

# Instruction manual

## USER'S MANUAL



**Professional wireless walkie-talkie**  
PROFESSIONAL FM TRANSCEIVER

## notice

The "Radio Administration Regulations of the People's Republic of China" stipulate: In China Units that set up and use radio transmitting equipment in the territory of the People's Republic of China And individuals must apply to the corresponding radio management agency to set up a station. Renewal, only after obtaining the radio license can it be used.

Hello:

Thank you very much for using it. This product has a newly developed function menu and personalized operation design , Allows you to use it easily .I believe that the compact size and reasonable price meet your needs.

### Unpacking and equipment inspection

Please carefully remove the walkie-talkie from the box.We recommend that you confirm before discarding the packaging materials  
Check if there are any items listed in the table below in the box.If any items are lost or damaged during handling  
Please confirm with the dealer.

### Random attachment table



Antenna



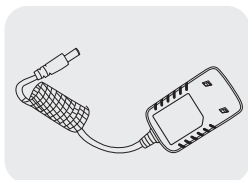
Battery



Back clip



Charger



Power adapter



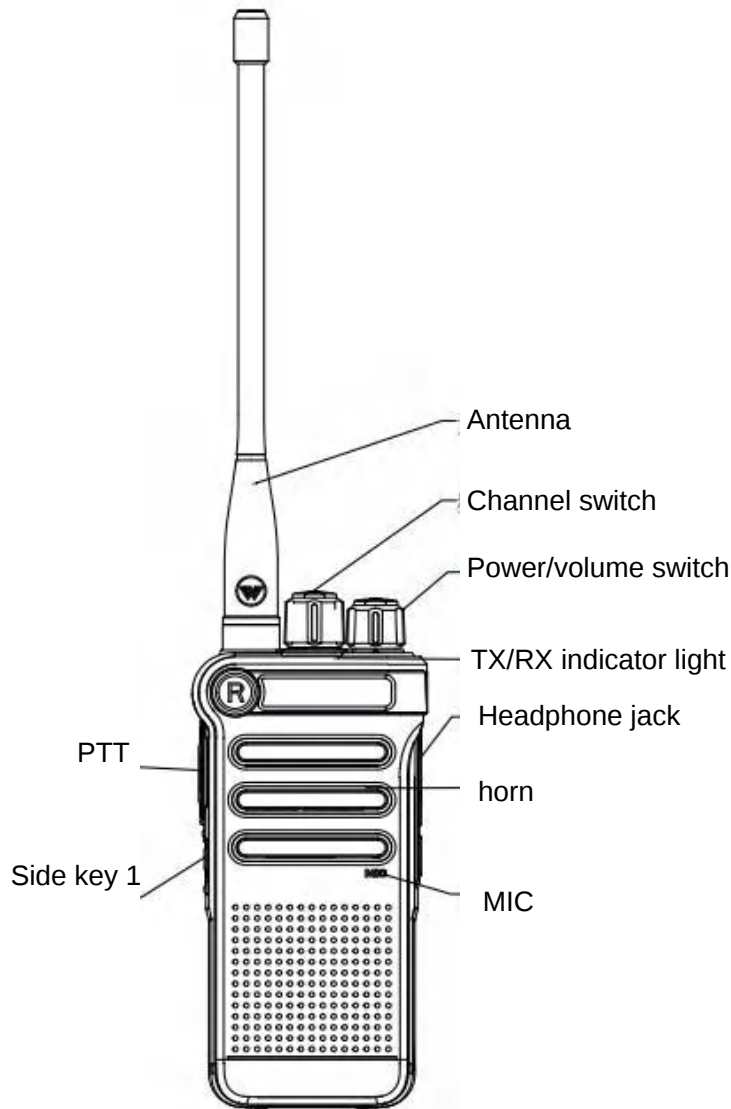
Certificate of conformity



Instruction manual

Function introduction:

1. Working frequency band:  
(Receive/transmit)  
UHF 400-470 MHZ
2. 16 storage channels
3. Chinese/English language report number  
4, 50 groups of CTCSS,  
105 sets of standard DCS
5. Launch timeout limit
6. Power saving function
7. VOX voice control function
8. Low electric alarm
9. Scanning function
10. Wide/narrow band
11. Scrambling function
12. High and low power
13. Computer programming
14. Special signaling function
15. Password write frequency function
16. Busy lock function
17. Squelch level
18. Non-standard sub-audio
19. Definition of side keys



## Operation instructions:

### 1. Status indicator light

Light up the red light in the transmission (transmission) and the green light in the reception

### 2. CHANNEL switch

Rotate this switch to select channels 1~16, counterclockwise to reduce the channel value , Clockwise to increase the channel value:

If the channel is rotated to a channel that is set to be empty by the write frequency software, an alarm tone will sound.

### 3. POWER switch/VOLUME controller

Turn on the power of the walkie-talkie when turning in a clockwise direction, and when you want to turn off the power of the walkie-talkie, press counterclockwise.

Turn to the click sound, and the call volume can be adjusted when turning.

### 4. PTT switch

After pressing PTT, speak into the microphone to call the other party, and a red light will be on to indicate, if this channel is not set to send At the radio frequency point, a beep will sound, and it will be received when released. If there is a signal, a green light will light up to indicate that the speaker is turned on.

### 5. Definition of side keys

It can be defined as the following functions by write frequency software.(The factory default is

the monitoring function)

Short press: A.Monitor B.Scan C scrambler D alarm E no

A Monitor: Monitor whether someone is talking on the channel of your choice. If there is no

signal, it will ring "sand".The sound of " rustle".

B scan: Tap and sound " beep " to enter the scan mode, and the green light flashes automatically at the same time, automatically

Detect the activity of channels 1 to 16 defined as scannable channels (the frequency writing

software can define each channel as scannable or

Can not be scanned), when there is a signal in the scanned channel, the walkie-talkie will

automatically stop on the channel for calls.Press again

Exit the scan mode with a " beep " and broadcast the current channel at the same time.

C scrambling: Perform the corresponding group scrambling processing on the voice of the

current channel.

D alarm: Tap to start the remote alarm, and the machine also emits an alarm tone at the same time.To cancel the alarm

Tap the PTT switch to cancel the alarm and broadcast the current channel at the same time.

E none: No function.

## **6. Squelch level**

By adjusting the squelch level, set the walkie-talkie to turn off and on when it receives a strong signal, and set

The lower the squelch level, the greater the noise floor when it is allowed to be turned on, and the farther the corresponding distance can be called, but it is accepted to be turned on.

The weaker the resistance to interference.This function is set to level 4 by default at the factory, you can use the write frequency software " Yes

Select the " Squelch level " option in the " Function" menu to set, the optional range is 0~9, of which it is set to level 0

When the squelch is normally open, the higher the level, the less easy it is to turn on the squelch.

## **7. Launch timeout**

The purpose of the transmission timeout is to prevent a single walkie-talkie from occupying the channel for too long, while avoiding the walkie-talkie for a long time.

Damage caused by inter-connection transmission, if the continuous transmission exceeds the limit time (set by the write frequency software), the intercom

The machine stops transmitting and a warning sound sounds. To stop the warning sound,

release the PTT switch and the walkie-talkie returns to reception. status.

Timeout warning, when the transmission is about to time out, a few seconds in advance (set by the frequency writing software) through the ringtone to predict respect

## 8. Scan switch

Turn on the **scan switch**, and when the walkie-talkie is set to be scannable by the write frequency software, it can be used on any channel.

Automatically enter the scanning state, and the walkie-talkie will automatically detect activities defined as scannable channels in channels 1 to 16.

Situation (The frequency writing software can define whether each channel can be scanned or not), when the scanned channel has a signal, the walkie-talkie will Automatically stop on the channel for calls.

Note: A. The walkie-talkie will stop on the channel with a signal. When the signal disappears, after about 10 seconds, the walkie-talkie will continue.

Continue to scan the next channel.

B. When there are less than 2 scannable channels, the walkie-talkie cannot be scanned.

## 9. Non-standard analog sub-audio self-programming function

Non-standard analog sub-audio can be programmed by yourself through the frequency writing software.

A. First, set the non-standard sub-audio QT signaling on the channel of the walkie-talkie, which can range from 67.0 sub-audio to 254.1 sub-audio.

Any set of sub-audio signaling between audio.



## **10. Voice selection**

A. Computer writing frequency: the voice selection is turned off, the walkie-talkie will not issue a voice notification, and the voice selection is in Chinese.

When the Chinese “voice notification” function is turned on, and when the English “voice notification” function is selected, the English “voice notification” function is turned on.

You can use the write frequency software to set and select.

B. Manual voice switching: Adjust the channel switch to channel 1, press and hold the side button to turn on, that is, switch between Chinese and English voice.

## **11. Battery power saving function**

The setting enters the power-saving mode, and the write frequency software can be used to set and select.

Note: A. No tick means that the walkie-talkie does not save power.

B. The tick indicates that the walkie-talkie saves power.

## **12. Battery voltage prompt**

Note: The voltage is too low: When the voltage is below a certain level, if the voice selection is turned off, a “ Ding, ding, ding ” tone prompt will be issued every 15s, and if the voice is on, it will prompt “ Please change the battery ” .If the voice selects Chinese Or in English, pressing and holding the PTT key or voice-activated emission is invalid and a “ Please change the battery ” tone prompt is issued.

## **13. Busy lock**

Note: The voltage is too low: When the voltage is below a certain level, if the voice selection is turned off, a “ Ding, ding, ding ” tone prompt will be issued every 15s, and if the voice is on, it will prompt “ Please change the battery ” .If the voice selects Chinese Or in English, pressing and holding the PTT key or voice-activated emission is invalid and a “ Please change the battery ” tone prompt is issued.

## **14. High and low power options**

This function of this machine is set to high power by default at the factory, and the “ high power ” of the “ transmit power” can be used by the frequency writing software.

The “ /Low” option is set to select whether the channel is operating at high power or low power.

## **15. Wide and narrow band selection (25.0khz/12.5khz)**

This function is set to broadband by default at the factory, and the “ width ” of the “ channel information” of the frequency writing software can be used.

The “ /Narrow” option is set to select whether the channel operates in wideband (25.0kHz) or narrowband (12.5kHz).

## **16. Voice control**

1.VOX voice control allows you to launch without pressing the PTT launch button, using only the sound of your speech.

After the speech stops, the transmission will automatically stop. You can use the frequency writing software to choose to turn this function on/off.

a.When VOX voice control is enabled on your walkie-talkie channel.

When you speak into the microphone, the transmitter will automatically turn on and send voice.If you stop speaking, the walkie-talkie will automatically stop transmitting and wait for reception.b.When you use the microphone headset.

To use the voice control function, you must adjust the VOX gain and set the VOX gain so that the pair The speaker distinguishes the size of the sound.

If the microphone is too sensitive, the surrounding noise will cause the walkie-talkie to start

transmitting. If the microphone is not sensitive enough, the walkie-talkie will not be able to collect your voice, be sure to adjust Adjust the VOX gain level to make the call go smoothly.

Note: When voice control is turned on and the VOX gain is set to a relatively high and sensitive level, if the speaker is turned on, the VOX gain is set to a relatively high and sensitive level.

If the speaker/microphone is connected to the walkie-talkie, the received signal amplified by the speaker/microphone may cause intercom The machine began to launch.

## **17. Read and write frequency encryption**

Write frequency software settings are available.

## **18. Scrambling function**

The frequency writing software can be used to turn on or off the scrambling function of each valid

channel. The scrambling is information encrypted.

In one way, the realization of scrambling is to complete the purpose of changing the transmission

spectrum through cepstral, after the receiver receives the signal.

Restore, so as to achieve the effect of confidentiality.Each channel can select a separate scrambling group, with a total of eight groups of scrambling frequencies ,

## **19. Sub-audio OT/digital sub-audio DOT**

You can use the frequency writing software to set the sub-audio QT/digital sub-audio DOT signaling on the channel of the walkie-talkie, when

When the channel is set to sub-audio or digital sub-audio signaling, only when the same sub-audio or digital sub-audio is received.

The frequency signal can turn on the squelch.If the same channel uses different OT/DOT for calls,

the squelch Can't be turned on, only the green light is on.The list of sub-audio OT/digital sub-audio DOT is as follows:

Sub-audio QT: (50 in total)

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 67.0  | 69.3  | 71.9  | 74.4  | 77.0  | 79.7  | 82.5  | 85.4  | 88.5  | 91.5  |
| 94.8  | 97.4  | 100.0 | 103.5 | 107.2 | 110.9 | 114.8 | 118.8 | 123.0 | 127.3 |
| 131.8 | 136.5 | 141.3 | 146.2 | 151.4 | 156.7 | 159.8 | 162.2 | 165.5 | 167.9 |
| 171.3 | 173.8 | 177.3 | 179.9 | 183.5 | 186.2 | 189.9 | 192.8 | 196.6 | 199.5 |
| 203.5 | 206.5 | 210.7 | 218.1 | 225.7 | 229.1 | 233.6 | 241.8 | 250.3 | 254.1 |

Digital sub-audio DQT: (116\*2 in total)

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| D017N | D023N | D025N | D026N | D031N | D032N | D036N | D043N | D047N | D050N |
| D051N | D053N | D054N | D055N | D065N | D071N | D072N | D073N | D074N | D114N |
| D115N | D116N | D122N | D125N | D131N | D132N | D134N | D135N | D143N | D145  |
| D152N | D155N | D156N | D162N | D165N | D172N | D174N | D205N | D212N | D217N |
| D223N | D225N | D226N | D243N | D244N | D245N | D246N | D251N | D252N | D254N |
| D255N | D261N | D263N | D265N | D266N | D271N | D274N | D305N | D306N | D311N |
| D315N | D325N | D331N | D332N | D343N | D345N | D346N | D351N | D356N | D364N |
| D365N | D371N | D411N | D412N | D413N | D423N | D425N | D431N | D432N | D445N |
| D446N | D452N | D454N | D455N | D462N | D464N | D465N | D466N | D503N | D506N |
| D516N | D523N | D526N | D532N | D534N | D546N | D565N | D606N | D612N | D624N |
| D627N | D631N | D632N | D645N | D654N | D662N | D664N | D703N | D712N | D723N |
| D731N | D732N | D734N | D743N | D754N | D765N |       |       |       |       |

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| D017I | D023I | D025I | D026I | D031I | D032I | D036I | D043I | D047I | D050I |
| D051I | D053I | D054I | D055I | D065I | D071I | D072I | D073I | D074I | D114I |
| D115I | D116I | D122I | D125I | D131I | D132I | D134I | D135I | D143I | D145  |
| D152I | D155I | D156I | D162I | D165I | D172I | D174I | D205I | D212I | D217I |
| D223I | D225I | D226I | D243I | D244I | D245I | D246I | D251I | D252I | D254I |
| D255I | D261I | D263I | D265I | D266I | D271I | D274I | D305I | D306I | D311I |

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| D315I | D325I | D331I | D332I | D343I | D345I | D346I | D351I | D356I | D364I |
| D365I | D371I | D411I | D412I | D413I | D423I | D425I | D431I | D432I | D445I |
| D446I | D452I | D454I | D455I | D462I | D464I | D465I | D466I | D503I | D506I |
| D516I | D523I | D526I | D532I | D534I | D546I | D565I | D606I | D612I | D624I |
| D627I | D631I | D632I | D645I | D654I | D662I | D664I | D703I | D712I | D723I |
| D731I | D732I | D734I | D743I | D754I | D765I |       |       |       |       |

## 20. Special signaling function

In the write frequency software menu: select in the digital sub-tone mode: there are two options: normal sub-tone and special sub-tone. Choose a special sub-tone, only walkie-talkies with the same DCS code and a special sub-tone can make normal calls.

### Technical indicators

|                        |                                                       |
|------------------------|-------------------------------------------------------|
| Frequency range:       | 400-470MHz                                            |
| Number of channels:    | 16                                                    |
| Power supply voltage:  | 7.4VDC                                                |
| Operating temperature: | -10°C~+50°C                                           |
| Antenna configuration: | inductive antenna                                     |
| Antenna impedance:     | 50 ohms                                               |
| Working method:        | same frequency simplex or different frequency simplex |
| Appearance size:       | 137x62x36                                             |

### Receiving part

|                              |              |
|------------------------------|--------------|
| Frequency range:             | 400-470MHz   |
| Sensitivity:                 | ≤0.2mV       |
| Bandwidth occupied:          | ≤16kHz       |
| Channel selectivity:         | >65dB        |
| Intermodulation:             | >55dB        |
| Audio output power:          | ≤500m W      |
| Audio distortion:            | ≤5%          |
| Frequency tolerance:         | 5ppm         |
| Receiving current:           | standby≤65mA |
| Audio response (300-3000Hz): | +7~-12.5dB   |
| Reference frequency:         | 26.00MHz     |

### Launch part

|                                               |            |
|-----------------------------------------------|------------|
| Frequency range:                              | 400-470MHz |
| Modulation method:                            | 16KFC3E    |
| Miscellaneous scattering frequency component: | ≤7.5μW     |
| Modulation noise:                             | <-40dB     |
| Modulation distortion:                        | <5%        |
| Frequency tolerance:                          | 5ppm       |
| Maximum frequency offset:                     | ≤±5kHz     |
| Emission current:                             | ≤2600mA    |
| Audio response (300-3000Hz):                  | +6.5~-14dB |
| Adjacent channel power:                       | ≤-65dB     |
| Modulation sensitivity:                       | 8~12mv     |

## Warranty card

### Remarks

1.This warranty card is only applicable to the above

Intercom of listed models and serial numbers

Machine warranty service

2.This warranty card is for the end user

Important reasons to enjoy warranty service  
Please keep the certificate safe.

3.This warranty card must be completed by the seller

Complete and stamp the sales seal

It can only take effect after that.

Customer name Gender: Male/female

Customer address and zip code \_\_\_\_\_

Contact number \_\_\_\_\_

Product model \_\_\_\_\_

Product serial number \_\_\_\_\_

Purchase date \_\_\_\_\_

Invoice number \_\_\_\_\_

Sales store seal \_\_\_\_\_ Sales store name \_\_\_\_\_

Store address and zip code \_\_\_\_\_

Store contact number \_\_\_\_\_

Store manager \_\_\_\_\_

Dear walkie-talkie users:

Hello!

Thank you very much for purchasing this walkie-talkie, we

Will do its best to provide you with stability and clarity

Clear and efficient wireless communication services. In order to make

You can better enjoy the advantages we provide you

Quality warranty service, please pay attention to the following information!

The warranty period of this product is calculated from the date of purchase, and the warranty period Failures that occur due to the use of this product under normal conditions during the period ,

According to the contents of this warranty clause (the host is guaranteed for 12 months) , Accessories (battery, charger) 6 months free warranty service) , Present the original warranty card and the purchase invoice, and authorize it at the designated time Right to repair station to enjoy warranty service;

Paid maintenance services will be implemented in the following situations during the warranty period:

(1) This warranty card and purchase invoice cannot be presented;

(2) This card has traces of alteration or does not match the product;

(3) Use this product under abnormal or unconventional circumstances  
Defect or damage caused;

(4) Due to incorrect use, accident, water ingress, negligence  
Defect or damage;

(5) Caused by incorrect testing, operation, maintenance, and installation  
Defects and damage caused by modification or adjustment, etc.;

(6) Defects caused by unauthorized maintenance, disassembly, etc.  
Trapped or damaged;

(7) Defects or damage caused by irresistible factors:

(8) Wear and tear under normal use:

When you need to repair, please send the walkie-talkie with this warranty card and purchase

The machine invoice is mailed together or sent to the authorized place designated by the company

Right to repair station, transportation costs shall be borne by the user;