

OPERATING INSTRUCTIONS: AT3 AND AT4 BEACH HUNTER

CONTROL FUNCTIONS

Depth: This control on the upper right has three functions:

- ◆ Turning the instrument on and off;
- ◆ Testing batteries; (See Battery Section)
- ◆ Regulating detection depth.

Trash Elimination Controls:

Ferrous Range: Allows adjustment for the elimination of targets in the iron range up to but not including aluminum pulltabs. Targets located in this range give an audio signal increase – not the Coin Alert™ audio signal.

Non-Ferrous Range: Allows adjustment for the elimination of targets in range of pulltabs through aluminum screwcaps. All targets located and accepted in this range will give the Coin Alert audio signal.

Pinpointing Push Button: Pressing this button selects the electronic zero motion pinpointing mode. Press and hold for pinpointing. Release the button, and the detector automatically returns to Trash Elimination Mode.

OPERATING INSTRUCTIONS

Initial Settings (Δ): Your Master Hunter has initial setting points (Δ) located on the control panel. By first rotating the controls to these points, you turn on the detector (with the **Depth** knob) and adjust it for satisfactory operation. As you become more familiar with your Beach Hunter, you may wish to make additional slight adjustments in relation to the targets you seek and the ground over which you are searching.

Searching: Scan the searchcoil at a rate of about one to two feet per second. Maintain a one to two-inch searchcoil height above the ground. Except for nails, foil or bottlecaps, all metal targets you encounter that are within the Ferrous Range will cause the sound level of your detector to increase. Targets in the Non-Ferrous Range other than pulltabs will produce the Coin Alert belltone signal. Pinpoint and recover all targets that produce an increase in audio signal volume or an audio Coin Alert.

Pinpointing: To use the Pinpointing function of your Beach Hunter to determine exact target location, press the push button and hold. This activates the pinpointing mode while you scan the area again. The detector will now give a more pronounced signal when the searchcoil is held directly above or crisscrossed over the target.

Even more precise pinpointing can be obtained by placing the searchcoil directly on the ground, then pressing and holding the button. Slide the coil, maintaining ground contact across the target. This is pinpointing by detuning and is a valuable asset

Recovery: Now that you have located a target, you must usually dig to recover it. Inland, it is recommended that a probe be used to help you determine your target's exact location. Nevertheless, always make as small a hole as possible with your digging tool (a sand scoop is generally favored in beach and surf environments). It is quicker, requires less work from you and leaves a hole that is easier to fill. And, you should **always fill your holes.**

Target Elimination: Garrett's Dual Discrimination System™ permits you to select the targets you desire in both Ferrous and Non-Ferrous ranges. The Ferrous range is adjustable from zero through bottlecap rejection, while the Non-Ferrous range takes over at pulltab rejection and is adjustable through aluminum screwcaps. Proper use of the two controls will dramatically improve accuracy in eliminating worthless targets in both the Ferrous and Non-Ferrous ranges and in accepting the many kinds of gold and silver rings, jewelry and silver gold coins.

- ◆ Rejected Ferrous Target: Audio threshold maintained - no change in sound.
- ◆ Accepted Ferrous Target: Normal increase of sound.
- ◆ Rejected Non-Ferrous Target: Normal decrease of sound.
- ◆ Accepted Non-Ferrous Target: Coin Alert Belltone.

As you adjust the controls for your desired levels of Accept/Reject, the four audio responses will automatically adjust to ensure correct target identification.

Control Adjustments: You may find that slight adjustments to the Depth and Elimination controls may be necessary. For example, you may wish to eliminate almost all trash from the audio response, you get an audio signal from all coins. Adjust the lower Ferrous control to reject small iron trash yet still accept nickels. Adjust the upper Non-Ferrous control to accept all other coins.

More on Target Audio: When scanning an area, you can determine the probable identity of a target by its sound. A normal audio response will signify that the target is most likely a nickel or a small gold ring. When the audio response is the Belltone, the target is most likely any other US coin, a larger gold ring or other highly conductive metal target. Depending upon the elimination control settings, it is possible that some pulltabs may still give an audio response.

When a metallic object is accepted, the detector's headphone sound will increase from your pre-selected audio threshold level. Some rejected targets, however, may cause the audio to "break up" or sound erratic. This is generally a response to shallow trash targets and can be remedied by raising the height of your searchcoil when scanning. Another indication of a rejected target is an audio signal in one direction as you scan, and no response when scanning from the other direction. Test typical trash items before operating your Beach Hunter to determine what signal your detector will give on encountering them.

BATTERIES

AT3 Beach Hunter ONLY:

Battery Test: When the power is turned on, the #1 battery circuit is checked automatically and audibly. Three beeps indicate that the batteries have a very good charge, two beeps indicate an adequate charge, and one beep means the batteries should be replaced. Circuit #2 (the audio battery) should be replaced when audio volume is no longer adequate.

Battery Replacement:

1. Release the clamps on each side of the detector.
2. Use the clamps as levers to remove the front panel.
3. Carefully remove the panel and chassis and disconnect the coil wire.
4. Check the color of the card on the desiccant pack. If the color is blue, the pack may be reused. If it is pink, replace the pack with a new one. Dry the card for one hour at 200°F.
5. Access the batteries by loosening the battery hold-down clamp. Observing the correct polarity, replace the batteries, then replace and finger-tighten the battery clamp.
6. Before reassembly, check and clean the rubber gasket. Use just enough silicon grease (not spray) or petroleum jelly to lubricate the gasket.
7. When reassembling, be sure the coil is connected and that the panel seats smoothly over the gasket.
8. Close latches and reinspect for proper panel *and* gasket seating.
9. Use only high-quality conventional or rechargeable batteries.
10. Recharge ONLY rechargeable batteries! NEVER try to recharge alkaline, carbon or other non-rechargeable batteries. This will probably result in serious damage to your detector

AT4 Beach Hunter ONLY:

Your AT4 Beach Hunter was equipped with NiCad rechargeable batteries designed to be recharged hundreds of times. You may also substitute other high-quality rechargeable or conventional batteries, if you wish - **Caution:** Recharge ONLY rechargeable batteries! NEVER try to recharge alkaline, carbon or other non-rechargeable batteries. This will probably result in serious damage to your detector.

Battery Test: Each time your AT4 Beach Hunter is turned on, the batteries that power it are checked automatically and audibly. Three tones indicate that the batteries have a very good charge, two tones indicate an adequate charge, and a single tone means it is time to *recharge* the rechargeables or *replace* conventional batteries.

Rechargeable Batteries:

When rechargeables require recharging, attach the recharger to the same connector as the headphones. This can be found below the Depth knob on the control panel. Observe the following recommendations to help achieve maximum benefit of the batteries with which your AT4 comes equipped.

- ◆ Keep the batteries fully charged as much as possible.
- ◆ Try to recharge rechargeables before using the detector.
- ◆ Do not leave rechargeables for long periods in a discharged or partially discharged condition.

- ◆ Remember that some rechargeable batteries can develop a “set” if they are used the same amount of time between recharging; that is, if they are regularly recharged after only two hours of use, they soon will take a charge for only two hours. Therefore, try to discharge batteries a differing amount of time between charges.
- ◆ At least every six months allow the batteries to discharge to a point where they fail to meet the minimum battery test; then recharge for 24 hours.
- ◆ Although manufacturers of rechargeable batteries report it impossible to overcharge them, it is recommended that they not be recharged for more than 24 hours. Fifteen hours generally assures a full charge.

Caution:

Recharge **ONLY** rechargeable batteries! **NEVER** try to recharge alkaline, carbon or other non-rechargeable batteries. This will probably result in serious damage to your detector.

Conventional Batteries:

You can switch to conventional batteries from the rechargeables with which your AT4 came equipped *at any time*. This can be done while you are hunting. You may choose to use conventional batteries when you find they will enable you to hunt for longer periods of time than the charge taken by your rechargeables:

1. Release the clamps on each side of the detector.
2. Use the clamps as levers to remove the front panel.
3. Carefully remove the panel and chassis from the box.
4. Loosen the clamp holding down the batteries and remove them. Be careful to observe the correct polarity (+ & -) when putting in new batteries. Use hand pressure only to tighten the battery clamp.
5. Before reassembling your detector, check and clean the rubber gasket seal. Use just enough petroleum jelly or silicon grease (not spray) or petroleum jelly to lubricate the gasket.
6. When reassembling, make certain that the coil wire is looped *beneath* the chassis. Allowing this wire to be on top or in any other position could result in an improper seal.
7. Make sure the panel seats smoothly over the gasket.
8. Use only high quality conventional batteries.
9. Never attempt to recharge conventional batteries.

OPERATING RECOMMENDATIONS

As you operate and use your Beach Hunter, you will quickly grow more proficient in its use. It is recommended that you build your own test plot. Bury several items, including a nail, a piece of foil, a pulltab, a bottlecap and several coins at depths of about two to eight inches and a foot apart. Clearly mark the location where each article is buried. Practice scanning the targets while listening to and studying the detection signals.

Remember that newly buried objects, especially coins, will be somewhat more difficult to detect than items that have been buried for some time. This is primarily a metallurgical phenomenon. Experiment with various settings of the **Trash Elimination** control to see how your detector responds. Practice trying to pinpoint and locate targets precisely.

When scanning, *do not hurry*. Scan the searchcoil at a speed of about one to two feet per second. Keep the searchcoil flat and level to the ground. Move it back and forth slowly and steadily while you walk at a pace that is comfortable. Be methodical. Do not skip any areas. Wear headphones for greater sound perception and concentrate on your scanning.

After you have operated your Garrett Beach Hunter for only a short time, you will be surprised at how proficient you have become at its use. Do not expect to achieve the greatest accuracy and success, however, until you have operated the detector for at least 100 hours or more.

MAINTENANCE

- ❖ Always remember that your Beach Hunter is a sensitive electronic instrument. It is built to withstand rugged treatment in the outdoors, but you should always handle it with reasonable care.
- ❖ Try to avoid temperature extremes as much as possible, such as storing the detector in an automobile trunk during hot summer months or outdoors in sub-freezing weather.
- ❖ Keep your detector clean. Always wipe the housing after use, and wash the coil when necessary. Protect your instrument from dust and sand as much as possible.
- ❖ Both the searchcoil and control housing of your Beach Hunter are submersible, but the detector is not meant for diving or for use in deep water.
- ❖ Disassemble the stem and rinse with clear water to remove salt residue and sand.
- ❖ For periods of storage longer than approximately one month, remove the batteries from the detector.

REPAIR SERVICE

In case of difficulty, read this Owner's Manual again thoroughly to make certain your detector is not inoperable needlessly. Your dealer may also be able to offer advice.

When your Beach Hunter must be returned to the factory for service, always include a letter that describes its problem as fully as possible. Before you return your detector to the Garrett factory, make certain:

- ◆ You have read these instructions carefully.
- ◆ You have checked batteries, switches and connectors. (Check *batteries* especially closely. They are the most common cause of detector "failure".)
- ◆ You have checked with your dealer, particularly if you are not familiar with this type of detector.

- ◆ You have included a note with the detector describing fully the problems you are encountering with this detector and conditions under which they occur. Make certain to include your name, address and a phone number where you can be contacted between 8:30 a.m. and 4 p.m., Central Time.
- ◆ You have carefully packed the Beach Hunter in its original shipping carton or other suitable box. Make certain that proper insulation or packing material is used to keep all parts secure. Do *not* ship stems or headphones unless they are part of the problem. Be certain to return all coils, unless the problem is mechanical.
- ◆ Ship to Garrett Metal Detectors, 1881 W. State St., Garland, TX 75042.
- ◆ You can call Garrett's Customer Service Department (972-494-6151) if you have further questions.
- ◆ Please allow approximately one week for Garrett technicians to examine and repair your detector after they receive it, plus another week for return shipping to you. All equipment will be returned UPS or parcel post unless written authorization is given by you to ship collect by air parcel post, UPS Blue (air) or air freight.

MIND YOUR MANNERS

Filling holes and obeying *no trespassing* signs are but two requirements of a dedicated metal detector hobbyist. A sincere request that Charles Garrett makes to every user of one of his detectors is that each place searched be left in a better condition than it was found. Thousands of individuals and organizations have adopted this formal Metal Detector Operators Code of Ethics:

- ❖ I will respect private and public property, all historical and archaeological sites and will do no metal detecting on these lands without proper permission.
- ❖ I will keep informed on and obey all laws, regulations and rules governing federal, state and local public lands.
- ❖ I will aid law enforcement officials whenever possible.
- ❖ I will cause no willful damage to property of any kind, including fence, signs and buildings and will always fill holes I dig.
- ❖ I will not destroy property, buildings or the remains of ghost towns and other deserted structures.
- ❖ I will not leave litter or uncovered items lying around. I will carry all trash and dug targets with me when I leave each search area.
- ❖ I will observe the Golden Rule, using good outdoor manners and conducting myself at all times in a manner which will add to the stature and public image of all people engaged in the field of metal detection.

WARNING!

Any metal detector may discover underground power lines, explosives or other items which when struck could cause personal injury. When searching for treasure with your Beach Hunter, observe these precautions at all times:

- ❖ Do not hunt in an area where you believe there may be shallowly buried underground electric lines or pipes.
- ❖ Do not hunt in a military zone where bombs or other explosives may be buried.
- ❖ Avoid striking any line known to be or suspected to be carrying electrical power.
- ❖ Do not disturb any pipeline, particularly if it could be carrying flammable gas or liquid.
- ❖ Use reasonable caution in digging toward *any* target, particularly in areas where you are uncertain of underground conditions.

PATENT PROTECTION: Proof of Garrett's excellence is the recognition given them by the following United States patents: 4,709,213; 4,488,115; 4,700,139; 4,398,104; 4,423,377; 4,303,879; 4,334,191; 3,662,255; 4,162,969; 4,334,192; 5,148,151; 5,138,262; 5,721,489; 5,786,696; 5,969,528; Design 274,704 and 297,221; Design 333,990; G.B. Design 2,011,852; Australia Design 111,674 and other patents pending.