

OPERATOR'S MANUAL
COINMASTER
4000/D Series 3



IMPORTANT

Procedure for turning instrument on.

1. *Select the desired mode.*
2. **SQUEEZE AND RELEASE THE TRIGGER.**
3. *Proceed with adjustment of controls.*

**A Message from
Mr. Kenneth White, Sr.
President, White's Electronics**

Congratulations! You are now the proud owner of one of the world's finest detectors. You'll enjoy the many relaxing hours you'll spend with your new detector.

Ahead of you lie exciting experiences you'll never forget. For years to come you'll have yarns to spin about the places you'll visit, the people you'll meet, the history you'll learn, and the treasures and relics you'll uncover. We envy your journey and wish you every success.

Before we tell you how to assemble and operate your instrument, there are two important points to leave you with:

1. Your new detector is precision-made and has been carefully tested at our factory. Properly cared for, it will last for years and years. Treat it like a good friend and it should never let you down.
2. Any piece of fine equipment is only as good as the person operating it. Right now your detector is "smarter" than you, so you've got some catching up to do. Become very familiar with your instrument. Practice as much as you can. Soon it will become a part of you.

You and your metal detector will make an outstanding team. We've known many "shooters" who could follow in the tracks of others and find buried coins and rings the others had missed. You've got the equipment to out-shoot most anyone. Now all you need is the practice.

Good Hunting,

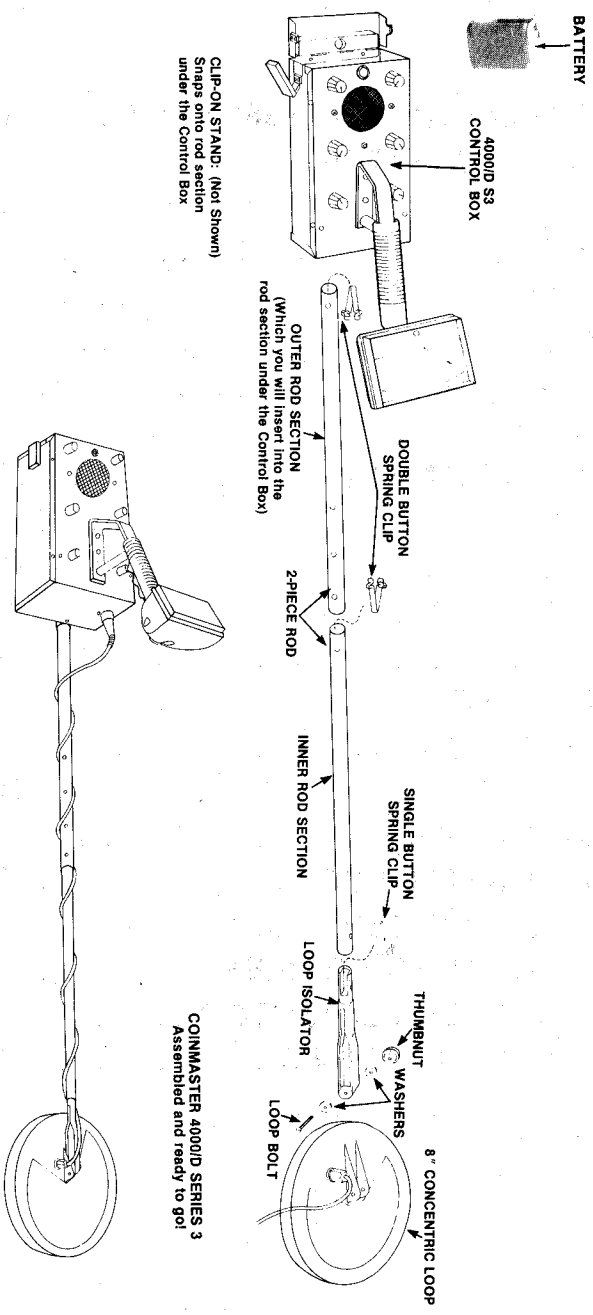
A handwritten signature in black ink that reads "Kenneth White". The script is fluid and cursive, with the first name and last name clearly distinguishable.

Kenneth White, Sr.

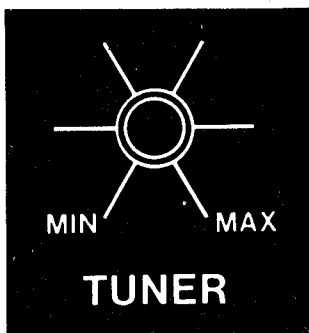
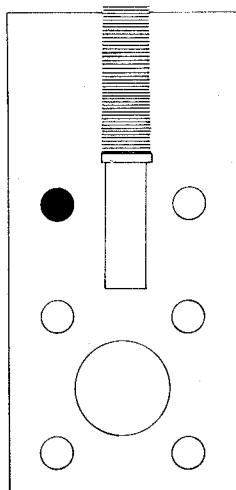
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PARTS IDENTIFICATION AND ASSEMBLY

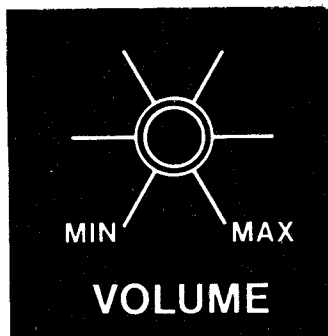
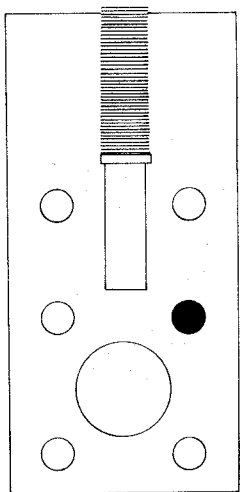


EXPLANATION OF CONTROLS: TUNER



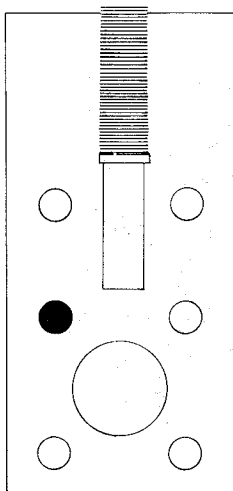
1. The TUNER sets the detector's THRESHOLD.
2. The THRESHOLD is indicated by an audio tone that is barely heard. It represents the detector's maximum operating sensitivity.
3. To set the THRESHOLD;
 - a. Set the MODE to GEB. Set the VOLUME to MAX. Set the TUNER to MIN.
 - b. Hold the detector so that its loop is in the air, straight out in front of you, waist high.
 - c. Turn the TUNER to the right until the tone is barely heard.
4. THE THRESHOLD NEEDS TO BE RESET WHENEVER ANY OF THE OTHER CONTROLS ARE ADJUSTED. To reset the THRESHOLD, squeeze and release the TRIGGER SWITCH.

EXPLANATION OF CONTROLS: VOLUME



1. The **VOLUME** controls the level of the audio tone.

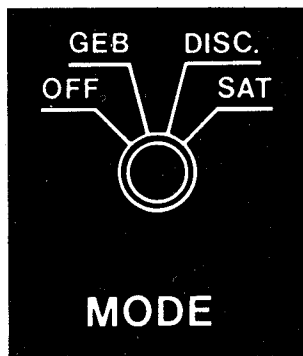
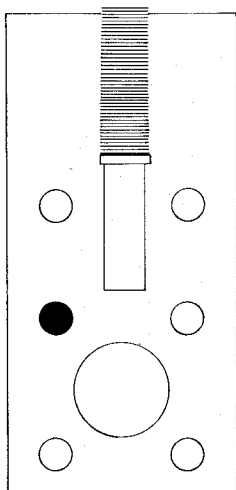
EXPLANATION OF CONTROLS: MODE



1. The **MODE** switch turns the detector on and off, and selects one of the three detection modes.
2. Each mode is designed for specific search conditions. These conditions include soil mineralization; amount of junk cluttering the area; and the targets to be located.
3. The **S.A.T.** (Self Adjusting Threshold) automatically performs a reset function to maintain an optimum threshold tone.
4. Each **MODE** is explained in detail on the following pages.

EXPLANATION OF CONTROLS:

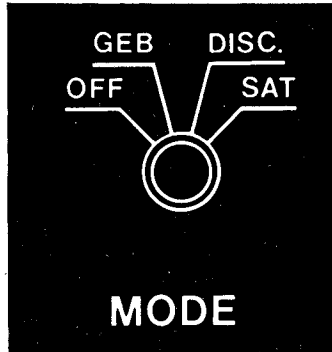
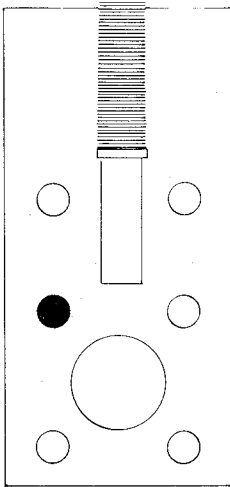
MODE: GEB



1. THE GEB MODE locates ALL METALS while neutralizing the effects of ground mineralization.
This MODE may best be used for prospecting, relic hunting and coin hunting in areas where there is little junk, (like pull tabs, nails, bottle caps and etc.)
2. In the GEB MODE, the detector must be ground balanced using the GEB CONTROL. (See page 12)
3. The loop does not have to be in motion to detect metal.

EXPLANATION OF CONTROLS:

MODE: DISC

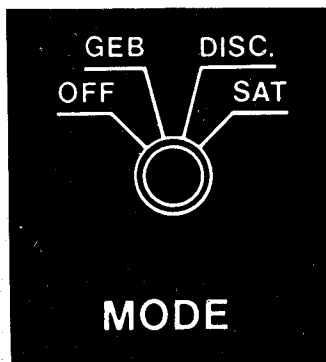
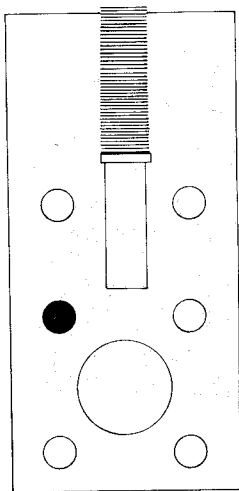


DISC is a TR Discriminating mode, DISTINGUISHING BETWEEN DESIRABLE AND UNDESIRABLE targets, THAT WILL NOT NEUTRALIZE the effects of ground mineralization at the same time.

1. It is excellent for coin hunting, relic hunting, prospecting, beachcombing and treasure hunting.
2. The DISC control is adjusted to distinguish between desirable and undesirable targets. (See page 14)
3. To use the detector in this mode, proceed as follows:
 - a. Tune to THRESHOLD as described on page 5.
 - b. Lower the loop to approximately $\frac{1}{2}$ " above the ground.
 - c. Squeeze and release the TRIGGER SWITCH to reset THRESHOLD.
4. Search with the loop level to the ground and as close to the ground as possible.

NOTE: If the loop is tilted or lifted, the tone may change due to variations of the ground.
5. When searching, the loop does not have to be in motion.

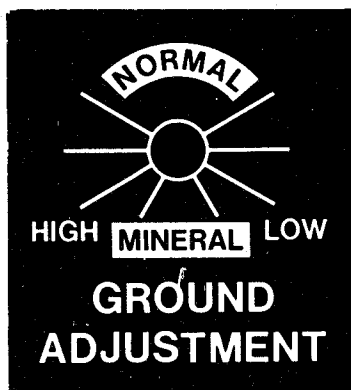
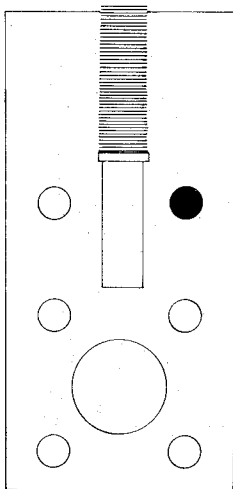
EXPLANATION OF CONTROLS: MODE: S.A.T.



The S.A.T. (Self Adjusting Threshold) is a GEB mode that detects ALL METALS while adjusting for the effects of ground mineralization. Use the S.A.T. mode when variations in ground mineralization require frequent retuning. To use the detector in this MODE, proceed as follows:

1. Tune to threshold as described on page 5.
2. Ground Balance in the GEB MODE as described on page 12.
3. Switch the MODE to S.A.T. Squeeze and release the trigger.
4. Since S.A.T. continually retunes the detector to threshold, the loop must be kept in motion or the unit may tune out the target. To return the detector to threshold, move the loop away from the target, squeeze and release the trigger.
5. For best results, do not hold the TRIGGER SWITCH to change modes from S.A.T. to DISC. When you are operating in S.A.T. and want to discriminate against a target for desirability, do the following:
 - a. Switch the MODE switch to DISC.
 - b. Adjust the DISC control for the desired amount of discrimination.
 - c. Squeeze and release the TRIGGER SWITCH.

EXPLANATION OF CONTROLS: GROUND ADJUSTMENT

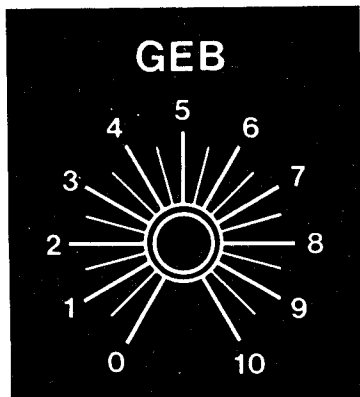
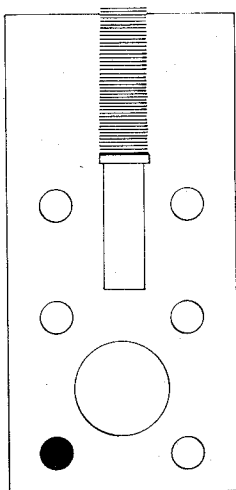


The GROUND ADJUSTMENT controls the detector's SENSITIVITY TO METALS AND GROUND MINERALIZATION in all modes of operation. As the control is turned towards LOW, the detector's overall sensitivity INCREASES. As the control is turned towards HIGH, the detector's overall sensitivity DECREASES.

1. Highly mineralized ground can produce the following symptoms:
 - a. Difficulty in adjusting the GEB control.
 - b. Variation of threshold as the loop height changes (lift-off effect).

To counter these problems, turn the GROUND ADJUSTMENT control counterclockwise towards HIGH until the effects of high mineralization are reduced.
2. In ground with little or no mineralization there will be no difficulty in adjusting the GEB control.
 - a. Turn the GROUND ADJUSTMENT control clockwise towards LOW. The less mineralization, the more the GROUND ADJUSTMENT control can be turned towards LOW.
 - b. The detector operates at maximum depth and sensitivity when there is little mineralization and the GROUND ADJUSTMENT control can be turned clockwise all the way to LOW.

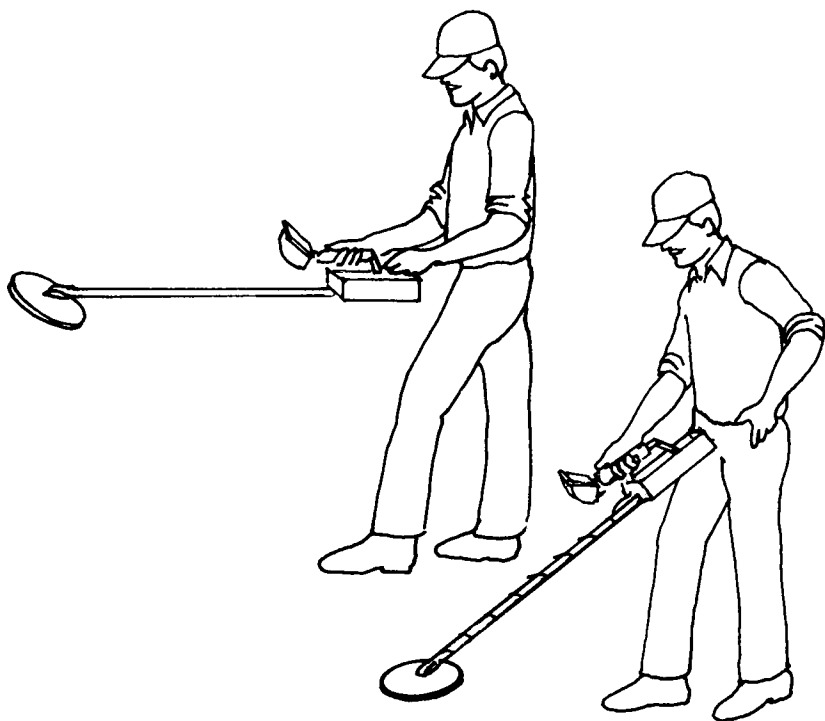
EXPLANATION OF CONTROLS: GEB



1. The GEB (Ground Exclusion Balance) control is used with the GEB MODE to neutralize the effects of ground mineralization.
2. THE DETECTOR NEEDS TO BE GROUND BALANCED EVERY TIME YOU BEGIN SEARCHING AN AREA. To Ground Balance the detector, set the controls as follows:

TUNER	MODE	GEB	VOLUME	GROUND ADJUSTMENT	DISC
THRESHOLD (See Pg. 5)	GEB	5	MAX	NORMAL	5

- a. Lower the loop to the ground. If the tone does not change, the unit is Ground Balanced.
- b. If the THRESHOLD tone changes, raise the loop waist high and turn the GEB control SLIGHTLY LEFT IF THE TONE INCREASED OR SLIGHTLY RIGHT IF THE TONE DECREASED.
- c. Squeeze and release the TRIGGER SWITCH. Lower the loop back down to the ground and note any change in tone.

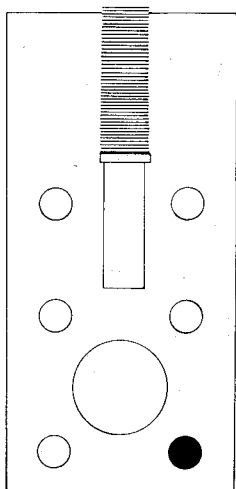


- d. Adjust the GEB control as explained in (b) until there is no change in the tone between air and ground.
- e. If you have any trouble adjusting the GEB control to a constant threshold, you may be over some metal. Move to another spot and repeat the above steps.

NOTE: Squeeze and release the trigger switch after each adjustment to the GEB control.

FOR YOUR INFORMATION: Mineralization is the ferric oxide (iron) or magnetic content of the soil. If it is not neutralized with the GEB control, the detector will react to it and this mineralization may "hide" metal objects from the detector.

EXPLANATION OF CONTROLS: DISC



1. The DISC (Discrimination) control is used in conjunction with the DISC mode to help distinguish between desirable and undesirable targets. The user sets the discrimination point with the knob slightly below the desired targets.

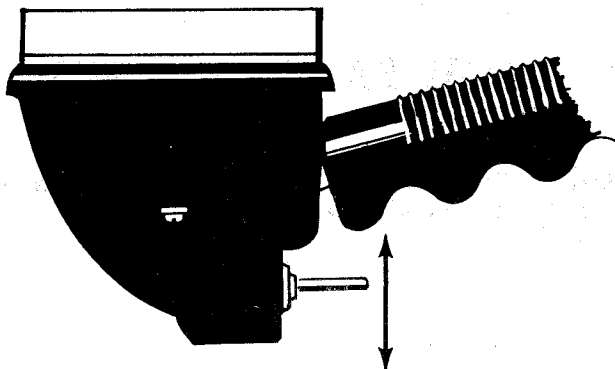
The audio response of targets ABOVE the DISC point produce louder tones. Targets below the set point make the tone go away.

EXAMPLE: With the DISC control set at "5", nickels and all other U.S. coins will produce a louder, solid tone. Nails and other ferrous objects will make the tone go away.

- a. Desirable targets may include such things as coins, rings, gold, and etc.
 - b. Undesirable targets may include such things as pop tops, pull tabs, nails and etc.
2. Discrimination should be used only as necessary to avoid passing over desirable targets.
EXAMPLE: When the DISC control is set to reject pull tabs, the U.S. nickel, some gold rings and other desirable items may also be rejected.
 3. Increasing the levels of discrimination reduces depth capabilities.

NOTE: Test the 4000/D using a variety of desirable and undesirable targets to become familiar with it before using it in the field.

EXPLANATION OF CONTROLS: TRIGGER SWITCH



The **TRIGGER SWITCH** is a control that changes the detector's operating systems.

1. **Retuning:** Regain threshold by squeezing and releasing the **TRIGGER**. **THIS MUST BE DONE AFTER ANY CONTROL HAS BEEN ADJUSTED.**
2. **Mode Changing:** Whenever the **TRIGGER SWITCH** is squeezed, the operating mode will change from that selected by the mode switch as follows:

MODE SWITCH	TRIGGER NORMAL	TRIGGER SQUEEZED
GEB	GEB	DISC
DISC	DISC	GEB
S.A.T.	GEB/S.A.T.	* DISC/S.A.T.

* Operating in DISC/S.A.T. is not recommended.

3. When the **TRIGGER SWITCH** is pushed forward, it locks into place the mode changes activated by squeezing the **TRIGGER**.

METER

The METER registers strength of signal from the loop.

1. When the signal is strongest, (its farthest movement to the right), the loop is over the target.
2. Use the meter to aid in pinpointing a target before digging.

LOW BATTERY ALERT

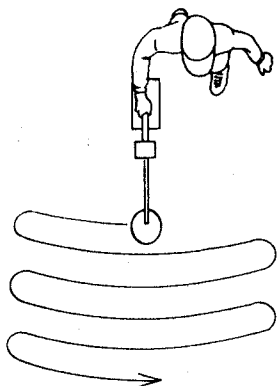
The LOW BATTERY ALERT is a light that glows when the batteries are low and need replacing.

1/4 " HEADPHONE JACK

Allows the user to listen to the audio signal on mono-headphones.

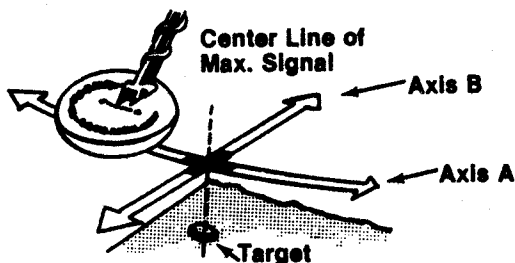
1. Disconnects the speaker output.
2. Reduces battery drain.

SEARCH METHODS



1. Always keep the loop flat and parallel to the ground. When raised, the depth penetration is decreased.
2. Swing the loop in front of you while searching. Each swing may cover an area from 4-6 feet in width.
3. The loop should be passed along the ground in smooth, even swings. It does not have to be swung quickly.
4. When a target is detected, sweep it from several directions. Note the audio response to determine if it is worth recovering.
5. To pinpoint a target for ease of recovery, "X" the target. The object will be at the center of the "X". See illustration below.

PINPOINTING



STANDARD BATTERIES

The standard battery holder has six "AA" batteries. To insert these batteries, proceed as follows:

1. Open the battery compartment door at the rear of the control box.
2. Remove the battery holder and carefully disconnect the terminal lead.
3. Note the position of each cell. Replace the old cells with new ones so the flat end of each battery rests against the spring in each holder.
4. Carefully reconnect the terminal lead and slide the battery holder into its slot.
5. Close and latch the battery compartment.
6. The standard batteries should last between 12-15 hours under normal conditions.

RECHARGEABLE BATTERIES

A rechargeable NICKEL CADMIUM battery pack is included with this instrument. It can be recharged up to 1000 times and should last around 10 hours under normal conditions after a full charge. Charge the rechargeable battery pack before its first use.

1. Recharge the NICKLE CADMIUM pack if it has not been charged for more than two months. (Batteries slowly lose their charge when stored.)
2. Charge the NICKEL CADMIUM pack only as necessary. Unnecessary recharging shortens the battery life.

NOTE: Batteries last longer when headphones are used.

OPERATING THE CHARGER

1. Connect the charger terminals to the NICKEL CADMIUM pack.
2. Plug the charger into an electrical outlet.
3. The NICKEL CADMIUM pack will be fully charged within 8 hours.

CAUTIONS ABOUT THE BATTERIES

1. The NICKEL CADMIUM battery pack should not be left on the charger more than 24 hours.
2. Do not dispose of batteries in a fire.
3. Protect the battery packs from being shorted. Burns may result and the batteries may be damaged.
4. The rechargeable battery system, (charger and battery pack), has a specific charge current. Do not attempt to mix other chargers or batteries with this system. Batteries may explode if a charge current is too high.
5. Non-rechargeable batteries may explode if you attempt to recharge them.
6. Store batteries in a cool, dry place.

PROPER CARE OF YOUR DETECTOR

The following are precautions you should take to protect your instrument from harm, ensure its long life and avoid nullifying the warranty.

CLEANING: The loop and probe are waterproof. They can be cleaned with fresh water and a mild cleanser. After cleaning, however, dry the instrument thoroughly. **CAUTION:** The instrument case is not waterproof, and water - if allowed to enter it - will damage electronic components.

WEATHER CONDITIONS: Protect your detector from excessively cold weather. Freezing can damage the electronic components, the case and/or the batteries. Excessive heat can also damage the instrument. Never leave it in the sun. If it's left in a car on a hot day, cover it to protect it from the direct rays of the sun, and then leave the windows slightly open to permit ventilation. Protect your detector if you operate it in the rain, as water may get into the instrument case.

SALT WATER: Salt water is very corrosive! Immediately after your detector has been exposed to salt water, rinse it thoroughly with fresh water, being careful not to allow water to enter the instrument case. Then wipe it with a cloth dampened with fresh water and dry it thoroughly.

ADDITIONAL PRECAUTIONS:

- a. Avoid dropping your detector.
- b. Do not use any lubricants on any part of your metal detector.
- c. Avoid sharp jars to the loop.
- d. Do not allow batteries to corrode inside the instrument.
- e. Do not alter or modify your instrument during its warranty period. Alterations will void the warranty.

A NATIONAL SERVICE PROGRAM

THE SERIAL NUMBER IS ON THE SILVER TAG INSIDE THE BATTERY COMPARTMENT.

THE CODE NUMBER IS ON THE WHITE TAG.

White's Electronics has always been concerned with the absolute quality of its mineral/metal detectors. Service after-the-sale is also of equal importance. In an effort to further the quality of service to our customers, White's reorganized its warranty service program significantly. Since January 1982, there have been ten factory authorized National Warranty Service Centers located regionally around the continental U.S. These Service Centers are identical to the Factory Service Center in Sweet Home, Oregon. In order to ensure you will get the finest service possible for your detector, the technicians in each National Warranty Service Center are Factory trained and given on-going training for new products and improved service techniques. They can also repair your out of warranty instruments with efficiency and timeliness.

Simply return the detector to the dealer where you purchased the unit. The unit must be accompanied by a completed service coupon provided by your dealer. You must provide proof of date of purchase before the unit is shipped.

If the unit has failed within the first 90 days of purchase, shipping will be prepaid.

If the unit fails after the first 90-day period, the customer is responsible for shipping costs. Please also include \$5.00 for return postage, handling and insurance.

Any repair work preformed by other than a White's National Warranty Service Center will automatically void the warranty.

If a problem occurs with your metal detector, first contact the White's dealer who sold it to you. In many cases your dealer can solve the problem. If not, the dealer will have your detector repaired under the Warranty Program. All of White's National Service Centers, located throughout the country, are owned and operated by factory trained technicians. These centers are fully equipped and the personnel fully trained with on-going programs at White's in order to service your mineral/metal detector. With this program, the average repair time has actually been reduced from weeks to days!

TO LEARN THE NAME AND LOCATION OF YOUR NEAREST WHITE'S DEALER CALL TOLL FREE: 1/800-547-6911

WHITE'S ELECTRONICS' LIMITED WARRANTY

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

Simply return the detector to the dealer where you purchased it. The unit must be accompanied by a completed service coupon provided by your dealer. You must provide proof of date of purchase before the unit is shipped.

If the unit has failed within the first 90 days of purchase, shipping will be prepaid.

If the unit fails after the first 90-day period, the customer is responsible for shipping costs. Please also include \$5.00 for return postage, handling and insurance.

Items excluded from this warranty are non-rechargeable batteries, headphones and other accessories.

The warranty is not transferable. Nor is it valid unless the Warranty Registration Card is returned to the factory address below within ten (10) days of original purchase for the purpose of recording that date, which is the actual commencement date of the warranty.

The warranty does not cover damage to detectors 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.

Some states, however, do not allow limitations on the length of implied warranties, or the exclusion of incidental or consequential damages. Therefore, the above limitations and exclusions may not apply to you.

In addition, the stated warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

White's Electronics, Inc.
1011 Pleasant Valley Rd.
Sweet Home, OR 97386

CODE OF ETHICS

Treasure hunting is the kind of new hobby that fires the imagination and generates its own enthusiasm. It's the most natural thing in the world to want to dig as fast as you can the minute you hear that first loud unmistakably "good" signal. It will be a real thrill to discover there's treasure right beneath your feet!

But wait a minute! We strongly urge you to adopt a code of ethics which will preserve the environment and also the rights of treasure hunters to operate detectors with as few restrictions as possible.

Before you even begin a search, check the law, ordinance or regulations about hunting on publicly owned sites. Abide by the rules. If the area is private property, get written permission from the owner to search it. You may find he will be more eager to give permission if you suggest sharing your finds with him, or if you offer to search for a specific item he has lost.

ABOUT DIGGING: In lawn areas limit the size of the hole to a maximum of two inches in diameter, cutting a plug of sod which can be easily replaced. After you take your finds, be sure to carefully fill the hole. **HOLES ARE BOTH UNSIGHTLY AND DANGEROUS!**

Detectors designed for locating large and deeply buried objects should be used with discretion - never in the lawn area, and with careful judgement in other locations. Consider the scar you may leave, before you start digging. This will vary a lot from one part of the country to another, depending on local soil and climatic conditions. Public officials and private property owners will be much more likely to allow continued treasure hunting if you do no environmental damage. You may even be able to increase your reputation as an ethical hunter by volunteering to carry out and dispose of whatever trash items you find.

Adoption of these attitudes can only enhance the public's opinion of treasure hunters and assure that many areas, both public and private, remain open to you and your new detector.

white's electronics, inc. 1011 Pleasant Valley Rd. Sweet Home, Oregon 97386

P/N 621-0088

Printed In U.S.A. 3/84