

BOYA WM4 PRO-K3

BOYA WM4 PRO-K3 2.4GHz Ultracompact Vlog Microphone Instruction Manual

Model: WM4 PRO-K3 | Brand: BOYA

1. INTRODUCTION AND OVERVIEW

The BOYA BY-WM4 PRO-K3 is an incredibly lightweight, ultracompact, and easy-to-use 2.4GHz wireless microphone system designed to deliver detailed, broadcast-quality sound. It is specifically optimized for use with iPhone, iPad, iPod, and other iOS mobile devices equipped with a Lightning connector. This system provides a reliable audio solution for various applications, including filmmaking, broadcast interviews, business presentations, vlogging, and live streaming, offering clear audio capture without distance limitations.

2. PRODUCT FEATURES

- **Ultracompact and Lightweight:** Designed for maximum portability and ease of use.
- **2.4GHz Wireless Technology:** Operates on the interference-free 2.4GHz spectrum, automatically hopping to free channels for stable audio transmission.
- **Built-in Microphone:** The transmitter features a high-quality built-in microphone, suitable for direct clip-on use.
- **Lavalier Microphone Option:** Includes a professional lavalier microphone for discreet placement and enhanced audio capture.
- **Wireless Range:** Achieves an impressive operating range of up to 164 feet (50 meters) in open areas.
- **Plug-and-Play Design:** Simple setup for immediate use with compatible devices.
- **Real-time Headphone Monitoring:** Allows users to monitor audio directly from the receiver.
- **Switchable Mono/Stereo Mode:** Offers flexibility for different recording needs.
- **Sound Attenuation Buttons:** Provides control over audio levels directly on the receiver.

3. PACKAGE CONTENTS

Please check the package contents to ensure all items are present and in good condition.

- BY-WM4 PRO Transmitter (TX)
- BY-WM4 PRO Receiver (RXD) with Lightning Connector
- Lavalier Microphone
- Foam Windscreen for Lavalier Microphone
- Microphone Clip
- Hard Carrying Case
- User Manual



Figure 3.1: Overview of the BOYA WM4 PRO-K3 system components.



Figure 3.2: Retail packaging for the BOYA WM4 PRO-K3.

4. COMPONENT IDENTIFICATION

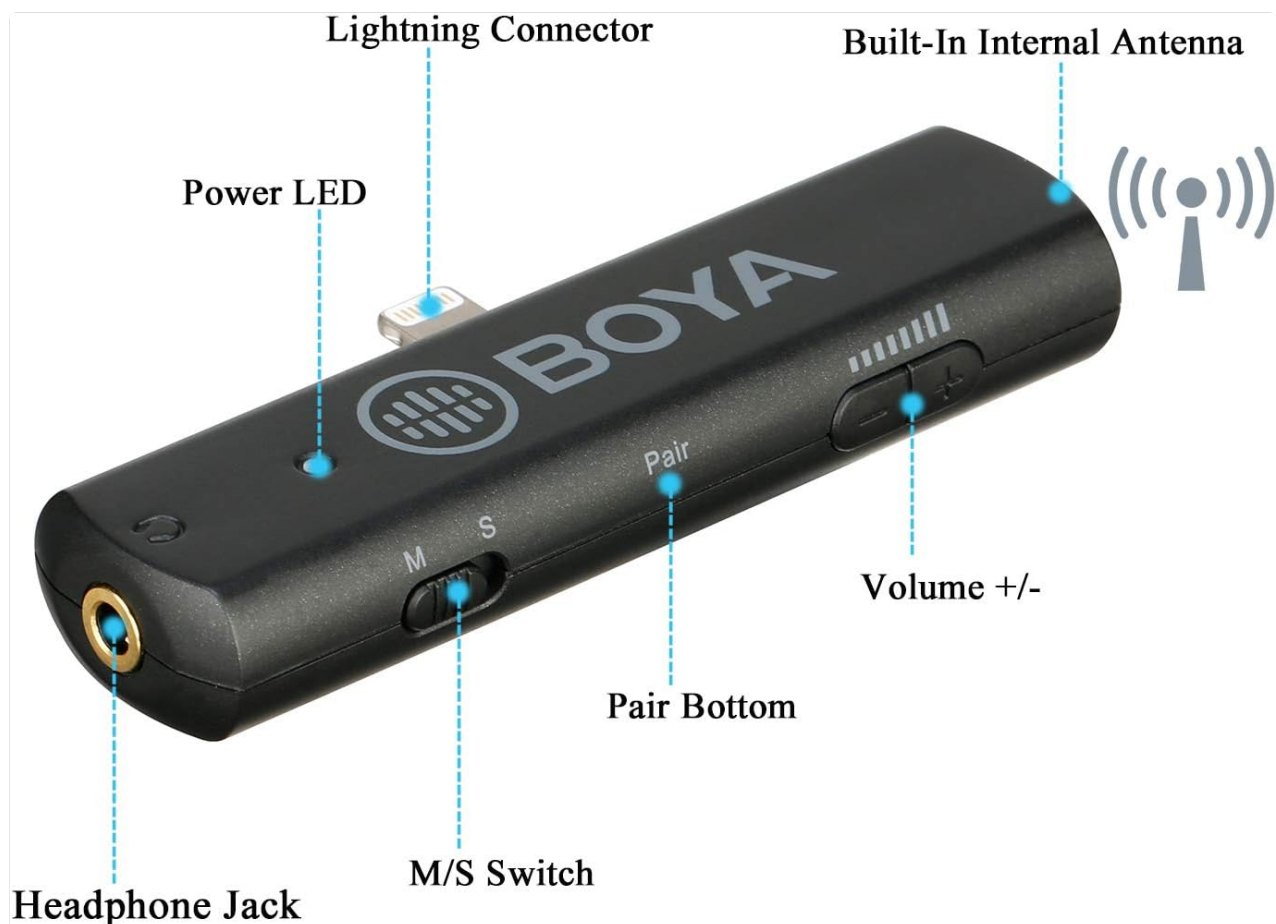
4.1 BY-WM4 PRO Transmitter (TX)



Figure 4.1: BY-WM4 PRO Transmitter (TX) overview.

- **Power LED:** Indicates power status and pairing.
- **Line In:** 3.5mm input for external audio sources.
- **Microphone Input:** 3.5mm input for the lavalier microphone.
- **Antenna:** For wireless signal transmission.
- **Power OFF/ON:** Slide switch to turn the unit on or off.
- **Pair Button:** Used for connecting the signal with the receiver.
- **Clip:** For attaching the transmitter to clothing or a belt.

4.2 BY-WM4 PRO Receiver (RXD)



2.4GHz Wireless Receiver

For iOS devices

Figure 4.2: BY-WM4 PRO Receiver (RXD) overview.

- **Lightning Connector:** For direct connection to iOS devices.
- **Power LED:** Indicates power status and pairing.
- **Built-in Internal Antenna:** For wireless signal reception.
- **M/S Switch:** Toggles between Mono and Stereo output modes.
- **Pair Button:** Used for connecting the signal with the transmitter.
- **Volume +/-:** Adjusts the audio output level.
- **Headphone Jack:** 3.5mm output for real-time audio monitoring.

5. SETUP

1. **Install Batteries:** Both the Transmitter (TX) and Receiver (RXD) units require two AAA batteries each. Open the battery compartment on the back of each unit and insert the batteries, ensuring correct polarity.
2. **Connect Receiver to Device:** Plug the Lightning connector of the RXD receiver directly into the Lightning port of your iPhone, iPad, or iPod.
3. **Connect Lavalier Microphone:** Plug the 3.5mm jack of the lavalier microphone into the 'MIC/LINE IN'

port on the TX transmitter. Secure the lavalier microphone to your clothing, approximately 6-8 inches from your mouth, using the included clip.

4. **Power On Units:** Slide the 'ON/OFF' switch on both the TX transmitter and RXD receiver to the 'ON' position. The Power LED indicators on both units should light up.
5. **Pairing (if necessary):** The transmitter and receiver are pre-paired from the factory. If they do not connect automatically (indicated by a solid blue Power LED on both units), press and hold the 'Pair' button on both the TX and RXD units simultaneously until the blue LED stops blinking and remains solid. This indicates a successful connection.



Figure 5.1: Initial setup of the BOYA WM4 PRO-K3 with a smartphone.



Figure 5.2: Receiver connected to a smartphone for recording.

6. OPERATING INSTRUCTIONS

1. **Recording:** Once the transmitter and receiver are successfully paired, open your preferred video recording application on your iOS device. The audio input will automatically switch to the BY-WM4 PRO-K3 system. Begin recording as usual.
2. **Audio Monitoring:** For real-time audio monitoring, plug headphones into the 3.5mm headphone jack on the RXD receiver. This allows you to hear the audio being captured by the microphone.
3. **Volume Adjustment:** Use the 'Volume +/-' buttons on the RXD receiver to adjust the output audio level to your recording device or headphones.
4. **Mono/Stereo Mode:** The RXD receiver features an 'M/S' switch. 'M' stands for Mono, which combines all audio channels into a single output. 'S' stands for Stereo, which keeps the left and right audio channels separate. Choose the mode that best suits your recording needs.
5. **Wireless Range:** Maintain the transmitter within the optimal operating range of up to 164 feet (50 meters) from the receiver for best performance. Obstacles and interference can reduce this range.



Figure 6.1: Using the BOYA WM4 PRO-K3 for mobile video recording.



Figure 6.2: The BOYA WM4 PRO-K3 in an interview setting.

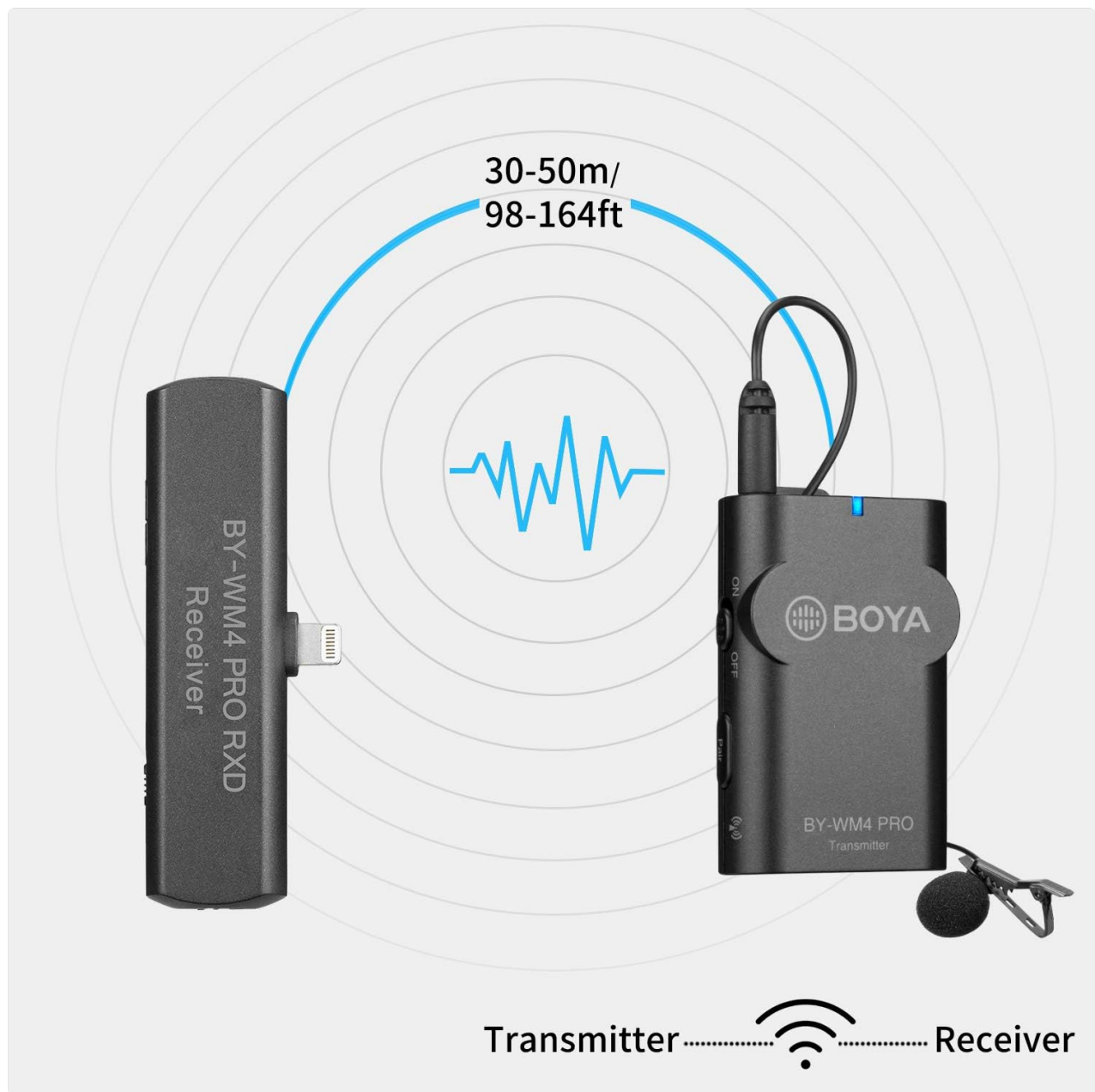


Figure 6.3: Wireless operation range.

6.1 Official Product Video: 2.4G Wireless Microphone Lavalier for Smartphone DSLR Camera

Your browser does not support the video tag.

This video provides a comprehensive overview of the BOYA WM4 PRO-K3, demonstrating its features, setup, and usage scenarios with both smartphones and DSLR cameras. It highlights the compact design, ease of use, and audio quality for various content creation needs.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the units. Do not use harsh chemicals or abrasive materials.
- **Battery Replacement:** Replace batteries when the Power LED indicator starts blinking or turns off, indicating low power. Always use fresh AAA batteries.
- **Storage:** When not in use for extended periods, remove the batteries from both units to prevent leakage and store the system in its provided carrying case in a cool, dry place.
- **Handle with Care:** Avoid dropping the units or exposing them to extreme temperatures, moisture, or dust.

8. TROUBLESHOOTING

• No Audio Output:

- Ensure both the transmitter and receiver are powered on and their Power LEDs are solid blue (indicating successful pairing).
- Check battery levels and replace if low.
- Verify the lavalier microphone is securely plugged into the transmitter's 'MIC/LINE IN' port.
- Confirm the receiver is correctly plugged into your iOS device's Lightning port.
- Check the volume level on the receiver and your recording device.

• Poor Audio Quality/Interference:

- Ensure the transmitter is within the optimal operating range (within 50 meters/164 feet) and there are no major obstacles between the units.
- Avoid environments with strong 2.4GHz interference (e.g., near Wi-Fi routers, other wireless devices).
- Check the lavalier microphone placement to avoid rubbing against clothing.
- Ensure the lavalier's foam windscreen is properly installed to reduce wind noise.

• Units Not Pairing:

- Turn both units off and then on again.
- Manually re-pair the units by pressing and holding the 'Pair' button on both the TX and RXD simultaneously until the blue LED becomes solid.

9. SPECIFICATIONS

Specification	Value
Brand	BOYA
Model Name	WM4 PRO-K3
Microphone Form Factor	Microphone System
Polar Pattern	Omnidirectional
Connectivity Technology	Wireless (2.4GHz)
Connector Type	Lightning
Power Source	Battery Powered (2x AAA per unit)
Audio Sensitivity	63 dB
Signal-to-Noise Ratio	84 dB

Item Weight	1.7 Ounces
Package Dimensions	6.73 x 4.65 x 2.24 inches
Color	Black
Compatible Devices	Personal Computer, Tablet, Camera, Smartphone

10. WARRANTY AND SUPPORT

Specific warranty information and detailed support contacts are not available in this manual. Please refer to the product packaging or the official BOYA website for comprehensive warranty details and customer support options.