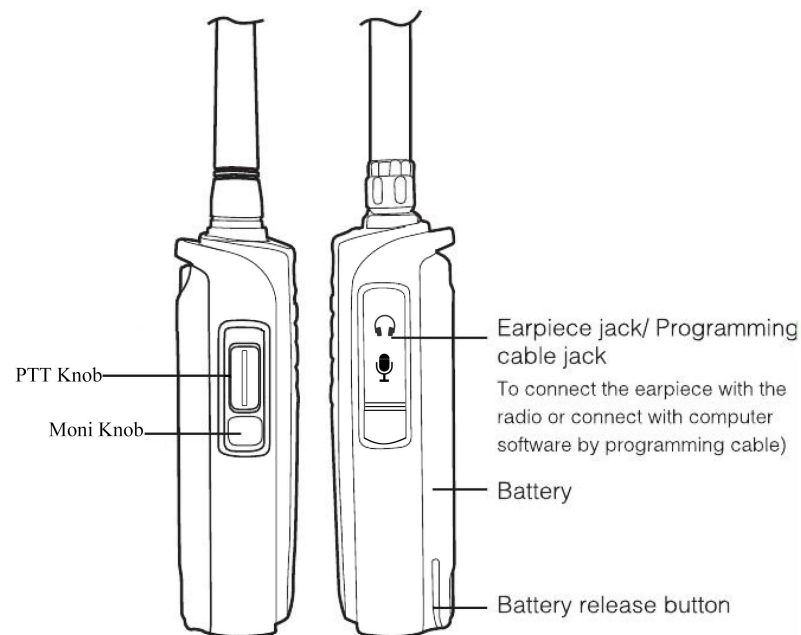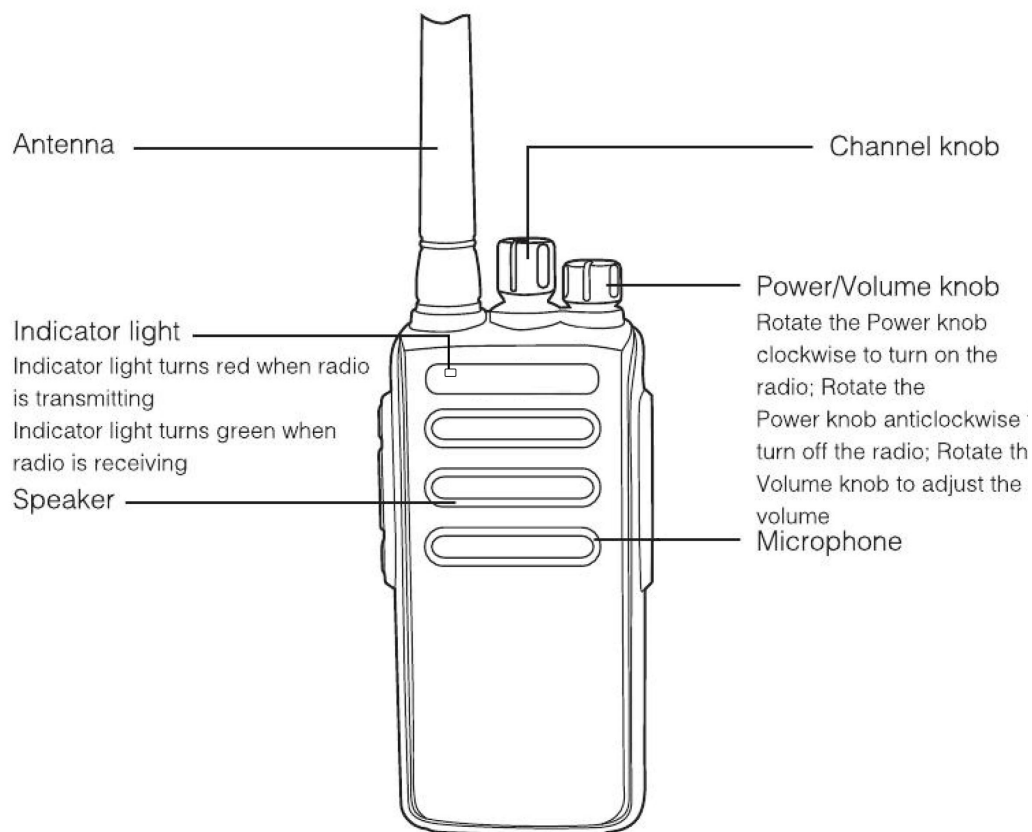# User`s Manual

■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 familar to your Radio

Antenna

Channel knob

Power/Volume knob
Rotate the Power knob clockwise to turn on the radio; Rotate the Power knob anticlockwise turn off the radio; Rotate th Volume knob to adjust the volume

Indicator light
Indicator light turns red when radio is transmitting
Indicator light turns green when radio is receiving

Speaker

Microphone

PTT Knob

Moni Knob

Earpiece jack/ Programming cable jack
To connect the earpiece with the radio or connect with computer software by programming cable)

Battery

Battery release button

■Basic operation

◆Start up and shutdown/ Volume adjustment

Rotate the [power on/off/volume] button clockwise until you hear "click" sound and hear the voice prompt. After turning on the power, rotate the [power on/off/volume] button clockwise to increase the volume gradually. Rotate the same button until you hear "click" sound to turn off the two-way radio. Rotate the same button anticlockwise to reduce the volume gradually until the power is turned off.

◆Monitor function

In standby mode, press [MONI] key to start monitoring. When squelch circuit is shut off, you will hear the background noise (the prompt tone sounds once); release the same key to stop monitoring, then you will not hear the background noise.
(If it is needed to check whether channel interference exists, you can press this key and rotate the volume control knob, then you will hear the background noise or interference noise.)

◆Squelch level setting (available for analog channel)

You can adjust the squelch level of the two-way radio by program, When the squelch level is set too low, the two-way radio is easy to be interrupted by useless call with weak signal; when the squelch level is set too high, call from remote position may also be screened out. Ex-work set as 5, you can program to 0-9, 0 means on always.

◆TOT

Time-out-timer function to avoid one talk too long, it can set by programming.

◆**Scan/Scan Add**: When current channel is CH16, radio will automatically scan from channel 1-16, if there are signal, scan will stop until signal off +10s will continue scan;
(if available channel<2, can not scan. If do not want enter to scan mode on CH16, set every channel "Scan add" "no" by computer)
◆**Voice Prompt:** Deactivate / Prompt in Chinese/ Prompt in English optional by program.
◆**Power save**: can set by PC programming save battery or not.
◆**Low voltage prompt:** When the voltage is lower than 5.8V, with language prompt the radio makes the"please charge the battery"alarm, or every 15s make"de~de~"alarm if no language prompt to remind the user to charge or replace the battery in time.
◆**Busy channel lockout:** OFF:Allow transmitting even if the channel is occupied. ON:Prohibit transmitting if the channel is occupied.
◆**Bandwidth setting:** Select channel bandwidth (NARR 12.5KHz /WIDE 25.0KHz) Ex-work set 25KHz.
◆**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)
◆**Scramble**: Scramble function is one of the ways to encrypt, can set by program.
◆**Setting QT/DQT**: If user set the QT/DQT on one channel, user is able to ignore other calls on the same channe
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
This radio has 40 groups of analog QT, 168 groups of /DQT

Main technical indexes

General	
Frequency Range	UHF: 400-470MHz
Storage Channel	16
Rated voltage	DC7.8V
Battery Capacity	4800mAh Li ion battery
Working Mode	Simplex or Semi-duplex
Work Temperature	-10 ℃ to +50℃
Antenna Impedance	50 Ω

Size	136*60*40mm
Weight	269g(with antenna and battery)
Transmitter	
RF Power Output	<12W
Modulation Type	16k Φ F3E
Maximum Deviation	<±5kHz
Inter mediation	8-12mV
Modulation Distortion	≤5%
Current	≥1600mA
Receiver	
RF Sensitivity	≤0.2μV
Inter modulation	≥55dB
Audio distortion	≤5%
Frequency tolerance	5ppm
Audio Power	>500mW
Audio Response	+7-12.5dB
Current	≥1600mA

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 replace or charge the battery. The battery may be installed improperly. Please remove and re-install the battery once.
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.