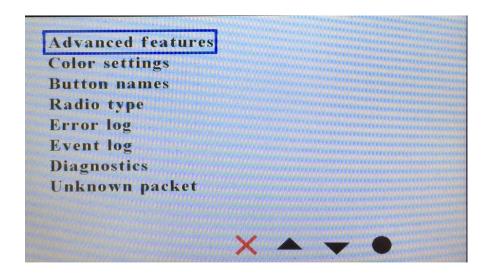
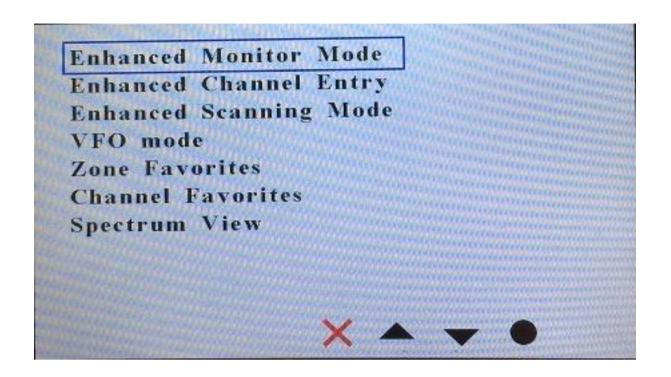
ADVANCED FEATURES

Pressing the rotary switch on the right will bring up the following screen



The up and down arrow on the touch screen or P2 or P3 or the right rotary switch will select which feature you want to select. The solid circle on the touch screen or P4 will select that feature that is highlighted. To exit from this menu select press the Red X on the touch screen or P1. The next picture will show the results of selecting the Advanced features.



Enhanced Monitor Mode

This is an advanced digital monitor mode or promiscuous mode. From a single screen you will be able to see the details of the channel you are receiving. Once you see what you want, you will be able to temporarily lock it in and use it for communication with the conversation in progress.

Enhanced Channel Entry

From a single screen, you will be able to enter all the parameters necessary for creating a channel. You will then be able to lock it in and start communicating with the channel you just set up.

Enhanced Scanning Mode

This feature will allow you to scan between two frequencies and then temporarily lock it in and use it for communication with the conversation in progress. A future version of this feature will allow you to permanently save it.

VFO Mode

You will be able to change frequencies by turning one of the rotary encoders. Various parameters associated with this feature will be able to be set from the screen instead of having to use the CPS and make a new code plug.

Zone Favorites

This feature will allow you to quickly select up to 1 of 16 preprogrammed zones. The setup of this feature is done entirely through the CS-BFD without the need for the CPS and loading a code plug. When selecting the zone, you are always starting with channel 1 of that zone.

Channel Favorites

This feature will allow you to quickly select up to 1 of 16 preprogrammed channels. The setup of this feature is done entirely through the CS-BFD without the need for the CPS and loading a code plug.

Spectrum View

This feature will allow you to see the amplitude of the signal over a frequency range. This is what is known as a spectrum Analyzer.

Enhanced Monitor Mode

This feature is not available yet

Enhanced Channel Entry

```
Enhanced Channel
Rx frequency = | 446.080000
     = 1000
Step
Offset = -5000000
Mode = DMR
Call type = Private
Color = 0
Slot
Contact id = 99
```

To move between parameters in this and other menus, the box around the parameter must be blue. When it is red it means you can change the value of the parameter. The change the active parameter position, use the right encoder, the up and down arrow keys, or P2 and P3.

To enter a parameter, use P4 or the enter position on the touch screen. To exit from a parameter, use P1 or the red X position on the touch screen. In some parameters but not all, pressing P4 or the enter position on the touch screen will get you both in and out of that parameter.

Rx frequency

This selects the Rx frequency either by turning the right encoder switch or a direct entry by using the DTMF keypad on the microphone. Pressing the enter key twice exits from this menu.

Step

This is the step size when adjusting the Rx frequency. The possible entries are:

10 Hz

20 Hz

50 Hz

100 Hz

250 Hz

500 Hz

1.000 Hz

5,000 Hz

10.000 Hz

25,000 Hz

50,000 Hz

100,000 Hz

250,000 Hz

500,000 Hz

1.000.000 Hz

5,000,000 Hz

Offset

This is transmitter offset frequency from the Rx frequency. The possible entries are:

0 Hz

600,000 Hz

5,000,000 Hz

-5,000,000 Hz

-600,000 Hz

Mode

This selects between Analog and Digital Mode

Call Type

This is a DMR only parameter and gives you a choice of Private, Group, or All.

Color

This is a DMR only parameter and allows you to select the color code from 0 through 15.

Slot

This is a DMR only parameter and allows you to select Slot 1 or Slot 2

Contact id

This is a DMR only parameter and allows you to enter the ID through the DTMF microphone keypad.

Squelch type

This is an Analog only parameter and allows you to select between the following:

- 1. None
- 2. CTCSS
- 3. DCS
- 4. -DCS (sometimes known as inverted DCS)

CTCSS encode

This is an Analog only parameter and allows all standard values between 67 Hz to 254.2 Hz.

CTCSS decode

This is an Analog only parameter and allows all standard values between 67 Hz to 254.2 Hz.

DCS encode

This is an Analog only parameter and allows all standard values between 023 and 754.

DCS decode

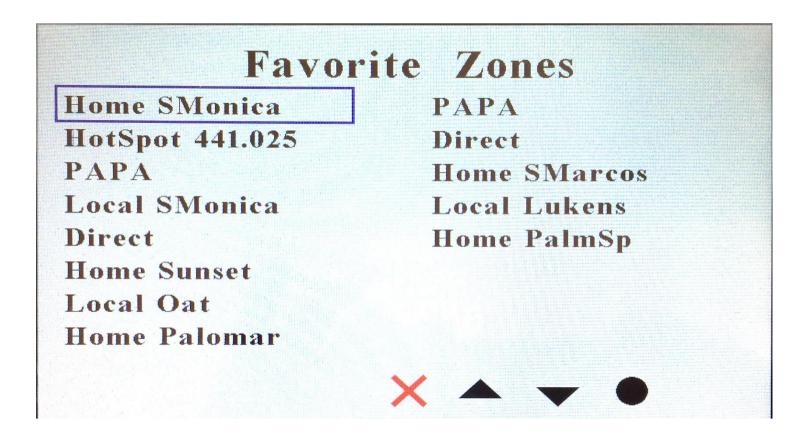
This is an Analog only parameter and allows all standard values between 023 and 754.

Enhanced Monitor Mode

This feature is not available yet.

Zone Favorites

When you select Zone Favorites, you get the following screen. You can get here directly by pressing the name of the zone on the touch screen from the home page.



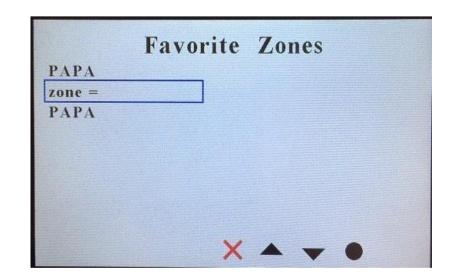
To select a favorite zone, use the right rotary knob or the up and down keys to select the zone you want to jump to and then press the solid circle or the P4 key. Alternatively, press the favorite zone on the screen.



Note that just above the caption "Home Lukens" it says Zone = 1. That tells you the zone number that channel is on. Below that caption, you will see ch = 56. That is the channel number. The 01 refers to the channel number within the zone.

If you want to add a new favorite zone, first move the box to a free zone or to an existing zone.

Then press the "1" key on the keypad of the DTMF microphone. The box will then be erased and the box will show "zone = " with a blinking cursor for you to enter the zone number as shown below.

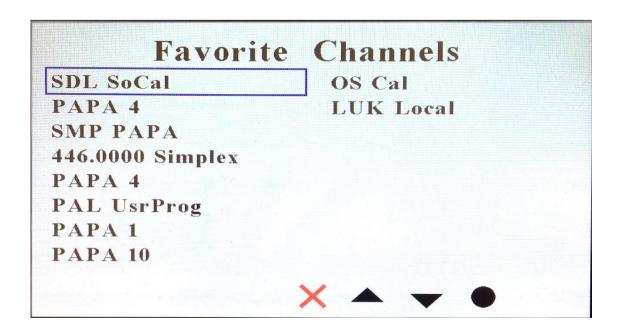


After you finished entering the zone number, press the "O" key from the keypad of the DTMF microphone, the P4 key, or the black circle on the display above the P4 key.

The new favorite zone will be stored, and the display will jump to the home screen with the zone you just picked.

Channel Favorites

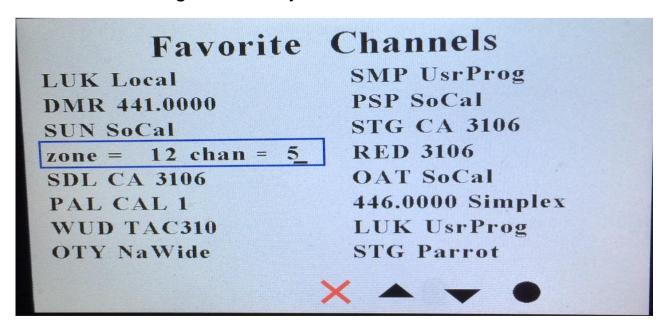
When you select Channel Favorites, you get the following screen. You can get here directly by pressing the name of the channel on the touch screen from the home page.



To select a favorite channel, use the right rotary knob or the up and down keys to select the zone you want to jump to and then press the solid circle or the P4 key. Alternatively, press the favorite channel on the screen.

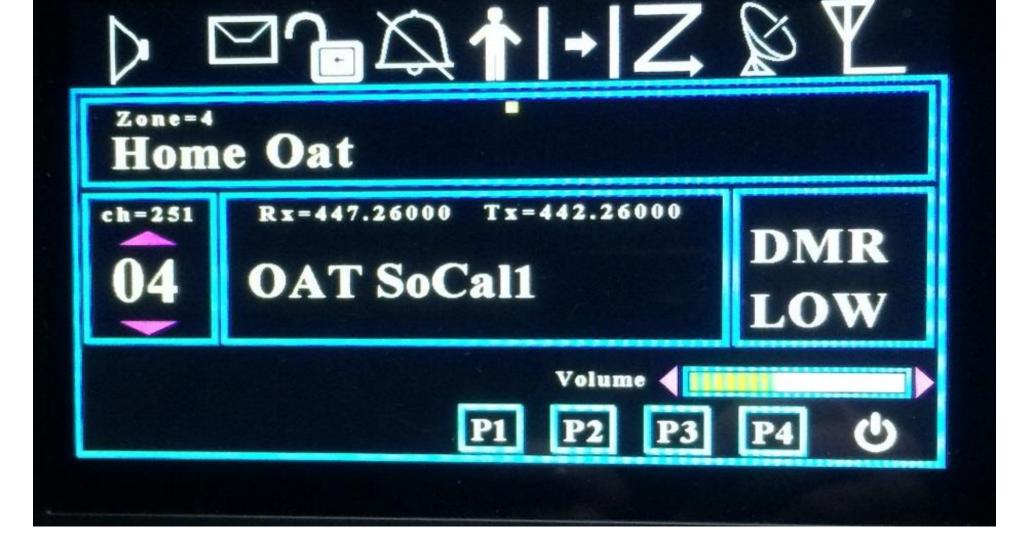
If you want to add a new favorite channel, first move the box to a free channel or to an existing channel.

Then press the "1" key on the keypad of the DTMF microphone. The box will then be erased and the box will show "zone = chan =" with a blinking cursor for you to enter the zone number as shown below.



The zone number can be between 1 and 250. After you finished entering the zone number, press the "O" key from the keypad of the DTMF microphone, the P4 key, or the black circle on the display above the P4 key. The blinking cursor will then move to allow you to enter the channel number. The channel number is the number within the zone and is between 1 and 16. Enter the appropriate channel number and then press the "O" key from the keypad of the DTMF microphone, the P4 key, or the black circle on the display above the P4 key.

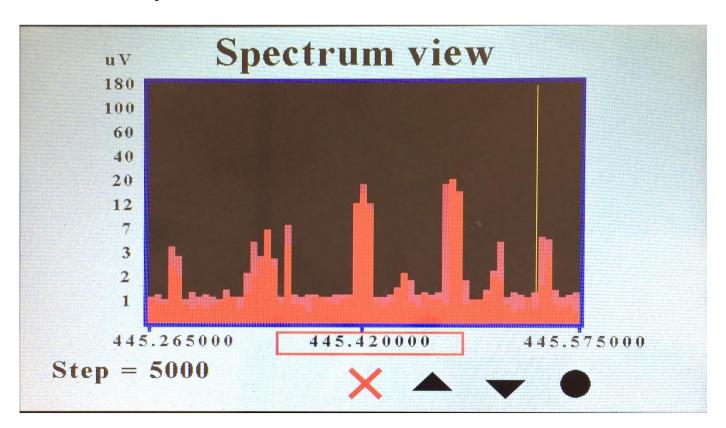
The new favorite zone will be stored, and the display will jump to the screen with the zone and channel you just picked..



Note that just below the caption "Home Oat" it says ch = 251. That tells you the channel number that channel is on. The 04 refers to the channel number within the zone. The Zone number is above the caption "Home Oat".

Spectrum View

The spectrum view is a built in spectrum analyzer. It shows frequency verses amplitude. There are two parameters than can be adjusted in this screen.... Step size and center frequency. To access these parameters, press the select key.



Step size

This is the step size when adjusting the Rx frequency. The possible entries are:

10 Hz 20 Hz 50 Hz 100 Hz 250 Hz 500 Hz 1,000 Hz 5,000 Hz 10,000 Hz 25,000 Hz 100,000 Hz 250,000 Hz 500,000 Hz 1,000,000 Hz

You can select between the step sizes by the right encoder or the up and down keys on the display, P2 and P3, and the keypad on the DTMF microphone. Once you select the size press the select key.

Center Frequency

Once you select the center frequency, you can change it by the right encoder or the up and down keys on the display, P2 and P3, and the keypad on the DTMF microphone. The step size determines how much the center frequency is going to change every time you press a key.