SONY

IMZ-RS400 Series

RealShot Manager Version 4

www.sonybiz.net/nvm

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

Sony introduces the IMZ-RS400 Series Intelligent Monitoring Software, which incorporates intelligent video analysis – "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.

In addition, 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 centre 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 Glance

▸ Smart Monitoring and Smart Search using Sony Video Motion Filters
▸ Customised Layouts and Intuitive User-Friendly GUI
▸ Motion Detection Function
▸ "Hot Spot" Monitoring and Dual Monitoring Capability
▸ Manual/Scheduled/Alarm Recording
▸ Playback During Recording
▸ Simultaneous Playback of Multiple Cameras
▸ Camera P/T/Z Control
▸ Privacy Masking Function
▸ Audio Support
▸ User Privileges
▸ AVI File Export

IPELA

Stunning video and audio brought to you by the "IPELA" series of visual communication products that encompass the three-pronged concept of "reality", "Intelligence" and "Usability". "IPELA" is the identity symbolising the Sony vision for the workplace of the future, connecting people, places and information with reality that has never before been achieved. "IPELA" lets your share, understand and experience as if you are actually there, when in fact, you are miles away. It allows you to quickly grasp a situation to make better business decisions.

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

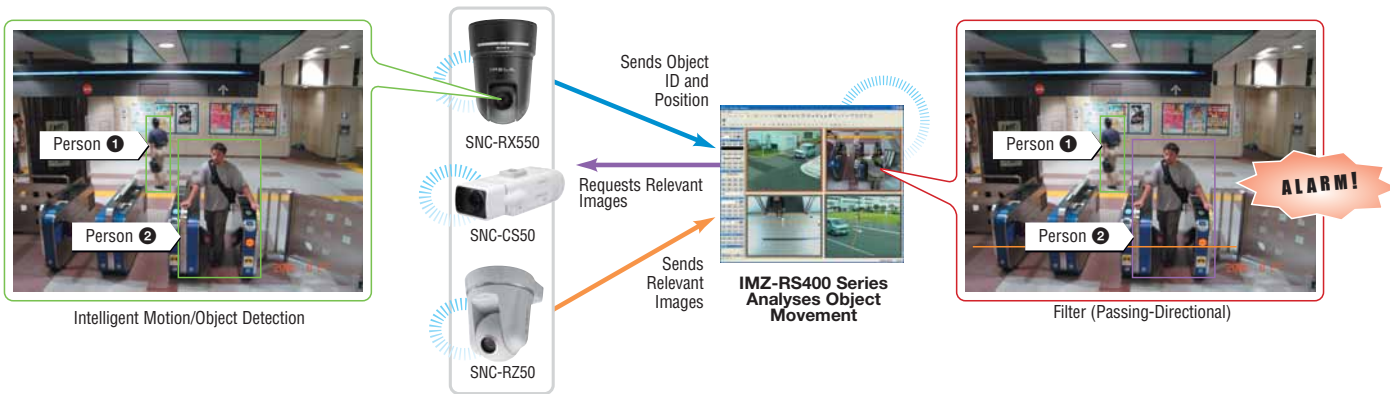| REALITY | • High Frame Rate
• Audio Support |
| INTELLIGENCE | • Video Motion Filter Alarm
• Video Motion Filter Search |
| USABILITY | • User-Friendly GUI
• Quick Search/Playback |

FEATURES

The DEPA Platform – Intelligent Video Monitoring

The IMZ-RS400 Series, which incorporates intelligent video analysis, is a key part of the Sony IP surveillance solution based on the DEPA platform. The intelligent video analysis 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-RZ50, SNC-RX550 and SNC-CS50). 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 analysed by the IMZ-RS400 Series using this metadata and filters. This method of distributed processing minimises the server workload, network bandwidth, and storage capacity, while making the system more stable and efficient in comparison with conventional video analysis systems.

Distributed Enhanced Processing Architecture (DEPA)

Intelligent Motion/Object Detection

SNC-RX550

SNC-CS50

SNC-RZ50

Sends Object ID and Position

Requests Relevant Images

Sends Relevant Images

IMZ-RS400 Series Analyses Object Movement

Person ❶

Person ❷

ALARM!

Filter (Passing-Directional)

Smart Monitoring

Intelligent Video Motion Filter Alarm

Users can define parameters (or 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.

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 minimise false alarms caused by noise and repeated motion patterns.

Intelligent Video Motion Filters

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.

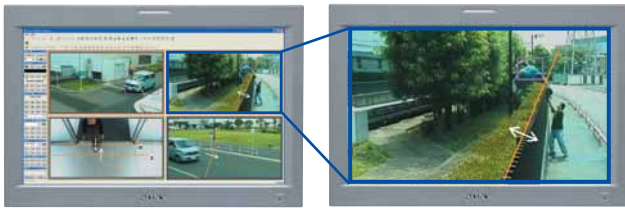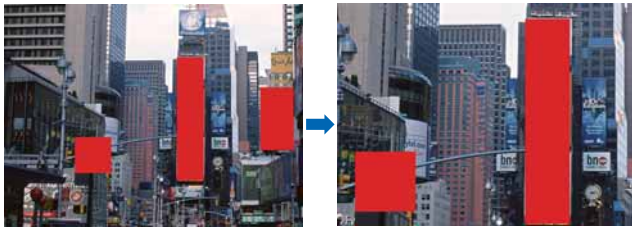Wrong Way on One Way Street

Illegal Parking
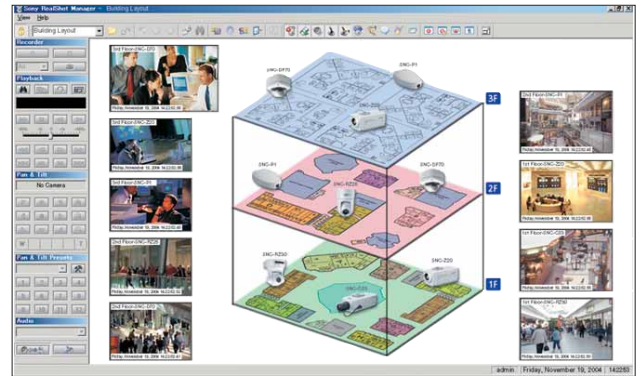

People-Counting

Stolen Picture

"Hot Spot" Monitoring

Privacy Zone Masking Function

Monitoring GUI

Flexible Monitoring Operation

Customised Layouts

The IMZ-RS400 Series features an intuitive and user-friendly GUI that can be personalised to suit the user's own requirements and preferences. The "Layout Editor" is a powerful feature that creates customised 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.

"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 triggered by an alarm.

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 centre of the image. And by clicking and dragging out a specified area of the image, the camera will zoom in to that area.
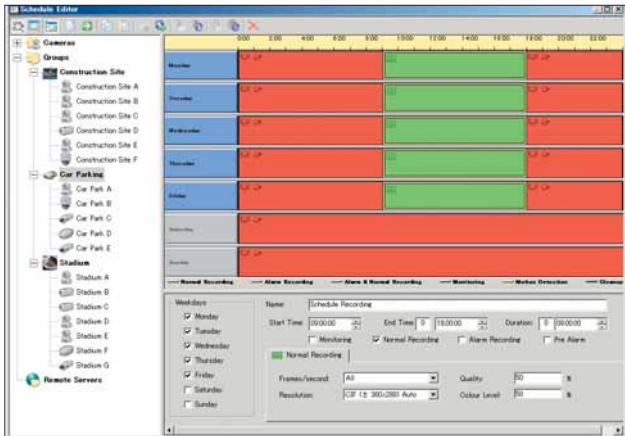
Privacy Zone Masking Function

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.
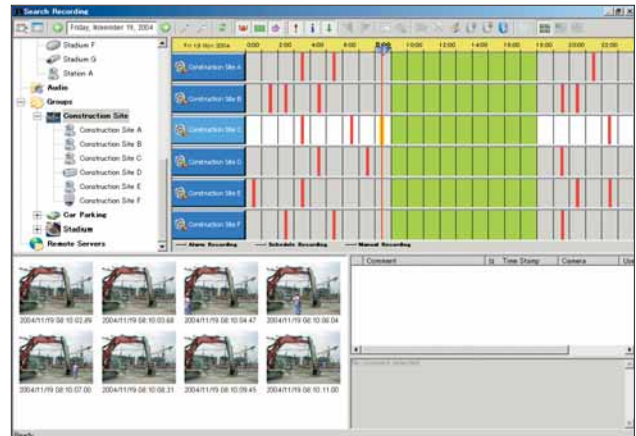
Audio Support

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.

Scheduled Recording GUI

Search Recording GUI

Flexible Recording

Manual Recording

With the IMZ-RS400 Series, when manual recording is set, authorised 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.

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.

Smart Search

Intelligent Video Motion Filter Search

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.

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.
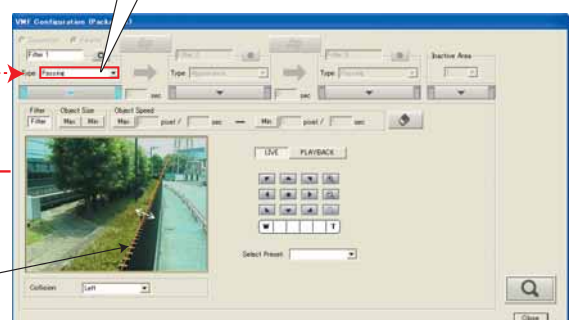
Intelligent Video Motion Filter Search

Day   Recorded Images   Night

Analyses Object Movement Using Filters

FILTERS

Passing • Appearance • Disappearance
Capacity • Existing • Unattended/Removed

Outputs Desired Images

Virtual borderline

Filter Setting GUI

FEATURES

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

AVI File Support

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.

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)

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.

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

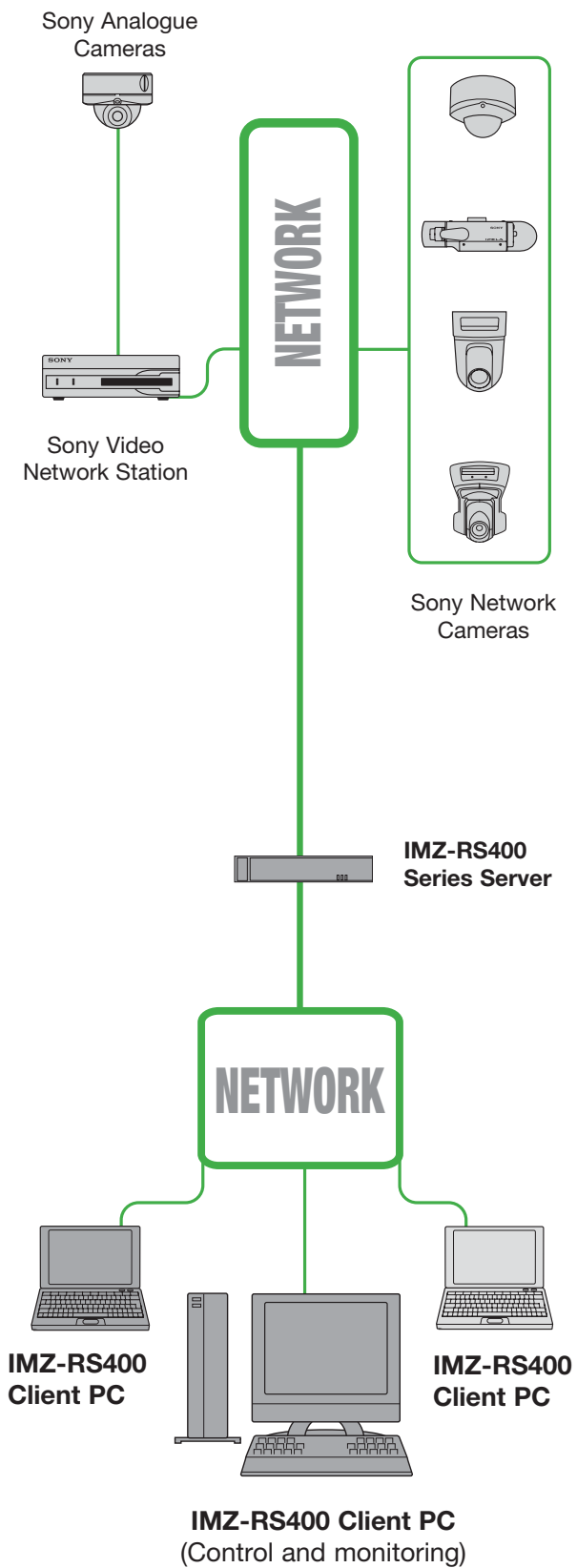Control PC software for up to 32 networked video sources

Optional Software Modules

RSM File Player

Software module for image playback only

System Configuration

Sony Analogue
Cameras

NETWORK

Sony Video
Network Station

Sony Network
Cameras

**IMZ-RS400
Series Server**

NETWORK

**IMZ-RS400
Client PC**

**IMZ-RS400
Client PC**

IMZ-RS400 Client PC
(Control and monitoring)

System Requirements

Intelligent Monitoring Software

Operating system	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-colour display

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