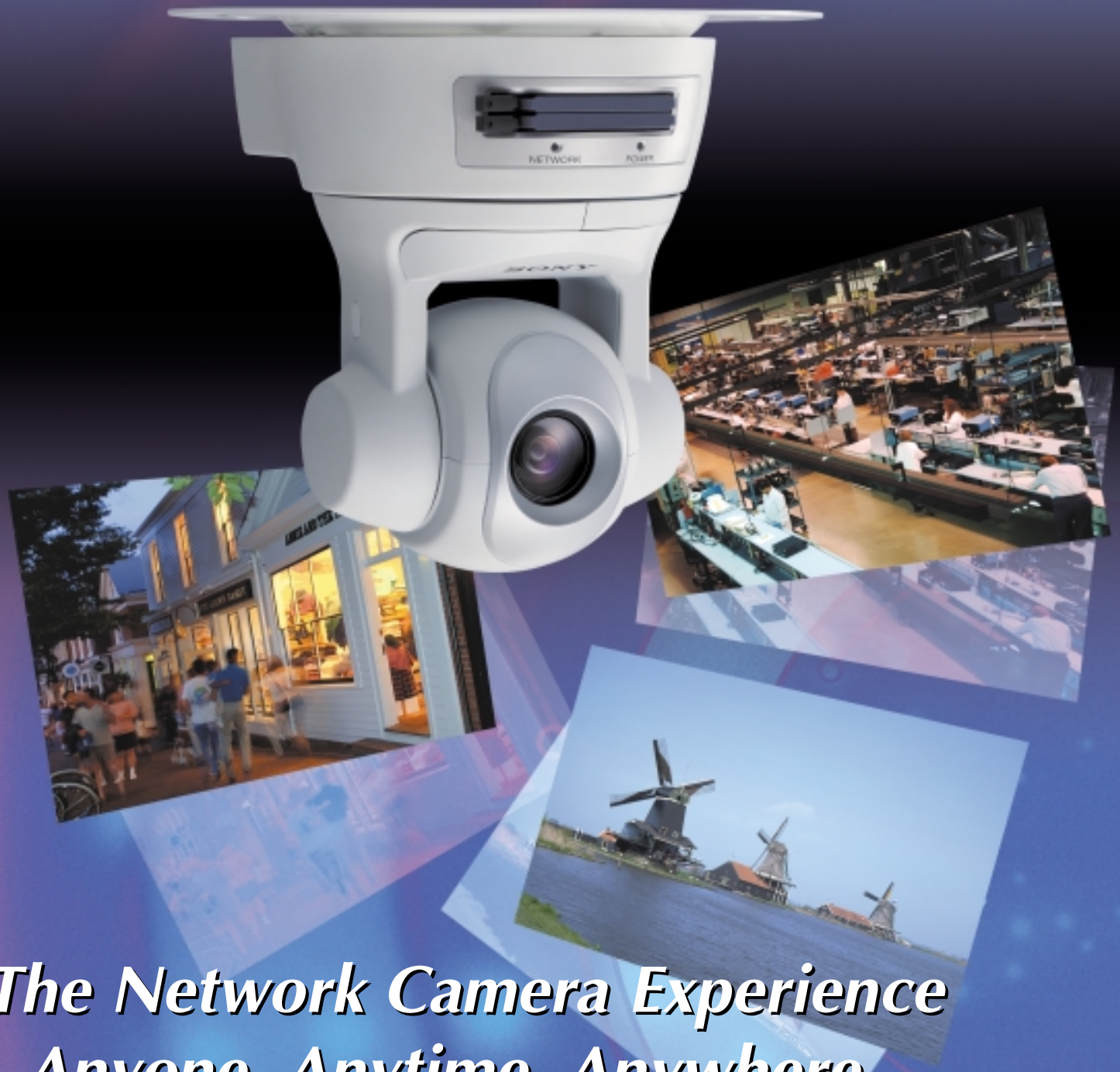
SONY

PRELIMINARY NETWORK CAMERA

SNC-RZ30N (NTSC)
SNC-RZ30P (PAL)



The Network Camera Experience
- Anyone, Anytime, Anywhere

Network cameras have been steadily making their way into the market over the past few years, yet few have been designed with the thought that went into Sony's color network camera, the SNC-RZ30.*

* In the following text, “SNC-RZ30” refers to both the SNC-RZ30N (NTSC model) and the SNC-RZ30P (PAL model).

Combining network functionality with a Pan/Tilt/Zoom (PTZ) capability, the SNC-RZ30 takes remote monitoring to the next step by offering the flexibility to see almost anything within the camera's range and field-of-view over an ordinary TCP/IP network. Images from the SNC-RZ30 can be viewed and the PTZ movement can be controlled using a PC running a standard browser without the need for additional software or plug-ins. Moreover, setup is very easy because the setup menu is also browser-based.

The SNC-RZ30 features a 25x optical zoom capability that allows a user to zoom in on small or distant objects with exceptional clarity. Image quality is extremely high because the SNC-RZ30 uses a high-resolution CCD imager. The SNC-RZ30 employs JPEG compression and can be set up to transfer these JPEG images to an FTP server or to a specified e-mail address. Also, the frame rate for this camera can be set as high as 30 fps*1, which makes for very smooth moving images. The SNC-RZ30 features built-in PCMCIA card slots to further expand the unit's memory with a flash ATA card, an ATA HDD card, or a Memory Stick™ with adaptor, allowing you to store tens of thousands of images.

Finally, unlike most network cameras, the SNC-RZ30 has an analog composite video output connector for outputting video to a local recorder, making it ideal for reviewing activity that might have been missed while monitoring in real time.

All of this functionality is packaged into one sleek, compact, and lightweight body that can be either ceiling mounted or placed on a flat surface. The feature rich SNC-RZ30 will make your network camera experience an unforgettable one.

*1 The SNC-RZ30N offers a maximum frame rate of 30 fps while the SNC-RZ30P offers a maximum frame rate of 25 fps.

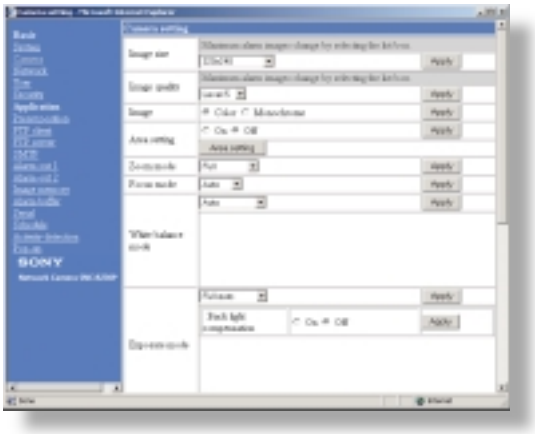
Features and Benefits

Remote Monitoring/Control Over Networks Using a Standard Web Browser

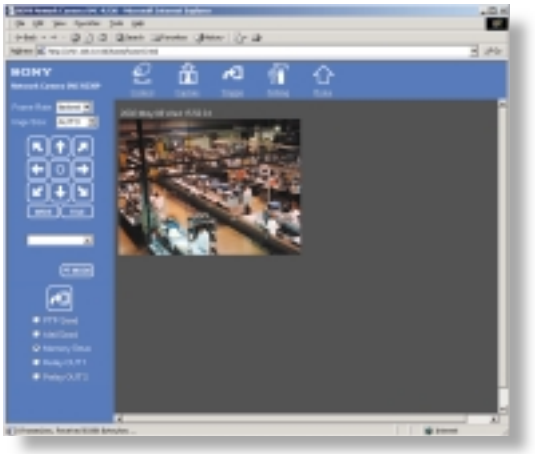
The SNC-RZ30 is equipped with a 100Base-TX (RJ-45) interface and has a web server capability with an assignable IP address. These features coupled with the camera's built-in software allow the user to control the unit and view live images over a network. All that is required is a PC running a standard web browser. No additional software or plug-ins are required. The following operating systems and browsers are supported by the SNC-RZ30:

Operating System	Web Browser
Microsoft® Windows® 98/98SE/ Me/NT4.0/2000/XP	Microsoft Internet Explorer version 5.5 and 6.0

• RZ30P Setting

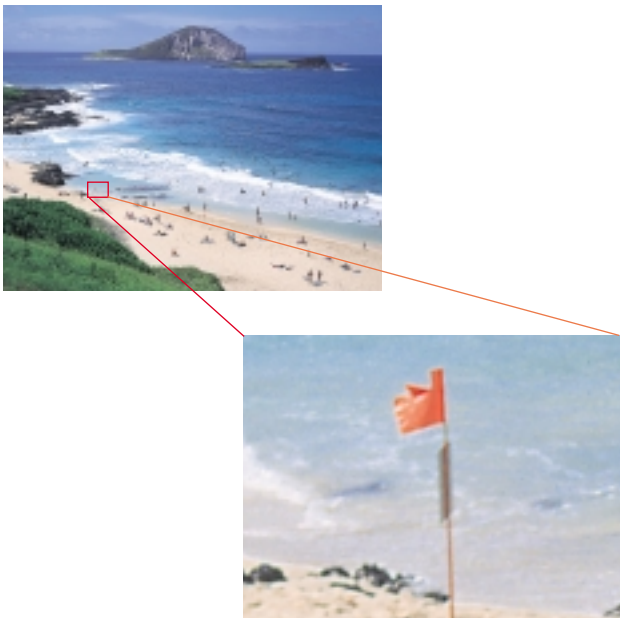


• RZ30P Viewer



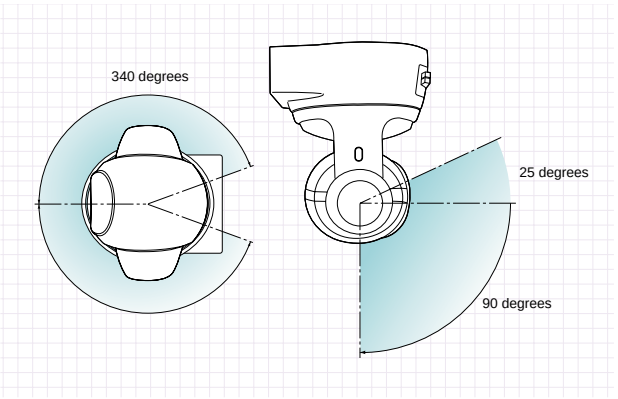
High-Speed, Quiet Pan/Tilt/Zoom (PTZ)

It's easy to locate almost any position in the viewable area surrounding the SNC-RZ30 using its high-speed PTZ capability. Of all PTZ-capable network cameras, the SNC-RZ30 has one of the widest ranges in its class: a pan range of 340°, a tilt range of 115°, plus a 25x optical / 300x digital zoom capability. The full 340° pan range can be covered in 2 seconds, and the -25° to +90° tilt range can be covered in 1.5 seconds. In addition to the wide range of motion and high-speed movements, the SNC-RZ30 incorporates gearless direct-drive motors that ensure exceptionally quiet operation.



25x Optical Zoom (simulated images)

■ Pan/Tilt Range



High-Quality Image/Selectable Parameters

The SNC-RZ30 has a number of selectable parameters that make it easy to match the quality of the image with your bandwidth requirements. For example, the SNC-RZ30, which uses the industry-standard JPEG compression format, has a compression ratio selectable between 1/5 and 1/60. Also, with a maximum setting of 30 fps*1, the frame rate can either be set manually at a fixed frame rate, or at a variable frame rate based on the amount of bandwidth available. Furthermore, the resolution can be selected from a choice of 736 x 480*3, 640 x 480, 320 x 240, and 160 x 120.
With a high-speed network connection, you can obtain high-quality video images, and with a limited bandwidth connection, you can set the parameters so that images are still very clear with no image break-up.

*2: Resolution for the SNC-RZ30N is 736 x 480 while resolution for the SNC-RZ30P is 736 x 544.

Image Transfer Using FTP/SMTP

Because the SNC-RZ30 supports both FTP and SMTP protocols, JPEG still image data can be transferred, as required, either to an FTP server or to a specified e-mail address as a JPEG attachment.

Activity Detection/Alarm Trigger

The SNC-RZ30 has a built-in motion and light sensor that can trigger an alarm or a switch. For example, the motion sensor could set off an audible alarm while the light sensor could be used to turn on a lamp when a room becomes dark. In addition to using these built-in sensors, a system can be configured such that up to three external sensors are connected to the SNC-RZ30 for use as an activity detector. Any or all of these sensors can be set to trigger an alarm, or to send a signal to a solenoid to perform functions such as locking a door. Other functions can also be performed such as sending the image that was captured at the time the alarm was triggered to an e-mail address or to an FTP server. Also, because the SNC-RZ30 has 8 MB of RAM designated as a buffer and a high-speed data-transfer capability of up to 30 fps, hundreds of images from before and after the alarm was triggered can be buffered in the RAM and transferred.

Two Type II PCMCIA Expansion Slots

Two Type II PCMCIA card slots are integrated into the SNC-RZ30. These slots can be used to increase the storage capacity of the unit by adding either a flash memory card or an ATA Hard Disk Drive (HDD) card.*3 IC recording media such as a **Memory Stick** with a **Memory Stick**/PC card adaptor can be used as well.

PCMCIA Type II x 2

*3: Slots cannot be used simultaneously.

MEMORY STICK

Analog Composite Video Output

The SNC-RZ30 can output an analog composite video signal via the BNC connector on the unit's rear panel.*4 This is an ideal feature for sending signals to a local recording deviceor monitor.

■ REAR PANEL

*4: The SNC-RZ30N output is in NTSC format (525/60), and the SNC-RZ30P output is in PAL format (625/50).

RS-232C/485 Transparency Interface

External equipment can be connected to the RS-232C/485 interface of the SNC-RZ30, and can be controlled by a PC connected to the network on which the SNC-RZ30 resides.

Simultaneous Access

Up to 50 users can simultaneously access a single SNC-RZ30 to monitor images and control the unit. One of two control modes for the camera can be set by the administrator, allowing control of the unit to be shared by a number of users. Mode 1 gives priority to the user who last attempted to control the camera, while mode 2 is time-based. When mode 2 is set, priority is given to a user for a specified amount of time and when time expires, the next person who takes control is given priority for that same amount of time.

Network Security Features

IP Filtering - User access to the SNC-RZ30 can be limited by IP filtering. Up to ten different groups can be established by defining an IP address range for each group. This allows users with IP addresses in a defined range to access the camera, while denying access to all other addresses.

Password Protection - User names and passwords can be assigned to allow four levels of access. Generally, the administrator has complete access/control of the unit, while the other three levels can be set to limit user privileges to functions such as PTZ control, viewing, trigger control, etc.

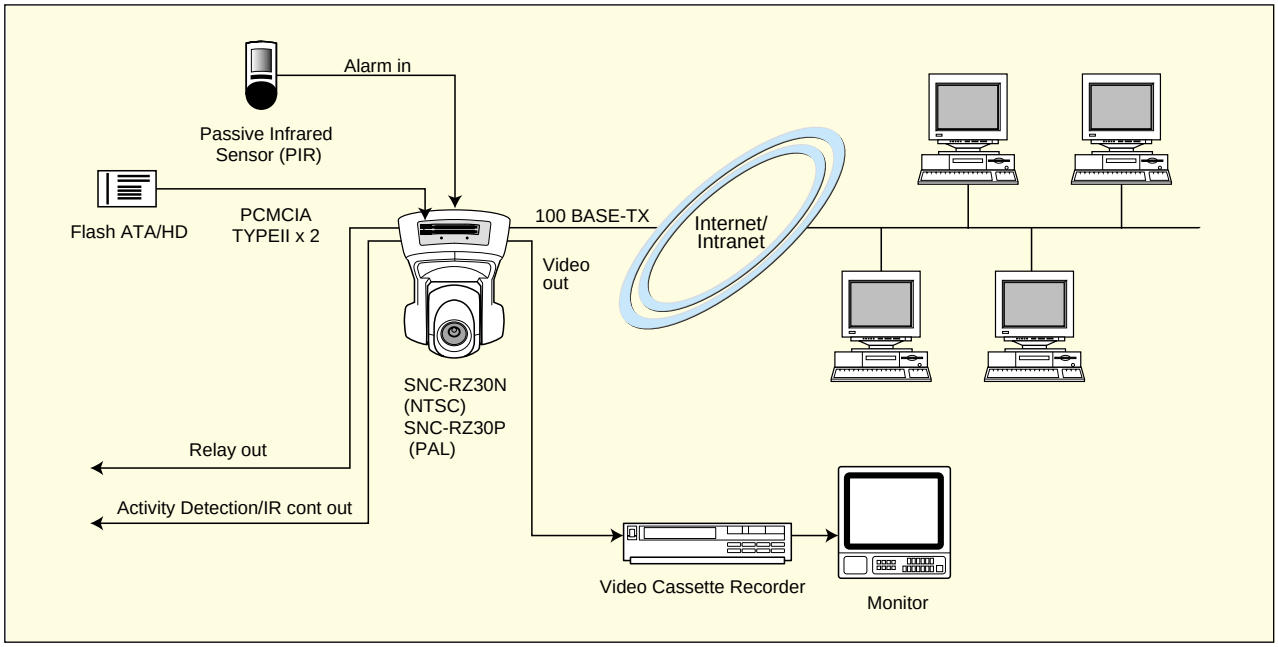
Other Features

Direct Pointing or Vectoring - There is an alternative method of controlling the pan and tilt of the SNC-RZ30. When this other method is selected, an on-screen simulated pad appears on the GUI (Graphical User Interface) allowing "direct pointing" or "vectoring" to control the camera.

"Tour" Feature - The "tour" feature allows the user to preset up to five scanning patterns with up to 16 positions in each scan. This is useful when you wish to monitor designated areas in a room.

Cropping Feature - The administrator can designate an area in the image to be cropped. This feature is particularly useful when you wish to monitor a specific location. In addition, it reduces the size of the image file, making the storage and transfer of images more efficient.

Sample System Configuration



Supplied Accessories

Ceiling Mount Kit

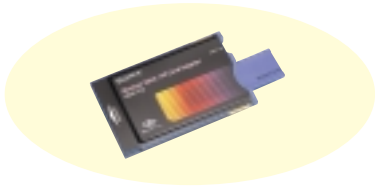
AC power adaptor
AC power cable
Ethernet cable (UTP category 5 cross cable)
CD-ROM (setup program and user's guide)

I/O receptacle
Installation manual
Ferrite core

Optional Accessories

MSA-8A/16A/32A/64A/128A
Memory Stick
(8 MB/16 MB/32 MB/64 MB/128MB)

MSAC-PC2
Memory Stick/PC Card Adaptor



Specifications

■ Camera

Imager	1/6 type Interline Transfer Super HAD CCD
Pixels	680,000 pixels (NTSC) 800,000 pixels (PAL)
Electronic shutter	1/4 to 1/10,000 sec. (NTSC) 1/3 to 1/10,000 sec. (PAL)
Exposure	Auto [Full Auto (including backlight compensation), Shutter-priority, Iris-priority] and manual
White balance	Auto, ATW, Indoor, Outdoor, One-push (trigger command), Manual
EV Compensation	-1.75 to +1.75 (15 steps)
Iris	Auto/Manual (F1.6 to close)
Gain	Auto/Manual (-3 dB to 28 dB)
Focus mode	Auto/Manual (Near, Far, One-push autofocus)

■ Lens

Zoom Ratio	25x optical zoom, 300x with digital zoom
Horizontal viewing angle	2.0 degrees to 45 degrees
Focal length	f = 2.4 mm to 60 mm
F-number	F1.6 (wide), F2.7 (tele)
Minimum object distance	Tele: 800 mm Wide: 30 mm

■ Hardware

CPU	32-bit RISC processor
RAM	32 MB (includes 8 MB alarm buffer)
Embedded flash memory	8 MB

■ Pan/Tilt

Pan angle	-170 to +170 degrees
Pan speed	2 sec./340 degrees
Tilt angle	-25 to +90 degrees
Tilt speed	1.5 sec./115 degrees

■ Image Data

Resolution	736 x 480, 640 x 480, 640 x 240, 320 x 240, 160 x 120 (NTSC) 736 x 544, 640 x 480, 640 x 240, 320 x 240, 160 x 120 (PAL)
Compression	JPEG
Compression ratio	1/5 ~ 1/60 (10 steps)
Frame rate	30 fps max. (640 x 480) (NTSC) 25 fps max. (640 x 480) (PAL)

■ Interfaces

Ethernet	100Base-TX /10Base-T (RJ-45)
PCMCIA	Type II x 2
Video Output	Analog Composite (BNC x1)
Sensor in	3
Alarm out	2
Serial IF	RS-232C/485 (transparency only)

■ Analog Video Output

Signal system	SNC-RZ30N (NTSC) SNC-RZ30P (PAL)
Sync system	Internal
Horizontal resolution	480 TV lines
S/N ratio	Better than 48 dB
Min. illumination	3 lx (color)

■ General

Mass	1.2 kg (2 lb 10 oz)
Power requirements	DC 12 V via AC adaptor (100 to 240 V)
Power consumption	21.6 W
Operating temperature	0 °C to + 40 °C (32 °F to 104 °F)
Storage temperature	-20 °C to + 60 °C (-4 °F to 104 °F)
Operating humidity	20% to 80% Non-condensing
Storage humidity	20% to 95% Non-condensing
Dimensions (W x H x D)	140 x 175 x 144 mm (5 5/8 x 7 x 5 3/4 inches)

■ Others

Protocols	TCP/IP, HTTP, ARP, FTP, SMTP, ICMP, and SNMP

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