

## BOYA 4-Channel 2.4G Wireless Microphone System

# BOYA 4-Channel 2.4G Wireless Microphone System User Manual

Model: 4-Channel 2.4G Wireless Microphone System

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## 1. PRODUCT OVERVIEW

The BOYA 4-Channel 2.4G Wireless Microphone System is designed for high-quality audio capture with smartphones and other compatible devices. This system features automatic pairing, intelligent noise cancellation, and a long transmission range, making it suitable for various recording scenarios.

### Key Features:

- **4-Channel Wireless System:** Supports up to four microphones simultaneously with automatic pairing for ease of use.
- **200M Transmission Range:** Utilizes 2.4G digital frequency for stable connection up to 200 meters in open environments.
- **Superior Audio Quality:** Achieves an SNR of 80dB and 48K/16bit recording, with 120dB SPL to prevent distortion.
- **Advanced Noise Cancellation:** Features dual intelligent noise cancellation technology and a windscreen for clear audio in noisy settings.
- **Versatile Design:** TX microphone includes a rotating clip and omnidirectional diaphragm. Comes with a portable charging case.

## Multi-Scene Use

The kits can record multiple sound sources for 4-person performances, conferences, speeches, podcasts, vlogging, mobile journalism, and more.



  
Vlogging



  
Mobile journalism



  
Podcasts

Image 1.1: The BOYA wireless microphone system being used in multiple scenarios, including vlogging, mobile journalism, and podcasts, demonstrating its versatility.

# Exceptional High-quality Sound

Wide-range 20-20.000Hz frequency response



Signal-to-Noise  
Ratio >80dB



Sensitivity  
-42±2dB



Distortion  
0.1%



Image 1.2: Visual representation of the microphone's high-quality sound capabilities, highlighting a wide frequency response of 20-20,000Hz, Signal-to-Noise Ratio >80dB, Sensitivity -42±2dB, and Distortion 0.1%.



Image 1.3: A hand holding one of the BOYA microphones, emphasizing its lightweight design at approximately 10.5g, making it portable and easy to use.

## 2. SETUP INSTRUCTIONS

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### 2.1 Unboxing and Initial Charge

Upon unboxing, ensure all components are present: Transmitter(s) (TX), Receiver (RX), and Charging Case. It is recommended to fully charge the transmitters and receiver using the provided charging case before first use.

- Place the transmitters and receiver into the charging case.
- Connect the charging case to a USB-C power source (DC 5V/2A) using a compatible cable.
- Charging indicators on the devices will show charging status. A full charge typically takes approximately 2 hours for the case and individual units.

## With Charging Case

It ensures your uninterrupted work for a long time, such as live streaming

**6H**

TX Battery Life

**2H**

Charging Time

**2TIMES**

Charging Case Times(4\*TX)



Image 2.1: The BOYA wireless microphone system with its charging case, illustrating the 6-hour TX battery life, 2-hour charging time, and the case providing 2 full charges for 4 transmitters.

## 2.2 Connecting the Receiver

The receiver is designed to connect directly to your smartphone or compatible device. For the Lightning version, plug the receiver into the Lightning port of your iPhone or iPad.

## 2.3 Automatic Pairing

The BOYA system features automatic pairing. Once the transmitters are powered on and the receiver is connected to your device, they should automatically establish a connection. A solid indicator light on both the transmitter and receiver typically signifies a successful connection.

## 3. OPERATING INSTRUCTIONS

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### 3.1 Powering On/Off

To power on a transmitter, press and hold the power button until the indicator light illuminates. Repeat for all desired transmitters. To power off, press and hold the power button again until the light turns off.

## 3.2 Microphone Placement

Attach the transmitter to your clothing using the rotating clip. For optimal sound capture, position the microphone approximately 6-8 inches (15-20 cm) from your mouth. The omnidirectional polar pattern captures sound from all directions, providing flexibility in placement.



Image 3.1: Illustration of the omnidirectional polar pattern, indicating 360-degree sound pickup. Also shows LED indicators for noise cancellation: static green for enabled, static blue for disabled.

## 3.3 Noise Cancellation

The system features intelligent noise cancellation. To activate or deactivate noise cancellation, press the dedicated noise reduction button on the transmitter. The indicator light will change color (e.g., static green for enabled, static blue for disabled) to confirm the status.

# One-click noise reduction

Live streaming without being bothered by external noise



Image 3.2: The BOYA microphone highlighting its one-click noise reduction feature, with a visual representation of sound waves before and after noise reduction, demonstrating its effectiveness in reducing external noise.

## 3.4 Monitoring Audio and Smartphone Speaker Support

When the receiver is connected to your smartphone, you can monitor the audio through headphones connected to the receiver's monitoring port (if available) or directly through the smartphone's speakers. If your phone's speaker is enabled, sound can be played directly without unplugging the receiver.

# Support Smartphone Speakers



**HINT:** Once your phone's speaker is enabled, sound can be played directly without unplugging the receiver.



Image 3.3: The BOYA receiver plugged into a smartphone, demonstrating its compatibility with smartphone speakers. A hint indicates that sound can be played directly through the phone's speaker once enabled, without needing to unplug the receiver.

## 4. MAINTENANCE

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### 4.1 Cleaning

Wipe the microphone transmitters, receiver, and charging case with a soft, dry cloth. Do not use liquid cleaners or solvents, as these can damage the devices. Ensure no moisture enters the ports or microphone capsules.

### 4.2 Storage

Store the system in its charging case or a protective pouch when not in use. Keep it in a cool, dry place away from direct sunlight, extreme temperatures, and high humidity. Avoid storing near strong magnetic fields.

### 4.3 Battery Care

To prolong battery life, avoid fully discharging the devices frequently. If storing for an extended period, charge the batteries to approximately 50% every few months.

## 5. TROUBLESHOOTING

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- **No Sound Output:**

- Ensure both transmitter(s) and receiver are powered on and fully charged.
- Verify the receiver is securely connected to your recording device.
- Check the recording app settings on your smartphone to ensure the external microphone is selected.
- Confirm the devices are paired (indicator lights are solid). If not, power cycle both units.

- **Poor Audio Quality/Interference:**

- Ensure the microphone is positioned correctly and not obstructed.
- Activate noise cancellation if in a noisy environment.
- Move closer to the receiver to reduce the transmission distance.
- Avoid environments with strong 2.4Ghz interference (e.g., Wi-Fi routers, other wireless devices).

- **Short Battery Life:**

- Ensure devices are fully charged before use.
- Battery performance may degrade over time with extensive use.

- **Devices Not Pairing:**

- Power off and then power on both the transmitter(s) and receiver.
- Ensure they are within close proximity during the initial pairing attempt.

## 6. SPECIFICATIONS

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### Transmitter (TX)

<b>Transmission Type</b>	2.4G digital frequency
<b>Modulation</b>	GFSK
<b>Polar Pattern</b>	Omnidirectional
<b>Antenna</b>	Built-in PIFA antenna
<b>Operating Range</b>	Up to 200m (in open environment without obstacles)
<b>RF Output Power</b>	<10dBm
<b>Distortion</b>	<0.1%
<b>Frequency Response</b>	20Hz-20kHz
<b>Sensitivity</b>	-42±2dB
<b>Signal-to-Noise Ratio</b>	> 80dB
<b>Audio Input</b>	Built-in Capsule
<b>Battery Voltage/Capacity</b>	3.7V/95mAh (Built-in Li-ion)
<b>Battery Life</b>	Approx. 6 hours

<b>Charging Time</b>	Approx. 2 hours
<b>Weight</b>	Approx. 10.5g
<b>Dimensions</b>	62.6mm×18.3mm×10.2mm
<b>Operating Temperature</b>	0°C to +50°C
<b>Storage Temperature</b>	-20°C to +55°C

## Receiver (RX)

<b>Transmission Type</b>	2.4G digital frequency
<b>Modulation</b>	GFSK
<b>Antenna</b>	Built-in PIFA antenna
<b>Operating Range</b>	Up to 200m (in open environment without obstacles)
<b>RF Output Power</b>	<10dBm
<b>Frequency Response</b>	20Hz-20kHz
<b>Signal-to-Noise Ratio</b>	> 80dB
<b>Audio Input</b>	USB type-C connector (for power/data)
<b>Power Requirements</b>	Powered by the external device
<b>Weight</b>	Approx. 9g
<b>Dimensions</b>	62.6mm×18.3mm×10.2mm
<b>Operating Temperature</b>	0°C to +50°C
<b>Storage Temperature</b>	-20°C to +55°C

## Charging Case

<b>Battery Type</b>	Built-in lithium-ion battery
<b>Battery Voltage/Capacity</b>	3.7V/ 1500mAh
<b>Charging Time</b>	Approx. 2 hours
<b>Power Requirements</b>	USB-C (DC 5V/2A)
<b>Weight</b>	Approx. 160g
<b>Dimensions</b>	143.6mm×80.5mm×35.5mm
<b>Operating Temperature</b>	0°C to +50°C
<b>Storage Temperature</b>	-20°C to +55°C

## General Product Specifications

<b>Package Dimensions</b>	6.3 x 4.72 x 2.76 inches
<b>Item Weight</b>	15.4 ounces
<b>ASIN</b>	B0DR8RF5K8
<b>Manufacturer</b>	BOYA

## 7. WARRANTY & SUPPORT

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For detailed warranty information and technical support, please refer to the official BOYA website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

Manufacturer: BOYA

For further assistance, visit: [BOYA Official Store on Amazon](#)