Getting Started

t this time you should have the OS456™/OS535™ installed in your Pro 2005, Pro 2006 or Pro 2035 radio.

The OS456™/OS535™ parameters should be set to the following:

```
OS456™/OS535™ Address    -> 80 hex
   controller Address    -> E0 hex
                  baud

  -> 9600
```

```
     bits     -> 8
     stop     -> 1
   parity     -> none
```

Note: These are the default parameters recommended by OPTOELECTRONICS.

 The OS456™/OS535™ should be cabled to your Macintosh Computer and if required, any driver software for your serial ports should be installed.

WAVE is supplied as a self extracting archives. Double click on WAVE.sea will result in a folder named "WAVEƒ" appearing on your disk. Inside WAVEƒ will be the WAVE program and some special files that WAVE requires.

Start WAVE by double clicking on it and the above windows will appear. The large window is the Log window and the small window is the Frequency Display window.

Bring down the Radio menu and chose OpenPort and select the port to which you connected the OS456™/OS535™. Note: Your Ports will not have custom names unless you use a third party utility to change their names.

Opening the port the OS456™/OS535™ is connected to will not only cause the serial port to be opened but WAVE will also send the commands to put the OS456™/OS535™ in "Remote" mode. By default (within the OS456™/OS535™) the radio will be tuned to 162.550 MHz (a popular weather frequency). At the same time a report on the interface is presented in the Log window. This information is provided by the OS456™/OS535™ interface and indicates the revision of both the hardware and the software of the OS456™/OS535™ board.

he Rectangle around the Frequency is an indication that the Radio Squelch is open (a signal is present). It will disappear if the Squelch is closed (no signal present). CTCSS and DCS values at this point are just initialization values. The "FM" is the demodulation being used. The "D95" is some random DTMF tones that have been received and below it is the S-Meter showing signal strength. The bottom rectangular area contains Icon buttons that show status and perform functions when they are clicked.

In this example, we are going to Scan frequencies between two limits and record the result of that scan (active frequencies) in the Log.

1.) Replace the Start-up limits (Limits MHz) with the limits you wish to use. For this example, don't make the limits too far apart and chose a range that has frequent traffic in your area. Some good examples are 461.0 to 461.5 or 154.0 to 155.0 or 471.0 to 472.0.
2.) Make sure that "Steps KHz" and "Mode" are set to "Auto" and Delay is set to "None". This will allow WAVE to pick values for these functions that best suit your Limit choices.

3.) Click on "Active" to indicate that this window should control the radio and double click on the right arrow icon to indicate the direction of the search.

4.) Adjust the Volume and Squelch on the radio for best operation.

WAVE should be scanning at this time. An indication of this is the values under the heading "Current" should be changing as the search progresses. Active frequencies will be listed in the Log (lower) portion of the window. If the frequency display in the Floating Window is flickering, turn off the "Hdwr Squelch" option in the Radio menu.

few word about the Icon area at the bottom of the floating window are in order. The first Icon (A speaker) is an indication that the radio's audio output is enabled. Clicking on this Icon will disable the radio's audio output and the sound waves will disapear from the Icon. The second Icon (A tape recorder) is like the audio button but indicates and controls the radio's tape recorder control function.

The next Icon ("L O") when clicked on, will cause the station currently being received to be recorded in the log with its lockout status set to TRUE and the contact with the station will be dropped.

The next Icon ("HOLD") will cause WAVE to discontinue scanning or searching on the current or next active signal. While this hold is in effect the Icon will change to "GO".

The Icon on the far right is a "Yield" button. Clicking on this while a station is being received causes the scanner to terminate contact and go on to the next frequency.

Normal log entries will be made for the station just dropped. This is very useful for "long winded" contacts.

The alternative status of these Icons is shown below.

his indicates that the radio's Speaker Audio is off, The Tape recorder is off and WAVE is in the HOLD state waiting for a "GO" indication from the user.

As the active frequencies are logged there may be some that you don't want to try the next time through the range. Just find the entry for that frequency (Use Sort By Freq from the Log menu to order the list) and double click in the Lockout Column of that frequency (see below). The # character is the indication that an entry is locked out.

he Lockout status is honored in both Searching and Scanning.

If you want to change the Limits of Search you must first make the window inactive (click on the Active button). Or you can open a New window from the File menu and enter your Limits in it. Multiple windows can be active at the same time. They will be serviced one at a time, round robin.

The columns of the Log are (from left to right) Lockout, Frequency, Demodulation, Tones, Hits and Description. See the chapter on The Log for information on how to modify these fields.

The Log you have accumulated can be Saved to a disk file by choosing Save from the File menu. The resulting disk file will have all of the settings from the window and all the log entries in a tab delimited format that is readable by Spreadsheet and text editing programs.

Scanning is just as easy. Please read the following chapters (in the release version of the manual) for a deeper understanding of the remainder of the program.