

BOYA

Live Streaming Microphone

Compatible with most computers
and mobile devices

手机直播麦克风

BY-EM20

User Manual
用户手册



INTRODUCTION:

Thank you for purchasing BOYA!

The **BY-EM20** is a professional live streaming microphone, equipped with a high-definition condenser capsule and 16bit/48kHz resolution, making it easy for you to podcast anytime, anywhere.

This microphone is compatible with most Android devices, laptops and computers (devices with 3.5mm stereo jack or Type-C connector).

Low noise, compact microphones have all-inclusive connectors and controls. Headphones output with dedicated volume control. AUX input and EFX controls in the main section for optimal level adjustment.

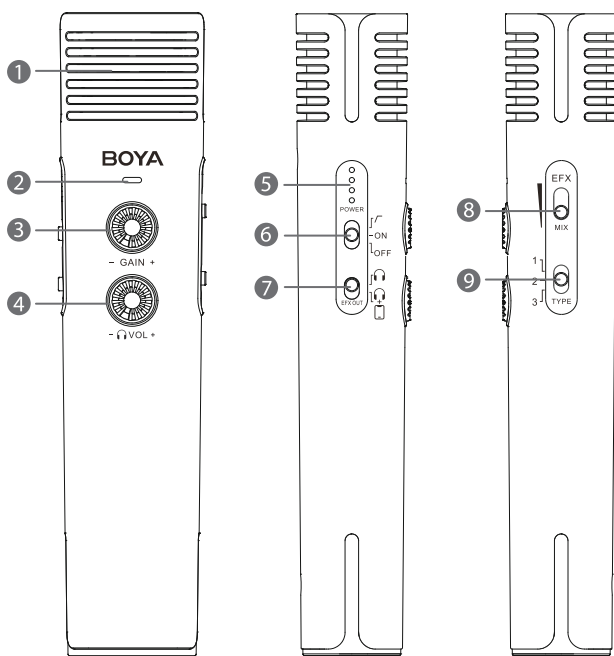
Additionally, the microphone has a digital signal processing (DSP) chip and provides users with a better singing experience.

The **BY-EM20** is easy to operate and can handle various types of signals, providing you with an economical and practical audio solution.

PACKING LIST:

- BY-EM20 Microphone *1
- Mic Holder *1
- Mini-Tripod *1
- Foam Windshield *1
- 1.2m (3.9') USB-A to Type-C Audio Cable *1
- 1.2m (3.9') Type-C to Type-C Audio Cable *1
- 1.2m (3.9') 3.5mm to 3.5mm Audio Cable *2
- Drawstring Bag *1

PRODUCT STRUCTURE:



1. Condenser microphone

2. PEAK indicator

3. GAIN control

4. Headphone volume control

5. Battery indicator

6. OFF / ON / LOW CUT

7.  /  Switch



Monitoring reverb effect sound and recording the Original Vocal Sound



Monitoring and Recording the Original Vocal Sound with Reverb Effect

8. Mix control

9. Mode switch

1) Karaoke

2) Streamer

3) Microphone Controller

10. 3.5mm headphone output / audio output jack

11. 3.5mm TRRS jack for smartphone

12. Type-C port

13. AUX input

- The AUX jack is selectable which can mix the external music via 3.5mm TRRS cable.

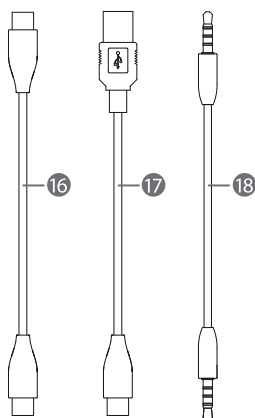
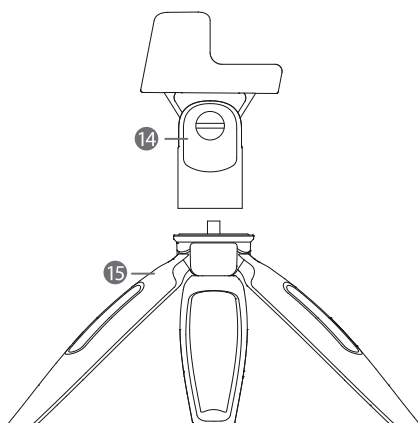
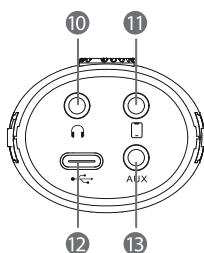
14. Microphone holder

15. Mini-tripod

16. 1.2m (3.9') Type-C to Type-C audio cable

17. 1.2m (3.9') USB-A to Type-C audio cable

18. 1.2m (3.9') 3.5mm to 3.5mm audio cable

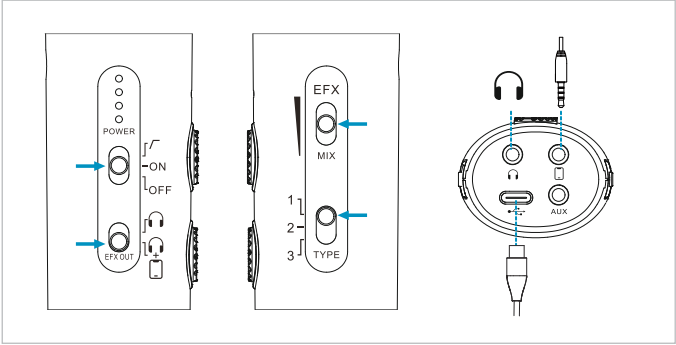


NOTE:

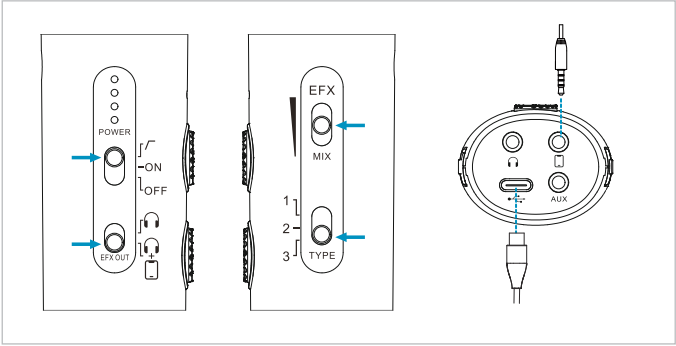
To get optimum sound performance, please adjust the microphone's pick-up angle. For maximum clarity and intelligibility, the microphone should always be facing towards the sound source that you wish to record.

MODE:

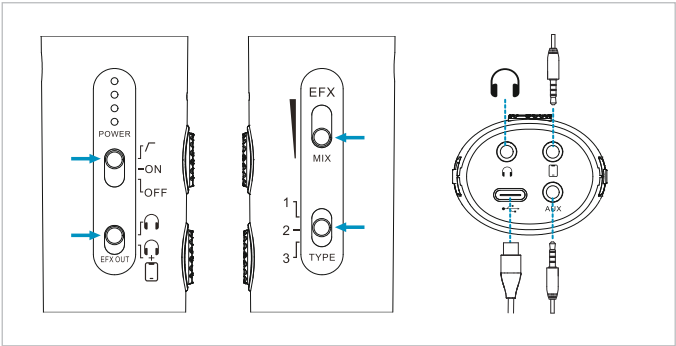
- Karaoke



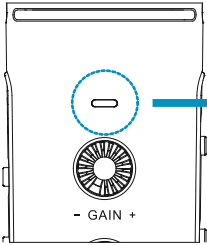
- Microphone Controller



- Streamer / Recording



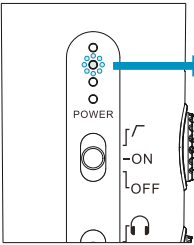
INDICATOR



A diagram of a device's front panel. It features a circular volume knob with a horizontal slider inside, highlighted by a dashed blue circle. Below the knob is a speaker grille and the text "- GAIN +". A blue arrow points from the volume knob to a legend on the right.

Flashing white light=volume is in a normal level

Flashing red light=volume is too high

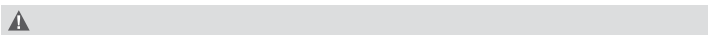
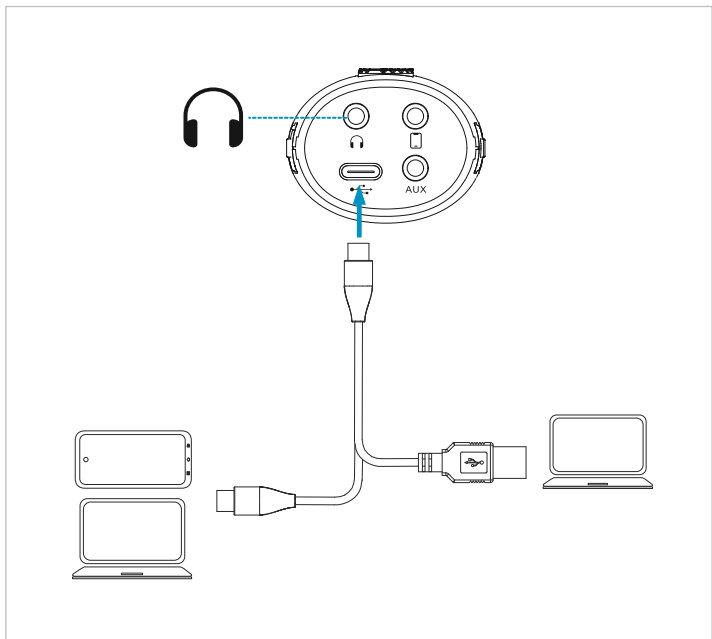


A diagram of a device's control panel. It includes a vertical row of four small circles at the top, with the top one highlighted by a dashed blue circle. Below these are the labels "POWER", "ON", and "OFF". A blue arrow points from the top indicator circle to the text "Indicate the battery level".

Indicate the battery level

HOW TO USE?

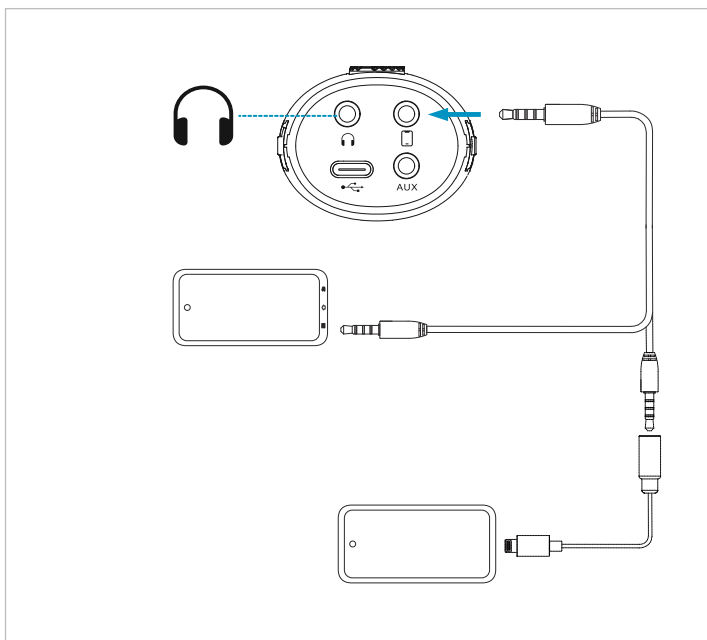
Digital Signal Connection-Type-C



NOTE:
Please follow the instructions and use the supplied cable to connect your device.

Analog Signal Connection-3.5mm jack

Using 3.5mm TRRS to TRRS Cable To Connect 3.5mm or Other Devices



NOTE:

- If the smartphone has a 3.5mm headphone jack and a Type-C port, it is recommended to choose the type-C first.
- 3.5mm TRRS to Lightning adapter not Included

FEATURES

- Compatible with most devices such as smartphones, laptops, computers
- High-quality digital signal processing (DSP) chip
- Real-time headphone monitoring
- Powered by built-in lithium battery, more than 24 hours working time
- Mix controls for better sound effect
- Integrated Type-C charging port
- Includes microphone clip, foam windshield, 1.2m (3.9') USB-A to Type-C audio cable, 3.5mm to 3.5mm audio cable*2, Type-C to Type-C audio cable

SPECIFICATION

Acoustic Principle	Condenser microphone
Polar Pattern	Cardioid
Frequency Response	20–20,000 Hz
Sensitivity	-30±3dB (0dB=1V/Pa @ 1KHz)
Output Impedance	100Ω
Signal to Noise Ratio	85dB
High Pass Filter	Flat / 150Hz
Sample Rate	48kHz / 16-bit
Connector	3.5mm headphone jack
	3.5mm TRRS jack
	Type-C port
Input	AUX jack
Maximum SPL	120 dBu
Built-in Battery Capacity	3.7V / 2600 mAh
Charging Time	4 hours
Working Time	24 hours
Power Requirement	Built-in battery or Type-C (DC 5V/1A)
Dimensions	190x42x33mm (7.5*1.6*1.3")
Weight	Microphone: 323g (11.4 oz) (mic clip included)

介绍

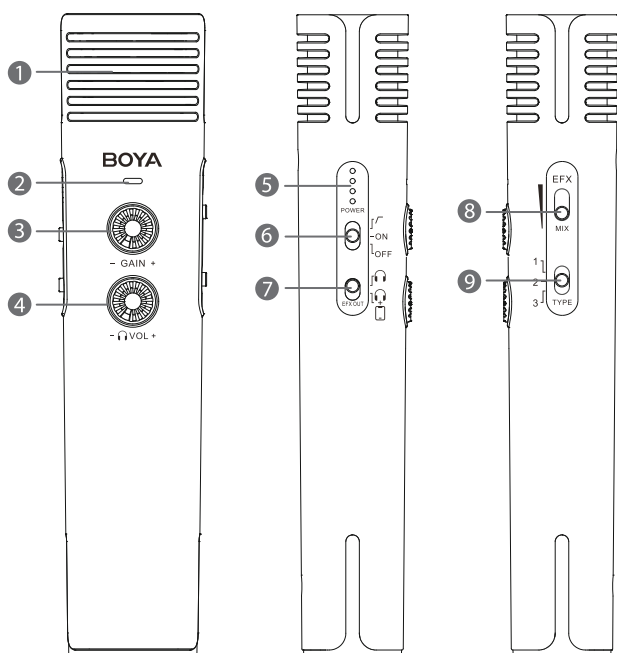
感谢您购买博雅!

BY-EM20是一款专业的手机直播麦克风，专业的电容音头有效抗干扰，适用于K歌、直播、录音等场景。这款麦克风专为智能手机、电脑等具备3.5mm立体声插孔或Type-C接口的设备设计。紧凑的机身上设有各类接口和控制旋钮。耳机插孔可随时监听录音；AUX接口可接入音频设备，为麦克风提供伴奏；混响效果控制可为您提供最理想的音频效果。此外，麦克风具有数字信号处理(DSP)芯片，为用户提供更好的演唱体验。该产品配备USB-A转Type-C音频线、Type-C 转Type-C音频线、3.5mmTRRS音频线等配件。

包装清单

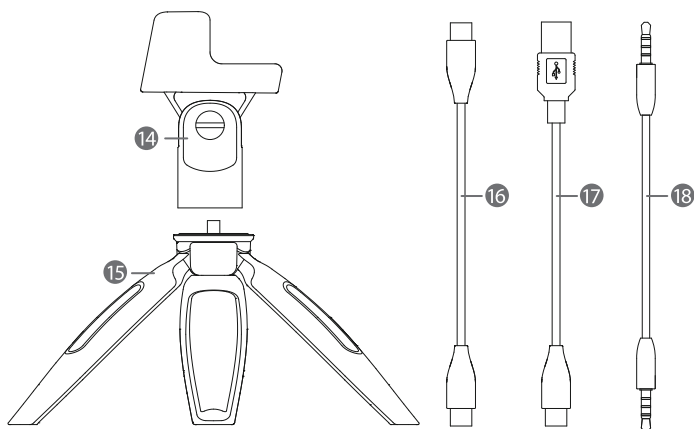
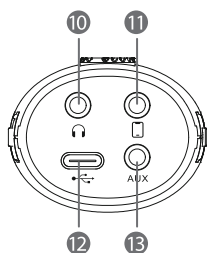
- BY-EM20麦克风 *1
- 麦克风支架 *1
- 三脚架*1
- USB-A转Type-C音频线（1.2米）*1
- Type-C 转Type-C音频线（1.2米） *1
- 3.5mm 转 3.5mm TRRS音频线（1.2米）*2
- 防风棉 *1
- 收纳袋 *1

产品结构



- 1. 电容麦克风
- 2. 输入音量指示灯
- 3. 增益旋钮
- 4. 耳机音量旋钮
- 5. 电源指示灯
- 6. 低切/开/关
- 7. 听湿录干/听湿录湿开关
 -  录制原声
 -  输出音频和监听均为美声效果
- 8. 混响效果调控
- 9. 模式切换开关
 - 1) KTV模式
 - 2) 直播模式
 - 3) 主播模式

- 10. 耳机监听/音频输出孔
- 11. 3.5mm TRRS音频孔（连接手机）
- 12. Type-C孔
- 13. AUX音频输入孔
 - 可选择接入伴奏音乐或声卡音效
- 14. 麦克风支架
- 15. 三脚架
- 16. Type-C转Type-C音频线
- 17. USB-A转Type-C音频线
- 18. 3.5mm转3.5mm音频线

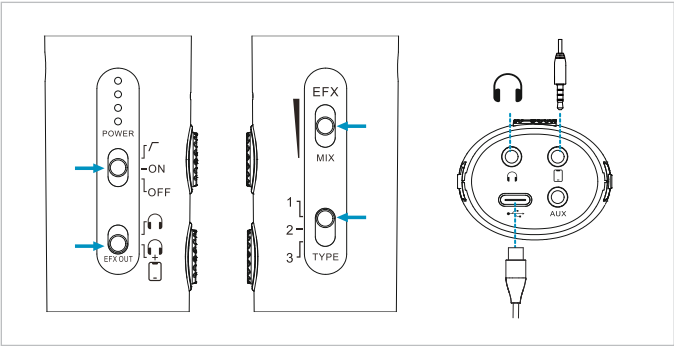


提示：

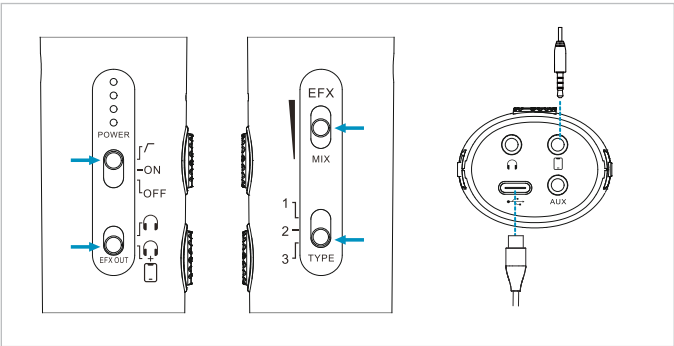
为了保持良好的录制效果，请适当调整麦克风角度，麦克风头应始终朝向您想要录制的声源。

模式选择

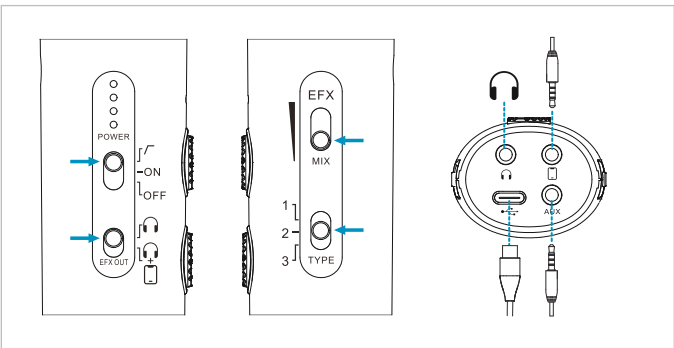
1) 在线K歌



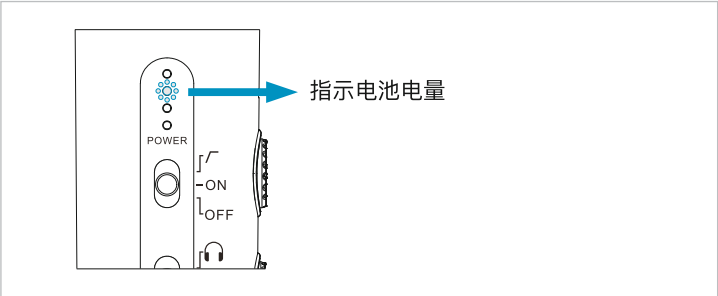
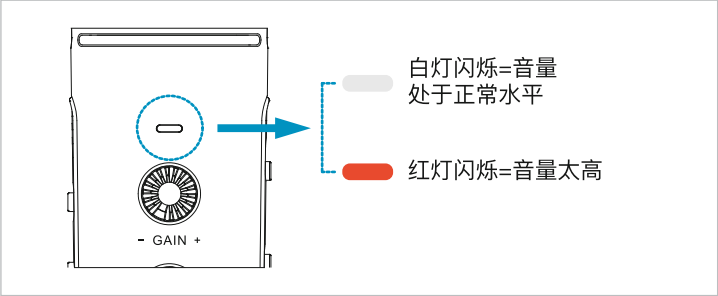
2) 主播模式



3) 直播 / 录音模式

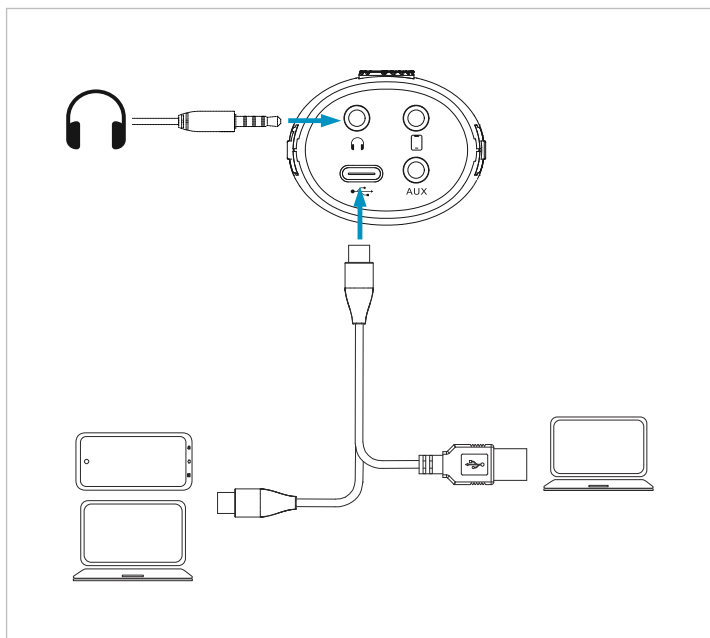


指示灯



如何使用？

数字连接方式-Type-C



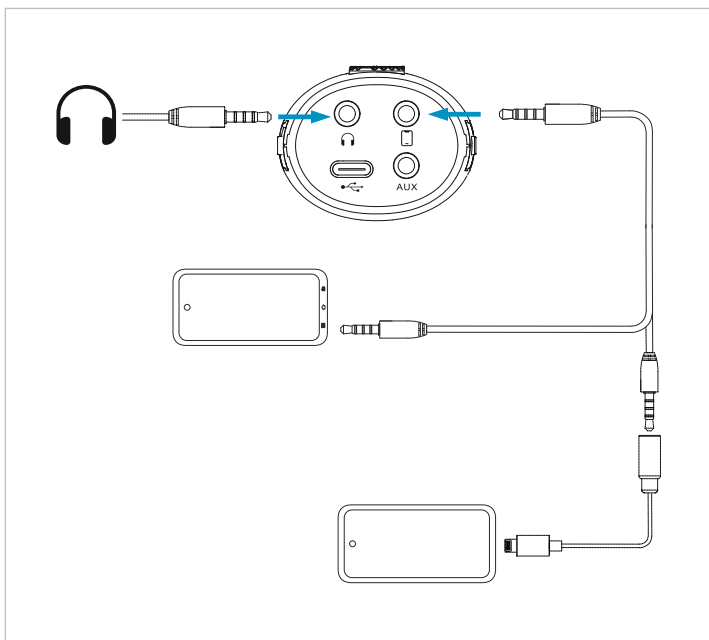
注意：

请按照说明使用配备的音频线，正确连接您的设备。

模拟信号连接方式-3.5mm音频孔

打开BY-EM20电源，将开关拨至ON位置。

模拟连接方式兼容3.5mm设备/Lightning接口苹果设备



注意：

- 如果手机既有3.5mm耳机孔和Type-C接口，建议优先使用Type-C接口进行连接。
- 3.5mm转Lightning转接头不包含

特点

- 高技术DSP数字信号处理芯片
- 实时耳返监听
- 内置锂电池供电，24小时强大续航
- 全系统兼容手机、笔记本、电脑
- 兼容各种直播软件APP
- 混响效果调节
- 内置Type-C充电口
- 配备支架，防风棉，USB-A转Type-C音频线，3.5mm转3.5mm音频线*2，Type-C转Type-C音频线

参数

声学原理	电容式麦克风
拾音模式	心型
频响范围	20—20,000 Hz
灵敏度	-30±3dB (0dB=1V/Pa @ 1KHz)
输出阻抗	100Ω
信噪比	85dB
高通滤波器（低切）	低切150Hz
分辨率	16Bit/48kHz
输出接口	3.5mm/TYPE-C孔
输入接口	AUX音频输入孔
最大声压级	120dBu
内置电池容量	3.7V/2600mAh
充电时间	4小时
续航时间	24小时
供电	内置锂电池或直流电 Type-C 5V/1A
尺寸	190x42x33mm
重量	Microphone: 323g（含支架重量）

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地址:广东省深圳市龙华区观澜街道大富社区硅谷动力智能终端产业园A16栋

TEL: 400 6131096

Email: sales@boya-mic.com

www.boya-mic.com / www.jiayz.com