

## Function Operation Instruction

### Function Introduction

- ◆ Frequency  
UHF: 400–470 MHz (RX/TX)
- ◆ Up to 16 Channels
- ◆ Chinese/English Language
- ◆ 50 Groups CTCSS, 105 Groups of standard DCS
- ◆ Time-out timer(TOT)
- ◆ Battery saving function
- ◆ Alarm function
- ◆ USB rapid charge
- ◆ Programmable by PC

### Battery Charging

1. Take out the charger, plug the AC (100-240V) 50/60Hz, then Green LED flashes;
2. Plug the battery or the radio with battery on the charger; make sure the battery is connected with the charger.
3. The charging process initiates when the red LED lights, the charging time based on the battery capacity. The green LED lights indicating the battery is fully charged.
4. Use the USB cable to plug to the radio, orange LED lights when charging, The light off indicates that the fully charged.

### Function Operation

#### SWITCHING POWER ON/OFF

Turn the power switches/volume control clockwise. You will hear a channel number, indicating the radio is ON.

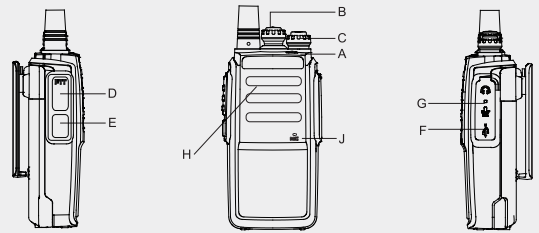
#### ADJUSTING THE VOLUME

Hold MONI button down to listen to audio level while rotating the Power switch/Volume control. Rotate clockwise to increase volume and counterclockwise to decrease volume.

#### SELECTING THE CHANNEL

Turn the channel switch to select your desired channel. NO.16 is Scanning Channel

### Item Description



**Note: The radio outlook based on the real radio.**

- A. LED Indicator: Green LED flashes when receive the signal, Red LED flashes when transmission.
- B. Channel knob: Rotate the knob to choose the channel (CH1-CH15), CH16 is scan channel.
- C. ON/OFF knob/Volume knob: Rotate the knob clockwise to turn on the radio, anticlockwise to turn off the radio. By rotating to control the volume.
- D. PTT switch: Press PTT and speak to the microphone to call, listen when release.
- E. Monitor: When press Monitor key, the squelch opened and the background noise comes out; the squelch close when release the monitor key.
- F. USB Rapid charge plug.
- G. Speaker/Microphone rubber plug: Please cover when not use the speaker and microphone.
- H. Insert loudspeaker. J. Microphone

### PTT TRANSMIT

To transmit, press and hold [PTT] and speak into the microphone in your normal tone of voice.

### SQUELCH LEVEL

The purpose of Squelch is to mute the speaker when no signals are present (Squelch OFF). With the squelch level correctly set, you will hear sound only while actually receiving signals (Squelch ON). The squelch level can be adjusted via program software.

The frequency of squelch is 0 (on) -9 (deep), steps: 1.

### VOX

- a. VOX function is effective when the function is turn on.
- b. VOX gain level: When the sound level is higher than the set level of VOX, VOX automatically transmit. The VOX gain level can adjust from 1 to 9 levels.
- c. When a signal is received, VOX will not transmit even if the sound level is higher than the set VOX gain level.
- d. On channels CH1 ~ CH5, press and hold the PTT and MONI, then switch on the radio, thus to activate the VOX function ON/OFF.

## MONITOR

When you are receiving and no signals present, the squelch function can mute the speaker, so you cannot hear the background noise .If you want to switch the squelch function OFF, press and hold MONI button .It is very helpful when you want to adjust the volume level and receive the weak signals.

### Battery Saving

- a.ON: Entering into the battery saving state automatically without any operation for 10 seconds
- b.OFF: Battery saving is off.

### Busy Channel Lockout (BCL)

Switch on or off each effective channel busy lockout function via PC programming software. When open this setting, signal from the current channel is banned to transmit.

### Beep

- a. The beep is on, and the "Di" sounds is emitted for every rotation of the channel
- b. The beep is off, and no "Di" sounds for every rotation of the channel

### Low Battery Voltage Warning

When the voltage is lower than the present value, a prompt "Please change battery" is issued every 5 seconds, press the PTT buttons is invalid and make "Di" sounds.

IV

## Chinese / English Prompt

This radio includes Chinese and English two kinds of voice signal mode (channel knob must be switched to channel CH15), firstly turn off the radio, and then hold the PTT button and MONI button while turning on the power to convert another way. Each time you switch a way so repeated.

### Time-out timer (TOT)

The function of the time-out timer is to prevent the speaker from using a channel too long and continuously, and the interphone emits continuously too long and the body heats up. If you continuously transmit the interphone, the TOT limit time set by the machine is exceeded; the radio will stop transmitting (the time can be programmed by computer while the factory setting time is 1 minute). Release the PTT button and press PTT again to resume transmitting.

### QT / DQT

The radio' s QT/DQT for each channel can be program by software. When the channel set the QT/DQT, the radio squelch open only if it receives a signal that uses the same QT or DQT. The radio squelch does not turn on if the same channel uses different QT / DQT calls, only lights in green, sub-CTCSS 50 groups, and digital sub-audio DCS 105 groups.

**Note:** Although using a channel with CTCSS / DCS sub-audio may be preferable to receiving unwanted calls, it does not mean your call is a secret.

V

## Technical Specification

General	
Frequency range	UHF 400-470MHz
Memory channels	16
Operation voltage	3.7V DC
Frequency stability	±2.5ppm
Operation temperature	-20 C—+50 C
Mode of operation	Simplex
Antenna impedance	50Ω
Transmitter	
RF Power	< 5W
Maximum deviation(W/N)	≤5KHz/≤2.5KHz
Spurious emission	≤ 7.5uW
Adjacent channel power	≤-65dB / ≤ -60dB
SNR(W/N)	≥ -45dB/≥-40dB
QT/DQT (W/N)	0.7±0.1KHz/0.4±0.1KHz
Modulation sensitivity	8-12mV
Transmission current	≤ 1.2A

## Receiver

Sensitivity	-122dBm (12dB SINAD)
Audio power	0.4W (8R Load)
Audio distortion	≤10%.
Intermediation(W/N)	≥65dB/≥ 60dB
Adjacent channel selectivity(W/N)	≥ 65dB/≥ 60dB
Clutter suppression	≥ 65dB
Receiver current	≤ 380mA

**Note:** The above specifications/technical instructions are for reference only because of the continuous improvement of the technology. Please refer to the physical object.