

Detector Field Test

XP Gold-Maxx

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Once I have purchased a new detector - after much consideration of all the information I can find out about it - I read through the manual, give the machine a try out with some objects that I hope it will be capable of finding or rejecting, and then it is out into the fields. Only then do I start finding the faults or operating difficulties with my new purchase. Some of the problems might only require another read of the manual to solve, but others could result from inbuilt characteristics that hadn't been mentioned in all the "hype".

I intend this report to have a different format. Instead of just copying out the functions of the various controls from the manual, I have tested those functions at home and in the field. My assessment will be based on seeing this detector through the eyes of a new owner, and what he or she will come up against. All detectors make finds; but it is how good they are at doing so, and with how much ease, that counts.

Nigel Ingram at Regtons contacted me and asked whether I would be prepared to carry out a field test on the new re-chipped XP G-Maxx, adding

that plenty of time would be allowed for me to come up with my findings.

Tone ID has always been a problem on the type of mineralised ground that I search, so I was interested to see how the G-Maxx would perform.

I don't think I need to go into all the details of how to assemble the G-Maxx from the box that it arrives in. Suffice it to say that it is very easy to put together and that build quality is first rate, with the manufacturers paying special attention to the known fault areas encountered on detectors.

The G-Maxx is well-balanced and light enough to use all day without experiencing arm fatigue. It runs at a frequency of 18kHz, and is powered by eight 1.5 volt AA batteries in two drop-in pods. These have a working life of 70 hours, although if you are using the NiMh rechargeables this drops to 50 hours.

One area I do think could see some improvement is that of the instruction manual. Parts of it need to be updated to correct English, and more in-depth explanations are required if it is to be fully understood.

After reading the manual I spent a

couple of hours at home assessing how the detector reacted to a range of different objects, and varying the settings in order to familiarise myself with the controls. Having gained what I thought was a basic understanding, I took the detector out to my back garden.

I live in a relatively new house so it has a great deal of builders' rubbish beneath the lawn. At the factory preset positions the detector was going absolutely "bananas". With the amount of different tones coming from the machine, I was sure that it wouldn't be too long before kids would be out on the streets looking for an ice cream van! Turning the sensitivity right down quietened the machine considerably. After this it was a question of taking the detector to any spare patch of land available and spending some time coming to grips with the controls. Familiarisation was the important issue, making any worthwhile finds secondary.

Eventually, as harvest progressed and more of my sites became available, I was able to try out the detector over a period of a couple of months in real field conditions. The results are outlined below.

Field Appraisal

The G-Maxx has two operating modes: it can be used in tone ID or meter discrimination, and these work independently of each other. As mentioned earlier, tone ID has never been a system that has previously worked properly on any of my sites as a result of heavy mineralization. I have to say that the G-Maxx is the first detector that I have used that can cope with these conditions without any problems.

When selecting tone ID you have a choice of two options: double or triple tones. With the double tone small pieces of iron will give a low sound but you get a clear high tone for the good stuff. There is no mistaking a good target: the deeper the coins the higher the pitch they develop, even when close to any nails.

Working in conjunction with the "Silencer" on "0" to "1" and sweeping



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slower in bad areas, I found target separation to be bordering on the edge of exceptional.

The triple tone will give a higher pitch than the double tone on coins, with a medium tone for less conductive metals. However, early during the test period I found it confusing to use either of the tone options over the deeper medium-sized iron targets, which resulted in a medley of tones. Could I have located a coin near to iron?

This, however, as I later discovered was down to me and my learning curve with the G-Maxx. Approaching the target from a different direction helped with identification. Also, one area where the triple tone scored better than the double tone was on coke. When coke is registered (the bane of many detectorists) in double tone it gives the same reaction as to a coin. But with triple tone a silver coin signal is markedly higher than coke (but this is not the case with a Roman bronze minim - see conventional discrimination below). I also found that switching from one tone mode to another helped with the identification of "iffy" signals.

While on the subject of tones, I found that the higher pitch of the innovative headphones supplied gave a far superior signal for this machine than my more expensive ones. No doubt they will be very light and cool in the summer months too, but I don't believe that they will stand up to a lot of misuse.

Besides the functions described above, the G-Maxx can also be used as a conventional silent-search discriminating detector. When using this Discrimination mode the tones, "Silencer", and iron volume facility will be de-activated. With this system the iron discrimination is spread over a wide band starting from all metal on "0". Nails are lost between the 5-6 settings, with full discrimination still



being able to pull a cut half of Henry II with very slight depth loss. This enables a lot more user control than many other detectors. Larger iron will come through and, if at depth, it is hard at times to differentiate from a good signal, but changing to tone ID with the iron level will show whether or not the target is ferrous. Conversely, it is very easy when in tone ID to switch to discrimination to verify signals. On full discrimination coke is lost, but you are still able to pull in hammered coins and Roman minims.

Normal discrimination is, without doubt, the quieter of the two sets of discrimination with no discernable differences in depth ability.

Regarding the "Silencer" the wording is misleading in the manual when it talks of false signals caused by iron, although this quite rightly implies some inbuilt discrimination. I have come to the conclusion that the "Silencer" with its three-position switch, works on the same discrimination principal as bottle cap reject. This is for nails and small iron only, and the larger the iron, the less the effect. (This

is where the iron volume level takes over). Running the coil over a 2in nail in the "0" position will give a certain amount of discrimination, by way of a broken signal. Switching to positions 1 then 2 will increase the rejection to "lose" the nail, albeit at the expense of losing a little of the response speed (but this is the fastest I have come across). Depth loss even on 2 is negligible.

In use on 0, small iron will give an easy identifiable "spit" or a very brief chopped signal. Switching first to 1 then, if necessary, to 2 will eradicate this smaller stuff; also by using 1 or 2, tone ID is improved on the worst sites. Do not be confused by people saying that the "Silencer" gets rid of ground chatter; it doesn't. The only thing to get rid of ground chatter is a more positive ground balance!

This leads me nicely onto the subject of ground balance. The preset mark will eliminate hot rocks and other mineralised objects such as certain pottery.

Fig.2. Iron of this size is too large for the "Silencer" but can be identified with the use of the Iron Volume Control.

Fig.1. The G-Maxx "Silencer" will handle iron of this size.





Fig.3. Response speed test of G-Maxx, using cut hammered halfpenny.



Fig.4. Response speed test using denarius. Because of the high quality silver and thickness of the coin it was possible to maintain a two-way signal (working very slowly).



Fig.5. Response speed test using Roman bronze coin. This is not too bad a distance for such a bronze coin considering the size of the nail.

Holding the coil for 5 seconds in the air, away from the ground when first switching on, ground balances the detector correctly. On other detectors with a 10-turn ground adjust set correctly to eliminate hot rocks requires a further turn, to a turn and a half more positive with an ensuing loss of depth.

So for those people where hot rocks aren't a problem, by turning the control to the left of preset this will give them more depth. For my land, I found this to be where the red segment starts, about the one o'clock position (mineralisation allowing). Bear in mind, however, that turning the control too far left of the preset will result in loss of discrimination and false signals caused by negative ground balance. If you set this even further to the left it will lead to the detector sounding off if the coil scuffs the ground. If hot rocks do become too annoying, run one over the coil and turn the ground balance to the right until the sound disappears. Too far right will result in loss of depth. After having said all that, for those new

to the machine it is best to stay at the preset mark. It will be more stable and give better discrimination. Keep to this, even with a change of coils.

Iron Volume

To begin with I was bemoaning the fact that the G-Maxx didn't have a constant threshold and an all-metal mode to help identify iron quickly. Large deep iron was coming through and to my ears sounded like a good signal, but after awhile the more I used the Iron Volume and understood it better, the quicker and easier it became.

Without the volume control, iron in the first few inches below the surface will give a low pitch; however, for deeper or larger pieces the tone changes to a higher single or double pitch. With the iron volume in use, anything ferrous gives a distinctive low buzz; the deeper or larger the object, the more you need to increase the Iron Volume level to the right to identify it.

I found that on large pieces such as horseshoes, if the coil was about a foot away the detector would give a good signal. Then as the volume control kicked in, the signal gradually became worse the closer the coil was moved to the iron.

Eventually I came to understand that the size of the target had overpowered the detector, and what I was hearing was not a good and a bad target

in close proximity. If the ground is very mineralised and contains lots of iron, having too high a sensitivity setting will cause the iron volume to sound out (slightly) on a good signal.

I did try adjusting the ground balance to a little more positive level and found that this helped - but only partially. Reducing the sensitivity will cure this. Some detectorists will have the Iron Volume control at their preferred settings as soon as they start detecting, but I found that if the control box was hip-mounted for ease of access, I could run the Iron Volume on zero and then use it to check out the individual "not sures". With more ferrous debris I found a setting about 9 or 10 o'clock worked well, and I could turn it higher on the individual larger pieces when necessary. The use of the volume control does not affect depth capabilities.

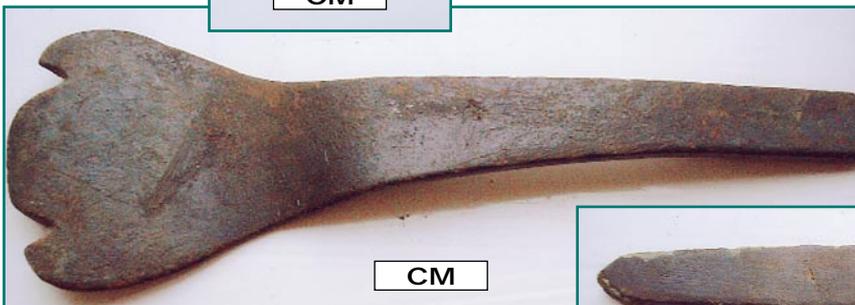
With the amount of mineralisation in the ground in my area, the higher kHz machines (17, 18 and 19) cry out for a DD wide-scan coil. The standard one fitted on the G-Maxx is really good, with very little "side loss" to nearly maximum depth. It is also robust, but light enough to swing all day. It combines the handling of mineralisation with good depths, and with this type of coil target acquisition doesn't have to rely on just the coil centre.

There is no pinpoint mode, so sweeping the coil at 90 degrees to the target is necessary. By lifting the coil and just getting a faint signal, placed the object dead centre each time.

Fig.6. This find was identified as a Romano-British decoration. No parallel is known.



CM



CM

Fig.7. Spoon handle with trident terminal, late 17th to early 18th century.



CM

Fig.8. Strap end with sheet spacer, late 13th to early 14th century.

Fig.9. Part of a Celtic silver unit.



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Fig.10. A demonstration of the G-Maxx's ability to pull out hammered pennies, and cut halves and quarters from amongst the iron. (Note the rust stains on the coins).

Conclusions

What do we all want from our detectors? Most of us would say "depth" but on the proviso that this does not come at the cost of having to dig a lot of iron. A good detector should also have the ability to find the tiny stuff from amongst the iron while handling bad mineralisation.

Until now I have had to use more than one detector to achieve all this, and it's a tall order to expect all of those abilities from just one machine. However, I have discovered that if used correctly the G-Maxx is capable of all these things.

To be frank, for the first few days that I used the Gold-Maxx I didn't like it, because I didn't understand it. In my ignorance I thought that it was "gimmicky", the information it was giving was at times misleading, and I had to contend with alien detecting terms such as "Silencer" and "Iron Volume". However, once I came to an understanding of the controls - and how each worked in conjunction with the others - it left me with an admiration for the thinking behind the design of the detector.

It eventually reached the stage where I was not only going out to make finds, but also to see just what else the

Fig.12. Small medieval oval buckle, 13th-14th century.



Fig.11. A handful of "scruffy" Roman.

detector could do. To get the best from this machine does require time and more than a little patience; but isn't that the case with all good detectors?

With regards to the dyed-in-the-wool, switch-on-and-go, silent search merchants, this is probably a machine that they will neither like nor appreciate. Using the tone ID system every target will be heard apart from the small ferrous. (The detector does have a perfectly good normal discrimination system, but I found that using this was not half as interesting - or informative!).

To get the best results out of this detector a slower sweep speed that normal is required. I don't recommend using the G-Maxx if you are one of those detectorists who always go belting out across the fields.

The areas where the G-Maxx has impressed me most has been its response speed and target separation, which is really exceptional. Normally to achieve such good results would be at the expense of depth. But such is not the case with the G-Maxx; in fact I noticed a marked improvement on depth over my other detectors, even on the likes of cut halves and quarters.

With such good results achieved with the standard wide scan coil on mineralised and iron infested areas, I would imagine that the addition of the accessory elliptical coil would be of real benefit on Roman sites etc.

Iron, deep or otherwise, was identified with the tone ID controls and that even included some iron washers (notoriously difficult to discriminate out). To begin with, however, I did have some problems in "sussing out" signals. However, coke problems should be a thing of the past by the use of the detector's discrimination controls, without loss of coinage.

I found the double tone easier to use as a search mode and then, when a target has been located, checking the signal with triple tone or - if needed - the standard discrimination mode. Differences in depth between the two discrimination modes was negligible.

Whether you choose to go for the hip-mount facility or not, the detector has perfect balance and is very light. As anyone who has read my previous articles will know, whenever I go out detecting I always put in a full day. I was able to use the G-Maxx for up to 10 hours at a time without the feeling that my arm was dropping off.

In final summing up, my feelings for this detector went from dislike to like. Would I recommend it? All I can say is that I now own one. **TH**

Footnote: Although I have criticised the content of the manual I have produced a four page supplement titled Tips & Hints that is now supplied with each Gold Max sold by Regton.

Fig.13. Part of a medieval purse bar with cross-hatch decoration, late 15th to early 16th century.

