Similarly, the DELAY/HOLD key can be used to change operation while searching.

MANUAL SEARCHING

The search can be switched to manual at any time by pressing the MANUAL key. Pressing the key again will step to the next frequency in the increment chosen.

Holding the MANUAL key down will continue searching, but at a much slower rate.

To resume normal searching, press the SEARCH key again.

SEARCH FREQUNCY TO MEMORY

Any frequency found during a search may be stored in memory. An unused memory channel should be used, or the frequency will replace any existing one in the channel chosen.

The search must be stopped on a particular frequency before it can be stored.

To store a frequency, press ENTER then the channel number (eq 0 5)

Pressing search again will resume searching at that frequency.

-12.5 KHz Switch

In some areas, frequencies in the 800 band have started to use 12.5 KHz offsets from normal 25KHz spacing. To compensate for this and to make your unit compatible with all systems, we have added a special offset control on the top panel. The frequencies that potentially could be offset are in the ranges: 811.0125 to 823.9875 for the mobile or portable side of the system and from 851.0125 to 868.9875 for the base location or repeater of the trunked system. In general, it is far easier to hear oalls when listening to the base than it is to the mobiles. As published information often times does not give the base frequency, only the mobile: add 45 MHz to the mobile frequency to determine the base frequency, e.g. a published frequency of816.0125

oan probably be best heard on that frequency plus 45.000 Mhz. or 861,0125 MHz, which would be the base station. The 12.5KHz switch is designed to function ONLY in the 800 band. It will not function properly in any other band. We suggest you use it to best effect while Searching through the five or ten channels used by a trunked system in the 800 band.

SPECIFICATION

Display type

Frequency Coverage	30- 49.995 MHz 138-174 " 436-512 " 830-950 "
Sensitivity @ 12dB SINAD	.4uV Lo, Hi VHF .5uV UHF 1.0uV 830-950MHz
Channels	20
Scan speed, channels/sec.	13
IF Frequency	1st IF 21.4MHz 2nd IF 455KHz
Search Increments	5,10,12,5KHz,Lo,Hi,VHF, 12.5KHz UHF 25KHz 830-950MHz
Audio Output	120mW = 10% or less THD
Power Required, VDC	6.0VDC
Power Consumption (squelched)	60mA
Antenna Connector	BNC

LCD

INSTRUCTIONS:

AR880 HAND HELD SCANNER

TOP PANEL CONTROLS:

VOLUME — — Also incorporates power on/off switch.

SQUELCH - Eliminetes background noise, also allows the unit to scan or search.

LOCK - Disables keyboard to prevent inadvertent

changes.

- To use 12.5KHz offsets from normal 25KHz -12.5K

spacing. It functions ONLY in the 800MHz band. It will not function properly in any other

bands.

FRONT (KEYBOARD) CONTROLS:

SEARCH - Starts or restarts the search process

SCAN - Starts or restarts scanning of memory channels

PROG - Used in conjunction with Search and Scan

Keys

INC - Selects frequency stepping increment for VHF and air band. On other bands. Frequ-

ency step is selected automatically.

MANUAL - Allows memory programming, advances search or scan one step, or takes unit out

of search/scan modes.

DLY/HOLD - Determines search mode when signal received: DLY allows unit to continue scan-

ning after signal has gone, hold stops scan-

ning on that frequency.

CLEAR - Clears incorrect frequencies before Enter

key is pressed.

- Digits for direct entry of frequencies 0-9

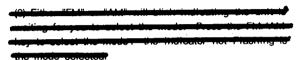
ENT - ENTER key

PROGRAMMING CHANNELS

Programming is done in the "manual" mode.

Follow this example: 146. 875MHz FM into channel 1.

- (1) Press "MANUAL"
- (2) Press 1 4 6 . 8 7 5 and ENT



(4) Press 0 1 to enter the chosen frequency and mode into channel 1.

Repeat the above procedure for each channel to be programmed. Remember that channel's 1 to 9 require the "0" digit to be pressed before pressing the channel number.

If you enter an invalid frequency "ERROR" will appear in the display. Press MANUAL and begin again.

Each time MANUAL is pressed, the scanning/searching process immediately stops. The channel and frequency displayed in the readout will not be affected, unless you change it as detailed above.

SCANNING

After you have programmed the frequencies of your choice into memory, you can scan between them. To start the scanning process, simply press SCAN.

If necessary, adjust the squelch control to eliminate any background noise: scanning looks for a "busy" channel and if the squelch control is set too low, background noise is considered a "busy" channel.

The display will show both the channel number and the frequency as it is scanned. If a transmission is found, the scanner will stop on that channel.

When the transmission cases, scanning will resume automatically.

CHANNEL LOCKOUT

To omit a channel from the scan, simply enter the channel number you wish to omit while in the scanning mode.

If you select the manual mode after locking out a particular channel, the "LOCK" indicator will appear in the display when you select the channel you have locked out

SCAN DELAY

Transmissions are often very short, and any answer might not be immediately made. Once the transmission ends, the scanner assumes a clear channel and commences re-scanning. In this case the next transmission would be missed.

This can be avoided by using the SCAN DELAY mode: when a busy channel is found, the scanner waits approximately 4 seconds before moving from the channel.

To activate the delay, press the DLY/HLD key. The "DELAY" indicator will appear in the display.

To de-activate the delay, press the DLY/HLD key again.

MANUAL OPERATION

If at any time you wish to monitor one channel continuously, press MANUAL repeatedly until the desired channel is reached.

SEARCHING

As distinct from the scan mode, the search mode looks for "unknown" frequencies between two limits (which you choose). Even more, you can choose the increments, or frequency steps, which are used, as well as the mode.

It is recommended that search limits be fairly narrow (eg 1MHz or 1ess) otherwise a long time might be taken to search the band and the signals you are searching for could easily be missed.

For example, you could search every 12.5KHz for transmissions between 500.125MHz and 501.250MHz in the FM band in the following manner:

- (1) Press the PROG key
- (2) Choose the desired frequency increment (12.5KHz) by pressing the INC key until the 12.5 is solid (not Flashing). (On UHF, only 12.5KHz increment is available, 5KHz, 10KHz, 12.5KHz are available all other bands)
- (3) Key in the lower frequency limit by pressing 500.125 then ENT.
- (4) Key in the upper frequency limit by pressing 501.250 then ENT.

(5) Coloct the FM made by pressing the AM-FM tray.

(6) Start searching by pressing the SEARCH key.

If you wish the search to stop at the first busy frequency and stay there, press the DLY/HOLD key until HOLD is shown in the display. If the DLY shows, the searching will continus approx. 4 seconds after the transmission ceases. Obviously the squelch control must be adjusted to remove background noise, otherwise searhing will not take place, Programming the search limits has no effect on the frequencies that have been stored in the scan channels.

The DLY/HOLD key can be used to change the mode while searching.

Programming the search limits has no effect on the frequencies that have been stored in the scan channels.