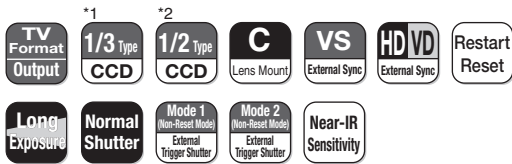


# XC-EI50/EI50CE XC-EI30/EI30CE



\*1: XC-EI50/EI50CE  
\*2: XC-EI30/EI30CE



Switch setting **P5-4**  
Connection Diagram **P8-4**



## Outline

Like the XC-EI50/EI50CE and XC-EI30/EI30CE, the XC-ES50/ES30 is compact and lightweight and offers near-infrared sensitivity. Extremely sharp images can be obtained when used under red LED illumination or in near-infrared light, such as in funduscopes.

## Features

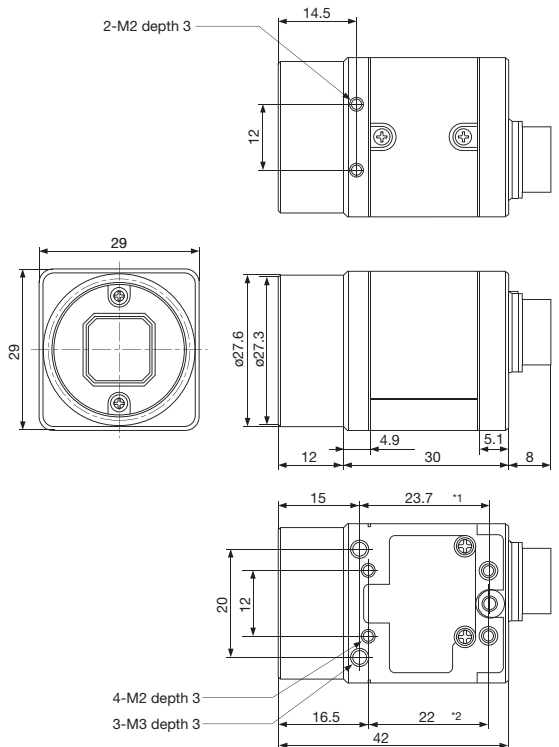
- XC-EI50/EI50CE: 1/2-type IT CCD
- XC-EI30/EI30CE: 1/3-type IT CCD
- Near-IR sensitivity
- High sensitivity: F1.4  
XC-EI50/EI50CE: 0.1 lx  
XC-EI30/EI30CE: 0.2 lx
- High S/N ratio: 60 dB
- Electronic shutter  
XC-EI50/EI30: 1/100 sec to 1/10,000 sec  
XC-EI50CE/EI30CE: 1/120 sec to 1/8,000 sec
- External trigger shutter  
XC-EI50/EI30: 1/4 sec to 1/10,000 sec  
XC-EI50CE/EI30CE: 1/4 sec to 1/8,000 sec
- 2:1 Interlaced/Non-Interlaced
- Frame/Field accumulation
- Restart/Reset
- Sync system: Internal/External (HD/VD)
- High Shock and Vibration Resistance

## Accessories

- Compact camera adaptor
  - DC-700/700CE
- 12-pin camera cable (CE standard)
  - CCXC-12P02N (2 m)
  - CCXC-12P05N (5 m)
  - CCXC-12P10N (10 m)
  - CCXC-12P25N (25 m)
- Tripod adaptor
  - VCT-333I

## Dimensions

Camera body of all XC-E models



\*1: M3 screw size  
\*2: M2 screw size

Unit: mm

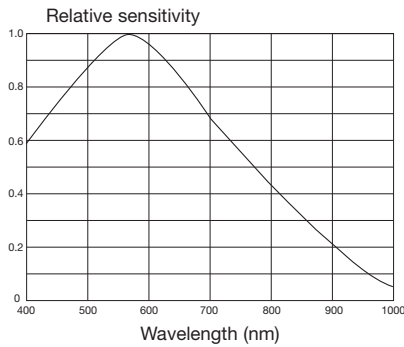
## Notice

From January 2005, the outside dimensions of XC-E series consoles will be changed to the same dimensions of XC-HR series consoles.

## Spectral Sensitivity Characteristics

### • XC-EI30

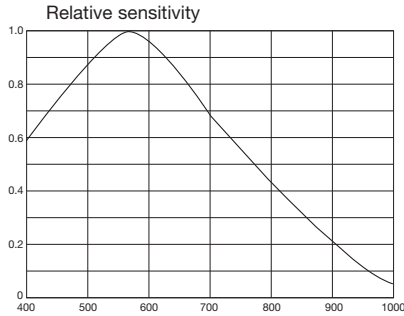
(Typical Values)



(Lens characteristics and light source characteristics excluded.)

### • XC-EI30CE

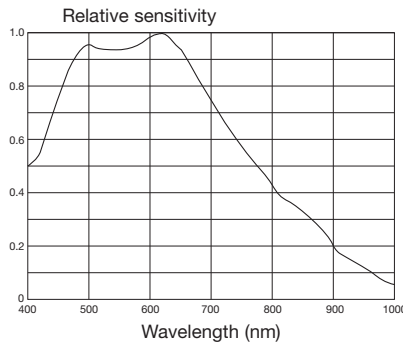
(Typical Values)



(Lens characteristics and light source characteristics excluded.)

### • XC-EI50

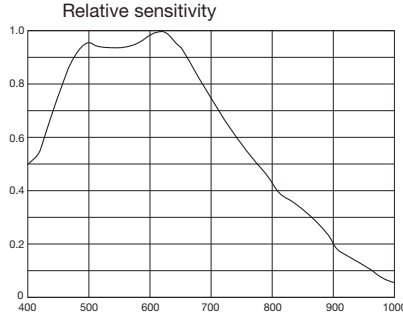
(Typical Values)



(Lens characteristics and light source characteristics excluded.)

### • XC-EI50CE

(Typical Values)

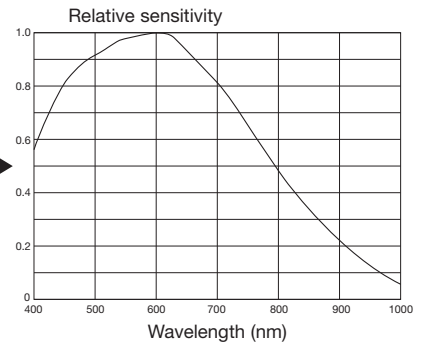


(Lens characteristics and light source characteristics excluded.)

### • XC-EI50\*

On and after S/No.200001

(Typical Values)

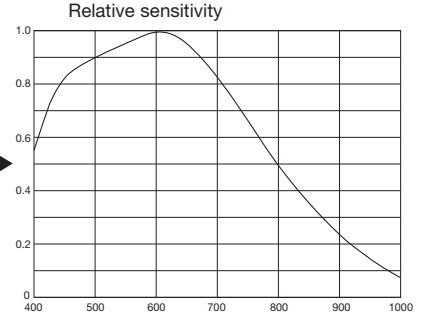


(Lens characteristics and light source characteristics excluded.)

### • XC-EI50CE\*

On and after S/No.500001

(Typical Values)



(Lens characteristics and light source characteristics excluded.)

\* The Special Sensitivity Characteristics are changed from the following serial number  
• S/N XC-EI50 200001 XC-EI50CE 500001

## Specifications

	XC-EI50	XC-EI50CE	XC-EI30	XC-EI30CE
Image device	1/2-type IT CCD		1/3-type IT CCD	
Signal system	EIA	CCIR	EIA	CCIR
Effective picture elements (H × V)	768 × 494	752 × 582	768 × 494	752 × 582
Effective lines (H × V)	752 × 485	736 × 575	752 × 485	736 × 575
Cell size (H × V)	8.4 μm × 9.8 μm	8.6 μm × 8.3 μm	6.35 μm × 7.4 μm	6.5 μm × 6.25 μm
Horizontal frequency	15.734 kHz	15.625 kHz	15.734 kHz	15.625 kHz
Vertical frequency	59.94 Hz	50 Hz	59.94 Hz	50 Hz
Lens mount	C-mount			
Sync system	Internal/External (Automatically switched according to input signal)			
External sync signal input	HD/VD (HD/VD level: 2 Vp-p to 5 Vp-p)			
External sync frequency	±1% (in horizontal sync frequency)			
H Jitter	less than ±20 nsec			
Scanning system	525 lines: 2:1 Interlaced	625 lines: 2:1 Interlaced	525 lines: 2:1 Interlaced	625 lines: 2:1 Interlaced
Video output	(automatic switching according to input signal) 1.0 Vp-p, negative, 75 Ω unbalanced			
Horizontal resolution	570 TV lines	560 TV lines	570 TV lines	560 TV lines
Sensitivity	400 lx F11 (γ=ON, MIN GAIN)		400 lx F8 (γ=ON, MIN GAIN)	
Minimum illumination*	0.1 lx		0.2 lx	
S/N ratio	60 dB			
Gain	AGC/Manual (adjustable on the rear panel)			
Gamma	ON/OFF (adjustable on the rear panel)			
Normal shutter	1/100 sec to 1/10,000 sec	1/120 sec to 1/8,000 sec	1/100 sec to 1/10,000 sec	1/120 sec to 1/8,000 sec
External trigger shutter	1/4 sec to 1/10,000 sec	1/4 sec to 1/8,000 sec	1/4 sec to 1/10,000 sec	1/4 sec to 1/8,000 sec
Power requirements	DC 12 V (9 V to 16 V)			
Power consumption	1.6 W		1.4 W	
Dimension (W × H × D)	29 × 29 × 30 mm (excluding protrusions)			
Mass	Approx. 50 g			
Operating temperature	-5°C to +45°C			
Storage temperature	-30°C to +60°C			
Performance guarantee temperature	0°C to 40°C			
Operating humidity	20% to 80% (no condensation)			
Storage humidity	20% to 95% (no condensation)			
Vibration resistance	10 G (20 Hz to 200 Hz 20 minutes for each direction-x, y, z)			
Shock resistance	70 G			
MTBF	126,469 hours (Approx. 14.4 years)			
Regulatory compliance	UL1492, FCC/ICES-003: Class B, CE: EN61326, AS/NZ: EN61326, KC: KN22/KN24: Class A			
Supplied accessories	Lens mount cap (1), Operating instructions (1)			

\* F1.4, γ=ON, MAX GAIN