

# Introducing your Intelligent Monitoring Software. Designed for security.

RealShot Manager Advance

**SONY**



# Simple, flexible and scalable – HD-ready Intelligent Monitoring Software from Sony Professional

Why choose from the RSM Advanced Series

## 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" connects

people, places and information with reality. "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
- Dynamic Frame Integration



### Intelligence

- Video Motion Filter Alarm
- Video Motion Filter Search
- Intelligent Setup



### Usability

- JPEG & MPEG-4 Compression Formats
- H.264 will be available with a future software upgrade
- Dual Encoding Capability
- User-Friendly GUI

The demand for surveillance systems is growing, and the adoption of IP as a transport mechanism for video is ever increasing. Sony Professional recognized this trend early on, and has been focused on developing products and solutions aligned with it. Now Sony Professional is pleased to announce the introduction of the IMZ-NS100 Series Intelligent Monitoring Software, which can be installed on your own Microsoft® Windows® server to monitor and control 1, 4, 9, 16 or 32 network cameras (IMZ-NS101, IMZ-NS104, IMZ-NS109, IMZ-NS116 and IMZ-NS132, respectively).

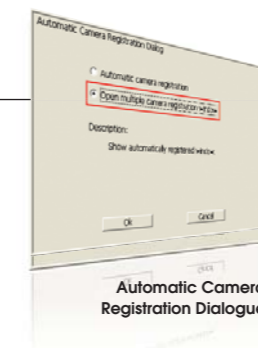
The IMZ-NS100 Series is easy to use and free from complicated operation – users find it simple to set up connected cameras and to set frame rates for recording. They can also easily monitor, search and play back events with intuitive manipulation.

A scalable security system can be set up in client/server configuration using more than one server installed with the IMZ-NS100 Series and/ or using the NSR-1000 Series Video Network Surveillance Server from Sony Professional (which is perfectly compatible with the IMZ-NS100 Series). This system can be controlled by a common user management interface, which allows the administrator to freely set up the access level of each user.

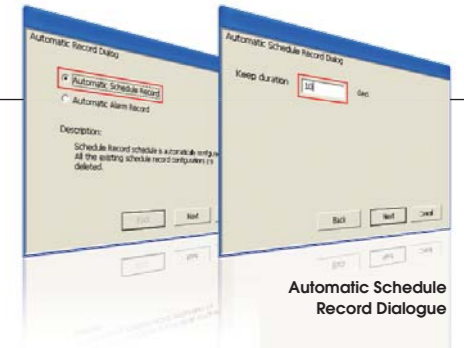
With the IMZ-NS100 Series, you can start an HD-ready video network surveillance system in the scale and configuration that's ideal for current conditions and expand this system in the future.



### Features



### Automatic Record Dialogue



### Open Platform

### Quick Setup & Easy Operation

The IMZ-NS100 Series can be used not only with Sony Professional's network cameras but also with other major brand network cameras.

### Automatic Camera Registration

With the set-up wizard, you can set up the cameras in a simple and straightforward manner. With Sony Professional's IP cameras, for example, the IMZ-NS100 Series instantly recognizes the IP addresses of connected cameras and registers them automatically. You do not need to check the IP addresses or go into multiple menus.

### Simple Recording Setup

The settings for recording are also easy. If you select "Automatic Schedule Record", you only need to input the recording duration (i.e. the number of days that data is left in the storage area). The IMZ-NS100 Series checks the HDD storage area and sets the best frame rate for recording. You do not need to check the storage area in your PC or calculate the frame rate yourself.

## Features

### The main GUI (Graphical User Interface)

With the user-friendly GUI, you can use various monitoring functions with intuitive operation, such as drag-and-drop. You can also run a quick search and playback recorded images while monitoring.

- 1 Monitor Frame
- 2 Camera Pane
- 3 Monitor Control
- 4 Camera Control
- 5 Alarm List
- 6 Playback Control



### Monitoring and quick search (intuitive main GUI)

#### Easy-to-use monitoring functions

Each Monitor Frame (1) shows the status of the video (live or recorded), and the name of the camera, above each video image. Up to 8 x 8 Monitor Frames can be used. By double-clicking a specific Monitor Frame, the display is switched to Single Monitor Frame mode as below.

#### Double-clicking a Frame



#### Hot spot monitoring/ Dual monitor support

A specific window in a 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 be manually selected or triggered by an alarm.



#### Drag-and-drop operation (camera switching)

All connected cameras are shown in a tree configuration in the Camera Pane (2). By dragging a camera icon and dropping it onto a Monitor Frame (1), you can easily view live images from a camera.

#### Camera Pan/Tilt/Zoom (PTZ) control

PTZ network cameras from Sony Professional and other supported brands can be controlled by the Camera Control pane (4). In PTZ Direct Control mode, when a point in the image is clicked, the camera automatically pans and tilts to make that point the centre of the image. You can also zoom into the image simply by dragging out the specified area of the image with a mouse.



#### Audio monitoring

The sound from a microphone connected to the camera can be monitored at the IMZ-NS100 Series.

#### Quick search and playback while monitoring

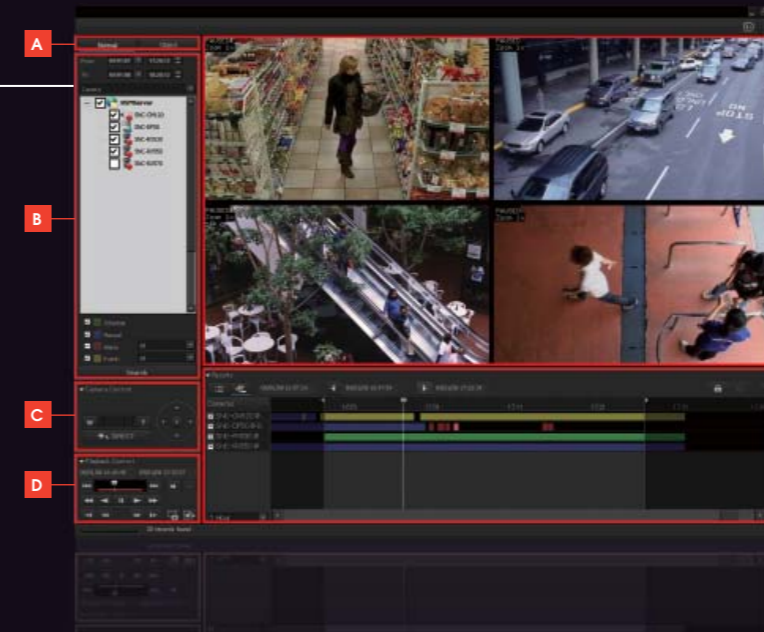
If you click PLAYBACK in the Monitor Control pane (3), you can play back the images recorded a certain number of seconds before (this is initially set in the GUI Setting menu). You can also quickly search for the recorded image by date/time search in the Monitor Control pane.

#### Alarm list playback

With the Playback Control pane (6), you can control the playback functions such as slow and reverse/forward. You can also export the still or moving images of your specified date and time to external media, such as CD-R, DVD-R and USB Flash Memory.

#### Customized layouts

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), camera icons and company logos.



### Sophisticated search functions

#### Two Search Functions

With the Switching Tab (A), you can select either Normal Search or Object Search.

#### – Normal Search

You can search for specific images by setting search conditions such as the camera name, date, time, and the type of recording (manual/schedule/alarm/event).

#### – Object Search

You can search for specific images in the recorded video using intelligent functions. There are two types of search – Post VMD (Video Motion Detection), and VMF (Video Motion Filter). With Post VMD, you can search for images in the recorded video with search conditions that

are set after the recording, such as specific object movements. With VMF, you can search for images in the recorded video using DEPA (Distributed Enhanced Processing Architecture) system features. With a VMF search, you should record metadata with DEPA-enabled cameras during the video recording. For example, you can count the number of people who passed a line that is set on the screen.

#### Post VMD Search



VMF Search

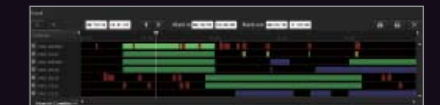
#### Dedicated search menu

- A Switching Tab (Normal Search/Object Search)
- B Search Menu (Search Conditions, VMD, DEPA Setting, etc.)
- C Image Control (Zoom, etc.)
- D Playback Control (Reverse, Forward, Stop, etc.)
- E Display Area (Playback of Searched Images)
- F Search Result Area

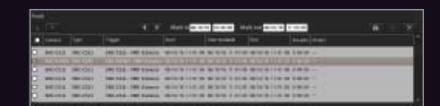
#### Search results by timeline or list

The search result is displayed either by timeline or list (F). In a timeline chart, search results are displayed in different colours depending on the type of recording. You can easily playback video just by clicking on a specific part of the timeline, or on the list.

#### Timeline Mode



#### List Mode



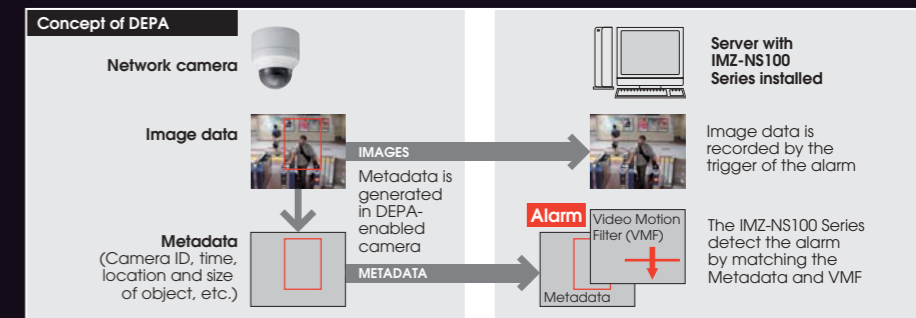
### What is DEPA?



In conventional video analytic systems, the camera only sends video images to recorders, and video image analysis is processed solely on the recorder side. In Sony Professional's DEPA system, the DEPA-enabled camera sends to the DEPA-enabled recorder not only video images but also related metadata, such as the camera ID, date/time and information about the shot object (size and position). The recorder checks this metadata with a search filter called

a VMF (Video Motion Filter), to send an alarm signal when the metadata matches a preset condition of the VMF. Since the partial image

processing is done on the camera side, the system can be configured in a much simpler manner, and can be expanded more easily.



**Versatile recording functions**

**Manual recording**

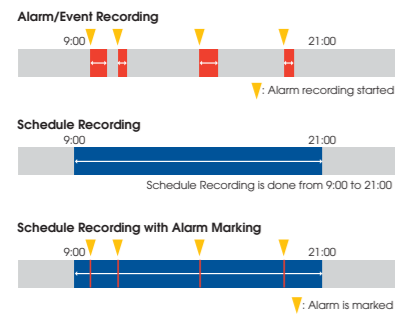
Manual Recording is started manually anytime the operator wants.

**Schedule recording**

Schedule Recording is started based on a set schedule.

**Schedule recording with alarm marking**

While using Schedule Recording, the time when the alarm is detected can be marked in the timeline. This function enables images to be searched quickly.



**Alarm/Event Recording**

There are two types of alarm-triggered recording – Alarm and Event (i.e. Activity) Recording. While it is important to initiate recordings based on video motion detection or alarm signal input, it is also helpful if the user can define what is considered an alarm. For example, a camera may be looking at an area where there are people moving about during office hours, but the recording of such motion should not be considered a true alarm; it is rather a normal event or activity.

However, such motion out of office hours should be considered a true alarm, and an action or alert needs to be initiated. The former is performed by Event Recording and the latter by Alarm Recording. The date/time of Alarm Recording is listed in an alarm list in the main GUI (but this does not occur with Event Recording). Having this capability accomplishes two things – it saves on storage (with motion/alarm recording only) and reduces seek times when searching alarms and events.

**Scalability and flexibility**

**Scalable to meet future demands**

The IMZ-NS101/NS104/NS109/NS116/NS132 can be installed on your own Microsoft® Windows® server to monitor and control 1/4/9/16/32 network cameras, respectively. As your surveillance requirements grow, you can simply add new servers with the IMZ-NS100 Series installed and/or the NSR-1000 Series, Sony Professional's video network surveillance server which is perfectly compatible with the IMZ-NS100 Series. You can easily set up a scalable security system in client/server configuration. (Please refer to the System Examples section.)

**Flexible user management setting**

All access to the IMZ-NS100 Series is managed by user authorization, which is set by the system administrator. The administrator can simply provide each user with a permission level selected from the five ready-made levels of operational permission, or set the accessibility in a more customized way. The accessible cameras for each user can be set for each camera, or for each IMZ-NS100 Series. When the system is configured with more than one IMZ-NS100 Series and/or with one or more NSR-1000 Series of network servers, all user information is shared throughout the whole system.

**Other features**

**MPEG4/JPEG dual stream**

Connected with Sony Professional's major network cameras,\* the IMZ-NS100 Series can accept both JPEG and MPEG4 from cameras at the same time. With a limited storage capacity, for example, you can monitor live video via MPEG4 at frame rates as high as 30 fps, and record video via JPEG at frame rates as low as 1 fps.

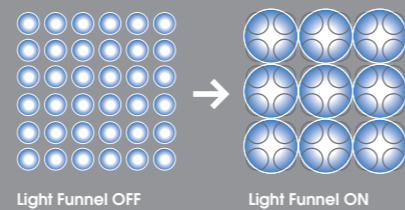
\* SNC-RX570/RX550/RX530, SNC-RZ50, SNC-DF85/DF80/DF50, SNC-DM160/DM110, SNC-CS50/CS20, SNC-CM120 and later models.

**Light Funnel control for higher sensitivity**

Light Funnel is a technology in Sony Professional's megapixel network cameras to provide higher sensitivity. By combining the information of four pixels and handling them as a single pixel, this type of camera provides sensitivity four times higher than conventional cameras. With the IMZ-NS100 Series, there is a menu to control the Light Funnel settings of applicable cameras; this simplifies control.

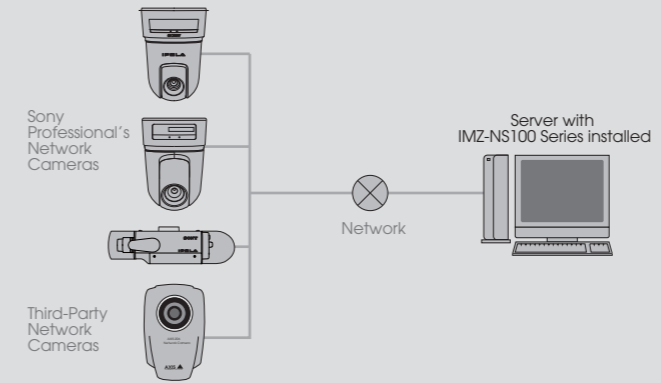
(Please note that when Light Funnel technology is applied to a 1280 x 960 image, its size becomes 640 x 480.)

Image of Light Funnel function

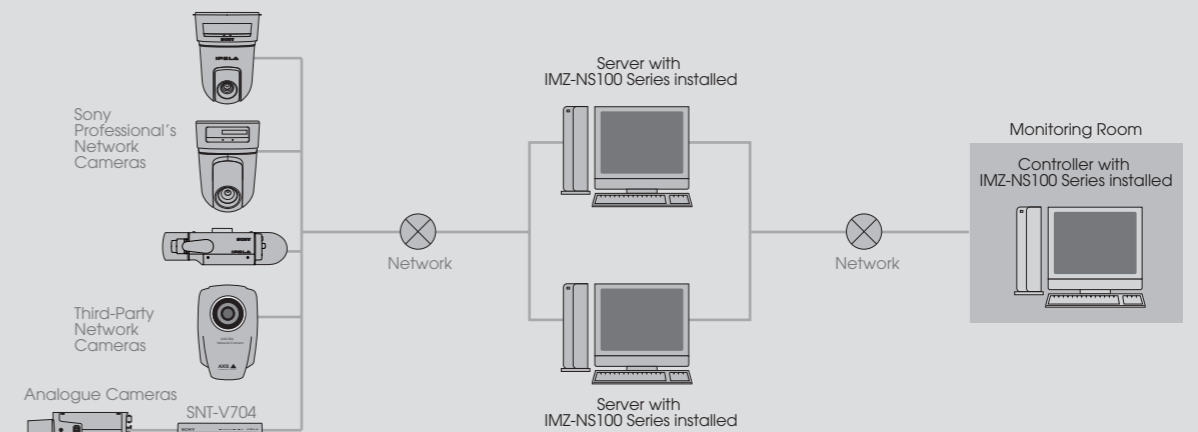


**System Configurations**

**Standalone Configuration**



**Client-Server Configuration**



**RSM Advanced Series software packages**

**IMZ-NS101**

Control PC software for 1 networked video source.

**IMZ-NS104**

Control PC software for up to 4 networked video sources.

**IMZ-NS109**

Control PC software for up to 9 networked video sources.

**IMZ-NS116**

Control PC software for up to 16 networked video sources.

**IMZ-NS132**

Control PC software for up to 32 networked video sources images to be searched quickly.

System Requirements		
Operating system <sup>*1</sup>	Microsoft® Windows Vista® Business Microsoft Windows Vista Enterprise Microsoft Windows® XP Professional SP2 Microsoft Windows Server 2003 Standard Edition SP2	
CPU	Intel® Core™ 2Duo 2.0-GHz or higher	
Main memory	1 GB or more	
HDD 2	10GB spare capacity (or more depending on the video that is to be stored)	
Video card	1024 x 768, 16/24 bit colour	
Network interface card (NIC)	100BASE-TX or higher	
Display (Resolution)	1024 x 768 or higher	
Specifications	Server	Client
Video compression	JPEG/MPEG-4	JPEG/MPEG-4
Audio compression	G711/G726	G711/G726
Number of cameras to be connected <sup>*2</sup>	32	—
Number of clients to be connected <sup>*3</sup>	10	—
Maximum number of layouts	100	100
Maximum number of users	100	100
Maximum number of servers to a client <sup>*4</sup>	—	64

\*1 x 64 edition is not supported.

\*2 This is a recommended value to assure high performance. It is technically possible to connect more than 32 units by installing on the PC a corresponding number of licenses.

Display/recording performance basically depends on PC performance, but an increase in cameras may deteriorate overall performance.

\*3 This is a recommended value to assure high performance. It is technically possible to connect more than 10 clients, but this increase may deteriorate overall performance.

\*4 This is a recommended value to assure high performance. It is technically possible to connect more than 64 servers, but this increase may deteriorate overall performance.

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#### About Sony Professional

Sony Professional is the leading supplier of AV/IT solutions to businesses across a wide variety of sectors including, **Media and Broadcast, Video Security and Retail, Transport & Large Venue markets**. It delivers products, systems and applications to enable the creation, manipulation and distribution of digital audio-visual content that add value to businesses and their customers. With over 25 years' experience in delivering innovative market-leading products, **Sony Professional** is ideally placed to deliver exceptional quality and value to its customers. **Sony's Professional Services** division, its systems integration arm, offers its customers access to the expertise and local knowledge of skilled professionals across Europe. Collaborating with a network of established technology partners, Sony Professional delivers end to end solutions that address the customer's needs, integrating software and systems to achieve each organisations' individual business goals. For more information please visit [www.sonybiz.net](http://www.sonybiz.net)

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