Cover for the control box available soon

Nokta Velox One

Spec sheet	
Operating Principle:	Induction Balance
Frequency:	17.5 kHz
Standard Search Coil:	28cm 11" waterproof DD
Weight:	4.4lbs/2k
Battery Type:	8 x AA batteries
Warranty:	2 year
Price:	£649

This month's field test is on Nokta's Velox One. This Turkish company has already impressed me with their Golden Sense detector, tested for the March 2013 ***Searcher***, so I was eager to see how this new machine performed.

This new model is also an induction balance detector, working at a high frequency of 17.5kHz. This should make it very sensitive to metals in the low conductivity range, like the thin section coins we have in our hammered coinage.

Out of the box

The detector is broken down into five pieces and assembly was simple and straightforward. First connect the handgrip/upper stem section to the control box, and adjust the distance between the arm cup and handgrip (to suit the length of your forearm), then tighten the plastic nut and bolt to lock the slider.

Figure 1

Fit the middle and lower stems, locking them into position. Slot the coil to the bottom stem and secure using the supplied plastic nuts and bolts. Wrap the coil up around the stem, taking up any slack cable before pushing the cable plug into the control box front end-cap, and secure the connection by twisting the knurled locking collar.

Figure 2

Finally connect the coiled-lead of the external battery pack to the front end-cap, and secure the connection. Assembly is achieved in less than three minutes.

Everything about this detector screams quality.

Figure 3

Battery pack

The detector is powered by a lithium polymer battery pack that lasts several days between charging. The LED battery level meter is a nice touch. Just press the button for an instant battery status, indicated by three red lights.

This pack is designed to clip to your belt and connects to the machine by a coiled lead. Personally I don't like being tethered to a detector, so during this field test, the battery pack was clipped to the armrest to allow me more freedom. I understand that there's an accessory battery pouch that you fit to the control box to carry the battery. This would be very useful, as the battery pack is very light, and I don't see any advantage of increased bondage!

Since receiving this machine to test, Nokta have upgraded the Velox with an AA battery pack and holder, which is positioned in the same place.

Controls

On the front end cap of the control box is a five position rotary switch. This controls On/Off and selects three higher ground mineralisation settings. In the 'on' position the detector runs in a mode where the ground conditions are normal (benign to moderate). The mineral 1, 2 and 3 positions are modes to deal with increased ground mineralisation. The control steps are progressive, so 'Mineral 1' is for medium ground mineralisation, 'Mineral 2' for high and 'Mineral 3' for the worse mineralisation you'll ever likely encounter.

On the rear end cap you have a volume control next to the 3.5mm (1/8″) headphone socket.

Figure 4

This leaves the main control panel, which is on the side of the control box.

Figure 5

Here there are three rotary control knobs that operate SENSITIVITY, IRON DISC and GROUND BALANCE. Below these knobs are two switches, which control the audio output of detected targets. IRON 'ON' lets you listen to iron targets as low tones, and switching to the 'OFF' position nulls their audio responses (silencing iron targets).

Note: In the 'OFF' position you have two tones, where lower conducting metals like thin silver, gold and lead give a medium tone. While high conductors like copper have high tones. In the IRON 'ON' position you hear iron as a third low tone.

The SIGNAL AUDIO switch has three positions, which operate a boost feature. Position 1 is Boost Off, and positions 2 and 3 increases the gain on small/deep targets, boosting their audio responses.

Coils

My test unit was supplied with two coils, an 11″ coil and a smaller 9″ accessory coil. Both are configured as Double D coils and are fully waterproof. The standard coil is the best choice where depth is important. Iron contaminated sites will better suit the 9″ coil, finding non-ferrous targets between the nails. There are other accessory coils available for the Velox, suited to varied ground and iron-trash conditions.

Figure 6

Test bed

Turning the rotary switch on the front end-cap to 'ON', started the machine with a medley of sound. There was then a short delay before a beep indicated it was ready for use. I set the controls to keep the detector as stable as possible while keeping it edgy and settled for good balanced settings at: Sensitivity 6, Ground Balance 12 o'clock, Iron Disc FS (factory preset), Iron Off and Signal Audio 1 (boost off).

As I started swinging the coil over the test bed, I received strong smooth repeatable responses from all targets to a depth of 12″. Small hammered coins also gave clear audio responses, and even my buried hoard gave a broken repeatable signal.

I was really impressed with these results, although I did notice some short chirpy falsing, which was clearly different to the good non-ferrous responses. This was a bit annoying and I assumed was because my Ground Balance hadn't been correctly achieved.

The Ground Balance procedure is slightly odd, as you are tuning the detector to the ground rather than balancing to a changing background tone. You swing the coil and adjust the Ground Balance switch to find the quietest operation (where there's the least falsing).

The instructions warn you not to turn the Ground Balance control too far clockwise, as this reduces depth. I found this control very hit and miss. I tended to keep it at the 12 o'clock position and then adjust the mineral 1, 2, 3 switch accordingly.

During the test bed assessment I could hear three distinct tones and wanted to better understand where the breaking point was within the conductivity range. I set up a simple air test to see which items would give medium-tones, and which would produce the higher ones. I was also interested to see if I could find targets that would give mixed responses, finds on the break-point of the medium and high tones.

The results:

Targets giving medium tones included; 5p, 10p, 20p, 50p, hammered coins (including fractions) and small Roman bronzes.

Targets giving high tones included; 1p, 2p, £1, Roman silver denarius and sestertius.

The only targets I could find on the 'breaking point' were large Musket balls.

Field test

The first site I decided to visit was a freshly ploughed Roman site. I set up the detector using the same setting I used on my test bed. I spent about five minutes adjusting the Ground Balance, before

switching to each of the three mineral settings, before finally settling on 'Mineral 1' and the Ground Balance control to 12 o'clock. After about ten minutes, I changed the coil to the smaller 9″ option, to better deal with all the iron that litters this site. I then eliminated the iron low tones by switching the IRON switch to 'off'. This eliminated a lot of the noise from what can only be described and iron contaminated ground.

Now the iron was silenced I could still hear some short choppy noise from the abundant hot rocks. I was just about to throw in the towel, when I received a sweet smooth repeatable tone through all this falsing. Digging down a good spade depth, the target was out of the hole. Searching the spoil I was soon holding a slightly dished green coin, which I instantly recognised as a Celtic bronze. This was just the inspiration I needed and I continued my search listening for those smooth tones which stood out in amongst the choppy background noise.

Targets soon started to flow, digging 22 more coins in just over two hours. I even managed to dig two more Celtic bronzes, making this a very successful days detecting.

The Velox One did well on my Roman site, but the next field I chose was a field with an adjacent stream, which had previously produced late hammered coins. I re-fitted the larger standard coil and set it up to achieve greater depths, increasing the Sensitivity to 8.

The first target I dug was an iron-cored 2p piece, which gave a good repeatable response. I decided to see if I could discriminate this target by moving the Discrimination from the Factory Position (FS) to maximum, and was surprised when it failed to alter the mixed low/medium tone of this target. With this still in mind, I dug my second junk target, which turned out to be a large piece of coke. So again I increased the Discrimination and thankfully this time the coke was discriminated at a setting of 6. Switching the Iron switch to 'ON' gave this coke target a low grunt iron tone (changing it from a medium to a iron low tone).

Figure 7

Figure 8

So although I had initially had reservations over the efficiency of the discrimination, I realise it's ideal for UK detecting. This was evident in my finds rate on this field, where I found two hammered coins.

Some of the Roman coins found

False noises were still present, but by now I had accepted them as a background noise, easy to ignore.

The last site I visited for this field test was a site I'd detected back in the late 80s. This site had originally been regularly ploughed before being set to pasture in 1989. Targets were plentiful in the early days, but recently it was like detecting in a sea of iron and virtually impossible to find anything other than ferrous targets.

I set up the detector for depth; switching the Iron switch to On, Iron Disc to FS, Sensitivity to 8 and then Ground Balanced the machine successfully.

The machine ran very quietly over pasture, rarely falsing on anything.

It was nice to hear all the low tones from iron and in areas of high concentrations the constant low tones were the prompt I needed to slow down my sweep speed. **This is an advantage missing from many detectors that silent search over iron.**

Targets weren't spectacular from this pasture, but I was happy finding a pouch full of non-ferrous items missed on previous searches … and again more than I expected.

Conclusion

The Velox One isn't as radical in design as the Golden Sense I previously tested; its stem has the traditional aluminum tubes rather than an all-plastic construction. This makes it a lot less whippy when you swing the coil.

The audio is very intuitive; a lot can be determined about the target before digging, like the size and depth. Although noisier than the detectors I usually use, I soon adapted and loved the way the positive signals stood out from the rest.

There are a few things I don't like. Putting the controls on the side of the control box is annoying. I regularly knock the switches. This will probably not be an issue if you are left handed, but as a right-hander I found this infuriating. However, in response to this issue Nokta have designed a cover for the control box; it will solve the problem of accidental control adjustment and provide protection from the elements.

The Velox One strikes a perfect balance of depth penetration, while retaining Sensitivity to small items like hammered coins. It's well balanced and the overall ergonomics allowed me to detect many hours without noticeable fatigue. This detector worked well for me, finding **50 Roman coins** plus a lot of other finds over the test period, more than I expected and is a surprisingly good machine, one I would happily use as my main detector!

TEST RESULTS

Nokta Velox One (Scores out of ten based on price category)	
Ergonomics (weight/balance)	8
Simplicity/User Friendliness	8
Build quality	10
Weather resistance	8
Discrimination Performance	8.5
Overall detection Performance	9
Value for money (£649 TBC)	9
SEARCHER RATING	

Competition: Your chance to win this machine!

Our thanks go to **Nokta** for allowing us to give this machine away worth **£649.00**. For your chance to win just answer the following question: **How many Roman coins did Search Ed' find with the Velox One?** Fill in the coupon below (no photocopies allowed unless you are a current subscriber and your number is required) with your answer and send it to us at the **Velox One Competition**, ***The Searcher***, 17 Down Road, Merrow, Guildford, Surrey, GU1 2PX. Closing date for all entries by **6th December** together with your name, address and contact number. Good luck!

Please enter me in the draw for the **Velox One** competition:

How many Roman coins did Search Ed' find with the Velox One?

.....

Name .....

Address.....

.....Postcode.....

Tel number.....

Subscriber no. (if required) .....

WIN!

App or digital subscribers ONLY simply either do a 'screen grab' of the page, print it out and post the coupon OR attach the screen grab to an email and send it to info@thesearcher.co.uk.

Competition Rules:

This competition is open to all readers except employees of ***The Searcher*** (which includes all regular contributors and their families) and our printers and distributors: Warners Group PLC. Only one entry is permitted per person. Entries will be accepted by POST only addressed to: **Velox One Competition, *The Searcher*, 17 Down Road, Merrow, Guildford, Surrey. GU1 2PX.** Digtal/app subscribers ONLY by email or post. To be valid, entries need to be received on or before **6th December** The draw will take place soon after and the winners will be notified by telephone (if possible).

There is no cash or other alternative to the prizes stated and the prizes is not transferable and no part or parts of the prize may be substituted for other benefits, items or additions. The judges decision is final and binding. No correspondence will be entered into. No responsibility can be accepted for entries lost, delayed or damaged in the post.