

Component/OEM

Color Block Camera FCB-S3000 FCB-S3000P



## **FEATURES**



Sony's new FCB-S3000/S3000P cameras are the first FCB blocks to incorporate 3-CCD technology for superb picture quality. With a 3-chip Mega Pixel camera system, these cameras provide precise color reproduction and high-resolution images in both 4:3 and 16:9 modes. Responding to the growing demands of 16:9 applications, the FCB-S3000/S3000P cameras supply outstanding performance and are equipped with a variety of convenient functions such as a high-speed serial interface, RS-232C/TTL control, 12x optical zoom, slow shutter, and more.

High picture quality and feature-rich functions make the FCB-S3000/S3000P cameras ideal for demanding applications such as videoconference systems, traffic monitoring, document stands, and photo booths where 16:9 modes are required.

# Mega Pixel 3-CCD and 14-bit DXP (Digital Extended Processor) for superb picture quality

- High horizontal resolution: 530 TV lines
- Precise color reproduction

Precision 16:9 technology that provides a

truly wider viewing angle compared to conventional cameras

High-speed serial interface (max. 38.4 Kb/s) and RS-232C/TTL signal level control (VISCA™ protocol)

48x zoom ratio (12x optical, 4x digital)

**Slow shutter** 

**Freeze function** 

Key switch control capability

Various signal outputs: Analog composite, Y/C, R/G/B/Sync

Various AF modes including zoom trigger and interval modes

#### Various customizable settings

**Power consumption** 5.3 W (motors inactive)/6.3 W (motors active)

**On-screen display (date/time/title)** 

**EEPROM backup system without battery** 

Lead-free solder and halogen-free mounting boards

### PIN ASSIGNMENT

#### Superb Picture Quality With a Mega Pixel 3-CCD

The FCB-S3000/S3000P incorporates three 1/4.7-type Advanced HAD<sup>™</sup> CCD sensors, each with a total of 1,070,000 pixels. These cameras deliver outstanding picture quality with a high resolution of 530 TV lines and accurate color reproduction. Their adoption of Advanced HAD technology contributes to low noise, even in low light shooting environments and with dark subjects.

#### 14-bit DXP (Digital Extended Processor)

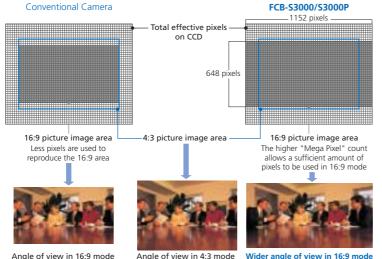
The use of 14-bit A/D conversion combined with 14-bit digital processing drastically reduces the noise commonly seen across dark areas of a picture compared to conventional cameras. This precision digital processing also contributes to expanding the dynamic range of the cameras so that both dark and light areas of an image are reproduced with high contrast, thus minimizing wash-out effect.

#### Precision 16:9 Technology, Including Wider Viewing Angle

Due to a greater number of pixels used in the 16:9 aspect ratio, these FCB cameras generate extremely high-resolution images compared to conventional cameras. In addition, the Mega Pixel 3-CCD enables a wide angle of view in the 16:9 mode.

Effective pixel number

- 960 (H) x 720 (V) (690,000 pixels) in 4:3 mode
- 1152 (H) x 648 (V) (746,000 pixels) in 16:9 mode



Angle of view in 16:9 mode (Conventional Camera)

angle of view in 16:9 mode (FCB-S3000/S3000P)

CN901 9-pin for Power and Video Output				
Pin No.	Name	Level		
1	UNREG	6 V to 12 V DC		
2	UNREG_GND			
3	NC			
4	VIDEO_OUT	1.0 Vp-р		
5	VIDEO_GND			
6	Y_OUT	1.0 Vp-р		
7	Y_GND			
8	C_OUT			
9	C_GND			

Connector: JST S9B-ZR-SM3A-TF

#### CN152 --- 8-pin for R/G/B Output

Pin No.	Name	Level	
1	GND (C)		
2	B_OUT	0.7 Vp-p	
3	GND (B)		
4	G_OUT	0.7 Vp-p	
5	GND (G)		
6	R_OUT	0.7 Vp-p	
7	GND		
8	C_SYNC	5 Vp-p	
Connector:	IST S8R_7R_SM3A_T	Ē	_

Connector: JST S8B-ZR-SM3A-TF

#### CN402 --- 10-pin for RS-232C Communication

Pin No.	Name	Level
1	TxD IN	RS-232C Level
2	NC	
3	NC	
4	RxD IN	RS-232C Level
5	TD_IN_DIRECT	TTL Level
6	NC	
7	NC	
8	RD_IN_DIRECT	TTL Level
9	GND	
10	AF_LED	
Connectory IC	T CTOP 2D CMOA TE	

Connector: JST S10B-ZR-SM3A-TF

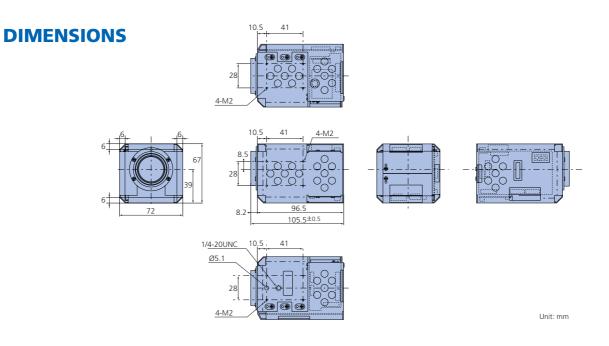
#### CN401 --- 12-pin for External Key Switch Control

Name
GND
GND
KEY_AD0
KEY_AD1
KEY_AD2
KEY_AD3
KEY_AD4
KEY_AD5
KEY_AD6
KEY_AD7
NC
STROBE

Connector: Molex 52689-1240 FFC (0.5 mm)

# **SPECIFICATIONS**

	FCB-S3000	FCB-S3000P
Image sensor	3-chip 1/4.7-type Interline Transfer (IT) Advanced HAD CCD	
Number of effective pixels	1,070,000	
Aspect ratio	4:3/16:9 switchable	
Signal system	NTSC	PAL
Horizontal resolution	530 TV lines	
Lens	12x zoom, f=3.6 mm (wide) to 43.2 mm (tele), F1.6 to F2.8	
Digital zoom	4x (48x with optical zoom)	
Angle of view (H)	Approx. 37.8° (wide end) to 3.3° (tele end) (4:3 mode)	
-	Approx. 45.4° (wide end) to 4.0° (tele end) (16:9 mode)	
Minimum working distance	100 mm (wide end) to 1,000 mm (tele end)	
Sync system	Internal	
Minimum illumination	15.0 lx (F1.6)	
S/N ratio	More than 50 dB	
Electronic shutter	1/4 to 1/10,000 s, 20 steps	1/3 to 1/10,000 s, 20 steps
White balance	Auto, Indoor, Outdoor, One-push, Manual	
AE control	Auto, Manual, Iris priority, Shutter priority	
EV compensation	On/Off	
Slow shutter	Auto/Manual	
Back-light compensation	On/Off	
Focusing system	Auto, Manual, One-push AF, Infinity, Zoom trigger	
Picture effect	Neg. art, Black & White	
Digital effect	Freeze	
Camera operation switch	Zoom tele, Zoom wide	
Video output	VBS: 1.0 Vp-p (sync negative), Y/C: Y: 1.0 Vp-p (sync negative) C: 0.286 Vp-p (without sync), R/G/B/Sync: 0.7 Vp-p (sync: 5 V TTL level)	
Camera control interface	RS-232C/TTL signal level control (VISCA) protocol, 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 45°C (32°F to 113°F)	
Power requirements	6 V to 12 V DC	
Power consumption	5.3 W (typical) (motors inactive)/6.3 W (typical) (motors active)	
Mass	Approx. 350 g (12 oz)	
Dimensions (W x H x D)	72 x 67 x 105.5 mm (2 <sup>7</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub> x 4 <sup>1</sup> / <sub>4</sub> inches)	



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