Field Test

C.Scope **CS770XD**

Fig.1. The C.Scope CS770XD



he C.Scope CS770XD is a very lightweight model and offers the user a very simple set of controls. These consist of just two rotary knobs and a touch pad push button.

This model is very similar to the Bill Wyman "Signature" detector as it offers the same sort of audio discrimination. It squeals out high pitched tones for good targets or a low growling tones for unwanted ones.

This CS770XD has a hard wired 8 inch waterproofed concentric polo search coil, operates from a single battery, and has a telescopic shaft that allows adjustment for the height of individual users.

The 17kHz operating frequency on this model is higher than most lower priced metal detectors. It is a frequency that offers fast recovery speed and good sensitivity to tiny targets.

Assembly

The CS770XD is both robust and well built. The detector comes in two parts within its original packaging. To

assemble all you have to do is loosen the central locking collar on the middle stem ensuring the search coil cable is loose.

Slide the lower stem fitted with the search coil into the upper stem, and then turn the lower stem around a number of times so that the cable wraps snugly around both stems. Do not over-tighten the cable, and make sure there is enough slack so that you can adjust the stem to your height. Once you have done this, the locking collar can then be finger tightened.

The operator's manual for the CS770XD is quite a short affair consisting of only four pages, but this is a simple machine.

The operating instructions are very easy to follow, and the manual includes a photographic diagram of the detector and description of its parts.

Controls & Set Up

The upper stem is of the now typical S-shaped configuration with foam rubber handle grip and control box mounted in front of it. There is an adjustable arm rest



Fig.2. Front panel of control box.



Fig.3. Battery compartment.

and stand to the rear, with the cup and stand held on by two thumb screw bolts.

The lower stem is plastic and has a height adjustment cut-off marker point moulded into it to prevent the stems from collapsing down too far.

The colour scheme for the detector is black and grey, with heat-reflective white for the search coil.

The CS770XD works from just one PP3 battery that clips into place within the battery compartment located on the underside of the small control box. An alkaline PP3 should provide around 40 hours of search time, depending on the make and quality of battery. When there is a distinctive decrease and weakness in the audio sound it is time to replace the battery. (If you own a detector that uses replaceable batteries – rather than an onboard rechargeable system – it goes without saying that you should always carry a spare or spares).

The control box is very compact and

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Fig.4. Eighth inch headphones socket.





robust, and is made from toughened plastic.

The speaker is positioned on the left hand side of the control box. The headphone socket, which is only of the eighth inch size type, is positioned just in front of it.

The control panel is laid out with two rotary knobs and a push button touch pad.

The first knob on the left hand side is the On/Off-Sensitivity switch. The push button in the middle is the Retune button, and the second knob on the right hand side is the site selector switch marked Inland/Beach.

If you are searching anywhere on inland sites you leave the knob on that setting; and if you are searching on the sand of a beach you turn the knob to the beach setting.

The audio discrimination (high squeal and low growl) only works in the inland setting. The beach setting still offers rejection for undesirable targets; the tone



Fig.5. Silver finds made during the test.

sound, though, will remain the same and just get higher in intensity when a good target is found.

When you turn the detector on for the first time find an area clear of surface trash and position the search coil about 2 inches above the ground. Turn the On/ Off Sensitivity knob and at the same time (with your other hand) press the Retune button and continue to turn the knob into the green sector. As you do this you will hear the threshold sound slowly rising. Set the detector to the edge of the threshold sound (just audible) and then release the Retune button.

The Sensitivity knob has three colour scales: red, white and green. The aim is to be able to set the detector to the highest level without too much interference occurring. The green sector is the highest optimum setting for the sensitivity.

Once you have set the sensitivity you can commence searching, bearing in mind that whenever there is a rise in the background threshold sound you need to press the Retune button to take the detector back to its optimum setting.

The threshold tone might need to be adjusted to optimum setting by the Retune button on unstable ground, and/ or if there is outside interference occurring (e.g. some electric fences, other detectors, tetra masts etc.).

Field Appraisal

In my opinion the C.Scope CS770XD is quite a unique model within its price

bracket as it boasts the 17kHz operating frequency and high and low pitch tone audio discrimination.

Some might say that the audio tones sound like two famous glove puppets from the past (Sooty and Sweep). However, these tones are not a million miles away from the latest VCO discrimination I have seen on other makes of metal detectors costing hundreds of pounds more.

If there is one thing I do know about non-motion models is that sometimes they can have the upper hand over the bigger guns, giving better responses over certain types of ground conditions.

I took the CS770XD out to a number of my sites and over a variety of field conditions including: stubble, ploughed, lifted potato fields, and pasture.

In most cases the detector behaved itself very well, with the exception of the pasture field where there was a general lack of finds anyway.

The CS770XD won't get down to extreme depths but it will find coinsized targets at good average depths and should pick these up at between 4-6 inches easily.

It will also register very tiny pieces of metal, which should prove good on medieval sites, or locations that produce tiny Roman coins or small artefacts.

At the time I bought the CS770XD most of my favourite sites were being ploughed but were not yet ready to search. As luck would have it, these were



also locations that had produced the early material in the past.

I had to seek alternative options, including fields that had seen plenty of town and village rubbish dumped and scattered over them in the past.

Although not my favourite sites, they did provide me with good test areas for the CS770XD. The presence of the rubbish, in fact, helped me to get used to the target sounds and see how well the detector's discrimination worked.

I was impressed with the CS770XD's performance, and also liked the way the audio discrimination sounded on the smaller targets.

Having a background threshold is great for picking up the fainter signal responses that sometimes came through as "iffy" targets with a faint semi good squeal. Responses such as these should be dug, and many of the recovered targets proved to be very tiny in size or buried at an awkward angle (i.e. "on edge" coins).

Some large iron objects will get

Some large iron objects will get through the detector's discrimination and sound off with a high pitch squeal; but on many occasions when this happened, it was because of the shape as well as the size of the iron.

Ferrous objects that have holes in them or ring-shaped iron pieces also come through as positive.

However, not all loud squeal signals resulted in junk. In one case the CS770XD gave a signal that nearly blew my ears off. After digging down about



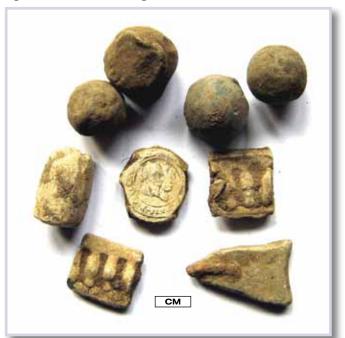
6 inches I recovered the target, which appeared to be a large piece of lead. However, rather than the usual scrap my find was shaped and when I turned it over it revealed itself to be an old toy battleship.

I started to wonder if there might not be a lost battle fleet lying hereabouts, as two years previously I had found a lead submarine in the same area.

After just a few detecting sessions I was able to conclude that the CS770XD is a pleasant detector to work with. In that time I had also amassed a load of different finds including a couple of silver coins.

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Fig.12. Lead finds including seals and musket balls.



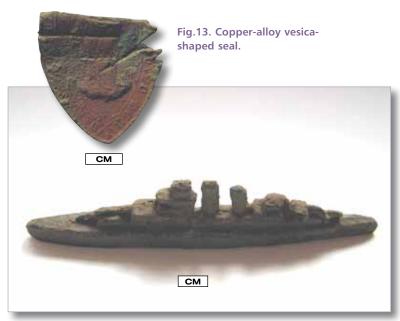


Fig.14. Lead toy battleship.



My recoveries included a newly lost penknife, and a long lost magnifying glass (or loupe) that came from a sandy field at around 6 inches. Copper coins, buttons, lead seals and musket balls have also all come to light.

The fact that the CS770XD can zero in on tiny targets has been demonstrated by a number of tiny finds including lead

airgun pellets, .22 bullets, studs and even a quarter of a broken button.

With such tiny objects coming to light with comparative ease, I am optimistic that the CS770XD will perform well for hammered cut quarters and halves when I am able to get on some of my older and better sites later in the year. No doubt time will tell.

I have still to use the CS770XD on beaches, but I hope to give it a good testing over the sands I visit in the summertime using the beach setting.

Conclusion

Although some detectorists might find the CS770XD to be a little too old fashioned – with its growl and squeak audio discrimination – for their tastes, I did find a use for it and was impressed by its simplicity.

It is a no-nonsense, inexpensive, non-motion model that has appealing qualities that can be utilised by beginner and veteran alike.

When I bought it I was on the hunt for a non-motion detector for sandy beaches and contaminated field sites. This is one that can cope where many other detectors would encounter problems with ground conditions, while retaining sensitivity to tiny objects.

I believe the CS770XD to be very underrated, and under-publicised, but it certainly gets a thumbs-up from me. Best of all, it's not expensive!

Specifications

Manufacturer: C.Scope International Ltd, Kingsnorth Technology Park, Wotton Road, Ashford, Kent TN23 6LN UK. Tel. 01233 629181. Email. info@cscope. co.uk

Model: CS770XD

Type: Non-Motion, Audio Discrimination model with 17kHz + 1kHz Sine Wave operating frequency.



Fig.15. Field testing the C.Scope CS770XD.

Features Include: On/Off Sensitivity switch, Retune touch pad, Inland/Beach selection switch, two tone Audio Discrimination (high for good low for bad), adjustable stem length 1m-1.37m.

Battery Life: 40 hours with a good alkaline battery.

Battery Type: Single 9 volt PP3 or rechargeable equivalent can be used.

Headphones: Eighth inch socket provided (if using normal quarter inch headphones a readily-available eighth to quarter inch adaptor should be used). **Search Coil:** 8 inch polo concentric,

waterproof.

Weight: 1.2kg with battery installed.

Recommended Retail Price: £175.00 (some retailer's prices may be lower with special offers).

Guarantee: Two years.

Accessories: Search coil scuff covers, headphones, and carry bags are available.

