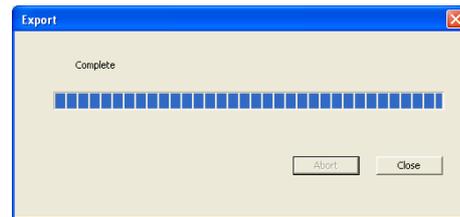
Notes

- 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.
- The space displayed for [Capacity Requirement] in the Export dialog box is just a rough indication. Even if the available space on the media exceeds the space displayed for [Capacity Requirement], the space of the media may actually be insufficient in some cases, resulting in export failures.
- 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 ahead out the current time.

When exporting ends, the following screen appears.

4 Click [Close].

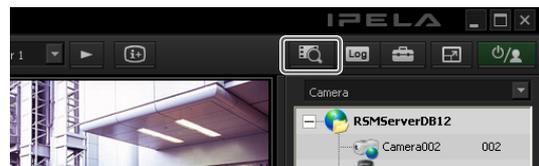


The Exporting screen closes.

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.

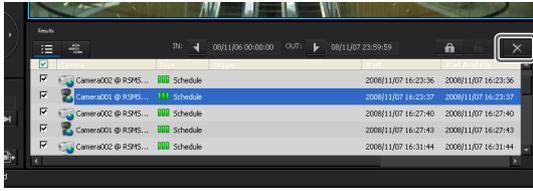


The Search Window appears.

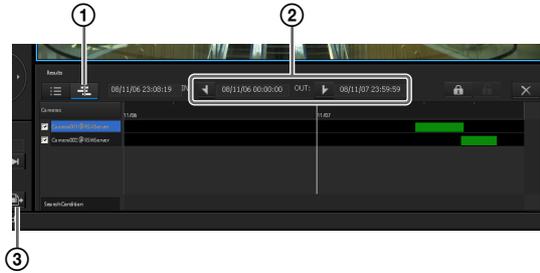
- 2 Specify the search conditions, and click [Search].

For details on finding recorded images, refer to “*Searching Recorded Images*” (page 120).

- Click to select the recorded images you want to export in the list of search results.



- Switch to the timeline view, specify the start point (mark in) and end point (mark out), and then perform the export.

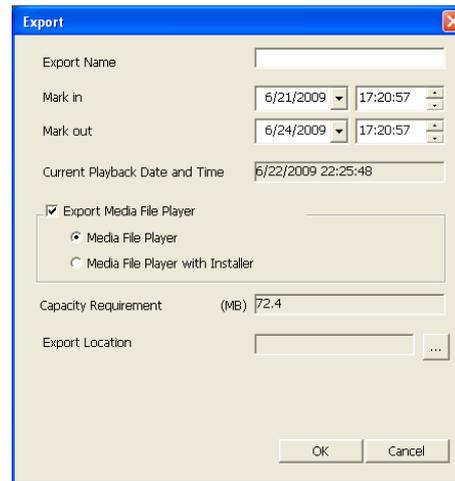


- Click (Timeline) to switch to the timeline view.
- Specify the start point (mark in) and end point (mark out) on the timeline. Click (Mark In) or (Mark Out) to set the current playback position as the start point or end point. The mark in or mark out position can also be moved by dragging and dropping.
- Click (Export Recording Data).

The Export dialog box appears. The subsequent procedure is the same as Step 3 of “Exporting Recorded Images” (page 126).

Setting Items of Export Dialog Box

This dialog box is displayed by clicking (Export Recorded Image) on the Main screen (page 111). 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.

OK

This starts exporting.

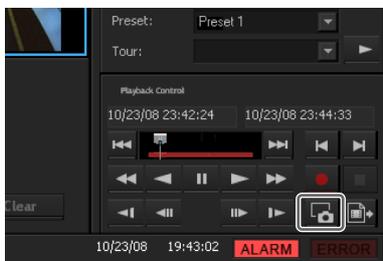
Cancel

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.

- 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.



Caution

The still image file is saved in the “SnapShots” folder located in the install folder.

System Administration

This section describes the operations necessary for routine system administration.

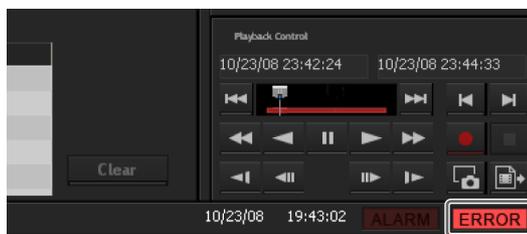
- *Monitoring the Error Status (page 129)*
- *Exporting Log Files (page 130)*

Monitoring the Error Status

When an error occurs with RealShot Manager Advanced, you can confirm the error with the ERROR lamp in the Main screen.

The ERROR Lamp on the Main Screen

When a major hardware or software error is detected, the ERROR lamp at the bottom right of the Main screen lights.

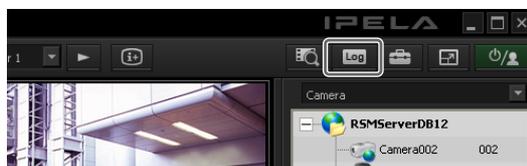


Confirming the Error Content

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.

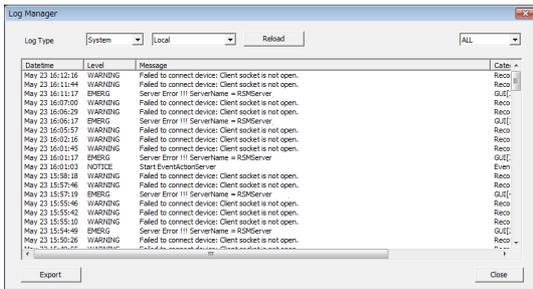
- 2 Confirm the error content.

Select System, Event/Alarm, or Operation from [Log Type].

Note

If you selected a system log, you can specify the level of the items you want to confirm in the drop-down menu at the top right. If you select [ALL], all items will be displayed.

The items will appear in order of priority level:
EMERGENCY > ERROR > WARNING > NOTICE > ALL.



Exporting Log Files

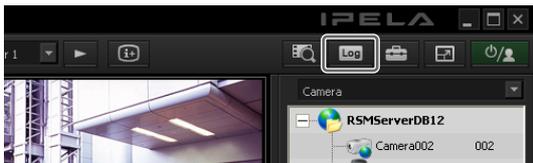
You can export the following log files.

- System logs
- Event and alarm logs
- Operation logs
- Detailed logs and system information

Note

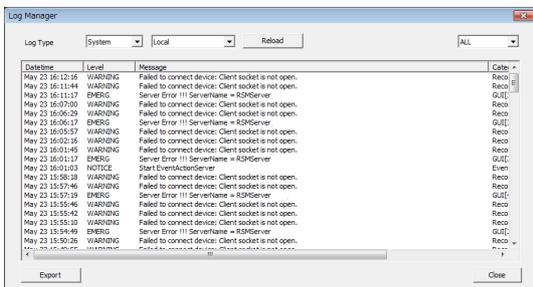
Filtering will not be applied.

- 1 Click **Log** at the top of the Main screen.



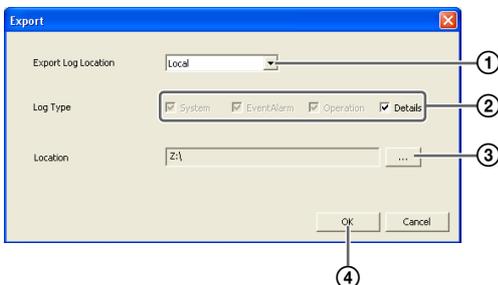
The Log dialog box appears.

- 2 Click [Export].



The Export dialog box appears.

- 3 Specify the logs you want to export, and click [OK].



- 1 Select whether to export local (i.e., the current computer) logs or logs for the server being referenced.

- 2 Select the check boxes of the logs to export.

Notes

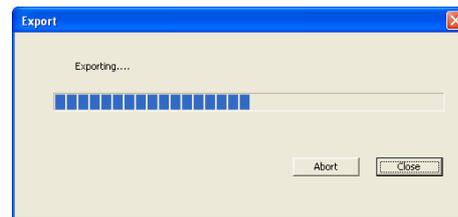
- Only users with “Administrator Menu Setting” permissions can select the [Details] check box. For details on permissions, refer to “*Registering Users*” (page 104).
- The files that are exported when [Details] is selected are identical to the files that are exported when using [Export System Information] in the Administration Menu.
- If you are operating from a client and [Export Log Location] is not set to [Local], [Details] cannot be selected for [Log Type].

- 3 Select the export location.

- 4 Click [OK].

Exporting starts.

The following screen appears during exporting to allow you to confirm the progress.

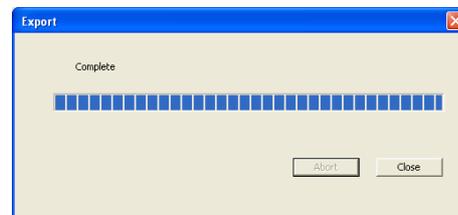


Note

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.

Uninstalling the Software

Perform the following procedure to uninstall the software.

Uninstall RealShot Manager Advanced



Uninstall PostgreSQL



Delete data

Before Uninstalling

- Log on to Windows as a user with administrator privileges when uninstalling.
- Close all other programs currently running.

As an example, the uninstallation procedure for Windows XP is described here.

Uninstalling RealShot Manager Advanced

Perform uninstallation from “Control Panel” - “Add or Remove Programs” as you would with any ordinary application.

Uninstalling PostgreSQL

Perform uninstallation from “Control Panel” - “Add or Remove Programs” as you would with any ordinary application.

Deleting the Data

Uninstalling PostgreSQL and RealShot Manager Advanced does not delete the data, so be sure to delete the data manually.

- 1 Delete the RealShot Manager Advanced installation folder.
- 2 Delete the storage location folder for recorded data.

Troubleshooting

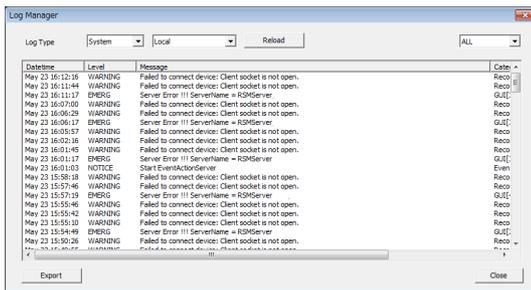
Logging

With RealShot Manager Advanced, you can view the most recent log messages in the “Log Window”.

Log Window

This window appears when you click  (Open Log Window) on the main window.

Each message displays the date, time, and cameras or applications on which the information was logged. The [message] column shows a description of the reasons for logging the information.



For details, refer to the “Monitoring the Error Status” (page 129).

Error Messages

License Errors

If RealShot Manager Advanced is started without a valid software license installed, the “30 day trial” version or RealShot Manager Lite will start.

To confirm that your license is installed properly

Select [Information] in the logon screen to open a dialog box. If the number of enabled cameras displayed in the dialog box matches the purchased license, the license is installed properly.



Caution

You must restart the computer after copying the license file to the RealShot Manager Advanced install folder.

Camera Monitoring Window Displays “NO CONNECTION”

This message appears when RealShot Manager Advanced is unable to communicate with a camera across the network. Confirm the following causes and solutions.

- The camera is turned off.
→ Turn the camera on.
- No network connection has been established between the camera and the RealShot Manager Advanced computer.
→ Confirm the connection settings. For details, refer to “Setting Items of Device Configuration Screen” (page 39).
- The camera configuration in RealShot Manager Advanced is incorrect.
→ Confirm the camera configuration, while referring to “Setting Items of Device Configuration Screen” (page 39).
- The camera configuration in RealShot Manager Advanced is incorrect.
→ Refer to the operating instructions for the relevant camera.

- If you connect to the network via a proxy server, the camera registration details are not correct.
 - Confirm the details for the proxy server. For details, refer to “*Setting Items of Device Configuration Screen*” (page 39).

Verifying a Network Connection (Using Ping)

Using the ping command, you can test whether the camera is connected to the network and whether it can be recognized by the computer.

1 Open the command prompt in Windows.

Click the [Start] menu, select [Run], and enter “cmd”, or press the Windows key + R to open the “Run” dialog box, and then enter “cmd.”

2 Enter the following command.

```
ping <IP address of camera>
```

When connected correctly

The following message appears beneath “Reply from 192.168.0.110:bytes=32time<1ms TTL=128.”

```
C:\>ping 192.168.0.110
Pinging 192.168.0.110 with 32 bytes of data:
Reply from 192.168.0.110: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.110:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

When connected incorrectly

As shown below, the message “Request timed out” appears.

```
C:\>ping 192.168.0.100
Pinging 192.168.0.100 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.0.100:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

If the network connection between the RealShot Manager Advanced computer and the camera passes through other devices, such as network routers and patch panels, you will need to verify that all other devices along the network are also working correctly.

Cannot Display or Record at the Maximum Frame Rate

When there are network-related issues, or when the settings on the camera or in RealShot Manager Advanced are incorrect, one of the following problems could be the cause.

- The camera resolution or picture quality is set too high for the network connection or the computer running RealShot Manager Advanced.
 - Confirm the camera configuration, while referring to “*Configuring Camera Video Settings*” (page 43).
- The maximum value is restricted by the local settings on the camera.
 - Refer to the operating instructions for the relevant camera.
- Multiple users are transferring images simultaneously.
 - The maximum frame rate for transferring images may decrease when the number of requests from users increases.

On-Screen Images Are Very Poor Quality

The cause may be one of the following.

- The camera is out of focus, or the lens is dirty.
- Low resolution and/or low picture quality have been selected in the camera settings.

Adjusting Camera Focus

For camera models that include a focus adjustment function, you can adjust the camera focus from the Main screen of RealShot Manager Advanced in the [Adjust] tab of the [Camera Control] pane. For details, refer to “*[Adjust] Tab*” (page 113).

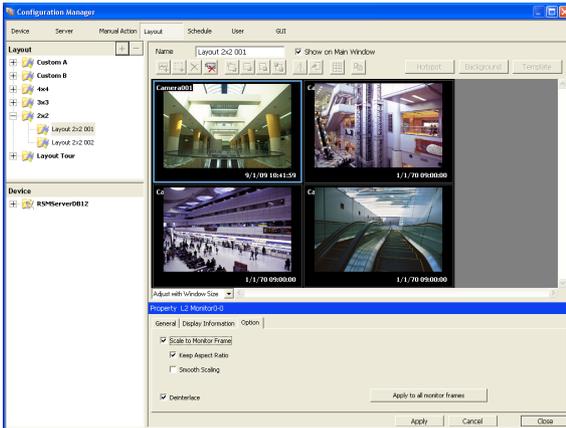
Resolution and Image Quality

If a low resolution is set for the camera in RealShot Manager Advanced, the image quality will be poor when the camera images are viewed in a large monitoring window.

For example, if the camera resolution is set to 160×120 pixels and the monitoring window is set to 800×600 , this will result in a very poor image quality.

In this case, make the following adjustments.

- Change the scaling method on the [Option] tab in the Layout screen. For details, refer to “[Options] Tab” (page 59) at the Layout Configuration screen.



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