

Field Test X-Terra 305



The X-Terra 305 packaging layout.



The Coiltek 15 Inch "All Terrain" coil.

Impressive layout of X-Terra 305 control box fascia.



I always enjoy field testing metal detectors from the Minelab stable. The X-Terra range – using the sophisticated VFEX technology – is a tried, trusted and well-established series of detectors, so when an updated or new model arrives it is truly exciting.

On this occasion I also had the added bonus of examining an additional product manufactured by Coiltek for the X-Terra range: the new Double-D 15 inch 7.5kHz "All Terrain" coil.

As is no doubt the case with many other readers, due to wet summers, delayed harvest etc., I have had to adapt to searching pasture fields when no ploughed land is available. As a result, the performance of large coils has become of particular importance and interest.

Pasture is not ploughed every year, so to maintain a "site find rate" it is necessary to detect deeper. Opposed to this disadvantage is the fact that the condition of many pasture-recovered finds is often far superior to those from agricultural sites, which are often corroded by fertiliser and have the potential to be damaged by various soil preparing implements. The application of so called "Green Waste" – much of it containing shredded aluminium onto agricultural

fields – and our changing weather patterns may well dictate in the near future that pastureland features in a much more predominant scale in the pastime of metal detecting.

When the package arrived I carefully unwrapped it, and examined it in situ. I also checked over the Coiltek 15 inch coil. I'm a great believer in initial product presentation, in addition – of course – to build quality and performance. At this stage I'm looking for any frustrating factors with the detector pack such as missing handbooks to the far more serious issues of poorly made or broken parts.

In regards to coils, I'm looking for splits, cracks, poor cable connections and all assembly items to be present. I'm glad to say no concerns at all here for either product.

As we old hands are quite experienced with the basics of detector layouts, many of us could put the parts together without consulting the relevant assembly pages in the manual. However, if in any doubt – or you are a new purchaser for this model – always consult the handbook to avoid incorrect assembly.

I examined the completed machine looking for any weakness or poor matching joints at the connection points; I also examined the cable condition. I'm pleased to say that all was in excellent order.

Specifications X-Terra 305

Weight (excluding batteries): 1.3kg (2.91lbs)

Length extended: 1.42m (56 inches)

Length collapsed: 1.22m (48 inches)

Visual Display: Positive Reflective LCD format

I then attached the Coiltek 15 inch coil to see how it looked on the body.

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X-Terra 305 with Coiltek 15 inch coil attached.



Specifications Coiltek Double-D 15 inch 7.5kHz "All Terrain" Coil

Diameter: 37cm (14.5 inches)

Weight: 697gm (1lb 8.6 ounces)

The coil's appearance on the X-Terra 305 looked good, the detector's balance remained comfortable, and (I must admit) I was certainly keen to test its performance.

For the purposes of the main field test, my aim was to experience the X-Terra 305 and its 7.5kHz coil on a variety of available terrains and soil types, interchanging with the Coiltek 15 inch coil as well. However, before doing this I spent a good hour studying the manual. Even though I am familiar with other Minelab models of detectors, I would highly recommend this. This is especially the case for those new to detecting, or those who have never used a Minelab before. I also recommend taking the manual into the field for instant at a glance consultation.

Having shown Dave Stuckey the X-Terra 305 he was also very impressed and offered to take some photos (so long as he could have a go with the detector!). We therefore drove out to Essex looking for available sites on which we had already gained search permission.

The first site was the location of a crashed German aeroplane that we hope to be excavating soon (if we can find it!). It was oilseed rape stubble, with soft friable top soil beneath which was a hard layer of clay.

We knew roughly where the aeroplane had crashed, but I wanted to

put the X-Terra 305 through its paces to try to locate the precise impact point. I liked the balance of this machine, and in this case the standard 9 inch search coil was ideal for gliding through and around the oilseed rape stalks.

Signals were crisp and sharp, and after an hour we had determined the impact point to a much more localised status. The deepest recorded signal gave us a 3 inch piece of aluminium at 12 inches.

The signal sounds were quickly discernible for different types of metals and precise digital recognition only wavered when there was a high complex mass of ferrous and non-ferrous metals. To be fair, unless you are hunting crashed aeroplanes this is the only time you might experience this. In almost all other cases you would probably be on such a trash infested modern site that you would quickly move off. The detector found the impact point for us, so had performed superbly and achieved what we wanted it to do.

This terrain, with the tough rape stems, would have been unsuitable for the Coiltek 15 inch coil.

The second site was a field of wheat stubble with alkaline chalky soil. It had been sheaved in the old traditional style, and Dave thought this would make an interesting backdrop for some photos.

Next to one of the sheaves the X-Terra 305 gave a signal that was clear but had a slight spitting edge to it. The screen digital numbers jumped around a bit too, but the target proved why. Lying



Using today's sophisticated advanced technology to search out the past.

just under the stubble was a 2010 dated 1p, no doubt dropped by one of the sheaf makers. These coins have a thin copper coating over an iron core. However, even in factory presets, the X-Terra 305 had still provided positive confirmation that the target should be investigated. Around the field edges a variety of targets were retrieved including shotgun cartridge caps, three corroded Georgian pennies, a broken penknife, and an old, white patinated lead .177 air rifle pellet that came up at about 4 inches.

The Coiltek 15 inch coil was then attached and used along the same field edges. With this combination I located a really corroded Georgian penny at a measured depth of 9.5 inches.

The balance of the X-Terra 305 with both coils is superb, and I was impressed by the degree of stem adjustment allowing the detector to be used by individuals who are short, medium or tall in height. (There is an even shorter stem available, making the detector fitted with this an ideal choice for children).

A short while later we returned to excavate the aircraft crash site. Since our last visit the field had been cultivated and had dried out considerably. I wanted to check the performance of the X-Terra 305 on the newly disturbed soil that now had much less moisture content.

Once again the performance was outstanding, with fragments of aluminium of around 10-100mm in length



Julian searching a sheaved stubble field.

being recovered at depths of up to 12 inches. These gave a screen reading of 40 in factory presets representing aircraft aluminium alloy. The scene of the investigation is shown in one of Dave's photos. Another shows some of the finds and renowned aviation archaeologist Philippa Wheeler and myself.

The excavation was highly successful with many parts of an exceedingly rare aircraft being located. Thanks to Minelab these can now be conserved and saved for the continuing study of this country's rich aviation heritage.

During the excavation I alternated between search heads in order to examine the performance of the Coiltek 15 inch coil in the same conditions. Once again the results were extremely good and resulted in the deepest find so far being recovered. This came from the side of the main excavation, and was a large 200mm section of compressed airframe. This was found at (a wrist numbing given the clay density) depth of 20.5 inches.

Overall this coil was finding objects in the range of 10-100mm in size at an observed depth of 2.5-3.5 inches deeper than the 9 inch coil. This result is, of course, what we were expecting.

The next site we chose was a huge and well detected series of pasture fields. For this section of the field test I also asked Steve to examine the performance of the X-Terra 305 as well. On this site

A target is revealed.



A decimal penny lost by one of the recent "sheaf makers".

The screen value 40 of aluminium alloy.



Scene of the Heinkel 177 crash site.



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Curious copper-alloy leaf with threaded end – possibly an ornate lamp stem fitting?

Broken Roman spoon bowl and Roman belt fitting.



Obverse and reverse of Charles I shilling.



Obverse and reverse of Edward (?) issue farthing.



Philippa Wheeler and Julian examine some of the finds made.

we always dig out circular plugs of grass and soil, remove the find and then place the plug back. In this way soil stratification disturbance is minimal and the grass root matrix hardly disrupted.

Going methodically slow here allows you to obtain those faint blips that can turn into positive signals and hopefully interesting finds. The top soils and underlying soil strata vary from fine and coarse gravels, to iron bearing clays and seams of peat; this is therefore a truly variable terrain to test a detector on.

The X-Terra proved able to cope with this variable soil terrain to a very high level of performance and consequently some interesting finds were made (along with, of course, the usual shotgun cartridge caps and Georgian pennies).

Various adjustments were made here and there to the X-Terra 305, but these were mainly down to individual choice and are not relevant to be recorded for a general field test.

Steve quickly mastered the X-Terra 305 and found a bowl from a Roman spoon and a Roman belt fitting. His next

find was a curious copper-alloy leaf with a threaded terminal, perhaps a decorative lamp fitting? He then followed this up with a cracking Charles I shilling, and minutes later a tiny Edward farthing. Both located in a very friable gravelly layer of soil. However, his most curious find was a 11mm diameter copper-alloy button with a silver coating. As with the hammered coins this was found with the 9 inch coil, and came from a depth of 5 inches in a compact layer of moist gravel bearing clay. The front is covered with a thin cut out of quite crudely manufactured glass that protects a portrait of a gentleman whose fashion attire seems to date him to around 1640-1680. A truly marvellous little find. What its actual age is, is currently the matter of some in-depth research.

There is a lot of bronze dross on this site – some of considerable age – and the screen value for this was always 44. The two final finds from this grassland were a medieval gilded copper-alloy buckle plate, and a Victorian/Edwardian brooch section. Both of these artefacts

were found with the Coiltek 15 inch coil X-Terra 305 combination, at a measured depth of 9 and 8 inches respectively.

Performance

All users concerned with this field test evaluation really appreciated the X-Terra's consistency in target evaluation and identification. This was tested on several garden test beds and also in the field. The numeric range for targets is from -4 to 44 and easy to interpret. This detector also has a superb ability at winking out non-ferrous targets even in the most trash laden search zones. The detector has Factory Presets as its foundation base and a huge variety of adjustable variations to suit the user to modify performance to enable all conditions to be searched. The X-Terra 305 has an all metal pattern and two additional preset patterns. Even if the machine is switched off or you have a battery change the edited patterns are automatically saved for you.

Conclusions

Lightweight, and easy to interpret and modify when required, not only does this detector look good it is also actually a smashing little machine to operate. Much care, thought, and research and development have been applied to this



Beautiful copper-alloy button with glass front showing gentleman dressed in 1640-80 style.



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Medieval copper-alloy buckle plate showing traces of gilding.



The screen value 44 of bronze dross.

Section of brooch possibly Victorian/Edwardian?



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model and all its optional accessories. This is reflected in user satisfaction and confidence, which are both vital components to successful metal detecting. It is a rugged detector that will be able to handle the tough life we give this type of equipment.

The qualities stated surely qualify this detector as a market leader for new starters and as a backup machine for more experienced users.

The manual supplied is written in easy to understand English. The detector's keypad layout is both ergonomic

and practical, make the machine real "turn on and go".

The standard 9 inch coil is a high level performer, but if you want increased coverage and more depth then the combination of the X-Terra 305 and Coiltek's 15 inch All Terrain Coil is superb. I feel this partnership has the undoubted potential for making some really cracking finds.

After considering myself and asking the others "Was there anything concerning this detector that could be corrected, improved or was just un-required?" the

answers were all negative; we think that this is perhaps the only time the word "negative" will be applied to the X-Terra 305.

It is simply a great partner to have out with you in the field finding, researching, conserving and above all sharing the buried metallic history of anywhere in the world you happen to use it. I therefore recommend this detector and wholeheartedly further recommend that anyone thinking about using or buying one shouldn't delay too long as we are already into the new season! TH