

FIELD TEST



The coil is the heart of this detector, handling the detecting, analysing and then transmitting processed information to both the remote control and the headphones. The Deus will operate with the remote control and headphones, or either of them on their own. So, for instance, on wet days you could leave the remote control at home and use just the headphones. You can also dispense with the supplied Deus phones and connect a set of standard headphones to the remote control using the 3.5mm socket at the base of the unit.

The coil is mounted to a very clever 'S' shaped stem system, which is fully adjustable via two locking cam grips, and can be fully collapsed for transportation (fig1). The remote control can then be fixed magnetically to the metal patch just above the handgrip. This whole setup is ridiculously light. My test unit weighed in at only 992 grams (890 grams if I didn't mount the remote control). That is lighter than some accessory coils on the market!

Another surprise for me was that the Deus also has the ability of changing its frequency from between 4KHz to 18KHz in four graduated steps. 4KHz is ideal for deep ground penetration with reduced sensitivity to tiny fragments of metal, while the 18KHz setting is very sensitive to small objects like cut quarter hammered pennies. The 8KHz and 12KHz are good compromises for a reasonable balance of depth and sensitivity. These are well thought out frequency choices making the machine very versatile, being able to adapt to any ground condition or any quarry.

Remote control

The remote control has six buttons configured in a three two one arrangement (fig2). The top three buttons are used to switch on/off the controller (left button) and to

Spec sheet	
Operating Principal:	VLF - 4kHz, 8kHz, 12kHz or 18kHz
Standard Search coil:	22.5cm (9") wireless DD coil
Weight:	992 grams
Battery type:	Lithium polymer
Warranty:	2 years
Price:	£1,395.00

I have been using metal detectors for 35 years and in all that time they have followed the same set design rules – you have a coil and it is wired to a control box. This is the way it's always been. But now XP have thrown away the rulebook, dispensed with all the faffing around with wires, and invented the world's first totally wireless metal detector!

All elements of the Deus (coil, remote control and headphones) communicate with each other via a digital radio link. When the coil detects a metal object, it analyses and transmits the target information to the remote control and headphones simultaneously. This happens so fast that there is no appreciable delay in audio response.



Figure 1



Figure 2

navigate the OPTION, MENU and Ground Balance (G.B.) settings. Below these are two buttons that are marked minus and plus (“-” and “+”). These are used to quickly change programs and to adjust the values of the menu settings. Finally, the last button below all the others activates the non-motion pinpoint mode.

It’s worth repeating that unlike all other detectors I can think of, the Deus doesn’t need the remote control (control box) to operate. You can leave it switched off, leave it in your car or even at home. As long as you are using either the supplied headphones or the remote control (with a set of wired headphones), the Deus will work perfectly without the other.

Menus

The top left button accesses the OPTION menu where you have three options: PROGRAMS, COIL and CONFIGURATION. The PROGRAM option is where you can load factory programs, rename that program and save custom settings. You can also return the settings back to the factory program, using the RESTORE option.

The COIL option is where you can register a second coil and then choose which coil is going to be used at any particular moment.

The last option is CONFIGURATION, and is used to adjust the mainly non-detecting settings of the remote control (backlight, contrast, time and speaker on/off).

The final option is UPDATE, which used to update the Deus’s software, via a USB interface, computer and internet.

The top middle button accesses the menu where you can adjust nine different detector performance settings: SENS (sensitivity), FREQ (frequency), IRON VO (iron volume), REACTIV (reactivity), AUDIO R. (audio response) NOTCH and DISC (discrimination). There are also EXPERT menus within some of these options that allow further customisation of settings.

The last button on the top row accesses the ground balance menu. Here you have four options: TRACKING, MANUAL, PUMPING and BEACH.

Ground balance modes

In MANUAL mode you can manually adjust the ground rejection level between 60 and 95. For most inland sites a setting of 90 is recommended.

PUMPING mode is a semi-automatic way of setting a correct ground balance. Simply find an area of ground free of metal targets. Then select PUMPING in the ground balance menu. Press the top left button to start the program and pump the coil up and down over the ground. When the correct ground is achieved, you will see G.B. OK displayed on the screen.

Throughout my test I left the ground balance settings in MANUAL 90. On some really bad ground I noticed the top number for the ground condition had dropped down to 70, so was able to use the PUMPING mode and keep it reasonably stable.

There is also a beach and tracking mode, both not covered in this field test.

Screen information

At first the screen looks a little daunting (fig3).

XP have really managed to display a lot of information in



Figure 3

a relatively small area and most of the icons are self-explanatory. The battery icon (with alternating icons for the controller and coil) give a visual display of the battery level of both the coil and remote control. The current program and time are also displayed along the top of the screen, while the frequency and menu labels are along the bottom.

The remaining information relates to the ground condition and the targets that have been detected. The large central numbers give you a reading based on the target conductivity number (TCN). This is also displayed graphically above as a long bar scale.

To the left of the conductivity scale is a curve icon, which shows you see how fast the Deus will recover after detecting a target. A short narrow curve means a fast recovery rate, while a wide curve indicates the machine is set up to be slower (deeper).

The last two important icons are to the right of the TCN, and they indicate the ground’s mineralisation (top), and the set level of ground effect correction (below).

Headphones

As mentioned previously, the headphones can be used either with or without the remote control. To switch on, simply press the minus button until you hear three rising tones (fig 4). You can then set the



Figure 4

volume to suit your hearing using the “+” and “-” buttons. You can also access and adjust the menu settings via the menu button and even change programs or switch coils. The screen is a lot smaller than the controller, so the level of information is slightly restricted (e.g. no program names other than P1 to P9). To switch off the headphones you press and hold both the “+” and “-” buttons until you hear three decreasing audible tones.

Programs

The Deus has nine pre-installed factory programs. These can be quickly changed using the + and - buttons on the remote control, or via the option menu (or even via the headphone menu). All of the programs can be customised and renamed to suit your individual detecting requirements.

Although they are customisable, I’m sure that the majority of users won’t feel it necessary to do so, because they are very well thought out. For the first few weeks using this machine, I just searched using GM POWER and DEUS FAST. My finds rate was so good that I didn’t even consider making adjustments to the factory settings. It was only later on a more demanding site, that I finally constructed a custom program. So these programs are good, very good.

Basic 1

This is a general use program, using the 12KHz frequency, three tones, and the disc is set high enough so you don’t hear iron. Like several of the other program, coke will be heard, and will need to be discriminated using the targets conductivity number (TCN) displayed on the remote control. Throughout my test, coke gave readings of below 30 (usually around 25).

GM Power

This is my favourite factory program, based on the excellent Goldmaxx Power and utilising the 18KHz high frequency and three tones. You will get low buzz tones on some iron, and coke will need to be discriminated using the TCN on the remote control.

Deus Fast

Virtually the same settings GM POWER program, but with a reactivity setting of 3, which gives a faster recovery speed, but makes some audio responses sound a lot shorter. Use this program when there is a lot of iron in the ground.

Pitch

Pitch uses the 12KHz frequency and utilises a variable tone. The discrimination is set high enough to ignore most iron responses. The variable tone is based on the intensity of a target, so the closer the object is to the coil, the higher the pitch.

I found this my least favourite program, and was disappointed it wasn't a variable tone based on conductivity.

G Maxx

This program is based on the G-Maxx1 detector, which uses a lower frequency (8kHz) and is good for finding higher conductive coins at greater depths.

Relic

RELIC is similar to G MAXX but with a lot more power and slower recovery rate. It is ideal for finding large deep items in good uncontaminated ground. The coil battery life will be less using this program, averaging only about 7 hours.

Wet Beach

This program is specifically designed for beach detecting. It uses less power than the other programs, allowing an average of 13 hours use from a fully charged coil (nearly twice as long as in RELIC).

All metal

This program is similar to the G-MAXX program except it doesn't use any discrimination, so you will hear every metal target (and all will have the same tone). This mode will be good for searching for large deep targets.

Basic 2

This is a good starting point for new users who haven't any experience with XP detectors like the Goldmaxx. It has been designed with settings that give great stability and ease of use. You won't hear many junk targets and the depth on good targets will be impressive. On my test bed this program worked better than some of the more expert programs for depth on hammered penny sized targets.

Batteries

Each of the three elements of the Deus is powered by identical rechargeable lithium polymer batteries. To recharge them XP have



Figure 5

supplied a clever little charger that connects to all three devices at the same time (fig5). Battery life for the headphones and remote control after a full charge should be 20 hours. The coil's battery life is a lot less, and varies depending on the power setting and frequency being used. I used the Deus throughout my test with the power set at 2 and using frequencies of 12 and 18kHz. With these settings I could expect at least 8 hours of continuous use, so it was important for me to get into a routine of putting the Deus on-charge at the end of each detecting session. Throughout my two-month test



Figure 6

period, the Deus never let me down by running low of battery power. As a precaution I always carried the XP emergency charger (which doubles as a torch (fig 6). However, I understand that new models have a battery life of 25hrs on both headphones and remote and an extended battery life on the coil for up to 13hrs.

To replace the lithium polymer batteries of the headphones and remote control should be straightforward, but the coil battery is sealed in, making its replacement a 'return to dealer' job.

On the test bed

I first tried the Deus over my established test bed in each factory program.

The best program that found the most targets was G-Maxx, getting all but one target, a hammered Edward penny at a depth of 10". This penny is usually only found by detectors using 10" or larger coils, so the Deus fitted with a standard 9" coil is definitely working at a disadvantage.

The next best program was surprisingly the DEUS FAST, finding all but the deepest targets. BASIC 2 also put in a great performance, and was noticeably the easiest program to use giving no false signal over the many iron objects in between my test targets.

Note: My test bed was setup for testing depth, and all the targets are deep. The real strength of detectors like the Goldmaxx and Deus are in their ability of seeing good shallow targets close to iron. My test bed does not cater for this strength, so this had to be demonstrated in the field.

In the Field

The timing of receiving my Deus couldn't have been better, as two of my best fields were available for searching. I first took it to one of my best-hammered sites where the wheat crop had grown to about 3". Every year this field produces lots of interesting finds, and the key to success is to cover as much of it as possible before other detectorists beat me to it.



Hammered

The area is very mildly mineralised and with lots of iron junk. There is also a lot of coke, silver paper and the occasional shotty end. Normally, using any other detector than what I'm used to would've been unwise. Interpreting 'iffy' signals correctly has always meant the difference between success and failure when detecting through the trash on this field. So, with some trepidation I started using the Deus in GM POWER, safe in the knowledge that I had my main detector waiting in the car. Any worries about using a new detector on such an important field soon vanished, as it pulled its first hammered after just ten minutes use. Iron was easy to discriminate, even the big stuff that broke through as a high tone signal. At first coke was a problem as it sounded strong, smooth and repeatable, but then I noticed that the visual display conductivity responses from coke were always below 30, so easily discriminated. I was so impressed with this first session that on subsequent detecting sessions I left my main detector at home.

In the following six detecting forays I found 18 hammered, averaging a jaw dropping three coins per day. Because I was getting such good results, I didn't feel the need to tinker with the Deus's factory programs. Most of the time I used GM POWER, switching to DEUS FAST when there was an increase in the amount of iron-buzz responses, indicating larger concentrations of iron, and the need for a faster recovery rate.

At about the time it started getting hard to swing the coil through the fast growing wheat, my best Celtic/Roman field was ploughed and set with maize. This field is highly mineralised and the iron contamination the worse I've ever seen. The factory programs handled the conditions reasonably well, although I felt I was missing some of the middle tone responses of the GM POWER program. So I switched to two tones and modified them so the good signals jumped out of all the low grumblings of the carpet of iron. I also dropped the frequency to 12kHz and made a few more adjustments to beef up the iron buzzes. With these new settings the good signals stood out, and I pulled coin after coin out of the fluffy ploughed soil. I found 26 coins on this first detecting session including two denarii. On every session since I have found over ten coins, and even as I write this article I am nipping off to put in a few more hours before the maize grows too high.

My Program

After playing with various settings, I found the perfect program for my hearing. I started with the GM POWER factory program, and then changed the number of tones to two. I then entered the expert tab, and changed the low tone to 200 and the second tone to 651. Because I wanted a bit more depth, I dropped the frequency to 12kHz, and raised the IRON VO to 4. These settings made the iron signals sound an extra low buzz, while non-ferrous target sing out a high tone.

Conclusion

When I first heard about XP's new wireless coil, I honestly thought it was just a hoax. How on earth could a detector work if it's not connected to its coil? Boy, how wrong can you be! This detector hasn't just rewritten the rule book, its ripped it up and thrown it away!

I am totally gob-smacked seeing the new direction XP has gone...a visual display...menus...multiple frequencies. This is a complete departure from their previous detectors, like the Adventis, G-Maxx and Goldmaxx. Whatever next?

Not only is it an important evolutionary step in metal detector manufacturing, it's also a damn fine metal detector to boot. It's capable of finding desirable targets in the most challenging of environments, where mineralisation and iron contamination would stop some machines from operating efficiently.



Roman

I love the weight and balance of the Deus, and can't think of any way of improving it. I also think the navigation of the remote control's menu system is fantastic. I didn't need to read the instruction manual – it was that intuitive.

Overall the performance was very good, giving me an excellent find rate and enough options for creating solutions for tricky search situations.

The only slight niggles I had was with the magnet on the remote control, which did fall off occasionally. (A lanyard is now provided to prevent this happening!) In the end I tended to clip the controller to a shirt pocket, tilting it up when I suspected coke had been detected. There is also an accessory arm-band case, which allows the remote control to be worn like a wrist watch. And I'm not too happy about having the time displayed on the remote control, as I won't have any excuse now when I get home late to the wife from detecting!

The Deus is the most exciting development in detecting manufacturing I've seen in the last ten years...and if it hadn't been for the high price tag (from years of R&D), this detector would've scored a perfect 10.

Test Results for Deus – (Scores out of ten based on price category)	
Ergonomics (weight/balance)	10
Simplicity/user friendliness	10
Build quality	10
Weather resistance	9
Performance	10
Value for money (£1,395)	8
SEARCHER RATING	