

BOYA BY-XM6-S1-Mini

BOYA BY-XM6-S1 Mini 2.4GHz Wireless Lavalier Microphone System User Manual

Model: BY-XM6-S1-Mini

INTRODUCTION

The BOYA BY-XM6-S1 Mini is an ultracompact and easy-to-use 2.4GHz wireless microphone system designed for capturing broadcast-quality sound. It is ideal for content creation, vlogging, mobile journalism, and more, offering exceptional audio performance for DSLR, mirrorless, and video cameras, as well as smartphones, tablets, and computers.

WHAT'S IN THE BOX

- 1 x BY-XM6 TX Mini Transmitter
- 1 x BY-XM6 RX Receiver
- 2 x USB-C Charging Cable
- 1 x Fur Windshield for Built-in Microphone
- 1 x 3.5mm TRS to TRS Output Cable for Cameras
- 1 x 3.5mm TRS to TRRS Output Cable for Smartphones
- 1 x Portable Pouch

Product Structure



Figure 1: Contents of the BOYA BY-XM6-S1 Mini package, including transmitter, receiver, cables, and windshield.

PRODUCT OVERVIEW

Transmitter (BY-XM6 TX Mini)

The ultracompact clip-on transmitter features a high-quality built-in omnidirectional microphone. It also includes a MIC IN jack for connecting an external lavalier microphone (included). Controls include a Power/Mute button and +/-/Pair buttons for easy operation.

Receiver (BY-XM6 RX)

The dual-channel receiver is equipped with a 3.5mm headphone jack for real-time monitoring and a 3.5mm TRS output jack for connecting to recording devices. It features an easy-to-use OLED display to show vital information such as audio input level, output volume, mute status, and battery level. Controls include Power/Mute, +/-/SET, and - buttons.



Figure 2: Detailed view of the BY-XM6 TX Mini Transmitter, highlighting its built-in microphone, status indicator, and control buttons.



Figure 3: Detailed view of the BY-XM6 RX Receiver, showing the OLED display, 3.5mm headphone output, 3.5mm TRS output jack, and control buttons.

SETUP

Connecting to a Camera

1. Attach the BY-XM6 RX Receiver to your camera's hot shoe mount.
2. Connect the 3.5mm TRS to TRS output cable from the receiver's output jack to your camera's microphone input.
3. Power on both the transmitter and receiver. They should automatically pair.
4. Clip the BY-XM6 TX Mini Transmitter to the speaker's clothing, ensuring the built-in microphone (or external lavalier mic) is positioned correctly.
5. Monitor audio levels via the receiver's OLED display and your camera's audio meters.



Figure 4: The BY-XM6 RX Receiver securely mounted on a DSLR camera's hot shoe, ready for recording.

Connecting to Smartphones/Tablets

1. Connect the 3.5mm TRS to TRRS output cable from the receiver's output jack to your smartphone or tablet's 3.5mm audio jack.
2. For devices without a 3.5mm jack (e.g., newer iPhones, Android phones with USB-C only), a compatible adapter (3.5mm-TRS-to-Lightning or 3.5mm-TRS-to-Type-C) is required and sold separately.
3. Power on both the transmitter and receiver. They should automatically pair.
4. Clip the BY-XM6 TX Mini Transmitter to the speaker's clothing, ensuring the built-in microphone (or external lavalier mic) is positioned correctly.
5. Monitor audio levels through the receiver's OLED display and your device's audio recording app.

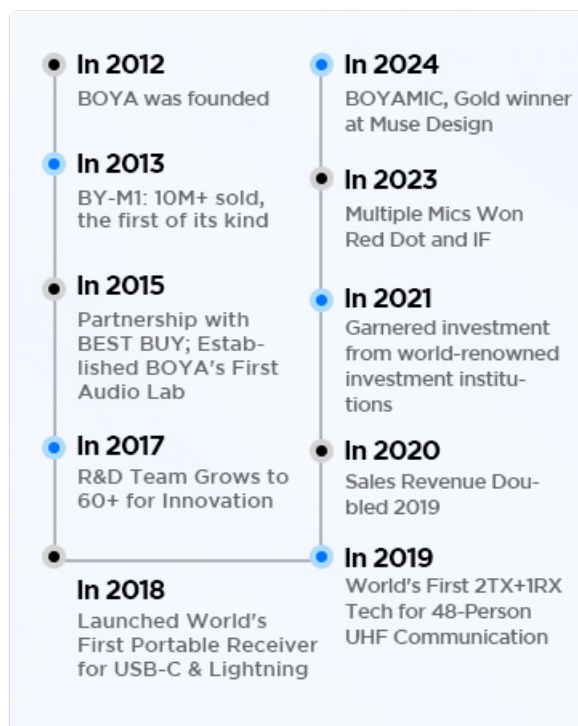


Figure 5: Various cables and adapters for connecting the BY-XM6-S1 Mini to DSLR cameras, smartphones, tablets, and computers.

Pairing the Devices

The transmitter (TX) and receiver (RX) are pre-paired at the factory. If re-pairing is needed:

1. Power on both the TX Mini Transmitter and RX Receiver.
2. On the TX Mini, long-press the '+' and '-' buttons simultaneously for 3 seconds to enter pairing mode.
3. The pairing indicator on both devices will flash, then turn solid blue once successfully paired.



Figure 6: Visual guide for pairing the BY-XM6 TX Mini Transmitter and RX Receiver.

OPERATING INSTRUCTIONS

Power On/Off

Long-press the Power/Mute button on both the transmitter and receiver to power them on or off.

Volume Control

Use the '+' and '-' buttons on the receiver to adjust the audio output volume. The OLED display will show the current volume level.

Real-time Monitoring

Plug headphones into the 3.5mm headphone jack on the receiver to monitor your audio in real-time, ensuring optimal sound quality during recording.



Figure 7: The receiver's OLED display showing audio levels and volume control, with a headphone icon indicating monitoring capability.

Mono/Stereo Output

The receiver supports selectable mono/stereo output modes. Use the SET button to switch between these modes based on your recording needs. Mono mode combines all audio into a single channel, while stereo mode separates audio into left and right channels.

Battery Life

The transmitter provides approximately 4.5 hours of battery life, while the receiver offers approximately 7 hours. Both units can be charged via USB-C. The charging case (if applicable to your kit) can recharge the units multiple times.



Figure 8: Battery life indicators and charging details for the BY-XM6 TX Mini Transmitter and RX Receiver.

MAINTENANCE

- Keep the devices clean and free from dust and moisture. Use a soft, dry cloth for cleaning.
- Avoid exposing the devices to extreme temperatures or direct sunlight.
- Store the microphone system in its portable pouch when not in use to prevent damage.
- Ensure all cables are properly connected and not strained to prevent wear and tear.

TROUBLESHOOTING

No Sound/Low Volume

- Check if both the transmitter and receiver are powered on and properly paired.
- Ensure the microphone is not muted on the transmitter.
- Adjust the output volume on the receiver using the '+' button.
- Verify that the audio cable is securely connected to both the receiver and your recording device.
- Check your camera/smartphone's audio input settings and volume levels.

Interference/Poor Sound Quality

- Ensure there are no obstacles between the transmitter and receiver that could block the 2.4GHz signal.
- Maintain a clear line of sight between the transmitter and receiver for optimal performance.
- Avoid using the system near other 2.4GHz wireless devices that might cause interference.
- Use the fur windshield on the built-in microphone to reduce wind noise when recording outdoors.

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Video 1: An introduction to the BOYA BY-XM6 Mini Wireless Lavalier Microphone system, showcasing its features and ease of use. This video provides a visual overview that can help in understanding basic setup and operation, potentially aiding in troubleshooting initial connection issues.

SPECIFICATIONS

Feature	Specification
Transmission Type	2.4GHz Digital Frequency
Operating Range	Up to 328ft (100m) (without obstacle)
Polar Pattern	Omnidirectional
Frequency Response	35Hz-18KHz
Maximum SPL	120dB SPL
Sensitivity	-39dB
SNR	> 77dB
Power Requirements	Built-in Li-ion Battery or USB-C DC 5V
Built-in Battery Life (TX)	Approx. 4.5 hours
Built-in Battery Life (RX)	Approx. 7 hours
Audio Output Connector	3.5mm Headphone Jack; 3.5mm TRS Output Jack

Feature	Specification
Weight (TX)	Approx. 14.5g (0.5oz)
Dimensions (TX)	46x23.92x15mm
Compatible Devices	Smartphone, Personal Computer, Camera

WARRANTY AND SUPPORT

For warranty information, technical support, and further assistance, please refer to the documentation included with your product or visit the official BOYA website. You can also visit the [BOYA Store on Amazon](#).