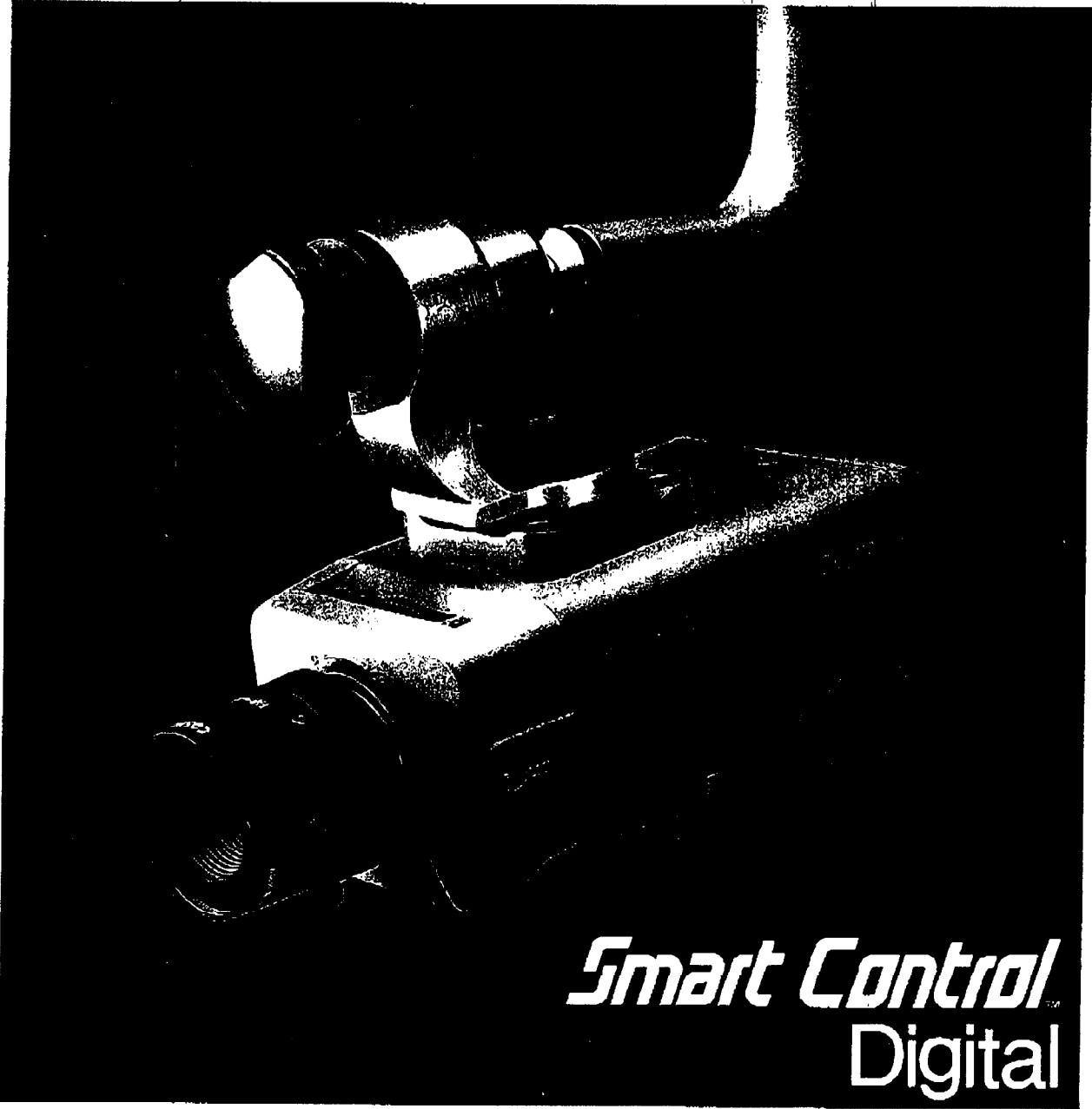


NTSC

SONY
SURVEILLANCE
SYSTEMS

SSC-DC14

CCD Color Video Camera



Lens and mount bracket shown are options.

SONY®

Sony's advanced digital technology delivers greater reliability, consistency and versatility in CCTV operation.

Sony introduces the new SSC-DC14 - 1/3-inch color DSP CCD high resolution camera specifically designed for surveillance and monitoring systems. Sony's advanced digital technology enables the camera to reproduce high fidelity images even in adverse light conditions. A host of outstanding features such as ATW pro, Turbo AGC™, Aperture Control, plus the intelligent and flexible automatic backlight compensation by Smart Control™ make this camera an ideal choice for demanding CCTV (Closed-Circuit Television) applications.



Smart Control.

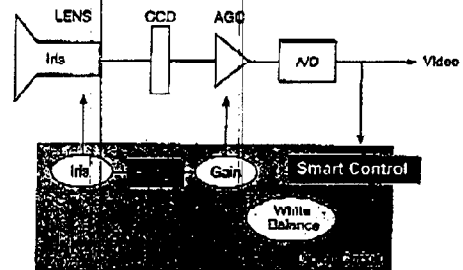
AUTOMATIC BACKLIGHT COMPENSATION FUNCTION

Smart Control is a newly developed digital light level control feature. When the BLC (Back Light Control) switch on the camera's rear panel is set to ON, this allows the camera to automatically identify the optimum picture balance and then execute the necessary light level compensation. Smart Control is activated by controlling three factors of "Iris", "Gain" and "White Balance" at the same time so that clear images with suitable light level can always be obtained. Smart Control works effectively wherever an object appears in a picture because the SSC-DC14 senses the entire area of the frame and measures the average light level.

This feature represents a distinct advance in the measurement of the light level of a picture and enables the SSC-DC14 to be fully utilized in various surveillance and security applications.

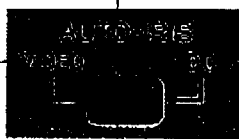
■ Lens Selection

To allow for flexibility in the choice of auto iris lenses, the SSC-DC14 will accept both Video type (ALC) or DC type (Non ALC) auto iris lenses. Selection is done using the AUTO IRIS select switch. For backlight applications, to fully utilize the Smart Control capabilities, the DC type auto iris lens is recommended.



Video servo type

DC servo type



Auto iris lens selection



Smart Control is activated

HIGH PICTURE QUALITY

The SSC-DC14 incorporates a densely packed 1/3-inch IT (Interline Transfer) Hyper HAD™ (Hole Accumulated Diode) CCD sensor. With 380,000 effective picture elements, the SSC-DC14 delivers an outstanding 470TV lines of horizontal resolution. Sony's highly advanced Hyper HAD sensor offers remarkably high sensitivity by precisely locating a microlens over each pixel, converging available light onto the photosensitive layer. Even in minimal lighting conditions the SSC-DC14 produces pictures with sufficient contrast and excellent color fidelity. Also, the HAD sensor™ technology ensures an excellent signal-to-noise ratio of 50dB.

TURBO AGC

In addition to the AGC function, the SSC-DC14 is equipped with new advanced Turbo AGC function, which automatically boosts its video gain by 6dB over the AGC range so that a subject under low illumination can be distinguished more clearly. This feature adds flexibility to surveillance and monitoring operation.

ATW (Auto Tracing White Balance) CONTROL

In order to meet a wide variety of operational conditions, the SSC-DC14 has two kinds of ATW modes - ATW pro and ATW. ATW pro is particularly suited for applications, where the operator may need to see the objects as they appear to the eye under various light conditions. The effective operational color temperature range on this feature is 2500K to 6000K. ATW mode allows the operator to see objects as they appear during daylight. The color temperature compensation range is extended down to 2000K and up to 10,000K. This feature ensures faithful and reliable color reproduction in a picture under the most varied circumstances. For example, parking lot with high pressure sodium lamps have a color temperature of 2100K.

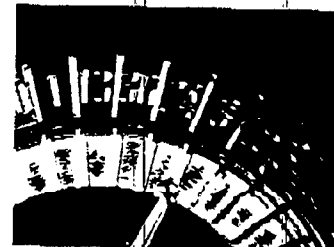
CCD IRIS FUNCTION

The SSC-DC14 is equipped with a CCD IRIS function. The exposure time of the photosensors is controlled by automatically changing the electronic shutter speed of the CCD, in the range of 1/60 of a second to 1/100,000 of a second, in response to incoming light conditions. The CCD IRIS function is also digitally controlled by the Sony advanced Smart Control. The incoming light control by the CCD IRIS function is performed completely electrically, without using any conventional mechanical iris control facility inside the camera, so that reliability is greatly enhanced. Moreover, thanks to the built-in electronic shutter technology, the CCD IRIS improves the motion resolution of an object under the appropriate level lighting conditions, reducing the blurring of motion.

Motion Resolution improved by CCD IRIS Function

<Rotating roulette>

CCD IRIS OFF
→ illegible numbers



CCD IRIS ON
→ legible numbers

SELECTABLE APERTURE MODES (NORMAL/SHARP)

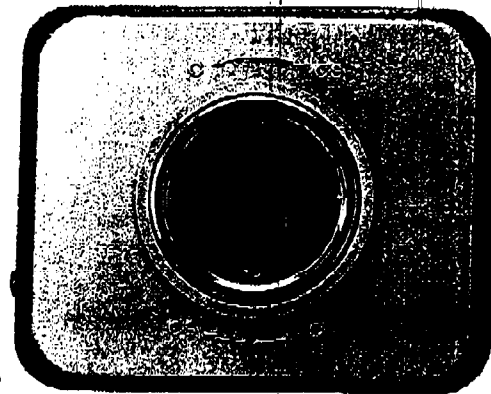
The SSC-DC14 is equipped with an Aperture control function. By switching the Aperture switch on the camera's rear panel to 'SHARP' mode, object outlines become sharper in the reproduced picture. This feature is useful when crisp images are required.

COMPACT AND LIGHTWEIGHT

Improved electronic circuitry and the extensive use of high packing density technology make the SSC-DC14 incredibly small and lightweight. Measuring only 130mm (5 1/8 inches) in length and weighing just 550g (1 lb 3 oz), it can be installed almost anywhere.

C/CS MOUNT LENSES

The SSC-DC14 accepts both CS and C-mount lenses without C-mount lens adapters. Switching the C/CS adjusting ring at the front of the camera body allows easy adjustment of the back length of the flange to accommodate each of the two types of lenses.

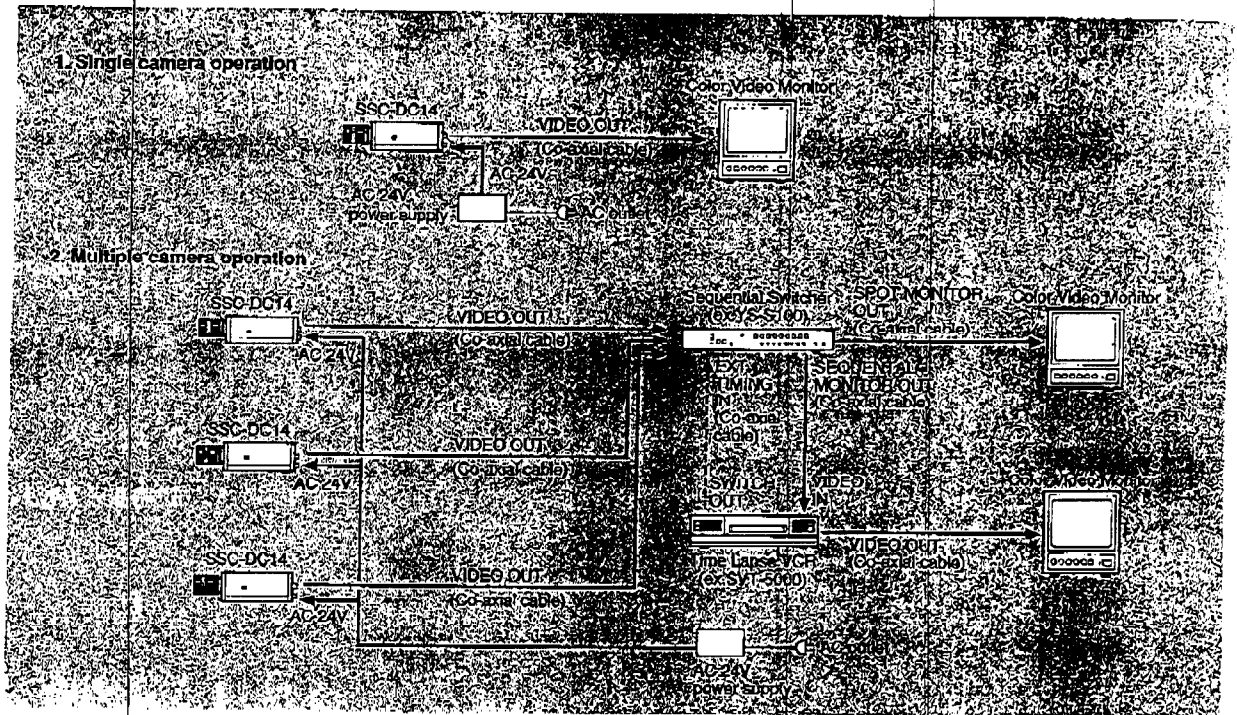


Actual size

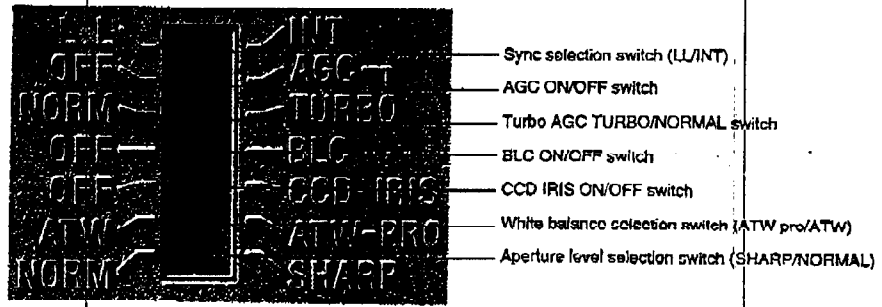
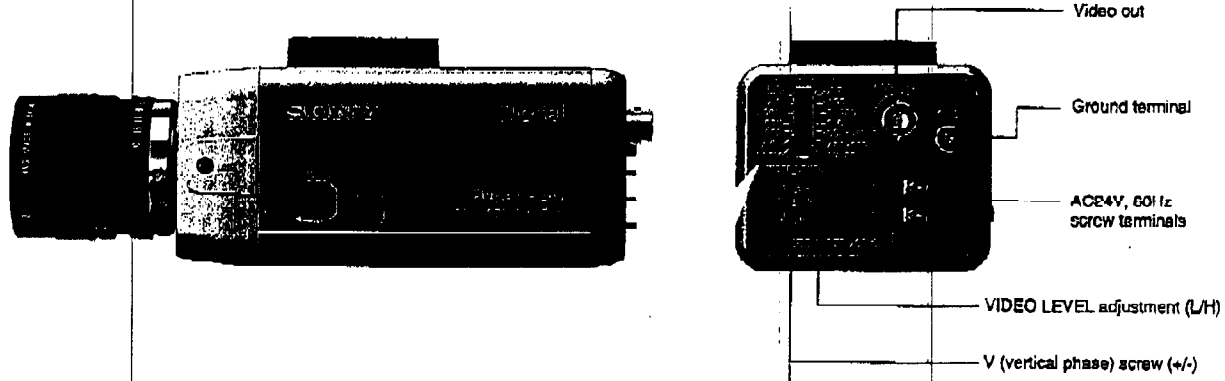
SYNCHRONIZATION CAPABILITY

The SSC-DC14 operates on 24V AC and features Line Lock for external synchronization as well as internal sync capability. In this method, the AC power frequency (60Hz) is used for the vertical sync reference instead of the internal clock of the camera, avoiding picture roll during camera switching operations. It also has an externally adjustable Vertical Phase ($\pm 90^\circ$) control. This makes camera installation and synchronization remarkably easy and simple.

I TYPICAL CONNECTIONS



Side view **Rear view**

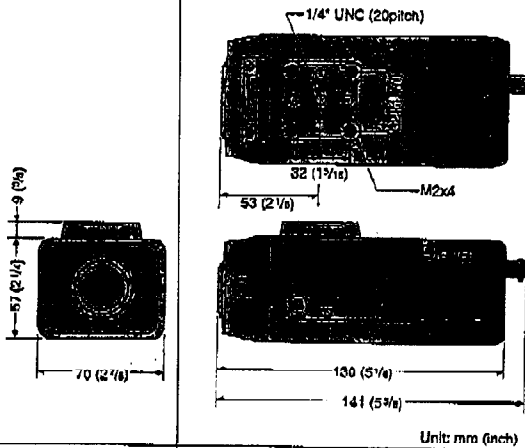


Specifications

Image pickup:	1/3-inch Interline Transfer Hyper HAD CCD															
Picture elements:	768(H) x 494(V)															
Sensor size:	3.3 x 3.9 mm															
Signal system:	NTSC standard															
Scanning system:	525 lines, 2:1 interlace															
Synchronization:	Internal or external with AC Line Lock															
Horizontal resolution:	470 V lines															
Lens mount:	C/CS mount adjustable															
Automatic gain control (AGC):	ON/OFF/Turbo															
CCD IRIS control:	ON/OFF switchable 1/60 to 1/100000 (second)															
White balance:	ATW pro/ATW switchable															
Phase control:	V phase adjustment (±90°)															
Signal-to-noise ratio:	More than 50dB (Weight ON/AGC OFF)															
Minimum illumination:	1.5 lx at F1.2 (40 IRE, Turbo AGC ON) 1.9 lx at F1.2 (50 IRE, Turbo AGC ON)															
Video out:	NORMAL SHARP selectable BNC, 1.0Vp-p, 75Ω, sync negative															
Storage temperature:	-40 to 60°C (-40 to 140°F)															
Power consumption:	4.5W															
Connectors:	LENS (4-pin) <table border="1"> <thead> <tr> <th>Pin</th> <th>DC servo</th> <th>VIDEO servo</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Control (-)</td> <td>Power (DC 9V, 50mA)</td> </tr> <tr> <td>2</td> <td>Control (+)</td> <td>Not connected</td> </tr> <tr> <td>3</td> <td>Drive (+)</td> <td>Video</td> </tr> <tr> <td>4</td> <td>Drive (-) (GND)</td> <td>GND</td> </tr> </tbody> </table> AC 24V terminals VIDEO OUT (BNC), GND Lens (4-pin) (30) Operating instruction manual	Pin	DC servo	VIDEO servo	1	Control (-)	Power (DC 9V, 50mA)	2	Control (+)	Not connected	3	Drive (+)	Video	4	Drive (-) (GND)	GND
Pin	DC servo	VIDEO servo														
1	Control (-)	Power (DC 9V, 50mA)														
2	Control (+)	Not connected														
3	Drive (+)	Video														
4	Drive (-) (GND)	GND														



Dimensions



Optional Accessories

Lenses

1) Auto-iris Type (Video servo type)



Model	VCL-S003EA	VCL-S003EA	VCL-S101EA
Mount	C	C	C
Focal length	3.0mm (1.18 inches)	6.0mm (0.24 inches)	12mm (0.47 inches)
Iris control	Auto	Auto	Auto
Filter size	—	M43 x 0.75mm	M43 x 0.75mm
Mass	28.0g (0.99 oz)	51.2g (1.83 oz)	127.0g (4.50 oz)
Dimensions	φ45.0(φa.) x 32.0(L)mm (1 13/16 x 1 5/16 inches)	φ45.0(φa.) x 48.0(L)mm (1 13/16 x 1 15/16 inches)	φ45.0(φa.) x 60.0(L)mm (1 13/16 x 2 3/16 inches)
Supply voltage	DC 9V 100mA	DC 9V 100mA	DC 9V 100mA

* As for the DC servo type (No-EE amplification-ALC Type) auto iris lenses, please contact the Sony office nearest you.

2) Manual-iris Type



Model	VCL-S003M	VCL-S003M	VCL-S101M
Mount	C	C	C
Focal length	3.0mm (0.12 inches)	6.0mm (0.24 inches)	12mm (0.47 inches)
Iris control	Manual	Manual	Manual
Filter size	M35.5 x 0.5mm	M35.5 x 0.5mm	M35.5 x 0.5mm
Mass	28.0g (0.99 oz)	51.2g (1.83 oz)	127.0g (4.50 oz)
Dimensions	φ30.0(φa.) x 28.0(L)mm (1 1/2 x 1 1/8 inches)	φ30.0(φa.) x 36.4(L)mm (1 1/2 x 1 7/16 inches)	φ30.0(φa.) x 30.0(L)mm (1 1/2 x 1 1/4 inches)

Design and specifications subject to change without notice.
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