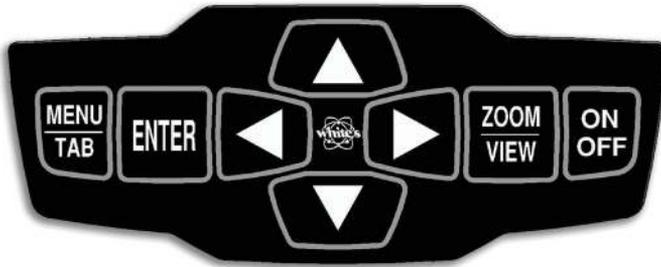




*Spectra*TM V³

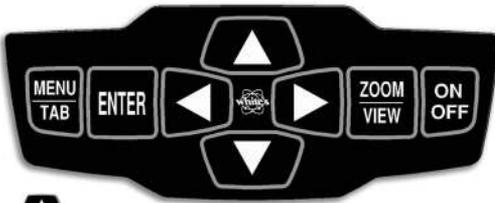


Field Guide



all you need to know

SPECTRATM



Navigation



-  **UP/DOWN** moves the Cursor vertical to select from a list.
-  **SIDE/SIDE** moves the highlighted selection horizontally.



MENU/TAB brings up menu or moves the Cursor to the next item or selection on the screen. Selection is highlighted.

MENU/TAB x2 brings up information screen. Includes backlight and advanced menu (see page 11).



ENTER selects the option.



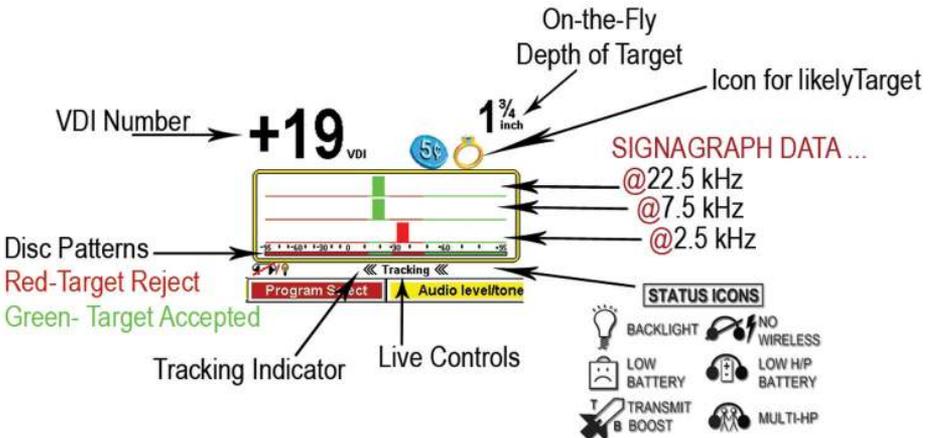
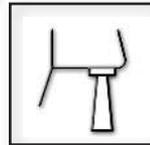
ZOOM/VIEW increases text size or provides more detailed Menu.



BACKUP or ESCAPE squeeze and release trigger from any Menu or control.

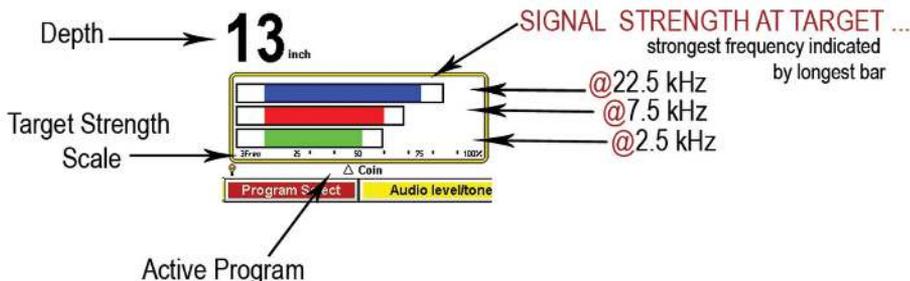
ACTIVE SEARCH SCREEN

TRIGGER IN CENTER POSITION



ACTIVE PINPOINT SCREEN

SQUEEZE TRIGGER and HOLD

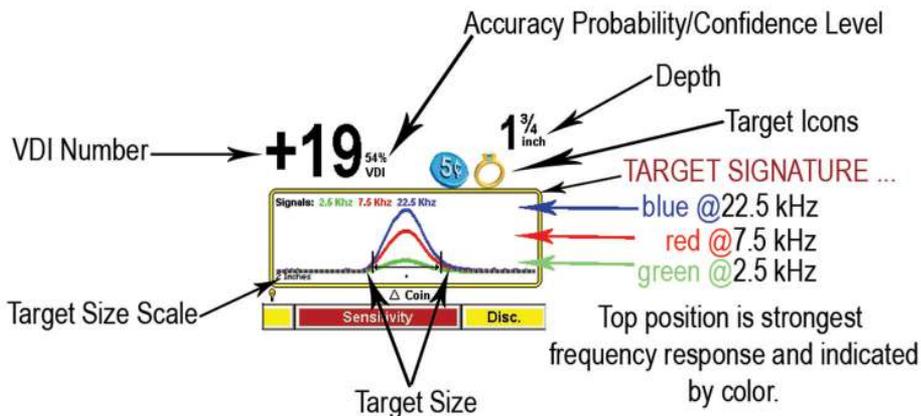
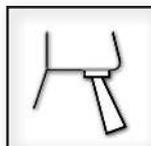


NO LOOP MOTION REQUIRED

TO Pinpoint - SQUEEZE AND HOLD TRIGGER

ACTIVE ANALYZE SCREEN

TRIGGER FORWARD



SWEEP AND ANALYZE

TO Analyze - TRIGGER FORWARD



Programs



Coin - Aggressively rejects pull-tabs and trash. Responds to all coins and some rings.

Coin & Jewelry - Less trash rejection than coin - accepts aluminum, responds to most jewelry, and and all coins.

Salt Beach - Salt subtraction method. Rejects iron and some trash. Accepts aluminum, responds to most jewelry, coins and rings.

Relic - Accepts Civil and Revolutionary War relics, large iron accepted. Large and small iron respond with a low tone.

Prospecting - Accepts Gold, Silver and Copper nuggets. Iron ID Uses VCO audio, SAT and aggressive ground reject. Accepts all metal targets.

Deep Silver - Accepts very high range VDI numbers. Allows max detection of deep Silver targets.

High Trash - High trash rejection for heavy use in public areas.

Hi Pro - Minimum audio trash reject. Display used for target ID - very high gain levels. May be unstable in some areas requiring adjustment of Gain and Sensitivity.

Mixed Mode Pro - Combines Audio from Discrimination and All Metal modes plus Hi Pro options. A relic-hunter favorite.

Meteorite - Detects nickel/iron specific to meteorites by accepting negative VDI numbers. Most other targets rejected.

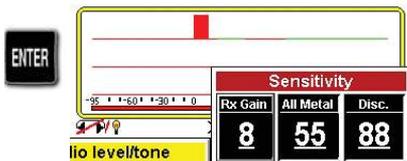
Common - Contains Demo Program. Further options in Expert Menu.

Restore - Returns selected Program to factory settings. Use Menu/Tab to select. Push Enter to restore. See back cover.

More in "Complete Owner's Guide"

USING LIVE CONTROLS -

Sensitivity Live Control used as EXAMPLE



Sensitivity



Sensitivity Zoomed

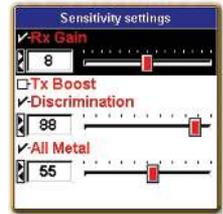
*Programs - Sensitivity -
Audio - Discrimination - Frequency -
Ground Balance/Tracking*



The **Live Control Bar** across the bottom of the display for quick and easy on-the-fly adjustment. Spectra continues to operate normally while these settings are being changed. Use to highlight, to adjust, or press to pop up the control. Press to expand the content. Detector continues to operate to allow for perfect adjustments.



Sensitivity



Rx Gain - (Pre-Amp) Adjusts receive signal amplification. Affects sensitivity, depth, and interference from external noise.

Tx Boost - Boosts transmit signal for use in low mineral ground.

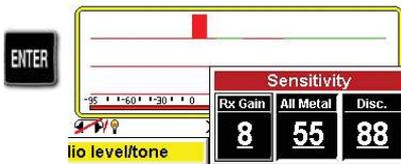
CAUTION - prolonged use will increase battery drain.

Discrimination - Adjusts level of sensitivity to targets. Affects depth.

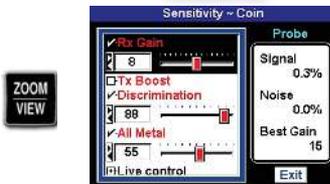
All Metal - Adjust detection signal in All Metal circuit. Effects depth and width of target response.

More in “Complete Owner’s Guide”

LIVE CONTROLS - SENSITIVITY



Sensitivity



Sensitivity Zoomed

Probe -

Percentage indicator of signal capacity-to-noise ratio, and a Best Gain calculation for MAX performance.

- Signal % = return from ground.
- Noise % = external electrical and ground noise.
- Best Gain = RX Gain reasonable level (considering all other current settings). With the loop on the ground, note “Best Gain”. Adjust RX Gain to match.

Tips ...

The “preset” factory program settings are always marked with a checkmark or the value is underlined. When changing Sensitivity on RX Gain, re-ground balance is recommended - see Ground Balance/Tracking page 9.



Audio



Target Volume - Adjust how loud a metal target “beeps”.

Audio Threshold - Adjust volume level of Threshold (slight background hum).

Tone - Target Tone or Pitch. (the “beep” a metal target produces).

Threshold Tone or Pitch - Tone or pitch of the Threshold.

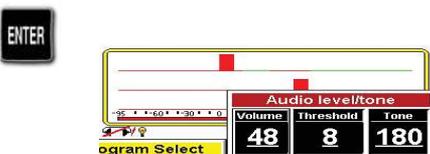
Tone ID - When activated produces a progressively higher pitch keyed to VDI number.

Wireless Headphone - SEE BELOW

More in “Complete Owner’s Guide”

LIVE CONTROLS - AUDIO

SpectraSound System comes factory pre-connected (Channel 4) allowing the below “Quick Connect Sequence”.



Audio



Audio Zoomed



Wireless Headphone - Quick Connect

- Select Audio or Zoom Audio
- to Wireless Headphone. Press
- Press to enable
- Press headphone power button.
- Headphone is connected **within five seconds** when you hear...
- Trigger to search.

Tips ...

Headphones automatically turn off with the detector. To manually turn **OFF** headphones, press headphone power button. You will hear . The metal detector speaker will connect **within ten seconds**. More options available in “Complete Owner’s Guide”.



Discrimination



Discrimination Accept / Reject - Custom setting accept or reject for VDI range.
 “X” Box = Accept (detected) - Empty Box = Reject.

Bottle Cap Reject - Adjusts level of Bottle cap signal response.

Hot Rock - Adjusts rejection level of negative pebbles and rocks that are not silenced by the ground balance system and would sound like targets.

Ground Filter -

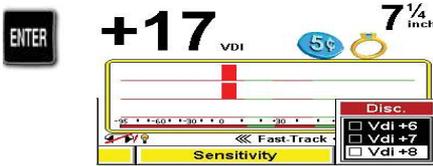
Selects one combination set of:

- Sweep speeds - Slowest 5.0Hz-7.5Hz-10Hz-12.5Hz (Fastest)
- Pass filters - High for moderate to high mineralized ground or Band for lower mineralized ground.

Select 10Hz-High for best all around performance.

More in “Complete Owner’s Guide”

LIVE CONTROLS - DISCRIMINATION



Discrimination



Discrimination Zoomed

Zoom Discrimination -



Visual Reject, VDI Select, and Icons

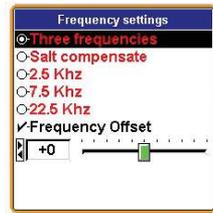
Advanced and custom Discrimination selections from several methods and menus. Icons can be selected from three sets - Park, Relic and Prospecting. Use Help Balloons (trigger forward) and advanced manual for more information.

Tips ...

CAUTION - activation of bottle cap or hot rock controls may cause good targets to break up and/or reject.



Frequency

Three Frequencies - Best choice for general use. Transmits and receives 2.5 KHz-7.5 KHz and 22.5 KHz at the same time.

Salt Compensate - Receives and displays all frequencies. Uses subtraction method for saltwater balance.

2.5 kHz - Single frequency. More sensitive to high conductive metals, Silver/Copper.

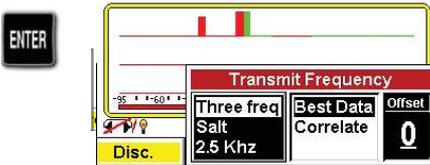
7.5 kHz - Single frequency. Sensitive to all types of metals.

22.5 kHz - Single frequency. Most sensitive to small and/or low conductive metal, Gold/Nickel.

Frequency Offset - Tunes out unwanted external signals by selecting one of 5 positive or 5 negative offsets. Aids in avoiding other metal detector signals and other electrical interference. Offsets apply to single or combined frequencies.

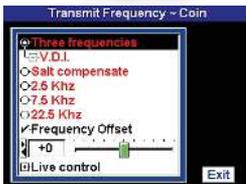
More in "Complete Owner's Guide"

LIVE CONTROLS - FREQUENCY



Frequency

ZOOM VIEW



Frequency Zoomed

Zoomed Frequency Control -

- Allows advanced frequency methods and display.
- Use "Help Balloons", (trigger forward), and advanced manual for more information on Best Data/Correlate.

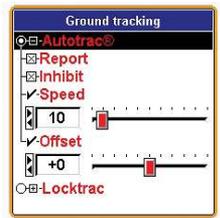
Tips ...

Using a single frequency can increase the sensitivity to certain classes of metals by concentrating all available energy to a single transmit frequency.

Moreover, 22.5 kHz is more sensitive to small and low-conductive targets like gold. 2.5 kHz works best for high-conductive targets like silver coins. Preset programs Prospecting and Deep Silver use the single frequency method. (Prospecting 22.5 kHz and Deep Silver 2.5 kHz.) **When changing frequencies a re-adjustment of Sensitivity and ground balancing is necessary.**



Ground Balance/ Tracking



For best results, instrument start up should be followed by a manual ground balance. Pull and hold trigger, then press and hold enter while pumping loop up and down over the ground until threshold is smooth. Release enter then release trigger. Also helpful as an option to check tracking from any search mode.

Report - ON ("X" in box) Activates ground tracking indicator arrows on display reports (indicates) the automatic increasing or decreasing of the ground balance point.

Inhibit - ON ("X" in box) When on, delays the point automatic tracking begins to adjust to the ground. Helps in iron infested ground. Use off in widely variable ground with little or no iron to allow immediate tracking.

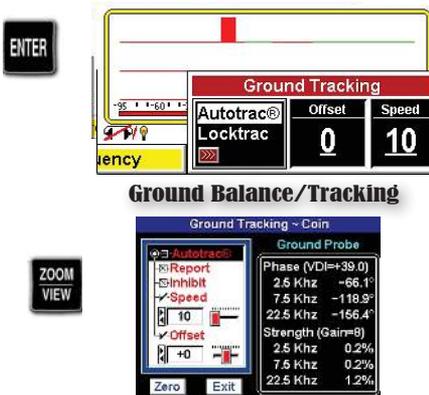
Speed - Adjust the rate of ground tracking – higher numbers “track” faster to changes in the ground.

Offset - Manually moves ground balance point from perfect balance. Positive offset often used in highly mineralized ground to enhance low conductive and small (gold, silver, coins) targets in radically changing noisy ground.

Locktrac - Locks ground setting. Turns off all tracking. Turn ON and use manual method above. Best used for repeatable responses on very deep targets, and rejection of difficult minerals.

More in “Complete Owner’s Guide”

LIVE CONTROLS - GROUND BALANCE/TRACKING



Ground Balance/Tracking Zoomed

Ground Probe -

Provides helpful information -

- To determine the severity of ground (weak ground vs strong ground).
- Targets can also be analyzed for VDI number, phase and target strength at each frequency. To use - (from Zoomed Live Control) Menu/Tab to Zero and press Enter with loop in air. Hold loop on the ground or target to read results.

Information/Configure



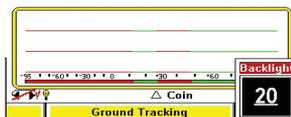
x2



To access Information/Configure press MENU twice in succession. To Exit squeeze and release trigger on hand grip twice.

Backlight - Spectra backlight is preset to maximum brightness (setting 20).

Battery life is significantly increased by reducing brightness or turning off backlight (setting 0).



Battery - Check battery voltage. Charge or replace soon at 8V or less.

Standard Battery - The standard battery holder holds eight “AA” cell batteries. Alkaline batteries are recommended.

NiMH Rechargeable Battery - The included “Smart Charger” senses the type of charge the battery needs and automatically adjusts the charge cycle. From complete discharge, this system provides a full charge in as little as 2-3 hours. A full charge will last 6-12 hours of normal use. An “Unhappy Battery Icon” will automatically appear on the search display when the battery approaches eight volts. When the battery voltage gets exceedingly low, Spectra will begin to act erratically and automatically shut down.

Charging - To charge the NiMH battery pack, plug the charger into a standard wall outlet. (110 volts for USA models, 220 volts for UK models). Insert the battery pack into the cradle and plug the charger plug into the back of the cradle. Green and red lights should glow. During charge it is normal for the battery and charger to get warm. If either gets hot or deforms due to the heat, discontinue use and return for testing. When the red light goes off the battery is fully charged and ready for use. Leaving the battery in the charger for longer periods does no harm.

Owner Registration - Embeds owner name and contact info.

To Register -

Tab to “owner’s name”. Use to select letters - to select next digit. **To space**, choose any blank space. Press ENTER for key board - trigger to back up.

NOTE: Record your unit’s unique password and serial number in a safe place.

To protect the owner, the password will not be visible after registration is complete - and plus to save.

Metric Units - Selects Metric Units.

Expert Menu - A much more extensive and advanced Menu.



The Expert Menu contains -

- Building your own custom program.
- Wireless sharing programs - transfer custom programs between Spectra instruments
- Multiple headphone transmit and receive.
- Changes color scheme and sound effects.
- Screen configuration and Live Controls
- Much more ...

See ***“Complete Owner’s Guide”*** for more explanation and instruction.

TEN PRESET **“turn on and go”** PROGRAMS -

Designed by experienced users to provide the benefit of years of practice ***“set up and ready to go”***! Tested and approved by the Pros in a wide variety of situations.



Tips ...

White’s Engineers have provided these simple adjustments to Preset Programs that may improve performance for specific situations.

■ **Zoom Sensitivity** - Rx Gain - adjust as per Probe recommendation.

■ **Transmit Frequency** - Frequency offset - adjust up or down to minimize external noise.

First Aid



- **Help Balloons** - From menu screens and Zoom menus, trigger forward - brings up a “*Help Balloon*” that offers more information about the menu item.



- **COMPLETE OWNER'S GUIDE** - All of Spectra's systems and controls are explained in complete detail.
- **DVD** - A short DVD designed to visually familiarize and instruct.
- **Website/Forum** - Ask questions, comment and share your experiences with White's Spectra owners at White's Website Forum: www.whiteselectronics.com.
- **Live Help** - Consult your local Dealer or contact White's Authorized Regional Distributor at **1-800-547-6911**. *We will be happy to help!*

NOTE -

Explore your Spectra metal detector with complete confidence. You cannot harm or destroy the original factory presets or software. Original programs are easily restored! See below.

TO RESTORE FACTORY PROGRAMS



FROM



to RESTORE - Press



Use  to select program. Use  to highlight **RESTORE** Press 

Selected program displays checkmark and is restored to factory settings.

- Wireless Headphone “enable on/off setting is **NOT** changed by “Restore”.
- Removing battery does NOT restore factory programs.