

BOYA

2.4GHz Dual-Channel
Wireless Microphone System
2.4GHz无线双通道麦克风系统

BY-WM3T

User Manual
用户手册



General Introduction

The BY-WM3T is an ultra-compact and portable 2.4GHz wireless microphone system. It is ideal for content creation, live streaming, vlogging, mobile journalism and much more.

This series has 3 different receiver options: 3.5mm TRS, iOS Lightning or USB-C output included in the kits, compatible with a camera, smartphone, tablet, computer and more. The USB-C receiver and iOS Lightning receiver are device powered and have USB-C charging ports, which support charging and powering of devices while in use.

The included charging case allows you to charge the transmitter(s) and 3.5mm TRS receiver anywhere, making the kit easy to carry on.

Features

- The units will be paired automatically as soon as they are switched on
- Also available in 48kHz HD audio when noise cancellation enabled
- Wide-range 20-20,000Hz frequency response - deliver exceptional high-quality sound
- Transmitter's built-in rechargeable lithium-ion battery provides 10+ hours of recording
- Up to 100m wireless operating range

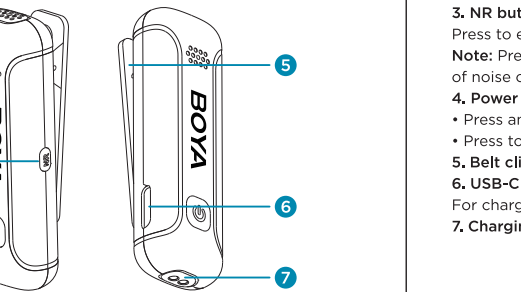
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Cautions

1. Non-professional teardown is strictly prohibited.
2. Please keep it away from heat sources such as radiators or spotlights.
3. Do not remove the battery without professional's help.
4. Please clean the device with only a soft, dry cloth.
5. When using and storing, please keep away from dust and moisture.
6. For the best pick-up pattern, do not hold your hand against the microphone capsule cover.

Product Structure

BY-WM3T-TX: Wireless Transmitter



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1. Built-in microphone

2. Status indicator

Status	Indicator
Unpaired	Blinking red and blue alternately
Paired successfully	Static blue
Mute	Blinking blue slowly
Noise cancellation enabled	Static green
Low battery	Blinking red slowly
Charging	Static red (in shutdown mode)
Fully charged	Red light off

Note: If charging the unit when it is ON, the indicator will display the current working status instead of charging status.

3. NR button

Press to enable or disable noise cancellation.

Note: Pressing the NR button will not change the current state of noise cancellation when the transmitter is muted.

4. Power button

Press and hold for 2 seconds to power on or off.

• Press to mute or unmute the microphone.

5. Belt clip

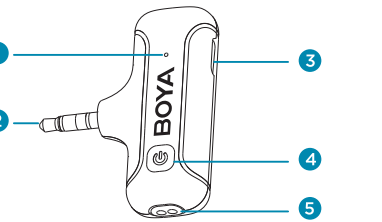
6. USB-C charging port

For charging the transmitter.

7. Charging contacts

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BY-WM3T-RX35: 3.5mm TRS Receiver



1. Status indicator

Status	Indicator
Unpaired	Blinking red and blue alternately
Paired successfully	Static blue
Low battery	Blinking red slowly
Charging	Static red (in shutdown mode)
Fully charged	Red light off

Note: If charging the unit when it is ON, the indicator will display the current working status instead of charging status.

2. 3.5mm TRS connector

It can be connected to cameras, recorders, mixers or other devices with a 3.5mm TRS jack.

3. USB-C charging port

For charging the receiver.

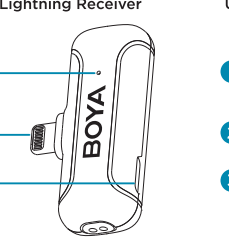
4. Power button

Press and hold for 2 seconds to power on or off.

5. Charging contacts

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BY-WM3T-RXD: iOS Lightning Receiver



1. Status indicator

Status	Indicator
Unpaired	Blinking blue
Paired successfully	Static blue

It can be connected to an iOS Lightning device.

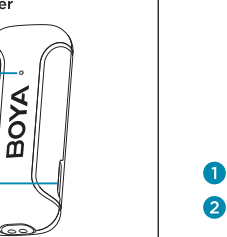
3. USB-C charging port

When the BY-WM3T-RXD is plugged into an external device, the external device can be powered via this charging port.

Note: Most USB-C desives can be charged through this port, which also supports up to 3A fast charging.

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BY-WM3T-RXU: USB-C Receiver



1. Status indicator

Status	Indicator
Unpaired	Blinking blue
Paired successfully	Static blue

It can be connected to an Android phone, table or other USB-C devices.

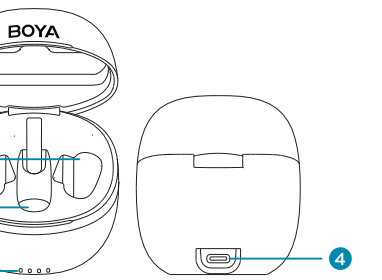
3. USB-C charging port

When the BY-WM3T-RXU is plugged into an external device, the external device can be powered via this charging port.

Note: Most USB-C desives can be charged through this port.

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BY-WM3T-CC: Charging Case



1. Slot for transmitter(s)

2. Slot for receiver

3. Charging indicator

Status	Battery Level	Indicator
Low battery	<10%	● ○ ○ ○
Charging	<25%	● ○ ○ ○
	26 ≤ 50%	● ● ○ ○
	51 ≤ 75%	● ● ● ○
	76 ≤ 99%	● ● ● ●
Fully charged	100%	● ● ● ●

4. USB-C charging port

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How to Use

For the kit of BY-WM3T-M2

1. The transmitter(s) and receiver will be turned on automatically as soon as it is taken out of the charging case (Or press the power buttons for 2 seconds to power on).
2. The transmitter(s) and receiver will be automatically paired. Their indicators are all static blue.
3. Plug the BY-WM3T-RX35 receiver into a device with a 3.5mm TRS jack.
4. You are ready to record.

For the kit of BY-WM3T-D2/ BY-WM3T-U2

1. The transmitter(s) will be turned on automatically as soon as it is taken out of the charging case (Or press the power button for 2 seconds to power on).
2. Plug the BY-WM3T-RXD receiver into an iOS Lightning device or the BY-WM3T-RXU receiver into a USB-C device.
3. The transmitter(s) and receiver will be automatically paired. Their indicators are all static blue.
4. Launch a video or audio recording app.
5. Select external microphone, if applicable (app dependent).
6. You are ready to record.

Tips: 1. It is recommended to record a sample and play it back to check if the audio level is acceptable before recording.

2. After recording, put the transmitter(s) and BY-WM3T-RX35 receiver back into the case for charging.

3. Due to 2.4GHz wireless frequency, signal can be easily attenuated. Please try to avoid obstacles, such as walls and buildings, and avoid close proximity to devices with 2.4GHz signal, such as high-power Wi-Fi antennas, radios, etc.

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Troubleshooting

If you encounter problems when using the unit, please refer to the following checklist before contacting technical support. If the problem cannot be solved, please contact the dealer's after-sales service department.

• If there is no sound from the unit or no sound when connected to an external device

- ① Make sure the connector on the receiver is well-connected to your device.
- ② Make sure the transmitter(s) is not muted.
- Current noise or other abnormal noise appears during monitoring
- ① In order to improve the recording effect in a noisy environment, it is recommended to enable noise cancellation.
- ② Make sure there is no interference near the unit. If the noise still exists after changing the unit's position, please contact our customer service.

• The operating range of the unit is limited and the sound is frequently intermittent

Make sure there is no interference between the transmitter(s) and the receiver. If the intermittent sound still occurs frequently, please contact our customer service.

• Failed to charge the transmitter(s) or receiver via the charging case

- ① Make sure the charging contacts of both are in full contact. Wipe the charging contacts with a clean cloth and try again.
- ② If you want to check whether the magnetic force is aging or whether the charging contacts of the two are not in sufficient contact, press the transmitter/receiver placed in the charging box to check whether it is in a charging state. If the transmitter(s) or the receiver is still failed to be charged, please contact our customer service.

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Specifications

Transmitter & Receiver	
Transmission Type	2.4GHz digital frequency
Modulation	GFSK
Polar Pattern	Omnidirectional
Antenna	Ceramic antenna
Operating Range	Up to 100m (without obstacle)
RF Output Power	10dBm
Distortion	< 0.1%
Frequency Response	20Hz-20kHz
Sensitivity	-40dB±2 (1V/Pa)
Sampling Rate	48kHz
Bit Rate	16bit
Signal-to-Noise Ratio	85dB
Audio Input	Built-in microphone capsule
Audio Output	RX35: 3.5mm TRS analog output RXD: iOS Lightning digital output RXU: USB-C digital output
Power Requirements	TX/ RX35: Built-in lithium-ion battery/ Charging contacts/ USB-C charging port RXD/RXU: Powered by an external device
Battery Capacity of TX/ RX35	TX: 95mAh; RX35: 95mAh
Battery Life of TX/ RX35	TX: Approx. 10 hours RX35: Approx. 5.5 hours
Charging Time of TX/ RX35	Approx. 2 hours
Weight	TX: 9.5g; RX35: 10g; RXD: 7g; RXU: 6g
Dimensions	TX: 53.0x18.4x16.8mm RX35: 47.4x38.9x11.6mm RXD: 47.4x26.7x11.6mm RXU: 47.4x26.6x11.6mm
Operating Temperature	0°C to +50°C
Storage Temperature	-10°C to +50°C

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Charging Case

Battery Capacity	600mAh
Charging Time	Approx. 2 hours
Charging Connector	USB-C port
Times for Charging Microphone	2 times (2*TX)
Weight	74.5g
Dimensions	65.8x52.8x72 mm
Operating Temperature	0°C to +50°C
Storage Temperature	-10°C to +50°C

In the Box

BY-WM3T-M2

- 2x BY-WM3T-TX Transmitter
- 1x BY-WM3T-RX35 Receiver
- 1x BY-WM3T-CC Charging Case
- 1x USB-C Charging Cable
- 2x Foam Windscreen
- 1x Carrying

BY-WM3T-U2

- 2x BY-WM3T-TX Transmitter
- 1x BY-WM3T-RXU Receiver
- 1x BY-WM3T-CC Charging Case
- 1x USB-C Charging Cable
- 2x Foam Windscreen
- 1x Carrying

BY-WM3T-D2

- 2x BY-WM3T-TX Transmitter
- 1x BY-WM3T-RXD Receiver
- 1x BY-WM3T-CC Charging Case
- 1x USB-C Charging Cable
- 2x Foam Windscreen
- 1x Carrying

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Check Your BOYA Warranty Status

1. The Warranty Start Date shall be the date you purchase the Product with a valid invoice.
 2. If the Customer is unable to provide an invoice of the original purchase, the Warranty Start Date shall be ninety (90) days after the Production Date displayed on the unit or its serial number (SN).
- Go to <https://cn.boyamicro.com/service-policy>. Enter a serial number (SN) to retrieve the warranty status for your Product. The result is for reference only, not as judgment criteria for warranty.

Warranty Information

For information about warranty, return, and replacement policies or service for repair, please visit <https://cn.boyamicro.com/service-policy>. You acknowledge that the warranty for your device is only valid in the country/region where it was purchased.



BOYA Support Get more product supports.
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