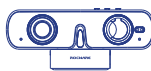


## MINI ALL-IN-ONE VIDEO SOUNDBAR

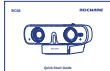
RC08

V4.0

### 1 Packing List



ROC08



Quick Start Guide



USB Cable

### 2 Product Main Features

#### ● Integrated Bionic Design to Simplify the Complexity

Integrated high-definition camera, high-sensitivity omnidirectional microphone, full-frequency speaker 3-in-1 design, plug and play, reducing wiring, one USB cable only making video communication easy and simple; Unique bionic design allowing you to get excellent audio-visual experience in video communications. Exclusive research and development algorithm solves the echo cancellation in a very small space, and the full-duplex call is clearer.

#### ● 1080P Full HD Ultra Wide Angle without Distortion

Support 1080P HD, provide image encoding output up to 1080P30/25, while downward compatible with 720P and other resolutions. Wide field of view, horizontal field of view up to 90°.

#### ● High-fidelity Full-frequency Speakers

Using high-fidelity speakers with ducted sound cavity, the treble is clear and penetrating, and the bass is natural and surging, providing extraordinary sound effects.

#### ● Audio 3A Algorithm

Built-in audio 3A algorithm (AEC/AGC/ANS), full-duplex mode, can automatically adjust and balance the volume and suppress noise at the same time while in voice acquisition to meet the needs for loud and clear communication.

#### ● e-PTZ

No mechanical rotating device needed for more accurate rotation accuracy, no noise, more reliable and durable, support 4x digital zoom.

#### ● Built-in Physical Privacy Cover

Equipped with an integrated sliding privacy cover to security the privacy.

#### ● 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 algorithm greatly reduces the image noise, the image maintains clean and clear even under the condition of ultra-low illumination, and the SNR of image is as high as 55dB or above.

#### ● Easy Installation

Standard equipped with damping rotating bracket, which is compatible with almost 100% display devices on the market, easy to install, stable and reliable.

● Support One-key Switching Between Landscape and Portrait Mode  
Landscape and portrait mode can be selected, one-key switching is suitable for various live stream scenarios.

#### ● Fast Focus

The fuselage is equipped with a laser-assisted focuser, advanced autofocus algorithm to realize extremely fast and accurate autofocus.

#### ● Touch to Mute

User-friendly one-touch mute design, one-touch to turn off the microphone.

### 3 Specification

Camera	
Sensor	1/2.8", CMOS, Effective Pixel: 2.07M
Scanning Mode	Progressive
Lens Mount	M12
Lens	Focus: f=2.8mm, Horizontal FOV: 90°
AF	Support fast autofocus
Minimum Illumination	0.5 Lux @ (F2.0, AGC ON)
Shutter	1/30s~1/10000s
White Balance	Auto, Manual, VAR
Camera Stand	Standard Damping Rotary Support
Physical Privacy Security	Support
Digital Noise Reduction	2D&3D Digital Noise Reduction

Backlight Compensation	Support
Digital Zoom	4X
USB Features	
Operate System	Windows 7 (only 1080P and below supported), Windows 8.1, Windows 10 or higher; macOS™ 10.10 or higher; Google™ Chromebook™ version 9.0.1547.70 or higher; Linux (support UVC)
Hardware	2.4 GHz Intel® Core 2 Duo CPU or higher; 2 GB RAM or more; USB 2.0 interface
Color System/Compression	YUY2 / H.264 / MJPEG
Video Format	1080P30/25, 720P30/25, 960x540P30/25, 640x360P30/25

USB Protocol	UVC 1.1
UAC	Support
UVC PTZ	Support (ePTZ)

Input/Output Interface	
USB Interface	1 x USB 2.0: Type C

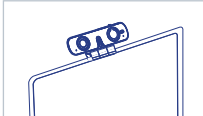
General Specification	
Input Voltage	5V (USB power supply)
Input Current	0.5A
Operating Temperature	0°C~40°C
Storage Temperature	-40°C~60°C
Power Consumption	2.5W
Dimension	121mm x 32mm x 31mm (without bracket)
Net Weight	0.2Kg

Audio Features	
Audio 3A Algorithm	Support Automatic Gain Control, Noise Reduction, and Echo Cancellation
Full-frequency Speaker	82dB SPL at 0.5m
Microphone	Omnidirectional Microphone, Sensitivity: -30±2dB
Echo Cancellation	Support

### 4 Simple Operation Steps



1. Connect ROC08 to computer with USB cable



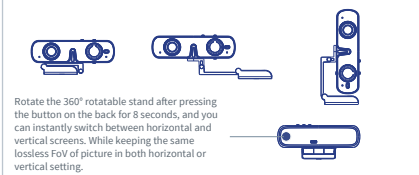
2. Clip the ROC08 to the computer and adjust the angle



3. Choose Rocware ROC08

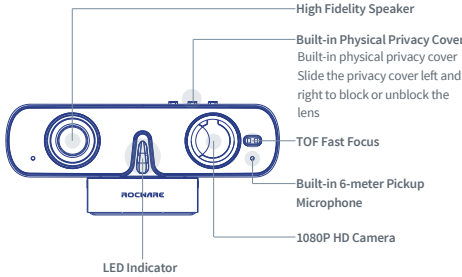


4. Start the meeting

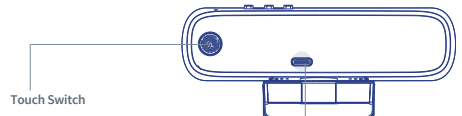


5. Adjust the bracket according to the needs of landscape and portrait modes.

### 5 Product Details



Blinking Blue: Indicates the camera startup in landscape mode  
Steady Blue: In landscape mode, the host obtains audio or video streams  
Steady Red: The MIC of the camera is mute  
Blinking Purple: Indicates camera startup or software upgrade in portrait mode  
Steady Purple: In portrait mode, the host obtains audio or video streams



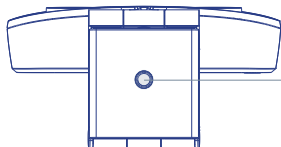
Touch Switch

Short touch for about 1~2 seconds:  
When the microphone is on, a short touch it will be off, and the LED indicator on the front will be red; Another short touch again, it will be on, and the LED indicator on the front will be blue

Long touch for about 8 seconds:

switch between landscape mode and portrait mode  
When the camera is in landscape mode, long touch for about 8 seconds to switch to portrait mode; Vice versa; Note: The camera will restart after switching

Type C USB 2.0 Interface  
For power supply & audio and video data transmission

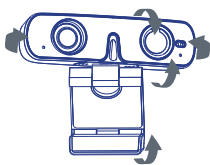


1/4"-20 Standard Screw Holes  
Various brackets and tripods can be easily installed

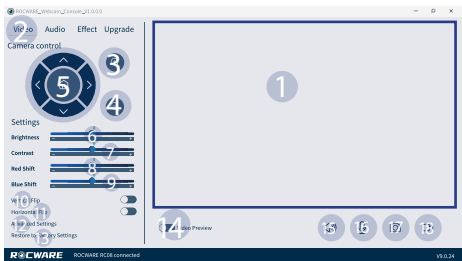


Base Stand

Various angles of the bracket can be adjusted freely (see the picture on the right)



### 6 Tool Interface



- Video screen preview box
- Menu
- Default is "Video", "Audio" is the sound control menu, and "Upgrade" is the upgrade menu. Note: The "Effect" menu function is still under development.
- Digital zoom in
- Image movement (Note: this feature is only available after digital zoom in)
- Brightness adjustment
- Contrast adjustment
- Red gain adjustment
- Blue gain adjustment
- Vertical flip
- Horizontal flip
- Advanced Settings
- Restore factory settings
- Image preview switch
- Sound volume adjustment
- Microphone adjustment (Note: This function is still under development.)
- Take photos
- Video recording (note: this function is still in development.)

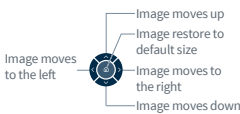


Image moves to the left

### 7 Safety Precautions

- In the process of transportation, storage, and installation, the damage caused by heavy pressure, violent vibration, and immersion should be prevented.
- The product should be placed on a stable surface or other horizontal platforms. The shell of this product is made of organic materials; avoid contact with liquids, gases, or solids that may cause corrosion of the shell.
- Do not disassemble the product without authorized permission.
- This product has no parts that consumers can repair by themselves; damage caused by consumer disassembly is not covered by a warranty.



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

### 8 Maintenance and Troubleshooting

#### Camera Maintenance

- If the camera will not be used for a long time, please disconnect the USB;
- Use soft cloth to clean camera housing.
- Please use the soft dry cloth to clean the lens. If the camera is serious dirty, clean it with diluted neutral detergent. Do not use any type of solvents, which may damage the lens and affect the image effect;

#### Unqualified Application

- Do not shooting extreme bright objects, like sunlight, outdoor, lighting, etc.
- Do not operating in unstable lighting conditions, otherwise image will be flickering.
- Do not operating close to powerful electromagnetic radiation, such as TV or radio transmitters, etc.

Troubleshooting	
Fault phenomenon	Solution
After power on, LED indicator is blue and keeps blinking	1. Check whether the USB cable is properly connected to the camera and PC, please re-plug; 2. Whether to use the original USB cable, it is not recommended to use other USB cable instead of the original one;
Image is blurry and out of focus	1. Check whether the TOF module is blocked, keep the TOF working area clean and unobstructed; 2. Check whether the focus is in automatic mode through the tool;
Microphone mute	1. Check whether the computer audio input device is mute; 2. Check the LED indicator of the camera to see if it is red, if so, short touch the touch button to unmute the microphone;
Abnormal sound from the speaker	1. Check whether the camera USB cable is directly connected to the computer. The best way is to connect the camera directly to the PC; 2. Check whether the speaker or speaker surface is damaged, or has creases;
No image output	1. Check whether the privacy cover is open; 2. Whether to enable multiple software access. The camera supports only one access.
The camera cannot be recognized after power on	Check whether the USB cable of camera is properly connected;
Howling	1. Check whether camera listening is enabled; 2. Not recommended to use the camera microphone with other acoustics devices;

Troubleshooting	
Fault phenomenon	Solution
Upgrade failed	1. Check whether the camera is recognized correctly after connecting to PC, and whether the connection is successful. If yes, re-upgrade it; 2. If MTD upgrade fails, close the tool and restart the upgrade tool to upgrade again. 3. Open the upgrade software, it shows that the connection fails, but the camera is connected to the PC and can be accessed normally. It is recommended to change another PC to upgrade.
Image flip	Check the LED indicator, if it is purple and the image flipped, it has entered the portrait mode.
Image has stripes that scroll up and down	Check the anti-flicker frequency of the camera. Set the power supply frequency to the same value as the anti-flicker frequency.
Image comes and goes from time to time	Check whether the cable of the video platform and TV is properly connected.
Android platform device has no image	1. Check whether the camera is recognized in the system. If not, restart the Android platform. 2. Set H264 to off by default on the tool and restart the camera.

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