

# OWNER'S MANUAL

## TP-318 (US Version)

September 8, 2000

### INTRODUCTION

Your FRS radio is a lightweight 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.

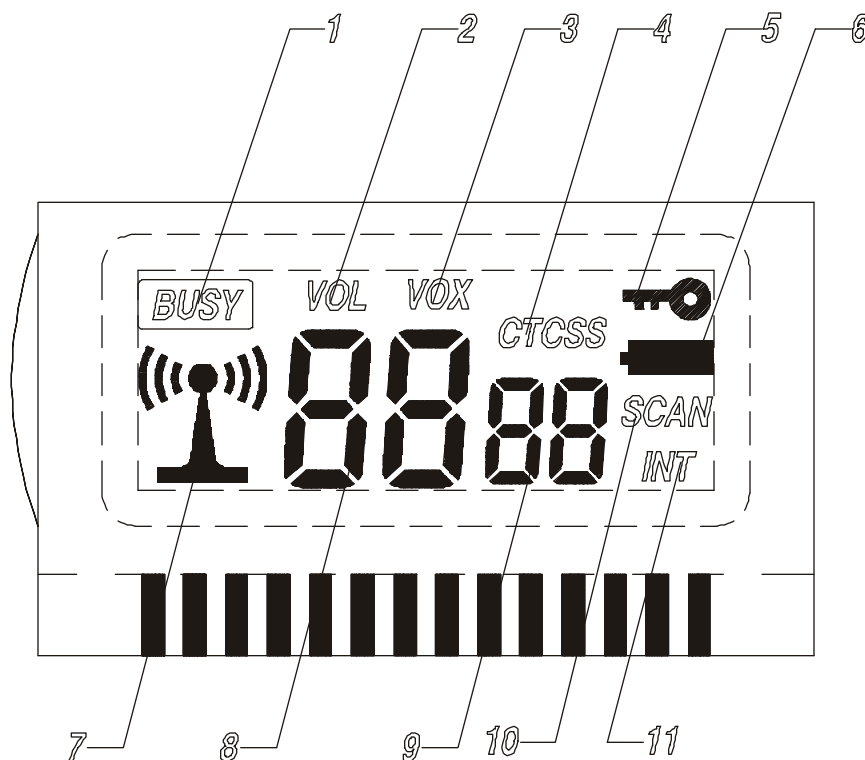
You can start using your FRS radio immediately without any license required! Your radio comes with 14 channels and you can talk with another person who has a FRS radio and is on the same channel and privacy code that you are using.

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

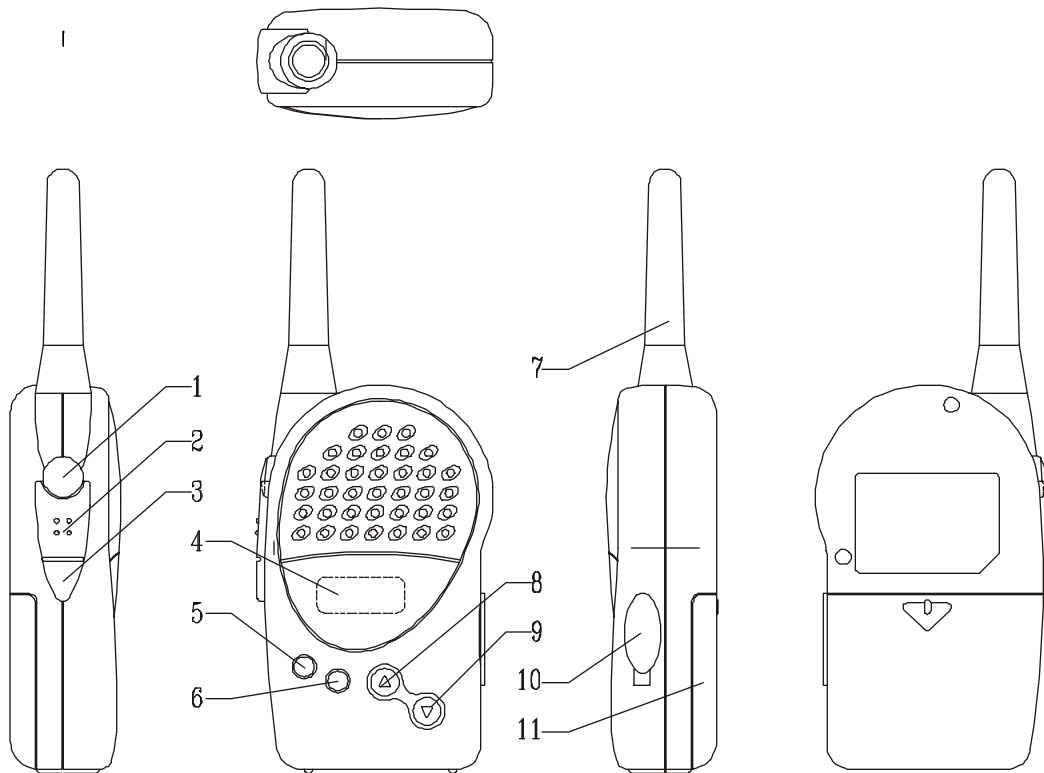
#### A. DISPLAY

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. **"BUSY"**: Displayed when a call is being received.
2. **"VOL"** : Displayed the current volume.
3. **"VOX"** : Displayed when the **VOX** is enabled.
4. **"CTCSS"**: Displayed when the **CTCSS** privacy mode is enabled.
5. "🔑": Displayed when the keypad lock has been activated.
6. "🔋": When this symbol is visible, it indicates the batteries are low. Replace the batteries after this indicator is on.
7. "📡": Displayed when your radio is transmitting or the **CALL** button is pressed.
8. Shows the selected channel number.
9. Shows the selected **CTCSS** code number.
10. **"SCAN"**: Displayed when the transceiver scans through all the channels.
11. **"INT"**: Displayed when the intercom is enabled.

## B. FUNCTION AND LOCATION OF THE CONTROLS




## 1. 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.

## 2. 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.

## 3. 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.

In addition, **MON button** is also a double-function button

### a) MON + Power

After inserting the Microphone /Speaker plug into the jack, press and hold **MON** button, then press **POWER** button to enable or disable the intercom function.

### b) MON + MODE

Press and hold **MON** button, then press **MODE** button to enable or disable the **CTCSS** privacy mode operation.

To determine **CTCSS** privacy code setting. Press and hold **MON**, then press **MODE** button for two seconds until **CTCSS** icon displays and the below privacy codes indicator flashes, press  $\Delta$  or  $\nabla$  button to select the desired code among 1 and 38. Press **MODE** button once to confirm and exit the setting mode and your radio is now in the privacy mode operation.

### c) MON + $\Delta$

Press and hold **MON** button, then press  $\Delta$  button to enable or disable the VOX function. To determine VOX setting, press and hold **MON** button, then press  $\Delta$  button for two seconds until VOX icon displays and the below VOX codes indicator flashes. Press  $\nabla$  to select the desired code among 1 and 3. While pressing and holding **MON** button, press  $\Delta$  button once to confirm and exit the setting mode and your radio is now in the VOX operation. 3 is the most easy to activate transmit and 1 is the most difficult to activate.

### d) MON + $\nabla$

You can activate or deactivate the key pad lock to avoid accidental pressing of keys. Press and hold **MON** button, then press  $\nabla$  button to activate/deactivate the keypad lock.

## 4. LCD Display

Your transceiver has a multifunctional liquid crystal display with backlight.

## 5. Power button

You can press **POWER** button to turn on the unit. Pressing the button again will turn off the unit. Please take out the batteries if you don't use the unit for a long time.

## 6. Mode button

Press **MODE** button and display the current mode you can press  $\Delta$  or  $\nabla$  button to obtain the comfortable volume.

## 7. Antenna

Provides excellent reception.

## 8. Δ button

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

### To Operate the Scan

Press and hold Δ or ▽ button 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 Δ or ▽ button is pressed, the unit will exit scan mode and stop at the current displayed channel.

In two cases, pressing **PTT**, **CALL**, and **MON** buttons will cause the scan to turn off and stop at the current displayed channel.

## 9. ▽/ Automatic Shut Off Button

Press ▽ 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 ▽ 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.

## 10. External Microphone/Speaker Jack

Connect a special speaker/microphone or earphone (supplied).

In addition, you can recharge Ni-Cd batteries using an optional battery charger of DC 6V 60Ma (not supplied). After turn off the unit, plug the charger barrel plug into the Mic jack on the side of the unit, then connect the charger to a standard AC outlet.

For Ni-Cd batt, the charging time is about 7-8 hours; For Ni-MH batt, the charging time is 14-15 hours.

## 11. Battery Compartment

Press and push back the battery door to release.

### C. OPERATION

1. Insert three alkaline or Ni-Cd batteries into the battery compartment, noting polarity.

Ni-Cd 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. Press **POWER** button 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 **CTCSS** 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 **CTCSS** privacy code as your radio.

## TECHNICAL SPECIFICATIONS

Frequency Range.....467.5625~467.7125 MHz  
462.5625~462.7125 MHz

Channels.....14

Power supply.....3 AAA Alkaline

Sensitivity at 12dB Sinad.....0.5μV

Adjacent Channel Rejection.....45dB

Audio Distortion .....7%

RF Output Power..... 300mW ERP@ 4.5VDC

Harmonic Emissions.....Less than 45dB

Dimensions (HWD).....57×97×27mm

Weight (without batteries)..... approx. 82g

## 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	

## CTCSS 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	

