M100

1.0

Product Quick Start

Date   **2024-07-11**

About This Document

Purpose

This document describes specifications of M100 and how to use it.

Intended Audience

This document is intended for upgrade personnel who must:

- Be familiar with the current network and version information about related NEs.
- Be experienced in operating and maintaining the device.

Symbol Convention

The symbols that may be found in this document are defined as follows.

Symbol	Description
⚠ DANGER	Indicates a hazard with a high level of risk which, if not avoided, could result in death or serious injury.
⚠ WARNING	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unexpected results. NOTICE is used to address practices not related to personal injury.
📖 NOTE	Calls attention to important information, best practices, and tips. NOTE is used to address information not related to personal injury, equipment damage, or environment deterioration.

Change History

Issue	Date	Change Description
02	2023-07-11	This is the second official release.
01	2023-08-22	This is the first official release.

Contents

1 Cover

►**M100 omnidirectional conference microphone**

Getting Started

2 Packing List

M100 (front view)	M100 (rear view)
USB cable: 1.0 m (USB-C to USB-A)	USB dongle

	/
M100 **Product Quick Start** 1.0 Issue:01 Date:2023-04-28 Copyright © Copyright Holder. All rights reserved. Quick Start (including the certificate of compliance and warranty card)	

Note: The actual product may vary, and its color depends on the model of the product to be delivered.

3 Appearance and Dimensions
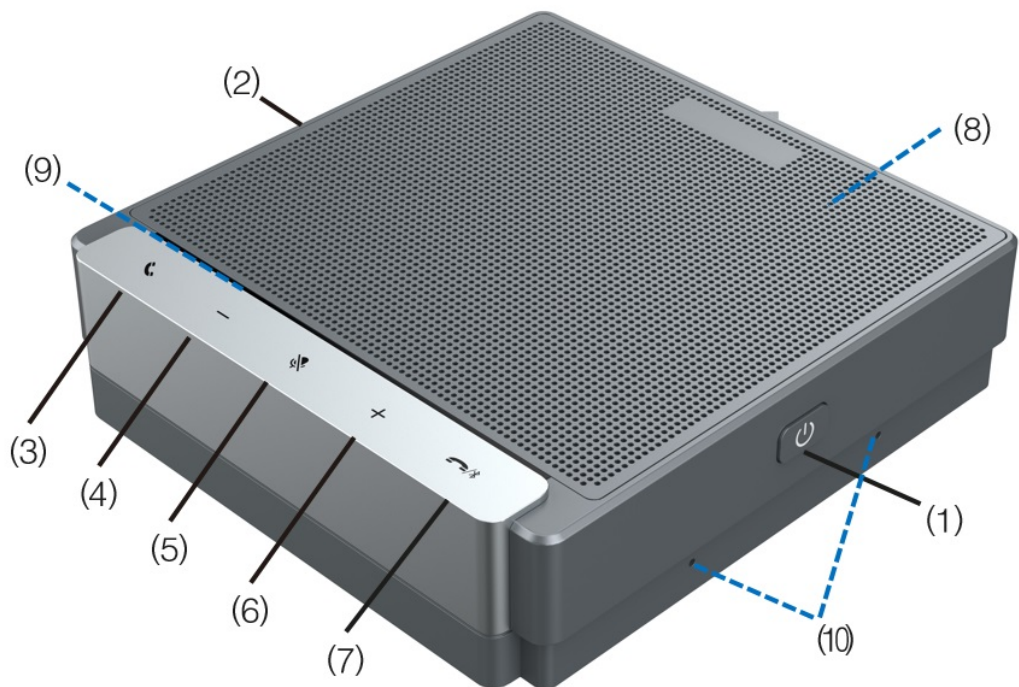
No.	Component	Function
(1)	Power Supply	Press and hold this button for 3s to power on or off the device, or press the power button to display the battery level. The device is powered off by default.
(2)	USB port	USB-C port Used to connect the device to a PC or recharger (5 V 1 A).
(3)	Answer button	Press it to answer an incoming call. The indicator is off by default. When there is an incoming call, the indicator blinks green. During a call, the indicator is steady green.

No.	Component	Function
(4)	Volume down	The indicator is off by default. When you press the button, the indicator is on.
(5)	Mute button	The indicator is off by default. When the speaker is muted, the indicator is steady red.
(6)	Volume up	The indicator is off by default. When you press the button, the indicator is on.
(7)	Hang-up/Bluetooth button	The indicator is off by default. If you press and hold the button to pair a Bluetooth device, the indicator blinks blue. When the pairing is successful, the indicator is steady on. If you press the button in a call, the call is ended.
(8)	Speaker mesh	It protects the speaker while allowing sound to pass as clearly as possible.
(9)	Status indicator strip	Startup: The indicator blinks green. Standby: The middle part of the indicator is steady green. Incoming call: The indicator blinks green. During a call: The middle part of the indicator is steady green. Volume adjustment: green (9 levels in total; set to the maximum level by default) Music playback: 9 levels in total; dynamic display Upgrade: The indicator blinks blue. Low battery: The indicator blinks red. Hardware fault: The indicator is steady red. Software fault: The indicator blinks red.
(10)	Sound pickup port	There are six sound pickup ports on three sides of the equipment.

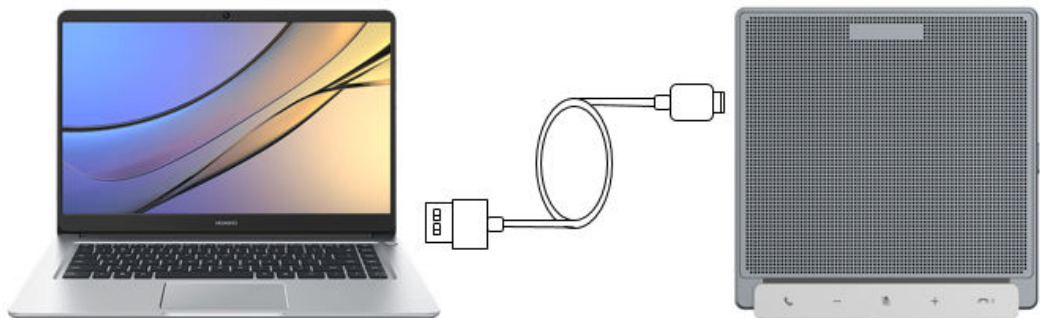# 4 Installation and Usage

4.1 Installation Description

M100 can be placed horizontally on a desk, as shown in the following figure.

4.2 Usage Instructions

4.2.1 Connecting a Device to M100 Using a USB Cable

Step 1 Connect the USB-A connector of the delivered USB-A to USB-C cable to a device, for example, a PC, and the USB-C connector to M100.

Step 2 Wait for 10s until M100 is powered on.

Step 3 Wait several seconds for the device to automatically identify and load the driver. The driver needs to be installed only for the first time use. After confirming that all connections are correct, open the third-party conference software on the device and select the corresponding microphone and speaker drivers to start an audio conference.

----End

4.2.2 Connecting a Device to M100 Through a USB Dongle
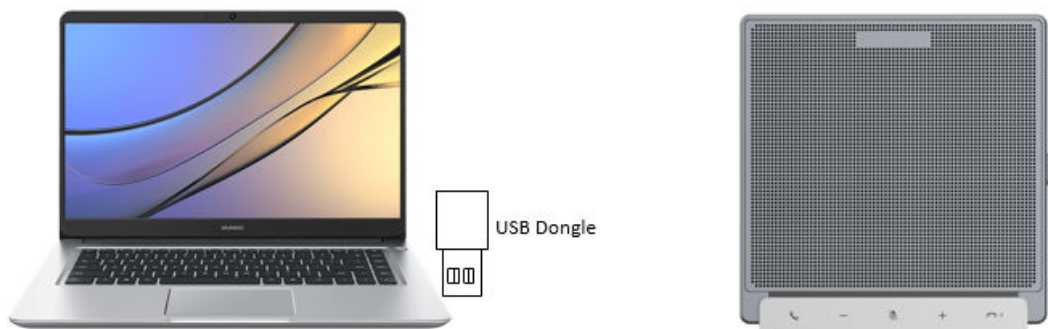
Step 1 Find the USB dongle delivered with M100.

Step 2 Press and hold the power button for 3s until the indicator blinks. Wait until M100 is powered on.

Step 3 Press and hold the Bluetooth button on M100 for 3s to make the indicator blink, in which state M100 starts to pair a Bluetooth device.

Step 4 Insert the dongle into the device to be connected. Wait for 5s until the connection is complete, in which state the Bluetooth indicator is steady blue.

----End

4.2.3 Connecting a Device to M100 Through Bluetooth

Devices such as mobile phones and PCs can be connected to M100 through Bluetooth within a distance of up to 10 m, providing excellent audio quality with the speaker and microphone.

Step 1 Press and hold the power button for 3s until the indicator blinks. Wait until M100 is powered on.

Step 2 When M100 is working properly, press and hold the Bluetooth button

for 3s to turn on Bluetooth. When the Bluetooth indicator blinks blue, M100 is searching for Bluetooth devices.

Step 3 Enable Bluetooth on the PC or mobile phone and search for the Bluetooth driver **M100**.

Step 4 Pair your PC or mobile phone with M100.

Step 5 Wait for about 10s until a Bluetooth connection is set up between M100 and your PC or phone. When the Bluetooth status indicator is steady blue, the communication starts.

----End

NOTICE

If a Bluetooth connection is not set up within 90 seconds, press and hold the Bluetooth button for 3s to enable Bluetooth and pair again.

M100 supports automatic reconnection for up to two devices that were connected before, once Bluetooth is enabled on M100.

If no device is connected through a USB cable within 3 minutes, Bluetooth device search is disabled.

4.2.4 Other Controls

Solution 1: Adjust the volume of sound pickup and playback via UAC.

Solution 2: Use the upgrade tool to control the microphone.

Step 1 Log in to the upgrade tool and select **M100** from the **Devices** drop-down list.

Step 2 Set and control the microphone through the UAC protocol by referring to the upgrade tool user guide.

----End

5 Specifications

	Feature	Description
Applic ation Scena rio	Applicab le places	Open space, manager office, mobile office, home education, Huddle Room (< 4 persons) (< 15 square meters)
Part functi ons	CPU perform ance	Quad-core A35 1.2 GHz
	Voice pickup distance	360-degree sound pickup with a radius of 3 m
	USB input	USB 2.0 Type-C port, mainly used with a PC, supporting UAC, with a maximum input of 5 V 1.3 A
	Cascadi ng	Not supported
	Bluetoot h	Bluetooth 5.1, which can be enabled when you press and hold the Bluetooth button. Device pairing lasts for up to 90s, and automatic connection upon power-on is supported. Two devices can be connected at the same time. However, only one can work. When one device is disconnected, the other works. When there is no obstacle, the devices can be connected within 8 m and used within 10 m.
	USB dongle	It takes 50s for M100 to adapt to the USB dongle for the first time. M100 has been paired with the USB dongle by default. The supported maximum pairing distance is 0.5 m. It can connect to M100 from a distance of up to 8 m, and can be used within a range of 10 m.
	Security slot	Not supported

	Feature	Description
Acces sories	USB dongle	Supported
	Cables	1 meter USB-A to USB-C
Micro phone	Voice pickup range	3 m sound pickup radius; 360° sound pickup
	Built-in microph one	Array of 6 or more microphones, omnidirectional sound pickup
	Techniq ues	FPC
	Samplin g frequen cy	48 kHz sampling (USB) 16 kHz sampling (Bluetooth)
	SNR	≥65dB
	Audio overloa d point	≥ 120 dB
	Sensitivi ty of the entire system	–6 dB FS@94 dB SPL @1 m
	Frequen cy respons e	100 Hz to 20 kHZ
	Serial connecti on	Not supported
	Full-duplex audio	Supported
	Audio preproc essing	Supports echo cancellation, automatic gain, dereverberation, steady-state noise suppression, and unsteady-state noise suppression.
Speak er	Speaker	One full-range speaker
	Sound amplific ation	> 73 dB SPL @2.5 m

	Feature	Description
	Volume	82 dB SPL, 3w, (1 m)
	Sound effect	Frequency response range: 150 Hz to 20 kHz
User interaction	Buttons	Answer
		Volume up
		Power button: Press and hold it for 3s to power on or off the device. Press the power button to display the battery level.
		Mute
		Volume down
		Bluetooth/Hang-up button. Press to end a call, or press and hold for Bluetooth device pairing.
	Power status	The power status can be queried.
	Key indicator	Answer button indicator: off by default; blinking green for incoming call; steady green in a call
		Bluetooth/End button indicator: off by default; blinking blue when you press and hold it for pairing; steady blue when the connection is successful
		Mute button indicator: off by default; red when muted (not affected by the call status)
		Volume button indicator: off by default; on for 1s after the button is pressed
	Indicator strip	Startup: The indicator blinks green.
		Standby: The middle part of the indicator is steady green.
		Incoming call: The indicator blinks green.
		During a call: The middle part of the indicator is steady green.
		Charging status: When M100 is powered on, the red indicator starts off dim and gradually brightens until it reaches its full brightness. When M100 is fully charged, the indicator is steady on.
		Volume adjustment: green (9 levels in total; set to the maximum level by default)
		Music playback: 9 levels in total;
		Upgrade: The indicator blinks blue.
		Low battery: The indicator blinks red.

	Feature	Description
		Hardware fault: The indicator is steady red.
		Software fault: The indicator blinks red.
Auto shutdown	Auto shutdown	If no audio data is transmitted or no button is pressed, the device automatically powers off after 30 minutes.
Software upgrade	Software upgrade	1. Supports upgrade through the USB port. 2. It takes less than 3 minutes to upgrade the software through a PC (USB).
System compatibility	System compatibility	Windows 7/8/10; macOS™ 10.10 or later; Linux (UAC enabled); Android (general-purpose; the performance may vary depending on the interconnected system)
Version query	Version query	Connect to the upgrade tool to query the version.
Security mechanism	Secure boot	The device has a secure boot mechanism. When the software is abnormal, the device enters the emergency mode, and the upgrade tool can be used to reload the software. The device provides an end-to-end security integrity check to prevent cracking.
Product admission	Product admission certification	Transportation report of the entire system, CE, WEEE, REACH, ROHS
Physical specifications	Requirement on temperature rise	The temperature rise does not exceed 15°C.
	Operating temperature	Operating temperature: 0°C to 40°C; storage temperature: –40°C to +70°C
	Operating humidity	Relative humidity: 10%–90%
	Operating height	≤ 2000 m

	Feature	Description
	Device dimensions (H x W x D)	34 mm x 122 mm x 118 mm
	Package dimensions (H x W x D)	55 mm x 192 mm x 171.5 mm
	Device net weight	0.328 kg
	Gross weight	0.5 kg
Power and power supply	Built-in battery	3200 mA Li-ion battery, 2.5 hours to charge from empty to full, 20 hours of calls, 11 hours of voice playback, 400 days of battery discharge when powered off
	Battery level check	You can press the power button to display the battery level.
	Power supply	DC power supply: 5 V; operating current: 0.5–1.3 A
	Charging time	2 hours
	Peak power consumption	< 6 W
	Operating power consumption	< 3 W
Product maintenance	Warranty service	2-year warranty

6 Safety Information

● Before you use the product, refer to the product vendor for version mapping information and to confirm compatibility with other video conferencing devices.

● Use only the standard USB cable supplied by the manufacturer to supply power to the device.

● During installation and commissioning, ensure that the microphone is in good contact with the PC or endpoint through a USB cable.

● Keep the device dry and prevent collision with other objects during storage, transportation, and operation of the device.

● Do not attempt to dismantle the device by yourself. In case of any fault, contact the appointed maintenance center for assistance or repair.

● Place the device on a stable surface.

● Keep the device and its accessories away from children to avoid fatal choking or ingestion.

● Keep the USB port clean and dry to prevent electric shocks or other hazards.

● Before cleaning the device, stop using it and disconnect the power supply.

● The device, packing materials, and any discarded components or units must be disposed of in accordance with local regulations in order to support recycling activities.

📖 NOTE

Contact your product vendor to learn more about safety precautions. This product is a class A product. Running this device in a living environment may cause radio interference.

7 FAQs

Question 1	Why can't I find the audio driver after I connect M100 to a PC or endpoint?
Answer	Verify that the USB connector and USB port are correctly connected. Verify that the standard USB cable is used. It is recommended that you use another PC and try again.
Question 2	Why can't I control M100 using the UAC protocol.
Answer	Check the port in the device manager of the PC to see whether the USB controller driver is properly installed. If the driver is not properly installed, reinstall it.
Question 3	Why is there no sound after M100 has been working for a period of time?
Answer	Check the working environment. For example, verify the cable is properly connected.
Question 4	When I select the M100 driver for the conference software, a message is displayed, indicating that the driver cannot be opened. Why?
Answer	1. Check whether other apps on the PC or endpoint are using the camera driver. If so, you are advised to close them and try again. 2. Uninstall the driver and reconnect the cable.
Question 5	The sound quality is poor when the battery level is low.
Answer	When the battery level is low, the power supply of the product decreases, the volume decreases, and the bass processing is weakened. It is recommended that you charge the product or connect the product to a PC using a USB cable.
Question 6	If two devices are purchased, can the dongle of a device be used together with the other device?

Answer	The dongle has been paired with the device before delivery and cannot be connected to other devices. For other dongles of M100, you can use the upgrade tool to restore to the factory settings, copy the Bluetooth name as the dongle name, save the settings, and touch and hold the Bluetooth button for pairing again.

8 Declaration on Toxic and Hazardous Substances in Electrical and Electronic Product

Component	Toxic or Hazardous Substances and Elements					
	Lead(Pb)	Mercury(Hg)	Cadmium(Cd)	Hexavalent Chrome(Cr6+)	Polybrominated Biphenyl(PBB)	Polybrominated Diphenyl Ether(PBDE)
Mechanical part	○	○	○	○	○	○
Board and circuit modules	○	○	○	○	○	○
Cable connectors	○	○	○	○	○	○

Note

This table is prepared in accordance with the provisions of SJ/T 11364.

○: The specified hazardous substance in all of the homogenous materials of this component is below the limit specified in GB/T 26125.

×: The specified hazardous substance in at least one of the homogeneous materials of this component exceeds the limit specified in GB/T 26125.

1. Mechanical parts: The steel, aluminum or copper materials contain lead.

2. Board/Circuit module:

● The PCB pad contains lead.

● Ceramatic/Feedthru/Mica capacitor on the board: The porcelain core contains lead.

● The high temperature type solder, used for the connector inside the transformer, contains more than 85% lead.

● Pins and solders of some internal components contain lead.

● The luminescence glass of chip inductor contains lead.

● The high-temperature solder, used for the transistor chip welding, contains lead.

● The glass of resistance layer and protection layer can contain lead.

● Pins and solders of the board IC and power unit and some other components contain lead.

● Cable connector: For most connectors, the metal shell, terminal, and pin contain lead.

9 Warranty Card

Dear user, thank you for using M100. Please read this warranty card carefully and fill in the required information. Keep the card in a safe place.

Information Registration

Your Name (or Company Name):

Contact		Invoice Number	
Address		Expiration Date	
Telephone		Dealer's Name	
Model		Dealer's Address	
Serial Number		Dealer's Telephone	

Dealer's Seal:

Limited Warranty

We warrant M100s that are purchased from authorized dealers to be free from defects in materials and workmanship, under proper use and in normal conditions, during the expressed warranty period. Special notices:

1. The terms of warranty expressed in the purchase contract enjoy higher validity than the terms expressed within this card. This card shall be used solely as a warranty certificate.

2. The warranty card must be preserved in good condition and free of any scratch or alterations.

3. The warranty card must be presented to the Huawei authorized service technician when the product is being returned for repairs.

This warranty card does not cover defects caused by:

1. Modifications and alterations performed on the warranted product by parties other than Huawei authorized service partners.

2. Damage caused by using the product under inadequate operating environments.

3. Force majeure including but not limited to fires, earthquakes, lightning storms, and tsunami.

4. Operations performed on the product unexpressed within the product documentation.

5. Normal wear and tear of components, including but not limited to the shell and the power module.

6. The warranty card and product serial number cannot be modified.

For cases not included within this limited warranty, not applicable, or where the warranty is rendered void or expired, Huawei reserves the right to charge for the repair services should the said products be capable of being repaired.

Huawei reserves the right to interpret this limited warranty.

Contact

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