intrend

Professional wireless microphone system

ITWMIC-Rx2-1S **ITWMIC-BP-1** **ITWMIC-HH-1**

Wireless User Guide

NOTE

NOTE

- The host should be placed in the proper position to keep the reception in good condition
- Please use MIC correctly , don't throw, drop, take off it.
- The machine should avoid sunny and raining.
- Please save it carefully when don't use it long time.
- Any problem, please contact distributor or our company, don't open it.
- Please confirm the power supply is 110V and 220V before using.
- For adequate ventilation, the minimum clearance around the equipment is 15cm.
- Vents should not cover items such as newspapers, tablecloths and curtains etc.
- The machine can't close to fire, such as candle.
- Considerations for environmental impact of discarded batteries (Example:
- Don't throw away the batteries when they are discarded. Please put in the designated recycle box.
- The machine should not suffer from water, please don't put vase on the machine.
- «  » terminal is charged warning, these cable should be setup and used by professional worker or use lead or cord.
- The machine should work on tropical or temperate
- Batteries can't under sunny, hot or fire environment.
- If use power plug and appliance coupler as disconnect device, the disconnect device operation should convenient.

FEATURES

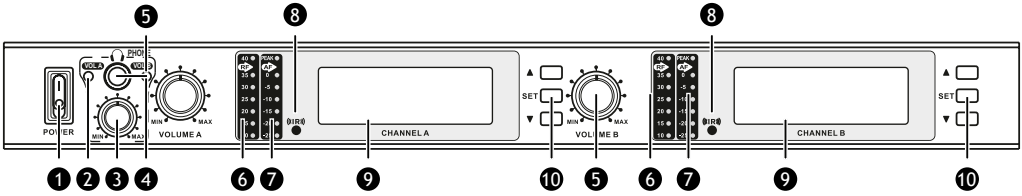
- Adopt UHF high band, less interference than the traditional VHF band, make the transmission more reliable;
- DPLL digital multi-channel PLL frequency synthesizer technology, the 50MHz frequency bandwidth to 250KHz channel spacing, providing up to 200 channel choices, more convenient set of machines simultaneously use, easy to avoid all kinds of interference;
- Advanced automatic frequency technology, even if the transmitter and receiver frequency adjustment disorder, and you just press the button, the transmitter will automatically lock the receiver to recover and adjust the same frequency, it is easy to operate;
- Special high-low power switching function, let you use this microphone easily not only in large location but also small rooms, this function longer the life of battery.
- Specific receiver set lock function to prevent mistake operation;
- Special receiver sensitivity adjustment function can be adjusted according to sensitivity, in order to improve the ability of interference or increase capacity to receive distance;
- High-quality LCD display, the working status of receiver and transmitter can be monitor easily and clearly.

ADJUSTING NOTICE

- Adjusting transmitter sensitivity is very important. High sensitivity lead to distortion, low sensitivity will lower SNR. Handle transmitter sensitivity is on suitable level, user don’t have to adjust it. Hanging type transmitter can adjust external voice as the clip and head MIC.
- If the frequency setup is correct, can use 14 transmitters on the same room and same frequency band. Incorrect frequency setup, lead to intermodulation interference.
- If many sets machine work on the same room, please avoid receiver machine overlapping.
- If work on KTV, school, please small power transmitter.

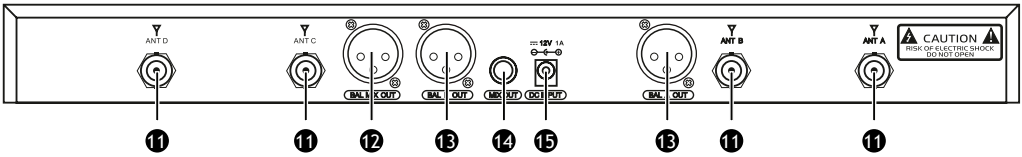
1 Names and functions

Front panel of dual channel receiver

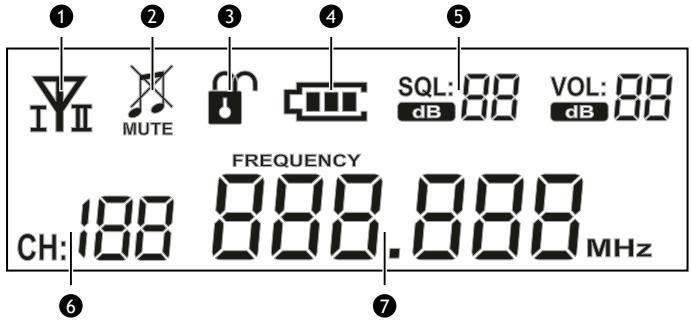


1. Power on: hoist the power supply; power switch is turned on, LCD on.
2. Button to monitor channel A or channel B via headphones
3. Volume knob for headphones.
4. Headphone connection, 1/4» stereo jack (6.35 mm)
5. Volume control knob.
6. RF signal indicator: Display the received RF signal strength.
7. AF display indicator: Display the received audio signal strength.
8. Infrared window: by using the «SET» button, send the channel parameters to the transmitter.
9. Red / green dual color liquid crystal display (LCD): displays the status of frequency, frequency / channel, squelch, received signal level.
10. Function button: Press «SET» button to select the main menu in cycle, stay 2-3 seconds, the menu is selected, and displays the current setting status. Press « ▲ » « ▼ » button to the currently selected Change the state of the menu or select, then press «SET» button settings to take effect.

Rear panel of dual receiver



11. Antenna jack, BNC socket.
12. Audio mixed balanced output.
13. Audio outputs: using «XLR»-type socket, two-channel signal output separately.
14. Audio unbalanced output.
15. Outlet: 12V DC power outlet of the power input socket, positive voltage is connected to the center of the socket.



1. Antenna CH selector display: dynamic display the currently selected receive channel.
2. Mute display : « MUTE » symbol, mean no signal.
3. System control symbol, lock symbol « », mean locking receiver work status(CH, main display etc), unlock symbol « » displaying, unlock receiver work status.
4. Transmitter batteries charge display
5. Receiver sensitivity setup
6. Channel display: display work CH.
7. 6 character display, display work status, frequency, level, menu etc.

2 Operation

1. Before turning on the receiver, do not turn on the transmitter, first turn receiver volume to the minimum, and then press the power button on the receiver to open it. When the power turns on, the LCD will be lighted, all the characters shown, and then LCD shows the current corresponding channel, frequency, automatic frequency status of the receiver.
2. When the transmitter is not turned on, the receiver LCD blacklight is red, you should observe the RF and AF indicator first. If there has a situation that RF or AF indicator lighted, that means there has too much interference in this channel, you should try to select another channel instead.
3. When turn on the power of the transmitter, the corresponding channel RF level meter lighted, the corresponding channel LCD backlight change to green, adjust the receiver volume to the appropriate position, then speak to the transmitter, the receiver AF level will be lighted. If there is no sound output or level meter is off, that means the system is not working properly, we have to inspection the machine.
4. Press the power button, the receive power off.

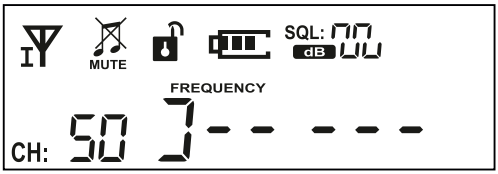
3 The panel operating instructions

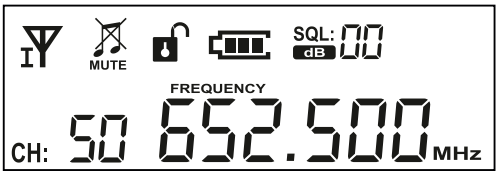
1. Button functions and operations

Press the middle button “SET” to confirm selection menu and set
Press “ ▲“ “ ▼“ button to adjust or select, then press “SET” button settings can take effect.
Keep pressing “ ▲“ “ ▼“ button to quickly select the frequency, channel.

2. LCD panel operation manual

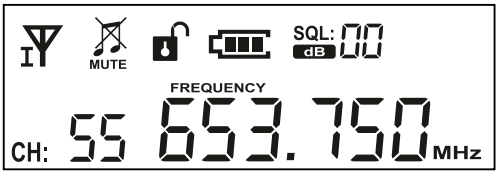
This receiver have 2 channel, operation key correspond this channel LCD content. Channel A as example, other channels the same operation as A.

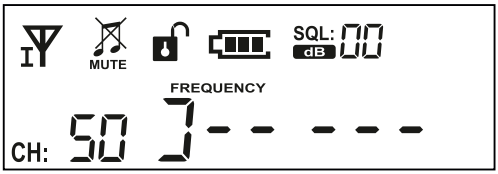




Frequency pair operation

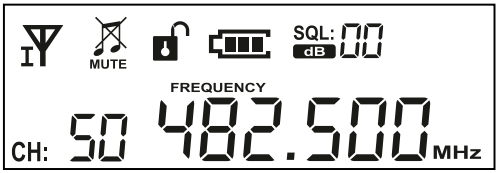
- Frequency pair operation: transmitter IR frequency pair window should point to receiver IR frequency pair window, press «SET» key, after 2-3 seconds, IR data send to transmitter. After correct frequency pair, can work normally. As picture on the left

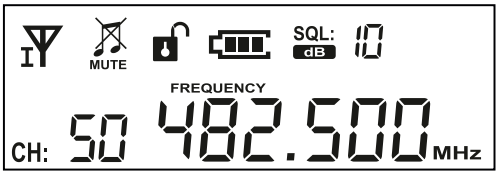




Channel or frequency display and adjusting

- This menu display currently receiver work channel, Press « ▲ » key or « ▼ » key can change work channel and frequency, after changing, please press «SET» to confirm it. Otherwise, it is invalid.
- If select new channel, but no confirmation, CH symbol will twinkle after 2-3 seconds. After «SET» confirmation, twinkle stop, that operate frequency pair.

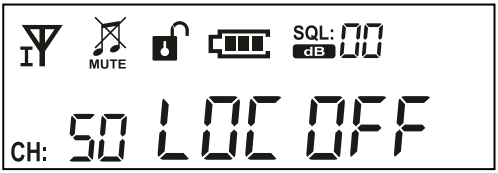


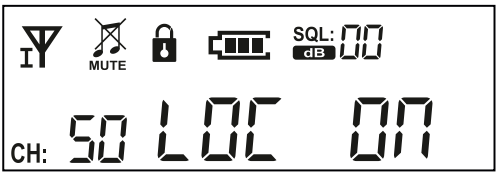


Sensitivity display and adjusting

Press “SET” key, LCD display as the left picture, « ▲ » twinkling, meanselecting status.

This menu display currently receiver work sensitivity, press « ▲ » key or « ▼ » key can change sensitivity, total 9 levels, high to low “00,05,10,15,20,25,30,35,40”. After changing, please press “SET” to confirm it. Other wise, it is invalid. If select new sensitivity, but no confirmation, sensitivity symbol will twinkle after 2-3 seconds. After “SET” confirmation, twinkle stop.

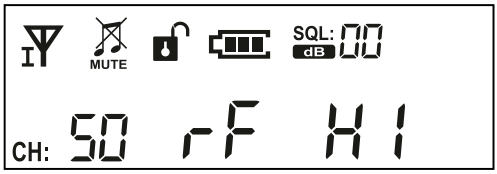




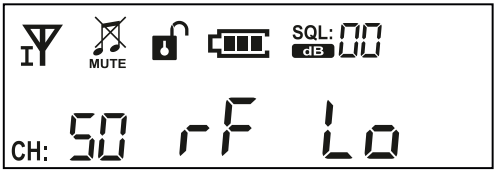
System lock control

- Repeat «SET» key, display «LOCOFF» or «LOC ON» picture (decide to currently status)
- When press « ▲ » key or « ▼ » key to change original status, please press «SET» to confirm it. Other wise, it is invalid. When system is locked, LCD display « 🔒 » symbol, when system is unlocked, LCD display « 🔓 » symbol
- If change original status, but no confirmation, LCD will twinkle after 2-3 seconds. After «SET» confirmation, twinkle stop.
- This menu function, lock or unlock receiver work status (channel, frequency, main display content etc), if lock, display «LOC ON», if unlock, display «LOCOFF», than change all menu function.

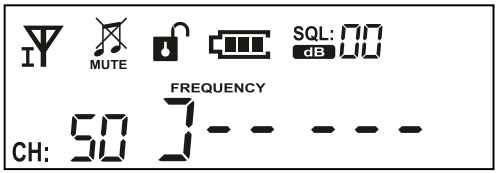
Transmitter power setup



- Pepeat «SET» key, that LCD display «rF HI» or «rF Lo»
  «rF HI»: high transmit power
  «rF Lo»: low transmit power
  (Notice: What is the status display on LCD based on the status set before)



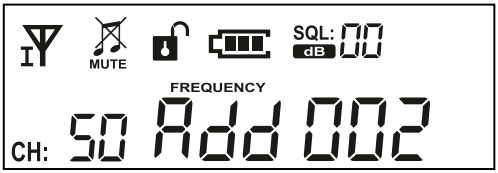
- Press « ▲ » key or « ▼» key to change original status, then confirm it by «SET» key.



- After setup new status, please press «SET» to confirm it. Transmitter IR frequency pair window should point to receiver IR frequency pair window, IR data send to transmitter. As the left picture

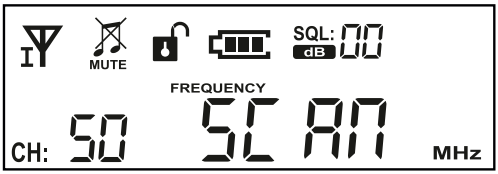
- If change original status, but no confirmation, LCD will twinkle after 2-3 seconds. After «SET» confirmation, twinkle stop.

ID number of the receiver setup



- Press «SET» key, LCD display as the left picture,
- This menu will use with the wireless microphone software platform that will display the ID number of the current receiver,and different receiver with different ID number.Press the key « ▲ » or « ▼ » will change the number

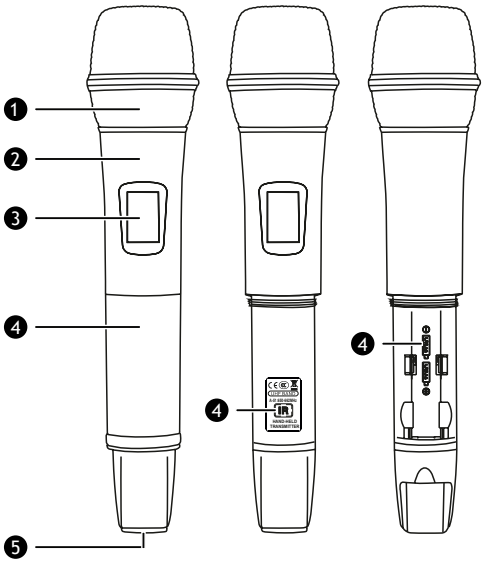
Auto scanning



- When the work frequency and channel is normal ,press the «Set» 2-3 seconds, make the LCD display «SCAN», the receiver will auto scan frequency, the frequency and channel will auto step-up, after selected the clean channel and frequency, the channel number will flash to remind to confirm, press «SET» button to confirm, then can reset the frequency pair again.

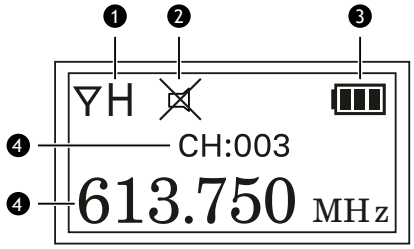
3. Monitoring

- For monitoring purposes you can listen to channel A or B with a headphone.
- Connect a headphone to the headphone connection of the receiver.
- Press the appropriate button VOL A VOL B to monitor channel A or B. Adjust the volume twist of the monitor, you can adjust the suitable volume.



1. Grill and cartridge module: grill is used to protect the cartridge, and eliminate the noise of «POP», and protect the microphone rolling on the table.
2. Microphone tube: at the top to assemble the grill and cartridge, battery and PCB assemble in the tube, there is a antenna at the bottom of the tube.
3. OLED display: display the channel and battery capacity.
4. Bottom tube of Microphone
5. Power / mute switch(touch switcher): pressing switch long time is turn on, pressing switch lightly is mute, pressing switch long time again is turn off.
6. IR window: send the channel data to the transmitter with the receiver button.
7. Battery compartment: install two AA batteries.

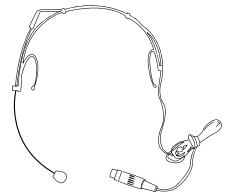
LCD display on hand-held transmitter

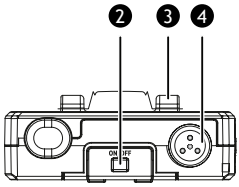


1. High and low power transmit display
2. Mute display
3. Battery capacity display
4. Channel display: display work CH.
5. 6 digital character display

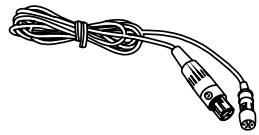
BODY-PACK TRANSMITTER

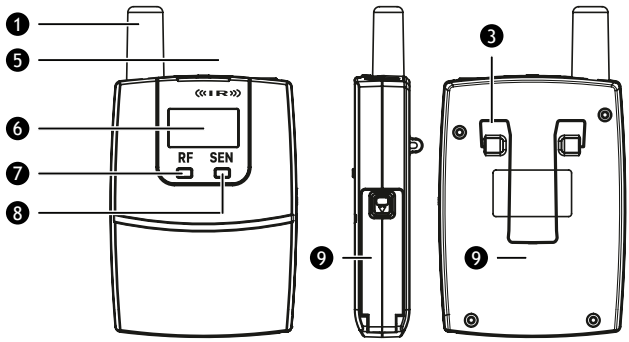
Headset microphone (accessory)





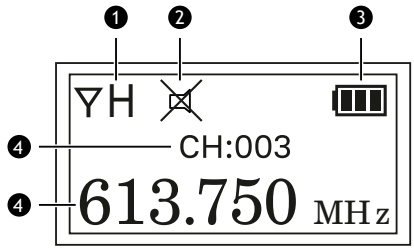
Clip microphone (accessory)





1. Transmitting antenna: built-in spiral antenna
2. Power Switch
3. Belt clip
4. Microphone input jack
5. Infrared receiver window
6. OLED display: Displays the current working channel and battery
7. Output power function key, clicking key can select high power « « or « « low power.
8. Adjust output sensitivity function key, total 4 levels, low to high, «-15dB», «-10dB»,»-5dB» and «0dB»
9. Battery compartment: 2 AA batteries installed

Body-pack transmitter LCD instruction



1. High and low power transmit display
2. Mute display
3. Battery capacity display
4. Channel display: display work CH.
5. 6 digital character display

Handheld or body-pack transmitter instruction operation

1. After turn on the power, OLED lighted, display the working channel and battery capacity.
2. If you want to change the working channel, you should change the receiver channel first, then put transmitter according to the receiver IR window, and press «SET» to confirm. The new channel data will send to transmitter, adjust up and down button to select channel and frequency.

HOW TO USE THE SYSTEM PROPERLY

1 How to use the body-pack microphone correctly

1. The body-pack microphone use built-in spiral antenna, but antenna should not touch the body, and do not trap with the microphone wire, otherwise will reduce the effect.
2. Make the moderate sensitivity according to the sound and microphone.
3. When you use the clip microphone, you should put the clip in the middle and fix the wire, to avoid any noise cause from turning head.
4. Head set microphone's cartridge position near the mouth, you can increase or decrease high and low tone by adjusting the distance of cartridge and mouth.
5. When you use clip microphone for enhance the sound, should use direction cartridge, the selection and position of the speaker is very importance, in some occasion that easy to make voice feedback should use acoustic feedback suppressor.

2 How to use hand held microphone correctly

1. You should hold the middle of the microphone, if hold too close to the grill, that would affect the microphone's pickup, if hold too close to the antenna at the bottom, which would affect the transmission, less the distance.
2. You can increase or decrease high and low tone by adjust the distance between microphone and mouth.

3 How to use receiver

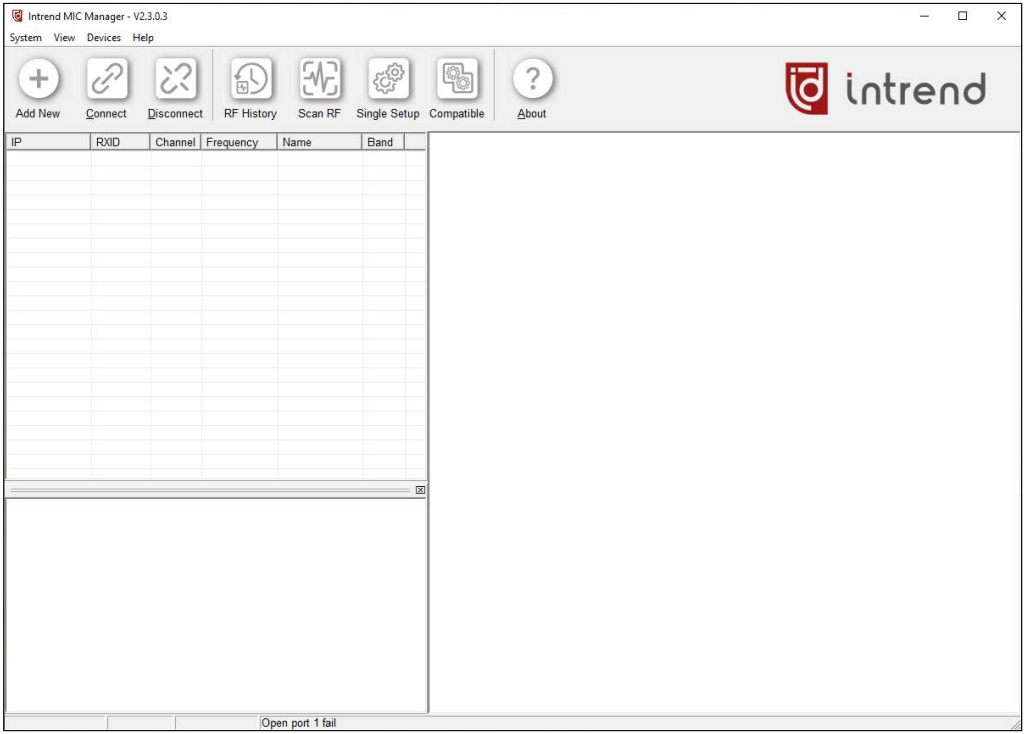
1. When the receiver uses Omni directional antenna, the distance between antenna and wall should over 0.5m.
2. Receive range is concerning with a lot of factors, it would be better if there is no large metal in the transmission way.
3. If the receiving conditions are not ideal, you can use an extension cord, an external high gain antenna, or antenna amplifier to achieve a better result.
4. When the receiver is in a metal cabinet, the antenna should place in the front panel to get a better result.
5. When the receiver is close to the edge, use directional antenna to point to using range, you can get better reception.

4 How to use several sets in a location

1. First, use different frequency, in 25MHz bandwidth, normally can use 8 transmitters at the same time and 16 transmitters in 50MHz bandwidth. If you want to use more, should use other frequency models.
2. When several transmitters use at the same time, the distance should be over 20cm of each transmitter. And under the condition of transmission, you should use the minimum power, to avoid interference.
3. When several receiver uses at the same time, we suggest you install a high gain antenna, antenna amplifier and receiver splitter.
4. If the transmitters are set to the low power, for example in KTV rooms and classrooms, are not limited to the quantities.
5. Please do not use Isometric channel of two channels of the Wireless conference transmitter. For example, CH1 set at channel 20, other channel should avoid setting at channel 40, 80,100. And if you use one channel for 2 transmitter, should pay attention to this too.

1 Functional Descriptions

The software use with GT6S wireless microphone system,solve the interference problem when more set of wireless microphone be used together.Specially,use for the professional performance and concert and others live event.



2 Main Features

1. Auto scan: frequency drawing tools The software can scan the frequency,and show the receiving situation of the wireless microphone through the chart.It will check the receiving problem and stop to effect the voice quality.

2. Control:Control the wireless microphone system through networking. The software can control the function of the wireless microphone system, for example:auto scan,infrared frequency pair,AF/RF Received Signal Strength,Battery strength and so on.

2 Software operating instruction

1. Equipment preparation
   A. Switch(self-provide)
   B. Wireless microphone system with network port
   C. PC with the software

2. Software interface description
   A. control menu:
   Add device / Caonnect / Disconnect / RF historical / Scan / Single system settings / More system settings / About

B. Menu Introduction
Add device: a. setting the ID number of the receiver which have connected with the software.
b. could add more receiver at the same time.

Connect£° Connect and operate the wireless microphone systemin the software.

Disconnect: Disonnect and operate the wireless microphone system in the software.

RF historical£° That could show the strength condition of the receiving signal.

Scan£° Scan the frequency of the wireless microphone system and setting.

Single system settings£º Setting the frequency for the single system after the scanning.

More system settings£º : Setting the frequency for more system
after the scanning.

Frequency pair:

(a).double click the name of the equipment which have connected,and will see the window of frequency pair.

(b).click the key of “frequency pair”,than the receiver and transmitter will be pair

(c).The window of frequency pair show the strength of AF and RF,and also show the frequency and channel.

4 The steps of the software

1. Connect the device Connect the wireless receiver,switch,computer,and make sure that all teh device are in the open status.

2. The setting of the computer IP address.
   Open the «my connecting»on computer,and setting the IP addressed be the fixed address,for example:setting the IP:192.168.0.100,subnet mask: 255.255.255.0

3. The ID setting of the device
   Click the «Add device» tool,and write the device information on the interface.Include:IP address(the IP No could not be the same),ID No of the device,channels,names.
   Notes:The ID No is the IP address of the receiver(could be inquire on the display menu of the receiver),the name was the system device.

4. Connect: Connect the device which have setting ID No and operate in the software.

5. Single system: Click the «Single system setting»
   More system: Click the «More system setting»
   Interface---choose the device No which be connected---»Open»--
   Show the «finish scaning»after the auto scan---click «confirm»---system automatic calculation which is the usable frequency---click the «setting frequency» ---choose the frequcncy---click the frequency and click «setting»---finish the frequency setting.

6. Frequency pair
   Choose the name of the device---double click the name of the device which have be connected---popup window---use the transmitter face the IR location of the receiver---click «Frequency pair»---finish the operate.

7. View the RF historical data
   That could be know the signal of the using system,and could be operation adjustment.

Failures and solutions

SYMPTOM	CAUSE
No indicate of transmitter and receiver	Transmitter of out battery, receiver unplugged
No RF signal of receiver	With different frequency or out of receive range
Have RF signal but no AF signal	Microphone unplugged or the squelch is too much of receiver
RF signal has too much noise	Transmitter frequency deviation is too small, the receiver output level is low, there may be interference signal
AF signal distortion	Transmitter frequency deviation is too large, the receiver output level is too high
Use a shorter distance, the signal instability	Transmitter set at small power, squelch of receiver is too much, receiver antenna is setting incorrectly, surrounded by strong electromagnetic interference

If the fault is not included in the table, do not remove to repair, please contact the manufacturer or local dealer.

Safety Guidance

Use and preservation:

Do not put the machine in high humidity, strong electromagnetic field, strong direct sunlight, and high temperature of such circumstances, if you do not want to use the machine for a long time, should unplug the power receiver, and remove the battery from transmitter

Cleaning:

Unplug the power before cleaning, and use wet cloth only. Not use any Cleaning agents or soluble liquid; otherwise it will damage the surface.

Maintenance:

If a malfunction or performance degradation, do not disassemble the cover to repair by yourself, to avoid the risk of electric shock or serious damage to the machine, and lose warranty rights. Please contact the local Dealer or factory, we will serve you best.

Warranty:

The machine does not have any parts to modify, please do not open the machine by yourself. Or you will lose the warranty rights.

SYSTEM PARAMETER:

- Frequency range :470-510MHz
- Modulation: wideband FM
- Adjustable Range: 50MHz
- Channel number: 200
- Channel Spacing: 250KHz
- Frequency stability: ±0.005% or less
- Dynamic Range: 100dB
- Maximum frequency deviation: 60KHz
- Frequency response: 70Hz-18KHz
- Overall signal to noise ratio: 50dB
- THD: 5%
- Operating temperature: -10 C˚- +55 C˚
- Power consumption: 5W

RECEIVER PARAMETER:

- Receiver mode: Double tune auto selecting signal (True diversity receiver)
- Spurious Rejection: 80dB
- Mirror suppression: 80dB
- IF Frequency: 1st IF: 110MHz, 10.7MHz IF II
- Wireless Interface: BNC/50
- Sensitivity: 6 dB V (S / N>80dB)
- T.H.D:<0.5% @ 1KHz
- Noise Ratio:105dB
- Intermediate Frequency:110MHz,10.7MHz
- Audio Output : XLR-3M 1V/600Ù; 6.3MMTRS 0.5/5KÙ
- Supply voltage: DC11-16V
- Working Current:160mA
- Chassis Size:420(L) x 44(H) x 185(W)mm

(A-50)/(B-50)transmitter parameter:

- Tube material:Zinc alloy
- Oscillation mode:(PLL)Phase Locked Loop
- Frequency range 470-510MHz
- Bandwidth:50MHz
- Output power: High 30mW / Low 3mW
- Harmonic Emission: -55dBC
- Frequebcy deviation(max):+/-68KHz
- Channel number: 200
- Directional:Dynamic cardioid directe
- Frequency response:50~18000MHz
- Sensitivity:-80dB
- Output Impedance:600ŭ
- Âattery:two AA batteries
- Use of time: when high power is greater than 8 hours, more than 12 hours at low power
- Display screen:OLED show the Battery,Channel,Voltage
- Transmitting distance:80-120 Metres

YT-2 Headset microphone parameter:

- Directional:Condenser omnidirectional
- Frequency response:20~20KHz
- Sensitivity:-35dB+/-3dB
- Output Impedance:2K••30%
- Maximum sound pressure level:140dB/135dB

YL-2 Lavalier microphone parameter:

- Directional:Condenser supercardioid
- Noise Ratio:58dB
- Sensitivity:-46dB+/-2dB
- Output Impedance:680Ù

2023