SONY®
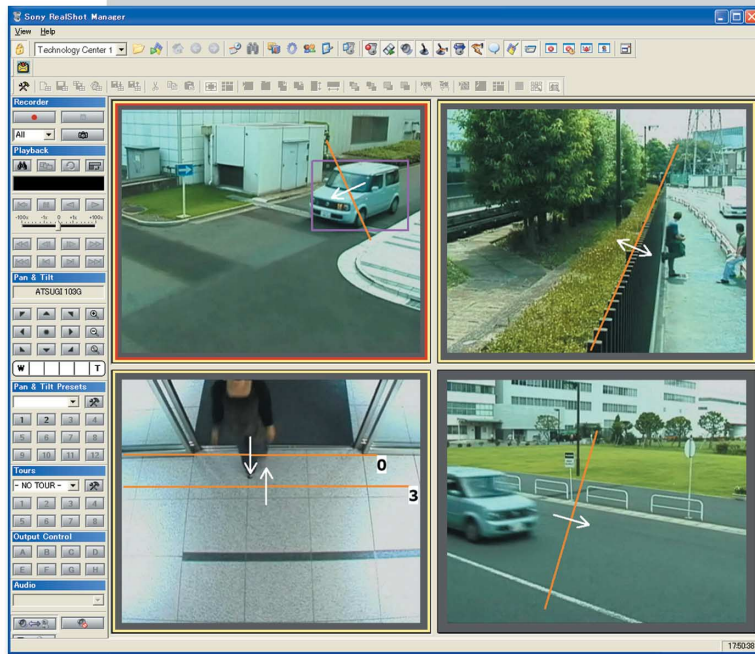
Intelligent Monitoring Software

IMZ-RS400 Series
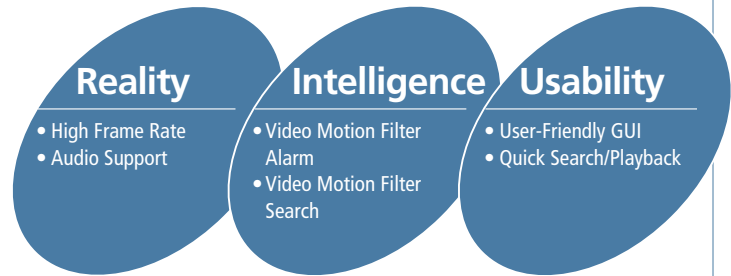

IMZ-RS401

IMZ-RS404

IMZ-RS409

IMZ-RS416

IMZ-RS432

Connect Your Vision

IPELA™

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 symbolizing the Sony vision for the workplace of the future, connecting people, places, and information with reality that has never before been achieved. "**IPELA**" lets you 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

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

*Sony introduces the IMZ-RS400 Series[*1] 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.*

*1 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.

FEATURES AT A GLANCE

Smart Monitoring and Smart Search using Sony Video Motion Filters[*2]

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

User Privileges

AVI File Export

*2 This function is available with the SNC-RX Series, SNC-RZ50, SNC-CS50, and later models.

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, 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.
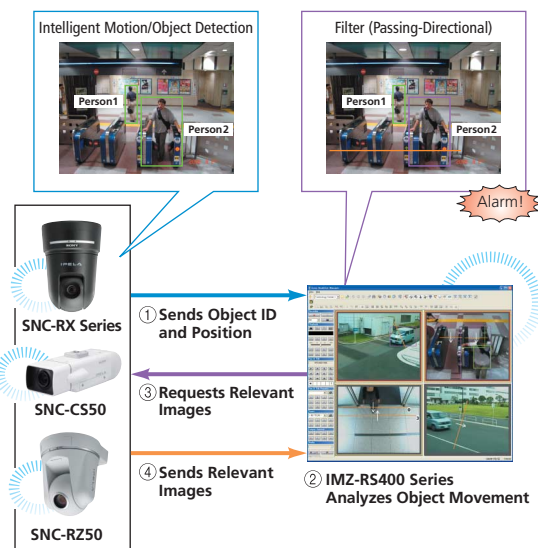
Smart Monitoring

Intelligent Video Motion Filter Alarm[*3]
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.[*4]

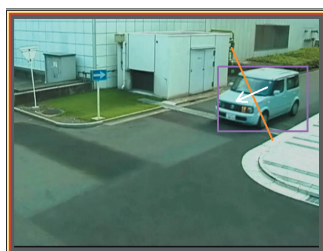[*3] This function is available with the SNC-RX Series, SNC-RZ50, SNC-CS50, and later models.

[*4] Object direction and speed settings are available only with the "Passing", "Appearance", and "Disappearance" filters.

Distributed Enhanced Processing Architecture (DEPA)

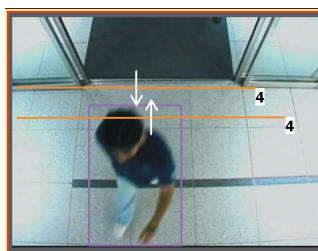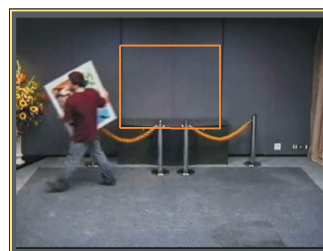| Filter	Camera Alarm Setting (IMD/IOD)	Application
Passing	IMD	Alarm is triggered when an object crosses a "virtual borderline."
Appearance	IMD	Alarm is triggered when an object enters a "virtual area."
Disappearance	IMD	Alarm is triggered when an object exits a "virtual area."
Capacity	IMD	Alarm is 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

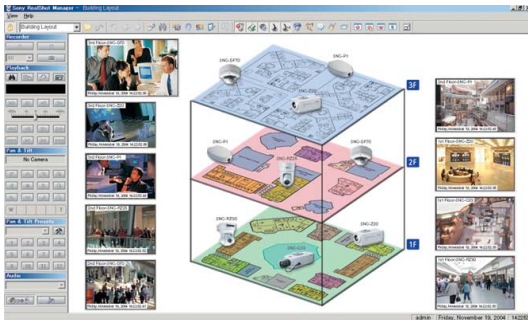People Counting

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
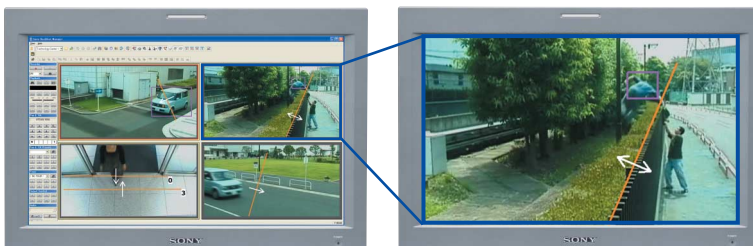
Customized Layouts

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.
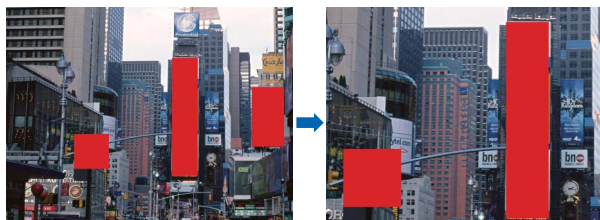
Camera PTZ Control

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[5]

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.

[5] 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.

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.

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.
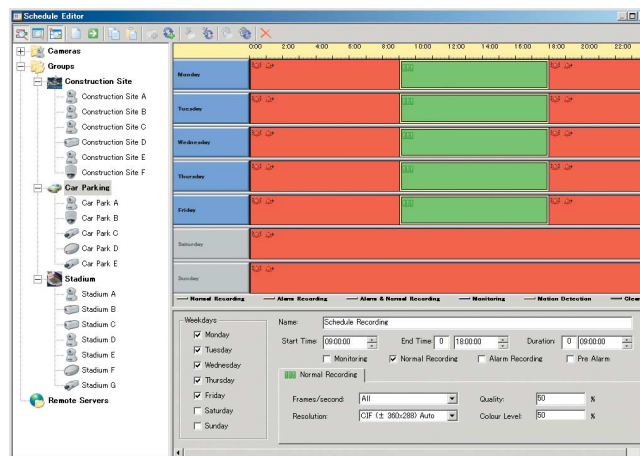
Scheduled Recording GUI

Smart Search

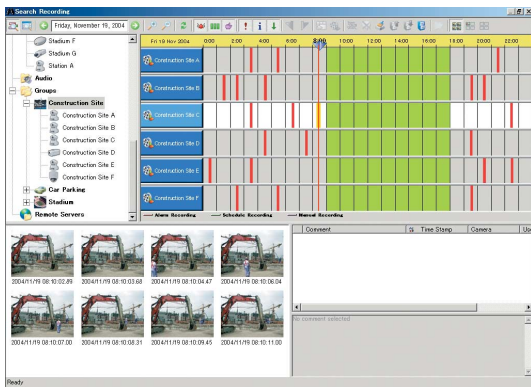### Intelligent Video Motion Filter Search[6]

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.
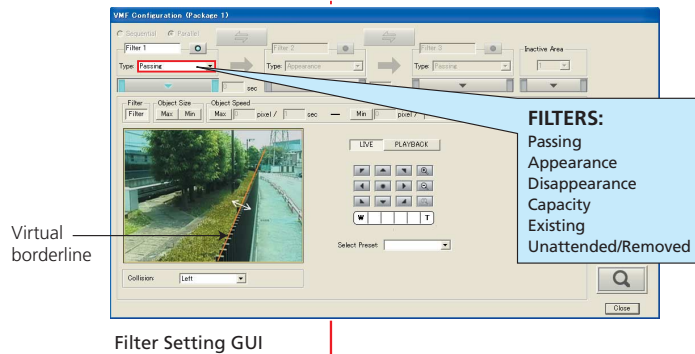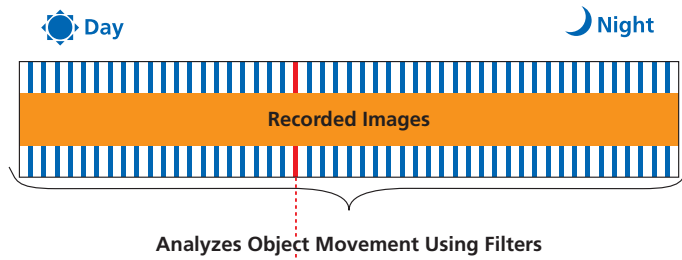
[6] This function is available with the SNC-RX Series, SNC-RZ50, SNC-CS50, and later models. Metadata related to IMD or IOD must be recorded in order to perform a video motion filter search. Current Sony network cameras cannot output IMD and IOD data simultaneously.
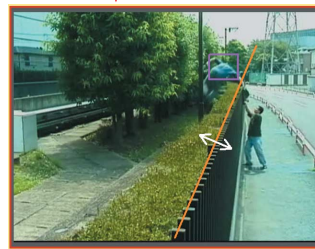
Easy and Quick Search of Recorded Images

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

Analyzes Object Movement Using Filters

Filter Setting GUI

FILTERS:
Passing
Appearance
Disappearance
Capacity
Existing
Unattended/Removed

Virtual borderline

Outputs Desired Images

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

AVI File Support*7

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.

*7 Only video can be exported to AVI. Audio export is not supported.
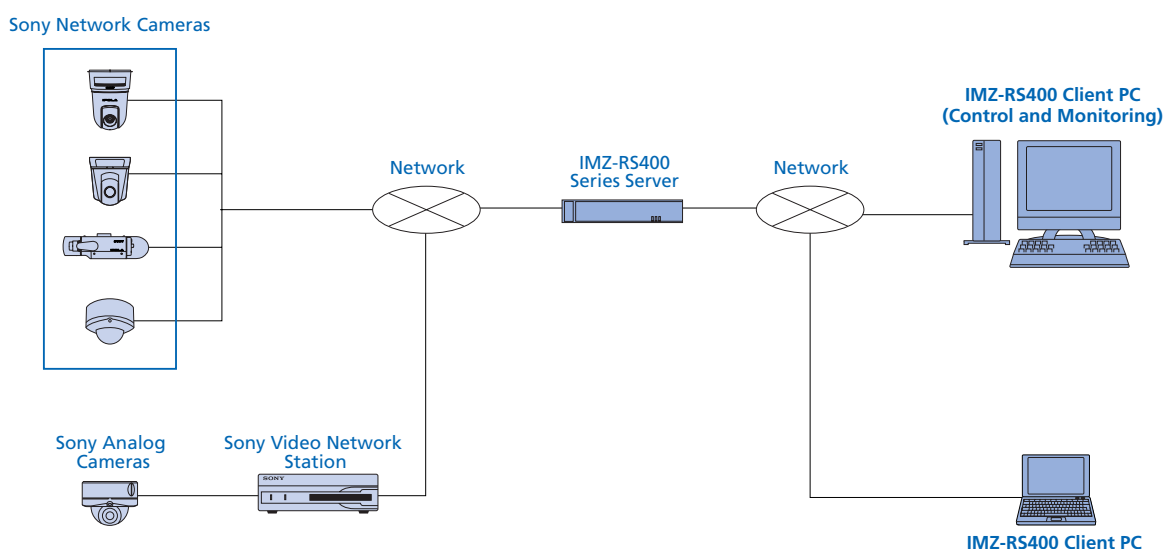
User Privileges

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)*8

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.

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

SYSTEM CONFIGURATION

Sony Network Cameras

IMZ-RS400 Client PC
(Control and Monitoring)

Network

IMZ-RS400
Series Server

Network

Sony Analog
Cameras

Sony Video Network
Station

IMZ-RS400 Client PC

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

- **RSM File Player**
  Software module for image playback only

SYSTEM REQUIREMENTS

Intelligent Monitoring Software

Operating system	Windows Vista Enterprize, 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

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