

**BY-WM4 PRO** 

Dual-Channel Digital Wireless Microphone

**Instruction Manual** 

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

The BY-WM4 PRO system is suitable for a wide range of wireless applications such as interviews, mobile journalisms, reporting, vloggings, podcasts and more.

The BY-WM4 PRO system is a expandable evolution system that allows the user to mix and match different kinds of receivers while using with the

Transmitter(TX4 Pro)

BY-WM4 Pro consists of one body-pack

(RX4 Pro), and their accessories as

transmitter(TX4 Pro), a portable receiver

Receiver(RX4 Pro)

Lavalier/lapel microphone 3.5mm to TRS audio output cable

3.5mm to TRRS audio output cable

Wind screen

Microphone Holder clip

Wind screen (x2)

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



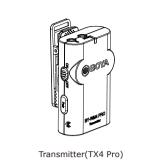
Transmitter(TX4 Pro) x2 Receiver(RX4 Pro) 

3.5mm to TRRS audio output cable

Lavalier/lapel microphone x2 3.5mm to TRS audio output cable

Microphone Holder clip (x2)

(TX4 Pro), wireless receiver with a Lightning (TX4 Pro), wireless receiver with a USB connector (BY-WM4 RXD), and their Type-C connector (BY-WM4 RXU),and their accessories as following:



Pairing Pin

BY-WM4 Pro-K3 is specially designed for

It consists of one body-pack transmitter

Lightning iOS Devices.

accessories as following:

Receiver(BY-WM4 RXD)

Microphone Holder clip

Receiver(BY-WM4 RXU) Transmitter(TX4 Pro) 

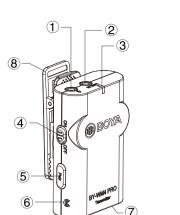
Microphone Holder clip Pairing Pin

BY-WM4 Pro-K5 specially designed for

It consists of one body-pack transmitter

Andriod and other Type-C devices.

**Transmitter (TX4 Pro)** 



- Connect the supplied lavalier microphone here - Fully insert the microphone's 3.5mm plug and make sure it clicks 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.

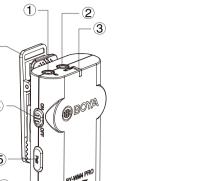
For more details, please see "Installing or uninstalling clip" on page 15.

e transmitter and the receiver connects

he transmitter and the receiver disconnects.

4. Power OFF/ON

For more details about LED indicator, please refer to



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

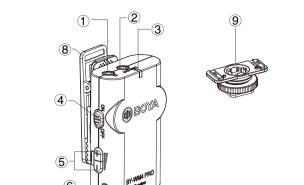
This botton is for connecting signal.

and receiver" on page 13.

Accommodates two pieces of AAA batteries. For more details, please see "Installing batteries"

For details, please see "How to connect transmitter

Receiver (RX4 Pro)



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

Do not connect headphones with a monaural mini jack. This may lead to short-circuiting of the headphone

output, resulting in distorted sound output. 2. LINE OUT (audio output) Jack - For using smartphone, tablet or Mac Connect one end (90° plug) of the supplied

TRRS stereo 3.5mm mini output cable here, and

the other end (straight plug) to smartphone.

. Open the audio/video app on mobile device, then

the indicator of receiver should be light up.

9. Shoe mount adapter

3. Power LED

4. Power OFF/ON

the input signal.

will effect signal.

7. Battery compartment

5. Volume +/-

6. Antenna

What's difference?

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

For more details, please see "Power LED" on page 7 Receiver "LINE OUT"

> 23.5 mm TRS connector - For cameras, camcorders, audio recorders and other audio/video recording devices.

4. Close the battery compartment cover. 5. Do the same ways as step 2 to 4 to insert battery into receiver.

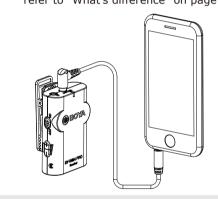
2. Slide and remove the transmitter's battery

1. Both transmitter and receiver requires two AAA size

### **Connecting the transmitter and receiver** Using the microphone with smartphone, tablet, Mac or laptop with combo headphone/Mic jack.

 Mount receiver to Smartphone, tablet, Mac or laptop. Using TRRS cable, plug the 3.5 mm connector(straight plug) into the audio jack of your smartphone. . Insert the 90° plug of the connecting cable into

- the receiver "LINE OUT" jack 4. Insert earphone into receiver " ∩ " for monitoring
- Sound if you need. . Slider 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 8.



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

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

Using the microphone with cameras, camcorders,

- 1. Mount receiver to cameras, camcorders, audio recorders and other audio/video recording devices.
- 3. Insert the other end of the connecting cable into the receiver "LINE OUT" jack. 4. Insert earphone into receiver "  $\Omega$  " for monitoring Sound if you need.

4. Repeat step 2 for the other transmitter.

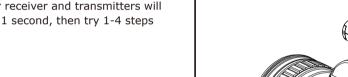
# audio recorders and other audio/video recording

- 2. Using TRS cable, plug the 3.5 mm connector into the audio jack of your camera.
- . Slider the power ON/OFF switch to ON position ( the

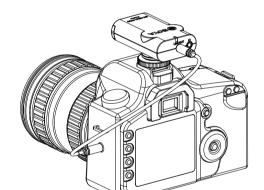
Caution: Please do not mix up audio cable, for details,

please refer to" What's difference on page 8"

3. Adjust the direction of the microphone to your mouth



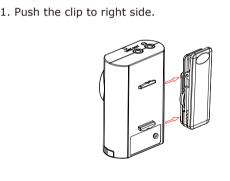
- LED indicator will light in blue)

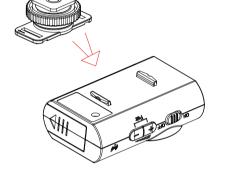


1. Clip is mounted on the microphone before leaving 2. Both transmitter and receiver include clip, that means you can mount them in any place you want.



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

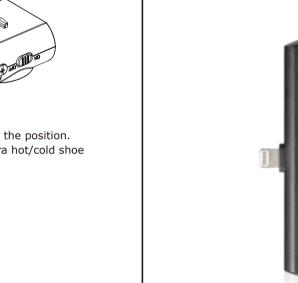




2. Push the cold shoe mount on the position. 3. Mounted receiver onto camera hot/cold shoe

When using an omnidirectional microphone like the one included with this system, the microphone may be picking up too much ambience.

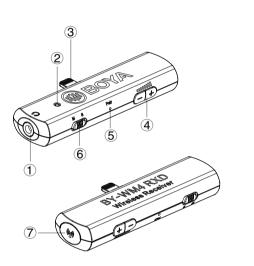
Make sure the microphone is as close as to the subject as possible.



**BY-WM4 RXD** 2.4GHz Wireless Receiver For iOS devices



### Receiver (BY-WM4 RXD)

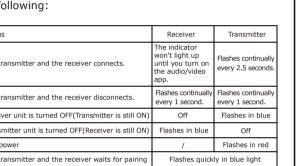


(3.5mm diameter stereo mini jack) o monitor the receiver output, connect the

Do not connect headphones with a monaural mini jack. This may lead to short-circuiting of the headphone output, resulting in distorted sound output.

### 2. Power LED

For more details about LED indicator, please refer to



## 3. Lightning Connector

Press these buttons to set the attenuation level of the input signal.

6. M/S Switch

4. Volume +/-

For more details, please see "Connecting the transmitter and the receiver" on page 21.

# 1. Plug the BY-WM4 RXD directly into the lightning port

owing:				
	Receiver	Transmitter		
smitter and the receiver connects.	The indicator won't light up until you turn on the audio/video app.	Flashes continually every 2.5 seconds.		3
smitter and the receiver disconnects.	Flashes continually every 1 second.	Flashes continually every 1 second.		
unit is turned OFF(Transmitter is still ON)	Off	Flashes in blue		
ter unit is turned OFF(Receiver is still ON)	Flashes in blue	Off		
er	/	Flashes in red		
smitter and the receiver waits for pairing	Flashes quickly in blue light			

7. Built-In Internal Antenna

## . The Power LED flashes slowly waiting for connecting with the transmitter.

light of receiver stays blue, and transmitter flashes

### BY-WM4 RXU 2.4GHz Wireless Receiver For Android and other Type-C devices

1. Turn on the transmitter and plug the receiver 2. Long press the pair bottom of receiver with pair

Connecting the transmitter and the Receiver

and receiver will be established.

below steps:

Before leaving factory, the connection of transmitters

If transmitters and receiver disconnect, please follow

For cameras, camcorders, audio recorders and

Press these buttons to set the attenuation level of

Please don't touch here during using, otherwise, it

For more details, please see "Installing batteries"

Accommodates two pieces of AAA batteries.

For more details, please see "Installing or

uninstalling clip" on page 15.

Connect one end of the supplied TRS stereo 3.5mm

mini output cable here, and the other end to camera.

other audio/Video recording devices.



3.Long press the pair button on the side of the transmitter entering the pairing mode. 4. When the transmitter and receiver connected, the

Otherwise, the light of receiver and transmitter will flash continually every 1 second, then try 1-3 steps

1) Please adjust the monitoring audio volume of RXD before recording.

This device complies with part 15 of the FCC rules. Operation is

subject to the following two conditions: (1) this device may not

any interference received, including interference that may cause

the limits for a Class B digital device, pursuant to part 15 of the

FCC Rules. These limits are designed to provide reasonable

cause harmful interference, and (2) this device must accept

(3.5mm diameter stereo mini jack)

Do not connect headphones with a monaural mini jack. This may lead to short-circuiting of the headphone output, resulting in distorted sound output.

### 2. Power LED

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

as following.						
Status	Receiver	Transmitter				
The transmitter and the receiver connects.	Stays blue	Flashes continually every 2.5 seconds.				
The transmitter and the receiver disconnects.	Flashes continually every 1 second.	Flashes continually every 1 second.				
Receiver unit is turned OFF(Transmitter is still ON)	Off	Flashes in blue				
Transmitter unit is turned OFF(Receiver is still ON)	Flashes in blue	Off				
Low power	/	Flashes in red				

6. M/S Switch

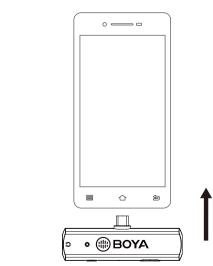
7. Built-In Internal Antenna

4. Volume +/-Press these buttons to set the attenuation level of the input signal.

# The transmitter and the receiver waits for pairing Flashes quickly in blue light

5. Pair Bottom For more details, please see "Connecting the transmitter and the receiver" on page 26.

2. The Power LED flashes slowly waiting for connecting with the transmitter.



and receiver will be established.

pin, the indicator of receiver will flash quickly when entering paring mode.

3.Long press the pair button on the side of the transmitter entering the pairing mode.

every 2.5 seconds. Otherwise, the light of receiver and transmitter will flash continually every 1 second, then try 1-3 steps

Before leaving factory, the connection of transmitters If transmitters and receiver disconnect, please follow

4. When the transmitter and receiver connected, the

1) Please adjust the monitoring audio volume of RXU before recording.

Status	Cause	Measure
The units does not turn on.	The batteries of BY-WM4 PRO TX exhausted.	Replace the batteries with new ones.
	The Power LED of BY-WM4 RXD doesn't light up while connecting with the iOS devices.	Open the audio/video app on mobile device, then the indicat of receiver should be light up.
	The Power LED of BY-WM4 RXU doesn't light up while connecting with the Android devices.	The receiver hasn't get a well connection with the devices. Please try to reconnect it again
The batteries become drained quickly.	The BY-WM4 Pro components is being used under extremely cold conditions.	The batteries drain quickly und extremely cold conditions.
	The BY-WM4 Pro components is being used under extremely hot conditions.	The batteries drain quickly unc extremely hot conditions.
There is no sound.	The transmitter and receiver are not in pairing mode.	Please refer to the Connecting the transmitter and the Receiv
	There do not have a good connection with the lavalier.	Please try to reconnect it again
	There do not have a good connection with the earphone.	Please try to reconnect it again
The sound is weak.	The input level of the receiver is low.	The input level of the transmit is low. Adjust the audio output level on the transmitter. Keep level as high as possible witho distortion to reach best Sound and Noise Ratio.
There is distortion	The input level of the receiver is inappropriate.	Adjust the audio output level of the transmitter. Keep this level as high as possible without distortion to reach best Sound and Noise Ratio.
iii tile soulla.	Headphones with a monaural mini jack is used.	Use the headphones with a stereo mini jack.

If you have any problem using the BY-WM4 Pro components, use the following checklist. If any problem persist, please consult our local dealer, or contact us

	Cause	Measure
does n.	The batteries of BY-WM4 PRO TX exhausted.	Replace the batteries with new ones.
	The Power LED of BY-WM4 RXD doesn't light up while connecting with the iOS devices.	Open the audio/video app on mobile device, then the indicator of receiver should be light up.
	The Power LED of BY-WM4 RXU doesn't light up while connecting with the Android devices.	The receiver hasn't get a well connection with the devices. Please try to reconnect it again .
es ined	The BY-WM4 Pro components is being used under extremely cold conditions.	The batteries drain quickly under extremely cold conditions.
	The BY-WM4 Pro components is being used under extremely hot conditions.	The batteries drain quickly under extremely hot conditions.
	The transmitter and receiver are not in pairing mode.	Please refer to the Connecting the transmitter and the Receiver.
	There do not have a good connection with the lavalier.	Please try to reconnect it again.
	There do not have a good connection with the earphone.	Please try to reconnect it again.
	The input level of the receiver is low.	The input level of the transmitter is low. Adjust the audio output level on the transmitter. Keep this level as high as possible without distortion to reach best Sound and Noise Ratio.
	The input level of the receiver is inappropriate.	Adjust the audio output level on the transmitter. Keep this level as high as possible without

# Feature:

BY-WM4 Pro System

• Ultracompact and miniature-size for receiver

**BY-WM4 Pro System** 

RF output level: Operation range: • Standard camera shoe mount and clip included (For BY-WM4 PRO/BY-WM4 PRO-K2 only)

84dB or more 0.05% or less (32Ω,1 KHz,65mW output) 3mW 60m (197ft) (without obstacle

Reception sensitivity: -90dB +/- 3dB / 0dB=1V/Pa, 1kHz Audio input connector: 3.5mm mini jack Power requirements: TX4 Pro/RX4 Pro: 3V DC (Two AAA size batteries) BY-WM4 RXD: Supplied by iOS device BY-WM4 RXU: Supplied by USB Type-C device BY-WM4 RXD: Apple MFi Certified Lightning Connector BY-WM4 RXU: USB Type-C Connector Receiver: 3V/70mA Transmitter: 3V/70mA TX4 Pro/RX4 Pro: 45x70x35mm (1.8x2.8x1.4") BY-WM4 RXD: 82×30.7×12mm (3.2×1.2×0.5") BY-WM4 RXU: 82×30.7×12mm (3.2×1.2×0.5") TX4 Pro/RX4 Pro: 47g (1.7 oz) BY-WM4 RXD: 12g (0.4oz)

BY-WM4 RXU: 9.5g (0.3oz)

### 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. Take care to prevent the equipment from dropping 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.

B.Battery life may vary depending on the type of battery used.

• If you do not intend to use the wireless microphone

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 Do not use or leave the transmitter and receiver in

### WARNING Keep the wireless microphone out of the reach of

Never use leaking batteries and never expose

MAINTENANCE Do not operate the device with wet hands or feet. Clean the equipment only in the way described in the instructions for use.

• (III) BOYA

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:

removing the batteries.Do not operate the device with a damaged housing, do not repair the device yourself. Have the device only repaired by a skilled Always keep your device in good condition, as

Interrupt the electric power supply immediately by

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,

specified in these in-structions for use.

Changes or modifications not expressly approved by the party esponsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with

following measures:

Radiation Exposure Statement

requirement. The device can be used

ındesired operation.

rotection against harmful interference in a residential installation. his equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the nstructions, 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 interferenceto radio or television reception, which

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 to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for

The device has been evaluated to meet general RF exposure

in portable exposure condition without restriction.

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

English: This device complies with Industry Canada license

Operation is subject to the following two conditions: (1) This levice may not cause interference, nd (2) This device must accept any interference, including terference that may cause undesired operation of the device. The digital apparatus complies

anada applicables aux appareils conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de 'appareildoit accepter tout

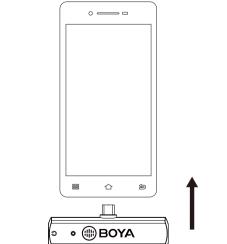
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indiqu é , sont strictement

his radio transmitter has been approved by Industry Canada to

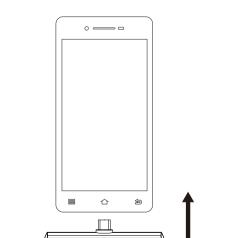
SHENZHEN JIAYZ PHOTO INDUSTRIAL., LTD. The BOYA logo is a trademark which is registered and owned by Shenzhen Jiayz Photo Industrial., Ltd. COPY RIGHT 2010-2020 TEL: 400 6131096 Email: sales@boya-mic.com



1. Plug the BY-WM4 RXU directly into the lightning port

3. USB Type-C Connector

# Set Up Guide



into smartphone.

light of receiver stays blue, and transmitter flashes

below steps: 1.Turn on the transmitter and plug the receiver 2. Long press the pair bottom of receiver with pair

Connecting the transmitter and the Receiver

Make sure there is an unobstructe and the receiver. Keep in mind that your body, clothes, and onstage sets are possible obstructions. RF signal is weak. Make sure the receiver and the transmitter are within 197' (60m) range. If there are obstructions, you may need to move closer.

Hard case included

• Ideal for Youtubes, vloggings, facebooks, podcasts, mobile journalisms and more Digital 2.4 GHz frequency band Dual-Channel wireless receiver

 Super-clear recording sound • Up to 60m (197ft) operation range (without obstacle) Monitoring sound by 3.5mm headphone output Master volume control Selectable stereo and mono mode (For BY-WM4 RXD/RXU only) Omnidirectional lavalier microphone

• Compatible with smartphones, DSLR cameras,

Compatible with smartphones, tablets, laptops

(For BY-WM4 PRO/BY-WM4 PRO-K2 only)

consumer camcorders, PCs etc

(For BY-WM4 PRO-K3/K5 only)

# **Specifications:**

GFSK (Gauss frequency Shift Keying) Frequency band: 2.4 GHz (2406-2474MHz) Frequency response: 35Hz-14KHz±3dB

Earphone output level: 32Ω,65mW

**IMPORTANT** 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

### Do not leave the receiver attached to the camera when storing the camera in a case.

batteries to excessive heat or fire.

cause noise to be recorded.

Do not mix up to use the transmitter and receiver.

Do not open the device. WARNING

including interference that may cause undesired operation.

exempt RSS standard(s).

with Canadian CAN ICES - 3 (B)/NMB - 3(B). French: Le pr é sentappareilestconforme aux CNR d'Industrie radio exempts de licence. L'exploitationestautoris é e aux deux

rouillageradio é lec triquesubi, m ê mesi le brouillageest

perate with the antenna types isted with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for ise with this device. e pr é sent é metteur radio a é t é approuv é par Industrie Canada pour fonctionner avec les types

d'antenne é num é r é s ci-dessous et ayant un gain admissible

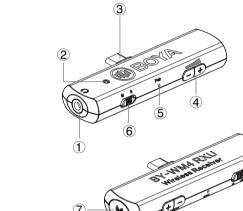
How to use it

Installing batteries

compartment cover.

3. Insert two pieces of batteries.

Receiver (BY-WM4 RXU)



To monitor the receiver output, connect the

www.boya-mic.com

interdits pour l'exploitation de l' é metteur.

inclus dans cette liste, et dont le gain est sup é rieur au gain maximal www.boya-mic.com / www.jiayz.com