

Field Test Report

XP ADX 150



Fig.1. The XP ADX 150 unpackaged.



Fig.2. The assembled machine.

I've never turned down an opportunity to carry out a field test on a new metal detector, especially when it involves technology that I have never got to grips with previously. So when TH asked me if I could do a field test on the XP ADX 150, I jumped at the chance.

It was not that the ADX 150 is technologically superior to my own machine, but simply because it gave me the opportunity to try out wireless headphones. I've often been intrigued by the idea of using a detector without the hassle of trying to avoid snagging the headphone cable, or putting my spade through it!

This is the newly-upgraded version of the ADX 100 and features the same revolutionary slide-through retractable stem and handgrip as its more superior brother, the XP Deus.

XP have utilised their knowledge from previous machines and fitted the 150 with an advanced microprocessor to enable faster analysis and discrimination of signals.

Although targeting the general market, XP have also simplified operation and handling of the machine by reducing the number of control switches to just two; which is ideal for beginners, or anyone who just likes to "switch on and go" and not have to bother with complicated set-up procedures.

The Package

The overall boxed package weighs approximately 1.9kgs, although the complete assembled machine weighs only 1.34kgs. Included in the package are: coil with 2.35m of cable, stem and handle, control box with battery cartridge inserts, and a packet of Velcro strips to secure the cable. Also included is a waterproof hip mount pouch with belt.

Batteries

The ADX 150 takes eight AA alkaline batteries, although rechargeable NiMh batteries can also be used. These fit into two cartridge inserts that slide into the battery chamber at the rear of the control box (note: you must ensure that the polarity contacts are the correct way round before inserting).

The estimated battery life for alkaline

batteries is 50 hours with headphones, or rechargeables 40 hours with headphones.

Control Box

The control box slots into the grooves under the armrest and snaps into position. Alternatively, you can wear it hip-mounted with the appropriate belt and waterproof pouch that comes supplied with the machine.

Headphones

The control box has a standard 6.35mm jackplug socket for normal cable headphones, but the ADX 150 is also "wireless ready" and has the appropriate transmitters integrated into its circuitry. In addition the ADX 150 features a 28mm loudspeaker on the front of the control box for use without headphones. Headphones are not supplied with the ADX 150.

Search Coil

The ADX 150 comes with a standard 9 inch (22.5mm) DD search-coil fitted with 2.35m of cable, which is wound around the shaft and handle before connecting into the rear of the control box.

Assembly

After unpacking the machine I laid out the components to check that everything was present (Fig.1.). Attachment of the search coil is pretty much the same as most other detectors, using rubber washers and securing with a "fly nut".

Once secured, the cable has to be wound around the stem and handle before connecting into the rear of the control box. The cable is then secured around the shaft by using the supplied Velcro strips. Once connected the machine is pretty much ready to use (Fig.2.).

Controls

As mentioned previously, the ADX 150's controls (Fig.3.) have been minimised to just two basic control switches for ease and simplicity of use. These consist of: On/Off-Sensitivity and Discrimination.

Once the machine is assembled, and the batteries installed, you can switch the



Fig.3. The control box features.

Fig.4. Inserting the plastic peg in order to use wireless headphones.

machine on. If everything is assembled correctly you will immediately hear a short "signature" tune that will tell you that the machine is working. The ADX 150 is effectively a "silent runner", meaning that there is no continuous threshold tone to be heard while it is in operation. The only sounds you should hear are when the coil passes over a target.

The Sensitivity can be adjusted to suit the type of ground, or environment, you are working on. High sensitivity may give extra depth to try and weed out those deeper targets, but it could render you susceptible to interference from outside sources, such as overhead pylons or other nearby metal detectors. You will eventually gain experience in knowing how to adjust this setting, but it's always best never to keep using it at its maximum setting.

The Discrimination switch goes from 1 to 10. In the Off position it is All-Metal mode. Experienced detectorists will probably want to set this straight to a setting that will reject foil etc. But for any newcomers to the hobby I would suggest starting off in the All-Metal mode to get used to using the machine. After you've

found and dug a few targets then try adjusting the Disc slightly to cut out iron, etc. It's never advisable to use a detector in the highest level of discrimination, as you'll end up possibly rejecting some smaller wanted finds.

Unlike some metal detectors the ADX 150 doesn't have audio discrimination, meaning that all signals will sound roughly the same regardless of the type of metal. However, a quick test on a selection of various objects did show that small rusty bits of iron gave a "spitty", less distinct signal.

In The Field

For the purpose of this test I was provided with two different types of wireless headphones: the WS1s and the WS3s, so I wasn't going to be using wired headphones.

Before using the ADX 150 with wireless headphones you need to insert the small plastic peg (supplied with the phones) into the jackplug socket on the front of the control box (Fig.4.). This not only disables the loudspeaker but also acts to prevent any dirt or water getting into the socket.

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The WS3-type headphones are pretty much like regular phones, going over the top of the head and completely encapsulating the ears (Fig.5.). The WS1-type headphones, however, are considerably smaller and simply tuck around the back of the user's head and press against the ears (Fig.6.).

Both types of headphones come with appropriate charger units and only take

about 2 hours to fully charge; a small LED indicator light on the side of each unit will tell when the unit is charged. Although they can both operate on two channels, if used with the ADX 150, they can only be used on Channel 1. Other detectors in the XP range can be operated on either channel.

For the initial part of the test, which my daughter Rachael helped me with,

we set up the ADX 150 using the control box in the hip-mounted position (Fig.7.). This was primarily due to the fact that we had just had a considerable amount of wet weather and didn't want to have to set the machine down on the ground with the control box situated under the armrest. This would have allowed it to get covered in water, or mud.

I decided that, as we had two sets of headphones, we could wear them simultaneously; Rachael wore the WS3s, while I wore the WS1s. Both sets of phones are switched on in the same manner – by pressing the two buttons on the side of the units *simultaneously* (Fig.8.). I emphasise the word *simultaneously* due to the fact that I tried to switch them on thinking I only needed to press just one button. Nothing happened. So I found it important to read the instructions carefully! A small signature "tune" can be heard, which indicates that the units are working, while the small LED lamp will blink repeatedly. (Note: the LED can be de-activated, if required, by pressing the



Fig.5. The WS3 type wireless headphones.



Fig.6. The WS1 type wireless headphones.



Fig.7. The waterproof hip-mounted control box pouch.



Fig.8. Switching on the headphones by pressing both buttons.



Fig.9. Trying out the ADX 150.

buttons simultaneously for 15 seconds). With everything switched on and working we set off to try out the ADX 150 (Fig.9.).

The site we used for the test was a small pasture field situated beside a massive old medieval barn (Fig.10.), which has now been converted into a stylish modern house. The village church is to the left of the picture, on the other side of the hedgerow.

We started out with the machine set at level "5" on the Sensitivity scale, and the Discrimination switched to "Off". Setting off from the gateway, we slowly walked down the slope towards the huge barn. It was a while before we had our first signal. I told Rachael to increase the Disc level in increments, to see if it eventually cut out. It did at around level "7", so I dug the object to ensure that it was just a piece of iron. It turned out to be exactly that... a small piece of rusty iron sheet about 2 inches across.

After we filled in the hole we continued down the slope until we had another signal. This time it was far stronger. Again, I instructed Rachael to increase the Disc level. This time it went all the way up to "9". With no other indicator to tell me what we were picking up I had little choice but to dig.

I cut out a large circular clump of earth to a depth of about 6 inches, which revealed a mass of building debris (Fig.11.). Rachael swept the coil over the hole once more, which gave another loud signal. Whatever the object was, it was below the building debris.

Digging out another 3 or 4 inches of soil eventually revealed a mass of red rusty material. As I carefully eased it out of the ground I found myself holding a large object (Fig.12.). It somehow resembled an old fashioned "butter pat", with its ribbed edge, although I'm sure they used to be made of wood – not iron? As it happened, the landowner's wife, who kept horses, told me that it was a very old horse grooming comb, which would originally have had bristles on it.

It was clear to me after this that very large pieces of iron would continue to be picked up with a strong signal even with the Disc levels set quite high. This isn't unusual with many types of metal detector, although having audio discrimination would certainly have helped here.

As Rachael and I continued I thought it was really novel that, having two sets of headphones, I could hear every signal that she picked up, and it got me wondering. What would happen if you went

to a detecting rally with one of these machines and somebody using an identical machine with wireless headphones came near you? Would you hear what they were picking up? Something to enquire about later, I think?

As we continued I thought it a good idea to swap headphones whenever we got a signal. I wanted to listen and see whether there was any noticeable difference in the sounds that each type of headphone made. Did any one type have the edge over the other, perhaps?

As it happened, when we picked up one signal, I tried both headphones before we began digging. The WS1 certainly gave a crisper, more "tinnier" sound than the WS3. The difference is certainly noticeable, we both agreed.

Again, I asked Rachael to increase the Disc levels, until it reached the maximum setting. The signal remained as strong as ever, and got stronger as I dug down.



Fig.10. The test site, next to an old medieval barn.



Fig.12. Old iron horse grooming comb (possibly Victorian?).



Fig.11. Encountering building rubble several inches down.

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About 6 inches down I spotted a brightly coloured object. As I gently brushed away some of the dirt I was pleasantly surprised to see a shining silver disc. Once it was removed from the soil I could see that it was a rather worn Young Head Victorian shilling (Fig.13.). I made a note that the ADX 150 picked it up at a reasonable depth and kept a strong signal through to the maximum Disc setting.

Fig.13. The Victorian "Young Head" silver shilling.



Fig.14. The author digging out a Georgian halfpenny.

Eventually, I took a turn with the machine, while Rachael took the camera and photographed me digging up an old worn George III halfpenny (Fig.14.).

I then decided to use the machine with the control box back in its position under the armrest. I did this for two reasons. Firstly, I wanted to see how it affected the weight and balance of the detector.

The ADX 150 is an incredibly light and comfortable machine to use. Although the coil is quite weighty compared to the other parts of the machine, placing the control box fitted under the armrest does help with the overall balance.

Secondly, I wanted to highlight the fact that having it situated in this position isn't exactly ideal on any detector. This is mainly due to the fact that if you are working on a wet and muddy field, or a very dusty field, putting the machine down to use both hands to dig means the control box ends up resting in the dirt, or wet grass (Fig.15.). Having the control box hip-mounted cancels out this problem. Alternatively, it is always worthwhile keeping a small plastic carrier bag in your pocket to place under the box if you want to avoid getting it dirty.

The field was absolutely littered with iron targets, which the ADX 150's discrimination managed to deal with quite well, although large iron targets seemed to require a higher disc level to cancel out. It is worth mentioning that the ADX 150 is a "motion" detector, which means that to register signals effectively you must keep the search-coil moving at all times.

One signal we got seemed very indistinct, so I tried switching headphones to see whether they reacted differently. The WS1 did give a slightly stronger signal, but whether that was down to the fact that they sounded different anyway, I don't know. I dug the target and found a small bronze artefact buried about 7 inches down (Fig.16.). This turned out to be a small medieval strap end.

Close to some stinging nettles we had a sharp signal, which gave a resounding double-blip sound in the headphones. Experience told me that it was probably something lying in the grass rather than under the soil. Rachael used the spade to clear the grass and nettles, until she spotted a little "jewel". This turned out to be a small pendant with a Ying-Yang symbol on it (Fig.17.).

After a couple of hours Rachael and I wrapped it up and headed back to the gate. Rachael passed me the WS1 headphones so that I could keep all the gear together. It was here that I found that the WS1 headphones had a slight "logistical" advantage over the WS3s. They can be folded down small enough to place inside the top pocket of my waist jacket (Fig.18.), which is very convenient indeed.

The overall haul of finds was pretty good and very much what I'd expect to find on a site such as this. We'd found at least half a dozen old coins, such as pennies, a Victorian silver shilling, a George II farthing and a brass threepenny piece (Fig.19.).

As for artefacts, the ADX 150 had



Fig.15. Showing how the control box ends up on the ground if you need to set it down.



Fig.16. This medieval strap end, found at 7 inches, gave a fairly indistinct signal at first.

managed to find a fragment of medieval bronze bowl, a medieval strap end, a barrel key, two identical livery buttons and a fragment of ornately decorated lead (Fig.20.).

Conclusion

Overall, I was impressed with the XP ADX 150's performance. Although I usually like a machine that operates with a threshold tone, and audio discrimination, using a "silent runner" on heavily contaminated sites doesn't give a lot of uncomfortable noise in your ears. It didn't suffer from any outside interference either. The discrimination on the ADX 150 certainly coped well with the amount of iron we had to contend with here, which was excessive.

The machine was light enough not to give you any amount of arm ache, so I didn't find myself having to stop for a rest. It is also a very well-balanced machine, even with the control box situated on the hip.

Its depth-finding capabilities are on a par with most other mid-range detectors. I was certainly impressed to find the strap end at about 7 inches, although the soil conditions were very good for detecting that day, which helped.

For anyone who prefers a no-nonsense, simple-to-use, lightweight metal detector I would certainly recommend the XP ADX 150.

As for the wireless headphones, I personally preferred the larger WS3 unit,

due to the fact that they felt more comfortable and kept out background noise effectively. The WS1s, however, certainly gave a sharper, more crisp sound than the WS3s, although they felt rather awkward being worn around the back of the neck. The WS1s also seemed prone to fall off the ears on occasions when I moved around. The fact, though, that they can be folded up neatly and fit into a small pocket is definitely an advantage. Ultimately, it's down to personal preference.

Eventually I found an answer to my earlier query about whether you could pick

up another XP-user's signals whilst using wireless headphones. After speaking to a representative at a main dealership, I was told that you could pick up another detectorist's signals if they came within a certain range of your machine. This isn't too much of a problem if one user has a higher-end model, such as the Deus, or Goldmaxx Power, as those users can easily switch channels. But if two ADX 150 users with wireless headphones came close together you could very easily pick up one another's signals. So be aware when attending metal detecting rallies! TH



Fig.18. The WS1 headphones can be folded up small enough to fit into any pocket.



Fig.19. Selection of old coins found by the ADX 150.



Fig.17. The small necklace pendant found in the grass.



Fig.20. Selection of various artefacts found on the test site.