

RADIO ILLUSTRATION

1. Led indicator

It lights red when transmitting, and lights green when receiving.

2. Channel-selecting knob

Rotate it to select channel 1-16, clockwise rotation to increase, counter – clockwise rotation to decrease. An alert tone will sound when an empty channel is selected.

3. Power/Volume knob

Rotate it by clockwise to power on the radio. To turn off the radio, rotate it by counter-clockwise until a click sound is heard.

4. PTT switch

Press PTT switch and then talk to the microphone, the indicator light turns red, if the channel does not have transmitting frequency, a “Du Du” tone sounds, and indicator light turns red.

Release PTT switch to receive. It lights green when there is signal.



5. Side key assignment

Side key functions can be assigned via programming software.
Short press: A. Monitor B. Scan

6. Squelch level

The squelch level will determine the signal strength to open the speaker of the radio. If the squelch level is lower, the background noise of opening the radio's speaker will be higher, and the corresponding communication range will be further, but the anti-interference capacity will be weaker. The default setting of squelch level is 3, you can adjust it through the menu "Squelch level" of the "Optional features" in the software, level 0 to 9 can be selected. 0 is the lowest level.

7. Time-out Timer (TOT)

The purpose of TOT is to prevent any radios from talking in one channel for too long time, and to prevent the radio from being damaged due to continuous transmission. If the transmitting time exceeds the TOT pre-set time, the radio will stop transmission and an alert tone sounds. Release PTT switch to stop the alert tone, the radio resumes to receiving mode.

8. Non-standard QT/DQT

Non-standard QT/DQT can be set via programming software, can select from 67.0 to 254.1Hz.

9. Battery save function

The battery capacity will be saved when this function is turned on via programming software.

OFF: No battery save

ON: Battery save

10. **Busy channel lockout (BCL)**

You can turn on/off the BCL function of every channel via programming software. If set it, no transmitting when press PTT, and will beep "Di" until release PTT.

11. **High/ Low power selective**

The default setting by factory is high power , can select H/L via programming software.

12. **Wide/Narrow band selective (25.0KHz/ 12.5KHz)**

The default setting by factory is Wide band, can select W/N on the channel working on wide band or narrow band.

13. **VOX**

No need press PTT to talk when transmitting. If no talking, transmitting will stop. The function can be set ON/OFF by programming software.

When wear headset, should adjust the VOX gain, set the VOX gain, to make the radio distinguish the sound. If the headset is too sensitive, the noise around will make the radio transmit. If the microphone is not that sensitive, the radio can not receive your voice. You should adjust the gain well to make the communication successfully.

14. **Programming encryption**

It is set by programming software.

15. **Scrambler**

You can turn on/off scrambler function in every valid channel via programming software. It is one of information encryption type. Every channel can select scrambler group. There are eight group for optional.

16. QT/DQT

QT/DQT can be set via programming software. When a channel has QT/DQT, the squelch will turn on when receive the same QT/DQT. If the QT/DQT is different in the same channel, the squelch will not turn on, only the indicator light turns green.

QT/DQT charts as follow:

50 QT code (Hz)

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

Technical Specification

General Specifications	
Frequency Range	446 ~ 446.20 MHz
Number of Channels	16 Channel
Operating temperature	- 10 ^o C ~ + 55 ^o C
Battery Capacity	2600mAh Li-Ion (Standard)
Dimensions: H x W x D (mm)	120*62*42 mm (Including battery)
Weight	266g (Including battery)
Battery Low Power Indicator Type	Voice prompt
Transmitter Specifications	
Frequency Stability	2.5ppm
Modulation Limiting	±=5KHz@25KHz
FM Hum & Noise	45dB@25KHz
Conducted/Radiated Emission	-36dBm < 1GHz, -30dBm > 1GHz
Adjacent Channel Power	-60dB
Audio Response	+3 ~ -3 dB
Audio Distortion	<3%

Receiver Specifications	
Sensitivity(12 dB SINAD)EIA	0.2 μ V@20/25KHz
Intermodulation EIA	60dB
Adjacent Channel Selection	65dB
Spurious Rejection	65dB
Rated Audio	1W
Audio Distortion & Rated Audio Distortion	3%
Audio Response	+3 ~ -3 dB
Conducted Spurious Emission	-58 dBm<1 GHz, -47 dBm>1GHz