BOYA BY-V20

BOYA BY-V20 Wireless Microphone System User Manual

Model: BY-V20 V2.0 (USB Type-C)

Brand: BOYA

1. INTRODUCTION

The BOYA BY-V20 V2.0 is a compact and lightweight wireless lavalier microphone system designed to deliver high-quality audio for various recording needs. It features a stable 2.4GHz digital transmission, effective noise cancellation, and broad compatibility with USB-C devices, making it ideal for content creation, live streaming, interviews, and more.

2. WHAT'S IN THE BOX

Please verify that all items are present in the package:

- BY-V20-Transmitter x 2
- BY-V20-RXU Receiver x 1
- Foam Windscreen x 2
- USB-A to USB-C Charging Cable x 2
- Carrying Bag x 1

Figure 2.1: All components included in the BOYA BY-V20 V2.0 package.

3. Product Components

The BY-V20 system consists of two transmitters (TX) and one receiver (RX).

Figure 3.1: Overview of the BY-V20 wireless microphone system components.

Transmitter (TX)

- **Microphone:** Built-in omnidirectional microphone for 360-degree sound pickup.
- **Power/Pairing Indicator:** LED light indicating power status and pairing.
- **Noise Reduction (NR) Button:** Activates/deactivates noise cancellation.
- **Power Button:** Turns the transmitter on or off.
- **USB-C Charging Port:** For charging the transmitter.
- **Back Clip:** 360-degree rotatable clip for easy attachment to clothing.

Receiver (RXU)

- **USB-C Connector:** Plugs directly into your device (phone, tablet, laptop).
- **Status Indicator:** LED light indicating connection status.
- **USB-C Charging Port:** Allows charging of the connected device while the receiver is in use.

4. SETUP

The BOYA BY-V20 V2.0 system is designed for plug-and-play operation, requiring no additional apps or Bluetooth pairing.

1. **Charge the Transmitters:** Before first use, ensure both transmitters are fully charged using the provided USB-A to USB-C charging cables. The LED indicator will show charging status.

2. **Connect the Receiver:** Plug the BY-V20-RXU receiver directly into the USB-C port of your recording device (smartphone, tablet, or laptop). The receiver will automatically power on and attempt to pair with the transmitters.

3. **Power On Transmitters:** Press and hold the power button on each transmitter to turn them on. The indicator light will show pairing status.

4. **Automatic Pairing:** The transmitters and receiver are pre-paired from the factory. Once both are powered on and within range, they should automatically connect. A solid blue light on the transmitter and receiver indicates a successful connection.

5. **Enable OTG Function (Android Devices):** For some Android smartphones, you may need to enable the 'OTG' (On-The-Go) function in your device's settings to allow external audio devices to function correctly. Refer to your phone's manual for specific instructions.

Figure 4.1: The BY-V20 V2.0 receiver is compatible with a wide range of USB-C enabled devices.

5. OPERATING INSTRUCTIONS

5.1 Noise Cancellation

The BY-V20 features a one-click noise cancellation function to reduce ambient noise and enhance voice clarity.

- **Activate Noise Cancellation:** Press the **NR** button on the transmitter. The indicator light may change to confirm activation.
- **Deactivate Noise Cancellation:** Press the **NR** button again to turn off the noise reduction mode.

Figure 5.1: One-click noise cancellation for clear audio in noisy environments.

5.2 Battery Life and Charging

The transmitters offer extended battery life for long recording sessions.

- **Transmitter Battery Life:** Up to 9 hours of continuous usage on a full charge. Charging time is approximately 2 hours.
- **Receiver Charging Function:** The receiver is equipped with a USB-C charging port, allowing you to continuously power your phone or recording device during use. This ensures uninterrupted shooting without worrying about device battery depletion.

Figure 5.2: The receiver allows pass-through charging of your connected device.

5.3 Omnidirectional Sound Pickup

The built-in omnidirectional microphone captures clear audio from all directions, providing flexibility in placement and movement.

Figure 5.3: Omnidirectional pickup ensures comprehensive sound capture.

5.4 Stable Transmission

The BY-V20 system offers a stable audio signal transmission range of up to 328 feet (100 meters) in open, obstacle-free environments.

Figure 5.4: Reliable wireless transmission up to 328 feet.

5.5 Smartphone Speaker Support

Once your phone's speaker is enabled, sound can be played directly through your smartphone without needing to unplug the receiver.

6. MAINTENANCE

To ensure the longevity and optimal performance of your BOYA BY-V20 wireless microphone system, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the transmitters and receiver. Avoid using harsh chemicals, solvents, or abrasive cleaners.
- **Storage:** Store the microphone system in the provided carrying bag when not in use to protect it from dust, moisture, and physical damage. Store in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** For optimal battery health, avoid fully discharging the transmitters frequently. If storing for an extended

period, charge the transmitters to approximately 50% before storage and recharge every few months.

- **Handle with Care:** Avoid dropping the devices or subjecting them to strong impacts, which can damage internal components.

7. TROUBLESHOOTING

If you encounter issues with your BY-V20 system, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No sound or low volume.	- Transmitters or receiver not powered on. - Not properly paired. - Device volume too low. - OTG function not enabled (Android). - Phone case obstructing connection.	- Ensure transmitters are charged and powered on. - Check indicator lights for successful pairing. - Increase recording device volume. - Enable OTG in Android settings. - Remove phone case if it interferes with receiver connection.
Interference or static noise.	- Beyond effective transmission range. - Obstacles between transmitter and receiver. - Strong electromagnetic interference. - Noise cancellation not active in noisy environments.	- Reduce distance between transmitter and receiver. - Ensure clear line of sight. - Move away from sources of interference (e.g., Wi-Fi routers, other wireless devices). - Activate noise cancellation by pressing the NR button.
Transmitter not charging.	- Charging cable faulty or not properly connected. - Charging port dirty.	- Try a different USB-C charging cable and ensure secure connection. - Clean the charging port gently.
Receiver not recognized by device.	- Device compatibility issue. - OTG function not enabled (Android).	- Verify your device has a functional USB-C port and supports external audio input. - Ensure OTG is enabled for Android devices.

8. SPECIFICATIONS

Feature	Detail

Feature	Detail
Item Weight	1.76 ounces
Product Dimensions	1.97 x 1.57 x 3.94 inches
Country of Origin	China
ASIN	B0DWKBWFCK
Item Model Number	BY-V20
Batteries	3 Lithium Metal batteries required (built-in)
Color Name	Black
Compatible Devices	iPad with Type-C interface, iPhone 15/15 Plus/15 Pro/15 Pro Max, Macbook/laptop with Type-C interface, Android smartphones with Type-C interface, iPhone 16/16 Plus/16 Pro/16 Pro Max
Connector Type	USB Type-C
Battery Type	Lithium Ion
Power Source	Battery Powered

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official BOYA website or contact the seller directly. Keep your purchase receipt as proof of purchase for any warranty claims.
You can visit the official BOYA store for more information: BOYA Official Store