

**FRS 80C
14 CHANNEL FAMILY RADIO SYSTEM**



**BEFORE OPERATING THIS PRODUCT PLEASE
READ THESE INSTRUCTIONS COMPLETELY**

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FCC WARNINGS

This device complies with part 15 of the FCC rules, operation is subject to the condition that this device does not cause harmful interference.

Features

No Air Time Fees and No License Required
Up to 2 miles range
14 Channels
Build-in VOX Function(Optional)
Multi-function LED Display
Talk Confirmation Tone and Call / Ring Button
Auto Battery Saver and Auto Squelch
Monitor and Key Lock Button
External Power (DC 6V) and External Microphone Speaker Jacks
Detachable Belt Clip

PRECAUTIONS

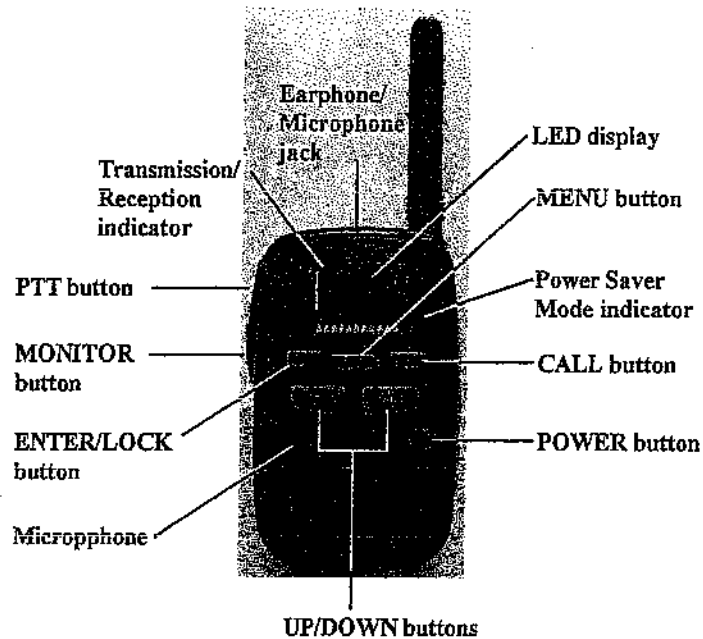
- Do not modify or attempt to adjust the transceiver for any reason.
- Avoid extremes in exposure to water, heat, and cold. This transceiver is weather resistant but not waterproof.
- Do not expose the transceiver to long period of direct sunlight, nor place the transceiver close to heating appliances.
- Do not place the transceiver in excessively dusty areas, humid areas, wet areas, nor on unstable surfaces.
- If an abnormal or smoke is detected coming from the transceiver, immediately switch OFF the power and remove the batteries from the transceiver. Contact your dealer.

UNPACKING

Carefully unpack the transceiver. We recommend that you identify the items listed below before discarding the packing material.

- Transceiver 1
- Belt Clip..... 1
- Instruction Manual 1

Controls and Indicators



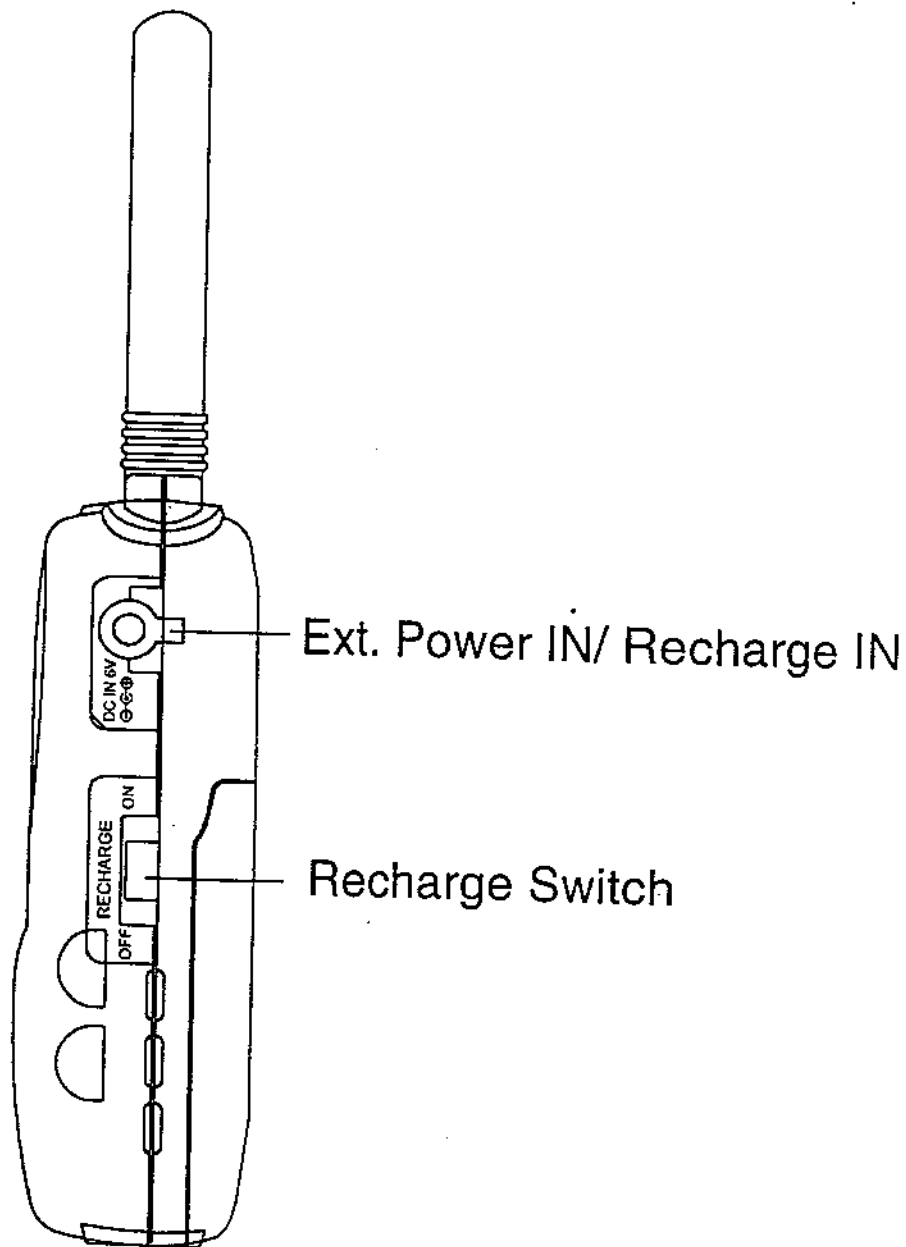
Display and Indicators


LED display - indicates Channel numbers, Volume level, Lock, Beep, Low Battery Level, etc.

Transmission and Reception indicator - When transmitting, the indicator stays on. The indicator flashes when receiving a signal.

Power Saver Mode indicator - flashes in Power Saver Mode.

Recharge the Batteries (Optional)



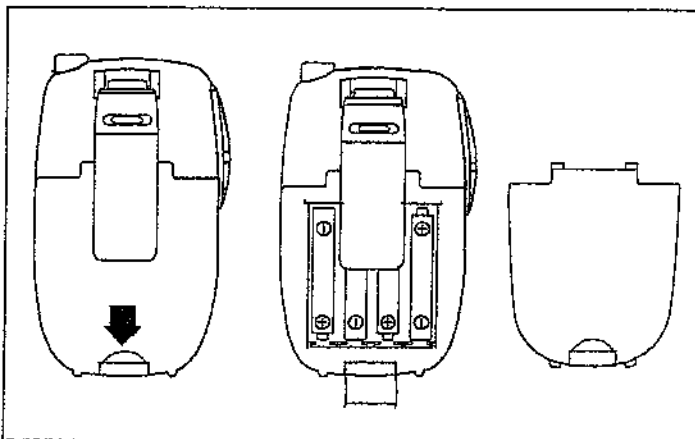
Note : When batteries are low or need charging the  BATT LOW indicator will blink. Replace alkaline batteries, or Recharge the Ni-Cd Batteries with Wall-mount charger.

Battery Life :

1. Using Alkaline Batteries
Approx 40 hours on standby mode.
Approx 3 hours continuous transmit mode.
2. Using Rechargeable Batteries (300 mAh)
Approx 12 hours standby mode.
Approx 1 hours continuous transmit mode.

Operation

Install Batteries



1. Pull lock tab down and lift door up (towards you) to remove battery cover.
2. Insert four "AAA" batteries. Position batteries according to polarity markings.

Note: When batteries are low or need charging the BATTERY LOW "L" will blink. Replace all batteries with new alkaline batteries.

To Turn On The Unit or To Turn Off The Unit

Press the POWER switch for more than 1 second.

Auto Battery Power Saver

The unit has a special circuit designed to extend battery life. If there are no transmissions within 5 seconds, the unit will automatically switch to battery save mode. The Power Saver Mode LED(Green) will flash.

Low Battery Indicator

When battery level becomes low, "L" appears on the LED display and flashes. Replace all four batteries with new ones.

To Transmit

Simply talk to the built-in microphone as VOX (Voice Activated Transmission - Optional) turns into transmission mode automatically, or press the PTT(Push-To-Talk) button.

To Adjust VOLUME control

Press momentarily UP button to increase or DOWN button to decrease volume.

The higher number, the higher volume level.

To Select Channel

1. Press the MENU button. The LED display indicates a flashing number.
2. Press the UP or DOWN button to set a desired channel from 1 to 14.
3. Press the MENU button to continue other settings(Beep On or Off). To complete setting, press the ENTER button.

Automatic Channel Scan

Press and hold the UP or DOWN button to search signals.
When the unit catches a strong signal, scan will stop for 5 seconds.
If you want to stop at that channel, press the PTT or ENTER button.

To Send Call Tone

Call tone sounds like a telephone ring, and is convenient for quickly identify yourself to another party. Persons whom you call will instantly recognize you because of your call tone.
Press the CALL button to send Call Tone. "C" appears on the LED display and flashes.

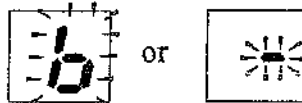
To Lock Control Keys (UP/DOWN, MENU keys)

Press and hold the ENTER button for 2 seconds. "L" will appear on the display.

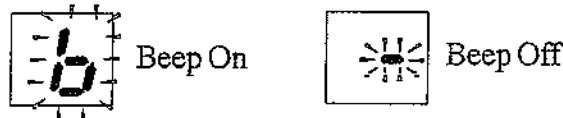
To Turn On or Off Beep

To turn on Beep

1. Press the MENU button twice. The LED display indicates as shown at right.



2. Press the UP or DOWN button to select below.

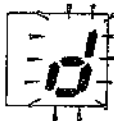


3. Press the ENTER button.

To Turn On or Off VOX with the built-in microphone

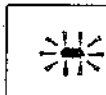
This feature enables you to disable the built-in microphone in VOX when you use the unit under noisy environment.

1. To disable the built-in microphone, press the MENU and ENRER buttons simultaneously. The LED display indicates as shown below.



Disable the built-in microphone

2. To turn on the built-in microphone, press the MENU and ENTER buttons simultaneously again. The LED display indicates as shown below.



The built-in microphone is turned on.

Frequency Range

The FRS 800unit represents one of the most advanced FM two-way radios used.

FRS Channel	Channel Frequency In MHz
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1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125

General Specifications

A. Frequency

CH = 14 Channels within 462 -467 MHz.

B. Receiver

1. Sensitivity	
For 12 dB signal	0.25 μ V
2. Max. audio output @ 10% THD	300 mW
3. Max. S/N ratio @ 1mV RF input	40 dB
4. Squelch Sens	0.2 μ V
5. Audio frequency resp.	
@ 300 Hz	\pm 10 dB
@ 3000 Hz	\pm 10 dB
6. Signal displacement BW	\pm 5 kHz
7. Adjacent CH. rejection	55 dB
8. Intermodulation rejection	55 dB
9. Spurious response rejection	55 dB

C. Transmitter

1. Effective radiated power	180mW
2. Carrier freq. stability	500 Hz
3. Modulation limiting	2.5 kHz
4. Carrier attack time	80 mS
5. Audio frequency response	
@ 300 Hz	\pm 10 dB
@ 3000 Hz	\pm 10 dB
6. Audio distortion	3 %
7. Hum and Noise	40 dB

D. Power Supply

1. Battery life (1 : 1 : 8 Ratio)	30 Hr
2. Battery, AAA x 4	4.8 - 6.0 V

SAFETY INFORMATION

Your wireless hand-held portable transceiver contains a low power transmitter. When the Push-to-Talk (PTT) button is pushed it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

IMPORTANT: To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face. If you wear the handset on your body while using the headset accessory, use only the Musical Electronics Ltd. supplied belt clip for this product and ensure that the antenna is at least 1 inch (2.5 centimeters) from your body when transmitting.

Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

User Manual

WARNING : Adjustment to this unit or replacement of any transmitter component (crystal, semiconductor, etc.) to this unit that could result in a violation 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.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.