RadioShack.

21-1936

18-mile GMRS/FRS 2-way radios with charger

*Thank you for purchasing your 2-way radios from **RadioShack**. You can talk to others in the next room, next door, and around the neighborhood. Your radios transmit and receive General Mobile Radio Service (GMRS) and Family Radio Service (FRS) frequencies.*

display with backlight
Lights up for 10 seconds when you press any key (except **PTT** and **BOOST)**.

PTT (Push to Talk)
Hold down to talk. Release to receive.

BOOST
Press for maximum transmission for one minute when you're using a GMRS channel. Requires Ni-MH batteries. Does not work when a headset is used.

WX/ALERT
- Press to listen to a weather channel.
- Press and hold to set the radio to the weather alert mode.

D-CALL
Press to send a short call tone to a person, a group, or all radios.

MENU/GRP
Accesses advanced features and group mode.

MIC
To transmit, hold down **PTT** and speak into the microphone.

on/off/volume
Rotate to turn on/off or to adjust volume.

△/▽
After pressing **CH/TONE/SCN**, press to select a channel.

headset jack
Connect a headset (not supplied).

CH/TONE/SCN
- Press before selecting a channel.
- Press before selecting a quiet code.
- Hold down to scan all channels. The radio pauses on active channels until activity clears. Press **PTT** to transmit on a paused channel. Press **D-CALL**, **PTT**, **BOOST**, **WX/ALERT** or **MENU/GRP**, or hold **CH/TONE/SCN** for two seconds to cancel the scan.

MON
Press briefly to monitor for weak signals on the current channel or quiet code. Hold for 2 seconds to continuously monitor. Press again to stop monitor.

DC jack
Connect a DC apapter (not supplied) for charging.

Please read this user's guide before installing, setting up, and using your new product. www.radioshack.com

what's included

GMRS/FRS Radios (2)

User's Guide

Battery Packs (2)

Belt Clips (2)

Charging Cradle

AC Adapter

©2006 *RadioShack* Corporation.
All rights reserved. *RadioShack* and *RadioShack.com* are trademarks used by *RadioShack* Corporation.

UTZZ01022ZZ(0)
21-1936
05A06
Printed in China

getting started

installing batteries

To install the battery pack or AAA batteries (not included), remove the battery compartment cover, install the battery pack according to the label and replace the cover.

NOTE
- *Dispose of old batteries promptly and properly. Do not burn or bury them.*
- *Use only fresh batteries of the required size and recommended type. Do not mix batteries of different sizes or chemistries.*
- *If you do not plan to use your radio for a month or more, remove the batteries. Batteries can leak chemicals that can damage electronic parts.*

charging your radios

Battery packs take about 16 hours to fully charge. When the battery is low, BATT appears and ▭ flashes. Recharge the battery pack. You can charge in one of two ways: using the cradle or your car adapter (not included).

NOTES
- *Do not recharge alkaline batteries.*
- *To prolong the life of your rechargeable batteries, always fully discharge your battery pack before recharging.*
- *You cannot recharge AAA type rechargeable batteries.*

charging using the cradle

1. Plug the supplied AC adapter into the cradle and a standard wall outlet.
2. Turn off the radio and place in the charger.
3. Charge the battery pack for 16 hours. (The indicator on the cradle lights while the radio is on the cradle even after the charging finishes.) Then remove the radio from the cradle after charging.

using vehicle battery power

You can charge the radio using a 9V, 210 mA DC adapter and a size H Adaptaplug™ adapter (neither supplied). Both are available at ***RadioShack***.

CAUTION *You must use a power adapter that supplies 9V DC and delivers at least 210 mA. Its center tip must be set to positive and its plug must fit the radio's DC 9V jack. Using an adapter that does not meet these specifications could damage the radio or the adapter.*

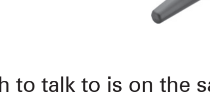
1. Turn off the radio.
2. Insert the Adaptaplug into the adapter's cord with center tips set to positive +. Then, insert the Adaptaplug into the radio's 9V jack and plug the other end of the adapter into your vehicle's power adapter socket.
3. Charge the battery pack for 16 hours until the display becomes blank.

automatic power save feature

After three seconds of inactivity, your radio switches to Power Save mode. The radio can still receive transmissions in this mode.

attaching belt clips

Attach each belt clip by sliding the belt clip down. To remove, lift the tab and slide the belt clip upward.



making a call

1. Turn on the radio.
2. Verify the person you wish to talk to is on the same channel.
3. Press PTT (push to talk) to talk, then release to listen.

muting keystroke tones

To mute the keystroke tones, press and hold **D-CALL** while turning on the radio. To reactivate the keystroke tones, turn the radio off. Then turn it back on while holding down **D-CALL**.

activating roger beep

A roger beep is sent to notify the end of a transmission. To activate the roger beep, press and hold △ while turning on the radio. To deactivate the roger beep, turn the radio off. Then turn it back on while holding △. You can hear a sent roger beep when the keystroke tone feature is on.

advanced features

To access advanced features, repeatedly press **MENU/GRP** to scroll through the menu.

Scramble	VOX Level	Call Tone	Silent Alert Mode	Key Lock
ON-OFF	OFF,1-5	1-10	ON-OFF	ON-OFF

To exit, press **PTT**, **BOOST**, **MON**, **D-CALL**, **WX/ALERT**, or **CH/TONE/SCN** or wait 10 seconds for the radio to automatically exit. Or, press **MENU/GRP** at the key lock setting.

scramble

You can use scramble mode if you want to make a private conversation. This works by garbling your transmission to unwanted listener. Be sure that your party also sets their radio to the scramble mode to listen in. To scramble your conversation:

1. Repeatedly press **MENU/GRP** until **SCRM** appears.
2. Use △ or ▽ to select on or off.

voice operated transmission (VOX)

Voice Operated Transmission (VOX) mode enables handsfree operation. To use VOX mode:

1. Insert a headset microphone into the headset jack.
2. Repeatedly press **MENU/GRP** until **VOX** appears. Selecting **oF** (OFF) disables VOX.
3. Repeatedly press △ or ▽ to select a VOX sensitivity level (1 - most sensitive to 5 - least sensitive) to suppress background noise. This helps prevent unintended transmission.

call tones

To change call tones:

1. Repeatedly press **MENU/GRP** until **CALL** appears.
2. Repeatedly press △ or ▽ to select a call tone (1 - 10).
3. To transmit the selected call tone, press **D-CALL**.
4. To cancel the tone, press **PTT** or **BOOST**.

silent alert mode

When silent alert mode is on, all incoming calls are muted, the backlight blinks, and **SLNT** and the call icon display to alert you of an incoming call. If you do not respond to the call within 5 seconds, the backlight turns off, and the miss call icon will continuously blink. The radio also vibrates to remind you that you missed a call every minute after the call for 3 minutes. Silent alert mode is disabled for 15 seconds when you transmit or press any other key, or after you receive the last signal.

To enter silent alert mode:

1. Repeatedly press **MENU/GRP** until **SLNT** appears.
2. Repeatedly press △ or ▽ to select on or off.
3. To confirm the setting and exit the menu mode, press **MENU/GRP** twice.

NOTES
- *To prevent unwanted silent alerts, be sure to use a quiet code whenever you use the silent alert mode feature.*
- *Even during silent alert mode, you can hear other users when you turn on the channel scan and an active channel is detected.*

key lock

To lock the radio keys:

1. Repeatedly press **MENU** until **LOCK** appears.
2. Press △ or ▽ to select **oF** (OFF) or **on** (ON).
3. To confirm the setting, press **MENU/GRP**. If you do not confirm your selection, the keys will not lock.
4. To unlock the keypad, turn the radio off and then back on.

group mode

In order to use group mode Direct Call and Auto Channel Change, you need to initialize the following settings on your radio:

- Set the radio to Group Mode
- Set a Group Number
- Set a Ring Tone
- Set a Unit Number
- Set a Nickname

setting the radio to group mode

To set the radio to group mode, press and hold **MENU/GRP** for 2 seconds. The radio displays **oF GRUP.**

Press △ to display **on GRUP**, then press **MENU/GRP** to continue to the next section.

NOTES *In group mode, you cannot receive transmissions from other radios unless they are also set to the same channel and group number.*

setting a group number

Set a group number from 0-142, so the group member can select the same group number to communicate with each other.

1. Press and hold **MENU/GRP** for 2 seconds. The radio displays **on GRUP.**
2. Press **MENU/GRP.** The radio displays **Gnnn** (where n is a number). Press △ or ▽ to select a group number.
3. Press **PTT** or **BOOST** to exit, or continue to the next section.

setting a ring tone

You can select a tone for a direct call.

1. Press and hold **MENU/GRP** for 2 seconds. Then press **MENU/GRP** two times until the radio displays **n RING**.
2. Press △ or ▽ to select the desired ring tones.
3. Press **PTT** or **BOOST** to exit, or continue to the next section.

setting a unit number

Each radio in your group needs to be set to a different number, from 1-16.

1. Press and hold **MENU/GRP** for 2 seconds, then press **MENU/GRP** three times until the radio displays **n _ _ _ _** (or your current nickname).
2. Press △ or ▽ repeatedly to select the desired unit number.
3. Press **MENU/GRP** to set the unit number and continue to the next section.

setting your nickname

Your nickname appears on other group member's displays when you make a group call or direct call. When no nickname is set, the unit number appears.

1. Press and hold **MENU/GRP** for 2 seconds. Then press **MENU/GRP** four times until the radio displays **n _ _ _ _** (or your current nickname) with the first place in the nickname flashing.
2. Repeatedly press △ or ▽ to select a letter. Then press **CH/TONE/SCN** to enter it and go to the next letter. Repeat step 2 until you have entered your nickname.
3. Press **MENU/GRP** to confirm the group settings menu.

using group mode

You can make direct calls to one of your group members privately and quickly change everyone in your group to another channel from a single radio.

1. Set up the group mode instructions above on every radio in your group.
2. To record the unit number and nickname of each, send a call to "ALL" from each radio one time (see "sending a direct call").

sending a direct call

You can call everyone in your group at once:

1. Press **D-CALL** in group mode. The radio flashes **ALL**.
2. Press **D-CALL** again. Everyone in your group receives a "chirp" for about 3 seconds. When the chirp ends, begin your conversation.

NOTES *If the unit number on your radio is the same as that of the received signal, **FAIL** appears. In this case, change the unit number on your radio.*

Or

Call one group member without the other members knowing:

1. To call a group member privately, press **D-CALL** in group mode. Then, use △ or ▽ to select the person and press **D-CALL** again. Your radio sounds a tone for 3 seconds and the selected person's radio sounds a tone for 10 seconds. If the person does not respond, your radio returns to group mode after 15 seconds. You can start a conversation by pressing **PTT** before the tone ends on your radio.
2. Your conversation will remain private until 15 seconds after your last transmission. After that, your radio automatically returns to group mode.

automatically changing channels

If the current group channel has RF interference, you can coordinate a group channel change.

- Press **CH/TONE/SCN** twice, the current channel and **CHCX** appears. Use △ or ▽ to select your target channel. Check whether the selected channel is vacant, then press **D-CALL**. Your radio chirps for about 10 seconds while it sends out the channel change signal. As each radio receives the channel change signal, it chirps once; then it changes to the new channel.

To ensure all radios make it to the new channel, we recommend you:

- Operate the radio in an open environment to allow the radio the best range.
- Optimize range during the channel change signal by raising the radio over your head for extra height.
- Do a "roll call" on the new channel to make sure no radio was left behind. If you missed someone, return to the previous channel and issue the signal again.

channels and quiet codes

Your radio has 22 channels and 142 quiet codes. To talk to others, you must be on the same channel and quiet code if it is activated.

NOTES *To set a quiet code, turn off group mode.*

To select a channel and quiet code:

1. Press **CH/TONE/SCN**, and then repeatedly press △ or ▽ to select a channel (1-22).
2. Press **CH/TONE/SCN**. The quiet code number flashes.
3. Repeatedly press △ or ▽ to select a quiet code (**oFF** or 1 - 142).
4. Press **CH/TONE/SCN** again.

NOTES
- *Quiet codes limit authorized users and reduce interference.*
- *Code **oFF** indicates that you have no quiet code selected. Your radio can receive a signal regardless of other radio settings.*

channel frequency chart

Ch.	Cross Ref.	Ch.	Cross Ref.
1	462.5625 FRS & GMRS	12	467.6625 FRS
2	462.5875 FRS & GMRS	13	467.6875 FRS
3	462.6125 FRS & GMRS	14	467.7125 FRS
4	462.6375 FRS & GMRS	15	462.5500 GMRS
5	462.6625 FRS & GMRS	16	462.5750 GMRS
6	462.6875 FRS & GMRS	17	462.6000 GMRS
7	462.7125 FRS & GMRS	18	462.6250 GMRS
8	467.5625 FRS	19	462.6500 GMRS
9	467.5875 FRS	20	462.6750 GMRS
10	467.6125 FRS	21	462.7000 GMRS
11	467.6375 FRS	22	462.7250 GMRS

NOTES
- *Use FRS (**LO**) channels 8 - 14, with a range of up to 5 miles, for longer battery life. Use GMRS (**HI**) channels 1 - 7 and 15 - 22, with a range of up to 18 miles, for more power.*
- *You can boost the typical range of GMRS channels only when operating on a Ni-MH battery pack. When you press **BOOST** while using alkaline batteries, **TXHI** appears instead of **BOOS** and the range is not boosted.*

using the weather radio

Your radio can receive weather broadcasts from the NOAA National Weather Service. There are 7 common NOAA channel frequencies in the US and Canada:

NOAA weather radio frequency list

Channel 1	162.400 MHz
Channel 2	162.425 MHz
Channel 3	162.450 MHz
Channel 4	162.475 MHz
Channel 5	162.500 MHz
Channel 6	162.525 MHz
Channel 7	162.550 MHz

1. To listen to a weather channel, press **WX/ALERT. WX** appears.
2. Press **CH/TONE/SCN**, and then repeatedly press △ or ▽ to select the desired weather channel. To change the channel continuously, press and hold △ or ▽ for more than 1 second.
3. To exit the weather channel mode, press **WX/ALERT. WX** disappears.

using the weather alert

In weather alert mode, the radio operates normally but also monitors the selected weather channel for alerts when it is not transmitting or in the menu mode. Your radio sounds an alert for serious weather conditions when it receives a weather alert.

1. Select your local weather channel.
2. Press and hold **WX/ALERT**; **alert** appears and the sound is muted.
3. Press **WX/ALERT** to change the mode from weather to GMRS/FRS. You can use the radio as usual.
4. When the radio receives a warning signal, an alert tone sounds for 5 seconds. **alert** and the channel indicator blink. Press any key to turn off the alert tone before it automatically stops.
5. To exit the weather alert mode and listen to the weather channel, press **WX/ALERT**.

NOTES *To turn off the weather alert mode before a warning signal is detected, press and hold **WX/ALERT**. **alert** disappears.*

product specifications

Channels .... 15 GMRS / 7 FRS / 7 Weather
Quiet Codes .... 38 Sub-Audible Tones, 104 DCS Codes
Operating Frequency
GMRS/FRS .... UHF 462.5500 - 467.7125 MHz
WX .... VHF 162.4000 - 162.5500 MHz
Range
Channels 8 -14 .... Up to 5 miles
Channels 1 - 7, 15 - 22 .... Up to 10 miles (or up to 18 miles with BOOST)
Power Source ....Ni-MH battery pack (supplied) or 4 AAA Alkaline Batteries (optional, not supplied)
Battery Life (5/5/90 duty cycle) .... About 12 hours (with Ni-MH Battery Pack)

Specifications are typical; individual units may vary. Specifications are subject to change and improvement without notice. Actual product may vary from the images in this document.

RF emissions information

WARNING! The Federal Communications Commission has adopted a safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. It is up to the user to properly operate this radio transmitter to insure safe operation. Please adhere to the following: Never allow children to operate the radio without adult supervision and the knowledge of these guidelines. Avoid touching the antenna when transmitting. Do not use the radio with a damaged antenna. Please contact your local ***RadioShack*** store for a suitable replacement. This device was tested for typical body-worn operations. Use only the supplied belt-clip to maintain compliance with FCC RF exposure requirements. For hand-held operation, the radio should be held 1 inch from the user's face. Use only the supplied accessories to comply with FCC RF exposure requirements. For more information about RF exposure, please visit the FCC web site at www.fcc.gov.

Changes or modifications not expressly approved by ***RadioShack*** may cause interference and void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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.

caring for your radios

- Keep your radios dry; if they get wet, wipe them dry immediately.
- Handle your radios carefully; do not drop them.
- Wipe your radios with a damp cloth occasionally to keep them looking new.

GMRS license

This radio operates on the General Mobile Radio Service (GMRS) frequencies when using Channels 1—7 and channels 15—22. You must have a GMRS license issued by the Federal Communications Commission to legally use these channels. For licensing information and application forms, visit the FCC online at: www.fcc.gov/wtb/uls or call the FCC hotline at 1-800-418-3676. If you have any questions, you can contact the FCC direct at 1-888-225-5322.

No license is required for operation on channels 8-14 or operation on any channel in Canada.

limited one-year warranty

This product is warranted by ***RadioShack*** against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from ***RadioShack*** company-owned stores and authorized ***RadioShack*** franchisees and dealers. For complete warranty details and exclusions, check with your local ***RadioShack*** store.

RadioShack Customer Relations
300 RadioShack Circle
Fort Worth, TX 76102

04/04