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14-CH, 38 Quiet Code, 500 mW Water Resistant FRS Radio





Owner's Manual Please read before using this equipment.

☐ Introduction

Family Radio Service is a new licensefree, two-way, short-range voice radio service that lets families and groups keep in touch with each other on specific reserved channels.

Your RadioShack 14-CH 38 Quiet Code 500 mW Water Resistant Sports FRS Radio is a lightweight, palm-sized radio that you can carry almost anywhere and use to talk with another person who has an FRS radio set to the same frequency as your radio. Quiet code is like having a subchannel within a channel, giving you greater communication flexibility.

Your radio has 14 channels and 38 different quiet codes. If someone else is using the channel you selected and you do not want to hear that person, select another channel or use quiet code (see "Using Quiet Codes" on Page 14).

You can talk with other FRS radio users whose radios are tuned to the same channel and quiet code as yours.

© 2001 RadioShack Corporation. All Rights Reserved. RadioShack and RadioShack.com are trademarks used by RadioShack Corporation. Your radio has *auto-squelch*, which means you will not hear anything on a channel unless someone is transmitting nearby on the same channel. You can turn off auto-squelch to hear weaker, distant transmissions (see "Auto-Squelch" on Page 15).

It also has these features:

- · Water and Shock Resistant
- · 2-Digit Channel Display
- · Rubberized Case
- · Call Button
- · Channel Lock
- 20-Hour Battery Life
- Headset Jacks
- · Low Battery Indicator
- · Built-In Charger
- 2-Mile Talking Range

FCC INFORMATION

Important: Do not open your radio to make any internal adjustments. Your radio is set to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the ra-

dio to exceed those limitations. Any adjustments made to your radio must be made by a qualified technician using the proper test equipment. To be safe and sure:

- · Never open your radio's case.
- Never change or replace anything in your radio except the batteries.

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn it off. If the interference goes away, your radio is causing it.

Try to eliminate the interference by:

- moving your radio away from the receiver
- calling your local RadioShack store for help

Using your radio as described in this manual exposes you to RF energy well below the FCC's recommended limits.

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.

☐ Preparation

Note: Your radio's display is protected during shipment by a piece of film. Peel off this film before you use the radio.

INSTALLING BATTERIES

Your radio requires three AAA batteries (not supplied) for power. For the best performance and longest life, we recommend alkaline batteries, or you can use nickel-cadmium (Ni-Cd) or nickel-metal hydride (Ni-MH) rechargeable batteries and charge them in the radio with an optional AC adapter. Both types of batteries are available from your local RadioShack store.

Before using the radio with rechargeable batteries, you must charge the batteries for a minimum of 12–16 hours, using an adapter (not supplied). See "Charging Rechargeable Batteries" on Page 7.

Warning: Dispose of old batteries promptly and properly. Do not burn or bury them.

Cautions:

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
- If you do not plan to use the radio for a month or longer, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.
- 1. Rotate OFF toward OFF until it clicks to turn off the radio, then pull down the latch on the bottom of the radio to remove the battery compartment cover.
- Use a pointed object such as a pen to set AL/NI inside the compartment to AL (for alkaline batteries) or NI (for rechargeable batteries).

Warning: Never set **AL/NI** to **NI** if you use non-rechargeable batteries. Non-rechargeable batteries can get hot or explode if you try to recharge them.

 Install the batteries inside the battery compartment, matching the polarity symbols (+ and -) marked inside the compartment. Then replace the battery compartment cover.

The radio's range decreases as battery power decreases. To ensure maximum range, keep fresh batteries in the radio.

If TX/BATT lights when you are not holding down PTT, replace or recharge the batteries.

Charging Rechargeable Batteries

You can charge rechargeable batteries in the radio using either a 9V, 300 mA AC adapter or a DC cigarette-lighter adapter and a size H Adaptaplug $^{\text{TM}}$ adapter (not supplied). All are available at your local RadioShack store.

It takes between 12 and 16 hours to recharge rechargeable batteries that are fully discharged. It takes about 14 hours to fully charge 550mAH Ni-MH batteries in your radio. For best battery life, do not overcharge.

Warning: Do not charge non-rechargeable batteries in the radio. Non-rechargeable batteries can get hot and explode if you try to recharge them.

Cautions:

You must use a Class 2 power source that supplies 9V DC and delivers 300 mA. Its center tip must be set to positive and its plug must fit the radio's **CHG** jack. Using an adapter that does not meet these specifications could damage the radio or the adapter.

- Always connect the adapter to the radio before you connect it to an external power source (such as an AC outlet or a vehicle cigarette-lighter socket). When you finish, disconnect the adapter from the external power source before you disconnect it from the radio.
- Do not charge rechargeable batteries longer than 12 to 16 hours.

Note: Ni-CD batteries and other batteries of lower capacity will fully charge faster, but provide less operating time.

- Rotate OFF toward OFF until it clicks to turn off the radio, then pull down the latch on the bottom of the radio to remove the battery compartment cover.
- 2. Use a pointed object such as a pen to set AL/NI to NI.
- Install the rechargeable batteries inside the battery compartment, matching the polarity symbols (+ and -) marked inside the compartment. Then replace the battery compartment cover.
- 4. Attach the Adaptaplug adapter to the adapter so the tip reads positive (+).
- Connect the other end of the adapter to a standard AC outlet or, if you are using a DC adapter, attach the other end to a vehicle's cigarette-lighter socket.

Important: The EPA certified RBRC® Battery Recycling Seal on the nickel-cadmium (Ni-Cd) battery indicates RadioShack is vol-



untarily participating in an industry program to collect and recycle these batteries at the end of their useful life, when taken out of service in the United States or Canada. The RBRC program provides a convenient alternative to placing used Ni-Cd batteries into the trash or the municipal waste stream, which may be illegal in your area. Please call 1-800-THE-SHACK (1-800-843-7422) for information on Ni-Cd battery recycling and disposal bans/restrictions in your area. RadioShack's involvement in this program is part of the company's commitment to preserving our environment and conserving our natural resources.

CONNECTING AN OPTIONAL MICROPHONE/SPEAKER

To use the radio privately, connect an optional headset with microphone or a microphone and earphone communication headset (available at your local RadioShack store) to the SPK and MIC jacks.

This connection automatically disconnects the internal speaker and the PTT (push to talk) button.

Or, you can connect a mono earphone (available at your local RadioShack store) into the **SPK** jack and use the **PTT** button as usual.

USING THE BELT CLIP

To use the supplied belt clip, slide it down onto the tab at the back of the radio until it clicks. To remove the clip, pull up on the middle tab of the clip and slide the clip upward.



USING A HAND STRAP

To attach an optional hand strap (not supplied) to the radio, thread the hand strap's small loop through the holes next to PTT. You might need to use a small screwdriver or a straightened paper clip to do this. Then pull the strap's large loop through the small loop.

To attach an optional pager chain (not supplied) to the radio, simply snap the chain's small loop into one of the holes next to PTT.

□ Operation

CONTROLS

OFF — turn away from OFF to turn the radio on and adjust the volume. To turn the radio off, turn — OFF toward OFF until it clicks.

PTT (push to talk) — to talk, hold down for about 1 second, then speak into the microphone. The TX indicator lights. Release PTT when you finish speaking.

CALL — hold down to send a paging tone or quiet code to all radios tuned to the same frequency.

Important: Do not hold down **CALL** for more than 10 seconds. The FCC does not allow you to send a continuous tone for more than 10 seconds at a time on FRS frequencies.

MON (monitor) — hold down to turn off auto-squelch (see "Auto-Squelch" on Page 15). To turn auto-squelch back on, release **MON**.

MODE — hold down then turn on the radio to set the quiet code, press to turn on or off the quiet feature (see "Using Quiet Codes" on Page 14), and hold down MODE until L appears to lock ▲ and ▼ to prevent accidental operation.

Hold down **MODE** until **L** disappears to unlock riangle and riangle .

lacktriangle and lacktriangle — selects the channel number.

DISPLAY AND INDICATORS

1-38 — indicates the selected channel (1-14) or quiet code (1-38).

TX/BATT Indicator — lights when you transmit a message, press **CALL**, or when the batteries are low.

L — appears when you lock ▲ and ▼.

QUIET Indicator — lights when quiet (CTCSS) is set and flashes while you are selecting the quiet (CTCSS) code.

USING QUIET CODES

You can set the radio with a Continuous Tone Coded Squelch System (CTCSS) quiet code and screen out unwanted conversations, even from someone transmitting nearby on the same channel. When a quiet code is set, the radio sends the code every time you press PTT or CALL and the radio only responds to signals that have the same code. Radios you plan to use together must be set to the same code. This radio has these quiet (CTCSS) codes.

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| | (Hz) | | (Hz) |
| 1 | 67.0 | 20 | 131.8 |
| 2 | 71.9 | 21 | 136.5 |
| 3 | 74.4 | 22 | 141.3 |
| 4 | 77.0 | 23 | 146.2 |
| 5 | 79.7 | 24 | 151.4 |
| 6 | 82.5 | 25 | 156.7 |
| 7 | 85.4 | 26 | 162.2 |
| 8 | 88.5 | 27 | 167.9 |
| 9 | 91.5 | 28 | 173.8 |
| 10 | 94.8 | 29 | 179.9 |
| 11 | 97.4 | 30 | 186.2 |
| 12 | 100.0 | 31 | 192.8 |
| 13 | 103.5 | 32 | 203.5 |

| Channel | Frequency (Hz) | Channel | Frequency (Hz) |
|---------|-------------------|---------|-------------------|
| 14 | 107.2 | 33 | 210.7 |
| 15 | 110.9 | 34 | 218.1 |
| 16 | 114.8 | 35 | 225.7 |
| 17 | 118.8 | 36 | 233.6 |
| 18 | 123.0 | 37 | 241.8 |
| 19 | 127.3 | 38 | 250.3 |

To set the radio to quiet and set a quiet code:

- 1. Hold down MODE then rotate

 OFF away from OFF to turn on the radio. The QUIET indicator flashes.
- While the QUIET indicator flashes, repeatedly press ▲ or ▼ to select the quiet code, then press MODE again. The QUIET indicator stays lit and the quiet (CTCSS) code is set.

To turn quiet on or off , press **MODE**. The QUIET indicator turns on or off.

AUTO-SQUELCH

Your radio has auto-squelch, which means you will not hear anything on a channel unless someone is transmitting nearby on the same channel. Or, if you use the quiet feature, you might not hear a transmission on the current frequency.

To turn off auto-squelch (so you can hear weaker, distant transmissions), hold down **MON**. Release **MON** to turn auto-squelch back on.

AUTO POWER SAVE

Automatic power save extends battery life by reducing the power the radio uses until the radio receives a signal or you press a key. When the radio sets itself to automatic power save, the radio's display turns off, then the channel number flashes intermittently.

Because the receiving radio might be using power save, wait about 1 second after pressing PTT to allow the receiving radio to come to full power before you begin speaking.

TALK CONFIRMATION

You can set the radio so a confirmation tone sounds when you release PTT. The tone alerts another person you are talking to that you have finished talking. To turn the tone on or off, hold down PTT while turning on the radio.

TURNING THE KEY TONE ON AND OFF

The radio is preset to sound a beep each time you press a key. To turn the beep on or off, hold down **CALL** then turn on the radio.

RESETTING THE TRANSCEIVER

If the transceiver's display is locked up or the transceiver does not work properly after you turn it on, try to turn it off and turn it on again. If this does not correct the problem, you might need to reset the transceiver.

To reset the transceiver, turn it off then hold down **MON** and turn it on again. I appears and a tone sounds. Release **MON**.

Note: If you turn off and then turn on the transceiver or reset the transceiver after a problem, it resets the channel and CTCSS code to 1.

CARE

Keep the radio dry; if it gets wet, wipe it dry immediately. Use and store the radio only in normal temperature environments. Handle the radio carefully; do not drop it. Keep the radio away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

Modifying or tampering with the radio's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your radio is not performing as it should, take it to your local RadioShack store for assistance.

☐ Specifications

RF Output Power 500 mW

Number of Channels 14

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 |

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|--------------------|---------|--------------------|
| 4 | 462.6375 | 11 | 467.6375 |
| 5 | 462.6625 | 12 | 467.6625 |
| 6 | 462.6875 | 13 | 467.6875 |
| 7 | 462.7125 | 14 | 467.7125 |

Temperature Range -4° to 122°F $(-20^{\circ}$ to 50°C)

Minimum Battery Life (alkaline):

Battery Type 3 AAA Alkaline or Rechargeable

External Jacks SPK, MIC, CHG

Microphone Impedance 1 kOhm

Weight (with batteries) 0.275 lbs (125 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RADIOShack MAKES NO EX-PRESS WARRANTIES AND ANY IMPLIED WARRANTIES, IN-CLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CON-TAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT O ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, IN-CLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAM-

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper normal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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We Service What We Sell

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