

Detector Field Test

Fieldmaster Searchman X7

Fieldmaster, if you are unfamiliar with the brand name, are one of England's longest-established detector manufacturers with origins that can be traced back to the early 1970s. Currently, most of their output is shipped out to Europe where Fieldmaster detectors are very popular. However, to keep in touch with their roots, a number of detectors are reserved for sale to the British market.

The Searchman is a VLF motion discriminator detector with silent search and a light emitting "Target Eye" display.

If you are ordering by post, the detector arrives stripped down to its various component parts (eg stems, control box, etc.). Putting all of these together is quite easy, and I soon had the detector assembled. I liked the extra large size of the middle section stem locknut, and the accessory carrying strap was also something that appealed to me. But the thing that really caught my interest was the "Target Eye" LED display. This is mounted as a separate unit above the control box, and enables the user to operate in

two modes: Target Depth and Target Identification.

However, before dealing with that I would like to go through the detector's description. The X7 has an "S" type pistol grip handle and arm rest, with the control box mounted below the stem and secured by two knurled nuts. The LED display is fitted immediately above this and held in place by one knurled nut.

The main controls are front mounted and are of the rotary type with the exception of the two-way toggle switch that controls the choice of "Target Eye" mode. The stem is in three pieces, with the lower section pre-fitted with the 8in search coil.

The battery compartment is situated in the control box, and the X7 is powered by one PP3 type battery - high power alkaline batteries are recommended although rechargeable ones can also be used.

Controls

Reject: This knob selects the level of discrimination - the more it is turned clockwise the more objects that the

detector will ignore. In the fully anti-clockwise position items of all metal will be located. This control also serves as the power on/off switch.

GND: (Ground) Again a rotary knob, this sets the ground balance ideally at a level where the detector will not respond to the ground itself.

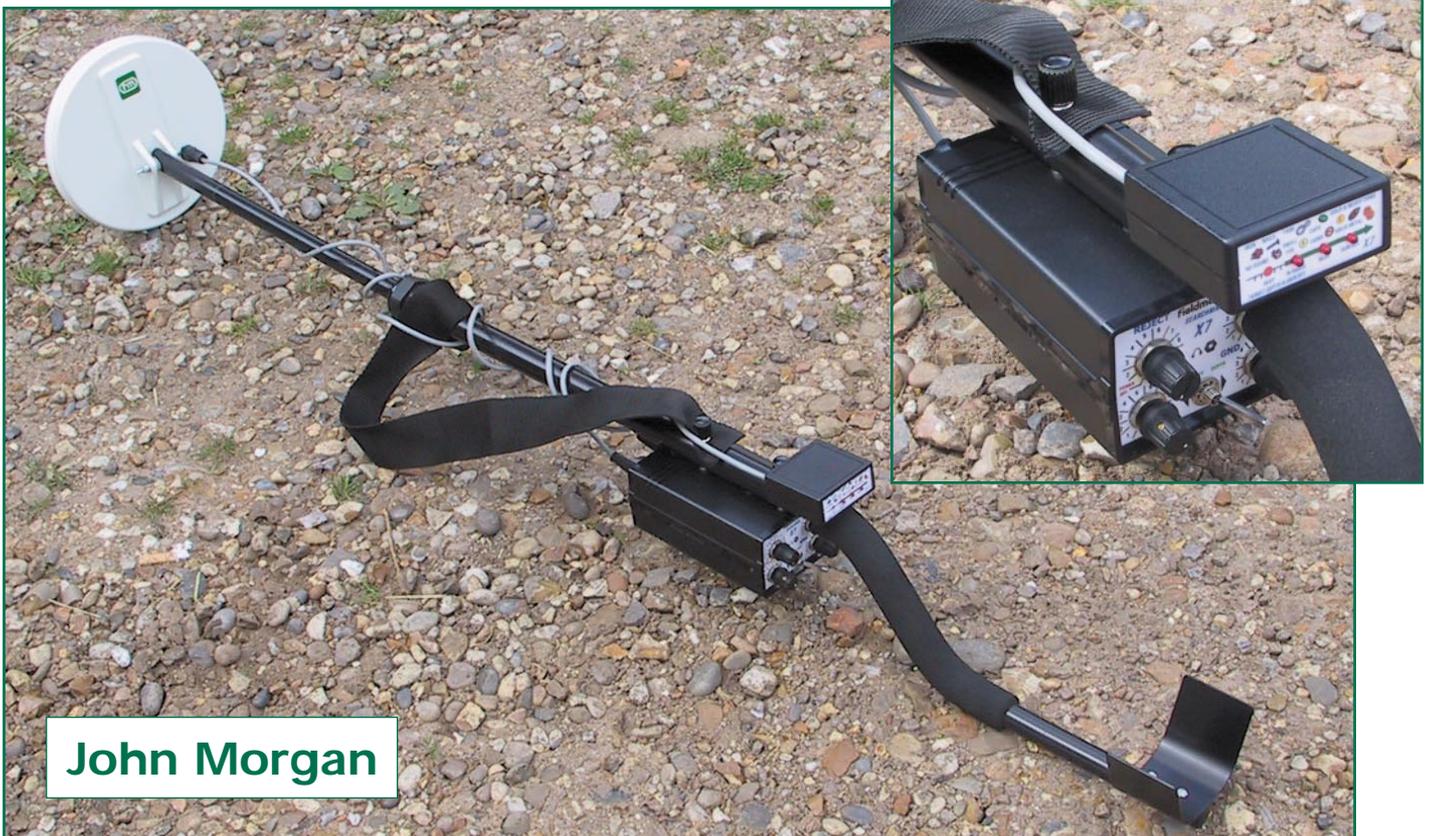
Depth: This varies the detection depth by controlling the sensitivity.

Identify/Depth: A toggle switch that, by flicking to the left or right, selects either of the two LED modes. With the switch in the "Identify" position, the display indicates - by a series of red lights - what the find might be. In the "Depth" position it identifies the likely depth of the target.

Volume: Another rotary knob that controls the output volume of the detector when using headphones - it does not effect the output of the loudspeaker.

Use Of Controls

The manual supplied with the X7 recommends that you normally work with the Reject control set to the 4-5 position, and the Depth set to Max. The



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GND control should be initially set to the pre-set position (6-7). At these settings the smaller pieces of iron, silver paper and other trash items will be either rejected or identified. When working on the beach or other areas where junk contamination is a problem, the Reject control should be raised to a higher level.

Target Eye Display

I have already mentioned that this display operates in two modes: Target Depth and Target Identity - both selected by the two-way toggle switch on the control panel.

Target Depth

By using this facility carefully you can pinpoint a target and estimate its size and depth. The fascia of this small black box has a row of four red LEDs. In Target Depth they light up according to the strength of response from the object - the nearer it is to the coil, the more the LEDs that will light up. In Target Depth the Depth control should be set to Max and the mode switch set to Depth.

Target Identity

Flicking the toggle switch to the "Target Identity" position will give you a good idea of what the target is before you dig it. In this mode conductivity is measured. The more solid or pure the metal is (eg lead or gold) the more the LEDs that will light up. To use the Tar-

get Identify facility, the Reject Control must be set to 6-7, the Depth control set to Max, and the mode switch to Identify.

On the fascia panel of the Target Eye LED display there are four bands in which a target can be identified by observing the number of lights that come on. A clear signal must be produced for the Target Eye to work, otherwise no LEDs will light up no matter what the find.

I spent a lot of time checking the Target Eye with different metal objects, and watching how the display reacted. While I was happy with the "in air" checks for Target Depth, the information provided in Target Identity was somewhat inconsistent.

The setting up of the controls was straightforward, but contrary to what the instructions said, I found that the preferred setting for the GND switch was higher than suggested, and the Reject setting needed to be lower than the recommended 4-5 at which the detector would cut out the smaller non-ferrous items such as buttons.

Field Appraisal

As all detectorists experience when handling a new machine, with the Fieldmaster Searchman X7 it did take me a few weeks to familiarise myself with all its little quirks and operating characteristics. But at the end of that time I did feel confident that I was getting the best that I could from the detector.

The main focus of my fieldwork using the X7 was on a previously searched area of approximately 50 acres. This produces on a regular basis anything from cut hammered coins to modern day pre-decimal pennies. As stated, this particular site has been heavily worked. Nevertheless, the X7 came up with a variety of previously missed non-ferrous targets. These ranged from buttons to musket balls, along with two crotal bells (both in their usual damaged state).

Once I had become familiar with the way the detector works, and having many years' experience of using other machines, I found that it was possible to identify a target just by the sound

and tone of the signal, and I only used the Target Eye display for a final check in cases where this was necessary.

Summary

In general, I would say that I was happy with the way the Searchman X7 performed and it has some interesting features. As with most detectors there were a few details that I felt could be improved. The Target Eye display is secured to the stem by one nut and this can come loose and cause the box to swing out of position. A slight knock can result in the same thing. I overcame the problem with two star washers of the correct diameter, but would like to see a re-think of this fixing arrangement.

My testing of this detector was carried out in summer and I found that in bright sunlight (admittedly rare in Britain) it was sometimes difficult to see whether the LEDs of the Target Eye were lit up or not. Once again I overcame the problem by making a temporary hood for the display out of black card. If I personally owned the detector I would have been inclined to devise a more permanent arrangement made from black plastic.



The armrest is secured onto the upper stem by one screw that protrudes above the surface of the armrest. When detecting in short sleeves this rubs against the skin causing soreness in a very short space of time. Once again this was a small problem, and one that was easily solved by a piece of tape. A more permanent solution would be to line the arm cup with self-adhesive foam padding.

The detector is not provided with a stand, which means that when it is placed on the ground it topples over. (I overcame this by using a “clip on” stand that most detector retailers should have in stock).

These small criticisms apart, I believe the Searchman X7 to be a good detector capable of making excellent finds. **TH**