Contents

1. Display Icon, LCD and Button Description

Antenna

Set button

Headset/Charger Jack

Power/Menu button

Up button

Down button

Microphone

Talk/Call button

Battery compartment
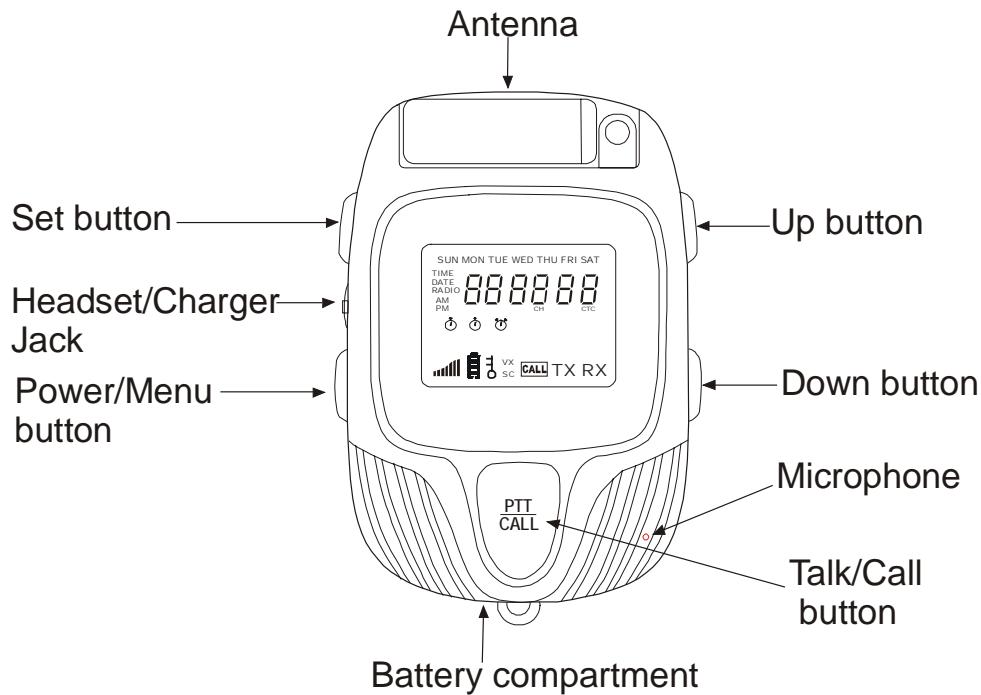
2. *Battery Installation*

Your FRS/GMRS WRISTWATCH is powered by a Lithium-Ion Battery.

To install and replace the Battery:

1. Push and pull out the BATTERY COMPARTMENT COVER LATCH located on the rear side of the unit, and remove the BATTERY COMPARTMENT COVER.
2. Install the Lithium-Ion Battery into the Battery Compartment. Be certain to follow the correct orientation in the compartment. A battery installed incorrectly can prevent the unit from operating.
3. Replace the Battery Compartment Cover and lock the Battery Compartment latch into position.

NOTE: If you install/replace the BATTERY the LCD screen remains blank for more than 3 seconds, press and hold the POWER/MENU button for 2 seconds and the LCD will display in WATCH mode.

3. *Turning the Unit On / Off*

1. Press and hold the POWER/MENU button at least 3 seconds. The unit will beep with a single tone and the LCD screen will display the FRS/GMRS current channel.
2. Press and hold the POWER/MENU button. The unit will beep with single tone and the LCD screen will turn back to WATCH mode.

4. *Adjusting Speaker Volume*

1. Press the UP button to increase the Speaker volume.
2. Press the DOWN button to decrease the Speaker volume.
3. The Speaker volume level is displayed on the lower corner of the LCD screen.
4. Default setting volume is 8.

5. *Receiving a Signal*

The unit is continuously in the STANDBY mode when the unit is ON and not transmitting. When unit receive a signal on the current channel, the RX icon is displayed.

6. **_Transmitting a Signal_**
1. Press and hold the TALK/CALL button to TRANSMIT. The TX icon will display. Hold the unit in a vertical position with the Microphone 2 to 3 inches from the mouth.
2. While holding the TALK/CALL button, speak into the unit in a normal tone of voice.
3. Release the TALK/CALL button when you have finished transmitting.

7. **_Call Tone (Melody Tones)_**
User can use CALL TONES to alert the other user to identify yourself. You can also use CALL TONES to signal the beginning of a transmission.
NOTE: There are 10 Melody Call Tones available you can select.

8. **_FRS/GMRS Menu Function_**
User can use the MENU button to select Channel number, Sub-Channel, Scan Channel, VOX sensitivity, Melody Call Tone, and Power Saver functions.

8.1. Channel Selection Function:
The user can select any from 22 channels available.
1. In FRS/GMRS on mode, press the POWER/MENU button once, the LCD screen will display the current channel number is flashing.
2. Press the UP/DOWN button to move to a higher or lower channel.
3. Press the SET button to confirm the selected channel.

8.2. Sub-Channel Selection Function:
The unit has 38 available sub-channels.
1. In FRS/GMRS on mode, press the POWER/MENU button 2 times, the LCD screen will display the current sub-channel number is flashing.
2. Press the UP/DOWN button to move to a higher or lower sub-channel.
3. Press the SET button to confirm the selected sub-channel.

8.3. Channel Scan Function:
Channel SCAN performs searches for active signals in an endless loop from Channel 1 to 22.
1. In FRS/GMRS on mode, press the SET button, the LCD screen will display the channel number and sub-channel number continuously changes. The unit will only stop until an active signal is detected.
2. When an active signal is detected, Channel SCAN pauses keeping the active signal broadcasted.
3. Press the PTT button to communicate through the active signal channel and Channel SCAN is deactivated.
4. When an active signal is detected, but another channel is desired, press the UP/DOWN button to bypass the current channel and continue to search for another active channel.
5. Press SET button to deactivate Channel SCAN mode.

8.4. VOX Function:
This function allows the user to do the hands free function in Transmitting and Receiving.
1. Press the POWER/MENU button 3 times to enter VOX mode selection.
2. Press the UP/DOWN button to select higher or lower cycle VOX sensitivity.
3. Press SET button to confirm the setting and return to FRS/GMRS Standby mode.

NOTE: On VOX mode, user can speak with their voice through the microphone to activate transmitting mode automatically.

8.5. Melody Call Tone Selection:

This function will let user to select the desired Melody Call Tone.

1. Press the POWER/MENU button 4 times to select Melody Call Tone mode.
2. Press the UP/DOWN button to select the desired Melody Call Tone.
3. Press the SET button to confirm the setting and return to FRS/GMRS Standby mode.

NOTE: Melody Call Tones is up to 10 melody tones.

8.6. Power Saving Function:

The unit has a built in Power Saver feature to make the batteries last longer. This function can help user to save battery life on their unit.

1. Press the POWER/MENU button 5 times to enter Power Saving Feature.
2. Press UP button to switch to Power Saving ON, or press the DOWN button to switch to Power Saving Off function.
3. Press the SCAN button to confirm the setting.

9. FRS/GMRS Menu Function:

User can setting Calendar Date (Year/ Month/ Day), Time Setting, Stop Watch Function, Clock Counter Meter, Alarm Clock Function, Key Lock Function and Hour Mode Function.

9.1. Calendar Date Setting:

This function allows user to adjust Year/Month/Date function.

1. From standby Watch mode, press the POWER/MENU button once to set Calendar Date.
2. Press the SET button, the Year segment will flash.
3. Press the UP/DOWN button to set the year.
4. To continue setting for Month and Date, user will do the same step from no. 2 thru 3.
5. Press the POWER/MENU button to confirm the setting.

9.2. Time Setting:

This function allows user to adjust Hour/Minute/Seconds.

1. From standby Watch Mode, press the POWER/MENU button 2 times to set the Time setting.
2. Press the SET button, the Hour segment will flash.
3. Press the UP/DOWN button to set the hour.
4. To continue setting for Minute and Second, user will do the same step from no. 2 thru 3.
5. Press the POWER/MENU button to confirm the setting.

9.3. Stop Watch Setting:

This additional feature is compatible to sports minded people.

1. From standby Watch Mode, press the POWER/MENU button 3 times to set the Stop watch function.
2. Press the TALK/CALL button to start the Stop Watch function.
3. Press the TALK/CALL button again to stop the Stop Watch function.
4. Press the POWER/MENU button to re-set the timer.

9.4. Clock Timer Setting:

This feature allows user to adjust the Clock Timer setting.

1. From Standby Mode, press the POWER/MENU button 4 times to set the Clock Timer function.
2. Press the SET button, the Minute will flash.
3. Press the UP/DOWN button to set the minute.
4. To continue setting for seconds and milliseconds, user will do the same step from no. 2 thru 3.
5. Press the POWER/MENU button to confirm the setting.

9.5. Alarm Clock Setting:

This feature allows user to set for Alarm Clock function.

1. Press the POWER/MENU button 5 times to set the Alarm Clock function.
2. Press the SET button, the Hour will flash.
3. Press the UP/DOWN button to set the hour.
4. To continue settings for Minute and seconds, user will do the same step from no. 2 thru 3.
5. Press the POWER/MENU button to confirm the setting.
    NOTE: Alarm tone will last up to 30 seconds.

9.6. Key Lock Function:

This feature allows user to lock the key function.

1. Press the POWER/MENU button 6 times to activate the Key lock function.
2. Press the SCAN button to set the key lock function
3. Press the UP button to activate the Key Lock On.
4. Press the DOWN button to activate the Key Lock Off.
5. Press the POWER/MENU button to confirm the setting.
    NOTE: To deactivate the Key Lock function the SET button will press about 2 seconds.

9.7. Clock Hour Mode:

This feature allows user to select the Clock Hour Mode.

1. Press the POWER/MENU button 7 times to select the Clock Hour mode.
2. Press the SET button, to set the Clock hour into 12 hours or 24 hours mode.
3. Press the UP button to select 12 hours mode.
4. Press the DOWN button to select 24 hours mode.
5. Press the POWER/MENU button to confirm the setting.
    NOTE: In 24 hours mode there is no AM or PM will display on LCD screen.

10. Battery Capacity Level / Low Battery Indication:

The Battery Charge level is indicated by the number of squares inside the Battery Icon on the LCD Screen.
When the Battery Charge Level is low, the Battery icon will flash to indicate the battery need to charge.

11. Charging the Battery

Your FRS/GMRS Wrist Watch type comes with an AC ADAPTER CHARGER to charge your Lithium-Ion BATTERY. To Charge the Battery;

1. Lift the HEADSET/CHARGER JACK COVER located on the side of your FRS/GMRS Wrist Watch type.

2. Connect the AC ADAPTER CHARGER into an AC outlet.

3. Insert the AC ADAPTER CHARGER into the HEADSET/CHARGER JACK. During charging, the LOW BATTERY LEVEL icon will flash on the LCD screen, and will only disappear once the BATTERY is fully charged.

NOTE: Charge the Battery for approximately 12 hours before initial use.

12. Specifications

Channels Available	22 Channels
CTCSS Sub-Channel	38 Channels
Output Power (Tx)	0.5W (FCC Maximum)
Battery Type	Lithium-Ion 4.0V, 650mAh Battery
Range	About 2 Miles

CHANNEL TABLE

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
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

SUB-CHANNEL TABLE

CTCSS Channel	Frequency (Hz)	CTCSS Channel	Frequency (Hz)	CTCSS Channel	Frequency (Hz)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
13	103.5	26	162.2	0	No Tone

13. ***Troubleshooting***

PROBLEM	SOLUTION
No Power	> Check the Battery. Ensure that the Battery was installed properly. > The Battery may be weak. > Replace old Battery with new Lithium-Ion 3.7V, 750mAh Battery.
Reception is weak	> Press the UP button to increase Volume. > The receiving signal maybe weak and/or out of range.
Can not change the CTCSS Sub-Channels	> Button Lock mode must be deactivated if the Button Lock icon is displayed in the LCD screen. > Battery pack may be weak.
In VOX Mode, FRS/GMRS transmit all the time	> Move to a clean and quite area. > VOX sensitivity must set to a lower level.
Range is Limited	> The Battery may be weak. > Replace with the new Battery if the Battery Charge Level indicator is low. > The maximum range will vary depending on the terrain and environment. > Open fields provide the maximum range, while steel/concrete structures, heavy foliage, and use in buildings and in vehicles may limit the range significantly.
Sound distortion problems	> If you are transmitting speak in a normal tone of voice, 2 to 3 inches away from the Microphone. > If you are receiving, lower the Volume to comfortable level. > The unit is too close. Unit must be at least 5 feet apart. Increase your distance. > The unit is too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear unobstructed conditions.

14. ***Safety Instructions***

14.1. Damaged Antenna

Do not use any communicator that has a damaged Antenna. If a damaged antenna comes in contact with the skin, a minor burn may result.

14.2. Batteries

As batteries can cause properly damage and/or bodily injury such as burns if conductive material such as jewelry, keys or beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects. Do not replace or change batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

14.3. For Vehicles with Air Bag

Do not place your Communicator in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a communicator is placed in the air bag deployment area and the air bag inflates, the communicator may be propelled with great force and cause serious injury to the occupants of vehicle.

14.4. Potentially Explosive Atmospheres

Turn your communicator when in any area with a potentially explosive atmosphere, unless it is type specifically qualified for such use. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

14.5. Blasting caps and areas

To avoid possible interference with blasting operation, turn your communicator off near electrical blasting caps or in "blasting area" or in areas posted: "Turn off two way radio". Obey all signs and instructions.
Note: Areas with potentially explosives atmospheres are often, but not always clearly marked. They include fueling areas such as below deck on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grains, dust or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

14.6. Electromagnetic Interference/Compatibility

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electronic compatibility.
Turn your unit OFF in any facilities where posted notices instruct you to do so.
Hospitals/health care facilities maybe using equipments that are sensitive to external RF energy.
Turn your unit OFF when on board an aircraft when instructed to do so. Any use of the unit must be accordance with airline regulations or crew instructions.

15. *Care and Safety*

To clean the unit, wipe with a soft cloth dampened with water. Don't use cleaners or solvents on the unit; they can harm the case and leak inside, causing permanent damage. Battery contacts maybe wiped with a dry lint-free cloth. If the unit gets wet, turn it OFF and remove the batteries immediately. Dry the BATTERY COMPARTMENT with a soft cloth to minimize potential water damage. Leave cover off the battery compartment overnight or until completely dry. Do not use until completely dry.

Exposure to Radio Frequency Energy

The design of your FRS/GMRS, which generates radio frequency (RF) electromagnetic energy (EME), complies with the following national and international standards and guidelines.

The Relevant Guidelines and Standards Are:

- FCC Report and Order FCC 96-326 (August, 1996)
- American National Standards Institute (C95-1-1992)
- National Council Radiation Protection and Measurements (NCRP-1996)
- International Commission on Non-Ionizing Radiation Protection (ICNIRP-1998)

To ensure optimal unit performance and to ensure that exposure to RF energy is within the guidelines in the above standards, the following operating procedures should be observed:

For Portable Two-Way Radio FRS/GMRS

- When transmitting with FRS/GMRS, hold the FRS/GMRS in a vertical position with its microphone 1 to 2 inches (2.5 to 5.0 cm) away from your mouth. Keep the antenna at least 2 inches (5 cm) from your head and body.

- If you wear a FRS/GMRS on your body, ensure that the antenna is at least two inches (5 cm) from your body when transmitting.

Electromagnetic Interference/Compatibility

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately Shielded, designed or otherwise configured for electromagnetic compatibility.

- Turn your unit OFF in any facilities where posted notices instruct you to do so. Hospitals and health care facilities may be using equipment that is sensitive to external RF energy.
- Turn your unit OFF when on board an aircraft when instructed to do so. Any use of the unit must Be in accordance with airline regulations or crew instructions.

15. FCC Notice

The FCC requires that you be advised of certain requirements involving the use of this device. 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 residential installation. This device uses and can generate radio frequency energy. If not installed and used in accordance with instructions, it may cause harmful interference to radio communications. However, there is no guarantee that the 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 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 to 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.

FCC INFORMATION: 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. Privacy of communications may not be ensured when using this equipment.

FCC WARNING: This equipment generates or uses radio frequency energy. Changes or modifications not expressly approved in writing may cause harmful interference and void the user's authority to operate this equipment.

SAFETY INFORMATION: your wireless hand-held portable transceiver contains a low power transmitter. When the PTT/CALL button is pushed it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted, Therefore exposure guidelines with safety levels for hand-held wireless devices.

CAUTION: To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and antenna at least 2 inch (5cm) from your face and speak in a normal voice, with the antenna pointed up and away from the face. If you wear the handset on your body while using the headset accessory, use only the supplied belt clip for this product and when transmitting, take it out of the belt to ensure that the antenna is at least 2 inch (5cm) from your body. Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.