

Safety Information For FRS UNIT



Your wireless handheld portable transceiver contains a low power transmitter.

When the Push-to Talk(PTT) button is pushed it sends out radio frequency (RF) signals.

This device is authorized to operate at a duty factor not to exceed 50%.

In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

CAUTION: To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and antenna at least 2 inch (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 manufacturers 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.

SPECIFICATIONS

■ GENERAL

▪ FRS Frequency Ranges	1 CH - 14 CH (462.5625-467.7125MHz)
▪ Channel Steps	25KHz
▪ Channel	FRS 14 Channel
▪ Frequency Stability	±2.5ppm (-10°C ~ 50°C)
▪ Emission Types	F3
▪ Antenna Impedance	50ohm. Unbalanced
▪ Supply Voltage	3.2 ~ 6.0V / DC

■ RECEIVER

▪ SENS FOR 12dB SINAD	-119dBm
▪ SQUELCH SENS. at THRESHOLD	-113dBm
▪ AUDIO FREQUENCY RESPONSE	±6dB
▪ IN BAND CONDUCTED RX SPURIOUS	40dB
▪ SPURIOUS REJECTION RATIO	54dB
▪ IMAGE REJECTION RATIO	60dB
▪ AUDIO DISTORTION at 1mV.....	3%
▪ AUDIO OUTPUT at 10% THD	800mV
▪ HUM & NOISE RATIO (UN SQUELCH).....	35dB
▪ ADJACENT CHANNEL REJECTION RATIO	60dB
▪ INTER MODULATION REJECTION RATIO	54dB
▪ BATTERY LOW INDICATOR	3.5V

■ TRANSMITTER

▪ CARRIER OUTPUT POWER	500mW
▪ MAXIMUM CURRENT AT 6.0V	350mA
▪ CONDUCTED HARMONICS EMISSION 2nd, 3rd, Other	-60dB
▪ AUDIO FREQUENCY RESPONSE (1Khz DEV) 400Hz	-20dB
1Khz	0dB
2.5Khz	+4dB
▪ PEAK FREQUENCY DEVIATION (at 1.25Khz DEV) AUDIO	2.5Khz
CTCSS.....	0.6Khz
AUDIO+CTCSS.....	3Khz
▪ TX DEVIATION	2.5Khz
▪ TX HUM & NOISE	30dB
(AF 1Khz/1.2Khz DEV)	
▪ TX DISTORTION	3%
(AF 1Khz/1.2Khz DEV)	
▪ MICROPHONE SENSITIVITY	6mV
(AF 1Khz/1.2Khz DEV)	

■ TEST CONDITION

- POWER SOURCE DC 6.0VOLTS
- ANT LOAD IMPEDANCE 50ohm NON-INDUCTIVE
- AUDIO LOAD IMPEDANCE 8ohm NON-INDUCTIVE

■ FREQUENCY RANGE

- 1ch..... 462,562.500Mhz
- 2ch..... 462,587.500Mhz
- 3ch..... 462,612.500Mhz
- 4ch..... 462,637.500Mhz
- 5ch..... 462,662.500Mhz
- 6ch..... 462,687.500Mhz
- 7ch..... 462,712.500Mhz
- 8ch..... 467,562.500Mhz
- 9ch..... 467,587.500Mhz
- 10ch..... 467,612.500Mhz
- 11ch..... 467,637.500Mhz
- 12ch..... 467,662.500Mhz
- 13ch..... 467,687.500Mhz
- 14ch..... 467,712.500Mhz

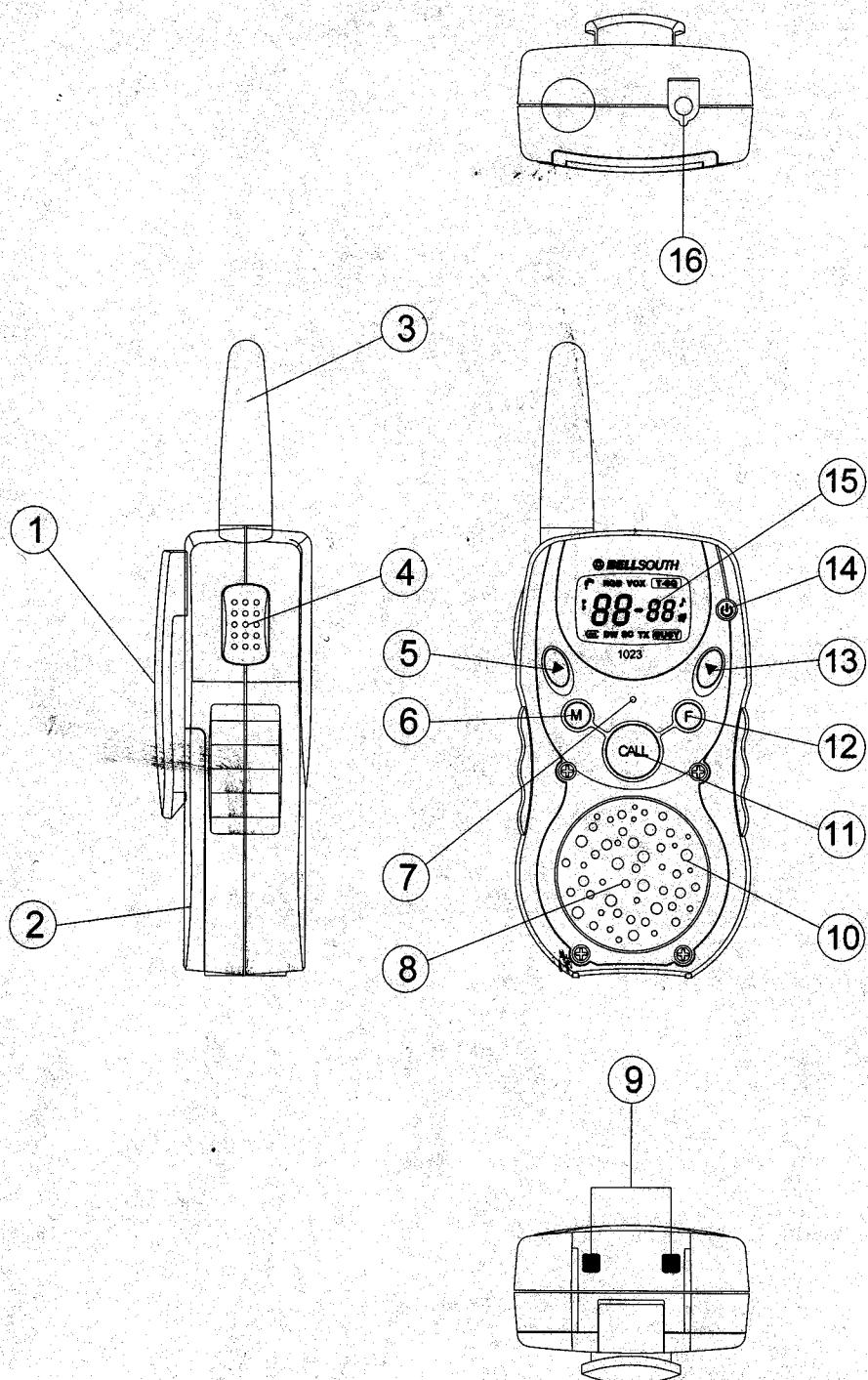
■ CTCSS FREQUENCY CHART

▪ 67.0	▪ 94.8	▪ 127.3	▪ 173.8	▪ 241.8
▪ 71.9	▪ 97.4	▪ 131.8	▪ 179.9	▪ 250.3
▪ 74.4	▪ 100.0	▪ 136.5	▪ 186.2	
▪ 77.0	▪ 103.5	▪ 141.3	▪ 192.8	
▪ 79.7	▪ 107.2	▪ 146.2	▪ 203.5	
▪ 82.5	▪ 110.9	▪ 151.4	▪ 210.7	
▪ 85.4	▪ 114.8	▪ 156.7	▪ 218.1	
▪ 88.5	▪ 118.8	▪ 162.2	▪ 225.7	
▪ 91.5	▪ 123.0	▪ 167.9	▪ 233.6	

■ INSTALL BATTERIES

To install batteries into the unit, it is necessary to move the belt clip upward towards the top of the unit. Next, remove the battery compartment cover by sliding it downward towards the bottom of the unit. Observe the polarity symbols on the bottom of the tray when inserting the AAA batteries. Replace the cover.

CONTROLS



1. Belt Clip (detachable)
3. Antenna(Fixed)
5. Up Button
7. Built in Microphone
9. Desk Top Charger Contacts
11. Call Button
13. Down Button
15. Liquid Crystal Display (LCD)

2. Battery Compartment Cover
4. Push-To-Talk (PTT) Button
6. Function Button
8. Built-in Speaker
10. Snap on Face Plate
12. Monitor Button
14. Power On / Off Button
16. Ear / Mic, AC Adapter Jack

Controls & Operation

(1) Power (On / Off) Button / Backlight (On/Off)

- 1) Press and hold this button for two seconds to turn the unit on. A short confirming melody will sound. To turn the unit off, press and hold the button for two seconds. A short tone will sound before the unit shuts off.
- 2) By pressing the PWR button momentarily, the LCD backlight is turned on ; press again and the LCD backlight is turned off. After the LCD backlight is turned on, the backlight will be turned off automatically after 5seconds, unless any buttons are pressed.

(2) Push To Talk (PTT) Button

Pressing and holding this button will allow you to speak to any transceiver that is set to the same channel and CTCSS privacy code setting as yours. Hold the transceiver approximately 1 to 2 inches from your face as you speak into the built in microphone. After you have finished speaking, release the button to allow the reception of incoming signals. It is not possible to transmit and receive at the same time. Releasing the button allows the unit to revert to standby mode.

(3) Volume Control

Press "UP" or "DOWN" button to increase or decrease audio level, the digits from 1 to 8 with "LE" will be displayed on the LCD.

(4) UP(▲) and DOWN (▼) Buttons

These buttons are used for controlling the volume and option settings (Channels, CTCSS Privacy Codes, SCAN, DUAL WATCH, VOX On / Off, RGB On / Off, BEEP On / Off) during programming mode.

(5) Function Button

In the standby mode, pressing this button briefly will enter the function edit mode.

- . First Press : Changing Channel
- . Second Press : Coded Tone Controlled Squelch System (CTCSS)

- Third Press : Channel Scan (SCAN)
- Fourth Press : Dual Watch (DW)
- Fifth Press : Voice Activated Transmission (VOX)
- Sixth Press : Roger Beep (RGB)
- Seventh Press : Beep On / Off

Pressing the button for more than 1.5 seconds will activate or deactivate “KEY LOCK” when the unit is in the stand by mode.

(6) Monitor Button

The button is used to check the activity on a channel before transmitting. The button allows you to listen in on a channel for weak signals.

Pressing the button during the edit function mode will return the unit to standby.

Pressing the button during a VOX transmission will discontinue the transmission and disable the VOX function for ten seconds.

Press and hold the button for over 2 seconds, “BUSY” and the symbol of “LIGHTNING” on the left side appear on the LCD at the same time.

Press and hold the button for less than 2 seconds, “BUSY” and the symbol of “LIGHTNING” on the left side disappear on the LCD.

(7) Power Save

This feature conserves battery power automatically when not in use.

The symbol of “POWER SAVE” will be displayed on the LCD 5 seconds after the stand-by mode is operated.

(8) Roger Beep (RGB)

“ROGER BEEP” notifies the end of transmission to the other transceiver.

To turn on “RGB”, press “FUNCTION” button six times.

The indicator of RGB and “rb-of” letters will be displayed on the LCD.

Press “UP” or “DOWN” button to toggle “RGB” mode on or off.

(9) VOX

To set the radio for “VOX” operation, press “FUNCTION” button five times.

The indicator of “VOX” will be flickering on the LCD.

Press "UP" or "DOWN" button to toggle "VOX" mode on or off.
Press "MONITOR" or "PTT" button to confirm "VOX"
To release "VOX", press "FUNCTION" button five times and "UP" or "DOWN" button to toggle "VOX" mode on or off.

VOX Sensitivity Level (1~ 5)

Press "FUNCTION" button when the power is off and press "POWER" button to turn on the radio.
The indicator of LE-3 (or 1~5) will be displayed on the LCD.
Press "UP" or "DOWN" button to select from 1 to 5 voice levels with 1 being the most sensitive and 5 being the least sensitive.

VOX Delay (1~ 5)

Press "FUNCTION" button when "VOX" level is adjusted.
The indicator of de-3 (or 1~5) will be displayed on the LCD.
Press "UP" or "DOWN" button to select from 1 to 5 time delays with 1 being the fastest and 5 being the slowest.

(10) CTCSS

To set "CTCSS" sub-channel mode, press "FUNCTION" button twice.
Press "UP" or "DOWN" button to choose the desired sub-channel to use.

(11) BEEP TONE

To set "BEEP" TONE function, press "FUNCTION" button seven times.
Press "UP" or "DOWN" button to toggle "BEEP TONE" mode on or off.

(12) CALL

Pressing "CALL" button will allow you to call the other transceiver.
The symbols of "LIGHTNING" on the right side and "BELL" will be displayed on the LCD at the same time.

Call Ringer

To select a favorite call ringer melody, press "CALL" button and hold "POWER"

button for over 2 seconds.

The indicator of "CA 01" will be displayed on the LCD.

Press "UP" or "DOWN" button to select from 01 to 03 call ringers with 3 selectable melodies to alert incoming call.

To release the call ringer, press "MONITOR" or "PTT" button.

(13) BUSY

When the receiver is operated, "BUSY" and the symbol of "LIGHTNING" on the left side appear on the LCD at the same time.

(14) TX

When the receiver is operated, "BUSY" and the symbol of "LIGHTNING" on the left side appear on the LCD at the same time.

When the transceiver is operated, the symbol of "LIGHTNING" on the right side appear on the LCD.

(15) SCAN (SC)

To set "SCAN" channel mode, press "FUNCTION" button three times.

The indicator of "SC" will be flickering on the LCD.

Press "UP" button to move the up road scan.

Press "DOWN" button to move the down road scan.

Press "MONITOR" button to monitor the desired channel.

After you finish selecting your desired channel, press "PTT" or "CALL" button briefly to leave "SCAN" mode.

(16) DUAL WATCH (DW)

To set DUAL WATCH, press "FUNCTION" button four times.

The indicator of "DW" will be flickering on the LCD.

Press "UP" or "DOWN" button to select the desired channel.

Press "MONITOR" button to monitor the desired channel.

After you finish selecting your desired channel, press "PTT" or "CALL" button briefly to leave "DW" mode.

(17) BATTERY LEVEL

The symbol of battery level indicates the battery power level from 1 to 3.

(18) KEY LOCK

To set "KEY LOCK" function, press "FUNCTION" button for over two seconds.

All buttons except POWER ON/OFF, BACKLIT, CALL, and PTT will not be operated at all when button lock function is enabled.

The symbol of "KEY LOCK" function will be displayed on the LCD.

To release "KEY LOCK" function, press "FUNCTION" button for over two seconds.

(19) FREQUENCY CHANNEL

To change the basic channel, press "FUNCTION" button once.

Press "UP" button briefly to move the upward channel

Press "DOWN" button briefly to move the downward channel.