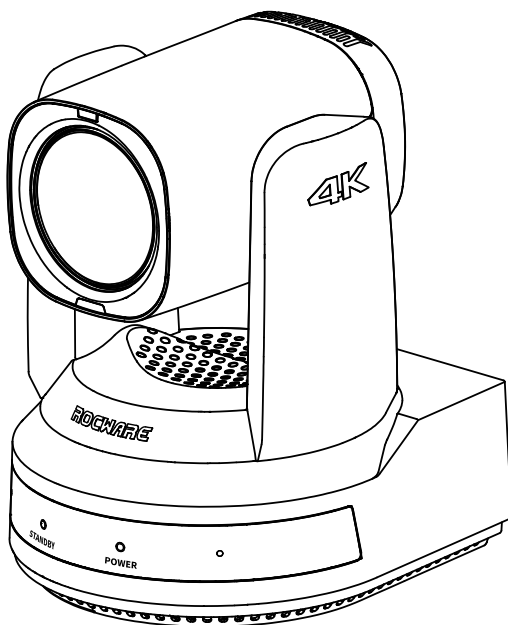


RC841UX 4K Video Conferencing PTZ Camera



User Manual

Limitation of Liability

This manual does not contain any warranties or implied warranties of any kind. The contents of this manual may be updated at any time without notice.



Warning

Operating this equipment in a residential environment may cause radio interference.

FCC Regulatory Conformance:



This device complies with Part 15 of the FCC Rules. The operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.



Note

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2014/30/EU.

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1 Safety Precautions

- During the installation and operation, all electrical safety regulations of the country and region of use must be strictly observed.
- Please use the power adapter that comes standard with this product.
- Do not connect multiple devices to the same power adapter (exceeding the capacity of the adapter may generate excessive heat or cause fire).
- Do not rotate the camera by hand, otherwise it may cause mechanical failure.
- When installing this product on a wall or ceiling, make sure the device is secure and there are no obstacles within the rotation range. Do not power on until all installations are completed.
- To avoid heat build-up, please keep smooth ventilation around the device.

- If the device smokes, smells, or makes noises, please turn off the power and unplug the power cord immediately, then contact the dealer in time.
- This device is not waterproof, please keep the device dry.
- This product has no user-serviceable parts, damage caused by the user's disassembly is not covered by the warranty.



Notice

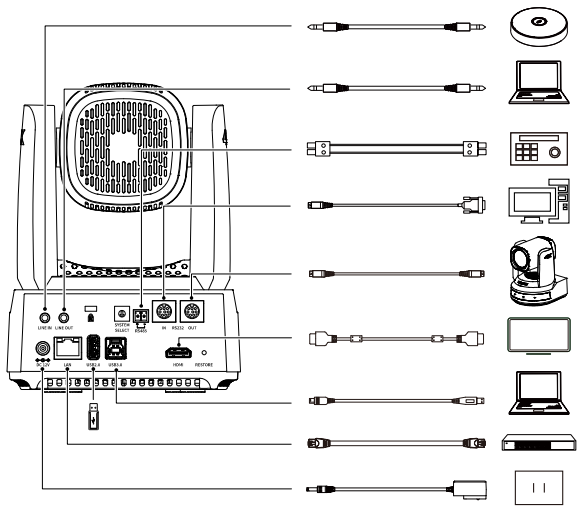
Running this device in a residential environment may cause radio interference.

2 Packing List

Name	Quantity
Camera	1
Power Adapter	1
USB Cable	1
Remote Control	1
Manual QR Code	1

3 Quick Start

- 1) Please check whether the connection is correct before starting.



- 2) After the camera is powered on, it starts to initialize. Move the motor to the right limit position, then to the middle position both horizontally and vertically. The motor stops running, and the initialization is complete. (Note: If preset 0 is saved, PTZ will be moved to preset 0)

4 Video Format

HDMI			
0	1080P60	8	1080P59.94
1	1080P50	9	720P59.94
2	1080i60	A	4KP29.97
3	1080i50	B	4KP59.94
4	1080P30	C	4KP25
5	720P60	D	4KP30
6	1080P29.97	E	4KP50
7	1080i59.94	F	4KP60

5 About Product

5.1 Features

● 4K Video Quality

Equipped with the new generation 4K CMOS sensor with a maximum pixel count of 8 million, this camera can achieve ultra-high resolution video images of 4K (3840x2160), meeting the high image quality requirements of various conference rooms.

● 12X Optical Zoom

Equipped with an 80.8° wide-angle lens, this camera features 12x optical zoom and 16x digital zoom, enabling clear capture of details both near and far in the conference room with no distortion at the edges of the image.

● Silent Mechanical PTZ

Equipped with a silent mechanical PTZ, this camera has a ±170° horizontal rotation range and a -30°~+90° vertical rotation range, fully covering the entire conference room space and leaving no blind spots, even in corner positions.

● AI-powered Intelligent Camera Technology

AI technology upgrade, equipped with advanced AI technologies such as presenter tracking, group framing and zone tracking. Equipped with in-house-developed ReID technology, the device identifies the speaker's figure, appearance, and outfit. As the speaker moves within the room, the camera automatically tracks them, ensuring the target remains centered. Even if there are interferences or the speaker exits the frame, the camera swiftly recaptures and tracks them upon reentry.

● Three-way HD Video Signal Output

Equipped with USB 3.0, HDMI 2.0 and LAN interfaces, it can output three-way HD video signals simultaneously, bringing more connection options and creating a high-quality conference experience for all participants.

● Supports NDI®|HX2

Supports the network video transmission technology NDI®|HX2, featuring plug-and-play, low latency, and easy deployment. It supports simultaneous transmission of audio, video, and control signals.

● Compatible With Popular Conferencing Software

This camera is compatible with popular video conferencing software systems, including Microsoft Teams, Zoom, Cisco WebEx and more, making it easy to connect and start a meeting.

5.2 Product Specifications

Camera	
Video System	HDMI: 4KP60, 4KP59.94, 4KP50, 4KP30, 4KP29.97, 4KP25, 1080P60, 1080P59.94, 1080P50, 1080P30,1080P29.97, 1080i60, 1080i59.94, 1080i50, 720P60, 720P59.94
Sensor	1/2.8", CMOS, 8.46 Megapixels
Scanning Mode	Progressive

Lens	12X, f=3.47mm~41.65mm, F1.84~F3.72
Digital Zoom	16X
Minimum Illumination	0.5 Lux @ (F1.8, AGC ON)
Shutter	1/30s~1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Support
Digital Noise Reduction	3D Digital Noise Reduction
SNR	≥55dB
Horizontal FOV	80.8°~7.5°
Vertical FOV	49.9°~4.3°
Pan Angle	±170°
Tilt Angle	-30°~+90°
Pan Speed	1.7°~100°/s
Tilt Speed	1.7°~69.9°/s
Image Flip	Support
Image Freeze	Support
Preset Position	255
Preset Accuracy	0.1°
USB Features	
Operating System	Windows 8/10/11, Mac OS X, Linux, Android
Color System/Compression	YUY2/H.264/MJPEG
Video Format	● YUY2:1080P30 (max.) ● H.264: 4KP30 (max.) ● MJPEG: 4KP30 (max.)
Frame Rate	1fps~30fps
USB Audio	Support
USB Protocol	UVC 1.1
UVC PTZ Control	Support
Network Features	
Video Encode Protocol	H.264/MJPEG
Video Stream	First Stream, Second Stream

First Stream Resolution	3840×2160, 1920×1080, 1280×720, 1024×576 etc.
Second Stream Resolution	720×480, 320×240 etc.
Video Bit Rate for First Stream	32kbps~84000kbps
Video Bit Rate for Second Stream	32kbps~20480kbps
Bit Rate Control	CBR, VBR
Frame Rate	50Hz: 1fps~50fps 60Hz: 1fps~60fps
Audio Type	AAC
Audio Bit Rate	96K, 128K
Protocols	NDI HX2, SRT, TCP/IP, HTTP, RTSP, RTMP(s), Onvif, DHCP, Multicast, etc.

Interfaces

USB Interface	1 × USB3.0: Type-B, support Video&Audio
	1 × USB2.0: Type-A
Video Output Interface	1 × HDMI 2.0
Audio Interface	1 × LINE IN: 3.5mm
	1 × LINE OUT: 3.5mm
Network Interface	1 × LAN: 10M/100M/1000M adaptive ethernet
Communication Interface	1 × RS232 IN: 8pin Mini DIN, Max Distance 30m, Protocol: VISCA/Pelco-D/Pelco-P
	1 × RS232 OUT: 8pin Mini DIN, Max Distance 30m, Protocol: VISCA
	1×RS485: 2pin phoenix port, Max Distance 1200m, Protocol: VISCA/Pelco-D/ Pelco-P
Restore Button	Support
Power Interface	JEITA type (DC 12V)

General Specifications

Input Voltage	DC 12V/PoE+ (802.3at)
Input Current	2A (Max.)
Operating Temperature	0°C~40°C

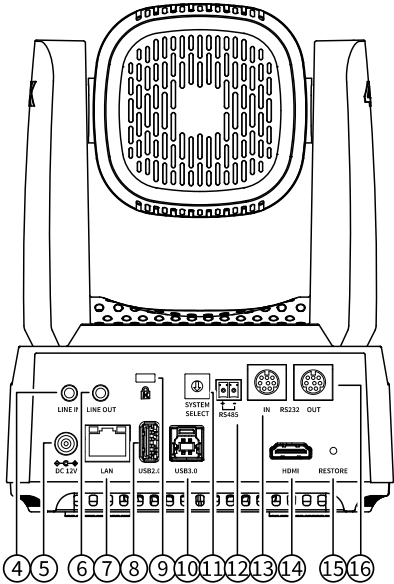
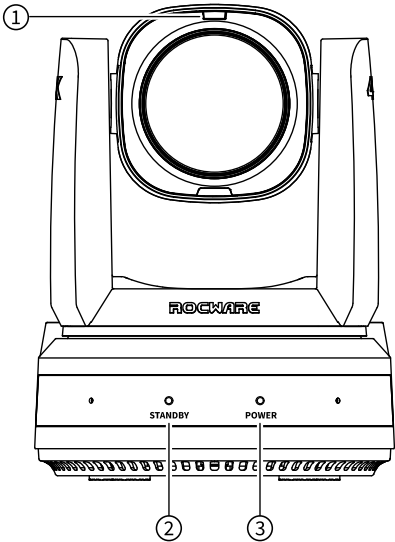
Storage Temperature	-40°C~60°C
Power Consumption	18W (Max.)
Dimension	142.2x151.9x188.9 (mm)
Net Weight	About 1.6kg



Note

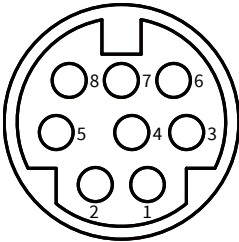
Product features and specifications are subject to change without notice.

5.3 Interfaces



No.	Name
1	TALLY Indicator
2	STANDBY Indicator
3	POWER Indicator
4	LINE IN Interface
5	DC 12V Interface
6	LINE OUT Interface
7	LAN Interface
8	USB2.0 Interface
9	Security Lock
10	USB3.0 Interface
11	System Select Switch
12	RS485 Interface
13	RS232 IN Interface
14	HDMI Interface
15	Restore Port
16	RS232 OUT Interface

5.4 RS232 Interface



No.	Function	No.	Function
1	DTR	5	RXD
2	DSR	6	GND
3	TXD	7	IR OUT
4	GND	8	NC

The correspondence between RS232 and DB-9:

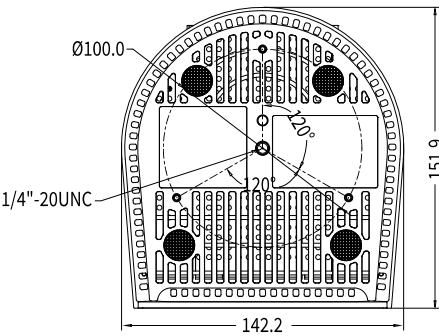
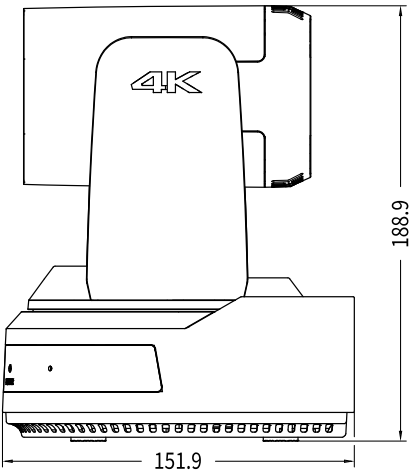
RS232	DB-9
1.DTR	1.CD
2.DSR	2.RXD
3.TXD	3.TXD
4.GND	4.DTR
5.RXD	5.GND
6.GND	6.DSR
7.IR OUT	7.RTS
8.NC	8.CTS
-	9.RI

The correspondence between RS232 and Mini DIN:

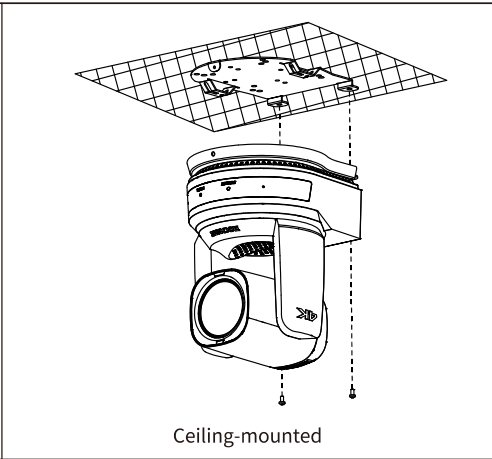
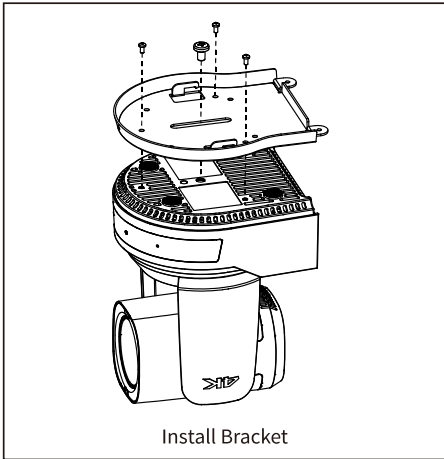
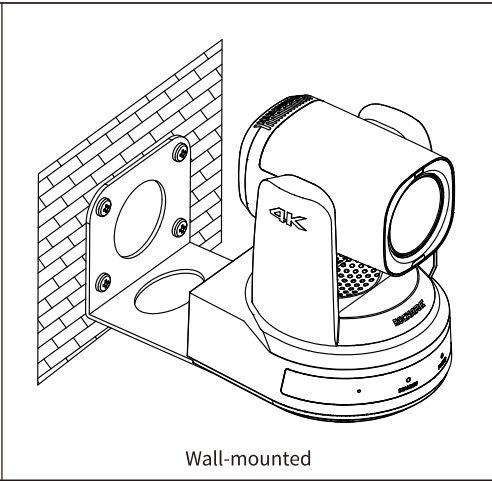
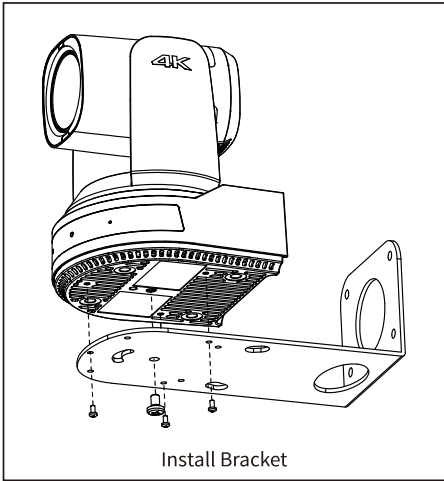
RS232	Mini DIN
1.DTR	1.DTR
2.DSR	2.DSR
3.TXD	3.TXD
4.GND	4.GND
5.RXD	5.RXD
6.GND	6.GND
7.IR OUT	7.NC
8.NC	8.NC

5.5 Dimension

Unit: mm



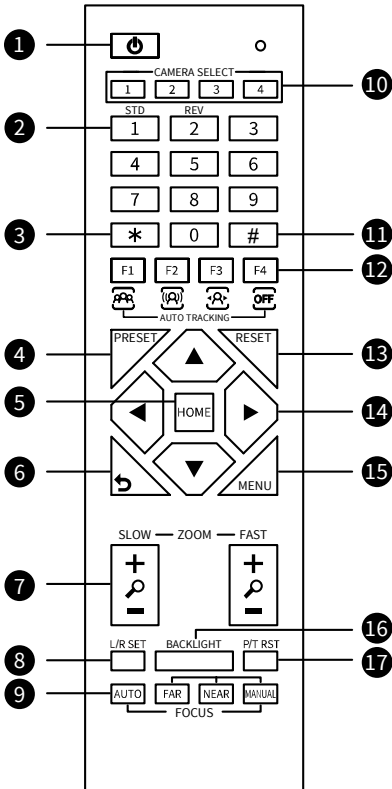
5.6 Installation



Note

The above installation diagram is for reference only. Please refer to actual product for the installation accessories.

5.7 Remote Control



Key Description	
1. ⏻ (Standby) Key	Press to enter standby mode
2. Number Key	To set preset or call preset
3. * Key	Use with other keys
4. PRESET Key	Successively press [PRESET] + Number key (0-9) to set preset position
5. HOME Key	Confirm selection or press to turn PTZ back to the middle position
6. ↶ (Return) Key	Press to return to the previous menu
7. ZOOM Key	● SLOW: Zoom In [+] or Zoom Out [-] slowly ● FAST: Zoom In [+] or Zoom Out [-] fast

8. L/R SET Key	● Standard: Simultaneously press L/R SET + 1 ● Reverse: Simultaneously press L/R SET + 2
9. FOCUS Key	Auto/Manual/Far-end/Near-end focus
10. CAMERA SELECT Key	Press to select and control the camera
11. # Key	Use with other keys
12. IR Remote Control Key	Successively press [*] + [#] + [F1]/[F2]/[F3]/[F4] to set the camera address 1/2/3/4
13. RESET Key	Successively press [RESET] + Number key (0-9) to clear preset position
14. PTZ Control Key	PTZ moved according to the arrow indicates
15. MENU Key	Enter or exit OSD MENU
16. BACKLIGHT Key	Backlight On/Off NOTE: ● Effective in auto exposure mode ● If it is too bright behind the subject, it will become dark, press the backlight key to enable the backlight compensation. Press again to disable this function
17. P/T RST (PTZ Reset) Key	Press to preset Pan/Tilt self-test
Shortcut Set	
F1: Start Group Framing	
F3: Start the tracking mode selected in the menu	
F4: Stop Tracking Mode	
Successively press [#] + [*] + [F4]:	
Enable/Disable image freezing function	
Successively press [*] + [#] + [1]:	
OSD menu default English	
Successively press [*] + [#] + [3]:	
OSD menu default Chinese	
Successively press [*] + [#] + [4]:	
Display current IP address	
Successively press [*] + [#] + [6]:	
Quickly recover the default	
Successively press [*] + [#] + [8]:	
Check the camera version	
Successively press [*] + [#] + [9]:	
Quickly set up inversion	
Successively press [*] + [#] + [MANUAL]:	
Quickly restore to default IP address	

6 GUI Settings

6.1 MENU

Press the [MENU] key to display the main menu.
Use the arrow key to move the cursor to the desired item and press the [HOME] key to enter the corresponding sub-menu.

MENU	
▶	Exposure
	Color
	Image
	P/T/Z
	Noise Reduction
	Setup
	Tracking Config
	Communication Setup
	Restore Default
[HOME] Enter	
[MENU] Exit	

6.2 EXPOSURE

Move the cursor to [Exposure] and press the [HOME] key to enter the Exposure page as below.

EXPOSURE	
▶	Mode Auto
	ExpCompMode Off
	Backlight Off
	Gain Limit 10
	Anti-Flicker 50Hz
	Meter Average
	DRC 1
▲▼ Select Item	
◀▶ Change Value	
[MENU] Back	

Mode: Auto, Manual, SAE, AAE, Bright.

ExpCompMode: On, Off (Effective in Auto mode).

ExpComp: -7~+7 (Effective in ExpCompMode On).

Backlight: On, Off (Effective in Auto mode).

Bright: 0~17 (Effective in Bright mode).

Gain Limit: 0~15 (Effective in Auto, SAE, AAE, Bright mode).

Anti-Flicker: Off, 50Hz, 60Hz (Effective in Auto, AAE, Bright mode).

Meter: Average, Center, Smart, Top (Effective in Auto, SAE, AAE, Bright mode).

Iris: F1.8, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11.0, Close (Effective in Manual, AAE mode).

Shutter: 1/30, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000 (Effective in Manual, SAE mode).

Gain: 0~7 (Effective in Manual mode).

DRC: 0~8.

6.3 COLOR

Move the cursor to [Color] and press the [HOME] key to enter the Color page as below.

COLOR	
▶	WB Mode Auto
	RG Tuning 0
	BG Tuning 0
	Saturation 100%
	Hue 7
▲▼ Select Item	
◀▶ Change Value	
[MENU] Back	

WB Mode: Auto, Indoor, Outdoor, One Push, Manual, VAR.

RG: 0~255 (Effective in Manual mode).

BG: 0~255 (Effective in Manual mode).

RG Tuning: -10~+10 (Effective in Auto, One Push, VAR mode).

BG Tuning: -10~+10 (Effective in Auto, One Push, VAR mode).

Saturation: 60%~200%.

Hue: 0~14.

Color Temp: 2500K~8000K (Effective in VAR mode).

6.4 IMAGE

Move the cursor to [Image] and press the [HOME] key to enter the Image page as below.

IMAGE		
►	Luminance	7
	Contrast	7
	Sharpness	6
	Flip-H	Off
	Flip-V	Off
	B&W-Mode	Off
	Gamma	Default
	Style	Default
▲▼ Select Item		
◀▶ Change Value		
[MENU] Back		

Luminance: 0~14.

Contrast: 0~14.

Sharpness: 0~11.

Flip-H: On, Off.

Flip-V: On, Off.

B&W-Mode: On, Off.

Gamma: Default, 0.45, 0.48, 0.5, 0.56, PC.

Style: Default, Norm, Bright, PC.

6.5 P/T/Z

Move the cursor to [P/T/Z] and press the [HOME] key to enter the P/T/Z page as below.

P/T/Z		
►	SpeedByZoom	On
	AF-Zone	Front
	AF-Sense	High
	L/R Set	STD
	Display Info	On
	Image Freeze	Off
	Digital Zoom	Off
	Call Preset Speed	24
	Pre Zoom Speed	5
▲▼ Select Item		
◀▶ Change Value		
[MENU] Back		

SpeedByZoom: On, Off.

AF-Zone: Front, Top, Center, Bottom.

AF-Sense: High, Low, Normal.

L/R Set: STD, REV.

Display Info: On, Off.

Image Freeze: On, Off.

Digital Zoom: Off, 2x, 4x, 8x, 16x.

Call Preset Speed: 1~24.

Pre Zoom Speed: 0~7.

6.6 NOISE REDUCTION

Move the cursor to [Noise Reduction] and press the [HOME] key to enter the Noise Reduction page as below.

NOISE REDUCTION		
►	NR3D-Level	6
▲▼ Select Item		
◀▶ Change Value		
[MENU] Back		

NR3D Level: Off, 1~9.

6.7 SETUP

Move the cursor to [Setup] and press the [HOME] key to enter the Setup page as below.

SETUP		
►	Language	EN
	DVI Mode	HDMI
	Video Format	1080P60
	Auto Patrol	Off
	Other	
▲▼ Select Item		
◀▶ Change Value		
[MENU] Back		

Language: EN, 中文, Русский.

DVI Mode: HDMI, DVI (Ineffective in 4KP60/50 video format).

Video Format: 4KP29.97, 4KP59.94, 4KP25, 4KP30, 4KP50, 4KP60, 1080P60, 1080P50, 1080I60, 1080I50, 1080P30, 720P60, 1080P29.97, 1080I59.94, 1080P59.94, 720P59.94.

Auto Patrol: On, Off.

Residence Time: 1~60 (Effective in Auto Patrol on).

Call Preset Speed: 1~24 (Effective in Auto Patrol on).

Other: Press the [HOME] key to confirm to enter the "Other" page to set the Auto Inversion (On/Off) and the Pre Attr (On/Off).



Note

The DVI Mode and Video Format will take effect after pressing the [HOME] key to restart the device.

6.8 TRACKING CONFIG

Move the cursor to [Tracking Config] and press the [HOME] key to enter the Tracking Config page as below.

TRACKING CONFIG	
▶ Tracking	Off
Tracking Mode	Presenter Tracking
Figure Size	Full
▲▼ Select Item	
◀▶ Change Value	
[MENU] Back	

Tracking: On, Off.

Tracking Mode: Group Framing, Presenter Tracking, Zone Tracking.

Figure Size: Full, Half Body, Close Up, Custom (Effective in Presenter Tracking mode).

6.9 COMMUNICATION SETUP

Move the cursor to [Communication Setup] and press the [HOME] key to enter the Communication Setup page as below.

COMMUNICATION SETUP	
▶ Protocol	VISCA
V_Address	1
V_AddrFix	Off
Net Mode	Serial
Baudrate	9600
▲▼ Select Item	
◀▶ Change Value	
[MENU] Back	

Protocol: Auto, VISCA, PELCO-D, PELCO-P.

V_Address: 1~7 (Effective in Auto, VISCA protocol).

V_AddrFix: On, Off (When set to On, the 88 30 01 FF command does not work. Effective in Auto and VISCA protocol).

P_D_Address: 0~254 (Effective in Auto, PELCO-D protocol).

P_P_Address: 0~31 (Effective in Auto, PELCO-P protocol).

Net Mode: Serial, Paral (Effective in Auto, VISCA protocol).

Baudrate: 2400, 4800, 9600, 38400.

6.10 RESTORE DEFAULT

Move the cursor to [Restore Default] and press the [HOME] key to enter the Restore Default page as below.

RESTORE DEFAULT	
▶ Restore?	No
◀▶ Change Value	
[HOME] OK	
[MENU] Back	

Restore: Yes, No.



Notice

When selecting “Yes” and confirming with the [HOME] key, all parameters will be restored to default, including the IR Remote and VISICA address.



Note

GUI menu and device information are subject to change without notice.

7 WEB Settings

7.1 Access Camera

Access <http://192.168.100.88> to pop up the login window, input the default username (admin) and password (admin) and click the “Submit” to enter the WEB page as below:

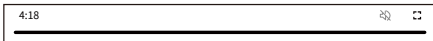


7.2 Control Camera

A. Video Display Window

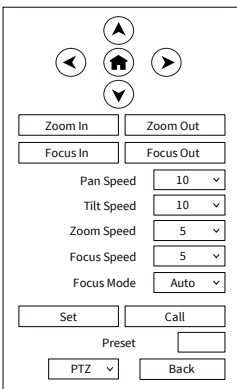
The video display window matches the video resolution, the larger the resolution, the larger the window.

The status bar is located below the display window is shown as below:



Full screen button

B. PTZ



Pan and Tilt Control

Use the arrow buttons to turn PTZ to up, down, left and right, click the HOME button to return it to the middle position.

Zoom

Zoom In/Zoom Out camera lens.

Focus

Focus In/Focus Out (it will take effect in “Manual” focus mode).

PTZ Speeds

The Pan speed value can be set to 1~24; the Tilt speed value can be set to 1~20; the Zoom and Focus speed value can be set to 1~7.

Focus Mode

Focus Mode: Auto, Manual.

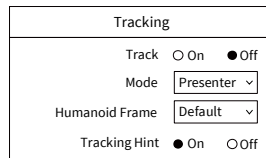
PTZ Presets

Use the arrow button to turn the PTZ to the desired position, enter a preset number (0~254) in the preset box and click the "Set" button to save. When the PTZ turn to another position, enter the preset number and click the “Call” button to return the PTZ to the preset position.

PTZ/OSD

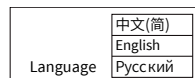
Move the cursor to pull-down the PTZ/OSD option, click "OSD" to open the on-screen menu and do menu settings on the interface.

C. Tracking



Select to turn On/Off the Track and the Tracking Hint. Set the Mode (Group Framing, Presenter Tracking, Zone Tracking) and the Humanoid Frame (Debug, Off, Default).

D. Language



Click to select “English”, “中文 (简)” or “Русский” to change the language of the webpage.

7.3 Live



Record: On, Off.



The record function is only enabled when a USB is inserted.

7.4 Video Settings

Video Settings

Video Format

1920X1080/60P

Encode Level

mainprofile

First Stream

Encode Codec

H264

Resolution

1920x1080

Bit Rate

4096

Frame Rate

30

fps

I Key Frame Interval

30

Bit Rate Control

CBR

Second Stream

Encode Codec

H264

Resolution

640x360

Bit Rate

2048

Frame Rate

30

fps

I Key Frame Interval

30

Bit Rate Control

CBR

Submit

Cancel

Video Format

Support 3840x2160/60P, 3840x2160/59.94P, 3840x2160/50P, 3840x2160/30P, 3840x2160/29.97P, 3840x2160/25P, 1920x1080/60P, 1920x1080/59.94P, 1920x1080/50P, 1920x1080/60I, 1920x1080/59.94I, 1920x1080/50I, 1920x1080/30P, 1920x1080/29.97P, 1280x720/60P, 1280x720/59.94P video formats.

Encode Level

Support mainprofile and Highprofile encode level.

Encode Codec

Support H264, H265 and MJPEG encode Codec.

Resolution

The first stream supports 3840x2160, 1920x1080, 1280x720, 1024x576, 720x480, 720x408, 640x480, 640x360; The second stream supports 720x480, 720x408, 640x480, 640x360, 480x320, 320x240. The larger the resolution, the clearer the image, but it also requires a larger code stream, which consumes more network bandwidth.

Bit Rate

A higher bit rate enhances image clarity. Consider the network bandwidth when configuring the bit rate. If the network bandwidth is limited and a higher bit rate is set, video stream transmission is compromised, resulting in a degraded visual experience.

Frame Rate

Higher frame rates result in smoother pictures, while lower frame rates create a more dynamic effect.

I Key Frame Interval

Adjust the interval between two I-frames. A larger interval can slow down the initial image display.

Bit Rate Control

Two bit rate control modes are available.

CBR (Constant Bit Rate): Encodes video at the set bit rate speed.

VBR (Variable Bit Rate): Considers image quality while encoding but doesn't strictly follow the preset speed.

7.5 Tracking Settings

7.5.1 Presenter Tracking



Auto Zoom/Auto Tilt

Turn On/Off the Auto Zoom/Tilt. When the Auto Zoom or Tilt is off, the camera stops zooming in/out or tilting automatically. Determine the zoom size and tilt position based on the tracking start position you choose. When Auto Zoom is off, the camera stops zooming In/Out automatically. When Auto Tilt is off, the camera only turns horizontally.

Target Retention Time

Set the Target Retention Time to return to the starting point after losing the target.

Figure Size

Figure Size: Full, Half Body, Close Up, Custom.

Tracking Start Position

Tracking Start Position: Current Location, Preset 1.

Character Position

Character Position: Left, Middle, Right.

7.5.2 Zone Tracking



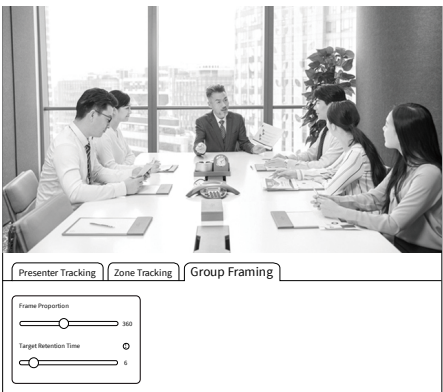
Zone Setting

Zone Setting: Zone A, Zone B, Zone C, Zone D. The zone tracking must be set "from left to right", and each zone must have overlap.

Tracking Start Area

Tracking Start Area: Zone A, Zone B, Zone C, Zone D.

7.5.3 Group Framing



Frame Proportion

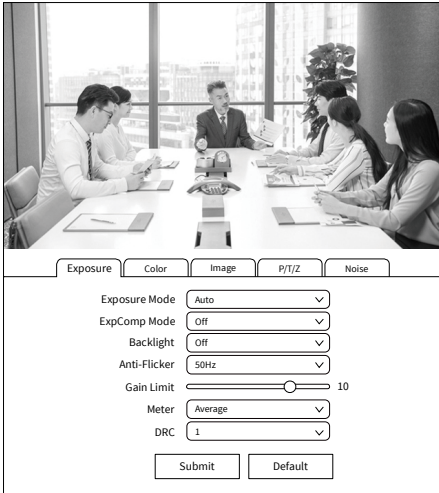
The Frame Proportion can be set from 200 to 550.

Target Retention Time

Set the Target Retention Time to return to the starting point after losing the target.

7.6 Image Settings

7.6.1 Exposure



Exposure: Auto, Manual, SAE, AAE, Bright.

ExpComp Mode (Exposure Compensation Mode): On, Off (Effective in Auto mode).

ExpComp (Exposure Compensation Value): -7~7 (Effective in ExpComp Mode “On”).

Backlight: On, Off (Effective in Auto mode).

Anti-Flicker: Off, 50Hz, 60Hz (Effective in Auto, AAE, Bright mode).

Gain Limit: 0~15 (Effective in Auto, SAE, AAE, Bright mode).

Meter: Average, Center, Smart, Top (Effective in Auto, SAE, AAE, Bright mode).

DRC: 0~8.

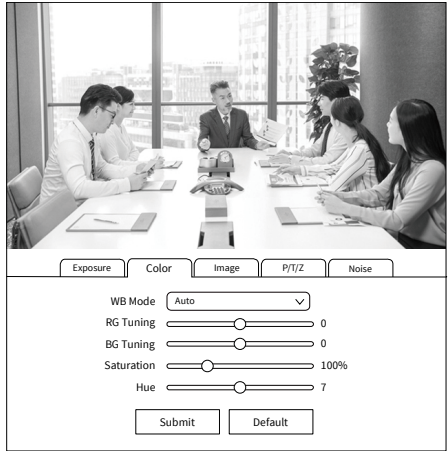
Iris: F1.8, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11.0, Close (Effective in Manual, AAE mode).

Shutter: 1/30, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000 (Effective in Manual, SAE mode).

Gain: 0~7 (Effective in Manual mode).

Bright: 0~17 (Effective in Bright mode).

7.6.2 Color



WB-Mode (White Balance Mode): Auto, Indoor, Outdoor, Manual, One_Push, VAR.

RG Tuning (Red Gain Tuning): -10~10 (Effective in Auto, One_Push, VAR mode).

BG Tuning (Blue Gain Tuning): -10~10 (Effective in Auto, One_Push, VAR mode).

Saturation: 60%~200%.

Hue: 0~14.

RG (Red Gain): 0~255 (Effective in Manual mode).

BG (Blue Gain): 0~255 (Effective in Manual mode).

Color Temp: 2000K~8000K (Effective in VAR mode).

7.6.3 Image



ExposureColorImageP/T/ZNoise

Luminance

Contrast

Sharpness

Flip-V

Flip-H

B&W-Mode

Gamma

Style

Submit

Default

Luminance: 0~14.

Contrast: 0~14.

Sharpness: 0~11.

Flip-V: On, Off.

Flip-H: On, Off.

B&W-Mode: On, Off.

Gamma: Default, 0.45, 0.48, 0.50, 0.56, PC.

Style: Default, Norm, Bright, PC.

7.6.4 P/T/Z



ExposureColorImageP/T/ZNoise

AF-Zone

AF-Sense

Image Freeze

Submit

Default

AF-Zone: Top, Center, Bottom, Front.

AF-Sense: High, Normal, Low.

Image Freeze: On, Off.

7.6.5 Noise



ExposureColorImageP/T/ZNoise

3D NR

Submit

Default

3D NR: Off, 1~9.

7.7 Audio Settings

Audio Settings

Audio Switch

Audio Type

Sample Rate

Bit Rate

Input Type

Input Vol

ADTS Options

Submit

Cancel

Audio Switch

Select to turn On/Off the Audio Switch.

Audio Type

Audio type AAC.

Sample Rate

Sample rate 44.1K and 48K selectable.

Bit Rate

Bit rate 96K and 128K selectable.

Input Type

Input type LINE IN.

Input Vol

Input Vol: 0~59.

ADTS Options

Select to turn On/Off the ADTS Options.

7.8 System Settings

7.8.1 Initialize

Initialize User U Disk Record Online Upgrade

Reboot Reboot

Factory Default Factory Default

Reboot

Click “Reboot” to restart system.

Factory Default

Click “Factory Default” and select “OK” to confirm to restore the factory default.

7.8.2 User

Initialize User U Disk Record Online Upgrade

UserName admin

Passwd *****

Guest guest

Passwd *****

Submit Cancel

Username and Password

Change the username and the guest login password (only use letters and numbers).

7.8.3 U Disk Record

Initialize User U Disk Record Online Upgrade

Record Settings

File Format MP4

Packed Time (min) 15

Save

USB Flash Disk Information

Capacity (M) 0

Free Space (M) 0

Mount Unmount Format

File Format

Record file format default MP4.

Packed Time (min)

Set the record file packed time (1~300).

Capacity (M)

Display the capacity information of the USB flash disk.

Free Space (M)

Display the free space information of the USB flash disk.

7.8.4 Online Upgrade

Initialize User U Disk Record Online Upgrade

Please Add Or Drag Files To This Area. Or Click Upload

Only Upload *.img Files

Update

The device supports online upgrade. Please refer to the above upgrade instructions to select the upgrade file package and click “Update” to upgrade the camera program.

7.9 Network Settings

7.9.1 Lan Settings

Lan

IP Configuration Type

Fixed IP Address

IP Address

192.168.100.88

Subnet Mask

255.255.255.0

Gateway

192.168.100.1

DNS Address

8.8.8.8

MAC Address

D4:E0:8E:EE:0F:EE

DHCP Timeout

30 sec

Static Fallback Address

192.168.100.88

Static Fallback Subnet Mask

255.255.255.0

Submit

Cancel

The default IP address is 192.168.100.88.

The MAC address, DHCP Timeout, Static Fallback Address and Static Fallback Subnet Mask cannot be changed.

7.9.2 Port Settings

Port

HTTP Port

80

RTSP Port

554

TCP Port

5678

UDP Port

1259

Sony Visca

52381

Submit

Cancel

A. HTTP Port

The IP address identifies a device in a network that can run multiple network programs, each using a specific network port for data transmission. On this page, you can configure the port used by the WEB SERVER program for data transfer. During port mapping, ensure that the port matches this one (the default is 80).

B. RTSP Port

Set the RTSP port, default is 554.

C. TCP Port

Set the TCP port, default is 5678.

D. UDP Port

Set the UDP port, default is 1259.

E. Sony Visca

Sony Visca default is 52381.

7.9.3 RTMP(S) Settings

RTMP (S)

First Stream

☐ On
 ☒ Off
 ☐ Video
 ☐ Audio

MRL

rtmp://192.168.100.138/live/stream0

Second Stream

☐ On
 ☒ Off
 ☐ Video
 ☐ Audio

MRL

rtmp://192.168.100.138/live/stream1

Submit

Cancel

Set the MRL of RTMP(S) and select "On", "Off", "Video" and "Audio" to enable or disable video and audio functions in the two streams.

7.9.4 SRT Settings

SRT Settings

SRT

☐ On
 ☒ Off

SRT Mode

Listener

SRT Server

192.168.100.1

SRT Port

4578

SRT Encryption

None

SRT Password

1234567890

SRT Bandwidth Overhead

25

SRT Variable Latency

500

SRT StreamId

#!::u=admin

Submit

Cancel

Select to turn On/Off the SRT, set the SRT Mode, SRT Server, SRT Port, SRT Encryption, SRT Password, SRT Bandwidth Overhead, SRT Variable Latency and SRT StreamId.

7.9.5 RTSP Settings

RTSP

RTSP Auth

☐ On
 ☒ Off

Submit

Cancel

Select to turn On/Off the RTSP Auth.

7.9.6 ONVIF Settings

ONVIF

ONVIF

☐ On
 ☒ Off

ONVIF Auth

☐ On
 ☒ Off

Submit

Cancel

Select to turn On/Off the ONVIF and ONVIF Auth.

7.9.7 Multicast Settings

Multicast

Multicast

☐ On
 ☒ Off

Address

224.1.2.3

Port

6688

Submit

Cancel

Select to turn On/Off the Multicast, set the Multicast Address (default is 224.1.2.3) and Port (default is 6688; 6688 is the multicast port of the first stream and 6690 is the multicast port of the second stream).

7.9.8 FreeD Settings

FreeD Settings

FreeD Data Output (Beta)

☐ On
 ☒ Off

Destination IP

192.168.100.88

Control Port

19147

Data Port

19148

Submit

Cancel

Select to turn On/Off the FreeD Data Output (Beta), set the Destination IP, Control Port and Data Port.

7.9.9 NTP Settings

NTP

NTP Time Sync

☐ On
 ☒ Off

Time Zone

(GMT+08:00) Beijing, China ▾

Server Address

time.windows.com

Time Interval (min)

1440

Submit

Cancel

Turn On/Off the NTP time sync, select the Time Zone and set the Server address and Time interval (min).

7.10 NDI® Configuration

NDI® Settings

NDI® Machine ID

15010038475446345209c2

Copy

NDI® License File

Select a license file

Upload Files

NDI® License

trial (30 minutes)

NDI® Firmware Version

v5.6.0

NDI® Machine ID

Display the NDI® machine ID of the camera, click the “Copy” button to quickly copy the ID.

NDI® License File

Click the “Select a license file” button to import the file and then click the “Upload Files” to upload and activate the NDI.

NDI® License

The NDI® license trial time is 30 minutes.

NDI® Firmware Version

Display the NDI® firmware version No. of the camera.



Note

The NDI® configuration function requires a license purchase for activation.

7.11 Overlay



Stream

First Stream

Time Enable☐

Title Enable☐

Title

IP Camera

Title Horizontal Position

-

0

+

Title Vertical Position

-

0

+

Time Horizontal Position

-

0

+

Time Vertical Position

-

0

+

Submit

Cancel

Stream

Stream: First Stream, Second Stream.

Time Enable

Turn On/Off the Time Enable.

Title Enable

Turn On/Off the Title Enable.

Title

Set the Overlay Title.

Title Horizontal Position

Set the Title Horizontal Position.

Title Vertical Position

Set the Title Vertical Position.

Time Horizontal Position

Set the Time Horizontal Position.

Time Vertical Position

Set the Time Vertical Position.

7.12 Information

Information

Device ID

UHD Camera

Device Type

F49_RC

Software Version

SOC v0.0.02 - ARM 6.2.355

Webware Version

v1.5.6

Device Serial Number

p1234567888

Submit

Cancel



WEB interface and device information are subject to change without notice.

8 Troubleshooting

Image

- The monitor shows no image.
 - 1) Ensure that the camera power supply is connected, the voltage is normal, and the power indicator is always on.
 - 2) Turn off the power switch to check that the camera is self-testing.
 - 3) Ensure the cable of the video platform and TV is in the correct connection.
- Image jitters after the camera is properly connected.
 - 1) Ensure that the camera installation is in a stable position.
 - 2) Check if any vibrating machinery or object is near the camera.
- There is no video image in the browser.

IE browser and IE core browser are not supported, the camera video image will be displayed correctly when using Google, Firefox, Edge, etc.

- Unable to access through the browser.
 - 1) Use a PC to connect to the network to test whether the network access is functional. Eliminate network faults that may caused by cable faults and viruses until the PC and the camera can pass the Ping test.
 - 2) Disconnect the network, connect the camera with the PC separately and reset the PC's IP address if necessary.
 - 3) Ensure that the IP address, subnet mask and gateway settings are correct.
 - 4) Check if the MAC address conflicts.
 - 5) Check if the web port is modified. The default setting is 80.

- Forget the IP address or login password.

The default IP address is: 192.168.100.88; The default username and password are: admin (After changing the password, please log in with the new password).

Control

- Remote control malfunctioning.
 - 1) Check and replace with new batteries.
 - 2) Ensure that the camera working mode is correct.
 - 3) Ensure that the address key of the remote control matches the camera.
- Serial port malfunctioning.
 - 1) Ensure that the protocol, address and bit rate of the camera are consistent.
 - 2) Ensure that the control cable is properly connected.

