Why Is This Feature Important

One of the things Hams hate to do it make code plugs. This routine scans for all the active channel nearby and analyses the characteristic of that channels. It then takes those channels it found and puts it in a predefined zone. The user can then modify it using either the CPS or the Enhanced Parameter utility built into the radio.

Of course, if that channel is not active, it won't use it. However, if it is not active, do you really want that as part of your zone?

Auto Scan Mode

The Auto Scan Mode allows the radio to make its own code plug! It does it by scanning the frequency range you have selected and then if it sees a signal, it stops to determine the characteristics of that channel and stores it. If you like, you can delete that channel before it gets stored.

One of the key features is to identify which is the repeaters Rx frequency and which is the repeaters Tx frequency. While it is possible to take an educated guess based on what frequency you are currently receiving, a better approach is to look at all the known repeaters in the area and see if there are any matches. If there is a match, it uses that repeater pair. If there is no match, it makes an educated guess.

When this program starts, the following will be displayed:

If the voice prompts are enabled, then the radio will annunciate Enhanced Scan.

In about two second, the display will now show the starting scanning frequency such as below.

Now the program is looking for the GPS module so it can determine the nearby repeaters so it can make a correction to its transmitter frequency if necessary.

If the module is not there and it has not locked on to a satellite, then we get the following error message:

If the voice prompts are enabled, then the radio will annunciate GPS Not Ready.

If the GPS is ready, and voice prompts are enabled, then we annunciate GPS Ready.

If the GPS is ready, we display the following again:

The radio is now building a table of the closest repeaters. This might take a few seconds so be patient. The table is large enough to store 200 repeater frequency pairs.

The radio now starts scanning after the table is built.

The maximum number of channels the radio will store while scanning is 64. If the radio ever finds 64 channels, the radio will then display:

If the voice prompts are enabled, then the radio will annunciate Active Channels Filled.

At this time, you can save the results by pressing the P4 key or you can press the P7 key and abort from the program. The radio has stopped scanning.

While scanning, the display looks as follows:

While scanning, after every 20 channels we update the display for the current frequency.

While scanning, the following options are as follows:

Press P7 to exit from this routine.

Pressing P4 will save the channels in a special zone that can be accessed anytime. The display will show as below:

If the voice prompts are enabled, then the radio will annunciate Channels Saved

Pressing P2 will delete a channel if there is a channel to be deleted. If there is no channel to be deleted, then you will hear an error beep. If a channel is deleted, you will see the following:

If the voice prompts are enabled, then the radio will annunciate Channel Deleted.

The system allows up to 64 deleted channels. When the radio gets to a channel that is deleted, the system skips over that channel.

Pressing P1 will display the number of active and deleted channels. The display will look as follows:

Enhanced Scan

Act 23 Del 15

If the voice prompts are enabled, then the radio will annunciate:

Active Channels followed by the number of active channels then Deleted Channels followed by the number of deleted channels.