# field test C-Scope CS2MX Desi Dunne



# C-Scope CS2MX

Operating Frequency: 17kHz Power: 8 AA Expected battery life: 30 to 40 hours Coil: 8" round concentric Weight: 1.4kg Warranty: 2 years Price: £265

A brand new C-Scope CS2MX winged its way to me just before Christmas by way of a direct request asking if I'd like to test it? I immediately agreed for several reasons some of which I will outline now.

I had tested the CS4Pi during the summer of 2015 and was impressed with it and had been happy to return to the C-Scope 'fold' as I had embarked on my detecting path with a C-Scope 'IB 100' model many years before.

Another very good reason is sometimes all you really want is a good honest decent detector capable of finding things within easy reach and using a lower cost detector forces one to look around more and choose sites that ordinarily mightn't be considered.

#### Assembly and Build

The shipping carton arrived, and the detector was removed for assembly. Because the coil is 'hard-wired' into the very solid control box there's a bit of an art involved trying to get the coil cable into a nice looking arrangement and not to just dangle loosely.

**Tip:** Remove the control box from the top shaft: connect the two shafts, and adjust to suit your height and tighten: with the control box in your left hand twist the now tightened shafts where

the cable winds onto it and becomes nice and taut and then simply pop the control box back on! Easy-peasy and a nice tight fit (a taut cable can help reduce false signals).

At the same time while the box is detached from the shaft insert the eight AA cells. Just remove the holder and pop them in observing correct polarity and reinsert. Tighten the four wheeled nuts and this should keep moisture out to some degree.

The Instruction Manual is just eight pages and has Quick Start instructions and real photographs. 'Low battery' condition is indicated by a step change in the signal tone to a higher pitch. The two rotary buttons have a good feel and have the most perfect turn resistance.

One major difference between it and the CS4Pi is the control box sits right on the shaft now by way of a drilled on clip and is not raised up to a height making it more deft to use. Having said that, prolonged use did tire my arm and for this reason I'd recommend to use the supplied hip-mount fitment.

Even the centrally located 'Pin Point' button has a good feel to it.

Above it is the large speaker that emits the most gorgeous tone I have heard from any detector in a very long time. Digital audio doesn't suit some people, it's harsh and fake but I challenge anyone not to like the sound the 2MX makes!

The Sensitivity control is on the left and goes to 10. A Threshold begins to kick in just past 8, and on the majority of sites I was able to run it at 10 with a Threshold Tone (not possible with beach use – more on this later)

Discrimination is top right of the box

and goes from 1-10.

This knob can also be clicked in to either maintain All Metal or clicked out to increase Disc: the Instruction Manual states: 'Set between 1-4 signals from most small iron rubbish are ignored'. This is partly true and would be applicable to very small ferrous pieces but not the larger ones e.g. plough shards.

The search coil is 8" round of concentric type and wasn't supplied with a coil cover.

#### **Bench tests**

It's important before venturing out with any detector to spend a while (long or short...up to you) doing some 'bench testing'.

For this, lay the detector on a table and keep the coil at least a foot away from any metal. Take a ruler (plastic) and some targets and pass these across the coil while making adjustments to the Discrimination control. This can give a rough approximation of what the detector might be capable of doing outside.

What I saw during this excited me a bit which prompted me to carry out some extended bench tests. Essentially, I was extremely pleased to see some major differences between the 'rejection points' between gold coloured square pull tabs, plain aluminum tabs, tabs of a rounded (oval) shape, some gold rings and gold coins.

#### For example:

A square aluminium tab rejected fully at Disc 7.15

A square gold one rejected at 7.25 A rounded gold aluminium tab rejected at 7.50

### So, the machine was responding to

variations in aluminium tabs. This was good. But, it got better! A full gold sovereign maintained full detection until it finally stopped at Disc 9. Various gold rings (9Karat to 22K) ceased signaling from Disc 8 to Disc 9.

It would appear then the 2MX has increased detection characteristics to gold items due to its 17kHz operational frequency and, appeared like it could tell the difference between tabs and rings! (Remember that the Discrimination control goes to 10). So, could a person set the Discrimination level set to 8 and completely ignore tabs while making more older jewellery finds?

Some typical 'air test' values on a variety of coins showed air depths between 7" to 9" but the bench tests revealed a super quick sweep speed is necessary to drive higher depth figures, eq. a large Roman bronze 3.5cms in diameter detected at Full Sensitivity and Zero Discrimination at 9.

A young head Queen Victoria shilling detected at 7", while a pound coin showed the same figure. Again, a fast sweep got better results. Then, in complete contrast, it was possible to pass a coin across the coil at a height of around 7" with a very slow sweep with no signal! So quicken up those sweeps and the finds should come.

To repeat the question: Will this detector find more gold and ignore the pull tabs and will it pull coins from 9" consistently? This is the whole point of the field test and my feeling before I set out is probably not. Factor in ground minerals and angles of buried coins and the level of Discrimination set in. During the air tests I witnessed 'an in-air depth loss' of 2" with the Discrimination control set beyond 8 and a full silver content Victorian shilling ceased to produce an actual signal set to 10.

But, let's not forget about 'halo effect' (where long-buried items blend with soils and produce far greater signals than they should) and then anything's possible!

#### First test - damp stubble field

As things went, a site I've been searching for around 20 years has never felt the force of a C-Scope

detector power down from my arm. It's a site that's been good to me. It's open farmland with an average ferrous content and light in ground minerals. A Threshold based detector can lose its tone at times with changes in mineralisation and I was keen to see what the 2MX would make of it all. It liked it! I was able to run with Full Power with a Threshold and for starters set the Disc control to 2.

A first signal petered out when the Disc control passed 8 so I knew it was going to be a non ferrous one. The 'sound' was 'short' and clear with an extra 'punchy thud' sound which I'd heard during bench testing and that indicated a shallow target. From about 4" up came a crudely shaped square item. Finds of this type were common here. It was as old as I had expected the finds to be.

Next up was a louder clatter, wider too and brash sounding and this stopped signaling at 9. I was disappointed to dig a small plough share the size of a thumb. The first thing I

had to learn was how to spot the difference between iron and not! So I 'upped' the Disc level to 3. The very next signal also produced a single shard of iron with positive sounds beyond 7 on

the Disc scale so I increased this control to 3.5. I didn't want to increase it to a higher level just yet.

Signals began to come quickly, many appearing to be from iron items as the language of the machine began 'speaking' to me. I also found that by turning the Sensitivity down to eliminate the Threshold tone reduced the stronger signals on some iron items. Iron, it seems produces a type of 'echo' sound. It's as if you entered a large room without furniture and shouted or when you blow really hard across the top of a glass bottle, hard to describe it, but hollow as well. (I should clarify this is with a decent set of headphones worn all the time).

At times small iron didn't signal on a re-sweep (normal with many detectors) or the signals decreased in both volume and tone to assure me that it was okay to walk on when they stopped signalling on sweeping from two sweeps to multiple passes.

If doubt persisted on some then the

#### Pin Point function was engaged and

if they sounded 'wide' and loud even with the coil several inches above the soil then these were ignored as 'larger and deeper' iron: deeper to 10" and beyond. Additionally it seemed that the Threshold didn't have any bearing on the signals because they were all loud for the most part and within easy reach of the 8" coil.

What would have been a beautifully patinated copper token came up unfortunately with 'warts' on it as otherwise it would have been a lovely find. Lead scrap surfaced, a small D-shaped buckle came up with a punchy signal.

I walked up and down between the furrows and stopped less frequently to interpret iron signals. It took several hours to get to know the 2MX.

A short sound was heard and at the same time a tiny button was observed on the surface. Then a good signal had me down on my knees and it took quite a while to locate it eventually reverting to my pin pointer. It looks like a tiny rivet and can be seen in Fig.1. This incredible sensitivity carried over to beach use as well.

#### Beach use

According to C-Scope the 2MX is 'managable on the beach with careful use' and I found this to be the case but, it's even better than they imagine!

Don't get too excited here and ditch the PI's and such! No, it does offer an extremely good performance on wet stony areas, close to and around rocks but not the really dense wet sand. It's suited to the type of conditions found in winter if one even dares to go to the beach at all in the coldest and most extreme winter months.

If your local beach has cliffs with rocky and shingle outcrops beneath then they are worth searching especially after winter storms. If you are brave (or mad) enough then this machine should reward.



# The weather had been very unsettled a ten minute recovery as it was s

since before Christmas and the beaches had taken a battering of sorts from high winds.

At first with a new test model one never knows what to expect when the coil is lowered to the surface. So I set the Sensitivity to 5, Disc to 3 and lowered the coil to the wet surface. Nothing happened!

I began to sweep across the wet sands and across masses of small pebbles and up to the larger rocks and it remained stable. So I increased the Sensitivity to 8 and it began to 'sound off' ever so slightly so I reset it to 7 and remained there for the first few hours.

The very first signal was loud, a 'clack' sound really and I felt through the cold wet shingle with my hands and felt a thin item. It was a rose gold coloured disc - very worn but with definite old designs on it and I am guessing it was a token of some sort. Fig.2. At the time I was convinced it was made from gold but the more I handled it I dispelled that notion as it was such a light

item. Moments later a really loud signal revealed a heavy folded silver target and again I guessed coin and was beginning to get really excited now but washing it in a nearby rock pool I saw the words, 'Made in China' and realised I had found a watch back!

However I did find coins, many of them: some worn to indecipherable discs and others of a more modern provenance like old decimal pennies. A really sharp clear signal that persisted as I ranged through the Disc level turned to

Above left: Figure 2 Above right: Figure 3 Below: Coins and other finds

a ten minute recovery as it was so small. I know what it is and at the same time I don't! I have seen them before. See Fig. 3

The short sharp 'clack' signals persisted and many took ages to find because they were so small and at times I found 'fishing gut line' before I located the fishing tackle bits attached.

To have found so many non ferrous items when I hadn't expected to was a bonus. I heard many 'rejected sounds' and didn't really dig any iron and that was also a surprise. Many long thin items such as parts from elaborate fishing hook surfaced and as an aside, the same occurred inland. I used to read reports from testers back in the eighties and they talked about detectors 'liking long thin items', which I always thought was a way of filling space in a

report. But not in this instance: the 2MX really does appear to like long thin items! It should be a really quick unit to use on the dry sand, and should pay for itself easily! For that I would recommend

turning up the Discrimination to eliminate everything with the exception of £1 and £2 coins. Then turn around and go back using a lower Disc setting to capture other interesting stuff that might be there.

#### Pasture

This was the only place during testing that appeared to unsettle the 2MX somewhat. My thoughts are that it is a difficult enough place to search anyway due to heavy iron contamination and the depth capabilities were enough to reach some ferrous items, that coupled with a preset Ground Balance setting was enough to confuse the detector and for that reason produce unwanted spurious noises

> For this reason the only reliable way to search was with much reduced Sensitivity.

#### Woodland

Everywhere I went with the 2MX ground conditions were moist and muddy and some worse than others. However on some woodland pathways I was able to find some semi dry areas that produced a

# "It's not your father's C Scope anymore!"?

raft of shallow recent loss coins, small 10cent euros mostly. These had either been missed by myself during previous searches or were dropped more recently by the multitude of people who use the woods for recreation. Just one old button was found and heavily corroded. But, the machine was a really easy and enjoyable outdoor experience.

#### Foreshore

I was really curious to see how it would perform on a muddy industrial river foreshore and would have to say it is much the same as that described in the beach use section. The main advantage here though would be the smaller coil





# being preferable than a larger one to

winkle in and out of all the ferrous dross that can abound. I'd definitely keep this machine for foreshore searching.

#### Value for money

The C-Scope 2MX represents excellent value for money considering it performs so well in as many situations as you might find yourself in.

#### Who would buy one?

Anyone wanting a very good entrylevel detector to see if the hobby will suit them. Or a regular searcher who might like to have a reliable 'backup' machine and perhaps someone who prefers to search for very small items: this machine excels at this task. Summed up in a single word: Dependable.

### Conclusion

Having spent some months with the 2MX I can report that this is a decent detector for the price and it's build quality. With new feature-packed models, some great new accessories and increased performance of their

# detectors I found this machine to be

capable under most conditions and at times, surpassed my expectations.

I wouldn't hesitate to buy one and keep it in the car, ready whenever an unexpected opportunity to detect arose. Similarly it can be compacted down to fit in a travel bag. Some might ponder about the wisdom of using an 8" coil but those searchers 'in the know' will be quick to

endorse it's use in specific situations i.e. in stubble fields, foreshores, the aforementioned stony beach areas.

### What it might lack in 'raw power'

it more than makes up for in its 'super Sensitivity' to tiny things. Fact is, in some circumstances it could even be a better bet than a high end detector! It's the kind of detector that C-Scope have built their reputation on.

I began with a basic Non-Discriminating C-Scope many years ago and it was a really good detecting experience. This one provides an even better experience.

The new CS2MX will do the job for many without fuss and should be a credible entry-level contender for a wide variety of buyers.

Check out my YouTube Channel: DesDunne1 and see some video footage from the testing of the machine.

# C-Scope CS2MX test results

(Scores out of ten based on price category)

#### Ergonomics (weight/balance): 9 Simplicity/User Friendliness: 9 Build quality: 10 Weather resistance: 9 Discrimination Performance: 8 Overall detection Performance: 8 Value for money (£265): 9

The Searcher Rating

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# **Competition:** Win this C-Scope CS2MX worth £265

Our thanks go to C-Scope for supplying this CS2MX, worth £265, to give away as a prize. For your chance to win just answer this question **What score does the tester give for build quality?** Just fill in the coupon below (no photocopies allowed unless you are a current subscriber and your number is required) and send it to us at the

**TREASUREpro Competition**, the searcher, 17 Down Road, Merrow, Guildford, Surrey, GU1 2PX. Closing date for all entries by 30 April together with your name, address and contact number. Good luck!

#### What score does the tester give for build quality?:

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