BOYA

2.4GHz Dual-channel Wireless Microphone System

2.4GHz双通道无线麦克风系统

BY-M1V1
BY-M1V2
BY-M1V3
BY-M1V4
BY-M1V5
BY-M1V6

User Manual
用户手册

General Introduction

The BOYA BY-M1V is an incredibly lightweight, ultracompact and easy-to-use 2.4GHz wireless microphone system for up to 2 people. This mic series has RX/ RXD/ RXU port of kits to choose from, delivering exceptional-quality sound to smartphones, tablets, DSLR cameras and camcorders. It provides a great solution for live streaming, content creation, mobile journalism and more.
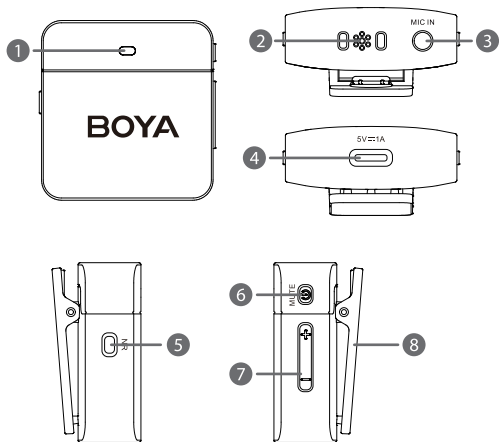
Available Kits

Model	In the box
BY-M1V1	1 × BY-M1V-TX 1 × BY-M1V-RX
BY-M1V2	2 × BY-M1V-TX 1 × BY-M1V-RX
BY-M1V3	1 × BY-M1V-TX 1 × BY-M1V-RXU
BY-M1V4	2 × BY-M1V-TX 1 × BY-M1V-RXU
BY-M1V5	1 × BY-M1V-TX 1 × BY-M1V-RXD
BY-M1V6	2 × BY-M1V-TX 1 × BY-M1V-RXD

Features
- Ultracompact and portable
- Up to 60m wireless operation range
- Easy-to-use clip-on TX transmitter/ RX receiver
- Compatible with smartphones, tablets, cameras, camcorders, etc
- Built-in mic for high-quality sound
- Ideal for 2-person interviews, podcasts & live streaming
- Selectable mono/stereo output

Product Structure

BY-M1V-TX: Clip-on Transmitter with Built-in Microphone

1. Status indicator

Status	Indicator
Unpaired	Blinks blue slowly (per second)
Pairing	Quickly blinks blue 3 times
Paired Successfully	Solid blue light
Mute ON	Blinks red slowly (per second)
Noise Cancellation ON	Solid green light
Maximum/Minimum Gain	Quickly blinks blue twice
Low Battery	Blinks red quickly
Charging	Solid red light
Fully Charged	Solid blue light

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Note: If the microphone is muted when battery is low or charging, the indicator will display the current working status (Mute ON) instead of the battery level.

2. Built-in microphone

3. 3.5mm mic in jack

It can be connected to a 3.5mm TRS lavalier microphone.

4. USB-C charging port

Use the included USB-C charging cable to charge the unit.

5. Noise cancellation button

Short press to turn on/off noise cancellation.

6. Power/Mute/Pair button

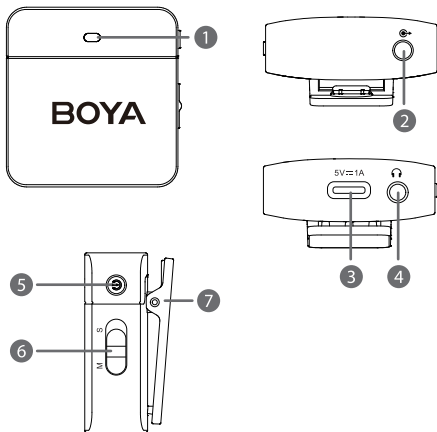| Function	Operation
Power ON/OFF	Press and hold for 2 seconds
Mute ON/OFF	Short press
Pairing	Double-click when not paired

7. Gain control (+-button)

Press the +/- button to adjust mic gain (totally 7 levels).
If the maximum/minimum level is reached, the indicator will
quickly blink blue twice.

8. Belt clip

BY-M1V-RX: Camera-mountable Clip-on Receiver

1. Status indicator

Status	Indicator
Unpaired	Blinks blue slowly (per second)
Pairing	Quickly blinks blue 3 times
Paired Successfully	Solid blue light
Low battery	Blinks red quickly
Charging	Solid red light
Fully charged	Solid blue light

2. 3.5mm TRS line output
Connect the BY-M1V-RX to a smartphone, tablet, camera, recorder or mixer with the included output cables.

3. USB-C charging port
Use the included USB-C charging cable to charge the unit.

4. 3.5mm headphone output
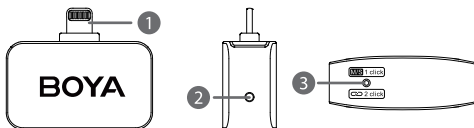Connect headphones for audio monitoring.

5. Power/ Pair button

Function	Operation
Power ON/OFF	Press and hold for 2 seconds
Pairing	Double-click when not paired

6. Mono/ Stereo switch
The output mode can be toggled between mono and stereo. When in mono mode, the audio from the left and right channel will be mixed. When in stereo mode, the audio from the left and right channel will be separated to the left and right of the stereo output.

7. Belt clip

BY-M1V-RXD: Compact Receiver with MFi Certified Lightning Connector

1. Lightning connector
It can be connected to an iOS Lightning device.
2. Status indicator

Status	Indicator
Unpaired	Blinks blue slowly (per second)
Pairing	Quickly blinks blue 3 times
Paired Successfully (Mono)	Solid blue light
Paired Successfully (Stereo)	Blinks blue slowly(every 5 seconds)

3. Pair & M/S pinhole
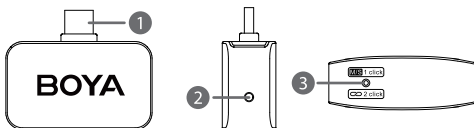Use the included pin to click:
One click: switching between Mono and Stereo output mode.
When in mono mode, the audio from the transmitter, or transmitters will be mixed to both the left and right sides. When in stereo mode, the two transmitters' audio output will be separated to the left and right sides.
Double click: enable pairing mode.

BY-M1V-RXU: Compact Receiver with USB-C Connector

1. USB-C connector
It can be connected to an Android Smartphone, Tablet, Computers or other USB-C devices.

2. Status indicator

Status	Indicator
Unpaired	Blinks blue slowly (per second)
Pairing	Quickly blinks blue 3 times
Paired Successfully (Mono)	Solid blue light
Paired Successfully (Stereo)	Blinks blue slowly (every 5 seconds)

3. Pair & M/S pinhole
Use the included pin to click:
One click: switching between Mono and Stereo output mode. When in mono mode, the audio from the transmitter, or transmitters will be mixed to both the left and right sides. When in stereo mode, the two transmitters' audio output will be separated to the left and right sides.
Double click: enable pairing mode.

Operation Guide

For the BY-M1V1/ BY-M1V2 Kit

1. Press and hold the power button for 2 seconds to turn on the transmitter and the receiver.

2. Pairing

Before leaving factory, the system is pre-paired. Therefore, the connection will be established once they are powered on. If they are disconnected, please follow the steps below:

①Double-click the power button of transmitter and receiver to enter the pairing mode. The indicators of both quickly blink blue 3 times.

②Transmitter and receiver will be successfully paired within 5 seconds. The indicators of both will turn solid blue.

③Repeat the above steps to pair another transmitter with the receiver.

3. Connect the receiver to the mic input of a camera, recorder or mixer with the included 3.5mm TRS to TRS cable; or connect it to a smartphone, tablet, or computer with the included 3.5mm TRS to TRRS cable.

4. You are ready to record.

For the BY-M1V3/ BY-M1V4/ BY-M1V5/ BY-M1V6 Kit

1. Press and hold the power button for 2 seconds to turn on the transmitter.
2. Plug the BY-M1V-RXD into an iOS Lightning device or the BY-M1V-RXU into a USB-C device.
3. Pairing
Before leaving factory, the system is pre-paired. Therefore, the connection will be established once they are powered on. If they are disconnected, please follow the steps below:
①Double-click the power button of transmitter. The indicator quickly blinks blue 3 times.
②Then, insert the included pairing pin into the small pinhole on the receiver and double click the button. The indicator of receiver quickly blinks blue 3 times.
③Transmitter and receiver will be paired within 5 seconds. After successfully paired, the indicator of transmitter will turn solid blue.
④Repeat the above steps to pair another transmitter with the receiver.
4. You are ready to record.

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Note: Due to the 2.4GHz wireless frequency is widely used, the signal may be easily attenuated or interfered. Please try to avoid obstacles while using, such as walls and buildings. And keep away from the devices with 2.4GHz frequency, such as high-power Wi-Fi antennas, radios, etc.

Specifications

BY-M1V-TX

Transmission Type	2.4GHz ISM
Modulation	GFSK
Operating Range	>60m (without obstacles)
RF Output Power	<10mW
Audio Input	3.5mm Jack or Built-in Omnidirectional Mic
Frequency Response	50Hz-20kHz
Signal-to-Noise Ratio	> 75dB
Maximum SPL	Built-in Microphone: 120dB SPL
Sensitivity	Built-in Microphone: -39dB±2dB (0dB=1V/Pa@1kHz)
Noise Cancellation	Yes
Power Requirement	Built-in Li-ion Battery or USB-C DC 5V
Antenna	PIFA Antenna
Battery Life	Approx. 6 hours
Weight	18g
Dimensions	40.2×39.4×18.6mm
Operating Temperature	0℃ to 50℃
Storage Temperature	−20℃ to 55℃

BY-M1V-RX

Transmission Type	2.4GHz ISM
Modulation	GFSK
Operating Range	＞60m (without obstacles)
RF Output Power	<10mW
Audio Output	3.5 mm Headphone Output Jack
	3.5 mm TRS Line Output Jack
Power Requirement	Built-in Li-ion Battery or USB-C DC 5V
Antenna	PIFA Antenna
Built-in Battery Life	Approx. 6 hours
Weight	18g
Dimensions	40.2×39.8×18.6mm
Operating Temperature	0℃ to 50℃
Storage Temperature	−20℃ to 55℃

BY-M1V-RXD

Transmission Type	2.4GHz ISM
Modulation	GFSK
Operating Range	>60m (without obstacles)
Audio Output	MFi Certified Lightning Connector
Power Requirement	Supplied by iOS Devices
Antenna	PIFA Antenna
Weight	10g
Dimensions	23.5×38×11.9mm
Operating Temperature	0℃ to 50℃
Storage Temperature	−20℃ to 55℃

BY-M1V-RXU

Transmission Type	2.4GHz ISM
Modulation	GFSK
Operating Range	>60m (without obstacles)
Audio Output	USB-C Connector
Power Requirement	Supplied by USB-C Devices
Antenna	PIFA Antenna
Weight	10g
Dimensions	23.5×38×11.9mm
Operating Temperature	0℃ to 50℃
Storage Temperature	−20℃ to 55℃

Packing List

BY-M1V1
1× BY-M1V-TX Transmitter
1× BY-M1V-RX Receiver
1× 3.5mm TRS to TRS Output Cable for Cameras
1× 3.5mm TRS to TRRS Output Cable for Smartphones
2× USB-C Charging Cable
1× Fur Windshield

BY-M1V2
2× BY-M1V-TX Transmitter
1× BY-M1V-RX Receiver
1× 3.5mm TRS to TRS Output Cable for Cameras
1× 3.5mm TRS to TRRS Output Cable for Smartphones
3× USB-C Charging Cable
2× Fur Windshield

BY-M1V3
1 × BY-M1V-TX Transmitter
1 × BY-M1V-RXU Receiver
1 × USB-C Charging Cable
1 × Fur Windshield
1 × Pairing Pin

BY-M1V4
2 × BY-M1V-TX Transmitter
1 × BY-M1V-RXU Receiver
2 × USB-C Charging Cable
2 × Fur Windshield
1 × Pairing Pin

BY-M1V5
1 × BY-M1V-TX Transmitter
1 × BY-M1V-RXD Receiver
1 × USB-C Charging Cable
1 × Fur Windshield
1 × Pairing Pin

BY-M1V6
2 × BY-M1V-TX Transmitter
1 × BY-M1V-RXD Receiver
2 × USB-C Charging Cable
2 × Fur Windshield
1 × Pairing Pin