

Field Test C.Scope 6MXi

By Adrian Gayler

The C.Scope 6MXi might not be a new machine, nor even been updated, but I feel it deserves a fresh review to see how it performs since it was first launched way back in 2011 (Fig.1). For those new to the hobby or who've not heard of the 6MXi, it is designed and manufactured by the British based company C.Scope. Originally called Candle International, a manufacturer of electronic components, they recognised the growing interest in metal detecting in the early 70s and ventured into the field for both hobbyists and commercial detectors. The company quickly established itself, and the name C.Scope became synonymous with offering high-quality metal detectors and exceptional customer service. However, times have changed, and many more manufacturers of detectors have appeared with new detecting technologies and designs. In its day, the 6MXi machine was extremely popular, and although still available today, some may see it as outdated and possibly scary with its array of knobs and no screen!

Remembering the 6MXi

I remember when the 6MXi first appeared and recall the original Field Test in Treasure Hunting magazine. At the time it was beyond my budget, having recently started a family and finding that any spare money was spent on car seats, buggies and very expensive school shoes as I recall. The 6MXi was a new top-notch addition to the legendary 'C' series (CS1220, CS3, CS4 and CS5) – but with a revolutionary twist: notch discrimination, pinpoint mode, and lightning-fast recovery speed. Compared to today's sleek machines with 2D displays, customisable tones, and carbon fibre shafts, it might seem a bit bulky and old school. But the 6MXi, like all C.Scope detectors, was renowned for its user-friendly interface, a hallmark of the company's design philosophy.

At the time of the launch of the 6MXi, my trusty metal detector was a well-worn second-hand Fisher F75, a machine that commanded a hefty price tag of over £800 when new. So, you can imagine my envy when my brother proudly unveiled his gleaming new 6MXi in the garden one spring day. The machine looked the bee's knees and having a quick play on his lawn I straightaway noticed the ultrafast recovery speed. I was stirred with a mix of admiration and jealousy that I couldn't quite suppress. "Can I borrow it?" I asked him straight after he wiped a blade of grass from the new shining black coil. Six months later I returned the 'well used' machine to my somewhat frustrated brother and planned to purchase one myself.

Time moved on and many, many machines and years later I found myself chatting with C.Scope on the phone, asking if they had any new machines or developments in the pipeline we could share with readers of the magazine. I recounted my tale, and they kindly agreed to send me a 6MXi as they were confident that the machine, even at 14 years old can still pack a punch against the latest range of detectors available.

The Machine and Controls

The 6MXi can appear very basic in looks by today's standards, with its straight two-piece stem and large control box on the back and not the front of the machine (Figs. 2 & 3). Let alone the 8 x AA batteries housed within the control box (2000mAh or higher rechargeable batteries can also be used) - more to





Specifications

Size	135cm extended 101cm collapsed
Weight	1.45kg
Frequency	17 kHz
Waterproof	No
PinPointer	Yes
Ground blance	Manual and Auto
Search modes	Single
Coil type	8" x 11" Elliptical DD Coil
Battery	8 x AA batteries
Heaphones	Wired with wireless options available.
Warranty	2 Years parts & labour 3 Years parts only (following the initial 2 years)



Fig.2. Not much has changed in 14 years.





The 6MXi 20 x 28cm 2D elliptical coil





come on a new option for rechargeable batteries later (Fig.4). Now, with the machine carrying a lot of metal and battery power, I recall my brother's being very 'nose heavy' using the 20cm x 28cm elliptical coil (Fig.5). However, with the new, straight stem on this machine I had no issues, and was pleasantly surprised at how comfortable the round foam grip handle was (Fig.6). C.Scope do supply a free plastic adapting clip which allows you to mount the control box on your belt, but between my finds bag, pinpointer and trowel already leaving me feeling like a one-man band, I decided to leave it on the machine.

I felt a few things needed adapting before I went out, the first of which was the headphones. C.Scope do offer a low-latency wireless headphone setup, but I preferred to use my own from some bits I had laying around. I used an August MR260 low-latency Bluetooth transmitter with a 3.5mm gold plated jack connected to the machine (Fig.7). This was easy to setup and cost less than £30 all together. I paired this with a set of headphones from my Golden Mask 7 machine. This took less than a minute and paired and re-connected when switched off then back on without any latency issues and with a crisp clear sound. You can of course use many other generic headphones or ear pods if preferred.

Next was the control box – unlike the coil, this is not waterproof or even shower proof. Being winter I did not want to get caught short when out detecting because of the rain, and although I could have ordered one from C.Scope, I decided to make my own contraption, from a clear polyester adhesive wrapping material which is normally used for wrapping cars. As I only wanted to cover the speaker and areas surrounding the bases of the knobs where water could get in, this seemed a



Fig.8. My shower proofing of the 6MXi.

quick and simple solution. This material is not cheap, but offers UV protection, is scratchproof and does not leave any sticky residue when removed (Fig.8).

The area that some may find daunting is the array of knobs - but once explained you will see how simple the 6MXi really is (Fig.9).

A - Power On/Off and Sensitivity level control

B – Iron Volume Control Mute the iron channel's audio by setting the control to position 1. To adjust the volume of the iron tone, increase the setting. The iron tone is the lowest-pitched audio of the three tones available on the machine.

C - Ground Control I found the Auto option worked perfectly on all the land I detected on without any noticeable loss of depth. However manual ground balance can be achieved via a configuration of the Sensitivity, Discrimination and Ground balance knobs.

D – **Disc Control** The DISC control allows you to filter out certain types of metals based on their conductivity. Setting a threshold to reject unwanted targets (e.g., iron) while accepting more valuable ones (e.g., silver, gold).

E - Disc Volume The Disc Volume control primarily affects the 'Medium' tone. At minimum setting (1), the 'Medium' tone is muted, silencing targets on the 'left' side of the Disc pointer. At maximum setting (10), the 'Medium' tone reaches its maximum volume, matching the 'High' tone. Between these settings, the 'Medium' tone gradually increases in volume, acting like a volume fader and influencing the audio balance between the 'left' and 'right' sides of the Disc pointer.



Fig.9. Controls on the 6MXi are quite simple once you get started.

Can the C.Scope Cope?

With a new machine using 14-year-old single 17kHz technology, I headed out early on a Friday morning in what I call perfect conditions: no wind, semi-moist soil after some light rain the day before and the sun partially breaking through the clouds. I really wanted to see how it would perform on land I have been over with a multitude of modern multi-frequency machines with all the bells and whistles a detectorist could ask for. With just 3 tones, no LCD display or graphical ID's, I was genuinely looking forward to a bit of a 'tonal' challenge. Using the auto ground balance and able to run the sensitivity to near maximum, the machine was complimentary in its silence on the heavy clay and slightly iron infested soil.

Off I went with minimal discrimination on the machine, covering areas that I knew both I and some of the *Treasure* Hunting magazine team had covered many times in recent months. A few low iron tones came in as I started walking across the very large field, along with a few mid-tones which I decided to dig. The first revealed a foil wrapper from a Tunnock's chocolate bar, followed by a lovely ring pull. It has been a decade since I have heard these tones, but they started to come back to me in a weird kind of way. Not having to look at any VDI's or graphs and using my brain and ears to discriminate what I heard was enjoyable and reminded me how and why I loved this hobby. Maybe my brain discrimination might not be as good as modern-day electronics, but I found this all part of the challenge.

Cunobelin Silver for C.Scope

After an hour or so, I had an absolute clear and loud two-way tone through my Bluetooth setup on the 6MXi - I knew it would be a good target to dig. With only the tones identifying the depth of the target I was hopeful that it wasn't that deep. At this point it is worth mentioning that even though the machine has a pinpoint function, I found I didn't need to use it as simply using the coil and tones I was digging 90% of my targets perfectly, simply finding the right point to dig by manoeuvring the coil. Digging out the plug I broke it up and waved it over the coil rather than use my pinpointer. This is probably because I thought I was back in 2014 where I didn't have a pinpointer and was enjoying a bit of 'retro' detecting.

Opening the clay clod like a sandwich, there it was – something which I don't often bring up on this permission! A fabulous Celtic Trinovantes and Catuvellauni Cunobelin silver unit in superb condition (Figs.10a & b). I swore out loud and then laughed. The swearing was due to me being angry with myself for not discovering this earlier, based on the number of times I had been over that piece of land. The laughter being from the enjoyment of finding it with a machine I wanted to love again after many years. And yes, possibly any other modern machine would have found it 'if' it had gone over that spot in the field that day. The coin was one of the shiniest and intact I have found for years. After a gentle clean at home you can see what a fabulous example it is, which I will cherish.

As I continued throughout the day, I unearthed a lot of good finds and a lot of junk targets, predominantly small pieces of lead which the area is laden with (Fig.11). The field saw a lot of medieval activity based on my previous finds, and pulling up two nice crotal bells which were ringers confirmed this. The three tones on the 6MXi works well and I came to know when I had a good target, although I did still get fooled a few times and dug some deep iron (Fig.12). The weight of the machine began to feel noticeable after three hours detecting, so I decided to stop for lunch. Sitting by the edge of the flat field I looked at the number of holes I had dug. The dark compacted soil from my boots showed up across the field and I was shocked on how many targets I had had, most of which were good. Was this because I was making the decision based on my own judgment and not relying on a digital display or multiple tones from a more recent machine that might have confused me? All I had was tones to guide me. I dug a lot of faint targets that gave a mid-range tone, along with some iron. This helped me confirm what I was hearing and digging.

Trying out the Manual Ground **Balance**

After a quick sandwich I turned the 6MXi back on and the headphone setup I had manufactured paired straight away. I found a clear bit of ground to try out the manual ground balance. I hadn't had any issues of ground chatter but wanted to see if I would get any more depth and possibly some improve-

ment in the target ID tones from the machine. After a good old pumping of the coil, I would normally have headed off into the adjoining field but based on my finds and the lovely Celtic silver unit, I wanted to stay where I was.

I was using the following settings on the machine: Sensitivity set to 9, Iron Volume set to 4, Discrimination Volume set to 4, and Discrimination set between 3 and 4, which produced three tones. This seemed to be working



Figs. 10a & b. Obverse and reverse of a Celtic Trinovantes and Catuvellauni Cunobelin silver unit.



Fig.11. I dug many pieces of lead.



Fig.12. I still dug a few bits of deep iron

well all morning, but I wondered if the manual ground balance would bring more from the ground. After two hours going back over and around the areas I had already detected, I had only pulled up a few buttons and more bits of lead until that lovely crisp 6MXi high tone came in, slightly faint. Using the X cross movement with the coil around the target instead of using the pinpointing function I dug down. The ground in this area was heavily compacted with lots of stone and broken flint where every

Figs.13a & b. Obverse and reverse of an.
Edward III penny.



stone looked like the target. I used my pinpointer this time in the hole, and a good job I did, as a very small hammered stuck to the end of it with a bit of the claggy Essex clay around five inches down (Figs.13a & b). Was this the benefit of using a manual ground balance?

The 6MXi Today

As winter began to set in, I headed out many times with the 6MXi and it has survived the odd shower with my homemade protective coating, although I think I will get a case from C.Scope in due course. I have taken a multitude of detectors out with me and compared them on depth, recovery speed and iron discrimination. These have included some modern machines using an array of multi-frequency technologies (Fig.14), as well as some single frequency machines (Fig.15). Firstly, the recovery speed on the 6MXi is still impressive compared to both the multi-frequency and single frequency machines. Almost like when the original Deus appeared and blew everyone away with its super-fast and changeable recovery speeds. On my iron infested areas, it performed very well not quite up there with some of the latest multi-frequency machines but not far off the single frequency machines. The depth I was getting on the 6MXi is still impressive. I dug a 'love token', probably all that remains of a William III sixpence (Fig.16a & b) at a good 10 inches in heavily compacted wet clay soil (Fig.17).

It did struggle with deep iron, something with which some more modern



machines still have issues today. However, I was detecting with almost zero discrimination which naturally allows the iron to come through, but I didn't want to risk missing small, low-conductivity targets. The 6MXi eliminates iron well with a higher discrimination, and I especially like the way this can be changed just by turning a knob on the control box rather than faffing into a menu screen.

I feel that the 6MXi is still very competitive machine. OK, it might have technology originally developed 14 years ago, but it is a classic design using technology that not only works, but can be easily repaired in the UK, and is British. Not often you can say that nowadays about many things. Not much has changed on the machine over the years, but some exciting news is that you will soon be able to purchase a rechargeable battery and charger for the machine. This will fit the C.Scope CS3MX-I, CS4Pi, CS4MX-I as





well as the CS6MXi and will be available direct from C.Scope. (Fig.18). I was able to achieve a good 18-20 hours with the batteries on the machine which lasted longer that my wireless headphones setup that would last only six hours. I found real enjoyment in just switching on the machine and only letting my ears do the work, instead of getting a stiff neck by constantly looking down at the screen. It's very rewarding when you hear and dig the right tone. After just a couple of days out with the machine I had unearthed a wide array of finds which I was personally pleased with (Figs. 19-24). These finds were from four fields where myself and my detecting buddy usually go, and although not heavily detected, they have been covered a few times at least. In all, the C.Scope machine was a joy to use and can easily hold its own with some modern machines today.

A Dozen Gold Staters!

As for beach detecting, I have not ventured there with the CS6MXi as, in my eyes, it is an inland machine. But I'm sure with a manual ground balance, reducing the sensitivity and upping the discrimination it will be OK, but nowhere near a

multi-frequency machine. Detecting with it bought back memories like using an analogue mobile phone - it still makes and receives calls but won't guide you home with its maps or interrupt your detecting with a WhatsApp picture sent by one of your friends. I intend to use the 6MXi more when out detecting now and hope I do as well with it as 'Hopenscope' who wrote an article in last month's Treasure Hunting magazine, showing some of his amazing finds including a dozen gold staters! I have had some interesting finds with the machine but no gold - yet!



Fig.18. The new rechargeable battery coming soon.



Fig.20. The top of a lead soldier still retaining some traces of paint.

Fig.21. An early lead weight.



Fig.22. An early Girl Guides badge.







Fig.24. Lifebuoy Soap 'Pro Valetudine' pin badge

