ROCWARE

RC91
4K PTZ Video Conference Camera

RC91 uses a new generation of Sony 1 / 2.8 inches high-quality UHD CMOS sensor with a maximum of 8.4 million pixels to output 4K (3840x2160) ultra-high resolution images, downward compatible with 1080P, 720P and other resolutions. Support HDMI2.0, can directly output 4KP60 uncompressed digital video. Combined with AI tracking and smooth PTZ function, it is used for live events, auditorium lectures, sports and game competitions, online and distance learning courses, multinational conferences, personnel training courses, live streaming and other application scenarios.

Main Features

4K Ultra HD

Using a new generation of Sony 1 / 2.8 inches, up to 8.4 megapixel high-quality UHD CMOS sensors to output 4K (3840x2160) ultra-high resolution images, downward compatible with 1080P, 720P and other resolutions.

12x optical zoom

Using high-quality 8 million ultra-high-resolution 4K ultra-telephoto lens, 12x optical zoom to capture crystal-clear images with a field of view of 80.8° ~ 7.5° .

255 presets

Rocware's unique auto patrol feature optimizes your camera controls to capture content automatically and seamlessly between your preset areas. With preset area tracking, you only need a RC91 to perform seamless switching of all your preset areas, giving your videos a wide variety of shooting ranges.

AI intelligent tracking

Built-in AI processor, using deep learning technology through human shape features, no matter where the face is facing, it can achieve smooth automatic tracking, which is very suitable for automatic target tracking in lectures, speeches, teaching and other scenes.

Low Illumination

New CMOS image sensor with ultra-high SNR can effectively reduce the image noise under low illumination. Meanwhile, the application of 2D and 3D noise reduction algorithms dramatically reduces image noise. The image maintains clean and clear even under ultra-low light illumination. The SNR of the image is as high as 55dB or above.

HDMI2.0

Support HDMI2.0 interface to directly output 4KP60 uncompressed digital video. Equipped with 3G-SDI interface, the effective transmission distance is up to 150 meters (1080p30).

Remote control

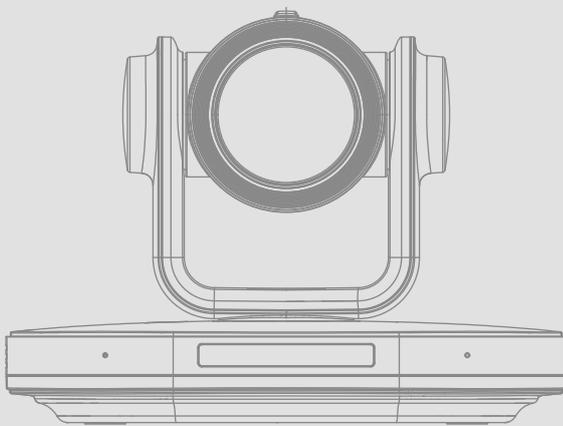Multiple control modes, RS232, RS485, network and USB can be used to control the camera.
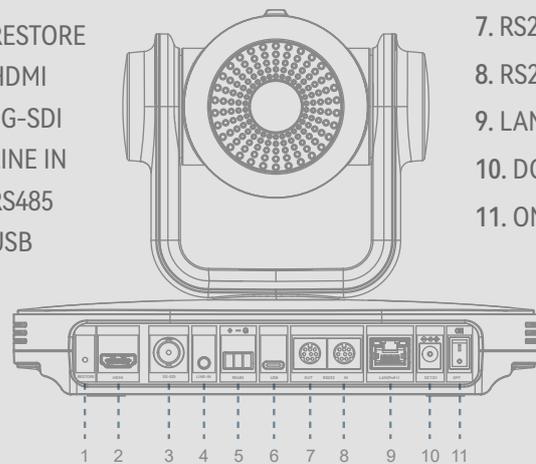
Intelligent Exposure

Effectively solve the impact of projection, TV and other equipment on the shooting of people

Product Interface

1. RESTORE
2. HDMI
3. 3G-SDI
4. LINE IN
5. RS485
6. USB

7. RS232 OUT
8. RS232 IN
9. LAN(PoE+)
10. DC 12V
11. ON/OFF

1 2 3 4 5 6 7 8 9 10 11

Remote Control

1.(Standby) Key
Press to enter standby mode. Press again to resume to normal mode.

2.Numeric Key: To set preset or call preset.

3.* Key: Use with other keys.

4.PRESET Key
Set preset: Store a preset position.
[PRESET] + Numeric key (0-9): Set the preset position.

5.HOME Key
Confirm selection or press to turn the lens back to the middle position.

6.(Return) Key: Press to return to the previous menu.

7.ZOOM Key

8.L/R SET Key

9.FOCUS Key
Press [AUTO] to adjust the focus automatically.
Press [MANUAL] to adjust the focus manually.
When in manual focus mode, press [FAR] to focus on far object or [NEAR] to focus on near object.

10.CAMERA SELECT Key
Press the button corresponding to the camera you want to operate with the remote controller.

11.# Key
Use with other buttons.

12.Auto Tracking Key
[F1]: Not enabled
[F2]: Not enabled
[F3]: Start AI Intelligent Tracking
[F4]: Stop AI Intelligent Tracking

14.PTZ Control Key
After zooming, press arrow button to perform panning and tilting. Press [HOME] button to face the camera back to front.

15.MENU Key
Enter or exit OSD MENU.

16.BACKLIGHT Key
Backlight ON/OFF: Press repeatedly to enable or disable the backlight compensation.

17.P/T RST (PTZ Reset) Key

Product Specifications

Camera

Video System	**HDMI:** 4KP25, 4KP30, 4KP50,4KP60, 4KP59.94, 4KP29.97, 1080P25, 1080P30, 1080P50, 1080P60, 1080P59.94, 1080P29.97, 1080I50, 1080I60, 1080I59.94, 720P50, 720P59.94, 720P60 **3G-SDI:** 1080P25, 1080P30, 1080P50, 1080P60, 1080P59.94, 1080P29.97, 1080I50, 1080I60, 1080I59.94, 720P50, 720P59.94, 720P60
Sensor	1/2.8 inch, CMOS, Max Effective Pixel: 8.40M
Scanning Mode	Progressive
Lens	12x, f = 3.4mm ~ 41.6mm, F1.8 ~ F3.7
Digital Zoom	16 x
Minimal Illumination	0.5Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual
Backlight Compensation	Support
Digital Noise Reduction	3D Digital Noise Reduction
Signal Noise Ratio	≥55dB
Horizontal Angle of View	80.8° ~ 7.5°
Vertical Angle of View	49.9° ~ 4.3°
Horizontal Rotation Range	±162.5°
Vertical Rotation Range	–30° ~ +90°
Pan Speed Range	1.8°/s ~ 80.5°/s
Vertical Rotation Speed Range	1.5°/s ~ 49°/s
H & V Flip	Support
Image Freeze	Support
Number of Preset	255
Preset Accuracy	0.1°

USB Features

Video System	Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android
Color System / Compression	YUY2 / MJPEG / H.264 / H.265
USB Audio	Support
Video Format	YUY2: max to 1080P@30fps H.264 AVC/SVC: max to 2160P@30fps H.265 SVC: max to 2160P@30fps MJPEG: max to 2160P@30fps
USB Video Communication Protocol	UVC 1.1~1.5
UVC PTZ	Support

Interface/Indicator

LINE IN Interface	1 x LINE IN: 3.5mm Audio Interface
Communication Interface	1 x RS485: 3pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P
	1 x RS232 OUT: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA network use only
	1 x RS232 IN: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P
HDMI Interface	1 x HDMI: Version 2.0
LAN(PoE+) Interface	1 x RJ45: 10/100/1000M,Adaptive Ethernet Port. It supports PoE+
USB Interface	1 x USB 2.0: Type-C
3G-SDI Interface	1 x 3G-SDI: BNC type, 800mVp-p, 75Ω. Along to SMPTE 424M standard
Restore Button	1 x Restore Button
Power Jack	JEITA type（DC IN 12V）
Tally Indicator	1 x Tally Indicator
Power Indicator	1 x Power Indicator
Status Indicator	1 x Status Indicator
Display Screen	1 x Display Screen
Power Switch	1 x Power Switch

Network Features

Video Compression	H.264 / H.265 / MJEPG
Video Stream	First Stream, Second Stream
First Stream Resolution	3840x2160, 1920x1080, 1280x720, etc.
Sub Stream Resolution	720x480, 720x408, 640x480, 640x360,etc.
Bit Rate Control	CBR, VBR
Frame Rate	50Hz: 1fps ~ 50fps, 60Hz: 1fps ~ 60fps
Audio Compression	G711A, AAC
Audio Bit Rate	96Kbps, 128Kbps
Support protocols	NDI®|HX, TCP/IP, HTTP, RTSP, RTMP(S), ONVIF, DHCP, SRT, Multicast, etc.

ROCWARE

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