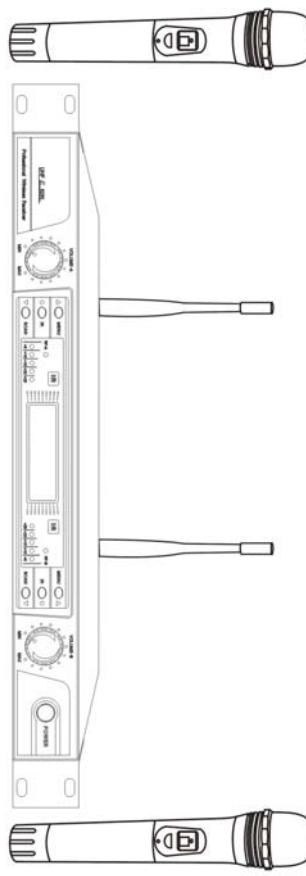


UHF 600MHz BAND
MULTI-CHANNELS WIRELESS MICROPHONE SERIES

***INSTRUCTION
MANUAL***

Model: 8230T34



1. Above contents are subject to change without prior notice
2. Prohibit to copy and excerpt the contents with any purpose, unless you get our company's written permission
3. We tried our best to complete the manual, if the manual has any ambiguous or mistake, please verify to our company in time. For any loss or damage without verification to our company, we won't bear any responsibility
4. It is recommended that all maintenance and service for the products should be carried out by us or our authorized agents. We won't bear any responsibility without our authorized person to do it.

6. Hackneyed questions and solutions

Phenomenon	Reason	Solutions
Nothing to show in the microphone screen	Microphone working normal Make a wrong Installation about batterie	The indicator of some microphone won't light on in working normal, it doesn't matter Inspect the polarity and install it again
The indicator light on or change the color	Out of power Battery plate dirty and rust	Replace the batteries Replace the batteries
Receiver can't receive the signal	Batteries power are low Microphone haven't turn on The frequency not match	Batteries power are low Replace the batteries Turn on the related microphone Adjust the frequency according to the operation manual
Receiver have reception but no sound	Over the operation distance Unauthorized to IR synchronization	Back to correct operation distance Operate the IR synchronization and get the authorization
There is cacophony in the sound box	The volume is to MIN Audio cable connected wrong or badness	Adjust the volume of the receiver and amplifier Check it and connect the audio cable correctly
The sound is intermittence	Sound feedback	Reduce volume, microphone never face to the sound box, and keep some distance from microphone to sound box
The operation distance is too short	Disorder environment	Over the operation distance Back to the correct operation distance Avoid the complicated condition, such as big metal objects, walls, scaffolding, etc

1. Safety and Environment

To reduce the risk of electrical shock, don't open the unit, there aren't replaceable parts inside.

Please check whether the AC voltage matches the power specifications of receiver before using. If you seldom use it, please take out batteries from transmitter and plug from AC socket. For the useless dry-batteries, don't discard at random, lest to pollute the environment.

Li-Battery in inner microphone, if you seldom use it, you should charge regularly (every 6 months)

Don't put the equipment near to the heat sources such as radiator, heating ducts, amplifiers and etc. Also don't place this to sunlight directly, excessive dust, moisture, rain and the place near mechanical vibrations or shock. For perfect effect, keep away from electric power lines, big metal object, computer, radar station and etc.

Don't near the liquid and tinder, also not put the vase, cup on it, in order to prevent the trouble and dangerous.

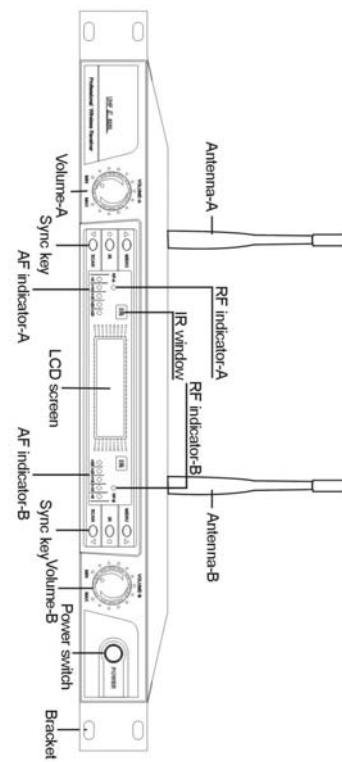
2. System Composition

These series compose of handheld microphones T34 and receiver 8230, including audio cable, batteries, assistant fixing rack, adjustment screwdriver, etc. please read the details and keep this operation manual to check at any time.

3. Installation and operation

3.1 Receiver 8230

The structural drawing of receiver 8230 as follow:



5. Specifications

5.1 Specifications of microphones

Freq Range	614.200-697.400 MHz
Freq Number	96+96
Freq Stability	±10ppm
Modulation	FM
RF Output	≤10mW
Audio bandwidth	40~18000Hz
T.H.D at 1kHz	≤0.5%
Power Supply	2x1.5V AA Size
Battery life	8~15 hours

5.2 specifications of receivers

	8230
Freq Range	614.200-697.400 MHz
Freq Number	96+96
Oscillation Mode	PLL synthesized
Freq Stability	±10ppm
Receive Mode	Super heterodyne and twice mixed
Input Sensitivity	-95~-75dBm
Audio Bandwidth	40~18000Hz
T.H.D at 1kHz	≤0.5%
S/N Ratio	≥110dB
Audio Output	Balanced XLR and unbalanced 1/4" socket
Power Supply	100V~240V/50~60Hz
Consume Power	≤8W

3.1.1 Install the receiver

Take out the receiver from the package and put the 2pcs receiver antenna to connect the receiver antenna socket (ANT). And you should adjust the antenna direction in upward and upright to ground. Please pay attention: you should make sure there have the free signal to enter between the microphone and receiver, and the receiver should be near to performance area. And keep away from the big metal objects, walls,

You can use the same way to operation the right side, and Mic B start to IR synchronization.

If the meantime for IR synchronization, the microphone parameter were set in the receiver, which will transmit to the microphone and take effect.

There are some reasons for unsuccessfully IR synchronization: you don't make IR receive window face to IR transmit window when the symbol "-----" is flowing; or use microphone B and receiver A to IR synchronization, or use microphone A to receiver B to do it.

4.1.5 Lock and unlock the key

Handheld microphone T34 have lock and unlock which can adapt the different situation. Please open the microphone tube, there will be Lock switch. You can adjust it as you need, you should know, if the microphone Lock on, the power switch will be invalid, and can't turn off. Please Lock off when you turn off.

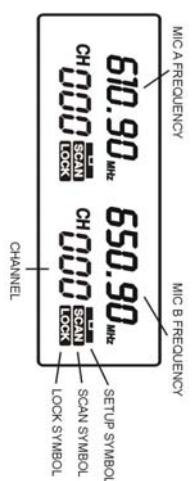
3.1.2 Check and Connect power
Check whether matched about the specifications between AC voltage adapter and the AC electric socket. If not, match, please stop to use and contact your dealer. Otherwise it will damage the machine and cause the dangerous. If matches, plug the output pin in power adapter to the DC INPUT jack in the rear panel of the receiver. And the adapter put into electric socket.

3.1.3 Connect the audio cable

One end of audio cable inserts into the unbalanced socket in receiver, and the other end inserts to MIC IN socket in amplifier. Balanced socket is used to connect the mixer, and it needs to buy the cable by yourself. Please notice: don't use the balanced socket and the unbalanced socket in the meantime. Lest to signal distortion.

3.1.4 Setup and turn on the receiver

Adjust the volume of the receiver and amplifier to "MIN" and push the receiver ON, then the LCD screen will light on and show the details, please see the picture as follows.



The frequency range of receiver is 610.9~639.4MHz with 96 channels for each space 300KHz, which match to A microphone (blue color), or 650.9~679.4MHz with 96 channels for each space 300KHz, which match to B microphone (yellow color). Please notice, for the local demand, the frequency, channels and channel space will be changed.

The SETUP symbol indication shows the currently adjustable state on the left or right; Scan symbol shows automatically scan state; Lock symbol shows the receiver key has been locked and not to be adjust.

After turning on the microphone, the blue RF signal indicator in the receiver panel will light up when the frequencies are the same between receiver and microphone. It shows having the available signal. If you speak to the microphone, the AF level meter of receiver will flash in terms of the volume. Making the volume button of the receiver and amplifier is in the middle position of volume knob Please notice, don't adjust the volume so large, lest to cause acoustic feedback shout and damage the equipment.

3.1.5 Change the receive frequency

If you change the receive frequency, press the key "●/IR" in the receiver panel, the symbol on the left side will flash, it shows the adjustable state. You can change the receive frequency by pressing "▲" and "▼" If confirm, you should press the "●/IR" key to exit. The same way you can change the receive frequency on the right side.

3.1.6 Setup the function menu

Receiver 8230 can be setup the functions such as squelch,etc. Pressing the "▲" key then turn on the receiver, you can enter into the menu, the Screen will show"Set:", Loosen the key into the first menu:

"-SQL-": squelch setting, the range is -95 to -75, you can press "▲" or "▼" to change the squelch; Press "SET" enter into setting the right side; Press "SET" again enter into the second menu.

"RFOUT": Microphone transmitting power setting, you can press "▲" to be high, it shows "H", also press "▼" to be low, it shows "L". The setting will be took effect after IR synchronization. Press "SET" enter into the third menu.

4.1.2 Turn on or turn off the microphone

Press power switch 1 second, the power shows green color/turn on. When you use, please pay attention to the change of color, when the power indicator change from green to red color, it shows the surplus of power only keep 10 mintues, you should change the the battery asap. Otherwise, it will be turn off automatically. If you turn off, press power switch again 1 second.

4.1.3 RF setting

Handheld Microphone T34 can set RF L or H to adapt the different situations. H(high power) used in far distance situation such as stage.; L(lower power) used in near distance and control operation distance range situations such as KTV, School, Church, etc How to set? Please open the microphone tubes, you will see the RF switch, you can adjust it as you like.

4.1.4 IR synchronization

If the first time to use or change the frequency. You should IR operations again before you use. A microphone is 610.90-639.40MHz, B microphone is 650.90-679.40MHz. They receive the receiver A and B each, two side with different frequency band, can't mix.

Mic A: starttting IR synchronization function of the receiver, to make the receiver ento into the IR synchronization with 5seconds. In the meantime, you should keep 1 meter between the microphone and receiver. And the IR receive window of Mic A face to the IR transmitting window of the receiver, then the receiver screen will appear "P----" on the left. It means finished, and the receiver can receive the signal. If it doesn't appear "P----", it shows operation unsuccessfully. You should do it again.

If you don't finish this operation, you can't see the symbol "P----", the microphone and the receiver will be the original settings, including the work frequency, ID information. The microphone will still work in the original settings and not cause the unworkable states by different new data.

Due to these rooms with the different sizes and places, some rooms may have noise when used, this is the infection of the microphone signal in each other, or the receiver may cause noise by the DVD or computer machine. Here you can adjust the knob for operational distance to the direction of "-" until there is no noise. If can't solve this problem, you can adjust the squelch in the setting menu of receiver such as -83, -81, etc. or auto scan free channels and IR synchronization again.

If the microphone damaged or missed, please use the replaceable microphone to IR synchronization with receiver. Please notice you should distinguish you need A microphone (blue color) [610.90-639.40MHz] or B microphone (yellow color) [650.90-679.40MHz] before you use the replaceable one, lest not to match.

4. Operations of microphone

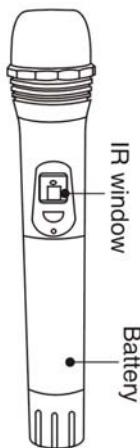
4.1 Handheld Microphone T34

Handheld Microphone T34 have IR function, External structure is follows:



3.1.7 IR synchronization

Setup the microphone parameter in the Receiver 8230 menu, including RF, transmitting power, channels, etc; all these data should be set from receiver to microphone through IR synchronization operation. Turn on microphone before IR operation, Pay attention A and B microphone, the frequency range for A microphone is 610.90-639.40MHz, B microphone is 650.90-679.40MHz. Then press sync key "●/IR" 2 seconds, the left will show "----", it means IR synchronization will start from the left side to the right side screen after 2 seconds. If you need IR synchronization single to the left side or the right side, please press SET in 2 seconds (before "----" starting to flow), the "----" will be switched between right and left screen. It will be started automatically after about 2 seconds



Starting to IR synchronization, the "----" indicator symbol will be flowing, it shows to transmit the data, the date will be transmitted again and again, and keep 5 seconds. Within this time, make the IR receive window of microphone face to IR transmitting

"SHIFT": We have done it in advance. No need to adjust. If you press "SET" again, it will enter into the first menu.

Any of the above steps, you can press "●/IR" or "POWER" to reserve the current setting and exit the menu.

SQL is important for the receiver operation and anti-interference: it is -95, the operation distance is fast, but the anti-interference is weakest; It is -75 on the contrary.

RF OUT will change the singal range and the operation distance. When RF is higher, the singal range is bigger, operation distance is far; When RF is lower on the contrary. In the stage situation, in order to provide enough operation disctance, you should set RF to be higher; In the KTV, school, etc, there is no need far distance, you can set RF to be lower to reduce the singal range.

window of receiver in 1 meter, the receiver screen will appear "P---" after a while. It means finish this operation. If you want to end IR synchronization, please press "●/IR" or "POWER".

If you don't finish this operation, you can't see the symbol "P---", the microphone and the receiver will be the original settings, including the work frequency, ID information. The microphone will still work in the original settings and not cause the unworkable states by different new data.

In fact, there are some reasons for unsuccessfully IR synchronization: you don't make IR receive window face to IR transmit window when the symbol "---" is flowing; or use microphone B and receiver A to IR synchronization, or use microphone A to receiver B to do it.

3.1.8 Automatically scan the free channels and auto IR synchronization

Receiver 8230 can scan the free channels and IR synchronization automatically.

When scan automatically, the receiver will scan all the channels in the band of receiver, and will select the free channels with weakest interference to IR synchronization.

If you need this operation, please press "▼/SCAN" for 2 seconds, the left screen will show SCAN symbol, and the setup symbol will flash. Shows it will scan and IR synchronization from left side to right side after 2 seconds. You can operation on the right in the same way.

After starting to scan, the screen will appear mutative frequency and the channel; Finishing scan, for a while, enter into IR synchronization and shows flowing "---". Here you should take the related microphone which has been opening and start to IR synchronization according to the above instruction. Microphone A (blue) [610.90-639.40 MHz] is related to the left of the receiver, microphone B (yellow) [650.90-679.40MHz] is related to the right of the receiver.

In the process of scan or IR synchronization, you can press "●/IR" to exit at any time. Only finished the IR synchronization, the receiver and microphone will change the settings.

No matter what exit or IR synchronization unsuccessfully, the receiver will be the original state and keep the normal work with the microphone.

3.1.9 Lock and unlock the key

In the normal state, press the key "▲" about 5 seconds, the lock symbol in the screen will appear, the key has been locked. If you need unlock the key, you should press the key "▲" again about 5 seconds, the lock symbol will disappear.

3.1.10 Install and setting in project

When install microphones in the KTV room or classroom, usually one product for each room. To install more sets in the same building or nearby building, the method of installing is as follows:

Suggest never put the receiver near to the metal objects, because it will reflect the signal and affect the signal distance of the receiver. Also avoid putting receiver with DVD player or computer machine together. The reason is the interference signal will affect the receive signal distance.

First, place all receivers into each room and connect power and output cable. Then turn on each receiver and insert batteries in the microphones, make sure microphones are off. According to the location of the rooms, starting from the first room, set the RF power on the receiver at low level, ensure the receiver squelch set at -95, then enter into Auto scan the free channels and IR synchronization. After finishing, place the microphones in a reasonable distance of each other. Never put two microphones too close, at least keep 30cm space between them. All other rooms do the same setup as instructed above, until all setup in each room is completed.