SNC-RH124

SNC-RH164

HD

Capture Critical Security Incidents in Clear and Bright HD Images

The SNC-RH124 and SNC-RH164 are network HD rapid dome cameras, supporting H.264, MPEG-4, and JPEG compression formats, that deliver excellent picture quality at HD resolution (1280 x 720, 30 fps) in 16:9 aspect ratio. With a total tilt range of 210° and a 360° endless high-speed panning capability, they can cover a wide monitoring area. Incorporating state-of-the-art image-enhancement technologies in a compact body, they allow users to capture clear and bright images in challenging environments.

These new HD cameras open up a whole new world of video security applications, such as border/airport/port surveillance, town monitoring, and transportation.

IPELA™

FEATURES

Clear and Bright HD Images

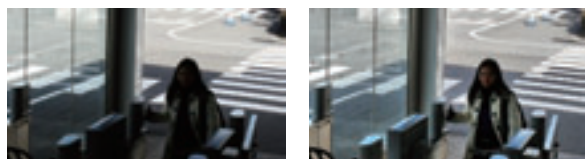### Excellent HD Picture Quality at 30 fps

The SNC-RH Series supports H.264, MPEG-4, and JPEG formats to bring you clear and detailed HD images. Capable of streaming in HD at 30 fps, it is an ideal product for wide-area surveillance applications.

SD   HD

(Actual images)

Visibility Enhancer

The SNC-RH Series also includes Visibility Enhancer technology. This tone-correction technology optimizes the visibility of a scene by increasing brightness in darker areas of the scene and compressing the brighter areas. The result is sharper, clearer images and a higher level of visibility – all of which are critical for security surveillance.
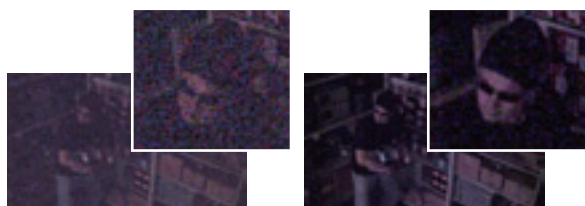
OFF   ON   (Actual images)

XDNR (eXcellent Dynamic Noise Reduction)

Incorporating newly developed XDNR technology, these cameras can provide clear images while at the same time minimizing motion blur under low illumination. What's more, when both XDNR and Visibility Enhancer are turned on, the cameras can achieve up to 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.
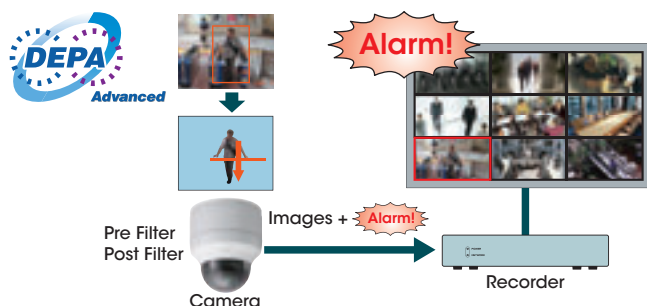
OFF   ON   (Actual images)

Intelligence

DEPA Advanced – Intelligent Video and Audio Analytics

Incorporating DEPA™ Advanced technology, the SNC-RH Series offers intelligent video and audio analytics. With this feature, the camera can trigger an alarm based on rules. This allows users to further refine the criteria for triggering an alarm, making the overall system more efficient.

Alarm!

Pre Filter
Post Filter

Images + Alarm!

Camera   Recorder

- **Intelligent Motion Detection**
  With this feature, the cameras can detect irregular motion and trigger an alarm based on up to three user-defined rules, such as intrusion across a virtual border or a beam intrusion detector[1].

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

- **Advanced Audio Detection[2]**
  Unlike conventional audio detection where an alarm is triggered based on a preset audio level, the SNC-RH 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.

Audio Functions

Voice Alert

The camera can store up to three pre-recorded audio files. Upon initiation, either manually or via an alarm, the camera can play out one of the three pre-recorded audio files via a locally connected active speaker.

Ambient Sound Filter

The SNC-RH Series is capable of learning ambient sound and suppressing extraneous noise.

Dynamic Range Compressor[2]

To prevent audio clipping from occurring due to high audio levels, these cameras employ the dynamic range compressor, which dynamically controls the gain to maintain incoming audio at a proper level.

Echo Cancellation

The SNC-RH Series has an echo-cancellation capability. This feature cancels the echo that would otherwise occur between the operator site and the camera site, when speakers and microphones are used in the system.

System Flexibility

Three Codecs – H.264, MPEG-4, and JPEG Support

The SNC-RH Series supports three compression formats: JPEG, MPEG-4, and H.264. The industry-standard JPEG compression format is the best choice for high-quality still images. MPEG-4 provides clear moving images efficiently over networks when bandwidth is limited. H.264 provides twice the efficiency of MPEG-4, for when bandwidth is even more limited.

Dual-encoding Capability

With its dual-encoding capability, the SNC-RH Series can stream any two formats from MPEG-4, JPEG, and H.246 simultaneously. This flexibility allows you to maximize your network and storage resources.

ONVIF Conformance
(Open Network Video Interface Forum)
In line with Sony's commitment to open standards, the SNC-RH Series conforms to ONVIF specifications. ONVIF defines a common protocol for the exchange of information between different network video devices regardless of manufacturer, and realizes greater interoperability in multi-vendor network video systems.

Support for IPv6
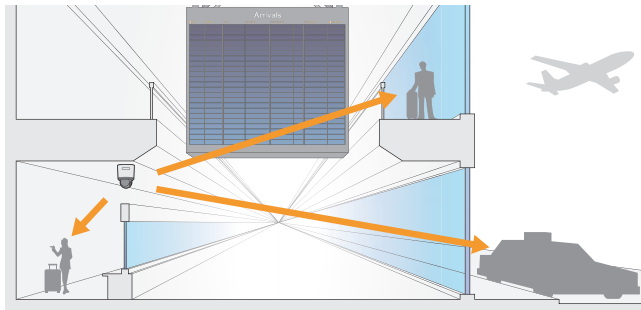The SNC-RH Series supports Internet Protocol Version 6 (IPv6).

Advanced Rapid Dome Mechanis

Above-the-Horizon Tilt – 15° Tilt-up
The SNC-RH Series has a total tilt range of 210°. Thanks to this additional 15° tilt range compared to the normal horizon-only view, the SNC-RH Series is able to monitor elevated areas – which greatly expands its viewing range.
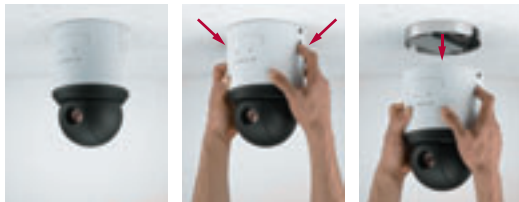
High-speed 360° Endless Panning
The SNC-RH Series has a high-speed 360° endless panning (or rotation) capability, as fast as 400° per second. This allows users to quickly and precisely capture almost any object within the field of view surrounding the camera.

Flexible and Easy Installation

Quick-release Mechanism
The camera can be installed or detached quickly and easily thanks to its newly developed base, which greatly reduces installation and servicing time.

Indoor model

Press Release Button and pull

Outdoor model

Remove Top Sunshade, Rotate Main Unit and pull
(Need to remove locking screws)

hPoE Support*³ (Compliant With IEEE802.3)
Supporting high Power over Ethernet (hPoE), the SNC-RH124 can be powered using the same Ethernet cable it uses for data transfer. This feature greatly reduces the physical infrastructure costs and speed of deployment.

Local Storage / Wireless Capability
The SNC-RH Series has a CompactFlash™ slot. This can be used either with a CompactFlash memory card for local video storage, or for wireless capability. The SNCA-CFW5 (802.11b/g) CompactFlash type wireless LAN card is supported.

Designed for Heavy-duty Outdoor Monitoring (SNC-RH164)

IP66 Rating
The SNC-RH164 complies with the IP66 standard for protection against water and dust.

Hard Coated Dome Cover
The camera is protected by an impact-resistant polycarbonate dome cover.

Integrated Sunshade and Ventilation Mechanism
For outdoor applications, the camera comes standard with a sunshield and special ventilation mechanism.

*1 Beam intrusion detector is available with version 1.1 or later
*2 Available with version 1.1 or later
*3 Available with version 1.2 or later

OPTIONAL ACCESSORIES

Indoor

YT-LD124C
Dome Cover Clear

Indoor

YT-LD124S
Dome Cover Smoked

Indoor

YT-ICB124
In-ceiling Bracket

Outdoor

SNCA-CW5
Outdoor Antenna Cable Kit
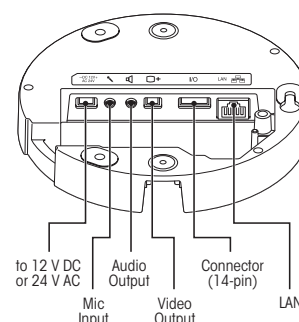
Indoor Outdoor

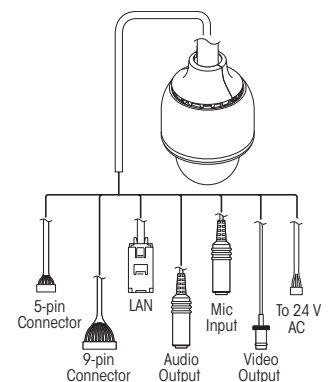**SNCA-CFW5**
Wireless LAN Card

Indoor Outdoor

SNCA-AN1
Wireless LAN Antenna

CONNECTORS

to 12 V DC or 24 V AC
Mic Input
Audio Output
Video Output
Connector (14-pin)
LAN

SNC-RH124

5-pin Connector
9-pin Connector
LAN
Audio Output
Mic Input
Video Output
To 24 V AC

SNC-RH164

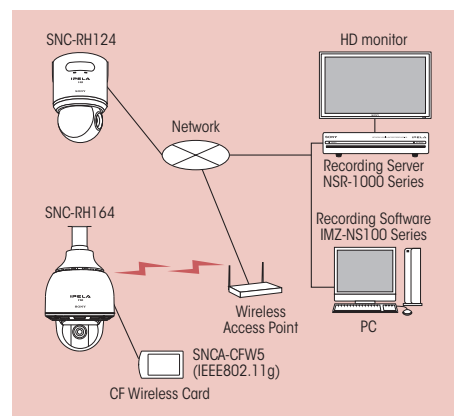# SPECIFICATIONS

	SNC-RH124	SNC-RH164
Camera		
Image device	1/3 HD CMOS	
Minimum illumination	Day : 1.9 lx (XDNR ON VE ON Slow Shutter OFF 50 IRE IP/Analog) Night : 0.17 lx (XDNR ON VE ON Slow Shutter OFF 50 IRE IP/Analog)	Day : 2.1 lx (XDNR ON VE ON Slow Shutter OFF 50 IRE IP/Analog) Night : 0.19 lx (XDNR ON VE ON Slow Shutter OFF 50 IRE IP/Analog)
Number of effective pixels (H x V)	Approx. 2 Megapixel	
Electronic shutter speed	1/2 to 1/10,000 s	
Auto gain control	Auto/Manual (-3 to +18 dB)	
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation	
White balance mode	Auto, Indoor, Outdoor, One-push WB, Manual	
Lens type	Auto-focus zoom lens	
Zoom ratio	10x	
Horizontal viewing angle	5.4 to 50 degrees	
Focal length	f=5.1 to 51mm	
F-number	F1.8 (wide), F2.1 (tele)	
Minimum object distance	10 mm (wide) to 800 mm (tele)	
Pan angle	360 degrees endless rotation	
Pan speed	400 degrees/s (max.)	
Tilt angle	210 degrees (with e-flip)	
Tilt speed	400 degrees/s (max.)	
Camera Features		
Day/Night *1	Yes	
Wide-D *2	No*3	
Visibility Enhancer	Yes*3	
XDNR	Yes	
Image		
Codec image size (H x V)	1280x720, 1024x576, 800x480, 768x576, 640x480, 640x368, 384x288, 320x240, 320x192	
Video compression format	H.264, MPEG-4, JPEG	
Maximum frame rate	H264/MPEG-4: 30 fps (1280 x 720) JPEG: 10 fps (1280 x 720)	
Audio		
Audio compression	G.711/G.726	
Scene analytics		
Intelligent motion detection	Yes (with built-in Post Filter)	
Intelligent object detection	No	
Advanced audio detection	Yes*4	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS,NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
Wireless network	Yes (With Optional *5)	
Number of clients	10	
Authentication	IEEE802.1X	
Analog video output		
Signal system	NTSC/PAL	
Horizontal resolution	480 TVL	
S/N ratio	more than 50 dB	
Interface		
Ethernet	10BASE-T/100BASE-TX (RJ-45)	
Serial interface	RS-232C, RS-422/RS-485 (PELCO D protocol)	
Card slots	CF card x1	
Analog video output	Composite video (1Vp-p)	
Sensor input	x 4	
Alarm output	x 2	
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power	
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms	
General		
Weight	Approx. 4 lb 6 oz (2.0 kg)	Approx. 9 lb 8 oz (4.3 kg)
Dimensions (ø x H)	6 1/8 x 9 inches (154 X 226 mm)	9 3/8 x 13 5/8 inches (238 X 346 mm)
Power requirements	hPoE *6, AC24V, DC12V	AC24V
Power consumption	25 W max.	80 W max.
Operating temperature	32 to +122 °F (0 to +50 °C)	-40 to +122 °F (-40 to +50 °C)
Storage temperature	-4 to +140 °F (-20 to +60 °C)	
System requirements		
Operating system	Windows® XP, Windows Vista™	
Processor	CPU: Intel Core2 Duo 2GHz or higher	
Memory	1GB or more	
Web browser	Microsoft Internet Explorer® Ver6.0, Ver7.0	
Supplied accessories		
	Base unit, Mounting bracket, Screws, Cables (Power input, BNC, I/O, Serial), Installation manual, CD-ROM (User's guide, SNC toolbox), Mounting template, Wire rope	Top sunshade, Rotate-and-lock coupling, Waterproof covers, Bolts, Installation manual, CD-ROM (User's guide, SNC toolbox), Wire fixing belt, Cables

*1 Removable IR Cut Filter   *2 DynaView™ Technology
*3 The camera has a conventional backlight compensation function and Visibility Enhancer, which optimizes image contrast dynamically.
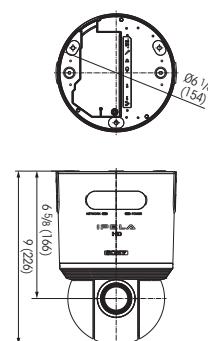*4 Available with software version 1.1 or later   *5 With optional SNCA-CFW5   *6 Available with software version 1.2 or later.
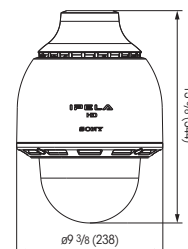
SYSTEM CONFIGURATIONS

DIMENSIONS

SNC-RH124

SNC-RH164

Unit: inches (mm)

CONFIGURATION

SNC-RH164

- Mounting arm with screw (not supplied)
- 1. Rotate and Lock Coupler
- 4. Top Sunshade
- 2. Base Unit with Memory Back-up
- 3. Main Unit with Built-in Sunshade

Install in indicated numerical order

* This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)