

## BOYA BOYA Magic-02

# BOYA Magic Wireless Mini Microphones User Manual

Model: BOYA Magic-02

## 1. INTRODUCTION

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The BOYA Magic Wireless Mini Microphones system offers a versatile audio solution for various recording needs, including use with iPhones, Android devices, PCs, and cameras. This compact and lightweight microphone system features advanced AI noise reduction, high-fidelity audio capture at 48kHz/24bit, and app control for enhanced functionality. Designed for portability and ease of use, it transforms into four different microphone forms: lavalier, handheld, desktop, and on-camera, making it suitable for diverse recording scenarios.



Figure 1.1: Overview of the BOYA Magic Wireless Mini Microphones system, showing the main unit, clip-on microphone, and various receiver adapters (USB-C, Lightning, 3.5mm TRS).

## 2. WHAT'S IN THE BOX

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Upon unboxing your BOYA Magic Wireless Mini Microphones, please verify that all components listed below are present and in good condition:

- Transmitter (TX) x2 (USB-C)
- Receiver (RX) x1 (Main unit)
- Lightning Receiver x1
- 3.5 mm TRS Receiver x1
- Charging Case x1
- Magnet x2

- Fur Windshield for transmitter x2
- Fur Windshield for Charging Case x1
- Foam Windscreen for Charging Case x1
- 3.5 mm TRS to TRS Audio Cable x1
- USB-C to USB-A Data Cable x1
- USB-C to USB-C Data Cable x1
- All-in-One Storage Bag x1

## Mute status at a glance

Easily see the mic status by looking down at the top-positioned indicator light



Figure 2.1: Visual representation of all items included in the BOYA Magic-02 package.

## 3. SETUP AND INITIAL USE

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### 3.1 Charging the Device

Before first use, ensure the transmitters and charging case are fully charged. The charging case extends the total battery life to up to 30 hours, with each transmitter providing up to 6 hours of operation on a single charge.

1. Place the transmitters into the charging case.
2. Connect the charging case to a power source using the provided USB-C to USB-A or USB-C to USB-C data cable.
3. Charging indicators will illuminate to show charging status.

# 30H Battery Life

20+ meetings | 15 interviews  
10 3H live broadcast marathons



Figure 3.1: The charging case and a transmitter, illustrating the extended battery life capabilities.

## 3.2 Connecting to Your Device

The BOYA Magic system offers multiple connection options for various devices:

1. **For Smartphones (USB-C/Lightning):** Insert the appropriate USB-C or Lightning receiver directly into your smartphone's charging port.
2. **For Cameras/Other Devices (3.5mm TRS):** Connect the 3.5mm TRS receiver to your camera's microphone input

using the provided 3.5mm TRS to TRS audio cable.

3. **For PC/Laptop:** Use the USB-C receiver or the 3.5mm TRS receiver with appropriate adapters if necessary.

**Important Tip:** Before first use, ensure to remove any protective plastic strips from the contacts of the lavalier microphones and the main unit to allow for proper charging and connection.

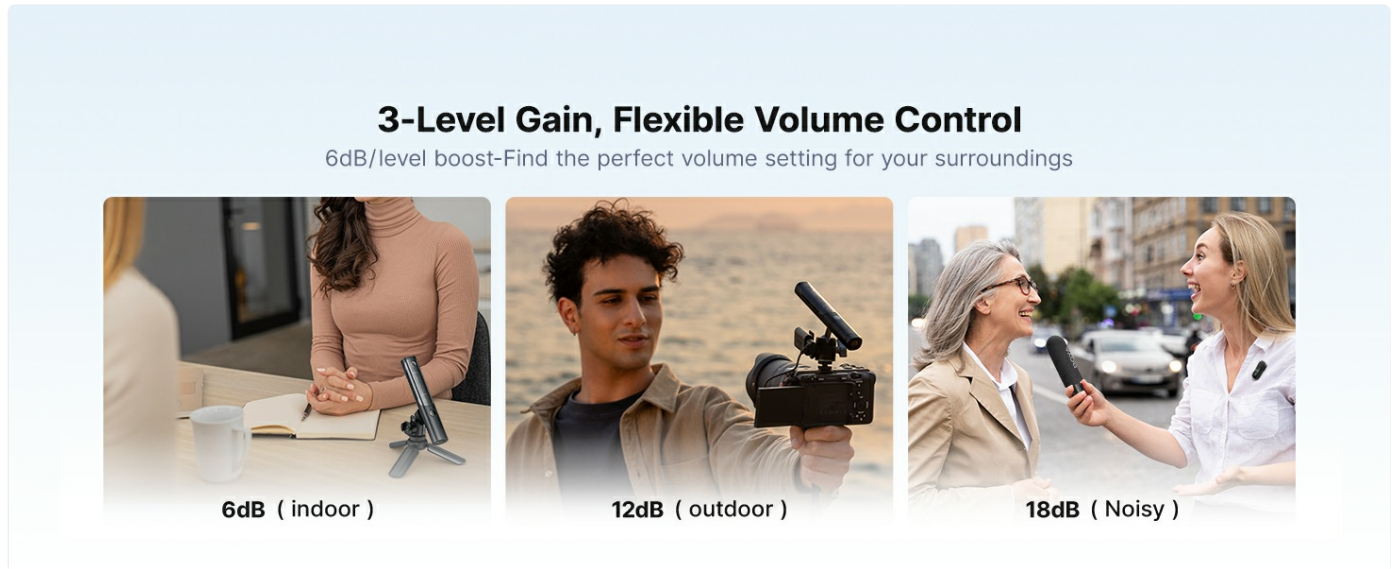


Figure 3.2: The BOYA Magic system is compatible with a wide range of devices, including iPhones, Android phones, cameras, laptops, and tablets.

### 3.3 Pairing the Microphones

The microphones are pre-paired with the receiver for convenience. If re-pairing is needed:

1. Ensure both the transmitter(s) and receiver are powered on.
2. Press and hold the pairing button on the receiver for at least five seconds until the blue lights flash quickly, indicating pairing mode.
3. Perform the same action on the transmitter(s).
4. Once paired, the lights will turn green, indicating a successful connection and active noise cancellation.

## 4. OPERATING INSTRUCTIONS

### 4.1 Microphone Forms and Usage

The BOYA Magic system offers four distinct forms for versatile use:

- **Clip-on/Lavalier:** The mini transmitters can be clipped directly onto clothing for discreet audio capture. Magnets are provided for alternative attachment.
- **Handheld:** The main unit, with a transmitter docked, functions as a handheld microphone, ideal for interviews or presentations.
- **Desktop:** When placed on a flat surface (a desktop stand, not included, is recommended), the main unit acts as a desktop microphone for meetings or podcasts.
- **On-Camera:** Attach the main unit to your camera's hot shoe (using an appropriate adapter, not included) for on-camera audio recording.



Figure 4.1: The BOYA Magic microphone can be used in clip-on, handheld, desktop, and on-camera configurations.

## 4.2 AI Noise Cancellation

The BOYA Magic features advanced AI noise cancellation to ensure clear audio in various environments. It intelligently separates background noise from your voice.

- **Strong Mode:** Provides up to -40 dB suppression for loud environments.
- **Light Mode:** Reduces white noise by up to -15 dB while preserving natural ambient sounds.

Activate or adjust noise cancellation via the BOYA Central app or the physical controls on the device.

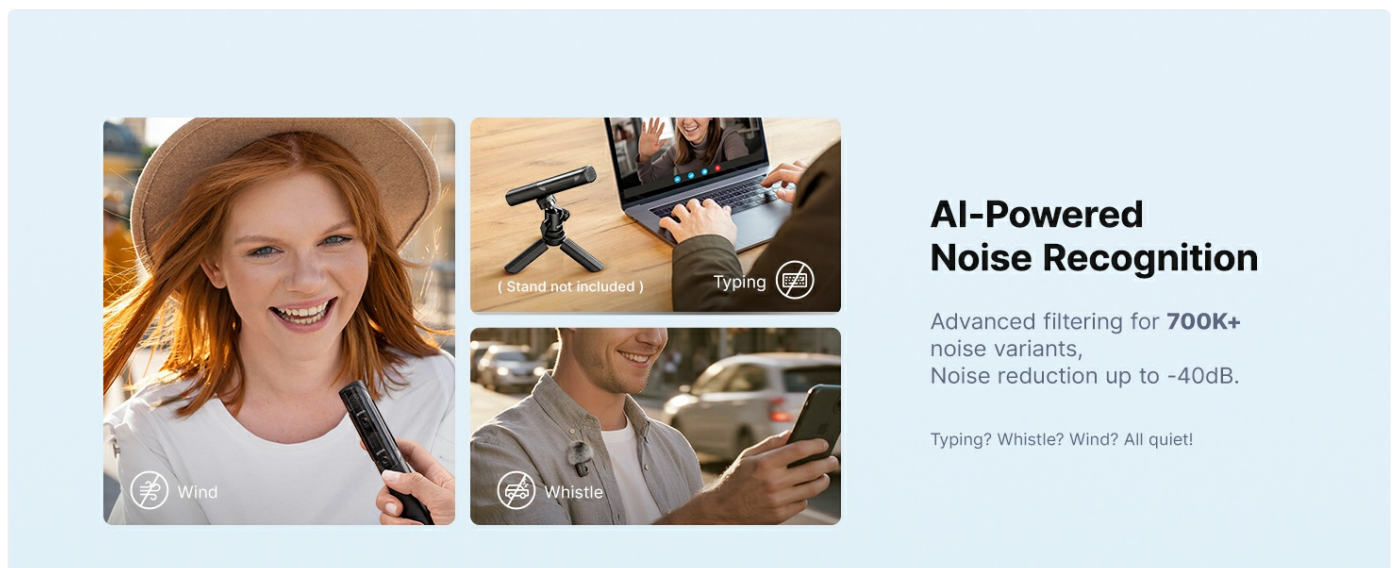


Figure 4.2: The AI noise cancellation effectively reduces common background noises like typing, whistling, and wind.

## 4.3 Audio Protection and Quality

The system is designed to deliver pristine audio quality and prevent distortion:

- **Smart Limiter:** Automatically prevents audio clipping from sudden loud sounds.
- **Safety Track:** Records a secondary backup track at -12 dB, ensuring a usable recording even if the main track peaks.
- **Studio-Grade Sound:** Captures audio at 48kHz/24-bit with an 80 dB signal-to-noise ratio and a wide 144 dB dynamic range.

# Dual Audio Protection, Always Clear

Smart Limiter & -12dB Safety Track



Figure 4.3: The smart limiter and -12dB safety track work together to prevent audio distortion.

## 4.4 BOYA Central App Control

Download the free BOYA Central app to unlock full control over your recording experience. The app allows you to:

- Adjust AI noise cancellation levels.
- Control gain (volume) settings (6dB, 12dB, 18dB for indoor, outdoor, noisy environments respectively).
- Set camera presets.

- Monitor mute status.
- Perform firmware updates.



Figure 4.4: The BOYA Central app provides comprehensive control over microphone settings and features.

## 4.5 Zero-Latency Headphone Monitoring

The receiver unit includes a 3.5mm stereo output for direct, latency-free headphone monitoring. This allows you to hear your audio in real-time during recording, ensuring optimal sound capture.

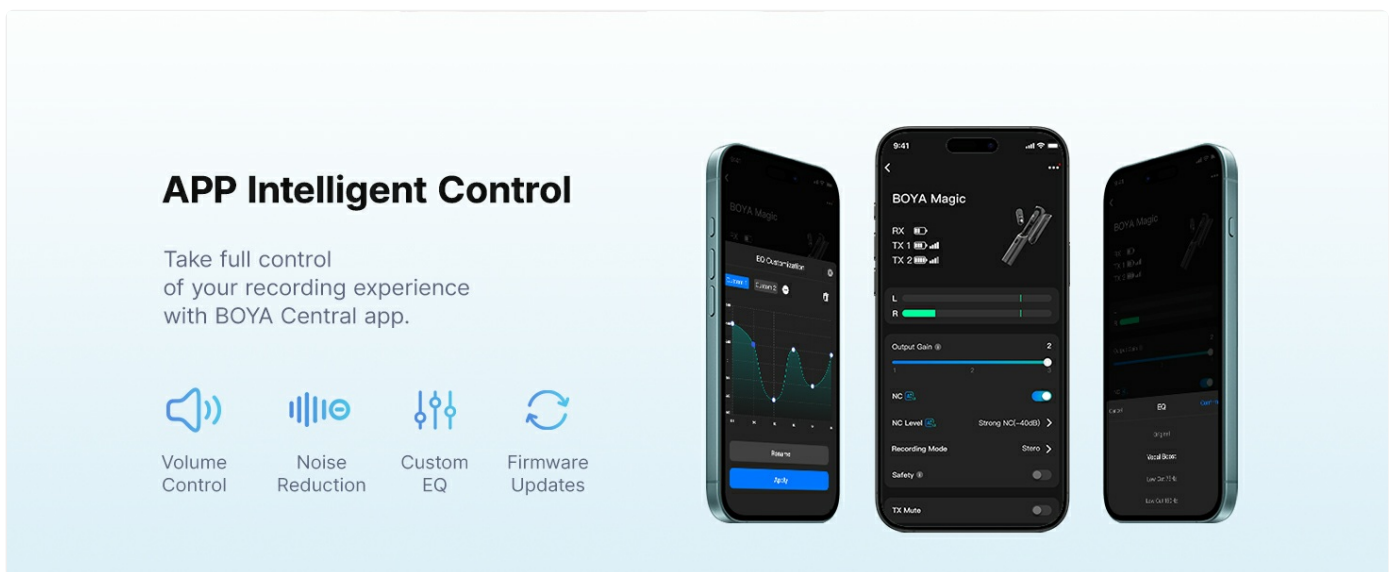


Figure 4.5: Connect headphones to the receiver for real-time audio monitoring.

## 5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your BOYA Magic Wireless Mini Microphones:

- **Cleaning:** Use a soft, dry cloth to wipe down the microphone units and charging case. Avoid using harsh chemicals or abrasive materials.
- **Storage:** Store the microphones and accessories in the provided storage bag when not in use to protect them from dust and physical damage.
- **Battery Care:** For long-term storage, ensure the batteries are charged to approximately 50% to prevent degradation. Recharge periodically if stored for extended periods.

- **Environmental Conditions:** Avoid exposing the device to extreme temperatures, high humidity, or direct sunlight.

## 6. TROUBLESHOOTING

If you encounter issues with your BOYA Magic Wireless Mini Microphones, refer to the following common problems and solutions:

| Problem                             | Possible Cause                                                                                                                                                  | Solution                                                                                                                                                                                                                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No sound or low volume              | Microphone not powered on.<br>Not properly paired.<br>Receiver not connected correctly.<br>Volume/gain too low.<br>Protective plastic strips still on contacts. | Ensure transmitters and receiver are powered on.<br>Re-pair the devices as per Section 3.3.<br>Verify the receiver is securely plugged into your recording device.<br>Adjust gain settings via the BOYA Central app or device controls.<br>Check and remove any plastic strips from the microphone contacts. |
| Audio distortion or clipping        | Input volume too high.<br>Strong ambient noise.                                                                                                                 | Lower the gain setting.<br>Ensure Smart Limiter is active.<br>Activate AI Noise Cancellation (Strong Mode) in noisy environments.                                                                                                                                                                            |
| Intermittent connection or dropouts | Out of range.<br>Interference from other wireless devices.<br>Low battery.                                                                                      | Ensure the transmitter and receiver are within the 328ft (100m) operating range.<br>Move away from other 2.4GHz wireless devices.<br>Recharge the transmitters and charging case.                                                                                                                            |
| BOYA Central app not connecting     | Bluetooth not enabled.<br>App requires update.                                                                                                                  | Ensure Bluetooth is enabled on your smartphone and the microphone system is discoverable.<br>Check for app updates in your device's app store.                                                                                                                                                               |

## 7. SPECIFICATIONS

| Feature                 | Detail                                  |
|-------------------------|-----------------------------------------|
| Model Name              | BOYA Magic-02                           |
| Microphone Form Factor  | Clip-On, Handheld, Desktop, Mini On-Cam |
| Connectivity Technology | Wireless (2.4GHz)                       |
| Operating Range         | Up to 328 ft (100 m)                    |
| Audio Sensitivity       | 33.5 dB                                 |
| Signal-to-Noise Ratio   | 80 dB                                   |
| Frequency Response      | 20 Hz - 20 kHz                          |

| Feature                           | Detail                                                                |
|-----------------------------------|-----------------------------------------------------------------------|
| Recording Quality                 | 48kHz/24-bit                                                          |
| Dynamic Range                     | 144 dB                                                                |
| AI Noise Cancellation             | Up to -40 dB suppression                                              |
| Battery Life (Transmitter)        | Up to 6 hours                                                         |
| Battery Life (with Charging Case) | Up to 30 hours                                                        |
| Power Source                      | Battery Powered (3 Lithium Metal batteries included)                  |
| Item Weight                       | 10.2 ounces (total package)                                           |
| Transmitter Weight                | 7 grams                                                               |
| Product Dimensions                | 1.04 x 0.83 x 5.56 inches                                             |
| Material                          | Acrylonitrile Butadiene Styrene                                       |
| Compatible Devices                | Camera, PC, Laptop, Tablet, Smartphone (Type-C, Lightning, 3.5mm TRS) |

## 8. WARRANTY AND SUPPORT

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### 8.1 Return Policy

The product is eligible for a return or replacement within 30 days of purchase, subject to the retailer's return policy.

### 8.2 Extended Protection Plans

Extended protection plans are available for purchase to provide additional coverage beyond the standard return period:

- 3-Year Protection Plan
- 4-Year Protection Plan
- Complete Protect (monthly subscription covering eligible past and future purchases)

Please refer to the specific terms and conditions of each protection plan for full details.

### 8.3 Manufacturer Support

For further assistance, technical support, or warranty claims, please contact BOYA directly. You can find more information and contact details on the official BOYA website or their Amazon store page:

[Visit the BOYA Store on Amazon](#)

## 9. PRODUCT VIDEOS

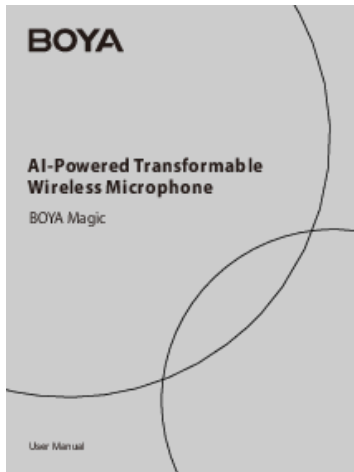
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No official product video URLs with "Seller" creator type were provided in the product data. Therefore, no videos could be embedded in this manual.



Related Documents

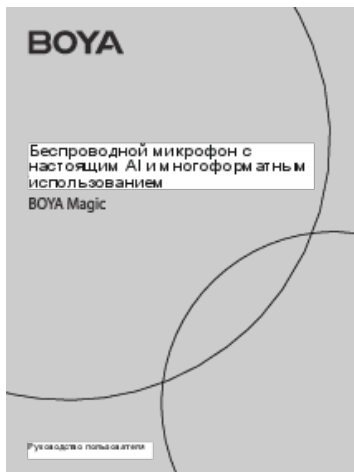
|  |                                                                                                                                                                                                                                                                                                                      |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><a href="#">BOYA Magic AI-Powered Wireless Microphone System User Manual</a></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><a href="#">BOYA Magic: Echtes KI-Mehrmodi-Funkmikrofon Benutzerhandbuch</a></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><a href="#">BOYA Magic: Manuale Utente del Sistema Microfono Wireless AI Multifunzionale</a></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><a href="#">BOYA Magic: Беспроводная микрофонная система с AI шумоподавлением</a></p> <p>Руководство пользователя для беспроводной микрофонной системы BOYA Magic. Откройте для себя AI-шумоподавление, многоформатную совместимость и длительное время работы для профессиональной записи звука.</p>             |



#### [BOYA Magic AI-Powered Transformable Wireless Microphone User Manual](#)

Comprehensive user manual for the BOYA Magic AI-Powered Transformable Wireless Microphone system, detailing its features, product structure, operation, specifications, and troubleshooting for content creators.

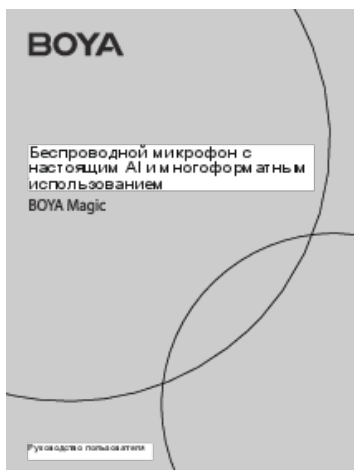
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#### [BOYA Magic: Беспроводная микрофонная система с AI шумоподавлением](#)

Руководство пользователя для беспроводной микрофонной системы BOYA Magic. Откройте для себя AI-шумоподавление, многоформатную совместимость и длительное время работы для профессиональной записи звука.

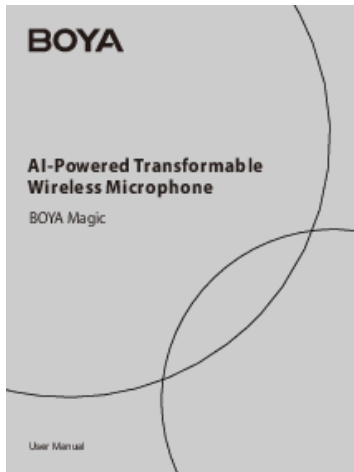
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#### [BOYA Magic Wireless Microphone System: User Guide & Overview](#)

Explore the BOYA Magic, a versatile 2.4GHz wireless microphone system designed for clear audio capture. This guide covers its transmitters, receivers (USB-C, Lightning, 3.5mm TRS), charging case, advanced features like AI noise reduction, and various kit configurations for content creators, vloggers, and podcasters.

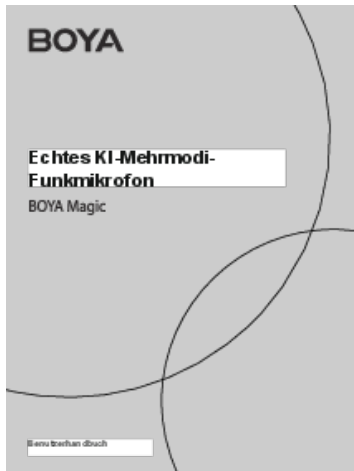
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### [BOYA Magic AI-Powered Transformable Wireless Microphone User Manual](#)

User manual for the BOYA Magic AI-Powered Transformable Wireless Microphone system. Details features, product structure, operation, troubleshooting, and specifications for transmitters, receivers (USB-C, Lightning, 3.5mm TRS), and charging case. Includes setup guides and technical data.

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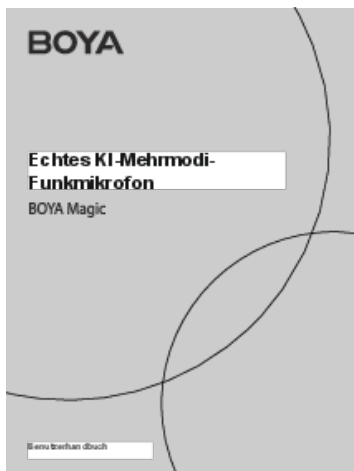


### [\[pdf\] User Manual](#)

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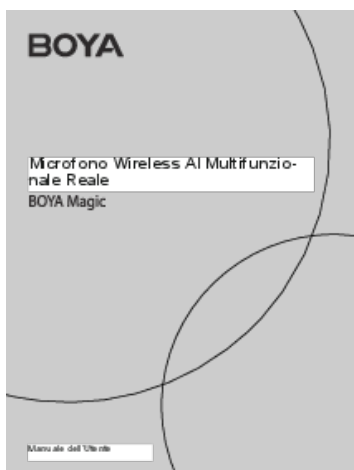
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### [BOYA Magic: Echtes KI-Mehrmodi-Funkmikrofon Benutzerhandbuch](#)

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.

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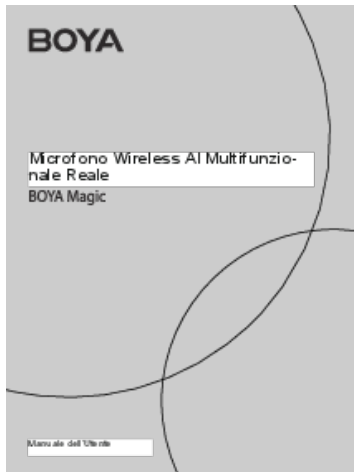


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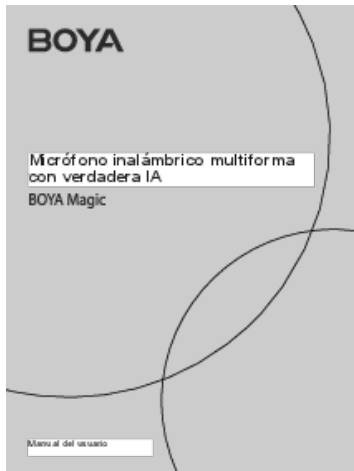
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### [BOYA Magic: Manuale Utente del Sistema Microfono Wireless AI Multifunzionale](#)

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.

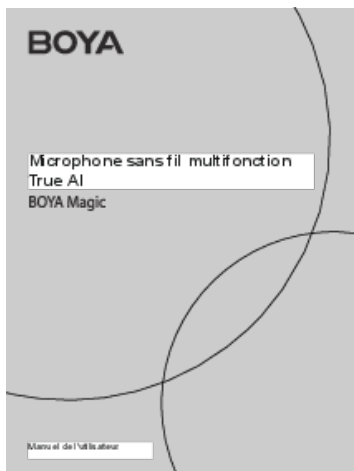
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### [BOYA Magic AI Wireless Microphone System User Manual](#)

Comprehensive user manual for the BOYA Magic AI-powered 2.4GHz wireless microphone system, detailing features, setup, operation, and troubleshooting for content creators, vloggers, and mobile journalists.

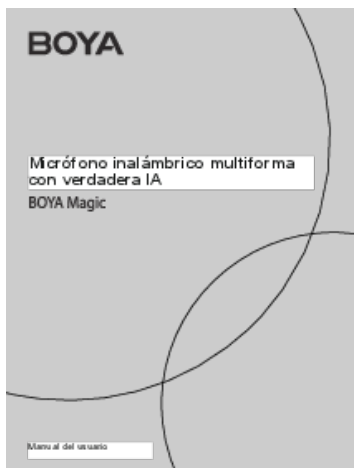
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### [BOYA Magic: Manuel du Microphone Sans Fil Multifonction True AI](#)

Découvrez le BOYA Magic, un système de microphone sans fil 2,4 GHz multifonction avec IA. Ce manuel utilisateur détaille ses caractéristiques, son utilisation et son dépannage pour la création de contenu, le vlogging et le journalisme.

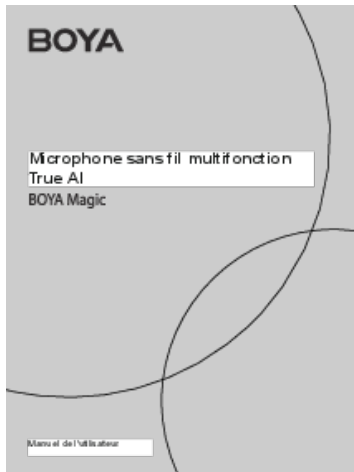
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### [BOYA Magic Multi-Shape Wireless Microphone System User Manual](#)

Comprehensive user manual for the BOYA Magic wireless microphone system, detailing features, operation, troubleshooting, and specifications for content creators, vloggers, and live streamers.

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[\[pdf\]](#) Instructions

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