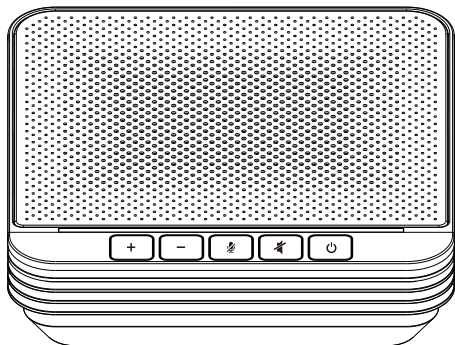


Conference Speakerphone User Manual



Version: V1.0

1. Product Overview

● 1.1 Description

Conference noise cancelling microphone is a noise cancellation Conference speakerphone with built-in 4-array Mic and a high power speaker. It can be both 2.4G wireless and USB cable connected to a PC simultaneously with low latency and intelligent dual mode switching. It Supports cross-platform integrate communication. It can be wireless cascaded and wired cascaded. One speakerphone for conference rooms up to 30 square meter. Equipped with professional high-performance DSP processor,full-duplex intercom algorithm, echo cancellation algorithm, auto gain algorithm, and intelligent noise reduction algorithm, it provides strong algorithmic technical support for remote calls. By the leading self-developed audio algorithms, it adapts to noise and reverberation environments,realizes interactive simultaneous speech of two parties in 3-meter radius without lagging or words dropping, clear & smooth audio. High-fidelity speakers to full comfortable sound and easy to listen and speak. It is widely used in remote video conferencing, education recording, live broadcasting, and remote medical.

● 1.2 Features



- Microphone pick up range up to 16ft (5 meters)

4 array mic,intelligent gain and clear sound pickup in 3 meter radius. Built-in high-fidelity speakers separated from the mics,scientific acoustic structure,uninterrupted full-duplex calls.



- AI Noise Reduction for Increased Efficiency in Pure Speech

Unique noise reduction algorithm,AI model learned from thousands of hours of data from different meetings, minimize room noise while preserving the clear and natural sound of the original speech, ensuring that the attention of participants is highly focused.



- Wireless cascading for small and medium conference rooms

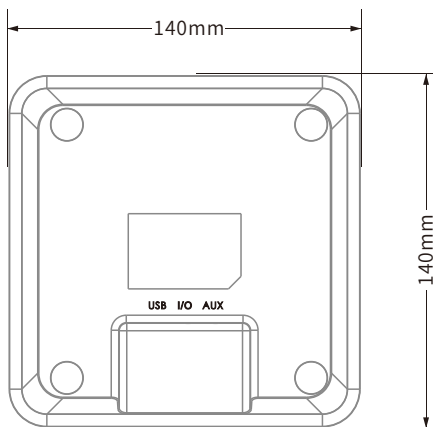
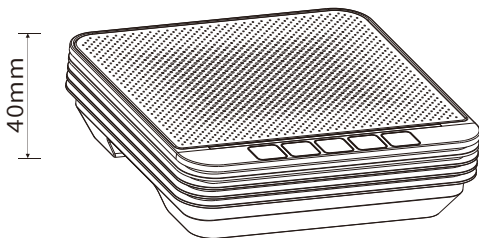
Self-developed wireless audio transmission technology, realizing 2in1 wireless cascading speakerphone for small and medium meeting rooms.



- Convenient cable-embedded, drive-free design

All cables are hidden at the bottom of the device, making the conference room more streamlined; USB plug-and-play makes it easy-start cloud conferencing.

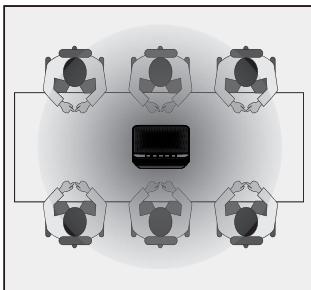
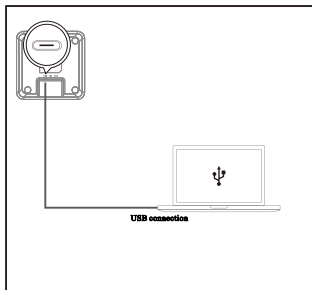
2. Dimensions



3. Connections

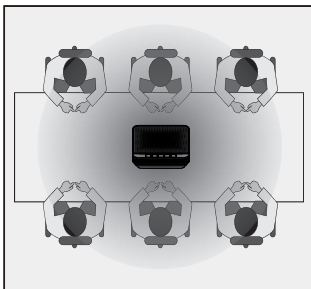
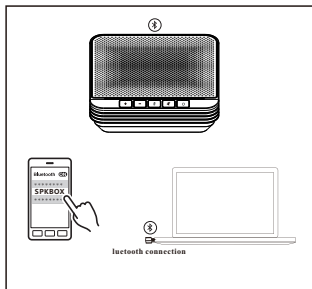
• 3.1 USB wired connection

Connected to the PC via USB cable, driver-free, plug and play.



• 3.2 Bluetooth model connection

Bluetooth Connection: Supports three connection methods—mobile phone Bluetooth, built-in computer Bluetooth, and Bluetooth dongle.



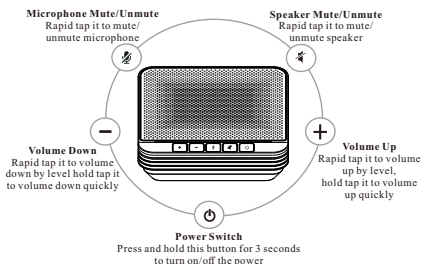
4. Speakerphone Introduction

• 4.1 LED status indicator

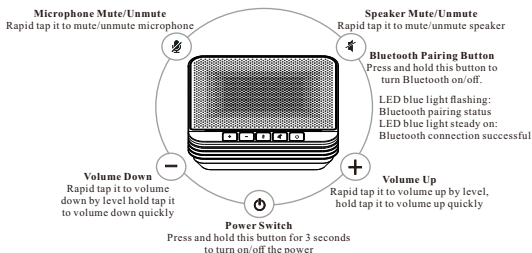
Blinking orange LED	Low power battery
Solid green LED	USB wired connected to PC
Solid blue LED	Wireless connected
Blinking blue LED	Wireless pairing
Red LED	Mute microphone
Other color LED	Unmute microphone
Purple LED	Mute speaker
Other color LED	Unmute speaker

• 4.2 Button function introduction

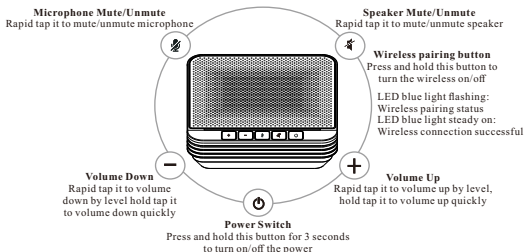
4.2.1 Introduction to USB Model Buttons



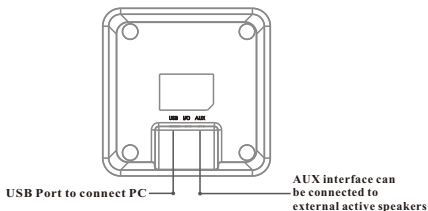
4.2.2 Introduction to Bluetooth Model Buttons



4.2.3 Introduction to wireless model buttons



4.3 Interface function introduction



5. Specifications

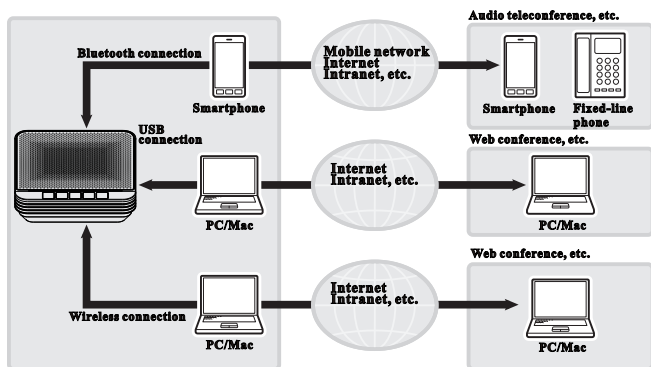
Technical Parameters					
Item	Function	Parameter	Item	Function	Parameter
M I C	Type	4 array Digital MEMS	Audio Characteristics	High-performance Digital Signal Processing (DSP) algorithms	
	Sensitivity	-26dBFS		INR	yes
	SNR	64dB		Intelligent De-Reverb	yes
	Voice pickup range	5 meter		Full-duplex transmission	yes
Speaker	Rated output power	4Ω/5W		Echo cancellation	yes
	Effective frequency range	20Hz-15kHz		Automatic gain control	yes
	Channel	Analog stereo channel		Distributed Audio Cascading Technology	
	Volume	90+3dB (200-8kHz) @1W/1m		Cascade function	Support connect to PC, conference tablet, conference terminal, recording and broadcasting host, etc.
	THDTotal harmonic distort	≥3 %			2.4 wireless connect
					Supports wireless cascading of 2 units

5. Specifications

Technical Parameters

Item	Function	Parameter	Item	Function	Parameter
	Product size	140mm(L)*140mm(W) *40mm(H)	Interfaces	Audio output	USB Model: USB, AUX Bluetooth Model: USB, AUX, Bluetooth Wireless Model: USB, AUX, 2.4GHz
dimensions	Net Weight	USB model: 279g Bluetooth model: 330g Wireless model: 330g			
	Package size	215mm(L)*170mm(W) *55mm(H)		Charging port	Type-C USB
	Gross Weight	USB model: 490g Bluetooth model: 623g Wireless model: 623g	Built-in	Capacity	USB Model: NO Bluetooth Model: 2200mAh Wireless Model: 2200mAh
keypad	Physical buttons	On/off, MIC mute, speaker mute, volume up/down			

6. Function example



• "Easy-to-talk" and "easy-to-hear" voice communications

The product is equipped with microphones with high voice-capturing capability and a speaker with high voice reproduction capability. It also provides high-performance audio signal processing functions, such as the adaptive echo canceller and noise reduction, providing "easy-to-talk" and "easy-to-hear" voice communications without skipping or noise.

• Connection with various communication devices

This product is equipped with three types of interfaces: "USB" for connecting to PCs and Macs, "Bluetooth" for connecting to smartphones and tablets, and "Wireless Connection" for linking to PCs and Macs.

• Extension through a daisy chain connection

By wirelessly cascading two identical devices, you can expand the pickup and playback range. This method is suitable for multi-person venues or large spaces where a single device cannot meet the requirements.

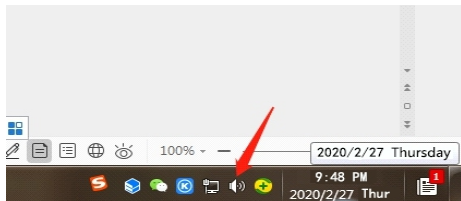
7. Select USB omnidirectional microphone

Step 1: Turn on the computer;

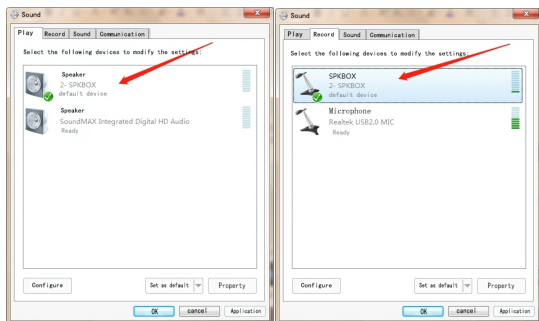
Step 2: Insert the USB omnidirectional microphone;

Step 3: Wait for the driver program to download for 10-15 seconds;

Step 4: Right click on the speaker and turn on sound (S);



Step 5: Select SPKBOX from the playback and recording devices, choose SPKBOX set the device to default value;



Step 6: Select the SPKBOX device as the default value and click OK to use it;

8. Q&A

Q: How to confirm that the speakerphone is wireless connected?

A: After plug the USB adapter to the computer, turn on the speakerphone and check:
LED indicator: solid blue LED on.

Audio Play: Select SPKBOX as PC default device, and the sound source is played by SPKBOX in normal audio, without noise or stuttering.

Recording: Open Audacity/cooledit/other software recording software, play audio through other devices, or speak, check whether the waveform is normal, and stop recording. Then play back the recorded audio to confirm whether the sound quality is normal.

Q: How to wireless pairing

A: Hold tap the wireless pairing button, when LED blinking blue plug the wireless adapter into the USB port, if the wireless is successful connected, solid blue LED on.

Q: How to synchronize mute the microphone status of wireless cascade models

A: Hold tap the mute button of the device to synchronize mute the status of all devices. Hold tap the mute button of the device again to unmute the devices.

Q: How big conference room can 2 wirelessly cascading speakerphones cover for?

A: By wirelessly cascading two units, you can cover conference rooms of 50 to 80 square meters.

Q: How to confirm that the wired speakerphone is in working well?

After connecting the USB to the computer, turn on the speakerphone and check:
LED indicator: solid green LED on.

Audio Play: Select SPKBOX on the PC, and the sound source is played by SPKBOX in normal sound, without noise or stuttering.

Recording: Open Audacity/cooledit/other software recording software, play audio through other devices, or speak, check whether the waveform is normal, and stop recording. Then play back the recorded audio to confirm whether the sound quality is normal.

9. Q&A

Q: The remote party hears its own echo during a meeting

A: Maybe the software does not select SPKBOX for both the microphone and the speaker.

Q: The remote party can't hear my voice during a meeting

A: The microphone may be in mute mode. Check whether the button indicator is red and tap the mute button to unmute it.

Q: How big conference rooms are recommended for a single device?

A: One voice pickup radius is 2 to 5 meters, and fit for 16-25 sqm meeting room up to 6-15 attendees.

Q: How big conference rooms can be covered By cascading 8 devices through wired

A: Connection? By cascading 8 devices a 150 square meter conference room can be covered.

Q: How to synchronize the mute mode of the device microphone for wired cascade models

A: Hold tap the mute button to synchronize the status of all devices.
Hold tap the mute button again to unmute the speaker.

FCC Statement

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

This equipment has been tested and found to comply with the limits for a Class B 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 in accordance with 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 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/TV technician for help

This device complies with part 15 of the FCC rules. 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.



Warranty

The warranty period is one year from the date of sale; during the warranty period, if the following problems are found, the warranty will not be provided:

- A. The product is not stored or used in accordance with the instructions of our company, resulting in damage.
- B. The use of accessories or modules other than our company's products causes damage.
- C. Defects or failures within the warranty scope are caused by personal repairs not authorized by our company.

Process for obtaining warranty service

If the product purchased by the customer requires warranty, the customer can send it to your equipment dealer by phone and the customer's payment receipt (such as a copy of the sales invoice) or to the address of our equipment after-sales service. Before delivery, it is recommended to describe the fault point clearly on a small piece of paper and send it randomly to our after-sales address.



Safety Precaution

*Please keep the device horizontal;

*Please use the provided cable to connect to the device. The standard USB cable length is 1.8m. If you need a longer cable, please purchase an extension cable with a signal amplifier, otherwise it may cause unstable signals, resulting in problems such as device failure to recognize and noise.

*Please ensure that the USB connection is stable. Do not frequently plug and unplug or apply external force to damage the USB interface or USB cable;

*Please ensure that the device is not blocked by other objects on the table;

*When cleaning the table, be sure not to wipe the device. Please prevent water or other impurities from entering the device; unauthorized disassembly and strong impact may cause damage to the device;

*Please do not disassemble this product for repair or replacement of accessories by yourself. If you need repair, please consult the official after-sales service. The device should be kept away from high temperature environments, heat sources, strong magnetic fields, and strong electric fields; continuous high-volume sound will damage human hearing.

*The sound pickup effect is best within a 5m radius of the device. The sound pickup radius can reach more than 5m in a quiet, reverberation-free environment. Please increase the number of cascaded units as appropriate according to the use environment.

*When connecting the all-in-one conference machine, please plug the receiver into the front USB port to ensure that the wireless adapter and the device are connected without obstruction. If the USB port is unavoidably blocked, please use a USB extender to reasonably avoid the blockage.

*The battery (battery pack or combined battery) must not be exposed to an overheated environment; please charge it in time if it is out of power.