

UHF Professional Wireless Microphone

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Instruction for user

UHF Wireless Microphone Instruction

Thank you for choosing our product, in order to let you use this product conveniently, please kindly read through the manual: wireless microphone system with infrared automatic frequency function, which is through professional design and produce. With excellent professional audio quality, the microphone system can help you deliver the smooth, clear and attractive voice in any stages. Adopts the advanced techniques with combination of multi-channel, ultra high frequency, the signal is more steady, and the transmission is more realiable. This microphone system is adjustable for different environment, and can be used together with many instruments. It is the best choice for you as it is the leader in the live performance instruments.

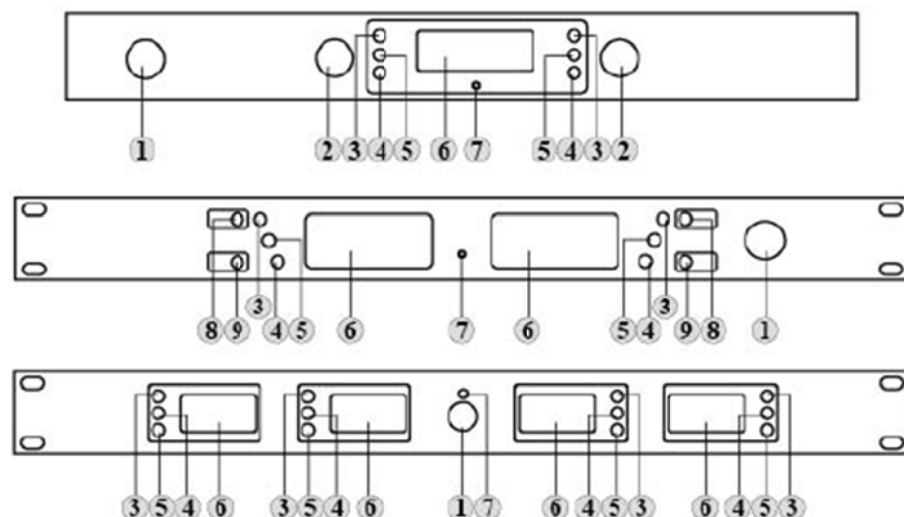
I . Characteristics of the System:

1. With UHF 470.5-607.5MHz frequency range designed, the signal receiving is more stable.
2. 200 frequencies can be chosen, which make it very convenient to use several sets at the same time.
3. Sync IR synchronization frequency technology adopted, the frequency of the transmitter can be received automatically by the sync IR signal and synchronously with the receiver.
4. The receiver and the transmitter have LCD display screens, displaying the working frequency, the operation is simple, direct and convenient.
5. Thick bass, light median and clear alt can be delivered.
6. The system can avoid noise interference and enlarge the dynamic range for the audio compressing-companding technology.
7. Two 1.5V batteries are used in the transmitter, the battery life is long, and it is convenient for user to buy, maintain and replace.
8. Balance independent and unbalance mix output design in the receiver, it is suitable for all kinds of audio equipment to connect.
9. The receiver and handheld microphone are made of high strength alloy that it is sturdy and durable.
10. Low power indicator of microphone helps to replace the battery in time.
11. Handheld, lavalier and headset microphone can be chosen to match with the receiver to meet the requirement of different occasion.

II. Function and operation:

i. Function and Operation of Receiver

(1) Front panel



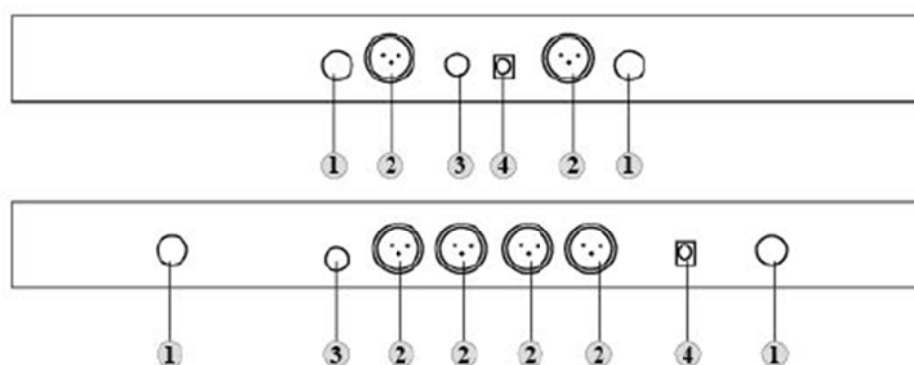
- ① Power switch: Power On/Off button, press the power switch to turn on the receiver, the LCD screen is lit. Press it again to turn off the unit, the LCD screen is dark.
- ② Volume: The volume control knob, colockwise rotate the knob, the volume increase, while negative rotation, the volume decrease.
- ③ UP: Manually frequency selection button. Press the “UP” button, the frequency and channel are up.
- ④ DOWN: Manually frequency selection button. Press the “Down” button, the frequency and channel are down.
- ⑤ SET: Menu setting button. Press it to confirm frequency after manually frequency setting, press it again to enter SYNC IR frequency selection. Long press the “SET” button to enter the automatically frequency search (AFS) function.
- ⑥ LCD display screen: Showing the frequency information.
- ⑦ IR: IR infrared window.
- ⑧ Volume +: Press this button to increase the volume.
- ⑨ Volume -: Press this button to decrease the volume.

Operation Method:

Receiver Frequency Setting:

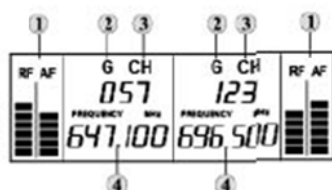
- ① Manually frequency setting, press the “UP”/“DOWN” button, to select the frequency up or down, after selecting the required frequency, press the “SET” button to confirm.
- ② Automatically frequency search, long press the “SET” button to enter automatically frequency search function, when finish, it will exit automatically.
- ③ SYNC IR, press the “SET” button, the receiver will enter SYNC IR frequency status, the screen shows “-----”, turn on the transmitter and face its infrared IR window to the receiver's IR window, when the microphone screen is lit, the match is successful.

(2) Back panel



- ① Antenna socket
- ② XLR Balanced Microphone Output
- ③ Mix Audio Output
- ④ DC output: It is for Power electricity cable inserting. Make sure the voltage is appropriate.

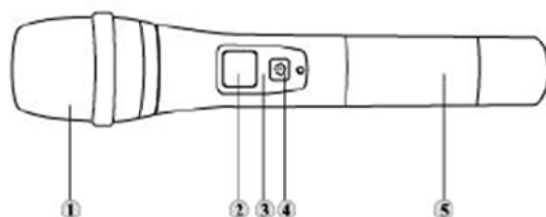
(3) LCD Display Screen



- ① RF & AF level display: Display the intensity index of RF and AF signal.
- ② Frequency band section display: Dynamically display the working section of the frequency band.
- ③ Channel display: Dynamic display the working channel.
- ④ Frequency display: Dynamic display the working frequency.

ii. Operation of Transmitter

(1) Handheld Transmitter:



- ① Head of Microphone: Grille and capsule is included.
- ② LCD display screen: Channel and battery power situation display screen
- ③ IR infrared window (inside)
- ④ Power switch: Press it in short time to turn on. Press it in longer time to turn off.
- ⑤ Battery compartment: Put in 2 batteries.

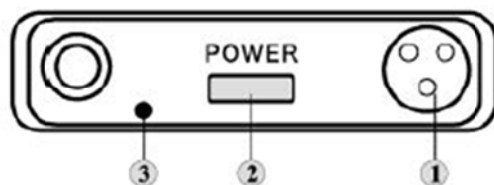
(2) Handheld transmitter display screen:



① Frequency display

② Battery display

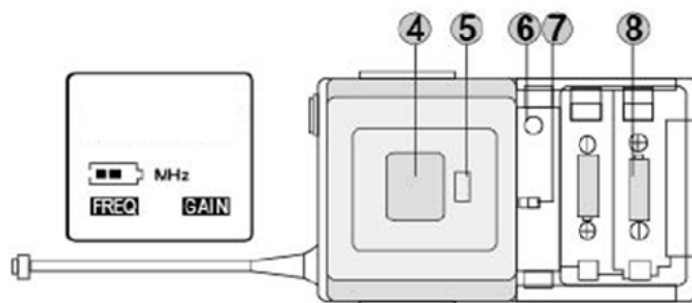
(3) Pocket transmitter:



① Microphone input socket

② Power indication light. Press it to turn. Short press it to mute and turn on volume. Long press to turn off

③ Low power display: Replace the battery if the red light keep bright



- ④ LCD display screen: Display the working frequency and battery capacity
- ⑤ Select button: Press it to select the frequency manually
- ⑥ IR infrared window
- ⑦ Power level switch: "H" is high power for long distance use. "L" is low power for short distance use.
- ⑧ Battery chamber

III. Specification

Comprehensive feature:

Frequency Range: UHF 470.5-607.5MHz

Frequency Response: 40Hz-18kHz

Frequency Stability: $< \pm 30\text{dB}$

Modulation Mode: wide- band FM

Modulation Range: 25MHz

Total channels: 200 channels

Working distance: 60m

Channel spacing: 250 KHz

Dynamic Range: 100dB

Maximum Deviation: $\pm 45\text{KHz}$

AF Response: 65Hz-15KHz ($\pm 3\text{ dB}$)

Total Harmonic Distortion: $< 0.5\%$

Audio Output Balance: $0-\pm 500\text{mV}$

Receiver :

Power supply: AC 220-240V, 50/60Hz

DC Adaptor output power: 13-15V, 500mA

Power consumption: 7W

S/N Ratio: $> 90\text{dB}$

P/N Ratio: $> 80\text{dB}$

F/N Ratio: $> 80\text{dB}$

Receive sensitivity: 5dBu

Transmitter:

Frequency Oscillation Mode: Analog system

Transmitter Power: 10mW

Modulation Mode: FM

RF output: 10mW

Band width: 50MHz

Frequency Interval: 250KHz

Maximum Deviation: $\pm 50\text{kHz}$

High Harmonics: $> 40\text{dB}$ (with carrier)

Battery Voltage: AA 1.5V $\times 2$

Battery Life: 8-10 hours

IV. Notes

1. Please choose non-intermodulation frequency setting way. Within 25MHz bandwidth, 4 to 8 transmitters can be used at the same time commonly. If more than 8 transmitters would be used together, other bandwidth should be applied certainly.
2. Appropriate distance should be kept from the microphone to the receiver. At least 1 meter between them. Too far away or too near would affect the vocal performance.
3. If signal receiving condition was not as good as that expected, extended cord, exterior high-gain antenna or antenna amplifier can be used to enhance it.
4. When several sets of receivers are used together, high gain antenna, antenna amplifier and receive branch unit are advised to be used.
5. The receiver and transmitter must be set in the same frequency channel.
6. Less signal interference between receiver and transmitter is much better. It is the best if signals from transmitter can reach receiver directly.
7. If the antenna of the receiver is omni-directional, the antenna should keep at least 0.5m from the wall and keep away from the metal objects.
8. If several transmitters were used together, they should keep 20cm from each other to avoid interference.
9. If the transmitters were set with small power, 100 transmitters at the same band can be used.
10. Should lavalier microphone be used for live performance, reinforced directional microphone capsule need to be applied. To avoid feedback, environment like position also is what should be paid attention to. If necessary, feedback destroyer can be equipped.
11. Hold the middle of microphone body when using. Too close to the grill, the sound pickup would be affected. Too close to the cable at the bottom, transmission efficiency and working distance would be decreased.
12. The position of headset microphone is usually near to the mouth. You can adjust the distance between the microphone and mouth to increase the treble or bass.
13. If the system would not be used for a long time, please turn off it and take the battery out.

V. Troubleshooting:

Problem	Reason	Solution
Indicator light is dark	Battery is in opposite polarity placement	Place it to the right polarity placement
	Battery is a lack of power	Replace with new battery
	Connecting clip of the battery is dirty or has been corroded	Clean or replace the battery clip
Indicator twinkle	Lack power	Replace with new battery
The LED display is dark	No electricity	Check the DC power adapter and voltage
	The power of receiver is not connected successfully	Check the DC power adapter and receiver connection
Receiver is out of signal response	Microphone is off	Turn on the microphone
	The frequency of microphone is not the same as the receiver	Adjust the frequency to the same
	The distance between microphone and receiver is too long	Shorten the working distance
Receiver has signal but no sound	Volume is too low	Adjust the volume control on the receiver
	The audio cable is in wrong connection	Connect the audio rightly
Receiver has signal before turning on microphones and some noise in speaker	Other equipment with the same frequency is in the working distance	Adjust the working distance to avoid the interference, keep certain distance away from the computer and mobile phone
Speaker howls	Feedback appear	Turn the volume to lower point and don't face the microphone directly to the speaker
Sound is consecutive	Away form the working distance	Back to the working distance
Working distance is too short	The environment is too complex	Be away form the complex environment and big metal subject, wall and the crowded

FCC warning statement

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used

in portable exposure condition without restriction.

This device operates on a no-protection, no-interference basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio license is required. For further details, consult Innovation, Science and Economic Development Canada's document Client Procedures Circular CPC-2-1-28, Voluntary Licensing of License-Exempt Low-Power Radio Apparatus in the TV Bands.