Intelligent Monitoring Software

Installation Guide
Software Version 1.4 and Later

RealShot Manager Advanced

© 2008 Sony Corporation
Table of Contents

Copyright Notice ....................................... 2
Features of RealShot Manager Advanced ................ 3
Operating Environment ................................ 4
Software ..................................................... 5
  RealShot Manager Advanced (Server) and RealShot Manager Lite .......... 5
  Limitations of RealShot Manager Lite ...................... 6
  Limitations when Connecting to the NSR-500 Series from RealShot Manager Advanced (Client) .............. 6
Example System Layouts ................................ 7
  Example System Layout 1 .................................... 7
  Example System Layout 2 .................................... 8
  Example System Layout 3 .................................... 9
END-USER LICENSE AGREEMENT ....................... 10
MPEG-4 Visual Patent Portfolio License ................. 11
Steps to Proficiency .................................... 12
Installing the Software .................................. 13
Setting Up for Use as a Server ......................... 16
  Setup for RealShot Manager Lite ......................... 16
  Setup for RealShot Manager Advanced (Server) ............. 17
Settings that Require Individual Configuration .......... 23
  Verifying Operation ....................................... 23
Setting Up for Use as a Client ......................... 24
  Logging On .................................................. 24
  Assigning Cameras to Monitor Frames .................... 24
Monitoring Camera Images .............................. 25
Recording, Searching, and Playing Images ............. 26
  Recording Live Images .................................... 26
  Playing Recorded Images ................................. 27
  Searching Recorded Images ............................... 27
  Playing Back Search Results ............................. 28
Stopping the Software .................................. 29
Uninstalling the Software ................................ 29
  Uninstalling RealShot Manager Advanced ................. 29
  Uninstalling PostgreSQL ................................... 29
  Deleting the Data ......................................... 29

Troubleshooting ......................................... 30
  Logging ..................................................... 30
  Error Messages ........................................... 30
  Miscellaneous ............................................. 31

Copyright Notice

© 2008 Sony Corporation. All rights reserved. This manual may not be reproduced, translated or reduced to any machine readable form in whole or in part, without prior written approval from Sony Corporation.

SONY CORPORATION PROVIDES NO WARRANTY WITH REGARD TO THIS MANUAL OR INFORMATION CONTAINED HEREIN AND HEREBY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH REGARD TO THIS MANUAL OR SUCH INFORMATION. IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT, CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL OR INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice.

For other copyright information, refer to the “Copyright.pdf” file located in the “copyright” folder of the RealShot Manager Advanced install folder.

Trademarks

“IPELA” and IPELA are trademarks of Sony Corporation.
Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.
Intel and Pentium are registered trademarks of Intel Corporation.

Other products or system names appearing in this document are trademarks or registered trademarks of their respective owners.
Further, the ®, or ™ symbols are not used in the text.
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 monitor frames 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 monitor frames.

Detailed Recording Schedule and Diverse Recording Modes
For each camera or group, a recording schedule can be configured for image recording. 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 monitor frame. 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 and MPEG4/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.)
Caution

- When using RealShot Manager Lite, 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 6).
- 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 (Server).
- The RealShot Manager Advanced license is a fixed-type license, permanently associated with the computer on which RealShot Manager Advanced (Server) is installed and used. Make sure to decide on which computer RealShot Manager Advanced (Server) will be used 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 6). 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.

<table>
<thead>
<tr>
<th>During software installation</th>
<th>Installed software</th>
<th>License purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select [Lite Server]</td>
<td>RealShot Manager Lite Server</td>
<td>RealShot Manager Advanced</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>During software installation</th>
<th>Installed software</th>
<th>License purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select [Advanced Server]</td>
<td>RealShot Manager Advanced</td>
<td>RealShot Manager Advanced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>License not purchased</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RealShot Manager Lite</td>
</tr>
</tbody>
</table>

30 days later

**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 6).
- 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.

<table>
<thead>
<tr>
<th>Function</th>
<th>RealShot Manager Lite</th>
<th>RealShot Manager Advanced (Server)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of cameras</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>Supported cameras</td>
<td>Supports Sony cameras only¹</td>
<td>Supports non-Sony cameras¹</td>
</tr>
<tr>
<td>Central server mode² (master/slave)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Video Motion Detection (Recorder)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Video Motion Filter (motion detection using metadata)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Object search³</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Alarm output</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Manual action</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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 operate that same camera from another RealShot Manager Advanced, NSR-1000 series or NSR-500 series, or from another Web browser. Doing so may result in malfunction.

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.

Network Cameras

Analog Cameras

Video Network Station

RealShot Manager Advanced (Server: Main Unit)

Note

- 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.
- RealShot 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 the User’s Guide (PDF).
- Increasing the number of clients connected to the RealShot Manager (Server) will increase the processing load of the server.
- RealShot 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 or 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 unit or the NSR-500 series unit acting as the master server.

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 unit or the NSR-500 series unit. For details on the necessary settings, refer to the Installation Manual and User’s Guide (PDF) for the NSR-1000 series or the NSR-500 series.
END-USER LICENSE AGREEMENT

The following End-User License Agreement ("EULA") is a legal agreement between you and Sony Corporation ("SONY"). Under the EULA, you may use SONY’s Intelligent Monitoring Software named “RealShot Manager Advanced” (the “Software”).

END-USER LICENSE AGREEMENT

Article 1. LICENSE
1. Subject to the terms and conditions of this EULA, SONY grants you a non-exclusive and non-transferable license, with no right to grant sub-licenses, to use the Software.
2. You may install and use one copy of the Software on a single computer.

Article 2. RESTRICTIONS
The license to the Software granted hereunder shall be subject to the following restrictions and limitations except as expressly approved by SONY or permitted by applicable legislation:
You may not:
① copy or duplicate the Software in whole or in part;
② alter, add, arrange, delete, or otherwise modify the Software in any manner;
③ reverse engineer, decompile or disassemble the Software in whole or in part;
④ assign, sublease, or otherwise dispose of the right to use the Software, whether with charge or not;
⑤ assign, sublicense, redistribute, grant the security of, or otherwise dispose of the right hereunder, whether with charge or not; and
⑥ deface, or obscure any copyright notice of the Software;

Article 3. FUNCTION ADDITION
In case that you are granted by SONY the right to remove a functional restriction implemented in the Software or add a function to the Software, by your payment to SONY as separately instructed by SONY, the terms and conditions of this EULA shall be applied to such portion of the Software that a functional restriction is so removed or a function is so added.

Article 4. RIGHT
All title to and copyrights on the Software are owned and/or controlled by SONY and/or third party licensors who grant SONY a license or sub-license of the Software. All rights not specifically granted under this EULA are reserved by SONY or such third party licensors.

Article 5. LIMITATION OF LIABILITY
1. THE SOFTWARE IS PROVIDED ON AN “AS IS" BASIS. SONY MAKES NO REPRESENTATION OR WARRANTY THAT THE SOFTWARE IS FREE FROM ERROR, DEFECT OR INACCURACY AND OPERATES PERFECTLY. SONY MAKES NO WARRANTIES WHATSOEVER, EXPRESS, IMPLIED OR STATUTORY, AND HEREBY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE.
2. SONY MAKE NO WARRANTY WHATSOEVER THAT THE USE OF THE SOFTWARE HEREUNDER DOES NOT INFRINGE OR WILL NOT CAUSE INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT OWNED OR CONTROLLED BY ANY THIRD PARTY.
3. YOU ARE SOLELY RESPONSIBLE FOR SECURITY OF COMPUTER IN WHICH YOU USE THE SOFTWARE.
4. SONY SHALL NOT INDEMNIFY, HOLD HARMLESS, AND DEFEND YOU AND/OR ANY THIRD PARTY FROM ANY DAMAGE INCURRED BY YOU AND/OR ANY THIRD PARTY ARISING OUT OF YOUR USE OF THE SOFTWARE.
5. IN NO EVENT SHALL SONY BE LIABLE TO YOU FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS OR PERSONAL PROFITS, LOSS OF DATA) ARISING OUT OF YOUR USE OF THE SOFTWARE, EVEN IF SONY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Article 6. TERMINATION
1. SONY may terminate this EULA if you fail to comply with any of the terms and conditions of this EULA. Such termination shall not prejudice SONY’s right to damages or any other remedy available at law.
2. In case of termination of this EULA, You shall cease all use of the Software and destroy all the Software.
3. The provisions of Articles 4 through 7 of this EULA shall survive the termination of this EULA.
Article 7. GENERAL
1. This EULA shall be construed according to the laws of Japan.
2. You agree to comply with all applicable export regulation laws, regulations and international treaties that apply to the Software.
3. The terms and conditions stated herein are declared to be severable. If any paragraph, provision, or clause in this EULA is found or be held to be invalid or unenforceable in any jurisdiction in which this EULA is being performed, the remainder of this EULA shall be valid and enforceable.

MPEG-4 Visual Patent Portfolio License

THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR

(i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD (“MPEG-4 VIDEO”)
AND/OR
(ii) DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG-4 VIDEO.

NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL, INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE HTTP://WWW.MPEGLA.COM
Steps to Proficiency

By installing the software and following the steps below, you can become proficient in RealShot Manager Advanced. The configurations required differ depending on whether RealShot Manager Advanced is used as a server or a client.

**Installing the Software (page 13)**
After downloading RealShot Manager Advanced, you need to install it on your computer.

**Setting Up for Use as a Server (page 16)**
Start RealShot Manager Lite or RealShot Manager Advanced (Server), and register cameras and configure settings. If you register the cameras automatically, you can begin monitoring immediately. You can also manually select cameras for registration and configure schedule recording\(^1\), layout\(^2\), and other settings as necessary. After configuration is complete, confirm operation.

**Setting Up for Use as a Client (page 24)**
Log on to the server, and assign cameras to monitor frames.
To install and use the [Client] type software, a computer running the [Server] type (RealShot Manager Advanced (Server)), an NSR-1000 series server or an NSR-500 series server must exist on the same network. For details, refer to the User’s Guide (PDF).

**Using RealShot Manager Advanced**
- Monitoring Camera Images (page 25)
- Recording Images Manually (page 26)
- Searching Recorded Images (page 27)
- Playing Recorded Images (pages 27, 28)

**To Configure Detailed Properties for RealShot Manager Advanced**
To configure the various properties according to your operating environment and objective, refer to the User’s Guide (PDF).

---

\(^1\) “Schedule recording” refers to the recording of images from a camera at regular intervals that are determined by a user configured schedule.

\(^2\) “Layout” refers to a setting that determines the arrangement and number of monitor frames (i.e., screen frames that display camera images) to display on the screen.

**Note**
To upgrade RealShot Manager Lite to RealShot Manager Advanced (Server), or to continue using RealShot Manager Advanced (Server), you must purchase a license. For details on purchasing licenses, consult your local Sony dealer. Continued use of RealShot Manager Lite and RealShot Manager Advanced (Client) does not require the purchase of a license.
Installing the Software

Run the installer to install the software on your computer. The installer performs the following operations in order:

- Installs PostgreSQL
- Installs RealShot Manager Advanced

Before Installing the Software

- As the language setting for PostgreSQL is configured to the language setting of your operating system at the time of installation, be sure to change your operating system’s language setting to the language of your choice before installation. If you installed the software without changing your operating system’s language setting, uninstall the software and reinstall it. For details on uninstallation, refer to “Uninstalling the Software” (page 29).
- Log on to Windows as a user with administrator privileges.
- Close all other programs currently running.
- You may not be able to install this version of RealShot Manager Advanced depending on circumstances, such as when a previous version of RealShot Manager is already installed. In such cases, be sure to uninstall the previous version of RealShot Manager. For details on uninstallation, refer to “Uninstalling the Software” in the RealShot Manager User’s Guide.
- Be sure to restart Windows after installing this version of RealShot Manager Advanced.

Caution

- Make sure that PostgreSQL is not installed on your computer when installing RealShot Manager Advanced for the first time with this version. If PostgreSQL is already installed on your computer, refer to the documentation for that PostgreSQL software, and be sure to uninstall it completely before installing RealShot Manager Advanced. If you installed RealShot Manager Advanced while failing to uninstall an existing PostgreSQL, uninstall RealShot Manager Advanced and start the process from the beginning.
- The database is created in the RealShot Manager Advanced installation folder. You cannot change the location of the database in RealShot Manager Advanced. As the file size of the database increases as the amount of recorded data increases, pay close attention to the storage capacity.
- Software installation may not be possible through applications such as Remote Desktop for Windows. When installing the software on a computer, perform installation directly on that computer.

1. Double-click the “setup.exe” file in the RealShot Manager Advanced folder.

   The installation wizard starts.

2. Click [Next].

   The installation procedure may take more than five minutes. If this is a problem, click [Cancel] to cancel installation.

3. Read the “END-USER LICENSE AGREEMENT” (page 10) included in this manual, select [I accept the terms in the license agreement], and click [Next].

   If you select [I do not accept the terms in the license agreement], the software is not installed, and the installation wizard exits.
4 Select a destination folder for installation, and click [Next].

The folder “C:\Program Files\Sony\RealShot Manager Advanced” is selected by default.
To change the destination folder, click [Change] and specify a folder to use for installation.

5 Click [Next].

Installation of PostgreSQL begins.

When installation of PostgreSQL completes, the following screen appears.

6 Select the type of RealShot Manager Advanced to install, and click [Next].

Select Server or Client. Please buy a valid license if you want to use this software with “Advanced Server” type.

- Server
- Like Server (One of charge)
- Advanced Server (license required after 30 days)
- Client

Note: This mode can never be changed unless you uninstall the product.

A confirmation message appears.

Note

To install and use the [Client] type software, a computer running the [Server] type (RealShot Manager Advanced (Server)) or an NSR-1000 series or an NSR-500 series server must exist on the same network. For details, refer to the User’s Guide (PDF).

7 Select the user interface languages to install, and click [Next].

You can select multiple languages.

Caution

The languages that you specify here are the language modules that will be installed. This is not a specification of the language that will be displayed when RealShot Manager Advanced runs. You can specify the language that will display when RealShot Manager Advanced runs in the [Administration Menu]. However, the languages will not be available for specification if their modules are not installed here.
8 Click [Install].

Installation of RealShot Manager Advanced begins.

9 When the following screen appears, click [Finish].

Installation of the software is now complete.

10 When the following screen appears, click [Yes].

The computer will restart.
Setting Up for Use as a Server

Setup for RealShot Manager Lite

After starting RealShot Manager Lite, you can begin monitoring immediately if you register the cameras automatically.

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

   The Camera Auto Registration screen appears.

2. Click [Yes].

   Cameras connected to the same segment on the network are automatically located and registered to RealShot Manager Lite.

Notes

- Only Sony cameras will be located and registered.
- Only cameras with IP address settings that have not been changed from factory default conditions will be located and registered. To register cameras with IP addresses that have been changed, use [Easy Setup] (page 18), or return the camera IP address settings to default conditions and restart RealShot Manager Lite.
- When there are multiple cameras connected, the cameras are registered in the order in which they are located, and up to nine cameras can be registered.
- If you want to manually specify cameras for registration, click [No] and perform the procedure in “Setup for RealShot Manager Advanced (Server)” (page 17) from step 2.
- If you select the [Do not show this dialog box again] check box, this dialog box will not appear on subsequent startup of the software, and cameras will not be located. If you selected this check box previously and want to perform automatic camera registration again later, configure settings in the [Administration Menu] to reenable display of this dialog box. For details on the [Administration Menu], refer to the User’s Guide (PDF).

3. If you do not want to configure any recording settings in particular, click [Cancel].

   If you want to configure settings, proceed to step 2 of “Setup for RealShot Manager Advanced (Server)” (page 17).

   If you clicked [Cancel], the Main screen reappears. Proceed to “Verifying Operation” (page 23).
A logon screen appears when you subsequently start up the software. Enter a user name and password, and click [Logon] to display the Main screen.
Default user name: admin
Default password: admin

Setup for RealShot Manager Advanced (Server)

Start RealShot Manager Advanced, and use the wizard to register cameras and configure various settings.

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

The Main screen appears if you are starting the software application for the first time.

You can enable the automatic logon function in the [Setup Menu] of the [Administration Menu].

The Recorder settings screen appears after a few moments.

2. Select a configuration method, and click [Next].

Select [Automatic Record Settings] to apply default recording schedule settings to all cameras, or select [Easy Setup] to use a wizard to register cameras and configure settings such as recording type.

Note
For details on [Advanced Setup], refer to the User’s Guide (PDF).

A settings screen that corresponds to the selected configuration method appears.
When [Automatic Record Settings] is selected

The Main screen appears and recording starts automatically for all cameras.

Proceed to “Verifying Operation” (page 23).

Notes

- The recording settings are automatically configured based on the number of cameras and storage capacity.
- If you want to change the recording settings, click (Configuration) at the top right of the Main screen, and select [Easy Setup] in the Recorder Settings screen that appears.

When [Easy Setup] is selected

Follow the instructions of the wizard to configure each setting.

1 Register the cameras.

If you do not want to register cameras, select [Skip configuration] and click [Next], and proceed to step 2.

1 Select [Configure], and click [Next].

A Camera Registration screen appears.

2 Select the check boxes for the cameras you want to register, and click [OK].

The cameras are registered in the order that they appear in the list.

Images from the camera are displayed.

Click on a text string to enable text entry modification.

Note

If you clear the check box for a camera that is already registered and click the [OK] button, the registration will be canceled.

Proceed to “2 Recording Schedule”.

2 Configure recording settings.

If you do not want to configure recording settings, select [Skip configuration] and click [Next], and proceed to step 3.

1 Select [Configure], and select the recording method, and click [Next].

Automatic Schedule Record Configuration

Perform schedule recording using settings automatically configured based on the number of cameras and storage capacity.

When you select this setting, be sure to also select [Duration Priority] or [Resolution Priority].
Duration Priority
Configures schedule recording within the limits of the storage duration entered.

Resolution Priority
Configures schedule recording using the cameras’ maximum resolution.

Automatic Alarm Record Configuration
Configures alarm recording using the cameras’ maximum resolution.

Note
- Schedule recording settings are applied to all registered cameras.
- The settings configured here will overwrite any schedule recording settings already configured.

A Schedule Recording Setting screen appears.

2 Verify the automatically configured settings, and click [OK].
You can change codec and resolution settings as necessary.

Example: When automatic schedule record configuration

Example: When automatic alarm record configuration
An estimated storage duration also appears for automatic alarm recording settings.

Proceed to “3 Add Layout”.

3 Add custom layouts.
If you do not want to add custom layouts, select [Skip configuration] and click [Next], and proceed to step 4.

① Select [Configure], and click [Next].

The Add Layout screen appears.

② Select a layout, and click to add it to the layout list.

The custom layout is added.

Note
If you select a layout in the layout list and click , the layout is removed from the list.

③ Click [OK].
Proceed to “4 Layout Settings”.

4 Assign cameras to monitor frames.
If you do not want to assign cameras to monitor frames, select [Skip configuration] and click [Next], and proceed to step 5.
1. Select [Configure], and click [Next].

The Layout Setting screen appears.

2. Select a layout in the [Layout List], and drag and drop a camera from the [Camera List] to a monitor frame.

The camera is assigned to a monitor frame.

Notes

- To unassign a camera from a monitor frame, select the monitor frame and click .
- If you select the [Scale to Monitor Frame] check box, the camera images are enlarged or reduced to match the monitor frame size.
- If you select the [Keep Aspect Ratio] check box, the cameras images retain their original aspect ratio, regardless of the aspect ratio of the monitor frame.

3. Click [OK].

Proceed to “5 Add User”.

5. Register users, and configure logon passwords and permission settings for various functions.

If you do not want to register users, select [Skip configuration] and click [Next], and proceed to step 5.

User

Enter the user name that will be used to log onto RealShot Manager Advanced. The name can be up to 32 characters long and consist of alphanumeric characters, hyphens (-), and underscores (_). User names are case sensitive.
Password
Enter the password that will be used to log onto RealShot Manager Advanced. The password can be up to 32 characters long and consist of alphanumeric characters, hyphens (-), and underscores (_). Passwords are case sensitive.

Reentry
Reenter the same password for confirmation.

User Level
Select the permission level to grant the user. For details on user levels and permissions, refer to the User’s Guide (PDF).

The user is added to the list in the User Management screen.

4 Click [OK].

Proceed to “6 Open Ports for External Network”.

6 Configure settings for opening the port to external networks.

These settings are required to access RealShot Manager Advanced from an external network.

If the router supports the UPnP function, you can use the UPnP function to configure the router settings.
- This setting allows all of the setting items will be configured automatically via UPnP. If you want to specify port numbers manually, refer to the User’s Guide (PDF).
- Router configuration is not necessary if the UPnP function is used.

If you are not using a broadband router with UPnP support, or if you are not using the UPnP function, click [Server Configuration] in the [Administration Menu], click [NAT Setting], and then configure the settings in the [NAT Setting] dialog box that appears. For details, refer to the User’s Guide (PDF).

These settings are not required if you do not intend to access the system from an external network. Select [Skip configuration] and click [Next], and proceed to step 5 in such cases.

1 Select [Configure].

2 Click [Send request to router].

3 Click [Next].

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 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 User’s Guide (PDF).
- If unauthorized users log onto RealShot Manager Advanced, there is a risk of the following.3)
  - RealShot Manager Advanced 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.

The Complete screen appears.

7 Click [OK].

This completes Easy Setup. The Main screen appears and recording starts.

Proceed to “Verifying Operation” (page 23).

Easy Setup Settings

After performing basic configuration, the values for each setting will be as follows.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Schedule recording</th>
<th>Alarm recording</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Duration priority</td>
<td>Resolution priority</td>
</tr>
<tr>
<td>Image size</td>
<td>D1 (when aspect ratio is 4:3)</td>
<td>1,920 x 1,080</td>
</tr>
<tr>
<td></td>
<td>If not supported, 4CIF, if 4CIF is also not supported, VGA. If not supported, next resolution smaller than 1,280 x 720 for 16:9 aspect ratio.</td>
<td>If not supported, 1,280 x 720. If 1,280 x 720 is also not supported, maximum resolution supported that is 1,280 x 960 or below.</td>
</tr>
<tr>
<td>Codec</td>
<td>Configured to the following in order of priority.</td>
<td>Configured to the following in order of priority.</td>
</tr>
<tr>
<td></td>
<td>H.264&gt;MPEG4&gt;JPEG</td>
<td>H.264&gt;MPEG4&gt;JPEG</td>
</tr>
<tr>
<td>Frame rate</td>
<td>For JPEG: Depends on storage duration for recorded data. For H.264/MPEG4: Depends on bitrate.</td>
<td>10 fps</td>
</tr>
<tr>
<td>Quality</td>
<td>50% Level 3 (cameras with 5 level settings) Level 5 (cameras with 10 level settings)</td>
<td>50% Level 3 (cameras with 5 level settings) Level 5 (cameras with 10 level settings)</td>
</tr>
<tr>
<td>Bitrate</td>
<td>Depends on storage duration for recorded data.</td>
<td>H.264/MPEG4 3 Mbps</td>
</tr>
<tr>
<td>Recording trigger</td>
<td>– VMD (Camera)2) VMD (Recorder)3) For JPEG: Standard mode For MPEG4 and H.264: Advanced mode</td>
<td></td>
</tr>
<tr>
<td>Data storage location</td>
<td>Not changed from existing configuration.</td>
<td>Not changed from existing configuration.</td>
</tr>
<tr>
<td>Audio</td>
<td>Disabled Disabled</td>
<td></td>
</tr>
<tr>
<td>Data overwrite</td>
<td>Not changed from existing configuration. (Default: Threshold when 15% of recording capacity remains)</td>
<td>Not changed from existing configuration. (Default: Threshold when 15% of recording capacity remains)</td>
</tr>
<tr>
<td>Cleanup</td>
<td>Not changed from existing configuration. (Default: Disabled)</td>
<td>Not changed from existing configuration. (Default: Disabled)</td>
</tr>
</tbody>
</table>

1) Configured to MPEG4 instead of H.264 for the following cameras. SNC-RZ50/CS50/RX530/RX550/RX570/DF50/DF80/DF85
2) RealShot Manager Lite supports only VMD (Camera).
3) If the camera does not support VMD (Camera), use VMD (Recorder) when using RealShot Manager Advanced.
Settings that Require Individual Configuration

Further configuration is required in the following cases.

Storage location settings
Under basic configuration settings, data is stored in the default storage location. For details on recording to other storage locations, refer to the User’s Guide (PDF).

When constructing systems that include multiple NSR-1000 series, NSR-500 series or RealShot Manager Advanced servers
When configuring multiple servers, individual configuration is required. For details, refer to the User’s Guide (PDF).

Audio settings for cameras
Under basic configuration settings, audio is disabled. For details on enabling audio, refer to the User’s Guide (PDF).

Verifying Operation

After basic configurations are finished, make sure that camera images are displayed in the “Main” screen and verify other such operations.

Caution

- If schedule recording and alarm recording settings already exist when you execute “automatic record,” the automatic configurations replace the previous settings.
- If the camera storage locations are deliberately changed, you can perform basic configuration again to recalculate the other settings. The settings will not be recalculated automatically.

Caution

• If you configured alarm recording settings in Basic Configuration, pass an object in front of the camera, and confirm whether an alarm occurs. A red frame surrounds the monitor frame, and a record of each alarm is displayed in the Alarm History at the bottom of the screen.

4 Refer to the User’s Guide (PDF) for details on operating each function.

5 Click [PLAYBACK] to play back recordings. When you click [PLAYBACK], images from a previously configured time will be played back (quick playback). When you enter a date and time and click [GO], recorded images will be played back.

6 Click the [ERROR] lamp at the bottom right of the screen to confirm whether errors have occurred. As the System Log appears when you click the [ERROR] lamp, you can confirm whether problems have occurred by viewing the log.

For details on “Main” screen operations, refer to the User’s Guide (PDF).

Caution

If the hibernate and standby modes are enabled in the power settings of your Windows operating system, the system will enter hibernate mode or standby mode whenever the mouse or keyboard is not operated for the specified amount of time. Therefore, be sure to disable the hibernation and standby settings beforehand.

1 Change the layout and display images from registered cameras.
Drag and drop a camera from the Camera list to a monitor frame to display images from that camera.

2 Click a monitor frame to activate it (light blue frame), and control pan, tilt, and zoom from the [Control] tab of the Camera Control pane.

3 If you configured alarm recording settings in Basic Configuration, pass an object in front of the camera, and confirm whether an alarm occurs. A red frame surrounds the monitor frame, and a record of each alarm is displayed in the Alarm History at the bottom of the screen.

4 Refer to the User’s Guide (PDF) for details on operating each function.

5 Click [PLAYBACK] to play back recordings. When you click [PLAYBACK], images from a previously configured time will be played back (quick playback). When you enter a date and time and click [GO], recorded images will be played back.

6 Click the [ERROR] lamp at the bottom right of the screen to confirm whether errors have occurred. As the System Log appears when you click the [ERROR] lamp, you can confirm whether problems have occurred by viewing the log.

For details on “Main” screen operations, refer to the User’s Guide (PDF).

Caution

If the hibernate and standby modes are enabled in the power settings of your Windows operating system, the system will enter hibernate mode or standby mode whenever the mouse or keyboard is not operated for the specified amount of time. Therefore, be sure to disable the hibernation and standby settings beforehand.

1 Change the layout and display images from registered cameras.
Drag and drop a camera from the Camera list to a monitor frame to display images from that camera.
Setting Up for Use as a Client

Specify a server, log on to RealShot Manager Advanced, and assign cameras to monitor frames.

Logging On

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

2. 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 IP address of the server 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.

   When logon is successful, the Main screen appears. Continue to the following section, “Assigning Cameras to Monitor Frames.”

Assigning Cameras to Monitor Frames

Assign cameras that are connected to the server to monitor frames in the Main screen. Two methods are available for assigning cameras:

- Drag a camera connected to the unit from the Camera list (①) to a monitor frame (②).
- Click a monitor frame to select it (①), and then double-click a camera from the Camera list (②).

The assigned camera automatically connects, and images from the camera appear in the monitor frame.
Monitoring Camera Images

This section explains in broad terms the steps to monitoring images from cameras. For detailed operating instructions and other functions, refer to the User’s Guide (PDF).

1. Click the monitor frame to display the live images on the main screen.

2. Click [LIVE] on the Monitor Control pane.

Monitoring Images of a Different Camera

Select a camera on the Camera list, 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] list.

Changing the Layout

Select a layout on the [Layout] toolbar at the top of the main screen to change the layout.

Controlling Cameras

When monitoring a camera equipped with the Pan & Tilt function, you can monitor images from the camera while performing pan, tilt, and zoom operations with the [Camera Control] pane the right.

- Moves the camera up, down, left, right, and diagonally.
- Performs wide-angle and telephoto zoom.
- Click [DIRECT] and specify an area in the monitor frame to zoom in by dragging the mouse.

For details on the use of each button, refer to the User’s Guide (PDF).
Note
You can also control a camera with the mouse or remote control. For details, refer to the User’s Guide (PDF).

Recording, Searching, and Playing Images

You can record live images, and search and play back recorded image data and audio data.

Caution
As a general rule, do not run other applications on the computer using RealShot Manager Advanced to perform recording.

Note
You can also set a recording schedule to record images from a camera. For details, refer to the User’s Guide (PDF).

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.

2 If no live images are displayed, click [LIVE] on the Monitor Control pane.
3 Click (Start Recording) on the Playback Control pane.

Recording starts.

Note
Recording continues even if you change the layout.

4 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.

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.

Searching Recorded Images

You can search for previously recorded images by camera or date, and play back the images.
This section provides a brief description of search and playback operations for recordings. For further details on operations and functions, refer to the User’s Guide (PDF).

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

The Search Window appears.
Specify the search conditions, and click [Search].

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 Back Search Results” (page 28).

---

**Playing Back Search Results**

1. Search for the recorded images in the Search Window.

2. Play the recorded images.

Screen example: List view

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.

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.
Stopping the Software

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.

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 User’s Guide (PDF).

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 Monitor Frame 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 the User’s Guide (PDF).

- The camera configuration in RealShot Manager Advanced is incorrect.
  → Confirm the camera configuration, while referring to the User’s Guide (PDF).

- 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 the User’s Guide (PDF).

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
Reply from 192.168.0.110: bytes=32 time<1ms TTL=128
Reply from 192.168.0.110: bytes=32 time<1ms TTL=128
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.

Miscellaneous

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 the User’s Guide (PDF).

- 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 the User’s Guide (PDF).

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

In this case, make the following adjustments.