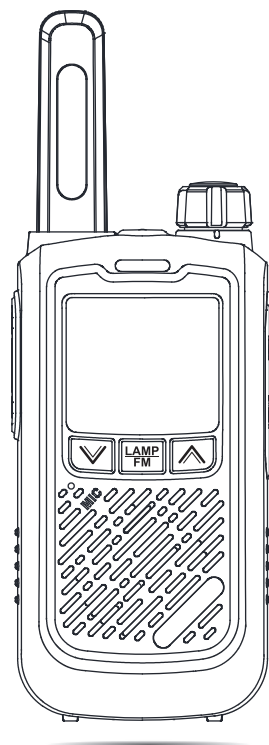
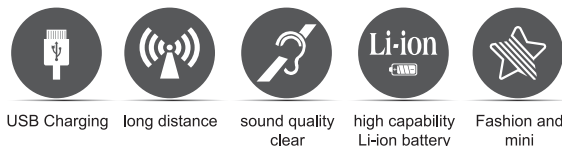


Use' s Manual



ATTENTION

Before using this product, read the RF Energy Exposure and Product Safety Guide that ship with the radio which contains instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulation.

Package Contents

- | | |
|--|-----------------|
| • 1 Transceiver | • 1 Belt clip |
| • 1 1500mAh Li-ion rechargeable battery pack | • 1 USB cable |
| • 1 User manual | • 1 Wrist-strap |

Note: The number of the above materials may be depending on the number of packages.

Main characteristics

- | | |
|------------------------------------|---|
| • 400-470MHz Transceiver | • Output power: ≤ 2W ERP |
| • 99 channels | • Channel scan |
| • Channel spacing: 12.5 KHz | • Vocal tuning |
| • Channel monitor | • Squelch |
| • LED Flashlight | • TOT (Time out timer) |
| • 2pin Kenwood accessory jack | • 260 Sub-codes (50 CTCSS Codes & 210 DCS codes) |
| • Battery save | • Battery low alert |
| • Li-Ion 1500mAh battery pack | • Battery Life: up to 18 hours (under typical use conditions) |
| • Micro USB connector for charging | • Segmented LED display |
| • Up to 8 km range* | • FM Radio receiver |

Note: *Range may vary depending on environmental and/or topographical conditions.

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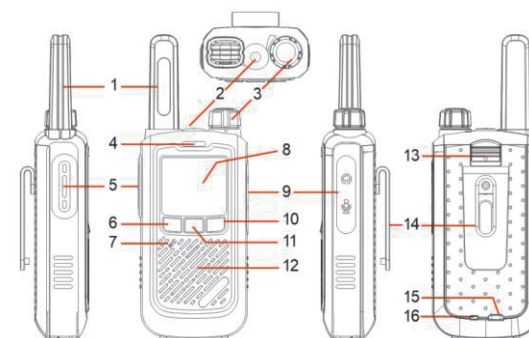
Disclaimer

The accuracy and completeness of the contents are sought in the process of compilation, but we do not bear any responsibility for the possible errors or omissions. With the continuous development of technology, we reserve the right to change the design and specification of the product without notice. No copy, modification, translation and dissemination of this handbook may be made in any form without the prior written authorization of our department.



Main controls and parts of the radio

1. Antenna
2. Flashlight
3. Power/volume knob: turn clockwise to power on and increase the volume level. Turn counter-clockwise to decrease the volume level and power off.
4. Led indicator: RED: TX; GREEN: RX.
5. PTT key: push this key to transmit, release it to receive.
6. ▼DOWN key: Press the key down to select the desired channel. Long press to lock or unlock function keys.
7. Built-in microphone
8. LED digital display
9. External Speaker/Microphone Jack- allows the connection with external devices such as headsets, microphones.
10. ▲UP key: Short press this key to select the desired channel upwardly. Long press the key to enter the monitoring state.
11. LAMP/FM key: Short press the flashlight to turn on or off.
12. Speaker
13. Battery release latch
14. Belt clip
15. Micro-USB Charging Port: DC5V USB input
16. Charging indicator: The red light is always on during charging, and the green light is always on when charging is full.



Operations

Turning your Radio On and Off

To turn your radio ON, turn the rotary knob clockwise.
To turn your radio OFF, turn the rotary knob counterclockwise.

Setting the Volume

Increase volume by turning the rotary knob clockwise.
To decrease volume, turn the rotary knob counterclockwise.
Do not hold the radio close to your ear. If the volume is set to an uncomfortable level, it could hurt your ear.

Talking and Listening

All radios in your group must be set to the same channel and Sub-Code in order to communicate.
1. Hold your radio 2–3 cm from your mouth.
2. Press and hold the **PTT** button while speaking. The Transmit **TX** icon appears on the display.
3. Release the **PTT** button. You can now receive incoming calls. When you do, the Receive **RX** icon appears on the display.
For maximum clarity, hold the radio 2 to 3 cm away and avoid covering the microphone while talking.

Channel selection

In standby mode, directly press the **▲UP / ▼DOWN** key to step down or down to select the channel. Press and hold the **▲UP / ▼DOWN** key to quickly switch channels down or up. The corresponding channel is displayed digitally. When the voice prompt function is turned on, the corresponding channel is broadcast by voice.

Monitor

Pressing and holding **▲UP** for 2 seconds to enter Monitor mode and listen for weak signals on the current channel. You can also listen to the volume level of the radio when you are not receiving. This allows you to adjust the volume, if necessary.

CTCSS/DCS tones

CTCSS and DCS tones are similar to access codes and enable the radio to communicate only with the users that are tuned on the same channel and have set the same code. For each channel, you can set up to 50 CTCSS tones and 210 DCS codes. The CTCSS/DCS tones are a sort of “access codes” and enable the radio to communicate only with the other users set on the same frequency and on the same CTCSS/DCS tone. Undesired signals coming from other stations set on the same frequency but with different CTCSS/DCS tones won’t be received.

Vox

The VOX feature enables hands free conversations without using PTT: just speak in the direction of the microphone and the communication will be automatically activated. The VOX sensitivity can be adjusted in 5 different levels (1...5) through the programming software:
Level 2 is set by default and has the lowest VOX sensitivity, 5 is the lowest one.
With the programming software you can enable/disable the VOX feature and select the sensitivity levels.

Battery recharge

The radio is equipped for using a 3.7V Li-ion rechargeable battery pack which can be recharged connecting the socket of the AC/DC wall adaptor to a mains power socket and inserting the jack of the wall adaptor into the desktop charger plug. It takes 4-5 hours to fully recharge the radio. For maximum battery life, we recommend charging the battery pack when the radio is off and the battery pack is fully discharged.
Using a different battery charger other than the one specified can cause damage to your device or may even cause explosions and personal injuries.
The Battery power saving feature enables a reduction in consumption of up to 50%. If it has been set, it automatically activates when the transceiver does not receive any signal for more than 5 seconds in order to save the battery life. Power saving can be disabled only through Programming software.

Scan

This function can only be activated by programming software. To enable the scan function, all 16 channels must be programmed. When the radio is turned on, press and hold the **▲UP** and **▼DOWN** keys at the same time, and scanning will start automatically. Whenever any signal is detected, the scan stops on a busy channel. If you press and hold PTT, you will send on the latest busy channel. Press any function key to exit the scanning state.

Flashlight

With radio turned on, shortly press the **LAMP/FM** key to turn on/off the flashlight at the top side of the radio.

English/Chinese language switch

Press and hold the **PTT + ▼DOWN** key to turn on the radio and switch the prompt language between English and Chinese.

FM Radio

The frequency ranges for listening to the radio is 88-108MHz.
Press and hold the **LAMP/FM** key to turn on the radio, and then use the **▲UP** to search for radio stations automatically.
Press the **PTT** key or turn off the radio to exit the FM radio.

Squelch

The Squelch function suppresses noises on free channels and allows receiving even weak signals. radio has 10 different Squelch levels that can be set by programming software: 0 means that the Squelch is turned off; from level 1 to level 9 you will have different levels of noise reduction. The higher is the level, the louder will be the Squelch. By default, the Squelch level of Radio is set on level 4. Make sure you do not set an excessively high squelch level because in this case you may not be able to receive weaker signals. On the other hand an excessively low Squelch value could enable the Squelch even when no signals are present. Squelch must always be adjusted when no signals are present. The Time Out timer is settable from 30 sec to 270 sec. only through the programming software. This feature is disabled by default.

Technical Specifications

General	Part
Working temperature	-10°C to +40°C
Operation Voltage	DC 3.7 V ±10%
Operation Mode	Simplex
Dimensions	150mm×54mm×27mm (with Antenna)
Weight	133g (Battery pack included)
Antenna Impedance	50ohm
Duty cycle	5/5/90%
Transmitter Part	
Frequency Stability	±2.5ppm
RF Output Power	≤2W ERP
Max frequency deviation	≤2.5KHz
Audio distortion	≤3%
Adjacent Channel Power	< 60dB
Spurious radiation	Within European legal terms
Occupied bandwidth	Within European legal terms
Receiver Part	
Receive Sensitivity	< 0.2μV @20dB SINAD
Audio distortion	≤3%
Audio response	300 Hz ~ 3 KHz
Adjacent Channel Selectivity	Within European legal terms
Inter modulation rejection	Within European legal terms
Spurious response	Within European legal terms
Blocking	Within European legal terms
NOTE: All specifications may be modified without prior notice or liability.	