SONY

Video Network Station

SNT-V304

- Easy To Use
- Flexible
- Economical
- High-quality Images

Video Monitoring Over Networks

The Sony SNT-V304 Video Network Station enables video surveillance cameras to be remotely monitored and controlled over LANs (Local Area Networks), and WANs (Wide Area Networks). It provides significant advantages over high-cost, inflexible video cabling. Accepting the video output of up to four cameras, the SNT-V304 provides remote, GUI-based, monitoring and control using networked PCs running a web browser. Several SNT-V304 units can be connected to a network to expand the number of cameras. A Sony HSR Series hybrid digital recorder can also be connected via an SNT-V304 to provide picture archiving, as well as up to 16 additional camera inputs.

Easy to use

- **Alternative Viewing Modes**

  The SNT-V304 accepts three composite video inputs, with a fourth input switchable to accept either a composite or S-Video signal. These signals are output in JPEG format to the network. At the remote PC terminals, signals from one or more SNT-V304 units can be monitored using a variety of screen combinations, including 4-division split screen (Quad) and single screen (Full/Huge selectable), plus an auto sequencing mode. Display patterns and image sizes are easily switched by simply clicking an icon. A name can be assigned to each video camera and video network station, so the sources being viewed are easily identifiable

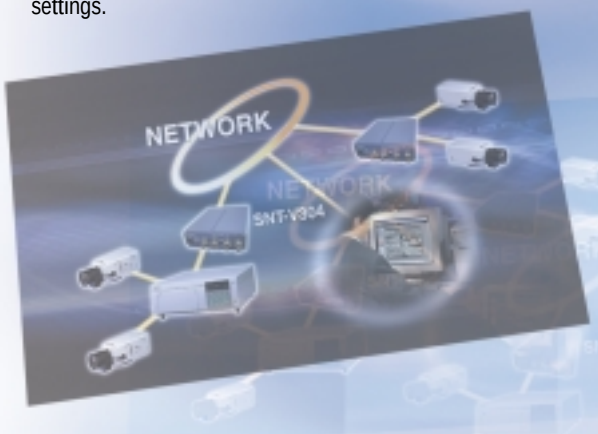
- **PTZ camera control**

  The SNT-V304 provides control of motorized PTZ (Pan, Tilt and Zoom) cameras such as the Sony EVI-D31* from the remote terminals. The PTZ functions are adjustable either in small or large steps by clicking on the control bar. Also, by clicking on a particular point on the screen, the view is changed to make that point the center of the screen.

  *The EVI-D31 is recommended for indoor use only

- **Multi-user access and password protection**

  With the SNT-V304, images are transmitted over a network so that up to eight users can simultaneously monitor camera images. This flexibility allows users to change their physical location on the network, and administrators can easily add or remove users from the system. Access to images can be controlled using password protection for up to 20 users. Three types of password settings are available, one for access, one for remote control of Sony HSR digital video archive recorders, and one for administration settings.



Flexible

- **Network monitoring system**

  SNT-V304 units can be installed across a company's network. Installations can range from a simple one-to-one configuration to a large-scale system that monitors several sites. Even with a large number of sites on a network, highly effective monitoring of alarms is provided because the alarm system of locally installed SNT-V304 units can send images and alarm information to a central monitoring location. Moreover, security managers can access a particular site's camera and review archived information held on Sony HSR digital recorders when these are installed.

- **Easy installation**

  The SNT-V304 is very easily setup. Simply connect the cameras, supply power, provide a network connection and an IP address.

- **Remote monitoring system**

  The SNT-V304 not only supports TCP/IP protocol for internal LAN or WAN networks, but also PPP protocol for use with telephone lines. The ability to distribute images over a telephone line via a modem allows the SNT-V304 to be used to monitor virtually any site, no matter how remote.

Economical

- **Using existing networks**

  By using popular protocols, TCP/IP and 10/100Base T interfaces, the SNT-V304 can be easily integrated onto a company's existing network. This can greatly enhance a current CCTV installation in a company by allowing access from both the company's Intranet or from remote points.

- **Monitoring images via a web browser**

  Since images are transmitted over the network in JPEG format, they can be monitored using the popular Internet Explorer 5.0 web browser.

Quality Images

- **High performance transmitting capability**

  A new chip, incorporating the latest algorithm and compression technology, provides smooth, near-real time images. Subject to the network bandwidth available, these images can be transmitted at a maximum rate of 30 frames/second (352 x 240 pixels) for NTSC, or 25 frames/second (352 x 288 pixels) for PAL.

- **Network management**

  Since an SNT-V304 is constantly transmitting images over the network, parts of the network are always occupied. To keep network traffic flowing smoothly, different settings can be used. One option is to limit the bandwidth utilized by the SNT-V304 to between 100 Kbps and 2.0 Mbps. A second option is to choose between five levels of JPEG compression (Hyper/Super/High/Medium/Low), according to picture quality preference. These options are selected via the Network Wizard.

New PC-based Monitoring System

The SNT-V304 provides monitoring and control of video camera images via a PC web browser. The SNT-V304 has the flexibility to be used in many different applications. With the familiar feel of an Internet home page, the built-in home page of the SNT-V304 provides a GUI (Graphical User Interface) within the web browser to provide all the functions and controls for effective remote monitoring

Benefits

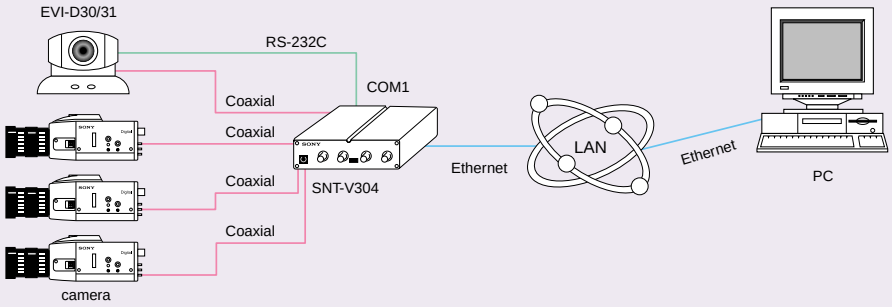
• *Economy*	*Operates over existing networks*
• *Flexibility*	*Remote monitoring, easy to expand*
• *Convenience*	*Simple to install, use, and maintain*
• *Performance*	*High refresh rates provide near-motion pictures*
• *Functionality*	*Remote camera/HSR recorder control, alarm image buffering*
• *Popular interface/protocol*	*TCP/IP, 10/100 BaseT interfaces*

Applications

- *Security monitoring for factories, plants, hotels, universities, banks, hospitals, warehouses, office buildings*
- *Remote monitoring for stores, banks, parking lots, filling stations, traffic, day-care centers*
- *Gate/access control*
- *Image distribution on a network*

System Configuration

LAN Application



Dial-up Application

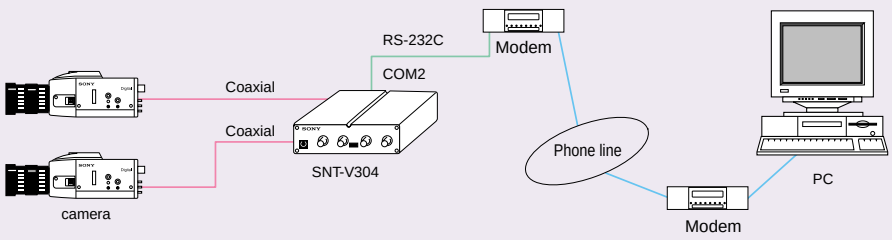


Image Alarm Buffering

The SNT-V304 is equipped with a video memory that stores alarm events. Pre-alarm and post-alarm images are recorded for each alarm, helping to make sure that no critical moments are missed.

■ Alarm activation

Four alarm inputs are provided. When an alarm input is triggered, the following responses are available.

- Alarm output:
  a trigger is sent to external equipment such as electronic door locks
- Pop up:
  a pop-up window is displayed momentarily or, when a different screen is being displayed, the alarm screen is shown.
- E-mail SMTP (Simple Mail Transfer Protocol):
  an e-mail message, with an attached JPEG file showing the alarm event, is sent to a pre-determined e-mail address
- Transfer to FTP (File Transfer Protocol) server :
  an image of alarm event is encoded into a JPEG file and automatically sent to a pre-determined server

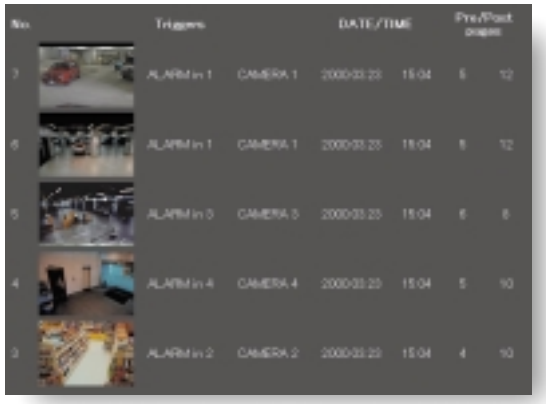
■ Pre/post alarm image storage

The SNT-V304 incorporates a 4 MB video memory, allowing it to store pre/post alarm JPEG images from each camera. The ability to view pre-alarm images can be very important as it will often show the events leading up to the alarm. The number and interval of pre/post images to be stored can be set for each camera independently. Pre/post alarm image storage also can be deactivited during certain periods, such as holidays or non-business hours.

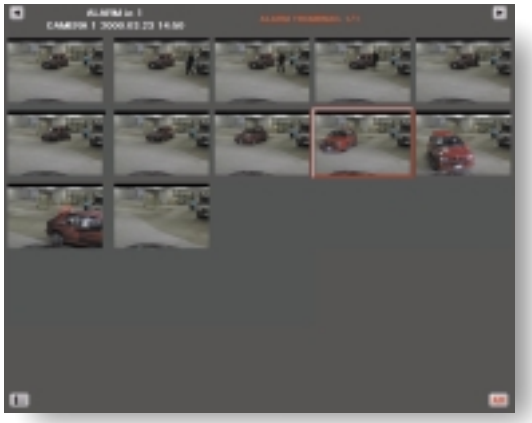
■ Alarm viewer

The JPEG format produces clear, high-quality images. Searching for images is easily done using the alarm list. This list shows the initial image of each alarm event, the type of trigger (alarm), the date and time, and the number of pictures stored. Also available are a Movie Mode, which plays back stored JPEG files, and a Thumb Nail screen which shows all pre/post alarm images. Images on the Thum Nail screen can be checked in greater detail by simply clicking on the image to enlarge it to full-screen size.

• Alarm List



• Alarm Thumb Nail



• Alarm Replay

Network Archiving Using Sony HSR Series Video Recorders

■ HSR recorder Control

Recording is an important function in surveillance systems. However, in distributed environments where facilities can be geographically far apart, providing the facility to record and monitor signals from remote sites can be a problem. Cabling and bandwidth limitations may make it uneconomic to centrally archive all these video sources depending on the type of application. A cost-effective alternative to centralized recording is a local archiving network solution. This solution combines a Sony HSR-1/P or HSR-2/P Hybrid Surveillance Recorder with each SNT-V304 - distributing recording around the network. Because the SNT-V304 provides remote control of HSR Series recorders, operator(s) can access any of the different sites to review incidents as necessary. This access is easily accomplished by using a standard Internet browser. And because of the built-in home page on the SNT-V304, all functions are easily accessed through the Graphical User Interface (GUI). Moreover, the new Playback During Recording function of the HSR-2/P allows images to be simultaneously played back and recorded.

• HSR Recorder user-friendly GUI

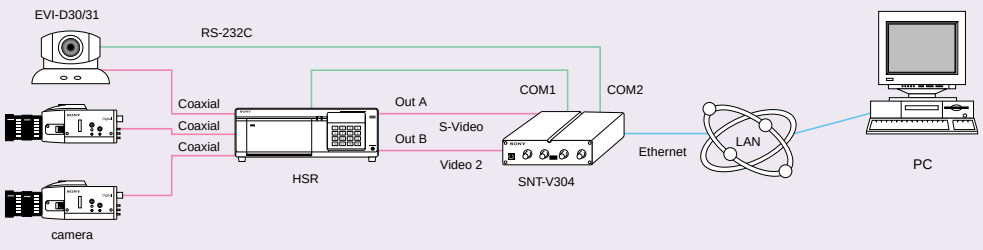
■ S-VIDEO input

One of the four video inputs of the SNT-V304 can be selected to accept the S-Video output signal of an HSR recorder for optimum playback monitoring quality.

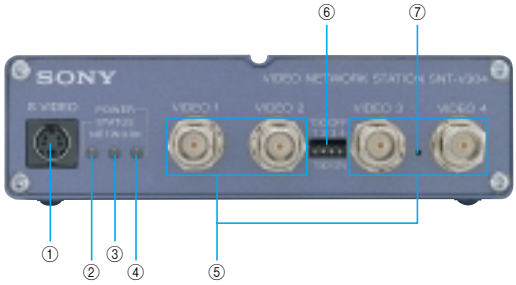
■ Remote Setup

Beyond controlling the HSR series recorders, the setup menu of these recorders can be accessed by security managers, allowing menu settings to be changed remotely after installation. The setup menu is GUI based and easy to use.

HSR recorder Application

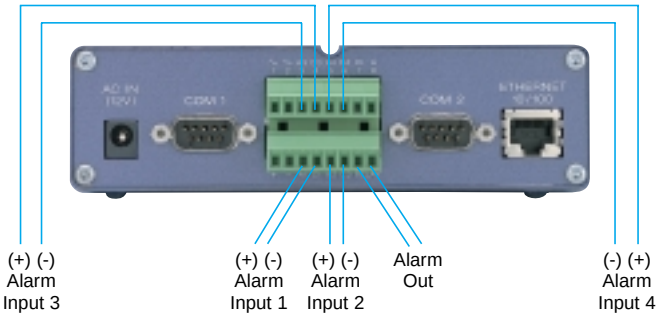


Front Panel



① S-Video input ② Status indicator ③ Network indicator ④ Power indicator
⑤ Video 1 to Video 4 Input ⑥ 75 Ω termination switch ⑦ Reset switch

Rear Panel connectors



Specifications

■ General

Video inputs	VBS/VS, BNC type x (4), Auto sensing for NTSC or PAL with 75 Ω termination on/off dip-switch S video, S terminal connector x (1) Alternative VIDEO 1
Serial port	RS-232C, D-sub 9 pin x (2) COM 1 : Maximum 230 Kbps - Camera control for EVI-D30/31 - Digital recorder control for HSR-1/P, HSR-2/P COM 2 : Maximum 38.4 Kbps - Camera control for EVI-D30/31 - Modem port
Alarm inputs	Terminal connector x (4), positive ON/negative ON
Alarm output	Terminal connector x (1), Relay out
Ethernet connector	RJ45 x (1), 10/100 Base-T Ethernet Cable
Power requirements	12 V AC (with supplied AC adaptor)
Power consumption	5.5 W
Operating temperature	5 to 50 °C (41 to 122 °F)
Dimensions	41.5 mm (H) x 146 mm (W) x 223.5 mm (D) (1 11/16 x 5 3/4 x 8 7/8 inches), including connectors
Mass	0.8 kg (1 lb 12 oz) (not including AC adaptor)

■ System requirements

OS	Windows 95/98, Windows NT 4.0/2000
Web browser	Internet Explorer 5.0 only
PC	Minimum Pentium III 400 MHz and 64 MB RAM
Ethernet	10 Base-T or fast Ethernet 100 Base-T
Login password	up to 20 users

■ Picture Image

Compression method	JPEG	
Maximum performance	NTSC	30 frame/sec (352 x 240 resolution)
		3 frame/sec (704 x 480 resolution)
	PAL	25 frame/sec (352 x 288 resolution)
		2 frame/sec (704 x 576 resolution)
Bandwidth	0.1 to 2.0 Mbps or unlimited	

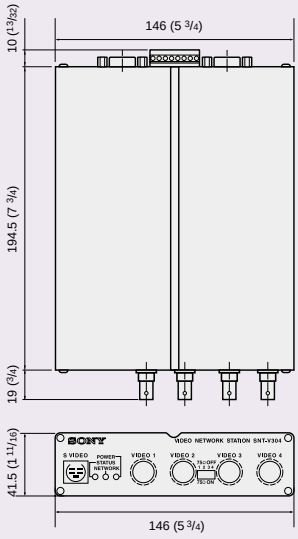
■ Camera view

View size	Full size (352 x 240 /NTSC, 352 x 288 /PAL) Huge size (704 x 480 /NTSC, 704 x 576 /PAL)
Sequence dwell time	5 to 30 seconds, 1 second steps
Site title	up to 40 characters
Camera title	up to 16 characters

■ Alarm view

Alarm duration	1 to 30 seconds
Video memory	Max. 4 MB
Image size	Full size (352 x 240 /NTSC, 352 x 288 /PAL)
Buffering interval time	10, 5, 4, 3, 2, 1, 1/2, 1/3, 1/4, 1/5 s

Dimensions



Unit: mm (inches)

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