

Vision Instruction Manual

Introduction

Congratulations and thank you for choosing White's Vision.

With pride we put our "Made In America" label on every metal detector we build. We've been designing, building, and distributing world wide, the finest metal detectors for nearly 60 years from our facility in Sweet Home, Oregon, USA.

Vision is the result of years of research and development, time proven manufacturing and testing techniques, listening to our customers... all the while keeping in mind "finding more and having fun doing it" are what it's all about!

The Vision represents many firsts for metal detector technology. More capabilities than any metal detector ever. Vision has Programs developed by our experts, already set up and ready to have fun finding the best your area has to offer.

Select a suitable Program from the list under Program and immediately benefit from all the power and capabilities the Vision offers. Switching between Programs is easy and quick using Live Controls, or MENU. Using factory expert developed Programs, success for first time users is a sure bet. Vision builds on "Turn On & Go" successes with more performance, more features, and the easiest operating system ever.

This instruction manual will give you a good understanding of the basics. There are no substitutes for field experience. Practice using the Vision and then study this manual further. Before long you may well be teaching the experts a thing or two.

I am proud of the Vision and the people here at White's who designed and build it for you.

Ken White President White's Electronics, Inc.

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(1). Assembly

Assembly Instructions

- A.** Remove all parts from shipping carton and check the assembly page to make sure all parts are present.
- B.** Use rubber washers between clevis/lower rod and loop ears. **Use only nonmetallic washers, fiber bolt, and thumbnut to secure loop/search coil to clevis/lower rod.**
- C.** Unlock "S" rod cam-lock and insert clevis/lower rod into curved "S" rod so that stainless steel spring clip buttons line up and lock into one of the adjustment holes in the curved "S" rod. Turn cam-lock to secure. The second or third adjustment holes are suitable for average size adults. Individuals 6' or taller should use the fully extended position. Individuals well over 6' tall should purchase the optional *Tall Man Fiber Lower Rod #500-0242-3 and/or #500-0240-1 Tall Man Aluminum "S" Rod.*
- D.** Unravel loop cable and wind the cable around the clevis and rod assembly, first revolution over the top of the rod. Wind cable all the way to the top of the curved "S" rod, about five revolutions. Use the black cable retainers, one near the loop, and one near the top of the curved "S" rod, to hold the loop cable in place.
- E.** Unlock control box rod cam-lock and insert curved "S" rod so that stainless steel spring clip buttons line up and lock into the rod on top of the control box. The "S" rod is designed to curve up toward the display. However, those who prefer to sweep the loop close to their feet may desire to assemble the "S" rod to curve down toward the

ground. Turn cam-lock to secure. Plug loop connector into control box, screw lock ring to secure.

F. Grip the instrument by the handle, with your arm in the elbow cup with strap secure, and sweep the loop/search coil over the floor. If the instrument fit feels uncomfortable, adjust the elbow cup by removing and repositioning the bolt/thumbnut and installing in one of the optional positions. If necessary, readjust clevis/lower rod length with the spring clip buttons and cam-lock so that the search coil can be held near the floor without requiring stooping over.

G. Remove the protective paper from the two black elbow cup foam pads. Carefully align pads on the inside of the elbow cup, one on each side of the center rod, and press firmly into place.

H. Adjust the elbow cup strap so that it is loose enough for you to slide your arm in and out without loosening each time you want to set the detector down. The elbow cup strap provides extra leverage and control. However, some prefer not to use it.

I. Install battery as described in the next section, **decal facing down**, single larger plastic tab and steel contacts facing toward inside of battery compartment.

J. It should be noted at this point that the Vision may not work as expected indoors due to the high degree of metals used in modern construction. It is best to tune and practice (**outdoors**) to ensure stable, predictable results. Additionally, freshly buried targets will not produce the normal depth and discrimination results of targets that have been naturally lost and settled in the ground. Due to the abnormality caused by digging a hole in the ground matrix, and the sophistication of the ground rejection circuitry, it may take a number of years for freshly buried targets to respond at true depths and discrimination accuracy. The best way to determine true detection depth is in real search conditions. It is normal for detection depth and discrimination to vary significantly with the slightest change in ground conditions and searching techniques.

K. Your Vision is designed with an automatic turn OFF if the trigger on the grip (or another control) "is not used" for a period of 30 minutes. This protects the battery from damage (absolute discharge) in case of an accidental turn on during travel or storage. Normally something noteworthy of at least pinpointing/depth reading (keeping the detector operating) is encountered during each 30 minutes of search. If

searching an unusual area free of concentrations of metal, the Vision will make a specific deep tone musical melody upon turn off. Simply press ON and squeeze and release the trigger on the grip to resume searching. The Vision returns to the exact settings prior to turning itself off.

(2). Batteries

The Vision is provided with two battery packs. A rechargeable Nickel Metal Hydride (NiMH) battery (Orange Decal) will require an initial 3-4 hour battery charge. To begin using the Vision immediately, use the back-up "AA" battery pack (Blue Decal).

(V3 Start Up Screen shows Battery Fill)

("AA" Battery Holder Drawing same as DFX)

"AA" Backup Standard Battery Holder

A. The standard battery holder (Blue Decal) holds eight "AA" cell batteries. Alkaline batteries are recommended for use with this battery holder.

B. Non-alkaline batteries can be used in this holder. When non-alkaline or rechargeable "AA" cells are used, detecting time (before replacement/recharge) may be reduced or increased depending upon the type of battery used.

(Unhappy Battery Face Display, Photo?)

C. An "Unhappy Battery Icon" will automatically appear on the display (lower left status line) when the batteries become too low (8 volts) to properly operate the Vision.

D. A headphone icon with a battery inside indicates the batteries are low in the wireless headphone. See additional status indications on bottom of control box.

E. The battery compartment opens by gently pulling down on the front of each of the two latches (on the bottom of the control box) releasing the catch and hinging open the door. The non-rechargeable battery holder can use many different types of batteries, including rechargeable. This holder is designed for standard size "AA" batteries 50 mm \pm .10 mm. Battery lengths shorter than this will likely cause

problems with this power supply.

F. When the Vision is turned on the battery voltage will momentarily appear on the opening display (lower left). The degree the battery is filled, toward +, indicates the battery condition. Full Fill = 100% battery life remaining, half fill = 50% battery life remaining.

G. To recheck the battery voltage during searching, press MENU twice and note battery voltage under BATTERY. Vision operates correctly between 8 Volts "low battery" and 13 Volts. Squeeze and release Trigger on grip (twice) to return to searching. Initial battery check voltage may indicate abnormally high. With new Alkaline, or a fresh battery charge, the most accurate battery voltage will be indicated after one hour of use.

(Information / Configure Display, Photo?)

H. Using the Standard Battery Holder

1. Slide open the battery holder lid (decal side of battery holder) by applying gentle upward pressure on the single large tab of the door so that it unlocks. Slide the door away from the battery box exposing the cell positions.
2. Remove any old cells from the holder. Note the "+" and "-" positions of each cell and the "+" and "-" for each position marked inside the cell tray. Install new "AA" cells **noting carefully the correct (+) and (-) positions. If any of the cells are installed incorrectly, battery life will be significantly reduced and/or the Vision may require service by an Authorized Service Center.**
3. Slide the door closed so that it snaps securely.
4. Insert the battery holder into the detector so that the decal is facing down, with the single larger battery holder door tab and metal contact points facing toward the inside of the battery compartment. Close the battery compartment door and secure the two latches on the bottom of the case. Hook the front (nearest the door) of each latch first, and then press down on the rear (furthest from the door).

H. NiMH Rechargeable Battery

1. A rechargeable NiMH (Nickel Metal Hydride) battery (Orange Decal) is provided with your Vision. This battery can be recharged hundreds of times. Full charge can be achieved anytime during the discharge cycle (a non-memory system). The provided "Smart Charger" and "Charging Cradle/Stand" sense the type of charge the battery needs and automatically adjust the charge cycle. From fully low this system provides a full charge in as little as 3-4 hours. A full charge will last ten to twelve hours of normal use. Battery life will vary with temperature, the number of targets found, and the exact settings used. Six hours is not unusual for extreme high performance settings, or for batteries that have experienced extensive use.

2. The battery will lose its charge during storage. If stored inserted in your instrument, this loss will be more noteworthy. It is recommended that the battery be removed from the Vision during periods of storage. It is not advisable to store rechargeable batteries for long periods of time without use (six + months). If extended storage is necessary, store with a charge (charged). If possible, recharge at least once every six months of non-use.

3. Do not discharge the battery in devices other than your metal detector. Unnecessary discharging and/or an absolute discharge will reduce battery life and may damage the battery. Unlike older rechargeable battery designs, the rechargeable battery provided with your Vision can be recharged at any time. *Regardless of whether or not it already has a partial charge, memory will not occur.*

4. White's has provided the leading edge NiMH rechargeable battery technology with your Vision. Disregard all advice that conflicts with the above recommendations. Care for batteries provided by other manufacturers, or with other White's models, may vary.

5. Do not combine (use) any other battery, or any other battery charger, not specifically designed to work with this system.

6. The NiMH battery provided with your Vision may be subject to recycling laws in your area. It is the right thing to do and is often legally required. If, perhaps many years in the future, you are uncertain as to where to return a White's NiMH batteries for recycling, please return it to the place of purchase or any White's Electronics Inc.

address circling "the recycling" (trash can) portion of the label.

7. Charging

- a. Plug the charger into a standard wall outlet. (110 volts for USA models, 220 volts for UK models).
- b. To charge, insert the battery into the cradle / stand (only fits one way) plug the charger plug into the back of the cradle / stand. Green light should glow.
- c. **Green and Red Lights ON** indicate battery and charger have made a good connection and the battery is charging. The battery charger is designed to charge a completely low battery in as little as 3-4 hours. However, no harm will come to the system leaving it charging for several days (automatic trickle charge).
- d. **Red Light OFF, Green Light ON** indicates battery is now fully charged and ready for use and will now simply maintain the full charge indefinitely. It is normal for the battery and charger to get warm during use. However, if either the battery or the charger gets too hot to hold or deforms due to the heat, discontinue use and return for testing.
- e. When using fresh batteries, the voltage will initially check somewhere in the 10 to 13 volt area. Unlike standard batteries, the rechargeable battery voltage will quickly drop somewhere between 9 and 11 volts and plateau there for most of its life. Once the rechargeable battery voltage drops below this plateau, it will quickly drop below a usable voltage level (8 volts) and thus require a recharge. "*Unhappy Battery Icon*" will automatically appear on the display when the battery approaches 8 volts. It is recommended to either recharge or switch to "AA" pack when occasional unhappy battery starts to appear (flash) on display. Upon consistent unhappy battery, Vision will not be operating properly and will soon entirely cease to operate.

I. Low Battery Condition

Like a personal computer, there are times (such as low battery conditions) when the microprocessor of a metal detector becomes out

of sequence with the rest of the circuitry. Symptoms may be general abnormal operation. To correct such difficulties "re-boot" by:

1. Remove the low battery.
2. Install a good battery.
3. Turn ON and squeeze and release trigger and you are ready to search.
4. Open battery door and remove battery without turning the Vision OFF (while detector is still ON).
5. Wait one minute, reinstall battery, turn detector ON, and check for proper function. All lingering peculiarities/symptoms caused by low battery condition will then be resolved.

(3). Custom Settings & Memory

The Vision offers the most intuitive memory system ever offered with a metal detector.

A. Make any setting change and it remembers it always, the changes made always return automatically upon re-use of that Program, good battery or not, removed battery or not. If the battery fails or is removed during use, the settings upon the last OFF cycle will return.

B. If you want to return to the original settings use RESTORE under Programs, or set everything back manually to the positions with lines under.

C. More on Memory after Program section.

(4). A Word About "Turn On & Go"

All the Vision features and performance are available by simply selecting a Program suited to your type of hunting. It is best to use different Vision Programs for quite some time in the field before giving any thought to custom settings. Many successful and advanced detector users never customize. All typical settings and uses are available within the Program choices. Further, if interested in how the different Vision options perform it is best to try a number of the very different Programs prior to researching any custom settings. Experts

have developed these programs for you, improving upon them (outside personal preferences) will be challenging even for the experienced.

A. First Time Out...Turn On And Go" Instructions

- 1. Press ON/OFF.**
- 2. Press ZOOM to select text size.**
- 3. Squeeze & release Trigger on the handle grip.**
- 4. Hold Trigger & hold ENTER, pump search coil (loop) up & down on the ground until background hum steadies, release ENTER... and then release Trigger and begin searching. (Note releasing Trigger before releasing ENTER) locks Vision in pinpoint mode, squeeze and release trigger twice to unlock pinpoint.**
- 5. Sweep search coil close to the ground,** from side to side, overlapping each pass.
- 6. Locate a consistent "BEEP" upon several passes of the search coil.**
- 7. Then look at display.** VDI, Blocks, and ICON, indicate a metal target worthy of digging.
- 8. Pinpoint** squeeze & hold toggle on the grip and slowly "X" the area. Depth in inches and maximum bar indicates target center.

B. After Some Field Use, In depth Turn-On & Go

- 1. Press ON/OFF:** When first turned on the Vision display shows the battery condition, owner details if registered, and when ARROW DOWN is pressed more information about the detector and general features. Owner Registration (protective branding the Vision with your name and address) will be covered in the section of this manual called (*INFORMATION / CONFIGURE*).

2. Press ZOOM to select the size of text that best suits your eyesight and preference. Repeat pressing ZOOM again and again to further enlarge the text. Once the largest size text is selected, pressing ZOOM one more time returns to the smallest size text. Continue pressing ZOOM until you find the desired size text. Fitting larger size text slightly changes display arrangements or feature positions.

3. Squeeze and release the Trigger on the handle grip.

a. Then squeeze and hold the Trigger on the handle grip, hold in the ENTER button, pump the search coil (loop) over the ground (1-12 inches) until the background hum becomes steady, release ENTER and then release trigger on the handle grip and begin searching.

b. Anytime during searching this "manual ground balance sequence" (squeeze and hold trigger on grip and press, hold ENTER and pump the search coil 1-12 inches over the ground until background hum becomes steady) can be repeated to ground balance the Vision to ignore ground minerals. However, once the initial ground balance is completed, the Vision will automatically track to most typical ground mineral changes. Only quick and dramatic (usually visible) ground changes require a manual sequence... such as dirt to gravel, dry sand to wet salt sand, wood chips to dirt, sand to dirt, or sand/dirt to rock.

c. Upon first use, the Vision begins in a general search COIN Program, which provides the typical coin discrimination and features (reject iron and small foil, accept nickels, reject some old style aluminum pull tabs, and accept from just above old style pull tabs and up). The Discrimination pattern is visible by a color bar located across the bottom of the yellow/tan rectangle, RED representing rejected ranges, and GREEN representing accepted ranges. If you have already been using the Vision and have switched to a different Program, the Vision remembers your preference and will begin in that specific Program (last used Program always returns regardless of battery condition or continuous installation).

d. The Program currently in use is indicated on the center lower portion of the display. Nothing in front of or behind COIN indicates

that this is the original factory COIN program. All settings are at the original default or SAVED levels. A triangle in front of COIN indicates there has been a recent change to the COIN program. A (+/-) behind COIN indicates there is an older change to the COIN program that has been brought back from memory. Both a triangle in front of COIN and a (+/-) behind indicate there are both recent changes and older changes recalled from memory to the original COIN program.

4. Backlight. On the same line as COIN, to the far left, a light bulb indicates the display BACKLIGHT is on. Press "ARROW RIGHT" until Backlight appears highlighted on the far right bottom corner of display, press "ARROW UP" and "ARROW DOWN" to adjust the degree of backlight. Backlight will affect the ability to clearly see the display in all light conditions. Backlight is used to achieve better visibility of the display improving upon personal eyesight differences. Unlike past display backlights, the Vision backlight has a significantly less cost in battery life. At medium backlight settings only a 15% reduction in battery life is expected compared to zero backlight use (a 1.5 hour reduction out of ten hours use). At maximum backlight settings only a 25% reduction in battery life is expected. Bottom-line, if it improves display visibility for you, use the backlight in any light conditions.

5. The LIVE CONTROLS across the bottom of the display offer quick and easy "on the fly" adjustment of all the normal metal detector features. Simply use ARROW LEFT & RIGHT to highlight a feature, then ARROW UP & DOWN to adjust it or ENTER to turn it ON/OFF. No need to enter a MENU. Adjustments are instant, like having knobs! Another White's innovation.

6. VDI Numbers and Spectragraph "R". Within the yellow / tan rectangle which dominates the display two important target indications are provided;

a. A small target reference number scale VDI (Visual Discrimination Indication numbers) from -95-0-+95 are listed. -95 to 0 represents the negative (ferrous) or magnetic target range (most iron and steel). +1 to +95 represents the conductive (nonferrous) target range (most precious metals). The VDI number will vary depending upon the exact electrical characteristics of the metal itself. These VDI numbers are the same reference numbers the Vision uses to accept or reject different target types, especially important when customizing the

Discrimination. The current target VDI number appears much larger above the rectangle upper left side of display. One first listens for a solid repeatable (over multiple search coil passes) audio "beep" then looks for a fairly consistent Icon and/or VDI number indicating a good quality metal target.

b. While sweeping the search coil metal targets will produce blocks above the -95-0-+95 metal range for each frequency currently in use. Their position in relation to the -95-0-+95 range will indicate the electrical characteristics (target signature) of the metal itself, which is based on its exact metal alloy. Rejected VDI range blocks appear in RED, Accept VDI range blocks appear in Green. Taller and narrower block patterns indicate higher quality metal alloys. Top block represents 22.5 kHz, center blocks 7.5 kHz, and bottom blocks 2.5 kHz. Typically gold and nickel respond better / stronger at 22.5 kHz, brass better / stronger at 7.5, and silver/copper better / stronger at 2.5 kHz. Noting which line of blocks fades last (lingers longest) is a further indication of the targets likely alloy. Multiple targets near each other can be tricky. When unusual variations are noticed, sweep the area from several different directions and/or hold the toggle on the grip and "X" the area to check for multiple targets. Then sweep each separately and note audio and display.

7. ICONs. In combination with the VDI number and target signature blocks, an ICON of a typical target for that range will appear above the rectangle in the upper right side of display, and a large VDI (visual discrimination indication or reference number) that represents that range will appear on the upper left side of the display. Some variation is expected from one search coil sweep to the next. However, overall reasonable consistency over several search coil sweeps is significant regarding metal alloys of interest. Again, multiple targets near each other can be tricky. When unusual variations are noticed, sweep the area from several different directions and/or hold the toggle on the grip and "X" the area to check for multiple targets.

8. Sweep the search coil close to the ground, scrubbing in grass, an inch above rocky, sandy, or coarse grounds, from side to side, overlapping each pass by 50%, not arching at the end of each sweep, even to the ground at all times, and typically brisk by beginner standards, about two seconds per pass from left to right and about two

seconds returning from right to left.

9. Ignore the display and listen for a solid sounding, repeatable audio "BEEP" upon several passes of the search coil.

Inconsistent, or broken sounds are not of interest. Solid, repeatable "BEEPs", upon multiple passes indicate a good metal target.

10. Then look at display. Once a solid and repeatable "BEEP" has been located sweep over it several times and then look at the display. A narrow tall bar graph in a desired range indicated both by the bar graph and the large VDI number in the upper left side of display, and a desired target ICON, indicate a good metal target worthy of digging.

11. Optional Step... experienced operators may at this point want to push the toggle on the grip forward (away from the grip) and look at a much more technical analysis of that metal target. Analyze provides a visually of the actual target signal. This Analysis mode will provide an indication of the size of the target (distance between the two black lines) and displays any differences of that signal at the different primary frequencies (22.5 kHz, 7.5 kHz, 2.5 kHz). Normally good alloys produce a set of smooth humps similar to a single camel hump, slightly different in height at each primary frequency. Coins on edge or irregular shapes often produce dips before and/or after this hump. Size will somewhat track your search coil sweep habits, however, it will do so consistently. Different alloys respond stronger at different frequencies. As well, irregularities (dips in normal pattern) at specific frequencies better identifies trash, particularly iron. The signal size in inches (or optional metric units) is shown on the lower left side of display. This size applies to each increment marked with dots across the bottom of the signal (3 inches with three segments, 3 X 3 = 9 inch wide signal). Accuracy dependent upon search coil sweep speed, however, consistent with consistent sweeps. Next to the large VDI number Vision anticipates accuracy regarding the target information as a %. Obviously 100% is sure target information, 10% is highly questionable information. If the information is questionable (30%) note the depth. If it is a deeper target (5+ inches) questionable display information is typical and one may still want to dig.

12. To Pinpoint exactly where to dig, squeeze and hold the toggle on the grip in (towards the grip) and slowly "X" the area where the "BEEP" was heard. Pivot 90 degrees and repeat "X" area. Display indicates depth in inches and bars indicates target center. Bar indicates a memory of strongest indication with an outline and the current strength with the filled portion. The strongest signal will be the exact center of the target. Release the toggle to resume searching. Note, with multi frequency pinpoint bar option, strongest bar suggest likely target alloy, silver/copper strongest at 2.5 kHz (bottom bar), mid range brass strongest at 7.5 kHz (center bar), nickel, gold, and small targets strongest at 22.5 kHz (top bar). The Vision can be locked into the pinpoint mode, while holding the trigger on the grip, press and hold ENTER then release the trigger, then release ENTER. Vision pinpoint mode will then remain until trigger is squeezed and released twice. Note, it is normal for the pinpoint mode threshold to gradually wonder up or down over relatively short periods of time, as pinpoint is not designed nor intended for prolonged searching. Again... release Trigger before ENTER to Lock in pinpoint mode, Squeeze and release Trigger twice to unlock.

(5). Live Controls

A. The LIVE CONTROLS (Like Backlight) across the bottom of the display offer quick and easy "on the fly" adjustment of all the normal metal detector features. Simply use ARROW LEFT & RIGHT to highlight a feature, then ARROW UP & DOWN to adjust it, or ENTER to activate or deactivate. No need to enter a MENU. Adjustments are instant, like having control knobs.

1. Maximize Live Controls by holding ZOOM and pressing ARROW Up X1 or X2.
2. Minimize or hide Live Controls by holding ZOOM and pressing ARROW Down X1, X2, or X3.

B. The exact live controls and the order in which they are listed changes depending upon which Program is selected. In other words COIN has different Live Controls and a different order compared to PROSPECTING. Live controls can be chosen, rearranged, and changed in their appearance (Expert Menu). We suggest using the different

recommended Program arrangements for quite some time before considering customizing. If you would like additional expert suggestions, your Vision is capable of electronically receiving all Programs and options, including Live Control selections and arrangements, from another Vision model you may encounter, under Expert, Program, Share.

C. Many personal preference selections within the Expert Menu will automatically bring those features out to the Live Controls and Six Block Menu. For example selecting a different method of making Discrimination adjustments within the Expert Menu will automatically install that same specific method in the Live Controls and Six Block Menu. Vision intuitively perceives your selected personal preferences as “the way you like it” and automatically accommodates those choices within the Live Controls and all Menus.

D. The COIN program initially offers the most popular options and arrangement one would expect to find on most high-end general use metal detectors.

E. Again, holding in ZOOM and pressing ARROW UP, increases the size of the Live Controls, at the cost of less of the display remaining for target information.

Holding ZOOM and pressing ARROW DOWN, decreases or completely hides the Live Controls allowing a greater portion of the display for target information.

F. Experts suggest you minimize or hide Live Controls when few further adjustments are expected allowing a better target screen size. To bring them back anytime on the fly Minimized or Full Size, hold ZOOM and press ARROW UP.

G. During adjustment of any Live Control, minor changes can be quickly added individually as that programs new Saved Defaults.

1. After making a specific Live Control adjustment you want to then Save as a default for that Program, simply press and hold ENTER and then press MENU (new box appears).

2. Use ARROW Up and Down to select “Save As Default” and press ENTER.

3. That individual change has now been added as that Programs new default setting.
4. Restore Defaults, reverts that setting to the original or last Saved setting for that Program.
5. Exit, exits that option or simply squeeze and release Trigger on grip to exit.

H. Sensitivity, and Ground Track Live controls - When Zoomed, (highlight then press ZOOM) provide additional measurements used for advanced comparisons and Expert option selections.

1. Sensitivity Live Control Zoomed – Probe provides a Signal %, Noise %, and reasonable Rx Gain recommendation. See Sensitivity Section.
2. Ground Tracking Live Control Zoomed – Provides a Ground Probe for measuring and comparing a target or the ground's phase, phase angle, and signal strength, at each primary frequency in use. See Ground Trac Section.

(6). SECOND LEVEL MENU

A. When a Live Control is highlighted (to highlight use ARROW LEFT & RIGHT), pressing and releasing ZOOM indicates you want to see or do more with that specific option, thus the Vision provides the next level menu. Within the Vision's second level MENU, the exact position is accessed that corresponds to the Live Control option you are interested in (highlighted). **At any point in the menu, pushing the toggle on the grip foreword accesses "Help Bubble" to describe that particular option.** Simply squeeze and release the toggle on the handle to return to a search mode.

B. If interested in a Live Control you can highlight it (ARROW LEFT & RIGHT), press ZOOM, then push the toggle on the grip forward. You will then access the second level MENU with HELP BUBBLES describing that option. Use arrows Up & Down to view other options within that menu with help bubbles.

C. The Live Controls, and their quick access to the Second Level Menu (With or Without Help Bubbles, Toggle on Grip Forward), provide the benefits of a zero and/or one level menu system, while retaining the depth and structure of a multi level MENU. Combining with the automated memory (change something and it automatically stays changed), Vision users benefit from the most versatile interface ever developed for metal detector!

D. Live Controls are the same features and adjustments listed under MENU, simply accessed differently. Although some listing and detail differences exist, Live Controls and MENU listings are the same options. An adjustment made to a Live Controls accomplishes the same change as if entering the MENU, selecting that feature, and making that same adjustment. Changes to the Live Controls show up in the MENU and Changes in the MENU show up as changes in the Live CONTROLS. The Vision remembers and automatically saves all changes automatically.

E. LIVE CONTROLS, MENU, and EXPERT MENU, are all different windows looking into the same set of features or adjustments. Progressively greater detail and option choices are offered. In this way keeping rarely adjusted features out of the way during normal searching yet allowing quickly access from either Live Controls or Menu.

(7). Navigation and Program Selection

A. In addition to accessing the second level MENU from the LIVE CONTROLS, to access the regular formatted MENU press MENU.

B. Six categories appear following the options one would expect to find on a typical high-end metal detector. Use The Arrows to highlight (select) a category, then press ENTER.

(Simple Six Block MENU TREE)

Starting with the Program category;

(8). PROGRAMS

Check mark in front of program name indicates it is the original factory or manual saved default program (no changes from default settings).

Triangle in front of Program name indicates it has been modified from the original or manually saved defaults (changed from default).

A. Coin – Provides for typical COIN and general use, rejects some older styles of aluminum pull-tabs.

B. Coin & Jewelry – Similar to Coin, however, less trash discrimination (accepts aluminum pull tabs) so as to respond to typical jewelry.

C. Salt Beach – Similar to Coin & Jewelry, however, provides for typical Salt Water Beach and Jewelry use. Less trash rejection compared to COIN, plus employs special salt subtraction multi-frequency technique. Note; COIN & Jewelry would be a better choice for fresh water beaches (no salt).

D. Relic – Provides for typical American Civil War & Revolutionary War relic type searching, very little trash rejection, small iron reject only, large iron accepted.

E. Prospecting – Provides for Gold Nugget searching. Also very good for other types of mother nature type metals prospecting, natural silver nugget, copper nugget, etc.

F. Deep Silver – Cherry picking mode (just high range VDI numbers) for high range targets (Silver). When the entire low range is eliminated, one can concentrate or separate the high VDI number targets among high trash.

G. High Trash – High trash rejection for difficult (trashy) public areas. Attempts to dissect/reject a majority of common trash while accepting a majority of common good targets. Always a gamble, however, hedges the odds considerably towards spending more time digging good targets in high trash areas.

H. Hi Pro – High performance general search mode. User must interpret most trash from the display indications.

I. Mixed Mode Pro – High Performance general search mode. Combines aspects of both Discrimination and All Metal modes.

J. Meteorite – Specific to nickel/iron meteorites (extreme <-> VDI numbers).

K. Common – Allows selection of your preferred common settings and categories, to later use within the Expert, Programs, Setup, Exclude, feature. NOTE: Original COMMON program has a showroom demonstration program loaded designed to work in high interference indoor areas (Reduced Sensitivity), intended only for Dealer Showrooms or showing friends/family basic Vision functions indoors.

1. Select Common as a complete user search program, you can set some or all standard preferred levels and feature choices. Then, later on, during Expert, Program, Setup, Exclude, some or all categories of your COMMON settings can be substituted to any program, effectively overriding all other selections for that category of options.

2. It is not necessary to set all categories for your common preferred settings. Most users will only set the categories they know they have Common preferences for. As an example, Volume & Threshold. A person may choose to select only the Volume & Threshold levels they prefer within Common. Volume and Threshold settings (set by you in the Common Program) can then be checked (under Exclude) to exclude Volume and Threshold from that Program, and would thus use (override) with your Common selections.

3. Later under Expert, Programs, Setup, Exclude, select a specific program, Menu/Tab to option sections, and then set the Volume & Threshold category as Exclude. Each category that is set for exclude automatically installs or substitutes your Common choices.

4. Expert, Program, Setup, Exclude, allows you to exclude only the following sections as complete groups of choices;

Discrimination, Sensitivity, Volume & Threshold, Audio Tones, Audio Modes, Frequency, Ground Tracking, Filter & Speed, Configuration.

6. To eliminate your Common selections for that program, one must go to Expert, Program, Setup, Exclude, and deselect Common, for that Program and that category.

7. To summarize, set up levels and option choices in Common, so you can plug in your Common choices into any specific, by category, later during Expert, Program, Setup, Exclude.

8. Original (Indoor Showroom) settings are automatically saved in the Library under COMMON if, at some point in the future, a person ever wants to reactivate those settings designed for high interference indoor demonstrations.

L. Restore – Returns the specified Program to the original or last manually SAVED defaults. Changes that were automatically saved will all return to their last manually saved defaults. In other words, if you have not manually saved anything, Restore returns everything to original factory recommended settings for that program.

1. Select RESTORE with ARROW Up & Down, then press ENTER.

2. Use ARROW Up & Down to select the PROGRAM you wish to restore.

3. Press MENU / TAB to toggle between highlighting RESTORE or CANCEL.

(Restore Display, Photo?)

4. Press ENTER to either RESTORE that PROGRAM or CANCEL.

5. Squeeze and release toggle on grip “once” to exit to six block MENU, squeeze and release toggle on grip “twice” to exit to the search mode.

(9). Memory Capabilities - The Vision offers the most intuitive and advanced memory system ever offered with a metal detector.

A. Make any setting change and it remembers it always, the changes made always return automatically upon re-use of that Program, good battery or not, removed battery or not. Note, if the battery fails or is removed during use, the exact settings upon the last OFF cycle will return.

B. Custom changes automatically save and return for that specific Program. Excluding “global settings” (described H. below) most Changes made to one Program (COIN) are not shared by any other Programs (COIN & JEWELRY). The COMMON feature (described under Programs) allows sharing of the features, levels, or personal preferences, among multiple Programs.

C. If you don't like the change you made, change it back manually, or use RESTORE under Programs.

D. Cannot remember what you changed? Looking at each adjustment, a line under number indicates the original default setting for that Program.

E. If you want your new settings to be the permanent defaults for that Program (line under your custom setting), manually Save under Expert / Programs. Or SAVE an individual setting only from the Live control by... selecting and adjusting it, then holding Enter and pressing MENU, Arrow to Save as Default, and press ENTER.

F. If you want to go back to all the original settings, RESTORE under Programs or Live control. Restores to original or last manual Save.

G. Can't remember if you changed it or not? Look at the name of the Program, triangle in front indicates recent change, "+ / -" behind indicates older changes have been brought back from memory. Both triangle in front and "+/-" behind, Program contains both recent changes and changes brought back from memory.

H. Some options (because of the way they are normally used) are not included in regular manual Save sequences. Change them once in one Program and they remain at that setting for all Programs. They stay changed for all programs until manually changed back. Backlight or choosing Metric Units for example.

1. All or part of the following options are treated as "global selections" exempt from the standard Save sequences;

Backlight, Metric Units, Share, Wireless Selections, Frequency Offset, (Menu - Size, Expert, Wrap, Top), (Control - Size, Wrap, Min, Hide) Battery Type, Auto Power Off Time, Key click, Effects, Audio Samples, Status Normal, Auto Track Report, Bookmarks.

2. Most users will not notice because of the way these selections are used. However, some will, specifically, a person cannot save programs with different backlight selections. One Backlight selection only, for all programs. Similarly, the Metric units setting will hold at the manually selected level through all Programs and Save sequences.

3. If you find your custom setting automatically carries through all programs, and or, you have difficulties setting an option differently

among different programs, that option is part of the "global selection" exempt from normal Save, listed above. A manual selection will be required with no differences allowed between different programs.

I. To review... when you make a change it automatically stays changed until you change it back. A recently changed Program has a triangle in front of the name. Changes reactivated from memory have a "+ / -" behind. Triangle in front of name and "+/-" behind name indicate both recent changes and changes brought back from memory. To permanently change custom settings to default for that specific Program manually SAVE described under Programs. Some "global selections" are excluded from differences between Programs, subjected to manual change only and carry through all programs. To restore original settings manually return all settings to the numbers with lines under or RESTORE under Program.

(10). Sensitivity

Press MENU, ARROW to Sensitivity, press ENTER.

(Six Block Display, Sensitivity highlighted)

A. Rx Gain – (Formally called Pre-Amp Gain) Use ARROW left and right to adjust. Dramatically adjusts the search coil receive signal prior to entering the electronic circuitry for signal processing (pre-amp). Sizing the search coil signal allows optimum noise rejection from both external electrical noise and ground minerals and thus optimizes detection depth. Constant OVERLOAD signals (not over a target) indicated by a low pitch audio beep and display OVERLOAD indication require a decreased Rx Gain setting. Smooth, stable, predictable results and little or no overload, suggest a higher Rx Gain setting might be usable in that area.

B. Tx Boost – Dramatically increases the signal being sent (transmitted) to the search coil (loop). By increasing the transmit signal, the receive signal is also increased. In low mineralized ground, Tx Boost will increase detection depth, however, battery life is also reduced significantly, perhaps as much as 50%. Also requires new thought to Rx Gain, Discrimination, and All Metal sensitivity levels. If Tx Boost is not well suited to your ground type, constant overload tone and display, and lack of stable, predictable, results, will indicate

turning Tx Boost OFF is required for that area.

C. Discrimination – (Formally called AC or Motion Sensitivity). Adjust the sensitivity (responsiveness) of the Motion Discrimination search modes. The highest setting that will operate smooth, stable, and predictably provides the best detection results. Usually Discrimination Sensitivity is secondary to Rx Gain in regards to reducing external electrical noise or interference.

D. All Metal – (Formally Called DC or Non-Motion Sensitivity). Adjust the sensitivity (responsiveness) of the All Metal and Pinpoint search modes. The highest setting that will operate smooth, stable, and predictably, and provides good pinpoint results, is recommended. Reduced levels typically pinpoint better, however, do not detect or pinpoint as deep.

(11). Audio

A. Target Volume – How loudly a metal target “beeps”. Use the ARROW Left & Right to adjust the target volume. Sample level indicated continuously “Beep” when the trigger on grip is pushed forward.

B. Audio Threshold – How loud the Threshold (continuous slight hum) is heard during searching. Use the ARROW Left & Right to adjust. Sample of the current Threshold level is indicated when trigger on grip is pushed forward. “0” = silent search (no threshold during searching). Experts recommend a slight threshold, as soft as you can and still hear it. Adjusting the audio tone (next option) may alter you’re preferred Volume & Threshold settings.

C. Tone –

1. **Target Tone or Pitch.** Use ARROW Left & Right to adjust the tone or pitch of the “beep” (the “beep” a metal target produces). Select a tone of pitch to suit your hearing. Again sample of the current tone or pitch is heard when the trigger on the grip is pushed forward.

2. **Threshold Tone or Pitch.** Use the ARROW Left & Right to select the Tone or Pitch of the Threshold. Experts recommend you set the Threshold pitch significantly different compared to the Target Tone Pitch. In this way target signals are more easily recognized over the

continuous threshold hum. Again sample tone or pitch is heard when the trigger on the grip is pushed forward.

D. Tone ID – Selecting Tone ID and pressing ENTER turns ON “X” in box or OFF a basic Tone ID feature. When ON, targets that indicate progressively higher toward +95 on the VDI scale “beep” with a progressively higher pitch “beep”. If accepted by the discrimination settings, iron type targets will produce the lowest pitch “beep”, large silver will produce the highest pitched “beep”. Nickels in the mid range indicate with the most medium pitched beep. Discrimination rejected target signals are still suppressed. With some practice, the pitch of the ‘beep” immediately indicates the approximate VDI range of the target without noting the display. Tone ID is used to highlight target signal ranges of greater or lesser interest. Some experts rely heavily upon tone ID where as others never use it. It will dramatically increase the variation of the audio signals one needs to interpret. However, if ones patience and hearing can handle the highly variable audio tones, Tone ID has been proven to “cherry pick” good targets among heavy and difficult trash.

E. Wireless Headphones – Select Wireless Headphones and press ENTER.

1. Press ENTER to Enable “X” in box” (turn on) Wireless Headphone transmitter.
2. Press Wireless Headphone Power Button to turn ON Wireless Headphone.
3. Note, the Vision and Spectra Wireless headphone are preset for automatic CONNECT on channel 4, no further connection steps are initially required. Turn ON/OFF wireless headphone Power Button automatically selects between the Visions built in Speaker, and the wireless Headphones. However, once a different channel has been selected, a Connect sequence is then required to Enable the Wireless Headphones.
4. Connect Sequence “AFTER CHANNEL CHANGE” described below – MENU/TAB to Connect, Press ENTER, Hold Power button on Wireless Headphone, beep-BEEP, beep-BEEP, and display prompts indicates connection made, squeeze and release trigger to search with wireless

activated.

5. Selecting a different wireless channel is provided to overcome any area wireless interference.

a. Arrow down to Channel, Select (arrow left & right) to find a Channel free of interference. Color Bar indicates level of external interference for each channel choice. Green representing clear channel, Red representing external interference. Ideally, select the channel with the largest portion of green within the bar.

6. A Power Level is provided to drive the headphone transmitter with enough power to overcome any reasonable distance or wireless signal resistance.

a. Arrow down to Power Level, Select (arrow left & right) a power level strong enough to provide good quality sound, however, not so strong as to needlessly waste battery life.

7. A speaker option is provided to allow automatic selection between the Visions built in speaker and the wireless headphone, simple by turning wireless headphones On/Off.

a. Note, if built in speaker is used extensively, Monitor Battery, Speaker, OFF "empty box" will conserve battery life by not sending any wireless signal during built in speaker use. When Monitor Battery, Speaker is ON "X" box, while listening to the built in speaker, on the status display, a headphone with a slash indicates the Vision is looking for a Wireless headphone and when a wireless is found "turned ON" will automatically discontinue sounding through the built in speaker.

b. Arrow down to Monitor Battery, Speaker, and press ENTER to deactivate or activate Battery Monitoring, Speaker, if automatic built in speaker selection (Wireless On/Off) is, or is not, desired. Again Monitoring Battery, Speaker, On "X", allows version to automatically sound through built in speaker when Wireless is turned off. However, as Vision keeps looking for a wireless, some additional battery life will be used.

8. For multi wireless headphone use;

a. Arrow down to Multiple headphone and press ENTER. MENU/TAB to Connect, and press ENTER. Hold all wireless Headphone Power Buttons and wait for wireless headphone to establish a wireless

connection indicated by "beep-BEEP, beep-BEEP" and display prompts.

- b. Menu/Tab to exit and press ENTER, or simply squeeze and release trigger.
- c. Note once On, Wireless remains On and (if Monitor Battery, Speaker is not selected) the built in speaker no longer functions until Wireless is disabled. If you find your Vision has no audio from built in speaker, disable Wireless.
- d. Turning off the Vision, automatically turns off all the wireless headphones that are in use.
- e. Multi Wireless headphone use is a great way to share the hobby, as well as teach metal detecting techniques.

(12). Discrimination

A. Discrimination Accept / Reject – Allows custom setting accept or reject for the entire VDI (Visual Discrimination Indication) range - 95(-0-)+95. This is the same range that appears on the display. Discrimination settings are built into each Program. Discrimination Accept allows customizing these original Discrimination settings. Custom settings automatically hold in memory until you either manually changed back or Restore that Program to the original or last manually SAVED settings.

1. Select Discrimination Accept and Press ENTER.
2. Use ARROW Up & Down to view each of the 191 VDI numbers from -95-0-+95.
3. "X" Box = Accept (detected)... Empty Box = Reject (suppressed). Press Enter to change the highlighted VDI number.
4. Hold ENTER and ARROW Up or Down to drag the current selection (Accept or Reject) through a range of numbers more quickly than one at a time. Saves time if vast changes are desired.
5. To speed individual changes (with a little practice) from the live controls a VDI number can be changed and Saved as a default for that Program.

- a. Highlight Live Control DISC.
- b. ARROW UP & DOWN to find the individual VDI number or numbers you want to change and SAVE as default.
- c. Press ENTER to change them to the desired status. Multiple VDI numbers changes will not be SAVED, only the last one change.
- d. Hold ENTER and then press MENU (new box appears).
- e. ARROW to "SAVE AS DEFUALT" and press ENTER.
- f. That individual VDI accept/reject change has now been added as a default for that program.
- g. This "Save As Default On The Fly" method can be used for one specific setting change ONLY within that specific Live Control option, and only for that specific feature within that Live Control. This method only Saves As Default for that specific option change "ACTIVE" during the Save process. To Save As Default" multiple option changes a will require this process be repeated immediately after each and every specific option change. A full Manual SAVE sequence is easier for multiple changes.

B. Bottle Cap Reject – Adjusts how aggressively the Discrimination rejects bottle caps and other unusual alloyed iron that contains both ferrous (iron) and nonferrous (non-iron) mixes. Old Square nails for example.

1. In any Discrimination search mode, Bottle Cap Reject adjusts the degree the audio breaks up (sputters) regarding iron/steel type target signals. 20 is the most aggressive (offers the greatest degree of break up on iron/steel. OFF provides the minimum degree of audio break up (least degree of sputter on iron/steel. 1-20 offer increasing degrees of audio break up. Caution must be used as in some ground types higher settings causes all target signals to break up or sputter.

C. Hot Rock Reject - Adjusts the degree a signal that appears to be a ground mineral abnormality (Hot Rock at +95 VDI) is allowed to respond (beep).

1. At a setting of OFF all VDI numbers (including +95) are allowed to respond at their natural occurring single strength or intensity.

2. At a setting of -10 all signals that indicate in the Hot Rock VDI range (+95) are excluded from responding.
3. At settings between -9 and +10, all +95 Hot Rock signals are artificially reduced in their normal occurring strength or intensity compared to all other VDI numbers. The smaller the number (towards -9), the greater the artificial reduction in the +95 VDI number signal strength or intensity.
4. If excessive +95 Hot Rock indications distract from identifying actual metals or obscure metal targets, select a more aggressive Hot Rock Reject level, (closer to -10).

D. Ground Filter

Filtering out ground minerals allows deeper penetration (detection depth) in mineralized grounds and also determines the ideal search coil or loop sweep speed for optimum performance. Less ground filtering benefits low ground mineral areas in depth, however, doesn't penetrate high mineral ground well. By adjusting ground filtering the Vision can be optimized for the regional ground conditions and search coil sweep speed. Use ARROW Left & Right to select custom ground filtration. Lower filters (5.0 Hz Band) favor slower search coil sweep speeds. Higher frequency selections (5 Hz High) tend to favor faster search coil sweep speeds.

Modern metal detector ground filtration, because it is no longer a specific set of components that equal a specific filter, has never been well described nor understood. Modern designs are better described by their speed (Hz) rather than their quantity or cycles. The ideal setting for your ground type is the one that offers the greatest depth penetration that also works best with your personal and typical search coil sweep speed.

The ideal setting for a person's search coil sweep speed and habits, may not be the best for another person in the same grounds.

Typically the lower number Hz are better suited for slower search coil sweep speeds. The BAND version of each filter speed works better for lower ground mineral conditions. The HIGH version is better suited to higher ground mineral conditions.

1. 5.0 Hz Band Pass processing works better for slower search coil sweeps and lower ground mineral types.
2. 5.0 Hz High (High Pass Filtering) works better for slower search coil sweeps and/or slightly higher ground mineralization.
3. 7.5 Hz Band Pass works better for slow to medium search coil sweep speeds and low to medium ground mineralization.
4. 7.5 Hz High (High Pass Filtering) works better for slow to medium search coil sweep speeds in medium to high ground mineralization.
5. 10.0 Hz Band Pass works better for normal to brisker loop sweep speeds and high ground mineralization.
6. 10.0 Hz High (High Pass Filter) works better for normal to brisker loop sweep speeds in even higher ground mineralization.
7. 12.5 Hz Band works better in extreme ground mineralization with relatively quick loop sweeps.
8. 12.5 Hz High (High Pass Filter) works better in even more extreme ground mineralization with relatively quick search coil sweep speeds.

Again, the ideal setting for your ground type is the one that offers the greatest depth penetration with your personal search coil sweep speed habits. A normal search coils sweep rate is 2 seconds from left to right, and two seconds returning from right to left, best suited to average ground mineralization and the 10.0 Hz settings.

(13). Frequency (Primary)

Allows selection among a variety of primary frequency options.

A. Three Frequencies – Allows three primary frequencies to be transmitted and received. Three Frequencies is normally the best choice for general searching.

B. Salt Compensate – Selects an optimum frequency configuration to subtract wet conductive salt water for use on the saltwater beach, (hunting ocean beaches) or alkali desert regions when wet or damp.

C. 2.5 kHz – Selects single frequency operation at 2.5 kHz. 2.5 kHz is ideal for hard, larger, high conductive metals, Silver / Copper.

D. 7.5 kHz – Selects single frequency operation, the medium 7.5 kHz. 7.5 kHz is a good middle of the road frequency for all types of metals.

E. 22.5 kHz – Selects single frequency operation at 22.5 kHz . 22.5 kHz is ideal for softer, smaller, medium to low conductive metal types, such as Gold / Nickel.

Note: Battery life will vary with single frequency selection, generally reduced battery life at 2.5 kHz and most noteworthy when Tx Boost is used.

F. Frequency Offset – Allows a user to slightly offset the primary operating frequency or frequencies of the Vision to avoid interference from other metal detectors operating nearby and/or from external electrical interference. Frequency offset doesn't significantly affect performance other than to reduce or eliminate interference from other electronics operating nearby and thus might allow higher Rx Gain settings.

1. Press ARROW Left & Right to choose an offset that avoids area interference.
2. If hunting near other metal detectors, offset allows near shoulder-to-shoulder search separation distances without interference between detectors.
3. This feature offsets actual operating frequencies. Wireless headphones are different and have their own Channel and Power selections to avoid audio wireless headphone interference. Wireless Headphone options are detailed under AUDIO section.

(14). Ground Tracking

Autotrac "R" - Selects among options controlling the automatic ground rejection feature.

A. Report - When ON ("X" in box) ground adjustments (tracking) is indicated by "TRACKING" appearing on the center lower portion of the display. Tracking with arrows pointing right indicate ground balance is

tracking with an increase in ground rejection levels. Arrows pointing left indicate tracking is occurring with a decrease in the ground rejection level.

B. Inhibit – When ON (“X” in box) ground mineral tracking is restricted during target signals that have a high probability of being a ground mineral or hot rock. Doing so prevents errors in ground tracking caused by ground anomalies not usually representative of the general search area. When off (empty square) ground tracking occurs regardless. ON is suggested for most types of searching. OFF is suggested for Prospecting.

C. Speed – Selects the speed or aggression of Auto Tracking. Press ARROW Left & Right to select the speed of Auto Tracking. Excessive ground tracking can be as bad for performance as insufficient ground tracking. A speed that keeps up with progressive ground changes is desired. A setting that adjusts significantly when passing over mere slight (spotty) ground imperfections can cause instability and errors. Ideally select a speed that keeps up (benefits) regarding normal progressive ground changes, yet doesn’t overcompensate on every unusual rock.

D. Offset – Selects a slightly + or – ground balance and tracking setting point to enhance ground rejection and target responses. Typically a “+” offset is used to reduce ground mineral responses and enhance target signal responses (particularly small size targets) in extreme ground types. More rarely “-” offset may be used to enhance the response of iron oxides in a low iron ground matrix, for example stony iron meteorites in a ground matrix consisting of ice/snow.

E. Locktrac – Locks ground tracking so that the ground rejection setting remains unchanged during searching. A benefit when searching extreme ground types where a fixed ground balance can be used to reject repeat responses from mineralization. Hold Trigger and hold ENTER then pump the search coil over a troublesome spot of ground mineralization until threshold stabilizes, lock ground tracking at that level, and that type of mineral will no longer respond throughout that area. Suggested only when spotty extreme mineral responses are so common as to obscure target responses. Ground Tracking Offset is another method of reducing or eliminating such extreme spotty ground changes.

From any search mode, holding the Trigger on the grip and the ENTER key then pumping the search coil over the ground, performs a Manual Ground Balance. If Loctrac is selected (no ground tracking), this manual setting will remain indefinitely.

(15). Information / Configure

A. How to Access – To access Information / Configure press MENU twice in succession. To Exit squeeze and release trigger on hand grip twice

B. Backlight – Use ARROW Left & Right to select a backlight level. Again Vision Backlight operates with low battery burden of 25% at maximum levels.

C. Battery – Check battery voltage during searching is quick and easy, simply press MENU twice, look at voltage, squeeze and release trigger on grip twice to exit back to a search mode.

D. Owner Registration – Allows the Vision owner to embed their name and contact information, protected from tampering, but updateable with original factory code.

1. Select Owner Register and press ENTER. Press MENU / TAB to select Register and press ENTER.

2. Password – IMPORTANT! Write down the password or code that automatically appears and keep it in a safe place separate from your Vision... (Password code will disappear, and must be manual re-entered, after first registration). If you normally keep your instruction manual at home, write it on the inside cover of the manual. Should you ever change addresses or sell your vision, this code must be retained and manually re-entered to update or revise your Visions registration information. To detour theft, without this original disappearing code, significant inconvenience can be expected regarding re-setting the Registration information.

3. Owner's Name – Use the ARROWS Down / Up, and Left / Right to

spell out your name. Or press ENTER to bring up a key-board and then use ARROWS and ENTER to spell out your name.

a. Select and ENTER blanks to add spaces. If you make an error, to redo that digit, squeeze and release trigger, ARROW back to that digit, and press ENTER to bring the Keyboard back, then redo that digit.

4. Contact - Press MENU / TAB to exit Name and select Contact. Type out your contact information using ARROWS, or pressing Menu to bring up the keyboard then ARROWS and ENTER.

5. SAVE – Use MENU / TAB to select SAVE, press ENTER to SAVE your Registration.

E. Metric Units – Select Metric Units. Press ENTER to turn ON indicated by an “X”, or OFF indicated by an empty square. When on, Metric Units are used for all measured indications.

F. Expert Menu - Select Expert Menu and press ENTER.

When Expert Menu is selected, a more extensive and advanced Menu becomes available. Once the Live Controls and Six Block menu are well understood, the Expert Menu expands upon the base options and features. Intended for advanced users, the Expert Menu contains all the features of the Six Block Menu with expanded and/or additional options and features. Expert exclusive features are “in use” regardless of accessing or customizing their selection or levels. In other words Expert options are there, in use, and are set for you, accessing the Expert Menu simply allows a person to customize. Press MENU Twice, ARROW down to Expert Menu, and press ENTER, to access Expert Menus.

Selecting Expert Only under Configure eliminates the six-block menu (Expert Menu appears with one push of the Menu button). Additionally if SETUP is selected in the Color Pallet Options, Expert Only activates custom color mixing choices throughout the menu system. Custom color mixing is only suggested for individuals with significant color blindness.

More on Expert Menu at the end of this manual.

(16). USA / Australian Service Centers

White's Authorized Service Centers
White's Electronics
1011 Pleasant Valley Rd.
Sweet Home, OR 97386
(541) 367 6121
Fax (541) 367 6629
Tmarshall@whiteselectronics.com

Electronic Exploration
575 West Harrison
Lombard, IL 60148
(800) 392-3223
(630) 620-0618
(630) 620-1005 FAX
tony@ee-il.com

Centreville Electronics
10063 Wellington Rd.
Manassas, Va. 20110
(888) 645-0202
(703) 367-7999
(703) 367-0868 FAX
bob@cwrelics.com

Gold Search Australia
Tony Mills Distributor
76 Broadway, Dunolly Vic 3472
Telephone: (+61) 03 5468 1877
Fax: (+61) 03 5468 1667
info@goldsearchaustralia.com
www.goldsearchaustralia.com

White's reputation has been built on quality products backed by quality service. Our Factory Authorized Service Centers are factory trained and equipped. They offer the same quality service as the factory. Service before and after the sale is the cornerstone of our customer relations.

A. Contact your Dealer. There may be a quick, simple fix or explanation that will prevent having to send the detector in for service.

B. Double check the obvious, such as batteries, and try the detector in another area to be sure there isn't interference.

C. Be sure to send all necessary parts with your detector, such as batteries and holders, as these items can result in symptoms. Before shipping detectors for service

D. Always include a letter of explanation about your concerns, even if you have talked to the Service Center by telephone.

E. Take care in packaging instruments for shipping. Always insure your package.

(17). (USA) Warranty

If within two years (24 months) from the original date of purchase, your White's detector fails due to defects in either material or workmanship, White's will repair or replace at its option, all necessary parts without charge for parts or labor.

Simply return the complete detector to the Dealer where you purchased it, or to your nearest Authorized Service Center.

The unit must be accompanied by a detailed explanation of the symptoms of the failure. You must provide proof of date-of-purchase before the unit is serviced.

This is a transferable manufacturer warranty, which covers the instrument two years from the original purchase date, regardless of the owner.

Items excluded from the warranty are non-rechargeable batteries, accessories that are not standard equipment, shipping/handling costs outside the continental USA, Special Delivery costs (Air Freight, Next Day, 2nd Day, Packaging Services, etc.) and all shipping/handling costs inside the continental USA 90 days after purchase.

White's registers your purchase only if the Sales Registration Card is filled out and returned to the factory address soon after original purchase for the purpose of recording this information, and keeping you up-to-date regarding White's ongoing research & development.

The warranty does not cover damage caused by accident, misuse, neglect, alterations, modifications, unauthorized service, or prolonged exposure to corrosive compounds, including salt.

Duration of any implied warranty (e.g., merchantability and fitness for a particular purpose) shall not be longer than the stated warranty. The manufacturer nor the retailer shall be liable for any incidental or consequential damages. Some states however, do not allow the limitation on the length of implied warranties, or the exclusion of incidental or consequential damages. Therefore, the above limitations may not apply to you.

In addition, the stated warranty gives you specific legal rights, and you may have other rights, which vary from state-to-state. The foregoing is the only warranty provided by White's as the manufacturer of your metal detector.

Any "extended warranty" period beyond two years, which may be provided by a Dealer or other third party on your detector, may be without White's authority, involvement and consent, and might not be honored by White's.

(18). USA Warranty Transfer

If for any reason you should sell your Vision prior to the date the warranty expires, the remaining warranty is transferable. Call 1-800-547-6911, and getting an Authorization Number to authorize this transfer.

Simply fill out the following information, including the Authorization Number, seal it in a stamped envelope, and send it to White's Electronics, 1011 Pleasant Valley Road, Sweet Home, Oregon 97386. The remaining warranty period will then be available to the new owner.

The Warranty Statement applies to both the original owner as well as the second owner.

Factory assistance is required to reset registration embedded in the Vision software.

WARRANTY TRANSFER;

Original Owner:

Name:

Address (Which appears on the original warranty card):

Instrument Serial Number:

Date Code:
Original Purchase Date:

New Owner:

Name:
Address:
Comments:
Distributor Authorization Code:

WARRANTY TRANSFER

(19). (UK) Warranty

WHITE'S ELECTRONICS (UK) Ltd.
After Sales Service
LIMITED WARRANTY STATEMENT

The serial number, which is unique to your unit, is on a white label inside the battery compartment. Please quote this number on any correspondence regarding your detector.

White's Electronics has always been concerned with the absolute quality of their mineral/metal detectors. Service after the sales is of extreme importance to us and we always do our utmost to ensure that customers are satisfied with our units.

If your unit should require servicing or repair, simply return it to us at the factory in Inverness and we shall carry out the necessary work for you.

Any work carried out by unauthorized persons will automatically nullify the warranty.

If within two years (24 months) from the original date of purchase, your White's detector fails due to defects in either material or workmanship, White's Electronics (UK) Ltd. will repair or replace at its option, all necessary parts without charge for parts or labor.

Simply return the detector to our factory in Inverness, Scotland, giving details of the faults.

Items excluded from the warranty are non-rechargeable batteries and other accessories.

The warranty is not valid unless the Warranty Registration Card is returned to the factory address within 10 days of the original purchase for the purpose of recording that date, which is the actual commencement date of the warranty.

This warranty does not cover damage to the detector caused by accident, misuse, neglect, alterations, modifications or unauthorized service.

Duration of any implied warranties (e.g., merchantability and fitness for a particular purpose) shall not be longer than the stated warranty. Neither the manufacturer nor the retailer shall be liable for any incidental or consequential damages resulting from defects or failures of the instrument to perform.

(21). Vision Expert Menu Summary.

For ongoing detailed Expert Menu information see;

www.whiteselectronics.com

A. LIVE CONTROLS, MENU, and EXPERT MENU, are all different windows looking into the same set of features or adjustments. Progressively greater detail and option choices are offered. In this way keeping rarely adjusted features out of the way during normal searching yet allowing experts quick access from either LIVE CONTROLS, or Menu.

1. One can quickly and easily access the Expert Menu from a search mode. Simply press Menu Twice "in quick succession" ARROW down

to Expert Menu, and press ENTER.

2. Remember, once in any menu, pushing the toggle on the grip forward provides "Help Bubbles" regarding that particular highlighted feature.

3. All Live Control Options, Six Block Menu Options, and Expert Menu Exclusive features, can be adjusted using the Expert Menu.

B. Many personal preference choices within the EXPERT MENU will automatically revise the Live Controls and Six Block Menu to accommodate those preferences. For example different methods of adjusting the Discrimination in the EXPERT MENU will automatically bring that specific method out to the Live Controls and Six Block Menu. Vision intuitively perceives your personal preference choices as "the way you like it" and accommodates by automatically revising all menus to best utilize those preferences.

C. Custom changes automatically save and return for that specific Program. Excluding "global settings" most Changes made to one Program (COIN) are not shared by any other Programs (COIN & JEWELRY). The COMMON feature (described under Programs) allows sharing of the features, levels, or personal preferences, among multiple Programs.

1. Some options (because of the way they are normally used) are not included in regular manual Save sequences and Memory. Change them once in one Program and they remain at that setting for all Programs. They stay changed for all programs until manually changed back. Choosing Backlight or Metric Units or for example.

2. All or part of the following options are treated as "global selections" exempt from the standard Save sequences and Memory;

Backlight, Metric Units, Share, Wireless Selections, Frequency Offset, (Menu - size, expert, wrap, Top), (Control - Size, Wrap, Min, Hide) Battery Type, Auto Power Off Time, Key click, Effects, Audio Samples, Status Normal, Auto Trac Report, Bookmarks.

3. Most users will not notice because of the way these selections are used. However, some will, specifically, a person cannot save programs with different Backlight selections. One Backlight selection only for all programs. Similarly, the Metric Units setting will hold at the manually selected level through all Programs and Save sequences.

4. If you find your custom setting automatically carries through all programs, and or, you have difficulties setting an option differently among different programs, that option is part of the "global selection" exempt from normal Save & Memory, listed above. A manual selection will be required with no differences allowed between different programs.

D. Performance settings, levels, choices, are active (performing) regardless of Expert Menu being activated (accessed) or not. Every Program utilizes the expert exclusive features at their factory set choices or levels.

E. In many sections of the Expert Menu, use of the MENU/TAB key to select among several options is required. As well, if you are selecting among options with the Up & Down keys, once at a multiple choice option, the ARROW Left & Right are then used to make that selection.

F. Once in the Expert Menu, under Configure, under Menu, "Expert Only" can be selected, press ENTER to activate "X".

1. "Expert Only " eliminates the secondary Six Block Menu, making the expanded "Expert Only" Menu the primary and only Menu (live controls still appear). When MENU is pressed once, Expert Menu appears. Expert Only, if Setup Option is chosen under Color Pallet, activates custom color mixing options throughout the Menu.

2. To return to simplified Six Block Menu, going back to Configure, Menu, select Expert Only, and press Enter to deselect. Six Block Menu returns and pressing MENU twice is, once again, required to access Expert Menu.

G. Book Marks – Within the Expert Menu, options a person is most interested in can be bookmarked for quicker access.

1. To bookmark an option select it, Hold MENU and Press ENTER. Book appears to the right of option.

2. Once in the MENU, Hold MENU and Press ARROW Down, to toggle through Bookmarked options.

3. To remove a bookmark, select it, hold MENU and press ENTER,

book no longer appears to the right of that option.

4. Bookmark as few or as many options as you desire.

H. Expert Menu

Expert Menu is arranged into nine categories most with sub-menus located on the following pages;

Summary

(1). Programs

A. Select – *(Choose a Current Program to use or search with).*

B. Save – *(Save Custom settings you have selected to a Program & Name It).*

C. Restore/Load – *(Bring a Program out to Live Controls & Menu from Library).*

D. New/Copy – *(Create an entirely new Program, or activate a Program from Library).*

E. Rename – *(Give an Existing Program a New Name).*

F. Erase – *(Delete a Program).*

G. Setup – *(Substitute custom setting categories from Common, to a Program being SAVE-ed, or Add a Program Comment (custom Help Bubble).*

H. Share – *(Transmit or Receive Programs from one Vision unit to another).*

I. Library – *(Add, Re-name, Delete, Programs from the Library).*

(2). Discrimination

A. Visual Reject – *(Select if rejected VDI numbers appear on*

display).

B. Bottle Cap Reject – (Adjust Discriminate break up on iron/steel).

C. Hot Rock Reject – (Adjust the response of +95 Hot Rocks).

D. VDI Selected By – (Select Different Ways of Setting or Selecting Trash Rejection or Discrimination).

E. Icons – (Select Icon Sets and/or add custom word icons for specific VDI ranges.)

(3). Sensitivity

A. Rx Gain – (Preamp Gain, Receive Signal Intensity).

B. Tx Boost – (Boost the Transmitter).

C. Discrimination – (AC or Motion Discrimination Sensitivity).

D. All Metal – (Non-motion Non-discrimination and Pinpoint Sensitivity).

(4). Audio

A. Target Volume – (How Loud a Metal Beeps).

B. Audio Threshold – (Continuous Background Hum During Searching).

C. Tone – (Audio Tone or Pitch).

D. Search Audio – (Audio Mode Selections, Discriminate, All Metal, Mixed Mode).

E. Pinpoint Audio – (Pinpoint Options, VCO Pitches, Ratchet Detuning).

F. Wireless Headphone – (Activating and adjusting Wireless Headphone).

(5). Frequency

A. Three Frequencies (Primary) - (Transmit & Receive the Primary Frequencies).

1. *Best Data* - (Vision chooses to use only the information which provides the strongest signal or response).
2. *Correlate* - (Vision calculates signal considering the information from all primary frequencies).

VDI (Correlate)

- a. *Span Limit* - (How different a signal can be between frequencies to still be considered a good target).
- b. *Wrap Limit* - (How far beyond +95, wrapping around into the -90 VDI range, a signal can be and still be considered a good signal).

B. Salt Compensate - (Special Multi-Frequency Salt Subtraction).

1. *Best Data* - (Vision chooses to use only the information which provides the strongest signal or response).
2. *Correlate* - (Vision calculates signal considering the information from all primary frequencies).

VDI (Correlate)

- a. *Span Limit* - (How different a signal can be between frequencies to still be considered a good target).
- b. *Wrap Limit* - (How far beyond +95, wrapping around into the -90 VDI range, a signal can be and still be considered a good signal).

C. 2.5 kHz - (Single 2.5 kHz Frequency Only).

1. *Normalize* - (Calibrates 2.5 kHz to indicate traditional VDI numbers).

D. 7.5 kHz - (Single 7.5 kHz Frequency Only).

1. *Normalize* - (Calibrates 7.5 kHz to indicate traditional VDI numbers).

E. 22.5 kHz – (Single 22.5 Frequency Only).

1. *Normalize* – (Calibrates 22.5 kHz to indicate traditional VDI numbers).

F. *Frequency Offset* – (Slightly Off Frequency to Avoid Interference).

(6). Ground Tracking

A. Autotrac

1. *Report* – (Indicate on Display When Ground Tracking Adjustments Occur and Indicate Increasing or Decreasing Levels).

2. *Inhibit* – (Restrict Ground Tracking or Not During Hot Rock Detection).

3. *Speed* – (Track Faster or Slower).

4. *Offset* – (Balance & Track Ground "+ or -" Perfect, to Enhance Small Targets and/or Avoid or Enhance Ground Signals).

B. Trac-Lock – (Lock Ground Tracking, or Use Manual Non-Tracking Ground Balance).

1. *Offset* – (Offset Locked Ground Balance "+ or -" Perfect, to Enhance Small Targets and/or Avoid or Enhance Ground Signals).

(7). Filter & Speed

A. Search – (Choose Search Mode Characteristics)

1. *Ground Filter* – (Adjust ground filtering to optimize for regional ground conditions and search coil sweep speeds).

2. *Recovery Delay* – (Speed or Slow target signal processing).

3. *SAT-* (Self Adjusting Threshold or Automatic Threshold Maintenance).

B. Analysis – (Choose Analysis Mode Characteristics, Toggle On Grip Forward away from Grip).

1. *Match Search - ("If Selected "X", Same Settings as Search", If Not Selected, Select Different settings Compared to Search).*
 - a. *Ground Filter - (Adjust ground filtering to optimize for regional ground conditions and search coil sweep speeds).*
 - b. *Recovery Delay - (Speed or Slow target signal processing).*
 - c. *SAT- (Adjust "Speed or Slow" Self Adjusting Threshold or Automatic Threshold Maintenance).*

(8). Configure

- A. Metric Units** – (Choose Metric Depth and Measurements).
- B. Backlight** – (Select Backlight Level).
- C. Color Theme** – (Select A Color Theme For the Display).
- D. Sound Effects** – (Select and adjust the Level, Volume, tone of sound effects, key licks, warning tones).
- E. Live Search Screen** – (Select Different Ways to Present Information On The Display, Search, Pinpoint, Analysis, and Status Line which indicates options in use and their status).
- F. Live Controls** – (Select and Arrange Live Controls across bottom of search display).
- G. Menu** – (Select Different Menus Options).
- H. Battery** – (Select Different Battery Options, Types, Auto Power Off Time).

