

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.

Monochrome Block Camera  
**FCB-EX45MC**  
**FCB-EX45MCC**



## FEATURES

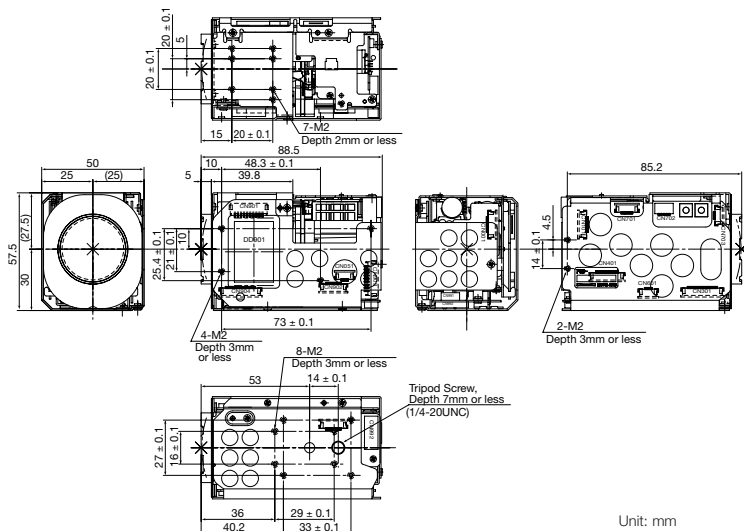
- 1/4 type EXview HAD CCD
- FCB-EX45MC: 380,000 pixels (EIA)
- FCB-EX45MCC: 440,000 pixels (CCIR)
- Extremely low minimum sensitivity of 0.01 lx (typical)
- High horizontal resolution of 520 TV lines
- 216x zoom ratio (18x optical, 12x digital)
- Spot AE
  - The AE area is selected from one of the 16 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<br>(low: max. 0.8 V, high: min. 2.0 V)              |
| 2       | TxD                 | CMOS 5.0 V<br>(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<br>(EX.FV: Negative, 3.0 Vp-p 50% duty) |
| 9       | GND (VL PULSE)      |  |

Connector: ELCO 00 6200 509 13000

# SONY

Sony Electronics Inc.  
1 Sony Drive  
Park Ridge, NJ 07656  
(201) 930-7000  
www.sony.com/videocameras

IS-1194  
MK10309V1

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