

## FCB-H10

Color HD Camera

### Sony's High-Definition FCB-H10 Color Camera Takes Your Applications to the Next Level

Sony continues to be on the cutting edge of HD (high-definition) and block camera technology with the latest addition to its FCB block color camera series. Introducing Sony's first high definition block camera – the FCB-H10. This camera can expand your solutions by providing high-quality and high-resolution images that only HD can offer.

The new FCB-H10 color camera allows you to experience the world of HD with a 1080i and 720p signal system. This exceptional camera incorporates a 1/3-type HD CMOS image sensor with a 16:9 aspect ratio, boasting approximately two-million effective pixels (see specifications). The FCB-H10 camera features multi-format video outputs from NTSC/PAL (VBS & Y/C) to full HD (1080i and 720p – analog Y, Pb, Pr).

In addition, the FCB-H10 inherits many outstanding features from Sony's previous world-renowned FCB cameras and couples these with superb HD picture quality. With its built-in 10x optical zoom lens (120x total when combined with digital zoom), Picture Freeze Function, SPOT AE Function, and Slow Shutter, the FCB-H10 is ideal for applications that require dynamic, high-resolution images, and flexible outputs such as video conferencing, cable TV broadcasting, and point-of-view (POV) applications.

### FEATURES

#### Superb Picture Quality – Two-Megapixel HD CMOS Sensor

The FCB-H10 incorporates a 1/3-type HD CMOS sensor (approximately two-million effective pixels) providing outstanding picture quality and high-resolution images.

#### Multi-Format Video Outputs from NTSC/PAL to Full HD

The FCB-H10 can provide full high-definition video in 1080i format. Depending on your application and configuration, you can select the format that is right for you. With eight video formats from SD to full HD, the FCB-H10 camera allows for SD to HD migration.

#### High-Speed Serial Interface (max. 38.4 kb/s) and TTL Signal-Level Control (VISCA™ protocol)

All camera settings can be performed by VISCA protocol at high communication speeds up to 38.4 kb/s.

#### 120x Zoom Ratio (10x Optical + 12x Digital)

The FCB-H10 incorporates a 10x optical zoom lens, achieving an outstanding zoom capability of up to 120x when used in combination with its 12x digital zoom.

#### Compact and Lightweight Design

With its compact and lightweight (approx. 4.2 oz / 120 g) design, the FCB-H10 can be integrated into systems with space restrictions.

#### Picture Freeze Function

The Picture Freeze Function outputs a still image while the camera is panning, tilting, zooming, focusing, initializing the lens, or performing preset operations. This helps prevent the display of unnecessary images.

#### SPOT AE Function

The AE area of the FCB-H10 can be selected from any block in a 16 x 16 matrix of the image to optimize brightness within the desired area.

#### Other Features

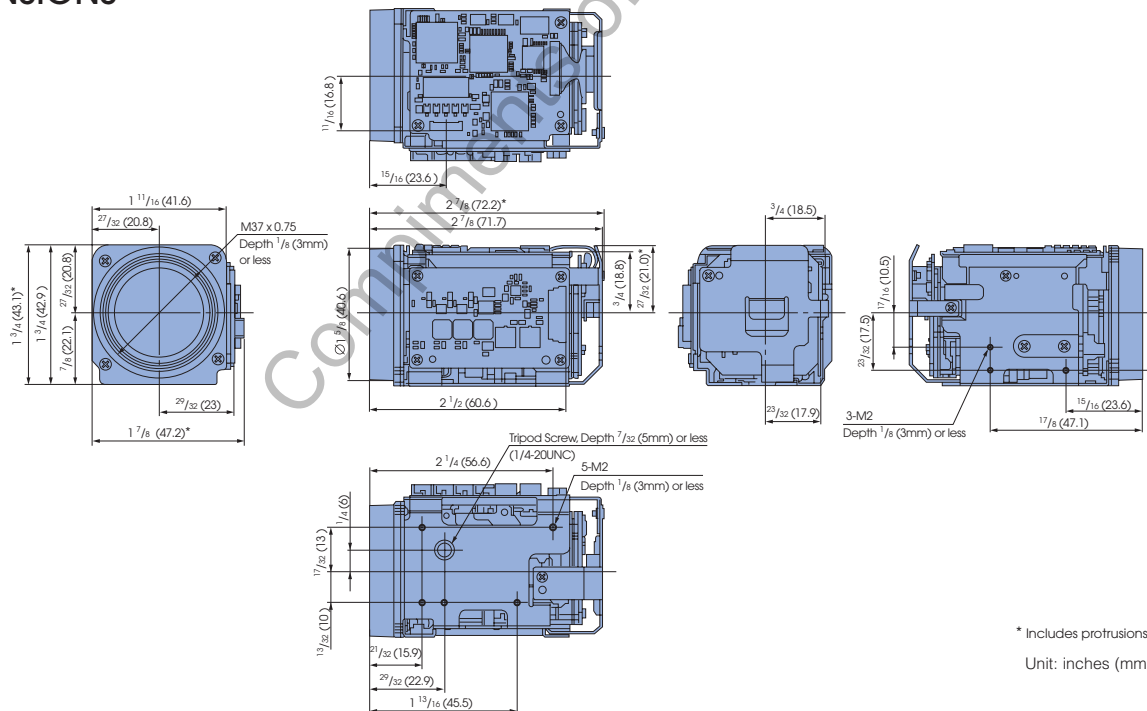
- Slow Shutter
- Low Power Consumption (3.8 W)
- Accessory lens mount (37 mm thread)

## SPECIFICATIONS

| FCB-H10                    |   |
|----------------------------|---|
| Image sensor               | 1/3-type CMOS   |
| Effective Number of Pixels | Approx. 2,000,000 pixels  |
| Aspect ratio               | HD 16:9<br>SD 4:3/16:9  |
| Lens                       | 10x optical zoom, f=5.1 mm (wide) to 51.0 mm (tele), F1.8 to F2.1   |
| Digital zoom               | 12x (120x with optical zoom)  |
| Horizontal angle of view   | 50° (wide) to 5.4° (tele)*  |
| Minimum object distance    | 10 mm (wide) to 800 mm (tele)   |
| Sync system                | Internal  |
| Minimum illumination       | 12 lx (typical) (F1.8, 50 IRE)  |
| S/N ratio                  | More than 50 dB   |
| Electronic shutter         | 1/2 to 1/10,000 s, 21 steps   |
| White balance              | Auto, Indoor, Outdoor, One-push, Manual   |
| Gain                       | Auto/Manual (-3 to 18 dB, 8 steps)  |
| AE control                 | Auto, Manual, Shutter Priority, Iris Priority, Bright, Spot AE  |
| EV compensation            | -10.5 to 10.5 dB (15 steps, 1.5 dB increments)  |
| Backlight compensation     | On/Off  |
| Signal system              | HD 1080/59.94i, 1080/50i, 720/59.94p, 720/50p<br>SD NTSC (Crop/Squeeze), PAL (Crop/Squeeze)               |
| Video output               | HD Analog component: Y/Pb/Pr<br>SD VBS: 1.0 Vp-p (sync negative) Y/C                                      |
| Focus system               | Full Auto (Normal AF/Interval AF/Zoom Trigger AF), One-push Trigger, Manual, Infinity, Near Limit Setting |
| Picture effects            | Nega Art, Black & White, Picture Freeze   |
| Camera operation switch    | Zoom tele, Zoom wide  |
| Camera control interface   | VISCA (TTL signal level), baud rate: 9.6 Kb/s, 19.2 Kb/s, 38.4 Kb/s, stop bit: 1 bit                      |
| Storage temperature        | -4 to 140 °F (-20 to 60 °C)   |
| Operating temperature      | 32 to 81 °F (0 °C to 45 °C)   |
| Power consumption          | 6 to 12 V DC/3.8 W  |
| Weight                     | Approx. 4.2 oz (120 g)  |
| Dimensions (w x h x d)     | 1 7/8 x 1 3/4 x 2 7/8 inches (47.2 x 43.1 x 72.2 mm)  |
| Supplied accessory         | 24P FFC (Flat Flexible Cable)   |

\* in HD and SD SQUEEZE output mode

## DIMENSIONS



\* Includes protrusions

Unit: inches (mm)

## PIN ASSIGNMENT & CONNECTOR

24 P FFC Connector for Camera Control, Analog Video Output, Power

| Pin No. | Name     | Level                         |
|---------|----------|-------------------------------|
| 1       | GND      |                               |
| 2       | TxD      | TTL Level (0 V - 5.0 V)       |
| 3       | TxD      | TTL Level (0 V - 5.0 V)       |
| 4       | RESET-IN | Reset: Low (GND) Normal: Open |
| 5       | GND      |                               |
| 6       | Y_OUT    | Y/C Y_OUT                     |
| 7       | GND      |                               |
| 8       | C_OUT    | Y/C C_OUT                     |
| 9       | GND      |                               |
| 10      | VBS OUT  |                               |
| 11      | GND      |                               |
| 12      | Y_OUT    | HD Analog Component           |
| 13      | GND      |                               |
| 14      | Pb_OUT   | HD Analog Component           |
| 15      | GND      |                               |
| 16      | Pr_OUT   | HD Analog Component           |
| 17      | GND      |                               |
| 18      | POWER    | 6.0 V - 12.0 V DC             |
| 19      | POWER    | 6.0 V - 12.0 V DC             |
| 20      | POWER    | 6.0 V - 12.0 V DC             |
| 21      | POWER    | 6.0 V - 12.0 V DC             |
| 22      | GND      |                               |
| 23      | POWER    | 6.0 V - 12.0 V DC             |
| 24      | GND      |                               |

Connector: KYOCERA ELCO 04 6240 224 006 848+

# SONY

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

IS-1203 (MK10432V1)

©2007 Sony Corporation. All rights reserved.  
Reproduction in whole or in part without written permission is prohibited.  
Design, features, and specifications are subject to change without notice.  
All non-metric weights and measurements are approximate.  
Sony is a registered trademark of Sony Corporation.  
VISCA is a trademark of Sony Corporation.

Printed in USA 8/07