

VFO Mode

Why Is This Feature Important

Sometimes you do not have the channel programmed into the radio and sometimes you do not know of any local channels. This feature allows you to manually scan for frequencies that are active.

The CPS has the following parameters:

VFO

| | | | |
|-------------------------|-------|-------------------------|-------|
| Range Start | _____ | Range End | _____ |
| Tx Offset VHF | _____ | Tx Offset UHF | _____ |
| Tx offset Direction VHF | _____ | Tx offset Direction UHF | _____ |
| Channel Spacing | _____ | Reserved 3 | _____ |
| Reserved 1 | _____ | Reserved 2 | _____ |

To get into the VFO mode, press the button that was setup in the CPS for Special Function 1. Scroll to the VFO entry and press P4 to start this feature. The first screen to appear will be as follows:



The frequency displayed will be the Range Start parameter. Once you get into the VFO mode, the use of all the buttons will have a special meaning. A summary of the use of the buttons are as follows:

Numbers 0 – 9. Setup the Encode and Decode parameters for CTCSS or DCS if in Analog mode and setup for Private or Group calling if in digital mode.

Star sets the CTCSS or DCS decode if in Analog mode or Private call if in Digital mode.

Pound sets the CTCSS or DCS encode if in Analog mode or Group call if in Digital mode.

P1 Changes the mode between Analog and Digital

P2 Changes the channel spacing

P3 Changes the direction of the Tx frequency relative to the Rx frequency.

P4 Changes the bandwidth for an Analog channel

P5 Increase the VFO frequency

P6 Decrease the VFO frequency

P7 Immediately exit from this feature back to the start screen

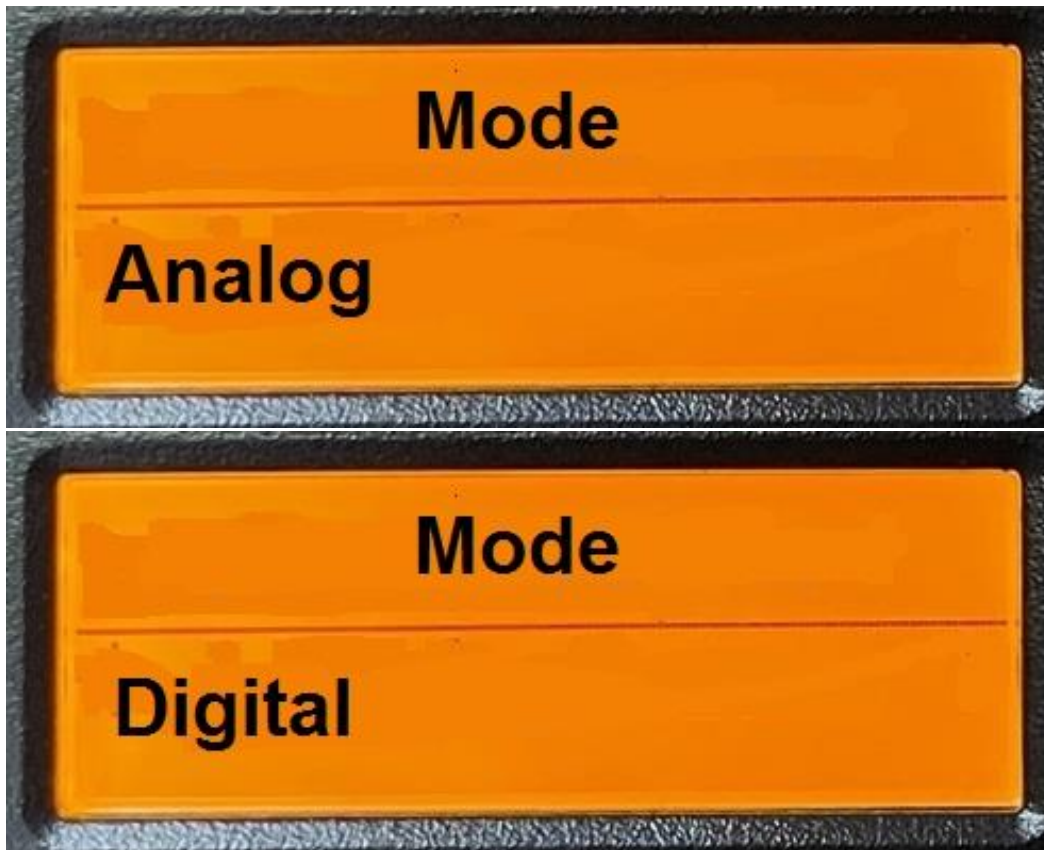
OK Changes the slot number for an analog channel

Cancel Changes the color code for a digital channel

Up increases the maximum frequency of the Range End CPS parameter

Down decreases the minimum frequency of the Range Start parameter

P1 will switch between Analog and Digital



Once you press the P1 key, the display will stay on for about three seconds before it goes back to the start screen display. However, if another key is pressed within that three seconds, that other key will take priority and do what it is supposed to do.

If the voice is enabled, the radio will announce the mode you are switching to.

P2 will change the channel Spacing. The available spacing is shown on the next 8 screens.



Channel Spacing

6.25 KHz

Channel Spacing

12.5 KHz

Channel Spacing

25 KHz



Once you press the P2 key, the display will stay on for about three seconds before it goes back to the start screen display. However, if another key is pressed within that three seconds, that other key will take priority and do what it is supposed to do. If the voice is enabled, the radio will announce the spacing you are switching to.

P3 will change the Tx offset direction. The choices are



Once you press the P3 key, the display will stay on for about three seconds before it goes back to the start screen display. However, if another key is pressed within that three seconds, that other key will take priority and do what it is supposed to do.

P4 will change the analog bandwidth. The choices are:



Once you press the P4 key, the display will stay on for about three seconds before it goes back to the start screen display. However, if another key is pressed within that three seconds, that other key will take priority and do what it is supposed to do.

If the voice is enabled, the radio will annunciate the bandwidth you are switching to.

P5 will move the frequency forward the amount specified in channel spacing.

As an example, the screen before any key was pressed is the following:



Assuming the channel spacing is 6.25 KHz, the screen after P5 is pressed will be the following:



If the voice is enabled, the radio will announce the frequency you are switching to.

P6 will move the frequency back the amount specified in channel spacing.

As an example, the screen before any key was pressed is the following:

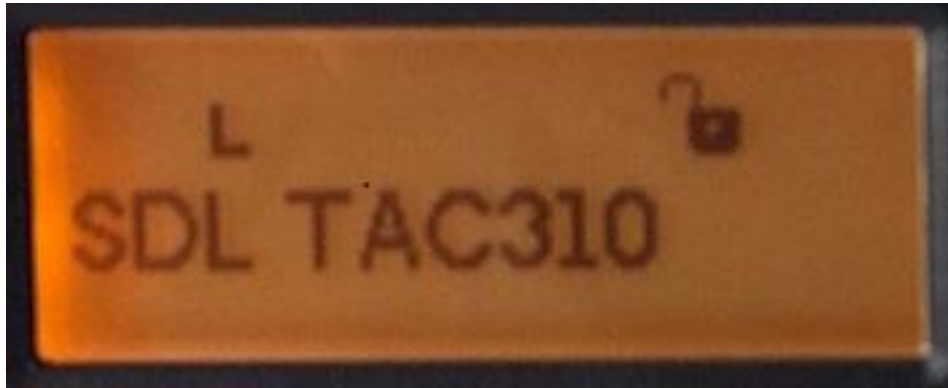


Assuming the channel spacing is 6.25 KHz, the screen after P6 is pressed will be the following:



If the voice is enabled, the radio will annunciate the frequency you are switching to.

P7 will exit from this screen and go back to the standby screen as defined by your CPS. An example is shown below.



O (on microphone) will change slot for digital. The choice is between 1 and 2.



Once you press the O key, the display will stay on for about three seconds before it goes back to the start screen display. However, if another key is pressed within that three seconds, that other key will take priority and do what it is supposed to do.

If the voice is enabled, the radio will annunciate the slot number you are switching to.

C (on microphone) will change color code for digital. The choices are between 0 and 15













Once you press the C key, the display will stay on for about three seconds before it goes back to the start screen display. However, if another key is pressed within that three seconds, that other key will take priority and do what it is supposed to do.

If the voice is enabled, the radio will announce the color code you are switching to.

Pressing the number keys on the microphone will show up on the display. If the mode is currently Analog, then up to four digits will be shown on the display. If it is digital, then up to nine digits will be shown on the display.

If the user presses more digits than allowed, then the display will be erased, an error beep will be generated, and it will go back to the start screen.

An example of an analog and digital entry is shown below:



Pressing the * key if an analog channel will cause the radio to store the DCS code or CTCSS code for receiving.

However, if there are less than three digits on the screen when the * key is pressed, the radio will generate an error beep and the radio will go back to the start screen.

If there are three digits on the screen, then the radio will check for a valid DCS code. If the DCS code is not valid, then the radio will generate an error beep and the radio will go back to the start screen.

If there are four digits on the screen, then the radio will check for a valid CTCSS code. If the CTCSS code is not valid, then the radio will generate an error beep and the radio will go back to the start screen.

Pressing the * key if a digital channel will cause the radio to store the data as a private call.

However, if there are less than 1 digit on the screen when the * key is pressed, the radio will generate an error beep and the radio will go back to the start screen.

If the number is not a valid private call number, when the * key is pressed, the radio will generate an error beep and the radio will go back to the start screen.

Pressing the # key if an analog channel will cause the radio to store the DCS code or CTCSS code for transmitting.

However, if there are less than three digits on the screen when the # key is pressed, the radio will generate an error beep and the radio will go back to the start screen.

If there are three digits on the screen, then the radio will check for a valid DCS code. If the DCS code is not valid, then the radio will generate an error beep and the radio will go back to the start screen.

If there are four digits on the screen, then the radio will check for a valid CTCSS code. If the CTCSS code is not valid, then the radio will generate an error beep and the radio will go back to the start screen.

Pressing the # key if a digital channel will cause the radio to store the data as a group call.

However, if there are less than 1 digit on the screen when the # key is pressed, the radio will generate an error beep and the radio will go back to the start screen.

If the number is not a valid group call number, when the # key is pressed, the radio will generate an error beep and the radio will go back to the start screen.

Pressing the PTT will transmit based on current parameters

Releasing the PTT will receive based on current parameters

The following parameters are supplied by this program:

CTCSS/DCS Encode and Decode

Group/Private Call

Frequency

Color Code

Slot Number

Analog/Digital Mode

Analog Bandwidth

If any parameter is needed that has not been provided by this program, then the channel the radio was on before getting into the VFO mode should be used for those parameters.

Encoder will be used for volume control. About three seconds after the volume control change, the radio should go back to the start screen.