

Colour Block Video Cameras

FCB-IX Series

Sony's FCB-IX series colour block cameras incorporate high-performance Digital Signal Processing (DSP) and firmware, greatly enhancing their operation and picture quality compared to conventional block cameras. Inheriting the outstanding features of Sony's previous generation of block cameras, Sony's FCB-IX cameras are ideal for numerous applications such as videoconferencing, low vision systems, mobile police cars, pipe inspection, photo booths and document stands.



The FCB-IX47A/IX47AP and FCB-IX45A/IX45AP colour cameras incorporate a 1/4-type Super HAD™ CCD and feature a 72x zoom ratio (18x optical, 4x digital) and a minimum illumination of 1.0 lx — expanding their vast application appeal. The FCB-IX11A/IX11AP colour cameras incorporate a 1/4-type Exview HAD™ CCD and feature a 40x zoom ratio (10x optical, 4x digital). With their ultra-compact and lightweight body, this makes them ideal for space restricted applications. Offering high picture quality and a variety of functions, the FCB-IX series is ideal for your demanding applications.



Features

- High-performance Digital Signal Processing (DSP)
- High-speed serial interface (max. 38.4 Kb/s) with TTL Signal-level control (VISCA™ protocol)
- High-quality image in both digital-zoom and slow-shutter modes (FCB-IX47A/IX47AP, FCB-IX11A/IX11AP)
- Various AF modes including Zoom trigger and interval modes
- Various AE modes including Spot AE mode to optimise the brightness within the specific area
- Expanded mode parameter for shutter speed and gain level
- Superb sensitivity
- Various customisable settings
- Low power consumption (1.5/1.6 W with motors inactive)
- EEPROM backup system without battery
- Lead-free solder and halogen-free printed-circuit boards

Features

FCB-IX47A/IX47AP

- 1/4-type Super HAD™ CCD
- 72x zoom ratio (18x optical, 4x digital)
- Minimum illumination of 1.0 lx (typical)
- Key switch control compatibility
- Spot AE
- Field Memory/Freeze mode
- High-speed serial interface (maximum 38.4 Kb/s) with TTL signal-level control (VISCA protocol)
- Electronic shutter/slow shutter
- On-screen display (date/time/title)

FCB-IX45A/IX45AP

- 1/4-type Super HAD™ CCD
- 72x zoom ratio (18x optical, 4x digital)
- Minimum illumination of 1.0 lx (typical)
- Key switch control compatibility
- Spot AE
- High-speed serial interface (maximum 38.4 Kb/s) with TTL signal-level control (VISCA protocol)
- On-screen display (date/time/title)

FCB-IX11A/IX11AP

- 1/4-type Exview HAD™ CCD
- Compact and lightweight
- 40x zoom ratio (10x optical, 4x digital)
- Minimum illumination of 1.5 lx (typical)
- Key switch control compatibility
- Spot AE
- Field Memory/Freeze mode
- High-speed serial interface (maximum 38.4 Kb/s) with TTL signal-level control (VISCA protocol)
- Electronic shutter/slow shutter
- On-screen display (date/time/title)

FCB-IX Series – Pin Assignment

CN903

DC and video connector
(FCB-IX47A/IX47AP and FCB-IX45A/IX45AP)

Pin No.	Name	Level
1	Power In	6 V – 12 V
2	GND (power)	–
3	NC	–
4	Video Out	Composite Video signal
5	GND (for video)	–
6	Y_Out	1.0 ± 0.2 V
7	GND (for Y signal)	–
8	C_Out	–
9	GND (for C signal)	–

Connector type: JST S9B-ZR-SM3A-TF

CN901 IF Board

DC and video connector
(FCB-IX11A/IX11AP)

Pin No.	Name	Level
1	Power In	6 V – 12 V
2	GND (power)	–
3	NC	–
4	Video Out	Composite Video signal
5	GND (for video)	–
6	Y_Out	–
7	GND (for Y signal)	–
8	C_Out	–
9	GND (for C signal)	–

Connector type: JST S9B-ZR-SM3A-TF

CN751 MC-Board

Communication connector
(FCB-IX11A/IX11AP)

Pin No.	Name	Level
1	T x D IN	RS-232C Level
2	NC	–
3	NC	–
4	R x D IN	RS-232C Level
5	TD	TTL Level
6	NC	–
7	NC	–
8	RD	TTL Level
9	GND	–
10	AF_LED	–

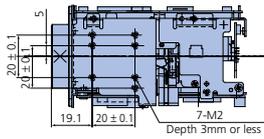
Connector type: JST S10B-ZR-SM3A-TF

CN701

Key switch connector

Pin No.	Name
1	GND
2	GND
3	KEY_AD0
4	KEY_AD1
5	KEY_AD2
6	KEY_AD3
7	KEY_AD4
8	KEY_AD5
9	KEY_AD6
10	KEY_AD7
11	NC
12	Strobe

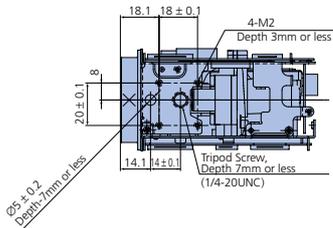
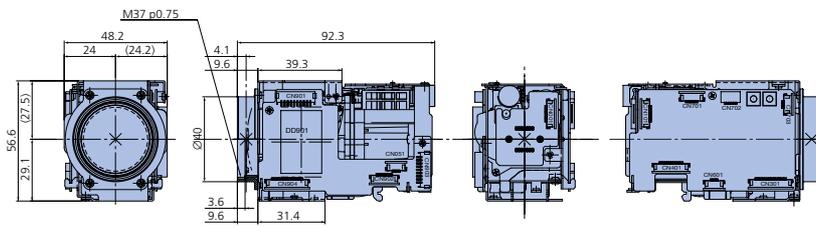
Connector type: Molex 52689-1297 FFC (0.5 mm)



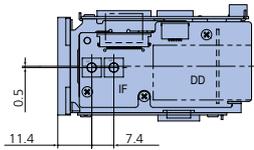
FCB-IX47A/IX47AP
FCB-IX45A/IX45AP



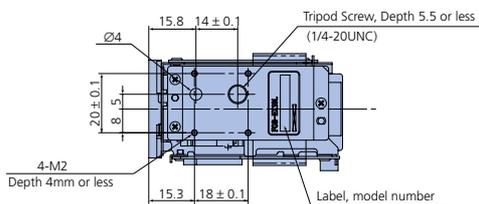
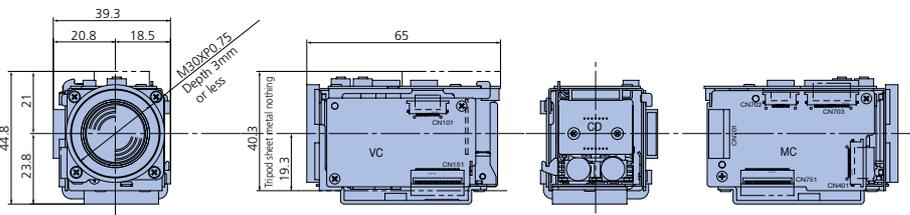
* The dimensions and appearance of the FCB-IX47A/IX47AP and FCB-IX45A/IX45AP are the same.



Unit: mm



FCB-IX11A/IX11AP



Unit: mm

Specifications

	FCB-IX47A	FCB-IX47AP	FCB-IX45A	FCB-IX45AP	FCB-IX11A	FCB-IX11AP
Image device	1/4 type Super HAD CCD				1/4-type Exview HAD CCD	
Effective picture elements	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels
Lens	18x zoom, f = 4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0				10x zoom, f = 4.2 mm (wide) to 42 mm (tele), F1.8 to F2.9	
Digital zoom	4x (72x with optical zoom)				4x (40x with optical zoom)	
Angle of view (H)	48 ° (wide end) to 2.7° (tele end)				46° (wide end) to 5.0° (tele end)	
Minimum working distance	10 mm (wide end), 800 mm (tele end)				10 mm (wide end), 1000 mm (tele end)	
Sync. system	Internal					
Minimum illumination	1.0 lx (50 IRE)				1.5lux (50IRE)	
S/N ratio	More than 50 dB					
Electronic shutter	1/4 to 1/10,000 s, 22 steps		1/60 to 1/10,000 s, 16 steps		1/2 to 1/10,000 s, 22 steps	
White Balance (WB)	Auto, ATW, Indoor, Outdoor, One-Push, Manual					
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)					
Back-light compensation	On/Off					
Flicker cancel	Auto	-	Auto	-	Auto	-
Freeze function	YES	YES	NO	NO	YES	YES
Focusing system	Auto (sensitivity: Normal, Low), One-Push AF, Manual, Infinity Interval AF, Zoom Trigger AF					
Picture effect	Neg. Art, Black & White, Mirror Image					
Camera operation switch	Zoom tele, Zoom wide					
Video output	VBS: 1.0 Vp-p (Sync. Negative) Y/C Output					
Camera control interface	VISCA (TTL/RS-232C signal level) Baud Rate 9.6 Kb/s, 19.2 Kb/s, 38.4 Kb/s Stop bit 1/2 selectable					
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 (inactive motors), 2.0 W (active motors)				6 to 12 V DC / 1.6 W (inactive motors), 2.1 W (active motors)	
Mass	170 g (6.0 oz)				95 g (3.4 oz)	
Dimensions (W x H x D)	48.2 x 56.6 x 92.3 mm (1 15/16 x 2 1/4 x 3 3/4 inches)				39.3 x 44.8 x 65 mm (1 9/16 x 1 13/16 x 2 5/8 inches)	

Sony Contacts

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