EAGLETRON

MODEL : FRS-128

NEW FRS "FAMILY RADIO SERVICE"
WITH 14 CHANNELS
SLIM SIZE WITH MAXIMUM POWER OUTPUT

PROFESSIONAL FEATURES

* 99 CODES, SCAN, MONITORING *
* POWER SAVE CIRCUIT *
* BACK-LIGHTED LCD DISPLAY *
* AUTO-SQUELCH *
* KEY LOCK DEVICE *
* TRADITIONAL VOLUME CONTROL *
* POWERED BY AA BATTERIES *

FRS-128 FAMILY RADIO SERVICE

Your Eagletron model FRS-128 brings the new FRS to your family. The Family Radio Service is provided for by the FCC and is totally licensed free.

The FRS-128 using maximum allowable power and a highly efficient antenna system can provide range up to 2-miles. Thank of the convenient and safety this slim-size of radio walkie-talkie can provide to your family, friend, or business associates. Use for fishing, hunting, picnics, biking, business, or any other activity where communications are needed for convenience or safety. The model FRS-128 incorporates all 14 channels with 99 privacy codes will allow you to hear only transmissions that are on the same channel with the same code you are using. Also this radio offers scan with busy channel by pass or delete, power save, auto-squelch, and a multifunction back-lighted liquid crystal display.

Due to the band of operation (462.5625–467.6625MHz) the FRS-128 can provide communication that are virtually free of atmospheric interference that is common on lower frequency bands. Along with this and on antenna system that is very efficient as compared to other unlicensed radio bands, communications range is surprisingly good. Many times the limit to maximum possible ranges are environmental factors such as blockage caused by trees, building, hills, or other obstructions. If you find communication is not possible, many times this can be overcome by moving only a few feet to a new location. Range is greatly reduced while operating in a vehicle or metal building. Battery condition also affects range. The FRS-128 operates on standard batteries of 3 x AA alkaline batteries or rechargeable ni-cad batteries (option).

NOTE: Do not leave batteries installed over a long period of time as leakage may occur which can destroy the radio.

This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.
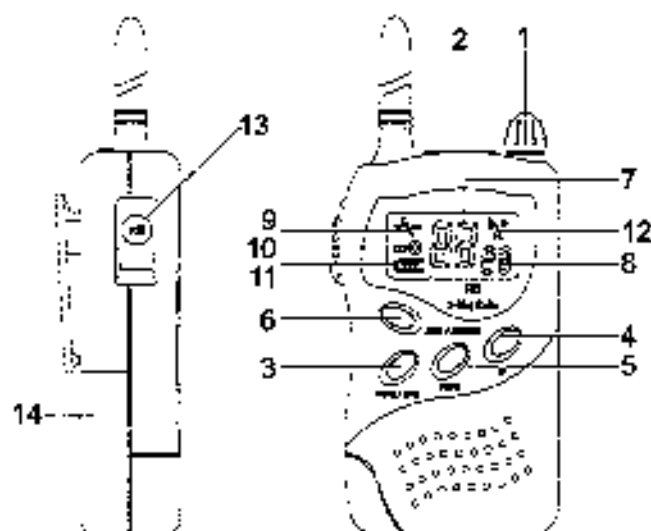
1."On/Off Volume Control

In "Off" position your transceiver is off. Turn this control clockwise to switch on the unit. Turn the knob clockwise a little more to set the audio level, until you get a comfortable sound level. Pressing the "Scan / Monitor" button once will allow background noise to be heard.

2."Speaker Microphone Connector"

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

3."Mode/Lock" Button

During non-scan operation pressing this button for about 0.5 second and then releasing the button after one beep sounds. The "Lock" symbol on LCD will disappear and "Channel" number will flash for channel select. Press this button again, the next symbol "Data Code" number will flash for data code select. Then press each of the "Down" or "Top" button for desired channel and code. Releasing this button for a while, the unit is entering 'Lock' function.

4."Up" Button

After "Mode / Lock" is pressed, pressing this button of "Up" for channel (or data code) select. Press and hold this button will automatically increase the channel (or date code) number.

5."Down" Button

After " Mode / Lock" is pressed, pressing this button of "Down" for channel (or data code) select. Press and hold this button will automatically decrease the channel (or data code) number.

6. "Scan/Monitor" Button

Press and hold this button for about 0.3 sec. and then release this button when you hear one beep sound. The symbol of " ─/\/─ " will appear on LCD display that shows the unit is entering the mode of "monitor" condition. Repeat above operating again, the symbol " ─/\/─ " will disappear on LCD display. This means the monitor function is turned off.

Press and hold this button for about 1 second, you will hear "Beep" sound twice. Then release this button. The unit is in the mode of "Scan" condition. In this operation, if the channel is used, the search will stop at that channel. Repeat above operating, the scan function will continue to search for next channel used. Press this button and then release this button when one beep sounds during scanning operation, the scan function will stop and go back to the original channel number position.

7."Channel" Icon

The channel number on LCD display indicates the number to be selected.

8."Data Code" Icon

The data code number on LCD display indicates the number of code to be selected.

9. "─/\/─ " Icon

The icon appears to indicate the unit in monitoring mode.

10. "Key Lock" Icon

The icon appears to indicate the unit being locked.

11. "Batteries" Icon

The icon appears to indicate the battery condition in the unit.

12. " $((\mathcal{A}))$ " Icon

The icon appears to indicate the unit either receiving or transmitting.

13. "PTT" button

Press this button to enable in the transmit mode. You will see the icon " $(\mathcal{A})$ " flashing outwards. If this button is not pressed, the unit is in the receive mode. You will see the icon " $(\mathcal{A})$ " flashing inwards.

14. "Battery Door"

This door is removed for the purpose of replacing standard batteries (3 x AA alkaline batteries).

15. "Channel Frequencies"

The channel numbers 01 through 14 are displayed when in normal operation. The number frequencies in Mhz are:

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	

HOW TO OPERATE YOUR TRANSCEIVER

1. Insert 3 alkaline into the battery compartment, noting polarity.
2. To set the privacy code, check the function instructions.
3. Rotate on ON/OFF volume control clockwise to turn the unit on.   Press the "Monitor" button and adjust the volume for a normal listening level.
4. Select the desired channel by the up or down buttons.

Note: If the channel will not change, check that the "Mode / Lock" button function.

To transmit: press and hold the PTT button, then talk into the microphone.

To receive: simply release the PTT button.

CAUTION: DON'T EXPOSE THE DISPLAY TO EXTREME HOT OR COLD TRMPERATURE.

TECHNICAL SPECIFICATIONS

GENERAL

Frequency range .... 462–467 Mhz
Channels 14
Modulation type .... FM
Antenna impedance .... 50 Ohm
Loudspeaker .... 8 Ohm 0.5W
Microphone .... condenser type
Power supply .... Alkaline 3 x AA (4.5 VDC)

RECEIVER

Sensitivity at 12 dB Sinad .... 0.25 μV
Selectivity .... 50 dB
Squelch range .... Auto
Audio output power .... 0.2W @ 8 Ohm (10% distortion)
Distortion at 775 mV Audio power 5%
Audio frequency response .... 400–3000 Hz

TRANSMITTER

RF Output Power .... nominal 500 mW @ 4.5 VDC
Frequency Tolerance 0.00025%
Harmonic Suppression .... more than 50 dB
Modulation .... FM +/- 2.5 Khz

CHANNEL FREQUENCIES

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	

FCC WARNING AND INFORMATION

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.
❑ Consult the dealer or an experienced radio/TV technician for help.

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.