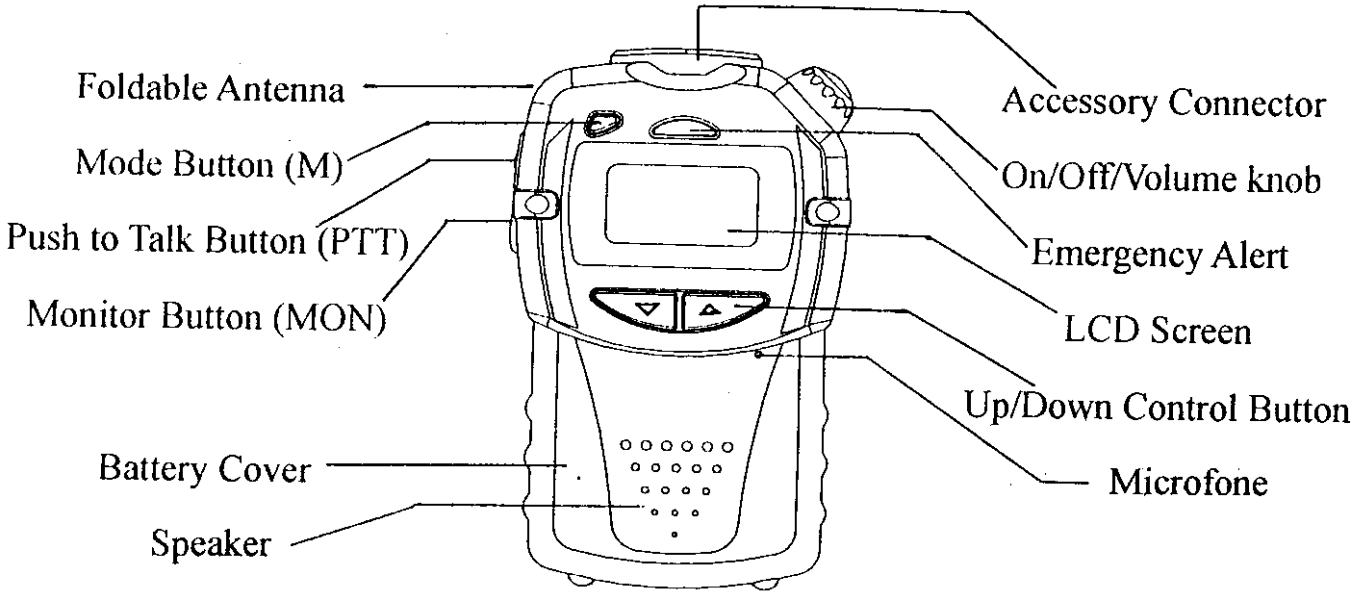
APPENDIX 5

USERS MANUAL

Four (4) Page User Instruction Manual
Follows This Sheet

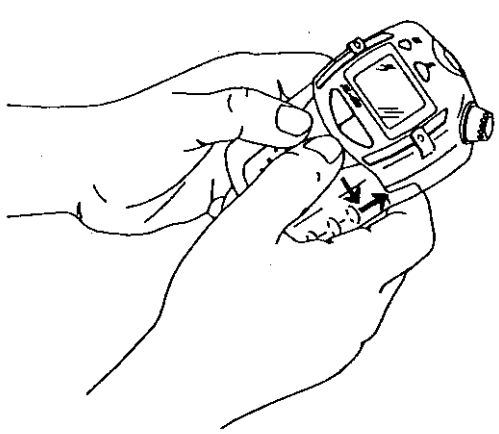
REXON RL-426 USER'S QUICK GUIDE

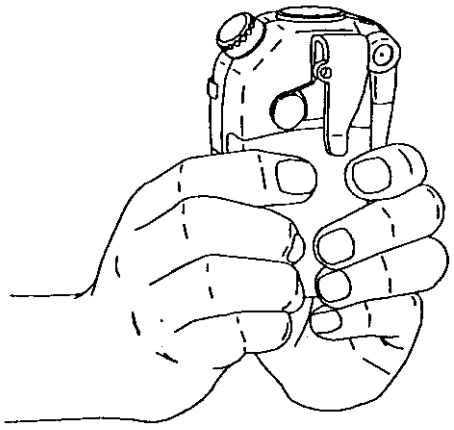
This device complies with part 15 of the FCC rules operation is subject to the condition that this device does not cause harmful interference.



■ **Opening the battery cover and installing battery.**

Put your hand like the drawing below, press down and push up following the "→" direction. Then install 3AA battery correctly. Slide battery cover into radio until it is securely in place.





Operation

Power On	Rotate On/Off/Volumn knob clockwise to turn on the radio.
Power Off	Rotate On/Off/Volumn knob counter-clockwise to turn the radio off
Adjust Volumn	Press and hold MON ,you will hear background noise, continue to hold MON and rotate On/Off/Volumn knob to desired volume level.
Display Backlight	The LCD has a backlight which is activated at power-up when power on or the MON 、▼、▲ is pressed.

Select Channel (CH)	Total 14 channel available. 1. The big digit number shown on LCD is the channel number at present. 2. Press ▼or▲ to select the channel. 3. To scroll rapidly, press and hold ▼or▲ button.
Select Private Code	The small digit number right down the LCD is the code of this CH at present. There are 38 CTCSS private codes (T1) and 83 DCS private codes (T2) available. 1. In CH mode, press M momentarily, the code flashing, and you are able to adjust. 2. Press ▼or▲ to select the code. 3. To scroll rapidly, press and hold ▼or▲ button. Note: ● In the CH selected, you will hear only those conversations which have the same private codes as your radio. ● when code shown "00", no private code is set, that is , you may hear all conversation in the Channel.
Monitor Channel	Press and hold MON until you hear a rushing noise. If the radio is equipped with the private code, pressing this button will disables the private code, allowing you to hear all conversations on a Cannel, including those outside your talk group.
To Transmit (TX)	Monitor channel first to ensure it is clear. Press and hold PTT(Push-to-Talk). Put radio upright before your mouth far about 10cm while speaking clearly into Mic.

	When TX, the " "indicator lights. NOTE: If PTT is pressed and hold for longer than 1 min, a time-out-timer dekeys the radio and a continuous tone sounds ; release PTT to restart transmit.
To Receive(RX)	Release PTT to hear voice activity.
Locking Keypad	Press and hold M to lock (or unlock) the ▼and▲ keypad. (takes about 3 seconds) . You will find out "key "indicator on the display.
Useful fuction by pressing MODE button :	In normal Channel mode, Press M (MODE) button momentarily repeatedly, LCD display will toggle between the following items : 1.Code flashing, 2.FM000.00 3. Scan 4. "PS of" or "PS on" 5."Pri of" or "Pri on" The operation of these useful functions is explained as BELOW :
1. Select Private Code	Adjusting private code mode: allow you to select private code.
2. Listen to FM Radio	FM radio mode: you may listen to the FM radio here. Press ▼or▲ to select the desired radio station. To scroll rapidly, press and Hold ▼or▲ button. NOTE: If it always automatically turn back to CH mode when the radio in FM mode, check if CH PRI "on "is setted. (REF: item 5)
3. Scan 1-14 Ch	Scan mode : Scan operation allows you to monitor 1-14 Channels with codes at present in the radio. 1. Press ▼or▲ to begin scan job. 2. Press ▼or▲ again to stop scanning and radio still remains in scan mode. Press ▼or▲ to begin scan again. 3. Press PTT to exit scan mode.

	NOTE: If receive activity is detected ,the radio stops on the active Channel, you will hear the conversation, After approx. 5 seconds of delay, the radio resumes scanning even if activity is still received. if received activity ceases, the radio resumes scanning after another 3 seconds, unless receive activity resumes.
4. Power Save (PS on or PS of)	Power save mode (PS of or PS on): When enabled, it will help to save 40% of power when standby for receive. Press ▼or▲ to scroll through ON and OFF. NOTE: Battery power is conserved by turning off the receiver circuitry, once the function is enabled, it will cause Receiver at most 2 seconds of delay. If you're in an urgent communication situation, it's much better to set up "off" mode to picking up the signal immediately.
5. Ch Priority (Pri of or Pri on) operating only in FM radio mode	Priority mode ("Pri of "or "Pri on"): Only effective in FM radio mode. When it's in ON, radio will keep monitoring the activity in your operating CH, when receiving any message, it will automatically interrupt your FM radio listening and turn back to the CH mode for your RX and TX. That is, you won't miss any message when enjoying the FM radio. Press ▼or▲ to scroll through ON or OFF.
Emergency Alert	Once you press E alert button, your radio will make high- pitched beep continuously for 30 seconds, and at the same, anyone in the same ch and code as you will hear 5 seconds of the emergency sound every 5 seconds through their radio. Press any button to stop.

APPENDIX 6

TRANSMITTER ALIGNMENT

Transmitter Alignment Instructions
Follow This Sheet

WARNING

Any repairs or adjustments should be made under the supervision of a qualified FRS technician.

TRANSMITTER

1.Power Supply Voltage

The power supply voltage should be set for 4.5VDC measured at the radio during transmit. Periodically check the power supply voltage during the alignment procedure.

2.Frequency Setting

A. Connect a frequency counter or Communications Service Monitor to the antenna connector through an RF power attenuator (5 watt minimum rating, 20 dB minimum attenuation).
B. Depress the PTT switch.
C. Adjust the TC301 trimmer capacitor such that the output frequency is equal to the channel frequency with a maximum error of +/- 200Hz.
D. Release the PTT switch.

3.Output Power Alignment.

A. Set the power supply voltage for 4.5VDC.
B. Connect a communications service monitor or a watt meter and dummy load to the antenna connector.
C. Depress the PTT switch.
D. To be convinced for 0.5 Watt (50 ohm load) output power with a maximum error of +/-0.15 Watts.
E. Release the PTT switch.

4.Deviation Adjustment

A. Connect an audio generator.
The audio Frequency should be set at 1 kHz.
B. Connect an FM deviation meter or communication Service Monitor to the antenna connector through an RF power attenuator (5 watt minimum rating, 20dB , minimum attenuation). Set the monitor to read peak deviation.
C. Depress the PTT switch.
D. Adjust VR102 for +/- 2.5kHz maximum deviation.
E. Release the PTT switch.

APPENDIX 7

CIRCUITS AND DEVICES TO STABILIZE FREQUENCY

SYNTHESIZER

A phase locked loop (PLL) circuit establishes and stabilizes operating frequency.

The data for producing necessary frequencies is established by the CPU on the digital board.

The frequency stability of the Tx/Rx is maintained by the TCXO, which generates a stable frequency of 23.5 MHz.

APPENDIX 8

CIRCUITS TO SUPPRESS SPURIOUS RADIATION
AND LIMIT MODULATION

Circuitry to Suppress Spurious Emissions

A low pass filter consisting of L412, C427, C423, C422, C431, C417, L411, C430, C416, L410 and C401 attenuate spurious emissions.

Circuitry to Limit Modulation

IC110 provides mike gain, limiting and audio low pass filtering.