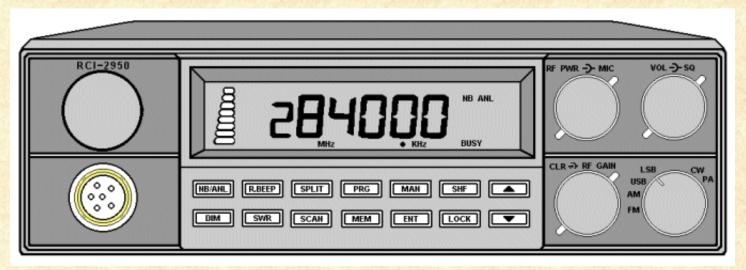
# Ranger RCI-2970

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#### INTRODUCTION

This section explains the basic programming procedures for the RCI-295012970 amateur 10 meter mobile transceiver.

#### FREQUENCY SELECTION

Frequency selection in the RCI-2950/2970 can be accomplished using three of the following methods:

1. The first method of frequency selection is through the use of the SHF (Shift) key and the and arrows. To accomplish this, press the SHF button until the cursor arrow is positioned under the digit of the frequency that is to be changed. Then use the arrow to increase the number. If a decrease in frequency is desired, press the arrow. Perform the steps described above for each digit of the frequency until the desired frequency is displayed in the LCD display window.

- 2. The second method of frequency selection is accomplished using the button and the frequency select knob located above the microphone jack. Use the SHF button in the manner described above to select the digit to be changed. Then proceed to rotate the frequency select knob clockwise to increase the frequency. Rotate the frequency select knob counterclockwise to decrease the frequency.
- 3. The third method of selecting the operating frequency of the radio is through the use of the button and the channel Up and Down button located on the microphone Frequency selection by this method is accomplished in

the same manner as with the and arrows on the key pad. The only difference is that the channel Up and Down buttons on the microphone are used.

While in receive mode, once a signal has been detected on a particular frequency, it may be necessary to slightly change the frequency to provide the best audio through the speaker. This can be accomplished by rotating the

clarifier control to vary the frequency by  $\pm$  0.5 kHz. After this fine tuning has been accomplished, press the button to lock in the frequency at the point of best reception.



# FREQUENCY SCANNING

Frequency scanning can be achieved using one of two methods: the first method involves the scanning of preprogrammed memory channels; the second method will permit the user to scan all frequencies between a preset upper and lower scan limit. Both methods of frequency scanning follow.

# **All Frequency Scanning**

To allow All Frequency Scanning, one must first program the upper and lower scanning limits. The scan limits are simply the highest and lowest frequencies that will be scanned. To program these limits, perform the following steps:

- 1. Press the PRG (Program) key.
- 2. Press the SCAN key. ("PRG SCAN+" should appear in the lower right corner of the display window.
- 3. Using the SHF key and the and arrows, select the upper scan limit, then press ENT
- 4. Press the SCAN key again. ("SCAN -" should appear in the display window.)
- 5. Using the SHF key and the and arrows, select the lower scan limit, then press ENT

The upper and lower scan limits have now been programmed. To activate the scan feature, return the radio to manual operation and press the SCAN button. If the display shows 'SCAN the radio will scan from the lower limit to the upper limit. If "SCAN -' is displayed, the unit will scan from the upper limit to the lower limit. To change from SCAN + to SCAN - or vice versa, press SCAN.

**NOTE:** When programmed, the upper and lower scan limits will also act as the upper and lower operating limits of the radio. The radio cannot now be programmed to operate above or below the scan limits.

### **Memory Scanning**

The RCI-295012970 has 10 non-volatile (i.e\* memory resident) memory locations which can be programmed with any available frequency within the operating band of the radio. The scan function of the unit can be programmed to scan these memory channels. The radio will then scan only those memory channels which have been programmed.

The first step in utilizing the memory scan function is to program the desired frequencies into the radio memory. This can be accomplished by performing the following steps:

- 1. With the radio operating in the manual mode, press the PRG (Program) key.
- 2. Press the (Memory) key. "PRG" should be displayed in the lower right-hand corner of the LCD display window. In the upper left portion of the display, "MEMORY" should be displayed. Directly below MEMORY, a number between 0 and 9 will be displayed. This number represents the memory location currently being displayed. Pressing

the key will increase the memory counter to the next memory location and the contents of that memory

location will be displayed. key and the and arrows, enter the frequency to be stored in the memory location displayed. After the desired frequency has been entered, press 4. Repeat steps 2 and 3 for all of the memory locations to be programmed. 5. After all desired memory locations have been programmed with frequencies, return the unit to the manual mode of operation by pressing the 6. To initiate memory scanning, press and then press As previously discussed, the display will show "SCAN + " or "SCAN -" to indicate whether the radio is scanning from the lowest or the highest merory location or vice versa. 7. To return the radio to normal (non-scanning) operation, press the OFFSET FREQ. OPERATION The RCI-2950/2970 has an offset or split frequency feature that will permit the radio to be operated in a half-duplex mode This will allow the user to talk on FM repeaters operating in the 10 Meter band. (NOTE The FM repeaters may require a sub-audible (CTCSS) tone be transmitted to gain access to the repeater. The RCI-2950 is not factoryequipped with a CTCSS encoder/decoder.) The split frequency function offsets the transmitter frequency either above or below the receive frequency by a user programmable amount. In the following example, programming of a 100kHz offset will be described. Before attempting to program the offset frequency, ensure that the radio is operating in the manual mode by pressing the 1. Press the kev. The LCD display window will display "00000" with "PRG" and "SPLIT" being displayed in 2. Press the the lower left-hand corner. 3. Using the arrows as described earlier, program the display to read "010000." A 100kHz offset has now been programmed into the radio. 5. Return the radio to manual operation by pressing the key and the arrows as described previously, set the radio for the desired receive frequency. 7. Press L In the lower right corner of the display, either "SPLIT + "or "SPLIT -" will be displayed. If SPLIT + is displayed, the transmitter will be offset 100kHz above the receive frequency when keyed. If SPLIT - is displayed, the transmitter will be offset 100kHz below the receive frequency.

9. NOTE: When the transmitter Is keyed, the frequency display will change to show the frequency being transmitted.

8. To return the radio to simplex operation (i.e, same transmit and receive frequency), press the



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Disclaimer: Although the greatest care has been taken while compiling these documents, we cannot guarantee that the instructions will work on every radio presented.