# SONY



SSC-CD SERIES Fixed Mini-dome Cameras SSC-CD45P – SSC-CD49P SSC-CD75P – SSC-CD77P

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# SSC-CD Series Fixed Mini-dome Cameras

Reproducing extremely clear and detailed images – Sony Analogue Mini-dome Cameras are ideal for use in commercial and industrial locations such as, airports, schools, offices and many more!

**S**ONY INTRODUCES a new line of fixed mini-dome cameras. All of these cameras employ highly-sensitive imagers, providing amazingly clearand detailed images in a number of security and surveillance monitoring applications. For easy setup, these cameras incorporate the Sony patented "Ball Joint Lens Mount" mechanism providing quick and easy adjustment of the camera's viewing angle during installation.

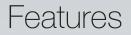
The SSC-CD77P and SSC-CD75P are vandal-resistant mini-domes designed to be used both indoors and outdoors. The SSC- CD77P camera incorporates the latest 1/3-type CCD with SuperExwave<sup>™</sup> technology, which provides superior sensitivity. Designed for 24/7 operation, this camera incorporates a Day/Night function, providing detailed images even in low lighting conditions. The SSC-CD75P utilizes a 1/3-type Super HAD CCD<sup>™</sup>, delivering high-quality images for security applications that do not require Day/Night capability.

The SSC-CD49P and the SSC-CD45P are compact and discreet dome cameras designed for indoor security and surveillance monitoring applications. The SSC-CD49P camera incorporates the Sony unique Dynaview<sup>™</sup> technology to provide a wider dynamic range when viewing high contrast scenes with severe backlighting such as near building entrances or windows.

Feature-rich and flexible – this line of mini-dome cameras offers a wide variety of options to choose from. Each camera has a unique offering, which allows users the flexibility to choose the right camera to match the solution requirements.

	SSC-CD45P	SSC-CD49P	SSC-CD75P	SSC-CD77P
			-	
CCD Imager	1/3-type Super HAD CCD	1/3-type CCD With Dynaview Technology	1/3-type Super HAD CCD	1/3-type CCD With Super Exwave Technology
Horizontal Resolution (TV lines)	540	480	540	540
Ruggedized Design (Vandal- and Weather-Resistant)	—	_	<ul> <li>Image: A start of the start of</li></ul>	<ul> <li>✓</li> </ul>
Wall- or Ceiling-Mountable	V	V	V	<ul> <li>✓</li> </ul>
3.6x Zoom, Auto-Iris Vari-Focal Lens	V	V	V	<ul> <li>✓</li> </ul>
Sony Patented Ball-Joint Lens Mount	V	V	V	<ul> <li>✓</li> </ul>
Day/Night Function	_	-	_	<i>v</i>
Wide Dynamic Range With DynaView	_	<ul> <li>✓</li> </ul>	_	_
Backlight Compensation	V	_	V	<ul> <li>✓</li> </ul>
Auto Tracing White Balance (ATW)/ATW pro	V	V	V	V

### Features at a glance



#### Sony Patented "Ball Joint Lens Mount" Technology

With the Sony patented "Ball Joint Lens Mount" mechanism incorporated into the vari-focal lens, the lens can be rotated freely in any direction. Unlike conventional cameras, only a "single action" is required to adjust pan and tilt angle, providing quick and easy adjustment of camera's viewing angle during installation.

### **Superb Picture Quality**

#### SuperExwave Technology

The SSC-CD77P incorporates an advanced 1/3-type CCD with SuperExwave technology that achieves extremely high sensitivity levels. This CCD imager provides a minimum illumination of 0.6 Ix in colour and 0.06 Ix in B/W at F1.3, enabling the camera to capture clear and detailed images even under low-light conditions.

# Wide Dynamic Range with DynaView Technology

The SSC-CD49P incorporates DynaView technology, which dramatically improves the camera's dynamic range by 128 times when compared to conventional cameras to reproduce clear images in extreme high-contrast environments. The camera captures the same image twice – first with a normal shutter speed, and then with a high shutter speed. The dark areas captured at normal shutter speed and the bright areas captured at high shutter speed are then combined into one image using an advanced DSP LSI. Additionally, as these high contrast scenes may have different lighting conditions, two white balance circuits, one for normal and the other for high shutter speed, are employed. This advanced technique reproduces high contrast images with proper colour.



#### **High Horizontal Resolution**

The high-quality CCD imager in combination with the camera's state-of-the-art DSP technology produces a high-horizontal resolution of 540 TV lines, providing amazingly clear and detailed images.

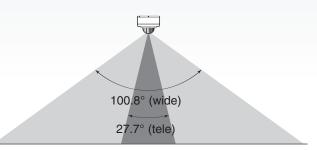
Sonv Patented

**Ball-Joint Lens Mount** 

#### Super HAD<sup>™</sup> CCD

The SSC-CD75P and SSC-CD45P incorporate a 1/3-type Super HAD CCD that delivers high-sensitivity levels and high-picture quality for a number of monitoring applications. The minimum illumination of these cameras is 0.9 k at F1.3.

#### Powerful 3.6x Zoom, Vari-focal Lens



These cameras come equipped with a 3.6x zoom, vari-focal lens that covers an extremely wide range of viewing angles from 100.8° (wide-angle) to 27.7° (telephoto). This feature provides installation flexibility for a number of different applications and locations.

DynaView Technology



At normal speed shutter



At high speed shutter



SSC-CD49P camera image

simulated images

### Flexible and Easy Installation

#### Wall- or Ceiling-Mountable / Easy Viewing Angle Adjustment

These cameras can be easily wall- or ceiling-mounted<sup>1</sup> for installation flexibility. Also, in addition to the BNC video output on the rear of the camera, a secondary video output (RCA phono jack) is provided on the front of the camera, which allows installers to monitor and adjust the camera focus and viewing angle easily and accurately.

1 A supplied mounting bracket is required when the SSC-CD77P is wall- or ceiling-mounted.

#### **Ruggedized Design**

The SSC-CD77P and SSC-CD75P vandal-resistant cameras are housed in a heavy-duty aluminum die-cast enclosure with an impact resistant polycarbonate dome. In addition, not only does the camera comply with the IP66<sup>2</sup> standard, but it has been designed to be further resistant to water ingress by using a special inner conduit for the camera cables. For cold weather outdoor applications, the optional YT-HU75 Heater Unit is available. This allows the camera to be used in severe temperatures as low as -40 °C (-40 °F).

2 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.

### **Operational Flexibility**

#### "Day/Night" Function

The SNC-CD77P can switch from day mode (Colour) to night mode (B/W) by replacing the camera's infrared cut filter with a clear filter. Based on user presets, the camera can toggle between day mode and night mode using an external sensor or automatically in response to surrounding light conditions. The camera can simultaneously switch to night mode and provide a trigger for near-IR illuminators via its external control port, allowing the camera to operate even in low light conditions.

### **Other Convenient Features**

#### **Backlight Compensation (BLC)**

Unwanted backlight can often cast a shadow in front of the subject of an image making it appear dark to the camera. The BLC function incorporated in the SSC-CD77P, SSC-CD75P and SNC-CD45P cameras automatically compensates for such conditions, making the subject more visible on the monitor.

#### Automatic Gain Control (AGC)

These cameras are equipped with an advanced AGC function. This automatically boosts the camera gain up to 24 dB, allowing operators monitoring the image to distinguish the subject more easily in low-light conditions.

# Auto Tracing White Balance (ATW)/ATW Pro

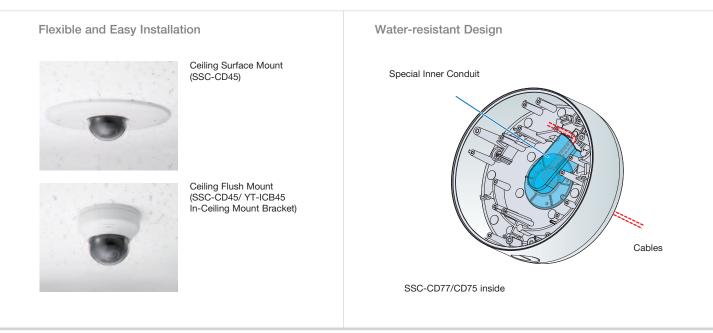
ATW is a feature that automatically adjusts the camera's white balance to adapt to changing light conditions. With ATW, these cameras can compensate for a colour temperature range between 2,000 K to 10,000 K so that operation under a variety of lighting conditions, including special light sources such as a sodium vapor lamp, can be achieved. When operating under natural light, incandescent lamps, or fluorescent light sources, ATW Pro, which compensates for a colour temperature range between 2,500 K to 6,000 K, is ideal for reproducing colour images closer to what we see with our eyes.

#### AC Line Lock/Internal Line Lock

These cameras feature both an AC line lock and an internal line lock for synchronisation. The AC line lock is ideal in multi-camera operations so that all cameras connected to the same power line are synchronised, preventing the video from rolling vertically when switching between cameras. The vertical phase can be adjusted by  $\pm$ 90 degrees.

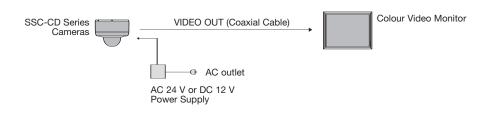
#### **Flexible Power Operation**

These cameras offer a choice of two types of power: 24 V AC or 12 V DC. The camera automatically adapts to the applied power source for fast and effective operation.

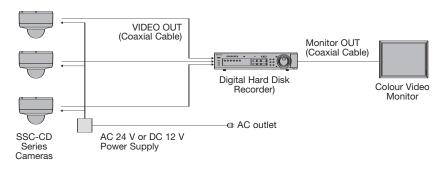


# System Configuration

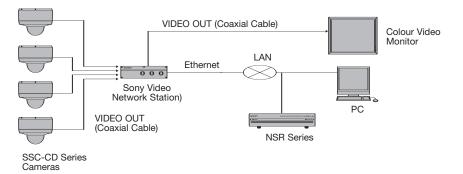
#### Single Camera Operation



#### **Multiple Camera Operation**



#### Multiple Camera Operation over LAN



# **Optional Accessories**



YT-ICB45 In-Ceiling Mount Bracket



YT-HU75 Heater Unit for SSC-CD77P and SSC-CD75P

## **Specifications**

	SSC-CD45P	SSC-CD49P	
Camera			
mage device	1/3-type CCD with	1/3-type CCD with	
-	Super HAD Technology	DynaView Technology	
Number of effective pixels (H x V)	440,000 (752 x 582)		
Gain control	ON/OFF		
White balance mode	ATW/ATW Pro		
_ens type	Auto iris vari-focal lens		
Zoom ratio	3.6x optical zoom (1.5x digital zoom)		
Horizontal viewing angle	100.8° to 27.7°		
Focal length	f=2.8 to 10.0 mm		
Backlight compensation	ON/OFF	DynaView ON/OFF	
Analogue video output	BNC x1, 1.0 Vp-p, 75 Ω, RCA x 1		
Signal system	PAL (C	omposite)	
Sync system	AC Line Lock/Internal Lock		
Horizontal resolution	540 TV lines	480 TV lines	
S/N ratio	more than 50 dB (AGC ON/Weight ON)		
Vin. illumination	0.9 lx	Colour: 0.7 lx	
	(50IRE, F1.3, AGC ON)	(50IRE, F1.3, AGC ON)	
General			
Mass	approx. 4	40 g (15 lb)	
Dimensions (Ø x H)	approx. 126 x 97 mm (5 x 3 7/8 inches)		
Power requirements	AC24V/DC12V		
Power consumption	4.0 W max. 4.2 W max.		
Operating temperature	-20 to 50 °C (-4 to 122 °F)		
Storage temperature	-40 to 60 °C (-40 to 140 °F)		
- ·		· · ·	
Supplied accessories			
Template, Wire rope, M4 shoulder scr	ew, Operation instructions		

Dimensions	Unit: mm (inches)
SSC-CD49P	(k/L E) (g) (L G) (k/L E) (g) (L G) (g) (L G) (g) (L G) (g) (g) (g) (g) (g) (g) (g) (g) (g) (g)
Ø 5 (7/32) hole x 2	
83.5	(5 9/32)
SSC-CD75P SSC-CD77P	7.5 (7) (7) (7) (7) (7) (7) (7) (7) (7) (7)
R44.5 (1 13/16)	
Conduit hole (3/4)	0 0 0 0
85.7	(3 3/8)
46 (1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	13/16) Hole for cables o58 to 72 (2 3/6 to 2 7/8) Horizontal marker
	Hole for bracket

Camera			
Image device	1/3-type CCD with	1/3-type CCD with	
0	Super HAD Technology	SuperExwave Technology	
Number of effective pixels (H x V)	440,000 (752 x 582)		
Gain control	ON/OFF		
White balance mode	ATW/ATW Pro		
Lens type	Auto iris vari-focal lens		
Zoom ratio	3.6x optical zoom (1.5x digital zoom)		
Horizontal viewing angle	100.8° to 27.7°		
Focal length	f=2.8 to 10.0 mm		
Backlight compensation	ON/OFF		
Day/Night function		Auto/External control	
Analogue video output	BNC x1, 1.0 Vp-p, 75 Ω, RCA x 1		
Signal system	PAL (Composite)		
Sync system	AC Line Lock/Internal Lock		
Horizontal resolution	540 TV lines		
S/N ratio	more than 50 dB (AGC ON/Weight ON)		
Min. illumination	0.9 lx (50IRE, F1.3, AGC ON)	Colour: 0.6 lx (50IRE, F1.3, AGC ON)	
		B&W: 0.06 lx	
		(50IRE, F1.3, AGC ON)	
General			
Mass	approx. 1.75 kg (3 lb 11 oz)		
Dimensions (Ø x H)	approx. 177 x 141 mm (7 x 5 5/8 inches)		
Power requirements	AC24V/DC12V		
Power consumption	4 W max. (16 W with heater option)		
Operating temperature	-20 to 50 °C (-4 to 122 °F)		
	-40 to 50 °C (-40 to 122 °F) w/heater unit		
Storage temperature	-40 to 60 °C (-40 to 140 °F		
Supplied accessories			
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SSC-CD75P

Bracket, Template, Torx wrench, M4 screws (4), Wire rope, M4 shoulder screw, Operation instructions

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Hole for bracket

\_ Vertical marker

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SSC-CD77P