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white's

# COINMASTER CLASSIC III COINMASTER

Manufactured by White's Electronics, Inc., Sweet Home, Oregon U.S.A.

## Instruction Manual

### ATTENTION:

To use your Classic III in average conditions, set **DISC** Control to **Ring Range**  $\nabla$ , **SENS** Control to  $\nabla$ , and **NORM** Toggle to the **NORM** position, **GEB/DISC** Toggle to **GEB/DISC**, and **FREQ ADJ** to  $\nabla$ .

The loop must be in continuous motion (moving from side-to-side) in order for this model to respond to metal.

Good metals produce smooth solid beeps, junk metals produce clicks or sputter sounding beeps.

Pinpoint metals exact location by holding the **GEB/DISC** Toggle in the **RESET/PP** position and "X" the loop over the area. Loudest beep indicates target center. Release toggle before continuing to search.

For more detailed operation instructions, refer to the information inside this manual.

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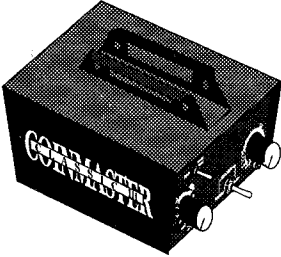
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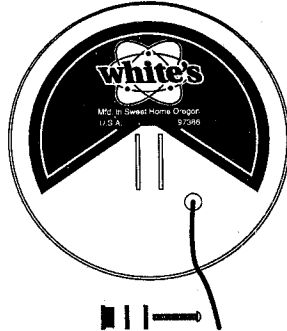
## Assembly Instructions

Remove all parts from the shipping carton, and make sure you have the following:

**Control Box**



**Loop**



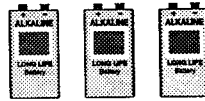
**Arm Cup**



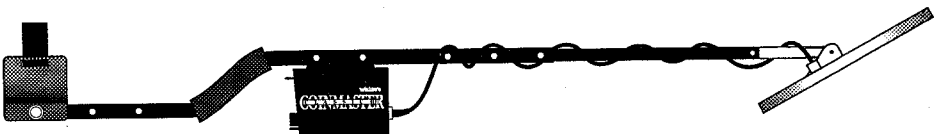
**"S" Rod**



**Straight Rod**

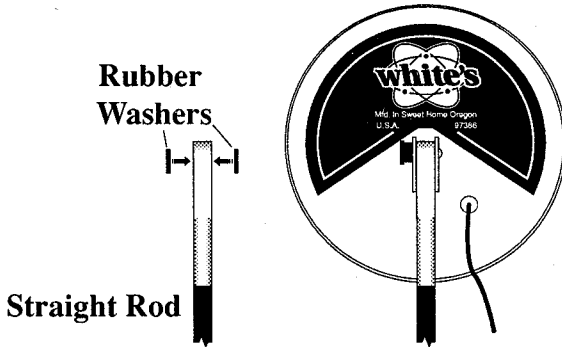


**Batteries**

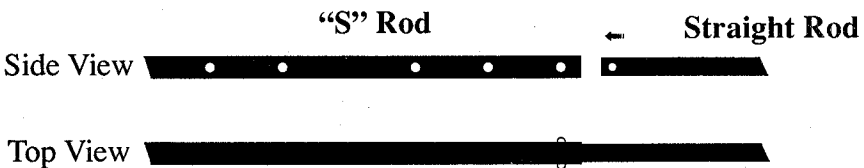


## Assembly continued...

The Classic III comes partially assembled. The Straight Rod will need to be attached to the loop as shown (be sure and place the two rubber washers on the end of the Straight Rod as shown before sliding end onto the loop):

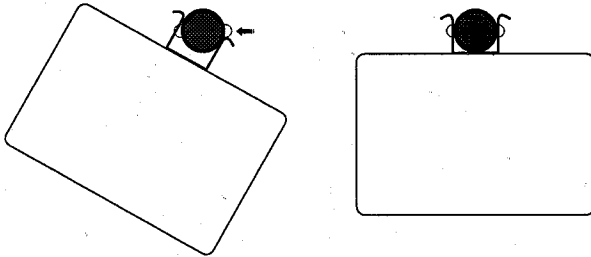


The Straight Rod connects to the "S" Rod by lining up the two pushbuttons on the Straight Rod with the two holes in the "S" Rod.

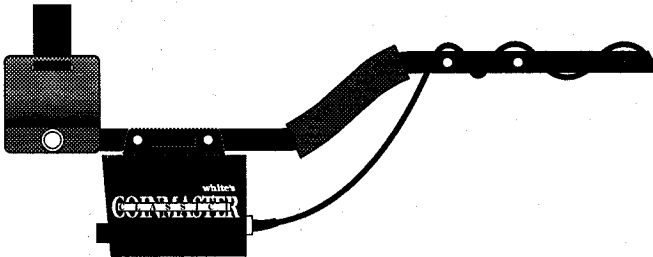


## Assembly continued...

The control box snaps off and on the rod by compressing the two spring clip buttons on one side and pivoting the control box.



Optional control box mountings are available on the "S" Rod.



This model can also be worn as a hipmount simply by removing the control box from the "S" Rod, adjusting the length of cable wound around the rod, and weaving a belt through the slots on the control box.





## Batteries

The Classic III is powered by three TRANSISTOR 9 Volt batteries.

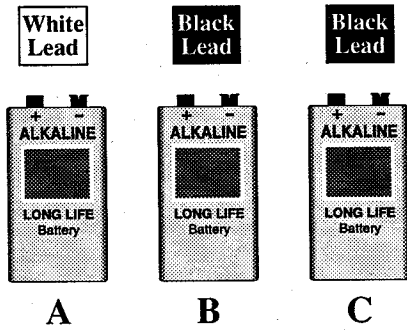


Open the battery compartment by grasping the black plastic plunger and pulling. **NOTE:** The battery compartment door is located on the back of the control box opposite the control panel. Once the door is removed, attach the battery leads to the batteries. **NOTE:** They will fit one way. **NOTE:** One of the battery leads is different than the other two. It may be a different color or be marked in such a way as to identify it from the other two. This battery lead runs the audio (beep). When headphones are **NOT** used, this audio (beep) battery will become low (weak), before the other two. When headphones **ARE** used, the batteries may or may not discharge at the same rate. It is recommended that the batteries be rotated occasionally to achieve maximum battery life.

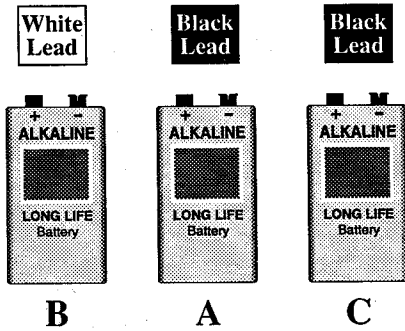
Alkaline 9 volt transistor batteries should last between 30 to 40 hours if rotated from battery lead to battery lead. Battery rotation is suggested as follows:

# Battery Rotation Schedule

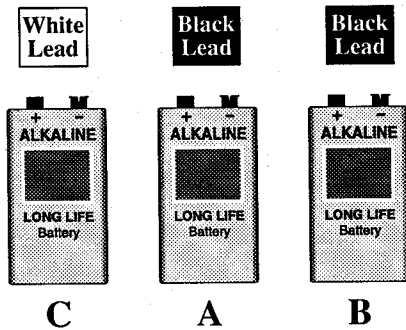
**First**



**Second**  
(Switch A & B)



**Third**  
(Switch B & C)



## Batteries continued.....

It is not necessary to reposition both black lead batteries to complete a rotation. Both black lead batteries run the same circuit thus moving one to the white lead and the white lead battery to the black lead completes a rotation.

Your instrument is designed to run on these batteries well below their normal voltages thus external battery testers will not accurately test whether the batteries need to be replaced.

1. If the volume (beep) seems to be getting weak (low), however the Low Battery LED is not glowing brightly, rotate the battery positions.
2. If the volume (beep) is strong, however Low Battery LED is glowing brightly, rotate the batteries or replace one or both non-audio batteries, (black leads.)
3. If the volume (beep) is weak, and the Low Battery LED is glowing brightly, replace all three batteries.

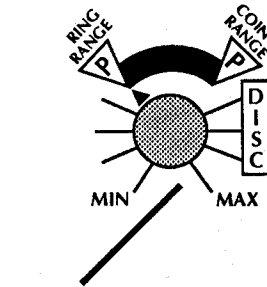


# Operating Instructions

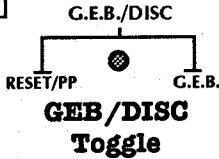
**Norm Toggle**



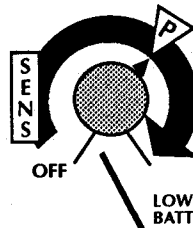
**1/4" Mono Headphone Jack**



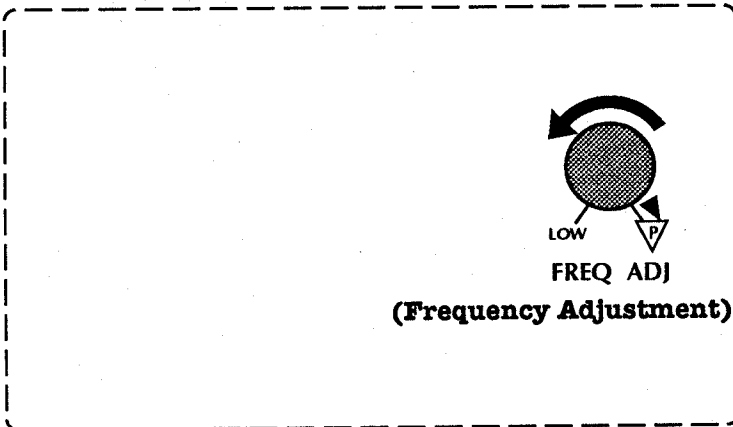
**DISC  
(Discrimination)  
Knob**



**GEB/DISC  
Toggle**



**SENS  
(Sensitivity)  
Knob**



**(Frequency Adjustment)**

## Operating Instructions continued.....

1. Once fully assembled, set the SENS Knob to the  $\nabla^P$  preset position.
2. Place the GEB/DISC Toggle to the GEB/DISC position.
3. Place the NORM Toggle to the NORM position.
4. Place the FREQ ADJ to the  $\nabla^P$  preset position.
5. The DISC Knob has two  $\nabla^P$  positions.
  - a. The RING RANGE  $\nabla^P$  is recommended. With the DISC Knob in this position, the detector will reject most iron and light foil, and respond to most valuables including jewelry.
  - b. The COIN RANGE  $\nabla^P$  is optional. With the DISC Knob at this position, the detector will reject more junk including aluminum pulltabs. However, nickels and some jewelry will also be rejected.
  - c. If you are using the RING RANGE  $\nabla^P$  and feel you are digging too much junk switch to the COIN RANGE  $\nabla^P$ , or adjust to a spot between COIN & RING RANGE that produces less junk.
  - d. When a metal is rejected, it produces a click or flutter sound. When accepted, a metal produces a smooth solid beep.

## Operating Instructions continued.....

6. Sweep the loop close to the ground passing from side-to-side. Walk forward slowly while sweeping, and make sure each pass of the loop overlaps the last. Each pass of the loop from right to left should take approximately two seconds. If the loop is swept very, very slow, or the detector is stopped, the detector may not respond to metal.

7. At this point, it is a good idea to find an area free of metal to practice. Place a quarter or dime on the ground. Pass the loop over the target. **Note:** If you sweep the loop over the coin, it is detected. If you stop the loop over the coin or sweep too slow, the instrument doesn't respond. Thus, loop movement is required for proper performance.

8. Place a large nail or steel bottle cap on the ground and pass the loop over them. Note the way the detector clicks or produces a flutter sound. Now pass the loop over a coin, and note the difference in sound. An operator will soon learn to ignore the clicks or flutters junk produces, and listen for the smooth beep coins and good metals produce.

9. Once a good beep has been located, pinpointing exactly where to dig can be completed several different ways.

- a. "X" the area, and "eyeball" the center.
- b. Hold the **GEB/DISC** Toggle in the **RESET/PP** position, then "X" the area and "eyeball" the center. Loudest beep indicates center.
- c. Place the **GEB/DISC** Toggle in the **GEB** position, then "X" the area, and "eyeball" the center. Loudest beep indicates center. Be sure to switch toggle back to **GEB DISC** before continuing.

## Operating Instructions continued.....

10. When the **GEB/DISC** Toggle is either in the **GEB** position, or held in the **RESET/PP** position, this model responds to all types of metals regardless of the **DISC** Knob position. If you want to detect all types of metals, place the **GEB/DISC** Toggle to the **GEB** position and leave it there.

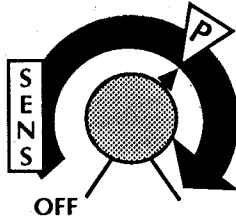
11. If when using this model near other metal detectors, it starts beep, beep, beeping, or blares continuously (**beeee eeeee p**), turn the **FREQ ADJ** Knob counterclockwise until the detector starts working normally again.

12. When using this model in extreme conditions, such as black sand, wet salt water sand, high mineralization, etc., placing the **NORM** Toggle in the **BLACK SAND** position, the **GEB DISC** Toggle in the **GEB DISC** position, and using a low **DISC** setting (somewhere around **RING RANGE**  $\nabla^P$  or below), performance will improve. When setting the controls in this manner, the instrument will respond to all types of metals (Zero Discrimination). When placing the **NORM** Toggle in the black sand position, the entire **DISC** range is changed. All rejection, except that against naturally occurring ground mineral, is shifted above **COIN RANGE**  $\nabla^P$ . Increasing the **DISC** control to or above **COIN RANGE**  $\nabla^P$  defeats the purpose of the Black Sand setting. Only at low **DISC** control settings with **NORM** Toggle in **BLACK SAND** position, will performance improve in extreme ground conditions.



# Explanation of Controls

## SENS (Sensitivity)



### What does it do?

The **SENS** control turns the detector ON and OFF, and is used to select the (Sensitivity) or degree to which this instrument responds.

### Why would I use it?

The  $\nabla$  works well in most areas, however there are two reasons an operator may wish to change the sensitivity setting:

1. If when using this model with the **SENS** control at  $\nabla$  it makes a lot of noise, beeping or clicking, when you sweep the loop, or continues even when the loop is away from the ground, the **SENS** control should be turned counter clockwise thus reducing the sensitivity, and allowing smooth stable operation.

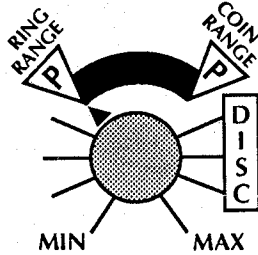
2. If when operating this detector with the **SENS** control at  $\nabla$  it works well, quiet and smooth, increasing the **SENS** control clockwise will increase sensitivity and detection depth, but may produce unstable audio responses.

Experience and personal preference will dictate how stable you prefer your instrument to perform. The **SENS** control allows for this adjustment.



# Explanation of Controls

## DISC (Discrimination)



### What does it do?

The **DISC** control selects the amount of rejection against junk metals. At **MIN** (minimum) most everything is detected except iron, nails, and some steel. At **MAX** (Maximum), most junk is rejected.

Only when the **NORM** Toggle is in the **NORM** position is the **RING RANGE**  $\nabla$  and **COIN RANGE**  $\nabla$  accurate. The **BLACK SAND** position shifts the **DISC** range considerably. (See **NORM TOGGLE**)

### Why would I use it?

The **RING RANGE**  $\nabla$  rejects junk, and responds to most valuables including jewelry. This **RING RANGE** is recommended for most areas. If, however, you dig too much junk at this setting, increasing the **DISC** control to the **COIN RANGE**  $\nabla$  will reject more junk. Some valuables including nickels, and some jewelry may also be rejected.

Again experience and personal preference will be a factor in selecting this setting. An operator must consider the likeliness of jewelry in the area to be searched, and how much

## **DISC (Discrimination) continued....**

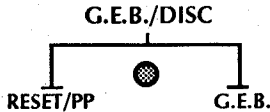
digging of junk metals is acceptable in the area; and to the operator personally, how hard do you want to work the area.

If you want to find nickels and jewelry with this model, you are going to have to dig your share of the junk metals that respond similarly. See Advanced Options for some help on this subject.



# Explanation of Controls

## GEB/DISC Toggle



### What does it do?

The **GEB/DISC TOGGLE** allows an operator to switch between the detectors operating modes. **GEB/DISC** is the most commonly used mode as it rejects junk metals. **GEB** is a mode which detects all types of metals, and is often used for pin-pointing a metal's exact location. **RESET/PP** readjusts and balances the circuit when the toggle is pushed to this position and released. If pushed and held in the **RESET/PP** position, the instrument responds just like the **GEB** position.

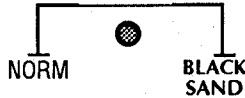
### Why would I use it?

If you're like most operators, you will search with the **GEB/DISC TOGGLE** in the **GEB/DISC** position to rule out some of the junk metals. Once a good metal is located, you could either #1, push and hold the toggle in the **RESET/PP** position, and "X" the target to pinpoint its exact location, or #2, push the toggle to **GEB** and "X" the target to pinpoint its exact location. Push the toggle back to **GEB/DISC** before continuing to search. If you wish to search for metals such as iron or steel, leave the toggle in **GEB** so the instrument will respond to all types of metals.



# Explanation of Controls

## NORM Toggle



### What does it do?

The **NORM TOGGLE** allows an operator to switch between two different discriminate ranges #1 **NORM** which is best suited for normal conditions, #2 **BLACK SAND** which is best suited for extreme conditions such as black sand, saltwater beaches, or high ground mineralization. The **BLACK SAND** position allows for true zero discrimination.

### Why would I use it?

If searching normal conditions, the **NORM** position works well. If searching extreme conditions, because of the elements in the ground, the **NORM** position may not work very well. Switching to the **BLACK SAND** position, and a low **DISC** control setting, performance will improve considerably in such extreme conditions. When set in this manner all types of metals will respond. Switching to **BLACK SAND** and using a high **DISC** setting defeats the purpose of the **BLACK SAND** position. See **ADVANCED OPERATORS** for more on the **NORM TOGGLE**.



# Explanation of Controls

## FREQ ADJ



LOW

FREQ ADJ

### What does it do?

The **FREQ ADJ** adjusts the operating frequency of this model.  $\nabla$  P is the normal operating frequency, approximately 6.55 Khz. As this control is turned counterclockwise, the operating frequency is shifted from approximately 6.55 Khz to approximately 6.35 Khz.

### Why would I use it?

If when operating this model, interference is experienced from other metal detectors causing your instrument to beep, beep, beep, or blare continuously ("**beeeeeeeep**"), shifting to a different frequency is necessary in order to continue normal operation.



# Explanation of Controls

## Headphones

### What does it do?

Headphones are available from your Dealer for your Classic III. They plug into the 1/4 inch jack on the face of the instrument where the knobs are located. This is a mono type jack; phones need to be mono or have mono capabilities to work correctly. 8-16 Ohms are recommended.

### Why would I use it?

Headphones do four things:

- 1) Increase battery life.
- 2) Increase an operator's ability to hear the detector.
- 3) Provide privacy to the operator.
- 4) Keeps the beeping noises from annoying less enthusiastic bystanders.

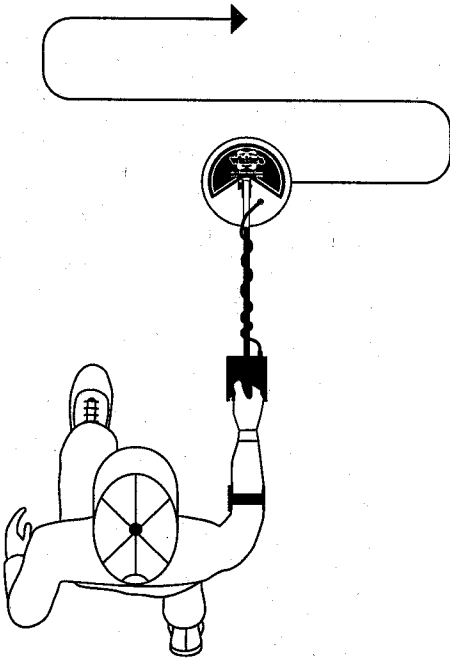
Headphones **are** recommended.



## Search Methods

Because the loop of this model must be moving in order to respond to metal, the sweep of the loop is critical to performance. Sweep the loop close to the ground, keep it close and flat throughout the sweep. (See examples.)

Overlap each pass to assure good coverage.



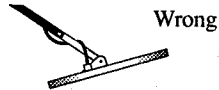
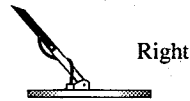
**Good targets sound smooth**



**Bad targets sound rough**

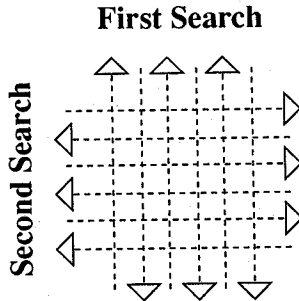


**Keep loop flat to the ground as you sweep**

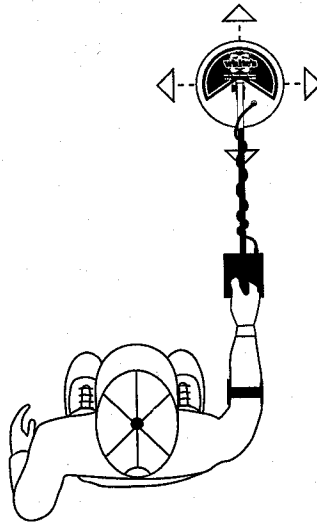


## Search Methods continued...

If you have an area that has produced valuables, or has the potential for producing valuables, cover the area twice. First in one direction, then again at a 90° angle from the first.



Once a good metal is located, "X" the area to pinpoint the target. Listen for the loudest beep as you sweep the loop, then stop and sweep in the other direction and listen for the loudest beep. The point where the two loudest beeps intersect is the center point of the target.





# Proper Care of your Detector

## **CLEANING:**

Both the loop and rod are waterproof, and can be cleaned with fresh water and a mild soap. After cleaning, dry the instrument thoroughly. **Caution:** Never raise the wet loop above the level of the instrument case. The instrument case is not waterproof, and water may run down the rod into the case damaging the electronic components.

## **WEATHER CONDITIONS:**

Protect your detector from excessively cold weather. Freezing can damage the electronic components, the case and/or the battery. Excessive heat can also damage the instrument. Never leave it in the sun. It's best to lay it in the shade when not in use. 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. Your detector has been changed to resist light to moderate rain. Protection is required for heavy rain. (Use a plastic bag.) Avoid getting water in the Control Box.

## **SALTWATER:**

Saltwater is very corrosive! After your detector has been exposed to saltwater, rinse the loop and rods in fresh water being careful not to let the loop rise higher than the level of the instrument case. Then wipe it with a cloth dampened with fresh water, and dry it thoroughly. Do not allow the main control box to get wet.

## **STORAGE:**

If you plan to store your instrument for any length of time, unsnap the batteries and remove them from the instrument. Whenever your instrument is not in use, turn the ON/OFF **SENS** Knob all the way to the left until it clicks off.

## Care continued.....

### **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 battery to corrode inside the instrument.
- e) Do not alter or modify your instrument during its warranty period. Alterations will void the warranty.

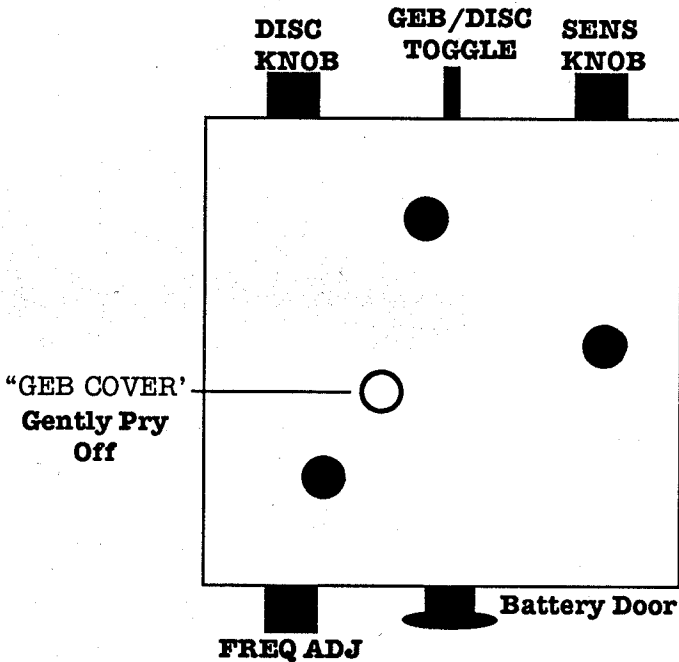


## Advanced Operators / Dealers Ground Rejection

The ground rejection of the Classic III is factory preset at a level slightly positive of a ferrite mineral sample. This setting should provide good performance in average ground.

If you notice false targeting, and performance doesn't equal your expectations, the ground rejection may need to be adjusted for your area. Place the **GEB/DISC TOGGLE** in the GEB position, and lower the loop to the ground. If you notice target response "beep" as the loop is abruptly lowered to and/or lifted from the ground, performance can be improved by readjusting the ground rejection.

Look at the bottom of the control box. Locate the "**GEB COVER**" correctly.



## Ground Rejection continued.....

**CAUTION:** Do not tamper with the other three plastic parts on the bottom of the control box as these secure the circuit board. Use a small regular screwdriver to gently pry off the **GEB COVER**. Save the cover to put back on after adjustment.

Once the **GEB** cover is removed, look through the hole. You will see the small adjustment trimmer used to adjust ground rejection. Use a very small thin regular screwdriver to adjust ground rejection. Counterclockwise sets this model for higher ground mineral. Clockwise sets this model for lower ground mineral. When set properly, the loop can be abruptly lowered to, and lifted from, the ground with the **GEB/DISC TOGGLE** in the GEB position without a target response "beep".

The proper ground rejection setting provides good detection depth with a minimum of false targeting.



## Advanced Operators Discrimination

The discriminate control can be further labeled with more specific information which will aid in determining if a metal is junk such as a pulltab, or good such as jewelry.

To mark these settings you will need an ordinary United States nickel and an ordinary aluminum pulltab. You will also need an area free of metal which is representative of the ground you normally search (similar).

Make sure **NORM TOGGLE** is in the **NORM** position. Bury the nickel about an inch in the ground. Use your instrument in the **DISC** mode. Sweep over the nickel and adjust the **DISC** control. Note that if the **DISC** control is too high, the nickel is rejected. Find the furthest position clockwise on the **DISC** dial which detects the nickel with a good sound. Mark this point on the dial.

Now do the same thing with the pulltab, place it an inch in the ground, pass over it, and adjust the **DISC** control. Note where it is rejected. This time mark the furthest counter clockwise position on the **DISC** dial that rejects the pulltab.

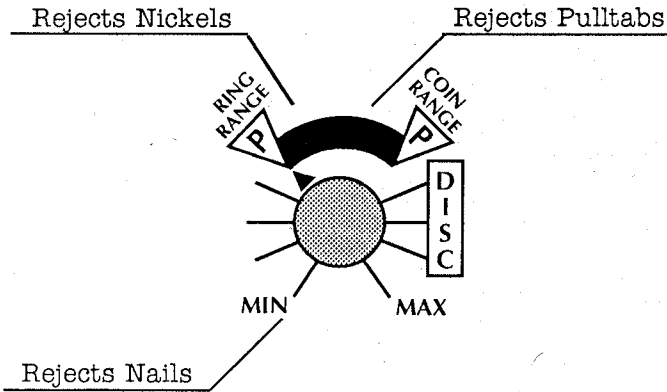
If you complete this correctly, you will now have two marks on your discriminate dial, one which is the highest point a nickel is accepted, and the other is the lowest point a pulltab is rejected.

You are now ready to search. Put the **DISC** control at the nickel mark. Once a good target is heard, continue sweeping the loop over the target while turning the **DISC** control clockwise. If the target starts being rejected before your pulltab mark, chances are it's a nickel or jewelry. If it's not rejected until the pulltab mark, it's probably a pulltab. If it's not rejected, it is a good target.

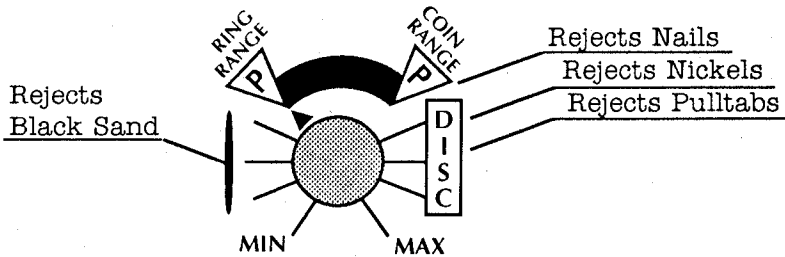
## Discrimination continued.....

**Note:** If the nickel and pulltab settings are very close to the same, the pulltab is probably not ordinary. Try a different pulltab.

When the **NORM TOGGLE** is in the **NORM** position, the **DISC** Knob rejection range is approximately as follows:



When the **NORM TOGGLE** is in the **BLACK SAND** position, the **DISC** Knob rejection range is approximately as follows:



## Discrimination continued.....

An advance operator can mark the nickel and pulltab on the discriminate dial with the **NORM** toggle in the **NORM** position. Then place the **NORM** toggle in the **BLACK SAND** position and set the **DISC KNOB** to the farthest point clockwise which still responds to the nickel. Once a smooth solid beep is located, switch the **NORM TOGGLE** back to **NORM** and again sweep the target:

1. If it still beeps smooth and solid, it is most likely a coin.
2. If it no longer beeps smoothly or doesn't beep at all, the target could be a nickel, pulltab, or jewelry. Continue sweeping the loop over the target and slowly turn the **DISC** Knob counterclockwise. If it starts beeping at your pulltab mark, it is most likely a pulltab. If it starts beeping between the pulltab and nickel, it's most likely jewelry, however, could be an abnormal pulltab. If it starts beeping at the nickel mark, it's most likely a nickel. If it starts beeping below nickel, it could be either jewelry or foil.



## Glossary of Terms

**Abruptly:** Quickly, without hesitation.

**Alkaline Battery:** Type of non-rechargeable battery that can be purchased. It has the ability to sustain longer periods of current drain, and greater storage life than the carbon-zinc type batteries.

**Black Sand:** Granular material consisting mostly of magnetite.

**Control Box:** Aluminum body of instrument (case).

**Detect:** Respond by "beep".

**Discrimination:** The ability to accept or reject (distinguish) metals of different characteristics, nails, bottle caps, coins, etc.

**Frequency:** Current cycles produced by the transmit oscillator per second. (Cycles per second.)

**G.E.B.:** (Ground Exclusion Balance) Ground Rejection.

**Good Metals:** Metals determined by the position of the **DISC** control to be acceptable. Desirable metals.

**Ground:** Dirt or the surface of the earth.

**Ground Rejection:** The cancellation of ground mineralization to ignore the masking effect ground minerals have over metals.

**Indicate:** Advice, proclaim, or point out.

**Junk Targets:** Metals determined to be trash or rejects, iron, foil, pulltabs, etc.

**Max:** The most or highest possible.

## Glossary continued.....

**Metal:** Metallic substances iron, foil, nickel, aluminum, gold, brass, lead, zinc, copper, silver, etc.

**Mineral:** Ferric oxide (iron) or other such non-organic substances naturally occurring.

**Min:** Minimum, the least possible.

**Mode:** An operation selection for specific operating characteristics.

**Motion:** Movement or sweep.

**Ordinary:** Common, average or not unusual.

**Performance:** Efficiency, the manner in which an instrument responds.

**Pinpoint:** Finding the metals exact location with respect to the loops physical center.

**Preset:** ▽ Control position determined to be ideal for average search conditions.

**Range:** A sequence, series, or scale between limits. (calibration)

**Reject:** Discriminate, cancel resonance or effect.

**Sensitivity:** (SENS) Capacity or degree to which an instrument responds.

**Stable:** Ability of a metal detector to maintain smooth predictable operation.

## Glossary continued.....

**Sweep:** Loop movement from side-to-side.

**Trimmer:** Small component used for adjustment.

**"X":** Cross the target from two different sides  $90^\circ$  from each other.



**White's Electronics, Inc.**



## **Limited 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. Neither the manufacturer or 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.



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