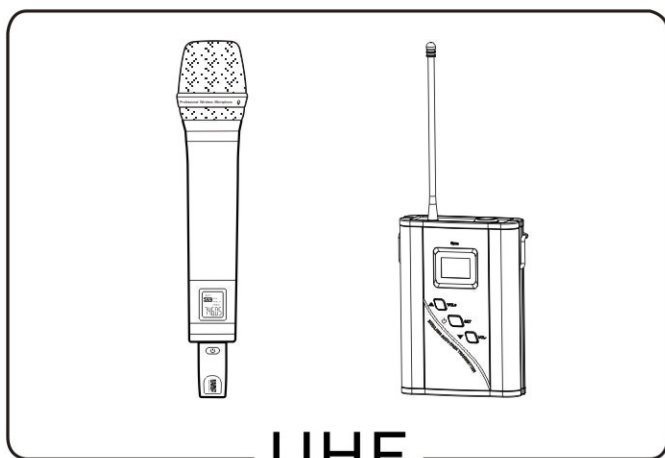


PROFESSIONAL DIGITAL WIRELESS CONFERENCE MICROPHONE

Operation Instructions

PROFESSIONAL WIRELESS MICROPHONE

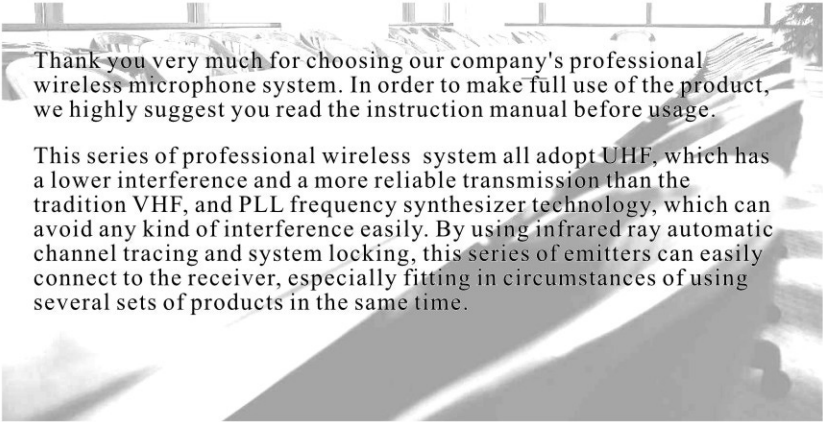
DIGITAL



UHF

This instruction manual includes several models of microphone and receiver. Read the relevant chapters according to the model you buy before usage. Keep it for future reference.

Foreword



Thank you very much for choosing our company's professional wireless microphone system. In order to make full use of the product, we highly suggest you read the instruction manual before usage.

This series of professional wireless system all adopt UHF, which has a lower interference and a more reliable transmission than the tradition VHF, and PLL frequency synthesizer technology, which can avoid any kind of interference easily. By using infrared ray automatic channel tracing and system locking, this series of emitters can easily connect to the receiver, especially fitting in circumstances of using several sets of products in the same time.

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1.Features

1. UHF international standard frequency range without interference

This series of products adopt UHF frequency range, 500 MHz~900MHz, the international standard range. Compared to the VHF low frequency range, UHF has broader resources, cleaner electromagnetic space and lower interference.

2. Multi-users adjusting frequency to make sure several machines can be used simultaneously according to the practical issues

This series of products adopt micro-processor control and phase-locked loop frequency synthesis technique, overcoming the flaws of high subcarrier and high interference. Multi-user adjustable frequency can easily change the frequency to assure several machines can be used at the same time and to avoid external disturbance.

3. Multi-level high quality sound surface wave filter with high quality of anti-interference

This series of products has high quality of frequency selection.

4. Equipped with LCD screen, convenient to know the working parameters

This series of products are all equipped with LCD screen, making operation easy and convenient.

5. Equipped with SQ capacity adjusting knob, flexible in operation

This series of products are all equipped with SQ capacity adjusting knob, making the operation flexible in all kinds of circumstances.

6. Professional audio output: XLR balanced output and 6.3 unbalanced output

This series of products are all adopt XLR balanced output and 6.3 unbalanced output, independently or combined, fitting in all kinds of equipment connection and avoiding the chaos and embarrassments caused by equipment unmatched.

7. Auto-mute and noise canceller circuit, eliminating the noise of turning on and off the machine

8. Adopt highly reliable SMT production

This series of products use high quality of components, apply SMT production, select only the high quality end-product.

9. Microphone can be exchange with each other to use in every channel.

The microphone have included every channel frequency, so every microphone can use each channel in a system.

2.Safety instructions

- Read this instruction manual.
- Keep this instruction manual for future reference.
- Follow all instructions in this instruction manual.
- Do not place the product near any heat sources such as radiators, stoves, or other devices that produce heat. If you are not going to use the product for a long time, pull out the battery. Do not throw or drop the product in case it causes severe damages.
- Be aware of the supply voltage. Only the supply voltage listed on the instruction manual fits the product.
- Only use accessories specified by our company.
- Never take apart the device. If devices are taken apart by customers in breach of this instruction, the warranty becomes null and void. Turn to the professional mechanic or local dealer for help if there is something wrong with the product.
- If components are needed to be replaced, replace them with original components produced by our company.
- Leave the devices the minimum space of 30 mm for proper ventilation. Do not cover the vent with newspapers, cloths, curtains, etc.

Do not place the devices near fire or water.

Only professional mechanic can assemble the devices if it is labeled with hazard warning sign “⚡” .

Recycle the replaced battery.

The devices can be used in tropical or temperate regions.

Only for safe use in the area with an altitude of below 2,000 meters.

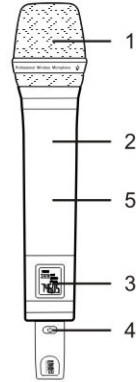


※ Adapter and circuit are working all the time as both receiver and transmitter have switch-noise-elimination circuits inside. So please put off the receiver and take out the batteries of transmitter (lithium battery charge per 3 month) when they are not used.

3.Operation instruction for Handheld microphone

3.1 Operation instruction

1. Twist the microphone body, insert 1.5V*2 AA battery. Be aware of the positive and negative electrodes.
2. Push the power switch for 2 seconds to turn on the microphone.
3. Press the power switch to show working frequency and battery level on screen(Figure 1). Press again will show the working channel(Figure 2). Screen backlight will go out in 2 seconds. Press power switch once can lighten the backlight, enable to see working status in dark environment.
4. Face the microphone LCD display window towards the receiver's IR window, then press“ACT” button to finish frequency adjustment.
5. In the open status, long press power switch can get in the volume adjust function, press switch can select “0dB, -10dB, -20dB, -30dB”(Figure 3).
6. Press the power switch for 2 second to turn off the microphone.。



3.2 Graphic instruction

- 1.microphone head 2.microphone body
3.LCD monitor/IR window
4.power switch 5.battery compartment



Figure1



Figure2



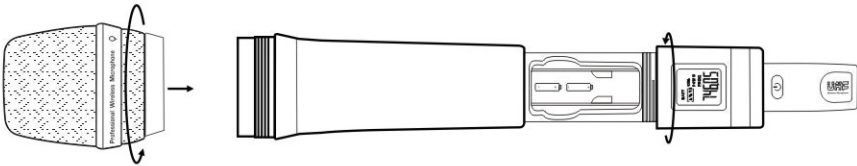
Figure3

Figure1:working frequency status

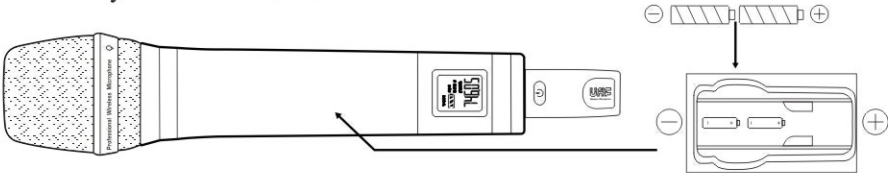
Figure2:working channel status

Figure3:working volume status

3.3 Installation graphic instruction



3.3.1 Battery install instruction



WARNING: BE AWARE OF THE POSITIVE AND NEGATIVE ELECTRODES WHEN INSERTING THE BATTERY. 2 AA 1.5V BATTERIES IS REQUIRED. IF YOU ARE GOING TO NOT USE THE DEVICES FOR LONG TIME, PULLOUT THE BATTERIES.

4. Operation instruction for bodypack transmitter

4.1 Operating instruction

1. Connect microphone: let the clip line connect with the three-PIN socket of the body-pack.
2. Put on the power: long press “⏻” 1 second. When open the LCD screen will show working status. (diagram 1)
3. Manual adjust frequency: press “SET” key into the adjustment status, LCD data will be twinkled. Press “▲” key or “▼” key to adjust the required frequency, press “SET” key to confirm the setting.
4. Automatic adjust frequency: adjust the required frequency in the receiver firstly, let the body-pack LCD screen face to the receiver IR window. Press receiver “SET” key to complete the setting.
5. Volume setting: press “VOL+” or “VOL-” to adjust. (diagram 2)
6. Press power key “⏻” 1 second to put off the microphone.
7. Microphone can be used in every channel.

4.2 Function graphic

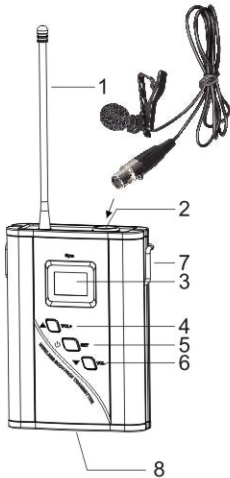
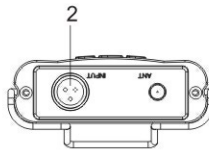


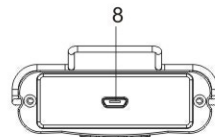
diagram 1 (working status)



diagram2 (volume status)



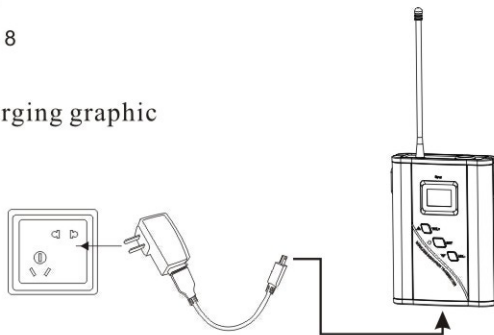
(top)



(bottom)

- | | | |
|---------------------------|--------------------------|--------------------|
| 1. External antenna | 2. Three-PIN socket | 3. LCD monitor |
| 4. Up key/adjust volume | 5. Power switch/set up | |
| 6. Down key/adjust volume | 7. Metal attaching clamp | 8. USB charge jack |

4.3 Battery charging graphic



WARNING: IF LONG TIME DIDN'T USE THE RPRODUCT, PLS CHAGER THE BATTERY PER 3 MONTH. PLS CHANGE THE BATTERY WITH THE SAME TYPE IF NEED.

5.Operation instruction for receiver

5.1 Working environment requirement for receiver

Connect the receiver with antenna and adjust the antenna to vertical.

Note that mental, wall, ceiling, human body will weaken the emitter's signal. For best effect, please follow the rules. The emitter should be placed as near the spot as possible. Keep the minimum distant of 1.5m with mental, wall, scaffold, ceiling, etc. Make sure the emitter and receiver are accessible straight forward.

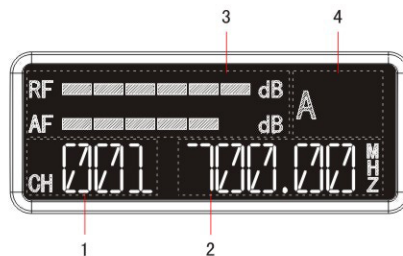
5.2 Operating procedure

1. Connect the electricity supply.
2. After turning on the receiver, the LCD screen will show the working parameters.
3. Connect the receiver s MIX OUT and MIC with audio connecting line.
Adjust to reasonable volume.
- 4.Set up the frequency of the channel.

5.3 Channel and frequency setting

The receiver has A,B,C,D four frequency groups. Long press UP or DOWN to change the frequency. After the frequency is selected, press SET for 1 second to confirm signal transmitting. Link the IR window of handheld or body-pack microphone with the ACT window on receiver on receiver to complete the frequency selection. (Successful operate display “OK”, if not it display “NO”)

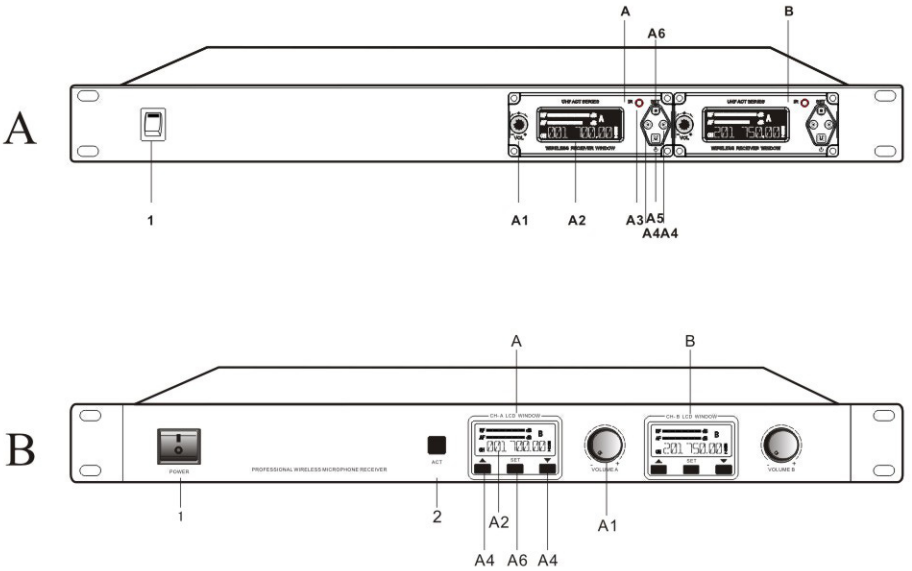
5.4 LCD monitor graphic instruction



1. Channel number 2.Working frequency 3.Audio and Signal level 4. Frequency group

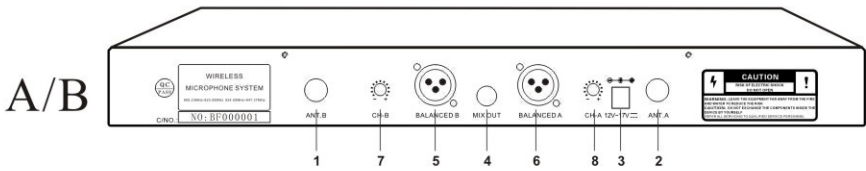
6. Two-channel receiver

6.1 Front panel of two-channel receiver



- 1. Power switch 2. ACT IR frequency window
- A channel: A1. Volume knob A2.LCD screen A3.IR window
- A4. Frequency selection button A5. Channel independent power switch A6.SET
- B channel: Same as A channel.

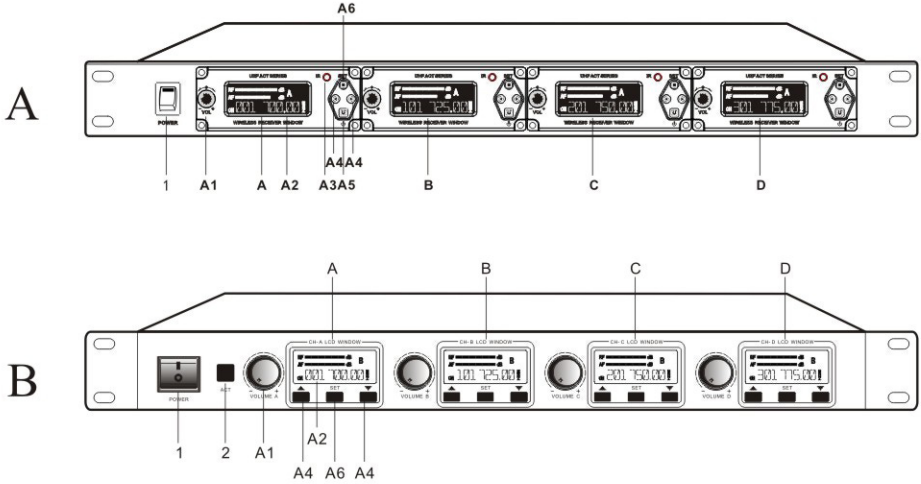
6.2 Back panel of two-channel receiver



- 1. B channel antenna 2.A channel antenna 3.DC socket
- 4.B channel SQ knob 5.A channel SQ knob 6.Hybrid unbalanced output
- 7. B channel balanced output 8.A channel balanced output

7. Four-channel receiver

7.1 Front panel of four-channel receiver



1. Power switch 2. ACT IR frequency window

A channel: A1. Volume knob

A2. LCD screen

A3. IR window

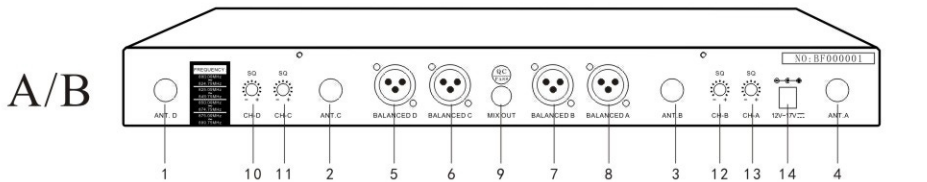
A4. Frequency selection button

A5. Channel independent power switch

A6. SET

B.C.D channel: Same as A channel.

7.2 Back panel of four-channel receiver



1. D antenna socket

4. A antenna socket

7. B channel balance output

10. D channel SQ knob

13. A channel SQ knob

2. C antenna socket

5. D channel balance output

8. A channel balance output

11. C channel SQ knob

14. DC socket

3. B antenna socket

6. C channel balance output

9. Hybrid unbalanced output

12. B channel SQ knob

9. Product parameters

9.1 Receiver's parameters

Mode of oscillation	: PLL synthesized
Frequency range	: UHF 500MHz-900MHz
Frequency stability	: $\pm 0.001\%$
Maximum frequency deviation	: $\pm 30\text{KHz}$
Modulation system	: FM
Signal-to-noise ratio	: $> 105\text{dB}$
Distortion factor	: $< 0.5\% @ 1\text{KHz}$
Sensitivity	: $1.2/\text{UV} @ \text{S/N}=12\text{dB}$
Power supply	: DC 12V-17V
Audio output:	: Independent : $0 \sim +400\text{mV}$ Mixed style: $0 \sim +300\text{mV}$
Power	: Two channel: 4.5W Four channel: 6W Eight channel: 9W

9.2 Handheld microphone parameters

Power supply	: DC3V (1.5V AA \times 2)
Power consumption	: 100mA
Carrier frequency	: UHF 500MHz~900MHz
Frequency stability	: $\pm 25\text{KHz}$
Signal-to-noise ratio	: $> 105\text{dB}$
Adjacent frequency interference ratio	: $> 80\text{dB}$
Dynamic range	: $> 100\text{dB}$
Type	: Moving-coil
Frequency response	: $40\text{Hz} \sim 20\text{KHz}$
Sensitivity	: $-53 \pm 3\text{dB} @ 1\text{KHz}$
Power	: 10mW

9.3 body-pack microphone parameters

Power supply	: 850mAh Li-battery
Power consumption	: 100mA
Carrier frequency	: UHF 500MHz~900MHz
Frequency stability	: ± 25 KHz
Signal-to-noise ratio	: >105 dB
Adjacent frequency interference ratio	: >80 dB
Dynamic range	: ≥ 100 dB
Type	: Condenser
Frequency response	: 40Hz~20KHz
Sensitivity	: -43 ± 3 dB@1KHz
Power	: 10mW

9.4 Integrated parameter

Working frequency	: UHF 500MHz~900MHz
Modulation system	: FM
Channel spacing	: 250KHz
Frequency stability	: $\pm 0.1\%$
Dynamic range	: ≥ 100 dB
Maximum frequency deviation	: ± 30 KHz
Frequency response	: 40Hz~20KHz
Comprehensive signal-to-noise ratio	: >105 dB
T.H.D	: $<0.5\%$ @1KHz
Operating distance	: about 80 meter
Operating temperature	: $-10^{\circ}\text{C}\sim 50^{\circ}\text{C}$

10. Solutions to breakdowns

Breakdowns	Causes	Solutions
Receiver can receive signal but with noise interference	Improper battery installation	Reinstall the battery
	There might be other devices with the same frequency near	Find the devices and shut it down
The microphone's LCD screen is not operating OR the microphone cannot be turned on	No battery	Reinstall the battery
	Improper battery installation	
	Battery level is too low	Replace the batteries
	Battery contact plate is dirty or rusted	Clean or replace the battery contact plate
The receiver is not energized	The utility is not energized	Check the utility
	The external power supply failure	Replace the external power supply of the receiver
The receiver cannot be connected	The microphone is off	Turn on the microphone
	The microphone's frequency does not fit in the receiver's	Adjust the frequency
	The microphone is too far away	Keep the microphone near
The receiver can receive but without sound	The volume knob is at the minimum	Adjust the volume
	Improper connection of audio connecting	Reconnect the audio connection
Before the emitter is on, the receiver can receive but with noise	There might be other devices with the same frequency near	Change the frequency of the system to avoid interference
On and off sound	Too far away	Keep it near
Effective operating distance is short	Complicated environment	Avoid metal, wall, crowds, etc as they will weaken the signal

Care and maintenance

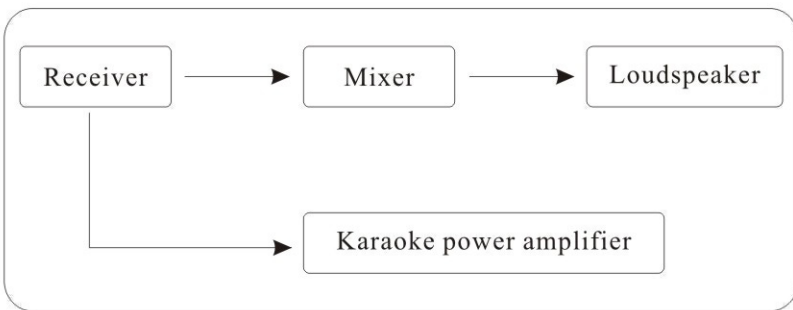
Before fixing or cleaning the device, cut of the electricity supply. Clean it with soft cloth. For spots, clean it with cloth that has neutral cleaning solvent and dry it with another cloth. Do not use gasoline, diluents or any other chemical product, or else the surface will be damaged.

11.Connection instruction

Operations

1. According to the picture, connect the receiver with other devices. Receiver's MIX OUT connect with amplifier's MIC or INDEPENDENT OUT connect with the two MIC of the amplifier.
2. The proper electricity supply is DC:12-17V. After turning on the receiver, set up the reasonable volume.
3. Pull out the batteries every time you finish using the emitter.

Connection instruction



Attention:

- 1 meter above floor
- At least 1meter to wall
- Antenna vertical to the receiver

This operation manual would be revised at any time without prior notice.

This manual contains needed information as much as possible. If there is anything unclear, wrong or omitted, please don't hesitate to contact us for confirmation. The company is free from all the damage and loss caused by no confirmation.

For testing and maintenance, please contact us or our authorized distributors through the dealer from whom you purchased this product. The company assumes no responsibility for any loss or damage resulting from testing and maintaining this unit by unqualified personnel.