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**CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.**

1. To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
2. Do not use force on switches or connection wires. When moving unit, first disconnect the power plug and the wires connected to other equipment. Never pull the wire itself.
3. Install this unit in a cool, dry, clean place----away from windows, heat sources of excessive vibration, dust, moisture and cold. To prevent fire or electrical shock, do not expose this unit to rain or water.
4. Only use provided power adapter, and confirm the voltage is correct to the adapter. The use of other power adapter may damage the machine and void your warranty.
5. The machine use 110-240V AC power supply voltage, the use of other voltage may cause fire and fault.
6. Avoid collisions or vibration of the machine.
7. Never open or try to change the circuit of the receiver, transmitters and the power adapter. This could damage your machine and void your warranty.  
If the machine fails to work, please send to the Maintenance Service Center.
8. Be sure to read the "Troubleshooting" section regarding common operating errors before concluding that the unit is faulty.
9. If there are any abnormal cases happened during using, such as smoke, odor, etc., please unplug the adapter immediately, and send the machine to the Maintenance Service Center ASAP.
10. Use the 2A alkaline batteries for the transmitter. Be sure the polarities are correct. (See the illustration inside the battery compartment.) Remove the batteries if the transmitters will not be used for an extended period of time.
11. When not planning to use this machine for long periods of time, disconnect the power adapter plug from the wall outlet.
12. Do not attempt to clean the unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.

## **FEATURES**

- 1.UHF band (500-960 MHz) frequency with 200-300 manually adjustable frequencies with PLL synthesized control.
- 2.Automatic search and transmitter frequency key: When the receiver is turned on in unlocked condition, Press the UP button it will search the strongest signal of the frequency; Press the DOWN button to automatically match frequency, the data of the receiver will send to transmitter through infrared ray.
3. Lock function, avoid misuse.
- 4.Two microphone channels with individual volume controls.
- 5.Two Independent XLR Balanced Outputs
- 6.One 1/4 inch phone jack mixed output.
- 7.LCD display panel on transmitters and receiver show RF/AF and Channel.
- 8.Rugged 1RU metal receiver chassis.
- 9.Operating range up to 100m.(in ideal condition)
- 10.DC 12V adaptor supply power adopter.

## **SAFETY**

### **Care and maintenance**

Keep the machine away from damp, electromagnetic field, high temperature. Never expose them to direct sunlight .Take out of the batteries of the transmitter and unplug the power wire of the receiver if you don't use it for a long time.

### **Cleaning**

Pull out the plug, use a slightly damp cloth to clean the machine. Do not use any cleansing agents or solvents.

### **Maintenance**

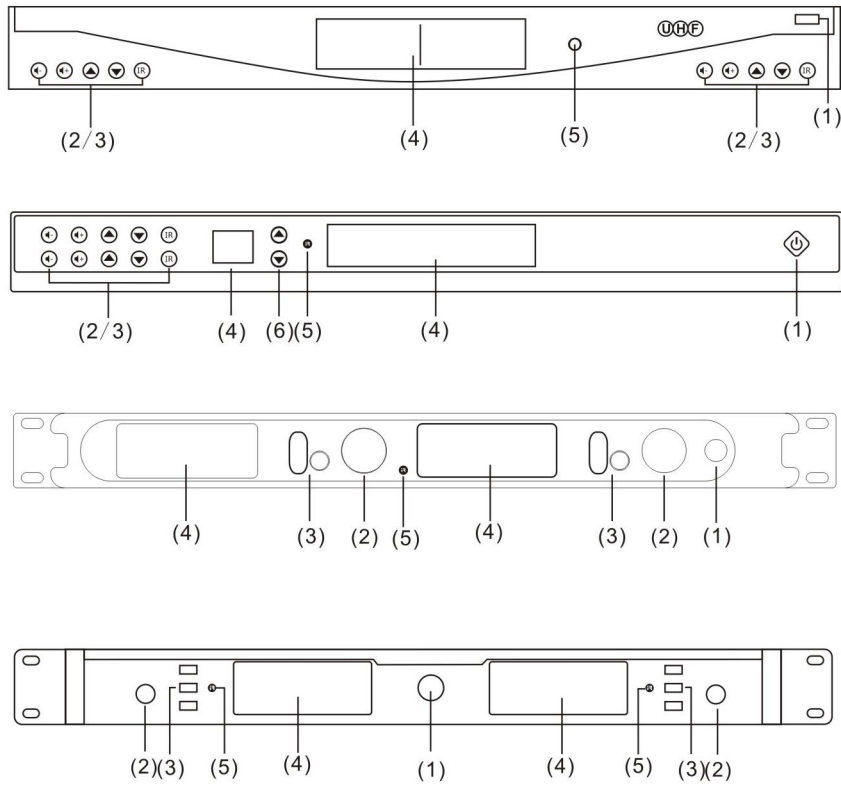
Never open the machine by yourself when problems appeared, please contact the local distributor or call us directly, we will do our best!

### **Repair**

If units are opened by customers in breach of this instruction, the warranty becomes null and void.

## **FRONT AND BACK PANEL DESCRIPTIONS**

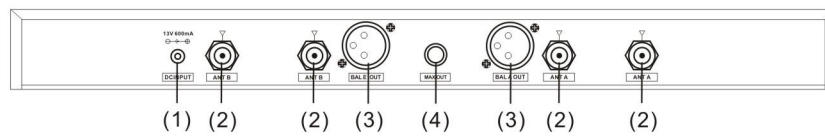
### **View of Front Panel**



- 1. On/Off switch
- 2. volume control
- 3. Function keys

- 4. display window
- 5. IR por
- 6. Adjust key group of channels 1–60

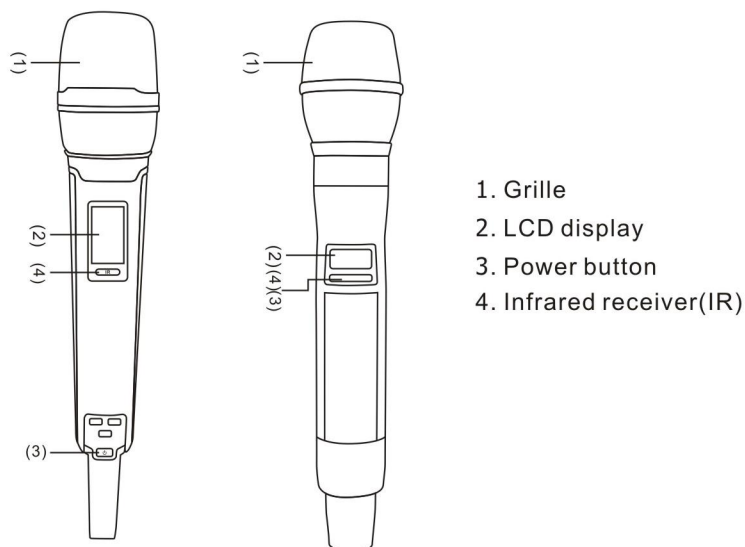
## View of Back Panel



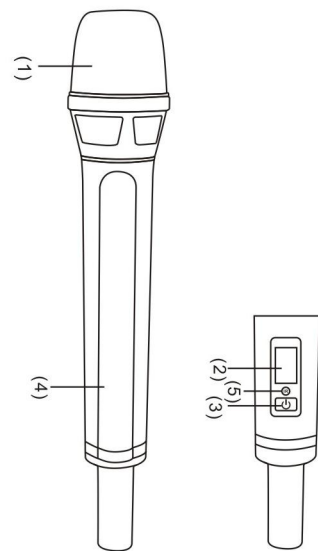
1. Power in jack: DC12V/ 500 mA
2. Antenna
3. Balanced audio output with XLR jack
4. Mix audio output with 6.35mm phone jack

## HAND-HELD TRANSMITTER DESCRIPTIONS

Type A

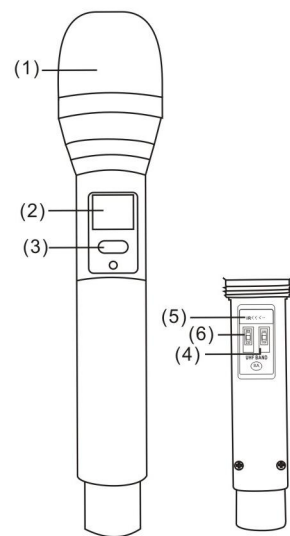


## Type B



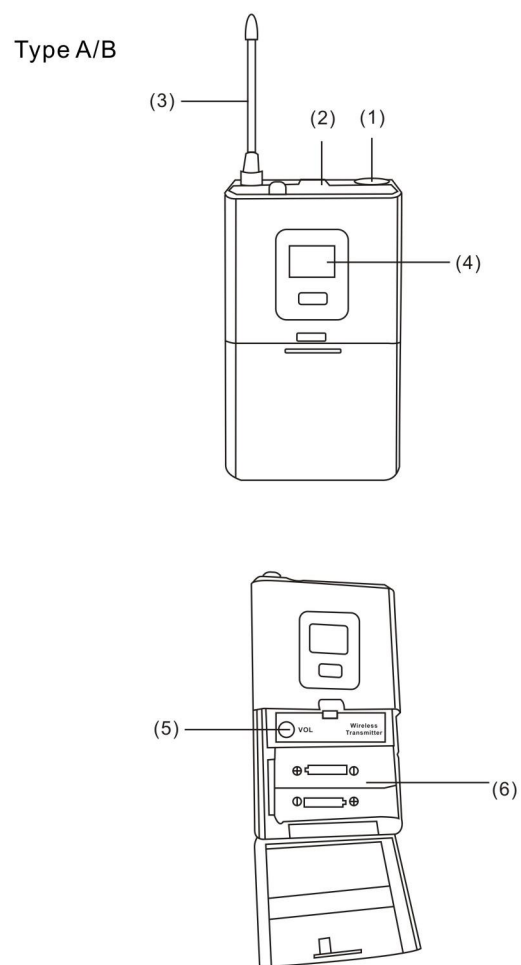
1. Grille
2. LCD display
3. Power button
4. battery cover
5. Infrared receiver(IR)

## Type C



1. Grille
2. LCD display
3. Power button
4. RF switch
5. Infrared receiver(IR)
- 6.Lock switch

## **BODY-PACK TRANSMITTER DESCRIPTIONS**



1. Microphone / line input (MIC / LINE)
2. Power button
3. Antenna
4. LCD display
5. Infrared receiver(IR)
6. Battery tray

## **RECOMMENDATIONS**

### **How to use the hand-held wireless microphone properly**

1. Hold the middle part of the microphone body. Holding too close to the sound inlet basket will affect the microphone's pick-up pattern, holding it at the lower part of the body will reduce the transmitter's range.
2. You can vary the bass reproduction by increasing/decreasing the talking distance to the microphone.

### **How to use the body-pack wireless transmitter properly**

1. Body-pack transmitter utilize a separate 1/4 wavelength whip .The effect will be reduced when the antenna be winded or touched by the user's body.
2. Adjust the sensitivity moderately based on varies audio resources and microphones.
3. When using a Lavalier Microphone, in order to reduce the variations to minimum when the user turns his or her head away from the microphone, attach the microphone as centrally as possible .Attach the microphone carefully and conduct the cable so that noise due to friction is avoided.
4. Always position the microphone at the corner of the mouth. You can increasing /decreasing the bass by adjusting the talking distance to the microphone.
5. When Lavalier Microphone used for live sound reinforcement, make sure that the sound inlet is directed towards the mouth, speaker should be select and layout to reduce the acoustic feedback in principle, in particular prone to acoustic feedback of occasions, match acoustic feedback suppression.

### **How to use the receiver properly**

1. There are True diversity and Non-real diversity ,Non-real diversity is economic and the True diversity has better effort on transmission, you can choose reasonable according to you need .
2. Observe a minimum distance of 50CM between receiving antennas and metal objects.
3. The range of the receiving varies because of many kinds of reasons. You can have better effect where there are no large metal objects.
4. If reception conditions are not satisfied, you should use two remote antennas which are connected via antenna cable.

### **Using several transmitters in the same place**

1. In the 50 MHz band width, you can use 200pcs transmitters at the same time.
2. When using several transmitters simultaneously, interference can be avoided by keep a minimum distance of 20CM between two transmitters.
3. When use many transmitters, we advise you to use the UHF Directional antenna、UHF Antenna Booster, Active Antenna & power distribution system.
4. \* Low-power\* set used in KTV, private rooms, school classrooms, etc., Using as many as 200pcs microphones at the same time will not interfere with each other.

## **SPECIFICATION**

| <b>System</b>              |                                 |
|----------------------------|---------------------------------|
| Carrier Frequency          | UHF 500-960MHz                  |
| Modulation Type            | FM                              |
| Available Band Width       | 50-60MHz                        |
| Channel                    | 200-300 channels                |
| Frequency stability        | $\pm 0.005\%$                   |
| Audio Dynamic range        | >105dB                          |
| Max. deviation             | $\pm 68\text{KHz}$              |
| Total Harmonic Distortion  | $\leq 0.5\%$                    |
| Frequency response         | 50Hz-18KHz( $\pm 3\text{dB}$ )  |
| Image & Spurious rejection | 80dB                            |
| Signal/Noise Ratio         | >105 dB                         |
| Maximum Distance           | 100m(in ideal condition)        |
| Operating Temperature      | -10℃—+40℃                       |
| <b>Receiver</b>            |                                 |
| Power supply               | DC 12V/ 500mA                   |
| Power consumption          | 3W                              |
| Sensitivity                | 12dB $\mu\text{V}$ (80dBs/N )   |
| Audio output level         | Mix: 0~200MV, Separate: 0~400mV |
| <b>Transmitter</b>         |                                 |
| Output power               | High:30mW; Low:3mW              |
| Battery                    | 3V(1.5V AA $\times$ 2)          |
| Battery Life               | High: >10 hours                 |
|                            | Low: >15 hours                  |

## **Troubleshooting**

| <b>PROBLEM</b>                                                             | <b>SOLUTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No sound; receiver RF lights and audio lights not glowing                  | <p>Make sure POWER switches on transmitter and receiver are set to the ON position.</p> <p>Check microphone batteries to ensure that they are providing power.</p> <p>Replace battery if necessary.</p> <p>Check receiver's AC power connection.</p> <p>Make sure antennas are in the microphones line of sight</p> <p>If necessary, reduce the distance between the microphones and receiver.</p> |
| No receiver sound; RF and audio level meter lights glowing                 | <p>Turn up the receiver's Volume level controls.</p> <p>Check for proper connection between receiver and external amplifier/mixer.</p> <p>Talk into the microphone and observe the receiver's RF signal LEDs. If they glow, the problem is elsewhere in the sound system.</p>                                                                                                                      |
| Receiver signal is noisy or contains extraneous sounds with transmitter on | <p>Check microphone batteries and replace if power is low.</p> <p>Remove local sources of RF interference, such as lighting equipment.</p> <p>Two transmitters may be operating too close together or on the same frequency. If so, turn one off.</p> <p>Signal may be too weak. If so, reposition antennas (If possible, move them closer to the transmitter).</p>                                |
| Noise coming from the receiver with the microphones turned off             | <p>Remove local sources of RF interference, such as lighting equipment.</p> <p>Reposition the receiver or antennas.</p>                                                                                                                                                                                                                                                                            |
| Momentary loss of sound as transmitter is moved around performing area     | <p>Reposition receiver and perform a "walkthrough" test and observe the signal strengths.</p> <p>If audio dropouts persist, mark these "dead spots" in the performing area and avoid them during the performance.</p>                                                                                                                                                                              |

**Warning:**

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

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. 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.

NOTE: This device and its antenna(s) must not be collocated or operation in conjunction with any other antenna or transmitter.