SONY®

Color Video Camera-NTSC

SSC-DC593

DynaView™

DynaView
COLOR VIDEO CAMERA

SONY

Wide Dynamic Range Day/Night Surveillance Camera

The SSC-DC593 color video camera is the latest addition to Sony's surveillance camera line up and is specifically designed for challenging lighting conditions as well as day/night surveillance applications. Incorporating Sony's newly developed DynaView technology, the SSC-DC593 camera offers an extremely wide dynamic range allowing for the capture of clear images - even in strong backlight situations. In addition, an automatic "Day/Night" function enables the camera to capture high quality color images during the day and clear black and white images at night.

The SSC-DC593 camera incorporates a 1/3 type IT CCD, which offers high horizontal resolution (480 TV lines) and high sensitivity (0.8 lx in Color mode and 0.07 lx in B&W mode).

For greater operational flexibility, the SSC-DC593 camera is equipped with a variety of convenient features including "Privacy Zone Masking", "Activity Detection" and "CCD IRIS™". In addition, the SSC-DC593 camera features dual-power capability (AC 24 V and DC 12 V).

Offering excellent picture quality and sophisticated features, the SSC-DC593 color video camera is the right choice for a wide range of surveillance applications.

S U R V E I

Superior Picture Quality

High resolution and high sensitivity

The SSC-DC593 camera incorporates a 1/3 type IT (Interline Transfer) CCD with 380,000 pixels. This camera provides a high resolution of 480 TV lines and can operate under a minimum illumination of 0.07 lx in B&W mode or 0.8 lx in Color mode.

A wide dynamic range with DynaView technology

With the newly developed DynaView technology, this camera achieves an incredible dynamic range that is 128 times wider than conventional cameras. Thanks to this new technology, users can capture clear images even in extreme high-contrast lighting environments.

By activating the DynaView mode, the camera will capture the same image twice - first with a normal shutter speed, and then with a high shutter speed. The newly developed LSI technology then combines the dark areas captured at normal shutter speed with the bright areas captured at high shutter speed to create one image. The result is an extremely high-contrast picture that is unattainable with a conventional camera.

Additionally, DynaView technology allows the SSC-DC593 camera to achieve more powerful Back-Light Compensation (BLC). While conventional BLC can result in over exposure of the image background, DynaView reduces this to a minimum by using a high shutter speed for the background, which consequently provides optimum exposure for both the subject and the background.

Day/Night function

The SSC-DC593 camera offers a "Day/Night" function to provide optimized sensitivity in both day and night shooting scenarios. As the scene illumination reduces and the acquired image darkens, the infrared filter is automatically removed and the camera switches to B&W mode, requiring only a minimum illumination of 0.07 lx. In addition, the camera's "Day/Night" function can be initiated on demand through an external control signal for added flexibility.

CCD IRIS

The CCD IRIS function allows the use of a manual iris lens instead of a more costly automatic iris lens. As the image brightness increases, the camera adjusts the exposure by automatically reducing the CCD photo sensor's exposure time (charge accumulation time). The CCD iris range is 1/60 ~ 1/100,000 second.

A wide Auto Tracing White (ATW) range

Automatic Tracing White is a feature that automatically adjusts the camera white balance in accordance with any changes in the lighting conditions under different illuminants. This ensures that the appropriate color balance of an image is always obtained. The SSC-DC593 camera provides an extremely wide Automatic Tracing White range of 2,000 K to 10,000 K, allowing adjustment-free operation under a variety of light conditions. Also, these cameras feature preset color temperature settings and user-defined manual settings.

Turbo AGC

The SSC-DC593 camera is equipped with the advanced Turbo AGC function. This allows the user to boost the camera's gain up to 24 dB, enabling viewers of the image to distinguish the subject more easily - even if it is shot in low light. The AGC settings are OFF, NORMAL, TURBO, or MANUAL.

■ DynaView

At normal speed shutter

At high speed shutter

DynaView

Advanced Features
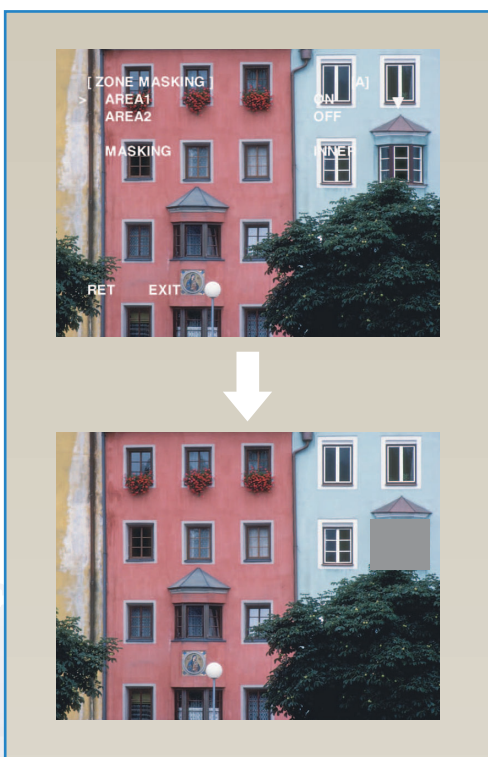
Activity detection function

The SSC-DC593 camera provides an activity detection function, which detects changes within an area of the image designated by the user. When activity is detected, the camera superimposes a blinking "ALARM" indication on the video monitor and outputs an alarm trigger signal to external equipment. Up to three user-defined detection areas can be freely selected. The on-screen, superimposed "ALARM" message is 10 seconds in duration, while the alarm trigger signal output can be selected within the range of 0.5 and 10 seconds.
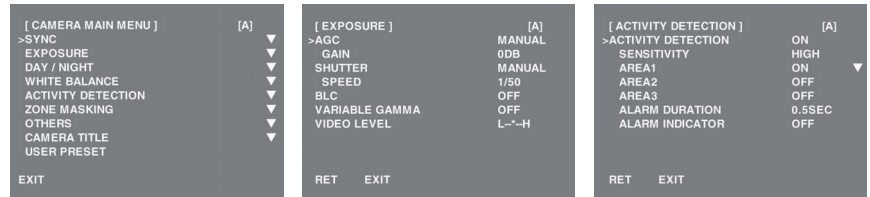
Privacy Zone Masking

With the Privacy Zone Masking function, unwanted or prohibited areas within an image can be masked. Up to two masking blocks can be freely selected in width and height. The masking areas are selectable from either the inside or the outside of the masking blocks.

User-friendly operation

On-screen set up menu

Camera settings can be made through the on-screen menu using the cursor keys on the side panel of the camera. Up to two customized settings can be stored in the memory to quickly recall specific setup conditions.

Camera title indication

The SSC-DC593 camera also features a camera title indication function. To easily identify individual cameras, users can assign a title of up to 24 characters to each unit, which can then be superimposed onto a video monitor screen. The position of the superimposed title is selectable from OFF, TOP LEFT, TOP RIGHT, BOTTOM LEFT, or BOTTOM RIGHT.

[CAMERA MAIN MENU]	[A]
>SYNC	▼
EXPOSURE	▼
DAY / NIGHT	▼
WHITE BALANCE	▼
ACTIVITY DETECTION	▼
ZONE MASKING	▼
OTHERS	▼
CAMERA TITLE	▼
USER PRESET	▼
EXIT	

[EXPOSURE]	[A]
>AGC	MANUAL
GAIN	0DB
SHUTTER	MANUAL
SPEED	1/50
BLC	OFF
VARIABLE GAMMA	OFF
VIDEO LEVEL	L--*--H
RET EXIT	

[ACTIVITY DETECTION]	[A]
>ACTIVITY DETECTION	ON
SENSITIVITY	HIGH
AREA1	ON ▼
AREA2	OFF
AREA3	OFF
ALARM DURATION	0.5SEC
ALARM INDICATOR	OFF
RET EXIT	

Menu operation buttons

Other Convenient Features

DC servo/video servo lens connection capability

The SSC-DC593 camera supports both DC-servo or video-servo lenses.

CS-mount

The SSC-DC593 camera can be used with CS-mount lenses. Easy and precise back-focus adjustments can be accomplished using thumb-wheel adjustment screws.
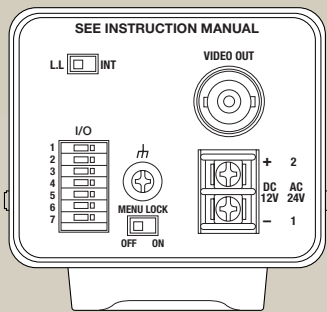
AC 24 V/DC 12 V operation

The SSC-DC593 camera accepts both AC 24 V and DC 12 V power sources and will automatically switch to the appropriate mode upon receiving power.
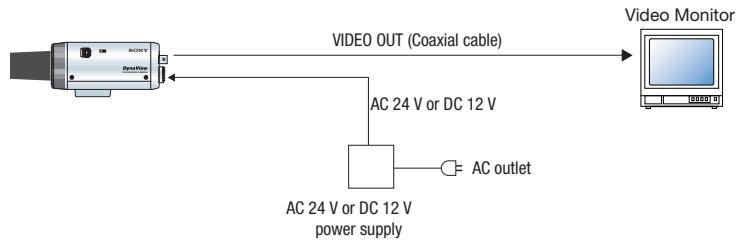
Sync system

The sync system of this camera can be switched between internal lock and AC line lock. When AC line lock is selected, the V-phase can be adjusted by ±90°.
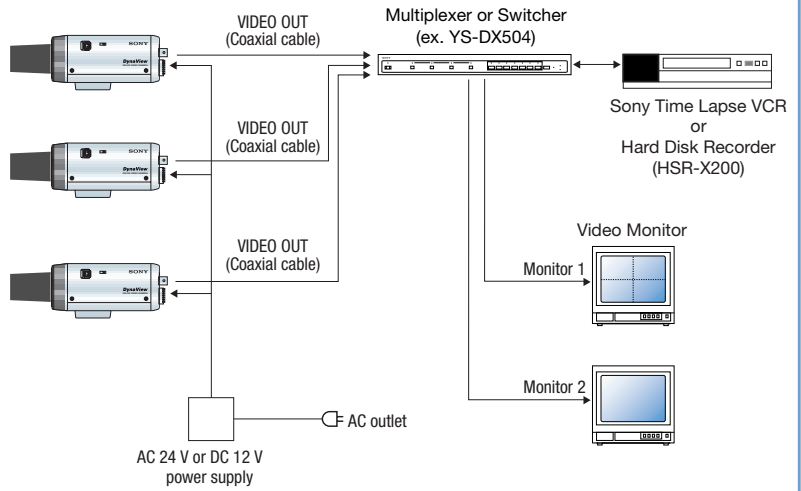
SSC-DC593

Single Camera Operation

VIDEO OUT (Coaxial cable)

Video Monitor

AC 24 V or DC 12 V

AC outlet

AC 24 V or DC 12 V
power supply

Multiple Camera Operation (In case of Line Lock)

VIDEO OUT
(Coaxial cable)

Multiplexer or Switcher
(ex. YS-DX504)

Sony Time Lapse VCR
or
Hard Disk Recorder
(HSR-X200)

VIDEO OUT
(Coaxial cable)

Video Monitor

Monitor 1

VIDEO OUT
(Coaxial cable)

Monitor 2

AC outlet

AC 24 V or DC 12 V
power supply

SEE INSTRUCTION MANUAL

L.L INT

VIDEO OUT

I/O
1
2
3
4
5
6
7

MENU LOCK

OFF ON

+ 2
DC   AC
12V 24V
– 1

SSC-DC593 Rear Panel

Specifications

	SSC-DC593
Image device	1/3 type Interline Transfer CCD
Picture elements (H x V)	768 x 494
Sensing area	1/3 type format (4.8 x 3.6 mm)
Signal system	NTSC standard
Sync system	INT/AC Line Lock
Horizontal resolution	480 TV lines
Lens mount	CS
Minimum illumination	Color: 0.4 lx at F1.4 (30 IRE, AGC ON, Turbo mode) 0.8 lx at F1.4 (50 IRE, AGC ON, Turbo mode) 2.9 lx at F1.4 (100 IRE, AGC ON, Turbo mode) B&W: 0.03 lx at F1.4 (30 IRE, AGC ON, Turbo mode) 0.07 lx at F1.4 (50 IRE, AGC ON, Turbo mode) 0.25 lx at F1.4 (100 IRE, AGC ON, Turbo mode)
AGC	NORMAL/TURBO/MANUAL/OFF selectable
CCD IRIS	ON/OFF switchable, 1/60 ~ 1/100,000 sec.
Electric Shutter	1/60 ~ 1/10,000 sec., 8 steps
White Balance (WB)	ATW-PRO/ATW/3200K/5600K/MANUAL/DUAL WB selectable
Back-Light Compensation (BLC)	DYNAVIEW/SPOT/WEIGHT/OFF selectable
S/N ratio	More than 50 dB (AGC OFF, WEIGHT ON)
Dynamic range	52 dB
Video out	BNC, 1.0 Vp-p, 75 Ω, sync negative
Operating temperature	14 °F to 122 °F (-10 °C to 50 °C)
Storage temperature	-40 °F to 140 °F (-40 °C to 60 °C)
Power requirements	AC 24 V ±10 %, 60 Hz or DC 12 V ±10 %
Power consumption	5.8 W
Auto iris lens	DC/video servo switchable
Weight	1 lb 2 oz (500 g)
Dimensions (W x H x D)	2 $^7/_8$ x 2 $^1/_4$ x 5 $^1/_8$ inches (70 x 57 x 129 mm)
Supplied accessories	Lens mount cap (1), Operating instructions (1), Menu operations (1)

Dimensions

Unit: mm (inches)

security systems
Nothing Escapes Us.™