

OPERATING INSTRUCTIONS: SEA HUNTERS XL500, XS500 AND XL200 PULSE DETECTORS ONLY

CONTROL FUNCTIONS

Audio: This control permits the operator to adjust the level of sound that is generated by the detector when it is searching for and signaling the presence of metal. It is recommended that the control be adjusted at a "threshold" level where sound is barely discernible through headphones. Any increase of sound caused by the detection of metal can then be interpreted easily by the operator. Do not adjust the control when a loud signal of metal detection is heard.

Detection Depth: This control (applicable only to the XL500 and XS500) checks the batteries and permits the operator to select the depth of targets to be sought and detected.

- ◆ Battery Check is performed automatically each time the Sea Hunter is turned on. Observe the meter and note position of the indicator. When it reaches only the lower end of the *BATT* range, NiCad batteries need recharging.
- ◆ Maximum permits searching for especially deep or small targets.
- ◆ Normal is the setting that would be used for general searching.
- ◆ Minimum setting would be used when the target sought has been lost recently or is known to be buried at a shallow depth.

When selecting between the three modes, a slight adjustment of the AUDIO sound control may be necessary.

Eliminator: This control permits the operator to adjust the Sea Hunter to eliminate detection of a wide range of undesirable metal trash. Elimination is increased as the knob is turned to a higher setting. For instance:

- "0" Setting provides no trash elimination, and most metal is detected;
- "3" Setting eliminates foil and iron rust;
- "6" Setting eliminates foil, iron rust, iron bottlecaps and very tiny nails;
- "7" Setting eliminates foil, iron rust, Iron bottlecaps, very tiny nails, aluminum pulltabs and other small trash metal pieces.

Test your ELIMINATOR setting with a trash target of the type you want to eliminate. Bring it across the bottom of your searchcoil at about two inches distance. If the target produces an increase in sound, rotate the ELIMINATOR knob further clockwise (to a higher number) and test again. Continue slight adjustments until the trash target chosen for elimination causes an increase in audio. Setting the ELIMINATOR at the higher numbers will cause some rings and coins to escape detection. It is recommended, therefore, that the ELIMINATOR knob be rotated no further than is absolutely necessary.

HEADPHONES

Underwater headphones issued with Garrett Sea Hunters are waterproof for submersion up to 200 feet. Some utilize liquid-filled ear cushions, which require reasonable care to avoid puncturing. Of course, those using Sea Hunters with non-waterproof (land) headphones should avoid submersion of the headphones.

SEARCHCOILS

Your Garrett Sea Hunter is equipped with a standard size (8") general purpose searchcoil suitable for searching anywhere under water or on land.

The following applies only to the XL500 and XS500: When attaching the searchcoil, use only hand pressure to tighten the connector. Do not use tools. It is also helpful to occasionally apply a small amount of lubricant (silicon grease or petroleum jelly) to the o-ring of the cable connector. Make certain that the lubricant is not allowed to contaminate the contact portion of the connector. Never submerge the detector without a searchcoil attached and the connector tightened properly. This precaution will prevent water leaks and contamination of the connector pins.

BATTERIES

Your Garrett Sea Hunter is equipped with NiCad rechargeable batteries which are designed to be recharged hundreds of times. Rechargers use the same connector as the headphones, located above the ELIMINATOR knob on the control panel. Observe the following recommendations to help achieve maximum benefit of your batteries:

- ◆ Keep the batteries fully charged as much as possible.
- ◆ Try to recharge the batteries before using the detector.
- ◆ Do not leave the batteries for long periods in a discharged or partially discharged condition.
- ◆ Remember that NiCad batteries can develop a "set" if they are always used the same amount of time between recharges; that is, if they are regularly recharged after only two hours use, they soon will take a charge for only two hours. Try, therefore to discharge batteries a differing amount of time between recharges.
- ◆ At least every six months allow the batteries to discharge to a point where the meter falls just below the minimum battery test level, then recharge for 24 hours.
- ◆ Use no rechargers other than the 110-volt unit with which the Sea Hunter was equipped or the optional 12-volt model sold as an accessory.
- ◆ Although manufacturers of NiCad batteries report it impossible to overcharge batteries, it is recommended that they not be recharged for more than 24 hours. Fifteen hours generally assures a full charge. The detector's charging light, visible through the top of the detector behind the connector, will illuminate when the batteries are being recharged. If it will not illuminate, either there is no charging source or the batteries are not recharging for some other reason.

OPERATING INSTRUCTIONS

Configuration: The long stem is used for searching on land or while standing in deep surf, and it is available for diving use under special conditions. When this stem is being used, the control housing can be carried either around the waist or over the shoulder. Many hobbyists find this distribution of weight preferable to having the most control housing mounted on the stem like most conventional detectors.

If the detector is attached to your body while diving, make certain that the strap does not interfere with any other equipment such as scuba gear or weight belts.

The Scubamate assembly can be used for underwater searching, especially when diving. It facilitates mounting the detector and searchcoil on a single hand-held unit to free the detector from the body entirely.

Scanning: Whether the Sea Hunter is to be used on land or in the water, it is recommended that a slow and methodical scanning pattern be used. Keep the searchcoil about one to two inches above the surface to be scanned. Scan at a speed of about two feet per second or slower, moving the searchcoil from side to side in front of you. At the end of each side-to-side movement, advance the searchcoil, but make certain to overlap slightly that area already searched to make certain that no metal objects have been missed.

Diving: Always perform the following checks **before** enter the water:

- ◆ Test batteries thoroughly according to the BATTERY CHECK.
- ◆ Scan several objects, metallic and non-metallic, to make certain the Sea Hunter is detecting properly.
- ◆ Visually check the detector, earphones and all seals and connections.

Detection Signals: Because your Sea Hunter uses pulse induction circuitry to detect metal rather than the type used by most land detectors, you will not hear a constant sound on the audio threshold. You will instead listen to a pulsing sound as the detector sends out and receives its signals. The presence of metal will be signaled by an increase in sound volume, which you will find quite similar to that of a land detector.

SPECIFICATIONS

Circuit Type: Pulse induction, automatic cancellation of salt/iron mineralization.

Frequency: 110 pulses per second.

Searchcoil Type: 8" pulse coil.

Depth Capability: Factory-tested and certified to 200 feet (65 meters) or seven atmospheres.

Buoyancy: Near neutral.

Batteries: Seven "sub-C" size NiCad rechargeable. It is recommended that owners not attempt to change these batteries.

Circuit (Current) Drain: Operating quiescent at threshold sound (no detection of metal) – 100 MA. Operation while detecting large metallic object – 160 MA. Operating life per charge is approximately 10 hours.

Weight in Air:

Control housing – 3.8 lbs. (1.7 kg)

Headphones – 1.4 lbs. (.062 kg)

Sea Hunter w/long stem and headphones – 8.1 lbs. (3.9 kg)

Scubamate – 2 lbs. (.9 kg)

MAINTENANCE

- ❖ Always remember that your Sea Hunter is a sensitive electronic instrument. It is built to withstand rugged treatment in the outdoors. Use your Garrett detector to the fullest extent possible, and never feel that you have to *baby* it. Yet, always protect the detector and 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. Wash sand and salt residue off the detector immediately after each use.

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 Sea 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 this Owner's Manual 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 an underwater detector or NiCad batteries.
- ❖ You have included a note with the detector describing 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 Sea 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

When searching on land or wading in water, filling holes is but one requirement 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 – on land or in the water - 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 Sea Hunter, observing these precautions:

- ❖ 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.