

Detector Field Test

Tesoro Lobo Supertraq

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Some years ago I decided that I needed a metal detector that could deal with the ironstone rich soils that I had encountered on some of my Roman sites. When the accumulation of occupation mineralisation is added to the underlying ferrous nature of the soil these sites can be very difficult to search. Cutback is often very severe and I do well to find metalwork at any appreciable depth. It seemed logical to me that a metal detector that was designed to find gold in black sand might fit the bill. The detector that caught my eye was the original Tesoro Eldorado. Over the years it proved itself on my difficult Roman sites. Depth could be improved by tweaking the threshold sound in the all metal mode, then searching in motion discriminate. The usual constant blipping was ironed out by adjusting the sensitivity.

The Eldorado excelled on one memorable occasion when the Midland Archaeological Research Society was searching an Iron Age hill fort (since scheduled). This site was littered with Iron Age, Roman and Saxon pottery but was contaminated by severe mineralisation. One "iffy" signal from the Eldorado turned up a nice Roman headstud brooch and, as an experiment, we placed it under about 3in of soil; another top-of-the-range detector couldn't find it! The Eldorado, however, gave a good positive signal which convinced me of the wisdom of my choice of detector.

It was as a result of these experiences that I became interested in the Tesoro Lobo Supertraq. It was developed for gold nugget prospecting and the manufacturers claim it can find gold nuggets smaller than a BB pellet, under good conditions. However, the Supertraq is a dual purpose machine and is excellent as a general purpose coinshooting and relic detector. That would do for me!

Description

The front panel of the Supertraq has three rotary control knobs, two switches, and a quarter inch jackplug socket. At the top left is the On/Off Threshold knob. To the far right is the Sensitivity knob and bottom right the Discrimination levels. The two switches are at the top of the panel. The switch to the left adjusts the detector to deal with Alkaline, Normal or Black Sand. The final switch is used for Pinpointing and switching between All Metal and Motion Discriminate.

Threshold-Ground Adjust. The fact that the On/Off switch is also used to adjust the threshold is a good design feature as it ensures that you go through the ground adjust procedure each time you begin your search. Ever seen some detectorists who switch on and go, without ground balancing first? They will never know what they are missing!

When using a detector with either

manual or semi-automatic ground adjust, I frequently re-adjust the setting as I search. Because I always use a line this is simply done at the end of each search lane, especially if the mineralisation is patchy.

Ground Selection. Before ground adjusting you must first select for the type of ground you are searching, using the top left switch. Normal Soil will cater for most sites and Alkali will deal more effectively with highly mineralised sites. I didn't feel the need to use the Black Sand mode on any of my inland sites.

The ground adjust procedure on the Supertraq is semi-automatic. First set the threshold so that the sound is only just audible in the all metal mode. Raise the search coil about a foot off the ground, in a place devoid of metal, then drop the coil to within 2in of the ground. You can do this fairly rapidly and when there is no change in the threshold sound the detector is ground balanced.

Sensitivity. This goes from Minimum to 10 and then into an orange Maxboost range. Set this so that the ground noise and blipping is acceptable. Any variation in the spurious signals calls for a sensitivity adjustment. If the detector goes very quiet try increasing the sensitivity for greater depth, and vice versa if it starts getting too noisy.

Discrimination. This knob adjusts the discrimination from Minimum through nine numbers to Maximum. I



always check discrimination using different types of ferrous nails and I found that, with the discrimination set at "3", I was just at the edge of small ferrous discrimination, with the odd nail coming through. This is the way I prefer to search, and the odd nail in my bag is a small price to pay for maximum depth and less ferrous masking. I have found that I'm recovering really deep ferrous objects such as horse shoes, ox shoes and other large pieces of ferrous but I firmly believe that many deep-seeking detectors are a bit "nail happy" when discrimination is set fairly low. Please don't make the mistake of increasing discrimination, just because you are finding a few nails or deep ferrous, or you may lose those deep desirable finds.

When I purchased the Lobo Supertraq from Mike Longfield I specified the Tesoro 9in x 8in web coil, (after Emailing Tesoro for advice on the most suitable coil configuration for my UK sites.) This coil has been a great success on other Tesoro models and I certainly don't regret choosing it.

Pinpoint-All Metal Discrimination. After initial set up of the ground adjust I usually switch to motion discriminate as my normal search mode. I haven't felt the need to use the all metal pinpoint mode because the web coil pinpoints very well. Searching in the all metal mode will give maximum depth, and is a good way to go on quiet grass fields or stubble, where you can't get the coil close to the ground, but it's a bit of an acquired taste on most sites. I will say one thing for the all metal mode on the Supertraq: it is the smoothest and sharpest all metal mode I've ever used. The audio doesn't tail off so much at either side of the target and I often use it to chase up those signals that are "lost" in the spoil after digging. I find there are several reasons for those "lost" signals. One reason is that the spoil has been placed over another ferrous target, and this masks the good target. You must check in all metal when the ferrous becomes obvious and you can move the spoil. (It works every time). Low conductive, small or thin objects are sometimes "lost", especially if their positional attitude to the coil when in the ground is altered when in the spoil. Some targets are on the edge of your discrimination setting and can give an audio signal in the ground, when surrounded by a dense and damp matrix, but are discriminated out when in the loose spoil. In any event you must always chase up these "lost" signals using the all metal mode. This, of



course, applies to most metal detectors and not just the Supertraq.

The one thing that sets the Supertraq apart from many other detectors is its operating frequency. At 17.5 kHz this frequency is especially favourable when searching for very small objects. I can honestly say that I have never found so many tiny items with any other detector. One day I found four Roman minims, and that really is a first for me. I expect to find the odd minim, but four in a three hour search is exceptional.

Because the Supertraq uses a VCO (Voltage Controlled Oscillator) the audio pitch rises as you centre the coil over the target. I was familiar with the VCO, in all metal, on other detectors but here it was in motion discriminate and I loved it! The VCO audio is not as pronounced on the deeper targets and many ordinary two way signals should also be extracted. Again, those types of target scream at you when in the spoil, as the VCO again becomes active. The Lobo Supertraq weighs in at three and a half pounds and 8ft of coil cable allows it to be hip-mounted if required.

It runs on eight AA batteries which are housed in two pods at the rear of the control box. This is a wired system and I would expect Tesoro to fit a drop in system when the time comes for an update.



In The Field

My first trip out with the Supertraq was to a Roman site that was sown with winter wheat. Most of my landowners allow me to search after the fields are drilled, mainly because I am very careful how I search, and do my utmost to replace plants carefully and not make a mess. I don't take the same route from the car into the field as this soon becomes a well beaten track and is an obvious scar on the crop. Where possible I always walk down the tramlines or "wheelings" to reach the search area. After setting the threshold and pumping the coil a few times I was ready to search. The detector balanced very quickly in the Normal ground mode and with discrimination on "3" and sensitivity at "10" I started along the first line. My first coin came within about 12m of the start, with the VCO screaming at me, which surprised me so early in the search. What a great start!

Over the next three hours I had found part of a Roman disc brooch, a piece of modern watch chain, two pieces of copper-alloy strip (one pierced), seven pieces of lead, a nice Roman fibula, 10 Roman bronze coins, and three ferrous nails.

I went to the same site the next day and found four pieces of coke ("iffy" signals with the Lobo but I still dug them), a tarpaulin ring, a musket ball, 10 pieces of lead, part of a modern alloy toy, a fragment of copper-alloy bracelet, a nail cleaner, and six Roman coins.

Two days later Ian joined me with his brand new Laser Hawkeye and we settled for another Roman site nearby, which we had nearly finished for the season. Again it was in wheat and the finds were gradually petering out as we approached the farm buildings. The coke was a lot more prevalent on this site, especially on the headland, and I found 17 pieces! I also found two ring-pulls (we were near to modern habitation), a musket ball, nine pieces of lead, two aluminium nails, and a



Roman fibula.



Part of a penannular brooch and a fibula brooch.



Roman fibula.



Roman fibula.

Lead weight.



Roman steelyard.



Three globe-headed pins, two fibula pins, and a disc brooch.



Wrap-around Roman finger ring.



Nail cleaner (?).

Selection of some of the items found while testing the Tesoro Lobo Supertraq.

hammered silver penny of Edward I.

Back on the previous site I found a modern button, a copper-alloy pointer, 15 pieces of lead, part of a Roman bracelet and seven Roman coins. I was only on the site for about an hour due to heavy rain. Although the rain stopped as I drove away I was loath to start searching again because of the "claggy" soil. By now I was really getting used to the Lobo and, although I was digging the occasional nail, my non-ferrous finds rate was excellent.

A final trip to the site near to the farm buildings resulted in more modern junk, including aluminium foil, pieces of curtain track, four more pieces of coke and a 1p coin; it was therefore back again to the more productive site. This time I was with John who found some tweezers, a lead weight, and two Roman coins with his XLT. I found part of another Roman bracelet, a copper-alloy finger ring, and three Roman coins. These finds were at the end of a 50m pass across the site, which again put us into a less productive area.

A few days later I returned to this same site. The soil dampness was borderline after overnight rain but I carried

on because it wasn't picking up too much. This time I managed to find eight pieces of lead, a bronze blob (probably from metalworking), a cut steel button, part of a penannular brooch and seven Roman coins. I was pleased at the amount of tiny pieces of lead and other metalwork I was finding. The Supertraq was certainly doing the job for which it was designed.

Another short trip, curtailed by rain, produced four pieces of lead and three Roman coins. I blame the rain on a magpie I saw on the way to the site! Subsequent trips to this site produced a nice crotal bell marked with a "T", two musket balls, four buttons, two more Roman fibulae, a copper-alloy pin from a fibula, two more broken bracelets, a Richmond farthing, two hammered silver coins, a pot mender, two buckles, a Charles II copper farthing, a Roman steelyard, 43 pieces of lead, and 30 Roman coins (including the four minims mentioned earlier). Because the wheat was bridging over I decided to go to another Roman site, which was sparsely sown in the area of a Roman complex. On the first day I found one piece of lead, six shotgun cartridge cases, and three Roman brooches (La

Tène type, headstud and penannular), plus four Roman coins.

The next few visits to this site unearthed two shotgun primers, another fibula pin, a button, a biconical lead weight, another complete fibula, 19 pieces of lead, and 23 Roman coins.

In conclusion, I can hardly believe the amount of small items I'm recovering. These include tiny pieces of lead, shotgun primers, minims and two fibulae pins which, being linear, are seldom found. You will notice that I have only used the Lobo Supertraq on mineralised Roman sites. This, after all, was the reason I bought it. The way I have set it up means I find some ferrous objects but I can live with that. Very small objects are the norm with this detector, even if you have to chase them "all over the field" when they suddenly null out, calling for the all metal mode. With the Supertraq, Tesoro have produced a metal detector that excels on mineralised sites, is easy to set up and use, and will find those elusive tiny coins and artefacts many detectors miss.

Finally, I wish to state that I have no connection with Tesoro or any other metal detector dealer or manufacturer. **TH**