

## SRG-X400

Standard 4K30P IP PTZ Camera with 30x (w/CIZ) 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-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™ 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 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 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.

### **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.

\* With Clear Image Zoom

### **Wide viewing angle**

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

### **Ideal for lecture capture**

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 enables cost-effective school studio system integration, allowing flexible configuration with other networked NDI®-enabled devices.

\* NDI® is a registered trademark of Vizrt NDI AB

## 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 Exmor R CMOS   |
| Image Sensor<br>(Number of Effective Pixels) | Approx. 8.5M pixels  |
| Signal System                                | 2160 <sup>*1</sup> / 29.97p, 25p, 23.98p<br>1080/59.94p, 50p, 29.97p, 25p, 23.98p<br>1080/59.94i, 50i<br>720/59.94p, 50p |
| 4K Capability                                | Yes (requires 4K optional license)   |
| Minimum Illumination                         | 1.6 lux (1/30s 50IRE F2 high-  |

|                          |   |
|--------------------------|---|
| (50IRE)                  | sensitivity OFF)  |
| Horizontal Resolution    | 1700 TV lines (Center) (4K <sup>*1</sup> )<br>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)<br>1/1 to 1/10000 sec (23.98 Hz system)<br>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 <sup>*1</sup> with CIZ**), 40x (HD with CIZ)<br>**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)<br>F2.0 to F3.8   |

|                          |  |
|--------------------------|--|
| Minimum Object Distance  | 80 mm (Wide)~<br>800 mm (Tele)   |
| Pan/Tilt Angle           | Pan: $\pm 170^\circ$<br>Tilt: $+90^\circ/-20^\circ$                    |
| Pan/Tilt Speed (Max.)    | Pan: $300^\circ/s$<br>Tilt: $126^\circ/s$                              |
| Pan/Tilt Speed           | Pan: $1.1^\circ$ to $101^\circ/s$<br>Tilt: $1.1^\circ$ to $91^\circ/s$ |
| Pan/Tilt Speed (Slow)    | Pan: $0.5^\circ$ to $60^\circ/s$<br>Tilt: $0.5^\circ$ to $60^\circ/s$  |
| Pan/Tilt Slow Mode       | Yes  |
| Pan/Tilt Operation Noise | NC30 or less*<br>* Sony measurement conditions                         |
| Preset Position          | 256 (CGI)<br>100 (VISCA)   |
| Picture Freeze Preset    | Yes  |
| PTZ Motion Sync          | Yes  |

## Network

|                     |   |
|---------------------|---|
| IP Video Resolution | $3840 \times 2160$ <sup>*1</sup> , $1920 \times 1080$ , $1280 \times 720$ ,<br>$720 \times 576$ , $720 \times 480$ , $640 \times 360$ |
|---------------------|---|

|                            |  |
|----------------------------|--|
| Compression Format         | H.264: High, Main, Baseline Profile<br>H.265: Main Profile   |
| Maximum Frame Rate         | H.264: 60 fps<br>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 (requires a license sold separately)   |

## Camera Features

|  |     |
|--|-----|
| Auto ICR<br>(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)<br>AAC LC 256 kbps/ST (IP) |
|-------------|--|

Auto Level Control (ALC): On/Off  
Equalizer: Off, Low cut, Voice  
enhancement



|                                  |   |
|----------------------------------|---|
| Setting Option                   | Input selection: Microphone/Line<br>Mic volume: -10~+10 (21 steps)<br>Audio codec |
| Embedded Audio in Baseband Video | Yes (3G-SDI, HDMI)  |
| Embedded Audio in IP Streaming   | Yes   |
| <h2>Interface</h2>               |   |
| 4K Video Output                  | HDMI x1 and IP (streaming) x1 <sup>*1</sup>                                       |
| 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<br>RGB, 4:4:4 8 bit  |
| Camera Control Interface         | VISCA RS-422 RJ45 (In/Out)<br>VISCA over IP RJ-45                                 |
| IR Remote Control                | Yes   |
| Microphone Input                 | Mini-phone (φ3.5mm) x2 (Mic/Line Selectable)                                      |

|                               |   |
|-------------------------------|---|
| Sync. System                  | INT   |
| Power Connector Type          | IEC60130-10 (JEITA standard RC-5320A) TYPE4             |
| <h2>General</h2>              |   |
| 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<br>32 °F to 104 °F                        |
| Storage Temperature           | -20 °C to +60 °C<br>-4 °F to +140 °F                    |
| Dimensions (W x H x D)        | 158.4 x 177.5 x 200.2 mm<br>6 1/4 x 7 x 8 inch          |
| Mass *2                       | Approx. 1.8 kg<br>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 | <p>AC power adaptor (1)</p> <p>IR Remote Commander Unit (1)</p> <p>Ceiling bracket (2)</p> <p>Wire rope (1)</p> <p>Screw M3 x 8 (9)</p> <p>Screw M2.6 x6 BLACK (1)</p> <p>HDMI cable fixing plate (1)</p> <p>Safety regulation (1)</p> <p>Download site information (1)</p> <p>Warranty (1)</p> |
|----------------------|---|

## 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



## SRG-XP1

Compact 4K60P IP  
POV Remote Camera  
with and 101° wide  
viewing angle lens



## SRG-XB25

Compact 4K60P IP  
BOX-style Remote  
Camera with 25x  
optical zoom



## SRGL-4K

4K license for SRG-  
X400/SRG-X120



## NUCLeUS

The smart digital  
imaging platform for  
medical environments

## Gallery

