

Component/OEM



OUTLINE

Ideal for monitoring applications, the FCB-EX480L/EX480LP are enhanced versions of the FCB-EX470L/EX470LP color block cameras. In addition to 18x optical zoom (total 216x with digital zoom) and high picture quality realized by DSP (Digital Signal Processing), the FCB-EX480L/EX480LP cameras feature auto white balance and auto focus functions. With the use of slow shutter and ICR (IR Cut Filter Removable) functions, the FCB-EX480L/EX480LP achieves near-infrared sensitivity of 0.01 lux, which enables the cameras to display clear, recognizable images in low light environments.

HIGHLIGHTS

- External Synchronization (V-Lock)
- ICR (IR Cut Filter Removable)
- Super HAD™ CCD
- 18x AF Zoom Lens
- 12x Digital Zoom
- Slow Speed Shutter
- Back Light Compensation
- TTL Direct Remote Control
- Several Picture Effects including Mirror Image
- Negative / Positive Reversal
- Character Generator

OTHER FEATURES

■ 18x AF Zoom Lens

The FCB-EX480L/EX480LP cameras incorporate an optical 18x AF zoom lens. If used with digital zoom, a zoom of up to 216x can be attained.

■ High Quality Picture

The adoption of a 1/4 type Super HAD CCD and DSP allows for highly detailed images with high quality color reproduction.

■ ICR (IR Cut Filter Removable)

The FCB-EX480L/EX480LP IR Cut Filter can be switched ON/OFF via TTL Direct remote control. If the IR Cut Filter is turned off, the sensitivity increases in the near-infrared spectrum. The combination of this function and slow shutter realizes a minimum illumination of 0.01 lux.

■ Single Connector and Metal Frame

While power, video, external sync, and control connectors are separate on the FCB-EX470L/EX470LP, the FCB-EX480L/EX480LP cameras feature a single connector for these different signals, allowing for easy connection to external equipment. Also, the addition of a metal frame housing to protect the camera boards enables the camera to be easily installed.

■ External Synchronization (V-Lock)

V-Lock external synchronization is incorporated in the cameras. This feature is used in CCTV applications where the switching of multiple cameras is necessary.

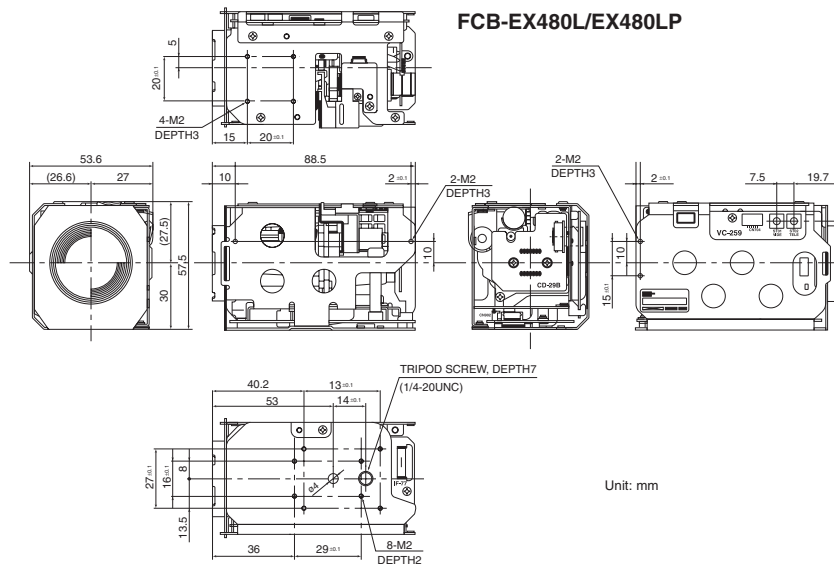
■ Camera Remote Control (TTL Direct)

Remote control of camera functions such as shutter speed, gain, and optical zoom is possible.

SPECIFICATIONS

	FCB-EX480L	FCB-EX480LP
Image Sensor	1/4 type IT CCD	
Number of Effective Pixels	768 (H) x 494 (V)	752 (H) x 582 (V)
Horizontal Resolution	more than 470 TV lines	more than 460 TV lines
Lens	18x Zoom f=4.1 to 73.8 mm (F1.4 to F3.0)	
Digital Zoom	12x (216x with optical zoom)	
Horizontal Angle of View	approx. 48 degree (wide end), approx. 2.7 degree (tele end)	
Min. Object Distance	10 mm (wide end), 800 mm (tele end)	
Sync. System	Internal / External (V-Lock)	
Min. Illumination (typ.)	2.0 lx (F1.4, normal shutter speed) 0.15 lx (F1.4, 1/4 s slow shutter) 0.1 lx (F1.4, IR cut filter: off, normal shutter speed) 0.01 lx (F1.4, IR cut filter: off, 1/4 s slow shutter)	
S/N Ratio	more than 50 dB	
Electronic Shutter	1/4 to 1/10000 s, 20 steps	1/3 to 1/10000 s, 20 steps
White Balance	Auto, ATW, Indoor, Outdoor, One Push WB, Manual WB	
Gain	Auto / Manual (-3 to 18 dB, 3 dB steps)	
AE Control	Auto, Manual, Priority mode, Bright, EV compensation, Back light compensation	
EV Compensation	-10.5 to +10.5 dB (1.5 dB steps)	
Back Light Compensation	On / Off	
On Screen Display	Mode display, Clock (Day / Time) display, Title display	
Focusing System	Auto (Sensitivity : H, L), On-Push AF, Manual, Infinity	
Picture / Digital Effect	Pastel, Neg. Art, Sepia, Black & White, Solarize, Mosaic, Slim, Stretch, Still, Flash, Lumi, Trail	
Camera Operation Switch	Zoom tele, Zoom wide	
Video Output	VBS: 1.0 Vp-p (Sync Negative)	
Camera Control Interface	VISCA (TTL signal level)	
Storage Temp.	-20 to 60°C	
Operating Temp.	0 to 50°C	
Power Consumption	2.0 W typ.(inactive motors), 3.2 W typ.(active motors) /DC 6 to 12 V typ.	
Weight	approx. 7.9 oz (225 g)	
Dimensions (W x H x D)	2 1/8 x 2 3/8 x 3 1/2 inches (53.6 x 57.5 x 88.5 mm)	

DIMENSIONS



PIN ASSIGNMENT

1	RXD IN	CMOS 5 V (low: max 0.8 V , high: min 2.0 V)	6	VBS OUT	1.0 ± 0.2 V
2	DSR OUT	CMOS 5 V (low: max 0.1 V , high: min 4.4 V)	7	GND (for VBS OUT)	
3	GND (for RXD&SD)		8	V LOCK PULSE	External VD-Lock Pulse (EX.FV : Negative , 3Vp-p 50% duty)
4	DC IN	9.0 ± 3V	9	GND (VL PULSE)	
5	GND (for DC IN)				

SONY

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