

APPENDIX 5
USERS MANUAL

FIVE (5) PAGE USER INSTRUCTIONS FOLLOW THIS SHEET

OWNER'S MANUAL

Attachment 10

FRS RADIO

21-1825

INTRODUCTION

Your RadioShack FRS radio is a lightweight, palm-sized radio that you can carry almost anywhere. Use it at shopping malls, amusement parks, or sports events to contact family and friends, or in a neighborhood watch for vital communications.

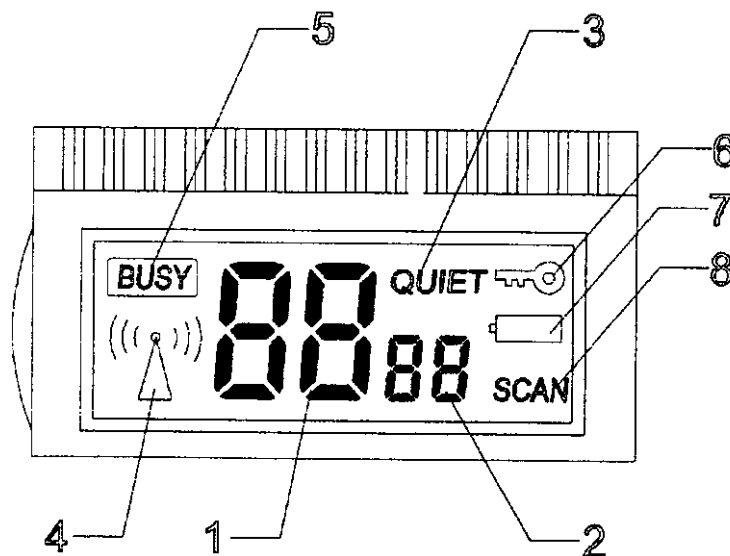
You can start using your FRS radio immediately without any license required! Your radio comes with 14 FRS channels and you can talk with another person who has a FRS radio and is on the same channel and privacy code that you are using.

Your radio also offers a multifunctional liquid crystal display with backlight, auto-squelch which eliminates noise between transmission, power saving, built-in modulation limiter circuit which automatically adjust the radio for a wide variety of voice levels to ensure a clear transmission, automatic shut off timer, memory retention, low battery indication and keypad lock.

USING THE RADIO

A. DISPLAY

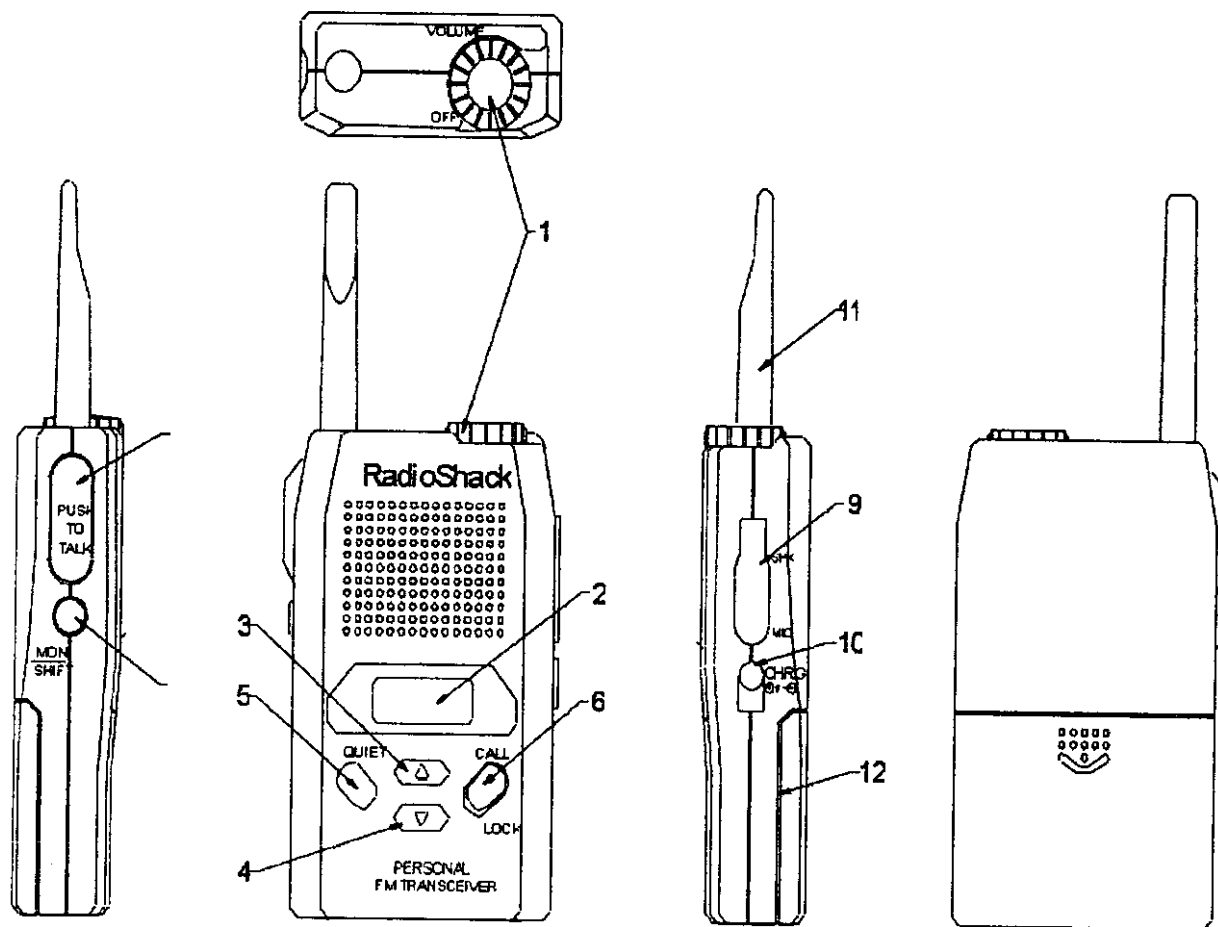
Your radio comes with a multifunctional backlight display. By pressing any button except the CALL and PTT, the backlight will illuminate for 7 seconds. The liquid crystal display has been enlarged to show all of the operating modes.



1. Shows the selected channel number.
2. Shows the selected quiet code number.

3. **"QUIET"**: Displayed when the QUIET privacy mode is enabled.
4. **"((()))"**: Displays when your radio is transmitting or the CALL button is pressed.
5. **"BUSY"**: Displays when a call is being received.
6. **"🔑"**: Displays when the keypad lock has been activated.
7. **"🔋"**: When this symbol is visible, it indicates the batteries are low. Replace the batteries after this indicator is on.
8. **"SCAN"**: Displays when the transceiver scans through all the channels.

B. FUNCTION AND LOCATION OF THE CONTROLS



1. "ON/OFF" Volume Control

In "OFF" position, your transceiver is off. Rotate this control clockwise to turn on your radio and adjusts the volume, until you get a comfortable listening level.

2. LCD Display

Your transceiver has a multifunctional liquid crystal display with backlight.

3. CH Δ button

Press CH Δ to move one channel up. Release when you reach the desired channel.

To Operate the Scan

Press and hold CH Δ or CH ∇ for two seconds allows the unit to begin scanning up or down through the channels. If a valid signal is present, the radio will stop on the active channel and remain stopped for 5 seconds. If no button is pressed, the scan mode will then immediately resume for the next channel after the signal disappears within 5 seconds or after 5 seconds have elapsed. If no signal is found on a channel, the unit will immediately continue to scan when no button is pressed.

During scan, if CH Δ or CH ∇ is pressed, the unit will exit scan mode and stop at the current displayed channel.

In both cases, pressing PTT, CALL, and MON buttons will cause the scan to turn off and stop at the current displayed channel. Press QUIET button during scan to stop scan and return to the original channel.

4. CH ∇ / Automatic Shut Off Button

Press CH ∇ to move one channel down. Release when you reach the desired channel.

The timer automatically turns off the unit if it is idle for 2 hours. Hold down CH ∇ while turning on the radio to enable or disable the timer. ON or OF (off) appears briefly.

Then, if the radio is idle for 2 hours, OF appears steadily. Press any button to operate the radio again. OF disappears and the last selected channel appears.


5. QUIET Button

Press QUIET button to enable or disable the QUIET privacy mode operation.

To determine QUIET privacy code setting, press and hold QUIET button for 2 seconds until QUIET icon is displayed and the quiet code indicator flashes. Press CH Δ or CH ∇ to select the desired code between 01 and 38. Press QUIET button once to confirm and exit the setting mode and your radio is now in the privacy mode operation.


Note: It is recommended to select the middle range of the QUIET privacy codes. If you have selected the front and end QUIET privacy codes, please wait 1 to 2 seconds to initiate QUIET, i.e. Press and hold Push-To-Talk button to transmit, wait 1 to 2 seconds, and then speak in a normal voice.

6. CALL Button

You can cause a ringer sound on all radios tuned to the same FRS channel and/or the privacy code as your radio. To send a page, press and hold down the CALL button. At this time, the speaker rings a bell, and the  icon is displayed and the outer (()) icon flashes.

You can also lock your radio setting to avoid accidental pressing of keys by activating the keypad lock. Press and hold MON button, then press CALL button to activate or deactivate the keypad lock.

7. Push-To-Talk button

To talk, hold down **Push-To-Talk**. Speak into the microphone in a normal tone of voice when the  icon is displayed. When you finish speaking, release **Push-To-Talk** button.

8. MON Button

Press this button to open the automatic squelch and allow background noise to be heard. Release **MON** button to turn the auto-squelch back on.

9. External Microphone/Speaker Jack

Connect an optional speaker/microphone or earphone in this jack.

10. Charging Jack

You can recharge Ni-Cd batteries using an optional battery charger (not supplied). Plug the charger barrel plug into the **CHRG** jack on the side of the unit, then connect the charger to a standard AC outlet.

11. Antenna

Provides excellent reception.

12. Battery Compartment

Press and push back the battery door to release.

Charge On/Off Switch (inside the battery compartment)

When you use Ni-Cd batteries or begin to recharge rechargeable batteries, the switch on the battery compartment should be set to the position of 'ON'. Open the battery door, and you will find this switch as shown as following:

CHARGE ON  **OFF**

Warning: Do not put the switch to the position of 'ON' when alkaline batteries are used. It may cause the radio to burst and cause personal injury when you recharge the batteries.

C. OPERATION

1. Insert three 'AAA' alkaline or ni-cad batteries into the battery compartment, noting polarity. Ni-cad batteries must be charged for a minimum of 10 hours before initial use. (Alkaline batteries are not rechargeable. **Do not connect to external power or charger when using alkaline batteries**).
2. To set the privacy code or time out timer, check the function instructions.
3. Rotate the **ON/OFF** volume control clockwise to turn the unit on. Press the "**MON**" button and adjust the volume for a normal listening level.
4. Select the desired channel and/or **QUIET** privacy code.
5. Press **Push-To-Talk** button to transmit or **CALL** button to cause a page.

6. To receive, simply release **Push-To-Talk** button.

Note: You can only communicate with another radio that is using the same channel and/or the same **QUIET** privacy code as your radio.

TECHNICAL SPECIFICATIONS

Frequency Range.....462-467 MHz
 Channels.....14
 Power supply.....3 AAA Alkaline
 Sensitivity at 12dB Sinad.....0.5μV
 Adjacent Channel Rejection.....45dB
 Audio Distortion7%
 RF Output Power..... 300mW ERP@ 4.5VDC
 Harmonic Emissions.....Less than 48dB
 Dimensions(HWD).....85x 52x 20(23)cm
 Weight (without batteries).....75g

CHANNEL FREQUENCIES

Frequency: MHz

01=462.5625	05=462.6625	09=467.5875	13=467.6875
02=462.5875	06=462.6875	10=467.6125	14=467.7125
03=462.6125	07=462.7125	11=467.6375	
04=462.6375	08=467.5625	12=467.6625	

QUIET PRIVACY CODES

Frequency: Hz

01=67.0	11=97.4	21=136.5	31=192.8
02=71.9	12=100.0	22=141.3	32=203.5
03=74.4	13=103.5	23=146.2	33=210.7
04=77.0	14=107.2	24=151.4	34=218.1
05=79.7	15=110.9	25=156.7	35=225.7
06=82.5	16=114.8	26=162.2	36=233.6
07=85.4	17=118.8	27=167.9	37=241.8
08=88.5	18=123.0	28=173.8	38=250.3
09=91.5	19=127.3	29=179.9	
10=94.8	20=131.8	30=186.2	