

# CVM-WM300

## UHF Wireless Microphone



# USER MANUAL

## Specification

### Lavalier Transmitter TX

Channels	96
Group A Wireless Frequency	794MHz ~ 806MHz
Group B Wireless Frequency	794MHz ~ 806MHz
Transmitting Power	10dBm/15dBm

### Hand-held Transmitter HTX

Channels	96
Group A Wireless Frequency	794MHz ~ 806MHz
Group B Wireless Frequency	794MHz ~ 806MHz
Transmitting Power	10dBm/15dBm

### Receiver RX

Channels	96
Group A Wireless Frequency	794MHz ~ 806MHz
Group B Wireless Frequency	794MHz ~ 806MHz

## 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 LCD high-resolution lattice screen, 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;
- . Used for Multiple Devices Working Together;
- . Working Distance is Up to 120m (120m in Open Area, 80m in Barrier Area);
- . LCF Low Cut Filtering Mode;
- . Auto-scanning for Quick Channel Selection;
- . Manual or Auto IR Sync;
- . Optional Language;
- . 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**



**Audio Dynamic Display Bar**



**Low Cut Filter**



**Auto-scanning**



**Adjustable RF Signal Strength**



**Auto IR Sync**



**Transmitter Power Monitor**



**16 Levels Volume Adjustment**



**Mono/Stereo Audio Switch**



**Real-time Monitor**



**Lithium Power Driven**



**Low Power Consumption**



**Lattice LCD**



**Optional Language**

## Notice

- ⚠ Transmitter should be more than 20cm from Receiver, when the distance is less than 20cm, Receiver's wireless signal receiving part will take protect action to shut down the receiving of wireless signal, then audio may be intermittent, which is normal;
- ⚠ 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

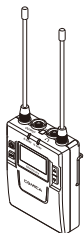
### Main Parts:



Lavalier Transmitter (TX)



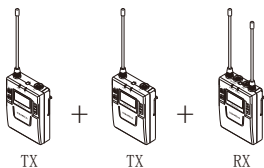
Hand-held Transmitter (HTX)



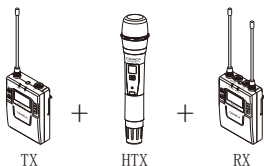
Receiver (RX)

## Multiple Selections:

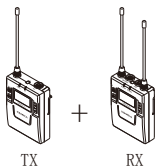
$$\text{WM300 (A)} = 2\text{TX} + \text{RX}$$



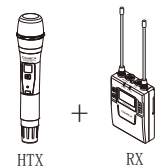
$$\text{WM300 (B)} = \text{TX} + \text{HTX} + \text{RX}$$



$$\text{WM300 (C)} = \text{TX} + \text{RX}$$



$$\text{WM300 (D)} = \text{HTX} + \text{RX}$$



## 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 Hot-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 + ⑥ + ⑦x2 + ⑧ + ⑨ + ⑩

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

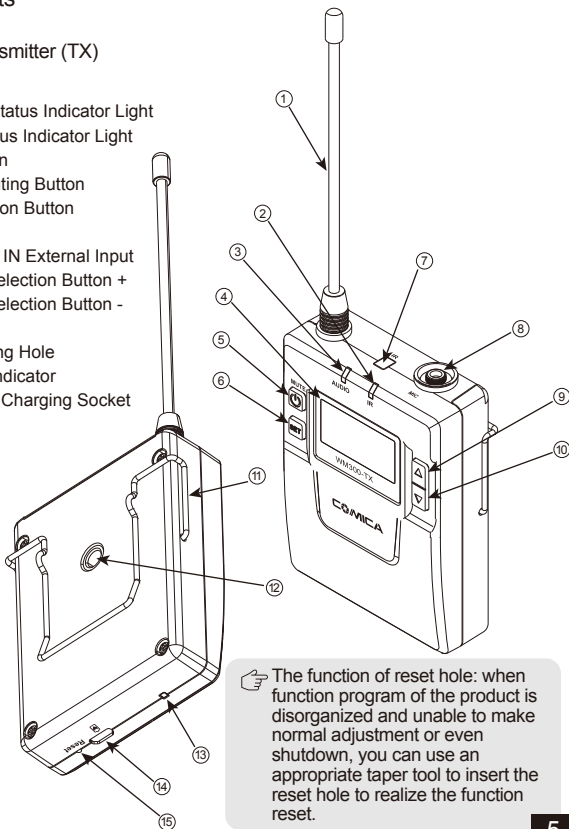
WM300(C)= ① + ② + ③ + ④ + ⑤x2 + ⑥ + ⑦ + ⑧ + ⑨ + ⑩


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

### Components

#### Lavalier Transmitter (TX)

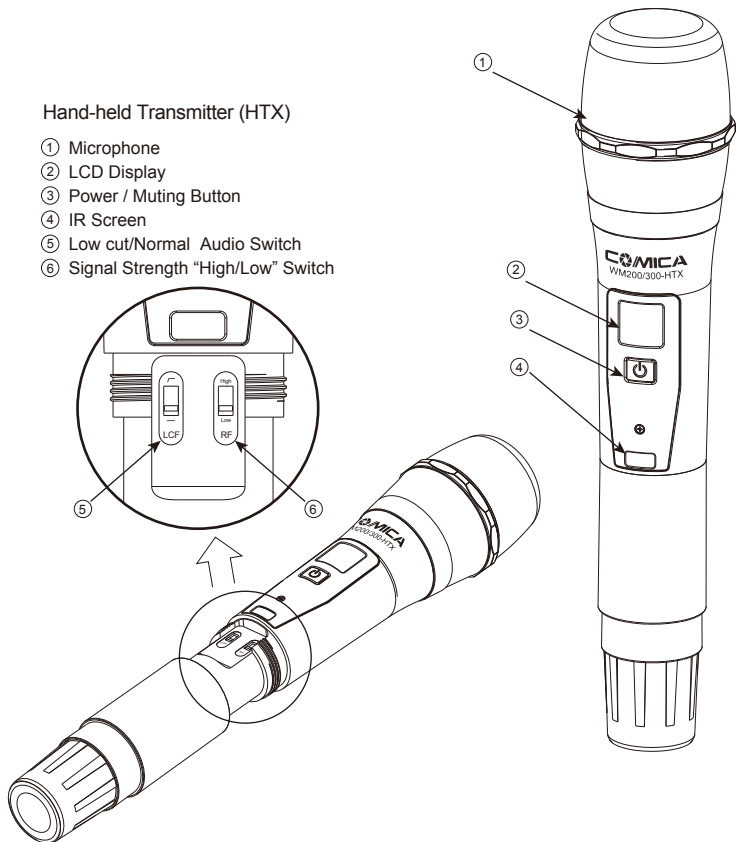
- ① Antenna
- ② Matching Status Indicator Light
- ③ Sound Status Indicator Light
- ④ LCD Screen
- ⑤ Power / Muting Button
- ⑥ SET Function Button
- ⑦ IR Sensor
- ⑧ MIC / LINE IN External Input
- ⑨ Function Selection Button +
- ⑩ Function Selection Button -
- ⑪ Belt Clip
- ⑫ 1/4 Mounting Hole
- ⑬ Charging 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.

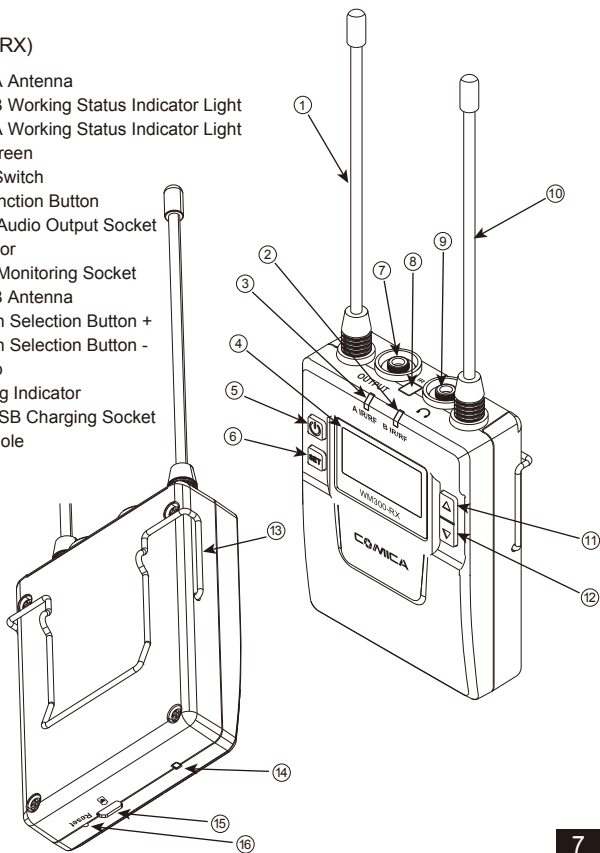
## Hand-held Transmitter (HTX)

- ① Microphone
- ② LCD Display
- ③ Power / 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 Power Switch
- ⑥ SET Function Button
- ⑦ 3.5mm Audio Output Socket
- ⑧ IR Sensor
- ⑨ 3.5mm Monitoring Socket
- ⑩ Group B Antenna
- ⑪ Function Selection Button +
- ⑫ Function Selection Button -
- ⑬ Belt Clip
- ⑭ Charging Indicator
- ⑮ Micro USB Charging Socket
- ⑯ Reset Hole



## Function Button Instruction

<b>Lavalier Transmitter / Receiver</b>    	<b>Power / 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>	1. Confirm the selected function 2. Exit the function adjustment menu
	<b>+ Button</b> 	<b>Short Press</b>	<b>Function Adjustment (+)</b>
	<b>- Button</b> 	<b>Short Press</b>	<b>Function Adjustment (-)</b>
<b>Hand-held Transmitter</b>  	<b>Power / 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

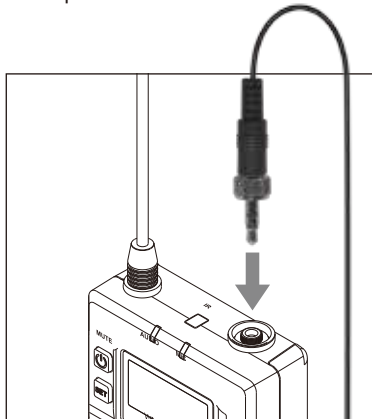


A IR/RF: Group A Working Status Indicator

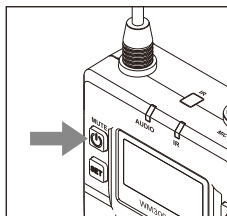
B IR/RF: Group B Working Status Indicator

### Lavalier Transmitter

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



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

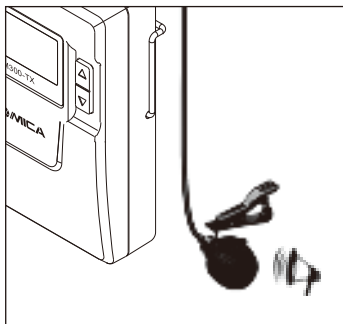


3. After the channel matching with the receiver, it can be used



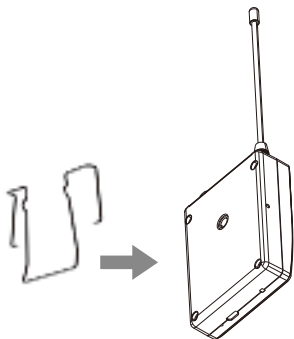
Please refer to screen operation instruction for channel matching.

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

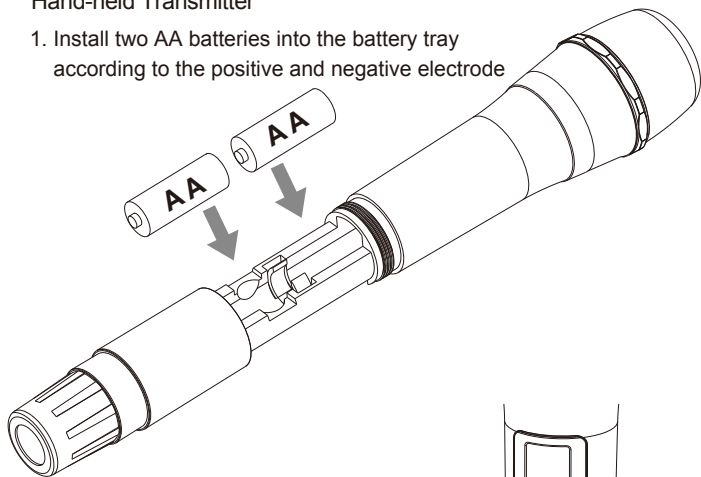
4. Connect the belt clip to the connection hole



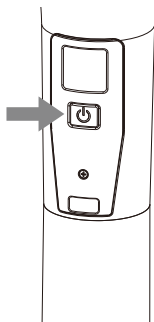
5. After the channel matching with the receiver, it can be used

## 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

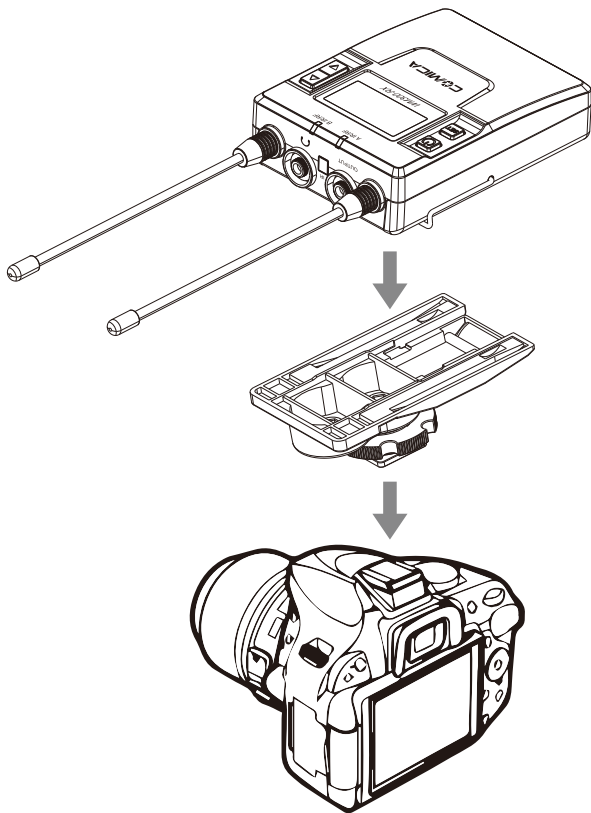


3. After the channel matching with the receiver, it can be used

 Please refer to screen operation instruction for channel matching.

## Receiver

1. Connect the receiver to the video device through the hot-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

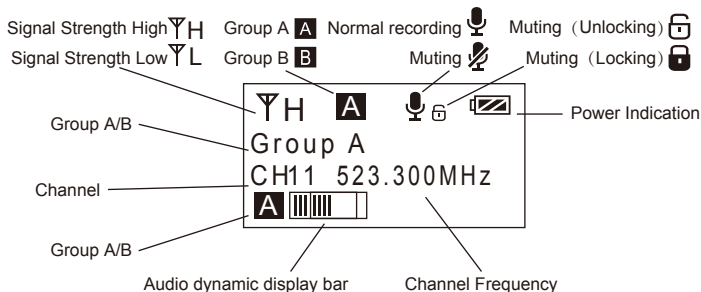


Please refer to screen operation instruction for channel matching.

## Screen Display and Operation Instruction

### Lavalier Transmitter

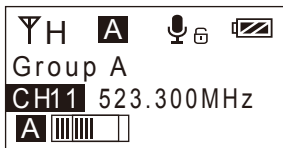
#### Screen Display Instruction



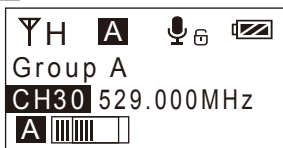
#### Operation Instruction

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

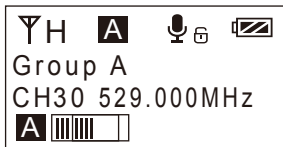
1.1 Long press button to CH setting display page



1.2 Short press button to select the channel

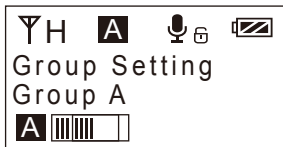



1.3 Short press  button to confirm

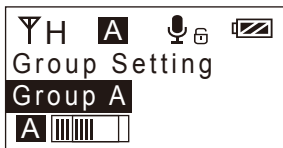



## 2. Group A/B Selection

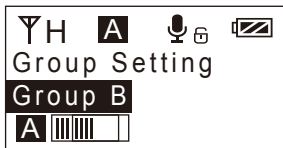
2.1 Press  button to ' Group Setting ' display page



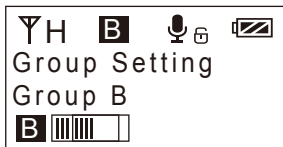
2.2 Long press  button to ' Group Setting ' display page




2.3 Press  button to select the group

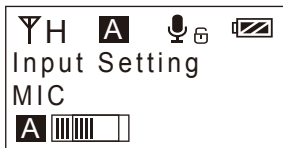


2.4 Short press  button to confirm

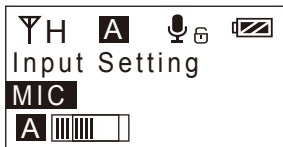


### 3.MIC/LINE IN Input Mode Adjustment

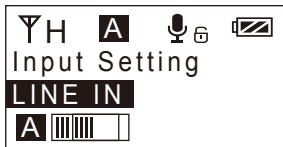
3.1 Press  button to ' Input Setting ' display page



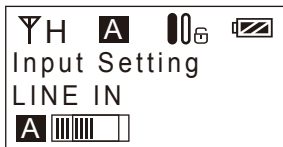
3.2 Long press  button to ' Input Setting ' display page




3.3 Press  button to select ' Mic/ Line in ' input mode



3.4 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.

## 4. Low cut ' High/Low/OFF ' Adjustment

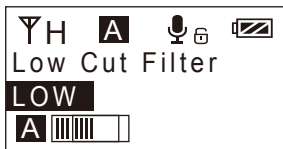
4.1 Press  button to ' Low Cut Filter ' display page



4.2 Long press  button to ' Low Cut Filter ' display page




4.3 Press  button to select LCF ' Hight / Low / OFF '



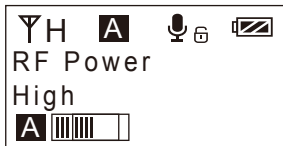
4.4 Short press  button to confirm




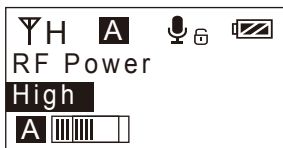
 low-cut function will filter out the low-frequency part of the audio source, such as the chirping and crowd noise, and the main audio source will be more crisp. Low cut divided into low cut in low range and low cut in high range, low range is to filter out part of the noise, while high range of low cut filter out all noise. Turn off the low cut to restore the true, the main source will be more vigorous, but it can be adjusted according to actual needs.


## 5. Transmitting Signal Strength ' High/Low ' Adjustment

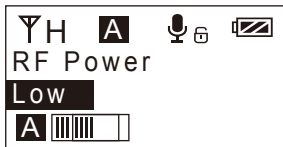
5.1 Press  button to ' RF Power ' display page



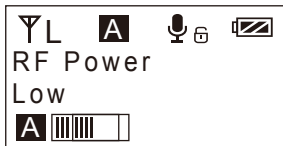
5.2 Long press  button to ' RF Power ' display page



5.3 Press  button to adjust the transmitting signal strength




5.4 Short press  button to confirm




## 6.Muting Mode Enable/ Disable

6.1 Press  button to ' Muting ' display page



6.2 Long press  button to ' Muting ' display page






6.3 Press  button to select Muting mode on/ off




#### 6.4 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.


## 7.Backlight ' Lighting Time/Turn Off ' Adjustment

7.1 Short Press  button to ' Backlight ' display page



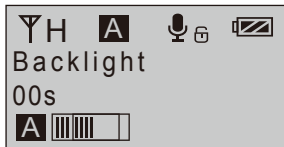
7.2 Long press  button to ' Backlight ' display page



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




7.4 Short press  button to confirm



## 8. System Language

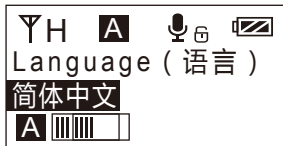
8.1 Short press  button to 'Language' display page



8.2 Long press  button to enter 'Language' display page



8.3 Short press  button to select language




8.4 Short press  button to confirm




## 9. Reset to Defaults

9.1 Press  button to 'Reset' display page



9.2 Long press  button to enter 'Reset' display page




9.3 Short press  button to select whether to restore factory Settings



9.4 Short press  button to confirm and restore factory setting



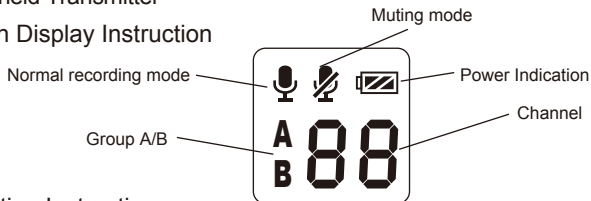
## 10. Version

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

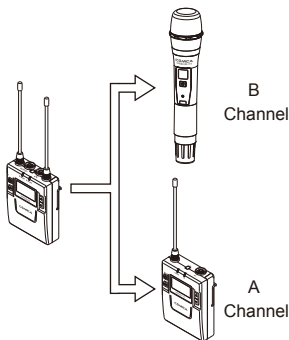
- 1.1 Long press  switch button for 2 seconds to turn on or off
- 1.2 When it's turned on, short press the  button to select muting mode



 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

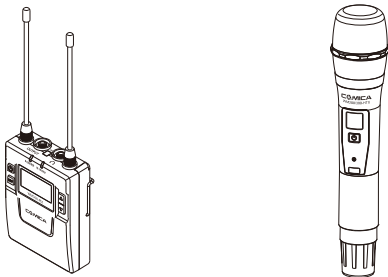
- 2.1 The hand-held transmitter defaults to channel B, and you can set the group and channel through the receiver (For example, If Group A of the receiver is used for the matching, after matching, it will be: Group A CHXX; If Group B of the receiver is used for the matching, after matching, it will be: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



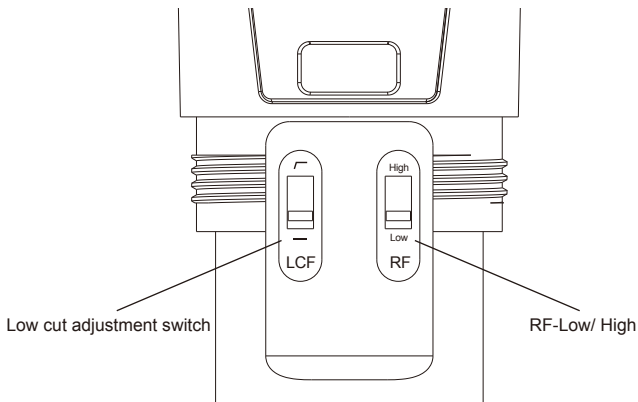
👉 During matching, don't shield the infrared receiving screen of the transmitter against the receiver.



## 2.3 Set the channel through infrared sync

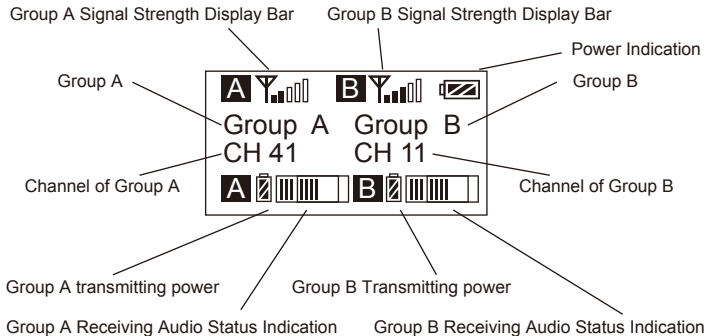


## 2.4 Function switch



## Receiver


### Screen Display Instruction

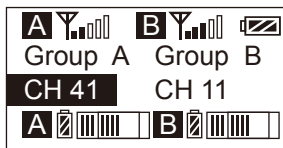


When Group A/B is on, the background color of the channel display icon is black;  
When Group A/B is off, the channel display icon is transparent and no background color.

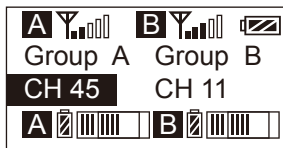
## Operation Instruction

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

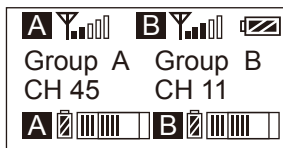
- 1.1 Long press  button to 'CH' display page, long press again for Group A/Group B switch



- 1.2 Short press  button to select the channel

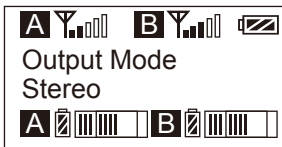


- 1.3 Short press  button to confirm

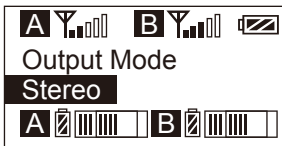


## 2. Audio Output Mode 'Stereo/Mono' Adjustment

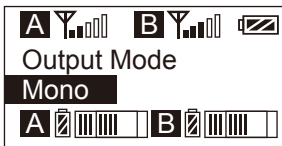
2.1 Press  button to 'Output Mode' display page



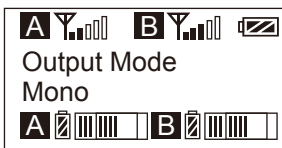
2.2 Long press  button to 'Output Mode' display page




2.3 Press  button to select Mono/ Stereo Output Mode

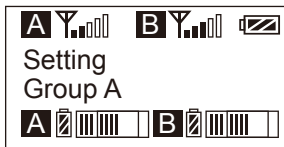



2.4 Short press  button to confirm

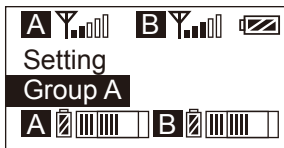



### 3.Group A/B Function Setting

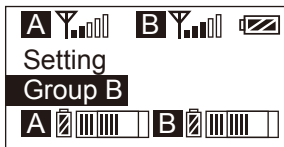
3.1 Press  button to ' Setting ' display page



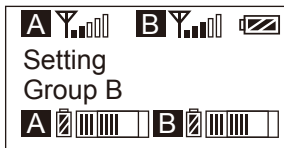
3.2 Long press  button to ' Setting ' display page



3.3 Press  button to select Group A/B to edit

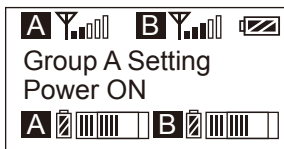


3.4 Short press  button to confirm

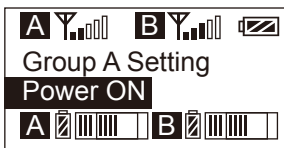



## 4.Group A/B ' On/ Off ' Adjustment

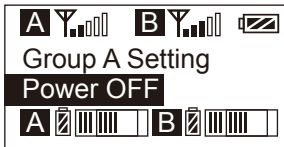
- 4.1 Short Press  button to ' Group A Setting ' display page  
Power ON



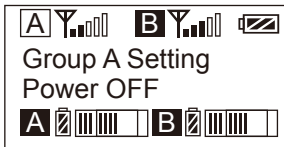
- 4.2 Long press  button to ' Setting ' display page



- 4.3 Short Press  button to select ' Power Off ' or not

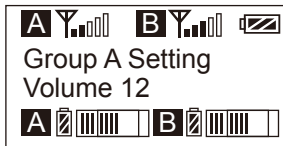



- 4.4 Short press  button to confirm

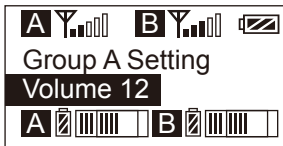


## 5.Group A/B Volume Adjustment

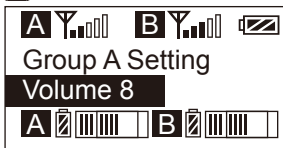
5.1 Short Press  button to ' Group A Setting ' display page  
Volume



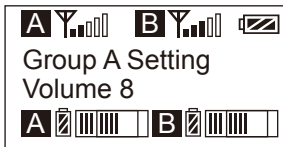
5.2 Long press  button to ' Setting ' display page



5.3 Short Press  button to adjust the volume



5.4 Short press  button to confirm

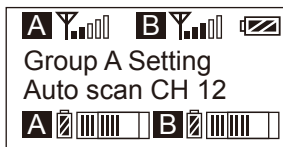


## 6.Group A/B Automatic Channel Scan

6.1 Short Press



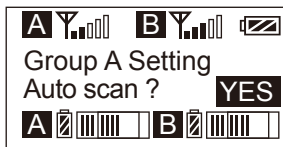
button to 'Group A Setting', display page  
Auto scan CH



6.2 Long press



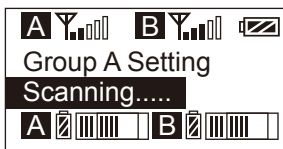
button for Auto scanning



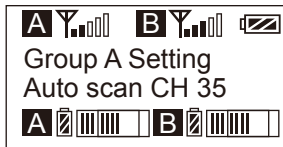
6.3 Short press



button to 'Scanning.....'



6.4 Scanning complete and choose the best suitable channel

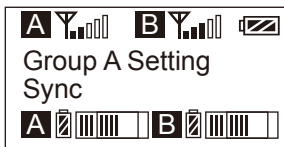


## 7.Group A/B IR Sync

### 7.1 Short Press



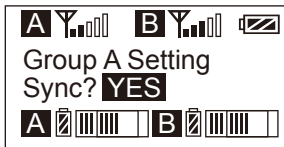
button to ' Group A Setting ' display page  
Sync



### 7.2 Long press




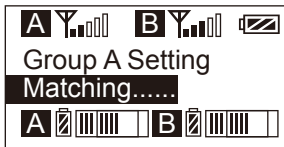
button for IR Matching



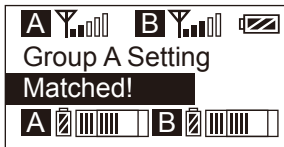
### 7.3 Use the




button to select whether to match,  
and short press  to confirm

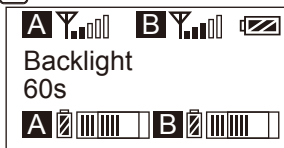



### 7.4 Matching OK

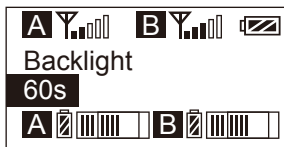



## 8. Backlight ' Lighting Time/Turn Off ' Adjustment

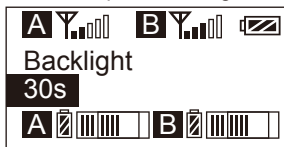
8.1 Short Press  button to ' Backlight ' display page



8.2 Long press  button to ' Backlight ' display page




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

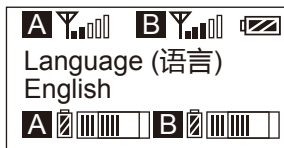



8.4 Short press  button to confirm

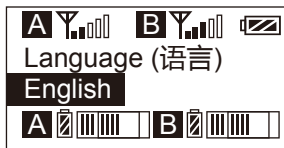


## 9.System Language

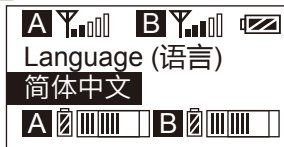
9.1 Short press  button to ' Language ' display page



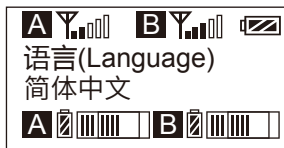
9.2 Long press  button to enter ' Language ' display page




9.3 Short press  button to select language

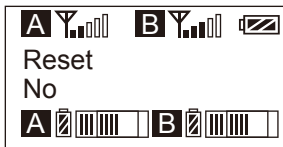



9.4 Short press  button to confirm

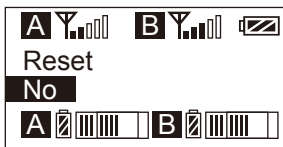



## 10. Reset to Defaults

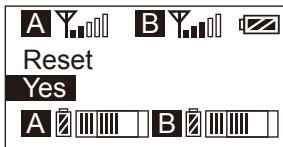
10.1 Press  button to 'Reset' display page



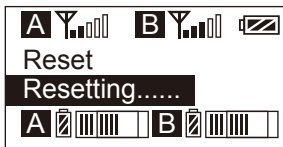
10.2 Long press  button to enter 'Reset' display page




10.3 Short press  button to select whether to restore factory Settings

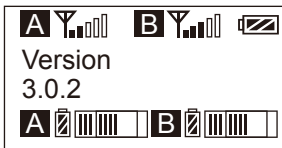


10.4 Short press  button to confirm and restore factory setting



## 11. Version

11.1 Press  button to ' Version ' display page to check the version



## Specification

### Lavalier Transmitter TX

Signal / Noise	>65dB
Antenna	1/4 Wavelength Wire Antenna
Stray Radiation	<-60dBc
Sound Delay	<20ms
Audio Distortion	<0.5%
Battery	Polymer Lithium Battery 3.7V 1800mAh
Dimension	84 x 63.5 x 23mm
Operating Temperature	0℃ ~ 50℃
Storage Temperature	-20℃ ~ 60℃

## Hand-held Transmitter HTX

Signal / Noise	>65dB
Antenna	PCB Antenna
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

Signal / Noise	>65dB
Antenna	1/4 Wavelength Wire Antenna
Receiving Sensitivity	-95dBm
Stray Radiation	<-60dBc
Sound Delay	<20ms
Audio Distortion	<0.5%
Battery	Polymer Lithium Battery 3.7V 1800mAh
Dimension	84 x 63.5 x 23mm
Operating Temperature	0℃ ~ 50℃
Storage Temperature	-20℃ ~ 60℃



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