SRG-X400

IP 4K (requires 4K optional license) Pan-Tilt-Zoom Camera with 40x (in HD) zoom and NDI®*|HX capability

Overview

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

The versatile SRG-X400 remotely controlled PTZ camera is ideal for a wide range of applications - from classrooms and meeting spaces to houses of worship, lecture halls and medical environments.

The camera's 1/2.5-type Exmor R CMOS sensor captures up to 4K resolution images (requires optional license) with excellent sensitivity, very low noise and rich, natural colour reproduction. It's complemented by the integrated high-resolution lens that offers zoom capability up to 40x in Full HD*** (30x in 4K), with 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 (via optional license), 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) 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.

* NDI® is a registered trademark of NewTek, Inc.
** Available through future upgrade planned in early 2020.
*** With Clear Image Zoom.

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

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noise, even in dimly-lit environments.

4K upgrade option
Upgrade to 4K shooting via optional license (availability planned in early 2020).

Up to 40x zoom
Powerful zoom up to 40x (in Full HD) allows finely detailed frame-filling close-ups. Responsive autofocus ensures that images stay clear and sharp, even at high zoom settings.

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

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.

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.

* NDI® is a registered trademark of NewTek, Inc. Network services, content, and the [operating system and] software of this Product may be subject to individual terms and conditions and changed, interrupted or discontinued at any time and may require fees, registration and credit card information.

Remote viewing
View pictures remotely over the Internet from a web browser, with support for RTSP (Real Time Streaming Protocol).

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

*Available through future upgrade planned in early 2020

Specifications

Camera	
Image Sensor	1/2.5 Exmor R CMOS

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Image Sensor (Number of Effective Pixels)	Approx. 8.5M pixels
Signal System	2160 (*1)/29.97p, 25p, 23.98p (HDMI and IP only) 1080/59.94p, 50p, 29.97p, 25p, 23.98p 1080/59.94i, 50i 720/59.94p, 50p
Minimum Illumination (50IRE)	1.6 lux (1/30s 50IRE F2 high-sensitivity OFF)
4K capability	Yes (requires 4K Option license)
Horizontal Resolution	1700 TV line (Center) (4K(*1)) 1000 TV line (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 (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*1 with CIZ)/40x (HD with CIZ) *CIZ = Clear Image Zoom
Focusing System	Auto/Manual
Horizontal Viewing Angle	Approx. 70.0° (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/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
Preset Position	256 (CGI) 100 (VISCA)
Picture Freeze Preset	Yes

Network

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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: 60 fps H.265: 60 fps
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 Optional (requires a license)

Camera Features

Auto ICR	Yes (available through future upgrade planned in early 2020)
Day/Night	Yes
Visibility Enhancer	Yes
Image Stabilization	Yes
Image Flip	Yes
Flicker Cancel	On/Off

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 Gain Control (AGC): 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	Yes

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Streaming	

Interface

4K Video Output	(*1) HDMI x1 and IP (streaming) x1
HD Video Output	3G-SDI x1, HDMI x1, IP (streaming) x1
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	Approx. 1.8 kg 3 lb 15.5 oz
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)

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	Download site information (1) Warranty (1)

Notes	
*1	Will be available from early 2020, after an upgrade, via a 4K Option license
*2	The values for dimensions are approximate

Related products

PEQ-C130

Vision Exchange™: Interactive presentation and active learning solution

PEQ-C100

Vision Exchange™: Interactive presentation and active learning solution

REA-C1000 Edge Analytics Appliance

RM-IP500

PTZ Camera Remote Controller

RM-IP10

IP remote control panel for BRC cameras

MCX-500

Multi-Camera Live Producer

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Gallery

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