



## OPERATION MANUAL

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**SUM2020** - USB CONDENSER MICROPHONE

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## 01. Specifications

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<b>Sound Element</b>	Capacitive, Permanently Polarized Condenser Capsule
<b>Frequency Response</b>	30Hz-20kHz
<b>Polar Pattern Directivity</b>	CARDIOID (0°-180°@1 kHz >5dB)
<b>Max SPL</b>	120dB
<b>Noise</b>	10dB
<b>Sensitivity</b>	25mV /Pa(-32dB±2db)
<b>Variable Gain</b>	+25dB
<b>Headphone Jack</b>	3.5mm (1/8") TRS (Stereo)
<b>USB Output</b>	USB - B
<b>Power Supply</b>	USB DC

## 02. Features

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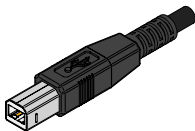


## 03. Microphone Setup

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### STEP 1

Plug one end of the USB cable into the **USB-B port of the microphone** and connect the other end to the computer USB-A port.



### STEP 2

Observe volume gain control setting and adjust to the desired level.

## 04. Power Requirements

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- The microphone is powered by your device's USB port, meaning that in most instances you can just plug the microphone in and get started right away. For non-standard USB ports, a powered USB hub may be required.
- It is a "plug/play" USB device, compatible with both **Windows** and **Mac OS** computers.

## 05. Microphone Placement

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- Placement of the Microphone relative to the vocalist can be varied depending on several factors including room acoustics, the vocal SPL, or whether the vocalist has a high or deep voice.
- An ideal starting point for reference is to place the Microphone directly in front of the vocalist, at head height, and in front of their mouth at a distance of 15 cm (6").
- Moving the Microphone a little closer will make the vocal sound more intimate and fuller, while moving the Microphone away will give the vocal a little more 'air' or room ambiance to the sound and will reduce the proximity effect (increased bass or low frequency response when the sound source is very close).
- You can experiment with the angle from which the Microphone is addressed, as different results can be achieved when the vocalist is 'off-axis' to the Microphone.

## 06. Set Your Input Level

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The Microphone factory default is set to an ideal internal gain setting. If you need to set your preferred sensitivity to the Microphone and listen to the headphone sound output, please observe the following steps:

- **STEP 1:** Check the hardware devices on the computer to see if there are any USB AUDIO devices visible.
- **STEP 2:** Open the computer AUDIO equipment and input the AUDIO input terminal (i.e. Microphone input). Select: "USB AUDIO Microphone input device" Select: "USB AUDIO headset device" as the output (that is for headphone monitoring); In this way, the desktop Microphone can be input to the computer, and the voice output to the headset;
- The sensitivity of the Microphone can be adjusted in real time through the sound card attribute 'Microphone'. It can be adjusted according to personal preference of gain structure.
- If the desktop Microphone is used alone, the original sound card device can be disabled on the computer to prevent conflicts if necessary.
- If the computer cannot recognize the desktop Microphone, choose to disable the original sound card. The device must be "USB AUDIO".
- If the sound is too low, check that the sound volume of each sound card software property is adjusted to a high enough setting.
- The volume of the Microphone can be adjusted by the control knob on the front of the desktop Microphone.
- Overall computer volume setting can also affect the output.

## 07. General Operation

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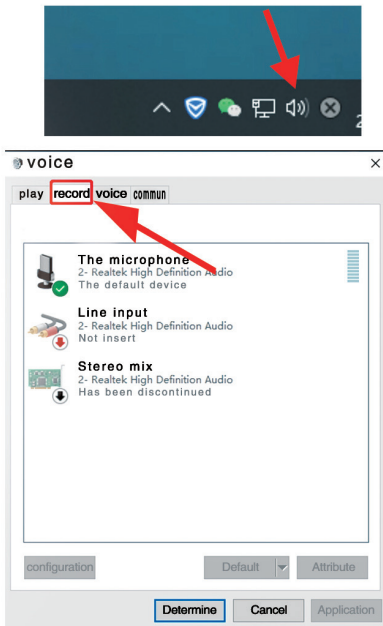
To manually adjust your input level via your computer's system preferences, please follow these steps.

### NOTE

Do not cover the Microphone grille with your hand.

### STEP 1

Right click the computer right voice icon, enter the sound control panel, and click record.



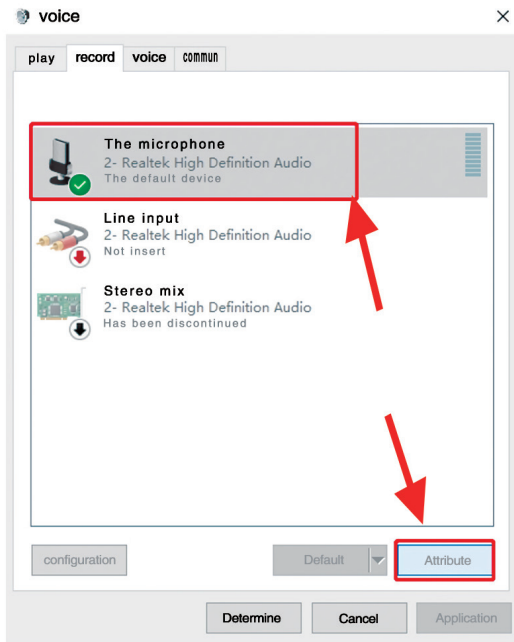
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### STEP 2

Select the Microphone.

Click on the properties below.



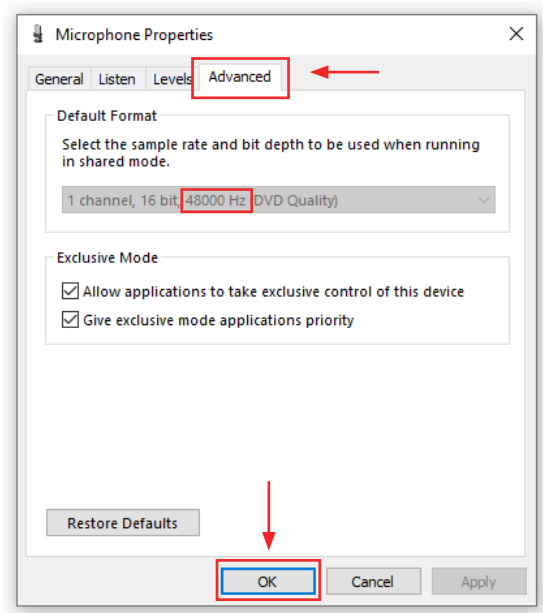


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### STEP 3

Click Advanced. Select 48000Hz,  
Finally, click OK.

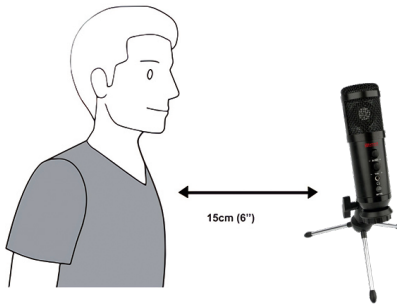
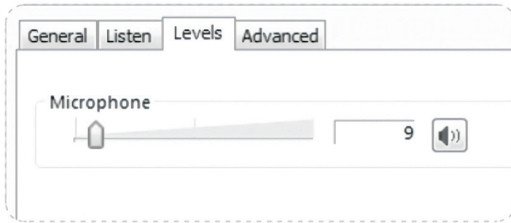


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### STEP 4

Adjust the input level using the level slider.



## **08. Warranty**

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Thank you for purchasing your Smart Acoustic USB Condenser Microphone. The Standard Consumer Limited Warranty for this Smart Acoustic Product is One (1) year from the original date of retail purchase. Please refer to your point of purchase for warranty claim assistance.



[www.smart-acoustic.com](http://www.smart-acoustic.com)