

Conference Wireless Microphone



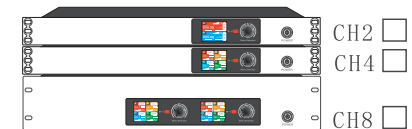
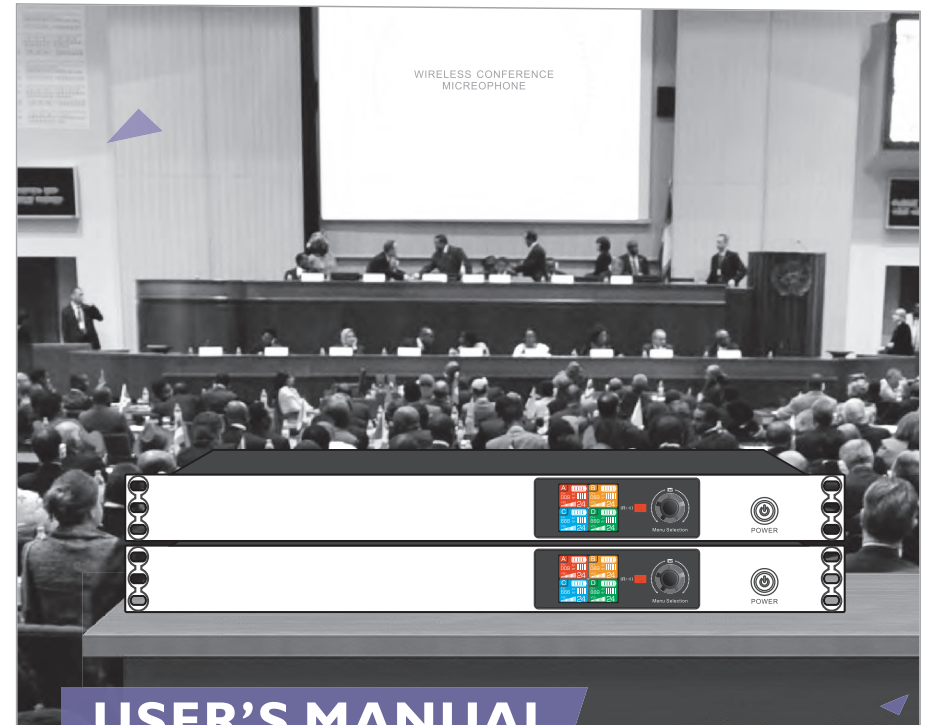
CAUTION
SHOCK DO NOT OPEN.
TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



- The company has the final interpretation of the manual
- We reserve the right to modify this manual without notice
- If the contents of this manual and your product does not match the, please prevail in kind
- Manufacturer right without prior notice to modify the technical specifications of reservations

UHF

PROFESSIONAL WIRELESS CONFERENCE MICROPHONE



CH2
CH4
CH8

CATALOG

Presentation -----	2
Application notice -----	2
Product features -----	3
Two-channel,Four-channel&Eight-channel receiver -----	4-7
(1).Names and functions of each part of receiver	
(2) Operating instructions for the receiver's LCD panel	
(3) Operating instructions	
(4) Receiver operation method	
Conference transmitter -----	8
(1) The names and functions of each part of the conference transmitter	
(2) Conference transmitter LCD display	
(3) Operating instructions	
Handheld transmitter (optional) -----	9
(1) The names and functions of each part of the handheld transmitter	
(2) Handheld transmitter LCD display	
(3) Operating instructions	
Wearing transmitter(Optional) -----	10
(1) The names and functions of various parts of the wearing transmitter	
(2) Wearing transmitter LCD display	
(3) Operating instructions	
Correct use of the system -----	11
(1).How to use the wireless conference transmitter correctly	
(2). How to use the receiver correctly	
(3). How to correctly use multiple sets of wireless conference transmitters at the same location	
System specifications -----	12
Receiver specifications -----	12
Transmitter specifications -----	12
Excellent stacking performance -----	13
Frequency Selection Table -----	13
Simple fault phenomenon and causes -----	14
Use and save -----	14

Presentation

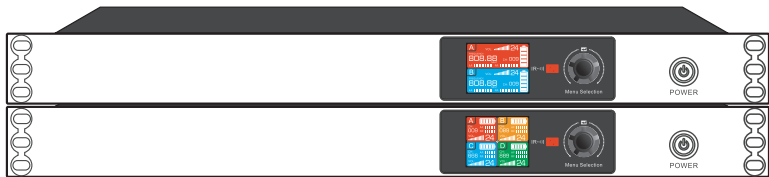
In order to ensure your better use of this product, please read this manual carefully before use.Understand the correct operation method to obtain the best use effect, and please keep it well the manual for the future .

Application notice

1. Please confirm the correct voltage before installation and use.
2. For full ventilation, the minimum clearance around the equipment is 50CM.
3. Ventilation holes should not be covered with articles such as newspapers, table cloth and curtains to impede ventilation.
4. The equipment shall not place naked flame sources, such as lighted candles.
5. Keep the equipment ventilated in tropical or temperate climate to avoid high temperature and direct sunlight and humidity and other environments.
6. The machine shall not be subject to water drops or splashing, and it shall not be placed on the machine such as vases something filled with liquid.
7. Non-technical personnel should not open the casing to explore its , which is in danger of voltage.
8. Do not collide, throw or vibrate the machine to avoid damaging it.
9. The hazard warning sign “ ⚡ ” is marked on this unit: This sign is: Warning of dangerous and electricity ; External conductors marked with such flag port connections need to be directed by personnel install or use ready-made leads or cords.
10. If you do not leave the working machine for a short time, please turn off the machine and adjust the power supply , when the machine is removed, it must not be left on.
 11. The power cord can not trample or pull.
 12. When loading the battery, do not insert the positive and negative terminals of the battery , if close the machine for a long time , please take the battery out of the transmitter.
 13. It is strictly prohibited to use batteries with damaged insulation material in the outer shell, otherwise it may cause short circuit.
 14. If you do not use the machine for a long time, please turn off the power supply and remove the power adapter. never let the it on.

Product features

- UHF band makes fewer interference compared with the conventional VHF band and more reliable transmission;
- DQPSK digital modulation and frequency synthesis technology provides up to 200 channel selection within interval of 300KHZ within the range of 60MHZ. Due to the inherent high immunity of digital modulation to intermodulation interference, it is very simple and convenient to realize the simultaneous use of multiple sets of machines (for example, 5 sets, a total of 20 transmitting bases), and keep away interference;
- Digital modulation and transmission technology with random unique ID is adopted to completely avoid the risk of off-site eavesdropping on the traditional wireless conference microphone system with FM modulation! Ensure confidentiality in signal transmission.
- The receiver adopts DQPSK dual-antenna true diversity reception. In a normal indoor environment with a radius of 30-60 meters, it can completely avoid the possible interruption and noise problems in the traditional analog FM modulation single antenna reception mode!
- Digital modulation and high fidelity reception ensure that the audio index of the whole machine is consistent! Unlike the traditional FM modulation mode, it will deteriorate with the increase of transmitting distance (with the traditional FM receiving mode, its receiving noise, distortion and other indicators will deteriorate with the increase of transmitting distance!).
- Both the receiver and the transmitter base adopt high-definition color LCD TFT display, which makes the working status of the receiver and transmitter clear at a glance:
- The TFT display information on the front panel of the receiver includes: under normal working conditions, the channel number of each channel when the four channels (A/B/C/D) are working in real time, RF working frequency, volume level display, and real-time AF ,RF signal strength display, real-time display of important information such as the battery level of each channel's transmitter; under the setting menu, the selection of each working channel, working frequency, channel volume and other important parameter settings can be easily switched and executed. The smooth UI interface allows on-site engineering staff to quickly operate proficiently!
- The TFT display information of the transmitting base includes: after infrared frequency alignment, the status display of the working channel (A/B/C/D) where the transmitting base is located, RF frequency point and RF power tap display, real-time display of important information such as speech time, AF level and battery power.



Two-channel&Four-channel receiver

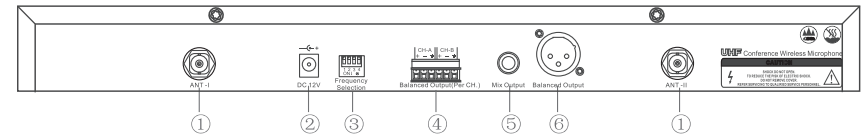
(1). Names and functions of each part of receiver

Front panel

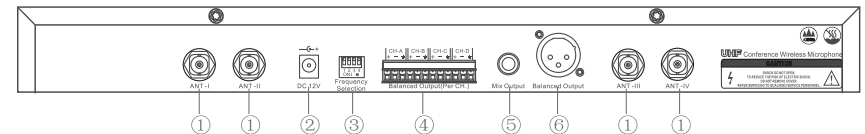


- ① Display
- ② Infrared frequency
- ③ Menu navigation key (press type encoder)
- ④ Power switch

Two-channel Back panel



Four-channel Back panel

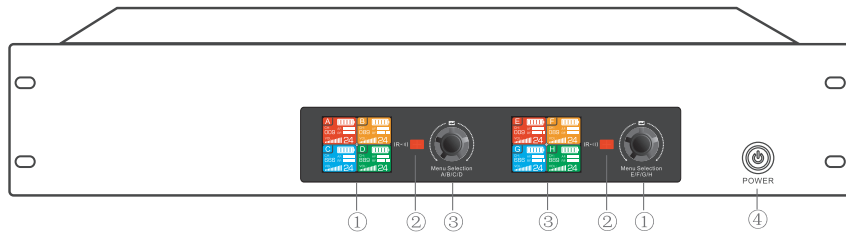


- ① Antenna interface
- ② DC power interface
- ③ Frequency switching
- ④ Four-channel independent balanced output
- ⑤ Mixed output (unbalanced)
- ⑥ Mixed output (balance)

Eight-channel receiver

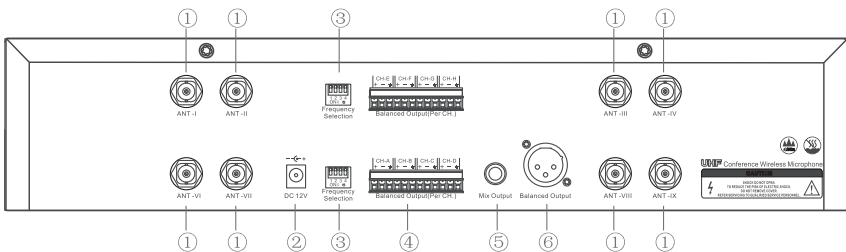
(1). Names and functions of each part of receiver

Front panel



- ① Display
- ② Infrared frequency
- ③ Menu navigation key (press type encoder)
- ④ Power switch

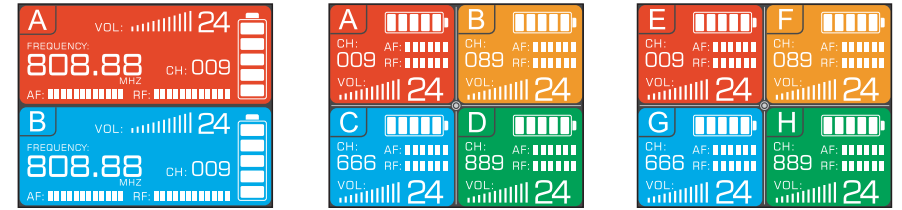
Back panel



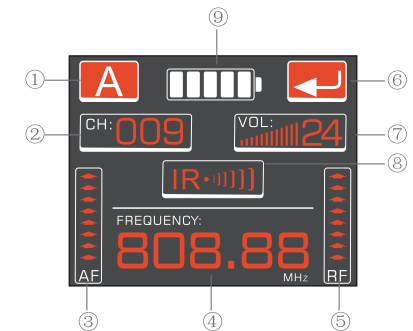
- ① Antenna interface
- ② DC power interface
- ③ Frequency switching
- ④ Four-channel independent balanced output
- ⑤ Mixed output (unbalanced)
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(2) Operating instructions for the receiver's LCD panel

LCD panel display



- ① Channel display
- ② Channel number of the channel
- ③ Display AF audio parameters
- ④ Display Channel frequency
- ⑤ Display RF parameters
- ⑥ Return to the upper display page
- ⑦ Display volume level
- ⑧ Infrared frequency
- ⑨ Display battery level



(3) Operating instructions

1. Lightly press the "menu navigation key" to activate the selection, and the setting is confirmed.
2. Turn the "Menu Navigation Key" to select the corresponding channel, and adjust the data by pressing and turning the "Menu Navigation Key".
3. After setting a single channel, turn the "menu navigation key" to select the "←" return arrow, press the "menu navigation key" to confirm, and return to the display homepage.

Note: If there is no operation on a single channel interface for more than 15 seconds, it will automatically jump to the display homepage.

(4) Receiver operation method

4-1, Before starting, transmitters temporarily not open, first the receiver volume to minimum, and then press the power button to open the receiver , power conduction, LCD display background lights, all the characters, according to a subsequent LCD displays the current receiver access frequency, automatic corresponds to frequency . Press and turn the "Menu Navigation Key" to set the receiver in the required four channels A, B, C, and D.The user can choose which channel to set according to the range indicated by each channel, as shown in the following figure:

Channel and frequency range of each channel (taking 600-660mhz operating frequency band as an example)

CHANNEL A: CH-A01 ~ CH-A50
FREQUENCY: 600.000MHZ ~ 658.800MHZ with STEP=1.2MHz

CHANNEL B: CH-B01 ~ CH-B50
FREQUENCY: 600.300MHZ ~ 659.100MHZ with STEP=1.2MHz

CHANNEL C: CH-C01 ~ CH-C50
FREQUENCY: 600.600MHZ ~ 659.400MHZ with STEP=1.2MHz

CHANNEL D: CH-D01 ~ CH-D50
FREQUENCY: 600.900MHZ ~ 659.700MHZ with STEP=1.2MHz

4-2. In the case of does not open conference transmitter to observe the first four channels of RF and AF indicator light , if there is no corresponding RF or AF indicator, that the channel interference is too big, should try to avoid interference .

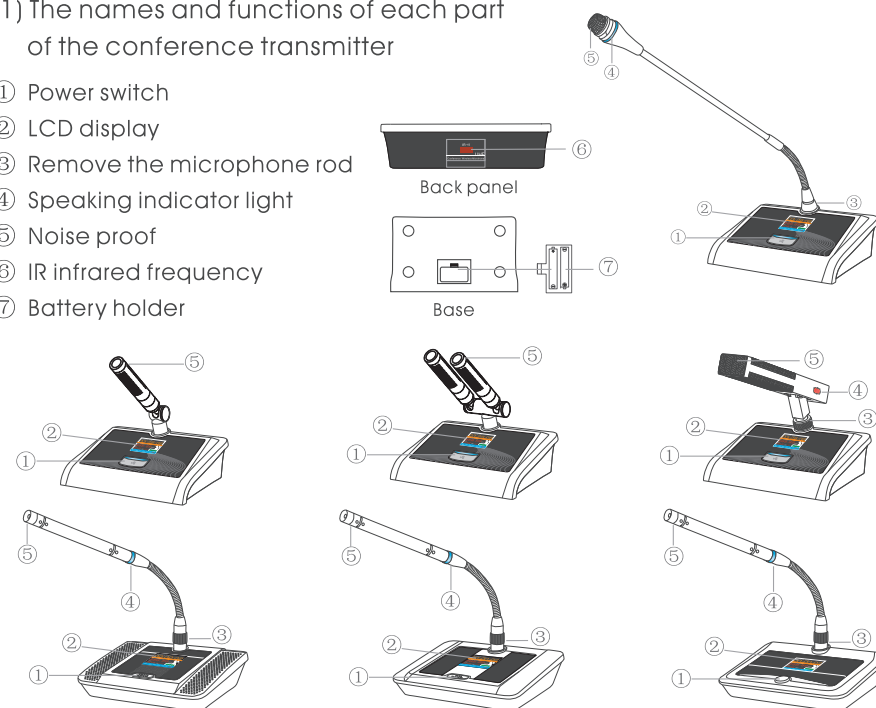
4-3, After open the transmitter power, the corresponding channel of RF level signal display, adjust the volume to the appropriate , and then to the conference transmitter cartridge pronunciation, receiver AF level transmitter volume display corresponding meeting . If there is no sound output and the level meter is not displayed, please check whether the RF signal level has been displayed .

4-4. Long press the power button, the color screen displays "BYE BYE", the receiver power is off .

Conference transmitter

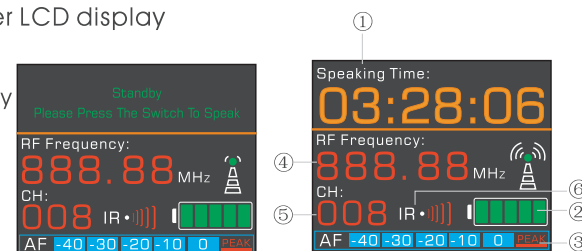
(1) The names and functions of each part of the conference transmitter

- ① Power switch
- ② LCD display
- ③ Remove the microphone rod
- ④ Speaking indicator light
- ⑤ Noise proof
- ⑥ IR infrared frequency
- ⑦ Battery holder



(2) Conference transmitter LCD display

- ① Speaking time
- ② Transmitter battery display
- ③ AF audio parameters
- ④ Frequency display
- ⑤ Channel display
- ⑥ Infrared frequency



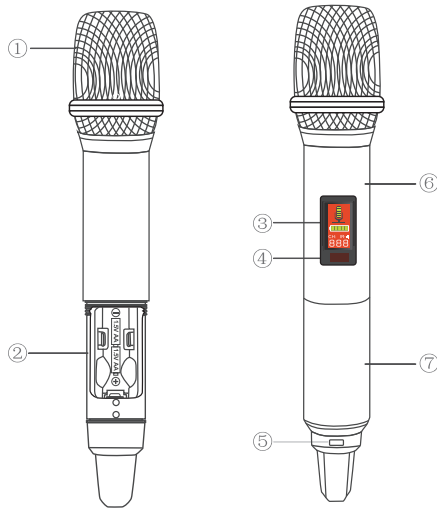
(3) Operating instructions

1. Press the power button to turn on the wireless conference transmitter, press the power button again, the base switch button light and speaking indicator light will light up, and enter the speaking state. After use, press the power button to turn it off.
2. Conference transmitters are excellent against RF interference, especially from mobile phones.

Handheld transmitter (optional)

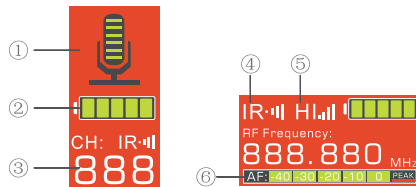
(1) The names and functions of each part of the handheld transmitter

- ① Gauze head
- ② Battery holder
- ③ LCD display
- ④ IR infrared receiving
- ⑤ Switch button
- ⑥ Up the tube
- ⑦ Down the tube



(2) Handheld transmitter LCD display

- ① Transmitter battery display
- ② Speaking icon
- ③ High and low frequency display
- ④ Frequency display
- ⑤ Infrared frequency
- ⑥ AF audio parameters



LCD screen can be automatically rotated

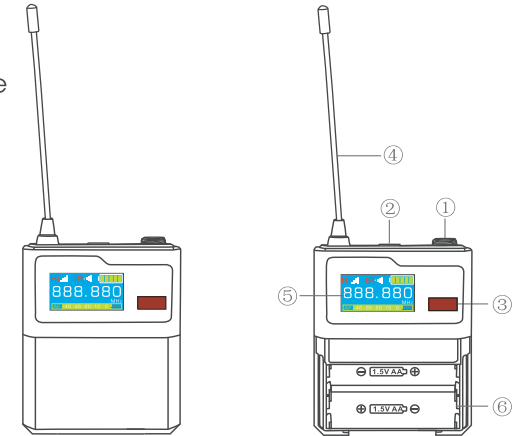
(3) Operating instructions

1. When the power is turned on, the LED backlight is on, and the LCD screen displays all working channels and battery power at the same time.
2. If the working frequency needs to be changed, the receiver frequency should be changed first, then the infrared frequency window "IR" on the transmitter and receiver should be aligned, The new frequency parameters are passed to the transmitter .

Wearing transmitter(Optional)

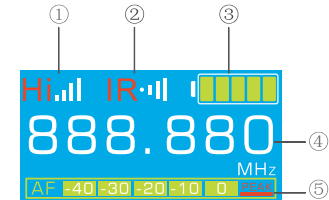
(1) The names and functions of various parts of the wearing transmitter

- ① Microphone input interface
- ② Power switch
- ③ IR infrared frequency
- ④ Antenna
- ⑤ LCD display
- ⑥ Battery holder



(2) Wearing transmitter LCD display

- ① High and low frequency display
- ② Infrared frequency
- ③ Transmitter battery display
- ④ Frequency display
- ⑤ AF audio parameters



(3) Operating instructions

1. When the power is turned on, the LED backlight is on, and the LCD screen displays all working channels and battery power at the same time.
2. If the working frequency needs to be changed, the receiver frequency should be changed first, then the infrared frequency window "IR" on the transmitter and receiver should be aligned, The new frequency parameters are passed to the transmitter .

Correct use of the system

(1).How to use the wireless conference transmitter correctly

- 1-1.Wireless conference transmitter uses built-in antenna, so the transmitter should not directly contact with the human's body, nor should it be entangled with the transmitter connection line, otherwise it will reduce the use effect..
- 1-2.The sensitivity should be appropriately adjusted according to the distance between the speaker and the sound head.
- 1-3.The speaker should be more than 10cm away from the front end of the sound head to avoid the introduction of friction noise or noises.

(2). How to use the receiver correctly

- 2-1.When the receiver adopts omnidirectional antenna, the antenna should be 0.5m away from the wall (especially the metal).
- 2-2.The receiving range is related to many factors and varies greatly. There is no large metal block component resistance in the transmission direction , can get better transmission effect.
- 2-3.If the receiving conditions are not satisfactory, the extension cable can be used, and the external high-gain antenna can be connected, even for antenna amplifier , can achieve very increasing effect.
- 2-4.When the receiver surface is built into the metal case , better reception will be provided the effect when the antenna is connected to the front panel .
- 2-5.When the receiver is close to the edge of the operating situation, the directional antenna is used to point to the scope of use can get better reception.

(3). How to correctly use multiple sets of wireless conference transmitters at the same location

- 3-1.First of all, the frequency configuration without modulation should be selected. Within 50MHz bandwidth, support 20sets be used at the same time conference transmitter, if you need to use more wireless conference transmitters, you need to configure other frequency bands type.
- 3-2.When multiple sets of conference transmitters are used together, they should be at least 20cm apart to avoid interference from each other.
- 3-3.When multiple sets of receivers are used together, it is recommended to install high gain antenna, antenna amplifier and receiving shunt .
- 3-4.The speaker should be at a proper distance from the front end of the head, too close to generate poof sound, too far to pick up sound sensitivity down, field amplification has to be raised in the volume, will result in a sharp but audible roar.
- 3-5.The frequency set between the four channels of wireless conference transmitter should not be adjusted at the same interval channel as far as possible. If CHANNAL A is set to channel 20, the other three channels should avoid setting to 48, 80, and 100 , at this time, the same channel configuration of four transmitters should also avoid setting equal spacing frequency .
- 3-6.The gooseneck of the wireless conference transmitter should be in good contact with the canons as far as possible, otherwise it will cause heavy dry .

System specifications

Frequency range:	600-660/620-690/640-700/...../880-940/900-960MHz A total of 16 optional working frequency bands, a total of 360MHz frequency coverage. (For details, please refer to "FREQUENCY SELECTION TABLE")!
Modulation mode:	DQPSK
RF operating bandwidth:	60MHz
Channels:	200
Channel interval:	300KHz
Frequency stability:	±0.005%
Dynamic range:	>100dB
Frequency response:	60Hz-18KHz(±3dB)
SNR:	>106 dB
Distortion:	≤0.2%
Working temperature:	-10℃ -+40℃

Receiver specifications

Receiver mode:	DQPSK dual antenna true decomposition reception
Wireless interface :	BNC/50Ω
Max output level :	+10dBV

Transmitter specifications

Wireless program:	wearable transmitter uses 1/4 wavelength whip antenna, handheld microphone built-in helical antenna
Output power:	High power 10mW; Low power 3mW
Stray rejection:	-60dB
Power supply :	2 AA batteries(2800mAh)
Duration time :	10mW>8 hours(10mW); 3mW >12hours(3mW)

Excellent stacking performance

Up to 5 sets (20 conference transmitter) modulating methods under the same space and the same frequency band:

For example, the actually set working frequency can be:

Set 1:A01、B03、C05、D07 Set 4:A32、B34、C36、D38
 Set 2:A11、B13、C15、D17 Set 5 :A41、B43、C46、D49
 Set 3:A21、B23、C25、D27

Remark:

Specific work frequency point set, can according to the actual situation, jumped in the environment interference frequency points (receiver comes with RF environment noise level detection and display function, like a simple version of the spectrometer, is very convenient for the commissioning and installation of engineering personnel work), and to ensure that each channel on the number of channels can be greater than or equal to 2. For example, A21/B23/C25/D27, or A32/B34/C36/D38, etc. (i.e. the operating frequency interval between channels is greater than 2.4m).

Frequency Selection Table

BAND SELECTION TABLE						
K1	K2	K3	K4	MODE	Frequency(MHZ)	
					start	stop
X	0	0	0	1	520	580
X	1	0	0	2	570	630
X	0	1	0	3	620	680
X	1	1	0	4	670	730
X	0	0	1	5	720	780
X	1	0	1	6	770	830
X	0	1	1	7	820	880
X	1	1	1	8	870	930
0 MEANS THE SWITCH POSITION IS UP (OFF)						
1 MEANS THE SWITCH POSITION IS BELOW (ON)						
K1/K2/K3/K4 CORRESPONDING TO THE SILK SCREEN OF THE CODING SWITCH						

Simple fault phenomenon and causes

Fault phenomenon	Fault cause
Transmitter and receiver no indication	Transmitter battery ran out and the receiver power failed to connect
Receiver no RF signal	Sending and receiving different frequencies or beyond the receiving range
RF signal on , but no audio signal	Transmitter microphone not connected or receiver static noise is too deep
Background noise of the audio signal is too loud	Transmitter modulation frequency too small, the receiver output level is low, and there may be interference signals
Audio signal distortion	Transmitter modulation frequency too large, receiver output level is too high
Short distance and unstable signal	Transmitter set at low power and the receiver's static noise is too deep,Receiver antenna set up improperly , with strong electromagnetic interference around

If the fault is not included in the above it , do not take it apart for repair, please contact the manufacturer or local distributor.

Use and save

Do not put the machine in high humidity, strong electromagnetic field, strong direct sunlight, high temperature and other environment to use or store, if a long time off , the receiver power should be removed, transmitter battery removed.

Cleaning: the power plug must be unplugged before cleaning and cleaned with a wet cloth. Do not use any detergent or solvent liquid, otherwise the surface will be damaged.

Power supply: make sure the power supply is in the required range, too high or too low will affect the work. When the transmitter is loaded into the battery, do not reverse the power supply, otherwise it may damage it .

Repair: if the receiver is fault or the performance drops, please do not remove the case to repair, so as to avoid electric shock or serious damage it , and will lose the warranty . Please contact the local distributor or manufacturer , we will try the best to help you.

Attachment: please use the attachment provided by the manufacturer or the approved attachment product to achieve the best performance.

Warranty: this receiver do not contain any repairable part, please do not open the housing , otherwise it will lose the warranty .