Read carefully before use

ELECTRONIC TUBE

Wireless Microphone User Guide

Professional UHF Diversity Wireless Microphone



UHF530-580MHz
Total System Bandwidth: 50MHz, Dual-2000-Channel Design The audio signal adopts a vacuum-tube amplifier circuit design.
Maximum Deviation: ±45kHz
The system adopts dual-tuning true-diversity for signal reception.
S/N Ratio: >90dB
Total Harmonic Distortion (T.H.D.): ＜0.2% @ 1kHz
Audio Frequency Response: 30Hz-16kHz @ ±3dB

Thank you for purchasing our wireless microphone system.

With years experience to producing wireless microphone system,our crews are confident to say we are the expert of manufacturing wireless microphone system. Our products are suitable for KTV room, karaoke stage and also school,showplace,stadium.and so on. Our products are convenient to operate,and of stably great quality.

So they are widely favoured by out customers We promise highly of first class quality, and also first class service. Our professional technician crew is always ready to help you with any technical questions!

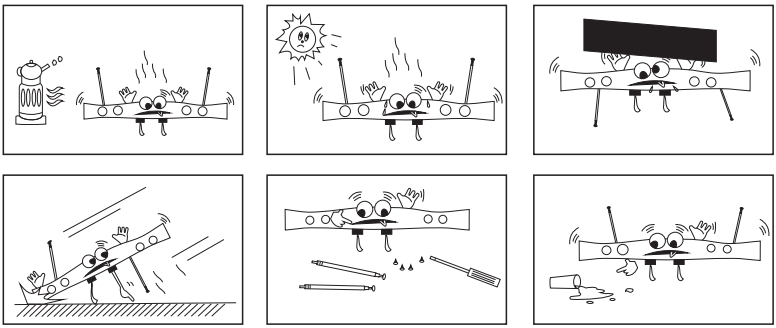
Warning: Beware of electric shock fine; machine must be kept away humid conditions!

CONTIONS

Please do not open up the system. technicians are always the only persons to sort out any technical operations.

STRICTLY READERS ARE TOLD

1. read the user guide-read carefully about safety and manipulation requests.
2. keep the manipulation introductions - please keep this manual for further need of safety and manipulation requests.
3. beware of the warnings - please notice the warnings for the machine while operating.
4. follow the denotements -please follow the denotements while operating.
5. accessional devices- only accessional devices from original produers of the machine are required.
6. humidity cautions- keep the machine away from humid condictions.
7. aeration- please keep the machine in well ventilated conditions at all time, there should be at least 5cm clearance around the device.
8. heat source-please keep the devices away from heat sources,including, radiator, heater, stove, etc.
9. power supply-please utilize the labelled voltage on the device.
10. no exposed fire should be on the device e.g. flaming candles.
11. please do not litter the batteries, dispose them into the appointed place when they are fully used.
12. no liquid or weights should be on the device, no water dripping or splashing onto lin to the device.
13. the device is also suitable in torvied zone,and variable zone.
14. This equipment uses a power plug as a disconnect device, which should be kept easy to operate.
15. This product is a Class 1 device and should be connected to a power output socket with protective grounding.



Do not operate our baby of the situations as above!

Only professionals can disassemble and assemble the system!

System Highlights

1:Built-in 2000 frequencies. Frequencies can be modified for multi-unit operation according to different requirements.

2:Built-in 9 groups, each group is preset with 10 interference-free frequencies for convenient multi-unit stacking operation.

3:The system has a built-in spectrum analyzer function, which allows direct observation of interference signals. Manually adjust the frequency to avoid interference signals.

4:The system is equipped with a built-in 6-step signal attenuator, which allows adjusting the operating range as required.

5:The receiver frequency can be switched for handheld or bodypack operation.

6:The system features built-in 9-band equalizer adjustment for treble and bass.

7:This system adopts digital ID code locking. Each channel is assigned a unique ID code to prevent cross-channel interference and deliver high anti-interference performance.

8:The audio is processed with innovative vacuum-tube technology, delivering full-bodied, springy and powerful low frequencies, prominent mid-frequencies, as well as delicate and clear high frequencies.

9:This system features true-diversity reception with four antennas and dual high-frequency tuners to extend operating range, suitable for all types of performances.

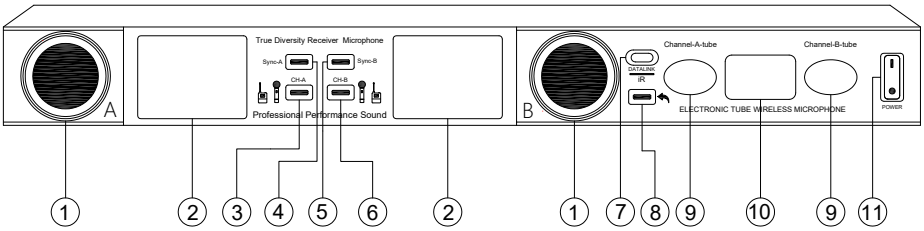
10:The receiver is powered by ±12V dual power supply to improve audio dynamic range and reduce total harmonic distortion.

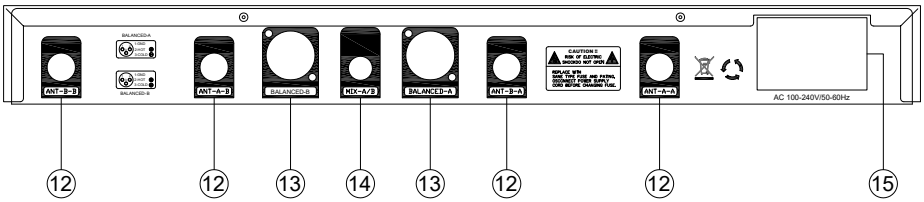
11:The transmitter is equipped with one-touch mute, selectable high/low power, smart mute and other functions.

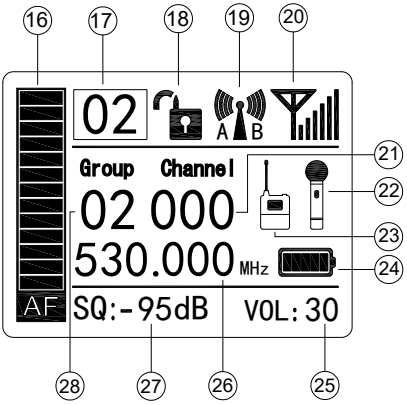
System Electrical Parameters

System Parameters	Receiver Parameters	Transmitter Parameters
Frequency Range：530-580MHz	Frequency Stability:±0.002%	Frequency Stability: ±0.002%
Frequency Tuning Step：25KHz/1MHz	Receiver Sensitivity:-102dBm	Transmit Power: 10 mW / 30 mW
Frequency Channels:2000CH	Image Rejection: ＞80 dB	Current Consumption: ＜ 120 mA @ Input Voltage 3 V
Frequency Bandwidth:50MHz	SNR: ＞90 dB	Second-Harmonic Rejection: ＞50 dBm
Reception Mode: Dual-tuner True-Diversity Reception	Expansion Ratio: 1:2	Maximum Deviation: ±45 kHz
Receiving Antenna: BNC rubber antenna	Dynamic Range: ＞100 dB	Compression Ratio: 2 : 1
Total Power Consumption: 14W (2CH)	Audio Amplification: Tube Amplification Processing	Pick-up: Cardioid dynamic microphone capsule
Power Supply:AC100-240V	Audio Output: 0-300 mV @ 1 kHz, Modulation: 30 kHz Input	Transmitting Antenna: Built-in loop copper wire antenna
Operating Range: ＞150 m (under ideal operating conditions)	Audio Output: 2 independent XLR balanced outputs, 1* 6.35 mm mixed output.	Battery Used: Two AA 1.5 V / 1.2 V batteries

Wireless Receiver Function Description





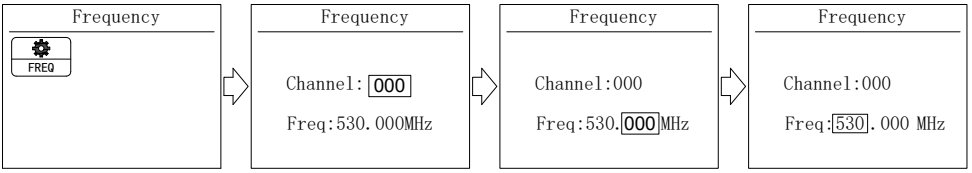


1:A/B Encoded potentiometer / Long press to lock or unlock / Rotate directly to adjust volume. The knob halo ring breathes-flashes when no transmitting signal is received, and stays steadily lit when transmitting signal is received.
2:A/B 2.4-inch TFT Display screen
3:A Channel Handheld/Lavalier Toggle Key
4:A Channel IR Pairing Key
5:B Channel IR Pairing Key
6:B Channel Handheld/Lavalier Toggle Key
7:IR Pairing Window
8:Function Exit Key
9:A/B Channel Tube Display Window
10:Brand Display
11:Power Switch
12:Receiving Antenna
13:A/B Channel Balanced Output Port
14:A+B Channel Mixed Output Port
15:AC100-240V Power Input Socket
16:AF Level Display
17:ID Code Display
18:Lock/Unlock Display
19:Diversity Switch Display
20:RF Signal Level Display
21:Receiver Frequency-Channel Count Display
22:Handheld Usage Display
23:Lavalier Usage Display
24:Transmitter Battery Level Display
25:Volume Display
26:Frequency Display
27:Received Signal Strength Display
28:Group Channel Display

WARNING: The power voltage of this device poses potential hazards. Do not disassemble the chassis or alter the factory-set operating voltage without authorization; otherwise, the safety certification will become invalid.All repairs must be performed by qualified service personnel.

Wireless Receiver Function Description

1)Frequency Setting



1:Setting Interface　2:Channel Number Adjust　3:Frequency 25KHz Step Adjustment　4:Frequency 1MHz Step Adjustment

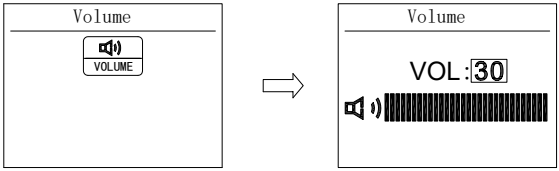
Operation：1.Short-press the encoder knob to enter the function setting interface. Rotate the encoder knob to select the menu.

2.Short-press the encoder knob again to access the channel-count setting. Rotate the encoder knob for adjustment. The channel number ranges from <000-009>, with 10 available channels in total.
(Note: When the preset frequency group is set to <02-10>, you can directly adjust the channel number of group <02-10>, without entering the frequency-group menu to modify the channel number for group <02-10>).

3.Short-press the encoder knob again to enter the frequency setting. Rotate the encoder knob for adjustment with 25KHz frequency step.
(Note: When the preset frequency group is selected as <01>, you can adjust the frequency directly, without entering the frequency-group menu to modify the frequency for group <01>.)

4.Short-press the encoder knob again to enter the frequency setting. Rotate the encoder knob for adjustment with 1MHz frequency step.
(Note: When the preset frequency group is selected as <01>, you can adjust the frequency directly, without entering the frequency-group menu to modify the frequency for group <01>.)

2)Volume Setting

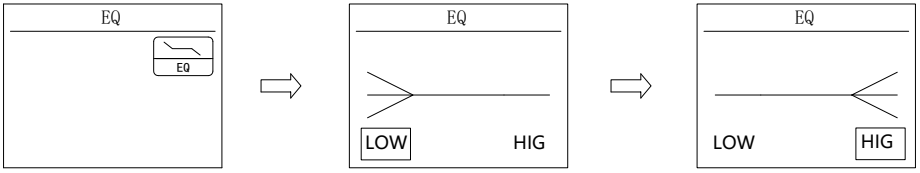


1:Setting Interface　2:Volume Adjustment

Operation：1.Short-press the encoder knob to enter the function setting interface. Rotate the encoder knob to select the menu.

2.Short-press the encoder knob again to enter the volume setting. Rotate the encoder knob for adjustment. The volume has 30 adjustable levels.

3)EQ Setup



1:Setting Interface　2:Bass Adjustment　3:Treble Adjustment

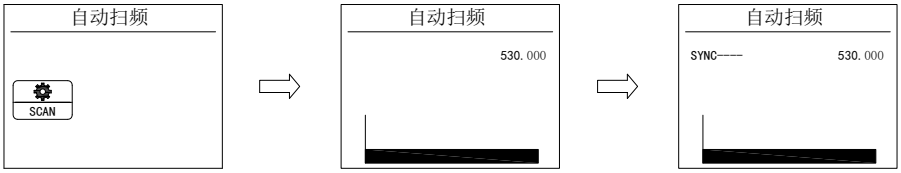
Operation：1.Short-press the encoder knob to enter the function setting interface. Rotate the encoder knob to select the <EQ> menu.

2.Short-press the encoder knob again to enter the bass setting. Rotate the encoder knob for adjustment. A total of 3 levels are available.

3.Short-press the encoder knob again to enter the treble setting. Rotate the encoder knob for adjustment. A total of 3 levels are available.

Wireless Receiver Function Description

4)Auto-Scan Setting



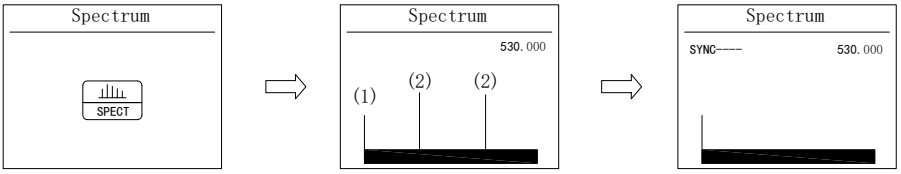
1:Setting Interface　　2:Auto-Search　　3:IR Frequency Sync

Operation：1.Short-press the encoder knob to enter the function setting interface. Rotate the encoder knob to select the <Auto-Scan> menu.

2.Short-press the encoder knob again to enter auto-search mode. The system will automatically scan the full frequency band for clear channels. After scanning, the clean frequency will be displayed at the upper-right corner. The whole process takes approximately 10-15 seconds.

3.Press the <Sync> key to send an IR signal to synchronize frequency with the transmitter. This function enables the system to automatically lock onto a clean frequency. Press the 〈↩〉 key to exit this function.

5)Spectrum Scan

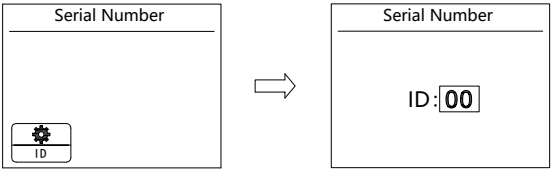


1:Setting Interface　　2:Spectrum Scan　　3:IR Frequency Sync

Operation：1.Short-press the encoder knob to enter the function setting interface. Rotate the encoder knob to select the 〈Spectrum〉 menu.

2.Short-press the encoder knob again to enter the spectrum analyzer interface. The coordinate signal bar (1) will be displayed on the screen. If other interfering signals exist, their spectrums will also be shown (2). When selecting a frequency, rotate the encoder knob; the coordinate signal bar will move accordingly, and the frequency value shown at the upper-right corner will change simultaneously. Do not select or position the coordinate signal bar close to any interfering-signal areas. After selection, press the <Sync> button on the panel to synchronize frequency with the transmitter. This function is for manually selecting a clean frequency. Press the 〈↩〉 button to exit this function.

6)ID Setting



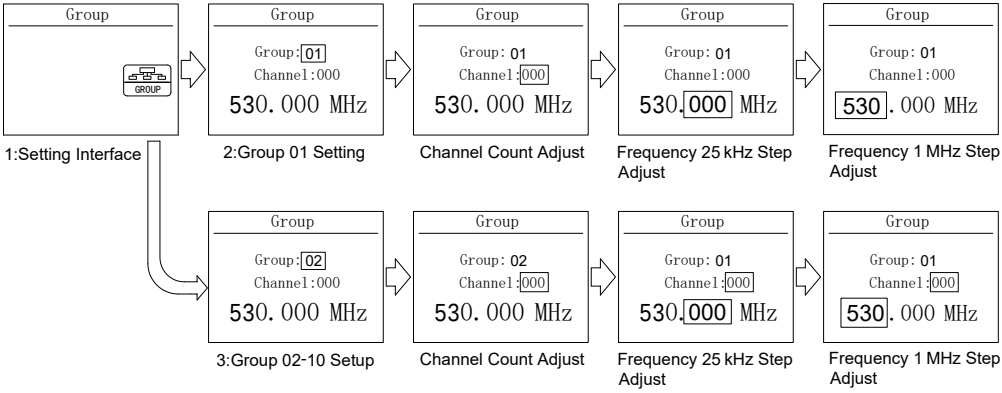
1:Setting Interface　　2:ID Setting

Operation：1.Short-press the encoder knob to enter the function setting interface. Rotate the encoder knob to select the menu.

2.Short-press the encoder knob again to enter the ID setting. There are 100 available IDs ranging from <00-99>. This ID shall match that of the transmitter. Users can quickly locate the corresponding receiver by checking the ID displayed on the transmitter.

Wireless Receiver Function Description

7)Preset Frequency Group Setting



1:Setting Interface
2:Group 01 Setting
Channel Count Adjust
Frequency 25 kHz Step Adjust
Frequency 1 MHz Step Adjust
3:Group 02-10 Setup
Channel Count Adjust
Frequency 25 kHz Step Adjust
Frequency 1 MHz Step Adjust

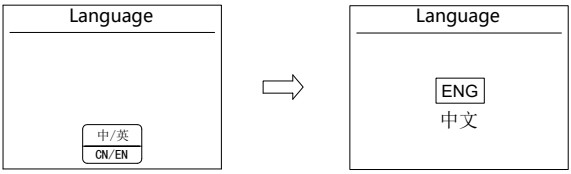
Operation：1.Short-press the encoder knob to enter the function setting interface, then rotate the encoder knob to select the menu.

2.Short-press the encoder knob again to access group selection; 10 groups are available in total. When Group 01 is selected, short-press again to enter channel selection. Channels range from <000-999>, with 1000 channels available. Short-press the encoder knob once more to enter frequency adjustment with a 25 kHz step. Short-press the knob again to switch to frequency adjustment with a 1 MHz step.

3.Short-press the encoder knob to access groups <02-10>, which are preset groups. Each group stores 10 interference-free frequencies, and the operation is identical to that of Group <01>.

Tip：Group <01> contains all available frequencies of this system. Groups <02-10> are pre-configured interference-free frequency groups. When multiple units are stacked, you can quickly select interference-free frequencies from Groups <02-10>.Frequencies in Groups <02-10> are pre-arranged by the system, and users may also re-edit them manually following the procedures above.
Example: Channel <000> under preset Group <02> is 640.000 MHz. You can change it to 640.025 MHz or any other interference-free frequency. This operation applies to all Groups <02-10>.

8)Language Setting



1:Setting Interface
2:Language Select

Operation：1.Short-press the encoder knob to enter the function setting interface, then rotate the encoder knob to select the menu.

2.Short-press the encoder knob again to enter the language selection menu, rotate the encoder knob to select Chinese or English.

Wireless Receiver Function Description

9)SQ Setting



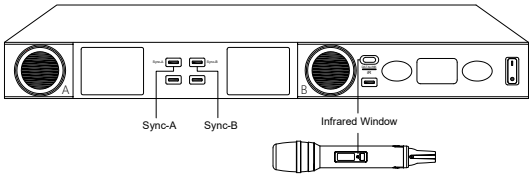
Operation：1.Short-press the encoder knob to enter the function setting interface, rotate the encoder knob to select the menu.

2.Short-press the encoder knob again to enter the gear selection interface. Rotate the encoder knob to select gear 1-6. Gear 1 provides the maximum operating range, while Gear 6 provides the minimum operating range. Select the appropriate gear according to your actual operating-range requirements. (−95dB for maximum range, −70dB for minimum range)

10) Infrared Frequency Sync Setting

Operation：1.Aim the infrared window of the transmitter at the infrared window of the receiver first.

2.Short-press the <Sync> button on the receiver to transmit the infrared signal. The receiver infrared window flashes red while the infrared signal is being transmitted.



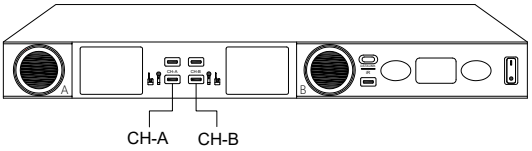
Tip：Press the <Sync-A> button for frequency sync on CHA channel, and press the <Sync-B> button for CHB channel.

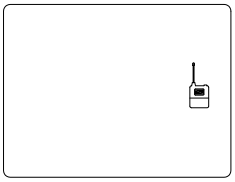
Wireless Receiver Function Description

11)Handheld / Bodypack Switch Setting

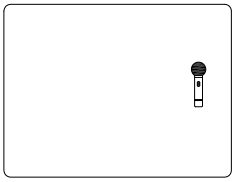
Operation: Short-press the CHA/CHB button to switch between Handheld and Bodypack modes.

Tip：Operate the CHA channel by pressing the CHA button; operate the CHB channel by pressing the CHB button.



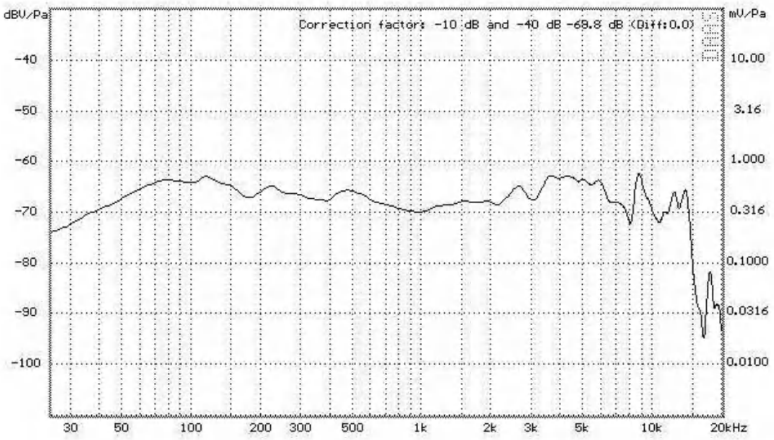


Display on screen when switching to Bodypack mode

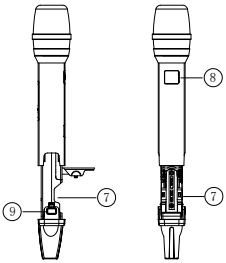


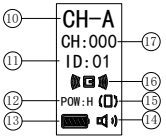
Display on screen when switching to Handheld mode

System Frequency Response Curve

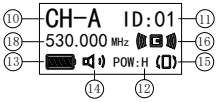


Wireless Transmitter Function Description



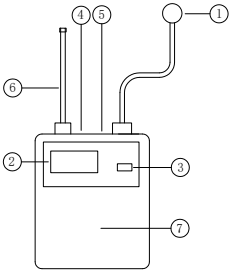


Display content in portrait orientation



Content displayed after screen rotation

1:Microphone capsule
2:TFT Display window
3:Mute key
4:Infrared window
5:Power key
6:Transmitting antenna area
7:Battery compartment (When installing batteries, press the snap buttons on both sides of the handheld microphone and pull down.)
8:Brand laser marking position
9:Snap button
10:Channel display
11:ID code display
12:Power display
13:Battery display
14:Mute-on and mute-off display
15:Screen rotation function display
16:Intelligent mute display
17:Frequency channel number display
18:Frequency display



Transmitter Operating Instructions

1)Intelligent mute setting

Operation：1.When the transmitter is powered on, press and hold the power switch until the symbol <G> appears on the screen, which indicates that the intelligent mute function is disabled.

2.When the transmitter is powered on, press and hold the power switch until the symbol <G> appears on the screen, which indicates that the intelligent mute function is enabled.

Tip: When the transmitter's intelligent mute function is enabled, it cannot be used on a microphone stand and must be held by hand. If you need to use it on a microphone stand, please disable the intelligent mute function.

2)Transmitter manual mute setting

Operation: Short-press the mute button, the transmitter enters mute-on status. The mute indicator light on the button lights up, and the symbol <> is shown on the display, the transmitter is muted. Short-press the mute button again to turn off mute. The mute indicator light goes out, the symbol <> appears on the display, and the transmitter works normally.

3)Transmitter power setting

Operation: When the transmitter is powered on, if the power display on the screen shows <POW:L>, the transmitter is in low-power mode. Press and hold the mute button for 1 second, the power display on the screen changes to <POW:H> indicating the transmitter is in high-power mode. Press and hold the mute button for another 1 second to return to low-power mode, and the power display will show <POW:L>.

4)Display screen rotation function setting

Operation: When the transmitter is powered on, if the display shows <>, the display rotation-view function is enabled. To disable this function, press the power key three times consecutively. The display shows<>, indicating the function is disabled. To restore the function, also press the power key three times consecutively until the display shows<>.

Faults and solutions

Troubleshooting
The following table lists some common faults and their solutions; if you can't resolve the fault, please contact your dealer

Problem	Solution
No sound (Status: Receiver RF doesn't display)	1. Check whether the power switches of the transmitter and receiven are in the "ON" position 2. Check whether the positive and negative polarity of the battery is disturbed 3. Check the antenna connection of the receiver to ensure that there is no obstruction between the antenna and the transmitter
No sound (Status: RF display is normal, AF display is normal)	1. Check if the receiver volume is the smallest 2. Check the connection between the microphone and other audio equipment is whether normal or not
No sound (Status: RF display is normal, AF display is abnormal)	1. Check if the transmitter power is turned on 2. Change the microphone of the transmitter if necessary
When the transmitter is connected, the received signal has noise or interference of external sound	1. Check whether the battery is installed firmly 2. Eliminate nearby radio frequency interference sources 3. If using a guitar or other musical instruments, check the connection 4. Two transmitters may use the same frequency, find and close one of them 5. The signal may be weak, re-adjust the position of the antenna, as close as possible to the transmitter 6. Change other frequency
After the transmitter is turned off, the receiver is noisy	1. Eliminate RF noise sources 2. Re-adjust the receiver or antenna position
The sound is occasionally lost during the movement of stage performance	1. Reposition the receiver and conduct a "walking" test to observe the RF display 2. "If you find that there is a loss of sound, mark this point, and avoid going there during the performance
Cannot turn on the transmitter	Replace the transmitter battery

Product warranty card

Thank you for purchasing this product! Please read carefully before you use this product the following terms:

1. Services:
   a. During the warranty period, the warranty card holders and can provide the appropriate purchase notes, product fuselage number of customers, enjoy Some free maintenance service.
   b. Beyond the product warranty period, the warranty card holders and can provide customers purchase the appropriate notes, may voluntarily decide No accept payment for repair services, customers can contact us paid maintenance issues.
   c. Does not comply with the warranty provisions do not apply this provision.
2. Second Scope:
   a. Application areas: the scope of this provision applies to the mainland People's Republic of China.
   b. Limits Description: In addition to the responsibility of the terms of a clear commitment to the outside, under any circumstances, be liable for other direct, Next, special, incidental damages and any other liability assumed.
3. hours:
   a. Our implementation of this product will be 15 working days after receipt of the goods to complete the repair work and return customers.
   b. Exceptional cases, some products because repair parts out of stock, I will be the Secretary to explain the situation to customers in a timely manner, and again agreed Maintenance completion time of the service.
4. service charges:
   a. Within the product warranty and product warranty, will provide customers with hardware failure free repair service.
   b. Beyond the warranty period or products under warranty, the customer voluntarily paid maintenance requirements, the production will be damaged Product repair, spare parts and maintenance costs incurred expenses borne by the customer.
5. non-service products include:
   a. Unable to provide product warranty card and purchase tickets.
   b. No installation or faulty operation caused by use of the product in accordance with the instructions specified.
   c. Use of non-product components.
   d. Unauthorized open the chassis for maintenance.
   e. Within the product warranty card does not match the record, or content by altered, or content can not be vague recognition.
   f. Product fuselage numbers have been artificially replaced or removed.
   g. Due to cause earthquakes, floods, fire, lightning and other force majeure device is not working properly.
   h. When using the device due to power surge, housing leakage, animal erosion, lake wetlands and other causes not work properly.
   i. Damage to the complimentary CD, connectors, cables, etc. and consumables provided.
   j. Faults and damage due to their own transport, mobile, overhaul, and other causes of falling after delivery.
   k. Other damage caused by human factors, such as hot plug, and other debris into the machine inside.
6. given the right to interpret and load:
   We reserve the right to rule on the interpretation of these terms and non-product service range. If unknown, please to Our inquiry.

Product Type:
Body number:
Unit (contact):
Telephone (fax):
Address:
Zip:

Buy Time	Carry-date	Symptom	Maintenance requirements	Remarks

UHF

Professional UHF Diversity Wireless Microphone

100% recycled paper
100% papier recycle

Name:M-9602

FCC STATEMENT
1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.

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

Antenna and Cable Requirements (FCC Compliance)
To ensure compliance with the EIRP (Equivalent Isotropically Radiated Power) limits applicable to unlicensed wireless microphones under FCC Part 15.236:

1.The transmitter is equipped with a dedicated, permanently attached internal spring antenna (Model: 555 Spring Antenna, Maximum Gain: -2.71 dBi). This antenna is not user-replaceable. Do not attempt to modify or replace the antenna.

2. Only the original accessories supplied by the manufacturer should be used with the receiver unit. The use of any unauthorized antennas or cables may cause the device to exceed the RF exposure and EIRP limits, violating FCC regulations.

3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.