



# IMZ-RS400 Series

Intelligent Monitoring Software

IMZ-RS401

IMZ-RS404

IMZ-RS409

IMZ-RS416

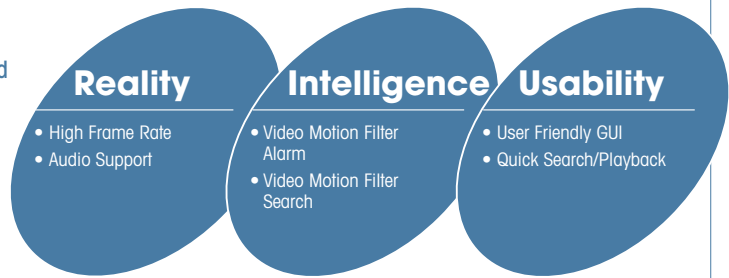
IMZ-RS432

click: [sony.com/security](http://sony.com/security)

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Real audiovisual communication over networks – this is business communication of the future, this is business communication brought to you today, this is **IPELA**.



## Intelligent IP Video Monitoring Based on the Sony Unique Distributed Enhanced Processing Architecture (DEPATM) Platform Incorporates Intelligent Video Analytics to Provide a High-Level of Security at an Affordable Price

Sony introduces the IMZ-RS400 Series\*<sup>1</sup> Intelligent Monitoring Software, which incorporates intelligent video analytics – "Video Motion Filter Alarms" and "Video Motion Filter Searches" – using metadata to provide operational efficiency and a high level of security. "Video Motion Filter Alarms" allow users to define parameters and to fine tune alarm triggers for live monitoring/recording so that crucial events are easily called to the attention of the guard and/or recorded. "Video Motion Filter Searches" allow users to define search parameters to situations so that events of interest are easily searched for in the recorded information. The flexible IMZ-RS400 Series is the perfect software solution for small to enterprise-class IP video monitoring environments using Sony network cameras. Either as a standalone system or in a client/server configuration, this easy-to-use software is an ideal control center for multi-camera monitoring. With its intelligent value-added features and system scalability, the IMZ-RS400 Series is ideal not only for use in security applications, but also for use in process/quality control and market-research applications to build a smart and powerful multi-camera video monitoring system.

### Features at a Glance

- Smart Monitoring and Smart Search using Sony Video Motion Filters\*<sup>2</sup>
- Customized Layouts and Intuitive User-Friendly GUI
- Intelligent Motion Detection Function
- "Hot Spot" Monitoring and Dual Monitoring Capability
- Manual/Scheduled/Alarm Recording
- Playback While Recording
- Simultaneous Playback of Multiple Cameras
- Camera P/T/Z Control
- Privacy Zone Masking Function
- Audio Support
- Sony 'Generic Camera' Support\*<sup>3</sup>
- User Privileges
- AVI File Export

\*<sup>1</sup> In this literature, "IMZ-RS400 Series" refers to any of the following: IMZ-RS401, IMZ-RS404, IMZ-RS409, IMZ-RS416, and IMZ-RS432. This software is compatible only with the Sony SNC Series of network cameras and Sony SSC Series of surveillance cameras used with the Sony Video Network Station (SNT Series). It does not support the H.264 codec.

\*<sup>2</sup> This function is available with the SNC-RX Series, SNC-RZ50, SNC-CS50, and later models.

\*<sup>3</sup> This function is available with the SNC-CM120, SNC-DM160, SNC-DM110, SNC-CS20, SNC-DS60, SNC-DS10, and later models which support 'Generic Camera' version 1.

## The DEPA Platform – Intelligent Video Analytics



The IMZ-RS400 Series, which incorporates intelligent video analytics, is a key part of the Sony IP surveillance solution based on the DEPA platform. The intelligent video analytics available with this application software works in conjunction with the Intelligent Motion Detection (IMD) and Intelligent Object Detection (IOD) functions of Sony DEPA-enabled Network Cameras (SNC-RX Series, SNC-RZ50, SNC-CS50, and later models). The DEPA solution architecture is designed so that IMD and IOD functions are performed by the network cameras and the relevant metadata generated is sent to the IMZ-RS400 Series. Object movement is then analyzed by the IMZ-RS400 Series using this metadata and filters. This method of distributed processing minimizes the server workload, network bandwidth, and storage capacity, while making the system more stable and efficient in comparison with conventional video analysis systems.

## Smart Monitoring

### Intelligent Video Motion Filter Alarm<sup>\*4</sup>



Users can define parameters (set filters) for use in conjunction with the IMD and IOD functions of Sony DEPA-enabled network cameras. Up to six filters can be used to limit alarm triggers to specific object movements or situations. In addition, filters can be defined with more detailed parameters to trigger alarms based on object size, direction, and/or speed to exclude objects that are not supposed to trigger an alarm.<sup>\*5</sup>

<sup>\*4</sup> This function is available with the SNC-RX Series, SNC-RZ50, SNC-CS50, and later models.

<sup>\*5</sup> Object direction and speed settings are available only with the "Passing", "Appearance", and "Disappearance" filters.



Distributed Enhanced Processing Architecture (DEPA)

| Filter             | Camera Alarm Setting (IMD/IOD) | Application  |
|--------------------|--------------------------------|--|
| Passing            | IMD                            | Alarm is triggered when an object crosses a "virtual borderline."  |
| Appearance         | IMD                            | Alarm is triggered when an object enters a "virtual area."   |
| Disappearance      | IMD                            | Alarm is triggered when an object exits a "virtual area."  |
| Capacity           | IMD                            | Alarm is triggered when a pre-specified number of objects are in a "virtual area."   |
| Existing           | IMD                            | Alarm is triggered when an object loiters in a "virtual area" for longer than a pre-specified time period.                             |
| Unattended/Removed | IOD                            | Alarm is triggered when an object is left unattended, or is removed from a "virtual area" for longer than a pre-specified time period. |

Intelligent Video Motion Filters



Wrong Way on One Way Street



Illegal Parking



People Counting



Stolen Picture

# Features

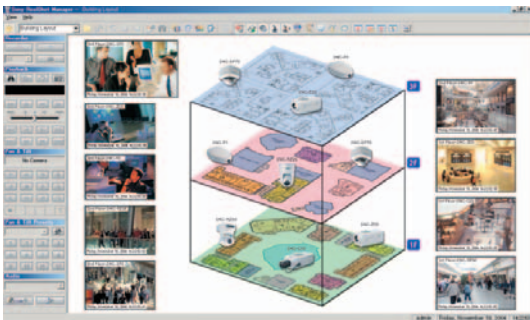
## Intelligent Motion Detection

The IMZ-RS400 Series features a built-in Intelligent 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 minimize false alarms caused by noise and repeated motion patterns.

## Flexible Monitoring Operation

### Customized Layouts

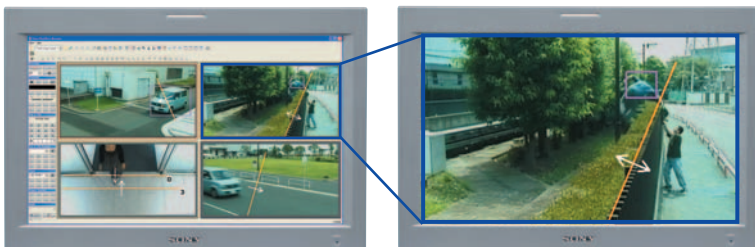
The IMZ-RS400 Series features an intuitive and user-friendly GUI that can be personalized to suit the user's own requirements and preferences. The "Layout Editor" is a powerful feature that creates customized site layouts and allows the user to insert backgrounds (e.g., a floor plan or campus layout), icons (that can be associated with a specific camera or monitor), and company logos.



Monitoring GUI

### "Hot Spot" Monitoring/Dual Monitor Support

A specific window in multi-camera view (i.e. a larger window within the multi-camera window), can be assigned as the "Hot Spot" area, or a second monitor may be used for this purpose. The "Hot Spot" area is used to display an image of interest to get a more detailed view – this image can either be manually selected or trigger by an alarm.



"Hot Spot" Monitoring

## Automatic Layout "Tour" Function

If systematic monitoring of various locations is required, the IMZ-RS400 Series 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.

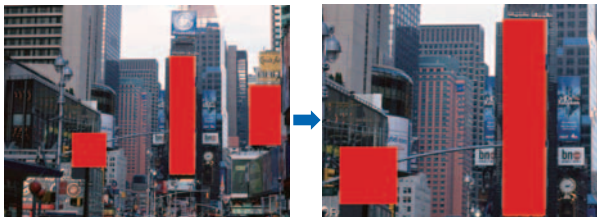
## Camera PTZ Control

Sony Pan/Tilt/Zoom network cameras can be controlled remotely over a network using the IMZ-RS400 Series software. 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 clicking and dragging out a specified area of the image, the camera will zoom in to that area.

## Privacy Zone Masking Function<sup>\*6</sup>

The IMZ-RS400 Series features a built-in Privacy Zone Masking function that allows you to mask unwanted or private areas of an image as required.

<sup>\*6</sup> The mask movement might be slightly delayed with hi-speed camera PTZ movements.



Privacy Zone Masking Function

## Audio Support

The IMZ-RS400 Series supports bi-directional audio. When used with Sony network cameras configured with a microphone, the software can accept and process incoming audio. What's more, when the camera is configured with speakers, the IMZ-RS400 Series can be used to make live announcements at the camera site.

## Alarm and Pre-Alarm Recording

The IMZ-RS400 Series supports Alarm and Pre-Alarm recording, which automatically records images immediately prior to the alarm trigger. Alarms can be triggered by devices such as external sensors or the built-in motion detection functions of Sony network cameras and IMZ-RS400 Series software.

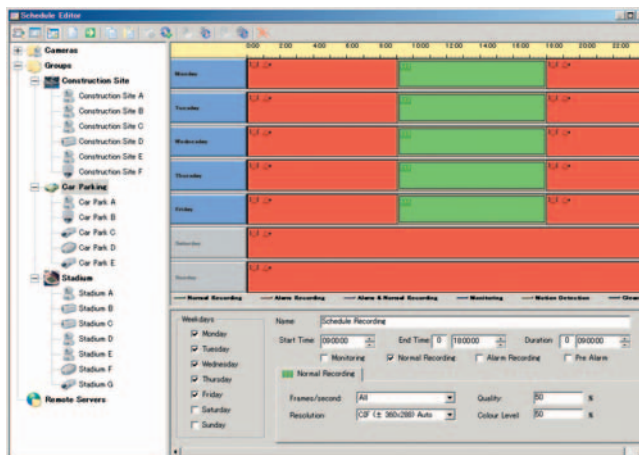
## Flexible Recording

### Manual Recording

With the IMZ-RS400 Series, 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 for any selected camera or group of cameras. There is virtually no limit to the number of scheduling combinations that can be selected – simply adjust the refresh rate, resolution, and picture quality to record the detail the user wants, when they want.



Scheduled Recording GUI



# Features

## Smart Search

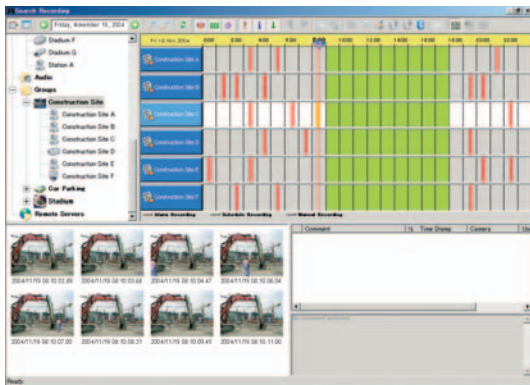
### Intelligent Video Motion Filter Search<sup>7</sup>

Filters that are used for monitoring and recording images from Sony DEPA-enabled cameras can also be used during searches. This allows users to quickly and effectively retrieve images. For example, a “virtual borderline” can be drawn to search for individuals entering restricted areas, or “virtual areas” can be set to search for images of items that have been either damaged or stolen. This allows operators to pinpoint desired search images and to drastically cut down the review/audit times after an event of interest has occurred.

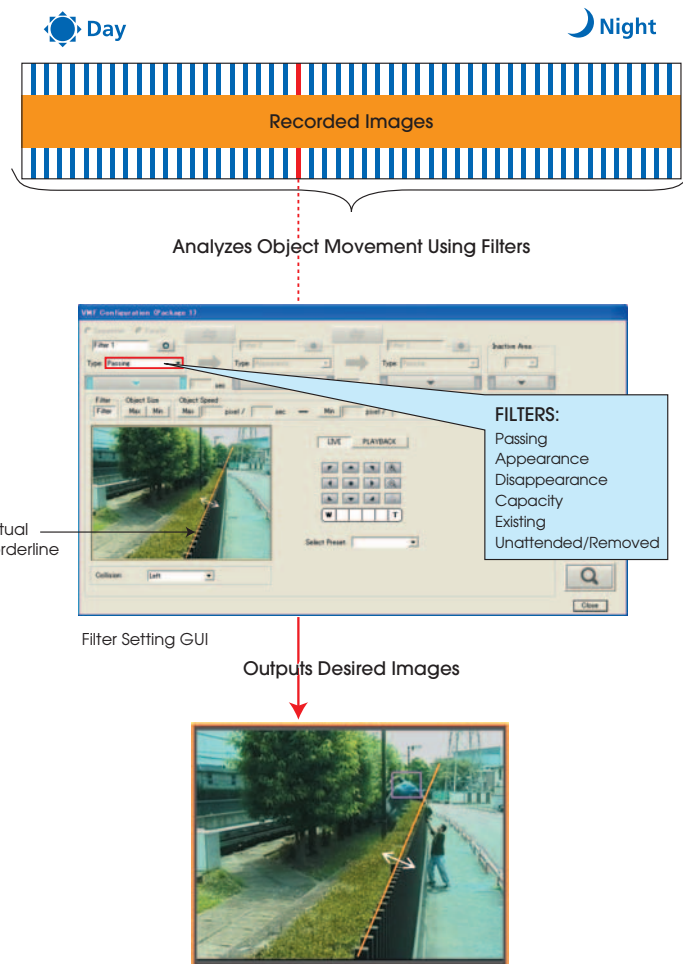
<sup>7</sup> This function is available with the SNC-RX Series, SNC-RZ50, SNC-CS50, and later models. Metadata related to IMD or IOD must be recorded in order to perform a video motion filter search. Current Sony network cameras cannot output IMD and IOD data simultaneously.

### Easy and Quick Search of Recorded Images

The Search Recording function of the IMZ-RS400 Series allows the user to quickly locate a particular recording. The calendar displays all recordings made (per camera or camera group) so the operator can see when and what kind of recording was made. The user can then filter these recordings by time/date, inserted comments, and/or alarm events. Alarm events can be designated from sensor inputs, motion detection results (camera or software), and motion filters. In addition, thumbnail preview images can also be displayed to make searching even easier and more effective.



Search Recording GUI



Intelligent Video Motion Filter Search

## Flexible Playback

### Playback While Recording

Recording and playback can be performed simultaneously with the IMZ-RS400 Series. Not only can previously recorded images be viewed, but images that are currently being recorded can also be viewed while recording.

### Simultaneous Playback

With the IMZ-RS400 Series, users can simultaneously play back recorded images from multiple cameras, providing quick and efficient operation. For example, a group of cameras covering a specific area can be played back simultaneously to see events from different views, or adjacent cameras can be played back to see the path of moving person or vehicle.

## Other Features

### Sony 'Generic Camera' Support

The IMZ-RS400 Series supports Sony's 'Generic Cameras'<sup>\*8</sup>, so users can easily integrate Sony's network cameras into your system without upgrading software.

<sup>\*8</sup> This function is available with the SNC-CM120, SNC-DM160, SNC-DM110, SNC-CS20, SNC-DS60, SNC-DS10, and later models which support 'Generic Camera' version 1.

### 1280 x 960 Resolution Support

The IMZ-RS400 Series allows users to monitor, record, and playback images at 1280 x 960 resolution.

### AVI File Support<sup>\*9</sup>

With the IMZ-RS400 Series, users can generate an exportable file with embedded data that includes the camera name and date-time stamps. These files can then be exported in the standard AVI file format for easy exchange with other applications.

<sup>\*9</sup> Only video can be exported to AVI. Audio export is not supported.

### User Privileges

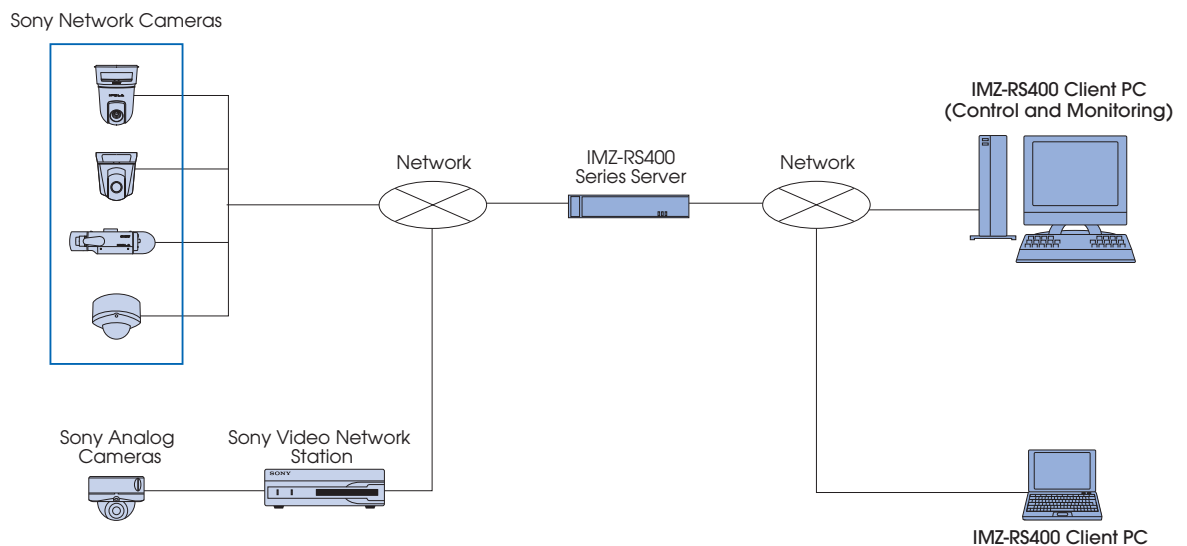
With the IMZ-RS400 Series, sophisticated security functions are incorporated in the software to help manage multiple users. The administrator can define user groups, add users, set privileges per user/group, and set up user access to specific camera groups.

### Application Programming Interface (API)<sup>\*10</sup>

An API for application developers or system integrators is offered with the IMZ-RS400 Series, allowing the software to be integrated with other application programs or systems such as GUI design software, POS (Point of Sale), access control, and alarm systems.

<sup>\*10</sup> For details on the API, please contact your local Sony office or authorized dealer.

## System Configuration



## IMZ-RS400 Series Software Packages

- **IMZ-RS401**  
Control PC software for 1 networked video source
- **IMZ-RS404**  
Control PC software for up to 4 networked video sources
- **IMZ-RS409**  
Control PC software for up to 9 networked video sources
- **IMZ-RS416**  
Control PC software for up to 16 networked video sources
- **IMZ-RS432**  
Control PC software for up to 32 networked video sources

## Optional Software Module

- **Media File Player**  
Software module for image and audio playback

## System Requirements

### Intelligent Monitoring Software

|                              |   |
|------------------------------|---|
| Operating system             | Windows Vista Enterprise, Windows Vista Business, Windows XP Professional, Windows 2003 Server, Windows 2000 Professional, or Windows 2000 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-TX  |
| Display                      | Full-color display  |

**SONY**

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