The Basics of Metal Detecting

Your Fast Tracker Metal Detector is a MOTION metal detector; movement over an object is required in order for the machine to detect an object and emit a tone.

The Fast Tracker has eliminated the two most difficult aspects of detecting - ground balancing and target tuning. Both of these functions are automatic. With only two operating knobs, you are on the Fast Track to finding buried treasure!

CAUTION:

FOR OUTDOOR USE ONLY:

• If demonstrating indoors, beware of interference from electromagnetic fields.
• If interference occurs, the detector will chatter or beep erratically.
• To avoid interference, turn the sensitivity down, turn off lights and appliances, or use outdoors.

DO NOT TEST ON THE FLOOR
Most floors contain metal, which will interfere with the target’s signal.

USE 9 volt ALKALINE batteries ONLY.
Fast Tracker FEATURES

- Interchangeable Coil System
- Headphone Jack
- S-Rod Handle System
- Discriminate Control
- Comfort Hand-grip
- Detector Stand
- Sensitivity Control
- Padded Armrest
- 7” Waterproof Coil
Assembling your Fast Tracker Metal Detector is easy and requires no tools. Just follow these steps:

1. Using the supplied bolt and knurled knob, attach the search coil to the lower stem.

2. 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. Maintain the search coil about 1 inch above the ground as you sweep.

3. Wind the search coil cable around the stem. Leave enough slack in the cable to let you adjust the coil when you are hunting on uneven ground. Then tighten the knob at the end of the search coil.

   **Note:** To adjust the coil, simply loosen the knob.

4. Insert the coil's plug into the matching connector on the control housing. Be sure the holes and pins line up correctly.

**Caution:**
- Do not force the plug in. Excess force will cause damage.
- To disconnect the cable, pull out the plug. Do not pull on the cable.
Use **ALKALINE** batteries only.

**Follow these steps to install the batteries.**

1. Carefully remove the battery compartment door by pressing the release clip on the right side of the door.
2. Snap one battery on to each of the terminals and place the batteries inside the compartment. The battery compartment is a tight fit. Insert one battery with the terminals facing down, and the second battery with the terminals facing outward. See illustration.
3. Replace the compartment door by first inserting the hinge on the side opposite of the release clip.
4. Then, press down firmly on the clip side until the battery door snaps into place.
Here is a quick way to demonstrate the basic features of your FAST TRACKER.

**Supplies Needed**

- a. A small nail
- b. A small piece of foil
- c. A quarter
- d. A nickel
- e. A dime
- f. A penny

**Position your Fast Tracker**

*Keep the detector away from metal objects.*

Have a friend hold the detector while you pass the objects over the search coil. Or, hang the detector over the edge of a chair or table, away from walls, floors and other metal objects. *Remove your jewelry and watch (they also contain metal)*

**Demonstrate It!**

- a. Click the power on, and turn the Sensitivity Knob to the 2:00 or 3:00 position.
- b. Click the right knob (Discriminate) off. 100% to the left.
- c. Sweep all of the objects back and forth over the search coil. *NOTICE the SINGLE TONE*
- d. Sweep the nail back and forth over the search coil. While sweeping, click the Discriminate Control (right knob) on.
  - Turn the Discriminate Control until the nail is no longer detected.
  - You have “discriminated out” the nail.
- e. Now pass the nickel with the Discriminate control in the 1:00 or 2:00 position. *NOTICE the LOW TONE.*
- f. Pass the Quarter. *NOTICE the HIGH TONE.*
- g. Pass all of the objects, while moving the Discriminate Control to differing positions. *NOTICE the DIFFERENT TONES, or NO TONE at all.*
The Fast Tracker is a MOTION metal detector; the search coil must be in motion over the targeted object in order for the machine to detect the object and emit a tone. Motion is required in order for the detector to automatically GROUND BALANCE. All soil and sand is different, containing varying amounts of naturally occurring minerals. As you sweep the search coil over the ground, your metal detector is constantly READING and AVERAGING the ground's mineralization, in order to differentiate between the naturally occurring ground minerals and a metal target.

**Adjust the SENSITIVITY**

After powering the unit on, turn the left knob, SENSITIVITY, 100% clockwise. If the detector chatters or emits erratic sounds, reduce the sensitivity by turning the knob to the left. The detector will work well at the 2:00 or 3:00 position.

This adjustment is necessary due to electromagnetic interference. Household appliances, lighting fixtures, outdoor power lines (overhead and buried) all emit electromagnetic fields. Electromagnetic energy also occurs naturally in the environment. Your metal detector creates its own magnetic field; so you need to adjust your SENSITIVITY to compensate for any interference.
**OPERATION**

Select the MODE OF OPERATION
The Fast Tracker has two operating modes, ALL METAL and DISCRIMINATION.

**ALL METAL**

To enter the ALL METAL mode, click the right knob (Discriminate) off, 100% counterclockwise. In the full counterclockwise position, you will detect all types of metal.

In the ALL METAL mode, your detector will emit only one tone, regardless of the type of metal detected. It will detect low-grade metals like iron (a nail) or aluminum (foil). It will also detect more valuable items like silver, copper, and gold.

**APPLICATIONS:**

Use the ALL METAL mode for household applications, such as finding property markers or lost objects like keys or machine parts.

ALL METAL is also useful for gold prospecting. Be aware that you need to search in an area where gold has been found in the past.

ALL METAL is also preferred for relic hunting. Many relics are made of iron. You must be in the ALL METAL mode to detect iron.

Maximum depth detection is achieved in the ALL METAL mode.

**DISCRIMINATION**

Click the Discriminate Control (right Knob) on to enter the DISCRIMINATION mode.

Discrimination is the elimination of certain metals from detection, and the classification of targeted metals using audio feedback. See chart below.

<table>
<thead>
<tr>
<th>TONE MODE AUDIO RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO RESPONSE</strong></td>
</tr>
<tr>
<td>Iron &amp; Steel</td>
</tr>
<tr>
<td><strong>LOW TONE</strong></td>
</tr>
<tr>
<td>Gold &amp; Nickel</td>
</tr>
<tr>
<td><strong>BROKEN TONE</strong></td>
</tr>
<tr>
<td>Old &amp; New Pull Tabs</td>
</tr>
<tr>
<td><strong>HIGH TONE</strong></td>
</tr>
<tr>
<td>Copper, Silver &amp;</td>
</tr>
</tbody>
</table>

As the chart illustrates, iron and steel will be discriminated out, inducing no audio response. Nickels and gold items will induce a low tone. Silver, copper, and brass will induce a high tone. Many pull-tabs (but not all) will induce a “broken” tone. To achieve the broken tone, set the discriminate control at the approximate center position, about 12:00.

Depth of detection is slightly reduced in the DISCRIMINATION mode.
**IN THE FIELD TECHNIQUES**

**SWEEP TECHNIQUE**

Sweep the search coil in a slow, consistent, side-to-side motion. The detector’s circuitry is constantly calculating the ground’s mineralization. A steady, consistent coil speed is required for the detector to make an accurate calculation. Keep the search coil about one inch above the ground. Keep the coil even with the ground. Do not raise the coil at the ends of your sweep.

![Correct vs Wrong Sweep Technique]

**TONES RESPONSE**

Only dig up targets that induce repeatable tones. Each time you pass the search coil over a possible target, you should hear the same tone. If the tone does not repeat on each pass, varies in tone, or varies in location, then the target is usually not of value.

Inconsistent tones are evidence of high oxidation (rusted metal) or irregularly shaped trash items.

Note, however, that multiple tones may be evidence of multiple targets.

If you cannot pinpoint the location of a very strong signal, lift the coil higher off the ground until a weaker, but more precise signal is heard.

For very weak signals, try moving the coil in short, rapid sweeps, closer to the ground.

![Signal Sweep Diagram]
IN THE FIELD TECHNIQUES

PINPOINTING

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

1. Once a buried target is identified by a good tone response, continue sweeping the coil over the target in a narrowing side-to-side pattern.
2. Take visual note of the place on the ground where the “beep” occurs as you move the coil slowly from side to side.
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.
5. Again make visual note of the spot on the ground at which the “beep” occurs.
6. If needed, “X” the target at different angles to “zero in” on the exact spot on the ground at which the “beep” occurs.

TROUBLESHOOTING

The following troubleshooting steps may assist you in case you’re having problems with your Detector.

YOUR DETECTOR IS EMITTING ERRATIC SIGNALS WHEN YOU’RE IN THE FIELD.

Your SENSITIVITY may be set too high. Try reducing the SENSITIVITY slightly until the false signals stop.

Remember to swing your coil slowly. Some inconsistent signals will occur on highly rusted metals. If the signal does not repeat after successive passes of the coil over the same area, then the target is usually not worthwhile.

Natural and man-made electromagnetic fields can cause interference.

YOUR DETECTOR IS NOT STABLE AND HAS A PULSING, DISTORTED TONE INSTEAD OF A CLEAR TONE.

This can occur if you’re operating near another detector or near power lines that can interfere with the detector’s operating frequency.

YOUR DETECTOR IS EMITTING A CONSTANT LOUD TONE OR CONSTANT REPEATING TONES

This usually occurs when the batteries are low. Try replacing your batteries with two new alkaline batteries.

KEEP 2 DETECTORS AT LEAST 20ft APART

If 2 detectors are in close proximity, interference between the two may cause your detector to emit erratic signals.
Your Fast Tracker Metal Detector is an example of superior design and craftsmanship. The following suggestions will help you care for your metal detector so that you can enjoy it for years.

Handle the metal detector gently and carefully. Dropping it can damage electronic components.

Use and store the metal detector only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.

Wipe the metal detector with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the metal detector.

The coil is waterproof and may be submerged into either fresh or salt water. Be careful to prevent water from entering the control housing. After using the coil in salt water, rinse it with fresh water to prevent corrosion of the metal parts.
METAL DETECTING APPLICATIONS

COIN SHOOTING

Searching for coins is the most popular metal detecting application. We receive testimonials every day from BOUNTY HUNTER users finding very old coins — many times from the 1800’s or earlier — in old school yards, parks, and even their own back yards.

To adjust your detector for coin shooting, you want to click on the ALL METAL control knob to about the 1:00 position. Find an older pull tab, and adjust the discrimination control to the point where you hear a broken, in-between, sound. At this setting, you have eliminated all iron objects, and will be aware of the presence of pull tabs, as they usually induce this broken tone.

Long-buried coins can often be detected deeper than newer coins. As an old coin oxidizes, it creates a magnetic halo in the soil, effectively increasing the size of its magnetic signature, and its detectability.

JEWELRY HUNTING

Keep the discrimination control at the 11:00 setting for jewelry hunting. Many gold rings will register similar to pull-tabs. Beware that you will dig up many pull tabs in the search for gold rings. Both pull-tabs and gold rings can induce a low tone. Keep the discrimination control at the lower, 11:00, setting so that you do not eliminate small gold rings from detection.

Some gold rings can induce a double beep whereas most pull-tabs will not. To achieve the double beep, move the coil very slowly over the buried target at differing angles. You can sometimes achieve a double beep as the search coil passes over two sides of the ring.

Necklaces can be very difficult to detect. Silver rings will induce a high tone. Highly oxidized trash items can also induce high tones.

RELIC HUNTING

A relic is a historical object, sometimes of great value. Relics are often made of iron or bronze. Therefore, keep your discrimination control turned off, in the 100% counterclockwise position. In this ALL METAL mode, you will detect all types of metal, including trash items. You must limit you relic-hunting activity to areas where you have a reasonable suspicion of finding an ancient object. Visit the local library to learn of historical events which occurred in the area. Remember to always obtain permission before searching property which is not your own.

CACHE HUNTING

A cache, pronounced “cash”, is a hidden store of valuables. Years ago, many people stashed valuables in cans, bags, and metal chests. They often buried them or hid them in the walls or floors of their homes. Search old homes or camp sites to locate caches. Caches are very rare and hard to find. Cache hunting requires the ALL METAL mode; so keep the discrimination control turned off.

HOUSEHOLD APPLICATIONS

Lost keys or machine parts, underground pipes, and property markers can all be located using the ALL METAL mode. Keep the discrimination control in the off position.
TREASURE HUNTER’S CODE OF ETHICS:

1. Respect the rights and property of others.
2. Observe all laws, whether national, state or local.
3. Never destroy historical or archaeological treasures.
4. Leave the land and vegetation as it was. Fill in the holes.
5. All treasure hunters may be judged by the example you set.

Always obtain permission before searching any site. Be extremely careful while probing, picking up, or discarding trash items. And ALWAYS COVER YOUR HOLES!

FIRST TEXAS PRODUCTS, LP 5-YEAR LIMITED WARRANTY

Bounty Hunter 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 Bounty Hunter Detector returned, shipping cost prepaid, to First Texas Products, LP. Damage due to neglect, accidental damage or misuse of this product is not covered by this warranty.

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