Detector Field Test

White's DFX

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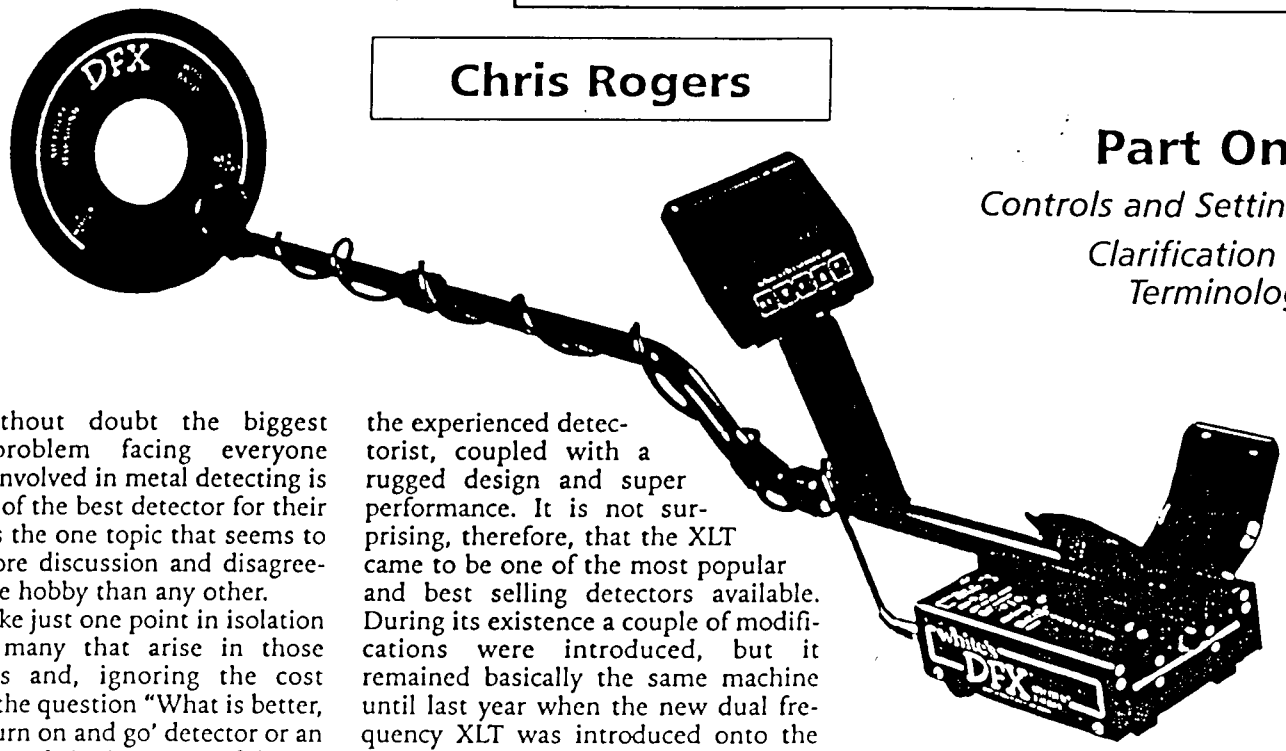
Part One

Controls and Settings

Clarification of Terminology



Without doubt the biggest problem facing everyone involved in metal detecting is the choice of the best detector for their needs. It is the one topic that seems to lead to more discussion and disagreement in the hobby than any other.

Let's take just one point in isolation from the many that arise in those discussions and, ignoring the cost factor, ask the question "What is better, a simple 'turn on and go' detector or an 'all dancing and singing' state of the art computerised machine?" Put another way, does the operator benefit from the so-called gadgets on a programmable machine?

There is, of course, no definitive answer to this except to say that, in the case of the latter, the majority of user programmable detectors do have the facility to simply switch on and go. This is achieved by using the factory pre-set programmes, which avoid the need to progress further into the finer details of the detector's operating capability. In my experience very few individuals, once bitten by the detecting bug, drop out and most are soon looking to upgrade their machine to help their efforts in the field. The more that is learnt about the other factors that come into play after gaining some search experience, such as different soil conditions and the varying conductivity of metals, the need for greater flexibility soon becomes apparent. The ability to adjust your machine to these changes can make the programmable detector appear the more desirable option. Whether the individual chooses to progress to these options could depend on his or her available finances.

Some years back White's introduced a new detector onto the market called the XLT. It was a well-balanced, lightweight machine, with easy to use pre-set programmes. It also had seemingly limitless operator adjustments for the experienced detectorist, coupled with a rugged design and super performance. It is not surprising, therefore, that the XLT came to be one of the most popular and best selling detectors available. During its existence a couple of modifications were introduced, but it remained basically the same machine until last year when the new dual frequency XLT was introduced onto the market, known as the DFX XLT.

Having used the XLT for hundreds of hours with great success, I found that a lot of the criticism expressed by the "turn on and go" fraternity was brought about by their failure to read and understand the operator's handbook, which - to be honest - can appear a bit daunting at first glance. This, when coupled with the retailer who either through lack of knowledge of the machine and/or time, fails to go through the different functions shown on the display screen with the prospective buyer, leads to a lot of the misconception about the XLT and programmable detectors in general.

With this in mind I have split my report into two halves. The first part concentrates on the controls and settings while attempting to clarify some of the terminology used. The second part will be the actual field test in which I conducted a number of searches using my own and other recommended settings in a number of different field conditions. My report pre-supposes that the beginner has carried out some research into the basics of detecting and is aware of such terms as "motion" and "non-motion", "ground minerals", "discrimination" and "sensitivity".

I have not included a beach test of the DFX but hope to be able to report back on this aspect of the DFX later in the year.

Physical Description

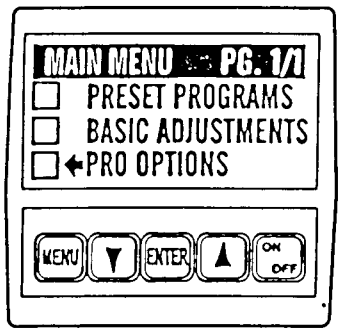
Immediately on opening the sturdy carrying box the DFX XLT is pleasing to the eye being well constructed and finished. Assembly is straightforward and takes just minutes to complete. As already stated, the owner's guide can appear complicated especially if you do not take the time and trouble to study it properly. I cannot stress the importance of reading this booklet thoroughly so that you are fully aware of what is available to you and how to go about achieving the best from your detector.

The detector's looks have not changed much from the earlier XLT, but the 9.5in coil is now of the Wide Band Multiple Harmonic type. The LCD meter panel is mounted at the end of a padded handle and under the meter is a toggle switch, operated by the index finger. This can be used for pinpointing and depth screen display. The metal control box, which is fitted below the armrest, has a hinged compartment in which the drop-in battery pack is housed. The detector's power is supplied from either the re-chargeable type nicad battery (green decal) pack or eight AA dry-cell batteries fitted into the (blue decal) standard battery box. The quarter inch headphone jackplug socket is also fitted in the rear of the control box.

One of the more obvious changes is the logo on the side of the box, which now reads "White's DFX Spectrum E-Series". Also printed on the control box is the start-up procedure and a target identification display scale. On the underside is a "Hot Key" shortcut chart that enables easy access from the search mode to the most needed adjustments. Among the less obvious changes are: dual frequency operation, four new user-designed programmes, adjustable sweep speed, and a digital signal filtration system.

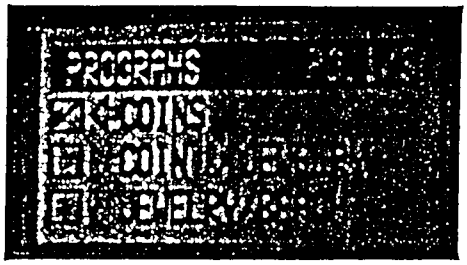
Set Up

The pre-set programmes in the DFX allow the user to push a couple of pads to begin searching while the detector automatically controls the adjustments for you. Beginners will find this facility the best option until they become familiar with the many adjustments that the more accomplished detectorist will want to access.



Looking at the display panel you will see five push button control pads. Reading from left to right they are marked: Menu, Arrow (down), Enter, Arrow (up), On/Off. The detector is turned on by pressing the On/Off pad, at which point an automatic battery test is carried out. The screen will momentarily show the battery voltage followed by the main menu. To recheck the voltage, squeeze and hold the trigger while pressing the down arrow. When the battery strength becomes too low for proper function of the detector, the words "Low Bat" will automatically appear on the display.

The main menu offers a number of choices commencing with "Preset Programmes". To access this setting simply press Enter after which a choice of five preset programmes appear on screen with an arrow pointing to the first "Coins". By pressing Enter (a bleep signal will be heard each time it is pressed) and following the instructions on the screen to raise the search coil to waist level, press Enter again then lower coil to ground level. The detector will now be correctly ground balanced and ready for operation in the Coins programme. While the coil is held at waist level the DFX's circuitry is measuring air temperature and other variables that effect electronic circuits. When lowered to ground level and the Enter pad is pressed again, the DFX is cancelling out the ground mineralisation effect (or 'Ground Balancing' the detector). In this and the other four preset programmes no further adjustments are needed. Nevertheless, any number of control adjustments are available to meet almost any need or style of detecting.



Display showing Coins programme.

Display showing ID number and icon

Display showing SinaGraph (best targets to the right).

The last screen to appear will be the search screen, at which point you will also hear the threshold hum. After sweeping the coil across the ground listen for a repeatable solid signal and look at the display. The icon will show what is likely to be below the search head and the VDI (Visual Display Identification) number can be checked against the chart on the control box. The SignaGraph section of the screen provides even greater information. Because this is a motion type detector the search coil must be kept moving to respond to a target. (See Mixed Mode).

Other Menu Options

We have already covered the first option on the VDU, Preset Programmes. The other options are: Basic Adjustments, Pro Options, and Custom or EEPROM programmes. Within these headings there are a number of settings, such as RACHET PINPOINT, COARSE GEB, PREAMP GAIN and many others that may not be familiar to users of different makes of detectors. With more than a little help from the manual, I will try to explain in detail what these terms mean.

EEPROM stands for Electrical Erasable Programmable Read-Only Memory, which is a memory chip that allows the storage of up to four custom programs despite battery changes and years of storage. These four "memory slots", along with the five Preset Programs, add up to a total of nine programs that should fit just about everyone's needs. The four EEPROM programmes can be erased and replaced with your own custom programmes. Setting them is a simple operation and I will cover this in the field test part of this report.

The first five Preset Programs are in permanent memory, with a similar looking name of EPROM (notice that one E is missing for Erasable). Changes made in these programs will return to factory settings when you change from one program to another or change batteries. However, if you have made changes and forget to save them in a custom program before turning off the machine, all is not lost. With a good battery still intact, squeeze and release the trigger immediately upon turning the detector back on, and the circuitry will revert to the last settings used. Otherwise, settings will revert to factory preset.

Preset Programs

The following is an explanation of each Preset Program.

Coins - All controls are set to handle rubbish contaminated areas such as parks, responding to most coins and larger jewellery. Discrimination is high in order to eliminate signals from items like nails, foil, ring-pulls, and "hot rocks". If possible, though, try to start with a program of low discrimination, as good items can be missed along with the bad. This is true for all metal detectors due to various reasons such as the conductive properties of different metals. This program will save you a lot of digging in badly contaminated areas.