

Important Note:

We've done our best to ensure this manual is accurate and complete, but we can't guarantee it's error-free. Technical specifications may change as we improve our products. Please don't copy or share this manual without our permission. Any references to third-party products are provided for information only - we don't endorse or guarantee them.

Radioddity FS-T8 FRS RADIO OWNER'S MANUAL





ATTENTION! The radio is a multitask FRS transceiver. Combining the latest technology in radio communication along with a sturdy mechanical frame, the radio is the ideal and effective solution for the professionals who need to stay in touch with the working team (in construction sites, buildings, shows, trade fairs or hotels) or for leisure users that just want to keep up with friends and family.

To help you ward off bodily injury or property loss that may arise from improper operation, please read all the information carefully before using our products.

Before operating the radio, please read all safety and operating instructions. Save all instructions in a safe place for future reference.



FCC Part 15.21 Warning Statement

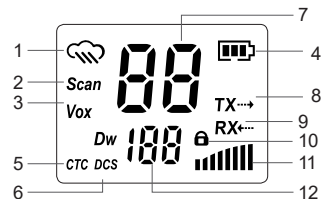
NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Appendix A.-Technical Specifications

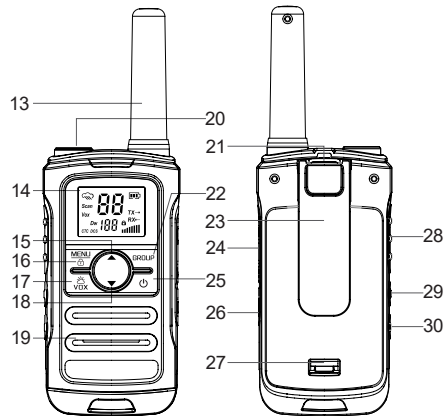
Channels	22 FRS/11 Weather
Sub-Codes	CTCSS Tones/ DCS Codes
Frequency Range	FRS
Operation Voltage	DC 3.7 V $\pm 10\%$
RF Output Power	2W/ 0.5W (FRS)
FM Modulation	11K0F3E@12.5KHz
Adjacent Channel Power	60dB@12.5KHz
Transmission current	$\leq 1000\text{mA}$

NOTE: All specifications may be modified without prior notice or liability.

Radio Overview



1. NOAA Weather Band Indicator
2. Scan Indicator
3. VOX Indicator
5. CTCSS Indicator
7. Channel Indicator
9. Receive Status Indicator
11. Volume level indicator
13. Antenna



2. Scan Indicator
4. Battery Level Meter
6. DCS Indicator
8. Transmit Status Indicator
10. Keypad Lock Indicator
12. DCS/ CTCSS Privacy Code Numbers
14. Backlit LCD Display

- 15.UP Button
- 17.Weather/VOX
- 19.Speaker
- 21.Belt Clip Lock Tab
- 23.Belt clip
- 25.Power
- 27.Battery release latch
- 29.Flashlight Button

- 16.Menu/Lock Button
- 18.DOWN Button
- 20.Flashlight
- 22.Group
- 24.Accessory Port
- 26.Type-C USB Charging Port
- 28.PTT(Push-To-Talk) Button
- 30.Scan Button

Main Features

- 22 FRS Channels
- 11 NOAA Weather Channels
- Li-Ion 2000mAh Battery Pack
- Channel Monitor
- CTCSS Codes/ DCS Codes)
- Hands-Free Operation(VOX)
- Roger Beep Tone
- Battery Level Meter
- Battery/Power Saver
- 2pin Kenwood Headset Jack

- Output Power: ≤2W(channels 1-7and 15-22)
- NOAA Weather Scan
- Privacy Codes Scan
- Channel Scan
- Keypad Lock
- Type-C USB Charging
- Emergency Strobe Light
- Backlit LCD Display
- Low Battery Audible Alert

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

Installation of Accessories

1.Install the Li-ion Battery

Each radio operates with either a li-ion battery pack or optional 3 AA alkaline batteries. The belt clip should be removed to ease installation or removal of the batteries. To install the batteries:

- (1) Turn the radio off. Remove the belt clip for easier access, then remove the battery cover by pressing down on the top center and sliding it downward from the radio.
- (2) Lift the battery cover latch and remove the cover.
- (3) Remove the Li-ion battery pack from the clear plastic bag (do not disassemble or unwrap the battery pack).
- (4) Insert the Li-ion battery pack. (installing the batteries incorrectly will prevent the unit from functioning properly)
- (5) Close the battery cover and replace the belt clip, ensuring it locks securely into place.



Installing Three AA Ni-MH Batteries (rechargeable)

Warning: Ni-MH batteries are rechargeable batteries and cannot be mixed with alkaline batteries.

- (1) Turn off the radio.
- (2) Lift up the battery cover latch and remove the battery cover.
- (3) Insert three AA Ni-MH batteries, ensuring correct + and – polarity. Incorrect installation may cause the unit to malfunction or become damaged.
- (4) Close the battery cover and replace the belt clip, ensuring it locks securely into place.



Installing Three AA Alkaline Batteries (non-rechargeable)

Warning: Alkaline batteries can only be used in emergency situations and cannot be charged. There is a danger of explosion when charging alkaline batteries.

- (1) Turn the radio off.
- (2) Lift the battery cover latch and remove the battery cover.
- (3) Insert three AA Alkaline batteries, ensuring correct + and – polarity. Incorrect installation may cause the unit to malfunction or become damaged.
- (4) Close the battery cover and replace the belt clip, ensuring it locks securely into place.

2.Installing the Belt Clip

To install, slide the belt clip into the slot on the back of the radio until the latch clicks into place. To remove, press the lock tab down and gently lift the clip upward toward the top of the radio.

3.External Speaker/Microphone Jack

Each radio can be paired with an optional external speaker/microphone or headset, allowing hands-free operation. To use an optional speaker /microphone or headset:

- (1) Open the rubber cap on the side of the radio.
- (2) Insert the plug(s) into the accessory port.

Charging the Battery

1.Charging the Radio

The radio can be charged using the Type-C USB port, which connects to a USB power source. For fastest charging, turn off the radio before charging.

Warning!

To reduce the risk of personal injury or property damage from fire or electrical shock, always use accessories that are specifically designated for this product. When using the Type-C USB port:

- 1. Connect the included AC adapter with Type-C USB cable to the radio's Type-C USB port.
- 2. Plug the other end into an outlet that provides USB charging power (NOT into a USB hub).

Note:

- Use only the supplied batteries and approved accessories.
- Charge time may vary depending on the battery life remaining.
- The batteries must be installed for the unit to operate, even if the unit is also connected to external power.
- If battery power is low, you cannot operate the radio even using external power. Allow the batteries to charge before using.
- If you try to transmit while power is low, the radio will automatically turn off.



Warning:Do not charge alkaline batteries. The radio will not be used for a long time, please take out and keep the battery properly.

2.Using the Radio Battery Level and Low Battery Alert

This radio has a **Battery Level Meter** {  } that shows the battery power level. The greater the number of bars visible, the stronger the battery level. When the battery level is low, the **Battery Shell** {  } icon will flash in the display indicating your batteries should be replaced or recharged if using a rechargeable battery pack.

Warning! To avoid the risk of personal injury or property damage from fire or electrical shock, only use accessories specifically designated for this product.

Basic Operations

In order to get the most out of your new radio, read this reference guide completely before attempting to operate the unit.

1.Turning the Radio On and Adjusting the Volume

- (1) Press and hold [] to turn the radio on.
- (2) Press  or  to increase or decrease the volume level.
- (3) Press and hold [] to turn the radio off.

2.Choosing a Channel

Your radio has 22 channels and privacy codes that you can use to talk to others. To talk with another user, both radios must be set to the same channel and privacy code.

Pres the [MENU] button once, then press the ▲ or ▼ buttons to select one of the 22 FRS channels. Press the [PTT] button or press the [MENU] button again to confirm the selection move to the next setting.

Note: You can check the FRS channel transmission activity status through the icon. On 1-7 and 15-22 channels, it is high-power transmission and {  } icon is displayed. On 8-14 channels, it is low-power transmission and {  } icon is displayed.

3.Talking on Your Radio

To talk to others using the radio:

(1) Press and hold the [PTT] button, then speak in a clear, normal voice about 2-3 inches away from the microphone. While transmitting, the TX icon will appear on the display. To avoid cutting off the beginning of your transmission, pause briefly after pressing the [PTT] button before you start speaking.

(2) Once you have finished speaking, release the [PTT] button. You can then receive incoming calls. During reception, the RX icon will appear on the display.

4.Monitor Mode Feature

Your radio allows you monitor weak signals on the current channel with a single key press. To turn on Monitor mode: Press and hold the [Scan] Button for 5 seconds. The receiver circuit will stay open, allowing both background noise and weak signals to be heard. The **RX←** icon blinks. To turn off Monitor mode: Release the [Scan] Button, the **RX←** icon stops blinking and disappears.

5.Group Call

The group call feature is unique to the FS-T8. It is a special PTT call: press and hold the [GROUP] button to speak, and all FS-T8 units within range will receive your message, regardless of the channel or sub-tone (CTCSS/DCS) they are using.

Note: A group call functions as a collective broadcast channel and cannot be disabled individually.

6.Channel Scanning

Your radio can scan all 22 channels for activity. Press [SCAN] to start or stop scanning. The radio stops on active channels and resumes after 5 seconds of inactivity. During transmission, scanning pauses and resumes 10 seconds after releasing the [PTT] button. Press ▲/▼ to manually restart scanning.

Note: Scanning works only on channels 1 – 22. All transmissions will interrupt scanning.

7.Using the Flashlight

You can use this radio in an emergency. If you press the [Flashlight button], the high-intensity LED flashlight on your radio will turn on.

- Your radio operates normally when the SOS strobe is activated.

(1) Press the [Flashlight button] once to turn on the light continuously. (Always On mode)

(2) Press the [Flashlight button] again to activate the strobe light, which emits the SOS signal. (Strobe SOS mode)

(3) Press the [Flashlight button] once more to turn the light off.

8.Keypad Lock

To prevent accidental changes to the radio settings, press [ /MENU] button for 3 seconds. The {  } icon will appear on the display. All key lock except [PTT] and [CALL] will still be active. Repeat the same procedure to unlock the keypad.

9.Using the Weather Radio/Scan Weather channel

Your radio is equipped with a NOAA Weather Radio function that lets you receive weather reports from designated NOAA stations. It also features a NOAA Weather Scan mode, which scans all 11 NOAA Weather Radio channels. Note: While using the Weather Radio, FRS communications will not be available.

(1) To turn on the NOAA Weather Scan: In Weather Mode, press and hold the [SCAN] button. The radio will switch to Weather Band mode and begin scanning all 11 channels, stopping on any active channel. When the channel becomes inactive for 10 seconds, the radio will resume scanning.

(2) To stop the NOAA Weather Scan and set the channel manually on the Weather band, press the [SCAN] button during NOAA weather scan. The radio will stop scanning and the display will show the current Weather band

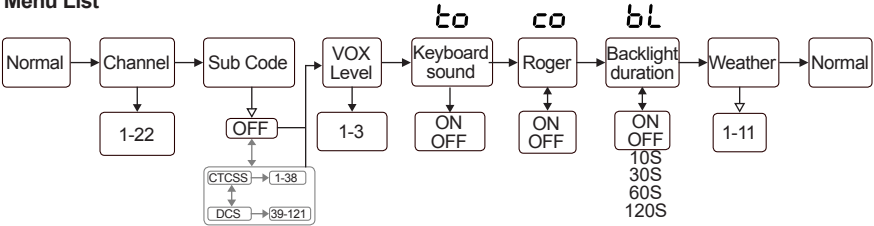
channel setting and the [📶] icon.

(3) In Weather band mode, press the [MENU] , and use ▲ or ▼ button to increase or decrease the number to the desired weather channel, then press [MENU] button to confirm and select one of the 11 NOAA weather band channels.

(4) To exit the Weather Radio mode, Long press [🔊 / VOX] button. The [📶] icon disappears.

Working the MENU System

FRS Menu List



1.Privacy Codes

Your radio incorporates two advanced coded squelch systems to help reduce interference from other users on any given channel. Either system can be used on all channels, but both systems cannot be used on the same channel at the same time.

To successfully communicate using a privacy code, both the sending and receiving radios must be set to the same channel and the same privacy code system (CTCSS or DCS), along with the same privacy code number. Each channel will remember the last privacy code system and number you select.

To select a Privacy Code for the current channel, press the [MENU] button, then use the ▲ or ▼ buttons to select one of the CTCSS or DCS codes.

The Privacy Code icon on the display will indicate whether your Privacy Code is set in CTCSS or DCS mode. To confirm the selection, press the [MENU] button again to move to the next setting.

NOTE: If you select a CTCSS Privacy Code, any pre-selected DCS Privacy Code will be canceled, and vice versa. Selecting a Privacy Code of "OF" will disable the Privacy feature. To communicate between two radios, all radios in your group must be set to the same channel and Privacy Code selections. The Privacy Code can only be set on channels 1 – 22.

2.VOX(Hands-Free Transmission)

Your radio has 3 VOX level settings:(1/2/3).

To set VOX, long press the [🔊/VOX] button until "VOX" appears on the display, then press the [MENU] button until the display shows a "VOX" icon, use the ▲ or ▼ buttons to select sensitivity level 1, 2, or 3, and press the [MENU] button again to confirm. Level “1” provides the highest sensitivity, while “3” is the lowest.

To turn VOX off, long press the [🔊 /VOX] for 6 seconds, until "VOX" disappears from the display.

3.Keypad Silent Operation

Your radio has a keypad silent operation mode. in this mode, all "keypad beeps" and "tones" are disabled. To set the keypad silent operation, press the [MENU] button until the display shows a 📶 icon. Select “on” or "OF" by pressing the ▲ or ▼ buttons then press the [MENU] button to confirm and move to the next setting.

4.Roger Beep(end of transmission) TONE

When the [PTT] button is released, the radio will beep to confirm to other users that your transmission has finished. Press [MENU] until the " 📶 " icon appears next to the "rb", then use the ▲ or ▼ buttons to select "ON" or "OF" and press the [MENU] button to confirm and move to the next feature setting.

Appendix B.- Trouble Shooting Guide

Phenomena	Analysis	Solution
You cannot turn on the radio.	The battery may be installed improperly.	Remove and reattach the battery.
	The battery power may run out.	Recharge or replace the battery.
	The battery may suffer from poor contact caused by dirty or damaged battery contacts.	Clean the battery contacts or replace the battery.
During receiving, the voice is weak or intermittent.	The battery voltage maybe low.	Recharge or replace the battery.
	The volume level may be low.	Increase the volume.
	The antenna maybe loose or maybe installed incorrectly.	Turnoff the radio, and then remove and reattach the antenna.
	The speaker maybe blocked.	Clean the surface of the speaker.
You cannot communicate with other group members.	The frequency or signaling type maybe inconsistent with that of other members.	Verify that your TX/RX frequency and signaling type are correct.
	You may be too far away from other members.	Move towards other members.
You hear unknown voices or noise.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio in analog mode maybe set with no signaling.	Request your dealer to set signaling for the current channel to avoid interference
You are unable to hear anyone because of too much noise and hiss.	You may be too far away from other members.	Move towards other members.
	You may be in an unfavorable position. For example, your communication may be blocked by high buildings or blocked in an underground area.	Move to an open and flat area, restart the radio, and try again.
	It may be the result of external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
The radio keeps transmitting.	VOX may be turned on or the headset is not installed in place.	Turn off the VOX function. Check that the headphones are in place.

NOTE: If the above solutions cannot fix your problems, or you may have some other queries, please contact your dealer for more technical support.

Appendix C.-FRS Frequency Chart (MHz)

CH.No	CH.Freq.	RF Power	CH.No	CH.Freq.	RF Power
1	462.5625	High	12	467.6625	LOW
2	462.5875	High	13	467.6875	LOW
3	462.6125	High	14	467.7125	LOW
4	462.6375	High	15	462.5500	High
5	462.6625	High	16	462.5750	High
6	462.6875	High	17	462.6000	High
7	462.7125	High	18	462.6250	High
8	467.5625	LOW	19	462.6500	High
9	467.5875	LOW	20	462.6750	High
10	467.6125	LOW	21	462.7000	High
11	467.6375	LOW	22	462.7250	High

Appendix D.-NOAA Weather Radio Frequency List (US, CAN, AND INTL)

Channel No.	RX Freq.(MHz)	Channel No.	RX Freq.(MHz)
1	162.5500	7	162.5250
2	162.4000	8	161.6500
3	162.4750	9	161.7750
4	162.4250	10	161.7500
5	162.4500	11	162.000
6	162.5000		

IMPORTANT NOTICE



WARNINGS: Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by PO FUNG COMPANY may cause a violation of the technical regulations of part 95 of the FCC rules, or violation of type acceptance requirements of part 2 of the rules. Your radio is set up to transmit a regulated signal on an assigned frequency, Any adjustment to your radio must be made by qualified technicians.

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.



FCC & RSS WARNINGS:

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

SAR tests are conducted using standard operating positions accepted by the FCC/ISED with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC/ ISED that it does not exceed the exposure limit established by the FCC/ ISED Tests for each product are performed in positions and locations as required by the FCC/ ISED For body worn operation, this device has been tested and meets the FCC/ ISED RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

To maintain compliance with the FCC/ ISED 's RF exposure guidelines, hold the transmitter and antenna at least 1 inch(2.5centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face.

This equipment complies with FCC/SED radiation exposure limits set forth for an uncontrolled environment. In order to comply with the FCC/ ISED RF exposure requirements, the antenna installation must comply with following:

Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.

Your wireless hand-held portable transceiver contains a low power transmitter. This product sends out radio frequency (RF) signals when the Push-to-Talk (PTT) Button is pressed.

The device is authorized to operate at a duty factor not to exceed 50%.

This device complies with ISED licence -exempt RSS standard (s), Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED licables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ISED exposition aux radiations

Cet équipement est conforme avec ISED les limites d'exposition aux rayonnements définies pour un contrôle environnement.

Cet émetteur ne doit pas être co-localisé ou fonctionner en conjonction avec une autre antenne ou émetteur.

Cet équipement doit être installé et utilisé avec un minimum de 2.5cm de distance entre le radiateur et votre corps.

Electromagnetic Interference/Compatibility

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.

2.This device must accept any interference received, including interference that may cause undesired operation.

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

Avis de conformité à la FCC:Ce dispositif a été testé et s'avère conforme à l'article 15 des règlements de la Commission fédérale des communications (FCC), Ce dispositif est soumis aux conditions suivantes: 1) Ce dispositif ne doit pas causer d'interférences nuisibles et; 2) Il doit pouvoir supporter les parasites qu'il reçoit, incluant les parasites pouvant nuire à son fonctionnement.

Tout changement ou modification non approuvé expressément par la partie responsable pourrait annuler le droit à l'utilisateur de faire fonctionner cet équipement.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1.This device may not cause interference.

2.This device must accept any interference received, including interference that may cause undesired operation of the device.

Precautions for Portable Terminals

■ Operating Prohibitions

To protect you against any property loss, bodily injury or even death, be sure to observe the following safety instructions:

- 1.Do not operate the product in a location containing fuels, chemicals, explosive atmospheres and other flammable or explosive materials, in such location, only an approved Ex-protection model is allowed for use, but any attempt to assemble or disassemble it is strictly prohibited.
- 2.Do not operate the product near or in any blasting area.
- 3.Do not operate the product near any medical or electronic equipment that is vulnerable to RF signals.
- 4.Do not hold the product while driving.
- 5.Do not operate the product in any area where use of wireless communication equipment is completely prohibited.

■ Important Tips

To help you make better use of the product, be sure to observe the following instructions:

- 1.Do not use any unauthorized or damaged accessory
- 2.Keep the product at least 2.5 centimeters away from your body during transmission.
- 3.Do not keep the product receiving at high volume for a long time.
- 4.For vehicles with an air bag, do not place the product in the area over the air bag or in the air bag deployment area.
- 5.Keep the product and its accessories out of reach of children and pets.
- 6.Please operate the product within the specified temperature range.
- 7.Continuous transmission for a long time may lead to heat accumulation within the product. In this case, please keep it at a proper location for cooling.
- 8.Handle the product with care.
- 9.Do not disassemble, modify or repair the product and its accessories without authorization.

■ Hazardous Environments

Do not operate the radio in hazardous environments. Explosion or fire may result, Do not operate the radio near unshielded electrical blasting caps.

Under certain conditions, radios can interfere with blasting operations and may cause an explosion. Turn your radio OFF to prevent accidental transmission when in a blasting area or in areas posted: "Turn off two-way radio." Construction crews often use remote control RF devices to set off explosives.

Precautions for Batteries

■ Charging Prohibitions

To protect you against any property loss, bodily injury or even death, be sure to observe the following safety instructions:

- 1.Do not charge or replace your battery in a location containing fuels, chemicals, explosive atmospheres and other flammable or explosive materials.
- 2.Do not charge your battery that is wet. Please dry it with a soft and clean cloth prior to charge.
- 3.Do not charge your battery suffering deformation, leakage and overheat.
- 4.Do not charge your battery with an unauthorized charger.
- 5.Do not charge your battery in a location where strong radiation is present.
- 6.Overcharge shall always be prohibited for it may shorten the life of your battery.

■ Maintenance Instructions

To help your battery work normally or prolong its life, be sure to observe the following instructions:

- 1.Accumulated dust on charging connector may affect normal charging, Please use a clean and dry cloth to wipe it on a regular basis.
- 2.It is recommended to charge the battery under 5℃ ~ 40℃ . Violation of the said limit may cause battery life reduction or even battery leakage.
- 3.To charge a battery attached to the product, turn it off to ensure a full charge.
- 4.Do not remove the battery or unplug the power cord during charging to ensure a smooth charging process.
- 5.Do not dispose of the battery in fire.
- 6.Do not expose the battery to direct sunlight for a long time nor place it close to other heating sources
- 7.Do not squeeze and penetrate the battery, nor remove its housing.

■ Transportation Instructions

- 1.Damaged batteries must not be transported.
 - 2.To avoid short circuit, separate the battery from metal parts or from each other if two or more batteries are transported in one packaging.
 - 3.The radio must be switched off and secured against switch-on, if the battery is attached.
- The content of the shipment must be declared in the shipping documents and by a Battery Shipping Label on the packaging. Contact your hauler for the local regulations and further information.

■ Precautions for Disposal

Once the service life of our products (including but not limited to radios and batteries) has ended, they shall not be disposed as household garbage. Their recycling and disposal shall satisfy your local regulations.