

# Field Test Report

## Detech EDS

**D**etech Ltd is a metal detecting company that has been involved in detector design and assembly for many years. They are based in Bulgaria. They are probably most famous in the UK for the introduction of the SEF Pro design of search coils, used to punch into the soil for more depth and ground coverage.

Detech also make detecting equipment such as a range of Pulse Induction models that are aimed at the more advanced detecting enthusiasts.

The Detech EDS is the first VLF detector in their range, intended to provide extreme depth and sensitivity but aimed at the everyday detectorist.

Although seriously equipped in terms of electronics, the EDS is lightweight and well balanced. It runs from only four AA batteries, which can be either of the rechargeable type or alkalines.

The detector has an onboard micro-processor controlling the important functions, and a good discrimination ability that can be finely adjusted.

This is coupled with its ability to work

in All Metal, where and when required. The whole of the control set up is very easy, making this a user-friendly model.

The EDS offers the user both Automatic and Manual ground adjusting and has 14 kHz operating frequency. This ensures the detector has universal abilities in finding coins, relics, and gold nuggets; and it is also adaptable to beach hunting.

### Assembly

The Detech EDS comes fully kitted out in its own zip-up carrying case that, when unzipped, reveals the detector disassembled.

Included with the detector are the two SEF Pro search coils – the standard 9 x 9 inch and the larger 12 x 12 inch. There are two zip-up pouches within the case: one that can be used to carry small accessories while the other contains the wall plug battery charger.

Under the search coils was a small bag containing the operator's manual, and a laminated waterproof sheet with the easy Automatic setting instructions.

To assemble the Detech EDS take the

disassembled detector pieces from the carrying case including the SEF search coil you are going to use.

Fit the batteries in the battery compartment on the Control Box. This is done by unclipping the hatch door. There are printed guidelines on the inside to show how to align the batteries properly but ensure they are placed over the provided ribbon. This is there to help pull the batteries out when they need changing. Alkalines can be used as well as the provided rechargeables.

Attach the coil to the lower stem and secure it with the bolt and wing nut provided. Fit the middle stem to the lower using only the posi-lock buttons at this stage. Attach the upper stem and control box, adjust to the required height and tighten the locking collars. Finally, wrap the coil lead around the stem and plug it into the control box.

Fig.2. Fitted with larger (12 inch) coil.



Fig.1. The Detech EDS with carrying case and coils.



## Controls & Functions

The control panel has a series of finger-accessible rotary switches and toggle switches (four of each) with an LED light positioned in the middle of them.

The LED light is there as a battery check. When the batteries are in good condition it will display a brief green colour when the detector is first switched on; however, the LED will show a red colour when batteries are exhausted.

The first rotary switch at the bottom left hand corner is On/Off Sens; at the top corner left hand side is the GND adjust; at the top right hand side the Threshold control switch; and at the bottom right hand side Disc control.

The toggle switches between the rotary ones are: top left marked High and Low (sensitivity setters that can come into their own if the detector is correctly balanced for specific grounds) with the Low position in red preset being used in the Auto mode.

Next to this is, on the right side, is a switch marked Freq.1 and Freq.2 (a frequency shift control). This can be used to eliminate some outside interference. At the bottom left is a switch marked M ground and A ground (Manual or Auto Ground Adjust). This also has a red preset. The final toggle switch on the bottom right is marked All Metal and Disc.

As well as the toggle switches that have red sectors on them, two of the rotary switches also have red sectors as well. These red sectors all represent factory preset markers, which are used to set the detector up when searching in the Auto ground rejecting mode.

When searching in the above set

up, the detector will be in silent search operation and will only sound off when a target is found.

During my testing of the Detech EDS I used it mainly in the Auto setting, which I found to be easy but quite effective as well.

The ground I searched presented a number of problems (variable mineralisation etc), but not to the extent that full manual ground adjustment was required.

## Field Appraisal

I conducted a number of bench tests at home before I ventured out with the Detech EDS. This was to get an idea of the signal sounds, and to see what depths could be achieved – even in the Auto setting. I was impressed with the findings, as they showed that the tests pieces I was using could be picked up at some depth.

The signals from various objects were also intriguing as well. I have used some detectors that, in certain conditions, would give “iffy” sounds even on hammered pennies. However, the EDS gave a good two-way signal on hammered coins.

With this in mind I took the EDS to a

newly cut stubble field where quite a few hammered coins had come to light in the past. These had now started to peter out, although I was sure some still remained to be found. This seemed to be an ideal location to try the deep-seeking abilities of the EDS using both the SEF Pro coils. I also used the Auto settings recommended for users new to the detector.

I turned the detector on and set the sensitivity to the red preset. The toggle switch was set to A ground, the next switch left in Disc, with the Disc rotary control set to Coins red sector. The threshold and GND were left alone. The upper toggle switches were left on low and Freq.1.

That was all that was required and the detector ran smoothly. The only sound came from pieces of iron being rejected, that from time to time would give a slight spit and crackle.

The first signal was a faint sounding two-way bleep, indicating it was a small object at some depth. I dug down about 6 inches and removed a clod of earth that I placed on the side. The signal was now much louder and came from the removed soil. At this point I was joined by a friend

Fig.3. Control panel layout.



Fig.4. The two coils supplied as standard.

who watched me extract the target, a small grey disc that later proved to be a hammered silver penny.

This came as a complete surprise as I normally have to put in a lot of detecting hours to make a find like this, while I had only been searching for about 10 minutes.

I went on to find some tiny pieces of lead, a couple of shotgun cartridge caps, and a musket ball.

After an early cup of tea I decided to swap search coils to see how the larger 12 inch coil would cope with the stubble and ground conditions.

I went back to where I had found the hammered penny earlier, and moving down a little from the find spot the received another faint target response very similar to the hammered one. At roughly the same sort of depth – and once again within a clod of earth – the EDS had recovered its second hammered of the day. Both these coins are of Edward I and minted in London.

The only other finds in the afternoon consisted of a couple of trouser buttons and a worn Georgian halfpenny.

The second site on which I used the EDS was a pea field that had recently

been harvested and quite near an old local parish church. One side of the field proved to be quiet, but the other half was quite busy. Once again I started by using the smaller standard coil.

The EDS gave out signal after signal,

and I found quite a lot of old worn copper coins and other bits and pieces. I also recovered a silver coin in the form of a sixpence of William III; this gave a crisp clear sound, and was retrieved from about 5 inches.



Fig.6. Searching the pea field.



Fig.5. Searching the stubble field.



Fig.7. Hammered pennies of Edward I and Georgian halfpenny.

