

PAL

FCB-CX1020P
FCB-CX995EP
FCB-CX985EP
FCB-CX490EP
FCB-CX48EP



FCB-CX1020P



FCB-CX995EP
FCB-CX985EP

Outline

Combined with new models using standard digital outputs with newly added functions such as progress scanning, image stabilizer, and wide dynamic range (Wide-D), the FCB-CX series C version cameras have increased functionality. Various built-in functions can be controlled by VISCA protocol commands. The custom preset function allows you to customize the initial setting of each function when the power of the camera is turned on. The use of these Blocks enables wide ranging applications, not limited to analog camera applications, and even digital camera applications.

Auto Focus Zoom Lens

FCB-CX1020P

36x optical zoom Auto Focus Zoom Lens
f = 3.4 mm (wide) to 122.4 mm (tele), F1.6 to F4.5

FCB-CX995EP
FCB-CX985EP

28x optical zoom Auto Focus Zoom Lens
f = 3.5 mm (wide) to 98.0 mm (tele), F1.35 to F3.7

FCB-CX490EP
FCB-CX48EP

18x optical zoom Auto Focus Zoom Lens
f = 4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0

Features

- Progressive Scan
FCB-CX1020P
FCB-CX995EP
FCB-CX490EP
- Digital output (comparable to ITU-R BT656)
- Image Stabilization: StableZoom™
FCB-CX1020P
FCB-CX995EP
FCB-CX985EP
- Wide dynamic range)
FCB-CX1020P
FCB-CX995EP
FCB-CX490EP
- Noise reduction (3D + 2D)
- Color enhancement
- Spherical privacy zone masking (with mosaic effect)
- Slow AE response
- Auto ICR (Auto Focus)
FCB-CX1020P
FCB-CX995EP
FCB-CX985EP
FCB-CX490EP
- Temperature Readout
- White Balance
- VISCA protocol (CMOS 5 V level)

Specifications

	FCB-CX1020	FCB-CX1020P	FCB-CX995E	FCB-CX995EP	FCB-CX985E	FCB-CX985EP	FCB-CX490E	FCB-CX490EP	FCB-CX48E	FCB-CX48EP	FCB-CX15E	FCB-CX15EP	
Camera													
Image sensor	1/4-type EXview HAD CCD®				1/4-type Super HAD CCD II™		1/4-type EXview HAD CCD®		1/4-type CCD		1/4-type EXview HAD CCD®		
Image sensor (Number of effective pixels)	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels	Approx. 380,000 pixels	Approx. 440,000 pixels	
Signal system	NTSC	PAL	NTSC	PAL	NTSC	PAL	NTSC	PAL	NTSC	PAL	NTSC	PAL	
Minimum illumination (50%, Normal mode, wide-end, aperture (MAX), F ratio) (typical)	1.4 lx (Shutter speed: 1/60 sec) 0.1 lx (Shutter speed: 1/4 sec) 0.01 lx (Shutter speed: 1/4 sec, ICR ON)	1.4 lx (Shutter speed: 1/50 sec) 0.1 lx (Shutter speed: 1/4 sec) 0.01 lx (Shutter speed: 1/4 sec, ICR ON)	0.65 lx (Shutter speed: 1/60 sec) 0.04 lx (Shutter speed: 1/4 sec) 0.005 lx (Shutter speed: 1/4 sec, ICR ON)	0.65 lx (Shutter speed: 1/50 sec) 0.04 lx (Shutter speed: 1/4 sec) 0.005 lx (Shutter speed: 1/4 sec, ICR ON)	0.25 lx (Shutter speed: 1/60 sec) 0.016 lx (Shutter speed: 1/4 sec) 0.0015 lx (Shutter speed: 1/4 sec, ICR ON)	0.25 lx (Shutter speed: 1/50 sec) 0.016 lx (Shutter speed: 1/4 sec) 0.0015 lx (Shutter speed: 1/4 sec, ICR ON)	0.7 lx (Shutter speed: 1/60 sec) 0.04 lx (Shutter speed: 1/4 sec) 0.001 lx (Shutter speed: 1/4 sec, ICR ON)	0.7 lx (Shutter speed: 1/50 sec) 0.04 lx (Shutter speed: 1/4 sec) 0.001 lx (Shutter speed: 1/4 sec, ICR ON)	0.4 lx (Shutter speed: 1/60 sec) 0.02 lx (Shutter speed: 1/4 sec)	0.4 lx (Shutter speed: 1/60 sec) 0.02 lx (Shutter speed: 1/4 sec)	0.9 lx (Shutter speed: 1/60 sec) 0.05 lx (Shutter speed: 1/4 sec) 0.01 lx (Shutter speed: 1/4 sec, ICR ON)	0.9 lx (Shutter speed: 1/50 sec) 0.05 lx (Shutter speed: 1/4 sec) 0.01 lx (Shutter speed: 1/4 sec, ICR ON)	
Recommended illumination	100 lx to 100,000 lx												
S/N ratio	More than 50 dB												
Gain	Auto/Manual/Max. Gain Limit (-3 dB to +28 dB, 2 dB step/Total 16 steps)												
Shutter speed	1/1 sec to 1/10,000 sec, 22 steps, Limit												
Sync system	Internal/External (V-Lock)												
Exposure compensation	-10.5 dB to +10.5 dB, 1.5 dB step/Total 16 steps												
Backlight compensation	Yes		Yes		Yes		Yes		Yes		Yes		
Gamma	Standard												
Aperture control	16 steps												
White balance	Auto WB, ATW, Indoor, Outdoor (fix/auto), Sodium Vapor Lamp (fix/auto), One Push WB, Manual WB												
AE (Auto exposure mode)	Full Auto Manual, Priority mode (shutter/iris), Bright, Spot Exposure, Slow AE												
Lens (wide) to (tele)	36x optical zoom, f=3.4 mm (wide) to 122.4 mm (tele), F1.6 to F4.5			28x optical zoom, f=3.5 mm (wide) to 98.0 mm (tele), F1.35 to F3.7				18x optical zoom, f=4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0			12x optical zoom, f=3.7 mm (wide) to 44.4 mm (tele), F1.6 to F2.8		
Zoom mode	Standard Speed Mode/Variable Speed Mode/Direct Mode												
Digital zoom	12x (432x with optical zoom)			12x (336x with optical zoom)				12x (216x with optical zoom)			12x (144x with optical zoom)		
Zoom movement speed													
Optical wide to Optical tele	4.0 sec (Focus Tracking ON), 2.7 sec (Focus Tracking OFF)			2.5 sec (Focus Tracking ON), 1.7 sec (Focus Tracking OFF)				2.5 sec (Focus Tracking ON), 2.0 sec (Focus Tracking OFF)		2.8 sec (Focus Tracking ON), 2.4 sec (Focus Tracking OFF)		2.5 sec (Focus Tracking ON), 2.0 sec (Focus Tracking OFF)	
Optical wide to Digital 12x tele	6.0 sec	6.2 sec	4.5 sec	4.9 sec	4.5 sec	4.9 sec	4.5 sec	5.2 sec	4.5 sec	5.2 sec	3.3 sec	3.8 sec	
Digital wide to Digital 12x tele	2.1 sec	2.3 sec	2.0 sec	2.5 sec	2.0 sec	2.5 sec	2.0 sec	2.5 sec	2.0 sec	2.5 sec	2.0 sec	2.5 sec	
Focusing system	Auto Focus (Normal AF, Interval AF, Zoom Trigger AF [Sensitivity: normal, low]), Manual (Standard Speed Mode/Variable Speed Mode/Direct Mode), One Push Trigger, Infinity, Near Limit, ICR-ON Focus compensation												
Focus movement speed	∞ to Near: 1.0 sec			∞ to Near: 0.7 sec				∞ to Near: 0.5 sec					
Horizontal viewing angle (wide) to (tele)	57.8 degrees to 1.7 degrees			55.8 degrees to 2.1 degrees				48.0 degrees to 2.8 degrees			53.6 degrees to 4.6 degrees		
Minimum object distance (wide) to (tele)	320 mm to 1,500 mm			300 mm to 1,500 mm				290 mm to 800 mm			300 mm to 1,000 mm		
Horizontal resolution	(10mm (wide) by VISCA control) 550 TV line												
Camera Features													
Auto ICR	Yes			Yes			Yes			No			
Wide-D	(Auto mode)	Yes			No			Yes			No		
	(IS/PS mode)	Yes			Yes			No			Yes		
Visibility Enhancer (VE)	No			No			No			No			
Defog	No			No			No			No			
Noise reduction	Yes (3D + 2D)			Yes (3D + 2D)			Yes (3D + 2D)			Yes (3D + 2D)			
Progressive scan mode	Yes			Yes			No			Yes			
Image stabilization	Yes			Yes			Yes			No			
StableZoom: (Magnification)*1	Yes (40x)			Yes (31x)			Yes (31x)			No			
Digital output	Yes			Yes			Yes			Yes			
Spherical privacy zone masking	Spherical, Color, Half tone, with mosaic effect												
Motion detection	Yes			Yes			Yes			Yes			
Alarm	Yes			Yes			Yes			Yes			
Slow AE response	Yes (Max. 2 min.)			Yes (Max. 2 min.)			Yes (Max. 2 min.)			Yes (Max. 2 min.)			
Picture effects	Neg. Art (Negative/Positive Reversal), Black White (Monochrome Image), Color enhancement												
Picture freeze	Yes			Yes			Yes			Yes			
Electronic-Flip (E-Flip)	Yes			Yes			Yes			Yes			
Mirror Image	Yes			Yes			Yes			Yes			
Slow shutter	Yes			Yes			Yes			Yes			
Temperature readout	Yes			Yes			Yes			Yes			
Title display	Yes (20 characters/line, max. 11 lines)			Yes (20 characters/line, max. 11 lines)			Yes (20 characters/line, max. 11 lines)			Yes (20 characters/line, max. 11 lines)			
Camera mode display	Yes (English*, Chinese)* Default			Yes (English*, Chinese)* Default			Yes (English*, Chinese)* Default			Yes (English*, Chinese)* Default			
Key switch control	Yes			Yes			Yes			Yes			
Camera operation switch	Yes (Zoom Tele, Zoom Wide)			Yes (Zoom Tele, Zoom Wide)			Yes (Zoom Tele, Zoom Wide)			Yes (Zoom Tele, Zoom Wide)			
Interface													
Video output	Digital: Y/Pb/Pr 4:2:2 (comparable to ITU-R BT656) Analog: VBS: 1.0 Vp-p (sync negative), Y/C										Digital: Y/Pb/Pr 4:2:2 (LVDS) (comparable to ITU-R BT656) Analog: VBS: 1.0 Vp-p (sync negative)		
Camera control interface	VISCA protocol (CMOS 5 V level) Baud Rate: 9.6 kbps, 19.2 kbps, 38.4 kbps, Stop bit: 1 bit												
General													
Power requirements	6.0 V to 12.0 V DC												
Power consumption	2.4 W (motors active: 5.1 W)			2.2 W (motors active: 5.0 W)			1.9 W (motors active: 4.6 W)		2.4 W (motors active: 4.4 W)		2.0 W (motors active: 3.1 W)		2.7 W (motors active: 3.4 W)
Operating temperature	-5°C to +60°C												
Storage temperature	-20°C to +60°C												
Operating humidity	20% to 80% (no condensation)												
Storage humidity	20% to 95% (no condensation)												
Dimensions (W x H x D)	50.0 x 57.5 x 87.9 mm			50.0 x 57.5 x 89.8 mm			52.7 x 57.5 x 88.5 mm		50.0 x 57.5 x 88.5 mm		44.8 x 46.9 x 71.8 mm		
Mass	Approx. 230 g			Approx. 238 g			Approx. 230 g		Approx. 220 g		Approx. 150 g		

*1 StableZoom: Stable zoom incases the magnification is that combined optical zoom and digital zoom.

* EXview HAD CCD and StableZoom are trademarks of Sony Corporation