

BY-WM4 PRO
Dual-Channel Digital Wireless Microphone

Instruction Manual

Thank you for purchasing BOYA BY-WM4 PRO! Designed for vloggers and as a limited budget and video hobbyists, BY-WM4 PRO is a new generation 2.4 GHz wireless microphone, Dual-Channel for capturing audio with dual subjects to your smartphones, tablets, DSLR cameras, consumer camcorders, PCs etc.

Feature

- Dual-Channel Wireless Receiver
- Digital 2.4 GHz Frequency band
- Super-clear recording sound
- Compatible with smartphones, DSLR cameras, consumer camcorders, PCs etc.
- Lightweight and compact for easy carrying
- Omnidirectional lavaliere microphone
- Hand case included
- Standard camera shoe mount and dip included
- Up to 60m (197ft) operation range (without obstacle)
- Power supplied by two AAA batteries for transmitter and receiver

BY-WM4 Pro-K1 consists of one body-pack transmitter (TX4 Pro), a portable receiver (RX4 Pro), and their accessories as following:

BY-WM4 Pro-K2 consists of two body-pack transmitters (TX4 Pro), a portable receiver (RX4 Pro), and their accessories as following:

Transmitter (TX4 Pro)

1. Microphone input
- Connect the supplied lavalier microphone here, - Fully insert the microphone's 3.5mm plug and make sure it fits into place.

2. Line In

3. Power LED
1) The power LED flash blue when the unit is on.
2) The power LED glows red when low power.

For more details about LED indicator, please refer to the following:

Color	Indicator	Transmitter
Blue	Power LED	Microphone is plugged in
Red	Power LED	Low power
Flashing Blue	Power LED	Microphone is not plugged in
Flashing Red	Power LED	Low power and microphone is not plugged in
Flashing Green	Power LED	Microphone is plugged in and power is sufficient
Flashing Yellow	Power LED	Microphone is plugged in and power is low

4. Power OFF/ON
5. Pair
This button is for connecting signal. For details, please see "How to connect transmitter and receiver" on page 11.

6. Antenna
Please don't touch here during using, otherwise, it will effect signal.

7. Battery compartment
Accommodates two pieces of AAA batteries. For more details, please see "Installing batteries" on page 9.

8. CIP
For more details, please see "Installing or uninstalling dip" on page 13.

Receiver (RX4 Pro)

1. Earphone Jack
(3.5mm diameter stereo mini jack)
To monitor the receiver output, connect the headphones to this connector.

NOTE
Do not connect headphones with a monoaural mini jack. This may lead to overvoltage of the headphone output, resulting in distorted sound output.

2. LINE OUT (audio output) Jack
- For using smartphone, tablet or Mac
Connect one end (CIP) plug of the supplied TRS stereo 3.5mm mini output cable here, and the other end (straight plug) to smartphone.

- For cameras, camcorders, audio recorders and other audio/video recording devices. Connect one end of the supplied TRS stereo 3.5mm mini output cable here, and the other end to camera.

3. Power LED
For more details, please see "Power LED" on page 5.

4. Power OFF/ON
Press these buttons to set the attenuation level of the input signal.

5. Volume +/-

6. Antenna
Please don't touch here during using, otherwise, it will effect signal.

7. Battery compartment
Accommodates two pieces of AAA batteries. For more details, please see "Installing batteries" on page 9.

8. CIP
For more details, please see "Installing or uninstalling dip" on page 13.

9. Shoe mount adapter

What's difference?

Ø 3.5 mm TRRS connector
- For Smartphone, tablet, Mac or laptop with combo headphone/Mic jack

Ø 3.5 mm TRS connector
- For camera, camcorders, audio recorders and other audio/video recording devices

How to use it
Insert batteries in the transmitter and receiver units

1. Both transmitter and receiver requires two AAA size batteries.
2. Slide and remove the transmitter's battery compartment covers.
3. Insert two pieces of batteries.
4. Close the battery compartment covers.
5. Do the same ways as step 2 to 4 to insert battery into receiver.

Connecting the transmitter and receiver using the microphone with smartphone, tablet, Mac or laptop with combo headphones/Mic jack.

Receiver

1. Mount receiver to Smartphone, tablet, Mac or laptop.
2. Using TRRS cable, plug the 3.5 mm connector (straight plug) into the audio jack of your smartphone.
3. Insert the 3.5mm plug of the connecting cable into the receiver "LINE OUT" jack.
4. Insert earphone into receiver "CIP" for monitoring sound if you need.
5. Under the power ON/OFF switch to ON position (the LED indicator will light in blue).

Caution: Please do not mix up plug, for details, please refer to "What's difference" on page 14.

NOTE:
Not all Android devices support external microphone when taking video, and you may need to download a third-party app and set up sound source as external microphone.

Connecting the Transmitters and the Receiver

Before leaving factory, the connection of transmitters and receiver will be established.

If transmitters and receiver disconnect, please follow below steps:

1. Turn on the receiver and the transmitter.
2. Press the button "+" and "-" for 3 seconds for receiver and press "pair" of one transmitter for 3 seconds at the same time.
3. When transmitter and receiver connects, the light of receiver will stay (blue). The light of transmitters will flash every 2.5 seconds.
4. Repeat step 2 for the other transmitters.

Otherwise, the light for receiver and transmitters will flash continually every 1 second, then try 1-4 steps again.

Using the microphone with cameras, camcorders, audio recorders and other audio/video recording devices.

Receiver

1. Mount receiver to cameras, camcorders, audio recorders and other audio/video recording devices.
2. Using TRS cable, plug the 3.5 mm connector into the audio jack of your camera.
3. Insert the other end of the connecting cable into the receiver "LINE OUT" jack.
4. Insert earphone into receiver "CIP" for monitoring sound if you need.
5. Under the power ON/OFF switch to ON position (the LED indicator will light in blue).

Caution: Please do not mix up audio cable, for details, please refer to "What's difference on page 14".

Install microphone

1. Clip is mounted on the microphone before leaving factory.
2. Both transmitter and receiver include dip, that means you can mount them in any place you want.
3. Adjust the direction of the microphone to your mouth by rotating the Microphone.

If receiver need to be mounted onto camera hot/cold shoe, please follow below steps:

1. Push the dip to right side.

Specifications:

RF Module	2.4GHz (Channel Frequency: 2.412-2.472GHz)
Frequency band	2.4GHz (2400MHz-2483MHz)
Frequency response	20Hz-20KHz
Signal-to-noise	80dB or more
Distortion	$0.5\% @ 1kHz (150Hz @ 1kHz)$ (without feedback)
Max output level	Dist
Impedance (output jack)	16Ω (nominal)
Receiver sensitivity	>math>100mV @ 1kHz</math> (with 2V/1V gain)
Audio input connector	3.5mm stereo jack
Operation range	60m (197ft) (without obstacle)
Max. Power Consumption	100mW (low drain with batteries)
Mount system/weight	Transmitter: 30g/0.6oz Receiver: 30g/0.6oz
Construction (shell)	Receiver: ABS/PC (with 2.4GHz & 2.48GHz)
Dimensions	Transmitter: 45x27x30mm (1.77x1.06x1.18 inches) Receiver: 45x18x30mm
Weight	Transmitter: 4.5g (0.16oz)

CAUTION

1. Please use our original audio signal cable which is equipped, it's more compatible with the wireless microphone, and make the sound better.

2. The figure given is only the approximate value that applies when there are no obstructions between the transmitter and receiver. This distance will vary depending on metal objects, people and other obstructions and on the signal strength. Laboratory field may vary depending on the type of battery used.

IMPORTANT

- If you do not need to use the wireless microphone for a long period time, please remove the batteries from both the transmitter and receiver.
- Do not touch the lavalier/lapel microphone, transmitter and receiver while recording, as this will cause noise to be recorded.
- Do not let the transmitter close to high-voltage equipment or to devices that emit strong electromagnetic fields, otherwise, it may cause the noise to be recorded.
- Do not use or leave the transmitter and receiver in hot, humid places.
- Do not leave the receiver attached to the camera when storing the camera in a case.
- Do not mix up to use the transmitter and receiver.

WARNING

- Keep the wireless microphone out of the reach of children.
- Never use leaking batteries and never expose batteries to excessive heat or fire.

MAINTENANCE

- Do not operate the device with wet hands or feet.
- Clean the equipment only in the way described in the instructions for use.
- Take care to prevent the equipment from slipping down. Make sure that the device is properly fastened and reliably mounted. If the device has dropped down on the floor have it inspected by a skilled electrician before you switch it on again.
- Should the equipment be damaged or defective or if you notice a scorching smell, interrupt the electric power supply immediately by removing the batteries. Do not operate the device with a damaged housing, do not repair the device yourself. Have the device or/ly repaired by a skilled electrician.
- Always keep your device in good condition as specified in these instructions for use.
- Do not open the device.

WARNING

FCC STATEMENT :
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that on which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.

RF warning statement:
The device has been evaluated to meet general RF exposure requirements. The device can be used in portable exposure condition without restriction.

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技术要求
1、表面无划痕
2、无正负公差
3、包装材料尺寸为内尺寸

JIAYZ 长丰 深圳市长丰影像器材有限公司

产品名称	BY-WM4 PRO-K2 无线话筒	版本	V00
产品编号	1F030000192	材料	105% 环保线材 镀锡灯罩
尺寸	90x145	比例	1:1.1
材料/工艺	聚碳酸酯	材料	镀金/口漆
	2.0/2.0±0.1	材料	超聚光