

FIELD TEST



Teknetics Eurotek Pro

Spec sheet	
Operating Principle:	VLF motion
Frequency:	7.8 kHz
Standard Search Coil:	8" concentric or 11" waffle DD
Weight:	8" coil version 1.1kg or 11" 2D coil version 1.2kg
Battery Type:	1 x PP3
Warranty:	5 year
Price:	£179 8"/£259 11" waffle DD

This month's field test is on the *Eurotek Pro* from Teknetics, and is an American machine designed specifically for the European market. Teknetics is part of the First Texas group of companies, which includes Fisher.

Out of the box

On receiving delivery of my test unit, I feared someone had made a mistake as the parcel seemed too small to contain a detector, but on removing the brown paper I was pleasantly surprised with a well-illustrated and compact product box.



Figure 1



Figure 2

First I secured the control box to the upper stem with the two supplied Philips headed bolts. After removing the nut and bolt from the arm cup, I slid it into position on the upper-stem, before refitting the fixings and tightened it with a Philips screwdriver.



Figure 3

The rest of the assembly follows the normal procedure; assemble the three-piece stem system, fit 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 back of the control box. Finally secure the connection by twisting the knurled locking collar. Assembly is achieved in less than five minutes.



Figure 4

Controls

All the functions of the detector are controlled with a five-button keypad. The first button on the left is the Power button. The MENU button allows you to toggle and adjust Sensitivity, Discrimination and Volume. This is done using the 'plus' and 'minus' buttons to increase or decrease the settings. The final button used to pinpoint the target position in the ground before digging. This is a momentary switch, operating while being held and returns to the Detect Mode once released.



Figure 5

A nice feature is the protective slide over the headphone socket, keeping out dust etcetera when the headphones are not fitted. The angle is also well thought out, clearing the handgrip even if your headphones have a straight jack-plug.



Figure 6

Discrimination tone system

The Eurotek is primarily an Audio Discrimination detector. In most situations you would leave the Discrimination setting in its default position '00' (zero). This will then give you three tones based on a target's TID (Target Identification number).

The Discrimination is progressive, so the higher the setting, the more objects are discriminated (from iron up). As the 'plus' button increases the Discrimination to 69, targets are blanked (give no sound, becoming invisible).

There are four states to this Discrimination; High, VCO, Low and No-tone. VCO is a variable-pitched middle tone, which changes depending on the signal strength of the target (shallow or deep, large or small).

Low tones are given to all objects falling into the iron range, between 00 and 40. Targets with TIDs between 40 and 69 are given VCO sounds.

The 00 to 69 range is the area that can be blanked, but the Discrimination level can be increased further to a maximum of 79. This final increase changes the tone from a high to VCO of targets falling in the 70-79 range.

It's not possible to discriminate or change the tones of any targets falling into the 80 to 99 TDI area, where they are always given high-tones.

For example: If you were to set the Discrimination to 75, targets under 69 will be blanked (give no sound, becoming invisible). The middle VCO tone will only affect a small band of targets falling in the 70 to 75 range. Targets registering at over 75 will give high tone responses.

Volume settings

Volume is also very clever, as it incorporates an Iron-Silencer at its higher settings. Between 1-9 all targets increase in volume (all three tones).

But at the setting of 10, ferrous low-tone targets are blanked. Then between 11-20 iron progressively increases in volume from zero while non-ferrous tones remain at the 'maximum 10' setting. So, it's possible to control the volume of low tone targets, allowing good VCO/High tone targets to stand out on iron-contaminated sites.

Saving settings

To save your custom settings you simply press and hold the MENU button for eight seconds and release once you see all three menu-categories along the bottom of the screen. This saved custom mode will now become the default start-up setting.

To reset the detector back to the factory settings; switch off the machine, press and hold the menu and then switch on. The next time the detector is switched on it will revert back to the factory-preset settings.

It is also possible to change the Pinpoint measurement between centimetres (CM) and inches (IN). To adjust, press and hold the Pinpoint button and switch on. Then release and re-press the pinpoint button to toggle between CM and IN. The setting is then saved for future start-ups.

Coils

My test unit was supplied with two coils, an 11" DD waffle and a smaller 8" concentric coil. Both coil options are available in the UK. The small coil option is significantly cheaper. So I was eager to try them both out on my test bed to see what the difference was.



Figure 7

Test bed

First I fitted the smaller concentric coil and turned the Sensitivity to maximum, and volume to 11. The Discrimination preset was 00, which I left unadjusted for this test.

Over my bed I received clear two-way responses to all milled coins to 8". A hammered penny gave a good response at 5" in an area of deep iron.

The Eurotek Pro stayed extremely stable on what can only be described as 'difficult ground', made up with topsoil from a Roman archaeological site.

Next I fitted the larger waffle coil and tried again. This coil transformed the responses, making it sound like a different detector, more like a Teknetics G2.

The depth increase was about an inch over that of the concentric coil (on a modern 5p.)

I'm not sure which coil I prefer; both had a similar depth capability. The smaller concentric coil gave sharper audio responses, but the ground coverage of the waffle coil would probably be the better choice on most sites where finds are spread over greater areas. Ideally you would own both, using the concentric coil to winkle out the good targets in areas of concentrations of iron targets.

Field test

By the time I was ready to test the Eurotek, it was July and all my preferred fields had become undetectable. From my test bed results I realised it sounded very similar to the G2 I'd previously tested. The G2 and Fisher Gold Bug share the same interchangeable coils, so I was interested to see if the Gold Bug DP (GBDP) coils were compatible with the Eurotek. I fitted the 4" GBDP coil and powering up the machine, my suspicions were confirmed as it worked perfectly. This excited me because a 4" coil on the Eurotek should make this a great Thames foreshore detector... it was time to find out!

I arrived on the South Bank close to Blackfriars Bridge and after a short walk found an area of scoured foreshore. As normal the area was littered with nails and other ferrous items. I switched on the Eurotek and reduced the Sensitivity to 4, as depth wasn't something I desired. A detector in these situations merely assists you seeing surface or shallow items obscured by debris. Depth of more than a couple of inches becomes a hindrance in these conditions.

I started searching in three tones, leaving the Discrimination at 00 and then reducing the Iron Volume by increasing the Volume to 11.

I started searching in three tones, setting the Discrimination at 40 and then reducing the Iron Volume by increasing the Volume to 12.

One problem I had was with large lumps of what looked like coal. Normally I don't have problems with coke using other detectors, but in the area I was searching I was getting good VCO signals off of

large lumps of coal. I increased the Discrimination level to 42, which then gave these targets choppy VCO sounds. This adjustment prevented me from digging further pieces of coke/coal.

Although very happy with this detector's performance on the foreshore, I didn't find anything of note other than a few 19th century buttons.

Conclusion

The Teknetics Eurotek Pro would make a great first detector, ideally suited for searching in the UK. The controls are simple but powerful, often operating more than one function, so it's really important to read the instructions to fully understand.

Looking at the price of the two coil choices and the price each commands, I would say the detector fitted 8" coil represents the better value package.

Teknetics Eurotek Pro (Scores out of ten based on price category)		
TEST RESULTS	Ergonomics (weight/balance)	9
	Simplicity/User Friendliness	9
	Build quality	8.5
	Weather resistance	8.5
	Discrimination Performance	8
	Overall detection Performance	7
	Value for money	9
	SEARCHER RATING	