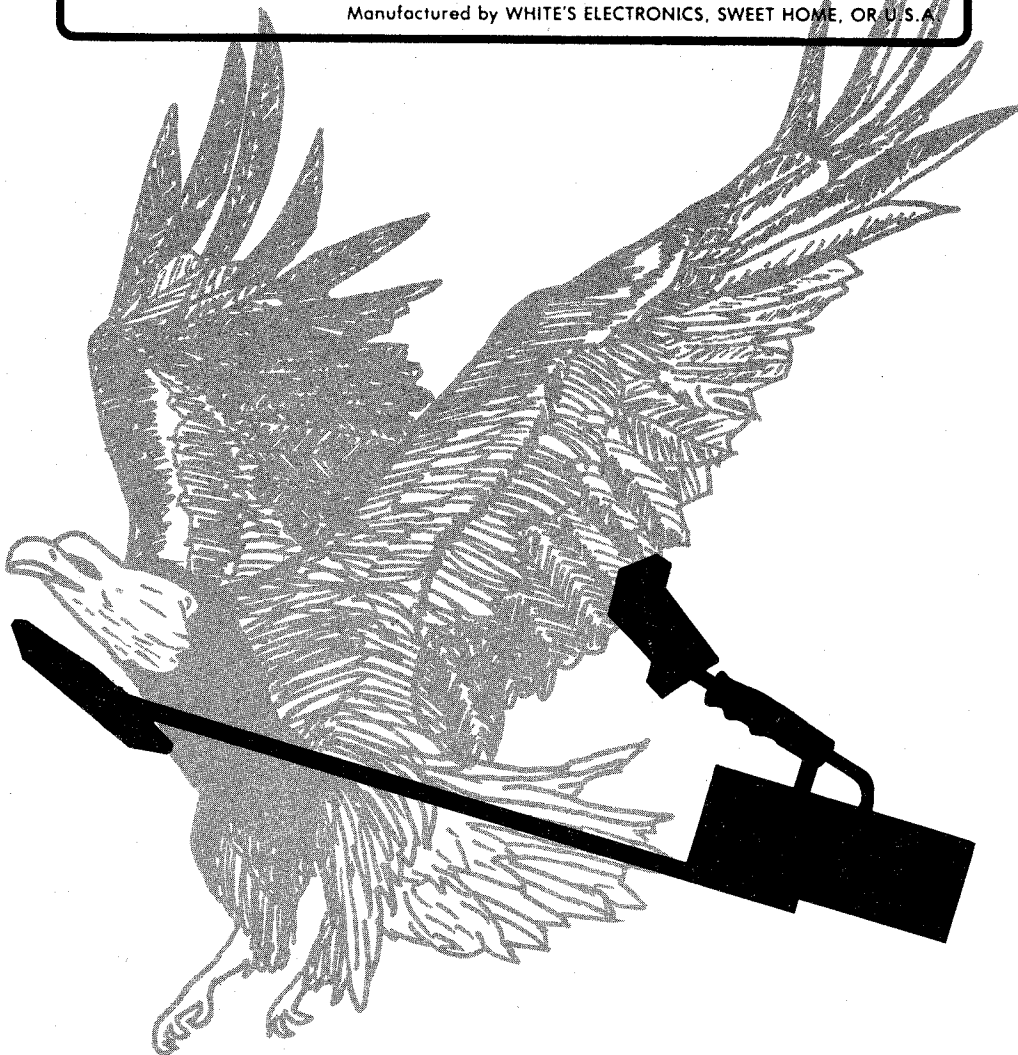


OPERATOR'S MANUAL

white's
EAGLETM **PROgrammable**
METAL
DETECTOR

Manufactured by WHITE'S ELECTRONICS, SWEET HOME, OR U.S.A.



 **white's electronics, inc.**



A Message from
Mr. Kenneth White, Jr.
Vice-President, White's Electronics, Inc.

Congratulations! You are now the proud owner of one of the world's finest metal detectors.

The EAGLE represents the first in a new generation of state-of-the-art metal detectors. Prior to the release of the EAGLE, many of this instruments' features were thought impossible. White's has again pioneered and introduced new technology, destined to change the metal detector industry forever. We have made many changes and additions to this new model. Read the following instruction manual carefully and refer back to it as often as necessary. Any piece of fine equipment is only as good as the person operating it. Become familiar with your EAGLE and practice. There is no substitute for field experience.

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

Good Hunting!

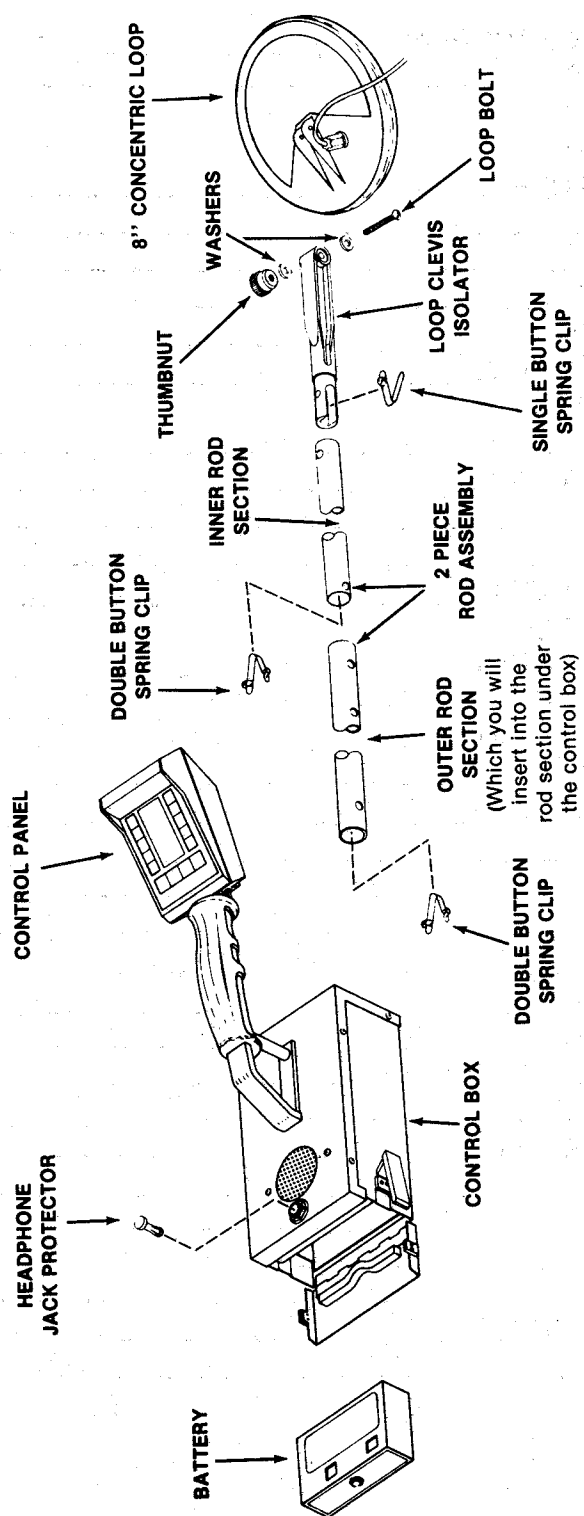


Kenneth R. White, Jr.

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PARTS IDENTIFICATION & ASSEMBLY



SIMPLIFIED INSTRUCTIONS

1. Assemble your instrument as shown on page one.
2. Install either four "C" cell alkaline batteries in the holder or use the rechargeable battery. If the instrument will not turn on or LOW BAT indication persists, replace or recharge the batteries.
3. Make sure the TRIGGER SWITCH is in the center search position.
4. Press the ON/OFF control once, the display will show everything for a moment, wait for it to clear and show AIR PROMPT .
5. Hold loop at waist level, away from known metals or the ground and press AIR control.
 - A. If you hear a multinote beep, reposition the loop and again press AIR control.  should appear.
6. When the GND PROMPT  appears on the display, place the loop flat on the ground and press GND control.
 - A. If you hear a multinote beep, reposition the loop and again press GND control.
 - B. If multinote beep persists, ignore it.
7. All other controls are preset to accept most coins and reject most junk.
8. Pass the loop smoothly over the ground, slightly overlapping each sweep. The loop must be swept or in motion to detect metals.
9. Once a good solid tone and consistently good display indication are noted, squeeze and hold the trigger. "X" the target, the loudest volume and lowest display number DEEP indicates the target is pinpointed below the physical center of the loop. Loop motion is not required when the TRIGGER SWITCH is squeezed for pinpointing.
10. Before continuing to search, squeeze and release the TRIGGER SWITCH with the loop at waist level to reset or clear for further searching.

EXPLANATION OF CONTROLS

PRIMARY CONTROLS: TRIGGER SWITCH, ON/OFF, AIR, GND & LAMP

The **PRIMARY CONTROLS**, labeled in **GREEN**, are the only controls that require setting each time you operate the EAGLE. All other controls may use preselected settings, determined to be ideal for most conditions.

- I. **TRIGGER SWITCH:** Located on the handle below the display.
- A. Always use the center search position during tuning and searching.
 - B. Use the squeezed and held position to pinpoint.
 - C. Use the forward lock position to lock into the pinpoint mode.
 - D. After pinpointing, always squeeze and release the TRIGGER SWITCH with the loop at waist level before continuing. This resets or clears for further searching.
 - E. Immediately after pressing ON/OFF control, squeezing and releasing the TRIGGER SWITCH, returns instrument to the exact settings prior to turning it off (memory recovery). Memory recovery will only work if the battery remains within 3.8 - 6.0 volts and is not removed for more than 30 seconds.
- II. **ON/OFF**
- A. Press once to turn power ON, press again to turn power OFF.
 - B. If ON/OFF doesn't turn power ON, replace or recharge the batteries.
 - C. LAMP automatically turns off with ON/OFF control.
 - D. Once instrument is turned ON, everything will be visible on the display for a few seconds and then clear, showing AIR PROMPT .
 - E. If controls are not used for twenty minutes, the instrument will automatically turn off.
- III. **AIR** 
- A. Prepares the instrument to GND (ground) balance.
 - B. Hold loop at waist level, away from known metals or the ground and press AIR CONTROL.
 - C. Multinote beep indicates error. Reposition the loop, away from known metals or the ground and again press AIR control.
 - D. You should hear a solid beep and then the display should show GND PROMPT .

PRIMARY CONTROLS, cont.

IV. GND

- A. Balances the instrument to ignore ground minerals.
- B. Place the loop flat on the ground and press GND control.
- C. Multinote beep indicates either an error, such as balancing over metal, or no minerals were present so a preselected GND setting was selected.
- D. Reposition the loop and again press the GND control. If multinote beep persists, ignore it as the ground is probably not mineralized.
- E. Do not adjust the loop to rod angle between AIR and GND balance. If angle is adjusted, then repeat AIR/GND balance sequence.
- F. To bench or air test the EAGLE capabilities, avoid loss of sensitivity by either using a mineral sample in place of the ground during GND balance or keep pressing the GND control until the multinote beep occurs indicating the instrument has reverted to a preselected GND setting.

V. LAMP

- A. Press LAMP control once to turn on LAMP.
- B. Press LAMP control again to turn LAMP off.
- C. LAMP automatically turns off with ON/OFF control.
- D. Memory recovery will not return LAMP to on position.
- E. LAMP use will reduce battery life.
- F. LAMP bulb can be replaced only by authorized service centers.
- G. Press and hold LAMP control to check battery voltage.
 - 1. 48 would indicate 4.8 volts, the normal fully charged voltage of the rechargeable battery.
 - 2. Four 1.5 volt alkaline "C" cell batteries are recommended for the standard battery holder and when new, check at about 6.0 volts.
 - 3. A voltage regulator insures no performance differences between these two types of batteries other than actual life.
 - 4. Battery strength is continually monitored and when LOW BAT persists on the display, the battery is getting weak.
 - 5. After checking battery voltage, if the LAMP is not needed, press and release LAMP control to turn LAMP off.

PRIMARY CONTROL

OPERATION REVIEW

1. TRIGGER SWITCH: Center (search) position.
2. Press ON/OFF and wait for AIR PROMPT .
3. Hold the loop waist level, away from known metals or the ground and press AIR. If you hear a multinote beep, reposition the loop and again press AIR. You should hear a solid beep and GND PROMPT  should appear.
4. Place the loop flat on the ground and press GND. If you hear a multinote beep, reposition the loop and again press GND. If multinote beep persists, ignore it, as the ground is probably not mineralized.
5. To check battery voltage, press and hold LAMP control. 48 indicates 4.8 volts.
6. To turn LAMP on or off, press and release the LAMP control.
7. Search, sweeping loop smoothly and evenly over the ground, slightly overlapping each sweep. The loop must be in motion to detect.
8. Once a consistently good beep and display indication are noted, squeeze and hold the TRIGGER and X the target. Loudest volume and shallowest DEEP number indicate target center. The loop does not have to be in motion when the TRIGGER SWITCH is squeezed.
9. Before continuing to search, squeeze and release the TRIGGER SWITCH with loop at waist level.
10. To turn detector OFF, press ON/OFF control.
11. If no controls are pressed for 20 minutes, the EAGLE will turn off automatically.

It is vital that you understand the PRIMARY CONTROLS before continuing, as all other controls are optionally adjustable and adjustment will depend on personal preference and application.

EXPLANATION OF CONTROLS

SECONDARY: AUDIO MODE, SENS, AUTOTRAC™, VOL▲ VOL▼

The **SECONDARY** controls, labeled in **YELLOW**, start out as preselected settings determined to be ideal for most conditions. After you set the **PRIMARY** controls, set the **SECONDARY** controls based on application and personal preference.

I. **AUDIO MODE:**

A. Selects between the three major audio modes.

1. Audible Threshold indicated as "A" on the display is the preselected starting mode.
 - a. Audible Threshold mode "A" is a standard motion discrimination mode with a continuous slight tone.
 - b. When DISC ON control is in the ON position (indicated by a prompt on the display beside the DISC ON button) mode A accepts or rejects targets based on the discriminate program.
 - c. When DISC ON control is in the off position (no prompt on display beside DISC ON button) mode A becomes an all-metal nonmotion mode.
 - d. When the TRIGGER SWITCH is squeezed and held, the display switches to depth and intensity reading, the mode switches to all metal nonmotion pinpointing and as the loop is passed over the target "X" ratchet pinpointing will automatically aid in centering the target.
2. Silent Search indicated as "B" on the display is achieved by pressing the AUDIO MODE control once (B appears on the display).
 - a. Silent Search is a motion discriminate mode that is silent until a target is accepted.
 - b. DISC ON control has little effect on the B mode except for turning on or off the discriminate program.
 - c. When the TRIGGER SWITCH is squeezed and held, the display switches to depth and intensity reading, the mode switches to all metal nonmotion pinpointing and as the loop is passed over the target "X" ratchet pinpointing will automatically aid in centering the target.
3. Audible Threshold (Tone I.D.) indicated as "C" on the display is achieved by pressing the AUDIO MODE control again (C appears on

SECONDARY CONTROLS, cont.

the display).

- a. Audible Threshold TONE I.D. is both a motion and nonmotion mode combined.
- b. When DISC ON control is in the on position (indicated by a prompt on display by DISC ON control) the C mode produces a high tone for targets accepted by the discriminated program and a lower or medium tone for targets rejected by the discriminate program.
- c. When DISC ON control is in the off position (no prompt on display beside DISC ON control) mode C produces the lower or medium tone for all metals.
- d. When the TRIGGER SWITCH is squeezed and held, the display switches to depth and intensity reading, the mode switches to all metal nonmotion pinpointing and as the loop is passed over the target "X" ratchet pinpoint will automatically aid in centering the target.

4. Pressing AUDIO MODE control again will return to "A" Audible Threshold.

- B. Select among AUDIO MODES based on application and personal preference.
- C. It is not recommended to avoid ratchet pinpointing since this is a convenient automatic feature with no known disadvantages. If, however, for some reason, you wish to avoid ratchet pinpointing, use AUDIO MODE "A" or "C" and set DISC ON control to the off position (no prompt on display beside DISC ON control).

II. SENS: Sensitivity

- A. Selects between five sensitivity levels.
- B. Numbers appear on display by SENS control.
- C. Number five is the most sensitive level.
- D. Press SENS control to increase sensitivity. (Returns to level one from level five.)
- E. Use the highest number that doesn't produce false signals or instability.

SECONDARY CONTROLS, cont.

III. AUTOTRAC™

- A. Automatically makes corrections to the GND (ground) balance as you search.
- B. Starts out turned ON, indicated by a small prompt on the display next to the AUTOTRAC control.
- C. Press once to turn AUTOTRAC feature OFF, small display prompt disappears and GND (ground) balance remains as originally set.
- D. Press again, small prompt appears on display next to AUTOTRAC control. AUTOTRAC is on.
- E. For most conditions, leave AUTOTRAC on for best results.
- F. If GND prompt appears when AUTOTRAC is on, repeat GND balance sequence.

IV. VOL ▲VOL ▼ : VOLUME UP, VOLUME DOWN

- A. Increases or decreases volume levels, both threshold and audio output.
- B. Press VOL controls to increase or decrease volume levels.
- C. Eight levels are available, shown as segments of the bar graph near VOL controls. The taller the bar graph, the higher the volume level.
- D. This bar graph is also an intensity scale in the pinpoint mode (TRIGGER squeezed), indicated by an additional line beside the bar graph.
- E. VOL starts out at level five, indicated by the five segments of the bar graph.
- F. Select the lowest volume level adequate for your hearing needs.
- G. High volume levels will reduce battery life.

SECONDARY CONTROLS

OPERATION REVIEW

First, set the PRIMARY CONTROLS, then:

1. To change AUDIO MODES, press AUDIO MODE control"
"A" Audible Threshold, "B" Silent Search, "C" Audible Threshold (Tone I.D.).
Sequence repeats.
2. Adjust sensitivity by pressing SENS control. Use the highest number that doesn't produce false signals. Returns to level one after level five.
3. Leave AUTOTRAC ON or turn OFF by pressing AUTOTRAC™ once.
4. Adjust volume level by pressing volume arrow up and arrow down controls.
5. You are now ready to search. Discriminate settings have been preselected to accept most coins - including nickels, and reject most junk, including pulltabs.
6. Sweep the loop smoothly and evenly over the ground, slightly overlapping each sweep. The loop must be in motion for detection of metal.
7. Once a consistently good beep and display indication are noted, squeeze and hold the TRIGGER SWITCH and "X" the target. The loudest volume and shallowest DEEP number indicate target center. The loop does not have to be in motion when the TRIGGER SWITCH is squeezed and held.
8. After recovering the target, squeeze and release the TRIGGER SWITCH with the loop at waist level before continuing. This resets or clears for further searching.
9. The SECONDARY controls should be understood thoroughly before continuing.

DISCRIMINATE CONTROLS: **DISC ON, LRN ACC CLR, LRN REJ SET, EDIT ▲EDIT ▼**

After setting the PRIMARY and SECONDARY controls, use the **DISCRIMINATE CONTROLS**, labeled in **BLUE** to program or adjust DISCRIMINATION. Preset settings are to accept most coins including nickels and reject most junk including pulltabs. Use the DISCRIMINATE controls to change preset settings.

I. DISC ON; DISCRIMINATE ON

- A. Starts out in the ON position, indicated by a small prompt on the display beside the DISC ON control.
- B. Press once, small prompt on display disappears, now the discriminate circuit is OFF and all metals strong enough to be detected will be.
- C. Press again, small prompt on display appears and metals are accepted or rejected based on the discriminate memory.

II. LRN ACC CLR; LEARN ACCEPT "CLEAR"

- A. Used to learn to accept target samples; "Teach Accept".
- B. To LEARN ACCEPT, first set PRIMARY and SECONDARY controls.
 - 1. Then, press LRN ACC CLR control once. MEM should appear on the display as well as a small prompt beside LRN ACC CLR control.
 - 2. Pass the targets to be learned acceptable about four inches from the loop, four to six passes or until the good tone is consistent.
 - 3. Press LRN ACC CLR again, Mem and small prompt on display should disappear and you are ready to search.
- C. Used to clear targets for accept response during Editing. See EDIT ▲EDIT ▼ controls.
- D. Do not attempt to LEARN targets that do not produce consistent tone and display indications.
- E. You may use target samples in the air or in the ground to LEARN ACCEPT.

DISCRIMINATE CONTROLS, cont.

III. LRN REJ SET; LEARN REJECT "SET"

- A. Used to learn to reject target samples; "TEACH REJECT".
- B. To LEARN REJECT, first set PRIMARY and SECONDARY controls.
 - 1. Press LRN REJ SET control once. MEM should appear on the display as well as a small prompt near LRN REJ SET control.
 - 2. Pass the targets to be learned reject about four inches from the loop, four to six passes or until the reject tone is consistent.
 - 3. Press LRN REJ SET again, MEM and small prompt on display should disappear and you are ready to search.
- C. Use to SET targets for rejection or discriminate response during Editing. See EDIT ▲ EDIT ▼.
- D. Do not attempt to learn targets that do not produce consistent tone and display indications.
- E. You may use target samples in the air or in the ground to LEARN REJECT.

IV. EDIT ▲ EDIT ▼;

- A. Used to enter EDIT mode and scroll or view 0 - 95 target range with corresponding indication - iron, foil, nickel, etc.
- B. First set PRIMARY and SECONDARY controls and make sure TRIGGER SWITCH is in the center position.
- C. Press either EDIT once to enter the EDIT mode. The instrument will not respond to metal in this mode. MEM should be visible on the display.
- D. Now use EDIT ▲ and EDIT ▼ to scroll up ▲ and down ▼ 0 - 95 range.
 - 1. For each of the 0 - 95 target numbers press either LRN ACC CLR to clear the number to be accepted or press the LRN REJ SET to SET the number for rejection.
 - 2. When SET appears on the display, that 0 - 95 target number is SET for rejection.
 - 3. When SET doesn't appear on the display, that 0 - 95 target number is clear to be accepted.
- E. To exit from the EDIT mode to an operate mode, squeeze and release the TRIGGER SWITCH.

DISCRIMINATE CONTROLS, cont.

- F. BLOCK EDIT; Editing large section of the 0 - 95 target range.
1. First set PRIMARY and SECONDARY controls and make sure TRIGGER SWITCH is in the center position.
 2. Press either EDIT control once to enter EDIT mode, MEM should appear on the display.
 3. To clear or accept a large section of the 0 - 95 target range, press LRN ACC CLR twice. Small prompt should appear on display near LRN ACC CLR control.
 - a. Now use EDIT controls to adjust block.
 - b. Each 0 - 95 target number that comes into view will automatically be CLEAR for accept.
 - c. To exit BLOCK EDIT mode to regular EDIT mode, press LRN ACC CLR control again. Small bar disappears from display near LRN ACC CLR control.
 - d. To exit BLOCK EDIT mode to an operate mode, squeeze and release the TRIGGER SWITCH.
 4. To set or reject a large section of the 0 - 95 target range, press LRN REJ SET twice. Small prompt should appear on display near LRN REJ SET control.
 - a. Now use EDIT controls to adjust block.
 - b. Each 0 - 95 target number that comes into view will automatically be SET for reject.
 - c. To exit BLOCK EDIT mode to regular EDIT mode, press LRN REJ SET control again. Small bar disappear from display near LRN REJ SET control.
 - d. To exit BLOCK EDIT mode to an operate mode, squeeze and release the TRIGGER SWITCH.
- G. MEMORY RECOVERY; Retaining a program or setting you have selected.
1. Once the instrument is turned off, then turned on again and GND balanced, all discriminate memory as well as all other settings will revert to the preselected settings.
 2. To retain discriminate memory program settings you have selected as well as other settings immediately after pressing ON/OFF control, squeeze and release the TRIGGER SWITCH.
 3. MEMORY RECOVERY will only work if the battery remains within 3.8 - 6.0 volts and is not removed for more than 30 seconds.

DISCRIMATE CONTROL

OPERATION REVIEW

First set the PRIMARY and SECONDARY controls, then:

1. Switch entire discriminate circuit off or back on by pressing DISC ON control. Prompt indicates on, no prompt indicates off.
2. Program Discrimination Learn by pressing either LRN ACC (Learn Accept) or LRN REJ (Learn Reject) once, PROMPT and MEM appear on display. Pass sample targets four to six times about four inches from the loop. Press LRN ACC (Learn Accept) or LRN REJ (Learn Reject) again to return to operate. PROMPT and MEM disappear.
3. Program Discrimination EDIT by pressing either EDIT control to enter the Edit mode. MEM appears on the display. Use EDIT▲ and EDIT▼ to view the entire 0 - 95 V.D.I. range and corresponding indication (iron, foil, nickel, etc.). For each of the 0 - 95 V.D.I. numbers, press either CLR (Learn Accept) to clear for accept or SET (Learn Reject) to set for rejection. SET appears on display for targets SET for rejection. SET does not appear for V.D.I. numbers cleared for acceptance. Squeeze and release the TRIGGER SWITCH to return to a search mode.
4. To BLOCK EDIT large sections of the 0 - 95 V.D.I. target range, first press either EDIT control to enter the EDIT mode. MEM appears on the display. Then press twice either CLR (Learn Accept) or SET (Learn Reject). PROMPT should appear on the display. Now each V.D.I. number that appears on the display throughout the use of the EDIT controls will automatically be either CLR (Learn Accept) or SET (Learn Reject), whichever was pressed. Press the same control (CLR or SET) to exit to regular EDIT mode or squeeze and release the TRIGGER SWITCH to exit to an operate mode.

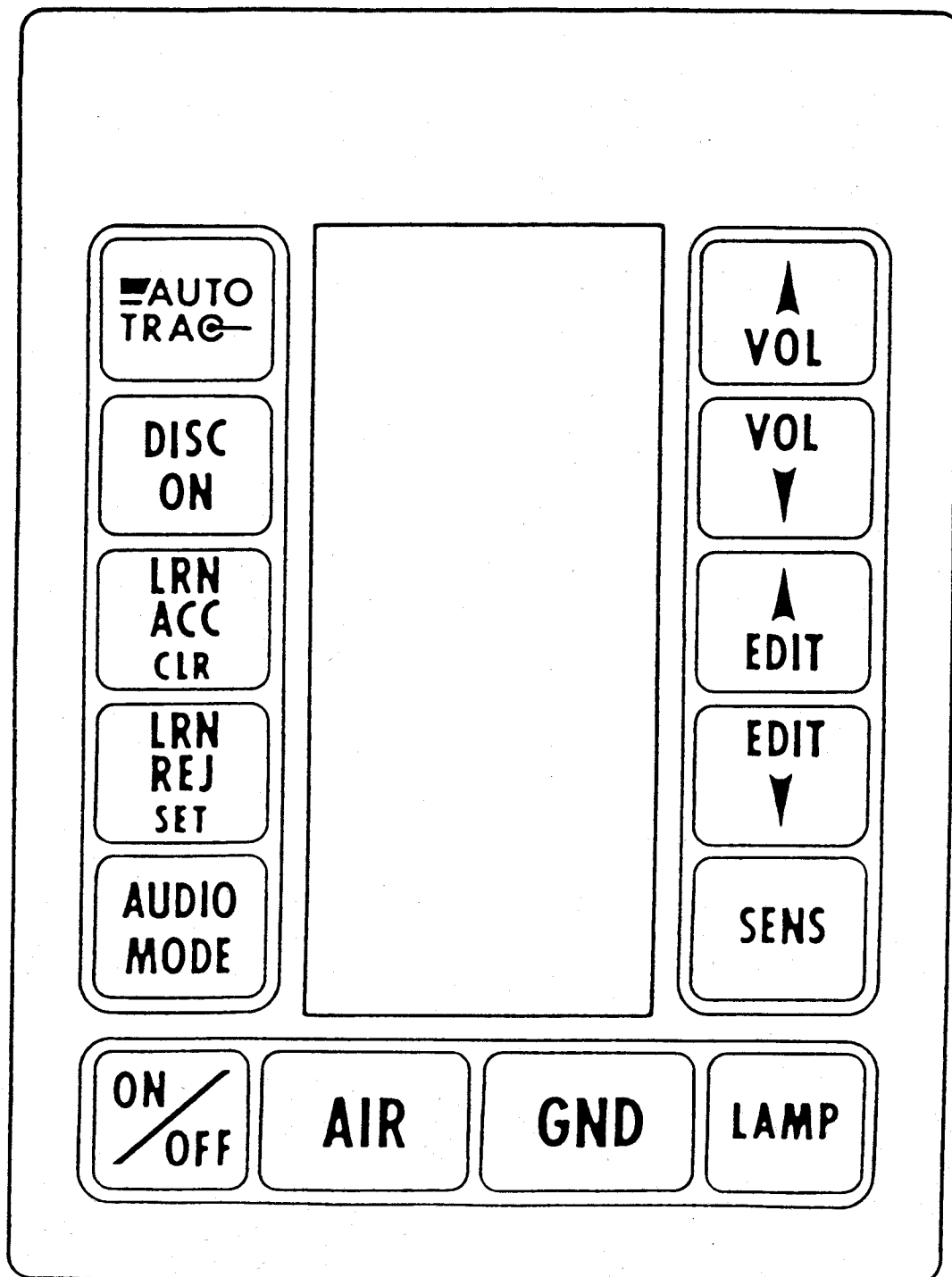
DISCRIMINATE CONTROL

OPERATION REVIEW, cont.

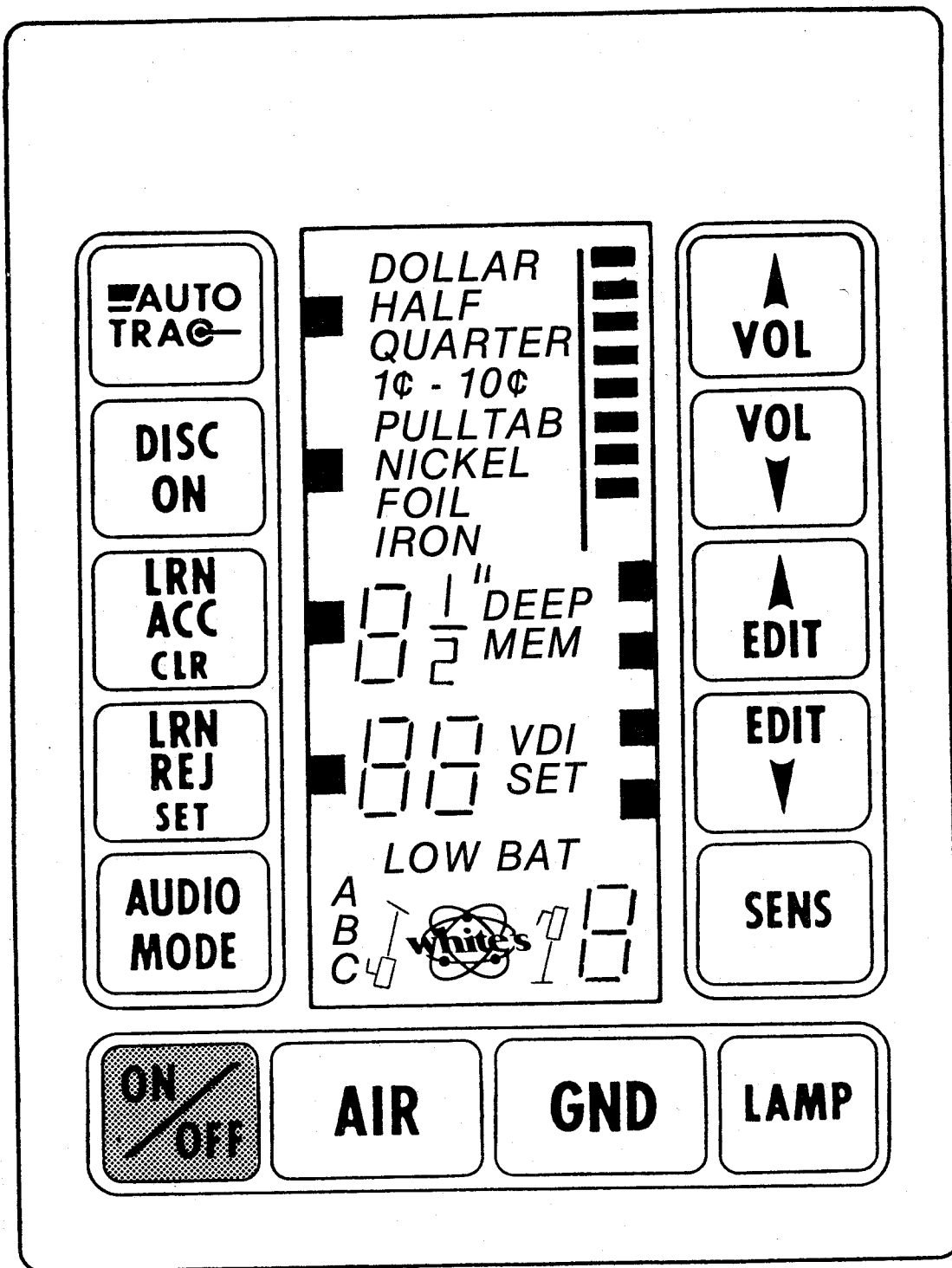
5. You are now ready to search. Sweep the loop smoothly and evenly over the ground, slightly overlapping each sweep. The loop must be in motion to detect metals.
6. Once a consistently good beep and display indication are noted, squeeze and hold the TRIGGER SWITCH and "X" the target. The loudest volume and shallowest DEEP number indicate target center. The loop does not have to be in motion to detect metals when the TRIGGER SWITCH is squeezed and held. After recovering the target and before continuing to search, squeeze and release the TRIGGER SWITCH with the loop at waist level to reset or clear for further searching.
7. After turning the instrument off, retain past Discriminate memory and all other settings prior to turning off by immediately squeezing and releasing the TRIGGER SWITCH after pressing ON/OFF control to turn instrument ON, "Memory Recover". Memory Recover will only work if the batteries remain within 3.8 - 6.0 volts and are not removed for more than 30 seconds.

DISPLAY

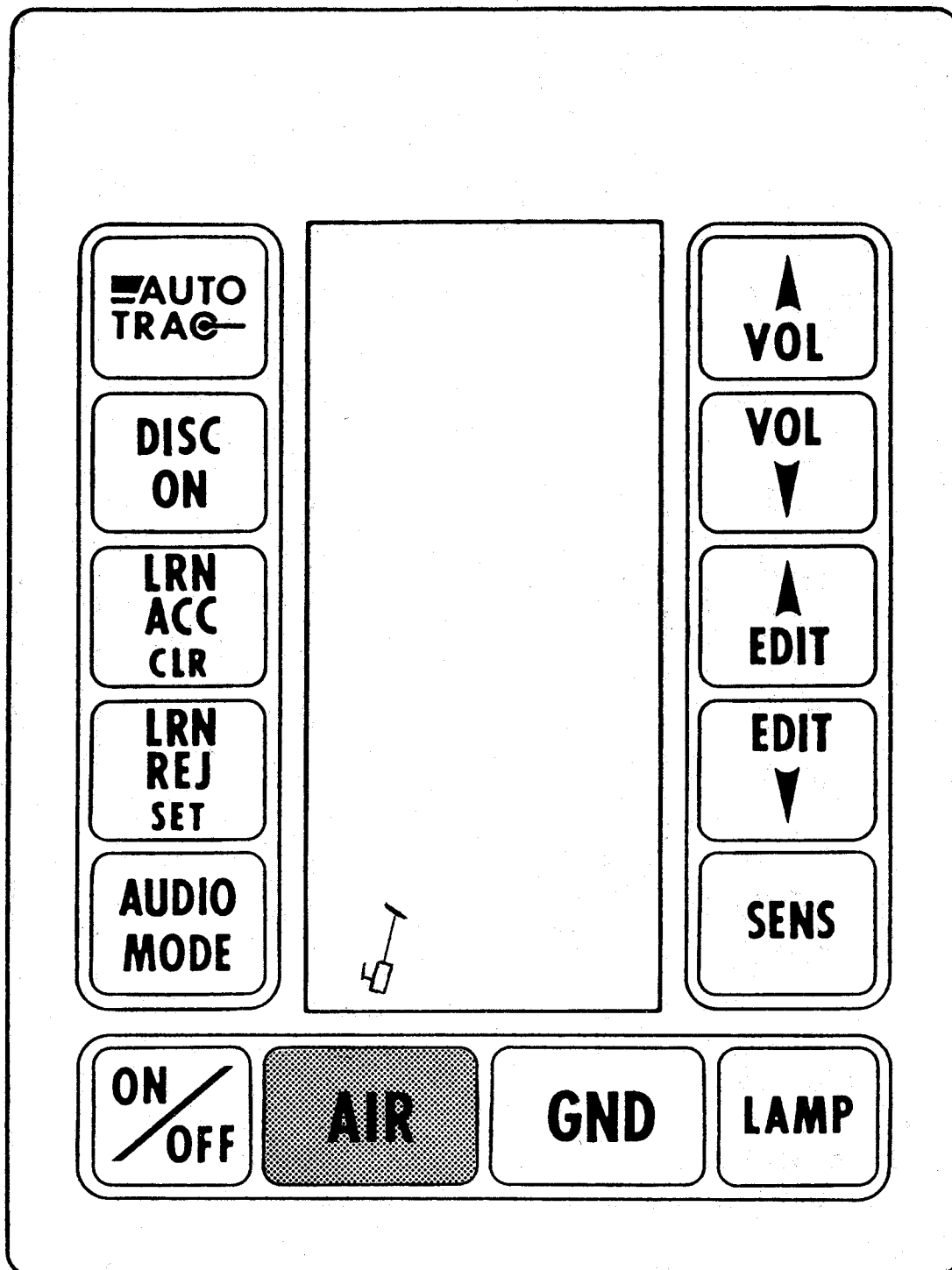
1. The DISPLAY provides a wealth of information for the operator.
 - A. When first turned on, the DISPLAY will complete a self test by showing everything for a few seconds.
 - B. The DISPLAY will then clear and request an AIR balance. 
(Hold loop in air, away from known metals or the ground and press AIR control.)
 1. If AIR balance was in error, AIR balance prompt will continue to be visible on the DISPLAY. (Reposition the loop, away from known metals or the ground and again press AIR control.) GND prompt  should appear.
 - C. The GND prompt indicates GND balance is required. (Place loop flat on ground and press GND control.)
 1. If AUTOTRAC™ causes a GND (ground) balance error, GND (ground prompt ) will reappear on the DISPLAY. Repeat AIR/GND tuning sequence). Turn off AUTOTRAC™ for such an area if error persists.
 - D. The DISPLAY shows the setting or level of each SECONDARY and DISCRIMINATE control.
 1. Beside the AUDIO MODE control, on the display:
 - "A" indicates Audible Threshold.
 - "B" indicates Silent Search.
 - "C" indicates Audible Threshold (Tone I.D.).
 2. Beside the SENS (sensitivity) control on the DISPLAY, numbers 1 - 5 indicates sensitivity level. Number 5 is the most sensitive setting.
 3. Beside the AUTOTRAC™ is a prompt that is visible when ON. No prompt indicates AUTOTRAC™ is OFF.
 4. Next to the VOL (volume) control on the display is indicated by an eight level bar graph. The taller the bar graph, the higher the volume level.
 5. Beside the DISC ON (Discriminate On) control a small prompt shows Discrimination is ON. No prompt indicates Discrimination is OFF.
 6. Next to the LRN ACC CLR (Learn Accept Clear) control, a small prompt and MEM appearing on the DISPLAY indicates Learn Accept is ON. In the EDIT mode, a small prompt by this control indicates BLOCK ACCEPT is ON.
 7. Next to the LRN REJ SET (Learn Reject Set) control, a small prompt and MEM appearing on the DISPLAY indicates Learn Reject is ON. In the EDIT mode, a small prompt by this control indicates BLOCK REJECT is ON.
 8. Next to the EDIT controls, four prompts and MEM visible on the DISPLAY indicates the EAGLE is in the EDIT mode.
 - E. The following pages show the different display indications and the proper procedure for each indication.



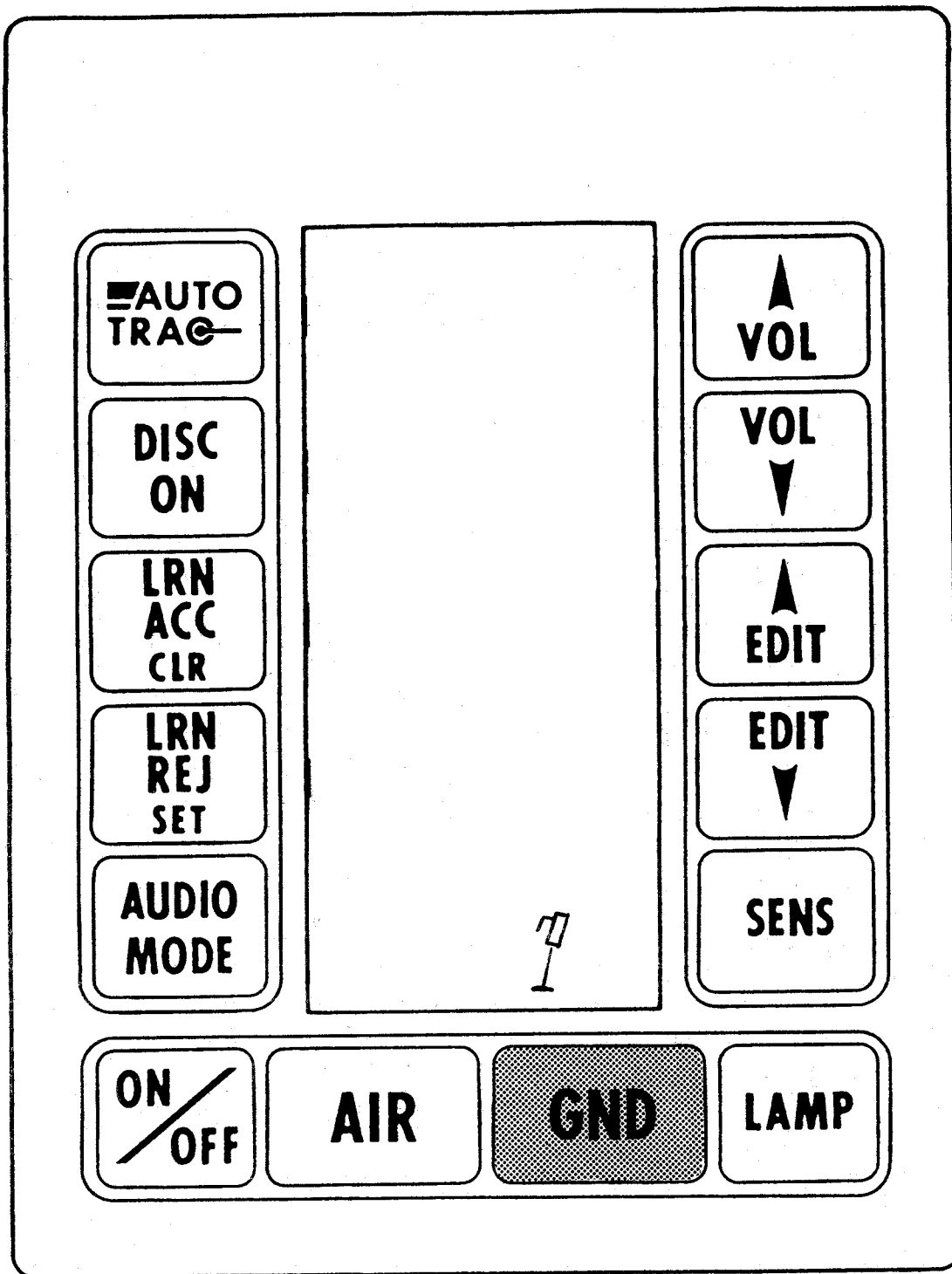
When **OFF**, nothing appears on the display.



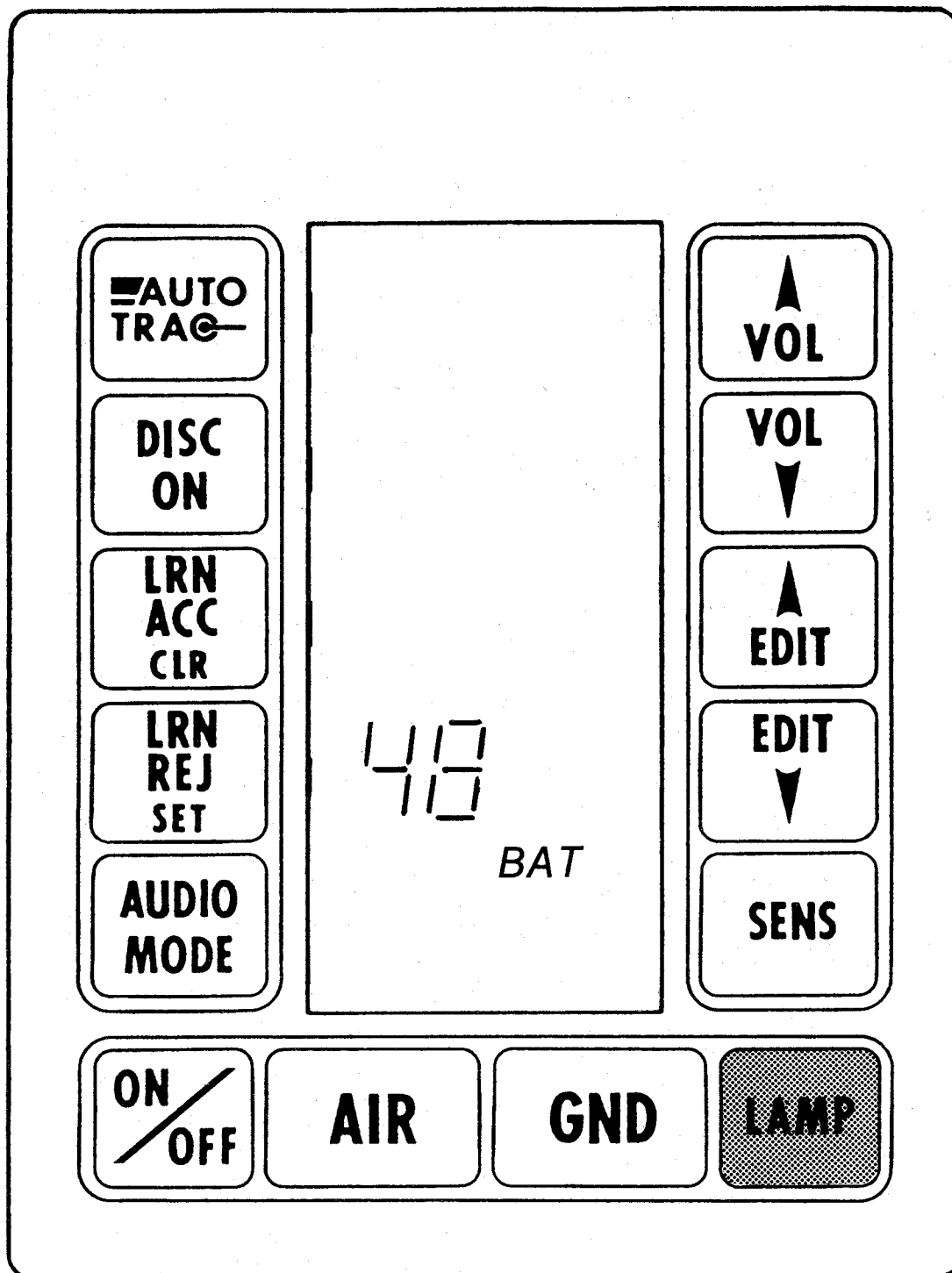
Press **ON/OFF** control once, all display items are visible for a few moments. If nothing appears on the display, recharge or replace the batteries.



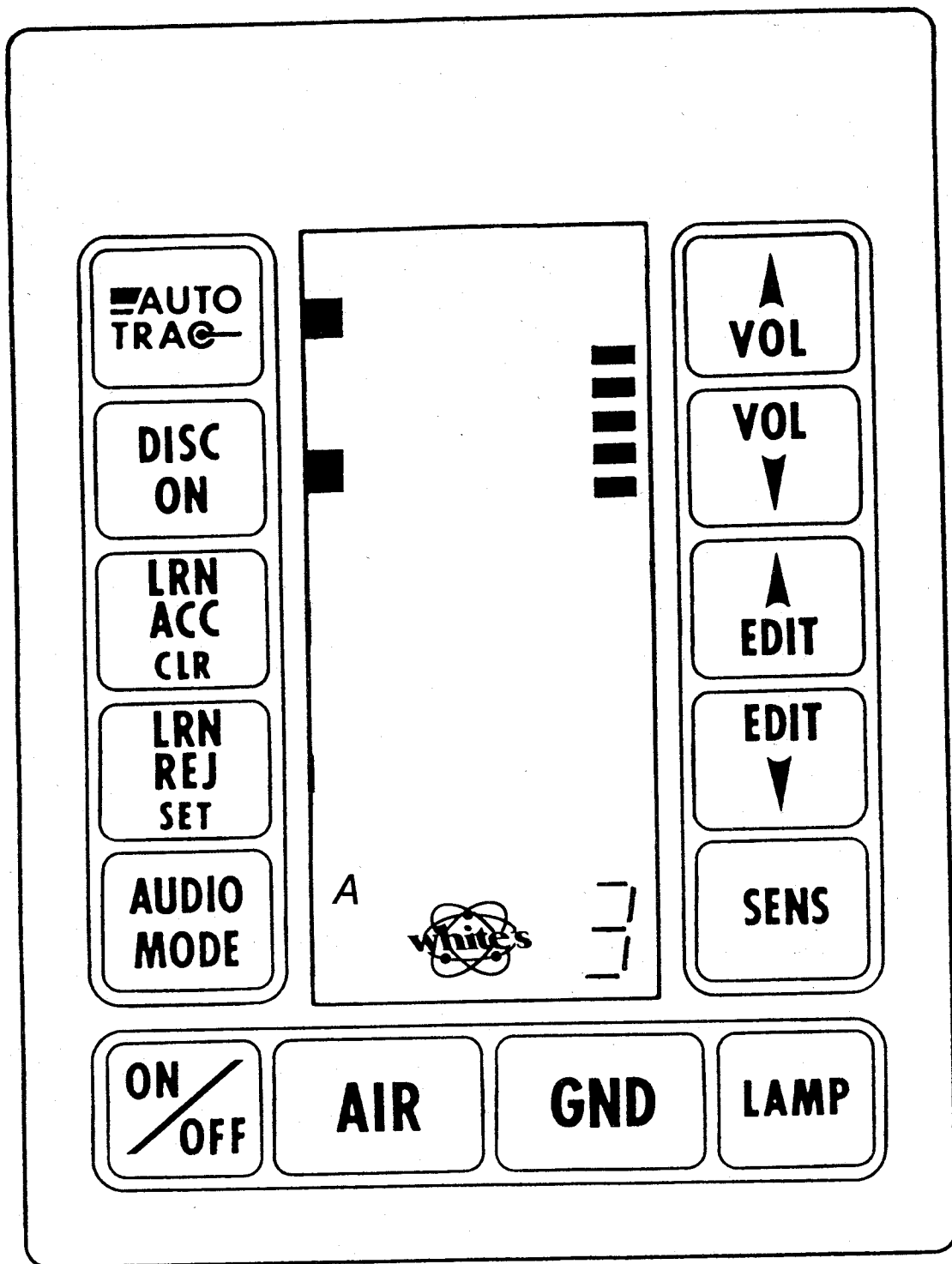
Display clears, showing **AIR** prompt. Hold the loop at waist level away from known metals or the ground and press **AIR** control. Instrument should give a solid beep and **GND** prompt should appear. If you hear a multi-tone beep, reposition the loop away from known metals or the ground and again press **AIR** control.



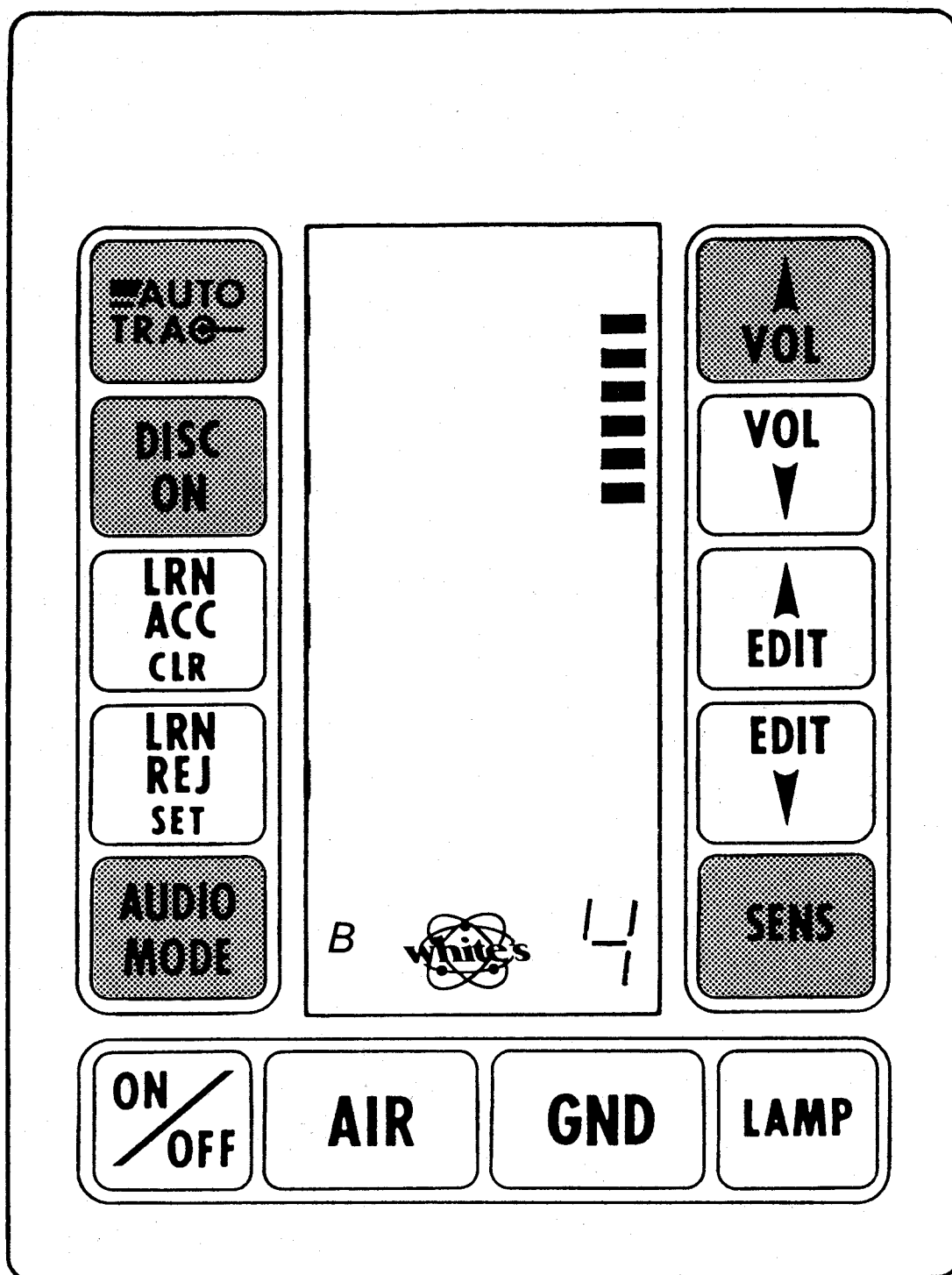
When **GND** prompt appears place the loop flat on the ground and press **GND** control. Multi-tone beep indicates you either balanced on top of metal or there weren't enough ground minerals to balance so the **GND** selected a predetermined level. In either case, reposition the loop and again press **GND** control. If multi-tone beep persists, ignore it. The ground is probably not mineralized. Normally you will hear a solid beep.



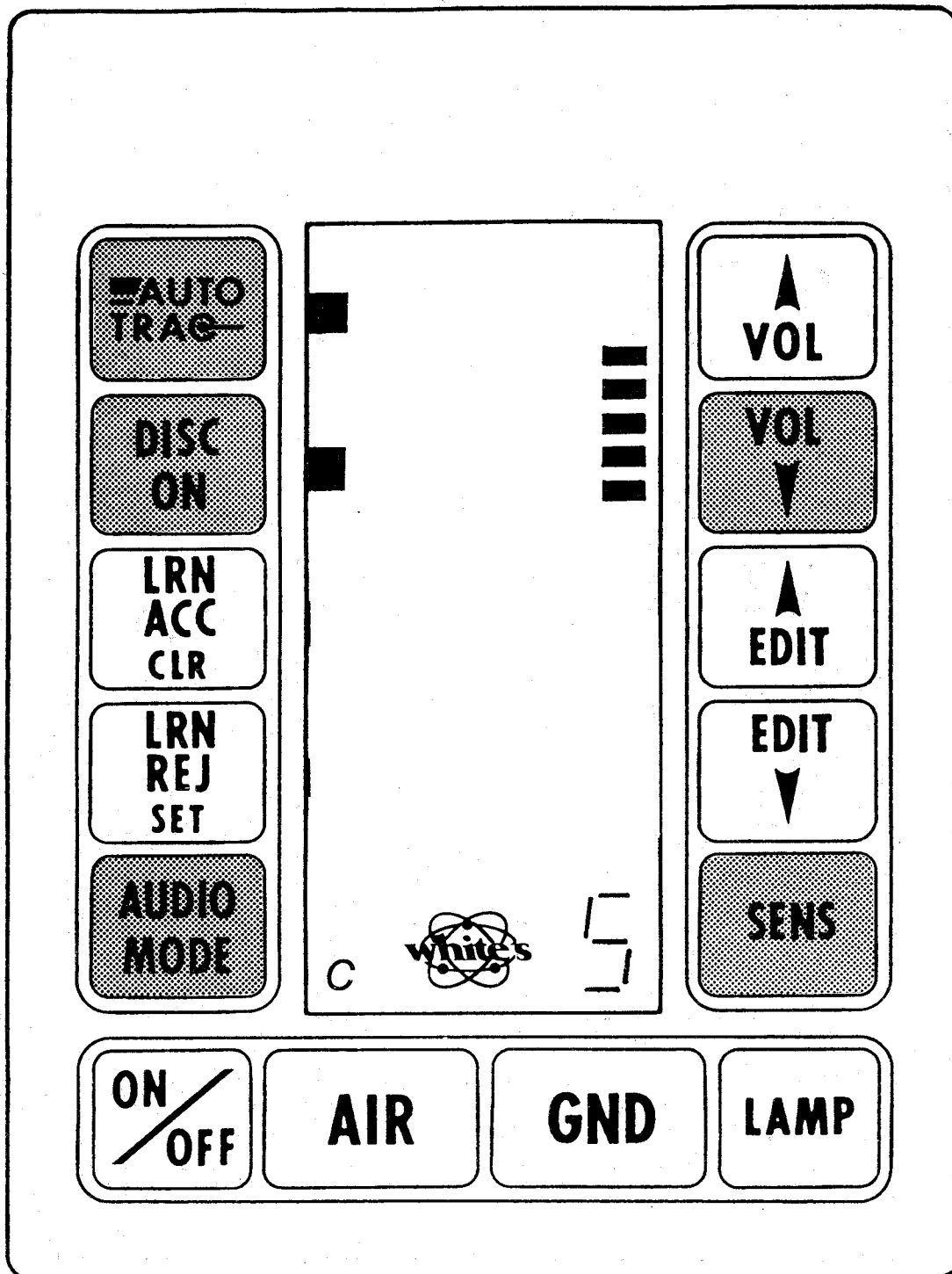
Press and hold the **LAMP** control to check battery voltage. 4.8 means 4.8 volts. LOW BAT will persist when the batteries are getting weak. 4.8 volts is the normal fully charged voltage of the rechargeable battery. Standard batteries when new should show about 6.0 volts. A built-in voltage regulator insures that no performance differences exist between these two types of batteries other than actual battery life.



You're now ready to detect. "A" indicates the instrument is in the "A" Audible Threshold Mode. White's logo indicates the instrument will respond to metal. Number 3 indicates sensitivity level 3. Prompts beside **AUTOTRAC** and **DISC ON** indicate these controls are in the ON position. The five segments of the bar graph indicate the volume is at level five.



Pressing **AUDIO MODE** control once switches to the "B" Silent Search Mode.
 Pressing **SENS** control once increases sensitivity to level 4.
 Pressing **AUTOTRAC** control once turns **AUTOTRAC** off, no prompt.
 Pressing **DISC ON** control once turns **DISC** off, no prompt.
 Pressing **VOL ▲** control once increases volume to level six shown as six segments of the bar graph.



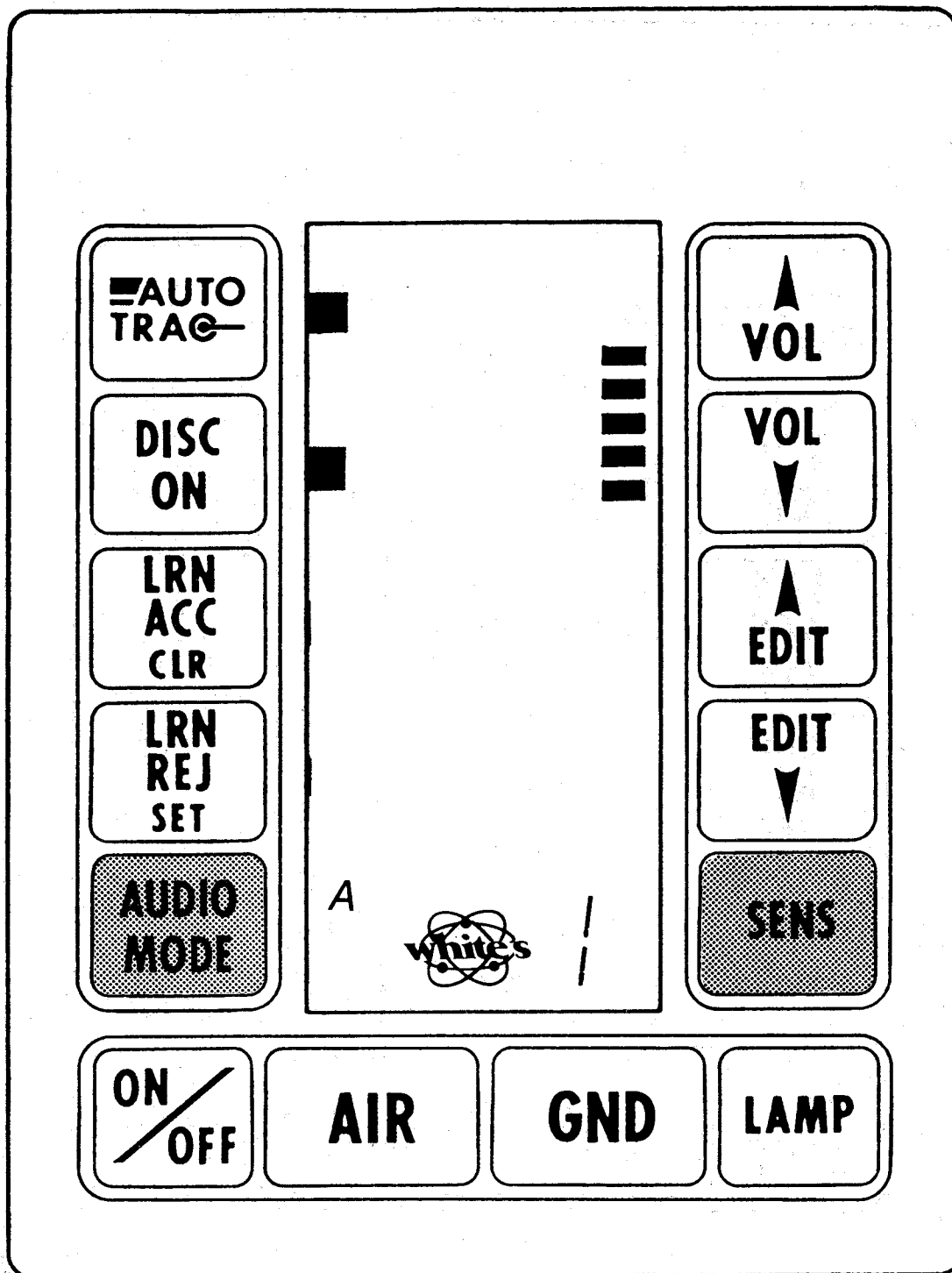
Pressing **AUDIO MODE** control again switches to the "C" Audible Threshold Tone I.D. Mode.

Pressing **SENS** control again increases sensitivity to level 5.

Pressing **AUTOTRAC** control again turns **AUTOTRAC** on, indicated by a prompt beside the control.

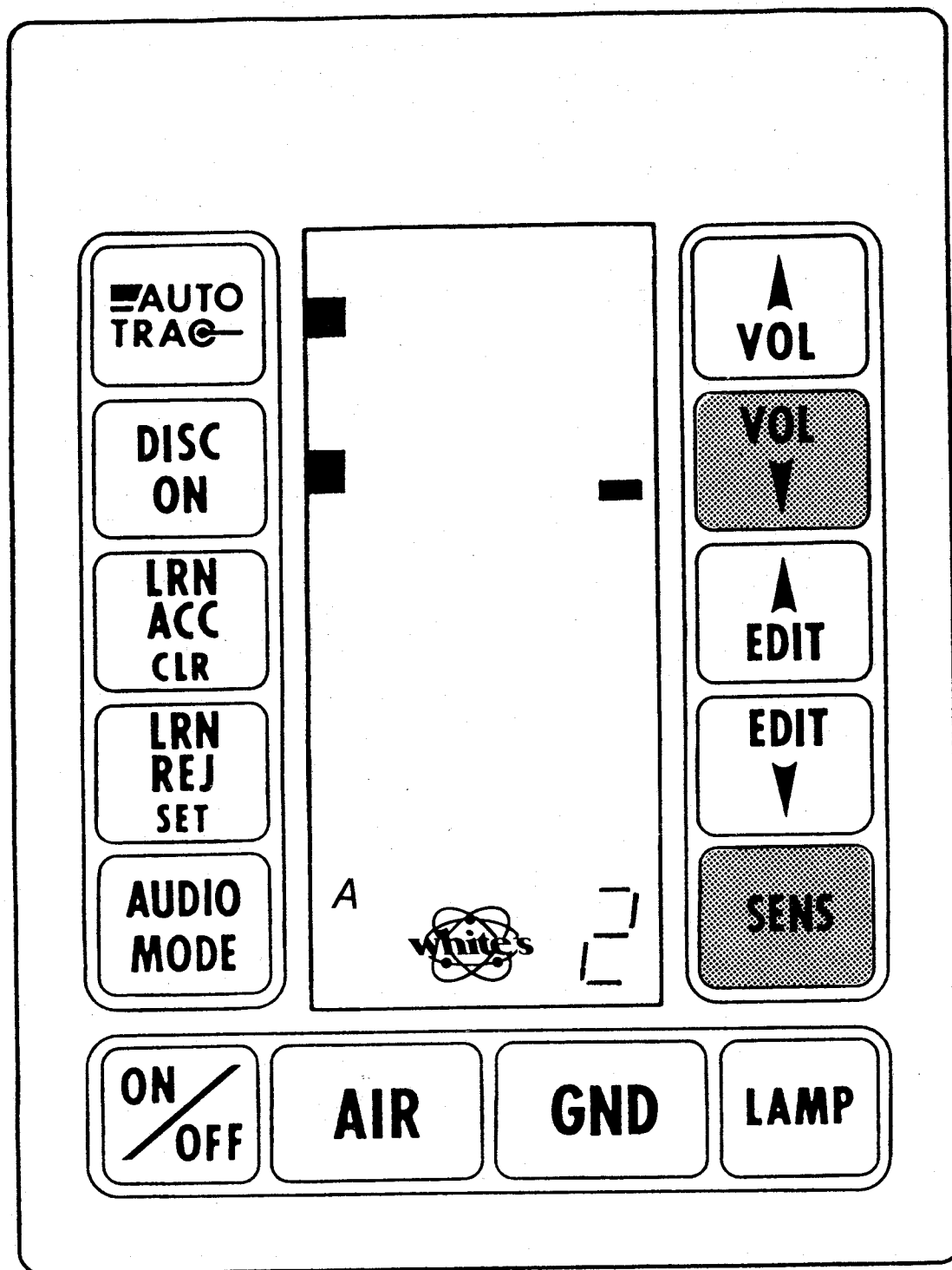
Pressing **DISC ON** control again turns **DISC** on, indicated by a prompt beside the control.

Pressing **VOL ▼** decreases volume to level five, indicated by the five segments of the bar graph.



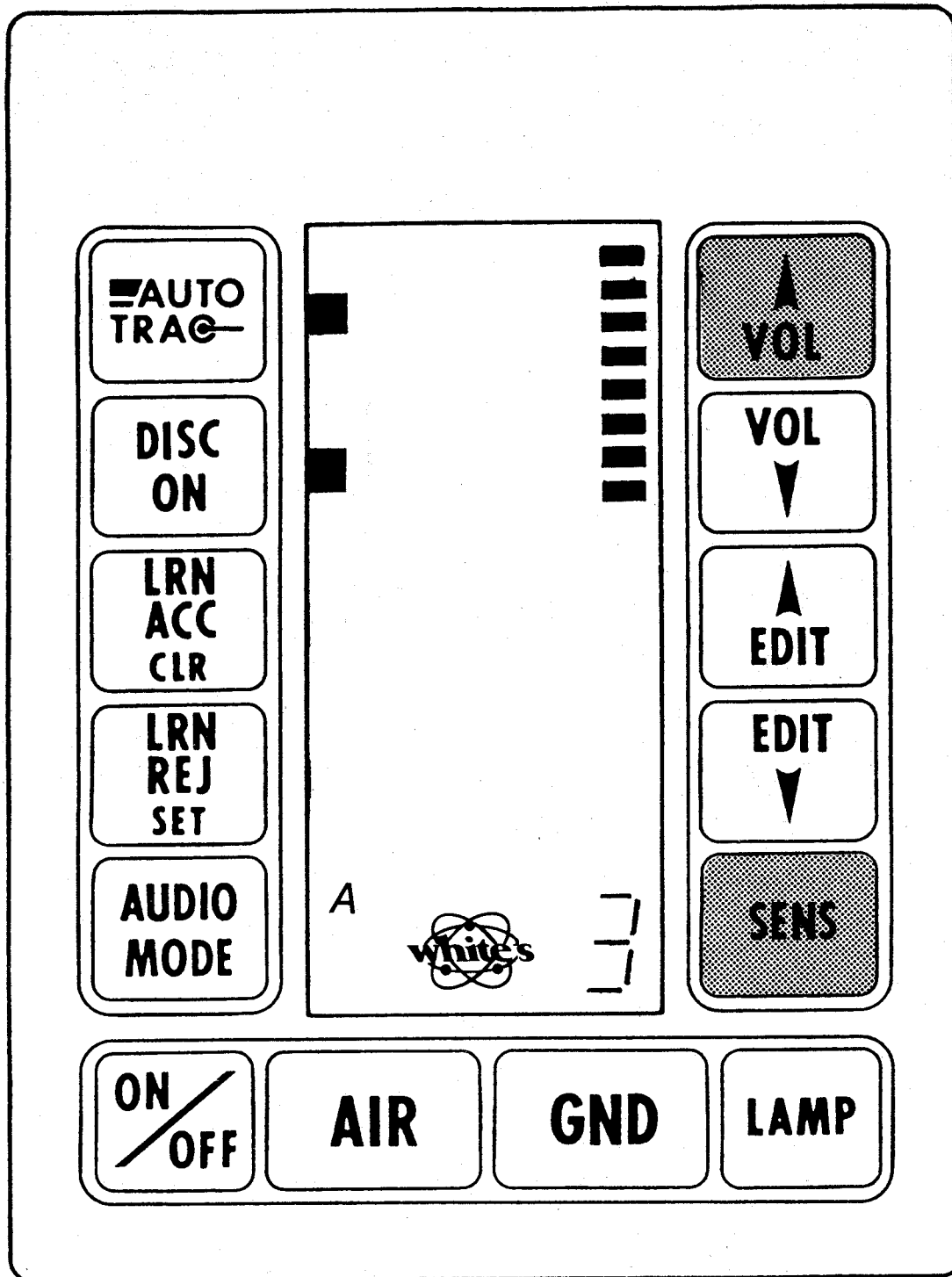
Pressing **AUDIO MODE** control a third time returns to the "A" Audible Threshold Mode.

Pressing **SENS** control a third time switches to sensitivity level 1.

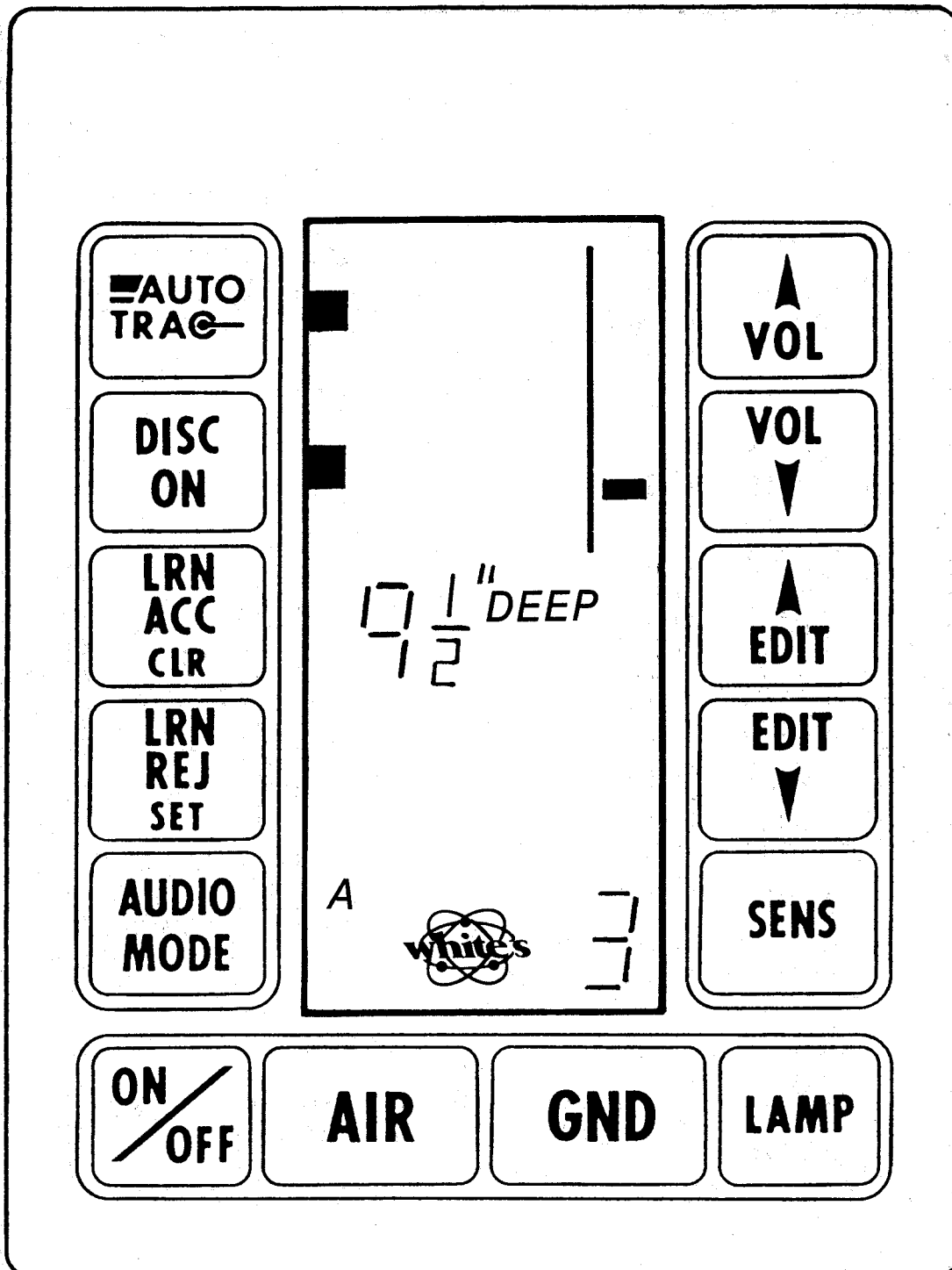


Pressing **SENS** control again switches to sensitivity level 2.

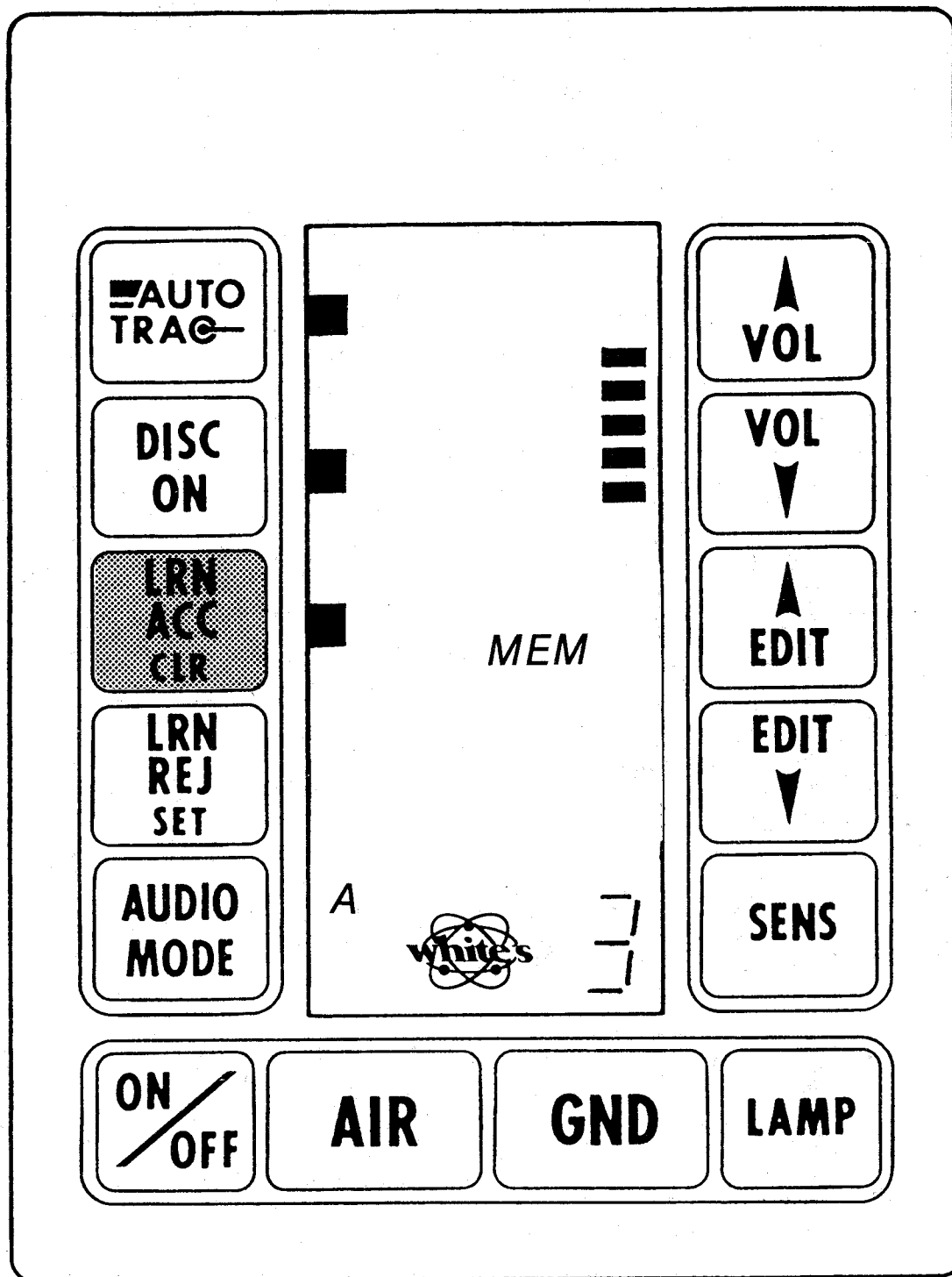
Pressing **VOL ▼** four or more times decreases volume to level one, indicated by the one segment of the bar graph.



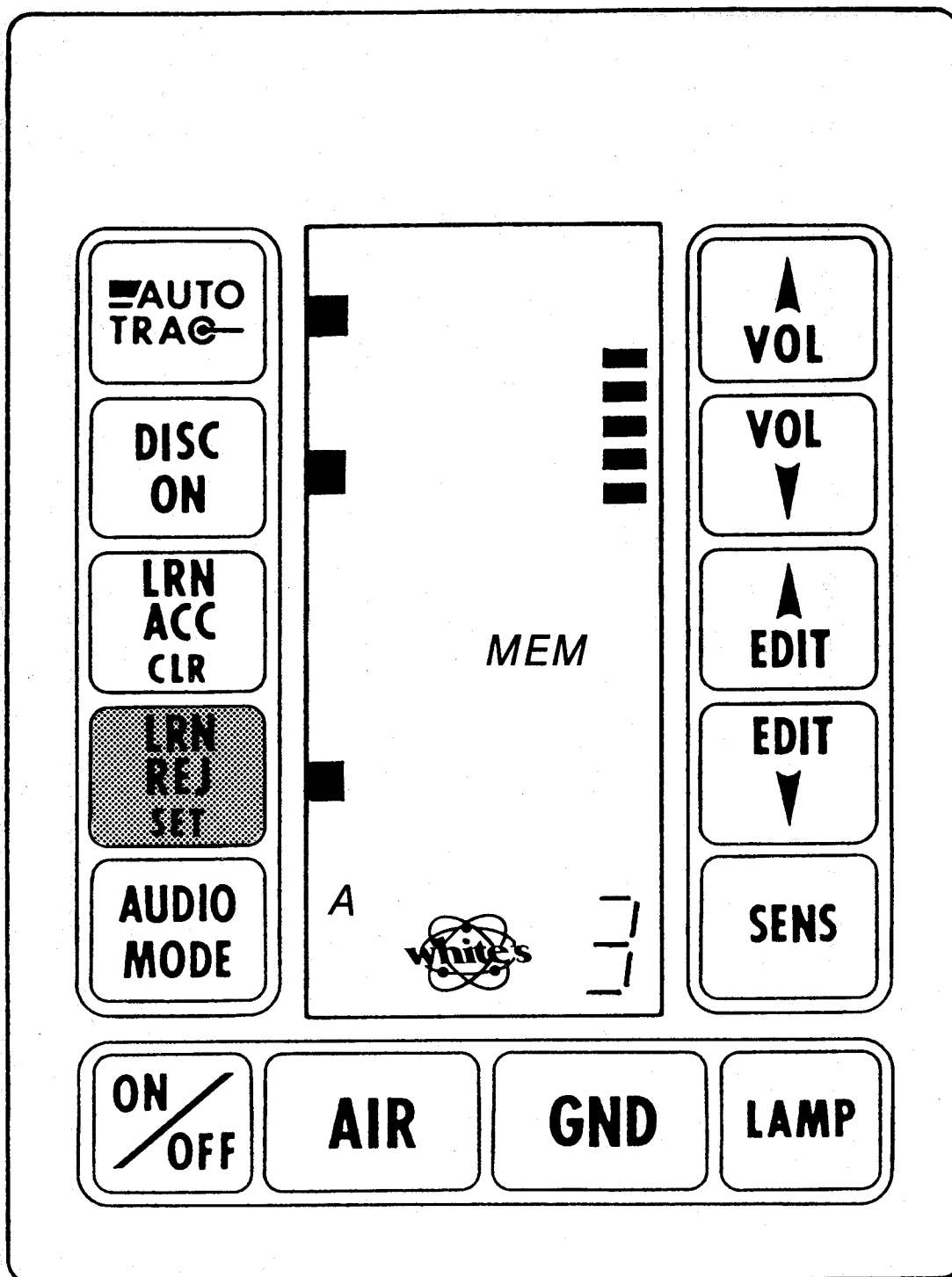
Pressing **SENS** control again switches back to sensitivity level 3.
Pressing **VOL ▲** eight or more times increases the volume to level eight, indicated by the eight segments of the bar graph.



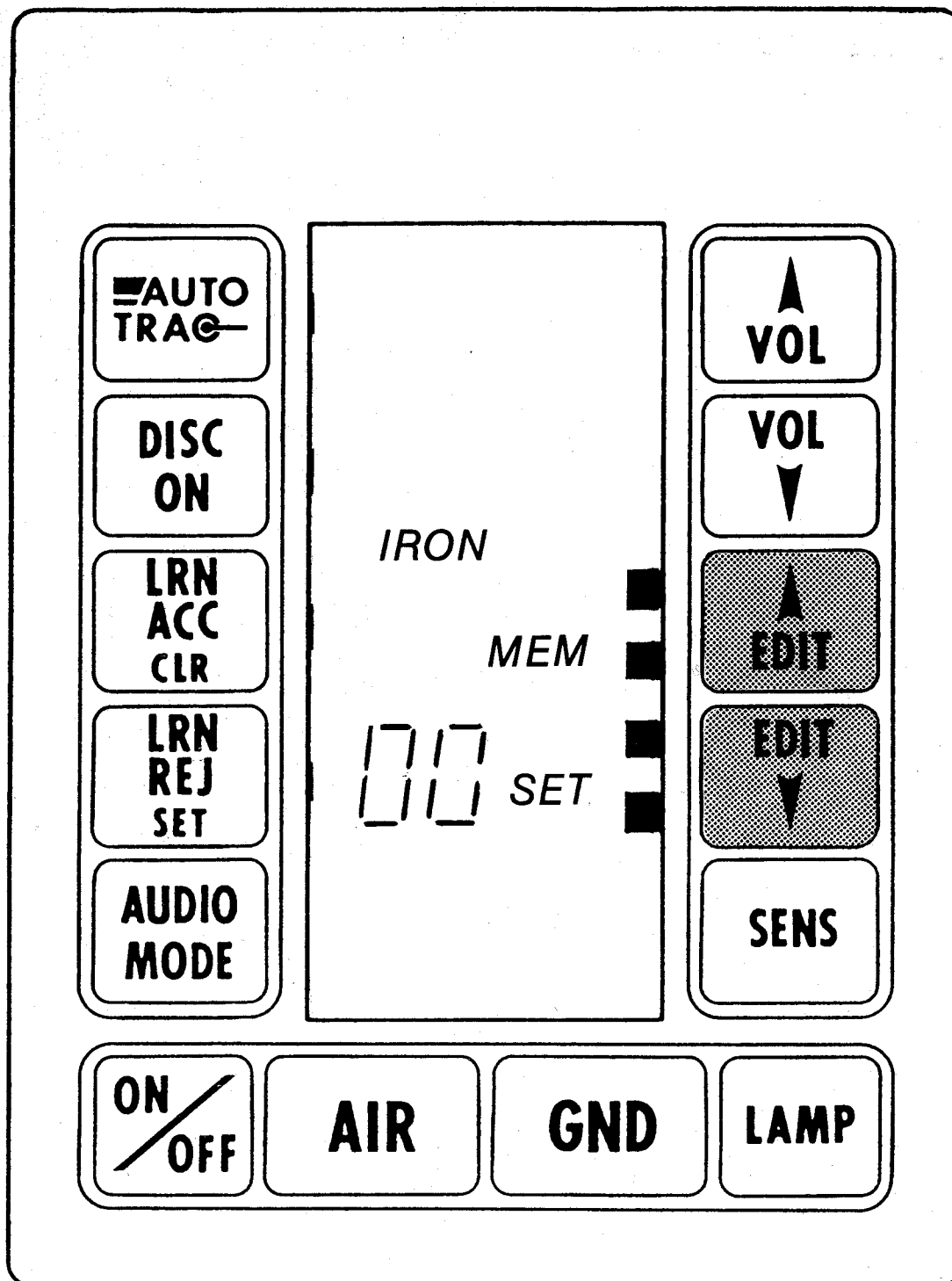
Squeezing and holding the trigger switches to the pinpoint and depth reading mode. **DEEP** number indicates target depth in inches. An additional line will appear beside the volume bar graph meaning this graph is now showing signal intensity rather than volume level.



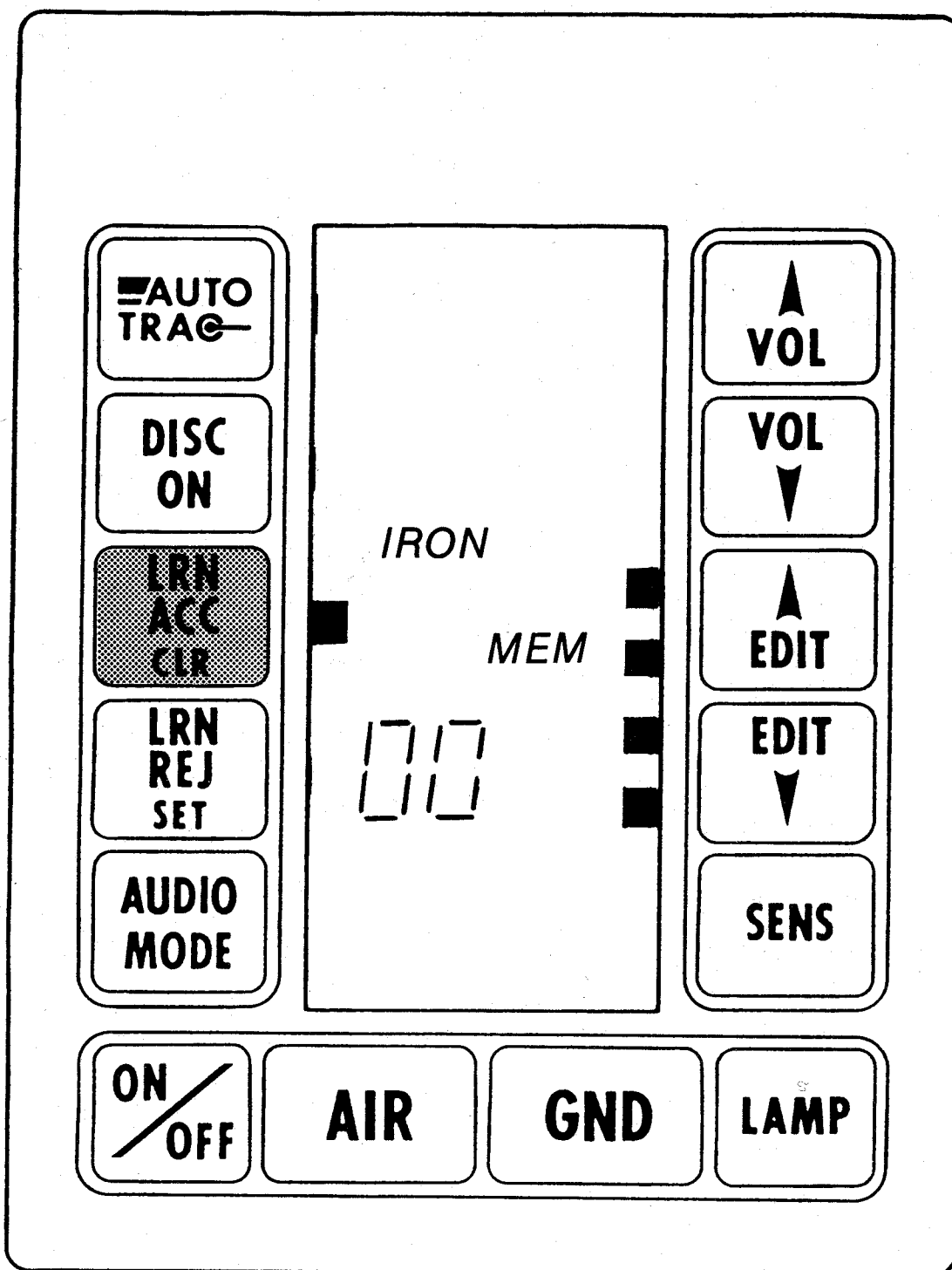
Press **LRN ACC**, prompt appears beside **LRN ACC** control and **MEM** is visible. The instrument is ready to learn to accept target samples. Pressing **LRN ACC** again will return to normal operation. Prompt and **MEM** will disappear.



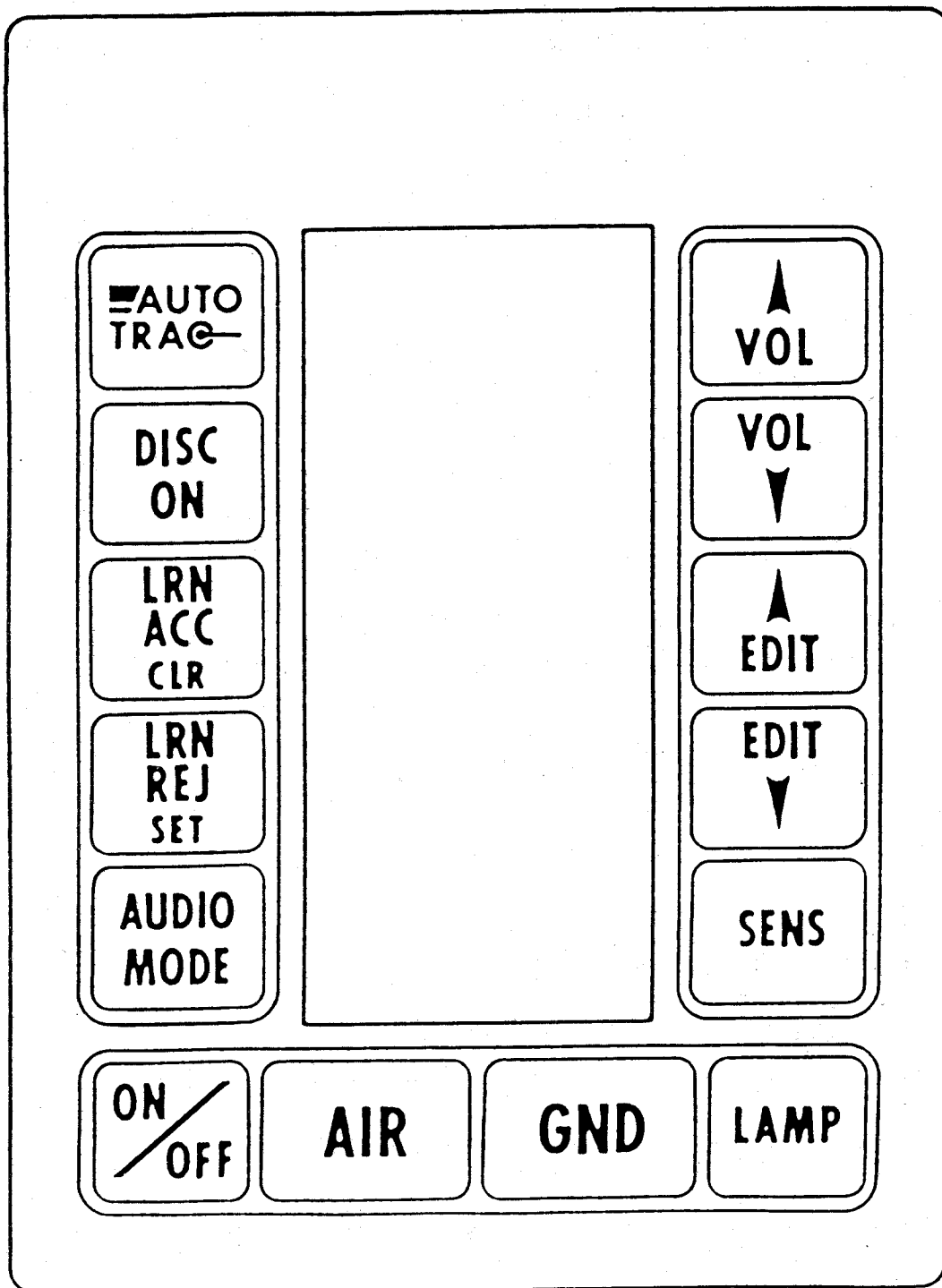
Press **LRN REJ** and prompt appears beside **LRN REJ** control. **MEM** is visible and the instrument is ready to learn to reject target samples. Press **LRN REJ** again to return to normal operation. Prompt and **MEM** will disappear.



Press either **EDIT** control to enter **EDIT** mode. Four prompts appear beside **EDIT** controls. Use the **EDIT** controls to view 0-95 V.D.I. target numbers and corresponding indication—Iron, Foil, Nickels, etc. **SET** appears for each of the 0-95 target numbers set for reject. **SET** doesn't appear for the 0-95 target numbers clear (CLR) for accept. White's logo doesn't appear because the instrument will not respond to metal in this mode. For each of the 0-95 target numbers, press either **CLR** to clear for accept or **SET** to set for reject. Squeeze and release the trigger switch to return to normal operation.



Once you enter the **EDIT** mode by pressing either **EDIT** control, press either **CLR** or **SET** twice. Prompt appears beside control to block edit large sections of the 0-95 target numbers. Then using the **EDIT** controls, each number that appears will automatically be changed to the **CLR (Accept)** or **SET (Reject)** status, whichever was pressed. Press the same control again (**CLR**) or (**SET**) to return to the normal **EDIT** mode. Squeeze and release the trigger switch to return to normal operation. White's logo doesn't appear because the instrument will not respond to metal in this mode.



Press **ON/OFF** control to turn instrument OFF. The instrument will automatically turn itself OFF if no controls are used for twenty minutes.

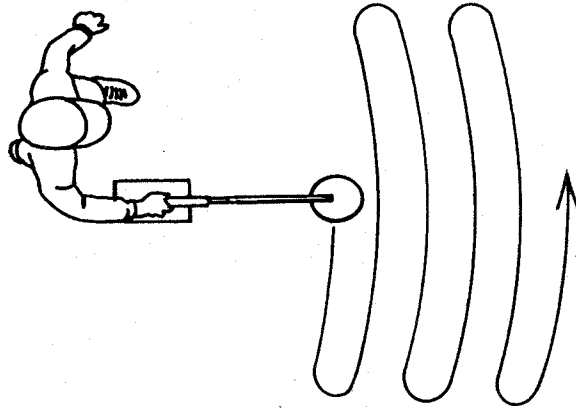
TUNING BY THE NUMBERS

1. TRIGGER SWITCH, center (search) position.
2. Press ON/OFF and wait for AIR PROMPT .
3. Hold loop waist level, away from known metals or the ground and press AIR. If you hear a multi-note beep, reposition the loop and again press AIR. You should hear a solid beep and GND PROMPT  should appear.
4. Place the loop flat on the ground and press GND control. If you hear a multi-note beep, reposition the loop and again press GND. If multi-note beep persists, ignore it.
5. To check battery voltage, press and hold LAMP control.
6. To turn LAMP on or off, press LAMP control.
7. To change AUDIO MODES, press AUDIO MODE:
"A" Threshold, "B" Silent Search, "C" Tone I. D.
8. Adjust sensitivity by pressing SENS control. Use highest number that does not produce false signals. (Returns to level one after level five.)
9. Leave AUTOTRAC™ on or turn off by pressing AUTOTRAC™ once.
10. Adjust the volume level by pressing VOL  or VOL .
11. Switch off or turn back on entire discriminate circuit by pressing DISC ON control.
12. Teach discrimination, program discriminate Learn by pressing either LRN ACC (LEARN ACCEPT) or LRN REJ (LEARN REJECT) once, PROMPT and MEM appears on display, then pass sample targets four to six times about four inches from the loop. Press LRN ACC (LEARN ACCEPT) or LRN REJ (LEARN REJECT) again to return to operate. PROMPT AND MEM disappear.

TUNING BY THE NUMBERS

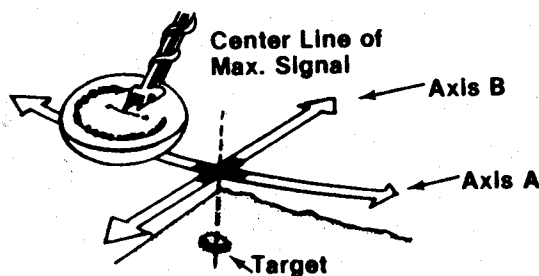
13. Manually program Discriminate EDIT by pressing either EDIT control to enter the EDIT mode, MEM appears on the display. Use EDIT▲ and EDIT▼ to view the entire 0 - 95 V. D. I. range and corresponding indication - iron, foil, nickel, etc. For each of the 0 - 95 V. D. I. numbers, press either CLR (LEARN ACCEPT) to clear for accept or SET (LEARN REJECT) to set for rejection. SET appears on display for targets SET for rejection. SET does not appear for V. D. I. numbers clear for acceptance. Squeeze and release the TRIGGER SWITCH to exit to an operate mode.
14. To BLOCK EDIT large sections of the 0 - 95 V. D. I. target range, first press either EDIT control to enter the EDIT mode. MEM appears on display. Then press twice either CLR (LEARN ACCEPT) or SET (LEARN REJECT). Prompt should appear on the display. Now each V. D. I. number that appears on the display throughout the use of the EDIT controls will automatically be either CLR (Learn Accept) or SET (Learn Reject), whichever was pressed. Press the same control (CLR or SET), to exit to regular EDIT mode or squeeze and release the TRIGGER SWITCH to exit to an operate mode.
15. You are now ready to search. Sweep the loop smoothly and evenly over the ground, slightly overlapping each sweep. The loop must be in motion to detect metals.
16. Once display indication is noted, squeeze and hold the TRIGGER SWITCH and "X" the target. The loudest volume and shallowest DEEP reading indicate target center.
17. After recovering the target and before continuing to search, squeeze and release the TRIGGER SWITCH with the loop at waist level to reset or clear for further searching.
18. To turn the instrument off, press ON/OFF control.
19. To retain settings prior to turning off, squeeze and release the TRIGGER SWITCH immediately after pressing ON/OFF control.

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 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, noting its Audio and Visual characteristics.
5. Before recovering an item, note its depth on the Display. This will help avoid hitting and marring the object during removal.

PINPOINTING



SEARCH METHODS, cont.

1. Once you have determined a target is worth digging, squeeze and hold in the TRIGGER SWITCH. This activates the pinpoint mode and displays depth and intensity reading.
2. Watch the display as the loop is moved over the target "X".
3. When the display DEEP number reaches it's lowest number (the shallowest depth) and the instensity bar graph (beside VOL controls) reaches it's tallest point, the target is directly below the center of the loop. Read the depth and dig.

Accurate pinpointing makes recovering targets easier; it minimizes the possibility of damaging the object and it minimizes damage to the area. Pinpointing is an important part of successful treasure hunting. Experience will help you develop this skill.

STANDARD BATTERIES

The standard battery pack holds four ALKALINE batteries. ALKALINE BATTERIES ARE THE ONLY DISPOSABLE BATTERIES RECOMMENDED FOR THIS INSTRUMENT. To insert these batteries, proceed as follows:

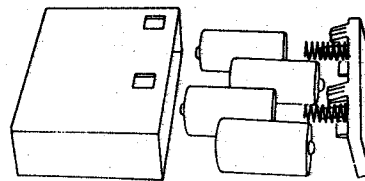
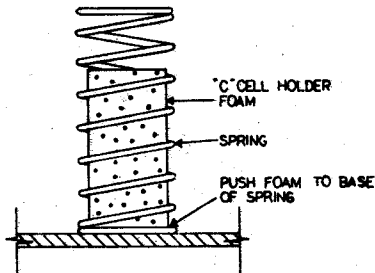
1. Remove the battery pack from instrument.
2. Remove the battery pack lid gently pulling the top sides of the pack apart until the lid springs up, or apply gentle pressure down on the four locking tab openings, two on each side.
3. Note the position of each cell. (The flat side of each cell fits against one of the 4 springs.)
4. Remove the dead batteries and replace them with new ones. (If the cells are put in backwards, the detector will not work.)
5. Line up the locking tabs on the lid with the holes on the battery pack. Snap them together.
6. Insert the battery pack into the detector. The two terminal points must touch the pointed contacts inside the instrument.

"C" Cell Holder Instructions

"C" SIZE ALKALINE BATTERIES ARE THE ONLY BATTERIES RECOMMENDED FOR THIS HOLDER.

Installation Instructions:

1. Push foam into the four springs.
2. Install 4 batteries (not included) with the flat side of each cell against one of the four springs. (If the cells are in backward, the detector will not work.)



RECHARGEABLE BATTERIES

Rechargeable NICKEL CADMIUM batteries are included with this instrument. These can be recharged up to 1000 times if the batteries have not been stored for extended periods of time (several years). Charge will last approximately 8 hours after a full charge. Charge the rechargeable batteries before their first use.

RECHARGE THE BATTERIES:

1. If the batteries have not been recharged for more than two months. (Batteries slowly lose their charge when stored.)
2. NOTE: Charge the batteries only when necessary. Unnecessary recharging shortens the life of the battery pack.

OPERATING THE CHARGER

1. Insert the charge plug into the battery pack. NOTE: The battery pack may be charged either in, or out of the detector.
2. Plug the charger into an electrical outlet. The light on the charger will glow if connected properly.
3. The pack will be fully charged within 10 hours.

CAUTIONS ABOUT THE BATTERIES

1. The battery pack should not be left on the charger more than 24 hours.
2. Do not dispose of the batteries in a fire.
3. Protect the battery pack from being shorted. Burns may result and the battery pack may be damaged.
4. The rechargeable battery system (charger and pack), have a specific charge current. Do not attempt to mix other charges or packs with this system. Batteries may explode if a charger current is too high.
5. Nonrechargeable batteries may explode if they are recharged.
6. Store batteries in a cool, dry place.
7. Avoid an absolute discharge, eliminating all voltage within these batteries will damage them.
8. The rechargeable battery pack is a sealed unit with no customer serviceable parts. Opening it may damage the unit and will void the warranty.
9. Store rechargeable batteries with a full charge. When storing rechargeable batteries for extended periods of time always recharge them about once every three months. Batteries stored without a charge may become defective. In many cases, the discharge recharge cycle to erase the memory will also work to revive batteries that have been in storage.

CAUTIONS ON THE "MEMORY" OF RECHARGEABLE BATTERIES

Nickel Cadmium (rechargeable) batteries are long lasting, powerful batteries that are excellent for operating your metal detector. These batteries can be recharged many times, thereby, saving you hundreds of dollars over the course of their life. But this very rechargeable advantage can have limitations. If these batteries are not discharged properly (no longer test good) they may develop a "memory". This shortens battery life.

The most common cause of the memory characteristic is repeated booster charges. In other words, if you recharge your batteries over and over again, after only three hours of use, the batteries will eventually only hold a three hour charge.

To avoid the occurrence of this characteristic, it is best to wait until LOW BAT appears on the display before recharging. You may then recharge these batteries for eight to ten hours. This should result in a maximum charge. If your batteries develop a "memory", the following method can be used to erase it:

1. Discharge the rechargeable battery through normal use.
2. Charge the batteries for eight to ten hours.
3. Repeat steps 1 and 2 three to five times or until the "memory" situation is corrected.

If the batteries still have the "memory" characteristic after five discharge-recharge cycles, new batteries are needed. Rechargeable "memory" is not covered by the warranty as it is considered the result of misuse and/or neglect.

New batteries or batteries that have been in storage may require three to five discharge-recharge cycles to reach their full output potential.

In many cases, the charger is the cause of the rechargeable battery problems. When sending in the rechargeable battery for testing, always include the charger and a letter describing the problem you are experiencing.

Rechargeable battery life and longevity will vary with climatic conditions, model, tuning, and operating procedures, as well as individual differences between batteries and instruments of the same type.

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 battery. Excessive heat can also damage the instrument. Never leave it in the sun. If it is left in a car on a hot day, cover it to protect it from the direct rays of the sun, and then leave the window slightly open to permit ventilation. Protect your detector if you operate it near water 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

- Avoid dropping your detector.
 - Do not use any lubricants on any part of your metal detector.
 - Avoid sharp jars to the loop.
 - Do not allow battery to corrode inside the instrument.
 - 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 equally important. Four factory authorized White's National Warranty Service Centers located regionally around the continental U.S. 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 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 performed 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!

FOR 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 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 manufacture 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

AUTHORIZED WHITE'S SERVICE CENTERS



1. White's Electronics, Inc.
1011 Pleasant Valley Rd.
Sweet Home, OR 97386
(503) 367-6121

3. Electronic Exploration
575 W. Harrison Rd.
Lombard, IL 60148
(312) 620-0618

5. United Metal Detectors
13821 Lee Hwy.
Centreville, VA 22020
(703) 631-0202

2. Koci Detector Sales/Service
1917 N. Kansas St.
Hastings, NE 68901
(402) 463-4705

4. Geo-Quest
104 U.S. Hwy. 46
Saddlebrook, NJ 07662
(201) 772-7443

KEY SPECIFICATIONS

APPROXIMATE BATTERY LIFE:

Rechargeable	8 Hours
Alkaline	10 Hours

BATTERY CHANGING:

Approx. Memory Hold Time	30 Seconds
Approx. Master Reset Time	3 Minutes

ENVIRONMENT:

Optimum Humidity Range	0 - 75%
Optimum Temp. Range	33° - 100°F 0° - 38°C

FREQUENCIES:

Operating	6.59 KHz
Audio Normal	412 Hz
C Mode Good Target	824 Hz
Control Buttons	1648 Hz
MultiTone	412 - 1648 Hz

SEARCHING

WHERE TO SEARCH

Start with your own yard. Valuables can be found anywhere people have congregated, gathered, lived, sat, walked, played, camped, picniced, traveled, or fought. The following list of locations have produced a great deal of coins, rings, relics, and treasure in the past:

- | | |
|---------------------------------------|-----------------------------|
| •Amusement Parks | •Carnivals |
| •Circus Grounds | •Fairgrounds |
| •Racetracks | •Rodeo Grounds |
| •Parks | •Playgrounds |
| •Schools | •Ghost Towns |
| •Trading Posts | •Stage Stops |
| •Hitching Posts | •Boardwalk areas |
| •Clotheslines | •Trails |
| •Sidewalks | •Parking Strips |
| •Around Old Trees | •Roadside Point of Interest |
| •Old Homesteads | •Storm Cellars |
| •Basements | •Beaches |
| •Swimming Holes | •Old River Crossings |
| •Bridges | •Past Disaster Areas |
| •Historical Locations | •Cabins |
| •Old Buildings | •Clubhouses |
| •Forts and Old Military Installations | |

HOW TO SEARCH

You must have permission to search private property from the owner or person in charge of managing the property. In most cases, you can locate the owner through City Hall or the county seat. If the area is city property, contact the Parks and Recreation Department for a permit and any restrictions. If it is a state or federal park, contact the superintendent or groundskeeper. In most cases permission to search is not a problem, given a few restrictions.

SEARCHING. cont.

DIGGING

Practice pinpointing and digging in your own yard before searching well manicured lawns. Try pinpointing a coin on top of the ground, then bury it and practice pinpointing.

Always fill in the holes you dig. Cut a plug or horseshoe shape about two square inches maximum, which can be easily replaced once the target is recovered. Many digging tools are available. Contact your dealer.

Always remove all items you recover, and never leave a mess. Holes are both unsightly and dangerous.

We strongly urge you to follow these steps, which will preserve the environment and also the rights of detector operators with as few restrictions as possible.

RESPECT

Respect the right of property owner, as well as laws, ordinances, or regulations about searching publicly owned sites. Public officials and private property owners will be more likely to allow continued searching if you do no environmental damage. Consider the scar you may leave before you start digging. This will vary alot from one part of the country to another depending on soil and climatic conditions. Always keep in mind that other detector operators may be judged by your example.

ADVANCED OPERATOR OPTIONS

Once you have mastered the EAGLE'S PRIMARY, SECONDARY and DISCRIMINATE controls, there are two options you may select that will change the audio discriminate and display characteristics. These options are independent of each other and can be used individually or simultaneously.

1. HEAVY DUTY BOTTLE CAP REJECT

- A. Produces more broken or ratty ones on bottle caps and other iron alloys.
- B. Access by pressing and continuing to hold LAMP control, then pressing and releasing AIR control. Prompt will appear, upper right hand corner of display (highest volume bar graph segment). Prompt will appear only when LAMP is held.
- C. Release LAMP control and you are ready to search with HEAVY DUTY BOTTLE CAP REJECTION on.
- D. Will revert to off position (no prompt) with main ON/OFF control unless MEMORY RECOVERY is used. (Squeeze and release TRIGGER SWITCH immediately after pressing ON/OFF control.
- E. Can be turned off manually by repeating step 1B, access sequence, press and continue to hold LAMP control, then press and release AIR control (prompt disappears). Release LAMP control and search.
- F. The advantages and disadvantages of this option will vary with changes in ground conditions (i.e. mineralization).

2. TWO QUADRANT V. D. I.

- A. Produces two V. D. I. target ranges 95 - 00 negative and 00 - 95 positive to allow more precise identification of iron alloys.
- B. Access by pressing and continuing to hold LAMP control, then pressing and releasing GND control. Prompt will appear, upper right hand corner of display (the second highest volume bar graph segment). Prompt will appear only when LAMP control is held.

ADVANCED OPERATOR OPTIONS, cont.

- C. Release LAMP control and you are ready to search. TWO QUADRANT V. D. I. on low will appear on the display for targets producing a V. D. I. number in the negative quadrant (below 00).
- D. An Iron indication will continue to appear on the display for all targets within the negative quadrant (00 or below).
- E. TWO QUADRANT V. D. I. robs the 'Low' indication of "LOW BAT". When the battery becomes weak only "BAT" will appear on the display while operating with this option.
- F. Will revert to OFF position (no prompt) with main ON/OFF control unless MEMORY RECOVERY is used. (Squeeze and release TRIGGER SWITCH immediately after pressing ON/OFF control.)
- G. Can be turned off manually by repeating step 2B, access sequence, press and continue to hold LAMP control, then press and release GND control (prompt disappears), release LAMP control and search. Suggested for prospecting and relic hunting.

GLOSSARY OF TERMS

ACCEPT: To detect; Discrimination is clear so as to respond to target.

A. G. E. B.: (Automatic Ground Exclusion Balance); AIR/GND balance sequence; balances against ground mineralization

ALKALINE BATTERY: Type of non-rechargeable battery that has the ability to sustain longer periods of current drain and greater storage life than standard carbon-zinc type

AIR BALANCE: Tuning procedure that prepares for GND (ground balance)

AIR CONTROL: Control that performs "AIR BALANCE". (Hold loop in air, away from known metals or ground and press air control.)

AIR PROMPT : Display indication that appears when AIR BALANCE is required.

AIR TEST: Testing or experimenting the response of a metal detector to various objects with the loop positioned away from the ground.

ALL METAL: Mode or function that responds to all types of metal, iron, foil, nickel, copper, silver, gold, etc.

AUDIBLE THRESHOLD: A slight and continuous tone or hum that makes it easy to hear changes in audio.

AUDIO MODE: A condition of operation selected by the detector operator for specific conditions, operating characteristics and/or features.

AUDIO: Volume or tone produced by a speaker or other sound emitting device.

AUDIO RESPONSE: see AUDIO

AUTOTRAC™: A feature that monitors GND (ground) balance and makes corrections to it as ground mineralization changes.

BAR GRAPH: Graphic means of indicated level (BAR CHART).

BAT: Battery, "power source".

BENCH TEST: "AIR TEST" Testing or experimenting the response of a metal detector to various objects with the loop positioned away from the ground.

BLOCK EDIT: EDITING large sections of the V. D. I. target numbers simultaneously to ACCEPT or REJECT status.

GLOSSARY OF TERMS, cont.

CLR: "Clear" (Learn Accept); to detect, see ACCEPT. To fix or prepare a V. D. I. number for accept.
Also see LRN ACC CLR, PROGRAM.

CLEVIS: Loop isolator, short plastic section between rod assembly and loop.

CONTROL BOX: Blue aluminum body of instrument, "case".

CONTROL CLUSTER: Panel where all controls are located.

DISCRIMINATE MEMORY: 0 - 95 V. D. I. numbers, CLEAR Accept or SET Reject status.

DISCRIMINATOR: A circuit that can be adjusted to accept or reject signals or targets of different characteristics.

DISPLAY: Liquid crystal exhibit of information located on control cluster, used as graphic visual indicator.

EDIT: To alter or rearrange to suit a particular purpose, see PROGRAM.

FALSE SIGNALS: Erratic or unstable tones, beeps and/or display indications that are not caused by the detection of metal. Interference.

FERRITE SAMPLE: Mineral sample consisting essentially of an iron oxide.

FREQUENCY: The number of complete alternating current cycles produced by the transmit oscillator per second.

GND (Ground): Dirt or the surface of the earth.

GROUND BALANCE: The cancellation of ground mineralization to ignore the masking effect ground minerals have over metal.

GND CONTROL: Control that performs ground balance, the cancellation of ground mineralization.

GND PROMPT : Display indication that appears when GND BALANCE is required.

HEAVY DUTY BOTTLE CAP REJECT: Special feature that produces more broken or ratty tones on bottle caps or other iron alloys.

IMMEDIATELY: At once, without delay.

INDICATE: Advise, proclaim, or point out.

INTENSITY GRAPH: Bar graph or chart that indicates signal strength in segments.

GLOSSARY OF TERMS, cont.

JUNK TARGETS: Metals determined to be trash or rejects; iron, foil, pulltabs, etc.

LCD: (Liquid Crystal Display) Used as graphic visual indicator, see "Display".

LOOP: (Search Coil) Circular plastic housing containing multiple windings.

LRN ACC CLR: (Learn Accept Clear) Control used to teach or learn accept and/or to clear for acceptance in the EDIT (CLEAR ACCEPT).

LRN REJ SET: (Learn Reject Set) Control used to teach or learn reject and/or to SET targets for reject in the EDIT mode, (SET REJECT).

MEM: (Memory) Recall, reproducing what has been learned, set and retained.

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

MINERAL: Ferric oxide (iron) or other such non-organic substance, naturally occurring in the ground.

MINERALIZED GROUND: Any soil that contains conductive or non conductive components, MINERALS.

MODE: See AUDIO MODE

MOTION MODE: An AUDIO MODE that requires loop motion to respond to metal targets.

MULTINOTE BEEP: A beep or audio response of varied frequency, pitch or tone.

NON-FERROUS: Not of iron; metals of the precious class (copper, silver, gold, etc.).

NON-MOTION: Mode that does not require loop motion to respond to metal.

NOTCH: Slot or category representing a specific point on the discriminate range. Each individual V. D. I. number 0 - 95 represents a notch. Each notch can be clear for accept or set for reject.

OPTIONALLY ADJUSTABLE: Controls that utilized preselected settings for average conditions, therefore, do not have to be set each time you operate.

OVERLAP: Refers to the amount of loop sweep advance, not being greater than the loop physical diameter.

GLOSSARY OF TERMS, cont.

PRE SELECTED: Controls that start out at settings or levels determined by the factory to be ideal for average conditions.

PRESET: (Pre Selected)

PINPOINT: Finding the target's exact location with respect to the loops' physical center.

PRIMARY CONTROLS: Controls that require setting each time you operate (TRIGGER SWITCH, ON/OFF, AIR, GND, LAMP).

PROBABLE I. D.: Most likely identification.

PROGRAM EDIT: Setting the discriminate memory (0 - 95 V. D. I. numbers) to clear accept or set reject status manually through use of the EDIT mode.

PROGRAM LEARN: Adjusting the discriminate memory by example, teach by example, learn accept or learn reject.

PROGRAM: To work out a sequence of operation to be performed by electronic equipment. Prepare, instruct, or set for a particular result.

PROGRAMMABLE: Ability to be programmed.

PROMPT: Reminder, display indication that tells either the tuning step required, control level or setting, mode or function.

RATCHET PINPOINTING: Automatic feature (activated by squeezing and holding the TRIGGER SWITCH) which will aid in centering the targets' precise location, PINPOINTING.

RECHARGEABLE BATTERY: Battery that is designed to be recharged or restore anew the active materials within.

REJECT: Discriminate or cancel response to a metal.

RESET: Clear for further search. Counter or clear the effect of Ratchet Pinpointing so as to be prepared for the next target.

RETUNE: (Reset) Clear for further search.

REVERT: Turn back to, return to.

SECONDARY CONTROLS: Controls that start out at settings or levels determined to be ideal for average conditions, AUDIO MODE, SENS, AUTOTRAC™, VOL.

GLOSSARY OF TERMS, cont.

SET: "SET" (Learn Reject) To reject, see REJECT, to fix or prepare a V. D. I. number for reject.
Also see, DISCRIMINATE, LRN REJ SET, PROGRAM.

SILENT SEARCH: Mode or option that is completely quiet until a metal is detected. No AUDIBLE THRESHOLD.

SLOW MOTION: A description of loop speed required to operate a motion mode.

STABILITY: Ability of a metal detector to maintain smooth operation without false signals, interference.

STATUS: Condition, position.

SWEEP: Loop movement from side to side.

TARGET: Any object buried in the ground or used in an AIR TEST that causes a metal detector to respond.

SELF TEST: Automatic test conducted by the instrument.

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

TARGET MASKING: When high concentrations of mineral or trash metals cause other valuable targets to be rejected.

THRESHOLD: See AUDIBLE THRESHOLD

TONE I. D.: (TONE IDENTIFICATION) Feature or mode that produces a high frequency tone for targets accepted by the discriminate memory and a lower or medium frequency tone for targets rejected by the discriminate memory.

TWO QUADRANT V. D. I.: Feature that produces two V. D. I. ranges 95 - 00 "Low" negative and 00 - 95 positive.

V. D. I.: (VISUAL DISCRIMINATION INDICATION) Display that indicates probable target identity or conductivity. Visual discrimination.

VOL: (VOLUME) Loudness, sound or audio level.

VOLTAGE REGULATOR: Circuitry that controls the amount of voltage/current that enters the circuit board.

WHITE'S LOGO: White's emblem.

