

BOUNTY HUNTER®
METAL DETECTORS

Challenger

M E T A L D E T E C T O R

OWNER'S MANUAL



Important Facts to Know about your Metal Detector

1) This is a MOTION detector.

You must **sweep** the searchcoil from **side-to-side** to detect metal. A motionless searchcoil over a metal object will not result in detection.

2) Do not use indoors. This detector is for outdoors use only. Household appliances emit electromagnetic filed, which can interfere with your detector. If conducting an indoor demonstration, turn the sensitivity down and keep the search coil away from appliances such as computers, televisions and microwave ovens. If your detector beeps erratically, turn off appliances and lights.

Do not test by placing coins on the floor. Most floors contain metal.

Keep the searchcoil away from floors, walls, and tables, which can contain metal.

3) Use 9-volt ALKALINE batteries only.

Do not use Heavy Duty Batteries.
Do not use Zinc-Carbon Batteries.

4) Adjust the Sensitivity to a low setting in the event of false signals.

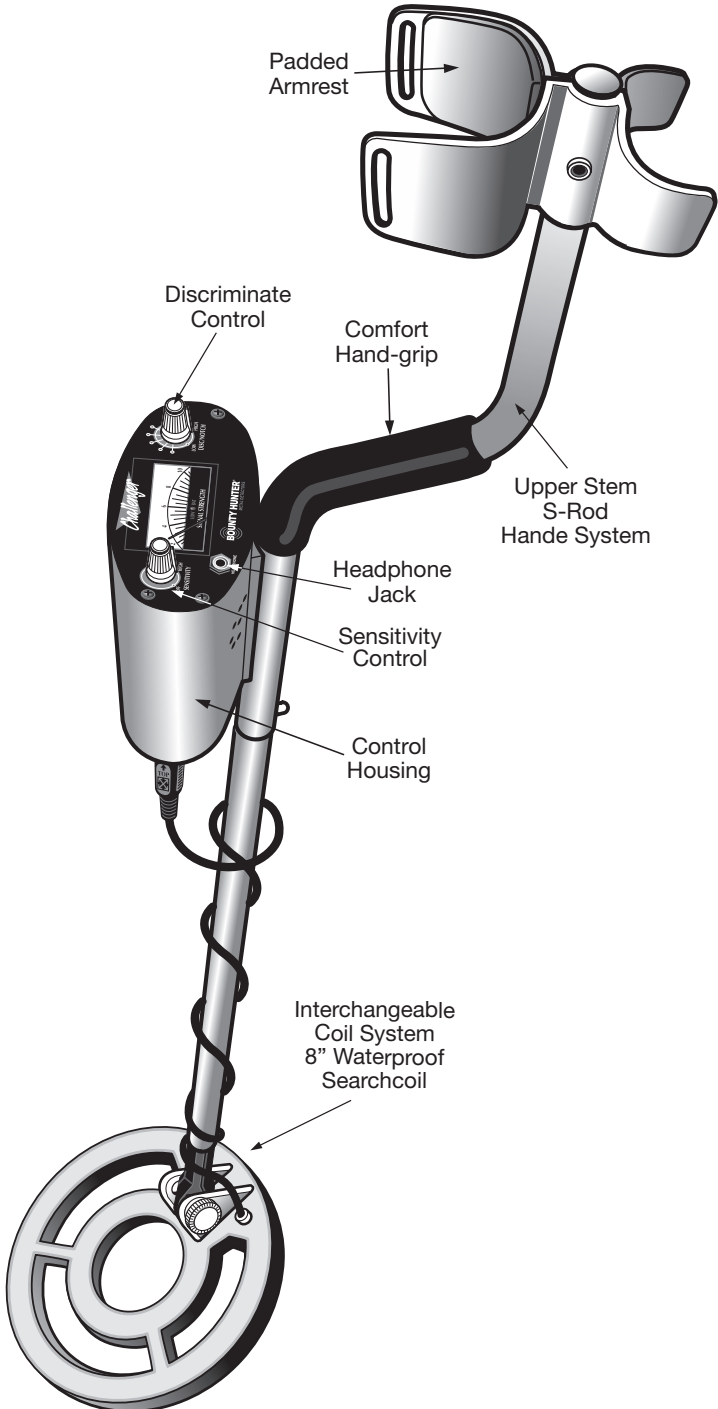
Always begin use at a reduced sensitivity level.

Increase to full sensitivity after you are familiar with the detector's operation.

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CHALLENGER FEATURES



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.

NOTCH - Notching is the elimination of an item, or range of items, within the metallic spectrum. We “notch-out” an object, or objects, selectively. Objects to the left and right on the metallic spectrum can be retained using the notch technique.

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. Pull-tabs can be eliminated from detection, 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.

EASY ASSEMBLY

Assembling your Challenger 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.

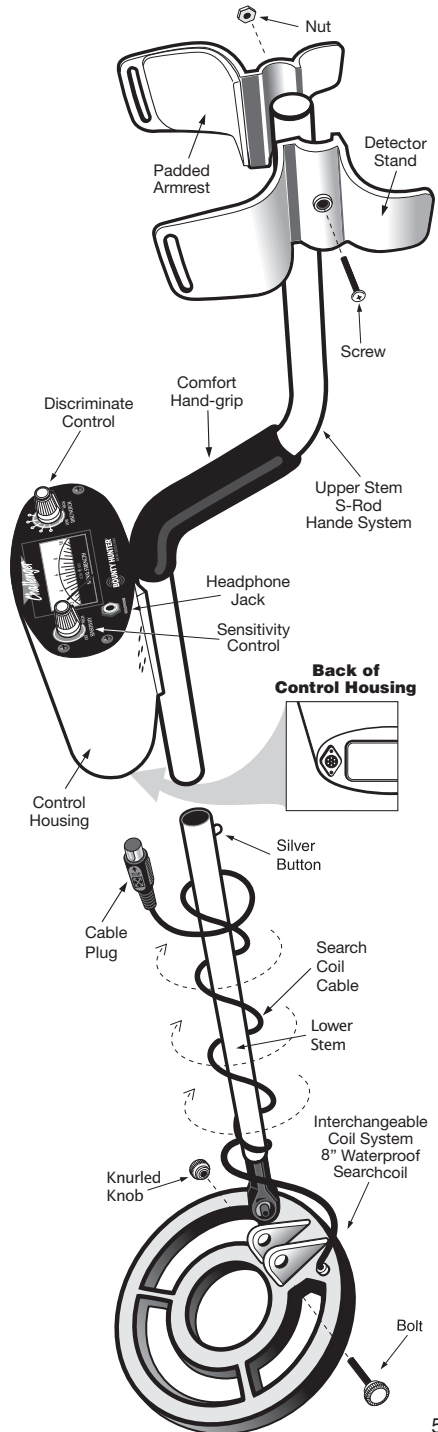
- 3 Wind the search coil cable around the stem. Leave enough slack in the cable to let you adjust the coil when you are hunting on uneven ground. Then tighten the knob at the end of the search coil.

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.



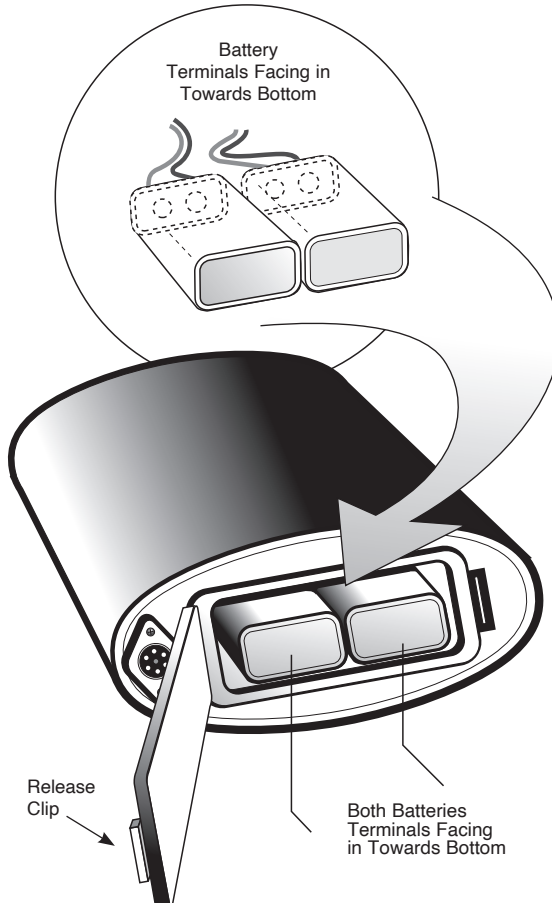
BATTERIES

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 onto each of the terminals and place the batteries inside the compartment. Feed wires to bottom of compartment first. Then push batteries into compartment with terminals facing inward. (see graphic)
- 3 Replace the compartment door by carefully inserting opposite side of clip first. Then press down on clip side until battery door snaps into place.

CAUTION: Some off-brand batteries may be very large and difficult to insert.



QUICK-START DEMONSTRATION

Here is a quick way to demonstrate your detector's basic features.

Supplies Needed

- A small nail
- A small piece of foil
- A penny
- A nickel
- A dime
- A quarter

Position your Challenger

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!

- Click the power on, and turn the Sensitivity Knob to the 2:00 or 3:00 position.
- Click the right knob (Disk/Notch) off. 100% to the left.
- Sweep all of the objects back and forth over the search coil.

NOTICE the SINGLE TONE

- 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.

- Now pass the nickel with the Discriminate control in the 1:00 or 2:00 position.

NOTICE the LOW TONE.

- Pass the Quarter.

NOTICE the HIGH TONE.

- Pass all of the objects, while moving the Discriminate Control to differing positions.

NOTICE the DIFFERENT TONES, or NO TONE at all.



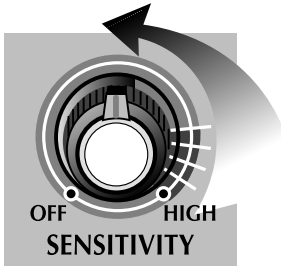
Signal Strength Meter

The meter's needle moves to the right when an object is detected. Stronger targets will cause the needle to move faster and farther to the right. The meter is useful in pinpointing; worthwhile targets are located at the location where the needle moves abruptly.



OPERATION

The Challenger 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.



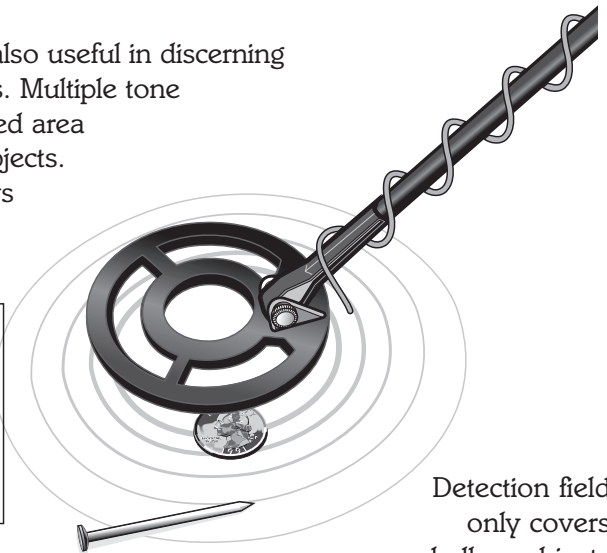
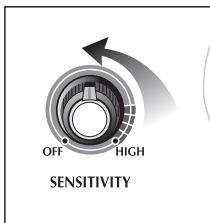
Adjust the SENSITIVITY

After powering the unit on, turn the left knob, SENSITIVITY, 90% 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 possible 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.

The sensitivity control is also useful in discerning objects at different depths. Multiple tone response over one targeted area could indicate multiple objects. Reducing sensitivity allows you to target only the shallower object.



Detection field
only covers
shallow objects

OPERATION

Select the **MODE OF OPERATION**

The Challenger has two operating modes, ALL METAL and DISCRIMINATION.

ALL METAL

To enter the ALL METAL mode, click the right knob Disk/Notch (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.

TONE MODE AUDIO RESPONSES			
NO RESPONSE  Iron & Steel	LOW TONE  Gold & Nickel	BROKEN TONE  Old & New Pull Tabs	HIGH TONE  Copper, Silver & Brass

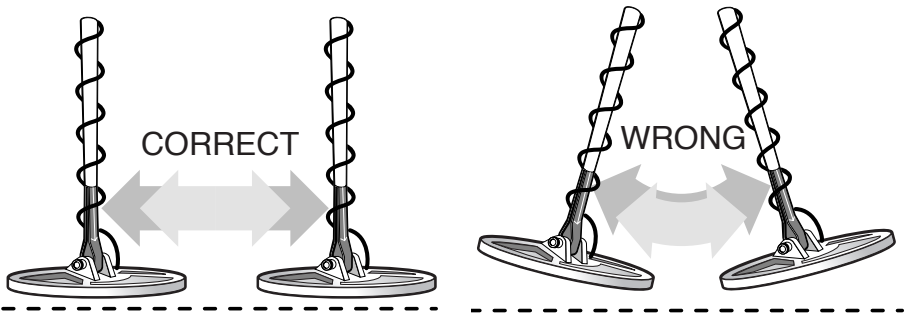
As the chart illustrates, iron and steel will be discriminated out, inducing no audio response. Nickels and gold items will induce a low tone. Silver, copper, and brass will induce a high tone. Many pull-tabs (but not all) will induce a "broken" tone. To achieve the broken tone, set the discriminate control at the approximate center position, about 12:00. Adjustment to 1:00 or 2:00 may be necessary to induce the broken tone for some irregularly-shaped objects

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.



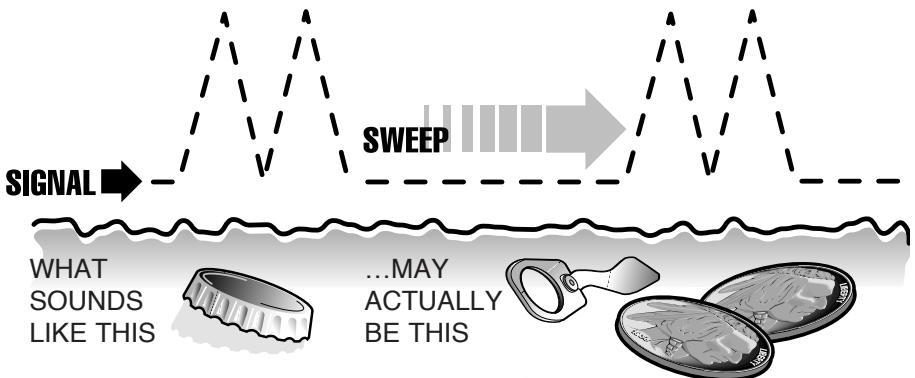
TONE RESPONSE

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 of the ground until a weaker, but more precise signal is heard. Alternately, reduce the sensitivity.

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

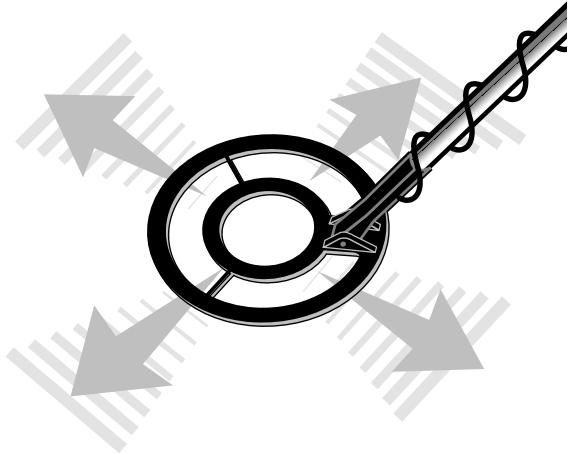


IN THE FIELD TECHNIQUES (continued)

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.



HEADPHONES

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. Connecting headphone temporarily disconnects the detector's internal speaker.

Your detector accepts a 1/4 inch headphone plug which connects to the headphone jack located on the front panel.

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

Do not wear headphones while operating your detector near high-traffic areas.

TROUBLESHOOTING GUIDE

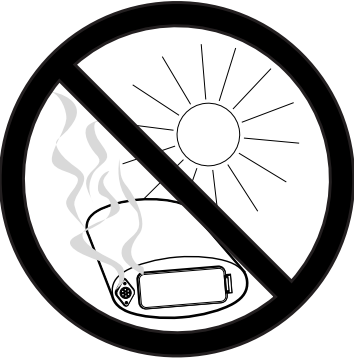
SYMPTOM	CAUSE	SOLUTION
<p>Detector chatters or beeps erratically</p>	<ul style="list-style-type: none"> • Using detector indoors • Using detector near power lines • Using 2 detectors in close proximity • Highly oxidized buried object 	<ul style="list-style-type: none"> • Use detector outdoors only • Move away from power lines • Keep 2 detectors at least 20' apart • Only dig up repeatable signals
<p>Constant low tone or constant repeating tones</p>	<ul style="list-style-type: none"> • Environmental electromagnetic interference • Discharged batteries • Wrong type of batteries 	<ul style="list-style-type: none"> • Reduce sensitivity until erratic signals cease • Replace batteries • Use only 9V alkaline batteries
<p>No power, no sounds</p>	<ul style="list-style-type: none"> • Dead batteries • Batteries connected improperly • Cord not connected securely • Not moving coil across target 	<ul style="list-style-type: none"> • Replace batteries • Check connections • Sweep search coil from side-to-side

CARE AND MAINTENANCE



Your Challenger 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 your 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:

- 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 leave no 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, LLC 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, LLC. 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.
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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www.detecting.com



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ACCESSORIES

Carry Bag

Rugged double-stitched construction - *CBAG-W*

Pouch & Digger Combo

Pouch with 2 large pockets & 9" heavy duty digging tool. *TP-KIT-W*

Bounty Hunter Stereo Headphones

Use with Bounty Hunter metal detectors. Lightweight and adjustable with true stereo sound, adjustable volume, 1/8 jack with 1/4 adaptor, 4' cable. *HEAD-W*

Pinpointer

Pinpoints the exact location of buried metal objects. Audio signal indicator and vibrator. Runs on (1) 9-Volt Battery. *PINPOINTER-W*

Sand Scoop

Large scoop with filtering holes. Made of strong plastic. *SAND SCOOPBH*

Replacement/Accessory Searchcoils

10" Magnum Coil – *10COIL*

7" Replacement Standard Coil – *7COIL-VLF*

4" Gold Nugget Coil – *4COIL*

Searchcoil Covers

Protect your coil from abrasion and damage.

10" Searchcoil Cover – *10COVER*

7X3/4" Searchcoil Cover – *7X3/4COVER*

4" Searchcoil Cover – *4COVER*

9" Heavy-Duty Digging Tool

Metal blade with comfortable plastic handle and depth gauge *TROWEL-2*

Digging Tool

Light and practical wide blade digging tool. *TROWEL-W*

Bounty Hunter Apron

Natural canvas with 2 large pockets. *APRN-BH*

Bounty Hunter T-Shirt

100% cotton with Bounty Hunter® Logo. Sizes – LG, XL & XXL

Bounty Hunter Baseball Cap

One size fits all, with Bounty Hunter® logo.

Gold Prospecting Kits

Items Included:

	Gold Kit PART NUMBER: GOLDKIT1	Deluxe Kit PART NUMBER: GOLDKIT2	Hardrock Kit PART NUMBER: GOLDKIT3
10 1/2" Gold Pan	x	x	x
14" Gold Pan	x	x	x
Classifier		x	x
2 – Shatterproof Vials	x	x	x
Snuffer Bottle	x	x	x
Black Sand Magnet		x	x
Treasure Scoop		x	x
Tweezers			x
Magnifier			x
Crevice Tool			x
Rock Pick			x
Instruction Booklet	x	x	x
Backpack		x	x

FOR COMPLETE DETAILS VISIT WWW.DETECTING.COM • 1-800-413-4131

