

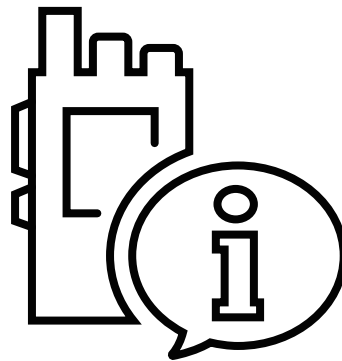
FC CE



This package is
100% recyclable

TG-FR1

User Manual



Portable Two-way Radio

EU Statement

We declare that the radio is compliance with Radio equipment Directive (RED) 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: xxxxxx

The device in the environment with the temperature between 0-40°C and operating under 2000m, otherwise, it may damage your radio.

For this device, Head SAR and Body SAR was performed with the device configured in the positions according to EN 50566:2017/A1:2023 & EN IEC/IEEE 62209-1528:2021, and face-up SAR was performed with the device 25mm from the phantom, and Body SAR was performed with the device 0mm from the phantom. Body SAR was also performed with the headset and belt clip attached and without.

CAUTION:

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

FCC compliance statement

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 including received interference that may cause undesired operation.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and 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.

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

Disclaimer of Rights

Without prior written permission from our company, it is strictly prohibited to copy, transmit, distribute, or store any part of this manual in any form.

In line with our policy of continuous improvement and development, our company reserves the right to modify or enhance any product described in this manual without prior notice.

Under no circumstances shall our company be liable for any loss of data or other damages, whether direct or indirect, arising from special incidents or accidents.

The contents of this manual are provided “as is.” Unless otherwise required by applicable law, no explicit or implied warranty is made regarding its accuracy, reliability, or content, including but not limited to implied warranties of merchantability or fitness for a particular purpose. Our company reserves the right to revise or withdraw this manual at any time without prior notice.

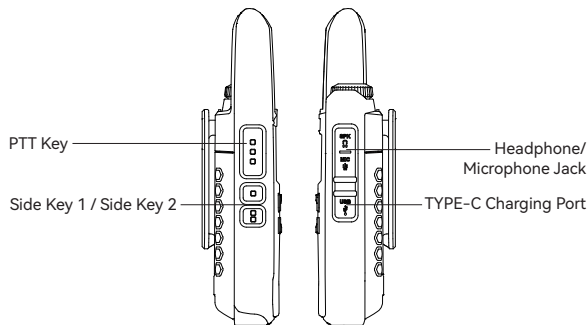
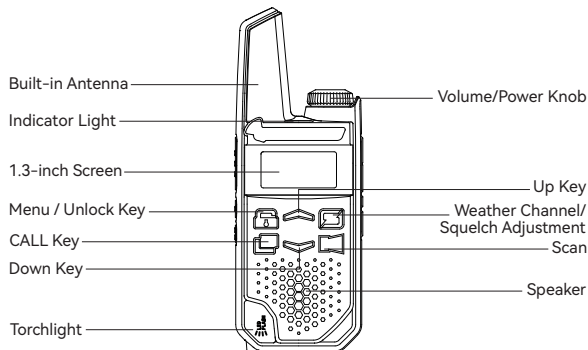
If there is any inconsistency between the contents of this manual and your radio, please refer to the actual product.

Our company reserves the final right of interpretation for this manual.

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Product Overview Diagram

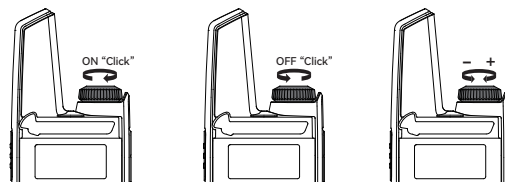


Note: The images in this manual are for reference only.
Please refer to the actual product.

Basic Operations

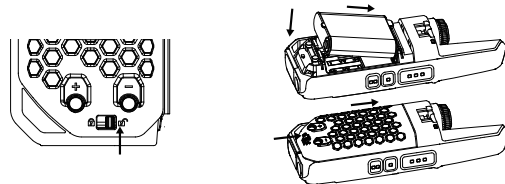
Power / Volume Adjustment

Rotate clockwise until a “click” sound is heard to power on successfully. Rotate counterclockwise to power off.
(After powering on, continuously rotating the knob clockwise increases volume; counterclockwise rotation decreases volume.)

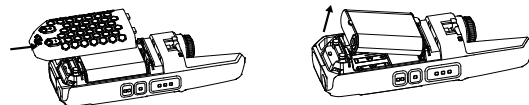


Battery Installation / Removal

To install the battery: Release the battery latch on the back of the radio, lift the battery cover, align the battery with its designated slot, and gently push it into place. Close the battery cover to complete installation.



To remove the battery: First turn off the radio. Release the battery latch on the back of the device, lift the battery cover, and slide the battery out in the direction indicated.



Key Functions Description (1)

PTT Key

Press and hold this key while speaking into the microphone to transmit.
(In the menu interface, pressing the PTT key serves as the confirmation key.)

Menu / Unlock Key

Short press to enter the menu selection. Long press to lock the keypad.
Long press again to unlock the keypad.

CALL Key

Short press to send a CALL tone.
(Note: The receiving radio will receive the CALL tone you selected, and this radio will play it through the speaker at the same time.)

Up Key

Move upward.

Down Key

Move downward.

Weather Channel / Squelch Adjustment Key

Squelch Adjustment:

Press the Weather Channel / Squelch Adjustment key to enter the squelch setting interface with a number displayed.
This number represents the noise reduction level, which can be adjusted through 7 levels using the up and down keys.

Weather Channel Selection:

Press the Weather Channel / Squelch Adjustment key — a number will appear on the screen.

Then press the Menu key, and use the Up/Down keys to select one of the NOAA channels (1–10).

Press the Menu key to confirm.

Press the Menu key again to enter the NOAA Standby setting, and use the Up/Down keys to turn it ON or OFF.

Press the PTT key to confirm, and then press the Scan key to exit.

(NOAA Channels 1–10 Frequencies: 162.55, 162.4, 162.475, 162.425, 162.45, 162.5, 162.525, 161.525, 161.775, 163.275 MHz)

Key Functions Description (2)

Scan Key

Press this key to scan the channel back and forth.

Side Key SK1/ Side Key SK2

Side key 1 short press: SOS.

Side key 2 short press: Turn on the flashlight.

Preparation Before Use

- Please use the designated charging equipment provided by our company.
- When the battery is used with the radio for the first time, a low battery warning may occur. Please charge the battery before use.
- Turning off the device does not affect Type-C charging.
- The indicator light turns green when Type-C charging is complete.
- Do not remove the battery when using radio body Type-C charging.

- [ATTENTION]**
1. It is prohibited to transmit when the radio is charging to avoid damage and accidental danger.
 2. When charging, the reception effect will be affected.
 3. Do not short-circuit the battery terminals or throw the battery into fire.
 4. Never attempt to disassemble the battery pack.

Device Status Indicator Light Guide

Indicator Light Status	Status Description
Red Light On	Transmitting / Charging
Green Light On	Receiving / Fully Charged

Common Operation Instructions

(1) Storage Channel

Press the menu key to enter the channel selection. Press the up and down keys to select the channel. (Press the PTT key to confirm).

(2) 38 Groups of CTCSS / 83 Groups of Standard DCS

Press the menu key twice to enter the CTCSS/ DCS and select the CTCSS/ DCS from group 1 to 121. (Press the PTT key to confirm).

(3) VOX

Press the menu key three times to enter the VOX level selection.
Press the up and down keys to select OFF and levels 1 to 9.
(Press the PTT key to confirm).

(4) Vibration Function (Optional Function)

Press the menu key four times to enter the vibration switch. Press the up and down keys to choose to turn it off or on.
(Press the PTT key to confirm)

Vibration indication: After 15 seconds of standby upon startup, a signal enters the receiver to receive it and vibrates for about 3 seconds. After 15 seconds of standby, it will vibrate as a prompt. If there is a received signal during the operation of the radio, it will not vibrate.

Common Operation Instructions

(5) CALL Tone Selection

Press the menu key five times to enter the CALL sound selection.
Press the up and down keys to select 1 to 9 CALL sounds.
(Press the PTT key to confirm).

(6) Key Tone ON/OFF

Press the menu key six times to enter this radio. Press the up and down keys to select to turn it on or off.
(Press the PTT key to confirm).

(7) TX End Tone ON/OFF

Press the menu key seven times to turn the tail sound on and off.
Press the up and down keys to select to turn it on or off.
(Press the PTT key to confirm).

Common Issues and Troubleshooting

If any abnormality is found during the use of this product, please refer to the table below first.

Abnormal Condition	Possible Cause	Troubleshooting
Cannot Power On	Low battery	Charge the battery or replace it and try again.
	Poor battery contact	Clean the electrode contacts or reinstall the battery.
Charging Failure	Battery voltage too low	After inserting the charger, you need to wait for a few minutes. The red light remains on constantly and the charging has returned to normal.
	Use non-standard adapters	Use the standard adapter (Note: Non-standard chargers may cause damage to the radio and are not covered by the three guarantees).
	Battery malfunction	Replace the battery.
Shortened Usage Distance	The antenna is damaged	Replace the antenna.
	Environmental factors	When there is "electromagnetic wave interference from high-power transmission base stations" or "weather factors" nearby, radio signals rely on air as the medium of transmission. For instance, strong winds often cause radio waves to be disturbed by sandstorms. The reflection and scattering of gas can also interfere with radio communication. In mild cases, it causes signal attenuation and shortens the communication distance; in severe cases, it leads to communication interruption.
Low volume	The volume knob is not adjusted to the maximum volume.	Turn the volume knob to increase the volume.
	Harsh usage environment and the sound hole is blocked.	Clean the sound hole of the radio speaker.

Specifications(1)

General Specifications

Frequency Range:	FRS: 462MHz+467MHz / PMR446: 446MHz
Channel:	FRS: 22 channels / PMR446: 16 channels
Frequency Stability:	±2.5ppm
Size:	147.8 × 54.1 × 30.5 mm (without belt clip)
Weight:	107g (without battery and belt clip)
Working Temperature:	0°C~40°C
Working Mode:	Same frequency single operation
Antenna Impedance:	50Ω

Transmitting

Output Power:	≤2W / PMR 446 0.5W
Emission Current:	≤1200mA
Maximum Frequency Deviation:	≤2.5KHz
Stray Emission:	≤7.5uW
Adjacent Channel Power:	≤-65dB
S/N (W):	≥-45dB
CTCSS/DCS Frequency Deviation (W):	0.25±0.1KHz
Modulation Sensitivity:	8~12mV

Specifications(2)

Receiving

Receiving Sensitivity:	-120dBm (12SINAD)
Audio Power:	≥350mW
Audio Distortion:	<10%
Intermodulation (W/N):	≥65dB
Adjacent Channel Selectivity (W/N):	≥65dB
Spurious Rejection:	≥65dB
Receiving Current:	≤350mA

【Note】 All stated specifications are subject to change without notice or obligation.

FRS/PMR446 Frequency

FRS Frequency			
Channel	Frequency	Channel	Frequency
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000
11	467.6375	22	462.7250

PMR446 Frequency			
Channel	Frequency	Channel	Frequency
1	446.00625	9	446.10625
2	446.01875	10	446.11875
3	446.03125	11	446.13125
4	446.04375	12	446.14375
5	446.05625	13	446.15625
6	446.06875	14	446.16875
7	446.08125	15	446.18125
8	446.09375	16	446.19375