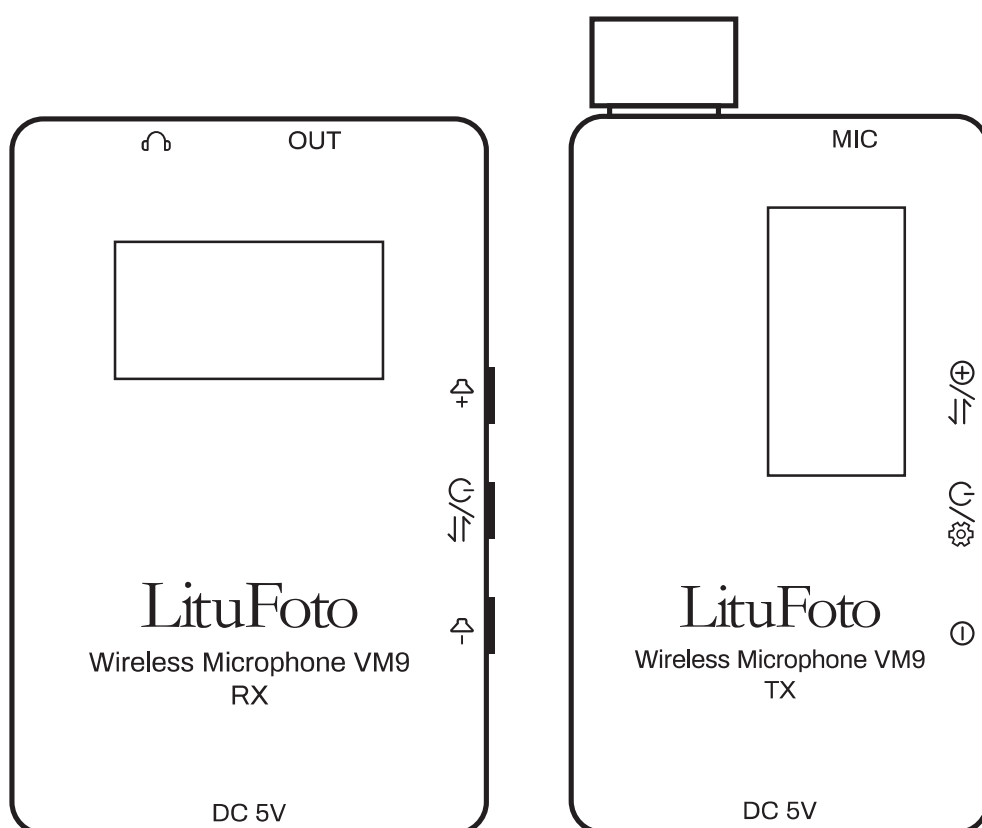


# RADA DUO

A-MIDUO

## User Manual



## ■ Introduction

Thank you for purchasing RADA DUO products!

VM9 is a compact and versatile lavalier wireless microphone with novel design, compact and lightweight, accurate sound pickup, intelligent noise cancellation and long running time.

The simple back clip design and transmitter with its own microphone is more flexible and ready to clip and use. Using UHF wireless transmission, its signal stability, broadcast-grade sound quality, is your rare ideal choice. With dual-channel design, not only can be used as a single-channel wireless microphone, but also can record two sources at the same time (one to two); and support monitoring and volume adjustment, the transmitter with low-cut function. In a noisy environment to filter the surrounding environment noise, it's convenient to adjust the recording effect in a timely manner. Compatible with all kinds of cameras, mobile devices, tablets, PC and other devices, widely used in live interviews, film and television, conferences, video teaching, Vlog and other places.

Please read this manual carefully before use, and please keep this manual for future reference after reading.

## ■ Warnings

1. In noisy environments, a certain amount of ambient noise is unavoidable.
2. Make sure the equipment is properly inserted into place when it is connected.
3. When not in use, it should be stored in a dry and clean place, and avoid storing or using it in places with high

temperature and humidity, so as not to affect sensitivity and tone.

4. Wire pulling and bumping may cause the microphone sensitivity to be reduced or even damaged.
5. Please keep it dry. Do not touch this product with wet hands. Do not immerse the product in water or expose to rain.
6. This product can not be waterproof, please pay attention to moist in rainy days and wet conditions.
7. The product may heat up during use, which is a normal phenomenon.
8. This product has precision electronic circuitry, please contact authorized maintenance personnel when repair is required, unauthorized disassembly of the product failure is not covered by the company's warranty.
9. Keep out of reach of children.

## ■ Precautions

1. After charging is complete, pull out the power cord.
2. If you have not used the product for a long period of time, charge the battery before using the product again. Otherwise, the product cannot be turned on without power.
3. In order to prolong the service life of the battery, it is recommended to maintain the charge every three months.
4. This product has a built-in rechargeable lithium battery which has a certain life limit. After using for a certain period of time, the performance will be reduced. But it is a normal phenomenon.

## ■ Standard Items

- Transmitter \*1 (one tow set of transmitter \*2)
- Receiver \*1                      •TRRS to TRRS audio cable \*1

- TRRS to TRS audio cable \*1
- 1 to 2 Type-C charging cable \*1
- (1 to 3 Type-C charging cable \*1 for a set of two)
- Cell phone clip \*1      •Cold shoe adapter base \*1
- Lavalier microphone \*1      •VM9 manual \*1      •Carry bag \*1
- 6.5 to 3.5mm audio adapter \*1
- Windproof wool cover \*1 (one tow set \*2)

## ■ Product Specification

### •VM9 transmitter

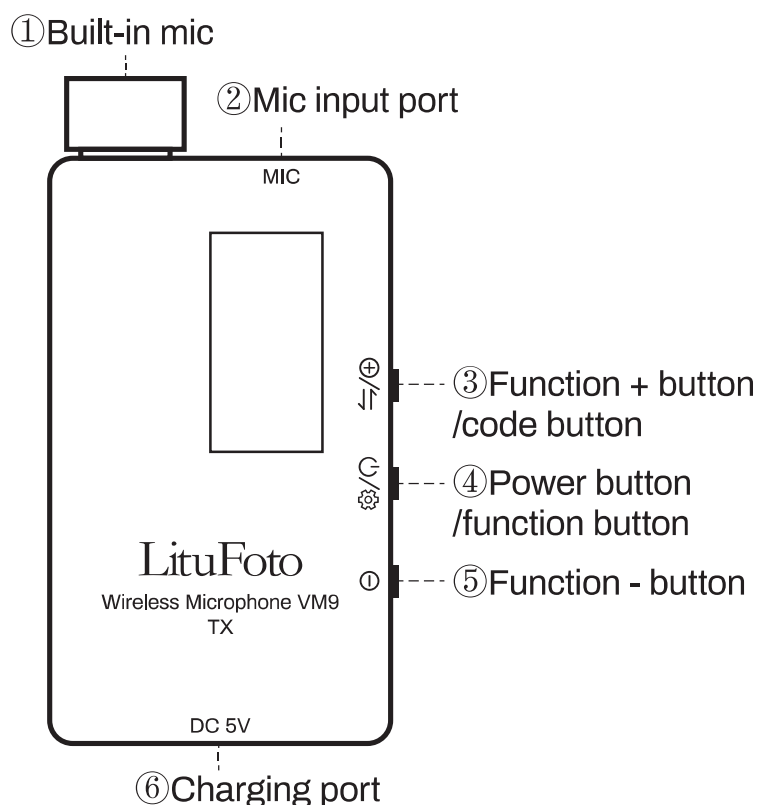
1. Transmission type: UHF wireless transmission
2. Operating voltage: 3.7V lithium battery
3. Operating current: 100mA@3.8VDC
4. Pickup mode: Omni-directional
5. Frequency range: 535.1-576.1MHz
6. Frequency stability: <15ppm
7. Transmission power: 13dBm/3.8VDC
8. Frequency response: 50Hz~15KHz
9. Control distance: 50M
10. Battery capacity: 3.7V/480mAh
11. Charging time: 1.5 hours
12. Endurance time: about 4 hours
13. Net weight: about 70g
14. Product size: 71mm\*37mm\*14mm

### •VM9 Receiver

1. Frequency range: 650~690MHz
2. Frequency stability: <  $\pm 15$ ppm
3. Comprehensive distortion: < 0.5%
4. Delay: < 2.5ms
5. Frequency response: 50Hz~15KHz
6. Receiving sensitivity: < -105dBm

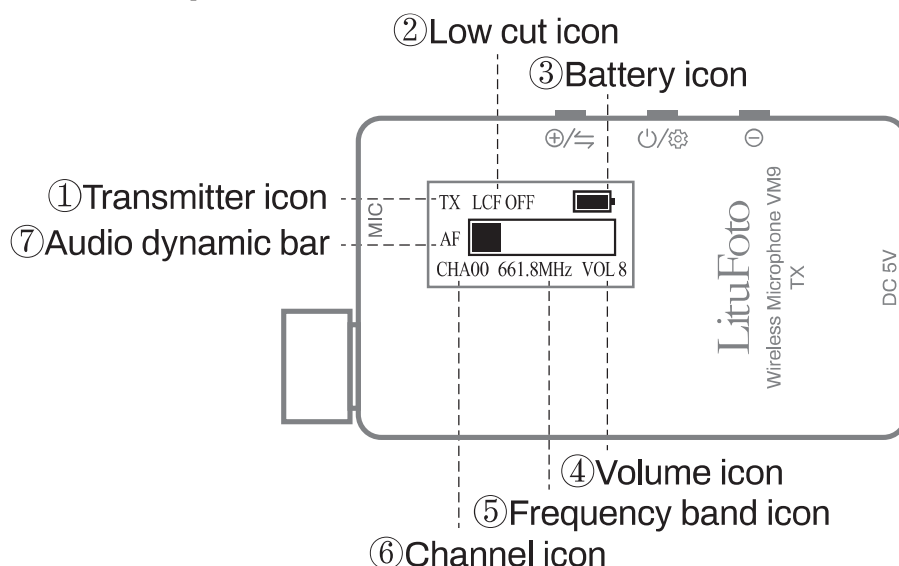
- 7. Dynamic range: >85dB
- 8. Control distance: 50M
- 9. Battery capacity: 3.7V/800mAh
- 10. Charging time: 2 hours
- 11. Survival time: about 6 hours
- 12. Net weight: about 86g
- 13. Product size: 62mm\*42mm\*16mm

## ■ Parts Name(transmitter TX)

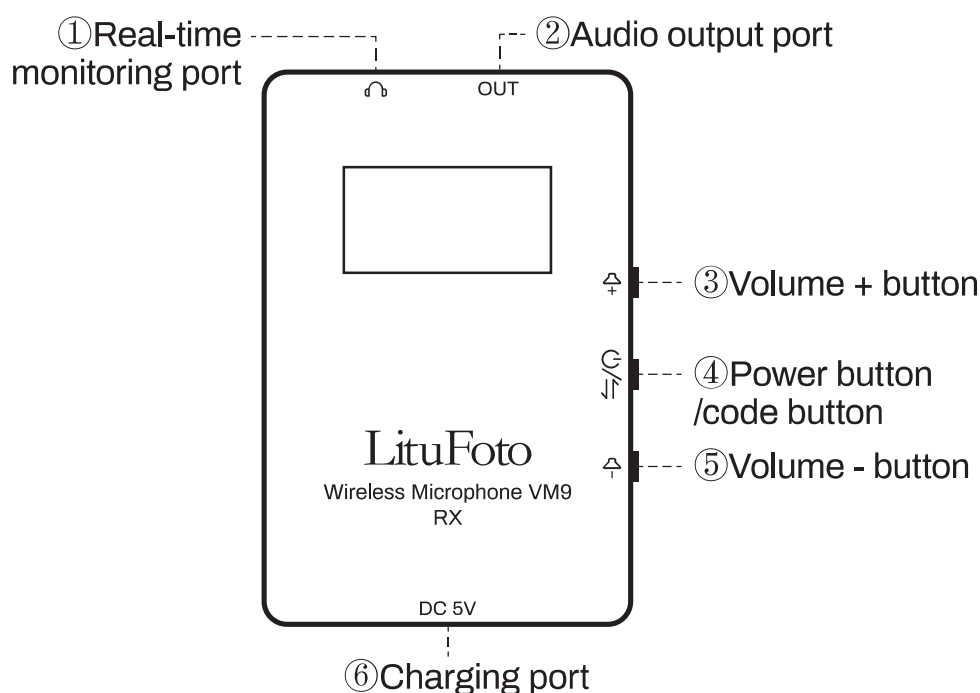


- ① Built-in mic: include audio.
- ② Mic input port: Suitable for 3.5TRS connection plug.
- ③ Function + button/code button: set the function for the increase button, lightly press 3 times in a row for code mode.
- ④ Power button/function button: long press for 2 seconds to turn off or on the power; after turning on the power, tap continuously to set the function mode.
- ⑤ Function - button: decreasing key when setting the function.
- ⑥ Charging port: USB Type-C charging port, input 5V1A.

## Icon Description (transmitter TX)



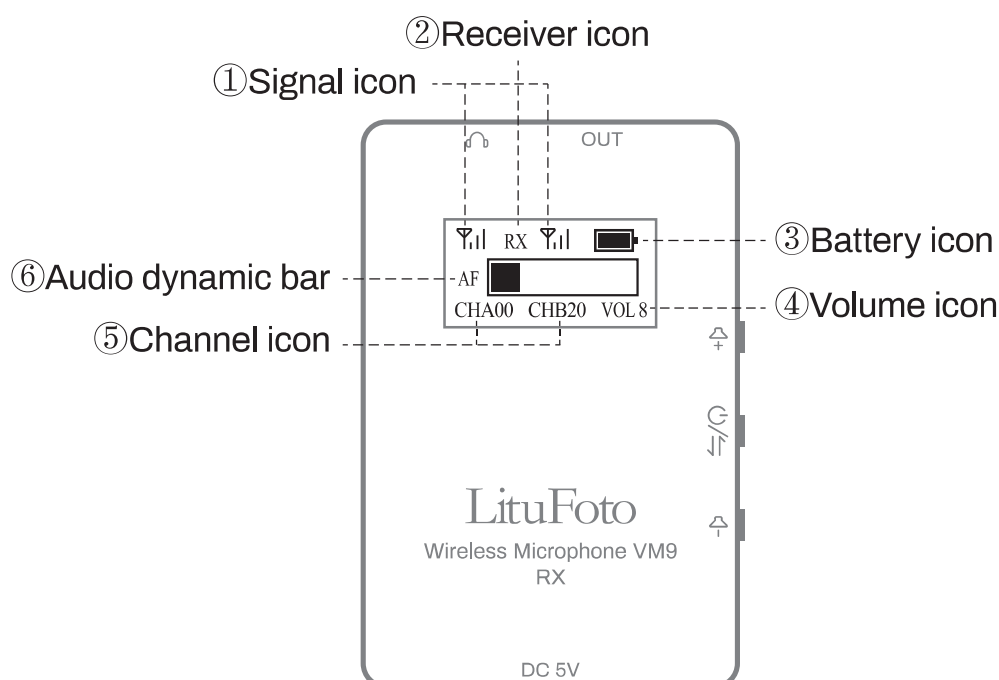
- ① TX: Transmitter icon.
- ② LCF: Low cut icon, when in a noisy environment, turn this function on to effectively filter the surrounding environment noise.
- ③ Battery icon: display the power and charging icon; when charging, the battery icon flashes, when fully charged the battery icon stops flashing.
- ④ VOL: Volume icon, 0~8 levels of volume.
- ⑤ MHz: Frequency band icon, frequency band 650~690MHz.
- ⑥ CHA: Channel icon, 0~20 channels.
- ⑦ AF: Audio dynamic bar, automatically displayed according to the volume level.



## ■ Parts Name(Receiver RX)

- ① Real-time monitoring port: connect headphones for real-time monitoring, suitable for 3.5TRS and TRRS connection plugs.
- ② Audio output port: use the audio connection cable to connect with recording equipment, suitable for 3.5TRRS connection plug.
- ③ Volume + button: In the power-on state, press lightly to increase the volume.
- ④ Power button/code button: long press 2 seconds to turn off or turn on the power; open the power, press lightly 3 times in a row for the code mode.
- ⑤ Volume - button: In the power on state, press lightly to reduce the volume.
- ⑥ Charging port: USB Type-C charging port, input 5V1A.

## Icon Description (Receiver RX)



- ① Signal icon: Show the signal strength.
- ② RX: Receiver icon.
- ③ Battery icon: display the power and charging icon; when charging, the battery icon flashes, when fully charged, the

battery icon stops flashing.

④ VOL: Volume icon, 0~8 levels of volume.

⑤ CHA/CHB: Channel icon, CHA is channel A, CHB is channel B, 0~20 channels.

⑥ AF: Audio dynamic bar, automatically display according to the volume level.

## ■ Connecting Cable Description

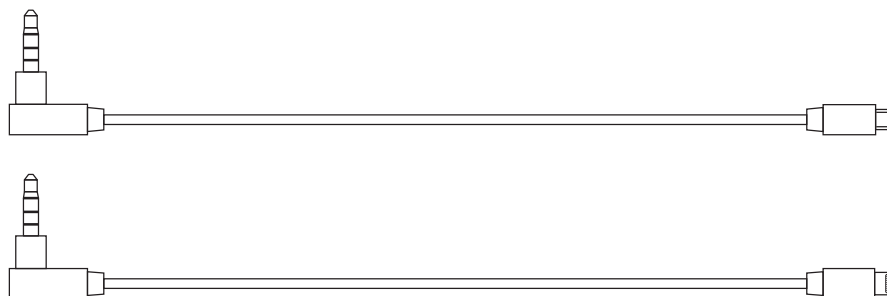
1. Camera connection cable: 3.5TRRS to 3.5TRS connection cable



2. Cell Phone connection cable: 3.5TRRS to 3.5TRRS connection cable



3. Type-C and Lightning interface devices need to purchase a separate adapter cable



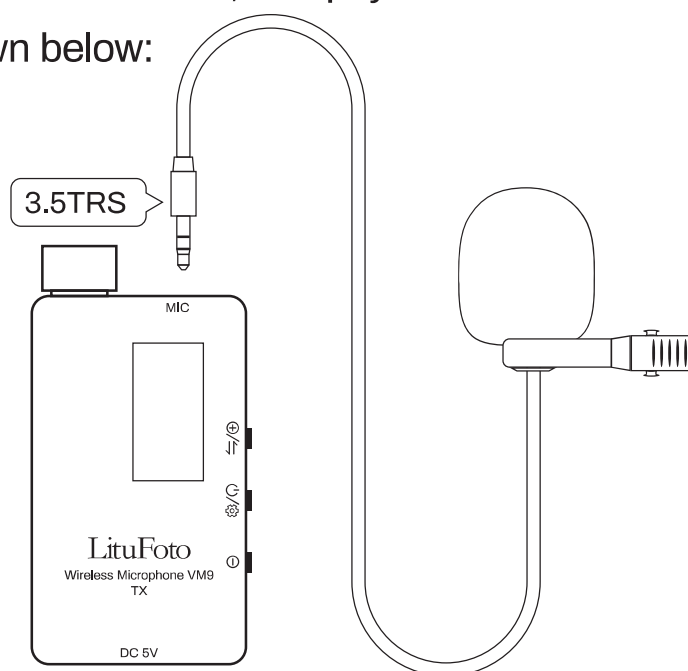
## ■ Equipment installation instructions

### A.Launcher installation instructions

The transmitter can be used with its own built-in microphone recording or external microphone recording. Insert the external microphone plug into the external microphone input



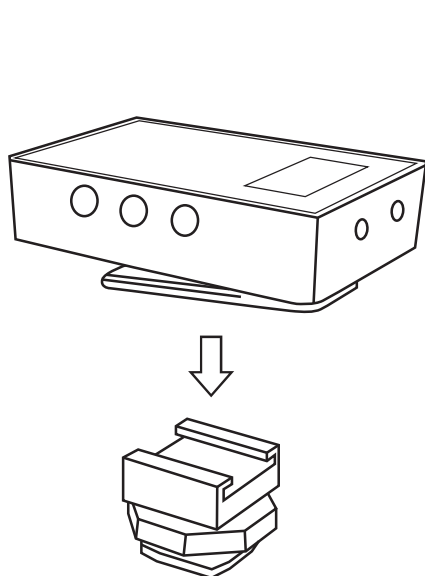
port "MIC" of the transmitter, and pay attention to insert it into place, as shown below:



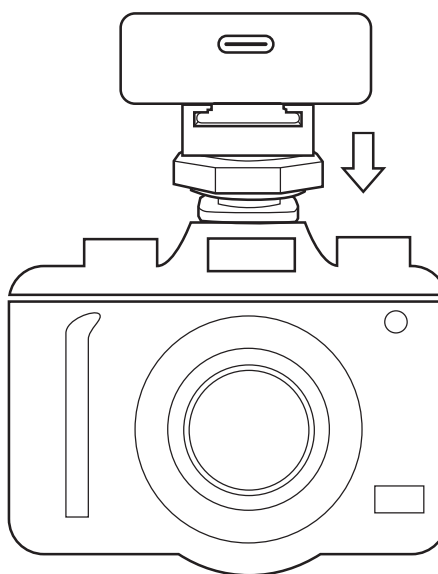
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## B.Receiver connection instructions

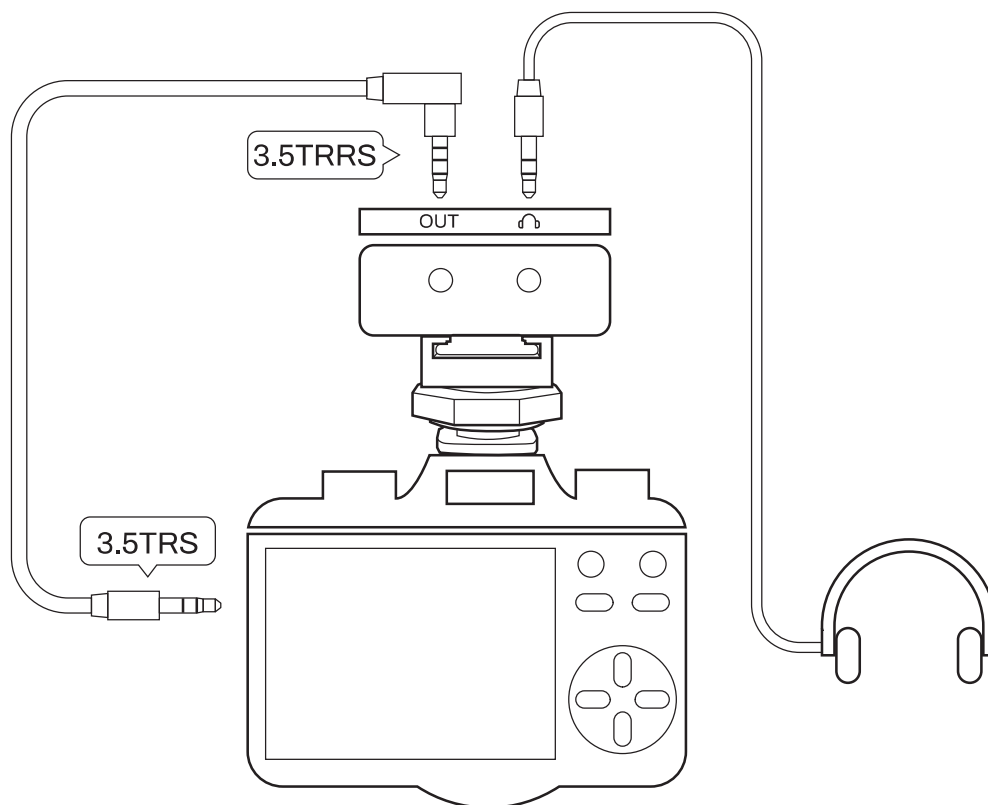
1.The receiver is connected to the camera to use, as follows:



① Install the receiver on the cold shoe adapter seat

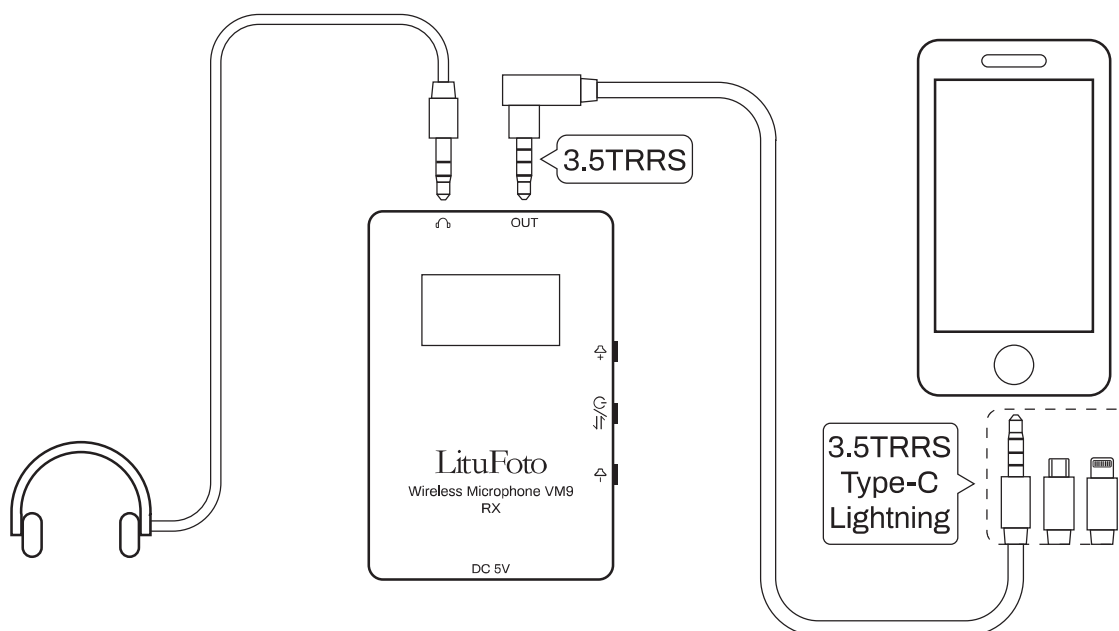


② Insert the cold shoe adapter seat into the camera hot shoe port and then tighten

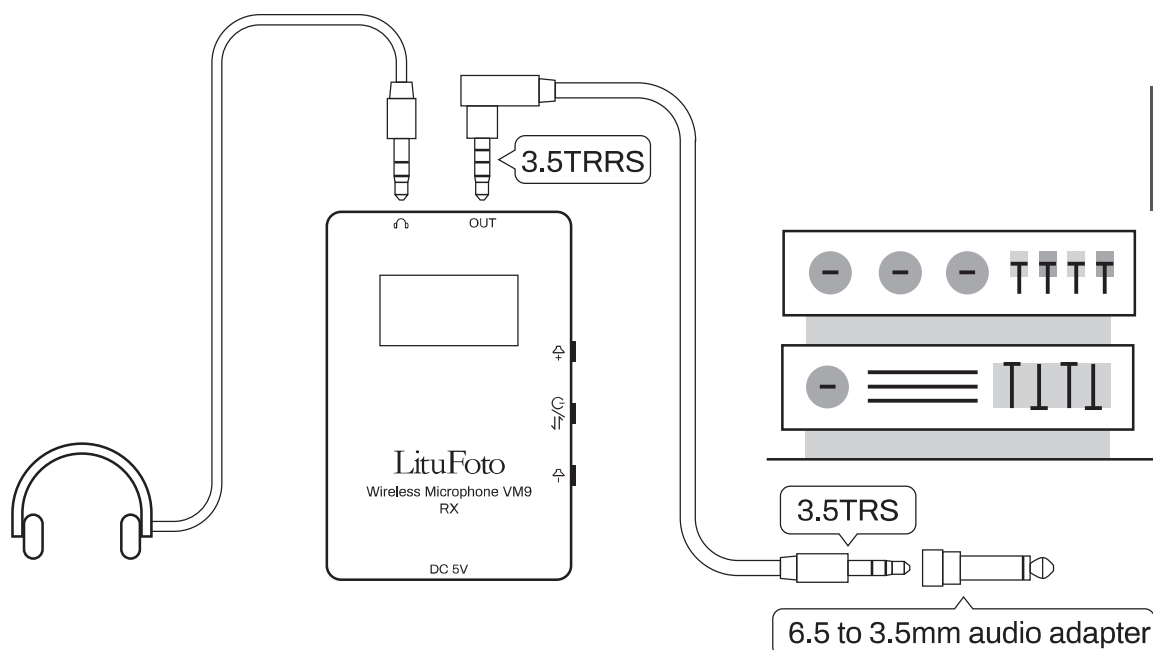


③According to the diagram  
connect the cable into the camera and receiver

2.The receiver is connected to the phone and used as follows:



3.Receiver connected to mixers, amplifiers, audio equipment,  
etc. 6.5 interface lossless transmission, as follows:



## ■ Operation instructions

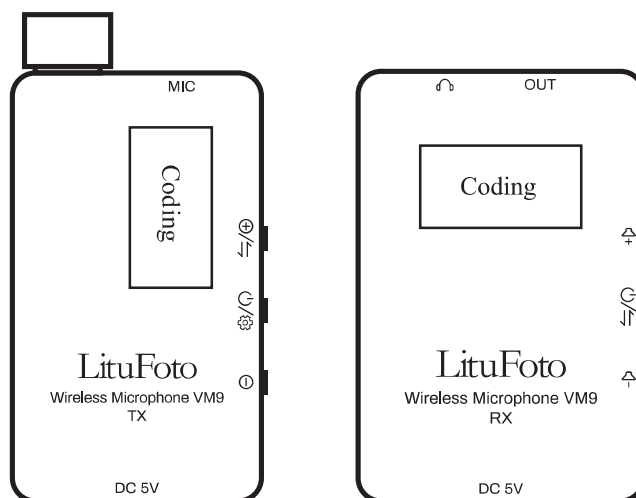
### A.Function setting

1. Transmitter: long press the power button/function button for 2 seconds to turn on the power, under the power on state, lightly press the power button/function button to set the channel, lightly press continuously to set the channel, volume, low cut function respectively, set with "+" "-" operation setting. 2 seconds after setting automatically save, or press the power button/function button to confirm.
2. Receiver: you can adjust the volume, tap the "+" button, the volume increases, tap the "-" button, the volume decreases.

### B.Connection operations

1. Each set of equipment has been factory code, such as channel misalignment, or the need to re-code, you can set the code again according to the following operation.
2. Power on state, the transmitter lightly press the function + button/code button 3 times to enter the code mode, the display shows " Coding " for the code mode, the receiver also lightly press the power button/code button 3 times to enter the code mode, the display also shows " Coding "for the code mode (as follows), at this time, the transmitter and receiver automatically to the code, the code is successful after the

transmitter and receiver channels on both sides of the same; the code is successful after setting the transmitter channel, the receiver will automatically receive the transmitter to set the channel, that is, successful code.



## ■ Troubleshooting

1. The transmitter and receiver are blocked by the building will affect the use of distance.
2. In a crowded environment, the human body will attenuate radio waves, as far as possible, the transmitter and receiver to avoid obscuring.
3. to control the use of the effective distance, the effective control distance is within 50M, such as obstacles or other factors affected by the environment, the distance will be reduced accordingly.
4. When the signal is interfered, you can try to change the use channel.
5. The device has a mute setting, if there is no sound, pay attention to whether the device volume is set to "0".
6. If the pickup distance is close or outdoor use, please put on the windproof wool cover to prevent sound distortion or reduce wind noise.
7. Make sure to plug in place when installing.
8. Make sure the product is paired and coded successfully before use.

## ■ Warranty Service Terms

1. This product is guaranteed for one year.
2. Warranty is calculated from the date of first purchase of the product. The purchase date is based on the date of registration of the warranty card when the product is purchased.
3. When a quality problem requires a warranty, return the warranty card, purchase document, and product to your dealer or factory for repair services.

## ■ Not Applicable Warranty

1. Product or component exceeds warranty.
2. Cannot provide warranty card or valid certificate for purchase.
3. Damage or broken caused by failure to use the instructions.
4. Broken or damage caused by improperly handling, dropping, shipping.
5. Malfunction or damage caused by contact with or exposure to improper temperature, solvents, acids, alkalis, flooding, or moisture.
6. Malfunction and damage caused by repairs, disassemblies, changes by users.
7. Malfunction or damage due to force or accident.
8. Malfunction or damage caused by other non-quality problems.

**The appearance of the product is scratched, discolored, worn and consumed during use, which is not a fault within the warranty scope. Damage or economic loss caused by improper use has nothing to do with the company.**

## **FCC Statement**

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

### **RF Exposure Information**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.