SONY

SRG-X120

Standard 4K30P IP PTZ Camera
with 12x optical zoom and
NDI®|HX capability for a wide
range of applications

Overview

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

The versatile SRG-X120 remotely controlled PTZ camera is ideal for a wide range of applications - from classrooms and meeting spaces and medical environments.

The camera's 1/2.5-type Exmor R CMOS sensor captures up to 4K* resolution images with excellent sensitivity, very low noise and rich, natural colour reproduction. It's complemented by the integrated high-resolution 12x zoom lens that offers an expansive approx. 70° wide angle coverage to capture every point of view.

High speed movement during preset recall captures the speaker's every movement, while Picture Freeze during transitions ensures your audience isn't disturbed by rapid camera movements. PTZ Motion Sync*** function allows smooth blending of separate pan, tilt and zoom movements for seamless, professional-looking transition.

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.

* 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

Note 1: This product contains pre-installed software and requires the purchase of licence keys to activate some functions.

Note 2: When using RM-IP500 firmware should be updated to V2.10 and for RM-IP10, firmware should be updated to V2.17.

Features

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

4K upgrade option
Upgrade to 4K shooting via optional license.

Wide viewing angle
Cover the whole scene in meetings and lecture theatres with a horizontal viewing angle of approx. 70° and up to 12x zoom capability.

Ideal for lecture caputure

Use the camera in conjunction with the AI-based REA-C1000 Edge Analytics Appliance to smoothly track the speaker's movements and automatically generate a cut-out image of speaker.

High speed movement and Picture Freeze Preset

Accurately capture the presenter's movements with maximum 300°/s pan and tilt movement during preset recall. Picture Freeze Preset maintains a steady image while the camera moves to a new preset position – with no uncomfortable transitions for your audience.

Smooth pan-tilt-zoom

PTZ Motion Sync function* allows smooth blending of separate pan, tilt and zoom movements for seamless, professional-looking transitions.

* Requires firmware V2.00.

Simpler installation, lower costs

A single network cable carries camera power, video output and control signals to simplify installation and reduce cabling costs.

Support for NDI®*|HX

NDI®|HX compatibility (via optional license) enables cost-effictive school studio system integration, allowing flexible configuration with other networked NDI®-enabled devices.

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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.

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.

Specifications

Camera	
Image Sensor	1/2.5 type ExmorR CMOS
Image Sensor (Number of Effective Pixels)	Approx. 8.5M pixels
Signal System	2160 (^{*1})/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 (requires 4K optional license)
Minimum Illumination (50IRE)	1.6 lux (1/30s 50IRE F2 high-sensitivity OFF)
Horizontal Resolution	1700 TV lines (Center) (4K^{*1}) 1000 TV lines or higher (Center) (FHD)

Gain	Auto/Manual (0 to +48 dB) (High Sensitivity On)
Shutter Speed	1/1 to 1/10000 sec (59.94 Hz system) 1/1 to 1/10000 sec (23.98 Hz system) 1/1 to 1/10000 sec (50Hz system)
Exposure Control	Auto, Manual, Priority AE (Shutter, Iris)
White Balance	Auto1, Auto2, One Push WB, Indoor, Outdoor, Manual
Zoom capability	12x
Focusing System	Auto/Manual
Horizontal Viewing Angle	Approx. 70° (Wide)
Focal Length	f=4.4mm (Wide) to 52.8mm (Tele) F2.0 to F3.7
Minimum Object Distance	80 mm (Wide)~ 400 mm (Tele)
Pan/Tilt Angle	Pan: ±170° Tilt: +90°/-20°
Pan/Tilt Speed (Max.)	Pan: 300°/s

	Tilt: 126°/s
Pan/Tilt Speed	Pan: 1.1° to 101°/s 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
PTZ Motion Sync	Yes

Network

IP Video resolution	3840x2160 (^{*1}), 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	512Kbps~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
Flicker Cancel	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 128 kbps/ST (IP) AAC LC 256 kbps/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 ([*1])
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
IR Remote Control	Yes
Microphone Input	Mini-phone (φ3.5mm) x2, (Mic/Line Selectabe)
Sync. System	INT
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) *2	158.4 x 177.5 x 200.2 mm 6 1/4 x 7 x 8 inch
Mass *2	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	< ±15°
Ceiling Mount	Yes
Supplied Accessories	AC power adaptor (1) IR Remote Commander Unit (1) 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	Available after an upgrade via a 4K optional license.
*2	The values for dimensions and mass are approximate.

Related products

RM-IP500

PTZ Camera Remote Controller

RM-IP10

IP remote control panel for BRC cameras

REA-C1000 Edge Analytics Appliance

Edge Analytics Appliance

MCX-500

Multi-Camera Live Producer

SRGL-4K

4K license for SRG-X400/SRG-X120

Gallery