

SONY®

Color Camera

FCB-EX480X/FCB-EX480XP

Component/OEM



Less than
1 Lux

OUTLINE

Ideal for monitoring applications, the FCB-EX480X/EX480XP are enhanced versions of the FCB-EX480L/EX480LP color block cameras. The FCB-EX480X/EX480XP incorporate Exview HAD™ technology - a new Sony technology that provides high sensitivity and a minimum illumination of less than 1 lux. In addition to 18x optical zoom (total 216x with digital zoom), the FCB-EX480X/EX480XP feature auto white balance and auto focus functions. With the use of slow shutter and ICR (IR Cut Filter Removable) functions, the FCB-EX480X/EX480XP achieve near-infrared sensitivity less than of 0.01 lux, which enables the cameras to display clear, recognizable images in low light environments.

FEATURES

- External Synchronization (V-Lock)
- ICR (IR Cut Filter Removable)
- Exview 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-EX480X/EX480XP 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 Exview HAD CCD allows for high detailed images with high quality color reproduction.
- **ICR (IR Cut Filter Removable)**
The FCB-EX480X/EX480XP 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 less than 0.01 lux.
- **Single Connector and Metal Frame**
The FCB-EX480X/EX480XP feature a single connector for power, video, external sync and control 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 camera. 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-EX480X	FCB-EX480XP
Image Sensor	1/4 Type IT CCD	
Number of Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Lens	18x Zoom f=4.1 to 73.8mm (F1.4 to F3.0)	
Digital Zoom	12x (216x with optical zoom)	
Angle of View (H)	approx. 48 degree (wide end) approx. 2.7 degree (tele end)	
Min. Object Distance	10mm (wide end), 800mm (tele end)	
Sync. System	Internal/External (V-Lock)	
Min. Illumination (typ.)	0.7 lx (F1.4 normal shutter speed) 0.04 lx (F1.4, ICR on, normal shutter speed) Less than 0.01 lx (F1.4, ICR on + 1/4 sec. slow shutter)	
S/N Ratio	more than 50 dB	
Electronic Shutter	1/3 to 1/10000 sec. 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 (1.5dB 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	2.0W typ. (inactive motors), 3.2 W typ. (active motors) / DC 6 to 12 V	
Weight	approx. 230 g	
Dimensions	52.5 x 57.4 x 88.5mm	

Pin Assignments

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

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