

SONY®

Intelligent Monitoring Software

IMZ-RS300

Series



IMZ-RS301
IMZ-RS304
IMZ-RS309
IMZ-RS316
IMZ-RS332
IMZ-RS300C



Flexible IP Video Monitoring With the Added Functionality of Intelligent Motion Detection

With a range of innovative network-ready products, Sony offers a clear solution to the world of IP video surveillance and monitoring applications. Tying these products together is the flexible IMZ-RS300 Series¹ Intelligent Monitoring Software, the perfect software solution for small to even enterprise-class IP video monitoring when using Sony network cameras. Either as a stand-alone system or in a client/server configuration, this easy-to-use software is an ideal control center for multi-camera monitoring. And with its seamless integration with Sony archive systems, you can rest assured that all of your images will be captured without missing a thing. The IMZ-RS300 allows professionals in many fields such as security, industry, process/quality control, and retail to build a powerful multi-camera video monitoring system that runs over a computer network.

The IMZ-RS300 offers a wide range of feature-rich functions - including motion detection, audio monitoring, an intuitive user-friendly GUI (Graphical User Interface), monitoring via a Web browser, a flexible recording/playback capability, alarm functions, dynamic masking, Pan/Tilt/Zoom (PTZ) into recorded images, and more. In addition to its sophisticated monitoring functions, the IMZ-RS300 allows users to configure a highly scalable system in which a virtually unlimited number of cameras can be remotely controlled and monitored from anywhere in the world. And by configuring the product in a client/server architecture, the system can satisfy a number of specific and unique application requirements. What's more, the API (Application Programming Interface) is available to system integrators allowing them to integrate the IMZ-RS300 with other systems and/or software.

With a spectrum of invaluable features and system scalability, the IMZ-RS300 software is sure to become an essential tool for IP video surveillance and monitoring operations.

¹ The IMZ-RS300 Series software is compatible only with Sony SNC Series network cameras and Sony SSC Series surveillance cameras used with the SNT Series Video Network Station products. In this literature, "IMZ-RS300" may be used as a reference to any of the IMZ-RS300 Series Intelligent Monitoring Software applications.

FEATURES

Motion Detection

The IMZ-RS300 features a motion detection function that can be used to trigger an alarm or perform a variety of other actions such as locking doors or turning on lights. Using a Sony advanced algorithm, the system can determine whether or not there is actual movement, which significantly reduces the chance of false alarms caused by noise.

MPEG-4 Support

With support for Sony MPEG-4 Network Cameras - such as the SNC-RZ25, SNC-P1, and SNC-DF40/DF70 - the IMZ-RS300 provides you with more options when configuring your network monitoring system.

Audio Support

The IMZ-RS300 is capable of recording, monitoring, and playing back G.711/G.726 audio. When configured with Sony microphone-equipped network

cameras, the IMZ-RS300 can accept and process incoming audio. And if the camera is equipped with speakers, the IMZ-RS300 can send an audio file to the camera to alert passers-by at the camera site. Furthermore, when configured with an optional network audio converter², the IMZ-RS300 is also capable of monitoring and recording audio signals.

Flexible Monitoring Operation

Customized Layouts

The IMZ-RS300 features an intuitive and user-friendly GUI that can be personalized in order to match your own requirements and preferences. The "Layout Editor" is a powerful feature that creates customized site layouts and allows you to insert backgrounds (e.g., a floor plan), icons (that can be associated with a specific camera or monitor), and company logos.

Web-Based Monitoring

If simple monitoring from a remote location is desired, the IMZ-RS300 can be configured with a web gateway, which allows monitoring from a PC running Microsoft® Internet Explorer.

Definable "Action Areas"

"Action Areas" can be created and utilized to switch to a new layout, such as when you want to zoom in to another area in a different wing of an office building or the opposite platform of a railway station. In addition, monitoring windows can be added and scaled to the layout that best suits your needs.

Automatic Layout "Tour" Function

If systematic monitoring of various locations is required, the IMZ-RS300 can be set up to automatically switch monitoring areas on a revolving basis. This is ideal for monitoring a number of different floors in an office building or for monitoring different areas on a single floor or large venue.

(Fig. 1)

"Hot Spot" Monitoring/ Dual-Monitor Support

"Hot Spots" can be flexibly assigned. If the image on a specific camera is of interest, it can be defined as a "Hot Spot" and can be assigned the largest monitor window on the display. Also, by using the multi-monitor function available with Microsoft® Windows® XP, the IMZ-RS300 allows for easier viewing of the "Hot Spot" by displaying multiple camera images on the primary monitor and displaying the "Hot Spot" image on the secondary monitor. (Fig. 2)

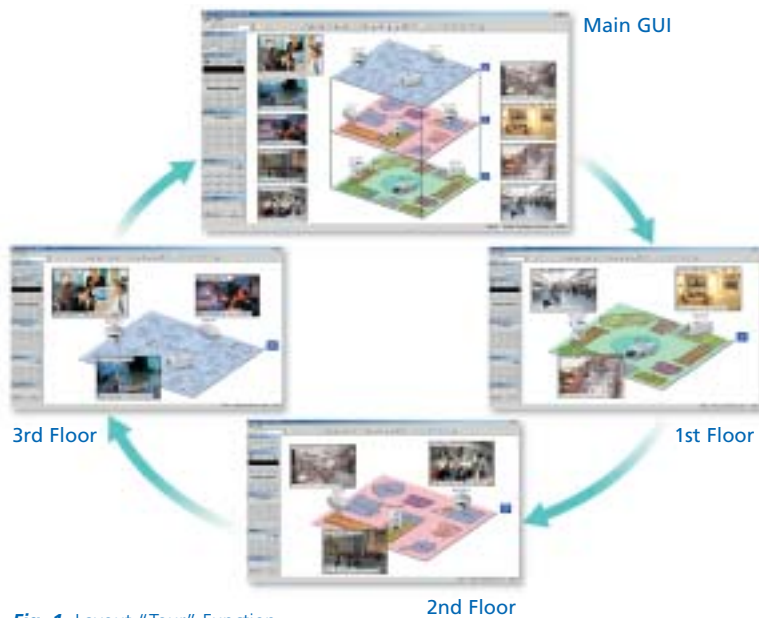


Fig. 1 Layout "Tour" Function



Fig. 2 Dual-Monitor/"Hot Spot" Monitoring

² A network audio converter capable of digital audio streaming is required. Please contact your local Sony office or authorized dealer for recommended network converters.

High Frame Rate

High-quality images captured by Sony network cameras can be monitored at a high refresh rate. For example, images captured from four SNC-RZ30N/2 (NTSC model) cameras can be refreshed at a maximum frame rate of 30 fps, while four SNC-RZ30P/2 (PAL model) cameras offer a maximum frame rate of 25 fps.³ What's more, images from 32 sources can be simultaneously recorded at the maximum frame rate in QVGA (320 x 240) image size.

- ³ In order to achieve the maximum frame rate, a client PC with adequate processing power and an adequate network environment are required.



Fig. 3 Scheduled Recording



Fig. 4 Search Recording

Flexible Recording and Playback

Each camera in the system can be configured for Manual, Scheduled, and Alarm/Pre-Alarm recording. Playback while recording is also possible.

Manual Recording

When manual recording is set, authorized users can initiate a recording at any time for any selected camera. Images from the selected camera are then recorded at the user-defined refresh rate, resolution, and picture quality.

Scheduled Recording

This mode allows users to schedule their recording requirements for any selected camera or group of cameras. There is virtually no limit to the number of scheduling combinations you can select - simply adjust the refresh rate, resolution, and picture quality to record the detail you want, when you want. (Fig. 3)

Alarm and Pre-Alarm Recording

The IMZ-RS300 supports Alarm and Pre-Alarm recording, which is used to record more detail when an alarm is triggered. Alarms can be triggered by a number of sensors, including external sensors, activity and motion detection sensors built in to the networked cameras, and internal sensors of the IMZ-RS300 application.

Playback During Recording

Recording and playback can be performed simultaneously, so previously recorded images can be viewed while recording continues.

Quick and Easy Search of Recorded Images

The Search Recording function allows you to quickly locate a particular recording. The calendar displays all recordings made (per camera or camera group) so you can see when and what kind of recording was made. You can then filter these recordings by time/date, alarm events, and/or inserted comments. Thumbnail, preview images can also be displayed to make searching even easier and more effective. (Fig. 4)



Fig. 5 Dynamic Masking Function

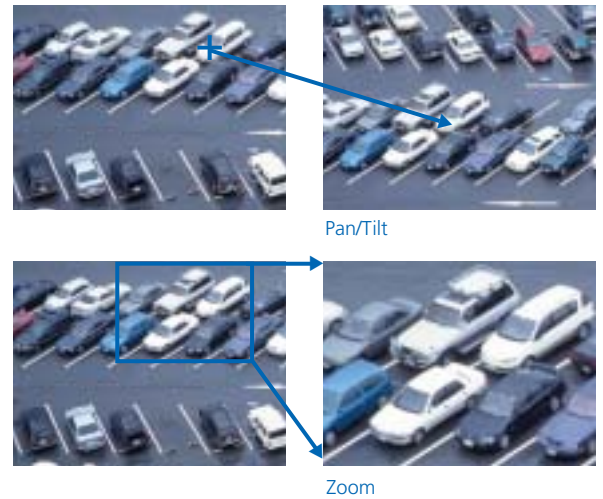


Fig. 6 Pan/Tilt/Zoom Control

Alarm Functions

Activity/Motion Detection to Trigger Alarm

The IMZ-RS300 can perform activity-based recording, triggered by Sony network cameras with activity and/or motion detection capability or by a signal from external sensor equipment. With its I/O management function, the IMZ-RS300 can be set up to control switch-operated devices (such as doors and lights) for maximum security and control.

Pre-/Post-Alarm Image Storage

When the IMZ-RS300 receives an alarm trigger - either from the activity or motion detection signal or the alarm input of the network cameras - hundreds of pre-alarm and post-alarm still images can be stored, providing users with a video log of these events.

E-mail Notification

When an alarm occurs, the IMZ-RS300 can be programmed to send an alarm notification along with the image data to one or more specified e-mail addresses.

Dynamic Masking Function

With the advanced Dynamic Masking function, unwanted or prohibited areas within an image can be masked as required. This feature is particularly useful for privacy protection. When zoom is engaged, the size of the masked areas will adjust in proportion to the zoom position. In addition, the masking position can be made to interlock with a camera's pan/tilt feature to achieve a comprehensive masking operation. The number of masking areas and types (color, border, Gaussian blur, luminance, mosaic, random noise outside of the area of interest) can be freely set. **(Fig. 5)**

Camera Control

Pan/Tilt/Zoom (PTZ) Control

Sony Pan/Tilt/Zoom network cameras can be remotely controlled over a network using the IMZ-RS300. When a point in the image is clicked, the camera automatically pans and/or tilts to make that point the center of the image. And by dragging out a specified area of the image, the camera will zoom in to that area. **(Fig. 6)**

Preset Position/Tour Feature

Preset positions can be assigned to each of the PTZ cameras, allowing the operator to select specific desired views. Furthermore, the "tour" feature can be set to control these cameras using up to five preset scanning patterns with up to 16 positions in each scan.

Application Programming Interface (API)⁴

An API for application developers or system integrators is offered with the IMZ-RS300, allowing the software to be integrated in other application programs or systems such as GUI design software, POS (Point of Sale), access control, and alarm systems.

⁴ For details on the API, please contact your local Sony office or authorized dealer.

AVI File Export

The IMZ-RS300 is equipped with an AVI file export capability. Users can generate an exportable file with embedded metadata such as recording start time, recording end time, and frame rate. These files can then be exported in the standard AVI file format for easy exchange with other applications. (Fig. 7)



Fig. 7 AVI Export Recording

Other Features

Time-stamped Comments

Operators can log events should anything notable occur during monitoring by inputting a comment. Comments can be linked to a camera with a given priority and time-stamped for easy logging.

User Privileges

Sophisticated security functions are incorporated in the software to help manage multiple users. The administrator can define user groups, add users, set privileges per user/group, and set up user access to specific camera groups.

Customized Logging Reports

In the event of a system problem, the logging feature makes it easier to determine the cause. By selecting the items you want to monitor, trouble-shooting is simplified.

Compatibility with Archive Systems⁵

The IMZ-RS300 is designed to interface with a number of archive systems. When configuring a medium- to large-scale system requiring disk and/or tape archives of image data, the IMZ-RS300 combined with an archive system is an ideal solution.

⁵ Contact your local Sony sales office for a list of compatible archive systems.

SYSTEM SCALABILITY AND FLEXIBILITY

Flexible and Scalable System

There are five basic Intelligent Monitoring Software packages and an additional control software package available to match the various requirements and configurations of small to large-sized installations. Users can freely build up a network monitoring system with one IMZ-RS300 Series software package or with a combination of packages.

Stand-Alone PC System

By installing any of the five IMZ-RS300 software packages, your PC becomes an advanced yet simple-to-operate command center for Sony video network cameras and servers - enabling and facilitating remote control, monitoring, and recording of multiple video cameras.

Client/Server System

In addition to the stand-alone PC system, users can freely configure a client/server system by setting up a controller PC separate from the IMZ-300 Series server. In this configuration, you have the option to add extra control PCs. Any PC running the IMZ-RS300C control software can remotely control, monitor, and record the existing IMZ-RS300 Series system. For higher performance, separate compression servers and/or archive servers can be configured into the system.

Viewing and Control from a Web Browser

With the addition of a Web gateway to your system, you can view images from all of the cameras and have limited control of the system from a networked PC running the Microsoft Internet Explorer web browser.

IMZ-RS300 SERIES SOFTWARE PACKAGES

- **IMZ-RS301**
Control PC software for 1 networked video source
- **IMZ-RS304**
Control PC software for up to 4 networked video sources
- **IMZ-RS309**
Control PC software for up to 9 networked video sources
- **IMZ-RS316**
Control PC software for up to 16 networked video sources
- **IMZ-RS332**
Control PC software for up to 32 networked video sources
- **IMZ-RS300C**
Additional control software for a controller PC

Supplied Accessories

Software license registration, software license certificate, and instructions for registration

OPTIONAL SOFTWARE MODULES

- **Web Gateway**
Required for monitoring images and control from a Web browser
- **Compression Server**
Software module dedicated to image compression
- **File Player**
Software module for image playback only

RECOMMENDED SYSTEM REQUIREMENTS

Intelligent Monitoring Software

Operating system*	Windows 2000, Windows XP or Windows 2003 Server
Processor	CPU: Pentium IV 2.4 GHz or higher
Memory	RAM: 512 MB or more
HDD	2 GB spare capacity
Video Card	1024 x 768, 16/24-bit color
Network Interface Card (NIC)	100Base-T
Display	Full-color display

Web Gateway

Operating system	Windows 2000 or Windows XP
Java Runtime**	Java Runtime Environment 1.4.2
Web Application Server**	Apache Tomcat 5.0.18
Web Browser	Internet Explorer Version 6.0 or later
Processor	CPU: Pentium IV 2.4 GHz or higher
Memory	RAM: 512 MB or more
HDD	500 MB spare capacity
Video Card	1024 x 768, 16/24-bit color
Network Interface Card (NIC)	100Base-T

Compression Server

Operating system	Windows 2000 or Windows XP
Processor	CPU: Pentium IV 2.4 GHz or higher
Memory	RAM: 512 MB or more
HDD	500 MB spare capacity
Video Card	1024 x 768, 16/24-bit color
Network Interface Card (NIC)	100Base-T

Intelligent Monitoring Software Web Viewer

Operating system	Windows 2000 or Windows XP
Java Runtime***	Java Runtime Environment 1.4.2
Web Browser	Internet Explorer Version 6.0 or later
Processor	CPU: Celeron 2.0 GHz or higher
Memory	RAM: 512 MB or more
HDD	500 MB spare capacity
Video Card	1024 x 768, 16/24-bit color
Network Interface Card (NIC)	100Base-T

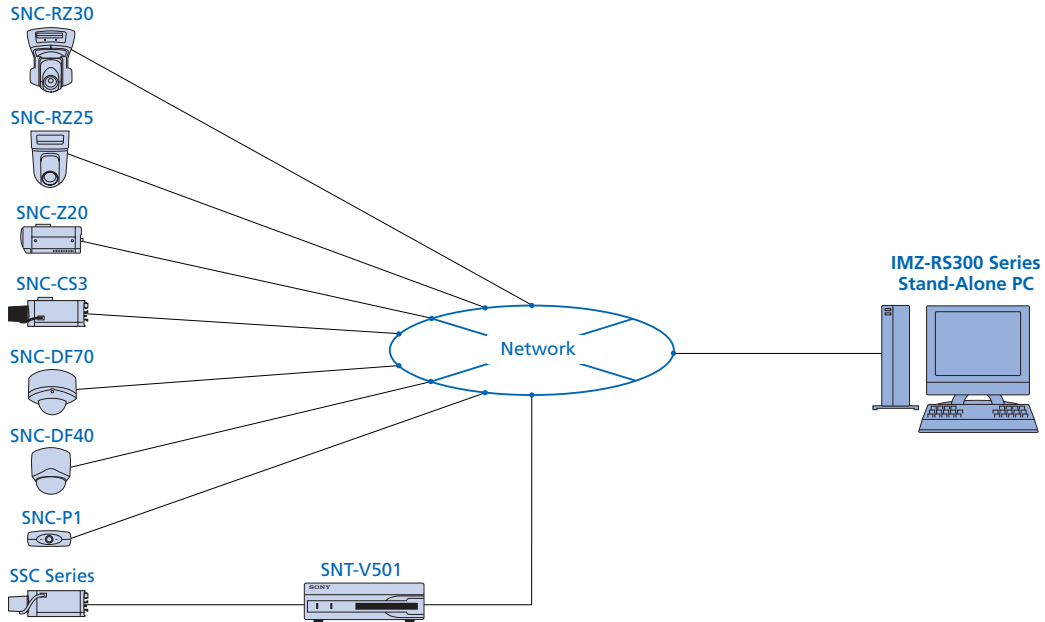
* Please contact your local Sony office or authorized dealer for compatibility information on the Linux Operating System.

** Both Java Runtime Environment and Web Application Server are included in the Web Gateway Module.

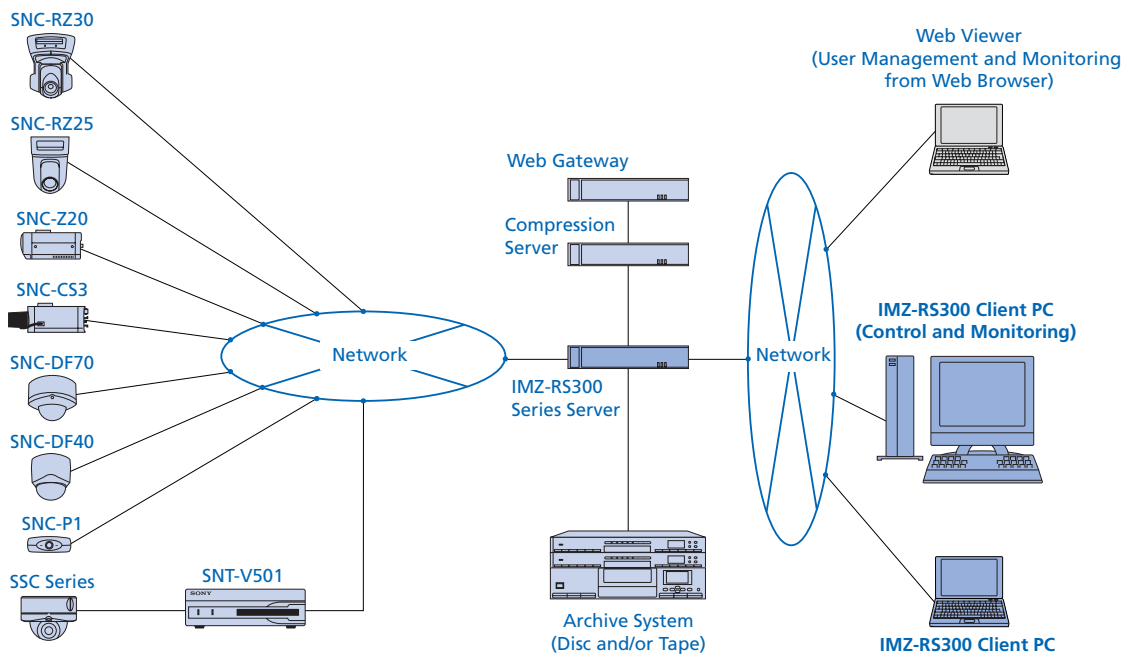
*** Downloadable from Web Gateway.

SAMPLE SYSTEM CONFIGURATIONS

Stand-Alone System



Client/Server System



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