
ATTENTION

The radio is a multi-task FRS transceiver. Combining the latest technology in radio communication along with a sturdy mechanical frame, 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 contact 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.

FCC RF EXPOSURE

WARNING! It is up to the user to properly operate this radio transmitter to insure safe operation. Please adhere to the following:

Do not use the radio with a damaged antenna. If a damaged antenna comes into contact with the skin, a minor burn may result.

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 2.5cm 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 mm. Do not use this device when antenna shows obvious damages.

■ Hand-Held Operation (Held-to-Face)

This device was evaluated for typical hand-held (held-to-face) operations with a 1 inch spacing from the front of the radio. For hand-held operation, the radio should be held 1 inch from the user's face in order to comply with FCC RF exposure requirements.

■ Body-Worn Operation

This device was evaluated for body-worn operations with the supplied belt-clip accessory. (All necessary accessories are

included in the package; any additional or optional accessories are not required for compliance with the guidelines.) Third party accessories (unless approved by the manufacturer) should be avoided as these might not comply with FCC RF exposure guidelines.

FCC COMPLIANCE

■ FCC PART 15 COMPLIANCE

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

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

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°C~40°C. 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.

MAINTENANCE

■ Care and Safety

Your walkie talkies was designed to fulfill any warranty obligations and to enjoy this product for many years.

As for all the electronically devices, we recommend you to follow this few suggestions:

- Do not attempt to open the unit. Non-expert handling of the unit may damage it and/or annul the warranty.

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- When using regulated power supply, take notice of power voltage that must be 5V to avoid damages.
 - High temperatures can shorten the life of electronic devices, and warp or melt certain plastics. Do not store the radio in dusty or dirty areas.
 - Keep the Radio dry. Rainwater or damp will corrode electronic circuits.
 - If it appears that the Radio diffuses peculiar smell or smoke, please shut off its power immediately and take off the charger or battery from the Radio.
 - To clean the radio, use a soft cloth dampened with water. Do not use cleaners or solvents because they can harm the body of the unit and leak inside, causing permanent damage.
 - Use a dry, lint-free cloth to clean the battery contacts.

■ 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.

WARNING! Read this information before using the radio. In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters.

Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of the radio complies with the FCC guidelines and these international standards.

Never allow children to operate the radio without adult supervision and the knowledge of the following guidelines.

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.

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

■Licensing Information

Use our radio in USA is subject to the rules & regulations of FCC. Changes or modifications not expressly approved by our may void the user authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

Note: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

Important: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by qualified technicians.

To be safe and sure:

- Never open your radio's case.
- Never change or replace anything in your radio except the battery.
- Any attempt to change frequencies or output power of the radio invalidates the approval

Package Contents

- 2 Transceiver
- 2 1200mAh Li-ion rechargeable battery pack
- 1 User Manual
- 2 Belt clip
- 2 Desktop charger

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

Main characteristics

- FRS Transceiver (No license required)
- Channel spacing: 12.5 KHz
- Battery save
- Ten (10) levels of Squelch adjustment
- 2pin Kenwood accessory jack
- Ultra long run-time of up to 18 hours (90% Standby, 5% talk, 5% listen)
- Output power: Max 1.3W
- Channel Scan, Scan mode: Time, Carrier, and Search
- Channel monitor
- Flashlight
- Li-Ion 1200mAh battery pack

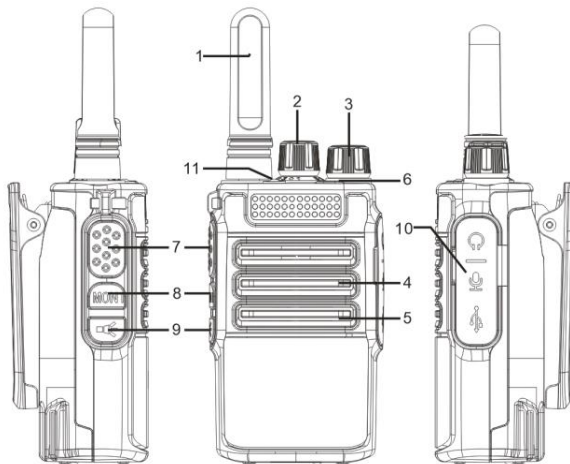
Battery recharge

This two way radio walkie talkies 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 V8 is off and the battery pack is fully discharged.

NOTE: 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.

Main controls and parts of the radio



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1. Antenna
 2. Encoder: rotate clockwise or counter-clockwise to select the desired channel
 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. Speaker
 5. Built-in microphone
 6. Led indicator: RED: TX; GREEN: RX.
 7. PTT: push this button to transmit, release it to receive.
 8. Side key 1: hold down this button to activate the Monitor function.
 9. Side key 2: shortly press this button to turn on/off the flashlight at the top side of the radio.
 10. External Speaker/Mic Jack- allows the connection with external devices such as headsets, microphones.
 11. Flashlight

Operations

Power on/off and volume adjustment

Rotate the Power/Volume knob clockwise to turn the radio on. Rotate the control clockwise /counter-clockwise to adjust the volume level as you prefer. To turn the radio off, rotate the control counter-clockwise till hearing a mechanical “click”.

Transmission

To communicate, all radios in your group must be set to the same channel. Briefly press the Side key 1 to enable the Monitor feature in order to make sure that the frequency is not busy, and then press the PTT button. Release the PTT key to receive. Only one user at a time can talk during radio communications. Therefore, it is important not to transmit when you are receiving a communication and use the transmission mode sparingly to allow other users to talk. Transmission consumes a significant amount of energy and should therefore be used sparingly to prolong the battery life.

Monitor

The Monitor feature is for excluding (opening) the Squelch, in order to listen to signals that are too weak to keep the Squelch permanently opened. Hold down the **Side key 1** to enable such function.

Scan

To enable the Scan function, the scanning will automatically start. Whenever any signal is detected, the scanning will stop on a busy channel. If the PTT is pressed, you will transmit on the latest busy channel; therefore if you don't pick up any signal when you press PTT, the radio will transmit.

Flashlight

With two way radio turned on, shortly press the **Side key 2** to turn on/off the flashlight at the top side of the radio.

Prompt voice switch settings

The encoder is selected to the **10th** channel. Press and hold the **PTT** and **Side Key 1** to turn on the radio, and turn the prompt voice on or off.

Turn on the prompt voice function, and there will be voice prompts when the encoder is turned on or operated. If you turn off the prompt voice function, there is only a "beep" prompt when you turn on or operate the encoder.

Emergency alert function

If necessary, you can per-program the **Side Key 1** into the Alarm function via CPS programming software.

Turn on the radio, short press the **Side Key 1** to turn on the alarm function. Press the **Side Key 1** again to release the emergency alarm status.

CPS programming path: Edit> Function Setting> Side Key> Alarm

Appendix A. – 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.

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 B. – Technical Specifications

General Part

Frequency Range	FRS
Working temperature	-20°C to +50°C
Operation Voltage	DC 3.7 V $\pm$ 10%
Operation Mode	Simplex
Dimensions	162mm×55mm×31mm (with Antenna)
Weight	147g (Battery pack included)
Antenna Impedance	50ohm
Duty cycle	5/5/90%

Transmitter Part

RF Output Power	$\leq$ 1.3W (Max)
FM Modulation	11K0F3E@12.5KHz
Adjacent Channel Power	60dB @ 12.5 KHz
Transmission current	$\leq$ 1000mA

Receiver Part

Receive Sensitivity	0.25 μ V (12dB SINAD)
Adjacent Channel Selectivity	$\geq$ 55dB@12.5KHz
Inter Modulation and Rejection	$\geq$ 55dB@12.5KHz
Conducted Spurious Emission	$\leq$ -57dB@12.5KHz
Rated Audio Power Output	750mW @8 ohms
Rated Audio Distortion	$\leq$ 5%

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

Appendix C. - Channels and Frequencies

CH.No	CH.Freq.	CH.No	CH.Freq.
1	462.5625	8	467.5625
2	462.5875	9	467.5875
3	462.6125	10	467.6125
4	462.6375	11	467.6375
5	462.6625	12	467.6625
6	462.6870	13	467.6870
7	462.7125	14	467.7125

Note : Ch 8-14 must not exceed 0.5W.