

BOYA Magic-05 (USB-C)

BOYA Magic-05 Wireless Lavalier Microphone User Manual

Model: Magic-05 (USB-C)

1. INTRODUCTION

The BOYA Magic-05 is a versatile wireless lavalier microphone system designed for high-quality audio capture with USB-C compatible devices. This manual provides detailed instructions for the proper setup, operation, and maintenance of your device to ensure optimal performance.



Figure 1: Overview of the BOYA Magic-05 Wireless Lavalier Microphone system components.

2. WHAT'S IN THE BOX

Verify that all items listed below are included in your package:

- Transmitter ×2
- USB-C Receiver ×1

- Charging Case x1
- Magnet x2
- Fur Windshield for transmitter x2
- Fur Windshield for Charging Case x1
- Foam Windscreen for Charging Case x1
- USB-C to USB-A Data Cable x1
- Storage Bag x1

BOYA Magic-05(USB-C)



Charging Case x1



Transmitter x2



USB-C Receiver x1



Foam Windscreen
for Charging Case x1



Fur Windshield
for transmitter x2



All-in-One Storage Bag x1



Fur Windshield for transmitter x2



USB-C to USB-A
Data Cable x1



Magnet x2

Figure 2: Contents of the BOYA Magic-05 package.

3. PRODUCT FEATURES

3.1 Transformable 4-in-1 Design

The BOYA Magic-05 offers exceptional versatility with its 4-in-1 design, allowing it to function as a clip-on lavalier, a handheld microphone (when inserted into the charging case), a desktop microphone (with an optional stand), or an on-camera microphone (by plugging the receiver directly into a camera).

1 Mic 4 Forms Multi-Scenario Ready

Note: Desktop stand is not included in the kit and must be purchased separately.



Figure 3: The BOYA Magic-05 in its four transformable forms: Desktop, Clip-on, On-Camera, and Handheld.

3.2 AI Noise Reduction

Equipped with True AI-powered noise reduction technology, the microphone effectively separates vocals from background noise in real-time, suppressing up to 40dB of interference sound. This feature ensures clear vocal recordings in various environments.

AI Noise Cancellation

Intelligent noise reduction without affecting vocals



Figure 4: Visual representation of the AI Noise Cancellation feature.

3.3 Compact Design & Extended Battery Life

The microphone transmitters are ultra-slim at 13mm and weigh only 7g. Each transmitter provides approximately 6 hours of use, and the charging case extends total usage time to up to 30 hours. The 2.4GHz wireless technology ensures a stable connection up to 100 meters (328 feet) line-of-sight. The receiver's USB-C port also allows for charging your connected device while recording.

7g of Powerfully Minimal Design



Figure 5: The minimal and lightweight design of the BOYA Magic-05.

Studio-Grade Clarity Meets Immersive Audio Capture

 **24-bit**

Bit Depth

 **48 kHz**

Sampling Rate

 **120dB**

Sound Pressure Level

 **$\geq 80\text{dB}$**

Signal-to-Noise Ratio



Figure 6: Battery performance details for the BOYA Magic-05.

30 Hours Battery for All-Day Recording



Figure 7: Illustration of the 100m (328ft) wireless transmission range.

3.4 Professional Audio Protection

The BOYA Magic-05 incorporates a smart limiter to prevent audio clipping during sudden loud noises and a -12dB safety track feature that records a backup audio track to safeguard against distortion. It captures full-band audio from 20Hz-20kHz with 48kHz/24-bit quality.

Smart Limiter&Safety Track to Protect Your Audio

BOYA Magic combines the smart limiter with the -12dB safety track to effectively prevent audio clipping and distortion-reliable recording, less editing.



Figure 8: Smart Limiter and Safety Track functionality.

2.4GHz Transmission 100M(328FT) Hassle-free Wireless Recording

100m



Figure 9: Studio-grade audio clarity specifications.

3.5 Plug & Play Wide Compatibility

The Magic-05 features a USB-C receiver for direct compatibility with USB-C Android smartphones, iPhone 16/15 series, tablets, laptops, and computers. It operates as a plug-and-play device, requiring no additional applications for basic functionality.

4. SETUP

- Charge the Devices:** Before first use, ensure both transmitters and the charging case are fully charged using the provided USB-C to USB-A data cable.
- Pairing:** The transmitters and receiver are pre-paired at the factory. Simply remove them from the charging case, and they will automatically connect. The indicator lights will confirm connection status.
- Connect the Receiver:** Plug the USB-C receiver directly into the USB-C port of your recording device (smartphone, tablet, laptop, or camera).
- Android Device Note:** For Android devices, you may need to enable the OTG function in your device settings before connecting the microphone. Refer to your device's manual for specific instructions on enabling OTG.

5. OPERATING INSTRUCTIONS

5.1 Transmitter Operation

- Power On/Off:** The transmitters power on automatically when removed from the charging case and power off when returned.
- Noise Reduction:** Press the designated button on the transmitter to toggle AI noise reduction on or off.
- Mute Function:** A dedicated button on the transmitter allows for quick muting and unmuting of the microphone.

5.2 Receiver Operation

- Connection Status:** Indicator lights on the receiver show connection status with the transmitters.
- Device Charging:** The USB-C port on the receiver allows for pass-through charging of your connected device while the microphone system is in use.

5.3 Usage Modes

- Clip-On Lavalier:** Attach the transmitter directly to clothing using its integrated clip. For enhanced wind noise reduction, attach the fur windshield.
- Handheld Microphone:** Insert a transmitter into the charging case to convert it into a handheld microphone.
- Desktop Microphone:** For desktop use, an optional stand (sold separately) can be attached to the charging case.
- On-Camera Microphone:** The receiver can be directly plugged into a camera's USB-C port for on-camera audio capture.

5.4 BOYA Central App (Optional)

For advanced control and settings, download the BOYA Central app. This app allows for adjustments such as output gain, noise cancellation levels, recording modes (mono/stereo), and EQ settings.

6. MAINTENANCE

- Cleaning:** Use a soft, dry cloth to clean the microphone and charging case. Avoid using harsh chemicals or abrasive

materials.

- **Storage:** Store the device in its provided storage bag in a cool, dry place when not in use.
- **Battery Care:** To prolong battery life, avoid fully discharging the device frequently. Charge regularly, even if not in constant use.
- **Windshields:** Clean fur windshields gently by shaking or using a soft brush. Replace foam windscreens if they become damaged or lose effectiveness.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No audio recording	Microphone not paired/connected; Receiver not properly inserted; Muted microphone; Low battery.	Ensure transmitters and receiver are paired (indicator lights solid blue). Re-insert receiver firmly. Check if microphone is muted. Charge all components.
Poor audio quality/Noise	AI Noise Reduction off; Environmental noise too high; Microphone too far from source; Wind interference.	Activate AI Noise Reduction. Move to a quieter environment. Position microphone closer to the speaker. Use fur windshields in windy conditions.
Intermittent connection	Out of range; Obstructions; Interference from other 2.4GHz devices.	Ensure devices are within 100m line-of-sight. Reduce obstructions between transmitter and receiver. Move away from other wireless devices.
Android device not recognizing mic	OTG function disabled.	Enable OTG function in your Android device's settings.

8. SPECIFICATIONS

Model: Magic-05 (USB-C)

Item Weight: 1.76 ounces (50g)

Package Dimensions: 7.36 x 3.74 x 2.99 inches (18.7 x 9.5 x 7.6 cm)

Compatible Devices: Smartphones, Tablets, Laptops, Computers with USB Type-C port

Connector Type: USB Type-C

Wireless Technology: 2.4GHz

Operating Range: Up to 100 meters (328 feet) line-of-sight

Transmitter Battery Life: Approximately 6 hours

Total Battery Life (with Charging Case): Up to 30 hours

Noise Reduction: AI-powered, up to -40dB cancellation depth

Audio Quality: 48kHz/24-bit, 20Hz-20kHz frequency response, ≥80dB Signal-to-Noise Ratio, 120dB Sound Pressure Level

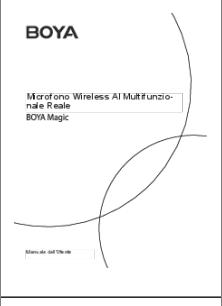
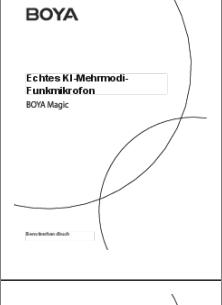
Audio Protection: Smart Limiter, -12dB Safety Track

9. WARRANTY AND SUPPORT

BOYA products are backed by an official warranty and dedicated technical support. For warranty claims, technical assistance, or further inquiries, please refer to the contact information provided on the official BOYA website or your purchase documentation.

© 2025 BOYA. All rights reserved.

Related Documents

	<p><u>BOYA Magic: Manuale Utente del Sistema Microfono Wireless AI Multifunzionale</u></p> <p>Guida completa al sistema microfono wireless BOYA Magic. Scopri le caratteristiche, le specifiche tecniche, le istruzioni d'uso e la risoluzione dei problemi per creare contenuti audio di alta qualità.</p>
	<p><u>BOYA Magic: Echtes KI-Mehrmodi-Funkmikrofon Benutzerhandbuch</u></p> <p>Umfassendes Benutzerhandbuch für das BOYA Magic KI-gestützte drahtlose Mikrofonsystem. Erfahren Sie mehr über Funktionen, Einrichtung, Bedienung und Fehlerbehebung für Content Creation, Livestreaming und Vlogging.</p>
	<p><u>BOYA Magic AI-Powered Wireless Microphone System User Manual</u></p> <p>Comprehensive user manual for the BOYA Magic AI-powered wireless microphone system, detailing features, components, operation, and troubleshooting for content creators and professionals.</p>
	<p><u>EU Declaration of Conformity - BOYA Wireless Microphones</u></p> <p>Official EU Declaration of Conformity for BOYA AI-Powered Transformable Wireless Microphones, detailing compliance with Radio Equipment, EMC, WEEE, and RoHS directives. Includes manufacturer details and model list.</p>