

# SONY®

NTSC

Network Mini Dome Cameras

## SNC-DF Series



SNC-DF40N  
SNC-DF70N



## Choose From the Sony High-Performance Mini Dome Camera Lineup to Meet Your Monitoring Needs – Ranging From Indoor to Outdoor, 24-hour Monitoring Applications.

Sony introduces new additions to its line of surveillance mini dome cameras – SNC-DF40 and SNC-DF70 Network Cameras. The compact dome design of the SNC-DF Series preserves a discreet appearance and is ideal for use in building entrances, schools, offices, retail stores and shopping malls.

The SNC-DF Series incorporates a built-in web server and network interface, which enables users to control the cameras and monitor images over a Network. These cameras utilize both MPEG-4 and JPEG compression formats, allowing for both smooth video/audio streaming and providing high-quality still images over a wide range of network bandwidths.

What's more, this series of cameras incorporate an external microphone input, and an audio line output for active speakers, allowing for audio monitoring and audible warnings at the monitoring site.

To meet a wide range of monitoring needs, the SNC-DF70 features a Day/Night capability in a durable aluminum diecast construction with an IP-66 rating, ideal for 24-hour outdoor surveillance applications.

## FEATURES

### All-in-one Network Mini Dome Camera

The SNC-DF Series incorporates a built-in web server and a 100Base-TX/10Base-T network interface in a compact dome design, allowing users to monitor live images and control cameras from a PC running a standard web browser; additional software or plug-ins are not needed. Its compact, discreet appearance is ideal where less noticeable video cameras are preferred.



Viewer

### Superior Picture Quality

The SNC-DF Series incorporates a 1/4-type Super HAD™ CCD that achieves high-horizontal resolution of 480 TV lines and high sensitivity. The CCD imager provides a minimum illumination of 0.8 lx at F1.0 (SNC-DF40)/0.9 lx at F1.0 (SNC-DF70), enabling the cameras to capture clear images even under low light conditions.

### Power Over Ethernet

The SNC-DF Series supports the 802.3af PoE standard, allowing for reduced infrastructure wiring costs and installation time.

## MPEG-4 and JPEG Compression Formats

The SNC-DF Series supports both the MPEG-4 and JPEG compression formats. The high compression ratio of MPEG-4 provides smooth moving images over networks even when bandwidth is limited. If higher quality still images are preferred, then the industry standard JPEG compression format is selectable from the setup menu. The SNC-DF Series also supports variable bit rates up to 2Mb/s.

Image size can be selected from six modes: 640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, and 160 x 120.

## High Frame Rate

The SNC-DF Series produces images at a maximum frame rate of 30fps (NTSC)<sup>\*1</sup> when the image size is 320 x 240 in both MPEG-4 and JPEG modes, producing clear and smooth-moving images.

<sup>\*1</sup> In order to view images at the maximum frame rate, adequate PC processing power and network bandwidth are required.

## Audio Monitoring

Incorporating an external microphone input, the SNC-DF Series is capable of picking up sound from a camera site clearly. The unit is also equipped with an audio line output for active speakers; allowing users to communicate with the remote site, expanding the capability of remote monitoring applications.

## Day/Night Function (SNC-DF70)

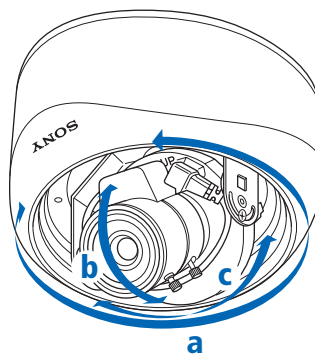
The SNC-DF70 features a "Day/Night" capability, which provides optimized sensitivity in both day and night shooting applications. As the scene darkens, an infrared filter is automatically replaced with a clear filter and the camera switches to B&W mode, allowing for operation at a minimum illumination of 0.2 lx at F1.0, or 0 lx<sup>\*2</sup> using an IR Illuminator from 3rd party vendors<sup>\*3</sup>.

<sup>\*2</sup> 0 lux means absence of visible light to the naked eye.

<sup>\*3</sup> Please contact your local Sony dealers for 3rd-party item.

## Easy Mounting and Flexible Installation

The SNC-DF Series can be wall-mounted or ceiling-mounted with the supplied ceiling-mount bracket. What's more, the 2.7x vari-focal lens incorporated into these cameras can be freely rotated, allowing for easy adjustment of the camera's viewing angle after installation.



a (Panning):  $\pm 150^\circ$

b (Tilting):  $\pm 75^\circ$

c (Rotating):  $\pm 150^\circ$

Adjustment range of lens angle



Ceiling Surface Mount (SNC-DF40)



Ceiling Flush Mount (SNC-DF40)

<sup>\*</sup>Optional YT-ICB40 Ceiling-mount bracket is required.

## Rugged Design (SNC-DF70)

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The SNC-DF70 is specially designed to be used for outdoor surveillance or indoors for vandal resistant applications. The cameras are housed in a heavy-duty aluminum die cast enclosure with a durable polycarbonate viewing window. These cameras comply with the IP66<sup>\*4</sup> standard for protection against water and dust.

<sup>\*4</sup> Ingress Protection (IP) standard is a system for numerically classifying the degree of protection provided by enclosures of electrical equipment against solid objects and liquids. IP66 means there is no ingress of dust and the equipment is protected against powerful water jets.

## Network Features

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### Adaptive Rate Control

To meet Quality of Service (QoS) requirements over a network, the SNC-DF Series provides an adaptive rate control function. This function automatically varies the bit rate of audio and video data to meet changing network conditions and selects the most appropriate frame rates. This function helps prevent audio and video breakup.

### Multicasting Capability

The SNC-DF Series has a built-in multicasting capability that enables efficient video and audio streaming to a large number of users.

### Simultaneous Access

Up to 20 (JPEG mode)/10 (MPEG-4 mode) users can simultaneously access any of the SNC-DF Series cameras and monitor images separately.

### Network Security Features

Access to the SNC-DF Series can be restricted to one or more groups of selected users. Up to ten different groups can be established by defining an IP address range for each group. In addition, user names and passwords can be assigned to allow three levels of access. The administrator has complete access/control of the cameras; while the other two levels of access can be set to limit user privileges to functions such as viewing, trigger control, etc.

## Alarm Functions

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### Motion Detection/Alarm Trigger

The SNC-DF Series is equipped with a built-in motion detection function that can generate an alarm through its alarm-output port or trigger another device to perform a variety of actions. The motion detection function uses vector information to detect motion so that unwanted noise components do not accidentally trigger the alarm. In addition to these features, the SNC-DF Series is equipped with a sensor-input port that can receive a trigger from an external sensor.

### Pre-/Post-Alarm Image Storage

With a built-in buffer memory, the SNC-DF Series can store several seconds of pre-alarm and post-alarm still images when an alarm is triggered by the motion detection function, the alarm input, or both.

#### Image storage capacity

MPEG 4 image: Approx. 15 s\* (pre-/post- 7.5 s)

\*when the image size is 320 x 240 at a frame rate of 30fps and a bit rate of 512 kbps

JPEG image: Approx. 10 s\* (pre-/post- 5 s)

\*when the image size is 320 x 240 at a frame rate of 15fps and the image quality is set to Level 3

### Image Transfer Using FTP/SMTTP

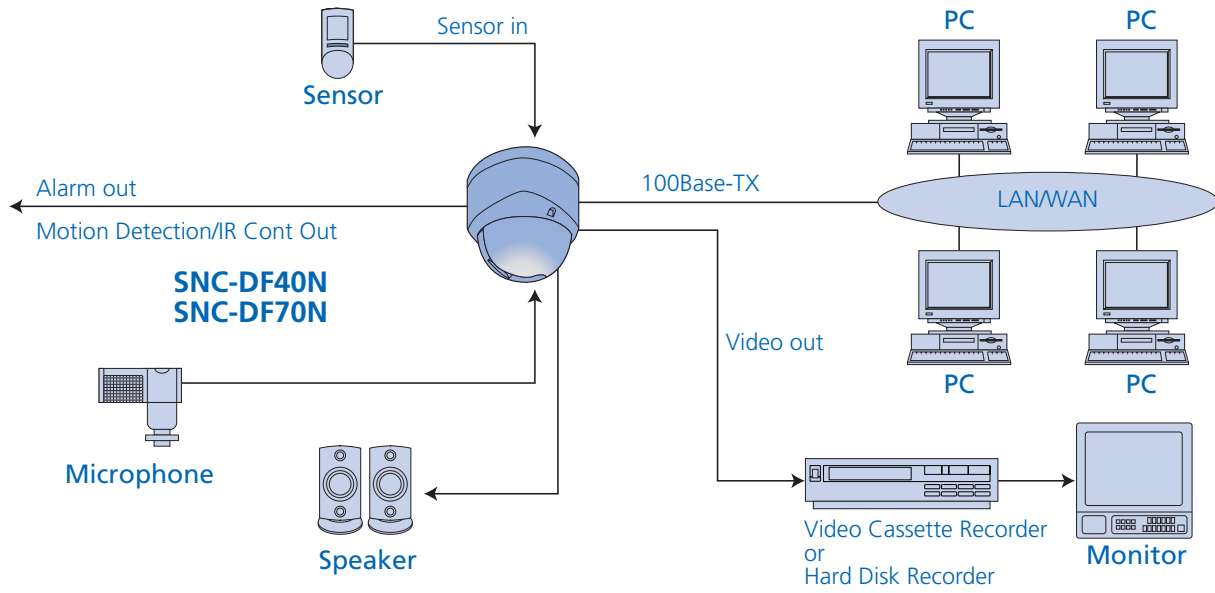
All of the pre-/post-alarm images stored at the time of an alarm event can be transferred to an FTP server for later viewing. Also, the still image captured at the time of an alarm event can be sent to a designated e-mail address.

## Analog Composite Video Output

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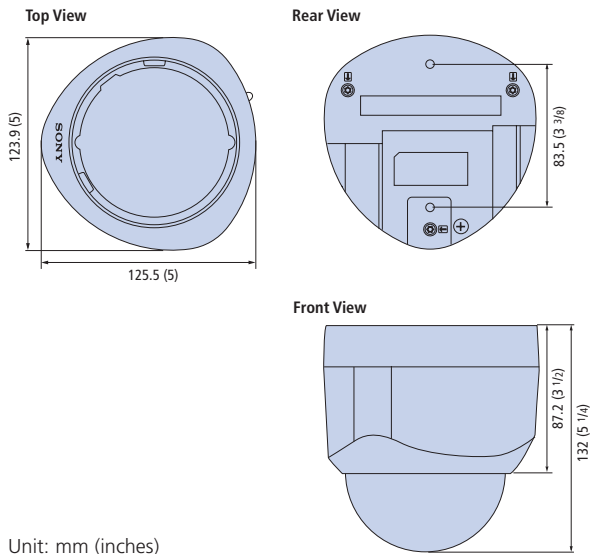
The SNC-DF Series is equipped with an analog composite video output, allowing camera images to be directly recorded or monitored by connecting video equipment such as time-lapse recorders, hard disk recorders, and monitors.

# SYSTEM CONFIGURATION

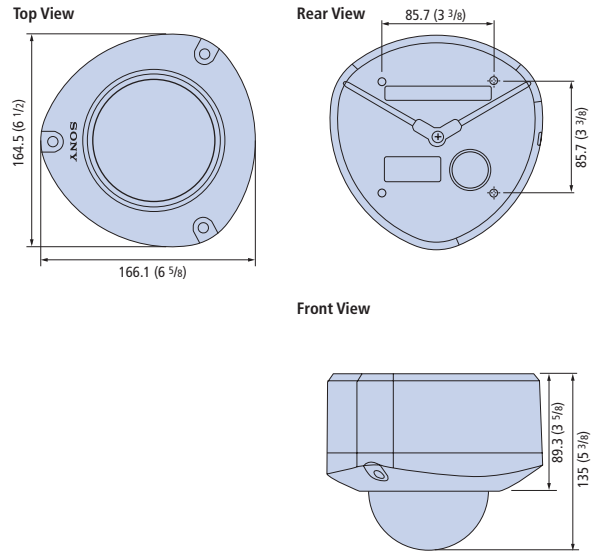


## DIMENSIONS

### SNC-DF40N



### SNC-DF70N



Unit: mm (inches)

## OPTIONAL ACCESSORIES



- YT-ICB40**  
Ceiling-mount bracket for SNC-DF40N
- YT-ICB70**  
Ceiling-mount bracket for SNC-DF70N

## REAR PANEL LAYOUT



SNC-DF40N

# SPECIFICATIONS

	SNC-DF40N	SNC-DF70N
<b>Camera</b>		
Image device	1/4-type Super HAD CCD	
Number of effective pixels (H x V)	768 X 494	768 X 494
Electronic shutter	1/60 to 1/100,000 s	1/60 to 1/100,000 s
Gain control	Auto:ON/OFF switchable (up to 18 dB)	
Exposure control	Auto, Back-Light-Compensation(BLC)	
White balance mode	ATW	
Lens mount	CS mount	
Lens type	x2.7 Vari-focal auto iris lens	
Horizontal viewing angle	66.6 to 26.9 degrees	
Focal length	f=3.0 to 8.0 mm	
F number	F=1.0	
Iris	CCD iris	
Minimum object distance	200 mm	
Other functions	Motion detection	Motion detection, Day/Night function
<b>Image</b>		
Image size (H x V)	640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120	
Compression format	MPEG-4/JPEG selectable	
Maximum frame rate (MPEG-4 mode)	Max. 30 fps (320 x 240)	Max. 30 fps (320 x 240)
(JPEG mode)	Max. 30 fps (320 x 240)	Max. 30 fps (320 x 240)
<b>Audio</b>		
Compression format	G.711 (64 Kbps) / G.726 (40, 32, 24, 16 Kbps)	
<b>Network</b>		
Protocols	TCP/IP, UDP, RTP, RTCP, ARP, ICMP, DHCP, DNS, HTTP, FTP, SMTP	
Number of clients	JPEG: 20 users, MPEG-4: 10 users	
<b>Interface</b>		
Ethernet	100Base-TX/10Base-T (RJ-45)	
Analog video output	Composite video (1.0 Vp-p)	
Monitor output	2-Pin connector	
I/O port	Sensor in (1), Alarm out (2)	
External microphone input	Mini-jack, 2.4 VDC plug-in power, 4.7 kΩ	
Audio line output	Mini-jack (Monoaural), max output level: 1 Vrms	
<b>Analog video output</b>		
Signal system	NTSC (Composite)	NTSC (Composite)
Horizontal resolution	480 TV lines	
S/N ratio	50 dB	
Minimum illumination (Color)	0.8 lx (AGC On, F1.0, 50IRE)	0.9 lx (AGC On, F1.0, 50IRE)
(Black and White)	–	0.2 lx (AGC On, F1.0)
<b>General</b>		
Weight	Approx. 1 lb 10 oz (750 g)	Approx. 3 lb 5 oz (1,500 g)
Dimensions (W x H x D)	5 x 5 1/4 x 5 inches (124 x 132 x 126 mm) without projection ports	6 1/2 x 5 3/8 x 6 5/8 inches (165 x 135 x 166 mm) without projection ports
Power requirements	AC24 V 50/60 Hz, DC12 V,POE	
Power consumption	7.5 W	8.0 W
Operating temperature	14 to 122 °F (-10 to +50 °C)	
Storage temperature	-4 to +140 °F (-20 to +60 °C)	
Operating humidity	20 to 80%, non-condensing	
Storage humidity	20 to 95%, non-condensing	
<b>Supplied accessories</b>		
	CD-ROM (setup program, users guide), Monitor cables (2), AC power code, Wire rope, Screws (2), Dome cover screw, Installation manual	CD-ROM (setup program, users guide), Monitor cables (2), AC power code, Wire rope, Screws (2), Installation manual
<b>System requirements</b>		
Operating system	Microsoft® Windows® 2000/XP	
Processor	Intel® Pentium® III, 1 GHz or higher (Recommendation: Pentium IV, 2GHz or higher)	
Memory	256 MB RAM minimum	
Web browser	Microsoft Internet Explorer® version 5.5 or 6.0	

**SONY**

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