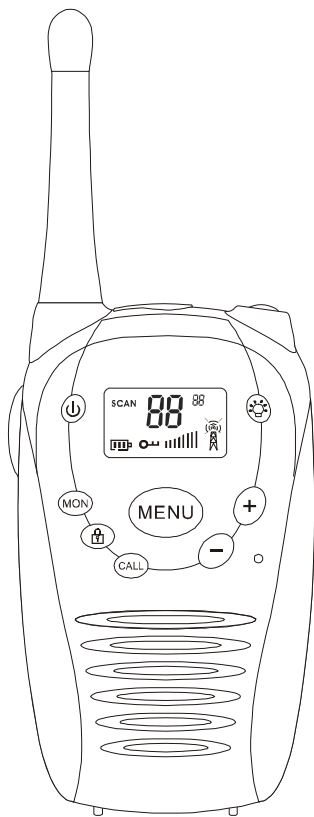


OPERATIONS MANUAL

14 Channel 2-Way Radios Family Radio Service Frequencies



Owners Manual
and Instructions

FCC Warnings

ADJUSTMENT: REPLACEMENT or substitution of transistors, regular diodes or other parts of a unique nature 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.

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.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following condition: this device must accept any interference received, including interference that may cause undesired operation.

FCC Warnings	2
Contents	3
Introduction	4
Controls and displays	4
Component Guide	5
Setting Up Your FRS Radio	6
Battery Installation	6
Battery Meter	7
Low Battery Indicator	7
Operation	9
Turning on your FRS	9
Communication	9
Receiving communications	9
Respond prompt tone	10
Channel selection	10
Frequencies	11
To speak directly to another radio	11
Range	11
Calling (Paging) another radio	12
Special Features	13
Automatic Squelch	13
Monitor	13
Channel Lock	14
Channel Scan	14
Automatic Battery Save	15
External Mic/Spk/Chg Jacks	15
Built-in flashlight.....	15
Customer Support	16
Channel Frequencies and Code Charts	17

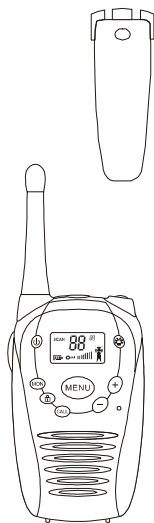
Introduction

Included In Your Package

When you unpack your FRS Radio, you should find the following items enclosed in the package:

- 14-channel FRS unit-2PCS
- Belt-Clip (attached)-2PCS
- This manual

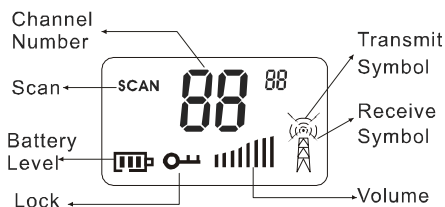
Please check for these Items carefully.



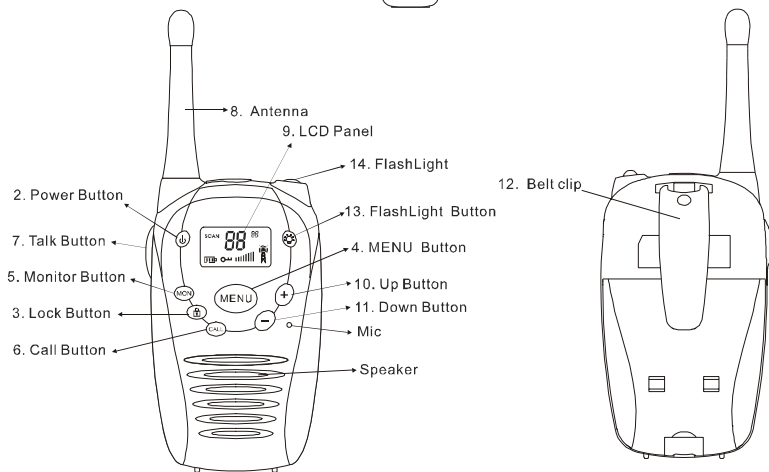
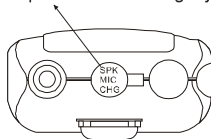
Controls and Displays

1. Speaker/Mic/Charge jack
2. Power Button
3. Lock Button
4. Menu Button
5. Monitor Button
6. Call Button
7. PTT(Talk Button)
8. Antenna
9. LCD Panel
10. Up Button (Change Channel and Volume)
11. Down Button (Change Channel and Volume)
12. Belt clip
13. Flashlight





1. Speaker/Mic/charge jack



Setting Up Your FRS Radio

Battery Installation

To use the radio, you must install 4 AAA size batteries.

Caution: incorrect positioning of the batteries can damage both the batteries and the unit.

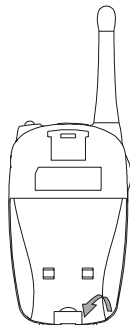
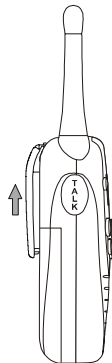
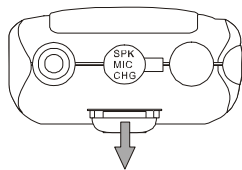
To install the batteries:

- Remove the belt clip by pulling the tab on the top of the belt clip back, and sliding it up and off of the unit.
- Pull the battery door lock tab down to release the battery cover.
- Insert four AAA batteries. Position the batteries according to the polarity markings on the plastic.
- Replace the battery cover. Snap the lock tab and belt clip back into place.

connecting the adaptor

To use the unit with an AC/DC Adaptor rechargeable batteries must be used. Lift the rubber flap on the top of the unit to expose the jack. Insert the round connector (OD 2.5mm) of the 7.5V DC/100mA AC/DC adaptor* into the SPK/MIC/CHG jack on top of the unit.

Note The unit should be turned OFF in order to charge the batteries properly. If the unit is turned ON and placed for charging the charge current is too low for the battery to charge up as the



Setting Up Your FRS Radio

unit is still using power. There is no charge indicator during charging at OFF mode. It takes approximately 7 to 10 hours to fully charge the batteries if they are at their lowest level.

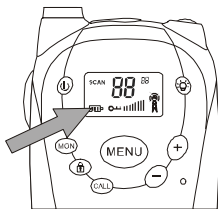


WARNING

DO NOT CHARGE THIS UNIT USING AN AC/DC ADAPTOR* WITH REGULAR AAA ALKALINE BATTERIES INSTALLED. USE ONLY THE AC/DC ADAPTOR WITH AAA RECHARGEABLE BATTERIES

- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable batteries.

* The AC/DC adaptor and rechargeable batteries are sold separately.



Battery Meter

The battery meter is located in the bottom left corner of the LCD display panel on the unit. It looks like a battery with a vertical bar inside. As the power is used up, the bar will disappear.

Low Battery Indicator

When the batteries need to be changed, the battery vertical bar inside will disappear. To ensure uninterrupted communication, replace the

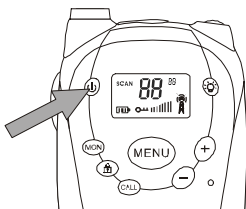
Setting Up Your FRS Radio

batteries as soon as possible.

Note:

Always use alkaline batteries for replacements. If you store your radio for long periods of time, always remove the batteries. Batteries may corrode and leak when left unused over long periods of time, and permanently damage your radio.

**DO NOT PUT BATTERIES INTO FIRE OR
EXPOSE TO HIGH HEAT. THEY MAY
EXPLODE.**



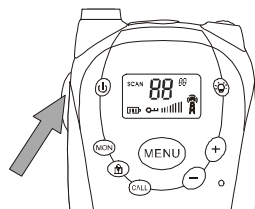
Turning On Your FRS

Push & hold the Power button for **at least 2 seconds** to turn the FRS radio ON or OFF. The unit will beep, the LCD panel will display information about your radio, and the panel will be illuminated by a green light for several seconds.

Communication

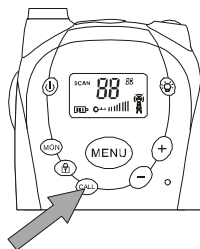
You can communicate two ways with your new FRS radio. There are 14 channels available to you. You can either talk directly to others and hear their response, or you can call or page them with an audible tone.

The FRS radios can only communicate when either the TALK button (for speech), or the CALL button (for paging) is pressed. The unit can only receive when both buttons are fully released.



Receiving Communications

When your FRS unit is turned on and is not being used to transmit voice communication or pages, it is always in the listening mode.



You cannot receive any transmissions when the **TALK** or **CALL** buttons are pressed, even if you aren't saying anything. Pressing these buttons automatically overrides and turns off the receive mode.

When you are using the unit in conversation, you

Operation

must release the **TALK** and/or **CALL** buttons to hear the responses of the other people. Failure to do so will keep your unit in transmission mode, preventing you from hearing other units.

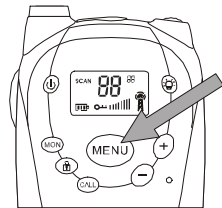
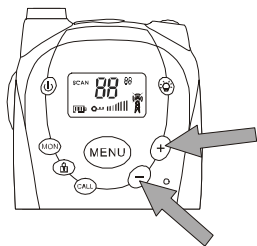
Respond Prompt Tone

When the person talking to you from another radio finishes speaking and releases his **TALK** button, you will hear a tone from your unit. This means that the other radio is now in receive mode, and you can begin your transmission.

Adjusting the Speaker Volume

The ⊕ and ⊖ Buttons control the volume, change channels, codes and program the FRS.

- Press the ⊕ button to increase volume.
- Press the ⊖ button to decrease volume.
- The LCD displays the volume level by the number of bars on the screen.

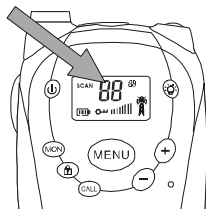


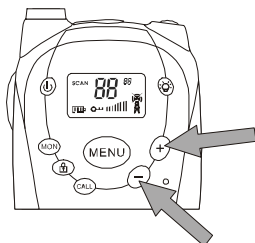
Channel selection

Your FRS operates on one of fourteen preset channels. You can only talk to other radios that are set to the same channel as your unit. The chart on page 17 gives the frequencies on which your radio operates.

To change the channel:

- Press the **MENU** (Channel Set) button. The large 2-digit channel number on the display panel will begin to flash.
- While the number is flashing, press

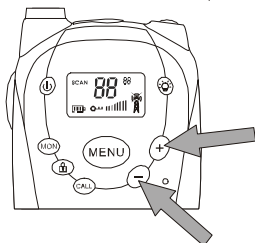




the up or down arrow buttons until you reach the desired channel.

- Press the **MENU** (Channel Set) button again to set the channel.

If you do not press **MENU** the second time, The unit will automatically return to normal operation in ten seconds.



Frequencies

Other FRS radio models may have only 2 channels. If you want to communicate with these units, you must set the channels as follows:

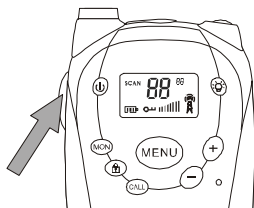
14-ch radios	Frequency	2-ch radios
Chan 8	467.5625 MHz	Chan 1
Chan 12	467.6625 MHz	Chan 2

To speak to Another Radio

- Turn the volume up to an audible level.
- Press and hold the **TALK** button on the left side of the unit. The signal transmitting waves on the LCD display will appear.
- While pressing on the talk button, speak into the microphone with your mouth 2 to 3 inches from the unit.
- When you finish speaking, release the **TALK** button immediately to hear the response.

Range

Your FRS unit has a range of up to 2 miles. This range can be decreased by certain atmospheric



Operation

and environmental conditions at the time of your conversation.

Some conditions that affect range are:

- Buildings
- Dense trees or foliage
- Hilly or mountainous terrain

The best range will be in flat, open terrain, without obstructions. Using the MON (monitor) button to override the automatic squelch will help extend the range to the maximum limits.

Your range is also dependent on the battery condition of the radio, the type of terrain where you are located, and the strength of the signal from the transmitting radio.

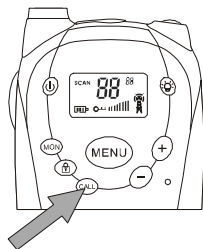
Calling (Paging) Another Radio

To send a page, or CALL

- Make sure both units are on.
- Turn the volume up to an audible level.
- Press and release the **Call** button on the front of your radio.

The other unit will make a 2 second call (page) tone. They can then respond to your call by either:

- Pressing the **TALK** button and speaking into the radio.
- Pressing the **Call** button, which activates a 2 second call (page) tone on your radio.

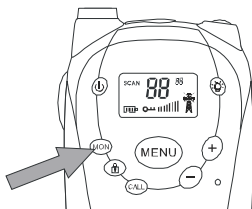


Automatic Squelch

Your FRS is equipped with automatic squelch circuitry, which filters out weak transmissions and unwanted noise. These signals may be picked up as background static, and are usually caused by terrain conditions, or if you have reached the limit of your range.

Monitor

This feature turns off the Automatic Squelch feature, either momentarily or continuously. This allows your unit to receive all signals to its maximum range, but it may pick up static signals as well. You can set the speaker volume by the noise of the static.



Momentary monitor feature activation:

- Press the **MON** button for up to 4 seconds. The monitor signals on the LCD display will appear.
- Release the button to restore the automatic squelch

Continuous monitor feature activation:

- Press the **MON** button for more than 5 seconds until you hear a “beep” sound and release it. The monitor signals on the LCD display will appear.
- To restore automatic squelch, press and release the **MON** button again.

NOTE: You cannot transmit when the

Special Features

MONITOR feature is activated.

Channel Lock

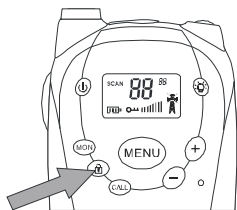
This feature locks the channel adjustment buttons on the front to the unit so that the channel cannot be changed accidentally.

To Lock the channel:

- Press the  button for 5 seconds until you hear a “beep” sound. The lock symbol - shaped like a key - will appear on the LCD display.

To Unlock the channel:

- Press the  button for 5 seconds until you hear a “beep” sound again. The lock symbol in the LCD display will disappear.

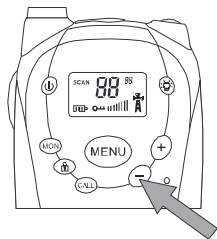
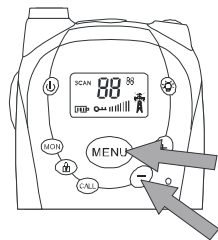


Channel Scan

Your radio can scan across it's 14 channels for any activity. This allows you find other radios without having to change channels.

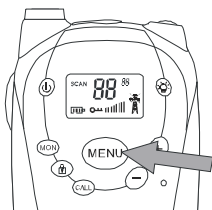
To scan:

- Press and hold the **MENU** button and the  button at the same time for 2 seconds.
- The channel display will change as it scans through the channels.
- When a signal is detected, the unit will pause and listen for 4 seconds.
- Press the **TALK** button to stop the scan and communicate, or the  button to continue.
- To stop the scanning operation, press the **MENU** button again.



Automatic Battery Save

Your FRS unit has special circuitry designed to extend the life of your battery. When the radio is not used for 4 seconds, it will switch itself into a low power mode.



Battery Save does not affect the radio's ability to receive transmissions. When a signal is detected, it automatically returns to full power.

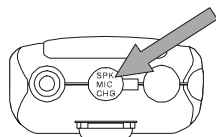
External Mic/Spk/Chg Jacks

Your FRS radio can be used with an optional external microphone and speaker*, usually sold together in a ear bud/mic combination. The jacks are located under the protective rubber cover on the top of the unit.

To attach external speaker/microphone headsets or ear bud/mic*.

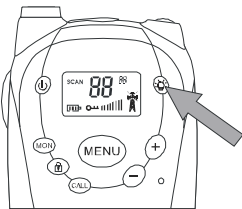
- Lift the rubber flap on the top of the unit to expose the jack.
- Insert the appropriate plug into the correct jack.

*The external microphone and speaker ear bud mic are sold separately.



Built-in flashlight

As an added feature, your FRS has a built-in flashlight that can be used in sending light signals or for your lighting needs.



Customer Support

Thank you for purchasing the FRS 2-way Radio. This is a high-quality communications device that can give you many years of reliable service. Please read these instructions carefully.

Should you encounter any problems with the product or not understand its many features, please refer to this owner's manual.

Channel Frequencies and Code Charts

FRS Channel Frequencies

Channel	Frequency (MHz)	Channel	Frequency (MHz)
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	462.6875	13	467.6875
7	462.7125	14	467.7125

