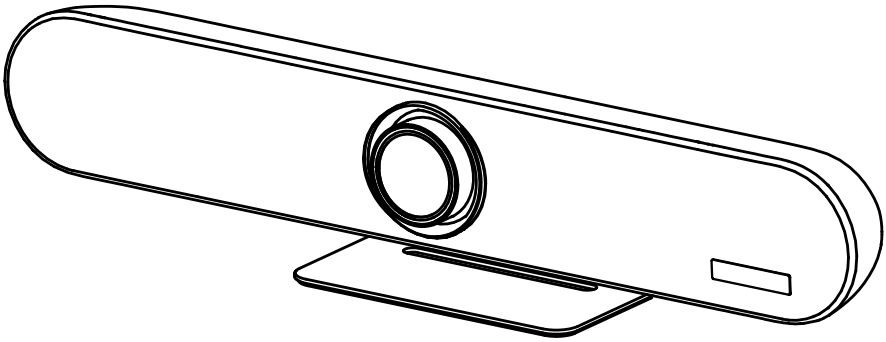
RB10 20MP UHD ALL-IN-ONE

USB Video Bar



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 & IC Statement

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.

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

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

1) This device may not cause interference.
2) This device must accept any interference, including interference that may cause undesired operation of the device.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :

1) L' appareil ne doit pas produire de brouillage;
2) L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

Class A ITE

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale, but the following warning shall be included in the instructions for use:

European Community Compliance Statement (Class A)

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 1
2 Packing List 1
3 Connection 2
4 About Product 3
4.1 Features 3
4.2 Appearance 4
4.3 Dimension 5
4.4 Installation 5
4.4.1 Monitor Mount 5
4.4.2 Wall Mount 6
4.5 Remote Control 7
5 AI Tracking 8
5.1 Speaker Track 8
5.2 Auto Frame 9
5.3 Smart Gallery 10
6 WEB Settings 11
7 Troubleshooting 12

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 12V 5A 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

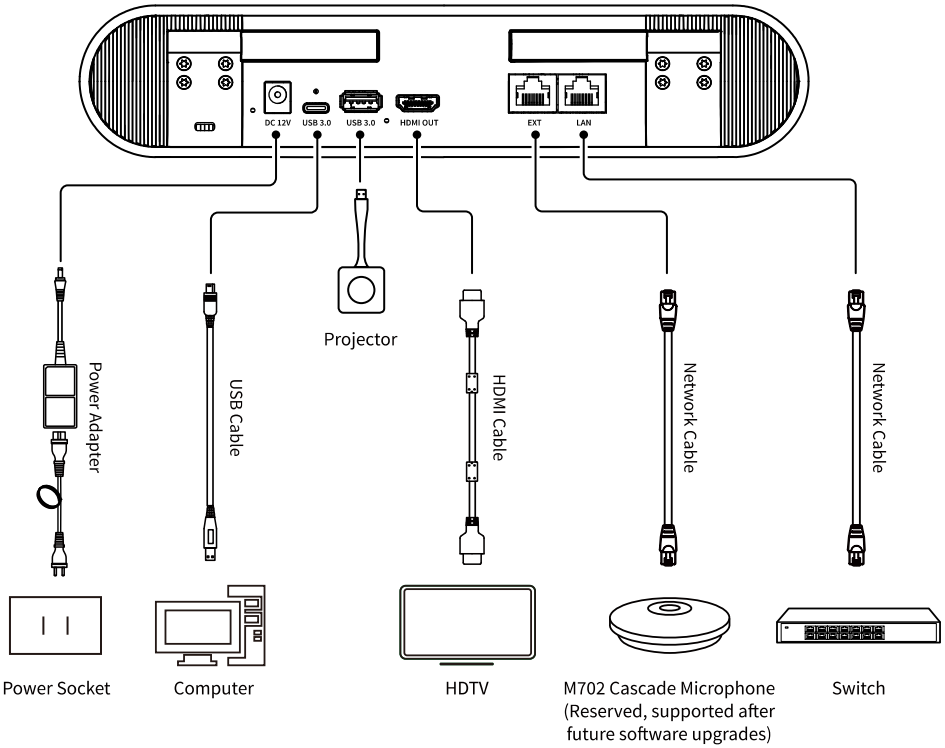
Running this device in a residential environment may cause radio interference.

2 Packing List

Name	Quantity
Camera	1
Power Adapter	1
Remote Control	1
Wall Mount Bracket (with screws)	1
USB Cable	1
Quick Start Guide	1

3 Connection

The cable connection contains optional configurations and for reference only. Please connect the cables according to actual needs.



Note

The recommended horizontal cascade distance is 3 meters, and the maximum number of cascades is 3. (Reserved, supported after future software upgrades.)

Projector Pairing:

Insert the BY40 wireless BYOD projector into the USB 3.0 Type-A interface of the camera, the blue indicator on the projector will turn on, after approximately 10 seconds, the indicator will change to red to indicate that the projector is paired. Remove the projector and connect it to a PC to enable the BYOM & BYOD functions.

4 About Product

4.1 Features

- **Applicable Scenarios**

Designed specifically for small and medium-sized conference rooms, help the enterprises rediscover the potential of using internal small and medium-sized meeting spaces. This facilitates more efficient meetings and reduces rental costs.

- **Customer Value**

Facilitates flexible daily business negotiations and remote team collaborations for small and medium-sized enterprises, creating a relaxed, free-flowing conversation environment to enhance decision-making speed and efficiency.

- **Integrated Design**

Integrated with a 20MP ultra-high-definition camera, beamforming microphone, and full-range speaker three-in-one design, reduce wiring and make video communication easy.

- **20MP UHD**

Using 1/1.8-inch high-quality UHD CMOS sensor with 20MP ultra-high pixel resolution enables high quality images of 4K (3840x2160), and backward compatible with 1080P, 720P and other resolutions to meet the needs of various video experience.

- **Wide Field of View**

120° wide-angle view (110° horizontal field of view), 5x digital zoom, customized optical lens for meeting scenes, built-in electric pan-tilt (±15° horizontal and vertical movement range), ensuring clear visibility of meeting participants.

- **Beamforming Microphone**

Built-in beamforming microphone (BF) with a pickup range of 6 meters. Low-distortion lateral beamforming algorithm directs the microphone directly towards the speaker, better sound and enhancing communication clarity, richness, and realism. Supports cascading extended microphones for wider coverage of harmony distance.

- **Audio 3A Algorithm**

Built-in Audio 3A algorithm (AEC/AGC/ANS), full-duplex conversation and meeting the communication needs in different room structures, providing comfortable and clear communication whether seated at the conference table, next to it or standing.

- **Full-Range Speaker**

Full-range high-fidelity speaker with professional acoustic design, reducing sound interference and providing exceptional sound effects.

- **Auto Framing**

Built-in intelligent automatic framing AI algorithm, combined with facial recognition, adjust the camera automatically to achieve the best composition as the number of seats in the meeting room changes.

- **Speaker Tracking**

Built-in intelligent analysis and sound source localization algorithm, sound-based positioning and intelligent EPTZ function, enables automatic speaker tracking and intelligent switching of speaker views to ensure that the speaker is always clearly on screen.

- **Smart Gallery**

Utilizing smart facial recognition AI algorithms, extract and intelligently arrange the close-up images of participants, enabling equal participation in meetings and more realistic face-to-face digital collaboration for remote participants.

- **BYOM & BYOD**

Built-in Wi-Fi module supports wireless access for personal laptops to call video and audio, supports the wireless projection from computers to the device for HDMI local display.

- **Rich Interfaces**

Support multiple interface types including USB 3.0, HDMI, RJ45, etc., enabling ultra-high-definition audio-video signal transmission.

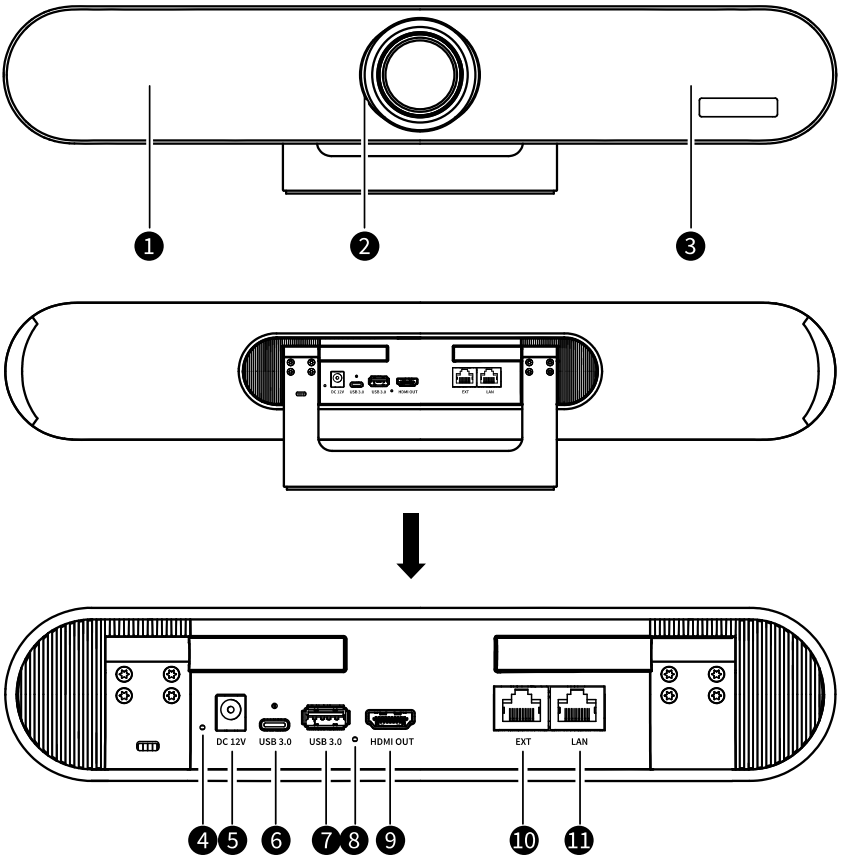
- **Easy Deployment**

Flexible installation options such as tabletop placement, wall mounting, or attachment to TVs/displays, making it easier to deploy quickly in crowded meeting rooms.

- **Plug and Play**

Connects to computers or commercial displays with a plug-and-play USB interface for instant use, reducing wiring complexity. Enables easy video communication and lowers user barriers to use.

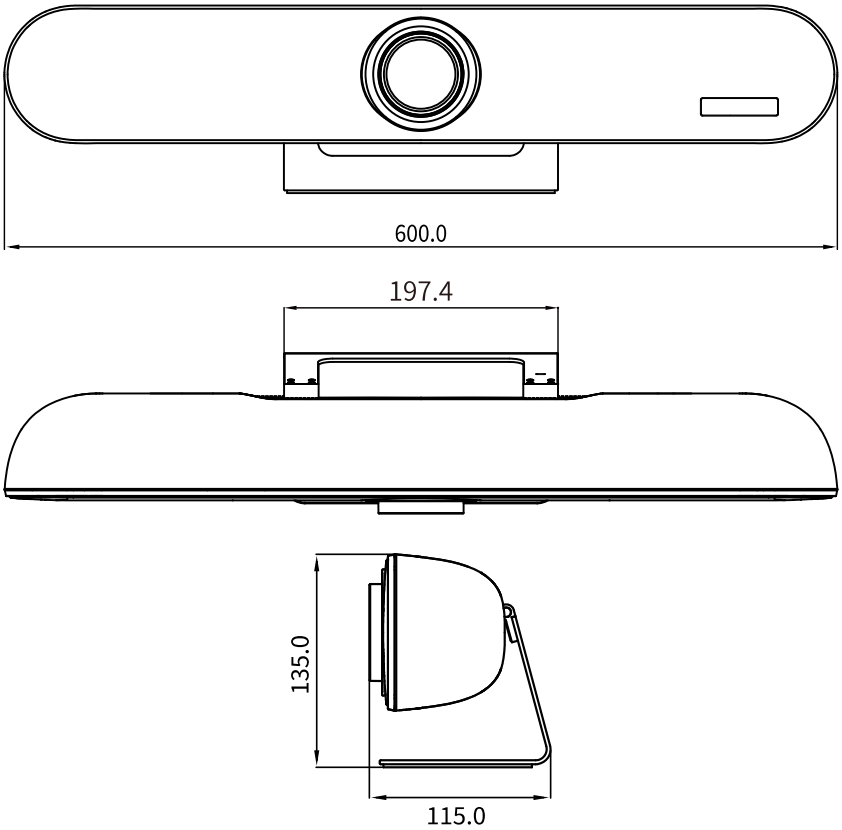
4.2 Appearance



No.	Name	No.	Name
1	Loudspeaker	7	USB 3.0 Type-A Interface
2	Status Indicator	8	Reset Port
3	Microphone Array	9	HDMI OUT Interface
4	Burning Port	10	EXT Interface
5	DC 12V Interface	11	LAN Interface
6	USB 3.0 Type-C Interface	-	-

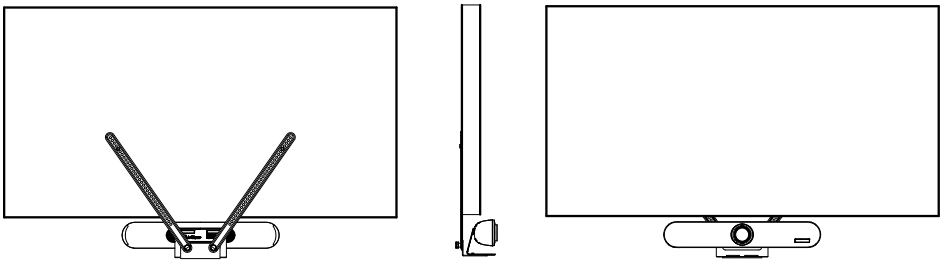
4.3 Dimension

Unit: mm

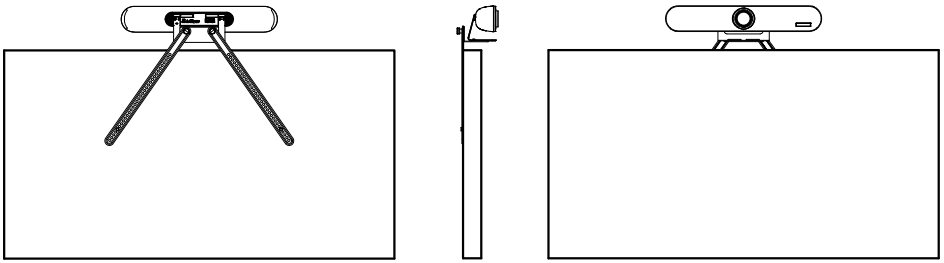


4.4 Installation

4.4.1 Monitor Mount



Bottom Installation

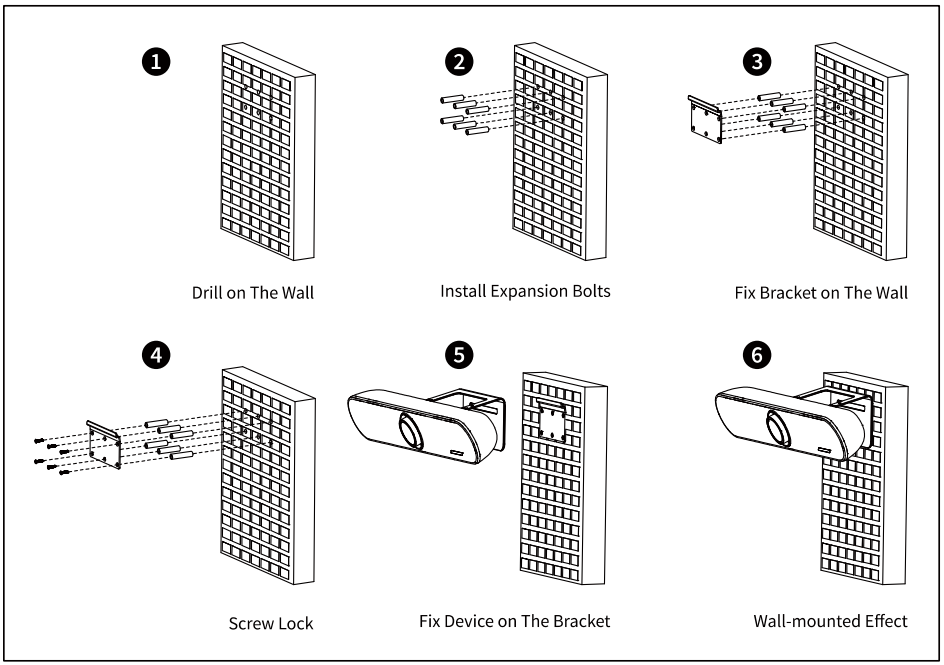


Top Installation

Note

The monitor mounting bracket is not included and need to be purchased separately.

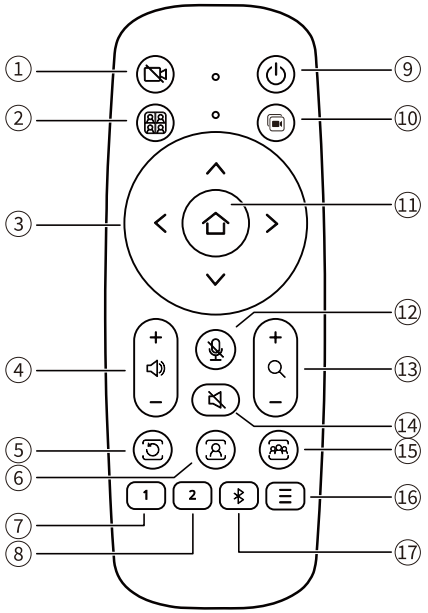
4.4.2 Wall Mount



Note

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

4.5 Remote Control



Key Description
1. Camera On/Off Key
Turn On/Off the Camera
2. Smart Gallery Key
Press to turn on the Smart Gallery function
3. Direction Keys
● Menu mode: Press to select and set the Menu ● Non menu mode: Press to move the Camera to Up/Down/Left/Right direction
4. Volume +/- Keys
Press to increase or decrease the volume
5. Exit Key
● Menu mode: Press to return to the previous menu ● Non menu mode: Press to exit the AI mode
6. Speaker Track Key
Press to turn on the Speaker Track function
7. Preset 1 Key
Long press to set preset 1; Short press to call preset 1
8. Preset 2 Key
Long press to set preset 2; Short press to call preset 2

9. Standby Key
Short press to enter/exit the standby mode
10. Smart Fusion Key (Reserved, supported after future software upgrades)
Press to turn on the Smart Fusion function
11. OK Key
● Menu mode: Confirm selection ● Non menu mode: Press to turn the camera back to the HOME position
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. Auto Frame Key
Press to turn on the Auto Frame function
16. Menu Key
Enter/Exit the OSD menu
17. Bluetooth Key (Reserved, supported after future software upgrades)
Enable/Disable the Bluetooth

5 AI Tracking

This camera supports three tracking modes: Speaker Track, Auto Frame and Smart Gallery.

Note

The Speaker Track, Auto Frame and Smart Gallery function can be directly turned on or off through the remote control; Alternatively, enter the AI setting menu of the camera to select to turn on/off the AI mode.

5.1 Speaker Track

➢ **Operation**

Step 1 After connecting and turn on the camera, press the "" key on the remote control to enable the Speaker Track function.



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 "" on the remote control to disable the Speaker Track function.

5.2 Auto Frame

➢ **Operation**

Step 1 After connecting and turn on the camera, press the "" key on the remote control to enable the Auto Frame function.



Step 2 When the participant's position moves, the camera will automatically adjust the image using facial recognition to achieve the best composition.



Step 3 Press the "" on the remote control to disable the Auto Frame function.

5.3 Smart Gallery

➢ **Operation**

Step 1 After connecting and turn on the camera, press the "" key on the remote control to enable the Smart Gallery function.



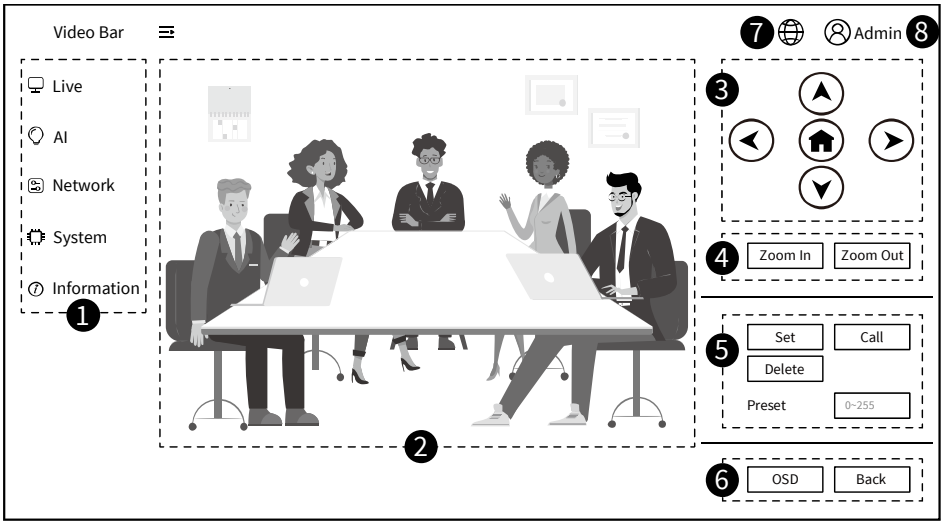
Step 2 The meeting layout adjusts according to the number of participants, the close-up images of participants will be extracted and arranged intelligently (refer to the below diagram for specific layouts).



Step 3 Press the "" on the remote control to disable the Smart Gallery function.

6 WEB Settings

Access the camera's IP address in the browser (default: 192.168.100.88) to pop up the login window, input the username (default: admin) and password (default: admin) and click the "Submit" to enter the WEB page as below:



1) WEB Configurations

Live: Configure the Exposure, Color, Image and Display parameters.
AI: Configure the AI modes such as Off, Smart Gallery, Speaker Track and Auto Frame.
Network: Configure the LAN parameters.
System: Support perform the Reboot, Factory Default, Download Log, and modify the username and the password for the WEB login.
Information: Support view device Information and perform System Upgrade.

2) Media Preview Window

Preview camera video image.

3) 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.

4) Zoom

Zoom In/Out the camera lens.

5) PTZ Preset

Use the arrow buttons to turn the PTZ to the desired position, enter a preset number (0~255) in the preset box and click "Set" button to save. When the PTZ turn to another position, enter the preset number and click "Call" button to return the PTZ to the preset position.

6) OSD

When selecting “Menu,” the OSD menu will appear in the top-left corner of the media preview window. Use the Up and Down buttons to navigate the menu, click HOME button to confirm to enter the submenus, and use the Left and Right buttons to modify the parameters of the menu. After making changes, select "Back" to save and exit to PTZ mode.

7) Language

Click to select “中文” or “English” to change the language of the webpage.

8) Admin

Home: Return to the home webpage.
Logout: Exit to the WEB login page.

7 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 connected correctly.

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 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 be 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.

