

# Detector Field Test

## White's DFX E-Series

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### Part Two

Field Trials

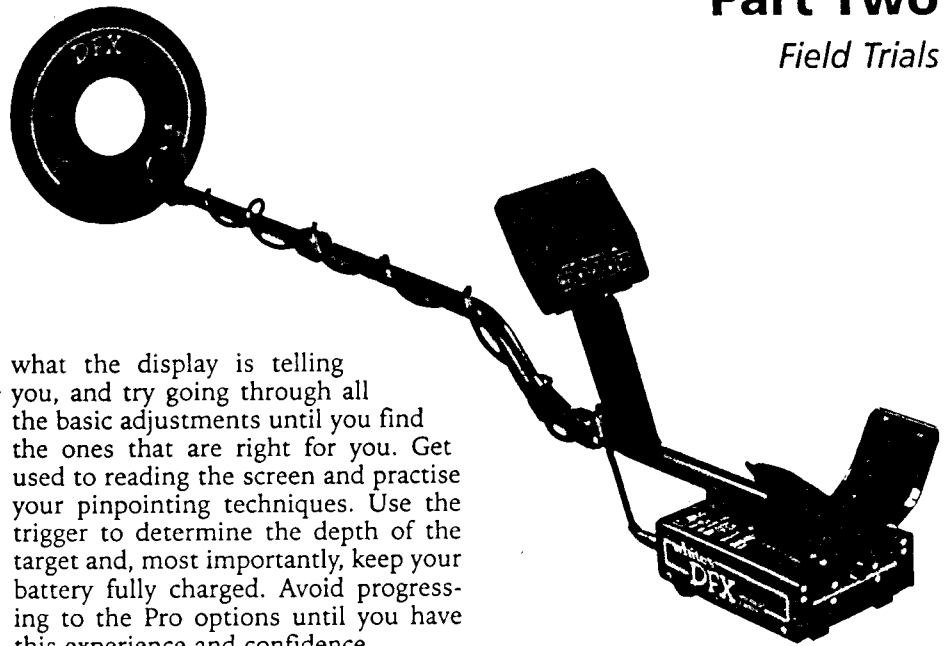
In Part I of this field test I discussed the advantages of a fully programmable detector as opposed to a "turn on and go" machine. I also covered the setting up and using of the XLT DFX in the preset programmes and went on to describe and identify the use of the basic settings and Pro options. In this second part I will describe how I went about setting up the DFX to my personal preferences. I will also suggest some ideas that may help you when setting out with your new machine.

Previous or present owners of XLTs will be familiar with most of the programmes and, with this in mind, I will be concentrating on introducing the newcomer to the programmable world of the DFX. For those experienced users who are looking to improve the performance of their machines I hope that I can give them some ideas that have helped me over the past few months. I also found that there is a whole mass of information concerning the DFX on the Internet, including some revised programmes that may be of assistance to the advanced user.

### Getting To Know The DFX

I make no apologies for stressing again the importance of reading and re-reading the manufacturer's handbook that is supplied with the DFX. It is laid out in an easy-to-read format and follows a logical sequence of directions covering all of the detector's functions. Failure to do this could lead you to not fully understanding the detector's capabilities and not benefiting from its advanced technology. Although I had previous experience of using the XLT, I spent several hours shut away from any distraction with the new detector and a selection of coins and other metallic objects. I went through the basic adjustments with the aid of the handbook, familiarising myself with the controls and readings on the display panel. When you have also done this, spend the first few weeks getting used to the feel and responses of the detector in the preset programmes.

In field use one of the most important things is to get the balance right. I found that I had to keep putting my thumb across the control buttons to counteract the weight of the coil because I hadn't adjusted the shaft to a suitable length. Don't dig your targets until you are sure that you understand



what the display is telling you, and try going through all the basic adjustments until you find the ones that are right for you. Get used to reading the screen and practise your pinpointing techniques. Use the trigger to determine the depth of the target and, most importantly, keep your battery fully charged. Avoid progressing to the Pro options until you have this experience and confidence.

### First Moves

I live and detect in the north of East Anglia. While there are some excellent sites in the area and some good finds to be made here, the soil conditions in this part of the country are, to say the least, extreme. You have to work your detector hard to achieve any sort of result. The soil is sandy and light but is very heavily mineralised. My experience has shown that getting the correct adjustments to the machine is vital. The five factory preset programmes in the DFX are very good and will locate most targets, but in my opinion they are not totally suitable for British conditions. Certain alterations need to be made - especially in the discrimination department - if you are serious about finding the smaller objects such as hammered cut halves and quarters.

With this in mind, and before any testing of the DFX, I looked through the Custom EEPROM Programme settings and decided that the EEPROM Hi Pro most closely matched the conditions I was going to be searching in. I started my tests without any adjustments except to the Tone ID. I prefer to operate with this in the "Off" position, relying on my experience to determine the difference between the signals received rather than the detector's varying tones with it switched on.

### Tests

I learnt a long time ago never to worry about the large targets; if a detector is picking up the small ones it will certainly pick up the larger ones. I carried out a number of tests that I have used over the years when assessing a detector's "in air" performance. Using a Henry VI farthing, an Edward III cut halfpenny and a small gold ring, I received a clear and precise signal from all of these items in this programme varying in distance from 3-5in from the search coil. I have a large, heavily mineralised rock that I use when purchasing a new detector. I am confident that if a machine can find a hammered coin under this, then it will perform well in the field. It is surprising how many of the upper price range models I tried failed this test, and I looked forward to seeing how the DFX would cope.

With the discrimination set to reject iron the DFX picked up the cut half with a "broken" signal but failed with the ring and farthing. I then put a full hammered penny under the rock and it was picked up this time more clearly.

Moving out onto the fields with the same settings, I was happy in the knowledge that the DFX could cope with the soil conditions. I tried it firstly on pasture with little finds of interest to comment on. It was noticeable,

ough, that I was not picking up any ferrous material.

The second site was mineralised with the added burden of heavy iron infestation; it had also been previously tilled for around 20 years. The soil was freshly ploughed, with the rough furrow pressed and very wet. In fact, these were not very nice conditions to be out in. However, I found a Georgian silver seal matrix at about 6in and this gave me the necessary boost to carry on.

Overall, my reaction to the DFX was that it was marginally better than the XLT. But it was not what I was looking for on my difficult sites, even when tried in all the suggested programmes and settings posted on the Internet. However, I did have an ace up my sleeve. I had been given a tip off that White's had a 10in x 5in elliptical coil available as an accessory to be used with the DFX in poor ground conditions. I purchased one from Regtons and fitted it to the machine.

Before trying the DFX with this different coil and using the experience gained from the initial testing, I decided to carry out a few minor adjustments to the basic settings of the preset Prospecting programme. The settings of the programmes are to be found at the rear of the handbook in Chapter 5. (In Part 1 of this field test, page 31, in the section describing the Prospecting programme, it states that you should not use this programme in this country. The opposite is true for the reasons stated above and I would like to apologise for any confusion that may have arisen).

## Basic Adjustments To The Preset Programmes

As already mentioned, the Prospecting programme settings are most suitable for searching in the mineralised and very difficult conditions described above; but they do need some minor changes. To fine-tune this programme (shown on page 55 of the handbook), I would suggest the following procedure:-

1. Set the volume, tone, sensitivity and threshold levels to your personal preferences.

2. Turn the Audio Disc ON (the prospecting programme is set for gold searching and therefore needs to be off).

3. Scroll down to Pro Options and alter Auto Track speed from 18 down to 8 or 9.

4. Continue to scroll down to Bottle Cap Reject and increase it from 1 to 3.



Some of the 127 non-ferrous finds made with the elliptical coil

5. Go to Rock Reject and adjust to 10.

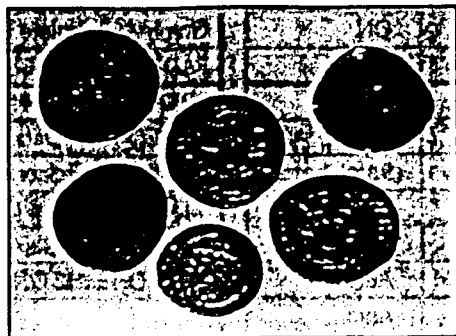
6. Sweep Speed should also be increased to between 12-15.

7. Scroll on to Pre Amp Gain and adjust to 3.

8. Most importantly go to 2 Frequency Best Data and turn it ON - this will automatically turn 1 Frequency off in the original programme.

This is all that I feel is necessary to match our bad British conditions, and as you become more familiar with the detector it may well be that you can make even finer tuning pay off. Remember, though, that these settings will only remain as long as the machine is turned on; when you switch it off the alterations will be lost and the detector will return to the factory settings.

To store the changes to the programme it is essential that they are transferred to one of the EEPROM Programmes. To do this after making the adjustments *do not turn the detector off*. Press Menu, which will take you to the preset programmes. Press Enter and using the down Arrow scroll down until you reach the Prospecting programme; this will have a flashing cursor next to it. Carry on scrolling down until you reach any of the EEPROM Programmes and press Enter. The screen will indicate a flashing cursor at LOAD. Do not press but continue on to SAVE. Press Enter again and your personal settings will be saved safely for you to recall anytime after switching off.



More of the non-ferrous finds.

## Tests With Elliptical Coil

Using the same "in air" and "below the rock" tests with the elliptical coil the DFX picked up all the test pieces with ease. To say that I was astounded would be an understatement. These were the best results I had achieved with any of the machines I had tested, and transformed the DFX in my view from a top range detector to *the* top detector.

Over the same ground that has been the graveyard to many machines, I located 127 non-ferrous finds. These included buttons, musket balls, pieces of lead, a medieval thimble, jettons, some hammered silver and two personal seals. This was all in four hours of detecting! Depth was excellent. I found a hammered penny at a measured 9in, and musket balls at depths of up to 10in. The discrimination was very good and I dug no iron at all. On three or four occasions I had doubtful two-way signals, but these were easily identified as iron on the SignaGraph display.

The detector was very sensitive to the very tiny finds, which it identified at good depths. Pinpointing was very easy with both coils. One interesting fact was that even in the factory preset coin mode the DFX rejects modern iron centre copper clad 2p and 1p coins.

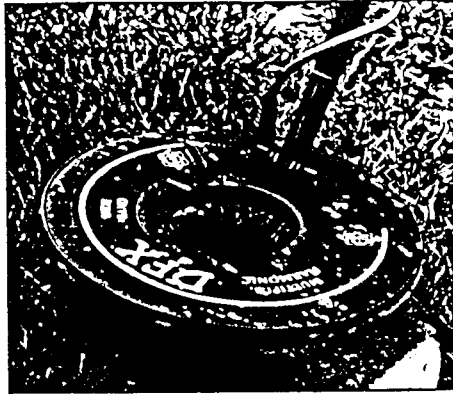
There are few faults with this detector, and those that exist are more than made up for by its performance. In certain configurations it is sensitive to high-tension electricity cables. On two occasions it also switched off without warning. The other more familiar "bad" design features of the XLT are still obvious: the control box and battery housing are at risk of damp when the machine is rested on the ground and the display screen is prone to scratching; as a result you really need to purchase covers for both of these components.

## Summary

Going back to the original theme of which is the better type of machine - "turn-on-and-go" or user programmable - the question becomes redundant when talking about the DFX. Here you have a simple pre-programmed detector that can be up and running as soon as you get on site. At the same time it is a machine that can be adjusted to meet the most demanding of circumstances. Even when using the Pro options that have been stored in the EEPROM settings you still turn on and go!

My intention was to take some of the mystery out of the technical side of the DFX, and I hope I have achieved this aim. It is not a difficult detector to use provided you read the handbook. Sit with the detector and handbook, and go through each stage again and again until you understand what you are doing. Don't attempt too many changes at once, as you will not be able to tell what differences the changes have had on performance. Go out with the intention of concentrating on certain aspects of the settings rather than trying to achieve perfection all in one go.

My suggestions as to the setting up



The 9.5in concentric and 10in x 5in elliptical coils used in the test.

of the detector are just a start, and I'm sure that you will rapidly become competent in achieving the right settings for your personal conditions.

I think that White's should give you the option of either the 9.5in concentric or the 10in x 5in elliptical coils when the DFX is first purchased. I can see a use for both but in my book the elliptical coil was the winner.

Although the DFX is priced at over £800 (some dealers are prepared to negotiate a better price), this is money well spent and there will be no need to

upgrade at a later date. I still have a long way to go with the DFX - experimenting with the frequencies for example - and you will find the same. Therefore be patient. I am fully aware that the cynics will say that this is another "be kind to the manufacturer" report and that I have exaggerated some of my comments. But I can assure you that I have never written a field test before, neither have I had any contact with White's. I have written about the detector as I found it....there is no point in doing otherwise. TH

## These are two suggested programmes that I found very good for the DFX using the Elliptical Coil

BASIC ADJUSTMENTS	Medium to high iron	Very high iron
Target Volume 48-63	63	63
Audio Threshold 0-42	13	18
Tone (Audio Frequency) 0-255	225	231
Audio Disc ON/OFF	ON	ON
Silent Search ON/OFF	OFF	OFF
Mixed Mode ON/OFF	OFF	OFF
A/C Sensitivity 1-85	73	72
A/C Sensitivity 1-60	50	30
Backlight 0-6	0	0
Viewing Angle 1-50	25	25
<b>PRO-OPTIONS</b>		
Ratchet Pinpoint ON/OFF	OFF	OFF
S.A.T Speed 0-10	9	7
Tone 1-D ON/OFF	OFF	OFF
V.C.O. ON/OFF	ON	ON
Modulation ON/OFF	OFF	OFF
Autotrac ON/OFF	ON	ON
Trac View ON/OFF	ON	ON
Autotrac Speed 1-20	18	9
Autotrac Offset	+ 1	+ 0
Trac Inhibit ON/OFF	ON	ON
Coarse G.E.B. 0-255	Auto	Auto
Fine G.E.B. 0-255	Auto	Auto

	Medium to high iron	Very high iron
Disc Edit -95 +95	ACC +95 - 40 REJ -95 - 41	ACC +95 - 45 REJ -95 - 46
Block Edit -95 +95	SAME	SAME
LEARN Accept/ON/OFF	OFF	OFF
LEARN REJECT ON/OFF	OFF	OFF
Recovery Speed 1-40	30	33
Bottle Cap Reject 1-20	1	3
Hot Rock Reject 0-20	15	10
Sweep Speed 1-20	7	15
Ground Filtering 2-6	4	4
Visual Disc ON/OFF	ON	ON
Icons ON/OFF	ON	ON
V.D.I. Sensitivity 0-99	86	86
D.C. Phase ON/OFF	OFF	OFF
Graph Averaging ON/OFF	ON	ON
Graph Accumulate ON/OFF	ON	ON
FADE Rate 1-14	7	7
PREAMP Gain 1-4	3	3
2 FREQ (Best Data) ON/OFF	ON	ON
2 FREQ (Correlate) ON/OFF	OFF	OFF
V.D.I. Normalized ON/OFF	ON	OFF
1 FREQ 3kHz ON/OFF	OFF	OFF
1 FREQ 15kHz ON/OFF	OFF	OFF