TREASUREmaster®
and
TREASUREpro
Owner's Manual

Manufactured in
Sweet Home, Oregon USA

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Introduction

Thank you for choosing White's metal detecting products.

White's TREASUREmaster® and TREASUREpro are our newest, lightweight, easy-to-use metal detectors. They are designed and built with the latest electronics technology, used to locate metal objects in the ground and provide the user with the information to help decide if that object has potential value worth digging for.

This owner's manual will provide a good understanding of the basics. However, there are no substitutes for field experience. Practice using your TREASUREmaster® or TREASUREpro and study this manual further. Before long, you may well be teaching the experts a thing or two.

We've been designing, building, and distributing worldwide for nearly 60 years from our factory in Sweet Home, Oregon, USA. We put our "Made in America" label on every metal detector we build!

We wish you all the best in your future adventures with your Treasuremaster and TREASUREpro metal detector.

Contents

Assembly

1. Remove all parts from the shipping carton and check assembly diagram to ensure all parts are present.

2. Install black rubber washers on fiber lower rod; attach lower rod onto search coil ears. Use only the nonmetallic washers, fiber bolt, and fiber thumbnut to secure search coil loop to the lower fiber rod, only finger tight (do not use tools).

3. Insert lower rod into upper aluminum "S" rod so that the spring buttons line up with one of the length adjustment holes in the "S" rod.

4. Wind the search coil cable around the rods, first revolution over the top of the rod, all the way to the control box/display. Plug the cable into the jack on the backside of the display. Tighten the retainer ring securely.

5. A Velcro arm cup strap has been provided to add leverage and control to your sweep. One end of this strap folds out to form a "T" that locks the strap onto one side of the arm cup slot. The other end is threaded through the slot on the other side. With your arm in position, fold the strap over onto the Velcro so that the strap is loose enough to pull your arm in and out of the arm cup.

6. Grip your Treasuremaster by the handle with your arm in the elbow cup and sweep the search coil over the floor. If the fit feels uncomfortable, adjust the position of the lower fiber rod in a different adjustment hole on the "S" rod, rewind search coil cable, and test fit again. The ideal position allows you to stand up straight and sweep the search coil over the ground without stooping over. The length of the lower rod and the position of the elbow cup can be quickly adjusted to accommodate different users.

7. Install two "AA" batteries noting the (+) & (-) positions marked inside the battery compartment. Batteries

Batteries

The TREASUREmaster® and TREASUREpro operate for up to 20 hours (without backlight) using two quality "AA" batteries.

1. Open the battery compartment door by gently pushing up on the battery tabs on the back of the display and hinge open the battery compartment door.

2. Insert two "AA" batteries, taking note of the correct (+) and (-) positions marked inside the compartment; close the door until it snaps shut.

3. High-quality "AA" alkaline batteries are recommended. Rechargeable NiCad, Nickel Metal Hydride, or other similar "AA" substitutions work well. Batteries near or above 2 volts per cell and higher are not recommended.

4. Battery life will change with battery type, operating temperature, and backlight use. Lowering the volume of the built in speaker or using headphones greatly extends battery life.

Quick Start

1. Press the power ON button. Upon first power up, the detector defaults to Coin and Jewelry mode.

2. Sweep the search coil from side to side, keeping it level and close to the ground. Overlap each search pass by at least 50%.

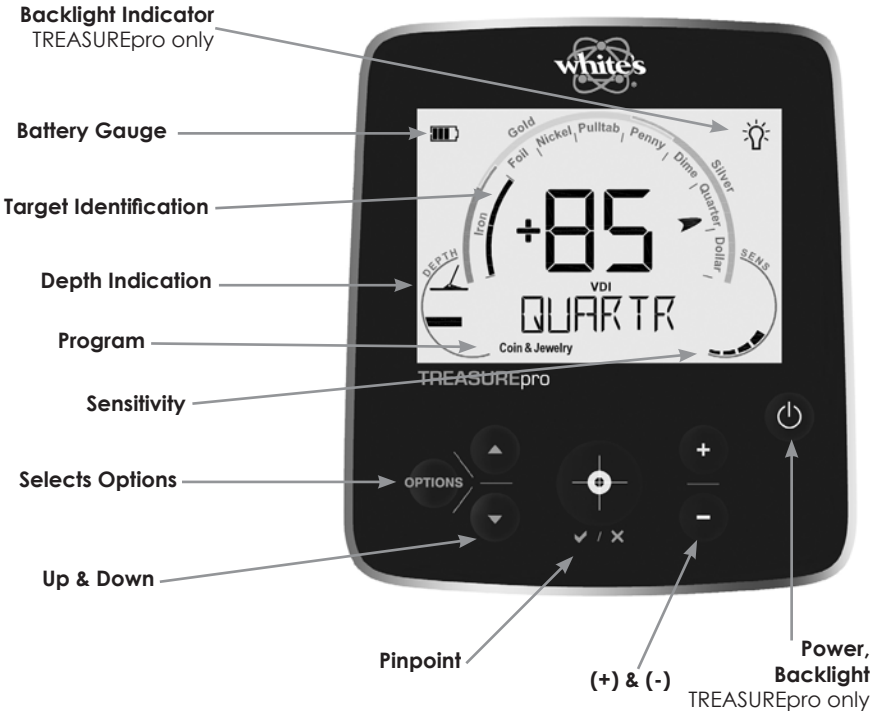
3. Once a target is detected, indicated by a consistent beep, sweep several passes and note the display identification and target depth.

4. If the target indicates dig worthy, press the Pinpoint button (✔/X). The pinpoint spot is on an imaginary line through the center of the search coil. It is important to determine where this detection line begins and ends on the coil, and then use that "heel" and "toe" to determine target center.

5. Sweep the target area slowly in an "x" pattern. The strongest beep and shallowest depth indicates target center.

6. Practice with a visible object above ground, moving back and forth over the target. You can learn to precisely pinpoint a target's center with this "heel-and-toe" method.

Display & Controls



1. Power: ON/OFF. Quick presses of the button toggle Backlight on and off (TREASUREpro only).

2. (+)/(-): Selects the level or setting of the particular option selected using the options controls. During normal search (+) & (-) adjust Sensitivity.

3. ✔/X: Access Pinpoint Mode. Also used for some menu sequences.

4. Options: Activates option selections. Up & Down arrows select among available options.

5. Search and detect metals while in the Options mode with the advantage that the currently selected option can be adjusted with the (+) & (-) buttons "on-the-fly." Press Options, select the option you want to adjust on-the-fly, and use the (+) & (-) buttons to adjust that option during searching.

Sensitivity

Used to increase or decrease responsiveness to targets, ground, and external electrical noise. By finding the highest setting that performs in your area, maximum depth can be achieved. Settings 1–8 are available.

Reduced sensitivity is often needed to search bad ground conditions or high electrical activity areas.

When the ground is highly mineralized (typically high iron), reduced sensitivity settings often increase detection depth. Finding the level that provides for smooth, stable operation and easy target identification is important to maximize performance. Few areas will allow maximum sensitivity settings.

1. During normal searching, press the (+) button to increase sensitivity; press the (-) button to decrease it. The Treasuremasters provide quick and convenient up or down sensitivity during use without accessing Options. The current sensitivity setting shows briefly where the VDI number normally is displayed.

2. Sensitivity adjustment is not featured in the Options, but only with the (+) or (-) buttons when not in the Options mode.

Program

A program is a complete selection of options for specific or targeted metal-detecting.

1. Coin & Jewelry- This is the primary search program used for general-purpose searching. When searching typical soil for coins, jewelry, or any other precious metals, and trash metal rejection is needed, Coin & Jewelry is the best choice. Coin & Jewelry discriminates against (rejects) ferrous (iron) objects and light foil. Discrimination can be customized in the Coin & Jewelry mode; see Discrimination.

2. Beach- The Beach program has features built in to ignore conductive wet or salty soils. Use Beach anytime you are searching a salt-water beach. And because many fertilizers are conductive when wet, heavily fertilized farm fields may also require the Beach mode if they are wet.

3. All Metal—Use the All Metal program to detect all metal types, including iron/steel. Finding property markers, clearing nails from a driveway, locating lost tools, relic-hunting when iron is of interest are examples of when All Metal would be used. All Metal is a superior search program compared to locking in the Pinpoint mode, which has electronic aids to help pinpoint that are not ideal for general searching. All Metal does have a VCO audio so target size and strength influences the audio.

Pinpoint Mode

Once the choice has been made to dig, press the ✔/X button to accesses the Pinpoint Mode. Pinpoint is different compared to an All Metal mode in that special features are activated to aid in target centering. Pinpoint Mode is not recommended for general searching.

High Trash (TREASUREpro Only)

Some areas (especially public areas) have high concentrations of trash. To productively search high trash areas requires a higher degree of Discrimination (trash rejection). If trash becomes an issue using one of the other programs, try High Trash.

To select a Program:

1. Press Options and use the Up & Down arrows to highlight the desired Program on the display.

2. Press (+) / (-) to select the highlighted Program.
Press Option again to return to normal searching.

Restore to Factory Settings

TREASUREmaster® - Power on the detector while holding down the Options button until "Fd" appears in the VDI area.

TREASUREpro- Navigate to the RESET command in the menu and press the Pinpoint button.

Discrimination

The Treasuremasters have the ability to accept or reject metal types based on their conductivity and/or electrical phase. Target conductivity/phase is indicated on the display VDI scale (Visual Discrimination Indication) with a VDI reference number. By learning what targets consistently indicate specific VDI numbers, you can be sure to accept or reject the different target VDI ranges that interest you.

Many types of targets share similar VDI number ranges. For example gold jewelry of varied sizes/ types shares the same VDI number range as aluminum of varied sizes/types. Deeper depths suggest the target being heavier gold; shallow depth indications suggest the target being lighter-weight aluminum. However, to find all the gold jewelry, digging lead, pull tabs and screw caps is to be expected.

Non-target metals (iron) often produce some beep, different from an accepted good target. In most cases, iron will produce a broken or inconsistent tone whereas an accepted good target produces a more consistent beep. The display can help, but an inconsistent tone is most likely a rejected target. If you have trouble recognizing these inconsistent beeps and displays, find the sweep speed that enhances the rejection sound to the point you can recognize it, compared to the sound of a good target. Accuracy is greatly increased sweeping the center of the target. Pinpoint (press ✔/X) and "x" the area with the "heel-and-toe" method from Quick Start (strongest beep and shallowest depth indicate center), return to Discrimination (press ✔/X again), then pass the search coil over target center and note the sound and display indication.

When a metal target doesn't indicate as expected, peculiarities within that metal's alloy mix (metal types) are usually to blame. For example, as steel bottle caps age, the iron deteriorates and the better (non-iron) alloys remain and become prominent. Very old bottle caps are likely to indicate as a quarter. The longer they are in the ground, the more the iron dissolves and the stronger/better the non-iron looks to a metal detector.

Soil conditions, corrosion factors, depth, and other variables can skew the audio and display indications and, thus, Discrimination settings. Used properly, however, Discrimination will more than double your time spent digging valued targets. The point is to reject the most common trash and accept the most common good targets.

The TREASUREmaster® has 8 rejection ranges and the TREASUREpro has 16 rejection ranges.

Discrimination comes already set up for the Program you have selected.

To Customize Discrimination:

It is sometimes necessary to customize discrimination for targets you want to accept/reject. Iron will likely jump all over the scale inconsistently. You can only reject the first range for iron. For other targets that indicate consistently in a range, identify and then reject that range.

1. Press Options and use Up & Down arrows to select Discrimination.
2. Use the (+) or (-) buttons to select the desired range you want to change, indicated by the flashing curser. Press Pinpoint button to toggle between accepting or rejecting that range. The Pinpoint button changes that range from reject (solid indicator bar) to accept (blank indicator bar) or from accept (blank indicator bar) to reject (solid indicator bar).
3. Press Options to exit.

Volume

Volume adjusts how loudly a metal target beeps. The Treasuremasters provide adequate volume levels for individuals with good hearing. Those with declining or impaired hearing should use headphones with the Treasuremaster models. With headphones, Treasuremaster volume is maximized.

To Adjust Volume:

1. Press Options and use the Up & Down arrows to select Volume.
2. Press (+) & (-) buttons to select the desired volume level.
3. Press Options to exit.

Threshold

Silent Search (no threshold) is the factory default audio setting. Audio will be heard only for targets. The "Up" and "Down" arrows next to the OPTIONS button allow adjustment for a background hum (threshold) during searching. While most people prefer Silent Search, the optional continuous threshold can be used to alert an operator to rejected targets and ground peculiarities.

To Adjust Threshold:

1. Press Options and use the Up & Down arrows to select Threshold.
2. Press (+) & (-) buttons to adjust threshold. Threshold level should be as quiet as possible while still hearing a hum.
3. Press Options to exit.

Some users prefer searching in silence (below the Threshold level). Although some sensitivity is compromised, it is often insignificant compared to uncomfortable use.

Tone Identification

The pitch or audio frequency produced by each target's display identification range can be highlighted with differently pitched sounds, called Tone Identification.

With a specific audio pitch reference for each range, one is immediately aware of that target's identification range based on the pitch of the beep it produces during searching without looking at the display.

When Tone Identification is in single tone, all accepted metal types produce the same audio pitch during searching. If the Discrimination is set to reject a specific target range, that range may not produce a beep of any pitch.

To Adjust Tone Identification:

1. Press Options and use Up & Down arrows to select Tone ID.
2. Press (+) & (-) to select Tone Identification and type.
3. Press Options to exit.

TREASUREmaster®

When 2-Tone is selected:

- Iron = Lowest Tone (if accepted), no tone if rejected
- All other targets produce a slightly higher pitch

When 4-Tone is selected:

- Iron = Lowest pitch beep (if accepted)
- Foil = Slightly higher pitch beep (if accepted)
- Tab = Slightly higher pitch beep (if accepted)
- All Coins = Highest pitched beep

2- & 4-Tone are the same as TREASUREmaster®
When 8-Tone is selected:

- Iron = Lowest Pitched Beep (if accepted)
- Foil = Slightly higher pitched beep (if accepted)
- Pull Tabs = Slightly higher pitched beep (if accepted)
- Nickels = Slightly higher pitched beep
- Zinc & Indian Heads = Slightly higher pitched beep
- Copper coins & Dimes= Slightly higher pitched beep
- Quarters = Slightly higher pitched beep
- Dollars = highest pitched beep

Ground Balance

The TREASUREmaster® and TREASUREPro automatically self-adjust to the ground mineralization currently being searched and track to changes in mineralization. Ground compensation and tracking to ground mineral changes is fully automatic. Automatic ground tracking improves performance over typical /normal ground where ground mineral changes are naturally occurring and gradual.

TREASUREPro- Spotty high ground minerals (naturally occurring or not), mixed in with lower mineral, can cause the ground tracking to error resulting in instability and difficulties (as if the sensitivity was set too high for the area). If at reasonably reduced sensitivity settings stability does not return, spotty high mineralization is likely the cause. To search these difficult areas, locking the ground balance at a fixed level (more often than not) resolves or reduces instability.

In the Options mode, the Tracking can be locked. However, the level the ground balance is set to when you LOCK is critical for stable operation.

Option #1- In 80% of situations, turning ON and prior to sweeping the coil over the ground, go to the options mode and Lock the ground tracking. This will result in improved performance in these difficult spotty areas. Locking the Tracking prior to searching locks the ground balance at the ferrite (high iron) level.

Option #2- In 20% of situations, a natural or man-made spotty mineralization may still cause difficulties at the (first turned on) ferrite locked ground rejection level. In these areas, finding a highly mineralized spot that is representative of all the spots in

the area, sweeping the search coil over that spot 6-12 times (or until is reasonably doesn't respond) and then going to the options mode and locking the ground tracking is required to search some difficult areas. A person is locking the ground rejection level at the high mineral spot so that all similar spots can be ignored (not respond).

If the minerals within these spots exceeds what would be considered ground mineral, crossing over to metal ore, those spots can only be discriminated as a trash metal by reducing the sensitivity. Ground tracking will not reduce/influence metal responses. An example of such an area would be where coal cinders (coal ash) were discarded or welding or metal manufacturing slag is common. In some regions, hot rocks (iron rich stones) can exceed the metal content of a mineral and thus exceed the range of any metal detectors ground rejection. Again, Discrimination and Sensitivity are the only way to deal with these metal type responses.

The TREASUREpro captures ground mineral information in real time. Thus, turning off the Power and turning back ON, will automatically unlock a locked ground balance level. This is necessary to capture new ground information. Switching in and out of the Beach mode (a different ground rejection range) will also unlock a locked ground balance. When powering ON/OFF or switching in or out of the Beach mode, remember to relock the ground tracking if that is required for the area.

Depth Units

The TREASUREmaster® and TREASUREpro can report target depth in inches or metric.

1. Press Options and use Up & Down arrows to select Depth Units.
2. Press (+) & (-) to select the units of measure desired.
3. Press Options to exit.

Backlight

The TREASUREpro has a backlit display option for use in low-light conditions. Backlight use will reduce battery life, but may be necessary in some conditions.

> Tap the Power button momentarily to select Backlight.

Searching

Sweep the search coil smoothly and evenly from side to side, as if mopping a floor, about 2 seconds per pass, overlapping each pass 50%. Keep the search coil as near the ground as possible, and the same distance from the ground throughout every pass.

By placing junk and good targets on top of the ground and sweeping the search coil past them, you can see the ideal sweep speed that enhances target detection and identification. If the search coil is swept too slowly, detection doesn't happen or discrimination isn't clearly recognizable. With the correct sweep speed, both detection and discrimination accuracy are optimized.

Fundamental to detecting success is choosing great places to use your Treasuremaster. These can be researched by word of mouth, at the library, in the newspaper, in books, or on the Internet. The longer an area has seen use, and the more activities and people who may have used it (especially when money was involved), the more interesting targets there will be to discover.

Remember that you must have permission from the property owner to search private property unless it is your own.

Many publicly owned lands are open to metal detecting. However, some have permit systems and digging tool restrictions. Always check with your local parks department for necessary forms, permission, and/or limitations.

Digging

Different terrains require different types of digging tools and digging techniques.

- On sandy beaches any simple strainer type scoop works fast and easily to recover targets.
- In grass or turf, a trowel or knife like tool works best. It can be combined with the hinged door digging method. The turf is cut on three sides and the flap turned over. By leaving the hinged part of the turf attached, the flap is less likely to get displaced by a lawn mower.
- When digging additional dirt from a hole, place it on a drop cloth. Once digging is completed, the drop cloth can quickly dump the dirt back in the hole with little spreading or effort.

In all cases care must be taken to minimize damage caused by digging. Practice in your own yard first. With a little practice and the correct tool, it should be difficult to tell where you have dug. Not only does this place detector users in a favorable light, it also assures you can return to the area for future searching.

Proper Care

As tough as your White's metal detector is, it is a sophisticated electronic device that requires reasonable common sense care similar to all electronic devices.

- Store in a warm, dry area with batteries removed
- Avoid harsh impacts
- Do not store in your car's trunk during winter and/or summer extremes
- Do not store in direct sunlight

Accessories

1. Headphones- Greatly increase the ability to hear the TREASUREmaster® and TREASUREpro in high noise environments, increase battery life, and provide for increased privacy. Any stereo headphone between 8 and 150 ohms will work.

2. Carry Cases- White's offers backpacks and gun-style cases to fit both the TREASUREmaster® and TREASUREpro. These padded cases offer convenience for storage and protection for travel.

3. Search Coils- The standard search coil is the best for all-around use. While larger search coils detect deeper, they are less sensitive to small targets and are harder to pinpoint. Smaller search coils pinpoint and, detect small metals better, and detect good targets in high-trash public areas better than larger search coils, but do not detect as deep as larger search coils.

4. Digging Tools- It is important to have appropriate digging tools for the areas you search. Care must always be used to leave the area as you found it.

Service

In the unlikely event that you have trouble with your White's metal detector that your retailer can not satisfactory help you with, White's has warranty service centers in the USA, and most regions outside the USA.

For our service centers nearest you please see our website
www.whiteselectronics.com

Warranty

If within two years (24 months) from the original date of purchase, your White's detector fails due to defects in either materials 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 the date of purchase before the unit is serviced under warranty.

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

Items excluded from the warranty are non-rechargeable batteries, accessories that are not standard equipment, shipping and handling costs outside the continental USA, special delivery costs (Air Freight, Next Day Air, 2nd Day Air, packaging service, etc.) and all shipping and 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 by your retailer soon after original purchase for the purpose of recording this information and keeping you up to date regarding White's ongoing research & development.

This 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. Neither the manufacturer nor the retailer shall be liable for any incidental or consequential damages.

Some states do not allow limitations 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 provides specific legal rights and you may have other rights, which vary from state to state.

The forgoing 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 Dealership or other third party on your metal detector, may be without White's authority, involvement, and consent, and may not be honored by White's Electronics, Inc.

Printed in the USA 5/15