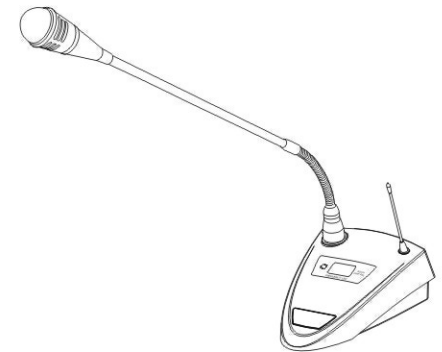


Professional wireless conference microphone

OPERATING INSTRUCTIONS

TUNABLE MULTICHANNEL WIRELESS CONFERENCE
MICROPHONE SERIES

UHF



This Operation Manual Is Subject To Be Revised Without Notice.

This Manual Contains As Much Needed Information As Possible. And If There Is Anything Wrong Or Omitted, Please Don't Hesitate To Contact Us For Confirmation. The Company Is Freed From All Lose And Damage Caused By No Confirmation.

For Testing And Service, Please Contact Us Or Our Authorized Distributors Through The Dealer From Whom You Purchased This Product. The Company Will Be Freed From The Loss And Damage Of Servicing Which maintain By Yourself Without any permission.

THIS INSTRUCTION MANUAL INCLUDES SEVERAL TYPES OF MICROPHONE AND RECEIVER. READ THE RELEVANT CHAPTERS ACCORDING TO THE TYPE BEFORE USAGE. KEEP IT FOR FUTURE REFERENCE.



Foreword

Thank you very much for choosing our company's professional wireless conference 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 conference 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. Can avoid the interference from the equipments such as VCD and DVD better.

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.

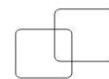
3. Multi-level high quality sound surface wave filter with high quality of anti-interference This series of products has high quality of frequency selection.

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. 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.

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

7. Adopt highly reliable SMT production
This series of products use high quality of components, apply SMT production, select only the high quality end-product. Increase the stability, credibility and the using time.

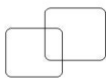


2.Safety instructions

- 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 product 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 took 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 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.



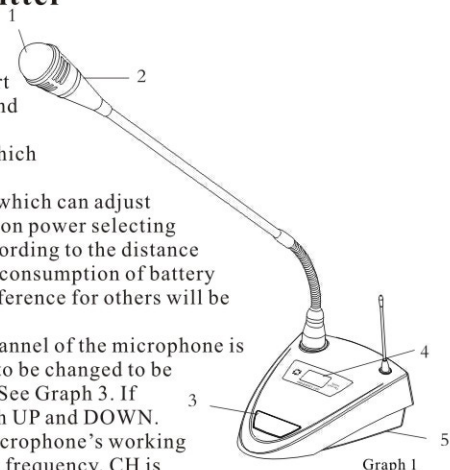
※ If the device is not going to be used, turn it off.



3. Operation instruction for emitter

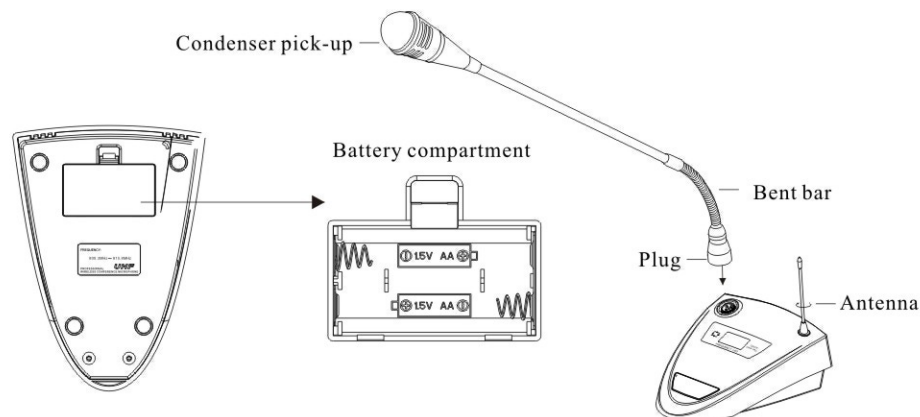
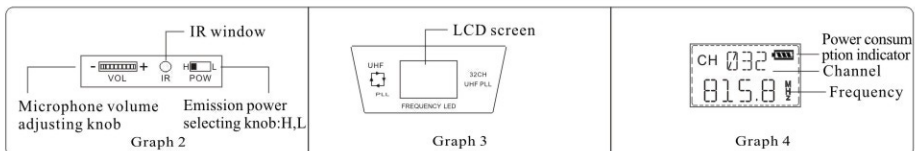
3.1 Brief introduction

1. Open the bottom battery compartment and insert 2 AA 1.5V batteries. Be aware of the positive and negative electrodes.
2. Touch the power switch. The light will be on which means the device is in functional mode.
3. The emitter has tone-adjusting potentiometer, which can adjust the volume according to each voice, and emission power selecting knob, which can select H(High) of L (Low) according to the distance of emitter and receiver. If selecte L , the power consumption of battery will be less and time will be extended and interference for others will be less. See Graph 2.
4. Channel selecting knob. Attention: after the channel of the microphone is changed, the channel of the receive also needs to be changed to be corresponding to the microphone's frequency. See Graph 3. If channel is needed to be changed, change it with UP and DOWN. The LCD screen will display the conference microphone's working parameters, the current channel and the current frequency. CH is short for CHANNEL. CH 032 means the current channel of the conference microphone. 815.8MHz means the current frequency. See Graph 4.
5. Touch the power switch for 1 second to turn off the microphone.



1. Microphone 2. Operating light
3. Power switch 4. LCD screen
5. Battery box

3.2 Graphic instruction



4. Operation instruction for receiver

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

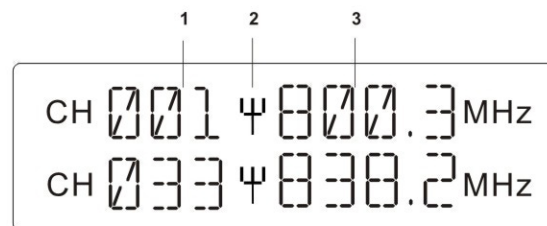
4.2 Operating procedure

1. Connect the electricity supply.
2. After turning on the receiver, the LCD screen will show the working parameters.
3. Connect the receiver's mtX out and mic with audio connecting line. Adjust to reasonable volume.

4.3 Channel frequency setting of receiver

The receiver has A, B, C, D, four independent grouping. Long press UP or DOWN to change the frequency. After the frequency is selected, press the SET to emit the signal. Link the IR window with the ACT window of the mainframe to end the frequency selection operation.

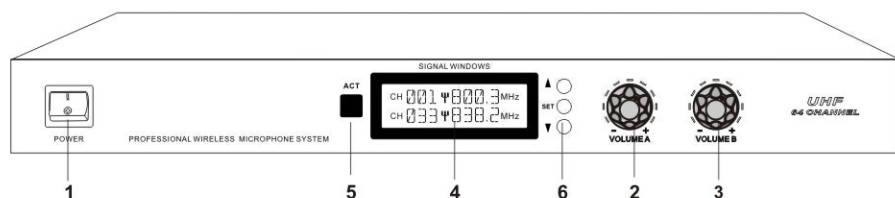
4.4 LCD screen



1. Working channel 2. Receive signal direction 3. Frequency direction

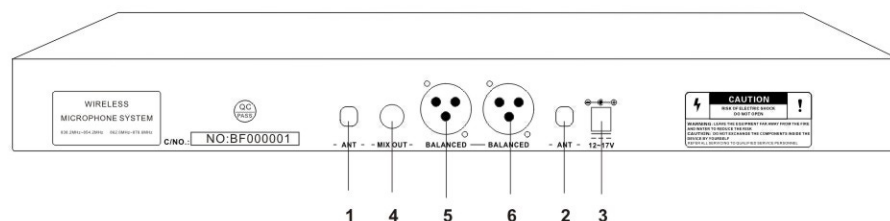
5. Two-channel receiver

5.1 Front panel of two-channel receiver



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|-----------------|-------------------|-----------------------------------|
| 1. Power switch | 2. A channel knob | 3. B channel knob |
| 4. LCD screen | 5. ACT window | 6. A. B channel adjustment button |

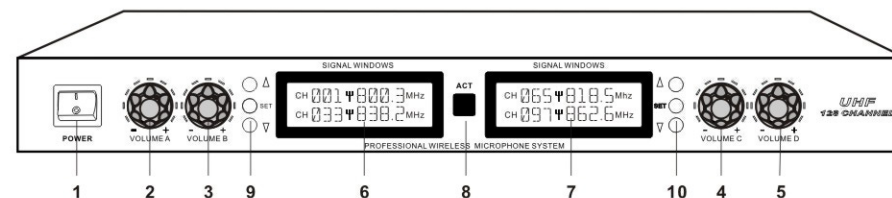
5.2 Back panel of two-channel receiver



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|-----------------------------|------------------------------|------------------------------|
| 1. B channel antenna | 2. A channel antenna | 3. DC socket |
| 4. Hybrid unbalanced output | 5. B channel balanced output | 6. A channel balanced output |

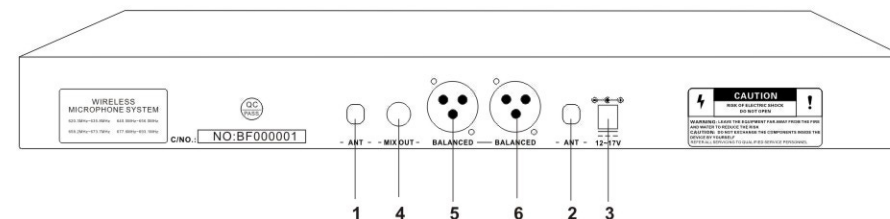
6. Four-channel receiver

6.1 Front panel of four-channel receiver



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|--------------------------------|---------------------------------|------------------------|-------------------|
| 1. Power switch | 2. A channel knob | 3. B channel knob | 4. C channel knob |
| 5. D channel knob | 6. A. B channel screen | 7. C. D channel screen | 8. ACT window |
| 9. A channel adjustment button | 10. B channel adjustment button | | |

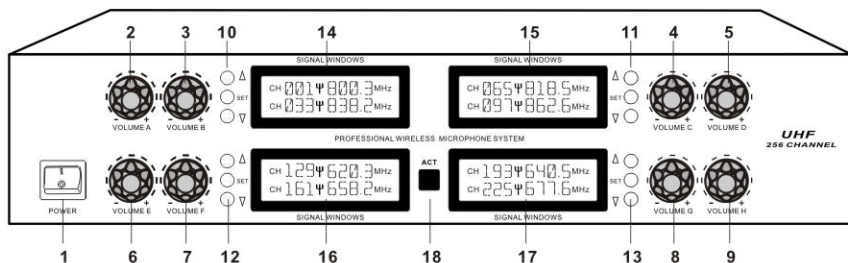
6.2 Back panel of four-channel receiver



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|-----------------------------|--------------------------------|--------------------------------|
| 1. C.D channel antenna | 2. A.B channel antenna | 3. DC socket |
| 4. Hybrid unbalanced output | 5. C.D channel balanced output | 6. A.B channel balanced output |

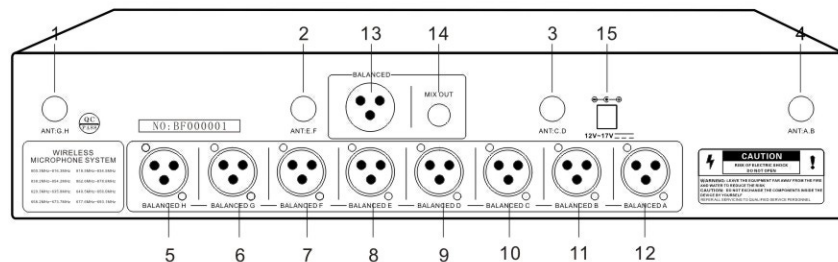
7. Eight-channel receiver

7.1 Front panel of eight-channel receiver



1. Power switch 2.A channel knob 3.B channel knob 4.C channel knob 5.D channel knob
 6.E channel knob 8.G channel knob 9.H channel knob 7.F channel knob
 10.A.B channel adjustment button 11.C.D channel adjustment button
 12. E.F channel adjustment button 13.G.H channel adjustment button
 14.A.B channel LCD screen 15.C.D channel LCD screen
 16.E.F channel LCD screen 17.G.H channel LCD screen 18.ACT window

7.2 Back panel of eight-channel receiver



1. G.H channel antenna 2.E.F channel antenna 3.C.D channel antenna 4.A.B channel antenna
 5.H channel balanced output 6.G channel balanced output 7.F channel balanced output
 8.E channel balanced output 9.D channel balanced output 10.C channel balanced output
 11.B channel balanced output 12.A channel balanced output 13.Hybrid balanced output
 14. Hybrid unbalanced output 15.DC socket

8.Product parameters

8.1 Receivers parameters

Mode of oscillation	: Phase-locked loop frequency synthesis
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: $0 \sim +400\text{mV}$ Hybrid: $0 \sim +300\text{mV}$
Power	: 6W

8.2 Emitter s parameters

Power supply	: DC 3V (1.5V AA*2)
Power consumption	: 100mA
Carrier frequency	: UHF 500MHz ~ 900MHz
Frequency stability	: 25KHz
Signal-to-noise ratio	: $>105\text{dB}$
Adjacent frequency interference ratio	: $>80\text{dB}$
Dynamic range	: $\geq 100\text{dB}$
Type	: Capacitance
Polarity Mode	: Single direction
Frequency response	: $40\text{Hz} \sim 20\text{KHz}$
Sensitivity	: $-47 \pm 3\text{dB} @ 1\text{KHz}$
Power	: 10mW



8.3 Comprehensive parameters

Working frequency	: UHF 500MHz ~ 900MHz
Modulation system	: FM
Channel spacing	: 500KHz
Frequency stability	: 0.001%
Dynamic range	: $\geq 100\text{dB}$
Maximum frequency deviation	: 30KHz
Frequency response	: 40Hz~20KHz
Comprehensive signal-to-noise ratio	: $> 105\text{dB}$
Comprehensive distortion factor	: $< 0.5\% @ 1\text{KHz}$
Operating distance	: about 100metre(open spaces without interference)
Operating temperature	: $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$

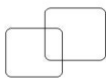


9. Solutions to breakdowns

Breakdowns	Causes	Solutions
After turning on the emitter, main frame has signal but with noise	Improper battery installation	Reinstall the battery
	There is the same frequency emitter used at the same time	Turn off other emitter
Cannot turn on the emitter	Battery contact plate is dirty or rusted	Clean or replace the battery contact
The emitters LCD screen is not operating	Improper battery installation	Reinstall the battery
	Battery level is too low Battery contact plate is dirty or rusted	Replace the batteries Clean or replace the battery contact
The receiver is not energized	The utility is not energized	Check the utility
	The fuse of receiver is blown	Replace the fuse which is at the back 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 receivers	Adjust the frequency
	The microphone is too far away	Keep the microphone close
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 close
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 off 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.

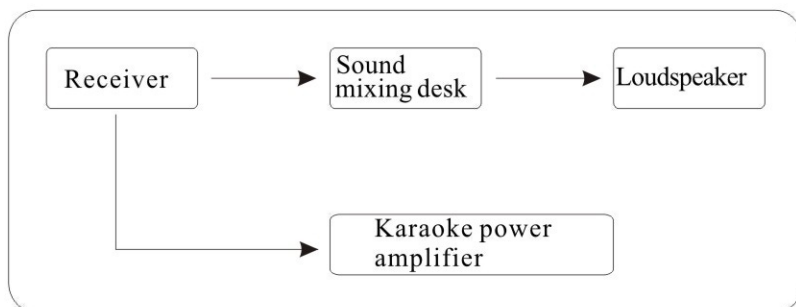


10.Connection instruction

Operations

1. According to the picture, connect the receiver with other devices, the MTX OUT with MIC or the OUT A,B,C,D with MIC
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