



XCD-SX910
XCD-SX910CR
XCD-X710
XCD-X710CR

CHANGING

B/W Video and Colour Raw Data Digital Camera Modules



Ideal for use in today's diverse applications in the machine vision industry.

In complement of the recent monochrome models, XCD-SX910 and XCD-X710, Sony introduces the newest additions to its IEEE 1394 digital camera family – the Sony XCD-SX910CR and XCD-X710CR Colour Raw Data Digital Camera Modules.

Sony IEEE 1394 digital camera series employs progressive scan CCD with square pixels, making them ideal for use in a wide range of machine vision applications.

What's more, the XCD-SX910CR and XCD-X710CR output raw image data, which allows the images to be captured at high frame rates.

The XCD-SX910 and XCD-SX910CR incorporate a 1/2 type, 1,450,000-pixel CCD and offer SXGA resolution images, while the XCD-X710 and XCD-X710CR, the XGA version of the XCD-SX910 and XCD-SX910CR, incorporate a 1/3 type, 800,000-pixel CCD.

These cameras incorporate an external trigger function, which allows fast-moving objects or still images to be captured clearly in low-light environments. A variety of convenient features such as partial scan (16 x 16 zones) and selectable output modes (frame rate/bit depth) make these cameras extremely flexible.

With their high frame rates, and compact, robust design, these cameras are the right choice for today's wide range of machine vision applications, ranging from demanding factory automation and semiconductor inspection to food, agriculture, and pharmaceuticals applications of machine vision.

Features

- High resolution with progressive scan square-pixel CCD
 - XCD-SX910 and XCD-SX910CR:
1/2 type IT CCD
SXGA, 1,280 (H) x 960 (V) with a maximum resolution of 1,376 (H) x 1,024 (V)
 - XCD-X710 and XCD-X710CR:
1/3 type IT CCD
XGA, 1,024 (H) x 768 (V)
- IEEE 1394 Digital Camera Specification Ver. 1.30 compliant
- Selectable frame rate
 - XCD-SX910 and XCD-SX910CR:
Up to 15 fps
 - XCD-X710 and XCD-X710CR:
Up to 30 fps
- 8-bit (Mono8) or 10-bit (Mono16) output (XCD-SX910 and XCD-X710)
- Raw data 8-bit (Mono8) or raw data 10-bit (Mono16) output (XCD-SX910CR and XCD-X710CR)
- External trigger input and Exposing output function (BNC)
- Partial scan (16 x 16 selectable zones)
- Binning function (2 x 1, 2 x 2) *
- Fast hardware or software asynchronous trigger
- Auto/Manual gain
 - XCD-SX910 and XCD-X710:
0 to 24 dB, 0.035 dB steps
 - XCD-SX910CR and XCD-X710CR:
0 to 18 dB, 0.035 dB steps
- C mount
- High shock and vibration tolerance
- Lead-free solder mounting board

* In binning mode for the XCD-SX910CR and XCD-X710CR the colour information is lost

THE WAY

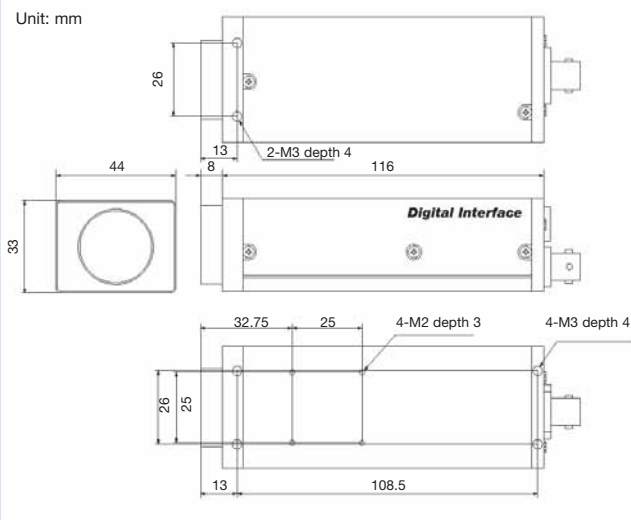
BUSINESS

COMMUNICATES

XCD-SX910, XCD-SX910CR, XCD-X710, XCD-X710CR SPECIFICATIONS

	XCD-SX910	XCD-SX910CR	XCD-X710	XCD-X710CR
Image device	1/2 type progressive scan IT CCD		1/3 type progressive scan IT CCD	
Effective picture elements	1,392 (H) x 1,040 (V); 1,450,000 pixels		1,034 (H) x 779 (V); 800,000 pixels	
Output image size	SXGA: 1,280 (H) x 960 (V), Max. 1,376 (H) x 1,024 (V)		XGA: 1,024 (H) x 768 (V)	
Cell size	4.65 µm (H) x 4.65 µm (V)			
Lens mount	C mount			
Minimum illumination	4 lx (F0.95 lens open, +18 dB gain)	20 lx (F0.95 lens open, +18 dB gain)	4 lx (F0.95 lens open, +18 dB gain)	20 lx (F0.95 lens open, +18 dB gain)
Digital interface	IEEE 1394-1995			
Transfer rate	400/200 Mbps			
Frame rate	15/7.5/3.75/1.875 fps		30/15/7.5/3.75/1.875 fps	
Gain control	Auto/manual (0 to 24 dB, 0.035 dB steps)	Auto/manual (0 to 18 dB, 0.035 dB steps)	Auto/manual (0 to 24 dB, 0.035 dB steps)	Auto/manual (0 to 18 dB, 0.035 dB steps)
White Balance	-	R/B Gain Control	-	R/B Gain Control
Hue	-	G Gain	-	G Gain
Optical Filter	-	Bayer Output	-	Bayer Output
External shutter	1/100,000 to 17.5 s			
External trigger shutter	Trigger start (mode0), trigger start and exposure duration (mode1)			
Partial scan	256 zones (16 x 16)			
Power requirements	DC 8 to 30 V (from IEEE 1394 camera cable)			
Dimensions	44 (W) x 33 (H) x 116 (D) mm (1 3/4 x 1 1/8 x 4 5/8 inches)			
Mass	250 g (9 oz)			
Operating temperature	-5 to +45 °C (23 to 113 °F)			
Storage temperature	-30 to +60 °C (-22 to +140 °F)			
Operating humidity	20 to 80% (non condensing)			
Storage humidity	20 to 95% (non condensing)			
Vibration	10 G (20 to 200 Hz)			
Shock resistance	70 G			
Regulations	UL60950 listed, FCC Class B Digital Device, CE (EN61326)			
Supplied accessories	Lens mount cap (1), Operating instructions (1), Cable (1), Clamp filter (2)			
Optional accessories	VCT-ST70I Tripod Adaptor 50 mm macro lens			

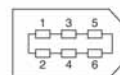
DIMENSIONS



REAR PANEL



PIN Assignment



- 1: Power
- 2: Power
- 3: TPB-
- 4: TPB+
- 5: TPA-
- 6: TPA+

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SONY

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SONY BUSINESS EUROPE

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