

**SNT-EX104**

A four channel stand alone video surveillance encoder, utilising state of the art image transmission and enhancement technology

**Four Channel Video Surveillance Encoder**

Designed for use in applications requiring up to four analogue channels, the SNT-EX104 is a powerful, fully featured video encoder delivering a range of unique features.

The SNT-EX104 delivers a unique four channel stand alone camera encoding concept which adds significant value and performance to existing small to medium sized analogue systems.

Converting up to four traditional analogue video signals into multiple digital video streams for transmission via IP-based networks, the SNT-EX104 encoder offers unrivalled network flexibility. Sony's unique XDNR (Excellent Dynamic Noise Reduction), VE (Visibility Enhancer) technology and DEPA Advanced (Distributed Enhanced Processing Architecture) combine with RS-485 and Coaxitron telemetry support to deliver superior image quality, a powerful video and audio analytics capability and advanced telemetry support to existing analogue systems.

The combination of powerful features and the enhancements offered to existing systems makes the Sony SNT-EX series the obvious choice when migrating from an existing analogue camera system, to an IP based monitoring solution.

ONVIF (Open Network Video Interface Forum) compliance for easy interoperability with IP monitoring products from a variety of manufacturers.

This product comes with the full PrimeSupport package. That's fast, hassle-free repairs, a helpline offering expert technical advice, and a free loan unit while yours is repaired. Plus the peace of mind that Sony is looking after your equipment – and your business.

**Features****Enhanced performance and image quality in all conditions combines with D1 resolution support for up to four analogue cameras**

Sony's unique XDNR (Excellent Dynamic Noise Reduction) and VE (Visibility Enhancer) and DFI (Dynamic Frame Integration) Technology come as standard

features within the SNT-EX series of encoders. This unique image enhancing technology delivers superior noise free images in the most challenging conditions. By utilising Sony's SNT-EX series with XDNR, VE and DFI technology high quality D1 resolution support, analogue cameras can now deliver superior imaging performance

**Triple codec operation**

The SNT-EX series supports three compression formats: JPEG, the best choice of high-quality still images; MPEG-4, the format that provides clear moving images efficiently over limited-bandwidth networks; and H.264, the alternative for severely limited-bandwidth networks, providing twice the efficiency of MPEG-4. The camera can generate JPEG and MPEG-4 images simultaneously

**Clear low-light images**

XDNR (Excellent Dynamic Noise Reduction) technology virtually eliminates image blur in low-light conditions, enabling users to clearly capture images that have not been easy to portray in the past. It also overcomes the problems associated with many competitor camera models. What's more, when both XDNR and Visibility Enhancer are turned on, the cameras can achieve four times the sensitivity compared to when they are off. This technology is ideal for any outdoor surveillance monitoring, such as in a car park at night.

**Improved performance in challenging lighting conditions**

VE (Visibility Enhancer) technology improves performance in challenging lighting conditions, for example high-contrast environments, such as casinos and highways, that had previously been difficult to monitor. The Visibility Enhancer's advanced system suppresses extreme whites and boosts dark areas in a scene simultaneously and dynamically, to produce clearer images on the screen.

**Improved performance from dynamic scenes**

DFI (Dynamic Frame Integration) technology produces superior images from scenes containing both still and moving objects. DFI technology detects moving objects and reduces motion blur, simultaneously detecting stationary objects and reducing jagged

edges. DFI delivers an optimized image with superior clarity and can be added to any analogue system by utilizing Sony's SNT-EX series.

### **Powerful Intelligent Video Analytics**

Sony's SNT-EX Series encoder's include a complete IP surveillance solution based on its Distributed Enhanced Processing Architecture (DEPA™) platform. Intelligent video analytics automatically identify critical events for a high-level of security and to provide streamlined workflows. Unlike conventional monitoring solutions, the DEPA solution provides added intelligence to assist the surveillance operator in taking quick action. Users can precisely refine parameters for use in conjunction with the Intelligent Motion Detection and Intelligent Object Detection functions. By utilizing the SNT-EX series encoders, analogue cameras can now deliver the significant benefits offered by DEPA Advanced analytics

### **Tamper Alarm**

When an attempt is made to tamper with the camera, such as spray-painting the lens, the SNT-EX Series detects this and triggers an alarm. This event can also be used to activate the camera relays, or even to start the Voice Alert function.

### **Advanced Audio Detection**

Unlike conventional audio detection where an alarm is triggered based on a preset audio level, the SNT-EX Series triggers its alarms based on ambient sound conditions as the threshold. The camera stores and updates ambient audio levels and frequencies, and when the threshold level based on this data, is surpassed, an alarm is triggered.

### **Voice Alert**

The encoder can store up to three pre-recorded audio alert messages which may be played via an active speaker upon manual or automatic initiation

### **Versatile telemetry interface**

The SNT-EX series offers support for control of 3rd party telemetry cameras. Maximum flexibility of control is offered via RS-422, RS-485 and Coaxitron interfaces

### **Flexible streaming support**

Video can be stored on optional USB memory media and then streamed using RTP/RTCP or RTSP protocols. This function is available with s/w version 1.1 or later.

### **Flexible recording and storage solutions**

External storage is also possible using USB flash memory. Continuous, pre and post event video may be stored in compressed format for later retrieval.

### **Support for IPv6**

The SNT-EX Series supports Internet Protocol Version 6 (IPv6).

### **ONVIF Compliant**

The ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices including automatic device discovery, video streaming and intelligence metadata. Allows interoperability between network video devices. By utilising Sony SNT-EX encoders, analogue systems can fully benefit from full ONVIF interoperability.

## **Benefits**

### **The perfect four channel stand alone analogue to digital migration solution from Sony**

Sony's SNT-EX104 encoders connect with up to four existing analogue cameras to deliver flexible IP integration solutions. Crisp and clear CCTV images are available with Sony's advanced image processing technology. The SNT-EX104 offers enhanced levels of security even in the most challenging lighting conditions.

### **Highly flexible network capability**

Enjoy exceptional operational flexibility using the ideal compression format for differing image and network types (JPEG for high quality still images; MPEG-4 and H.264 for clear, moving images over bandwidth-limited networks). Maximise network and storage resources by utilizing simultaneous dual-encoding of any two formats, from JPEG, MPEG-4 and H.264.

### **Optimum image quality when using traditional analogue cameras**

By using Sony's SNT-EX range of encoders users can benefit from unrivalled image quality. State of the art image enhancing technology, that only Sony can offer, delivers clearer, brighter and higher quality images.

### **Simple to install, easy to maintain.**

Intelligent IP and MAC support for up to four address simplifies installation and reduces servicing and time and costs

### **ONVIF compliance offers the optimum in system flexibility.**

Compliance with ONVIF (Open Network Video Interface Forum) ensures interoperability and maximum flexibility between a wide range of manufacturers' network video products.

## Technical Specifications

<b>General</b>		<b>Image</b>
Mass	Approx. 1.4 kg (3 lb 1 oz)	Codec image size (HxV)
Dimensions (W x H x D)	210 – 44 – 250 mm (8 3/8 – 1 3/4 – 9 7/8 inches)	D1 (NTSC: 720 x 480, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)
Power requirements	DC12 V	Video compression format
Power consumption	14.4W max.	H.264, MPEG-4, JPEG
Operating temperature	0 to 45 °C	Maximum frame rate
Storage temperature	-20 to +60 °C	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)
<b>System Requirements</b>		<b>Scene analytics</b>
Operating system	Microsoft Windows XP, Windows Vista	Intelligent motion detection
Processor	Intel Core2 Duo, 1.8GHz or higher	Motion detection
Memory	1GB or more	Advanced audio detection
Web brower	Microsoft Internet Explorer Ver.6.0, Ver.7.0	
<b>Encoder Features</b>		<b>Network</b>
Visibility Enhancer	Yes	Protocols
XDNR	Yes	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
Coaxitron control	Yes	Number of clients
<b>Interface</b>		Authentication
Analog video input	x 4	Number of IP address/Mac Address
Ethernet	10BASE-T/100BASE-TX (RJ-45)	x 4
Serial Interface	RS-485	
USB Memory slots	x 4	
Sensor input	x 4	
Alarm output	x 4	
Audio interface (IN/OUT)	IN x 4, OUT x 4	
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: over 2.2kohm, 2.45VDC plug-in power	
Audio line output	Mini-jack (Monaural), Max output level: 1.5Vp-p	
<b>Supplied Accessories</b>		
Supplied accessories	CD-ROM (User's Guide and supplied programs) (1), Installation Manual (1), B&P Warranty Booklet (1), AC adaptor (AC-NB12A) (1), Power cord (1), I/O port connector (SNT-EX104 only) (1)	