



PROFESSIONAL AUDIO EQUIPMENT

# CVM-WM300

## UHF 80-Channels Wireless Microphone



# USER MANUAL



## Foreword

Thanks for purchasing COMICA WM300 UHF wireless microphone;

WM300 is an all-metal wireless microphone with dual-transmitter triggered by one receiver, with built-in polymer lithium battery, it utilizes UHF wireless FM technology and LED high-resolution lattice screen, 80 channels in total, 16-level adjustable volume, and integrated into LCF (Low cut filter), Auto-scanning, Auto IR Channel-match, stereo / mono switchable audio mode, RF signal strength adjustment, MIC/LINE IN input dual selection, power monitoring at receiver end, sound pickup dynamic display, backlight adjustment and other functions, at the same time with strong shielding anti-noise performance, it's a high-quality microphone to broadcasting level;

To ensure the smooth use and safety of the product, please carefully read this instruction before using and properly assemble and operate.

## Main Features

- . Dual Transmitters Triggered by One Receiver, A/B Double Group Options;
- . 80 Channels, Used for Multiple Devices Working Together;
- . Working Distance is Up to 120m (in open area, up to 80m in Barrier Area);
- . LCF Low Cut Filtering Mode;
- . Auto-scanning for Quick Channel Selection;
- . Manual or Auto IR Sync;
- . Adjustable RF Signal Strength;
- . Audio Dynamic Display Bar;
- . 16 Levels Volume Adjustment;
- . Transmitter Power Monitor;
- . Mono/Stereo Switchable Output Modes;
- . Built-in Rechargeable Lithium Battery, Slim Body;
- . Low-consumption, Super-long Standby Time;
- . Lattice LCD Display, High Resolution;
- . Full Metal Manufacturing, Excellent Shielding;



**120m Working Distance**



**Dual-Mic Trigger**



**Full Metal and Super Shielding**



**80 Channels**



**Low Cut Filter**



**Auto-scanning**



**Adjustable RF Signal Strength**



**Auto IR Sync**



**Audio Dynamic Display Bar**



**Transmitter Power Monitor**



**16 Levels Volume Adjustment**



**Mono/Stereo Audio Switch**



**Real-Time Monitor**



**Lithium Power Driven**



**Low Power Consumption**



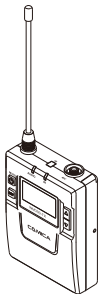
**Lattice LCD**

## Notice

- ⚠ When using auto IR sync, please stay within one meter, otherwise the signal may be too weak and the sync will not be successful;
- ⚠ In the case of stereo/mono mode switch, please preset the mode before using to avoid the transient interference caused by switching during usage;
- ⚠ The antenna will affect the working distance. Please protect the antenna and avoid any man-made damage;
- ⚠ The working distance will be affected by the surrounding environment. Please try to keep the environment open without interference during usage, and close the WIFI of the device itself;
- ⚠ When using this product in a short distance, it is recommended to set RF strength at 'LOW' to reduce the power consumption;
- ⚠ For smart phone shooting, customers must separately purchase a TRS-TRRS audio converting cable, and pay attention to set the mobile phone mode to 'Flight Mode' to avoid incoming call interference;  
(It does not support the original recording system of some android systems, the third-party APP is recommended to be used in this case);
- ⚠ Please keep this product in dry environment;
- ⚠ Do not expose the device in rain or humid environment, otherwise there will be a danger of short circuit;

## Package Contents

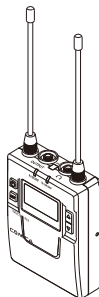
### Main Parts:



Lavalier Transmitter (TX)



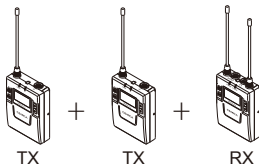
Hand-held Transmitter (HTX)



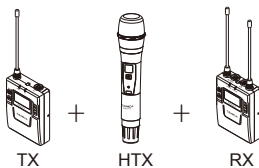
Receiver (RX)

## Multiple Selections:

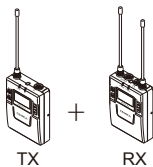
WM300(A) = 2TX + RX



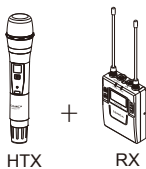
WM300(B) = TX + HTX + RX



WM300(C) = TX + RX



WM300(D) = HTX + RX



## Accessories:

- ① 3.5mm Mic Audio Input Cable
- ② 3.5mm-3.5mm Audio Output Cable
- ③ 3.5mm-XLR Audio Output Cable
- ④ Micro USB Charging Cable
- ⑤ Belt Clip
- ⑥ Camera Cold-shoe Mount
- ⑦ Wind Muff
- ⑧ Portable Box
- ⑨ User Manual
- ⑩ Warranty Card



①



②



③



④



⑤



⑥



⑦



⑧



⑨



⑩

👉 The accessories of each combination include:

WM300(A)= ①x2 + ② + ③ + ④x2 + ⑤x3 + ⑥x3 + ⑦x2 + ⑧ + ⑨ + ⑩

WM300(B)= ① + ② + ③ + ④ + ⑤x2 + ⑥x2 + ⑦ + ⑧ + ⑨ + ⑩

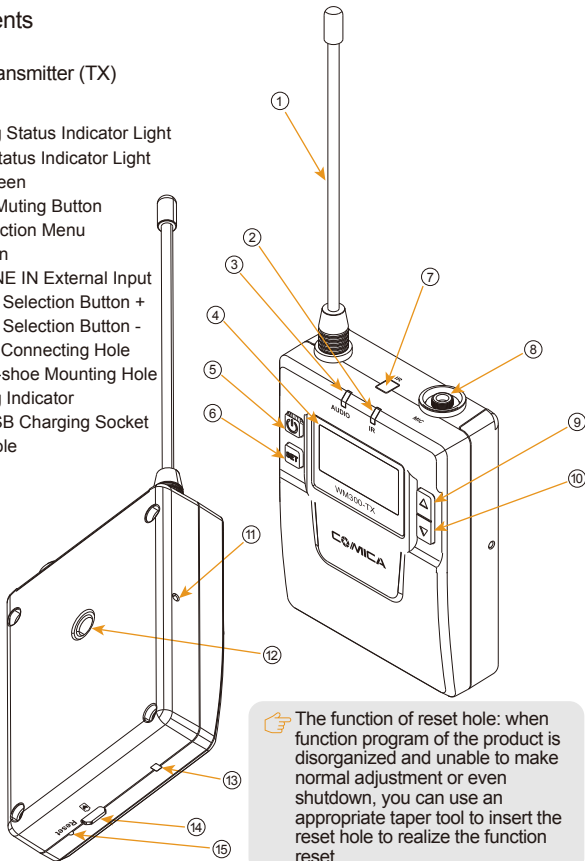
WM300(C)= ① + ② + ③ + ④ + ⑤x2 + ⑥x2 + ⑦ + ⑧ + ⑨ + ⑩


WM300(D)= ② + ③ + ④ + ⑤ + ⑥ + ⑦ + ⑧ + ⑨ + ⑩

### Components

#### Lavalier Transmitter (TX)

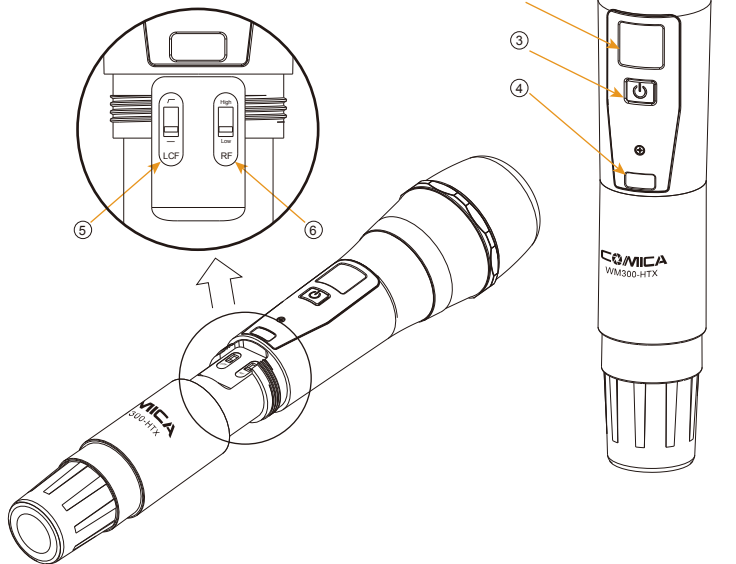
- ① Antenna
- ② Matching Status Indicator Light
- ③ Sound Status Indicator Light
- ④ LCD Screen
- ⑤ On-off / Muting Button
- ⑥ SET Function Menu
- ⑦ IR Screen
- ⑧ MIC / LINE IN External Input
- ⑨ Function Selection Button +
- ⑩ Function Selection Button -
- ⑪ Belt Clip Connecting Hole
- ⑫ 1/4 Cold-shoe Mounting Hole
- ⑬ Charging Indicator
- ⑭ Micro USB Charging Socket
- ⑮ Reset Hole



 The function of reset hole: when function program of the product is disorganized and unable to make normal adjustment or even shutdown, you can use an appropriate taper tool to insert the reset hole to realize the function reset.

## Hand-held Transmitter (HTX)

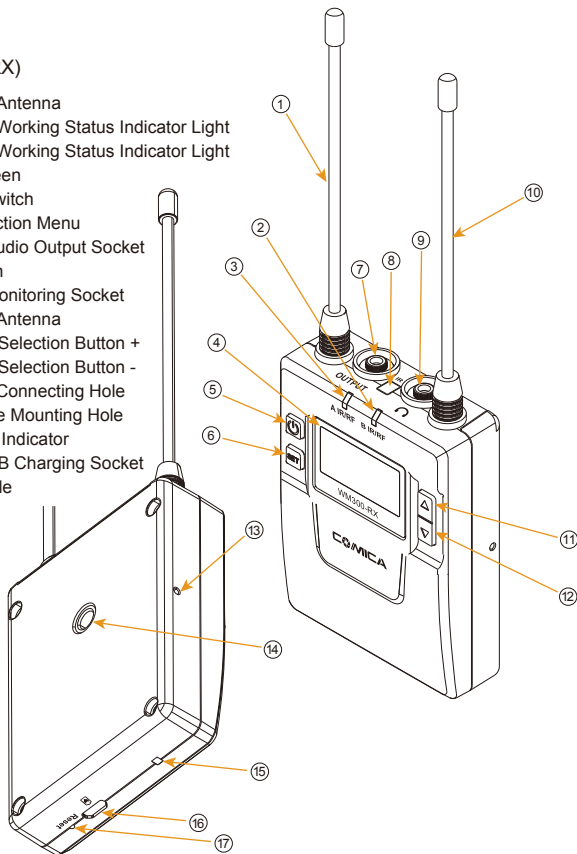
- ① Microphone
- ② LCD Display
- ③ On-off / Muting Button
- ④ IR Screen
- ⑤ Low cut/Normal Audio Switch
- ⑥ Signal Strength "High/Low" Switch














## Receiver (RX)

- ① Group A Antenna
- ② Group B Working Status Indicator Light
- ③ Group A Working Status Indicator Light
- ④ LCD Screen
- ⑤ On/Off Switch
- ⑥ SET Function Menu
- ⑦ 3.5mm Audio Output Socket
- ⑧ IR Screen
- ⑨ 3.5mm Monitoring Socket
- ⑩ Group B Antenna
- ⑪ Function Selection Button +
- ⑫ Function Selection Button -
- ⑬ Belt Clip Connecting Hole
- ⑭ Cold-shoe Mounting Hole
- ⑮ Charging Indicator
- ⑯ Micro USB Charging Socket
- ⑰ Reset Hole



## Function Button Instruction

<b>Lavalier Transmitter / Receiver</b> 	<b>On-off / Muting Button</b> 	<b>Long Press</b> <b>Power On / Off</b>	
		<b>Short Press</b> <b>Muting Mode</b> (This function is only for transmitter, when the mute function is turned on and the screen is lighted up)	
	<b>SET Function Menu</b> 	<b>Long Press</b> <b>Enter the function adjustment menu</b>	
		<b>Short Press</b> <b>1. Confirm the selected function</b> <b>2. Exit the function adjustment menu</b>	
<b>Hand-held Transmitter</b> 	<b>+ Button</b> 	<b>Short Press</b> <b>Function Adjustment (+)</b>	
	<b>- Button</b> 	<b>Short Press</b> <b>Function Adjustment (-)</b>	
	<b>On-off / Muting Button</b> 	<b>Long Press</b> <b>Power On / Off</b>	
		<b>Short Press</b> <b>Muting Mode</b> (Only goes into effect when the screen lights up)	
	<b>"Low cut/ Normal" Sound Switch</b> 	<b>Push-up</b> <b>Low cut</b>	
		<b>Push-down</b> <b>Normal</b>	
	<b>Signal Strength "High/Low" Switch</b> 	<b>Push-up</b> <b>Signal strength--high</b>	
		<b>Push-down</b> <b>Signal strength--low</b>	

### **Signal strength high / low switching effect:**

With high signal strength, the wireless working distance is up to 80-120M, high power consumption, battery life is short; With low signal strength, the wireless working distance is up to 30-60M, low power consumption, the battery can be used for a long time.



### Low cut function:

Appropriately remove the low frequency part of the sound, reduce the ambient noise of the low frequency part, to make sound more clean and clear.

## Indicator Light Instruction

Transmitter	AUDIO	Green Light Keeps On	Normal Recording Status (This state is only for the transmitter, when the channel matches successfully, the receiver can pick up the sound)
		Red Light Keeps On	Muting Mode
		Red Light Flicker	Low-power reminder
	IR	Green Light Keeps On	Channel matches (No matter the channel matches or not)
		Red Light Flicker	Channel in the match... (only for IR Sync)
Receiver	A IR/RF B IR/RF	Green Light Keeps On	Normal working status after the channel matches
		Green Light Flicker	Channel doesn't match
		Red Light Flicker	Channel in the match... (only for IR Sync)
			Low-power reminder
		Red light keeps on	Channel closed



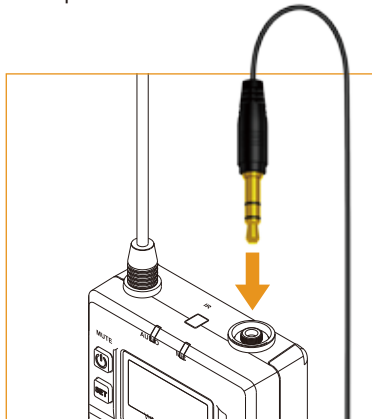
A IR/RF: Group A Working Status Indicator

B IR/RF: Group B Working Status Indicator

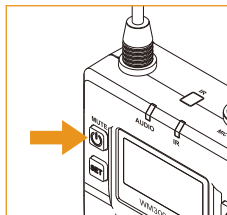
## Installation and Usage

### Lavalier Transmitter

1. Insert the 3.5mm audio input line into MIC socket



2. Long press the power button to turn on the transmitter

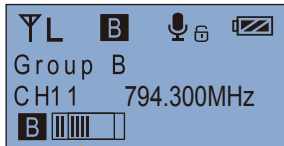
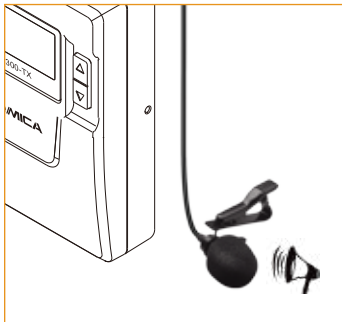


3. After the channel matching with the receiver, it can be used



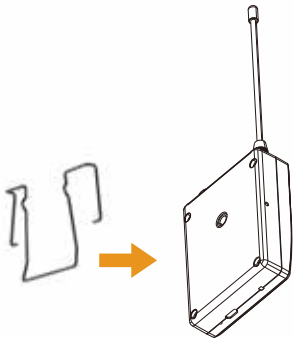
Please refer to screen operation instruction for channel matching.

3. Connect the MIC to the audio source and check the working status according to the volume indicator on the screen



Audio Dynamic Display Bar

4. Connect the belt clip to the connection hole



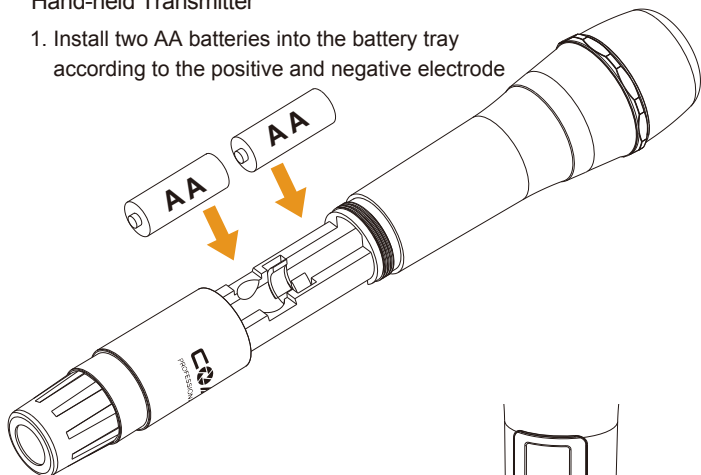
5. After the channel matching with the receiver, it can be used



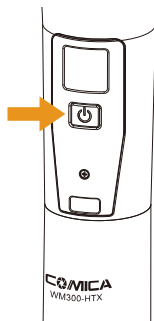
Please refer to screen operation instruction for channel matching.

## Hand-held Transmitter

1. Install two AA batteries into the battery tray according to the positive and negative electrode



2. Long press the button switch to turn on the hand-held transmitter



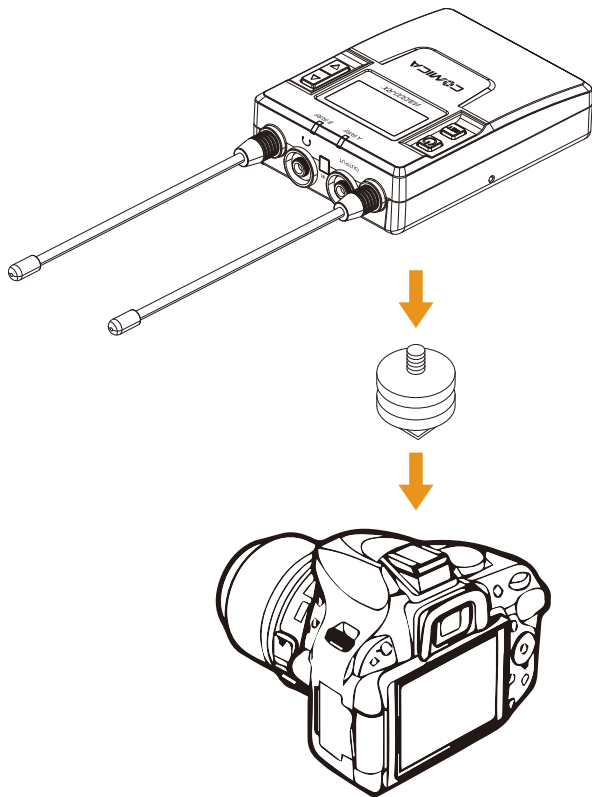
3. After the channel matching with the receiver, it can be used



Please refer to screen operation instruction for channel matching.

## Receiver

1. Connect the receiver to the video device through the cold shoe



2. Insert the 3.5mm-3.5mm audio OUTPUT line into the OUTPUT port, and insert the headphone into the 3.5mm monitoring socket for real-time monitoring, then long press the power button to turn on the receiver



3. After the channel matching with the receiver, it can be used



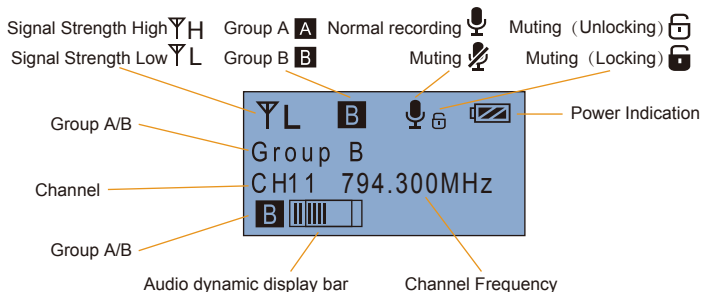
Please refer to screen operation instruction for channel matching.



## Screen Display and Operation Instruction

### Lavalier Transmitter

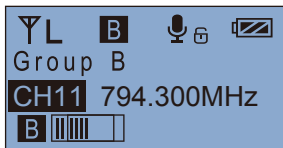
#### Screen Display Instruction



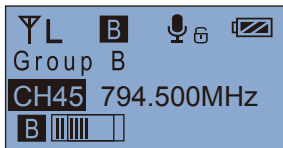
#### Operation Instruction

##### 1. Manually Adjust the Channel of Transmitter

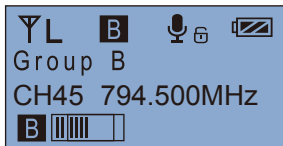
1.1 Long press **SET** button to CH setting display page



1.2 Short press **Δ** button to select the channel

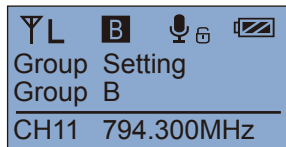


1.3 Short press  button to confirm

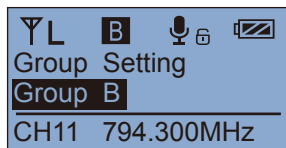



## 2. Group A/B Selection

2.1 Press  button to " Group Setting " display page



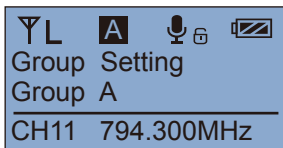
2.2 Long press  button to " Group Setting "display page



2.3 Press  button to select the group

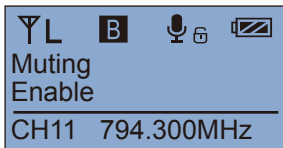



2.4 Short press  button to confirm




### 3. Muting Mode On/ Off

3.1 Press  button to “ Muting ” display page



3.2 Long press  button to “ Muting ” display page








3.3 Press  button to select Muting mode on/ off




### 3.4 Short press button to confirm



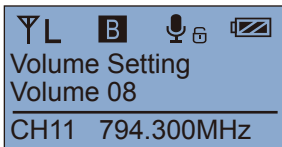
 When set to “Disable”, the muting function cannot be used, the icon is:  

When set to “Enable”, the muting function works, the icon is:  

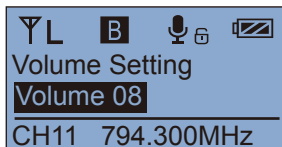
The muting mode can be controlled only when the screen is on, press any button to light the screen and then press the  button to switch the muting mode.


## 4. Volume Adjustment at Transmitter End

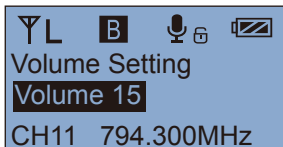
4.1 Press  button to “Volume Setting” display page



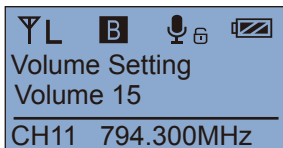
4.2 Long press  button to “Volume Setting” display page



4.3 Press  button to adjust the volume, 16 levels in total

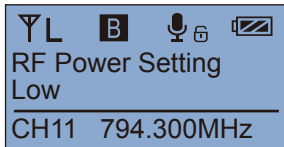


4.4 Short press  button to confirm

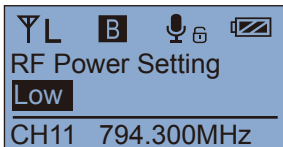



## 5. Transmitting signal strength “ High/Low ” Adjustment

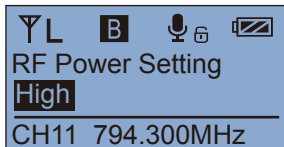
5.1 Press  button to “ RF Power Setting ” display page



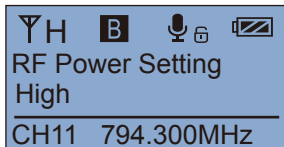
5.2 Long press  button to “ RF Power Setting ” display page



5.3 Press  button to adjust the transmitting signal strength

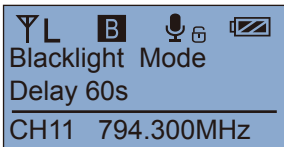


5.4 Short press  button to confirm

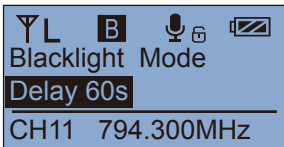



## 6. Backlight “ lighting time/turn off ” Adjustment

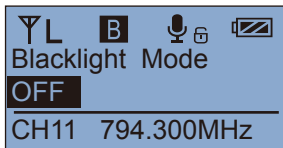
6.1 Press  button to “ Backlight Mode ” display page



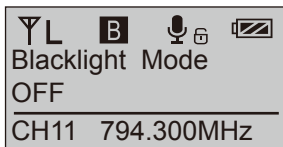
6.2 Long press  button to “ Backlight Mode ” display page




6.3 Press  button to adjust the backlight lighting time or you can turn it off for power saving

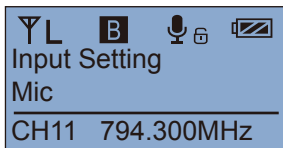


6.4 Short press  button to confirm

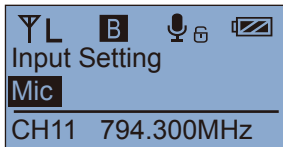



## 7. MIC/LINE IN Input Mode Adjustment

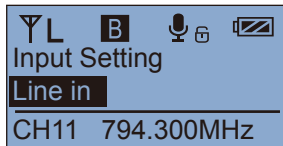
7.1 Press  button to “ Input Setting ”display page



7.2 Long press  button to “ Input Setting ” display page



7.3 Press  button to select “ Mic/ Line in ” input mode



7.4 Short press  button to confirm



Mic mode is for Microphone input;

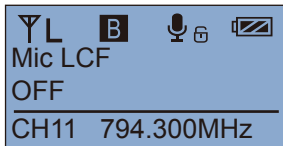
Line in mode is for external audio input, such as smart phone music player.


Selecting the corresponding input mode will bring you a better audio effect.

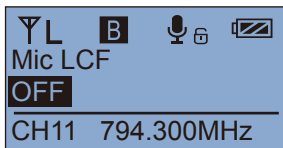



## 8. Low cut “On/Off ” Adjustment

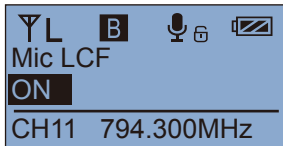
8.1 Press  button to “ Mic LCF ” display page




8.2 Long press  button to “ Mic LCF ” display page



8.3 Press  button to select LCF On/ Off

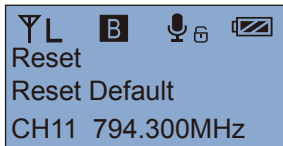


8.4 Short press  button to confirm

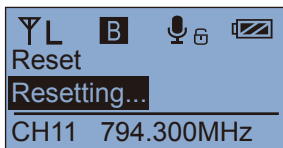
 The LCF function will remove the low-frequency part of the audio source, such as the sound of wild insects and the noise of the crowd, and the main audio source will be thinner. When the LCF function is turned off, the original sound will be restored, and the main sound source will be thicker. You can adjust according to actual needs.

## 9. Reset to Defaults

9.1 Press  button to “Reset ” display page




9.2 Long press  button for resetting

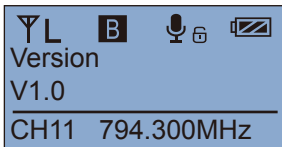


9.3 Resetting is finished



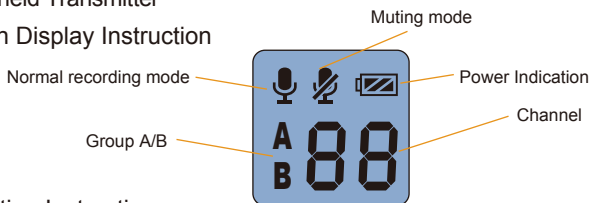
## 10. Version

10.1 Press  button to “Version ” display page to check the version



## Hand-held Transmitter


### Screen Display Instruction

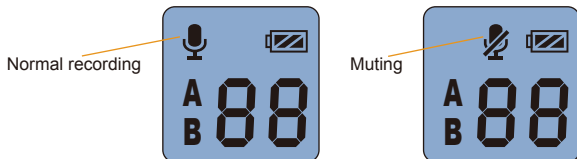




### Operation Instruction

#### 1. Turn on and Muting Mode Switch

1.1 Long press  switch button for 2 seconds to turn on or off

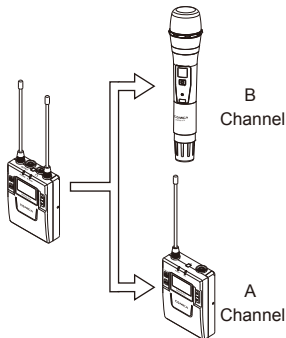
1.2 When it's turned on, short press the  button to select muting mode




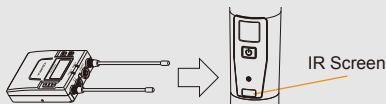
 The muting mode can be controlled only when the screen is on, press any button to light the screen and then press the  button to switch the muting mode.

## 2. Set the channel through infrared sync

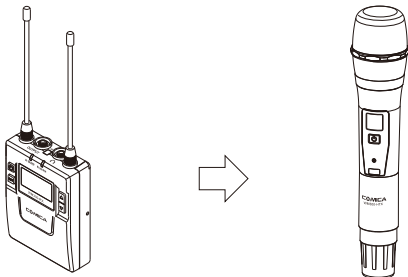
- 2.1 The hand-held transmitter defaults to channel B, and you can set the group and channel through the receiver (For example, If Group A of the receiver is used for the matching, after matching, it will be: Group A CHXX; If Group B of the receiver is used for the matching, after matching, it will be: Group B CHXX)
- 2.2 When the hand-held transmitter and the lavalier transmitter are used together, you should set them to different channels



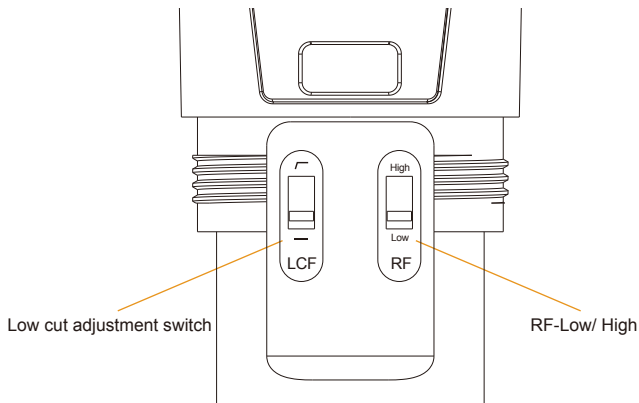
 During matching, don't shield the infrared receiving screen of the transmitter against the receiver.



## 2.3 Set the channel through infrared sync

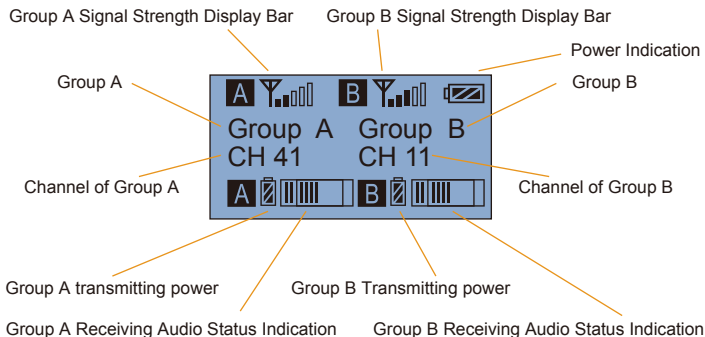


## 2.4 Thumbwheel switch



## Receiver


### Screen Display Instruction



When Group A/B is on, the background color of the channel display icon is black;  
When Group A/B is off, the channel display icon is transparent and no background color.

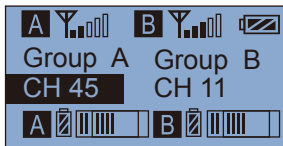
### Operation Instruction

#### 1. Manually Adjust the Channel of Group A/ Group B

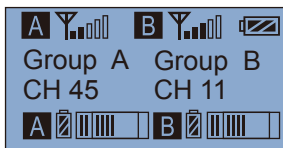
- 1.1 Long press  button to “CH” display page, long press again for Group A/Group B switch



1.2 Short press  button to select the channel

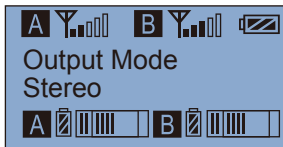


1.3 Short press  button to confirm

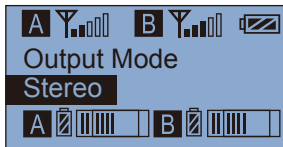



## 2. Audio output mode “stereo/mono” adjustment

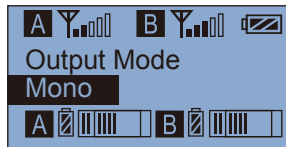
2.1 Press  button to “ Output Mode ” display page



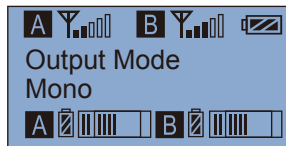
2.2 Long press  button to “ Output Mode ” display page



2.3 Press  button to select Mono/ Stereo Output Mode




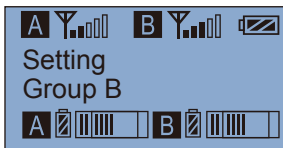
2.4 Short press  button to confirm







### 3. Group A/B function setting

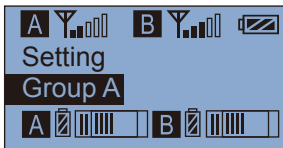
3.1 Press  button to “ Setting ” display page



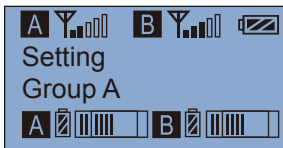
3.2 Long press  button to “ Setting ” display page



3.3 Press  button to select Group A/B to edit

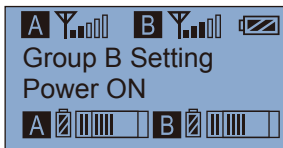



3.4 Short press  button to confirm

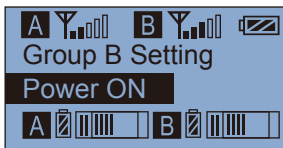



## 4. Group A/B “ On/ Off ” Adjustment

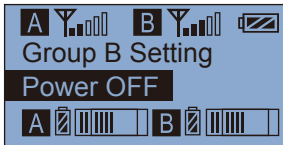
4.1 Short Press  button to “ Group B Setting Power ON ” display page



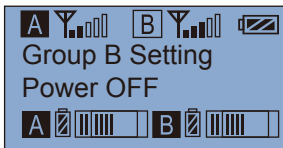
4.2 Long press  button to “ Setting ” display page



4.3 Short Press  button to select “ Power Off ” or not

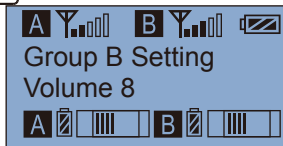


4.4 Short press  button to confirm

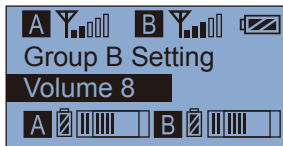


## 5. Group A/B Volume Adjustment

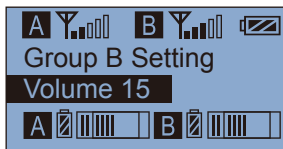
5.1 Short Press  button to “ Group B Setting Volume ” display page



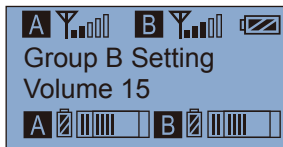
5.2 Long press  button to “ Setting ” display page




5.3 Short Press  button to adjust the volume

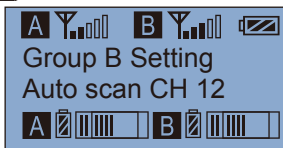


5.4 Short press  button to confirm

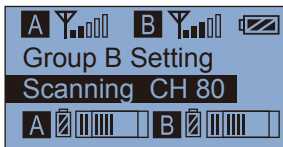


## 6. Group A/B Automatic Channel Scan

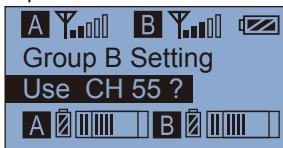
6.1 Short Press  button to “ Group B Setting Auto scan CH ”display page



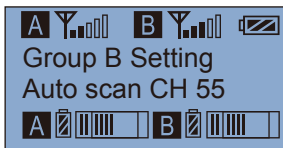
6.2 Long press  button for Auto scanning




6.3 After scanning, the best available channel will be shown on the screen and prompted for use

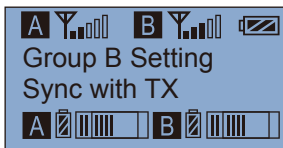


6.4 Short press  button to confirm

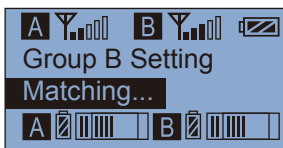


## 7.Group A/B IR Sync

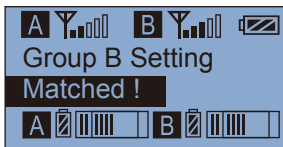
7.1 Short Press  button to “ Group B Setting Sync with TX ”display page




7.2 Long press  button for IR Matching

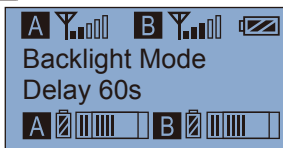


7.3 Matched

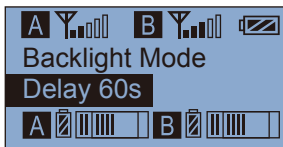



## 8. Backlight “lighting time/turn off ” Adjustment

8.1 Short Press  button to “ Backlight Mode ” display page



8.2 Long press  button to “ Backlight Mode ” display page



8.3 Short press  button to adjust the backlight lighting time or you can turn it off for power saving

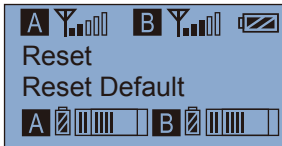


8.4 Short press  button to confirm



## 9. Reset to Defaults

9.1 Press  button to “ Reset ” display page




9.2 Long press  button for resetting



9.3 Resetting is finished



## 10. Version

10.1 Press  button to “ Version ” display page to check the version



## Specification

### Lavalier Transmitter TX

Channels	80
Group A Wireless Frequency	794.000MHz ~ 806.000MHz
Group B Wireless Frequency	794.000MHz ~ 806.000MHz
Signal / Noise	>65dB
Antenna	1/4 Wavelength Wire Antenna
Transmitting Power	10dbm/15dbm
Stray Radiation	<-60dBc
Sound Delay	<20ms
Audio Distortion	<0.5%
Battery	Polymer Lithium Battery 3.7V 2000mAh
Dimension	84 x 63.5 x 23mm
Operating Temperature	0℃ ~ 50℃
Storage Temperature	-20℃ ~ 60℃



## Hand-held Transmitter HTX

Channels	80
Group A Wireless Frequency	794.000MHz ~ 806.000MHz
Group B Wireless Frequency	794.000MHz ~ 806.000MHz
Signal / Noise	>65dB
Antenna	PCB Antenna
Transmitting Power	10dbm/15dbm
Stray Radiation	<-60dBc
Sound Delay	<20ms
Audio Distortion	<0.5%
Battery	AA Batteries x 2pcs
Dimension	Φ53.5(MAX) x 253mm
Operating Temperature	0℃ ~ 50℃
Storage Temperature	-20℃ ~ 60℃

## Receiver RX

Channels	80
Group A Wireless Frequency	794.000MHz ~ 806.000MHz
Group B Wireless Frequency	794.000MHz ~ 806.000MHz
Signal / Noise	>65dB
Antenna	1/4 Wavelength Wire Antenna
Receiving Power	-95dBm
Stray Radiation	<-60dBc
Sound Delay	<20ms
Audio Distortion	<0.5%
Battery	Polymer Lithium Battery 3.7V 2000mAh
Dimension	84 x 63.5 x 23mm
Operating Temperature	0℃ ~ 50℃
Storage Temperature	-20℃ ~ 60℃



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