

Wunderbar

79068-WB User Manual

Wunderbar UHD All-In-One Conference Bar



All Rights Reserved

Version: 79068-WB_2020V1.0

Wunderbar

79068-WB User Manual

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different product model specifications may vary.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated October 2020. In order to continue improving the product, we reserve the right to make function or parameter changes without notice or obligation. Please refer to the dealers for the latest details.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It 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 commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



Table of Contents

1. Safety Precautions	4
2. Package List	5
3. Dimensions & Interface	5
3.1 Dimensions	5
3.2 Interface	6
4. Product Introduction	7
4.1 Features	7
5. Specifications & Installation	9
5.1 Specifications	9
5.2 Installation	10
5.2.1 Wall-Mount Instructions	10
5.2.2 Source Layout	11
6. Remote Control	12
6.1 Remote Control Pairing	12
6.2 Remote Control Layout	13
6.3 Remote Control Operation	13
7. GUI Settings	14
7.1 Menu	14
7.2 Settings	14
7.3 Noise Reduction	15
7.4 Information	15
7.5 Restore Default	16
8. Maintenance & Troubleshooting	16
8.1 Maintenance	16
8.2 Troubleshooting	16

1. Safety Precautions

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully, and save the original box and packing material for possible future shipment
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons
- Do not dismantle the housing or modify the module (electrical shock or burn hazard)
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction
- Refer all servicing to qualified service personnel
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water
- Do not put any heavy items on the product's power cable
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards
- Install the device in a place with sufficient ventilation to avoid damage caused by overheating
- Keep the module away from liquids
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes

Wunderbar

79068-WB User Manual

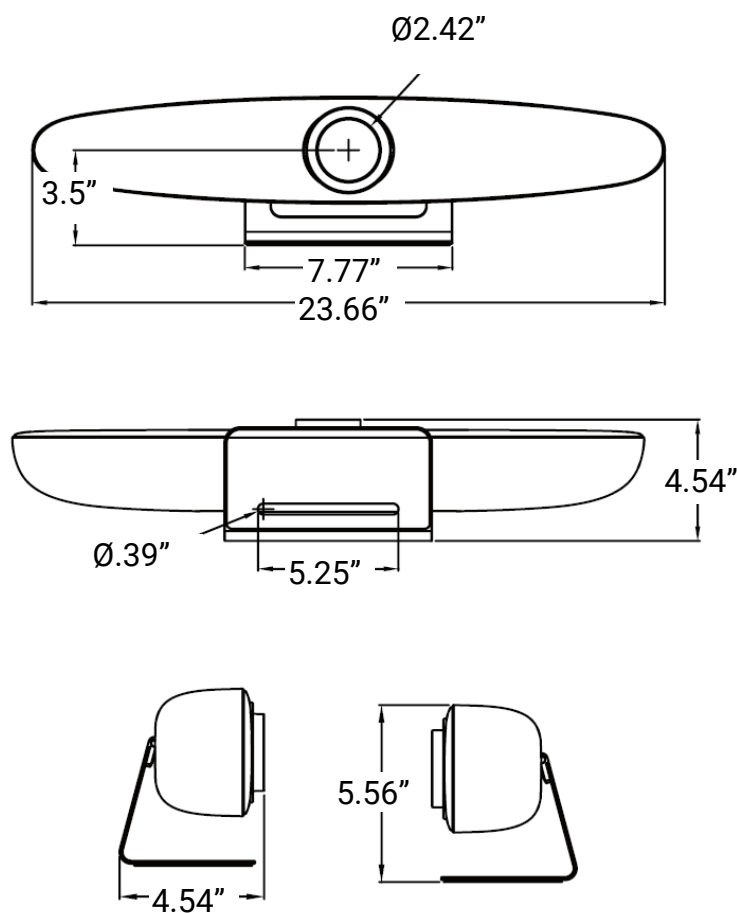
2. Package List

- Camera
- Power adapter
- Power cable
- Remote control
- USB cable
- Wall bracket
- User manual

Note: Please contact your distributor immediately if any damages or defects in the components are found.

3. Dimensions & Interface

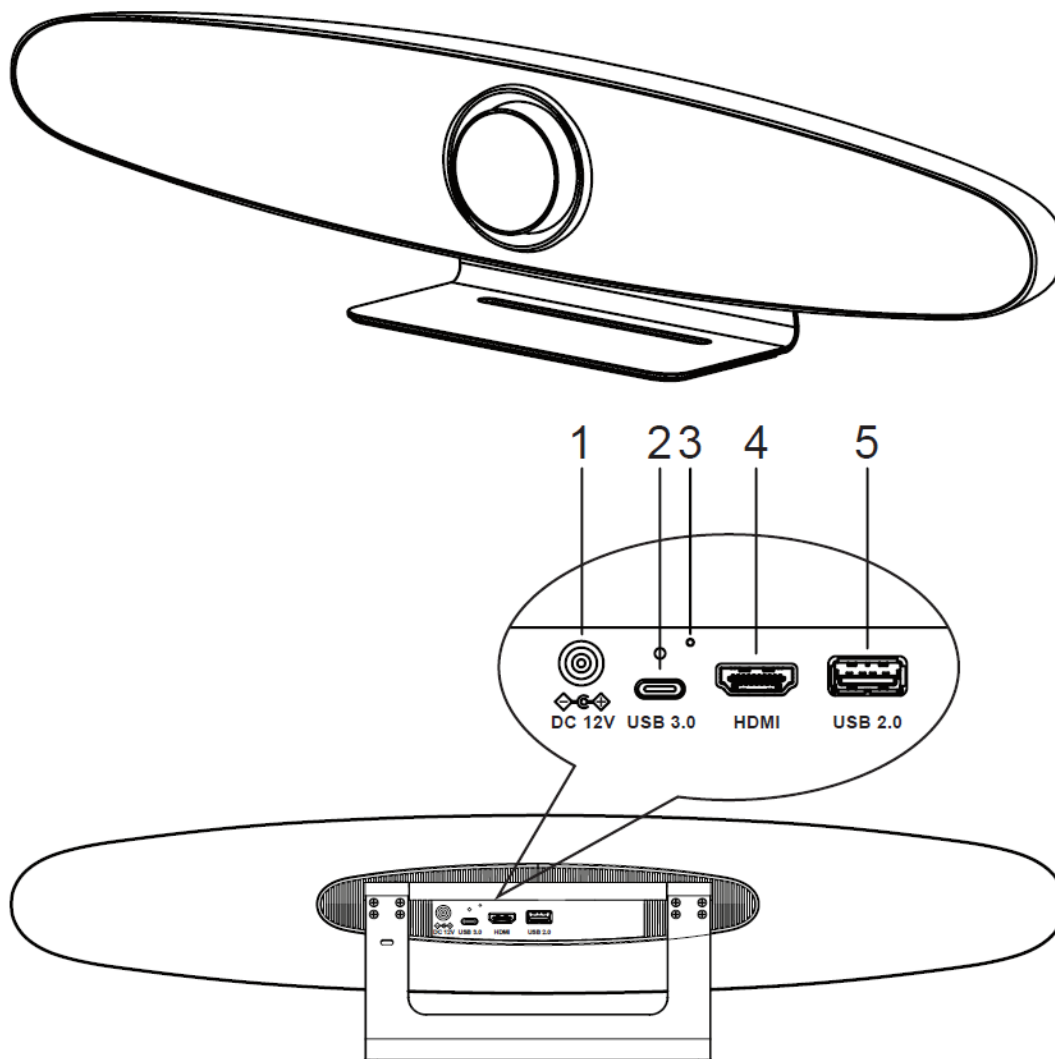
3.1 Dimensions



Wunderbar

79068-WB User Manual

3.2 Interface



No.	Description
1	DC 12V Interface
2	USB 3.0 Interface
3	Reset Button
4	HDMI Interface
5	USB 2.0 Interface

Wunderbar

79068-WB User Manual

4. Product Introduction

4.1 Features

Application

This product is specially designed for small and medium-sized meeting rooms, namely for huddle rooms with 4 to 6 people.

All-in-one Design

The three-in-one design of a 4K ultra HD camera, beamforming microphone, and full-frequency loudspeaker reduces wiring and allows for easier video communication.

Bluetooth 5.0

This product can be connected to mobile phone via Bluetooth as a microphone and speaker, and can connect mobile phone calls to audio and video conferences.

4K UHD

The camera uses a 1/2.5 inch, 8.51M pixel high quality CMOS sensor for a 4K (3840x2160) @ 60fps clear image, and is downward compatible with 1080P, 720P and other resolutions. It can meet the needs of users for different video experiences, and can provide clearer, smoother, and more accurate communication.

Wide Field-of-View (FoV)

With a 121° wide field of view (110° horizontal field of view), 5x zoom, optical lens customized for conferences, and built-in electric head (horizontal and pitch $\pm 15^\circ$ motion range), there is no need to worry about camera position as the camera will follow participants automatically.

Beamforming Microphone

The Beamforming (BF) microphone is built-in, with a pickup distance of ~20 feet. The low-distortion transverse beamforming algorithm can direct the microphone directly to the speaker, which allows for superior sound and clearer communication.

Audio 3A Algorithm

A Built-in audio 3A algorithm (AEC/AGC/ANS) can meet the communication needs of different room layouts. Whether sitting at a conference table, sitting against a wall, or standing, users can expect a comfortable calling experience.

Full Frequency Speaker

The full frequency Hi-Fi loudspeaker, with its professional acoustics design, reduces noise interference and provides an outstanding sound quality.

Wunderbar

79068-WB User Manual

Plug and Play Type

Through the plug-and-play USB interface, connecting to the computer or business display screen is easier than ever. Less wiring and convenient video communication makes the device easy to set up and use.

Intelligent Analysis

A Built-in intelligent analysis algorithm listens to the speaker's position, while automatic participant-framing and speaker tracking switches the speaker's screen to ensure that the speaker is always clearly in the picture.

Rich Interfaces

Supports HDMI 2.0 and USB 3.0 audio/video outputs simultaneously.

Easy Installation

Flexible installation options for countertops, walls, and TV/display screens are available for quick installation and deployment.

Wunderbar

79068-WB User Manual

5. Specifications & Installation

5.1 Specifications

Camera	
Video Resolution	4K@60fps, 4K@30fps, 1080P@60fps, 1080P@30fps, 720P@60fps, 720P@30fps, etc
Sensor	1/2.5 inch, CMOS, 8.51M pixel
Lens	120° (DFOV), 110° (HFOV) 5x digital zoom Pan Tilt: ±15°
PTZ	MPT + EPTZ
Digital Noise Reduction	2D & 3D Digital Noise Reduction
Signal-to-Noise Ratio (SNR)	≥ 55dB
Back-Light Compensation (BLC)	Supported
Audio	
Full-Frequency Speaker	96dB Sound Pressure Level (SPL) @ 0.5m
Microphone Array	Beamforming microphone Pick-up distance: Up to 20 feet (6m)
USB Features	
Connection Type	USB 3.0 (compatible with USB 2.0)
Video Compression Format	YUY2 / MJPG / NV12
USB Audio	32k sampling rate Supports UAC 2.0
USB Communication Protocol	UVC 1.1 ~ 1.5
UVC PTZ Control	Supported
Input/Output Interface	1 HDMI (19-pin, Female, Version 2.0) 1 USB 3.0 (Type-C) 1 USB 2.0 (Type-A)
Power Input	DC 12V, 1.5A (max)
General	
Control Method	2.4G Remote Controller
Installation Method	Desktop, wall, TV, or other display device
Operating Temperature	32 ~ 104°F (0 ~ 40°C)
Storage Temperature	-40 ~ 140°F (-40 ~ 60°C)
Product Dimensions	23.7" (601mm) x 5.6" (141mm) x 4.5" (151mm)
Product Weight	5.5 lbs. (2.5kg)

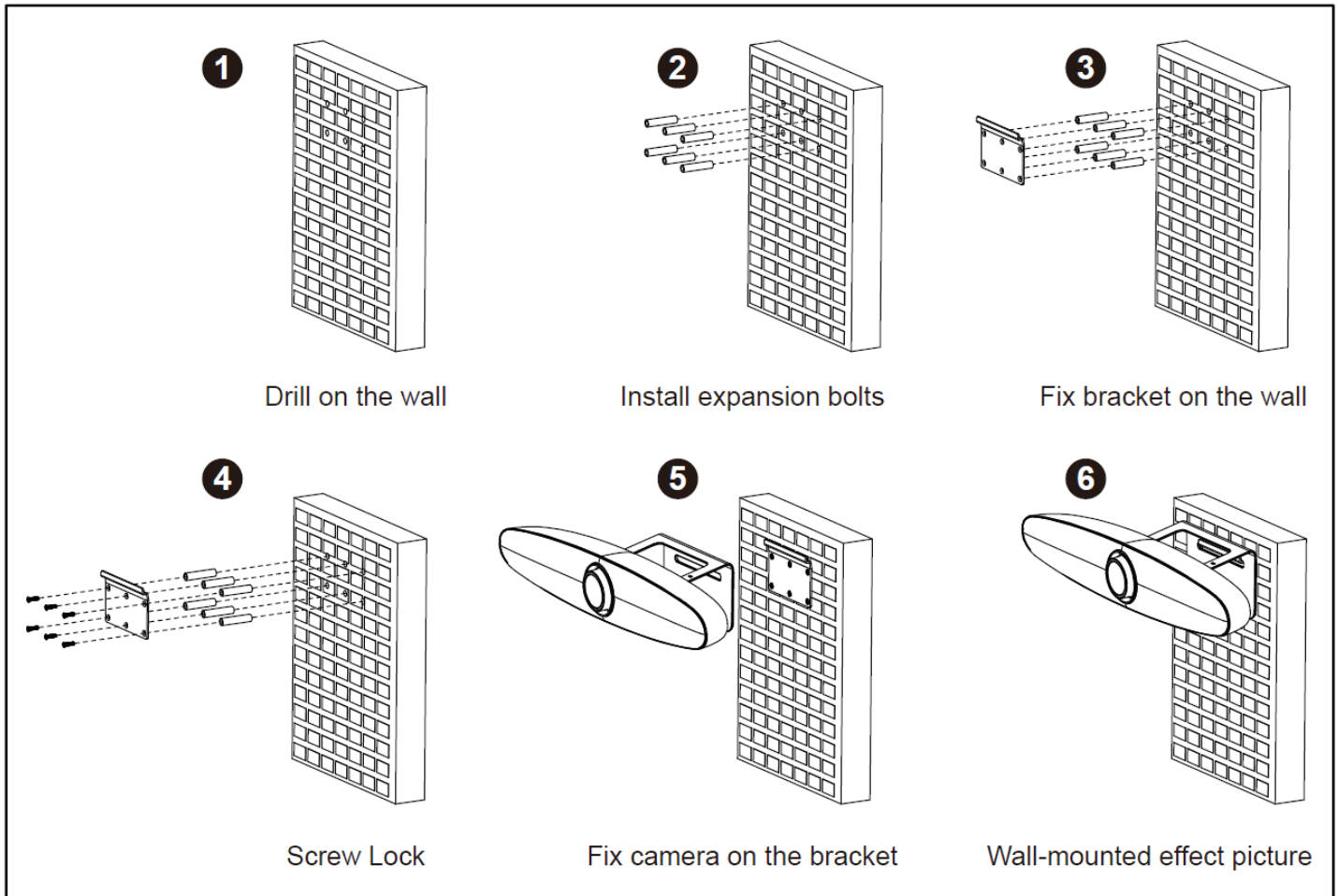
Specifications are subject to change without notice

Wunderbar

79068-WB User Manual

5.2 Installation

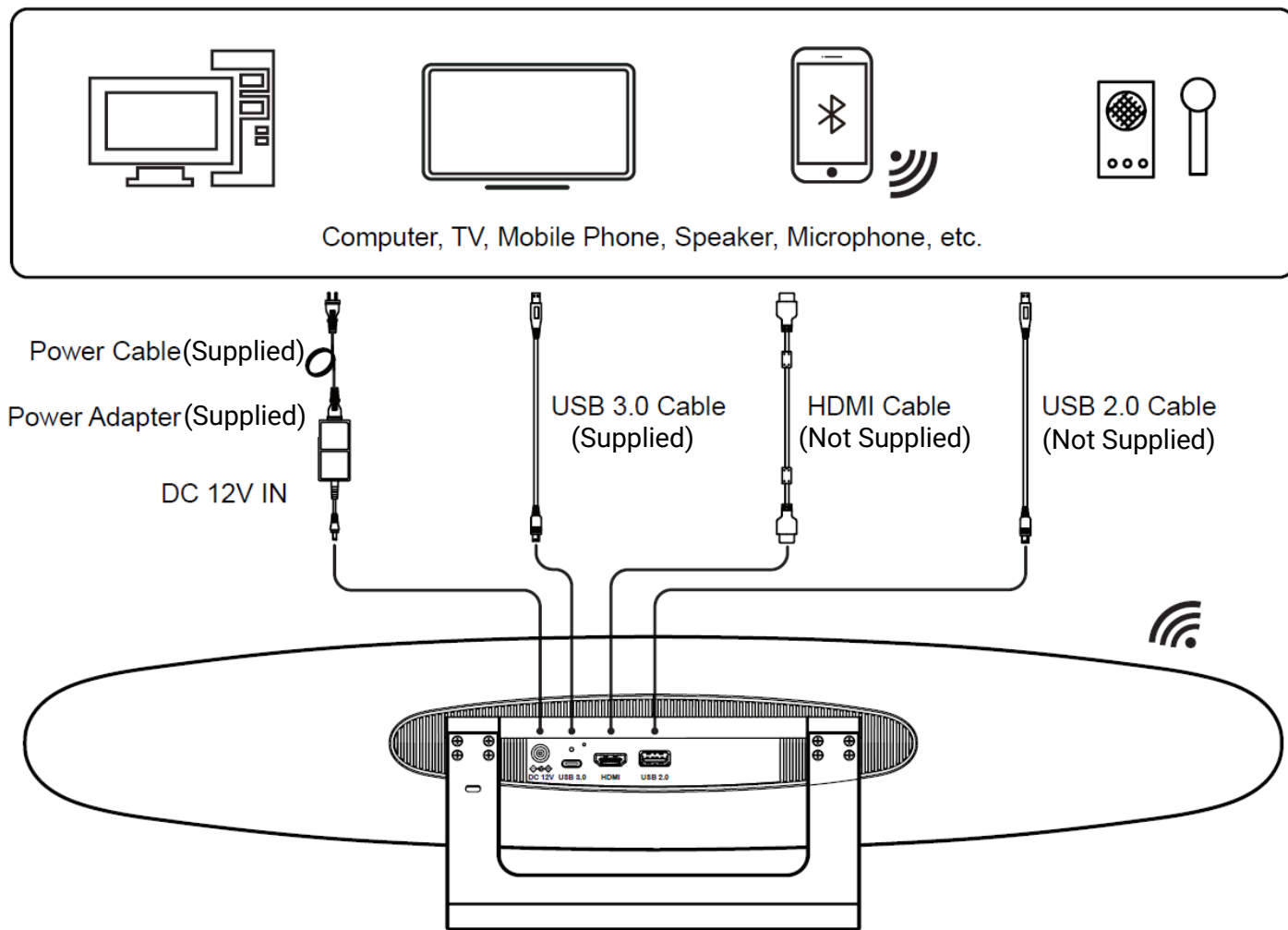
5.2.1 Wall-Mount Instructions



Wunderbar

79068-WB User Manual

5.2.2 Source Layout



6. Remote Control

6.1 Remote Control Pairing

Note: The remote control has been paired with the device when it leaves the factory, and it can be used normally without special operations. If the remote control needs to be re-paired, users can follow the steps below.

Step 1

Connect the camera to the power supply and wait for the camera initialization to complete. The camera will then output video normally.

Step 2

Clear the paired status of the remote control. Then, press and hold the remote-control pairing & OK buttons at the same time, and continue to hold until the remote control indicator shows a steady red light. Release the buttons to successfully clear the remote control paired status.

Step 3

Trigger the camera to enter remote-control pairing mode. Use a paperclip to press the camera's reset button, and the camera's LED light will turn blue when it enters the pairing mode.

Note: Each time you enter pairing mode, there will only be a 15s operation time. After the timeout, the pairing mode will automatically exit and the LED will no longer be blue. If you need to pair again, you will need to press the reset button again to enter the remote control pairing mode.

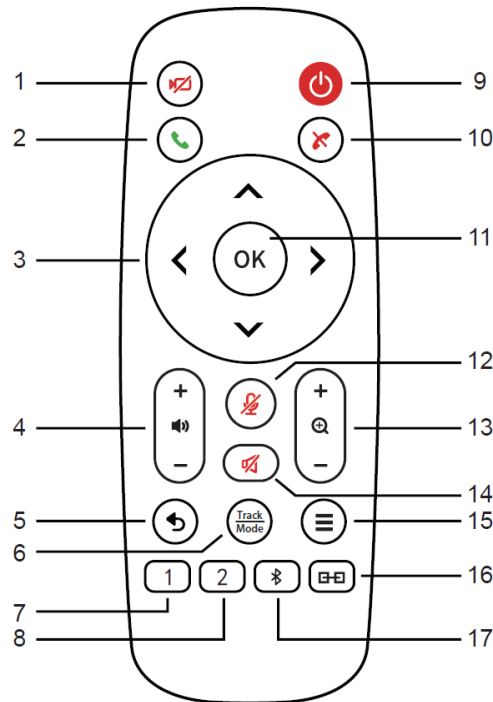
Step 4

To begin pairing, take the remote control whose pairing status has been cleared, and then press and hold the pairing buttons on the remote control and wait for matching to finalize. When pairing is successful, the camera's LED light will turn blue and flash on and off. After pairing is successful, the camera can be operated normally via the remote control. If the pairing fails, repeat steps 2-4 until matching is successful.

Wunderbar

79068-WB User Manual

6.2 Remote Control Layout



6.3 Remote Control Operation

No.	Name	Function Description
1	Camera Power	Press to turn camera on or off
2	Call	Answer/initiate call/enter call interface
3	Camera Control	Press to pan or tilt camera in the direction indicated by the arrow; press [OK] button to return to the middle position
4	Volume	+ Volume up, - Volume down
5	Return	After pressing, the OSD menu returns to the previous menu
6	Track Mode	Press to turn auto-tracking mode on or off
7	Preset 1	Long press to set preset 1, short press to call preset 1
8	Preset 2	Long press to set preset 2, short press to call preset 2
9	Standby	Long press to standby, short press to return to normal
10	Hang Up	Hang up the call/Leave the meeting
11	OK	Confirm current selection
12	Microphone Mute	Turn the microphone on/off
13	Zoom	Zoom in [+]; zoom out [-]
14	Speaker Mute Key	Turn the speaker on/off
15	Menu Key	Press to enter or exit the OSD menu
16	Remote Control Pairing Key	Press to begin wireless pairing
17	Bluetooth Key	Turn Bluetooth on/off

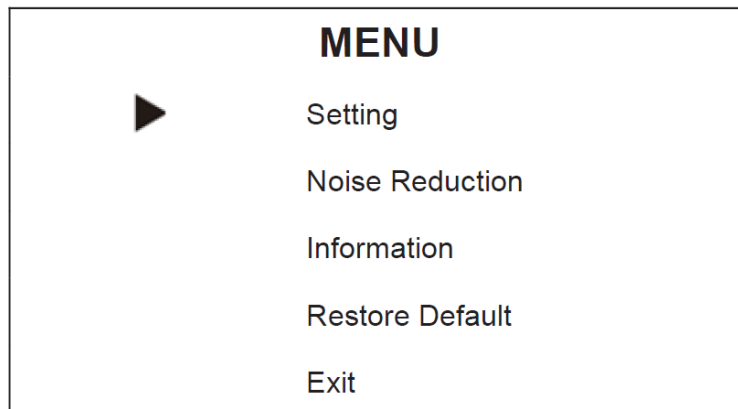
Wunderbar

79068-WB User Manual

7. GUI Settings

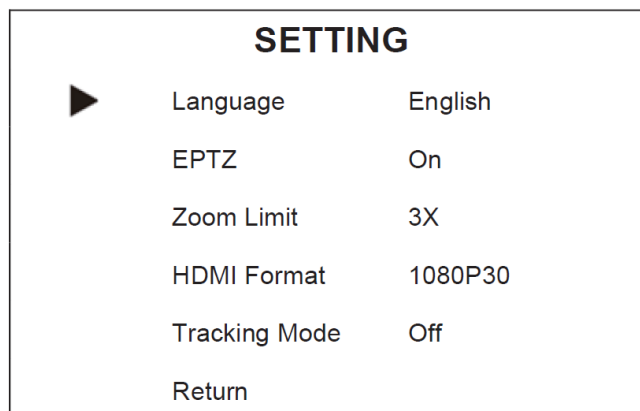
7.1 Menu

Press [MENU] key; the screen will display menu content.



7.2 Settings

Move the cursor to "Setting" in the main menu, and press [OK] to enter the Setting page, as shown in the below figure.



Language: English, Chinese (Default: English)

EPTZ: On, Off (Default: On)

Zoom Limit: 1.5x, 2x, 3x, 4x, 5x (Default: 3x)

HDMI Format: 1080P30, 1080I60, 4K@30, 4K@30 PIP (Default: 1080P30)

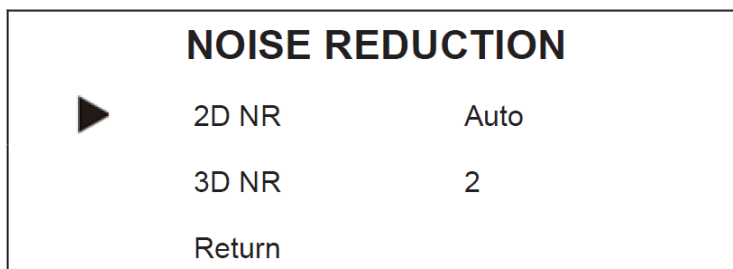
Tracking Mode: Off, Participants, Speaker (Default: Off)

Tracking Effect: Smooth, Instantaneous (Effective only in Participants or Speaker of Tracking Mode)

Tracking Speed: Slow, Normal, Fast (Effective only in Participants or Speaker of Tracking Mode)

7.3 Noise Reduction

Move the cursor to "Noise Reduction" in the main menu, and press [OK] to enter the Noise Reduction page, as shown in the below figure.

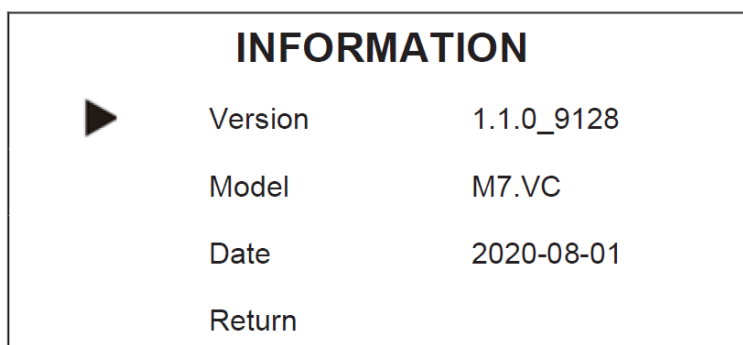


2D NR: Close, Auto, 1 ~ 5 (Default: Auto)

3D NR: Close, Auto, 1 ~ 8 (Default: 2)

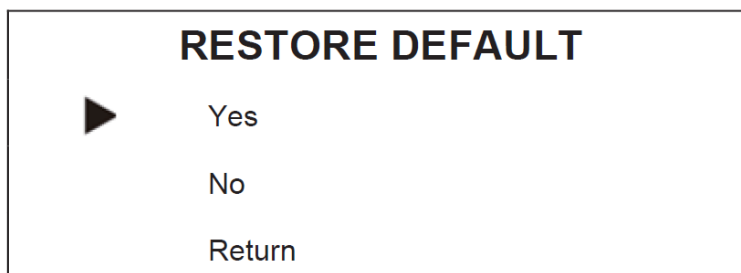
7.4 Information

Move the cursor to "Information" in the main menu, and press [OK] to enter the Information page, as shown in the below figure.



7.5 Restore Default

Move the cursor to "Restore Default" in the main menu, and press [OK] to enter the Restore Default page, as shown in the below figure.



Yes / No: Confirm or cancel restore factory settings.

8. Maintenance & Troubleshooting

8.1 Maintenance

- If the camera will not be used for a long time, disconnect the power switch after use.
- Use a soft cloth or cotton paper to remove dust from the camera housing.
- When cleaning the camera lens, use a dry soft cloth to wipe. If there is substantial dust, use a neutral cleaning agent. Do not use a strong or corrosive detergent, as it may scratch the lens and affect image quality.
- Avoid aiming the camera at particularly bright light sources, such as sunlight, lights, etc.
- Do not use the camera under unstable lighting conditions as it will cause the image to flash.
- Do not use around facilities that transmit high-power radio waves, such as a television or radio-transmitting station.

8.2 Troubleshooting

If the video has jittering:

- Check whether the camera is installed in a stable position
- Check whether there is vibrating equipment near the camera