Firward

SED-6

USER'S MANUAL

PROFESSIONAL

FM TRANSCEIVER

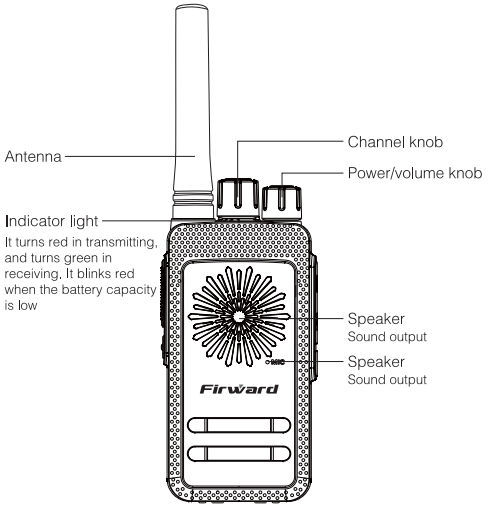
- TOT • Scan • Voice Prompt • Battery save function
- Vox • Low battery prompt
- Scrambler • Busy channel lock • Squelch

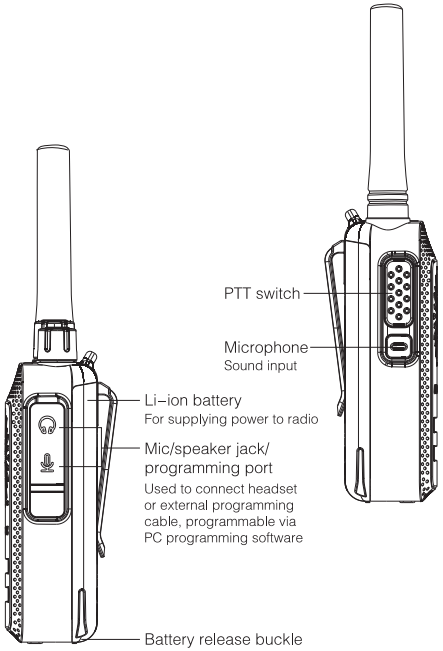
CE FC RoHS

Supplied Accessories

Li–ion battery | Charger | Antenna | Belt clip

GETTING FAMILIAR





BASIC OPERATION

1. Indicator

Indicator turns red when transmitting, and it turns green when receiving

2. Channel Knob

Rotate the knob to select the channel 1 to channel 16, counterclockwise rotate to decrease the value of channel name, clockwise rotate to increase the value of channel name

3. Power Knob/Volume Knob

Clockwise rotate to turn on the radio, and counterclockwise rotate to turn off the radio. Rotate the knob can adjust the volume.

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. 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 radios speaker the radios speaker will be higher, and the corresponding communi–cation range will be further, but the anti–interference capacity will be weaker. The default setting of squelch level is 5, you can adjust it through the menu "Squelch level" of the "Optional Features" in the programming software. Level 0 to 9 can be selected. 0 is the lowest level.

6.Monitor

Press the squelch button to monitor different DCS calls at the same frequency, or press to press the button to listen when the signal strength does not reach the threshold.

7. TOT

The purpose of TOT is to prevent any radio from talking in one channel for a long time, and to prevent the transceiver from being damaged because if continuous transmission. If the transmitting time exceeds the TOT pre–set time, the radio will sounds "DU" and stops transmit, release the "PTT" key to back to receive status and stop sound "DU"

8. Scan

When the current channel is channel 16, the radio will will automatically detect the 16 channels which defined as scan. When the channel which is be scanned has signal, the radio will stop in the channel to communication

Notice:

A. When the scannable channels is less than 2 channels, radio can't go to scan

B. When the radio is stopping in the channel which has signal, after the signal disappears 10s, the radio will scans the next channel

C. If radio do not want to scan, please choose the "No" in the "Scan Add" for every channel

9. English voice prompt

The voice prompt can be selected " English/None" through the program–ming software.

10. Battery save function

This function can be set by the software

Turn on this function can make the standby time more longer.

11. Low battery alert

Notice:

when the voltage is lower than a certain level,if the voice selection is turned off, the sound of "DuDu" will appear every 15 seconds. If the voice is on, it will prompt "please charge." If the voice choice of Chinese or English, press PTT key or Vox transmission is invalid and the spund of "please charge" will still prompt, at the same time, the sound "Di" will ring until PTT release or Vox end.

12. Busy channel lock

If the busy lock is set, press PTT after receiving the signal to prohibit transmis–sion and sound "Di" is ringing until PTT release.

13. Wide/narrow bandwidth select

The default is wide band, you can select the wide band or narrow band through the programming software

14. VOX

Speak to the microphone in normal voice to transmit, no need to press PTT key, turn VOX on /off through the software.

A: when VOX is on in your working channel.

Speak to the microphone directly, it will transmits automatically.

The radio stops transmitting when there is no voice, and waits for receiving

B. When a headset with a microphone is used

When VOX is on, you should VOX gain for the radio to identify voice volume.

If the microphone is too sensitive, the noise around radio will start transmit–ting

If the microphone is not sensitive, the radio can not collect your voice, please adjust VOX level well to guarantee smooth communications.

15. Scrambler

We can use programming software to turn on or off the function of scrambler. Scrambling is one of the methods of information encryption. Scrambler is achieved through cepstrum to complete the goal of change of transportation spectrum. After receiving and releasing the signal, it is restored to achieve the effect of secrecy. Each channel can select the scramble solely.

16. CTCSS/DCS

You can set the CTCSSQT / DCSDQT via programming software. After setting the CTCSS or DCS, the squelch can only be turned on when the channel receiving the same CTCSS or DCS. If the same channel uses differ–ent QT / DQT for calling, the squelch cannot be turned on, the lights in green.

17. Programming protect

Enter the programming software interface, password box will appear (pass–word default is empty) , Tick the new password, the new password will be changed from the original gray into white editable state, fill in the password and click, password set successfully.

18.Special signal

This function occurs when there is DCS on the current channel, the purpose is to make the radio under the same group of DCS unable to hear the call content, to achieve the function of encryption.

SPECIFICATIONS

GENERAL

Frequency Range: 450–470MHZ
Channel No.: 16
Operating Voltage: 3.7V DC
Working Temperature: –10℃~+50℃
Antenna: high gain antenna
Antenna Impedance: 50Ω
Mode of Operating: Simplex
Charging Current: 500mA
Dimension: 114x54.8x32.6mm
Battery capacity: 1500mAh

TRANSMITTER

Frequency Range: 450–470MHZ
RF Power: 2W
Modulation Type: 16KF℃3E
Spurious Component: ≤7.5μW
Modulation Noise: <–40dB
Modulation Distortion: <5%
Frequency Stability: 5ppm
Max Fr. Deviation: ≤±5KHz
Current: ≤1200mA
Audio Response (300–3000Hz): +6.5~–14dB
Adjacent Channel power: ≥65dB
Modulation Sensitivity: 10±2mv

RECEIVER

Frequency Range: 450–470MHZ
Receiving Sensitivity: ≤0.2μV
Occupied Bandwidth: ≤16KHz
Adjacent Ch. Selectivity: ≥65dB
Intermodulation: ≥55dB
Audio Output Power: 1W
Audio Distortion: ≤5%
Frequency Stability: 5ppm
Transmission current: 150mAh
Receiving current: 55mAh
Standby current: 55mAh
Audio Response (300–3000Hz): +7~–12.5dB
Reference Frequency: 26.000MHz

Warranty card

Note:

1.This warranty card is only applicable to two-way radio of the above-listed model and serial number.

2.The warranty card is an important document for the end-user to enjoy warranty service, please keep it well.

3.This warranty card must be completed by the dealer and stamped with the sales stamp to take effect.

Customer's name:

Gender:

Add and postal code:

Customer's tel:

Model:

Serial number:

Purchasing date:

Purchasing date:

Invoice No.:

Dealer:

Stamp:

Add and ptal code of the dealer:

Contact tel:

Handling people:

WARNING

Our two way radio generators RF electromagnetic energy during transmit mode.This radio is designed for and classified as “Occupational Use Only”,meaning it must be used only during the course of employment by individuals aware of the hazards,and the ways To Minimize Such hazards.

This radio is NOT intended for use by the “General Population” in an uncontrolled environment. This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only”.Inaddition, our two way radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

---IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

---American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

---American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields-RF and Microwave.

CAUTION

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, two way radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft,and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

Attention:

This radio complieswith IEEE and ICNIRP exposure limits for occupational/controlled RF exposure emvironment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only. An appropriate warning lable is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original acessories (belt clip)a minimum distance of 0 cm. Do not use this device when antenna shows obvious damages.

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

FCC Regulatory Conformance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Verification of harmful interference by this equipment to radio or television reception can be determined by turning it off and then on. The user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Compliance and Control

Guidelines and Operating Instructions

To control your exposure and ensure compliance with the occupational/ controlled environmental exposure limits, always adhere to the following procedures.

Guidelines:

- Do not remove the RF Exposure Label from the device.
- User awareness instructions should accompany device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions:

- Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), press the Push-to-Talk (PTT) key. To receive calls, release the [PTT] key. Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy only when transmitting (in terms of measuring for standards compliance).
- Keep the radio unit at least 2.5cm away from the face. Keeping the radio at the proper distance is important as RF exposure decreases with distance from the antenna. The antenna should be kept away from the face and eyes.
- When worn on the body, always place the radio in an approved holder, holster, case, or body harness or by use of the correct clip for this product. Use of non-approved accessories may result in exposure levels which exceed the FCC's occupational/ controlled environmental RF exposure limits.
- Use of non-approved antennas, batteries, and accessories causes the radio to exceed the FCC RF exposure guidelines.
- Contact your local dealer for the product's optional accessories.

MODIFACATION OF THIS DEVICE TO RECEIVER CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.