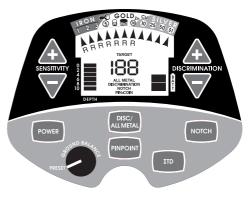




# Owner's Manual





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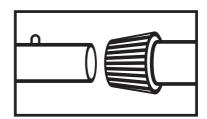
#### **ASSEMBLY**

Assembly is easy and requires no tools.

**Position** the lower stem (the straight tube) with the silver button toward the back. Using the bolt and knurled knob, attach the search coil to the plastic knurled extension protruding from the lower stem.

Press the button on the upper end of the lower stem, and slide the lower stem into the upper stem.

> Adjust the stem to a length that lets you maintain a comfortable upright posture, with your arm relaxed at your side. Tighten the stem locking nut.



Cable

Button

**3 Wind** the cable securely around the stem.

 $m{A}$  **Insert** the plug into the matching connector on the right underside of the

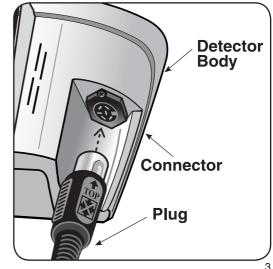
Coil

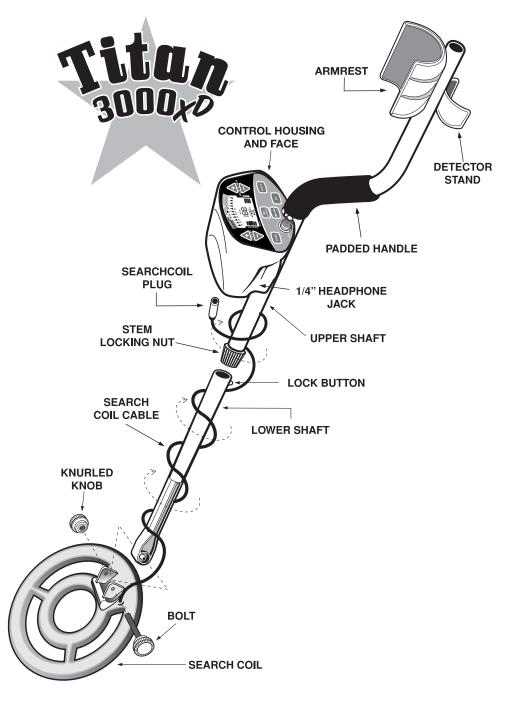
Be sure detector body. that the key-way and pins line up correctly.

#### **Caution:**

Do not force the plug in. Excess force will cause damage.

To disconnect the cable. pull on the plug. Do not pull on the cable.



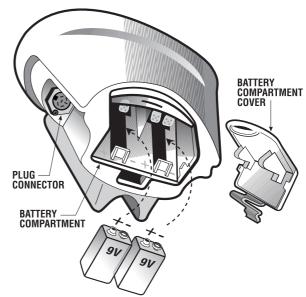


#### **BATTERIES**

Use **ALKALINE** batteries only.

## To install the batteries:

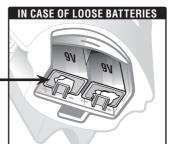
- Remove the battery cover by disengaging the clip at the back.
- Align the polarity of the batteries correctly, with the positive "+" toward the coil plug connection, as indicated by the + and indicators on the housing.



Insert (2) 9-Volt ALKALINE batteries, with the contacts pointed inward, and press down on the back of the batteries to snap them into place.

**Some** brands of batteries, due to different outside dimensions, will require moderate force to clear the retaining tabs.

If the batteries fit loosely, and you want to guarantee a very secure electrical contact, insert a piece of paper or thin cardboard between the back of the battery and the supporting post.



4 Replace the battery door.

The **Low Battery Indicator** will come on and stay on if the batteries need to be replaced.

Most metal detector problems are due to improperly installed batteries, or the use of non-alkaline or discharged batteries. If the detector does not turn on, please check the batteries. If the batteries are loose, press them forward while pressing the **ON** touch pad.

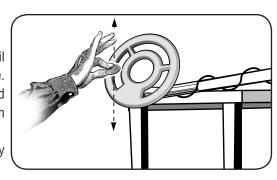
#### **QUICK-START DEMONSTRATION**

#### I. Supplies Needed

- A Nail
- A Pull-Tab from a beverage can
- A Quarter
- A Zinc Penny (dated after 1982)

#### **II.** Position the Detector

- a. Place the detector on a table, with the search coil hanging over the edge. (or better, have a friend hold the detector, with the coil off the ground)
- Keep the search coil away from walls, floors, and metal objects.



- c. Remove watches, rings and other jewelry or metal objects from hands and wrists.
- d. Turn off appliances or lights that cause electromagnetic interference.
- e. Pivot search coil back toward the detector body.

#### III. Power Up

Press the ON touch pad.

#### IV. Wave each Object over the Search Coil

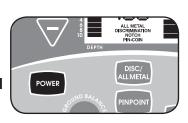
 $a. \ \ Notice \ a \ different \ tone \ for \ each \ object.$ 

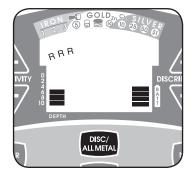
Base Tone: Nail
Low Tone: Pull-Tab
Medium Tone: Zinc Penny
High Tone: Quarter

 Motion is required. Objects must be in motion over the search coil to be detected.

#### V. Press the MODE touch pad

The detector will beep twice and an "R" will appear under the iron indicator.





#### **QUICK-START DEMONSTRATION (continued)**

#### VI. Wave the Nail over the Search Coil

a. The Nail will not be detected.
b. The Nail has been "Discriminated Out."

# VII. Press the "DISCRIMINATION-▲" touchpad twice.

Three "R"s are now displayed.

#### VIII. Wave all objects over the Search Coil

The Nail and Pull-Tab will not be detected. The other objects will be detected with their own distinctive tones.

#### IX. Press the NOTCH touchpad.

A flashing "R" will appear under the 5¢/PT segment.

# X. Press the DISCRIMINATION **A** touchpad three times.

The flashing "R" will move to the **ZINC** segment.

#### XI. Press the NOTCH touchpad again.

The "R" will appear under zinc.

#### XII. Wave the zinc penny over the search coil.

The penny is discriminated out.

#### XIII. Press the DISC A-M touchpad

The detector returns to  $\pmb{\mathsf{ALL}\text{-}\mathsf{METAL}}$   $\pmb{\mathsf{mode}}.$  No "R"s are displayed. All types of metals will be detected.

#### XIV. Wave the pull-tab over the coil.

#### XV. Press the ITD touchpad.

An "R" will appear.

# XVI. Wave the pull-tab over the search coil again.

The pull-tab (most recently detected item) is eliminated from detector.

# IPOINT

NOTCH

#### XVII. Press the PINPOINT touch pad.

Hold one of the metal objects motionless over the search coil.

- All Metal objects are now detected.
- Depth and Target indicator do not lluminate in this mode.
- One monotone sound indicates the presencce of any type of metal.

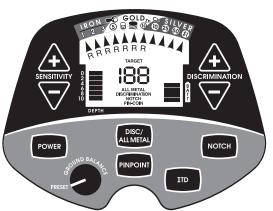


#### **BASIC OPERATION**

#### **POWERING UP**

#### Press the POWER touch pad.

- The detector will beep 4 times.
- All display segments will illuminate momentarily.
- The SENSITIVITY and BATTERY indicators will stay illuminated.



#### MOTION and NO-MOTION MODES

Depending on the operation mode selected, the **Titan 3000 XD** detects metal both with the coil in motion, or with the coil motionless. In the **PINPOINT mode** of operation, metal is detected with the coil motionless over the ground. This no-motion operation helps to locate the exact location of buried objects, and is very useful in understanding the size and shape of buried metal objects. The **PINPOINT mode** offers deeper ground penetration, but cannot classify targets, nor indicate their depth.

The other operating modes require the coil to be in motion to detect a target. When in the **DISCRIMINATION**, **ALL-METAL** or **NOTCH modes**, the coil must be in continuous motion. It is often useful to search for targets in a motion mode, and when identified, pinpoint their location with the **PINPOINT** control.

#### **SENSITIVITY**

At its default sensitivity setting, the detector will detect a coin-sized object, such as a quarter, buried approximately seven inches deep. To change the sensitivity level, and thus the detection depth, press the **SENSITIVITY** ▲ or **keys**. The 6-segment scale at the left of the display, above "coin depth", indicates the sensitivity level when these touch pads are depressed.

#### **CAUTION:**

At higher sensitivity levels, the detector is susceptible to electromagnetic interference from electronic devices. Reduce sensitivity if demonstrating indoors or if using near power lines or electrical equipment. Reduce sensitivity if detector emits false signals.

#### **ALL METAL MODE (Default Operation)**

The detector defaults to **ALL METAL mode** after powering on. In this mode, all types of metals will be detected. An object's **PROBABLE** identification is indicated by the arrows at the top of the display. In addition, the **PROBABLE** depth of coin-sized objects is indicated by the rectangular segment indicators on the left side of the display. All detected objects will cause the depth indicator to illuminate. The depth indication is not accurate for larger objects; however, it will provide accurate relative depth indications. The greater the distance an

object is from the search coil, the greater its depth value.

#### **DISC/ ALL-METAL Touch Pad**

Pressing this touch pad will cause the detector to toggle between two operating modes, **DISCRIMINATION** and **ALL-METAL**. If the detector is in the **ALL-METAL** mode (the default mode).



pressing the touch pad will change the detector into **DISCRIMINATION mode**. If the detector is in the **DISCRIMINATION mode**, pressing the touch pad will change the detector into **ALL-METAL mode**.

#### **DISCRIMINATION MODE**

**Discrimination** is used to eliminate unwanted objects from detection. To enter this mode, from **ALL-METAL mode**, press the **DISC/A-M touch pad**.

After pressing **DISC/A-M**, the detector will:

- Beep twice
- Display 3 "R"s under the left-most segments, Iron 1, 2 & 3

Ferrous objects will not be detected in **DISCRIMINATION mode**.

Heavily oxidized ferrous objects and very large iron objects will sometimes, however, be detected, usually with a high tone and an indication to the right of the target indentification scale.

To increase the level of discrimination, press the **DISCRIMINATION**  $\triangle$  touch pad. Each time the  $\triangle$  pad is depressed, an additional "R" will appear, thus eliminating from detection the objects which fall into the corresponding categories.

To decrease the level of discrimination, press the DISCRIMINATION 
▼ touch pad. Each time the ▼ pad is depressed, an illuminated "R" will disappear, thus returning to detection the objects which fall into the corresponding categories.

**Discrimination Mode** is a fixed-start-point elimination system. Objects are cumulatively eliminated as the level of discrimination increases.

#### BASIC OPERATION (continued)

#### **NOTCH MODE**

To selectively eliminate a category from detection within the metallic spectrum, use the **NOTCH Mode**.

#### **Technical Note:**

The **NOTCH touch pad** causes the status of an **"R"** segment to toggle between **ON** and **OFF**.

#### To use the **NOTCH Mode**:

The **NOTCH touch pad** can be depressed at any time. But for first-time use, place the detector in **ALL-METAL mode**.

A first demonstration is best accomplished as follows:

- 1) Turn the power OFF.
- 2) Turn the power ON.
- 3) Press NOTCH.

A flashing "R" will appear under the IRON-1 segment.

- 4) Press the DISCRIMINATION ▲ touch pad several times. Notice that the "R" moves upon each press of the DISCRIMINATION ▲ touch pad.
- 5) Press NOTCH again.
  The flashing "R" will become permanently illuminated.

If an object has been "**notched-out**", you can return it to detection status. To "**un-notch**" a category:

- 1) Press NOTCH.
- 2) Move the flashing "R" over the permanently illuminated "R", using the **DISCRIMINATION** ▲ or ▼ touch pads.
- 3) Press NOTCH again.

#### ITD

The **ITD** (Instant Target Discrimination) control is a convenient way to eliminate a known undesirable metal object from detection.

To demonstrate the **ITD control**:

- 1) Set the detector in All-Metal Mode
  - **Note:** ITD functions in all motion modes, but is best demonstrated first from the All-Metal Mode.
- 2) Pass the search coil over an undesirable object.
- 3) Notice the Target Indication

**Note:** You can only **ITD** objects that register under the seven left-most segments (from Iron to Zinc).

#### **BASIC OPERATION** (continued)

- **4**) Press **ITD**. An **"R"** appears under the segment to be eliminated.
- **5**) Pass the search coil over the same object again. The undesirable object is eliminated from detection

The **ITD** control is easy to use in the field. As you are detecting, and encounter an object which you wish to eliminate from detection, simply press the **ITD** touch pad after detecting the object.

The **ITD** control eliminates the most-recently detected object category from detection. The category eliminated is indicated with an **"R"**.

#### **PIN POINT MODE**

Since long-buried objects can appear exactly like the surrounding soil, the process of finding the exact location of a small object, such as a coin, can be time-consuming and frustrating. Objects buried many inches deep present an especially daunting challenge. In addition, during the unearthing process, care must be taken not to damage valuable relics. The best solution to these problems is the no-motion **PINPOINT mode**.

At any time during operation, press the **PINPOINT touch pad**, and the detector enters the no-motion mode. In the **PINPOINT mode**, any object in the coil's detection field will induce a monotone hum. The location of a coin-sized object can be discerned with pinpoint accuracy by narrowing the detection field as described on page 21.

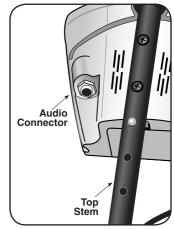
Be sure that the detector is properly **GROUND BALANCED** before using the **PINPOINT MODE**. **See page 19** for manual ground balancing instructions. Also, consult **page 21** for proper no-motion field techniques.

The Target Identification and Target Depth indicators are disabled in this mode. To discern the identification and depth of an object, you must use one of the motion modes of operation.

#### **HEADPHONE JACK**

Using headphones (not supplied) with your metal detector makes it easier to identify subtle changes in the threshold levels for better detection results, and also reduces drain on the batteries. The **Titan 3000 XD Metal Detector** has a stereo headphone jack located at the rear of the case.

This device is to be used with interconnecting cables/headphone cables shorter than three meters.



#### **AUDIO TARGET IDENTIFICATION**



While the **LCD** (**Liquid Crystal Display**) is very accurate in identifying buried objects, the user in the field does not always maintain the display screen in his field of vision. Therefore, we have incorporated an audio feedback mechanism to alert the user to the nature of buried objects. This audio feedback system first alerts the user to the presence and classification of objects, whose nature and location can be confirmed using the **LCD** display.

The detector can sound four different tones, depending on the object detected.

#### **BASS TONE**

Ferrous objects, such as iron and steel, will induce a bass tone.

The smallest gold objects can also induce a bass tone.

#### **LOW TONE**

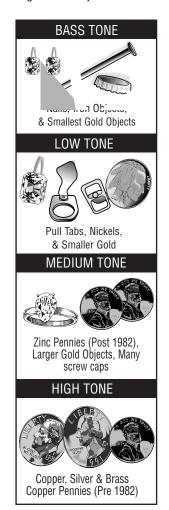
Pull-Tabs, nickels & smaller gold

#### **MEDIUM TONE**

Newer pennies (post-1982), larger gold objects, zinc, small brass objects, and most bottle screw caps will induce medium tones. Many recent vintage foreign currencies will induce medium tones.

#### **HIGH TONE**

Silver and copper coins, larger brass objects, older pennies (pre-1982), and highly oxidized metals will induce high tones. Quarters, dimes and other precious coins fall into this category.



#### TARGET AND DEPTH DISPLAY



#### **READING THE DISPLAY**

The Liquid Crystal Display (**LCD**) shows the **PROBABLE** identification of the targeted metal, as well as the **PROBABLE** depth of the target, in inches.

The detector will register a repeating, unchanging target identification when a buried target has been located and identified. If, upon repeated passes over the same spot, the target identification reads inconsistently, the target is probably a trash item, or oxidized metal. With practice, you will learn to unearth only the repeatable signals.

The segment identifications are highly accurate, when detecting the objects described on the label. However, if you register in a given category for an unknown buried object, you could be detecting a metallic object other than the object described on the label, but with the same metallic signature. Also, the greater the distance between the target and the coil, the less accurate the target identification.

**GOLD TARGETS:** Gold objects will register on the left side of the **LCD** scale. Gold will register depending upon its size. The smaller the gold object, the further to the left it will register.

**Gold flakes** will register under Iron-1 **Small gold items** will register under Iron or 5¢/PT.

**Medium-sized gold items** will register under PT or S-cap.

**Large gold items** will register under S-cap or Zinc.

**SILVER TARGETS:** Silver objects will register to the right of the scale, under  $25\phi$ ,  $50\phi$ , or \$1, depending on the size of the object. The larger the object, the farther to the right it will register.

**IRON:** Ferrous objects will register on the far-left side of the target identification scale. 1, 2, or 3 indicates the relative size of iron objects. Small nails, for instance, will usually illuminate the Iron-1 arrow whereas large structural ferrous objects will usually illuminate the Iron-3 arrow.

Objects in this category could be worthless scrap, or a more valuable iron relic.

**5c/PT:** Nickels and most newer pull-tabs(those that stay attached to the can) will register here.

**PT(pull-tabs):** Pull-tabs from older beverage cans will register here. Few newer pull-tabs will also register here. Many gold rings will also register here.

**S-CAP:** Older screw caps from glass bottles will register here. Large gold rings, like a class ring, could also register here. Some non-U.S. coins of recent vintage will also register here.

**ZINC:** Newer pennies (post-1982) will register here. Many non-U.S. coins of recent vintage will also register here.

**Cu10¢:** Dimes and pre-1982 pennies will register here. Older, pre-1982, pennies are composed of copper, which has a metallic signature similar to a dime. Most copper coins will register here.

**Caution:** The target indications are visual references. Many other types of metal can fall under any one of these categories. While the **Titan 3000 XD** will eliminate or indicate the presence of most common trash items, it is impossible to accurately classify **ALL** buried objects.

#### **DEPTH INDICATOR:**

The Depth Indicator is accurate for coin-sized objects. It indicates the depth of the target, in inches. Large and irregularly-shaped objects will yield less reliable depth readings

When passing over an object, the depth indicator will light up and stay illuminated until another object is scanned. Repeated indication at the same depth level indicates an accurate target detector. If the depth indication varies with each sweep, try sweeping at different angles; there may be more than one target present. With practice, you will learn the difference between accurate readings, multiple targets, and highly erratic readings which evidence trash or irregularly shaped objects.

#### **DEPTH AND TARGET DISPLAY**



# THREE DIGIT TARGET INDICATOR

The three digit target indicator, in the middle of the LCD display, provides a specific target value to help identify buried targets more accurately. With practice in the field, you will learn to associate target values with the probable identification of buried objects. The target value can vary each time the coil passes over the target, depending upon the angle of the object and the distance from the coil. As a starting point, refer to the table below.

# Titan 3000 XD TARGET Readout

The table below list some common approximate target value equivalents. With experience in the filed, you will recognize many types of metals by their numeric value.

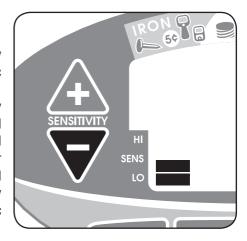
VALUE RANGE	POSSIBLE OBJECTS	
0-10	Iron	
30-39	Nickel - Small/Med. gold rings	
43-48	Pull-Tab - Some large gold rings	
53-60	Screw Cap	
62-74	Zinc, Penny	
83-88	Wheat Cent	
86-100	Dime	
107-127	Quarter	
105-120	Liberty Dollar	
120-126	Franklin Half Dollar	
134-150	Silver Dollar	
150-199	Large Metal Object	

#### **SENSITIVITY ADJUSTMENT**

# ELECTROMAGNETIC INTERFERENCE

The principle use for the Sensitivity Control is to eliminate Electromagnetic Interference (**EMI**).

A hobby metal detector is an extremely sensitive device; the search coil creates its own magnetic field and acts like an antenna. If your detector beeps erratically when the search coil is motionless, the unit is probably detecting another electromagnetic field.



Common sources of **EMI** are electric power lines, both suspended and buried, motors, and household appliances like computers and microwave ovens. Some indoor electronic devices, such as dimmer switches used on household lighting, produce severe **EMI** and can cause the detector to beep erratically. Other metal detectors also produce their own electromagnetic fields; so if detecting with a friend, keep two metal detectors at least 20 feet apart.

If the detector beeps erratically, **REDUCE THE SENSITIVITY** by pressing the **Sensitivity** ▼ **Pad** on the left of the control panel.

#### SEVERE GROUND CONDITIONS

A secondary use for the Sensitivity Control is to reduce false detection signals caused by severe ground conditions. While your **Titan 3000 XD** contains circuitry to eliminate the signals caused by most naturally occurring ground minerals, 100% of all ground conditions cannot be anticipated. Highly magnetic soils found in mountainous and gold-prospecting locations can cause the detector to emit tones when metal objects are not present. High saline content soils and sands can sometimes cause the detector to false.

If the detector emits false, non-repeatable, signals, REDUCE THE SENSITIVITY.

#### **MULTIPLE TARGETS**

If you suspect the presence of deeper targets beneath a shallower target, reduce the sensitivity to eliminate the detection of the deeper targets, in order to properly locate and identify the shallower target.

#### IN THE FIELD TECHNIQUES



#### **PINPOINTING**

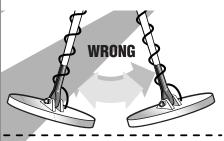
Accurate pinpointing takes practice and is best accomplished by "X-ing" the target area.

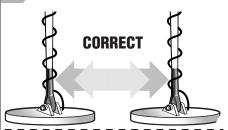
- Once a buried target is indicated by a good tone response, continue sweeping the coil over the target in a narrowing side-to-side pattern.
- Take visual note of the place on the ground where the "beep" sounds.
- 3. Stop the coil directly over this spot on the ground.
- 4. Now move the coil straight forward and straight back towards you a couple of times.
- Again make visual note of the spot on the ground at which the "beep" sounds.
- 6. If needed, "X" the target at different angles to "zero in" on the exact spot on the ground at which the "beep" sounds.

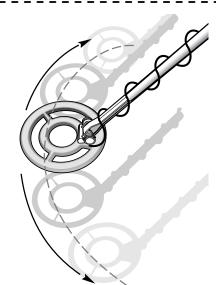


#### **COIL MOVEMENT**

When swinging the coil, be careful to keep it level with the ground about one inch from the surface. **Never swing the coil like a pendulum.** 







**NOTE:** This modern Metal Detector is referred to as a Motion Detector since it can respond to a target only while the searchcoil is being moved over the Target.

#### IN THE FIELD TECHNIQUES

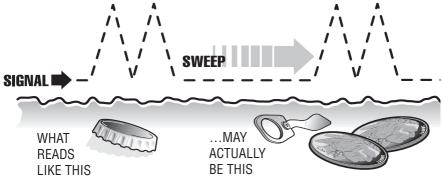
Motion Modes Only

Swina the search coil slowly. overlapping each sweep as you move forward. It is important to sweep the coil at a consistent speed over the ground as you search. After identifying a target, your sweep technique can help in identifying both the location and the nature of the target. If you encounter a weak signal, try moving the coil in short, rapid sweeps over the target zone; such a short rapid sweep may provide a more consistent target identification.



Most worthwhile objects will respond with a repeatable tone. If the signal does not repeat after sweeping the coil directly over the suspected target a few times, it is more than likely trash metal.

Crossing the target zone with multiple intersecting sweeps at multiple angles is another way to verify the repeatability of the signal, and the potential of the buried target. To use this method, walk around the target area in a circle, sweeping the coil across the target repeatedly, every 30 to 40 degrees of the circle, about ten different angles as you walk completely around the target. If a high-tone target completely disappears from detection at a given angle, chances are that you are detecting oxidized ferrous metals, rather than a silver or copper object. If the tone changes at different angles, you may have encountered multiple



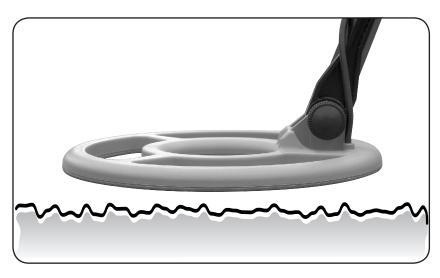
#### IN THE FIELD TECHNIQUES

objects. If you are new to the hobby, you may want to dig all targets at first. With practice in the field, you will learn to better discern the nature of buried objects by the nature of the detector's response.

You may encounter some false signals as you proceed. False signals occur when the detector beeps, but no metal target is present. False signals can be induced by electromagnetic interference, oxidation, or highly mineralized ground soils. If the detector beeps once, but does not repeat the signal with several additional sweeps over the same spot, there is probably no target present.

When searching very trashy ground, it is best to scan small areas with slow, short sweeps. You will be surprised just how much trash metal and foil you will find in some areas. The trashiest areas have been frequented by the most people, and frequently hold the most promise for finding the most lost valuables.

Also maintain the search coil positioned just above the surface of the ground, without making contact with the ground. Making contact with the ground can cause false signals.



PINPO

ALL METAI

PINPOINT

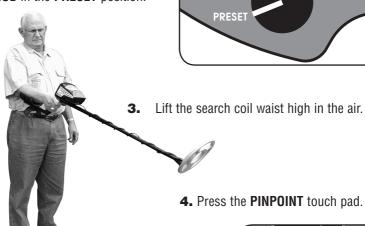
#### **GROUND BALANCING**

Before using the **PINPOINT mode**, it is necessary to "**Ground Balance**" your detector, this ground balancing adjustment offsets the effects of minerals and salts in the ground.

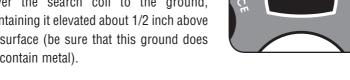
#### To **GROUND BALANCE** your detector:

1. Using the ALL-METAL mode, find a patch of ground which is free of metal objects. You will use this section of ground to test the detector. The presence of any metal objects in this area will interfere with this procedure.

2. Begin with the ground balance **KNOB** in the **PRESET** position.



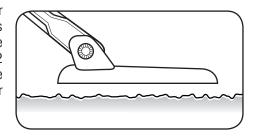
**5.** Lower the search coil to the ground, maintaining it elevated about 1/2 inch above the surface (be sure that this ground does not contain metal).



• If the detector emits sound with the search coil 1/2 inch over the ground, further **ADJUSTMENT IS NECESSARY**.

#### IN THE FIELD TECHNIQUES (continued)

 If the detector r e m a i n s silent with the searchcoil 1/2 inch over the ground, no further clockwise adjustment is necessary.



- 6. If the detector emits sound with the coil over the ground in STEP 5, further adjustment of the ground balance KNOB is required as follows:
  - Lift the search coil waist high
  - Rotate the ground balance KNOB clockwise 1/16 inch
  - Press PINPOINT
  - Lower the search coil to the ground again

**If the detector still emits a tone**, repeat this procedure. You are searching for the ground balance knob position where the detector is just silent.

It is important to move the knob in small increments in order to find the first setting (moving clockwise) at which the detector remains silent. To insure yourself of the optimal adjustment, move the KNOB slightly counterclockwise from a silent-adjusted position to check for the most counterclockwise silent position possible.

If the KNOB is over-adjusted in the clockwise direction, the detector can lose sensitivity or produce false high-tone signals. An over-adjusted condition can also cause the detector to sound off when the coil is lifted away from the ground.

**As your search** takes you to different areas, verify the ground balance setting periodically using the above procedure. Within a geographical area, ground conditions can change. Varying elevations, proximity to water, and concentrations of rock, sand or clay can all affect ground condition and sometimes require recalibration with the ground balance knob.

#### IN THE FIELD TECHNIQUES (continued)



**In the Pinpoint Mode**, coil sweep technique is not important. Rather, user retuning is critical.

The detector does not automatically adjust to changing ground and environmental conditions; the operator is required to make the adjustment. If the detector sounds a constant tone over all areas of the ground, retune the detector by pressing the PINPOINT button.

#### RETUNING

**Keep** the coil still, just above the ground surface, and press the **PINPOINT button**. Make sure that the spot on the ground you chose for tuning did not contain metal; pass over the area with the coil again to insure that the detector does not emit a tone.

#### **TEMPERATURE CHANGE**

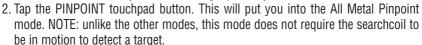
If the detector moves from one temperature environment to another, or if the temperature changes, you must retune the detector until the temperature stabilizes. If you move from a cooler to a warmer environment, the detector may emit a constant tone; if so, retune. If you move from a warmer to cooler environment, the detector may lose sensitivity; if so, retune.

#### **PINPOINTING**

# How To Pinpoint Targets Using The PINPOINT Mode

When you've discovered a target you wish to dig, do the following:

1. Hold the searchcoil about half an inch above the ground, off to the side of where you think the target probably is.

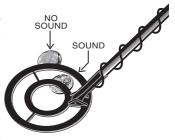


3. Lift the searchcoil slightly, and pass it over the target. The sound will be loudest over the center of the target.

#### To Narrow It Down Further:

4. Now that you know about where the target is, again lower the searchcoil to about half an inch above the ground, near the center of the target but not right over the top. Tap the button again. The sound will instantly go away.

5. Lift the searchcoil slightly and move it horizontally over the target. The audible response zone will be much narrower. If you move the searchcoil around right and left and also forward and back, making an "X" pattern over the target, you can determine the location of the target usually within an inch or two. NOTE: if at any time it seems like the signal may be drifting, just tap the Pinpoint button. This restores the signal to its zero level.



## **TROUBLESHOOTING**

TROUBLE SHOOTING GUIDE			
SYMPTOM	CAUSE	SOLUTION	
Detector chatters or beeps erratically	<ul> <li>Using detector indoors</li> <li>Using detector near power lines</li> <li>Using 2 detectors in close proximity</li> <li>Highly oxidized buried object</li> <li>Environmental electromagnetic interference</li> </ul>	<ul> <li>Use detector outdoors only</li> <li>Move away from power lines</li> <li>Keep 2 detectors at least 20' apart</li> <li>Only dig up repeatable signals</li> <li>Reduce sensitivity until erratic signals cease</li> </ul>	
False high-tone signals	<ul> <li>Over-adjusted ground balance knob</li> </ul>	Move GB knob counter clockwise	
LCD does not lock on to one target ID or detector emits multiple tones	<ul> <li>Multiple targets present</li> <li>Highly oxidized target</li> <li>Sensitivity set too high</li> </ul>	Move coil slowly at different angles     Reduce sensitivity	
No power, no sounds	<ul> <li>Dead batteries</li> <li>Poor battery contact</li> <li>Cord not connected securely</li> </ul>	<ul> <li>Replace batteries</li> <li>Push batteries in tighter</li> <li>Insert paper spacers (see page 5)</li> <li>Check connections</li> </ul>	

#### **TERMINOLOGY**

The following terms are used throughout the manual, and are standard terminology among detectorists.

#### **ELIMINATION –**

Reference to a metal being "eliminated" means that the detector will not emit a tone, nor light up an indicator, when a specified object passes through the coil's detection field

#### **DISCRIMINATION –**

When the detector emits different tones for different types of metals, and when the detector "eliminates" certain metals, we refer to this as the detector "discriminating" among different types of metals.

Discrimination is an important feature of professional metal detectors. Discrimination allows the user to ignore trash and otherwise undesirable objects.

#### **RELIC** -

A relic is an object of interest by reason of its age or its association with the past. Many relics are made of iron, but can also be made of bronze or precious metals.

#### IRON -

Iron is a common, low-grade metal that is an undesirable target in certain metal detecting applications. Examples of undesirable iron objects are old cans, pipes, bolts, and nails. Sometimes, the desired target is made of iron. Property markers, for instance, contain iron. Valuable relics can also be composed of iron; cannon balls, old armaments, and parts of old structures and vehicles can also be composed of iron.

#### **FERROUS -**

Metals which are made of, or contain, iron.

#### PINPOINTING -

Pinpointing is the process of finding the exact location of a buried object. Long-buried metals can appear exactly like the surrounding soil, and can therefore be very hard to isolate from the soil.

#### **PULL-TABS** –

Discarded pull-tabs from beverage containers are the most bothersome trash items for treasure hunters. They come in many different shapes and sizes. Most pull-tabs can be eliminated with the Mode Control, but some other valuable objects can have a magnetic signature similar to pull-tabs, and will also be eliminated when discriminating out pull-tabs.

#### **GROUND BALANCE -**

Ground Balancing is the ability of the detector to ignore, or "see through," the earth's naturally occurring minerals, and only sound a tone when a metal object is detected.

## **TREASURE HUNTER'S CODE OF ETHICS:**

- Always check Federal, State, County and local laws before searching.
- Respect private property and do not enter private property without the owner's permission.
- Take care to refill all holes and try not to leave any damage.
- · Remove and dispose of any and all trash and litter found.
- Appreciate and protect our inheritance of natural resources, wildlife and private property.
- Act as an ambassador for the hobby, use thoughtfulness, consideration and courtesy at all times.
- · Never destroy historical or archaeological treasures.
- All treasure hunters may be judged by the example you set; always conduct yourself with courtesy and consideration of others.

# First Texas Products, L.L.C. Five Year Limited Warranty

Titan Metal Detectors are warranted against defects in workmanship or materials under normal use for five years from date of purchase to the original user. Liability in all events is limited to the purchase price paid. **Liability** under this **WARRANTY** is **LIMITED** to replacing or repairing, at our option, any Titan Detector returned, shipping cost prepaid, to

First Texas Products, L.L.C. 1120 Alza Drive, El Paso. Texas 79907

Damage due to neglect, accidental damage or misuse of this product is not covered by this warranty.

Proof of purchase is required to make a claim under this warranty.

#### NOTE TO CUSTOMERS OUTSIDE THE U.S.A.

This warranty may vary in other countries, check with your distributor for details.

Factory warranty follows the channel of distribution.

Warranty does not cover shipping costs.

According to FCC part 15.21 Changes or Modifications made to this device not expressly approved by the party responsible for compliance could void the users authority to operate this equipment.

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