Monochrome Block Camera

FCB-EX45MC
FCB-EX45MCC

Sony's new FCB-EX45MC/EX45MCC black-and-white block camera is especially suited for security-dome, traffic-monitoring, airline security and facial recognition applications. Incorporating a 1/4 type B/W EXview HAD CCD™, these cameras achieve excellent sensitivity of less than 0.01 lux – making them ideal for extremely low-light environments. Featuring a high-performance Digital Signal Processor (DSP), the FCB-EX45MC/EX45MCC camera also achieves a high resolution of 520 TV lines and is equipped with an 18x optical zoom lens.

These FCB-EX45MC/EX45MCC cameras are equipped with new and unique surveillance features such as an Enhanced Spherical Privacy Zone Masking function for use with a pan/tilt system and Sony's SMART Lens Control technology. In addition, these FCB-EX cameras also inherit many popular functions from Sony's 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 (usually found in Sony's color block cameras), the FCB-EX45MC/EX45MCC is a remote controllable black-and-white surveillance and monitoring solution.

Aegis Electronic Group
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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 colors can be selected together.

- High-speed serial interface (max 38.4 kb/s) and TTL signal-level control (VISCA™ protocol)
- Unique Algorithms for Lens-Life Extension

SMART Lens Control (Sony Modular Automatic Lens Reset Technology)
These FCB cameras incorporate a SMART Lens Control Technology that monitors lens focus position during zooming and automatically compensates for mechanical misalignment which may occur over long periods of continuous usage.
Autofocus (AF) Algorithm
This unique algorithm controls the camera's auto focus function to provide extended lens life and steady image quality. This technology makes these block cameras ideal for security applications, in which 24/7 continuous usage is required.

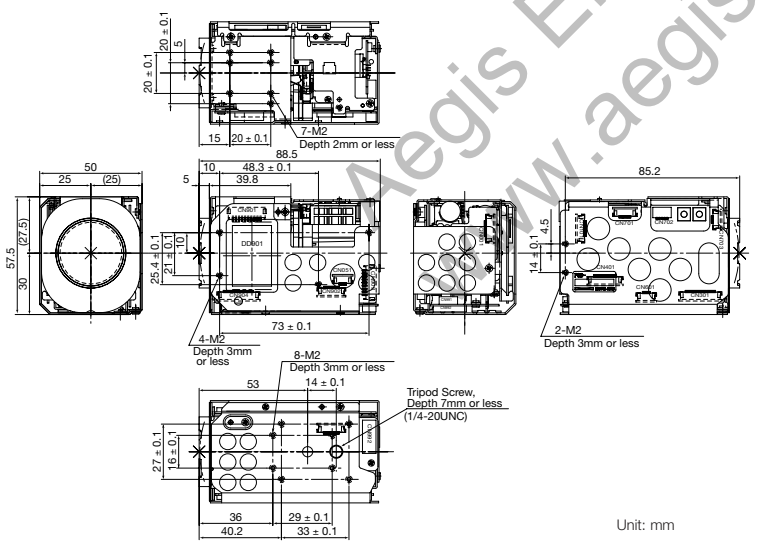
- Various customizable settings
- Internal/External sync
- 16-Bytes of Memory is Available for Recording Data such as Product Serial Numbers and Camera/System ID Numbers
- Low power consumption – min. 1.5 W (when motors are inactive)
- Environmentally-friendly (Lead-free solder and Halogen-free Printed-circuit boards)

SPECIFICATIONS

	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	-4°F to 140°F (-20°C to 60°C)	
Operating temperature	32°F to 122°F (0°C to 50°C)	
Power consumption	6 to 12 V DC/1.5 W (typical) (motors inactive), Less than 2.2 W (typical) (motors active)	
Weight	Approx. 8.1 oz (230 g)	
Dimensions	2 x 2 3/8 x 3 1/2 inches (50 x 57.5 x 88.5 mm)	

* 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

PIN ASSIGNMENT

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 RxD & TxD)	
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)	

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