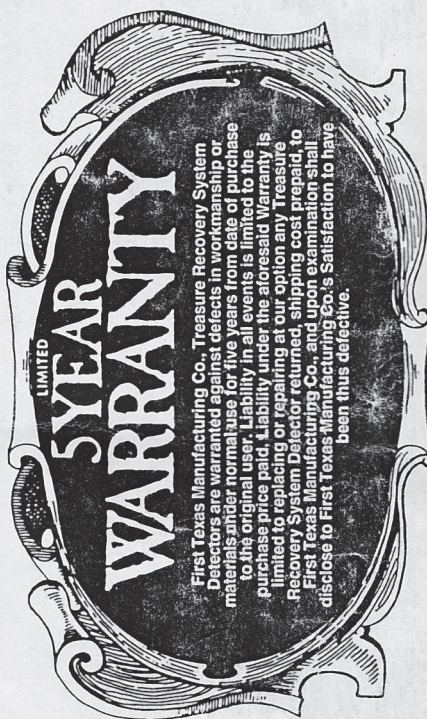


85



10 years old
LURE



First Texas Manufacturing Co., Treasure Recovery System 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 the aforesaid Warranty is limited to replacing or repairing at our option any Treasure Recovery System Detector returned, shipping cost prepaid, to First Texas Manufacturing Co., and upon examination shall disclose to First Texas Manufacturing Co.'s Satisfaction to have been thus defective.



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INTRODUCTION

Welcome to the fascinating world of metal detecting.

Your new Select 220 was designed for versatility in all areas of treasure hunting.

Coin-shooting, relic hunting, and gold bugging are some of the many ways your detector can be utilized.

Metal detecting is a fun, rewarding hobby that is in complete harmony with the environment.

Use your detector with consideration and respect for others' property. Always fill in your holes and use small trowels for digging. If you are digging in a lawn, plug the grass properly and there will be no damage to the grass.

Always gain permission upon entering private property.

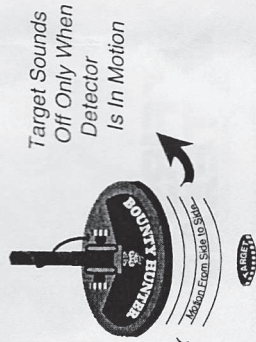
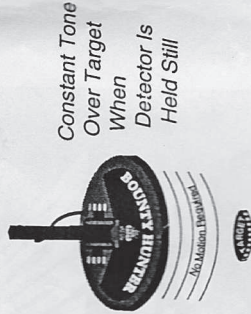
Detecting is a lifelong pursuit available to all ages. History is intriguing and is revealed every time you dig up a coin or relic of the past. Happy hunting!

Important:

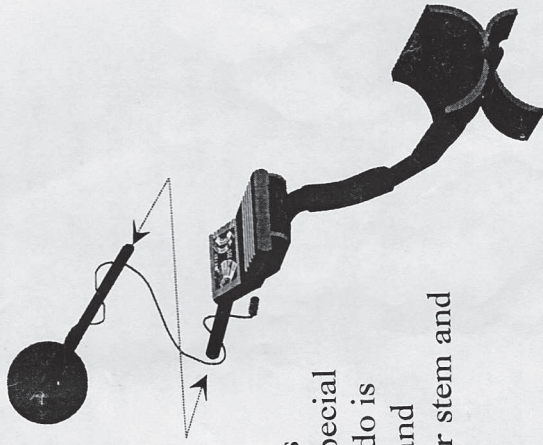
Your Select 220 has two distinct systems in one:

I ALL METAL Mode with Audio Threshold, manual Ground Balance control and Toggle Switch Tuner. In this setting, detected targets will cause the detector to sound off for as long as the target is under the searchcoil. The Ground Balance Control is used when the Toggle Switch is in ALL METAL setting only.

II DISCRIMINATE Mode with Three Tone Audio Target Identification, Sensitivity Control, Automatic Ground Balance and "Motion" Automatic Tuning. In this setting, iron is rejected and the Discriminate Control is used to reject various levels of trash items. Motion is now required to make a detection and items held still under the searchcoil will be tuned out.



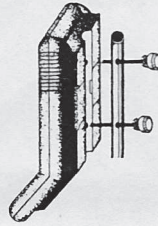
ASSEMBLY



Assembly of this unit is easy and requires no special tools. All you have to do is attach the search coil and lower stem to the upper stem and control housing.

I Depress the button on the upper end of the lower stem and slide it in the upper stem. Push the lower stem up so that the button snaps in the third hole from the end of the upper stem.

II Wind the search coil cable around the stem.

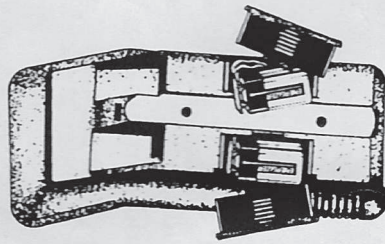


III Install the coil connector into the mating connector on the control housing.

This detector requires two 9 volt ALKALINE transistor-type batteries.

The batteries are accessed by pulling out on the battery doors located on the bottom of the control housing.

Whenever the batteries need replacing, the Low Battery indicator light will come on and stay on. It will always "flash" momentarily whenever the Power Switch is turned off. This lets you know it is working properly and the batteries are good.



An audible warning (loud tone that can not be tuned out) will also occur when battery life falls below the usable level. Turn the detector off and install new ALKALINE batteries.

BATTERY LIFE: The use of ALKALINE batteries is specified for this detector. The following tips will help you to get maximum battery life.

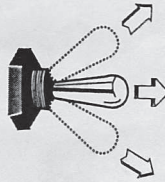
1. *Use headphones* — Using Headphones can be very beneficial. Battery life will be greatly extended. Background noise, such as street traffic, is minimized. Targets are easier to hear.
2. *Switch batteries around* — Upon installing a fresh set of 9 volt ALKALINE batteries keep track of your operating time. After approximately four or five hours use, switch the two batteries around. Audio draws one battery down slightly faster than the other; thus, switching them around helps insure equal drain.

Remember 95% of all detector malfunctions are either due to faulty batteries or poor connections at the battery clip. Always check your battery condition if you feel your detector is not working properly. After you have connected and unconnected your batteries several times, the prongs on the clip lead may spread apart, or the prongs on the battery itself may be spread. Gently squeeze these prongs together with your fingers to insure a good snug fit. Anytime you are going to store your detector make sure you remove the batteries and store them in your refrigerator to prolong battery life.

POWER SWITCH: This switch is used to turn the detector ON or OFF and to select search modes.

PINPOINTING AND MODE TOGGLE SWITCH

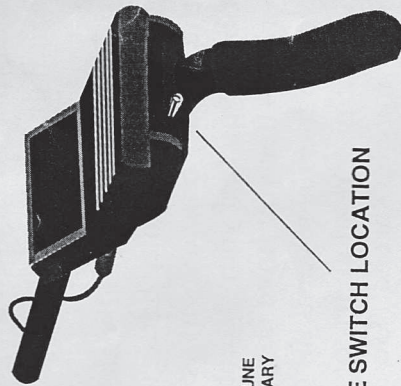
This is a three position switch with one 'momentary' and two 'lock' positions. The center 'lock' position is the ALL METALS pinpointing mode. From this center position the momentary position can be used for instant retuning or faster detuning of the ALL METALS auto pinpointing mode. The second 'lock' position (away from center) places the detector into its normal silent search motion mode.



DISCRIMINATION
STATIONARY

ALL METAL
STATIONARY

GROUND RETUNE
NON-STATIONARY



TOGGLE SWITCH LOCATION

SENSITIVITY: This control is used to reduce the detector's sensitivity to conditions that may cause the unit to respond in an erratic manner. Broadcasting antennas and power lines can cause false signals. Very large or multiple, closely spaced small trash targets can cause the detector to emit (indistinguishable or ghost) sounds. Generally these signals will sound chopped and will not be repeatable; you will soon learn to recognize them. Turning down the sensitivity control will help reduce the detector's erratic response if the above conditions should ever occur. There will also be some loss of target sensitivity, therefore always set the sensitivity control as high as you can while attempting to maintain smooth operation.

FOR ALL METAL TUNING—always push MODE switch to TUNE, then release to center position. **FOR DISCRIMINATE** place MODE switch in DISC position.

DISCRIMINATION AND NOTCH CONTROL:

This variable control allows selective response to targets that are in the foil-screw cap range. When the **MODE** switch is set to 'DISC', the control functions as a standard variable discriminator. As the control is increased from its full counterclockwise position—iron, foil, nickels, pull tabs, screw caps, pennies and dimes will be rejected in stated order.

It is often desirable to eliminate some pull tabs without rejecting nickels, since many types of gold rings are also rejected along with the nickel.

This can be done by setting the **POWER** switch to 'NOTCH'. The **DISC/NOTCH** control now functions as a variable notch rejection window. The notch can then be adjusted to reject, or 'notch out', selected types of pull tabs or other trash.

When using the notch feature, most iron and small foil will be automatically rejected by the discrimination circuits. To set the notch, use a pull tab of the type to be rejected. Adjust the **NOTCH** control to the point (around the area marked **PULL TAB** on the control) at which the tab is notched out, or rejected. Now check a nickel to be sure it is still accepted. Note that some pull tabs or tab pieces have nearly the same detection properties as nickels and some gold rings. These items can not be separated. In the **AUTO NOTCH** position most zinc pennies, pull tabs, screw caps, iron and light foil will automatically be rejected; thus, the detector will generally respond to **GOINS**.

VIEWMETER: The Target ID meter with Dual Readout will "lock" onto a target and hold. If the ID does not "lock", the Sensitivity control setting should be lowered slightly until a satisfactory ID "lock" is achieved.

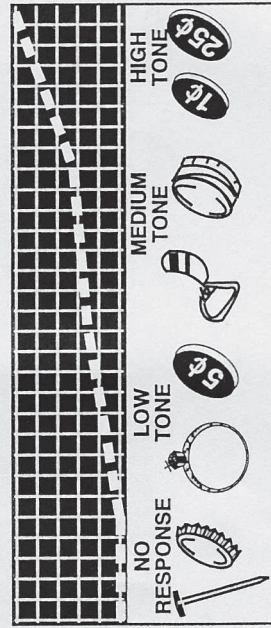


DEPTH INDICATOR:
 The Depth Indicator will give the approximate depth, in inches, for coin sized objects. The Depth Indicator does "lock" as does the Target ID.

The Target ID and Depth readings will not unlock from the previous Target until a new target is detected.



ATI-AUDIO TONE IDENTIFICATION: When operating in the DISC mode, all detected targets will cause an audio response. Through ATI these targets can be placed into three tone categories for identification of the detected item.



ALL METAL THRESHOLD
 When using in the ALL METAL Mode, and after pushing the MODE Switch to TUNE, you should hear a slight Threshold hum from the speaker or headphones. The Threshold level is pre-set for headphone use and might not be loud enough to be heard from the speaker alone by some persons. The Threshold hum is easily adjustable by moving the Ground Balance control slightly, one way or the other. The movement required is slight and will not affect the Ground setting. This should be done while setting the Ground Control for proper Ground balancing, as a slight threshold hum is necessary to determine if you are losing or gaining signal from ground conditions. By the same token, if you are getting too loud of a threshold hum—either through the speaker or headphones—it can be reduced with a slight movement of the Ground Control. For Maximum Sensitivity in the ALL METAL Mode, you must have a slight Threshold hum at all times.

There is no threshold hum in the Disc/Notch Mode and the Ground Control becomes automatic. This is also the "motion" Mode and the detector, (or target, when practicing) must be kept moving to make a detection.

BLANKER CONTROL

BLANKER CONTROL: The Blanker features automatic detection of deep coin targets, while at the same time ignoring all shallow surface targets and trash.

Most experienced Th'ers know that the majority of trash targets they encounter are shallow—generally less than three inches deep. They also know that most older coins, rings and other relics are often deeper than three inches.

Until now, the detector sensitivity could be reduced only to deep targets but not to shallow, often less desirable, targets. This is just the opposite of what most experienced Th'ers wanted.

The Blanker variable depth control activates an automatic circuit that reduces, and in most cases completely eliminates, detection of all shallow targets and trash. Yet, maximum sensitivity and discrimination of the deeper targets are still maintained.

To use blanking, simply set the variable Blanker control to the desired depth and have the detector in 'Preset' DISC Mode. When the Blanker is not in use, the control should be turned all the way left until it "clicks" off.

CAUTION: When using the 3 and 4 inch blanker settings, the SENSITIVITY control must be set at maximum, or as near maximum as conditions permit. If the blanker setting exceeds the sensitivity setting, nothing can be detected. No blanking will occur while in the All Metal Mode.

GROUND BALANCE

Begin with the Ground Balance knob adjusted towards the word "PRESET". Lower the searchcoil to about one foot above the ground. Push the Toggle Switch towards the Tune position and release. The Threshold Tone should be steady. Now drop the searchcoil to within 1/2 inch of the ground. If the Ground control setting is correct, the Threshold Tone should not change significantly. If it does change, either gaining or losing tone, adjustment to the setting is necessary. To adjust the Ground Control hold the unit with the searchcoil about 3 feet above the ground. Then adjust the Ground control knob slightly to a new position.

Now repeat the procedure outlined above until the correct setting is found. As you move about, while searching, the Threshold tone may vary up and down slightly due to soil changes. This usually does not affect the sensitivity of the unit and should not require any further adjustment. If the Threshold tone does change a significant amount, readjustment might be necessary. Before adjusting the Ground Control knob, try raising the searchcoil one foot from the ground and pushing the Toggle Switch again and then lowering the searchcoil back to the ground. Sometimes the change in Threshold Tone is due to reasons other than ground conditions and can easily be corrected in this manner. If not, then repeat the full procedure.

INCORRECT GROUND SETTING



If the Ground Balance Control is not correctly set, moving the loop up and down will cause a significant change in the threshold audio.

CORRECT GROUND SETTING



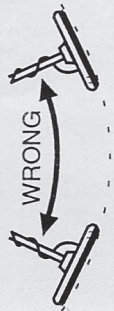
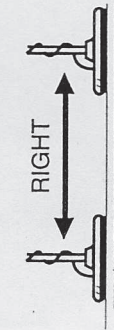
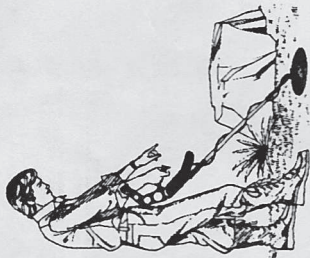
With the Ground Balance Control correctly set, there will be little or no change in the threshold audio as the loop is moved up or down near the ground. The detector is now ready to operate in the All Metals mode. In this mode any metal (ferrous or non-ferrous) will be detected.

Saltwater Balance: To balance the effects of saltwater use the same general procedures as used for ground balancing. The difference is that the GND/Salt control will balance salt around the counter-clockwise area of its range, near the word 'salt'.

NOTE: If there is difficulty in making the adjustment you may be over a hidden metal object. Move to another area and try again.

The detector should be held in a position that is comfortable for you. Sweep the detector from side to side in about a three foot arc. The unit does not need to be hurried, so go at a pace that doesn't wear you out.

Sweep in a slightly overlapping pattern as shown. The search signal will peak as a target center is passed. Try to keep the search coil parallel to the ground at all times and avoid lifting the coil off the ground at the end of each swing. Since you are putting more distance between the coil and the target on a careless swing, this will prevent loss of detection of some deeper targets. In flat areas, sweep the coil as close to the ground as possible without touching. Hitting the ground or rocks may cause a false signal similar to the sound of a desired target. Sweeping the coil too high above the ground results in a loss of depth.



IN THE FIELD (cont.)

When operating the detector, some false signals may occur at the end of your swing. At this point, where the coil reverses direction, the detector is most susceptible to trash-induced noise. There are ways to tell whether these noises are deep good signals or trash. One way is by repeatability. Trash-induced signals will not be repeatable as you swing the coil over the suspected target several times; a good target response will be repeatable. You may also want to use the Blanker to ignore the surface targets. Another method is to switch to **ALL METALS THRESHOLD Mode** and check the target response. If the response is weak, it may well be a deep good target, but if it is very strong, it is probably trash.

If the trash in an area is so heavy that you are getting a lot of choppy sounding false signals, you can get better results by slowing down your sweep speed and using shorter sweeps. It is also helpful to hunt areas twice, the second time at right angles to the first time. This will allow detection of some targets that were hidden by trash the first time due to the sweep direction.

If there is any doubt whether a target is good or not, **DIG IT.**

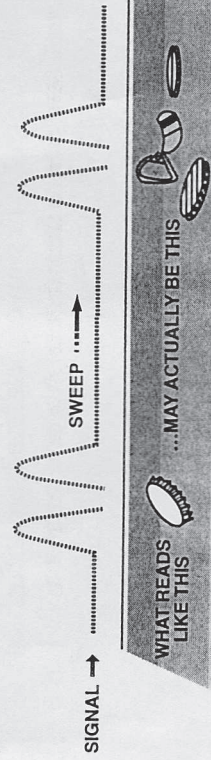
If you don't dig any junk at all, you are surely passing up good finds too.

DETECTION TIPS

NOTE: The search coil must be moving to detect a target using the DISC system. However, the detector operates very efficiently, even when swung at very slow speeds.

The DISC Mode is not affected by the ground mineralization, and when used at the beach, it will go from wet sand to dry and back without changing tune. The DISC Mode is recommended for areas of heavy surface trash. This Mode can reject small surface area targets such as wire, nails, tacks and rivets that to other detectors may look like coins. Larger junk targets are easily identifiable because of their erratic signal or widespread signal areas.

Often you will receive a signal from a target that is too difficult to read to really determine what it is. What may seem to be a bad target because of the signal pattern, may be a combination of targets.



If you do determine that there is more than one target present, try sweeping the coil over it at a more favorable angle in the **DISCRIMINATION** or **NOTCH MODE** to receive an improved reliable reading.

Accuracy: Although your detector is very accurate on finding coins and other valuable metals, it is not perfect. An example of this would be a pull tab that detects like a large gold ring.

Halo Effects: Gold and silver coins don't oxidize much so they have very little halo effect. However, nickels and pennies do oxidize quite a bit and this oxidation surrounds the coin and not only makes the coin appear more conductive, it also makes the coin appear larger than normal.

Some nails, nuts and bolts and other iron objects (such as old bottle caps) oxidize very much and the halo effect around these iron objects makes them hard to reject. Try sweeping the loop different directions over the target. A good target will have a fairly stable reading; whereas, a bad target will usually not.

Freshly buried coins may not respond exactly the same as coins buried for a long time.

PROPER CARE FOR YOUR DETECTOR... Metal detectors are sensitive electronic instruments. Although it does not have to be babied, reasonable care must be taken to help insure a long trouble-free life for your detector.

nents to break down.

KEEP IT SAFE... Never transport your detector in such a manner that will subject it to extreme vibration or shock. The unit may be cushioned by wrapping it in a blanket or by putting it in a carrying bag or case designed for that purpose.

COIL... The coil is waterproof and may be submerged in either fresh or saltwater. Caution should be exercised to prevent water from entering the chassis. After the coil is used in saltwater, the coil should be rinsed with fresh water to prevent corrosion of the metal parts.

KEEP IT CLEAN... Take a few minutes after each use to remove dirt and dust. Wipe the housing and wash the coil—especially if it has been dipped in saltwater. A plastic bag over the control box at the beach will help protect the unit from sand and prevent corrosion due to salt air.

KEEP IT COOL... Never store your detector in an extremely hot environment, such as an automobile trunk in the summer, for extended periods of time. The prolonged heat will not only shorten battery life considerably but can cause electronic compo-

IMPORTANT

DO NOT RETURN UNIT TO THE DEALER.

If your unit is operating, but not as intended, or if you have any questions, you may want to call the factory and ask for assistance. Customer Service (915) 855-4206.

If your detector requires service, please return it to the address below. Please include an explanation of the problem.



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