

FCC ID : OUZ-FRS2288818

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.



This message will printed on the blister card

**Functional Specifications
of
TL 218
14 channels FRS (“TalkFree 100”)**

File Name : FRS Basic Model v03.Doc
Date: Dec. 01,2000
Version: 0.3
Modify by: Y.S.Ng

1. FEATURES

- 250mW ERP output power.
- Up to 2 miles range.
- Front panel push buttons give you easy access to all 14 channels.
- Incoming call / Ring Alert --- One push "CALL" button allows this unit to ring other units announcing a communication.
- Roger Beep tone --- Provides "end of the transmission" tone confirmation for ease of use.
- Automatically remember last channel used.
- Key tone signal to confirm key activation.
- LCD display for the Channel indication.
- LED indication for transmission or battery low.
- Monitor Button
- Auto power saving mode for extended battery life.
- Low battery warning & indication.
- Adjust speaker volume.
- FCC licensing Not required.
- Use 3-AAA Alkaline batteries.
- Battery life – Up to "TBD" hours (when used for 10% transmit, 10% receive and 80% standby).

- Standard requirements:
 - a) FCC part 15;
 - b) FCC part 95.

2. MAJOR PARTS

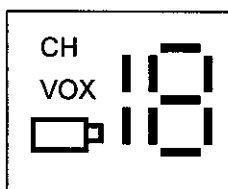
2.1 LED INDICATION:

Steadily ON --- During transmission.

Blinking --- Battery low.

2.2 LCD DISPLAY:

The LCD screen is shown below. It is one and half 7-segment digits plus the "CH" icon and the "LOW BATT" icon.



2.3 KEY BUTTONS:

- 1) [POWER ON/OFF] button;
- 2) [PTT] (Push-To-Talk) button;
- 3) [CHANNEL] button;
- 4) [UP] button;
- 5) [DOWN] button;
- 6) [CALL] button;
- 7) [MONITOR] button

2.4 SPEAKER VOLUME CONTROL

It is a rotary VR.

3. OPERATIONS

3.1 TO COMMUNCIATE

The FRS radio have 14 channels. To communicate with others, all FRS radios in your group must be set to the same channel (See the TABLE 1). Other FRS radios may have interference Eliminator Code, which must be turned off or set to zero for proper communication with this unit.

TABLE 1

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

3.2 TURN THE FRS RADIO ON:

When the unit is OFF, press and hold the [POWER ON/OFF] button until the unit beeps and the current CHANNEL setting shown on the LCD display.

3.3 TURN THE FRS RADIO OFF:

When the unit is ON, press and hold the [POWER ON/OFF] button until the unit beeps and the LCD become blank.

3.4 ADJUST THE SPEAKER VOLUME:

Rotate the speaker volume knob while holding down the [MONITOR] button until you reach a comfortable listening level.

3.5 SET THE CHANNEL:

1. When the unit is ON, press [CHANNEL] button. The channel become unlocked & blinking;
2. Press [UP] / [DOWN] button to increase / decrease the channel;;
3. The unit set, lock and save the new channel in the following conditions:
 - a) Press [CHANNEL] button;
 - b) Press [PTT] button;
 - c) Press and hold [POWER ON/OFF] button;
 - d) No further key stroke for 5 sec.

3.6 SENDING MESSAGES:

1. To maximize clarity, hold the radio 2 to 3 inches from the mouth;
2. Press [PTT] button and speak into microphone. The LED indicator turns on continuously when the transmitting;
3. To receive messages, releases the [PTT] button.

3.7 BATTERY SAVING

3.7.1 Transmit time-out timer:

The time-out timer feature helps extends battery life by preventing accidental transmission. The radio will emit a continuous warning tone after the [PTT] button is pressed for 60 sec continuously and will stop transmitting.

3.7.2 Battery saver:

After 3 seconds elapse with no key entries, no call received, and no transmission, Battery saver turns on automatically . It repeats switching the receiver ON / OFF at certain ratio to maximize battery life.

3.8 CALL TONE

The call tone alerts all receivers in the same channels. Press the **[CALL]** button and the users on your channel will hear the call tone.

3.9 LOW BATTERY ALERT

When the batteries are low, the LED blinks every 2 seconds, the "LOW BATT" LCD icon blink and the radio will beep 1 to 2 seconds in the following condition:

- a) After turning power on;
- b) After release of the **[PTT]** button;
- c) Every 10 minutes.

3.10 TEST MODE

1. Press both **[Call]** and **[Monitor]** key during power up reset, LCD display will on all segments for 3 sec, then off 3 sec;
2. The radio entered Rx on status and default channel is 8;
3. Press **[Up]/[Down]** to increase/decrease the channel;
4. Press **[Channel]/[Monitor]** to enter Tx / Rx on status.
5. The radio will return to Rx on status after 60 sec continuously stay at Tx on.

4. PRECAUTION

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 devices, 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.

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.

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 when transmitting, ensure that the antenna is at least 1 inch (2.5 centimeters) from your body.

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

History:

Edition	Change	Location	Rev. Date	Remark
Rev. 0.0			Aug. 31,2000	Initial draft
Rev. 0.1	Add LCD display		Sept. 1,2000	
Rev. 0.2	Most LED signal updated		Nov. 23, 2000	
Rev. 0.3	Precautions and warning added		Dec. 01,2000	
Rev. 0.4	Test mode instruction added		Dec. 04,2000	