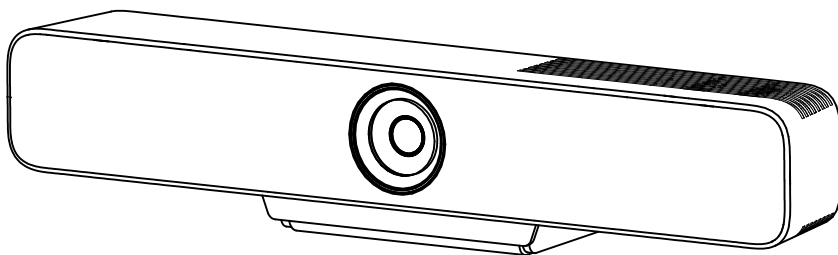# COMREON®
RB10Lite 4K BYOM VideoBar

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:

FC

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.

CE

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.

Catalogue

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
VideoBar	1
PD Power Adapter	1
Power Cable (USB Type-C)	1
HDMI Cable	1
USB Type-C Cable (Support DP Alt Mode)	1
Remote Control	1
Quick Start Guide	1

3 Quick Start

Please check whether the connection is correct before starting.

USB Cable	Network Cable	Power Adapter	HDMI Cable	USB Type-C Cable (Support DP ALT Mode)
Touch Display	Switch	Power Socket	HDTV	PC
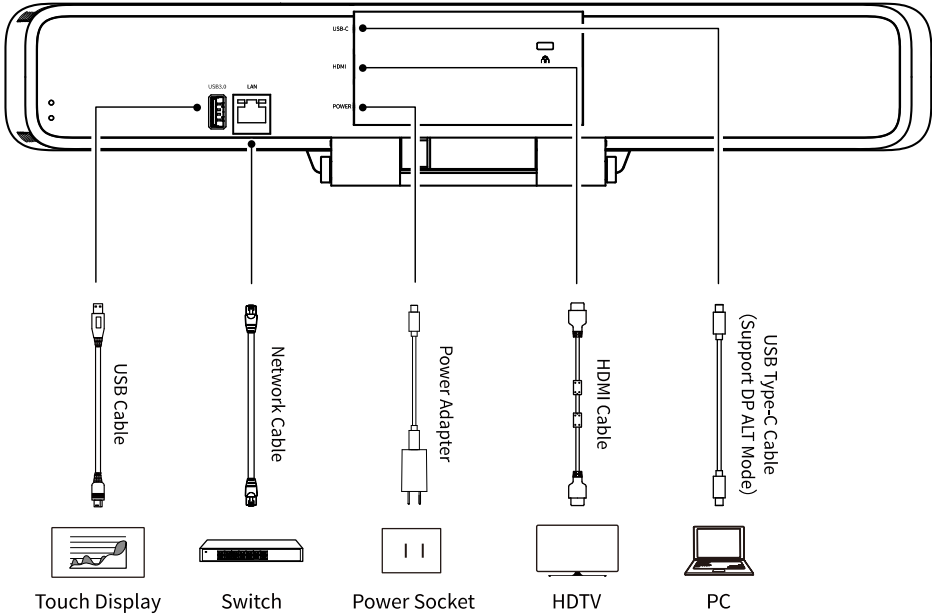
Note

After connecting the Touch Display to the USB 3.0 port of the VideoBar, the PC can be reversed controlled via the Touch Display (Reserved function).

4 About Product

4.1 Features

● **All-in-one Integration, Flexible Deployment**

The 4K camera, array microphone, and speaker are integrated into a compact and lightweight design, supports multiple installation methods, offers minimal deployment, plug-and-play functionality, and seamlessly integrates into any meeting space.

● **Wired BYOM, More Convenient Meetings**

Support USB-C single-cable BYOM applications and 4K local screen mirroring, enables flexible and efficient meeting collaboration.

● **First-line Communication, Fast and Stable**

The USB-C port supports reverse PD power supply and 100Mbps network connection, enabling audio, video, power, and network transmission in one cable, reducing cable clutter, eliminating the need for a laptop power supply, and simplifying network setup, resulting in a cleaner desktop and a more stable BYOM experience.

● **4K UHD Vision, Privacy Assured**

Built-in 4K UHD camera with a 120° ultra-wide angle for detailed images and a clear view of the entire meeting space; equipped with an electric lens cover to protect privacy and security.

● **AI Framing, Precise Focusing**

Equipped with industry-leading AI algorithms, support Group Framing and Speaker Framing, eliminating the need for complex operations, automatically focuses on the speaker to present the best meeting images and enhance communication focus.

● **AI Noise Reduction, Exceptional Audio Quality**

Built-in 6 MEMS array microphones and full-range speaker, 6-meter long-distance voice pickup, integrated with AI audio algorithms based on deep learning, intelligently eliminate echo, noise, and reverberation, enabling clear full-duplex audio conversations.

● **Remote Centralized Control, Convenient Management**

Support remote Web management and can be integrated into a centralized management platform, making operation and maintenance management easy and convenient.

4.2 Product Specifications

Camera	
Video Resolution	4KP30, 1080P30, 720P30
Sensor	1/2.8", CMOS, Effective Pixels: 8MP
Optical Lens	DFO: 120° HFOV: 110° VFOV: 75°
Digital Zoom	5x
Privacy Cover	Built-in electric sliding
Digital Noise Reduction	2D&3D Digital Noise Reduction
SNR	≥50dB
White Balance	Auto

Minimum Illumination	0.5 Lux
Backlight Compensation	Support
Microphone	
Type	6 x omnidirectional digital MEMS microphone arrays, beamforming technology
Pickup Range	Clear pickup distance: 4m, effective pickup distance: 6m
Frequency Response	50Hz–17kHz
Sensitivity	-38dB
Maximum Sound Pressure Level	124dB
SNR	65dB
Speaker	
Driver Type	1 x 1.5" full range driver, dual diaphragm sound chamber
Rated Power/ Impedance	5W/4Ω (Max. 8W)
Frequency Response	F0~20kHz
Sensitivity	80±3dB
THD	200Hz-10kHz＜3%
AI Video Features	
Group Framing	Support
Speaker Framing	Support
AI Audio Features	
Active Noise Cancellation (ANC)	Support
Acoustic ECHO Cancellation (AEC)	Support
Reverberation Suppression	Support
Automatic Gain Control (AGC)	Support

USB Features	
Connection Type	USB 3.0, backward compatible with USB 2.0
Color System/ Compression	YUY2/H.264/MJPEG
Audio Bit Rate	48K
USB Protocol	UVC 1.1, UAC 1.0
UVC PTZ Control	Support

Network Features	
Protocol Version	IPv4, IPv6
Protocol Support	TCP/IP, DHCP, SSH, HTTP, HTTPS with SSL/TLS, RTP, RTCP, SNTP, ARP

Interfaces	
USB Type-C	1 x USB 3.0 Type-C, support USB audio/video transmission and DP ALT mode, support PD reverse power supply (up to 45W)
HDMI OUT	1x HDMI 2.0, maximum resolution: 4KP60
Network	1 x LAN: 10/100/1000 Base-T, support PoE power supply (IEEE802.3 at)
POWER	1 x USB Type-C (65W PD power supply)

Installation	
Installation Method	Integrated multi-functional bracket, supports desktop, wall-mounted, TV top-mounted, and other installation methods
Security Protection	Anti-theft lock slot

System Compatibility	
PC System Requirements on BYOM Mode	Windows 10 and high versions, Mac OS 10.0 and high versions
Cloud Meeting Software Compatibility on BYON Mode	Microsoft Teams and Skype for Business, Zoom client, BlueJeans, Google Meet, - Cisco Webex, Tencent Meeting/VooV Meeting, DingTalk Meeting, Lark Meeting

Centralized Equipment Management System	Equipment management platform

General Specifications	
AC Power	Input: AC 100~240V 50/60Hz, Output: PD 20V/3.25A (max.)
PoE Power Supply	IEEE802.3 at, 48V/0.5A
Operating Temperature	0°C~40°C
Storage Temperature	-40°C~60°C
Operating Humidity	10~95%
Storage Humidity	10~95%
Dimension	400mmx60mmx60mm (excluding bracket)
Net Weight	About 0.9kg
Certifications and Standards	CE, FCC, ROHS, Reach, WEEE

Note

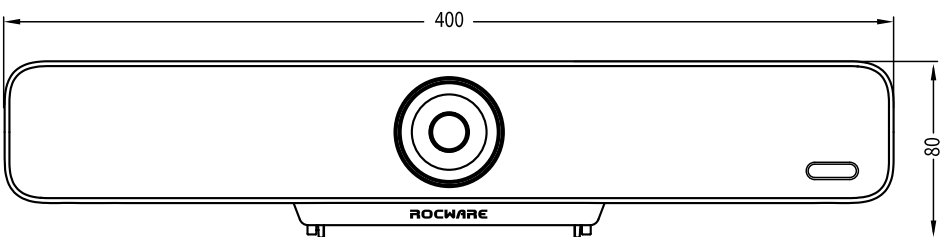Product features and specifications are subject to change without notice.
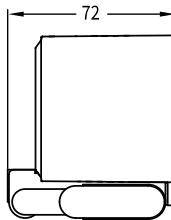
4.3 Interfaces
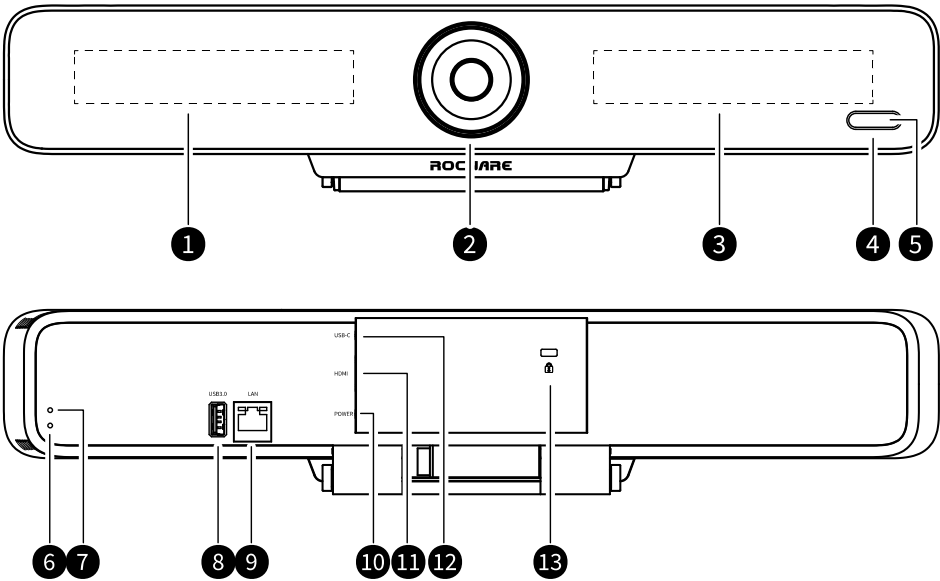
No.	Name	No.	
1	Loudspeaker	8	USB3.0 Port
2	Camera	9	LAN Port
3	Microphone Array	10	POWER Port
4	IR Window	11	HDMI Port
5	Power Indicator	12	USB-C Port
6	Reset Button	13	Security Lock
7	Firmware Update Button	-	-

4.4 Dimension

Unit: mm

72

4.5 Installation

4.5.1 TV Mounting

4.5.2 Wall Mounting

❶ Drill on the wall	❷ Install sealing plugs
❸ Fix device on the wall	❹ Wall-mounted effect
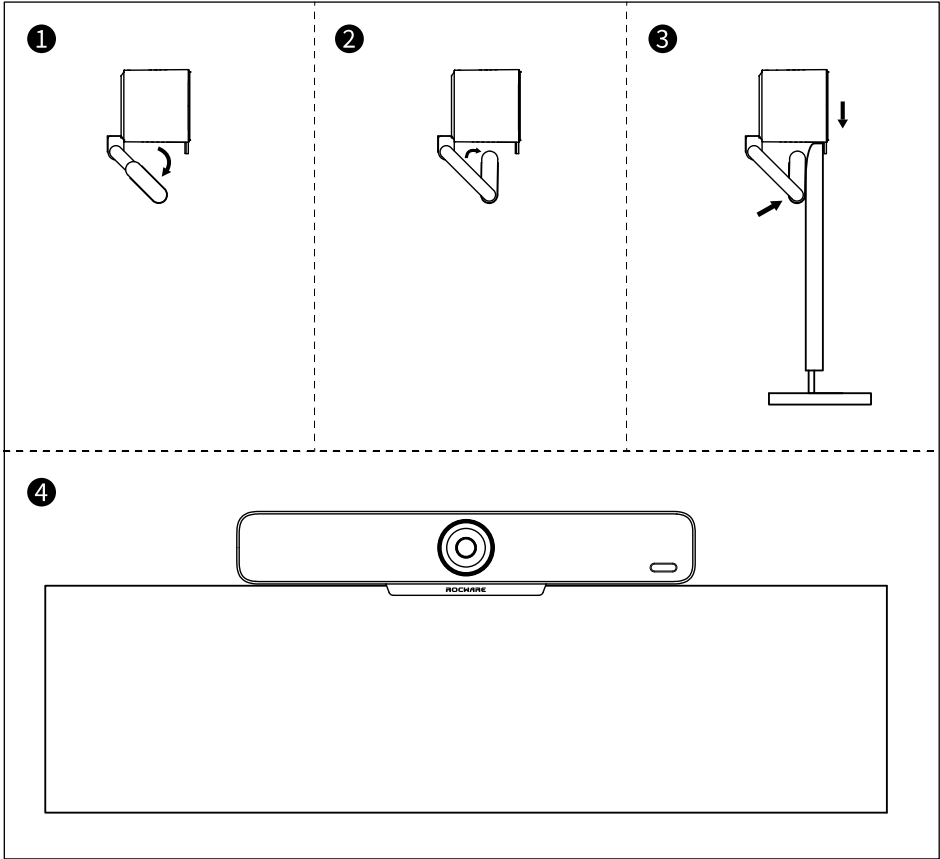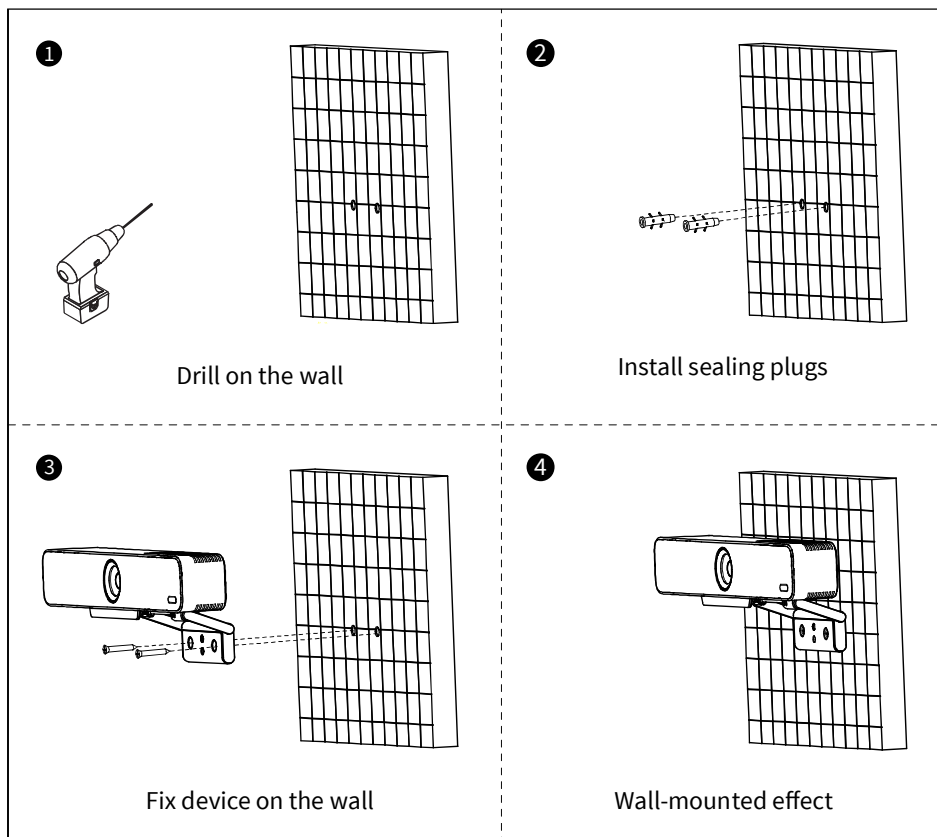
📄 Note

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

4.6 Remote Control

Key Description	8. Preset 3 Key
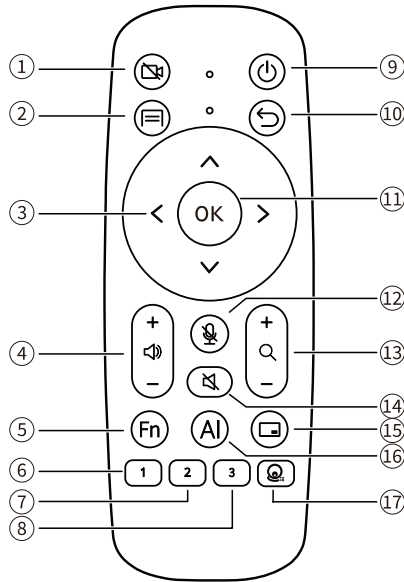
Key Description

1. Camera On/Off Key

Turn On/Off the Camera

2. Menu Key
- Press to enter the BYOM interface and refer to the screen instructions to use the camera on a PC
- Or, use the direction key to select the "⌧" icon and press the [OK] key to confirm to enter the OSD MENU interface to do menu settings

3. Direction Keys
- Menu mode: Press to select and set Menu
- Non menu mode: Press to move the Camera to Up/Down/Left/Right direction

4. Volume +/- Keys

Press to increase or decrease volume

5. Fn Key (Custom Function Key)

Reserved, supported after future software upgrades

6. Preset 1 Key

Press to call preset 1 (only effective for PTZ camera)

7. Preset 2 Key

Press to call preset 2 (only effective for PTZ camera)

8. Preset 3 Key

Press to call preset 3 (only effective for PTZ camera)

9. Power Key

Press to select Standby, Power Off or Restart

10. Return Key

Press to return to the previous menu

11. OK Key

Confirm selection

12. Microphone Mute Key

Turn On/Off the Microphone

13. Zoom Keys

Zoom in [+]; Zoom out [-]

14. Speaker Mute Key

Turn On/Off the Speaker

15. Layout Switch Key

Press to switch the picture layout (only effective for PTZ camera)

16. AI Key

Press to select Speaker Framing Group Framing, or Close

17. Preset Key

Successively press [Preset] + Number key (1-3) to set the preset position (only effective for PTZ camera)
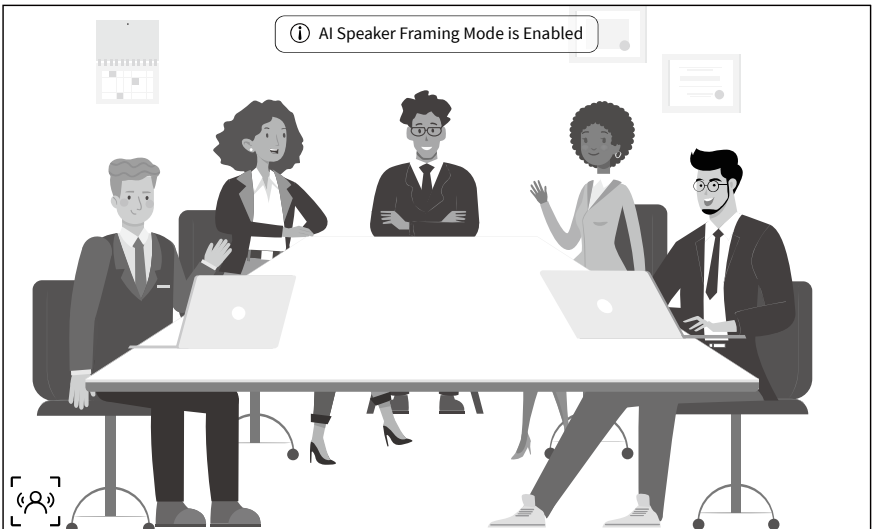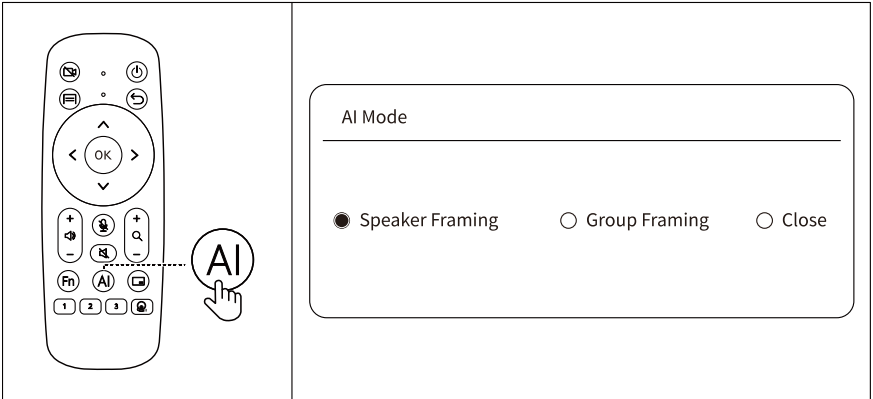
5 AI Tracking

Camera supports Speaker Framing and Group Framing tracking function.

5.1 Speaker Framing

➢ **Operation**

Step 1 Press the [AI] key on the remote control and select "Speaker Framing" to enable the Speaker
Framing function, the " " icon will appear in the lower left corner of the screen and "AI Speaker
Framing Mode is Enabled" will be displayed.

**Step 2** When the participant speaks, the camera will automatically lock the speaker's position and give a close-up image based on the sound source.

Step 3 Press the [AI] key on the remote control and select "Close" to exit AI mode, the display will show "You have turned off AI mode".

5.2 Group Framing

➢ **Operation**

Step 1 Press the [AI] key on the remote control and select "Group Framing" to enable the Group Framing function, the "⌂" icon will appear in the lower left corner of the screen and "AI Group Framing Mode is Enabled" will be displayed.

AI Mode

○ Speaker Framing   ◉ Group Framing   ○ Close
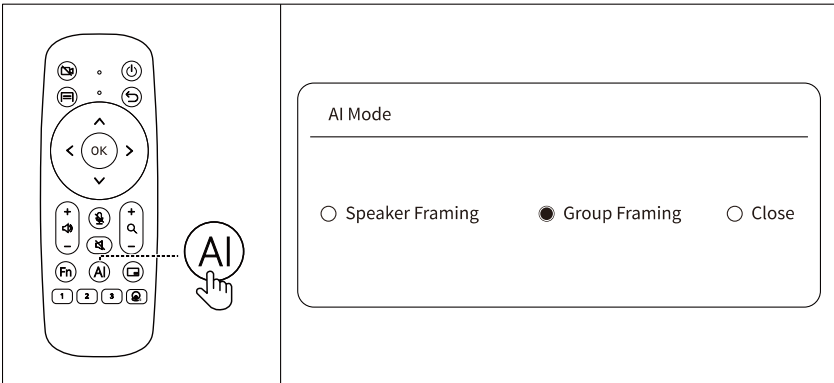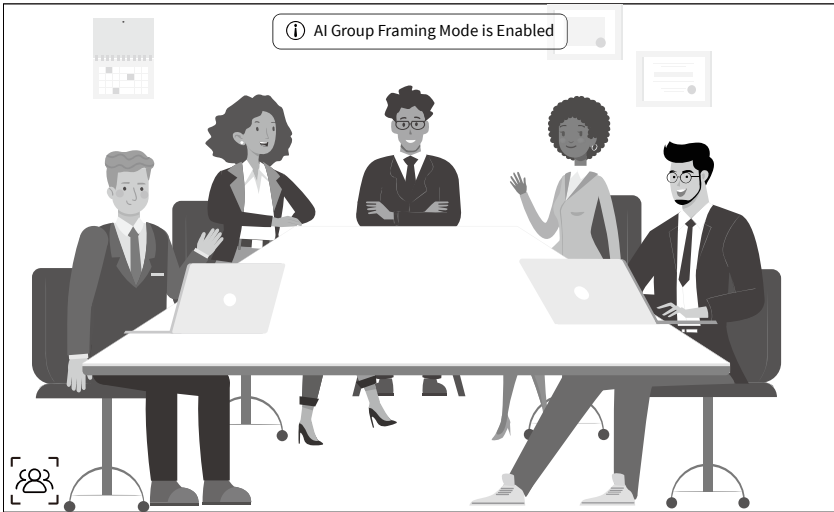
Step 2 When the participant moves, the camera will automatically adjust the image for the best composition using facial recognition.

Step 3 Press the [AI] key on the remote control and select "Close" to exit AI mode, the display will show "You have turned off AI mode".

6 BYOM

The camera supports BYOM (Bring Your Own Meeting) function. After connecting the Camera and turning it on, the screen will display the BYOM interface as below; Or, press the [☰] key on the remote control to enter the BYOM interface and refer to the interface instructions to use the VideoBar.
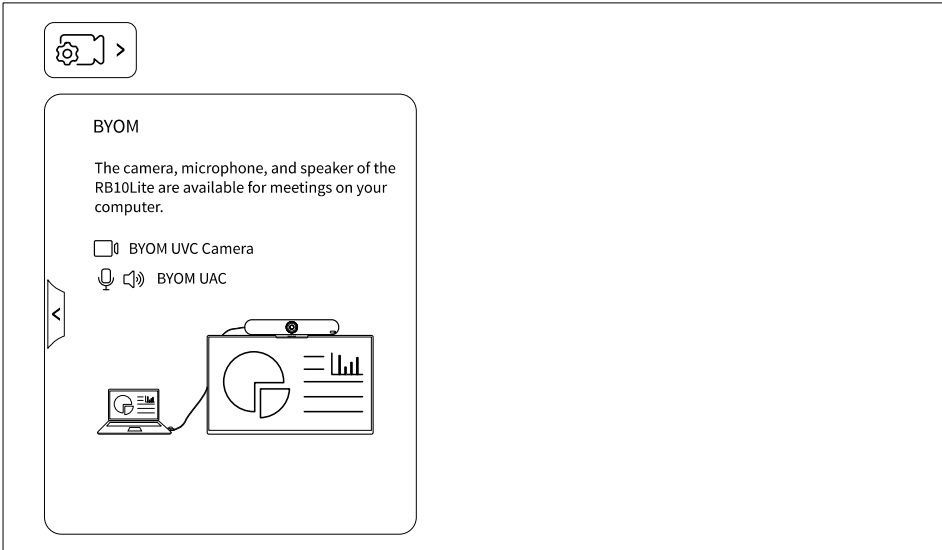
7 GUI Settings

Press the [▤] key on the remote control and move the cursor to select the "⊡" icon, then press the [OK] key to confirm to enter the main OSD menu interface as below.

⌨ Camera	⌨ Camera
⊛ System Settings	Exposure
	Color
	Image
	Noise Suppression
	Reset

7.1 Camera

When in the main menu interface, move the cursor to select and enter to the "Camera" interface to do the menu settings.

⌨ Camera	⌨ Camera
⊛ System Settings	Exposure
	Color
	Image
	Noise Suppression
	Reset

7.1.1 EXPOSURE

Move the cursor to select and enter the "Exposure" menu interface, and use the [◀]/[▶] key to change values. After the change, press the [↩] key to return to the previous menu.

⌨ Camera	⌨ OSD Menu	
⏩ Exposure	Mode	Auto
Color	ExpCompMode	Off
Image	ExpComp	0
Noise Suppression	Backlight	Off
Reset	Gain Limit	11
	Anti-Flicker	50Hz
	Meter	Average
	DRC	1

Mode: Auto, Manual, SAE, AAE, Bright.
ExpCompMode: On, Off (Effective in Auto mode).
ExpComp: -7~7 (Effective in Auto mode).
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, Bottom, Top (Effective in Auto, SAE, AAE, Bright mode).
Shutter: 1/30, 1/50, 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.

7.1.2 COLOR

Move the cursor to select and enter the "Color" menu interface, and use the [◀]/[▶] key to change values. After the change, press the [↩] key to return to the previous menu.

⌨ Camera	⌨ OSD Menu	
Exposure	WB Mode	Auto
⏩ Color	R Gain	0
Image	B Gain	-2
Noise Suppression	Saturation	100%
Reset	Hue	0

WB Mode: Auto, Indoor, Outdoor, OnePush, Manual, VAR.
RG Tuning: -127~127 (Effective in Auto, OnePush, Manual, VAR mode).
BG Tuning: -127~127 (Effective in Auto, OnePush, Manual, VAR mode).
Saturation: 60%~200%.
Hue: -10~10.
Colortemp: 2500K~8000K (Effective in VAR mode).

7.1.3 IMAGE

Move the cursor to select and enter the "Image" menu interface, and use the [◀]/[▶] key to change values. After the change, press the [↩] key to return to the previous menu.

☖ Camera	☖ OSD Menu	
Exposure	Luminance	7
Color	Contrast	7
▶▶ Image	Sharpness	Auto
Noise Suppression	Flip-H	Off
Reset	Flip-V	Off
	B&W-Mode	Off
	Gamma	EXT
	LDC	Off
	Image Style	Default

Luminance: 0~14.

Contrast: 0~14.

Sharpness: Auto, 0~15.

Flip-H: On, Off.

Flip-V: On, Off.

B&W-Mode: On, Off.

Gamma: Default, 0.45, 0.5, 0.56, 0.63, EXT.

LDC: On, Off.

Image Style: Default, Outdoor, Cozy, Norm, Bright, PC.

7.1.4 NOISE SUPPRESSION

Move the cursor to select and enter the "Noise Suppression" menu interface, and use the [◀]/[▶] key to change values. After the change, press the [↺] key to return to the previous menu.

☖ Camera	☖ OSD Menu	
Exposure	2D NR	2
Color	3D NR	Auto
Image		
▶▶ Noise Suppression		
Reset		

2D NR: Close, 1~10.

3D NR: Auto, Close, 1~9.

7.1.5 RESET

Move the cursor to "Reset" and press the [OK] key to confirm to restore the PTZ Camera to default settings.

| ☖ Camera	☖ Camera
⚙ System Settings	Exposure
	Color
	Image
	Noise Suppression
	▶▶ Reset

When reset OSD to default settings, the screen displays "Camera has been restored to default".

📑 Note

The OSD menu and device information are subject to change without notice.

7.2 System Settings

When in the main menu interface, press the direction key to select "System Settings" and confirm with [OK] key to enter the system setting interface as below.
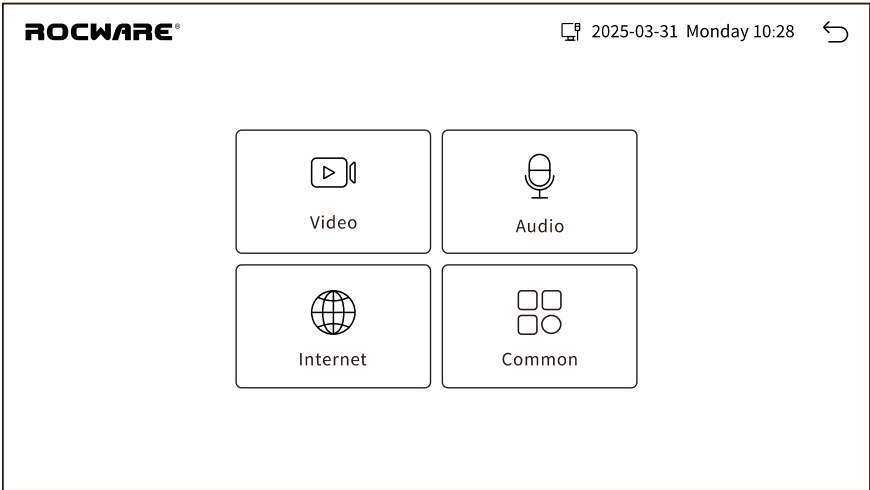
7.2.1 Video Setting

➢ **Operation**

Step 1 When in the System Settings interface, move the cursor to select "Video" and confirm with [OK] key.
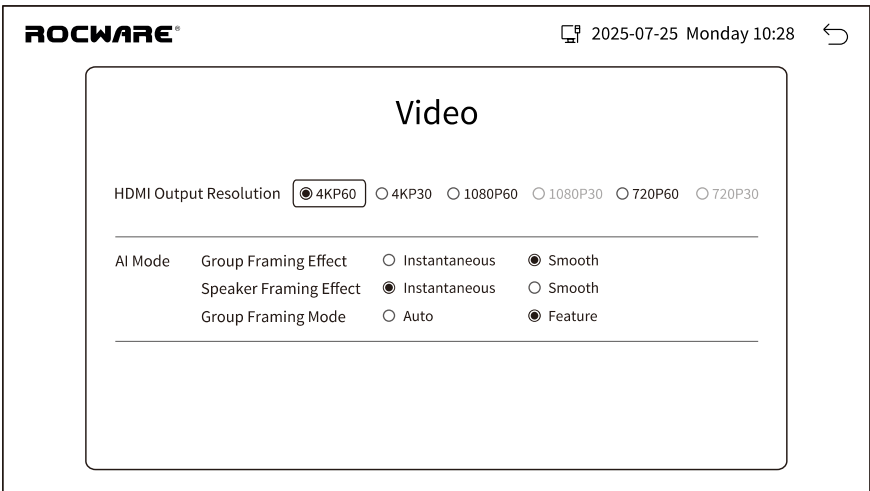
Step 2 Configure the video parameters (see below table) and confirm with [OK] key.

Step 3 Press the [↩] key on remote control to save and return to the upper-level interface.

Parameter	Parameter Declaration	Parameter Setting
HDMI Output Resolution	Configure the HDMI output resolution: 4KP60, 4KP30, 1080P60, 720P60, support EDID.	Default: 4KP60
AI Mode	Group Framing Effect: Instantaneous, Smooth	Default: Smooth
	Speaker Framing Effect: Instantaneous, Smooth	Default: Instantaneous
	Speaker Framing Mode: Auto, Feature	Default: Feature

7.2.2 Audio Setting

➤ **Operation**

Step 1 When in the System Settings interface, move the cursor to select "Audio" and confirm with [OK] key.

Step 2 Configure the audio parameters (see below table) and confirm with [OK] key.
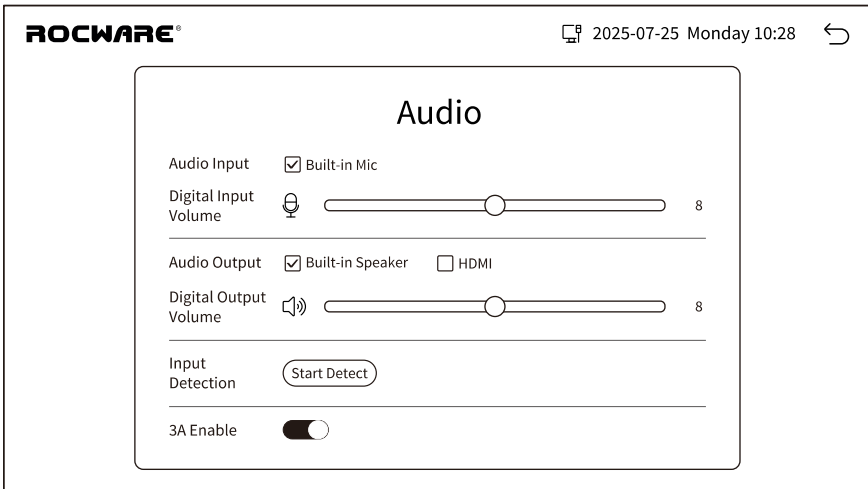
Step 3 Press the [↩] key on remote control to save and return to the upper-level interface.

Parameter	Parameter Declaration	Parameter Setting
Audio Input	The default audio input source is Built-in Mic.	Default: Built-in Mic
Digital Input Volume	Configure the digital input volume value.	Default:8
Audio Output	Select the audio output source: Built-in Speaker, HDMI (Note: The built-in Speaker and HDMI output cannot be selected simultaneously, only one audio output source can be selected at a time.).	Built-in Speaker
Digital Output Volume	Configure the digital output volume value.	Default:8
Input Detection	Select "Start Detect" to enter the Microphone Detection interface and speak into the microphone to detect if the sound input is normal.	/
3A Enable	Select to enable/disable 3A enable function.	Default: Enable

7.2.3 Internet

➢ **Operation**

Step 1 When in the System Settings interface, move the cursor to select "Internet" and confirm with [OK] key.

Step 2 Configure the internet parameters (see below table).

Step 3 When complete the configuring, select "Confirm" to send the IP configuration.

Step 4 Press the [↩] key on remote control to return to the upper-level interface.

Parameter	Parameter Declaration	Parameter Setting
Enable	Select to enable/disable the wired network.	Default: Enable
Type	Configure the network acquisition type: ● Static IP: The IP address of the camera is assigned by the network administrator. ● DHCP IP: Camera automatically obtains the IP address through the DHCP server.	Default: DHCP IP
Protocol	Configure the network protocol: IPv4, IPv6.	Default: IPv4
IPv4/6 Address	Configure the IP address of the camera.	Default: DHCP IP
Subnet Mask	Configure the subnet mask for the camera.	Default: DHCP IP
Gateway	Configure the gateway address corresponding to the camera's IP.	Default: DHCP IP
DNS	Configure the IP address of the DNS server.	Default: DHCP IP

7.2.4 Common

➢ **Operation**

Step 1 When in the System Settings interface, move the cursor to select "Common" and confirm with [OK] key.

Step 2 Configure the common parameters (see below table) and confirm with [OK] key.

Step 3 Press the [↩] key on remote control to save and return to the upper-level interface.

Parameter	Parameter Declaration	Parameter Setting
Device Information	Display the Device Model, Software Version, Device IP, Serial Number and MAC Address of the camera.	/
Language	Configure the system language of the camera: English, 中文(简体).	Default: English
Time Zone	Select the time zone of the area.	Default: Eastern Time
Web Access	Select to enable/disable the web access.	Default: Disable
Online Upgrade	When "Start" is selected, the camera will obtain the upgrade file from the specified HTTP server and upgrade as prompted.	/
Restore Factory Settings	Click "Start" and select "Confirm" to restore the factory settings and restart the camera.	/
Ethernet For Laptop	Select to enable/disable the ethernet for laptop.	Default: Disable

⚠ **Notice**

After restoring the factory setting, all the previously configured parameters will be lost. Please perform this operation with caution.

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.

Control

● Remote control cannot work

1) Check and replace with new batteries.
2) Check if the camera is in normal working mode.
3) Check if the remote control mode is compatible with the camera.

● Remote control cannot control PTZ

If the GUI interface shows a menu and PTZ cannot be controlled, press the return button on the remote control until the menu disappears.