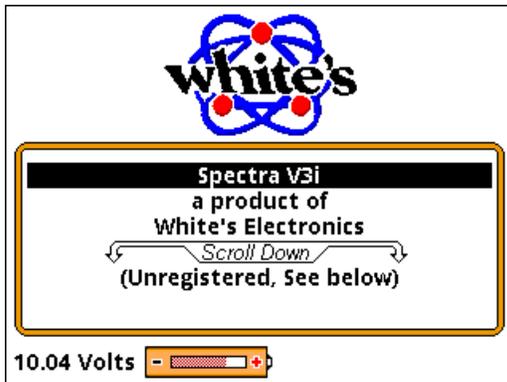


Turn On & Go

Although V3i is highly programmable, it includes several factory preset programs which provide good overall performance and allow a new user to quickly start hunting.

1. Press **ON/OFF**: V3i displays the owner details (if registered) and battery condition; scroll down for information about the detector and general features.

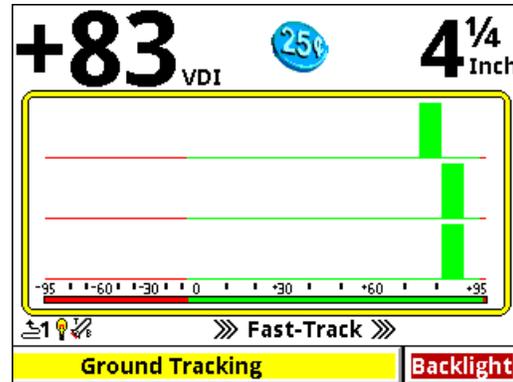
Tip: Press **ZOOM** to change the font size



2. Press **MENU**: The initial six-block menu screen lets you easily change basic settings. Select **PROGRAMS** and scroll down to choose a search program:



3. Pull Trigger: Squeeze and release the Trigger on the handle grip. V3i is now in normal search mode.



Programs and Memory

V3i has 9 preset factory programs:

- **Coin & Jewelry** - Accepts most common coins, along with rings and jewelry.
- **Salt Beach** - Coin & Jewelry using salt subtraction mode.
- **Relic** - Mixed mode, no Tone ID, no VCO.
- **Prospecting** - Optimized for nugget hunting.
- **Deep Silver** - Optimized for deep silver.
- **Meteorite** - Accepts most iron.
- **High Trash** - Fast recovery response for better trash separation.
- **Hi-pro** - Advanced Coin & Jewelry.
- **Mixed Mode Pro** - Advanced features including Stereo mixed-mode.

These programs are designed for good performance under most conditions and provide an excellent starting point. However, ground conditions vary considerably, so some adjustments may be necessary. Changes to factory pro-

grams, as well as completely new custom programs, can be saved to memory and recalled at any time. Saving and restoring programs is covered in the Expert portion of this manual.

Manual Ground Balance

V3i's automatic ground balance system has a fast-track mode that attempts to balance the system to soil conditions within 20 seconds of turn-on. If you do not begin searching within 20 seconds or the ground is unusually trashy, V3i may not fast-track correctly and you may want to do a manual ground balance:

- Squeeze/hold the Trigger, then press/hold **ENTER**.
- Pump the search coil over the ground (1-12 inches) until the background hum becomes steady (usually 4 to 6 times). Make sure you do this over an area free of targets.
- Release **ENTER**, then release the Trigger, and begin searching.

Tip: If you release the trigger *before* releasing **ENTER**, V3i will lock the screen to pin-point mode. Simply pull the trigger twice to search.



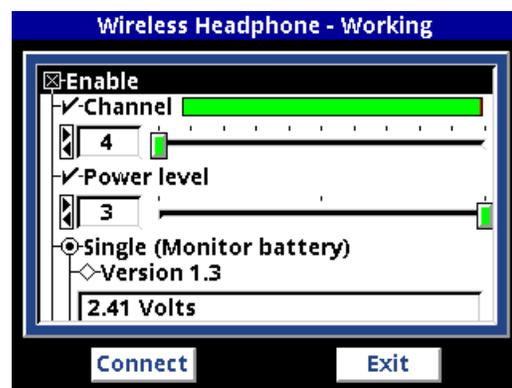
This manual ground balance sequence can be done at any time during normal search. Once the initial ground balance is completed, V3i will automatically track to most typical ground mineral changes.

Tip: If V3i seems to have an erratic audio only when sweeping the search coil on the ground, check the ground balance.

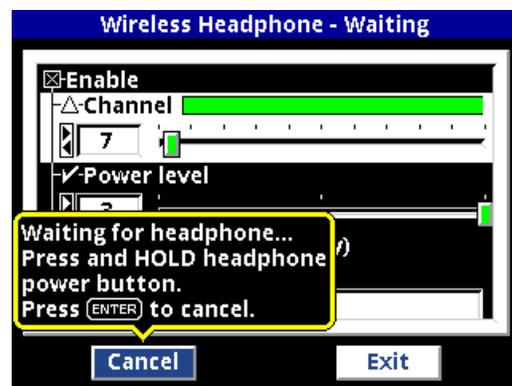
Wireless Headphones

If you purchased V3i with wireless headphones (WHP), then do the following to enable them:

- Turn on your WHP; you should hear a turn-on tone (ta-DA).
- Press **MENU**, select **Audio**
- Scroll down and select **Wireless Headphone**
- If the **Enable** box is unchecked, the press **ENTER** to check it. You will see multiple options appear:



If **Monitor Battery** reports a voltage, then the WHPs were recognized and are working. If, instead, it reports "Not responding," then the WHPs were not recognized. Try cycling their power. If this does not work, you will need to do a connect sequence. Simply **TAB** to the connect button and press **ENTER**. You will see:

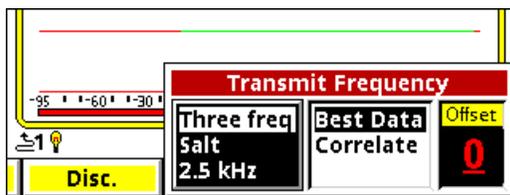


Press/hold the WHP power button until it connects.

By default WHPs are set on Channel 4 and Power Level 3. If there is excessive interference, and especially if you are hunting near another V3/V3i user, you may need to try a different channel. Each time you change the channel, you will need to repeat the connect sequence. Turning down the Power Level has little effect on battery life so it is best to leave it at 3.

Electromagnetic Interference (EMI)

EMI can be a problem with any wide-band metal detector, whether a multi-frequency VLF or a pulse induction design. V3i includes a frequency offset to help deal with this. Simply select the **Transmit Frequency** item on the Live Control Bar to access the **Offset** control:



There are ± 5 increments of frequency offset; with the search coil held in the air, find the one for best stability.

Tip: EMI is easiest to hear in pinpoint mode (trigger pulled).

Tip: If V3i continues to have erratic audio with the search coil held in the air, reduce the RX Gain.

Menus & Controls

V3i is the world's most configurable metal detector. In order to make this detector both user-friendly to a new detectorist, and to satisfy the desires of advanced users and tech-heads, there are 3 ways to changes settings:

- 6-Block Menu — Common settings
- Live Control Menu — Live-search settings
- Expert Menu — Complete settings

By default, when the **MENU** button is pressed during normal search the 6-Block menus appear. These are designed to represent the controls normally found in a high-end analog metal detector. Advanced users may choose to disable the 6-block menu and go straight to the Expert menus. We will cover all the menu settings in subsequent chapters.

6-Block Menu



The 6-Block menus contain the most important settings all in one place. Briefly, the controls behind the 6-Block menus are:

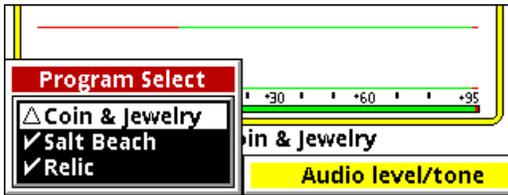
- Programs — select from a list of pre-configured programs
- Sensitivity — receiver sensitivity settings
- Audio — volume, tones, tone ID
- Discrimination — discrimination and filter settings
- Frequency — frequency mode and settings
- Ground Tracking — tracking mode and settings, plus filters

While the 6-Block menu is being accessed, the search operation of V3i is suspended.

Live Control Menus

You may want to quickly change settings while searching. By default, the Live Control Bar is displayed at the bottom of the Search screen and its items are accessible via the left/right arrow buttons. When a Live Control item

is selected (using the **ENTER** button), a small control box pops up with one or more individual controls:



Any available setting in the Live Control Bar performs the same function as any like-named setting in the 6-Block menus (or the Expert menus), but the live controls can be adjusted while the detector is in normal operation. For many of the Live Control items, you can press the **VIEW** button to access additional settings and controls. Accessing these screens suspends the search operation of *V3i*.

Tip: Press **VIEW+DN** and **VIEW+UP** to hide or expand the Live Control Bar.

Expert Menus

Both the 6-Block menus and the Live Control menus are subsets of *V3i*'s configuration settings. The complete menu of all possible settings is found in the Expert menu. The Expert menu can be accessed by pressing **MENU,MENU** from the Search screen (this brings up the **Information** screen), scrolling down to the bottom, and selecting **Expert Menu**.

The Expert menus are very extensive and it is easy for a new user to get confused as to how all those different controls affect the detector. We highly recommend avoiding the Expert menus until you get comfortable with the 6-Block controls and the Live Control Bar. If you explore the Expert menus and want to quickly exit, simply pull the trigger switch a few times.

Controls

V3i uses a variety of different interface controls. Most of them are very similar to

those found in computer graphical interfaces so they will be familiar to many users.

V3i Displays

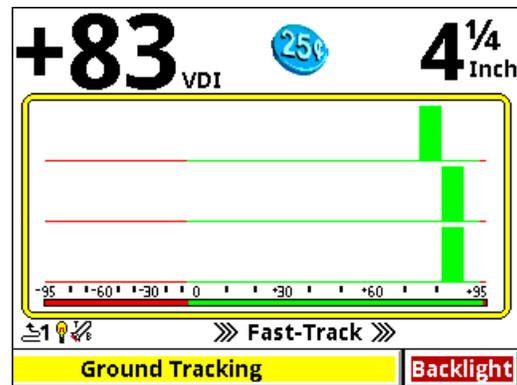
V3i has 3 display modes corresponding to the 3 positions of the trigger switch:

- Trigger neutral — Normal Search
- Trigger forward — Analysis
- Trigger pulled — Pinpoint

Each of these display modes are normally tied to certain operational modes and can be programmed differently, and even have different screen displays. This section briefly describes the default modes and their screens. A more detailed discussion of display modes is given in Chapter xx.

Search mode

Search mode is the normal display mode for *V3i*. By default, it shows a 3-frequency SpectraGraph¹:



Along the top of the screen are the VDI number, icons, and depth. The majority of the screen consists of the SpectraGraph display, which provides real-time information on the target's VDI. See Chapter XX for more information on how to read this display.

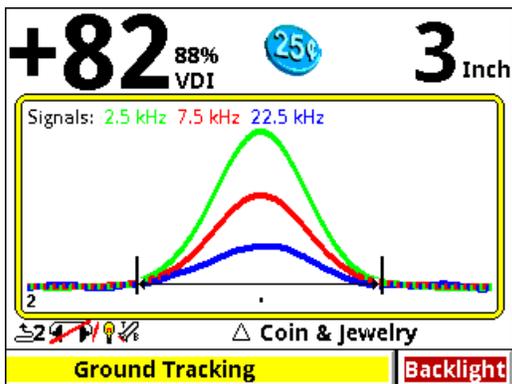
1. Some factory programs run in single frequency mode, so they will display a single frequency SpectraGraph.

Below the SpectraGraph is the Status Line, which contains icons for the status of wireless headphones, backlight, and transmit boost. In the middle of the Status Line the name of the active Program is displayed, and is occasionally overwritten by the ground tracking status.

At the bottom of the Search screen is the Live Control Bar which gives instant access to the most common settings while V3i is operating.

Analysis mode

The Analysis display mode offers an alternate way to analyze the target. In most programs, this mode is set up to display the Sizing screen. Like the Search screen, the top of the

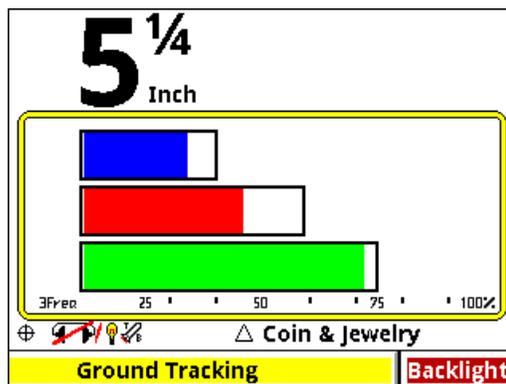


Sizing screen contains the VDI number, icons, and depth, the middle has the same Status Line, and the Live Control Bar is at the bottom. Instead of the SpectraGraph display, there is a Sizing display which, when the coil is swept over the target a single time, produces a

graph of the sweep response of each frequency. See the Chapter XX for more information on how to read this display.

Pinpoint mode

Pinpoint mode places V3i in an all-metal mode and displays the Pinpoint screen:



Again, this screen has the depth (but no VDI or icons), Status Line, and Live Control Bar. The Pinpoint display consists of 3 horizontal moving bars which give the relative signal strengths of the three frequencies. This can be used to precisely pinpoint the target, and to see which frequency is giving the strongest response. See the Chapter XX for more information on how to read this display.

Tip: To lock V3i in Pinpoint mode pull and hold the trigger, press and hold **ENTER**, release the trigger and release **ENTER**. V3i will stay in Pinpoint mode until you double-pull the trigger.