

## BOYA BY-M1

# BOYA BY-M1 Omnidirectional Lavalier Microphone

## INSTRUCTION MANUAL

Model: BY-M1 | Brand: BOYA

### 1. Introduction

The BOYA BY-M1 is an omnidirectional lavalier microphone designed for versatile audio capture across a wide range of devices. It is compatible with smartphones, DSLRs, camcorders, audio recorders, and personal computers. This microphone is engineered to provide clear, high-quality sound, making it suitable for video production, presentations, podcasting, and live streaming.

Key features include:

- **Superior Sound Quality:** Captures crystal-clear audio with an omni-directional polar pattern for consistent sound pickup from all directions.
- **Minimal Background Noise:** Achieves pristine audio with a signal-to-noise ratio of 74dB or more, effectively reducing unwanted ambient noise.
- **Effortless Compatibility:** Connects to a wide range of devices using the 3.5mm TRRS connector and includes a 1/4" adapter.
- **Ultimate Portability:** Compact design with an included storage pouch for easy transport and protection.
- **Versatile Power Solution:** Powered by a single LR44 battery (included) for extended recording sessions.



*Figure 1: The BOYA BY-M1 Omnidirectional Lavalier Microphone.*

## 2. Package Contents

The BOYA BY-M1 package typically includes the following items:

- BOYA BY-M1 Lavalier Microphone with integrated 6-meter (20-foot) cable
- Lapel Clip
- Foam Windscreen
- 1/4" Adapter
- LR44 Battery
- Storage Pouch
- Instruction Manual



*Figure 2: Included accessories with the BY-M1 microphone.*

## 3. Setup

### 3.1. Battery Installation

The BY-M1 microphone requires a single LR44 battery for operation when used with cameras or other devices that do not supply plug-in power. For smartphone use, the battery is not required as smartphones provide plug-in power.

1. Unscrew the two halves of the control module to reveal the battery compartment.
2. Insert the LR44 battery with the positive (+) side facing upwards.
3. Carefully screw the two halves of the control module back together until secure.



Figure 3: Battery compartment of the control module.

### 3.2. Connecting to Devices

The control module features a switch to select between 'Camera' and 'OFF/Smartphone' modes. Ensure the correct mode is selected for your device to function properly.

- **For Smartphones:** Slide the ON/OFF switch to the **OFF/Smartphone** position. The microphone will draw power directly from your smartphone.
- **For DSLRs, Camcorders, Audio Recorders, PCs:** Slide the ON/OFF switch to the **Camera** position. The microphone will use the installed LR44 battery for power.



*Figure 4: The Camera/OFF/Smartphone switch on the control module.*

Connect the 3.5mm TRRS plug into your device's microphone input jack. If your device requires a 1/4" input, use the provided 1/4" adapter.





*Figure 5: Device compatibility with the BY-M1 microphone.*

## **4. Operating Instructions**

### **4.1. Attaching the Microphone**

Attach the lapel clip to the microphone and then securely clip the microphone to your clothing, ideally near your mouth for optimal sound capture. The foam windscreen helps reduce plosives and wind noise.

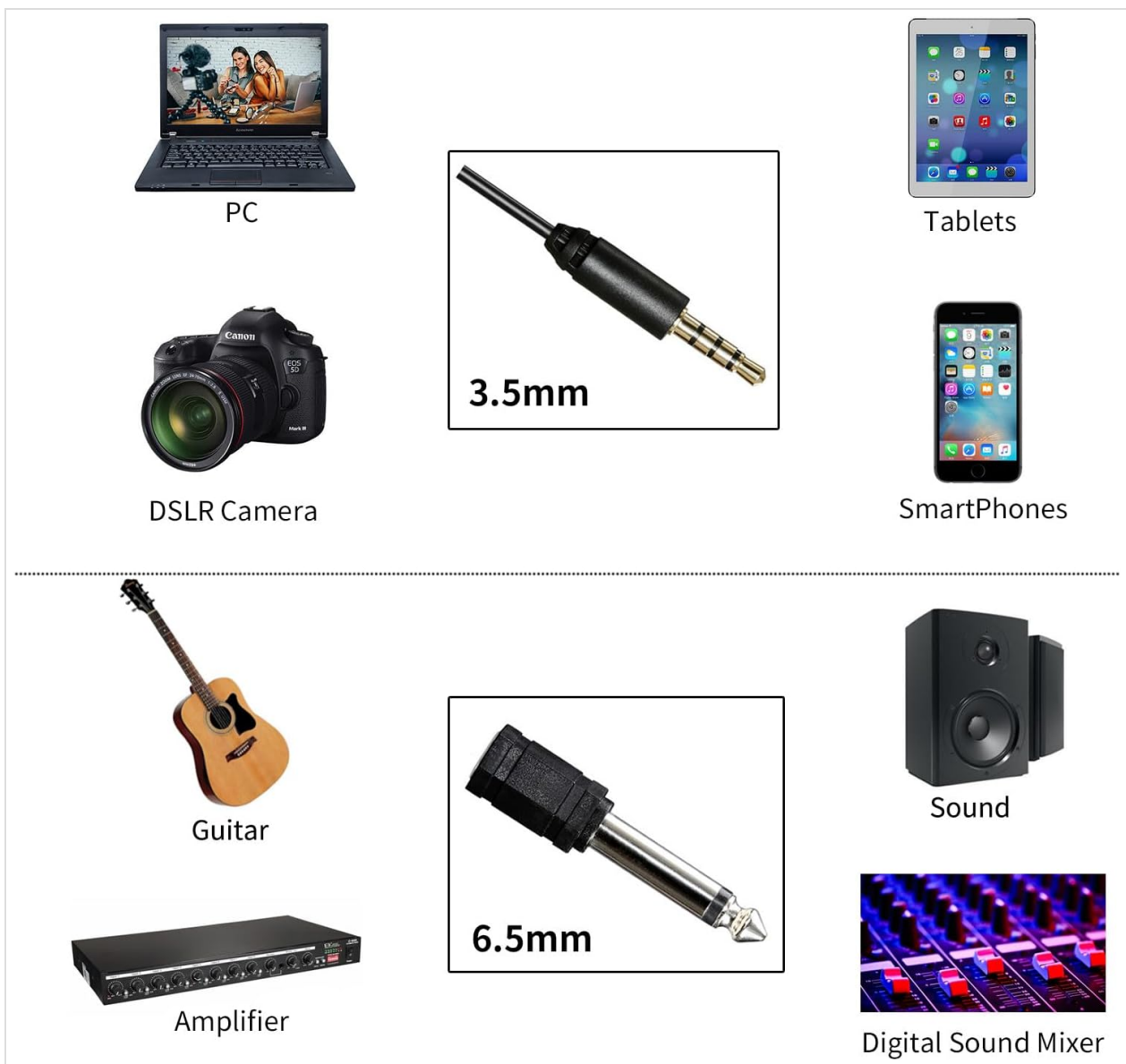


Figure 6: Proper placement of the lavalier microphone.

## 4.2. Recording Tips

- The BY-M1 is an omnidirectional microphone, meaning it picks up sound equally from all directions. This is beneficial for capturing ambient sound or when the sound source is moving.
- For best results, especially when recording speech, try to minimize background noise in your environment.
- Utilize the long 6-meter cable to position yourself at an optimal distance from your recording device while maintaining clear audio.
- Always perform a short test recording to ensure the microphone is functioning correctly and the audio levels are appropriate before a critical recording session.

## 5. Maintenance

### 5.1. Battery Replacement

If using the microphone in 'Camera' mode and the audio quality degrades or the microphone stops functioning, the LR44 battery may need replacement. Follow the battery installation steps in Section 3.1.

### 5.2. Cleaning and Storage

- Gently clean the microphone and control module with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials.
- Store the microphone and its accessories in the provided storage pouch to protect them from dust and damage.
- When not in use, ensure the switch is in the 'OFF/Smartphone' position to conserve battery life.

## 6. Troubleshooting

### • No Sound/Low Volume:

- Ensure the switch on the control module is set to the correct position ('Camera' or 'OFF/Smartphone') for your device.
- Check if the LR44 battery is correctly installed and has sufficient charge (if using 'Camera' mode).
- Verify that the 3.5mm plug is fully inserted into your device's microphone input.
- Adjust the input volume settings on your recording device.

### • Excessive Background Noise:

- As an omnidirectional microphone, it will pick up sounds from all directions. Try to record in a quiet environment.
- Ensure the foam windscreen is properly attached to reduce wind noise and plosives.
- Check for any loose connections that might introduce static or hum.

### • Intermittent Audio:

- Inspect the cable for any damage or kinks.
- Ensure all connections are secure.

## 7. Specifications

Feature	Detail
Transducer	Electret Condenser
Polar Pattern	Omnidirectional
Frequency Range	65Hz - 18kHz
Signal-to-Noise Ratio	74 dB SPL
Sensitivity	-30dB +/- 3dB / 0dB=1V/Pa, 1kHz
Output Impedance	1000 Ohm or less
Connector	3.5mm (1/8") 4-pole gold plug
Battery Type	LR44
Cable Length	6.0 meters (20 feet)



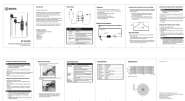

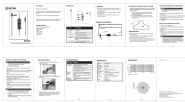

Microphone Dimensions	18.00mmH x 8.30mmW x 8.30mmD
Microphone Weight	2.5g
Power Module Weight	18g
Compatible Devices	Smartphones, DSLRs, Camcorders, Audio recorders, PCs



## 8. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the official BOYA website or contact your local distributor. Keep your purchase receipt as proof of purchase for warranty claims.

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### Related Documents - BY-M1

	<p><a href="#">BOYA BY-M1DM Dual Omni-directional Lavalier Microphone User Manual and Guide</a></p> <p>Comprehensive user manual for the BOYA BY-M1DM Dual Omni-directional Lavalier Microphone. This guide covers features, setup, usage with smartphones, cameras, laptops, and troubleshooting tips.</p>
	<p><a href="#">BOYA BY-M1S Universal Lavalier Microphone Instruction Manual</a></p> <p>Comprehensive instruction manual for the BOYA BY-M1S universal lavalier microphone, detailing its features, specifications, product structure, and usage with various devices like smartphones, cameras, and laptops.</p>
	<p><a href="#">BOYA BY-M1 Universal Lavalier Microphone User Manual</a></p> <p>Comprehensive guide to the BOYA BY-M1 universal lavalier microphone, covering features, setup, usage with cameras and smartphones, troubleshooting, and specifications.</p>
	<p><a href="#">BOYA BY-M1 Universal Lavalier Microphone Instruction Manual</a></p> <p>This manual provides instructions for the BOYA BY-M1 Universal Lavalier Microphone, covering its features, package contents, setup, usage with various devices (smartphones, cameras, laptops), battery replacement, troubleshooting, and specifications.</p>

	<p><a href="#">BOYA BY-M100 Series Miniature Microphones: Quick Start Guide &amp; Specifications</a></p> <p>Comprehensive guide for BOYA BY-M100, BY-M110, BY-M100D, BY-M100UC, and BY-M100UA miniature microphones, covering setup, features, and technical specifications.</p>
	<p><a href="#">BOYA BY-M1 Pro II Universal Lavalier Microphone - Instruction Manual &amp; Specifications</a></p> <p>Detailed instruction manual for the BOYA BY-M1 Pro II universal lavalier microphone. Learn about its features, setup, usage with cameras and smartphones, specifications, and monitoring audio.</p>