BOYA

Ultracompact 2.4GHz Dual-channel Wireless Microphone System

2.4GHz 迷你双通道无线麦克风系统

BY-XM6-S1
BY-XM6-S2
BY-XM6-S3
BY-XM6-S4
BY-XM6-S5
BY-XM6-S6

User Manual
用户手册

General Introduction

BOYA BY-XM6 systems are incredibly lightweight, ultracompact and easy-to-use wireless microphone systems for up to 2 people.

The microphone delivers exceptional, broadcast-quality sound to DSLR, mirrorless and video cameras, smartphones, tablets, computers, etc.
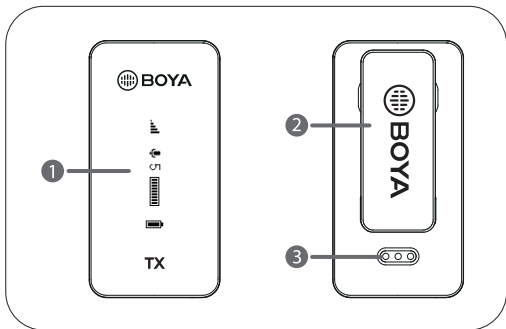
It is ideal for content creation, vlogging, mobile journalism, and more.

Available Kits

Model	In the box	
BY-XM6-S1	1×BY-XM6 TX	1×BY-XM6 RX
BY-XM6-S2	2×BY-XM6 TX	1×BY-XM6 RX
BY-XM6-S3	1×BY-XM6 TX	1×BY-XM6 RXD
BY-XM6-S4	2×BY-XM6 TX	1×BY-XM6 RXD
BY-XM6-S5	1×BY-XM6 TX	1×BY-XM6 RXU
BY-XM6-S6	2×BY-XM6 TX	1×BY-XM6 RXU

Product Structure

Wireless Transmitter BY-XM6 TX
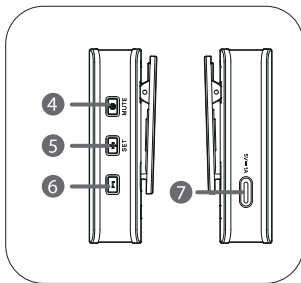

1. OLED display

- For more details, please refer to "OLED Display Operation Guide".

2.Belt clip

3.Charging contacts

4. Power/Mute button

Function	Operation
Power ON	Long press
Power OFF	
Mute ON	Short press
Mute OFF	

5. +/SET button

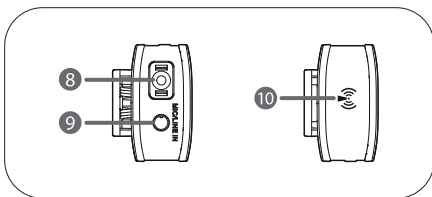| Function	Operation
+	On home screen, short press to adjust mic gain.
	On menu screen, short press to select different functions or values shown on the display.
SET	On home screen, long press to enter the menu screen.
	On menu screen, long press to enter the displayed menu. Then, long press again to confirm your option.

6. - button

- On home screen, short press to adjust mic gain.
- On menu screen, short press to select different functions or values shown on the display;
- long press to return to home screen.
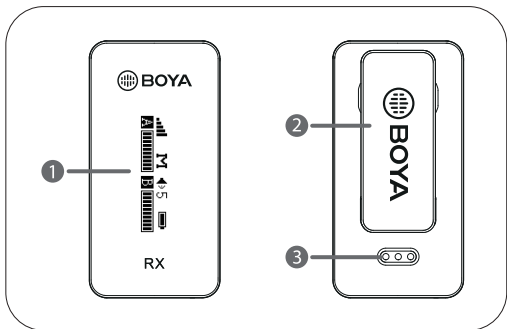
7. USB-C charging port (DC 5V)

8. Built-in microphone

9. MIC/LINE IN jack

- It can be connected to the supplied 3.5mm lavalier microphone, or other 3.5mm TRS microphones or line-in devices.

10. Antenna

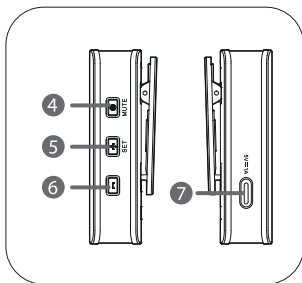# Wireless Receiver BY-XM6 RX

1. OLED display
- For more details, please refer to "OLED Display Operation Guide".

2.Belt clip

3.Charging contacts

4. Power/Mute button

Function	Operation
Power ON	Long press
Power OFF	
Mute ON	Short press
Mute OFF	

5. +/SET button

Function	Operation
+	On home screen, short press to increase volume.
	On menu screen, short press to select different functions or values shown on the display.
SET	On home screen, long press to enter the menu screen.
	On menu screen, long press to enter the displayed menu. Then, long press again to confirm your option.

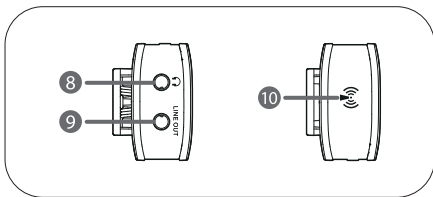## 6. - button
- On home screen, short press to decrease volume.
- On menu screen, short press to select different functions or values shown on the display;
- long press to return to home screen.

7. USB-C charging port (DC 5V)
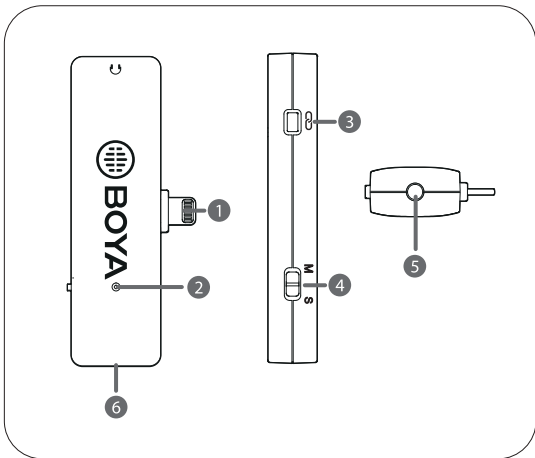

8. 3.5mm headphone output
- Connect headphones for audio monitoring.

9. LINE OUT jack
- Connect the BY-XM6 RX to a smartphone, tablet, camera, recorder or mixer with the supplied output cables.

10. Antenna

BY-XM6 RXD: Compact Receiver with Lightning Connector

1. Lightning connector
- It can be connected to an iOS Lightning device.

2. Status indicator

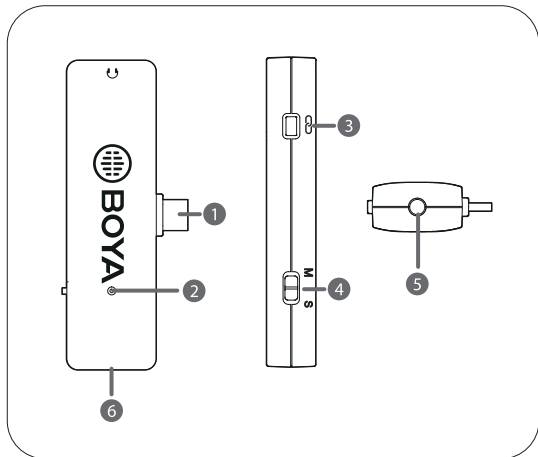| Status	Indicator
Unpaired	Slowly flashing blue light
Pairing	Quickly flashing blue light
Paired Successfully	Solid blue light

3. Pair button

4. 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.

5. 3.5mm headphone jack
- Connect headphones for audio monitoring.

6. Antenna

BY-XM6 RXU: Compact Receiver with USB-C Connector

1. USB-C connector
- It can be connected to an Android smartphone, tablet or other USB-C devices.

2. Status indicator

Status	Indicator
Unpaired	Slowly flashing blue light
Pairing	Quickly flashing blue light
Paired Successfully	Solid blue light

3. Pair button

4. 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.

5. 3.5mm headphone jack
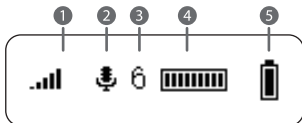- Connect headphones for audio monitoring.

6. Antenna

OLED Display Operation Guide

Wireless Transmitter BY-XM6 TX

Home screen

⚠

If no operation is performed within 20 seconds on other screens,
the display will automatically return to home screen.

1. **Pairing indicator**
   ▁▃▅▇ Paired successfully   ▁▃▅▇ Disconnected   ((•)) Pairing
2. **Input mode & Mute indicator**
   🎙 Mic in   ↑↓ Line in

   Mute ON

   🎙 Mute ON (under Mic in mode) 🔇 Mute ON (under Line in mode)
3. **Mic gain**
   Displays the TX transmitter's mic gain level
   on home screen, press +/- button to adjust the microphone's
   input gain level.
4. **Audio input level meter**
   Displays the audio input level.
5. **TX's battery level indicator**
   Displays the TX battery level. Please recharge the device
   immediately when the indicator starts flashing.

Menu screen

On home screen, long press SET button to enter menu screen.
On menu screen, long press - button to return to home screen.

```
Connect Yes?
```

Connect Setting
Pair with the receiver. For details of operation, please refer to
"Operation Guide".

```
Backlight On
```

Backlight Setting
Set backlight to always on or on for 10/30/60 seconds.
Default is "On".

```
Mute Enable
```

Mute Key Setting
Enable or disable mute key button function.
Default is "Enable".

```
Mic Gain 6/6
```

Mic Gain Setting
Adjust the microphone's input gain level (0~6).
Default is "5".

```
Input Mic In
```

Input Mode Setting
The input mode can be selected to Mic In or Line In. When Mic In mode selected, the transmitter can be connected to the supplied lavalier microphone, or other microphones with a 3.5mm TRS output. When Line In mode selected, the transmitter can be connected to line-level output devices.
Default is "Mic In".

```
Language English
```

Language Setting
English or Chinese are available.
Default is English.

```
Restore Yes?
```

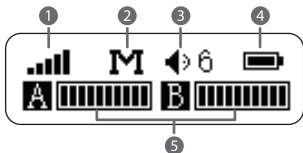**Restore Default Setting**

```
Version V2.0
```

Version of the BY-XM6 TX

Wireless Receiver BY-XM6 RX

Home screen

⚠️

If no operation is performed within 20 seconds on other screens, the display will automatically return to home screen.

1. Pairing indicator

    📶 Paired successfully   📶 Disconnected   ((••)) Pairing

2. RX's output mode

   M: Mono   S: Stereo

3. Output volume & Mute indicator

   on home screen, press +/- button to adjust the volume.

   🔇 Mute ON   🔊 Mute OFF

4. RX's battery level indicator

   Displays the RX battery level. Please recharge the device immediately when the indicator starts flashing.
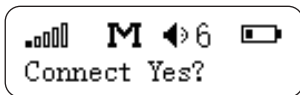
5. Audio input level meter
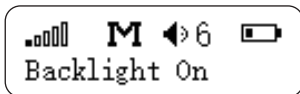
   Displays the audio input level.

Menu screen

⚠️

On home screen, long press SET button to enter menu screen.
On menu screen, long press - button to return to home screen.

.ₒₒₗₗ **M** ◀)6 ▭
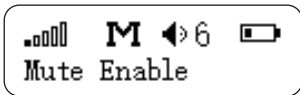Connect Yes?

Connect Setting
Pair with the transmitter. For details of operation, please refer to
"Operation Guide".

.ₒₒₗₗ **M** ◀)6 ▭
Backlight On

Backlight Setting
Set backlight to always on or on for 10/30/60 seconds.
Default is "On".

```
.₀₀₀₀  M ◀)6  ▭
Mute Enable
```

Mute Key Setting
Enable or disable mute key button function.
Default is "Enable".

```
.₀₀₀₀  M ◀)6  ▭
Volume 6/6
```

Output Volume Setting
Output volume can be set from 0 to 6.
Default is "5".

```
.₀₀₀₀  M ◀)6  ▭
Output Mono
```

Output Mode Setting
The output mode can be set to either mono or stereo. 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. Default is mono.

```
.ıooll   M  ◀)6  ▭
Language English
```

Language Setting
English or Chinese are available.
Default is English.

```
.ıooll   M  ◀)6  ▭
Restore Yes?
```

Restore Default Setting

```
.ıooll   M  ◀)6  ▭
Version V2.0
```

**Version of the BY-XM6 RX**

Operation Guide

For the BY-XM6-S1/BY-XM6-S2 kit

1. Long press the power button to turn on/off 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 below steps:

① Long press the SET button to enter menu screen

② Use the + or -button to display the Connect setting menu on both transmitter and receiver.
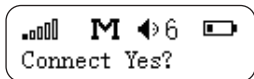
RX **TX**

③ Long press the SET button to select the menu.

RX **TX**

④ Select Yes, and long press the SET button to confirm.

⑤ Transmitter and receiver will be successfully paired within 10s.

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

4. You are ready to record.

For the BY-XM6-S3/BY-XM6-S4/BY-XM6-S5/BY-XM6-S6 kit
1. Long press the power button to turn on the transmitter.
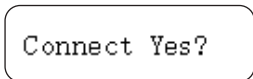2. Plug the RXD into an iOS device or the RXU into an USB-C device.
3. Pairing
Before leaving factory, the system is pre-paired. Therefore, the connection
will be established once they are powered on. If they are disconnected,
please follow below steps:
①Long press the TX's SET button to enter menu screen
②Use the + or - button to display the Connect setting menu

```
Connect Yes?
```
TX

③Long press the SET button to select the menu.

```
Connect Yes?
```
TX

④Select Yes, and long press the SET button to confirm. The transmitter
enters pairing mode.
⑤Then, press and hold the Pair button of the RXD/RXU for 3 seconds to
enable pairing mode. The indicator will flash blue rapidly.
⑥Transmitter and receiver will be successfully paired within 10s. The
indicator of the receiver will turn solid blue, while the indicator on
the transmitter will change to .
4. You are ready to record.

Specifications

BY-XM6 TX Transmitter

Transmission Type	2.4GHz Digital Frequency
Modulation	GFSK
Operating Range	Up to 328ft (100m) (without obstacle)
RF Output Power	＜10mW
Polar Pattern	Omnidirectional
Frequency Response	35Hz-18KHz
Maximum SPL	Built-in Microphone: 120dB SPL
	Lavalier Microphone: 110dB SPL
Sensitivity	Built-in Microphone: -39dB
	Lavalier Microphone: -39dB
SNR	> 84dB
Power Requirements	Built-in Li-ion Battery or USB-C DC 5V or Charging Contact
Built-in Battery Life	Approx. 7 hours
Antenna	PIFA Antenna
Audio Inputs	3.5mm TRS MIC/LINE IN Jack or Built-in Microphone
Weight	Approx. 32g(1.13oz)
Dimensions	62.1×31.6×16.5mm
Operating Temperature	−10℃ to 50℃
Storage Temperature	−20℃ to +55℃

BY-XM6 RX Receiver

Transmission Type	2.4GHz Digital Frequency
Modulation	GFSK
Operating Range	Up to 328ft (100m) (without obstacle)
Audio Output Connector	3.5mm Headphone Jack
	3.5mm TRS Output Jack
Audio Output Level	–60 dBV to -20dBV
Power Requirements	Built-in Li-ion Battery or USB-C DC 5V or Charging Contact
Built-in Battery Life	Approx. 7 hours
Antenna	PIFA Antenna
Weight	Approx. 32g(1.13oz)
Dimensions	62.1×31.6×16.5mm
Operating Temperature	–10℃ to 50℃
Storage Temperature	–20℃ to +55℃

BY-XM6 RXD Receiver

Transmission Type	2.4GHz ISM Frequency
Modulation	GFSK
Operating Range	Up to 328ft (100m) (without obstacle)
RF Output Power	＜10mW
Audio Output Connector	3.5mm Headphone Jack
	Lightning Connector
Power Requirements	Supplied by iOS Devices
Antenna	PIFA
Weight	14.5g (0.51oz)
Dimensions	75.6x23.15x12mm

BY-XM6 RXU Receiver

Transmission Type	2.4GHz ISM Frequency
Modulation	GFSK
Operating Range	Up to 328ft (100m) (without obstacle)
RF Output Power	＜10mW
Audio Output Connector	3.5mm Headphone Jack
	USB-C Connector
Power Requirements	Supplied by USB-C Devices
Antenna	PIFA
Weight	14.5g (0.51oz)
Dimensions	75.6x23.15x12mm

Features

- 2.4GHz wireless transmission technology
- Ideal for content creation, vlogging, mobile journalism, and more
- Delivers exceptional, broadcast-quality sound
- Ultracompact clip-on transmitter and dual-channel receiver
- Easy-to-use OLED display
- Real-time headphone monitoring
- Operating range of up to 100m
- High-quality built-in microphone
- Lavalier microphone included
- Selectable mono/stereo output

Packing List

BY-XM6-S1 (1×BY-XM6 TX + 1×BY-XM6 RX)
1× BY-XM6 TX Transmitter
1× BY-XM6 RX Receiver
2× USB-C Charging Cable
1× Lavalier Microphone
1× Mic Clip for Lavalier Microphone
1× Foam Windscreen for Lavalier Microphone
1× Fur Windshield for Built-in Microphone
1× 3.5mm TRS to TRS Output Cable for Cameras
1× 3.5mm TRS to TRRS Output Cable for Smartphones

BY-XM6-S2 (2×BY-XM6 TX + 1×BY-XM6 RX)
2× BY-XM6 TX Transmitter
1× BY-XM6 RX Receiver
3× USB-C Charging Cable
2× Lavalier Microphone
2× Mic Clip for Lavalier Microphone
2× Foam Windscreen for Lavalier Microphone
2× Fur Windshield for Built-in Microphone
1× 3.5mm TRS to TRS Output Cable for Cameras
1× 3.5mm TRS to TRRS Output Cable for Smartphones

BY-XM6-S3 (1×BY-XM6 TX + 1×BY-XM6 RXD)

1× BY-XM6 TX Transmitter

1× BY-XM6 RXD Receiver

1× USB-C Charging Cable

1× Lavalier Microphone

1× Mic Clip for Lavalier Microphone

1× Foam Windscreen for Lavalier Microphone

1× Fur Windshield for Built-in Microphone

BY-XM6-S4 (2×BY-XM6 TX + 1×BY-XM6 RXD)

2× BY-XM6 TX Transmitter

1× BY-XM6 RXD Receiver

2× USB-C Charging Cable

2× Lavalier Microphone

2× Mic Clip for Lavalier Microphone

2× Foam Windscreen for Lavalier Microphone

2× Fur Windshield for Built-in Microphone

BY-XM6-S5 (1×BY-XM6 TX + 1×BY-XM6 RXU)

1× BY-XM6 TX Transmitter

1× BY-XM6 RXU Receiver

1× USB-C Charging Cable

1× Lavalier Microphone

1× Mic Clip for Lavalier Microphone

1× Foam Windscreen for Lavalier Microphone

1× Fur Windshield for Built-in Microphone

BY-XM6-S6 (2×BY-XM6 TX + 1×BY-XM6 RXU)

2× BY-XM6 TX Transmitter

1× BY-XM6 RXU Receiver

2× USB-C Charging Cable

2× Lavalier Microphone

2× Mic Clip for Lavalier Microphone

2× Foam Windscreen for Lavalier Microphone

2× Fur Windshield for Built-in Microphone