

PROFESSIONAL

WIRELESS MICROPHONE

- ◆ Dual channel UHF PLL control
- ◆ Multi-function LCD
- ◆ 1000channels tunable
- ◆ Automatic frequency selection with group scan function
- ◆ Infrared automatic transmitter setup



USER'S MANUAL

Note: To ensure this component will work safely and to its fullest potential, please read this operating manual carefully before use and keep for future reference.

Warning, Caution and Others

Thanks for purchasing our wireless microphone series product. We take pride in providing our customers with only the most advanced and highest quality karaoke products on the market. Please read through the following safety guard before use to ensure proper usage:



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of unshielded dangerous voltages within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

To reduce the risk of electrical shock, fire, etc:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture
3. Do not throw the battery casually. Please put it into assigned recycling bins.

PARTS

Please use the spare parts supplied and certified by manufacturer.

POWER SUPPLY

Please operate the unit under the voltage as labeled. Make sure the local voltage is available to the wireless microphone.

CLEANING

Please make sure the power is disconnected before cleaning or repairing the machine. The machine can be cleaned by using a soft cloth with water. Dry the machine with a dry cloth and let it air dry for 15 minutes.

Content

Product Instruction	1
1. Feature.....	1
2. Technical Specification.....	2
Installation	3
1. Receiver.....	3
2. Handheld Microphone.....	5
3. Body-pack Transmitter.....	6
Operating Menu on receiver	7
1. LCD Screen.....	7
2. How to use.....	7-8
Debugging before operating	9
Troubleshooting	10
Parts Checklist	10

Product Instruction

This is a wireless microphone system which is suitable for professional stage using. With most advanced technology as spacious UHF, transmitter, CPU control, PLL control, LCD, automatic frequency selection & 1000 channel tunable, the unit was competent in any stages.

1. Feature

A. UHF frequency transaction

Spacious UHF transaction, 600~960MHz, transmitting in high efficiency, reducing distortion, picking up weak signals, more comfortable use.

B. LCD display screen

Advanced multi-function LCD display all the menu items can be display in the LCD screen.

C. 1000 channel tunable

1000 selectable frequencies across 600~960MHz bandwidth allow selecting the non-interfered frequency according to the environment.

D. MCU control

Ultra high-speed MCU analyzes signals, control noise and shock for perfect tone.

E. Automatic frequency selection with group scan function

Automatically analyzing the surroundings and selecting the best frequencies before using the system.

F. Infrared automatic transmitter setup

The system send the data to the transmitter through IR automatically. Transmitter can track the IR signal and lock the working frequency.

2. Technical Specification

RECEIVER

- Carrier Wave Frequency Range: UHF 614~960MHz
- Oscillation Mode: Phase-locked Loop controlled
- Carrier Wave Stability: 10PPM
- Switching bandwidth: 24MHz
- Frequency Space: 25KHz
- Sensitivity: -105dB @ sinad=12dB
- S/N Ratio: >105dB
- T.H.D.: <0.5% @ 1KHz
- Image rejection: 85dB typical
- Spurious rejection: 75dB typical
- Frequency Responses: 40Hz~18KHz
- Working distance: 200 feet
- Squelch Control: dual-squelch circuit
- AF Output Impedance: 2.2K Ω
- Max. Output Level: Balance : 0-400mv , Unbalance : 0-200mv
- Display: LCD
- Power Supply: External DC Power Supply, 0.5A, 12~18V DC
- Output Connector: 2XLR Balanced Socket Unbalance TRS ϕ 6.35mm Socket
- Dimensions (m/m): 420(L) x 45(H) x 200(D)
- Weights (Kg): 2.5

TRANSMITTER(HANDHELD)

- Transmitter power: 10mW
- Spurious emission: <40dB (with carrier)
- Display: LED
- Battery voltage: AA 1.5v x 2
- Battery life: 8 hours
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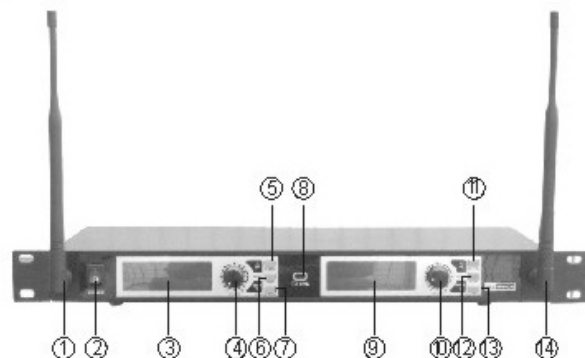
TRANSMITTER(BODY-PACK)

- Transmitter power: 10mW
- Spurious emission: <40dB (with carrier)
- Display: LCD
- Battery voltage: AA 1.5v x 2
- Battery life: 8 hours

Installation

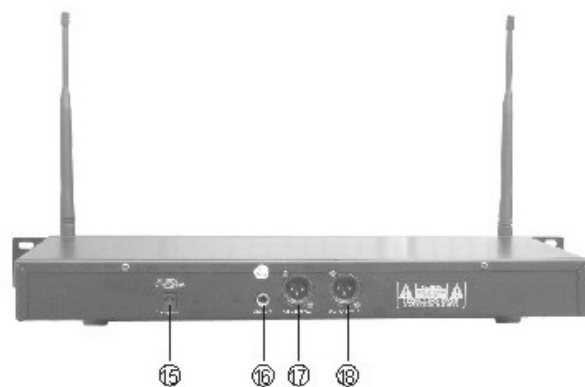
1. RECEIVER

Front Panel



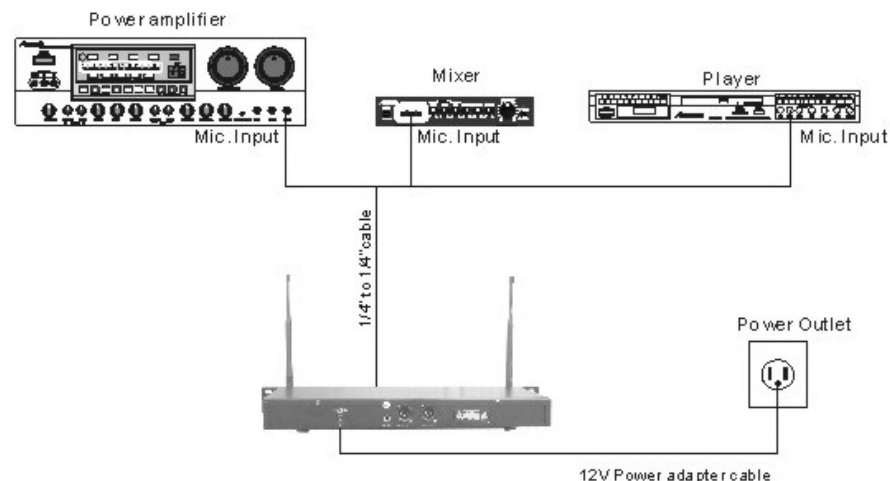
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|------------------------------|------------------------------|
| ① BNC Antenna Socket A | ⑧ IR Window |
| ② Power Switch | ⑨ B Channel LCD screen |
| ③ A Channel LCD screen | ⑩ B Channel Volume Control |
| ④ A Channel Volume Control | ⑪ B Channel UP/IR SYNC |
| ⑤ A Channel UP/IR SYNC | ⑫ B Channel MENU/STOP |
| ⑥ A Channel MENU/STOP | ⑬ B Channel DOWN/MANUAL SCAN |
| ⑦ B Channel DOWN/MANUAL SCAN | ⑭ BNC Antenna Socket B |

Rear Panel



- | | |
|---------------|------------------------|
| ⑮ DC Input | ⑰ BNC Antenna Socket B |
| ⑯ 6.35 Mixout | ⑱ BNC Antenna Socket A |

How to install the microphone system



1. Insert the antennas into the BNC antenna socket and put the antennas in vertical position.
2. Connect the DC power adapter to the receiver's DC input 110V~230V, then plug the other end of AC power adapter into the wall outlet.
3. Connect one end of a 1/4" to 1/4" cable to the receiver's unbalance audio output (MIXOUT) and the other end to a karaoke mixer, karaoke player or karaoke power amplifier 1/4" microphone input. If you are using the balance audio output, use a XLR to XLR cable to 1/4" cable.
4. For achieving the best receiving sources, please make sure keeping the receiver 1 meter away from the ground at least. The distance between transmitter and receiver's antenna need to be under 1 meter. Please avoid operating the unit in complex environment.
5. Turn on the receiver, the systems will go back to last working condition.

2. Handheld Microphone



- 1) **Cartridge module**- This is where you would sing into.
- 2) **Microphone body**- The main frame of the microphone.
- 3) **Operating indicator** and 4) **Switch button**-

Hold the switch button for 1 second to turn on the power. Light will turn green means microphone is now in working condition.

When it lights up green, then press switch button shortly, the light will turn yellow, means microphone is in mute mode, no sound will come out from microphone. To go back to working mode, press the switch button shortly again, the light will turn green.

When IR syncing, microphone needs to stay power on, but can be either working or mute mode. After switching channel on the receiver, press power button shortly on the receiver to start IR syncing. Then put the button part of the microphone to face the IR launcher on the receiver, the distance needs to be under 1 meter. Press the microphone switch button shortly to confirm the IR syncing.

When there is no light, it means the microphone power off.

- 5) **Battery cover & IR receiver**- This is the base of the microphone where you would hold it. It is also a battery cover. The bottom part has an IR receiving unit inside which receives the IR signal from the receiver to complete the IR matching for microphone and receiver.
- 6) **IR signal receiving and charging unit**.

Operation(& switching channels):

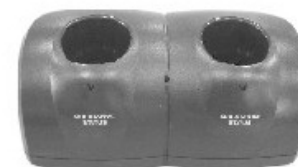
- 1) Install batteries. Make sure the positive and negative ends are installed properly.
- 2) Revolve the battery cover clockwise to fix with handheld microphone.
- 3) If you need to mute the microphone, push the switch button shortly, the light will turn yellow.
- 4) After you are done singing, push the switch button for about 1~2 seconds then release, lights will turn off.
- 5) If you are not going to use the microphone for a long period of time, turn off the microphone and pull out the batteries to avoid deterioration and damage to the components.
- 6) When IR syncing, microphone needs to stay power on, but can be either working or mute mode. After switching channel on the receiver, press power button shortly on the receiver to start IR syncing. Then put the button part of the microphone to face the IR launcher on the receiver, the distance needs to be under 1 meter. Press the microphone switch button shortly to confirm the IR syncing. If IR syncing is confirmed, the channel information on the LCD of the receiver will display "IR_OK."
- 7) Do not recharge batteries until they are low. (Indicated by the red light or light off)

How to charge your rechargeable batteries

1. Please use rechargeable dock and wireless microphone handheld which comes with the package to charge the rechargeable batteries.
2. Please do not recharge the batteries until the battery is low, while microphone light indicated with the flashing red light.
3. When using rechargeable dock charging batteries, the charging indicator light on the charging dock will turn red while batteries are charging. When rechargeable batteries are full, the light will turn off.
4. Charging the batteries before they are low will cause the battery's usage life span to shorten.

* Batteries recharging time = 1 hour

* Do not charge the batteries if you are not using rechargeable batteries.



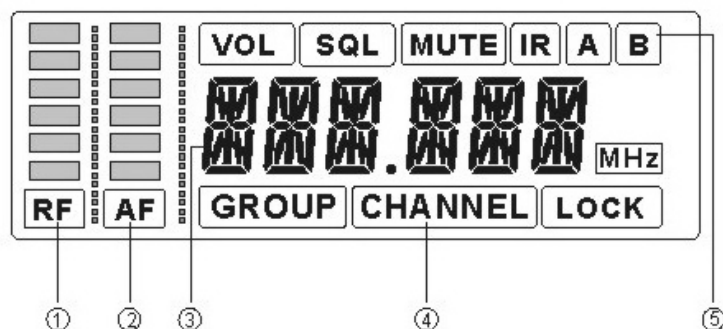
3. Body-pack Transmitter

- ① Transmission antenna
- ② Operating indicator- When it lights up red, the body-pack is now in working condition. When it is flashing red, it means the battery is low that was unable to keep working within half an hour. Please replace the battery shortly.
- ③ Power switch- With "ON", "MUTE" and "OFF" position optional.
- ④ Input socket- It's used to connect the headset or lavalier microphone.
- ⑤ LCD screen- Display the channel and battery status.
- ⑥ Operation button- Hold the switch button for 1.5 seconds to turn on/off the power, then press the operation button softly again for 0.5 seconds to confirm the IR syncing.
- ⑦ Battery cover- This is the base of the microphone body-pack that you would hold it. It's also a battery compartment that you install the batteries.
- ⑧ AF gain control- Control the audio output to match the transmitter. (It's already tested by manufacturer. Don't adjust it if not required)
- ⑨ IR Window- This is used to receive the IR signal.
- ⑩ Waist clip: Fix the body-pack with waist while using the microphone.



Operating Menu on receiver

1. LCD Screen



- ① RF signal indicator
- ② AF signal indicator
- ③ Six digit display
- ④ Operating menu
- ⑤ Antenna working indicator

2. How to Use

Turn on the receiver, the system will turn to be initialization and LCD screen showing the current working condition.

1. Channel setting: Press "SET" button for 0.5 second to enter channel selecting menu, the LCD screen will display "FREQUEN" for 1.5 second and indicate to "--PRESS UP OR DOWN TO CHANGE FREQUENCY--" in roll. Press "UP" or "DOWN" to increase or decrease the frequency, then confirm the selected frequency by pressing "SET" button.
2. IR Sync: The IR syncing can be used through the menu or shortcuts, please read the operating way as below:
 - (A) Shortcut: Press "UP" button doubly, the "IR" light up, which means the receiver is waiting for IR sync. To do the syncing, put the button of the wireless microphone handheld to face IR Sync window, keep the distance between microphone and receiver within 1 meter, then press the button on the microphone. If IR sync success, the CH in the LCD screen will display "IR.OK" and you can see the RF signal bar on the LCD screen.

- (B) Operating on menu: Press "SET" button doubly, the LCD screen will display "SCAN" for 1.5 second and indicate to "--PRESS MANUAL SCAN BUTTON TO START SCANNING--" in roll. Then press "UP" button, the LCD screen will turn to be "--PRESS BUTTON AGAIN TO START TIRING--" in roll after displaying "IR" in 1.5 second. To do the syncing, put the button of the wireless microphone handheld to face IR Sync window, keep the distance between microphone and receiver within 1 meter, then press the button on the microphone. If IR sync success, the CH in the LCD screen will display "IR.OK" and you can see the RF signal bar on the LCD screen.

Note: The LCD screen will display "-CHANNEL OCCUPIED PLEASE CHOOSE ANOTHER ONE" if the system was interfered with the other electric equipment. Please select another frequency and keep IR Syncing.

3. Automatic Frequency Selection with group scan function
 - (A) Shortcut: Press "DOWN" button doubly to scan group frequency automatically and you can see "SCAN" is lighting upon the LCD screen. The system can choose and lock a best frequency after finishing scanning.
 - (B) Operating in menu: Press "SET" button doubly, the LCD screen will display "SCAN" for 1.5 second and indicate to "--PRESS MANUAL SCAN BUTTON TO START SCANNING--" in roll. Then press "DOWN" button to start automatic frequency selection with group scan function.

Note: Before using this function, please make sure the transmitter is off. Choosing one of the RF channels for Automatic Frequency Selection, the system will eliminate the interference caused by electric equipments like DVD, TV and etc, then turn on the handheld microphone to do the IR syncing. After that, move to the other channel for automatic frequency selection to avoid interference for each channel. The microphone is in good working condition at this moment.

4. Button Locked function
Press "SET" button continuously four times, the LCD screen will display "LOCK" for 1.5 second and the indicate to "--PRESS UP OR DOWN TO LOCK OR UNLOCK --" in roll. Then press "UP" to lock the button, Will go back to original menu when you press "SET" button or just wait for 12 seconds.

Debugging before operating

1. Turn off the transmitter before using the system, put the volume control in minimum position, then switch on the receiver. The receiver turn to be initialization and the LCD screen light up.
2. Please tune the frequency manually when you have known the best working frequency in the area; the Automatic Frequency Selection with group scan function can be used under the complex environment. Check to see if the AF and RF signal are normally displayed or not. If not, it means that the receiver was disturbed by other signal. Please reset the frequency accordingly.
3. Switch on the handheld or body-pack microphone for a moment, put the microphone handheld to face the the IR Sync receiver. The LCD screen will indicate the level of RF signal and which antenna is working. When you sing into microphone, the receiver will display the volume level accordingly.
4. How to control the volume of receiver and amplifier
 - A. To control the Unbalanced output volume: When you put the volume control in the middle position, the output volume is equivalent to the wired microphone's. Then adjust the receiver's volume controls slightly in order to have best performance.
 - B. It will make distorted sound when you sing into the microphone loudly if the receiver's volume is too high. Conversely, the performance of the microphone will go down for low sensitivity if the receiver's volume is too low.
5. How to acquire beautiful sound:
 - ① Please make sure the distance between the receiver and transmitter is not too far.
 - ② Put the receiver away from some large substance that was made of metal.
 - ③ Please have the system tested for dead angle before using in stage.

Troubleshooting

Problem	Status indication	Solution
No sound	Receiver No lights	Check to see if the operating indicator of transmitter is normal, or the frequency is the same as receiver's.
	Receiver Lights on, AF signal level is flashing by sound volume	Check and make sure the receiver connect with the other audio equipment properly
	Receiver Light on, AF signal level without Changing by sound volume	Check to see if the transmitter is working under mute condition
Distorted sound: Feedback		<ul style="list-style-type: none"> • Move the receiver away from electric equipment • Choose the other channels for the receiver and transmitter simultaneously • Check to see if the sound volume of receiver is too high
Transmitter not working	Operating indicator flash in red	Replace the batteries

Parts Checklist

Handheld/Body-pack microphone X 2 (optional)
DC power adapter X 1
Receiver X 1
Male to male cable X 1
Antenna X 2
AA battery X 4
User manual X 1
Charger X 1 (optional)