

Detector Field Test

Viking VK40

David Drummond

Towards the end of 2004 I was fortunate enough to be given the opportunity to test the newest detector in the Viking range, the VK40.

The VK40 is the latest of the computerised models with LCD screen, and the addition this time of membrane key pads on the control panel and a 9.5in polo search coil.

The VK40 currently rounds off the VK range, which includes the successful VK20 and VK30 models that also feature LCD screens and incorporate a new control box design.

First Impressions

On opening the box containing the VK40, I was immediately drawn to the actual size of the detector. It is quite a long machine and only breaks down into two parts as the 9.5in polo search coil is hardwired into the control box.

As a result the detector would probably be more suited to a larger holdall for transporting about as opposed to a conventional rucksack or smaller bag.

Once out of the box the detector is straightforward to assemble. Just push the lower stem into the upper one (the detector is made up in a two piece "S" configuration), and then turn the lower stem so that it wraps the coil cable around the stems. Remember, however, to leave some slack and not tighten the cable too hard.

Once this is done, you can then adjust to the desired length via the spring lock clip on the lower stem and the positioned holes on the upper stem. When the correct height is achieved tighten both stems together via the locking collar at the end of the upper stem.

Having assembled the detector, all that remains to do is to install the single PP3 battery into the battery pod drawer located just under the speaker on the control box.

The new type of control box is a new design from the previous VK20 and VK30 models. It is a complete unit as opposed to being in two parts, and has a futuristic look to it. It is made of plastic and the control panel is in two tones of green above, and below the LCD screen, with three of the keypads in red while the rest of the control box is of a black colour.

Just above the control box is the rubber handle and above that the combined arm cup and detector stand. The arm cup incorporates a Velcro strap to

help keep your arm in place.

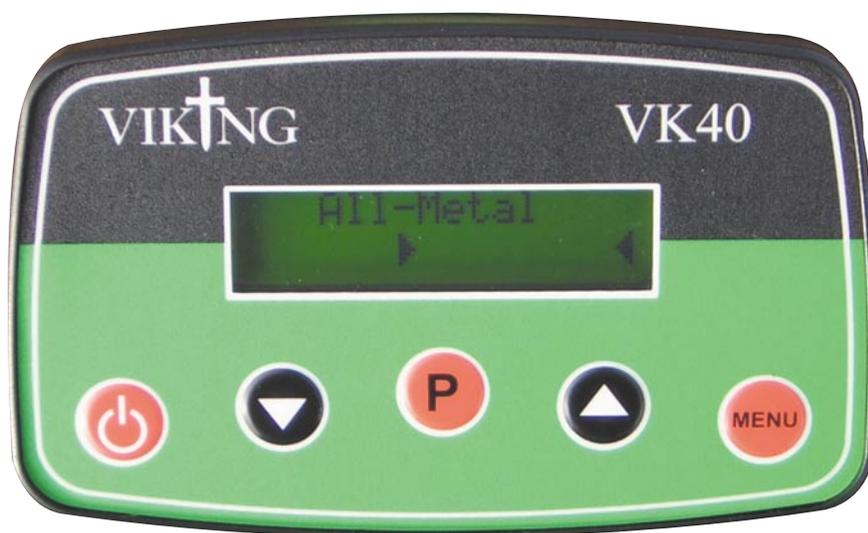
Unlike many computerised metal detectors the VK40 is very simple to operate and doesn't come with a large handbook; the manual from front page to back page is just 12 pages long and very easy to follow.

The VK40 model features a threaded wheel nut balance device at the end of the lower stem where the search coil is attached. This is to ensure that the detectors 9.5in polo coil stays rigid and in place, and the wheel nut can be adjusted to angle the search coil to any desired position.

Keypad Functions & LCD Screen

The VK40 offers three different detection search modes: Motion Mode, All-Metal Mode, and Non-Motion Mode. It also offers two types of ground modes one being Inland, and the other being Beach.

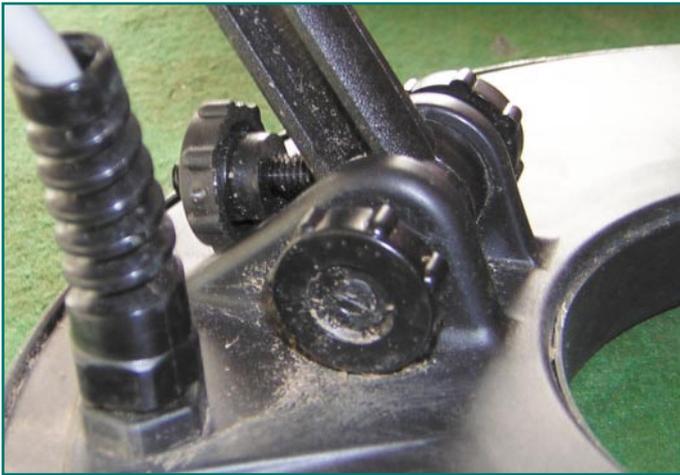
Other functions include the ability to adjust settings for Discrimination and Sensitivity. If desired there is also a



function whereby you can override the automatic Auto Power-Off switch. This, like many modern day cameras, has the ability to turn the detector off if neglected from use after approximately five minutes.

All the functions and modes are easily activated using the membrane keypads as described below.

Working from left to right, the first key pad is marked as a circle with half a line going through it. This is the Power



Wheel nut balance device.



Battery housing.

On/Off Key. Pressing this once will turn the detector on, and pressing it again will turn it off.

Next you have a Downward Arrow; this key will switch from the current detection setting to the Motion Mode.

When the detector is in the Menu mode, the downward arrow key can be used to decrease the Sensitivity or Discrimination setting.

The middle keypad is a "P", which can be used in either the Motion or All-Metal modes to accurately pinpoint a target by keeping the finger pressed on it while you pass the search coil over a likely target.

And when the detector is in the Non-Motion detection mode keeping the finger pressed on this keypad will retune the audio threshold to its preset level.

Next to the "P" key pad is one marked as an upwards arrow. By pressing this key while in the Motion mode it will switch to the All-Metal mode or vice versa depending on the mode you are in.

When the detector is in the Menu mode (just like the downward arrow function) the upwards arrow can be used to increase the setting in Discrimination or Sensitivity.

Finally, there is the keypad marked Menu. This key switches the detector into the Menu mode, allowing the Sensitivity, Discrimination and Ground settings to be adjusted.

Motion Mode is a silent search mode and there will only be an audible signal given when the search coil passes over a metallic object and the search coil is in motion. However, it is useful to remember that, depending on your discrimination setting, if a signal sounds off one way only or it breaks up then it could be rubbish.

On the other hand, if you get a clear signal either way when you swing the coil and a high number is noted on the

LCD screen - with a large amount of blocks showing - then the target would be worth digging.

All Metal Mode is a facility that provides a continuous faint audio threshold tone. This helps to find the smallest of signals possible to be picked up. In this mode the audio output will be continuous, but slowly retunes to the threshold level preventing the detector from drifting out of tune; but again it requires the search coil to be moving in a similar fashion to that of the Motion mode.

In this mode discrimination is automatically seen via the LCD Screen (in the same way as the Motion mode setting).

The All-Metal mode does not work when you switch the ground setting from Inland to Beach.

Non-Motion Mode is similar to the All-Metal mode for it also provides a faint audio threshold tone through both speaker and headphones. However, in this mode the detector does not automatically retune. It enables the search coil to be held stationary over a target to allow accurate pinpointing.

Depending on ground conditions

Mike Drummond with VK40.



and temperature, the threshold tone may experience a change in its level; if this does happen it can be retuned by pressing the "P" keypad for a few seconds.

Discrimination on the VK40, as with the VK20 and VK30 models, is determined by looking at the readings on the LCD Screen via numbers and blocks that appear on the target ID bar.

For instance, if you were to receive a signal and saw on the screen a low number such as 10 or 15 - appearing with only one or two blocks - then it would suggest you have found rubbish such as a small piece of iron or a small rusty nail. But if you received a much higher number - say from 65 to 70 and five or six blocks appearing - it would suggest a piece of metal of higher conductivity has been found and that it would be worth digging up.

The discrimination numbers range from 0, which will pick up all metals, right through to 90 that will pick up only larger objects of higher conductivity.

When using the detector for the first time it is a good idea to keep the discrimination set to 0 so that you can get acquainted with numbers and blocks; after this you will probably have found a desired setting that you are happy with.

Sensitivity can be set to the optimal level for the site you are searching. For example if you are working a site that is not contaminated with bad mineralisation such as coke, and does not have electric fences or pylons nearby, you will probably get away with a higher setting such as 90. Alternatively, if you do have problems with false signals or conflicting numbers appearing on the screen you may have to reduce the sensitivity level.

With in-the-field practice you will soon gain experience of both the discrimination and sensitivity settings.



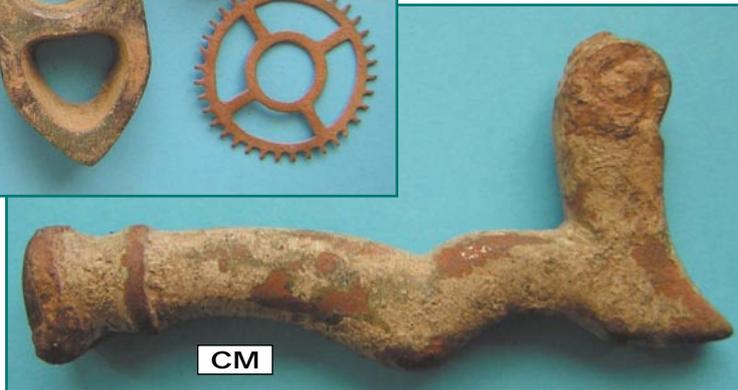
Musket balls, lead seal, buckles etc.

CM



Token, weight and thistle medalion.

CM



Unidentified copper alloy find.

CM



Large brass weight.

CM

Field Appraisal

I took the VK40 to a number of stubble fields and found that it performed really well over most of the sites I visited. I set the discrimination to 30 and, depending on the length of the stubble, the sensitivity on 60 to 80 (leaving it in the All-Metal mode).

Initially, I began to wonder if the detector was working properly for nearly every signal I was getting came up on the ID bar as 10-15. But in the end this just proved the accuracy of the discrimination. The fields I search have a lot of iron and non-ferrous rubbish in them and, just to be doubly sure, I dug a number of these signals to see what they were. As expected, they turned out to be small fragments of iron or nails.

Eventually, finds started to pick up and the better readings on the LCD screen started to come through: first a musket ball, then a small bronze weight, and then a button. All came in at 65 to 70, with six to seven blocks appearing.

I was not only impressed at the accurate readings, but also with the actual depths. The small weight came up from around the 5in mark and the musket ball was equally as deep.

I then found a large buckle fragment, a Victorian farthing, and a Scottish medallion showing thistles and a date of 1832. This came up from a depth of around 8in. Then came up a very nice and unusual brass weight giving a reading of 90 on the ID Bar.

It is a 4oz weight with markings that still can be seen, and also came up from a very good depth.

On another site we visited the VK40 did very well for the conditions and managed to find nine coins. Some had been lost by potato pickers of immediate post war years, but amongst them were two worn George III halfpennies and a very thin token with 3d on it; depths achieved were again excellent.

While searching over another field the VK40 picked a large amount of non-ferrous junk fragments. These were mainly old furniture fittings and the like, but I have included a photograph of one particular piece that seems to differ from the rest. I wonder if any readers know what it once could have been a part of? Its seems ornately made, is copper alloy and if I was to take a guess, I would say it might have been one half of a combination pipe tamper/nutcracker.

Conclusions

Viking have come up with yet another great detector. Introducing the membrane key pad is a right move as it does away with rotary controls completely. I have not yet finished with my findings and will include the performance of the VK40 on beaches in a future issue (when the present foul weather allows me to search some!).

I preferred to use the All-Metal mode with its background threshold on most of my sites, and therefore have

not really used the Motion and the Non-Motion modes much as yet.

My only real criticism of the VK40 is that I would have preferred the search coil to be a plug-in type as opposed to it being hardwired. This would have allowed the detector to be broken down more easily for transportation.

The detector is very easy to operate and offers good discrimination and great depth. It is well balanced and light enough to use all day; it therefore should appeal to all newcomers to the hobby as well as the more experienced.

Specifications

- Model:** Viking VK40
- Type:** Microprocessor Controlled, All-Metal, Motion and Non-Motion, LCD Target Display, Variable Discrimination, Sensitivity and Pinpoint via Membrane Key Pad.
- Manufacturer:** Viking Metal Detectors, 1 Angela Street, Mill Hill, Blackburn, BB2 4DJ. Tel: 01254 55887. Fax: 01254 676901.
- Email:** viking@metaldetectors.co.uk
- Web Site:** www.metaldetectors.co.uk
- Batteries:** 1 x PP3
- Battery Life:** 10 to 15 hours using an alkaline
- Search Coil:** 9.5in concentric coil
- Weight:** 1.4kg
- Accessories:** coil cover, headphones, detector holdall, control box cover.
- Price:** £299.00 (inc VAT)
- Guarantee:** Two Years

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