

## BOYA BY-WM8PRO-K1

# BOYA BY-WM8Pro-K1 UHF Wireless Lavalier Microphone System

## INSTRUCTION MANUAL

### 1. Introduction

The BOYA BY-WM8Pro-K1 is a UHF Dual-Channel Wireless Lavalier Microphone System designed for professional audio recording. This system is suitable for a wide range of applications including interviews, electronic news gathering (ENG), electronic field productions (EFP), film production, business presentations, and educational content creation. It provides reliable audio transmission with 48 selectable UHF channels and offers both stereo and mono output modes.

The system includes one bodypack transmitter (TX8 Pro) and one portable receiver (RX8), an omnidirectional lavalier microphone, and necessary connection cables for various recording devices. Its robust design and user-friendly features ensure high-quality audio capture for DSLR cameras, mirrorless cameras, and video cameras.

### 2. Package Contents

- RX8 Portable UHF Wireless Receiver (1 unit)
- TX8 Pro UHF Wireless Bodypack Transmitter (1 unit)
- Omnidirectional Lavalier Microphone (1 unit)
- Stereo 3.5mm Mini-Jack Cable (1 unit)
- 3-Pin XLR Cable (1 unit)
- Detachable Shoemount Adapter (1 unit)
- Belt Clips (2 units)

### 3. Component Identification



Figure 3.1: BOYA BY-WM8Pro-K1 Receiver (left) and Transmitter (right) units.

### 3.1. RX8 Portable Receiver

- **Antennas:** For signal reception.
- **LINE OUT:** 3.5mm audio output to camera/recorder.
- **HEADPHONE:** 3.5mm headphone output for audio monitoring.
- **LCD Display:** Shows channel, battery status, audio level, and other settings.
- **SET Button:** Accesses menu and confirms selections.

- **+/- Buttons:** Navigates menu and adjusts values.
- **Power LED:** Blue indicates power on, red indicates low battery.
- **Power Switch:** On/Off control.
- **Battery Compartment:** Holds two AA batteries.

### 3.2. TX8 Pro Bodypack Transmitter

- **Antenna:** For signal transmission.
- **MIC IN:** 3.5mm input for lavalier microphone.
- **LINE IN:** 3.5mm input for line-level audio sources.
- **LCD Display:** Shows channel, battery status, audio level, and other settings.
- **SET Button:** Accesses menu and confirms selections.
- **+/- Buttons:** Navigates menu and adjusts values.
- **POWER / MUTE Button:** Short press to mute/unmute, long press to power on/off.
- **Power LED:** Blue indicates power on, red indicates low battery.
- **Battery Compartment:** Holds two AA batteries.



Figure 3.2: Top view of a BOYA BY-WM8Pro-K1 unit, illustrating the various ports and controls.

## 4. Setup

### 4.1. Battery Installation

1. Open the battery compartment cover on both the receiver and transmitter units.
2. Insert two AA batteries into each unit, ensuring correct polarity (+/-).
3. Close the battery compartment cover securely.



Figure 4.1: Battery compartment of a BOYA BY-WM8Pro-K1 unit, showing the removable battery holder for two AA batteries.

#### 4.2. Connecting the Lavalier Microphone

- Connect the 3.5mm locking connector of the lavalier microphone into the 'MIC IN' port on the TX8 Pro transmitter. Ensure the connector is fully inserted and locked to prevent accidental disconnection.
- Clip the lavalier microphone to the user's clothing, approximately 6-8 inches (15-20 cm) below the chin, facing upwards.

#### 4.3. Mounting the Receiver/Transmitter

- Attach the belt clip to the back of the transmitter for wearing on clothing.
- For the receiver, attach the shoemount adapter to the back. This allows mounting the receiver onto a camera's hot shoe or cold shoe mount.

#### 4.4. Connecting to a Camera/Recording Device

1. Use the provided 3.5mm mini-jack cable to connect the 'LINE OUT' port of the RX8 receiver to the microphone input of your camera or recording device.
2. Alternatively, use the provided 3-pin XLR cable if your recording device has an XLR input.



Figure 4.2: Connecting the receiver to a DSLR camera's audio input.



Figure 4.3: Receiver mounted on a DSLR camera, ready for use with headphones for monitoring.





Figure 4.4: System setup with a smartphone on a tripod, demonstrating versatility.

## 5. Operating Instructions

### 5.1. Powering On/Off

- **Receiver (RX8):** Slide the 'POWER' switch to the 'ON' position.
- **Transmitter (TX8 Pro):** Press and hold the 'POWER / MUTE' button for approximately 2 seconds.
- To power off, repeat the respective steps.

### 5.2. Channel Selection and Synchronization

1. On both the receiver and transmitter, press the 'SET' button to enter the menu.
2. Use the '+/-' buttons to navigate to the channel selection option.
3. Select a desired channel. Ensure both the receiver and transmitter are set to the same channel for proper communication.
4. The system features PLL-synthesized tuning for stable signal.

### 5.3. Audio Level Adjustment

- On the receiver, use the '+/-' buttons to adjust the output audio level to match the input sensitivity of your camera or recording device. Monitor the audio levels on your camera to avoid clipping.
- The transmitter also allows for input gain adjustment via its menu to optimize microphone sensitivity.

### 5.4. Monitoring Audio

- Connect headphones to the 'HEADPHONE' jack on the RX8 receiver to monitor the audio in real-time. This is crucial for ensuring clear sound and detecting any interference or issues.

### 5.5. Mute Function

- On the TX8 Pro transmitter, a short press of the 'POWER / MUTE' button will mute the microphone input. The LCD display will indicate 'MUTE'. Press again to unmute.

## 6. Maintenance

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- **Cleaning:** Use a soft, dry cloth to clean the units. Avoid using harsh chemicals or abrasive materials.
- **Battery Replacement:** Replace AA batteries when the power LED glows red or the battery indicator on the LCD shows low power. Always use fresh batteries for optimal performance.
- **Storage:** When not in use for extended periods, remove batteries from both units to prevent leakage. Store the system in a cool, dry place away from direct sunlight and extreme temperatures.
- **Cable Care:** Handle cables carefully. Avoid sharp bends or excessive pulling to prevent damage to connectors and wiring.

## 7. Troubleshooting

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- **No Audio Output:**
  - Ensure both transmitter and receiver are powered on.
  - Verify that both units are set to the same channel.
  - Check battery levels; replace if low.
  - Confirm the lavalier microphone is securely connected to the transmitter's 'MIC IN' port.
  - Ensure the receiver's 'LINE OUT' is correctly connected to the camera/recorder's audio input.
  - Check if the transmitter is muted.
- **Poor Audio Quality/Interference:**
  - Change to a different channel to avoid interference from other wireless devices.
  - Ensure the transmitter and receiver are within the operational range (up to 300 feet line of sight).
  - Minimize obstacles between the transmitter and receiver.
  - Adjust the input gain on the transmitter and output level on the receiver to prevent distortion or low signal.
  - Check for damaged cables or connectors.
- **Battery Compartment Issues:**
  - Exercise caution when installing or removing batteries to prevent damage to the battery compartment. Avoid excessive force.

## 8. Specifications

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Feature	Detail
Microphone Form Factor	Microphone System
Item Dimensions (L x W x H)	1.14 x 2.64 x 8.19 inches
Power Source	Battery Powered (2x AA per unit)
Signal-to-Noise Ratio	80 dB
Hardware Platform	Camcorder, Camera
Number of Channels	48 (UHF)
Item Weight	8.8 ounces (250 Grams)
Connectivity Technology	Wireless (UHF)
Connector Type	3.5 mm Jack, XLR
Special Feature	3.5mm jack, Wireless, Dual-Channel, LCD Display
Compatible Devices	Camcorder, Camera, Headphones
Color	Black
Polar Pattern	Omnidirectional (Lavalier Mic)
Audio Sensitivity	70 Decibels
Operation Range	300 feet (without obstacle)

### 9. Warranty and Support

Specific warranty information for the BOYA BY-WM8Pro-K1 system is not provided in this manual. For warranty details, technical support, or service inquiries, please refer to the official BOYA website or contact your authorized BOYA dealer. Keep your purchase receipt as proof of purchase for any warranty claims.

### Related Documents - BY-WM8PRO-K1

	<p><a href="#">BOYA BOYAMIC 2.4GHz Wireless Microphone System User Manual</a></p> <p>Comprehensive user manual for the BOYA BOYAMIC 2.4GHz dual-channel wireless microphone system. Covers features, setup, operation, troubleshooting, and specifications for vlogging, live streaming, and mobile journalism.</p>
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	<p><a href="#">BOYA BY-XM6 Ultracompact Wireless Microphone System User Manual</a></p> <p>Comprehensive user manual for the BOYA BY-XM6 Ultracompact 2.4 GHz Dual-channel Wireless Microphone System. Details product structure, operation, features, specifications, and packing lists for the BY-XM6-S1 and BY-XM6-S2 models, providing guidance for setup and use.</p>
	<p><a href="#">BOYA BY-WM8 Pro UHF Wireless Microphone System: Operating Instructions &amp; Guide</a></p> <p>Detailed operating instructions for the BOYA BY-WM8 Pro UHF Dual-Channel Wireless Microphone System. Learn about setup, features, troubleshooting, and specifications for professional audio recording.</p>
	<p><a href="#">BOYA BY-WM8 UHF Dual-Channel Wireless Microphone System Instruction Manual</a></p> <p>Comprehensive instruction manual for the BOYA BY-WM8 UHF Dual-Channel Wireless Microphone System, covering setup, operation, installation, and troubleshooting for ENG, EFP, and DSLR video applications.</p>
	<p><a href="#">BOYA BY-WM8 Pro-K2 UHF Dual-Channel Wireless Microphone System User Manual</a></p> <p>User manual for the BOYA BY-WM8 Pro-K2 UHF Dual-Channel Wireless Microphone System, covering setup, operation, features, and technical specifications for optimal audio capture.</p>
	<p><a href="#">BOYA BY-WM6 UHF Wireless Microphone System User Manual</a></p> <p>User manual for the BOYA BY-WM6 UHF wireless microphone system, detailing installation, operation, specifications, and troubleshooting for ENG, EFP, and DSLR video applications.</p>