

# SONY®

NTSC/PAL

Color Video Cameras

## SSC-E470 Series



SSC-E473  
SSC-E473P  
SSC-E478P





## State-of-the Art CCD Technology and Digital Signal Processing (DSP) technology from Sony – Providing You With Amazingly Clear and Detailed Images for Day/Night Surveillance Applications

The SSC-E473/E473P/E78P\* Color Video Cameras are the latest additions to the Sony surveillance video camera lineup. Specifically designed for challenging lighting conditions as well as day/night surveillance applications, these cameras incorporate a newly developed 1/3-type CCD with SuperExwave™ technology allowing these cameras to achieve extremely high sensitivity levels, and utilizing Sony's newly developed DSP technology allows the cameras to attain high horizontal resolution of 540 TV lines.

The newly developed CCD imager offers a minimum illumination of 0.55 lx and an excellent signal-to-noise (S/N) ratio of more than 50 dB, allowing the cameras to reproduce amazingly clear and detailed images.

What's more, 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 - making it perfect for 24-hour surveillance.

With excellent picture quality, a stylish new design, and a wide range of sophisticated features, the SSC-E473/E473P/E478P Color Video Cameras are the ideal solutions for day/night surveillance applications in locations such as transportation facilities, schools, and parking lots.

\* The SSC-E473 is intended for use in NTSC areas, the SSC-E473P and SSC-478P are for use in PAL areas.



## FEATURES

### Superb Picture Quality

#### State-of-the-Art SuperExwave™ CCD Technology

The SSC-E470 Series incorporates a newly developed 1/3-type CCD with SuperExwave technology that achieves extremely high sensitivity levels and produces high-quality images. This CCD imager provides a minimum illumination of 0.55 lx at F1.2, enabling the cameras to capture clear and detailed images even under low light conditions. Additionally, these cameras reproduce images with a high picture quality of 380,000 pixels (SSC-E473) / 440,000 pixels (SSC-E473P/E478P) and have an excellent S/N ratio of more than 50 dB.

#### Innovative DSP Technology

Unlike conventional DSPs, the newly developed DSP technology employed in these cameras increases the horizontal resolution attainable by the CCD. Due to a combination of this DSP technology and the SuperExwave CCD technology, these cameras offer a high horizontal resolution of 540 TV lines, providing amazingly clear and detailed images.

### Day/Night function

The SSC-E470 Series 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 black-and-white mode, allowing for operation at a minimum illumination of 0.05 lx.

### Slim and Stylish Design

These slim and lightweight color cameras can easily be installed in places where space is limited and where installation was previously difficult for larger cameras. A stylish rear panel cover and transparent lens cap come as standard on these cameras, so the camera will not detract from the natural decor of the room in which they are installed.



### Wide Auto Tracing White (ATW) Range

ATW is a feature that automatically adjusts the camera's white balance to adapt to changing light conditions. The SSC-E470 Series provides an extremely wide ATW range of 2,000 K to 10,000 K, allowing adjustment-free operation under a variety of light conditions. Users can choose from two modes: ATW Pro and ATW. ATW Pro mode is particularly suited to applications where the operator needs to see objects as they appear to the eye. This ensures that a precise color image is always obtained.

## Turbo AGC

The SSC-E470 series cameras are equipped with an advanced Turbo AGC function. This allows the user to boost camera gain to 24 dB, enabling viewers of the image to distinguish the subject more easily - even if it is shot in low light. The AGC mode is switchable between OFF and TURBO.

## Back-Light Compensation (BLC)

Unwanted backlighting can often cause the subject matter of an image to be cast into shadow. The BLC function incorporated in these cameras automatically compensates for such conditions and allows the subject to be more visible.

## 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). This is achieved by using the CCD electronics shutter, which has a range of 1/60 (NTSC) / 1/50 (PAL) to 1/100,000 second.

## Other Convenient Features

### DC-Servo Lens Connection Capability

The SSC-E470 series cameras supports the widely available DC-servo lenses.

### CS-Mount

These cameras are equipped with a CS-mount, which provides compatibility with industry-standard CS-mount lenses.

### AC 24 V/DC 12 V Operation

The SSC-E473 and SSC-E473P accept both AC 24 V and DC 12 V power sources, and will automatically switch to the appropriate mode upon receiving power.

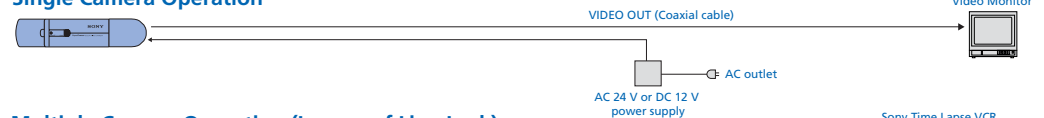
### Sync System

The sync system of these cameras can be switched between internal lock and AC line lock. When AC line lock is selected, the V-phase can be adjusted by  $\pm 90^\circ\text{C}$ .

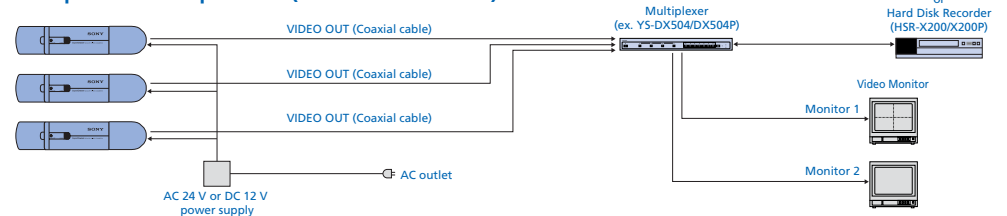
## SYSTEM CONFIGURATIONS

### SSC-E473/E473P

#### Single Camera Operation



#### Multiple Camera Operation (In case of Line Lock)

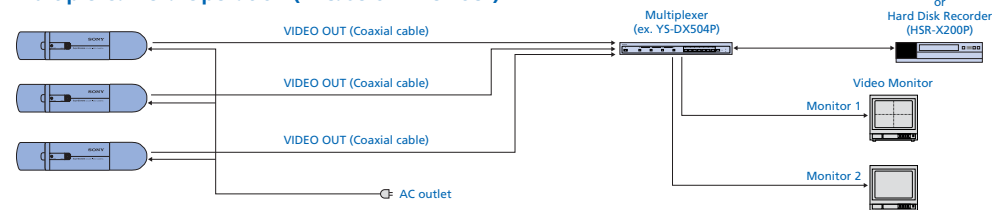


### SSC-E478P

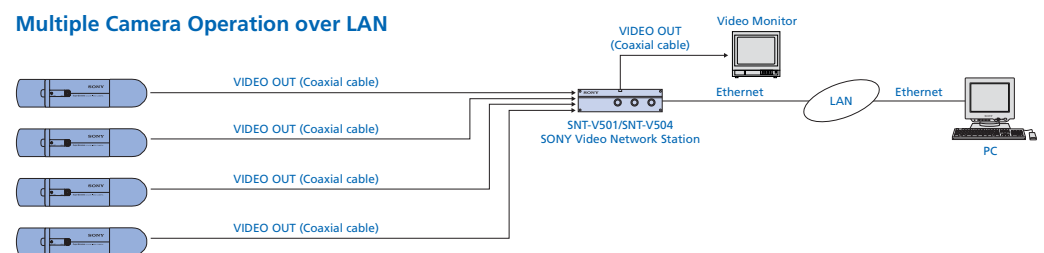
#### Single Camera Operation



#### Multiple Camera Operation (In case of Line Lock)



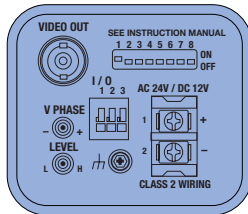
### SSC-E473/E473P/E478P Multiple Camera Operation over LAN



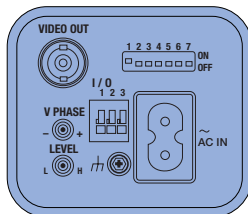
# SPECIFICATIONS

	SSC-E473	SSC-E473P	SSC-E478P
Image device	1/3 type Interline Transfer CCD with SuperExwave		
Picture elements (H x V)	768 x 494 (NTSC)	752 x 582 (PAL)	
Sensing area	1/3 type format (4.8 x 3.6 mm)		
Signal system	NTSC standard	PAL standard	
Sync system	INT/Line Lock		
Horizontal resolution	540 TV lines		
Lens mount	CS		
Minimum illumination	Color: 0.55 lx at F1.2 (50 IRE, AGC ON, Turbo mode) /B&W: 0.05 lx at F1.2 (50 IRE, AGC ON, Turbo mode)		
Day/Night function	Auto/Manual selectable		
AGC	TURBO/OFF switchable		
CCD IRIS	ON/OFF switchable, 1/60 to 1/100,000 s	ON/OFF switchable, 1/50 to 1/100,000 s	
White Balance (WB)	Auto White Balance Pro(ATW Pro) /Auto White Balance(ATW)		
Back-Light Compensation (BLC)	ON/OFF switchable		
S/N ratio	More than 50 dB (AGC OFF, WEIGHT ON)		
Video out	BNC, 1.0 Vp-p, 75 Ω, sync negative		
Auto iris lens	DC servo		
Operating temperature	-10 °C to 50 °C (14 °F to 122 °F)		
Storage temperature	-40 °C to 60 °C (-40 °F to 140 °F)		
Power requirements	AC 24 V ±10%, 60 Hz or DC 12 V ±10%	AC 24 V ±10%, 50 Hz or DC 12 V ±10%	AC 220 V to 240 V ±10%, 50 Hz
Power consumption	4.0 W		
Mass	380 g (13 oz) 460 g (1 lb 1 oz) * including front and rear covers		400 g (14 oz) 480 g (1 lb 8 oz) * including front and rear covers
Dimensions (W x H x D)	60 x 53 x 124 mm (2 3/8 x 2 1/8 x 5 inches) 60 x 53 x 246 mm (2 3/8 x 2 1/8 x 9 3/4 inches) * including front and rear covers		
Supplied accessories	Lens mount cap (1), Operating instructions (1), Front cover(1), Rear cover(1), Screws(2)		Lens mount cap (1), Operating instructions (1), Front cover (1), Rear cover (1), Screws (2), Power cable (1)

## Rear View

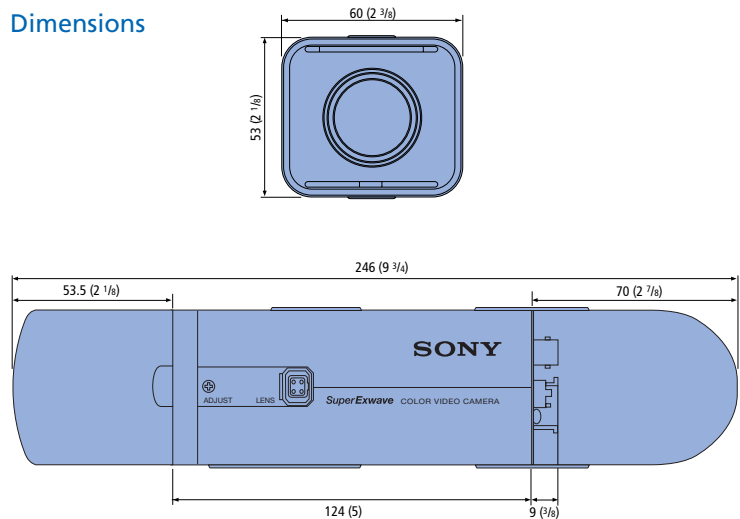


SSC-E473/E473P



SSC-E478P

## Dimensions



Unit: mm (inches)

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