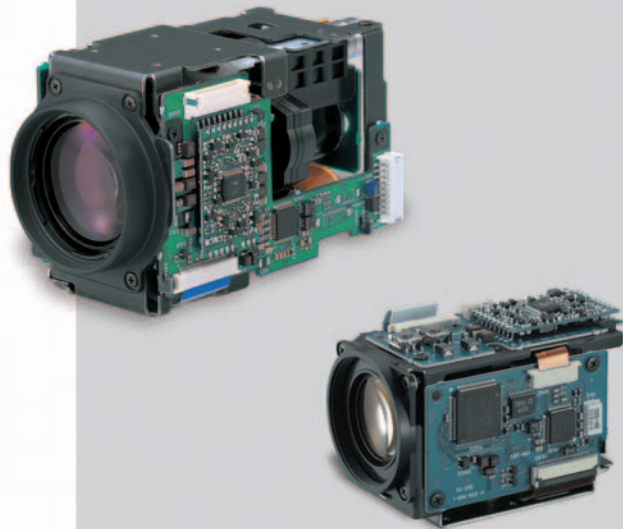


SONY®

Color Block Cameras

FCB-IX Series



FCB-IX47A/FCB-IX47AP
FCB-IX45A/FCB-IX45AP
FCB-IX11A/FCB-IX11AP

FEATURES

FCB-IX Series

Sony's FCB-IX Series of color block cameras incorporate high performance Digital Signal Processing (DSP) and sophisticated firmware that greatly enhance their operability and picture quality compared to conventional block cameras.

The new ultra-compact FCB-IX11A/IX11AP color cameras feature a 1/4-type EXview HAD™ CCD, 40x zoom ratio (10x optical/4x digital) and minimum illumination of 1.5 lux (50 IRE). Measuring only 1-9/16 x 1-13/16 x 2-5/8 inches and weighing less than 3.5 ounces, the FCB-IX11A/IX11AP cameras are ideal for space-restricted applications and can easily be interchanged with Sony's previously offered FCB-IX10A/IX10AP cameras.

The FCB-IX47A/IX47AP and FCB-IX45A/IX45AP color cameras incorporate a 1/4 type Super HAD™ CCD and feature a 72x zoom ratio (18x optical/4x digital) and a high sensitivity of 1.0 lux – expanding their vast appeal.

Inheriting the outstanding features of Sony's previous generation of block cameras, these FCB-IX cameras are ideal for numerous general-purpose applications such as low vision systems, mobile police cars, pipe inspection, photo booths and document stands.

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 Optimize the Brightness within the Specific Area

Expanded Mode Parameter for Shutter Speed and Gain Level

Superb Sensitivity

Various Customizable Settings

Low Power Consumption (1.5/1.6 W with inactive mode)

EEPROM Backup System without Battery

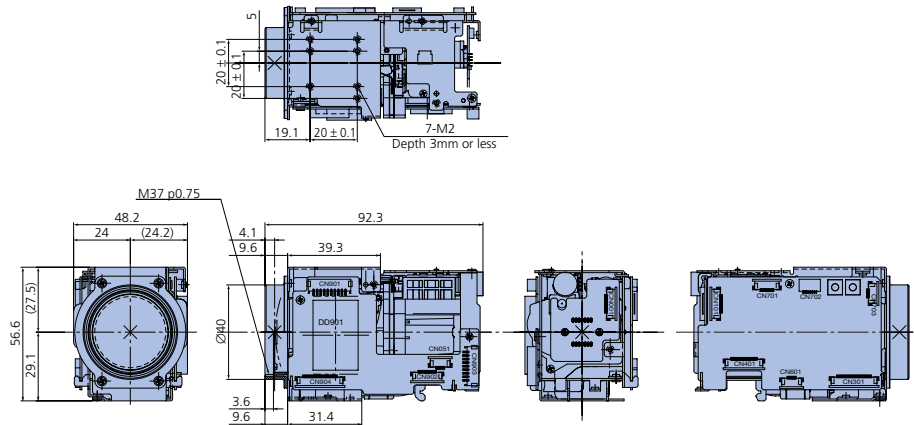
Lead-free solder and Halogen-free Printed-circuit-boards

FCB-IX SERIES LINE-UP



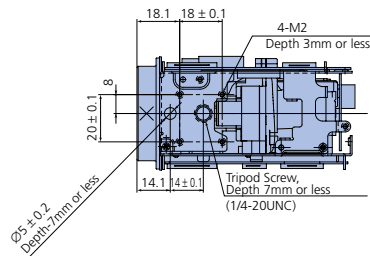
FCB-IX47A/IX47AP

- 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)



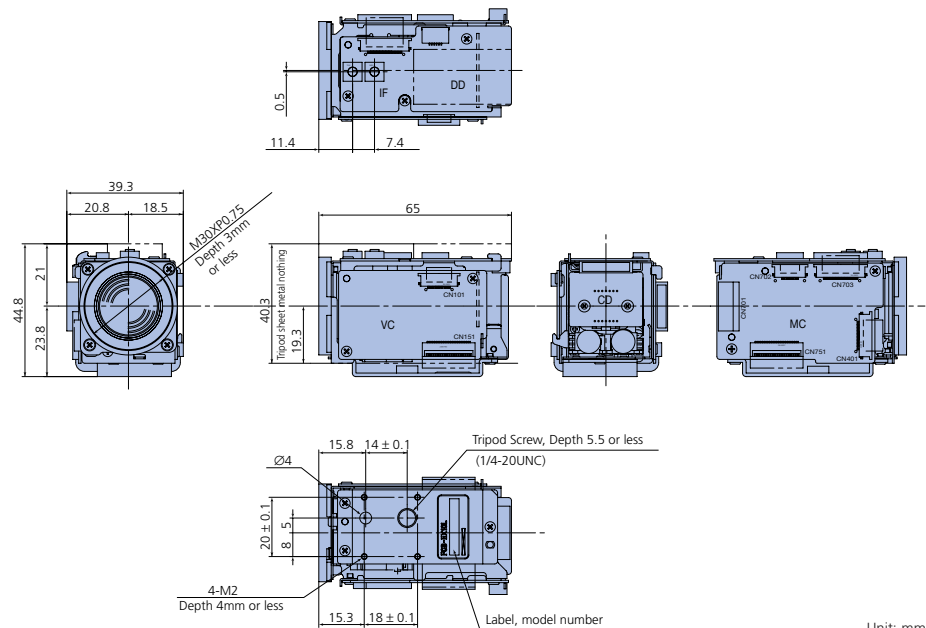
Unit: mm

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



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)



Unit: mm

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: 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: 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)

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) | |
| Viewing angle (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) | | | | 1.5 lx (50 IRE) | |
| S/N ratio | More than 50 dB | | | | | |
| Electronic shutter | 1/1 to 1/10,000 s, 22 steps | | 1/60 to 1/10,000 s, 16 steps | | 1/50 to 1/10,000 s, 16 steps | |
| White balance | 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 | – |
| 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 | -4 to 140 °F (-20 to 60 °C) | | | | | |
| Operating temperature | 32 to 122 °F (0 to 50 °C) | | | | | |
| Power consumption | 6 to 12 V DC/1.5 W (motors inactive) 2.0 W (motors active) | | | | 6 to 12 V DC/1.6 W (motors inactive) 2.1 W (motors active) | |
| Weight | 6.0 oz (170 g) | | | | 3.4 oz (95 g) | |
| Dimensions (W x H x D) | 1 15/16 x 2 1/4 x 3 3/4 inches (48.2 x 56.6 x 92.3 mm) | | | | 1 9/16 x 1 13/16 x 2 5/8 inches (39.3 x 44.8 x 65 mm) | |

SONY

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