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APPENDIX C: **MANUAL**

MIDLAND®

FRS1400

UHF FM TRANSCEIVER
(FAMILY RADIO SERVICE)



CONTENT

Notices to The user.....	3
FCC Warning.....	3
Safety Information.....	4
FRS Product Description.....	5
Function and Location of the Controls.....	6
The Belt Clip.....	8
Battery Installation.....	9
Operation.....	10
LCD Display Panel.....	12
Specifications.....	13
FRS Channel Table.....	13

NOTICES TO THE USER

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

One or more of the following statements may be applicable:

FCC WARNING

This equipment generates or uses radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

INFORMATION TO THE DIGITAL DEVICE USER REQUIRED BY THE FCC

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, user and can generate 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 the interference will not occur in a particular installing. 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer for technical assistance.

SAFETY INFORMATION:

Your wireless hand-held portable transceiver has been designed using a low power transmitter.

When the **PTT** switch is pressed, the transceiver generates radio frequency (RF) electromagnetic energy (EME).

This transceiver is designed to comply with the FCC Report and order FCC 96-326 (august, 1996).

CAUTION:

To stay within the standards of the FCC's RF exposure guidelines, hold the Transceiver and antenna at least 2 inches (5 cm) from your face and speaker in your normal voice. Keep the antenna pointed up and away from your face.

If you wear the transceiver on your body, ensure that the antenna is at least 1 inch (2.5 cm) from your body while you are transmitting.

Use only FRS1400 genuine accessories and the supplied antenna. Unauthorized antennas, modifications, or attachments may damage the transceiver and violate FCC regulations.

FRS PRODUCT DESCRIPTION

Family Radio Service (FRS) is the newest generation in personal two-way communications. FRS radios operate in a license-free radio band (no FCC license is needed for FRS operation), on any of the 14 license-free channels.

The FRS1400 is a lightweight compact two-way radio that can be used up to about two miles with family or friends at parks, shopping malls, sporting events, connects-any indoor or outdoor activity.

The FRS1400 is compatible with other two-way radios using the FRS frequency band (operating in the frequency range from 462.5625 MHz to 467.7125 MHz).

Please read this user's manual thoroughly to get the most out of your FRS1400 two-way radio.

Note: The maximum transmission range will vary depending on terrain and environment. Range will be greater in open fields, while the range is shorter within and around buildings or large structures.

FUNCTION AND LOCATION THE CONTROLS



FUNCTION AND LOCATION THE CONTROLS

A. Fixed Antenna

B. PTT Button- speak into the microphone when the TX indicator lights. When you finish speaking release PTT.

C. Belt Clip- use to secure the radio to a belt, or another.

D. Monitor / Back light Button- checks activity on the channel, and permits the radio to monitor weak signals.

E. Battery Compartment- houses 4 AAA size batteries.

F. Power ON/OFF and VOLUM Adjust switch.

G. Speaker/ Microphone jack

H. Speaker

I. Charger jack.

J. MIC

K. LCD Panel- a multifunction display which indicates channel and other radio status/ icon.

L, M. Up/Down Button- used for adjusting the Channel Changing.

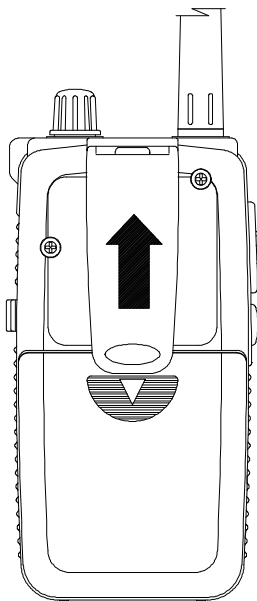
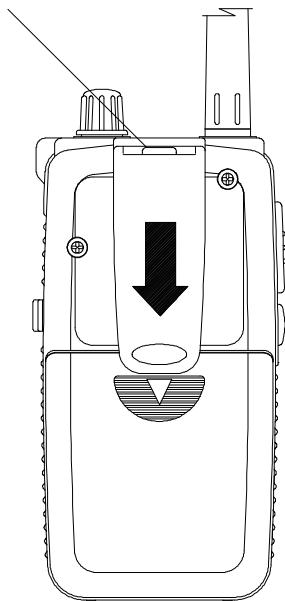
N. TX/RX LED Indicator.

THE BELT CLIP

To remove the belt clip, pull the tab and slide the belt clip down.

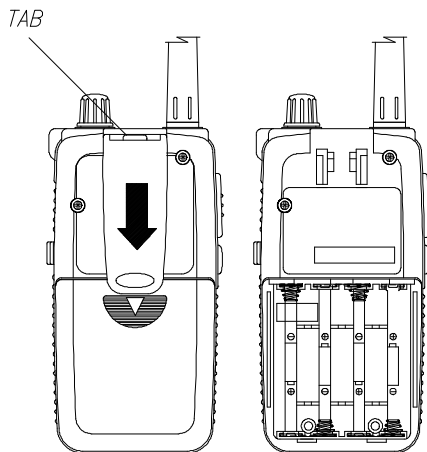
To reattach the belt clip, slide it up until it locks into place.

TAB



THE BATTERY INSTALLATION

1. Remove the belt clip.
2. Lift up the battery cover from the battery compartment
3. Install four (4) "AAA" alkaline (Not included) following the polarities as shown on battery compartment.
4. Reinstall the battery cover.
5. Reinstall the belt clip.



Notes:

- ☞ The FRS1400 has built-in power saver for maximum battery life. But when the FRS1400 is not being used, conserve battery power by rotate the power switch OFF.
- ☞ Remove the batteries if the unit will not be used for a long period of time.

OPERATIONS

Turning the radio ON- Rotate PWR/VOL control clockwise. The radio will beep and LCD panel will display.

Turning the radio OFF- Rotate PWR/VOL Control counter clockwise.

Adjusting the speaker sound level

- ☞ Rotate PWR/VOL control clockwise or counter clockwise to adjust the volume.

Receiving a CALL (RX)- The radio is continuously in receiving mode when the radio is ON. The LED will light up in green when receiving a tone.

Transmitting a CALL (TX)

1. Press and Hold the PTT button to transmit and the TX LED will light up in red.
2. While holding the PTT button, speak in normal voice about 2 to 3 inches away from the microphone.
3. Release the PTT when you have finish transmitting.

Notes: In order for the other people to receive your receive your transmission, they must also be on the same channel you currently using.

Changing Channels- The FRS1400 has 14 available channels. To change channels:

- ☞ Press the UP (▲) button for higher channel.
- ☞ Press the down (▼) button for lower channel.
- ☞ The channel changes from 1 to 14, or from 14 to 1, repeatedly.

Monitor/Back-lighting Button: You can use the MONITOR feature to listen in for weak signals in the current channel.

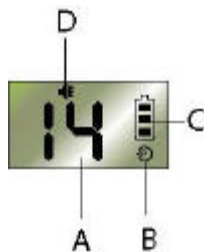
- ☞ Press and Hold the MONITOR button for at least one second for normal monitoring.
- ☞ Press the MONITOR button quickly to back-light the LCD Display.

Battery Level/Low Battery Indication

- ☞ The LCD panel displays the battery power level according to the number of squares lit inside the battery symbol.
- ☞ When the battery level is low, the battery icon will flash to indicate that the batteries need to be replace.

LCD Panel Display

- A. Channel Display.
- B. Power Save Mode indicator.
- C. Battery capacity level indicator.
- D. Monitor function indicator.



Power Save Mode

☞ After 6 second in standby Mode without RX signal, Power save mode will be ON and power save Icon flashes.

SPECIFICATIONS

Channels Available	14 Channels
Output Power (TX)	0.5W (FCC Maximum)
Battery Life	30 Hours (typical)
Rang	About 2 Miles (Open field)

FRS CHANNEL TABLE

Channel Number	Frequency (MHz)
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

