

UHF Multi-channel wireless Microphone

USER'S MANUAL



UHF ACT200 CHANNEL
PROFESSIONAL WIRELESS
MICROPHONE SYSTEM

※ **Attentions**

- Please take a few moments to read these instructions carefully, as we want you to enjoy your new products quickly and to the fullest.

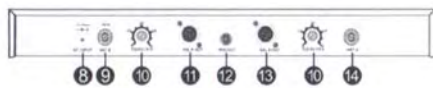
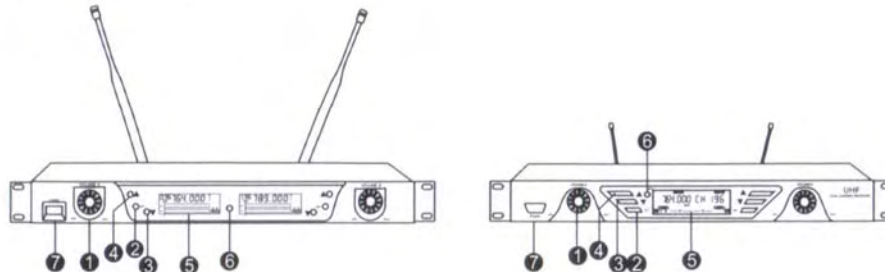
※ **Safety instructions**

- ▲ For the sake of safety, when you do various of connection, please do not grasp the cable, but hold the plug, you should not injure the power cord ensure that the use of safety.
- ▲ Only use provided power adapter, and confirm whether the supply voltage correspond with the adapter power requirement, the use of power adapter provided by other suppliers may damage the machine.
- ▲ This unit supply voltage, according to the actual use to the external power supply voltage to determine the selection of the power adapter. (110VAC or 220VAC optional external power adapter or other suitable).
- ▲ Keep the machine away from the high-temperature, humidity, dust environment and liquid substances, in order to avoid fault.
- ▲ Do not collision, throwing, vibration of the machine.
- ▲ Not to open, touch, change the receiver, transmitter and the power adapter, there are no modifiable things, if the machine fails to work, please send to the maintenance center.
- ▲ In the use of process, when there is any abnormalities, such as smoke, odor, etc., please immediately unplug the power adapter, and send to the maintenance center authorized by YMIOO as quickly as possible.
- ▲ Please use the 2A alkaline batteries specialized for the transmitter allocated orrechargeable batteries, never reverse the positive and negative poles, when there is no use for a long time, take the batteries out of the transmitter.
- ▲ Prohibited the use of insulating material damaged batteries, or else may lead to short-circuit.
- ▲ Please do not leave the working machine for a long time, close the machine and unplug the power adapter, don't keep the machine running.

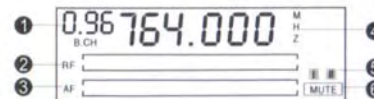
※ Features

- ★Adopt UHF paragraph, less interference, more reliable transmission.
(Actual frequency of use in accordance with local regulations to determine the machine.)
- ★Adopt multi-channel DPLL frequency synthesis technology, in the 50MHz frequency bandwidth, with 250KHZ channel spacing, providing as many as 200 channel choices, Convenient for machines used at the same time, easy to avoid all kinds of interference.
- ★Advanced automatic frequency technology, even if the transmitter and receiver frequency modulation in turmoil, you can conveniently adjust the frequency to correspond with the receiver.
- ★Equipped with high power conversion function, you can use fluently not only in places of assembly activities (high-power launch), but also in the classroom, KTV rooms (low-power launch), saving more battery power.
- ★Lock function, avoid misuse.
- ★Sensitivity is adjustable, improve the anti-interference.
- ★LCD display, more intuitive.

✧ Receiver



- ① Volume button
- ② Set confirm button
- ③ Up
- ④ Down
- ⑤ LCD display
- ⑥ IR frequency-shift
- ⑦ Power
- ⑧ DC power
- ⑨ Anthena B channel
- ⑩ Static noise regulation
- ⑪ Balance B channel output
- ⑫ Mixed output
- ⑬ Balance A channel output
- ⑭ Anthena A channel



- ① Channel display: the current working channel
- ② 8 class R F level display: the R F signal strength
- ③ 8 class audio level display the audio signal strength
- ④ Frequency display: current working frequency
- ⑤ Channel display: display the current working channel in dynamic
- ⑥ Mute display: When mute light on, means do not receive the RE signal.

Operation of the receiver

1. Pre-boot, do not open the transmitter, receiver's volume should be minimum, and then press the power button on the receiver to open receivers, the power turns on, the LCD background lights up, all the characters all show, followed by the main display bar shows the receiver channel, frequency, key "SET" allows the main display field in a variety of content switching.
2. When the transmitter is off, you should observe the RF and AF level, if strong

interference appeared, change the channel so as to avoid the interference point.

3. Turn on the transmitter, RF level meter lights up, adjust the volume to the proper one, speak to the microphone ,AF level meter of receiver lights up, when there is no sound or the level meter lights don't shine, indicating that the system is abnormal, should be overhauled.
4. Press the POWER button for 2-3 seconds, turn off the receiver.

Operating menu of LCD

1. Key functions and operations

1. Press the middle button "SET" can select menu and confirm your Settings.
2. Press "▲" "▼" button to select or adjust the current menu, and then "SET" key set to store your settings.
3. Long press "▲" "▼" key to select frequency and channel quickly.

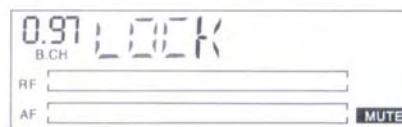
2. LCD display and Operations

i. Infrared frequency

Press the "SET" button when the LCD display "PRG IR",2-3 seconds later, transmitting the infrared frequency to the transmitter.



ii. System locking control



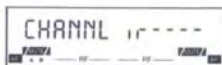
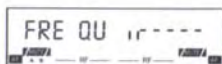
- The Lock mode determines whether the lock current job status of the receiver (channel, sensitivity, the main display contents, power switch, etc.)
- The LOCK ON mode prevent to change current work status ,including shut down .It enables the receiver or transmitter not to be accidentally programmed or switched during operation .
- To deactivate the lock mode ,frist press the SET button. Then press the ▲/▼ buttons to select LOCK OFF .If you confirm your selection by pressing the SET button ,LOCK OFF appears on the display and the buttons can be operated as usual .

A. Frequency operation

Press the SET button until FRG IR appears on the display ,2-3seconds later ,it begins to deliver the infrared data to the transmitter .



B. The main display column operation:



- Press the SET button to get into the standard display into the operating menu. 2-3seconds later ,CHANNEL or FRE QU appears ,then press the ▲/▼ button can change the selection between the two modes .CHANNEL indicates the operating menu display the channel number and FRE QU indicates the current work frequency.

(Illustration :To display which menu depend on the previous SET status.)

- Press the SET button to store the setting or the screen flashing after 2-3seconds indicating that the settings are not available ,the transmitter still work at previous setting .

C. Channel / frequency display and adjust



Channel display and adjust

► Press the SET button and select the CHANNL mode, the screen display the left menu. This menu shows the current channel that receiver wakes.

► Press the ▲/▼ button can change the current channel, then press SET to store the setting enable the receiver work at re-selected channel or the screen flashing after 2-3 seconds.

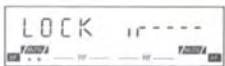
FREQUENT DISPLAY



► Press the SET button and select the FREQU mode, the screen display the left menu. This menu shows the current frequency that receiver wakes.

► Press the ▲/▼ button can change the current frequency, then press SET to store the setting enable the receiver work at re-selected frequency or the screen flashing after 2-3 seconds.

D. Lock control



► Press the SET button until LOCK menu appears. Via the LOCK menu, you can activate or deactivate the lock mode.



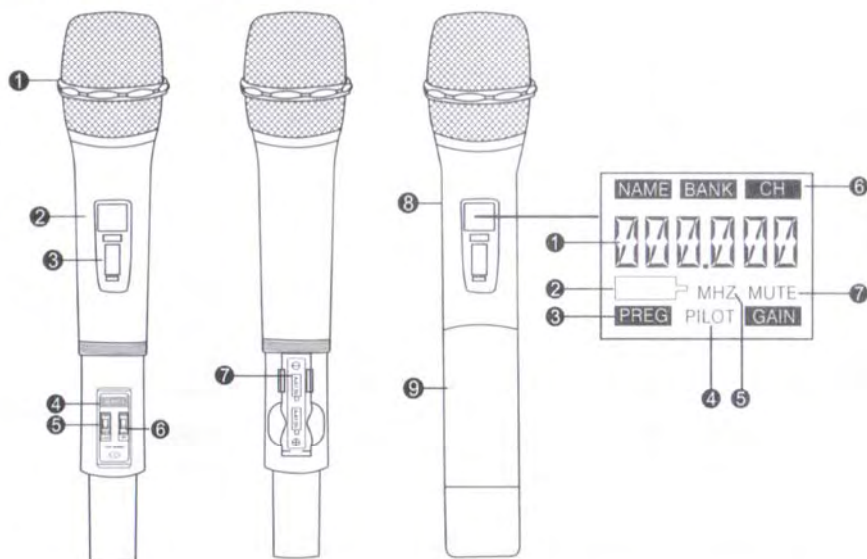
► 2-3seconds later, the screen display the left menu.

(Illustration :To display which menu depend on the previous SET status)



※ Transmitter

Handheld transmitter



- ① Grille
- ② LCD display
- ③ switch button
- ④ IR receiver
- ⑤ Lock switch
- ⑥ High-low power (RF)
- ⑦ Battery holder
- ⑧ Up tube
- ⑨ Down tube

- ① Six characters display
- ② Battery power display
- ③ Frequency display
- ④ Leading note display
- ⑤ MHZ-frequency display
- ⑥ Channel display
- ⑦ Mute display

Operation of the Handheld Microphone

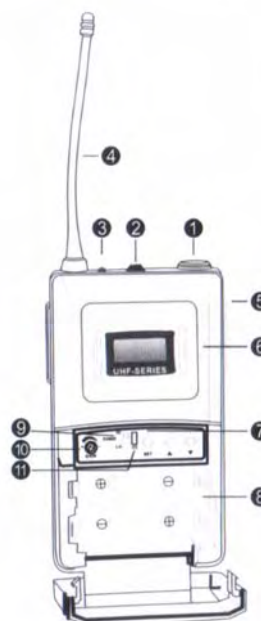
1. Click the power on. The Back Lights up, LCD display the current channel and capacity of battery.
2. when you want to change the channel or frequency, you should change

the receiver firstly, then take the transmitter pointing to the infrared window which is on the receiver, press the "SET" button, the channel information changed.

Bodypack transmitter

BAT CH 079

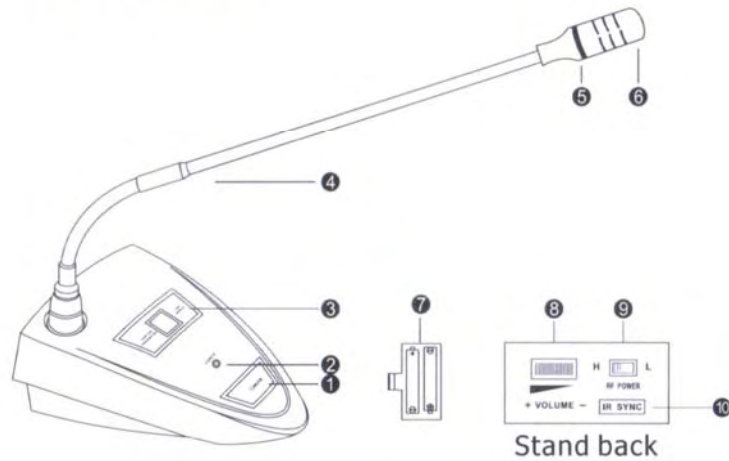
- ❶ Microphone input
- ❷ Power button
- ❸ Battery status indication
- ❹ Antenna
- ❺ Back splint
- ❻ LCD display
- ❼ SET button
- ❽ Battery tray
- ❾ Volume control
- ❿ Power control
- Ⓜ Infrared frequency



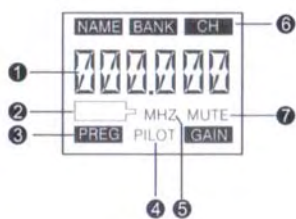
Operating of the Bodypack transmitter

The same of handheld transmitter.

Conference transmitter



- ❶ POWER MUTE button
- ❷ Battery status indication
- ❸ LCD display
- ❹ MIC bar
- ❺ Voice indication
- ❻ Microphone Head(MIC)
- ❼ Battery tray
- ❽ Volume control
- ❾ POWER select button(High/Low)
- ❿ Infrared frequency



- ❶ Alphanumeric display
- ❷ Battery display
- ❸ Frequency display
- ❹ "PILOT" display
- ❺ "MHZ"-appears when the frequency is display
- ❻ Channel display
- ❼ "MUTE" display

Operating of the conference transmitter

1. Long press the MUTE button to open the conference transmitter and you can shut it according to the same method.
2. Press the MUTE button lightly, you can mute the transmitter, even if there are changes at this time will not be interfered, speakers can use it at special conditions such as cough conveniently.
3. When the RF signal is too weak, to adjust the RF power toggle button at the back of the pedestal.
4. To get the best result, you can adjust the volume at the back of the pedestal according to different occasions and environment.

✂ Recommendations

How to use the Bodypack wireless transmitter properly

1. Bodypack microphone transmitter using 1 / 4 wave antenna Bullwhip, the antenna can not contact the body directly and it should not be entangled with the microphone, otherwise the effect would be reduced.
2. Adjust the sensitivity moderately based on various 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 handheld wireless microphone properly

1. Hold in the middle of the microphone body, Holding it close to the sound inlet basket will influence 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 wireless conference transmitter properly

1. Wireless conference transmitter using Built-in antenna wave antenna Bullwhip, the antenna can not contact the body directly and it should not be entangled with the microphone, otherwise the effect would be reduced.
2. It will generate plops if the Speaker and the front-end of the sound head close too much, conversely the sensitivity will descend, to solve the problem you have to turn up the volume in the live, but lead to harsh noise.
3. MIC bar of wireless conference transmitter should be connected better to the pedestal, or it will generate great interference.

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 chose 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 unfavourable, you should use two remote antennas which are connected via antenna cable.

Using several transmitters in the same place

1. Should first choose intermodulation-free frequency allocation within the 25MHz bandwidth, usually can use 8 transmitter, 50MHz bandwidth using 16 transmitters, if the need to use more sets of wireless microphones, you need to configure other band models.
2. When using several transmitters simutaneously, interference can be avioded by maintanining a minmum distance of 20CM between two transmitters.
3. When use many transmitters, we advise you to use the high-gain antenna, antenna Amplifier and Receiver demultiplexer.
4. In low-power state, such as KTV private rooms, school classrooms, using as many as 200 microphones at the same time will not interfere with each other.
5. The wireless transmitter should not adjust the Equidistant channel among four channels, for example, when the CHANNEL A set at 20,the rest of three channels should be avoided setting at 40、 80、 100 etc..The rule applies to each channel.

If problems occur

Error checklist

Problem	Possible cause
No operation indication	Batteries are flat or accupack is flat
No RF signal	Transmitter and receiver are not on the same channel
	Transmitter is out of range
RF signal available, no audio signal, "MUTE" display appears on the display panel	Transmitter is muted("MUTE")
	Receiver's squelch threshold is adjusted too high
	Transmitter doesn't transmit a pilot tone
Audio signal has a high level of background noise	Transmitter sensitivity is adjusted too low
	Receiver's AF output level is adjusted too low
Audio signal is distorted	Transmitter sensitivity is adjusted too high
	Receiver's AF output level is adjusted too high
The use of short-distance, Signal instability	Transmitter set at a low-power
	Squelch is too high
	Receiver antenna set improper
	Surrounded by strong electromagnetic interference

If problems occur that are not listed in the above table or if the problems can not be solved with the proposed solutions, please contact your local agent for assistance.

※ 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 with 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.

※ System

Frequency ranges	614.2-697.8MH (Actual frequency of use in accordance with local regulations to determine the machine)
Modulation Mode	Broadband FM
Available Band Width	50MHz
Channel number	200
Channel spacing	250KHz
Frequency stability	± 0.005%
Dynamic range	100dB
Peak deviation	± 45KHz
Audio response	80Hz-18KHz(± 3dB)
Comprehensive SNR	>105 dB
Comprehensive Distortion	≤0.5%
Operating Temperature	-10℃—+40℃

Receiver

Receive mode	Double Conversion Super Heterodyne
Intermediate frequency	The first medium frequency:100MHz The second medium frequency:10.7MHz
Wireless interface	BNC /50Ω
Sensitivity	12dBμV (80 dBS/N)
Sensitivity adjustment range	12-32dBμV
Spurious rejection	≥75 dB
Maximum output level	+ 10 dBV

Transmitter

Antenna Program	Bodypack transmitter with 1 / 4 wave whip antenna, handheld microphone built-in spiral antenna
Output power	9.54mW
Spurious rejection	-60dB
Voltage	Two AA batteries
Current utility time	High: >10 hours Low: >15 hours

§ 15.19 Labelling requirements.

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.

§ 15.21 Information to user.

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

§ 15.105 Information to the user.

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.