

FCB-EX45MC FCB-EX45MCC

The new Sony FCB-EX45MC* black-and-white block camera incorporates advanced features and is especially suited for security-dome, traffic-monitoring, airline-security and facial-recognition applications.



Features

1/4 type EXview HAD CCD

FCB-EX45MC: 380,000 pixels (EIA)

FCB-EX45MCC: 440,000 pixels (CCIR)

Extremely low minimum sensitivity of 0.01 lx (typical)

High horizontal resolution of 520 TV lines

216x zoom ratio
(18x optical, 12x digital)

Spot AE

The AE area is selected from one of the 16 vertical/16 horizontal blocks of the picture to optimize brightness within the desired area.

Enhanced Spherical Privacy Zone Masking

Unwanted or prohibited areas within an image can be masked precisely and appropriately. This technology allows masking areas to be interlocked with Pan/Tilt/Zoom movements regardless of the camera angle. A maximum of 24 masking areas can be preset to any of 160 horizontal and 120 vertical masking blocks, and up to eight block positions with two colours can be selected together.

Unique Algorithms for Lens-Life Extension

- Autofocus (AF) Algorithm
This unique algorithm makes the block camera ideal for security applications, in which 24/7 continuous usage is common. This technology controls the unit's autofocus function to provide extended lens life and steady image quality.
- SMART (Sony Modular Automatic lens Reset Technology) Lens Control*
Automatically compensates for mechanical misalignment of the lens, which may occur over a long period of continuous usage of 1.0 lx (F1.8, 50 IRE).

High-speed serial interface (max. 38.4 kb/s) and TTL signal-level control (VISCA™ protocol)

Monochrome Block Cameras

Adopting a 1/4 type B/W EXview HAD CCD™, the FCB-EX45MC achieves excellent sensitivity of less than 0.01 lx – making it ideal for extremely low-light environments. Featuring a high-performance Digital Signal Processor (DSP), the FCB-EX45MC camera also achieves a high resolution of 520 TV lines and is equipped with an 18x optical zoom lens.

The FCB-EX45MC camera incorporates an Enhanced Spherical Privacy Zone Masking feature and SMART Lens Control technology. It also inherits many popular functions from earlier FCB-EX Series, such as Spot AE, quick camera control via a high-speed serial interface (max. 38.4 kb/s) and customizable settings. Combining superb picture quality and a variety of convenient functions, the FCB-EX45MC is a match for a wide range of surveillance and monitoring applications.

* In the following text, "FCB-EX45MC" refers to both the FCB-EX45MC (EIA model) and the FCB-EX45MCC (CCIR model).

FCB-EX45MC -FCB-EX45MCC Specifications

Features

Various customizable settings

Internal/External sync

16-Bytes of Memory is Available for Recording Data such as Product Serial Numbers and Camera/System ID Numbers

Low power consumption - min. 1.5 W (when motors are inactive)

Environmentally-friendly (Lead-free solder and Halogen-free Printed-circuit boards)

	FCB-EX45MC	FCB-EX45MCC
Image sensor	1/4 type EXview HAD CCD	
Number of effective pixels (H x V)	768 x 494	752 x 582
Signal system	EIA	CCIR
Lens	18x zoom f=4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0	
Digital zoom	12x (216x with optical zoom)	
Angle of view (H)	48° (wide end) to 2.7° (tele end)	
Minimum working distance	35 mm (wide end), 800 mm (tele end)	
Sync system	Internal/External (V-Lock)	
Minimum illumination	Less than 0.01 lx at 1/60 s (50 IRE)	Less than 0.01 lx at 1/50 s (50 IRE)
S/N ratio	More than 50 dB	
Horizontal resolution	520 TV lines	
Electronic shutter	1/60 to 1/10000 s, 16 steps	1/50 to 1/10000 s, 16 steps
Gain	Auto/Manual (-3 to 28 dB, 2 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)	
Backlight compensation	On/Off	
Privacy zone masking	On/Off	
On screen display	Title, Privacy Zone Block	
Flicker cancel	Auto	-
Focusing system	Auto (Sensitivity: H, L), One-Push AF, Manual, Infinity, Interval AF, Zoom Trigger AF	
Picture effects	Nega art	
Camera operation switch	Zoom tele, Zoom wide	
Video output	VS: 1.0 Vp-p (sync negative)	
Camera control interface	VISCA Protocol (TTL signal level)	
Storage temperature	-20°C to 60°C (-4°F to 140°F)	
Operating temperature	0°C to 50°C (32°F to 122°F)	
Power consumption	6 to 12 V DC/1.5 W (typical) (motors inactive), Less than 2.2 W (typical) (motors active)	
Mass	Approx. 230 g (8.1 oz)	
Dimensions	50 x 57.5 x 88.5 mm (2 x 2 3/8 x 3 1/2 inches)	

Pin assignment & connector

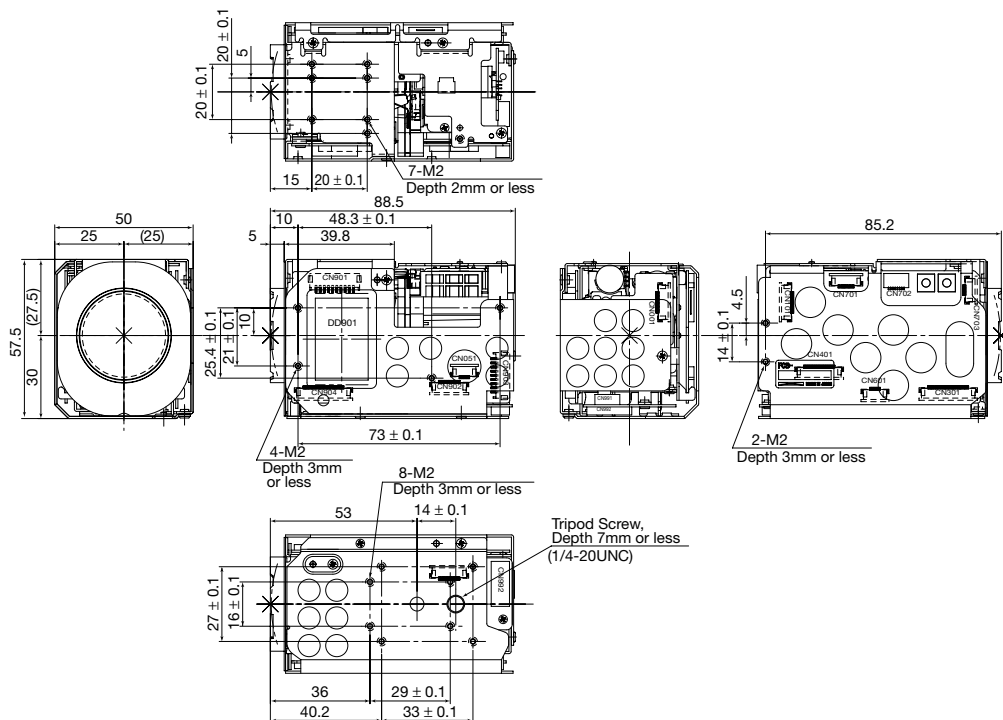
CN992

Pin No.	Name	Level
1	RxD	CMOS 5.0 V (low: max. 0.8 V, high: min. 2.0 V)
2	TxD	CMOS 5.0 V (low: max. 0.1 V, high: min. 4.4 V)
3	GND (for Rx/D & Tx/D)	-
4	DC IN	9.0 V ± 3.0 V
5	GND (for DC IN)	-
6	VS OUT	1.0 V ± 0.2 V
7	GND (for VBS OUT)	-
8	V LOCK PULSE	External VD-Lock Pulse (EX.FV: Negative, 3.0 Vp-p 50% duty)
9	GND (VL PULSE)	-

Connector: ELCO 00 6200 509 13000

* The initial factory setting for the SMART Lens Control function is "OFF". When the function is turned OFF and the unit is used continuously for more than 24 hours, lens system initialization is recommended every 24 hours to extend the life of the lens. The "Initialize Lens" command takes a little less than 3 seconds to initialize the focus and zoom. When the Smart Lens Control function is turned ON, lens initialization is not required.

Dimensions



Unit: mm (inches)

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