How to Easily Develop Your Latent Skills to Find Treasure in Abundance

FREE REPORT ON LONG-RANGE LOCATORS

David Villanueva
LONG-RANGE LOCATORS

In the last ten years or so a number of devices known as Long-Range Locators (LRLs) have come onto the market. The manufacturers claim that Long-Range Locators will find gold and silver, find it deep, find it fast and find it from a mile or more away. Some, such as Electroscope and Lectrasearch, look like a fancy dowsing rod with an ‘electronic’ control box. They do not come cheap, being typically priced about equivalent to top of the range conventional metal detectors. With a conventional metal detector you can almost invariably locate the source of any signal, with a LRL you may or may not locate the source of any signal. This factor, coupled with claims of irrelevant circuit wiring and negligible battery power drain, has lead to much controversy and claims that these devices are a scam!

First let me say that if you study The Successful Treasure Hunter’s Essential Dowsing Manual and put some of the ideas into practice – YOU WILL NOT NEED A LONG-RANGE LOCATOR – you will easily out-perform LRLs. However, from my own experience with an Electroscope Model 20, they do work and I believe the majority are basically dowsing devices which genuinely attempt to take the burden of discrimination away from the dowsers. Yes, the circuit wiring may appear to be irrelevant but if no one knows how dowsing works, who can say what is irrelevant? Yes, battery drain may be negligible but I can remember receiving radio broadcasts on a crystal set with no battery whatsoever and when I switch my LRL on it works in a much more controlled manner than if I try and use it switched off.

Let me say again that dowsers have no real need for Long-Range Locators, (I very rarely use mine) however, if you already have one or are just plain interested, here is a free report on how you can use a Long-Range Locator (particularly the Electroscope M20) to find treasure:

A key factor in dowsing is discrimination; the ability to define the precise whereabouts of specific objects or substances. Traditionally the dowsers has decided what he or she is seeking; whether it be underground water or metal objects; gold or iron; ancient or modern and the rods have responded according. While it has always been possible to make small modifications to dowsing tools to improve discrimination, it is only recently that serious attempts have been made to produce an electronically discriminating L-rod - the Long-Range Locator.

The manufacturers’ claim that Long-Range Locators or LRLs for short, will find gold and silver, find it deep, find it fast and find it from a mile or more away. However, I would advise you to check that you have done as much as you can with dowsing before you reach for your chequebook; after all LRLs don’t come cheap and if you can achieve as much with simple L-rods, you do not actually need one.

If you really feel that you can’t discriminate and a Long-Range Locator is just the thing for you, there are a number to choose from. Most work on the L-rod principle but there are other types since the term ‘Long-Range Locator’ covers any device that will pinpoint metal from a distance (usually measured in yards or miles) as opposed to a metal detector which only works in close proximity (a few inches).

The LRL I am about to discuss is the Electroscope Model 20
which is available in the UK from Spin-A-Disc Promotions (with whom I have no connection) and will cost the price of a top of the range metal detector. There is a much more expensive Model 301, however I find the M20 quite adequate even without the plethora of add-ons – the Phaser, the Kinetic Magnum Shield, the Interfaces and the Receptor Terminal.

The Electropositive Frequency Induction Locator, to give it its full name, bears very little resemblance to a conventional detector, in either construction or use. It is designed to be used, held at chest height, for indicating the presence of buried metal from a distance. Final target pin-pointing usually has to be carried out with a metal detector.

The M 20 consists of a black plastic, more or less rectangular box housing the electronics, with a set of three extendable antennae attached to the front. The control box sits on top of a hand grip, fitted with a gimbal which allows the unit to swivel in the horizontal plane, through an angle of 300° from stop to stop. This swivelling is the machines only means of identifying the presence of a metal target; there is no sound, light or meter indication.

How the machine actually works electronically is a closely guarded secret. The control box is hermetically sealed so that the electronics cannot be accessed without damage to the unit, which has lead some to believe that there is nothing relevant in the control box. However, if this were the case then the machine would either not work at all or would work in an identical manner regardless of how the controls are set-up or whether the power switch is on or off. It is clear that reducing sensitivity improves discrimination in favour of gold and silver and the control box contains a sensitivity reduction device, probably a type of circuit breaker, which reduces sensitivity beyond what can be achieved mechanically by adjusting the antennae and without necessarily reducing range. When I tested my Electroscope against L-rods I found that when using the ‘Scope while switched off, it still worked but behaved very sensitively like a pair of L-rods while when switched on, the reaction was much more controlled as is using a single L-rod.

The machine comes with a manual and instructional video which more than adequately cover the handling techniques – balancing and sweeping. Before the machine is switched on balancing has to be learned. Balancing simply means holding the ‘Scope steady at chest height, with the antennae parallel to the ground, or slightly inclined, and at a 90° angle to your body. This is achieved by holding your upper arm into and down your side, your elbow at 90° to your upper arm and your wrist locked back. It is a good idea to practice handling the ‘Scope indoors at first, as wind can cause problems. Once competent, ‘force fives’ should present no problem. When you have the hang of balancing whilst standing still you can learn to walk around whilst maintaining the balance. The second handling trick is 'sweeping'. To sweep you stand still, feet apart and keeping the ‘Scope balanced, you twist slowly at the waist alternately left to right then right to left. The object of this ritual is that you are looking for a “twitch” at the tip of the central antenna as it momentarily sticks while sweeping past the target. This so-called “hit” is one way the ‘Scope identifies the presence of metal; the other is simply by pointing.
To start finding buried metal the ‘Scope must first be switched on and set up for searching:

**Model 20 controls are:**

<table>
<thead>
<tr>
<th>Control</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right hand slide switch</td>
<td>Power on, all metal mode on.</td>
</tr>
<tr>
<td>Left hand slide switch</td>
<td>Ferrous discrimination on.</td>
</tr>
<tr>
<td>Central rocker switch</td>
<td>Either non ferrous/high sensitivity mode or gold and silver/low sensitivity mode.</td>
</tr>
<tr>
<td>Rotary control [ 0-10 ]</td>
<td>Tuning and discrimination</td>
</tr>
<tr>
<td>Push button</td>
<td>Illuminates L.E.D. for battery check. The battery is housed on the under-side.</td>
</tr>
<tr>
<td>Antennae</td>
<td>All extend to increase sensitivity and range (distance).</td>
</tr>
</tbody>
</table>

Settings depend very much on where you use the ‘Scope. The manual recommends extending all antennae fully which presumably works fine in wilderness areas. If you want to explore typical British farmland, however, I would not advise using the settings described in the manual as the sheer quantity of targets within range confuse the machine to the point of making it inoperable.

These are the settings that I use in Britain and I am sure that they will work anywhere where considerable quantities of buried metal artefacts are the norm:

- **Both slide switches on; depress push button momentarily to check battery.**
- **Rocker switch to gold and silver mode.**
- **Rotary control to 7.5 (prior to tuning).**
- **Both side antennae completely withdrawn.**
- **Central antenna extended 4"- 5" ONLY.**

The reduced antennae length restricts the range to about 30 metres but, believe me, unless you intend searching remote areas, that is plenty.

Every time you use the ‘Scope in the field, it should be tuned into a metal sample before you start searching. Tuning is defined as adjusting the machine, so that it responds centrally to a target. The ‘Scope does not locate metal nearly as well 'in air' as it does in the ground. In fact it is said that a small metal object has to be buried for two to four weeks, before it is even possible to locate it. Consequently a large sample has to be used for tuning. You need to find an area relatively clear of buried metal, which you check by 'sweeping' the area with the ‘Scope two or three times.

Once you have found an area clear of metal, you can put down your own sample about three metres away. I use three small gold rings or ten shillings worth of British pre-1947 silver coins. Sweep the sample with the ‘Scope until you see the ‘twitch', then stop sweeping and bring your forearm in line with the sample. If the ‘Scope comes to rest with the central antenna in direct line with your forearm and the sample, then the ‘Scope is tuned; if it doesn't, then the rotary control has to be adjusted, a little at a time and the sample rechecked as before, until the antenna 'locks on' in direct line with the sample and your forearm. The whole point of this ritual is to set the ‘Scope up to accurately pin-point the metal that you are looking for. Most of the time I tune to silver as it is more likely to be found than gold, and, although discrimination is simultaneously adjusted, it seems to make little difference to the ‘Scope's willingness to react to other metals.

It is very easy finding targets you can see but a very different ball game finding targets that are buried. There are two methods suggested in the manual. One called 'boxing-in', relies on the fact that when the ‘Scope passes over or close by a...
target, the ‘Scope swings around to point at, or to try to point at, the target. You sweep to locate a target, then follow the direction that the antenna indicates until the ‘Scope swings to the right or left as you reach the target. Continue walking forward until the ‘Scope hits its stop, turn 90° in the direction the ‘Scope has swung i.e. left or right. Re-balance the ‘Scope and walk forward until the ‘Scope swings round to its stop. Place a marker, turn 90° in the same direction as before, re-balance and so on, until four markers have been placed, each representing the corner of a box. The target should be in the centre of the box.

Using the second method called 'intersecting', you sweep the area in front of you until the antenna points in a particular direction, then mark the direction with a straight piece of wood; move several metres to one side and repeat the process. If a line is run out, in the marked direction, from each point; the target lies where both lines cross.

An easier way is to make up two four foot (1200mm) timber laths of approx. one inch (25mm) square section, drill a ¼” (6mm) hole in the end of each lath, thread with string and secure. Take your laths out to your site and from your starting point, sweep with the ‘Scope for a hit, then follow the ‘Scope's antenna towards the target, dragging one lath behind you by the string, with your free hand. When the ‘Scope swings around, drop the lath and return to your starting point, where you should have left your other lath. Pick up the lath and move about ten metres to the left or right, sweep again for a hit and follow the antenna towards the target dragging the lath. Most of the time you will arrive at the point you dropped your first lath, the ‘Scope will swing and you drop your second lath on top of the first. The target should lie where the laths cross. Sometimes the ‘Scope will react to a different target, before you reach the one you scored a hit on, which is easily overcome by making a further "run" with the lath that fell short.
Both the above methods are good for searching open land but if you want to search orchards, woodland or any other relatively confined spaces, you need another method. The ‘Scope can be used very effectively by simply treating it more or less as a single L-rod. Unfortunately you can’t really use a metal detector in one hand with the ‘Scope in the other since it becomes difficult to maintain the ‘Scope in balance and prevent it from being attracted to your metal detector. The method of using cane markers previously described with the single L-rod does, however work extremely well almost anywhere, whether open land or not.

You will need a couple of dozen 18 inch garden canes which you can either carry in one hand or in a quiver etc.. Set-up and tune the ‘Scope and just hold the ‘Scope out in front of you while walking slowly back and forth across the search area in parallel lines. The width between your lines should be between two and six metres (or yards) depending on the spacing between rows of trees or other obstructions and what, if any targets you are prepared to sacrifice (see graph). As you approach an unknown target, the ‘Scope will begin to swing around, keep walking forward whilst the ‘Scope continues its arc until the stop is hit. At this point place a cane in the ground and, as you won't be recovering the target immediately, lean the cane in the same direction as the ‘Scope's swing to identify which side the target lies (i.e. if the ‘Scope swung left, lean the cane to the left; if the ‘Scope swung right, lean the cane to the right). Take a couple of paces forward, to clear any target you may have walked over, turn 180°, re-balance the ‘Scope and retrace your steps until the ‘Scope swings round to its opposite stop. Place a second cane, leaning in the same direction as the first to complete the marking of the target. With one target marked, turn, re-balance the ‘Scope and continue searching, marking all targets, as described, until all the canes are used up or some convenient point is reached. You can then put the ‘Scope away, for the time being, while giving your metal detector an airing.
You now need to search for and recover the targets. Many targets will be small or deep or both, so it is important to search slowly and carefully with your detector setup to obtain maximum depth. Perhaps fit a large searchcoil, if you have one, use the maximum sensitivity you can use on the site and minimum discrimination or better still, all metal. While it is possible to predict the location of the target mathematically, from the angle (30°) the ‘Scope would have made at the canes (dotted line in fig.) this is largely irrelevant since the ‘Scope in common with other dowsing implements, is not a precise pin-pointer. To stand a good chance of finding the target; at each pair of canes, search all the area between the two canes out to half the width between the canes, in the direction the canes are leaning plus a yard strip all round. For example, if you
have two canes, leaning right, four metres apart, you need to search a rectangle six
metres long by four metres wide, the line between the two canes, with a yard added
each end, forming the left hand long side of the rectangle. (See diagram) In practice,
you will generally have a line of trees or similar obstruction each side of you when
using this method so it is fairly simple to assume the obstruction to be the limit of the
width of search area. Dig all signals.

I know this all sounds rather complicated and illogical, however the search
pattern is necessary to overcome the vagaries of using the ‘Scope and avoid missing
targets. This list is not exhaustive but covers the main factors influencing the ‘Scope’s
(and single L-rod’s) pin-pointing:

1. The ‘Scope only pin-points accurately if the target is of the same metal and
signal intensity as the sample used for tuning.
2. The ‘Scope will turn if it passes directly over a metal object (the ‘Scope will
turn even before it reaches a large metal object), thus targets can be found
around either or both of the marker canes.
3. A gust of wind or loss of balance could cause the ‘Scope to turn sooner or
later than it should do.
4. There may be multiple targets in and around the search area:
   a) A less attractive target on the opposite side of the ‘Scope to the target can
      hold the ‘Scope off the target until the less attractive target has been
      passed.
   b) The ‘Scope may point in-between multiple targets.
   c) The ‘Scope may have indicated a different target at each marker.
5. The target may not have been found.
   a) The target is too small and/or too deep to be picked up by the metal
detector and/or searchcoil being used.
   b) The target may be discriminated out by the metal detector.
   c) Remanence – someone or something got there first. The term
remanence, used to describe the effect of the target appearing to be there
after it has previously been moved or removed, takes two forms: short-
term remanence lasting a couple of weeks and long-term remanence
which lasts indefinitely. The scientific explanations are that short-term
remanence is the magnetic effect of a buried target not disappearing
immediately on recovery and long-term remanence is the result of minute
particles of the target migrating into the surrounding earth during the
period of burial, which are not recovered with the target. The larger the
target and the longer it is buried the more likely it is to produce long-term
remanence after recovery.

About 30% of marked areas fail to produce a target. Since much time can be
wasted chasing elusive targets, I tend to take the view that if I can't locate the target with
this method, then I wouldn't have found it using a metal detector alone, and I just carry
on searching for other targets that I can find. If recovery of the target is paramount, most
of the pin-pointing problems have fairly obvious solutions. One solution that may be
less obvious is to search the site again after a fortnight or so has elapsed, mark out the
target areas as before, then 'sweep' each area with the ‘Scope, using the 'intersecting'
method for final pin-pointing. Detect and dig around the intersect.

With all the talk about finding gold and silver, it came as some surprise to me, to
discover that the ‘Scope, when set in gold and silver mode used as I have described,
actually responds to all metals, especially since when using the 'sweeping' method, I
could not obtain a response from iron or aluminium. However, the ‘Scope does
discriminate by size or weight and distance. To illustrate I have graphed the weight of the smallest find, for every metal found, versus shortest line distance from the ‘Scope as it indicated the target. Whilst the graph is only approximate, it is useful for determining how far apart to set parallel lines of search, to avoid losing desirable artefacts. For instance, three metres between searches, would give a range of 1.5 metres either side of the ‘Scope, which would ensure optimum location of precious metals larger than a hammered farthing, copper or lead based artefacts of five grammes weight upwards and smaller targets that were closer to the ‘Scope than 1.5 metres.

![Target Weight versus Distance](image)

I have also analysed some of my Electroscope aided finds in the table below:

<table>
<thead>
<tr>
<th>Artefact</th>
<th>Metal</th>
<th>Weight in Grams</th>
<th>Depth in Inches (&quot;) / Centimetres</th>
<th>Distance in Feet (') / Centimetres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henry III. Penny</td>
<td>Silver</td>
<td>1.2</td>
<td>6&quot; / 15cm</td>
<td>7' / 213cm</td>
</tr>
<tr>
<td>Henry III. Cut ¼d</td>
<td>Silver</td>
<td>0.34</td>
<td>2&quot; / 5cm</td>
<td>4' / 122cm</td>
</tr>
<tr>
<td>Edward I. Penny</td>
<td>Silver</td>
<td>1.3</td>
<td>4&quot; / 10cm</td>
<td>5' / 152cm</td>
</tr>
<tr>
<td>Edward IV. Penny</td>
<td>Silver</td>
<td>0.64</td>
<td>6&quot; / 15cm</td>
<td>10' / 305cm</td>
</tr>
<tr>
<td>Henry VIII. 2d.</td>
<td>Silver</td>
<td>1.2</td>
<td>8&quot; / 20cm</td>
<td>4' / 122cm</td>
</tr>
<tr>
<td>Vespasian As</td>
<td>Bronze</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roman Unidentified</td>
<td>Bronze</td>
<td>15</td>
<td>8&quot; / 20cm</td>
<td>1' / 30cm</td>
</tr>
<tr>
<td>Rumbler Bell</td>
<td>Bronze</td>
<td>83</td>
<td>1&quot; / 2.5cm</td>
<td>5' / 152cm</td>
</tr>
<tr>
<td>Crotal Bell</td>
<td>Bronze</td>
<td>74</td>
<td>8&quot; / 20cm</td>
<td>3' / 91cm</td>
</tr>
<tr>
<td>Crotal Bell</td>
<td>Pewter</td>
<td>29</td>
<td>12&quot; / 30.5cm</td>
<td>3' / 91cm</td>
</tr>
<tr>
<td>Pot Leg</td>
<td>Bronze</td>
<td>68</td>
<td>15&quot; / 38cm</td>
<td>5' / 152cm</td>
</tr>
<tr>
<td>George V. Penny</td>
<td>Bronze</td>
<td>9</td>
<td>8&quot; / 20cm</td>
<td>10' / 305cm</td>
</tr>
</tbody>
</table>

As I used a metal detector for recovery, the depths listed in the table are largely irrelevant other than to show that the ‘Scope will locate objects at least as deep as metal detectors. Many finds have come up from close to the detector’s depth limit which suggests that the ‘Scope will go deeper and I did once locate a two-inch...
diameter iron water pipe three feet below ground, although all antennae were fully extended at the time.

I tried to compare the ‘Scope with a conventional L-rod but other than the advantage of being able to ‘sweep’ with the ‘Scope, there was no difference in that both instruments gave the same reaction in the same place, perhaps not surprising as the operator was the same. However, compared to searching with a metal detector only, the advantages of using a Long-Range Locator (or L-rods, for that matter) are considerable. In the tests I intentionally gave the ‘Scope a hard time by mainly searching land over which I had previously searched with a metal detector. Despite the handicap, the ‘Scope managed to produce a greater number of finds, a higher proportion of which were silver, than my metal detector produced over the same searching time when the site was virgin. In fact the ‘Scope delivered nearly as many hammered silver coins in a few months as conventional searching produced in three years. From land that I know I 'thoroughly' searched previously with the metal detector, the ‘Scope located the smallest hammered silver coin I had ever found - twice! On the other hand, metal detector searches over areas that the ‘Scope declared barren, produced nothing but junk. Ground coverage, on average, was at least three times greater than a questionably thorough conventional search, whilst producing better quality finds as a result of the ‘Scopes sensitivity to precious metal and from slightly greater depths owing to improved detector efficiency and operator concentration. The ‘Scope is no more difficult to use than a conventional detector, in fact its light weight (20 OZ) and operating position makes searching less tedious on many sites, you just need to learn different techniques.

THE ELECTROSCOPE MODEL 301

I have a report from the Turin Archaeological Group (Italy) who were, and may still be, passionate users of Model 301s to the point of buying five new units every year at around £1500 each.

“We use this type of apparatus especially in desolate areas to complement normal metal detectors which we use for pinpointing. The apparatus gives maximum range in desolate areas without interference from power lines, radio frequency, buildings, etc..

Range Testing in the Field:

<table>
<thead>
<tr>
<th></th>
<th>Desolate Areas</th>
<th>Normal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>1.5 miles</td>
<td>¼ mile</td>
</tr>
<tr>
<td>Object</td>
<td>Bronze Patera</td>
<td>Bronze Lance</td>
</tr>
<tr>
<td>Dimension</td>
<td>38 cm diameter</td>
<td>30cm x 7cm</td>
</tr>
<tr>
<td>Depth</td>
<td>3 feet</td>
<td>1 feet</td>
</tr>
</tbody>
</table>

In the normal area it was necessary to use an Electro 1 Eliminator to eliminate electrical interference from a power line, one mile from the field. In normal areas the range is approximately one quarter of the maximum range of two miles claimed by the manufacturer, Thomas Afilani. The maximum depth of prospecting was seven feet on an Etruscan tomb in Tuscany.”

At the end of the day it comes down to personal choice and probably won’t matter much whether you make your own dowsing tools or buy a fancy Long-Range Locator to learn to use either and you will see a significant improvement in your treasure hunting success.