

# User`s Manual

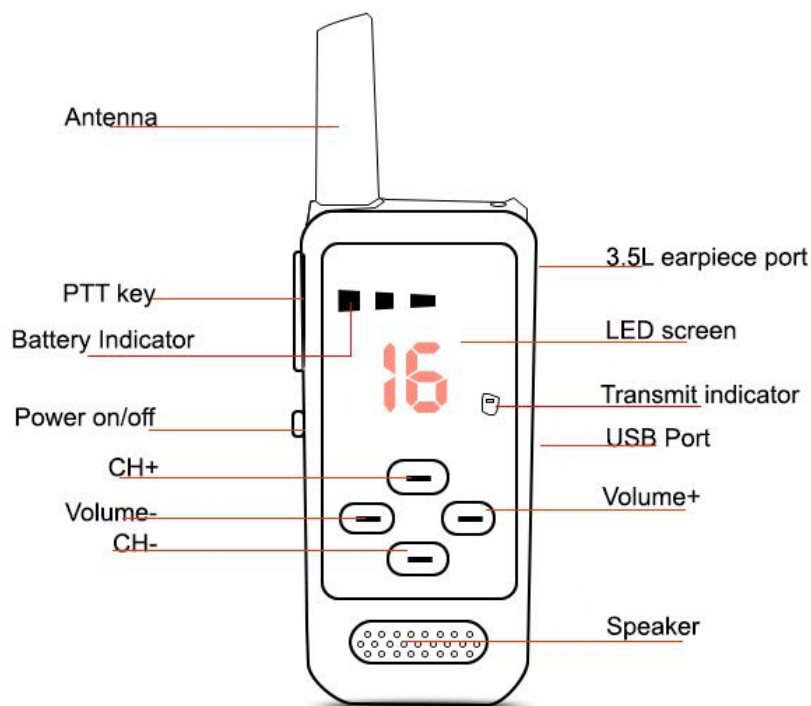
## ■Safety Warning before use

Do not use the walkie talkie in the explosive environments ( such as gas , dust , steam , etc . ) in sunlight directly for a long time , or put it near by the heating appliances.

Do not place walkie talkie in extremely dusty ,moisture and water splashing places , and do not put in uneven surface.

Maintenance can only be carried out by professional and technical personnel , Please do not disassemble by oneself.

## ■Get familiar to your Radio



## ■Basic operation

### ◆Start up and shutdown/ Volume adjustment

Press the [power on/off/volume] button about 3-4 seconds until you hear "du" sound and screen display the channel No.. After turning on the power, press the [power on/off/volume] button about 3-4 seconds until you hear "du" sound and screen display is off, means the power is turned off.

### ◆Make call and answer call

Press the [PTT] button and speak to the mic as normal volume, keep the mic away from your mouth about 3-5cm will get good audio, the TX icon (down right of the screen) is on. release [PTT] button to receive call, the RX icon (up right of the screen) is on.

◆Volume set : press (left) Volume- or Volume+(right) to decrease or increase the volume.

◆Channel set : Press (UP)CH+ or (Down) CH- to choose the channel.

◆Scan: long press CH- or CH+, radio will start scan from channel - or + , if there are signal, scan will stop until signal off will continue scan; long press CH+ or CH- stop scan.

(if available channel<2, can not scan. )

### ◆TOT

Time-out-timer function to avoid one talk too long, it can set by programming from 30-300seconds, ex-work set is off.

◆Low voltage prompt: When the voltage is lower than working voltage, radio make“de~de~”alarm and battery icon shining to remind the user to charge the battery in time.

◆Keypad lock : long Press (left) Volume- or Volume+(right) to lock the front 4 key, long press left or right key again to unlock the 4 keys.

◆VOX Voice-operated transmitting: when voice-operated transmitting is activated, transmitting can be executed just by shouts without pressing PTT key. (with headset must set the VOX level for radio hear the voice clearly, the amplified RX voice from headset/microphone may active TX by VOX too )

When power on the radio, shortly press power key to start/ stop VOX function, VOX must be set on by programming in advance.

◆Setting QT/DQT: If user set the QT/DQT on one channel, user is able to ignore other calls on the same channel

When users set QT/DQT on one channel, only receive the same QT/DQT can radio open the squelch.

In the same way, only other people set QT/DQT the same as your scan they receive your call

The ex-work setting is no CTCSS/DCS, please change by PC programming.

## Main technical indexes

General	
Model	F1
Frequency Range	400-470MHz
Channel Capacity	16 channels
Frequency Stability	±2.5ppm
Operating Temperature	-25~+60℃
Antenna Impedance	50Ω
Operating Voltage	3.7V
Dimensions (W×H×D)	82*38*18mm
Weight (with battery and belt clip)	72g
Battery	4800mAh (Li-ion Battery)
Transmitter	
RF output power	1.5W
Modulation Type	16kΦF3E
Modulation Limiting	≤±5kHz
Modulation Character	+3dB / -3dB
Spurious Radiation	0.75μW
Adjacent Ch. power	≥65dB
Max Fr. Deviation	≤5kHz
Occupied Bandwidth	≤16KHz
Receiver	
Receiving Sensitivity	0.18μV
Adjacent Ch. Selectivity	60dB
Inter-modulation	60dB
Co-channel suppression	-8dB
Audio Response	+2dB -10dB

## Professional FM transceiver

Audio Output	500mW
Audio Distortion	≤3%

All specifications are subject to change without prior notice or taking any responsibility.

## Troubleshooting guide

Problem	Solution
Without power supply, the two-way radio doesn't work.	The battery may has run out. Please charge the battery.
The battery runs out again not long after charging.	The battery reaches its service life limit (about 300 charging and discharging cycles), please replace the battery.
The two-way radio can't make call to other members in the group.	Please confirm whether your frequency and CTCSS signal tone are consistent with that of other members in the group. Other members in the group may be too far away. Please confirm whether you are within the valid range of other two-way radios.
Communication distance is short.	Confirm whether the antenna is in good contact and is the original antenna, and whether the battery voltage is normal. The dealer adjusts the squelch level.
Other tones (not from group members) appear in the channel.	Please change the CTCSS signal tone. At this time, be sure to change the signal tone of all two-way radios in the group.
Noise level is high.	The two-way radio is too far away from other members. After adjusting the valid communication range, reset the two-way radio and try again. The two-way radio is in a bad location such as in a place that is blocked by a high building or in basement. After transferring the two-way radio to a flat and open place, reset it and try again. The two-way radio is interrupted by external environment or electromagnetic field. Keep the two-way radio away from equipment which may interrupt it.