SONY

Network Camera

SNC-RZ30N/2
SNC-RZ30P/2

*The High-Performance Network Camera With Pan/Tilt/Zoom (PTZ) Delivering Outstanding Image Quality – The Improved SNC-RZ30[*1] Is the One!*

Combining network functionality with a Pan/Tilt/Zoom (PTZ) capability, the SNC-RZ30 takes applications such as remote monitoring, webcasting, etc. to the next step by offering the flexibility to see almost anything within the camera's range and field-of-view over a 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. 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 newly improved high-resolution CCD imager and a high-quality image processor. The SNC-RZ30 employs motion-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,[*2] which makes for very smooth moving images. The SNC-RZ30 features two built-in PC card slots to further expand the unit's memory with removable media,[*3] allowing you to store tens of thousands of images. In addition, the card slot can accept IEEE 802.11b compliant wireless cards,[*4] enabling the unit to be wirelessly connected to a network.*

Finally, unlike most network cameras, the SNC-RZ30 has an analog composite video output that can be fed to a local video monitor or a video recorder, for viewing and redundant recording.

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. Make the feature rich SNC-RZ30 the camera for your network applications.

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*1 Unless otherwise noted, "SNC-RZ30" in the following text refers to both the SNC-RZ30N/2 and SNC-RZ30P/2.

*2 The SNC-RZ30 offers a maximum frame rate of 30 fps while the SNC-RZ30P offers a maximum frame rate of 25 fps. In order to achieve the maximum frame rate, a client PC with adequate processor speed and a network environment with adequate bandwidth are required.

*3 Removable media can be a Flash ATA card, ATA HDD card, Memory Stick media card and Memory Stick/PC Card Adaptor, all of which are not included.

*4 Please contact your local Sony sales office for a list of compatible wireless cards for use with the SNC-RZ30.

FEATURES

New & Improved

High-Quality Image

Employing a new Super HAD CCD, the SNC-RZ30 delivers outstanding picture quality even in low-light conditions for your remote monitoring applications. The minimum illumination level has been improved, providing higher sensitivity as compared to the original SNC-RZ30.

Original CCD

New CCD

Simulated images

New & Improved

Desktop or Ceiling Mountable in a Single Unit

A unique image flip function enables the SNC-RZ30 to be either placed on a flat surface or ceiling mounted – images are output right-side-up regardless of the orientation of the unit. Unlike other products that require separate models for ceiling and desktop applications, this single model is all that is necessary when installing your network camera system saving you the hassle of ordering multiple models.

High Frame Rate/Selectable Parameters

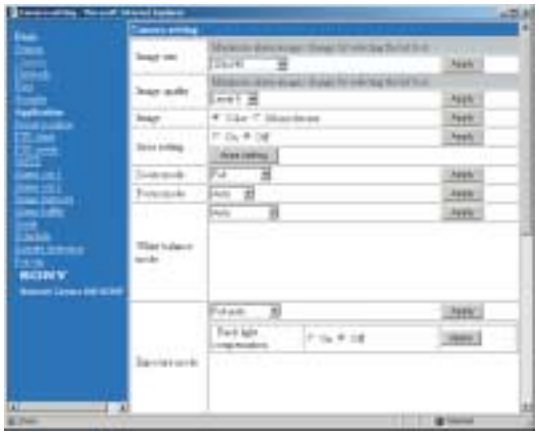
The SNC-RZ30 also has a number of selectable parameters that make it easy to match the quality of the image with your bandwidth requirements. For example, the SNC-RZ30, which uses the industry-standard motion-JPEG compression format, has a compression ratio selectable between 1/5 and 1/60. Also, with a maximum setting of 30 fps,[*2] 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,[*5] 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.

[*5] Resolution for the SNC-RZ30N is 736 x 480 while resolution for the SNC-RZ30P is 736 x 544.

Remote Monitoring/Control Over Networks Using a Standard Web Browser

The SNC-RZ30 is equipped with a 100Base-TX interface and has a built-in web server. This allows 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;[*6] no additional software is required.

[*6] Requires Microsoft® Windows® 98 or higher operating system and Microsoft Internet Explorer 5.5 or higher web browser.



SNC-RZ30 Setting Menu

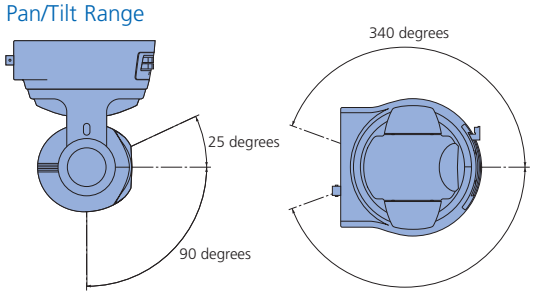
SNC-RZ30 Viewer

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 / 12x digital zoom for a total zoom capability of 300x. The full 340° pan range can be covered in 2 seconds, and the -90° to +25° 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 smooth and quiet operation.

25x Optical Zoom (simulated images)

Pan/Tilt Range



"Day/Night" Function

The SNC-RZ30 offers a "Day/Night" function to provide optimized sensitivity in both day and night environments. As the scene darkens, the infrared cut-filter is automatically replaced with a clear filter and the camera switches to B/W mode, requiring a much lower minimum illumination level. Three modes can be set: automatic, manual, or timer mode.

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 activity detection function that can be set to trigger its two output relays. When there is movement in the field-of-view of the camera, the camera can trigger either or both of its relays to, for example, set off an audible alarm, turn on a lamp, or send a signal to an electric door strike to lock or unlock a door. In addition to using the built-in activity detection function, the SNC-RZ30 can be configured with up to three external sensors for expanded functionality. These sensors can also be set to trigger the camera's output relays, or to move the camera to a preset position.
Moreover, other actions can be performed at the time of an alarm event triggered by either the activity detection function or an external sensor. For example, sending the image that was captured when the alarm was activated, to an e-mail address or to an FTP server is possible. 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,[*7] hundreds of images from before and after the alarm was triggered can be buffered in the RAM and if required transferred to an FTP server.

[*7] The SNC-RZ30N transfers data at speeds up to 30 fps while the SNC-RZ30P transfers data at speeds up to 25 fps.

Two Type II PC Card Slots

Two Type II PC card slots are integrated into the SNC-RZ30, and can accept the following types of PC cards:[*8]

Memory Card

You can increase the SNC-RZ30 storage capacity by adding either a flash memory card or an ATA Hard Disk Drive (HDD) card. IC recording media such as a **Memory Stick**™ media card with a **Memory Stick**/PC card adaptor can also be used.

Wireless Card

Wireless networks are becoming more prevalent allowing you to install your SNC-RZ30 without unsightly wires. The SNC-RZ30 is compatible with IEEE 802.11b compliant wireless PC cards.

[*8] Please contact your local Sony sales office for a list of compatible PC cards for use with the SNC-RZ30.

Analog Composite Video Output

The SNC-RZ30 can output an analog composite video signal via the BNC connector on the unit's rear panel.[*9] This is an ideal feature for sending signals to a local recording device or monitor.

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

Rear Panel

RS-232C/485 Interface (Transparency Function or VISCA Protocol)

Transparency Function

The SNC-RZ30 has a transparency function available via the RS-232C/485 interface. External equipment can be connected and controlled by a PC connected to the network on which the SNC-RZ30 resides.

VISCA Protocol

The SNC-RZ30 can be interfaced with external control equipment using the VISCA protocol. This configuration allows for local control of P/T/Z and camera settings.

Simultaneous Access

Up to 50 users can simultaneously access a single SNC-RZ30 to monitor images and control the camera. 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. One mode gives priority to the user who last attempted to control the camera, while the other mode is time-based. When the time-based mode 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 camera, while the other three levels can be set to limit user privileges to functions such as PTZ control, viewing, trigger control, etc.

Other Features

Viewing from a PDA

Images from the SNC-RZ30 can be viewed from a PDA running Microsoft Pocket PC® 2002.*10

*10 The Jeode™ plug-in Ver. 1.9.1 is required for viewing images from a PDA.

Direct Pointing or Vectoring

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

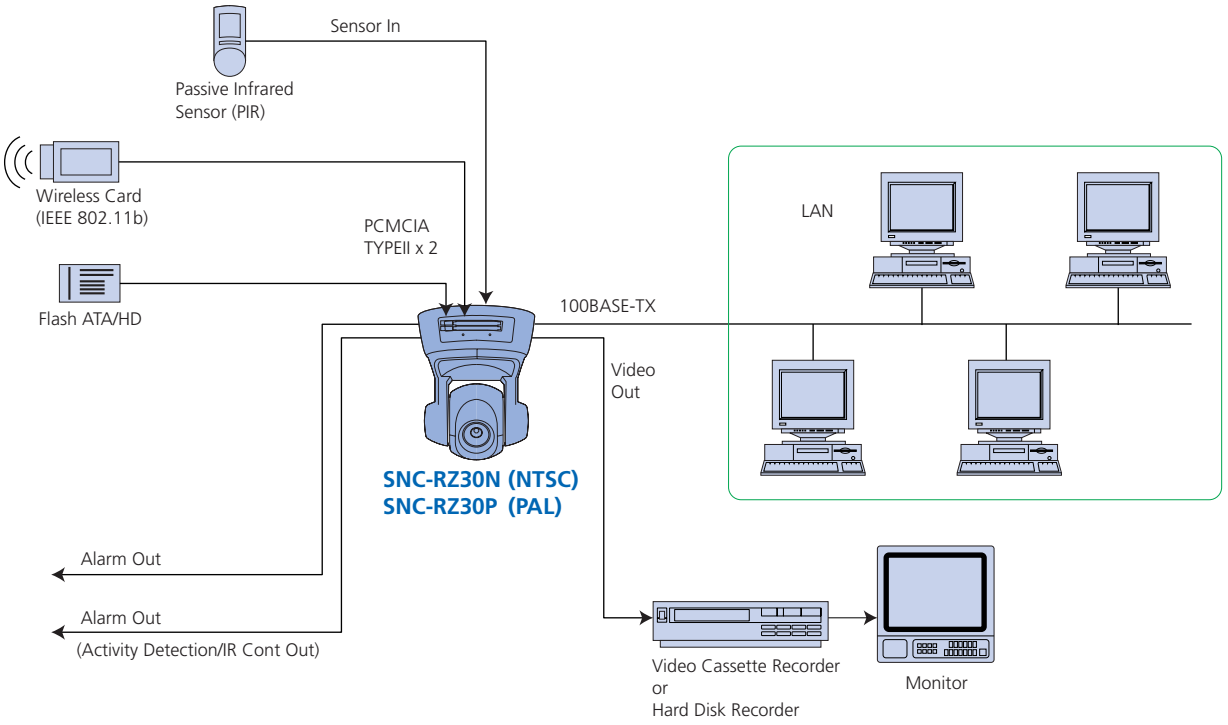
"Tour" Feature

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
CD-ROM (setup program and user's guide)
I/O Receptacle
Installation Manual
Ferrite Core

OPTIONAL ACCESSORIES

MSH-32/64/128
Memory Stick
(32 MB/64 MB/128MB)

MSAC-PC3
Memory Stick/PC Card Adaptor

SPECIFICATIONS

	SNC-RZ30N/2	SNC-RZ30P/2
Camera		
Image device	1/6 type Interline Transfer Super HAD CCD	
Number of total pixels	680,000 pixels	800,000 pixels
Electronic shutter	1/4 to 1/10,000 sec.	1/3 to 1/10,000 sec.
Gain control	Auto/Manual (-3 dB to 28 dB)	
Exposure control	Auto (Full auto, Shutter-priority, Iris-priority), Manual, EV compensation, Back light compensation	
White balance mode	Auto, Indoor, Outdoor, One-push auto, Manual	
Lens type	Auto-focus zoom lens	
Zoom ratio	25x optical zoom (300x with digital zoom)	
Horizontal view 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	300 mm (wide), 800 mm (tele)	
Pan angle	-170 degrees to +170 degrees	
Pan speed	2 sec./340 degrees	
Tilt angle	-90 degrees to +25 degrees	
Tilt speed	1.5 sec./115 degrees	
Other functions	Day/Night, Activity detection, Image stabilizer, Position preset	
Image		
Image size	736 x 480, 640 x 480, 320 x 240, 160 x 120	736 x 544, 640 x 480, 320 x 240, 160 x 120
Compression format	JPEG	
Compression ratio	approx.1/5 to 1/60 (10 steps)	
Maximum frame rate	30 fps (640 x 480)	25 fps (640 x 480)

	SNC-RZ30N/2	SNC-RZ30P/2
Network		
Protocols	TCP/IP, HTTP, ARP, ICMP, FTP, SMTP, DHCP, SNMP (MIB2)	
Number of clients	50	
Interface		
Ethernet	10Base-T/100Base-TX (RJ-45)	
Serial interface	RS-485/232C (Transparency function or VISCA protocol)	
I/O port	Sensor in x 3, Alarm out x 2	
Card slot	PC Card Type II x 2	
Analog video output	BNC x1, 1.0 Vp-p, 75Ω	
Analog Video Output		
Signal system	NTSC (Composite)	PAL (Composite)
Horizontal resolution	480 TV lines	
S/N ratio	48 dB	
Minimum illumination	Color: 2.5 lx. (50IRE, F1.6: AE mode, slow shutter off)	
General		
Mass	1.2 kg (2 lb 10 oz)	
Dimensions (W x H x D)	140 x 175 x 144 mm (5 5/8 x 7 x 5 3/4 inches)	
Power requirements	12 V DC via supplied AC adaptor (AC 100 to 240 V)	
Power consumption	21.6 W max.	
Operating temperature	0 °C to + 40 °C (32 °F to 104 °F)	
Storage temperature	-20 °C to + 60 °C (-4 °F to 140 °F)	
Operating humidity	20% to 80% Non-condensing	
Storage humidity	20% to 95% Non-condensing	

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