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F6
FM TRANSCEIVER

USER'S MANUAL



ROHS **CE** **FC**

Accessories List

Accessories	Quantity
Adaptor	1
Battery pack	1
Belt clip	1
Cord	1
User's Manual	1
Guarantee certification	1
Charger	1
Radio mainframe	1
Antenna	1

This user's manual is applicable to the following models:

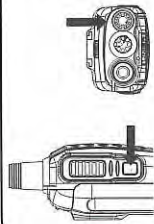
F6-3	400-420MHz
F6-4	450-470MHz
F6-5	350-370MHz
F6-6	370-390MHz
F6-8	136-174MHz
F6-9	350-390MHz
F6-13	330-370MHz
F6-14	400-470MHz
F6-15	430-470MHz
F6-16	450-490MHz
F6-17	480-520MHz
F6-18	400-430MHz
F6-19	440-470MHz
F6-20	420-470MHz

Specification	
General	F6
Frequency Range	136-174MHz 350-390MHz 400-470MHz
Channels	16(15+S)
Channel space	25kHz(W)/12.5kHz(N)
Operating Temperature Range	-20°C~+60°C
Antenna Impedance	50Ω
Operating Voltage	7.2V Dc ± 20%
Modulation Type	16kØF3E(W)8kØF3E(N)
Frequency Stability	±2.5ppm(-20°C~+60°C)
Battery (Standard)	Li-Ion 1100mAh, 7.2V
Dimensions (WXHXD)	54mm x99mm x 31mm
Weight	225g(with battery and antenna)
Receiver	F6
Sensitivity (12dB SINAD)	≤0.20μV
Adjacent Channel selectivity	≥65dB(W)/ ≥55dB(N)
Intermodulation reject ratio	≥60dB(W)/ ≥55dB(N)
Spurious Response	≥60dB
Audio Output	500mw
Transmitter	F6
RF Output Power	5W(VHF),4W(UHF)
Spurious & Harmonics	≤-70dB
FM Noise	≤-35dB
Audio Distortion (300-3000Hz)	≤5%
Maximum Frequency Deviation	±5kHz(W)/ ±2.5kHz(N)

GEO FENNEL F6 Operating Instructions



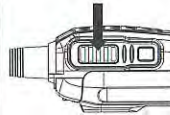
Turn On-OFF/Volume Control knob clockwise, and a “beep” will sound.



Press and hold the monitor button, rotate the volume control knob to adjust volume.



Rotate the Channel Selector knob to select your desired channel. When you receive valid signal, sounds will be heard.



Press the PTT, and speak clearly with your mouth about 2.5 to 5cm (one to two inches) away from the microphone. Release PTT to receive messages.

Function Introduction

Time-out Timer: this function can avoid certain user occupying a channel for too long. When you keep transmitting over the time limit, radio will terminate the transmission automatically and generate alert sounds. In this case, you should release the PTT button. When you press PTT button again, radio will resume the transmission. Time-out limit should be set up by your dealer.

Battery saver: radio will activate battery-saving function automatically when radio has neither received any signal nor be operated for over 10 seconds. When radio received signals or started other operations, battery-saving function will be released automatically. This function should be set up by your dealer.

Low battery alert: when battery level is too low, radio will terminate transmission and generate alert sounds automatically; meanwhile led indicator will flash red. In this case, you should change or recharge your battery.

Monitor: This radio has built-in squelch circuit. When no valid call is received, speaker will be muted to eliminate background noise. If you want to turn on the speaker manually, please press and hold the monitor button on the left side of radio, status led indicator will keep green during this period. This function is very helpful when you want to adjust speaker volume or receive weak signals.

QT/DQT: This function can help you to filter irrelevant communications. When there are irrelevant communications in your channel, led indicator will be green but the speaker is muted. If you want to hear this communication, please press the monitor button on the left side of radio.

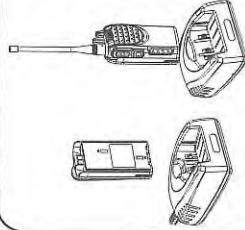
Note: When battery voltage is too low, transmission will be prohibited, and status indicator led will flash red.

Getting Started:

Please charge batteries prior to initial use, because batteries are not charged when leaving factory.



Connect power supply with charger as below indication, and the charger's left LED will light yellow.



- *Align the groove on each side of battery with the corresponding raised rail on each side of the charger pocket.
- *Ensure that battery contacts with the charging contacts of charger correctly.
- *When battery is properly seated in the pocket, charger's right LED will light red to indicate that charging process is started.

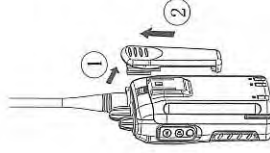
*If you are using Li-ion battery, the charger LED will turn from red to green when charging is completed.

Remove the battery from charger and disconnect the power supply when charging is completed.



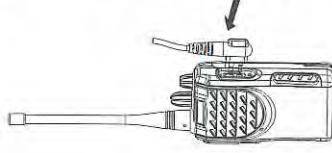
Attaching the Belt Clip

Align the grooves of the belt clip with those of the battery. Push the belt clip downwards until a click is sounded.



Removing the Belt Clip

Use a key to press the belt clip tab away from the battery, slide the belt clip upwards to remove it.



Install Earphone/microphone

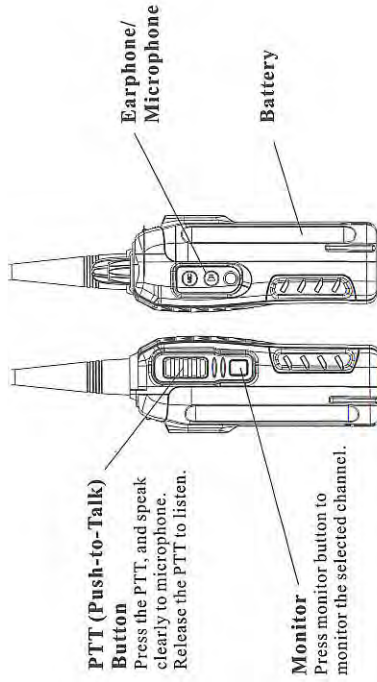
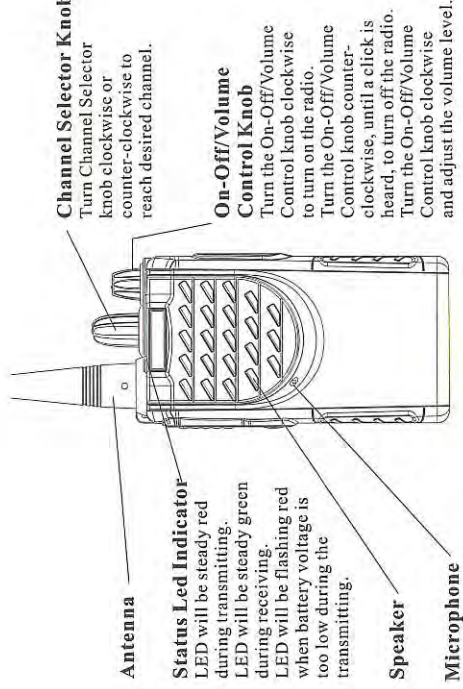
Remove earphone dust cover, insert earphone/microphone into corresponding earphone jack, then earphone/microphone will work.

Noted: Use of earphone/microphone may weaken the water-proof level of the radio.

Before using the two-way radio, please read below safety instructions carefully.

- *When speaking into the microphone, please keep your mouth 2.5cm to 5cm away from microphone.
 - *Use of accessories not originally provided or authorized by GEO FENNEL may result in risk of being exposed in the excessive electromagnetism environment without enough protection.
 - *Please use antenna provided or authorized by GEO FENNEL. If a damaged antenna comes into contact with your skin, a minor burn can result.
- Please turn off your radio when you are instructed to do so.

- *Make sure the radio always keeping more than 15 cm away from heart pacemaker. Please do not use radio when driving. Do not store the radio in the upper of safety airbag or any place when any safety airbag spreading might reach to.
- *Please turn the radio off in advance to avoid every possible risk of exploding when stepping into the environment with potential exploded gas or dusty or close to demolished and detonator field. Carefully put batteries into pocket, wallet or other bag with mental materials. To avoid exploding, do not put batteries in fire.
- *Repair of radio could only operated by professional technicians. Unauthorized disassemble or adjustment to the radio will affect the validation of warranty services.



Caution

1. Do Not Shake the antenna.
2. Keep 5cm space between your mouth and two way radio.
3. Please take off the radio from the your belt with both hands.
4. Please cover the earphone to avoid the dust
5. Do not frequently push and pull the earphone to the radio. Please operate the earphone tenderly.
6. Please press PTT switch tenderly.
7. Please tenderly operate the Channel Knob and Volume Knob.

Battery Pack maintenance

1. Please charge the battery indoor
2. The battery shall be charged after it release all power
3. Do Not charge the radio with battery too long time, because it makes the battery life shorter
4. When the battery is on the shelf, please charge and discharge it every 2 month
5. Li battery pack is protected by IC. When the battery pack is auto shut off, please recharge it to make it work properly.