SONY

BRC-X400

Premium 4K30P IP PTZ Camera
with 30x (w/CIZ) zoom and
NDI®|HX capability for use in a
wide range of environments

Overview

Capture every point of view in 4K with excellent picture quality and efficient IP production workflow

The versatile BRC-X400 PTZ camera is ideal for use in a wide range of environments - from broadcast studios and remote on-air suites to sports stadiums, arenas, houses of worship and lecture halls.

The camera's 1/2.5-type Exmor R™ sensor captures broadcast quality 4K images with excellent sensitivity, very low noise and rich, natural colour reproduction. It's complemented by the integrated high-resolution lens that offers a powerful zoom capability of up to 80x in Full HD** (30x in 4K), with an expansive approx. 70° wide angle coverage to capture every point of view.

Efficient IP-based live production is augmented with support for NDI®|HX allowing flexible configuration with other networked NDI®-enabled devices.

Images also can be reviewing remotely via a web browser, with support for RTSP (Real Time Streaming Protocol), RTMP*** (Real Time Messaging Protocol) and SRT*** (Secure Reliable Transport) ensuring smooth, stable streaming of video plus audio (from an optional microphone, available separately) over

an IP network.

Installation and set-up is easy, with a new Picture Setting File**** allowing the same settings to be applied to multiple cameras through a web interface from a laptop or PC. Convenient integration in multi-camera live events is also simplified with genlock support and an 'on-air' tally lamp.

* NDI® is a registered trademark of Vizrt NDI AB
** With Clear Image Zoom and Tele Convert Mode
*** Requires firmware V3.00
**** Requires firmware V2.00

Features

Excellent 4K images, even in low light
The sensitive 1/2.5-type Exmor R sensor captures high-quality 4K images with very low noise, even in dimly-lit environments.

Up to 80x zoom
Powerful zoom up to 80x (in FHD) allows frame-filling close-ups with fine details seen clearly. Responsive autofocus ensures that images stay clear and sharp, even at high zoom settings.

Wide viewing angle
Cover the whole scene in sports arenas and lecture theatres with a horizontal viewing angle of approx. 70°.

Support for NDI®*|HX
NDI®|HX compatibility supports efficient IP-based live production, allowing flexible configuration with other networked NDI®-enabled devices.

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Multiple control protocols

PTZ and other camera functions can be controlled remotely via S700PTP, CGI and VISCA protocols.

Flexible and efficient IP-based production
In addition to RTSP, RTMP(S)* and SRT* (Secure Reliable Transport) are supported. Video can be streamed directly from camera to online streaming service, also can be transmitted more securely, with lower latency and more stably even in unstable network environment.

* Requires firmware V3.00.

Simpler installation, lower costs
A single IP cable carries camera power, video image, audio output and control signals to simplify installation and reduce cabling costs.

Ideal for live production
Genlock allows seamless multi-camera switching in live events. The camera's inbuilt tally lamp is ideal for live productions and reality shows. PTZ Trace Memory makes it even easier to film programs by recalling the usual camera works.

Fast, fuss-free set-up
The new Picture Setting File* function can apply the same camera settings among multiple cameras for fast set-up.

* Requires firmware V2.00

Simplified construction of VR/AR systems*
Real-time camera tracking data (pan/tilt/zoom/focus/iris) can be output from the camera over IP network in free-d* protocol. It can construct VR/AR system without additional tracking system, easy and cost effective solution.

*VR: Virtual Reality, AR: Augmented Reality

* free-d is an industry-standard protocol for transmitting camera tracking data.

Specifications

Camera	
Image Sensor	1/2.5 Exmor R CMOS
Image Sensor (Number of Effective Pixels)	Approx. 8.5M pixels
Signal System	2160/29.97p, 25p, 23.98p 1080/59.94p, 50p, 29.97p, 25p, 23.98p 1080/59.94i, 50i 720/59.94p, 50p
4K Capability	Yes (built-in 4K functions)
Minimum Illumination (50IRE)	1.6 lux (1/30s 50IRE F2 high-sensitivity OFF)
Horizontal Resolution	1700 TV lines (Center) (4K) 1000 TV lines or higher (Center) (FHD)
Gain	Auto/Manual (0 to +48 dB) (High Sensitivity On)
	1/1 to 1/10000 sec (59.94 Hz system)

Shutter Speed	1/1 to 1/10000 sec (23.98 Hz system) 1/1 to 1/10000 sec (50 Hz system)
Exposure Control	Auto, Manual, Priority AE (Shutter, Iris)
White Balance	Auto1, Auto2, One Push WB Indoor, Outdoor, Manual
Zoom Capability	30x (4K with CIZ), 40x (HD with CIZ), Max. 80x (HD with CIZ* and Tele Convert Mode) *CIZ = Clear Image Zoom
Focusing System	Auto/Manual
Horizontal Viewing Angle	Approx. 70° (Wide)
Focal Length	f=4.4 mm (Wide) to 88.0 mm (Tele) F2.0 to F3.8
Minimum Object Distance	80 mm (Wide)~ 800 mm (Tele)
Pan/Tilt Angle	Pan: ±170° Tilt: +90°/-20°
Pan/Tilt Speed (Max.)	Pan: 300°/s Tilt: 126°/s
	Pan: 1.1° to 101°/s

Pan/Tilt Speed	Tilt: 1.1° to 91°/s
Pan/Tilt Speed (Slow)	Pan: 0.5° to 60°/s Tilt: 0.5° to 60°/s
Pan/Tilt Slow Mode	Yes
Pan/Tilt Operation Noise	NC30 or less * * Sony measurement conditions
Preset Position	256 (CGI) 100 (VISCA)
Picture Freeze Preset	Yes
Preset Mode1/Mode2	Yes
PTZ Trace Memory	Yes
PTZ Motion Sync	Yes
Camera Tracking Data Output	Yes (Requires firmware V2.10)

Network

IP Video Resolution	3840x2160, 1920x1080, 1280x720, 720x576, 720x480, 640x360
Compression Format	H.264: High, Main, Baseline Profile H.265: Main Profile

Maximum Frame Rate	H.264: 60fps H.265: 60fps
Bitrate Compression Mode	CBR/VBR (selectable)
Range of Bitrate Setting	512 Kbps ~50 Mbps
Multi Streaming Capability	3
Maximum Number of Clients	5
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, DHCP, DNS, RTP/RTCP, RTSP, UPnP, VISCA over IP
NDI®|HX Capability	Yes (requires a license sold separately)

Camera Features

Auto ICR (Auto mode of IR Cut filter Removal)	Yes
Day/Night	Yes

Visibility Enhancer	Yes
Image Stabilization	Yes
Image Flip	Yes
Picture Setting File	Yes
Picture Profile Preset	Yes
Color Gain	Yes (15 steps)
Color Hue	Yes (15 steps)
Color Matrix	Yes (STD, HIGH SAT, FL LIGHT, MOVIE, STILL, CINEMA, PRO, ITU709, B&W)
Gamma	STD, STRAIGHT, 512 PATTERN, MOVIE, STILL, CINE1, CINE2, CINE3, CINE4
Gamma Level	Yes (15 steps)
Black level	Yes (97 steps)
Black Gamma	Yes (15 steps)
Knee Point	Yes (13 steps)
Knee Slope	Yes (15 steps)
Flicker Cancel	On/Off
Color Bar	On/Off

Color Bar Overlay Name	On/Off
Hide OSD Menu	On/Off
Standby Mode	Yes
Remote Standby	Yes

Web UI	
Ver Up	Yes

Audio	
Channel	2ch
Audio Codec	AAC LC 128kbps/ST (IP) AAC LC 256kbps/ST (IP)
Setting Option	Auto Level Control (ALC): On/Off Equalizer: Off, Low cut, Voice enhancement Input selection: Microphone/Line Mic volume: -10~+10 (21 steps) Audio codec
Embedded Audio in Baseband Video	Yes (3G-SDI, HDMI)
Embedded Audio in IP	

Streaming	Yes

Interface

4K Video Output	HDMI x1 and IP (streaming) x1
HD Video Output	3G-SDI x1, HDMI x1, IP (streaming) x1
Remote Video Format Switching	Yes
HDMI Color Space	YCbCr, 4:2:2 8 bit RGB, 4:4:4 8 bit
Camera Control Interface	VISCA RS-422 RJ45 (In/Out) VISCA over IP RJ-45 S700PTP RJ-45
IR Remote Control	Yes
Microphone Input	Mini-phone (φ3.5mm) x2 (Mic/Line Selectabe)
Sync. System	EXT/INT
External Sync. Input	BNC, 75Ω, HD 3-level sync, SD Black Burst
Tally	Front x 1

Power Connector Type	IEC60130-10 (JEITA standard RC-5320A) TYPE4

General

Power Requirements	DC 12V (DC 10.8 to 13.2V), PoE+ (IEEE802.3at compliant)
Power Consumption	25.5 W Max.
Operating Temperature	0 °C to 40 °C 32 °F to 104 °F
Storage Temperature	-20 °C to +60 °C -4 °F to +140 °F
Dimensions (W x H x D)*1	158.4 x 177.5 x 200.2 mm 6 1/4 x 7 x 8 inch
Mass *1	Approx. 1.8 kg 3 lb 15.5 oz
Camera Body Color	White/Black
Size of Screw Hole for Tripod	1/4-20UNC x1
Mountable Angle	< $\pm$15°
Ceiling Mount	Yes
	AC power adaptor (1) IR Remote Commander Unit (1)

Supplied Accessories	Ceiling bracket (2)
	Wire rope (1)
	Screw M3 x 8 (9)
	Screw M2.6 x6 BLACK (1)
	HDMI cable fixing plate (1)
	Safety regulation (1)
	Download site information (1)
	Warranty (1)

Notes

| *1 | The values for dimensions and mass are approximate |

Related products

REA-C1000 Edge Analytics Appliance

Edge Analytics Appliance

HXC-FB80

Three 2/3-inch Exmor™ CMOS sensor HD colour studio camera

HXC-P70

Affordable, three 2/3-inch Exmor CMOS sensor, full HD/SD compact system camera with direct optical fibre cable connection

RM-IP500

PTZ Camera Remote Controller

RM-IP10

IP remote control panel for BRC cameras

RCP-3100

Joystick type of remote control panel

MCX-500

Multi-Camera Live Producer

RCP-1500

Joystick type of Remote Control Panel

for HDC/HSC/HXC series cameras.
5 units in 19-inch EIA rack.

for HDC/HSC/HXC series cameras. 4 units in 19-inch EIA rack.

RCP-3500

Remote-control panel for HDC/HSC/HXC series cameras

RCP-3501

Remote-control panel for HDC/HSC/HXC series cameras

MSU-3000

Master setup unit, multi camera remote control panel for system cameras (horizontal type)

MSU-3500

Master setup unit, multi camera remote control panel for system cameras (vertical type)

BRC-AM7

Premium PTZ Auto Framing Camera with AI Analytics, 4K 60p, 20x optical zoom. High interoperability with other production systems

Gallery