Field Test **Rutus Versa**

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For those who might not be that familiar with Rutus, they are a company which has a history both in the design and manufacture of metal detectors dating back to the 1980s. Based in Poland, they have gained an established international reputation for innovative and reliable machines, accompanied by advanced features. I use a Rutus Alter 71, which is still one of my most favourite machines, albeit a bit dated in still using batteries and it not the lightest machine to carry around all day. However, last year Rutus launched their Atrex model, being very similar to the Alter 71 but with a faster processor and colour screen. Even though it had their new multi-frequency as well as single frequency options, it still wasn't what a lot of Rutus users were waiting for.

In May this year Rutus announced the Versa (Fig.1), a re-designed machine, being lighter, faster, waterproof, collapsible and with a built in re-chargeable battery. This was looking to be a very impressive machine and clearly was something the avid Rutus fanbase had been waiting for. After a few teaser videos on YouTube and social media, Rutus announced the machine should be shipping towards the end of July / beginning of August. Mid-July I received the Versa from the official UK distributor, Detecnicks, and straight away I knew it was going to be a much more compact machine.

Fig.1. The new Versa from Rutus standing proud.

The Pack and Optional Extras

1 x Versa multi-frequency machine.
1 x DD 28cm standard coil.
1 x DD 23cm coil (optional extra).
1 x charging cable.
1 x 3.5mm audio cable.
1 x silicone cover and cap for speaker / charging port (when used underwater).
2 x coil bolts and nuts.

Technical Specifications

- Waterproof up to 2.5 metres depth.
- Weight with DD28 cm coil: 1330gm.
- Unfolded length: max 134cm.
- Folded length: 60 / 69cm.
- Adjustable handle and armrest.
- WIFI updateable.
- Built in speaker – dual ability to work with headphones.
- Built-in rechargeable battery giving 10 to 25 hours.
- Charging time: 7 hours (charger with a current capacity of not less than 500 mA).
- Ability to charge with an external power bank.
- Headphones: Rutus SR-1 wireless headphones + OS-2 wireless receiver.

Software Specifications

- Multi frequency or single tuneable from 4 to 40 kHz, in the range up to 14.2 kHz. 0.2 kHz step, above 14.8 kHz - 0.6 kHz step.
- EMI preview.
- Automatic and manual Ground Balance.
- Hot Rock masking.
- Sensitivity: 30 levels.
- ID: 120 points (iron range: from -29 to 0, non-ferrous range: from 0 to 90).
- Discrimination: 120 points.
- Notch: 120 points.
- Reaction: 8 levels.
- Masking.
- Threshold level and tone.
- Iron volume.
- SAT: 20 levels.
- Variable tone from non-motion channel in dual programs.
- Multifilter permanently enabled in field and field dual programs.
- Bottle Cap Filter permanently enabled in Beach and Beach Dual programs.
- Tones: 3 user profiles: 1, 2, 3, 6 tones and pitch.
- Volume: 30 levels.
- Backlight: 21 levels.
- Pinpoint with depth measurement for coins.
- Factory programs: Beach, Beach Dual, Field, Field Dual, Park, Park Dual, Non-Motion with discrimination and tone ID.

Fig.2. The Versa – a new and compact, lightweight model from Rutus.

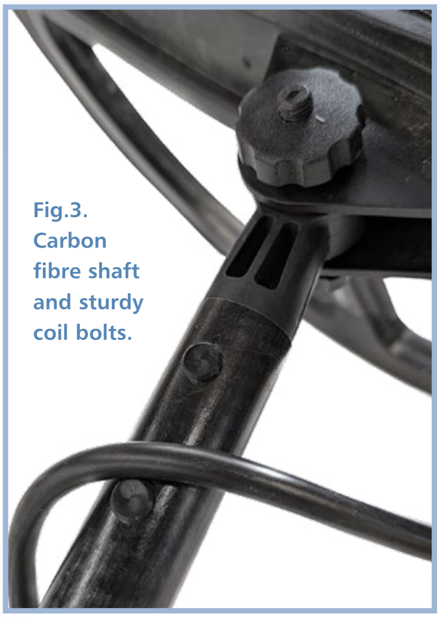

Fig.3. Carbon fibre shaft and sturdy coil bolts.

First Impressions

Rutus has come a very long way since the Alter 71 and the Atrex. Out of the box, straight away you can see the Versa is far more in touch with the modern-day detectorist, more compact (Fig.2) and with most of the features people now have on their list when purchasing a new machine. The build quality of the machine is second to none, starting with the well-balanced coil with a strong plastic nut and bolt leading to the shaft (Fig.3). A round lower carbon-fibre shaft links into an almost triangular aluminium top stem, both held by excellent quality cam locks (Fig.4) which are similar to those found on the Minelab Vanquish. I was very impressed with these as they are both quick and easy to release and lock. No faffing around with having to twist and lock for tightness adjustment like some other machines.

The handgrip is of one-piece hard plastic with recessed grooves (very similar to that featured on the Atrex) which locks into the control box when first assembled. A new feature from Rutus on the Versa is the ability to easily adjust the height of the hand grip with the cam locks, a common feature on most machines now but much needed to get the best ergonomics from a machine.

Leading onto the control box, this is fairly compact at 7.5cm x 12cm with just 5 push buttons and a back-lit LCD display (Fig.5) with a coil and headphone jack on the rear. Now with the Versa being waterproof to 2.5 metres (when applying the silicon speaker cover and plug to the headphone / charging port), there is no need to worry about having to have your rain cover to hand when caught in the odd shower (Fig.6). Many times, I have been caught out with this in forgetting to pack the cover for my Atrex and Alter 71 and having to submerge the control box in a bag of rice for a couple of days to remove trapped moisture behind the screen afterwards, so I'm delighted with this new feature.

Fig.4. High quality cam locks, with adjustable handle height.

Fig.5. The Versa start up with back-lit screen.

Switching On

On turning on the Versa you are welcomed by the Rutus and Versa logos and software version running on the machine and, of course, the little tune that reminds me of an 80s handheld LCD games machine (Fig.7). Starting with the top left of the screen you have your discrimination going from left to right and with the ability to notch out certain ID's and a ferrous range of -30 to 0 and non-ferrous 0 to +90.

Next is the sensitivity which runs from 0 to 30 and then your battery indicator, backlight, wireless head-

Fig.6. Back of the control box without and with underwater protection.

Fig.7. The very intuitive and simple screen layout.

phone indicator and bottom of the screen which program and frequency you are in. One click on the settings button takes you into the options for the machine where you can make the usual changes to the sensitivity, discrimination, reactivity speed, masking, threshold and audio and gain. A new feature I found was that the iron volume now has a 'P' pitch option (motion mode only) 2 tones, this is to tell if your target is either large or small iron. In regard to tones on the Versa, the machine comes with the option of 1,2,3 and 6 tones, as well as 3 empty slots where you can create and save your own preferred custom settings.

Programs

The versa offers 7 programs: Beach Mode, Beach Mode Dual, Field Mode, Field Mode Dual, Park Mode, Park Mode Dual and a dual channel Non-Motion Mode which only operates from 7.6 to 9 kHz (Fig.8). The programs are very similar to the Atrex but with beach mode only running in multi-frequency and with the bottle cap rejection turned on as standard. For the other programs you can choose either single frequency, ranging from 4kHz to 40 kHz, or up to 10 of the optional multi-frequencies. The reason for 10 multi-frequencies to choose from is in the event of any EMI interference, either from another detector, electric fence, or overhead power lines, you can simply switch until you find the best channel with minimal interference which is shown in a bar LCD display on the screen (Fig.9). This feature is similar to pressing a button to re-tune the machine offered by other manufacturers, but this way you can actually see which is the best one of the 10 to choose, which is especially handy when adding a power bank.

The 'Dual' option of each program works in the identification of all metals, potentially giving greater depth. This is more for the experienced user and so it is probably best to stick to the standard programs when first using the machine.

One thing to mention is that although the Versa comes with a headphone jack connection via a lead which plugs into the rear of the control panel, the SR-1 headphones (Fig.10) are an additional £119. Alternatively you can opt for the Rutus OS-2 Bluetooth module (£55) which takes 1 x AA battery and enables you to plug in your current headphones

Fig.8. Choice of seven pre-set programs.

Fig.9. One of the ten multi-frequency choice options.

and enable wireless operation with the machine. This has superseded the original OS-1 and much better in performance. You also now have the option for the sound to come through the external speaker and headphones at the same time, ideal for YouTubers.

Like the Atrex, the Versa software is fully updateable via your mobile phone, tablet or home computer without any leads (Mac, PC, Android and Apple). It took me seconds to connect and was very easy and will ensure any niggles with the new machine can hopefully be fixed via a software update (Fig.11).

Fig.10. The Rutus SR-1 low latency Bluetooth headphones.

Hodograph Display

Users of previous Rutus machines will find that the interface is very similar but more compact with an improved layout. The one thing I love about Rutus machines is the hodograph display. When mastered, this can be a very powerful tool for target identification and offers valuable insights concerning your target's composition. When the hodograph graph closely resembles a wobbly or inclined line (Fig.12) within a specific range, it strongly indicates that the object is made of a single material such as iron / trash. If the hodograph shows a straight vertical line (Fig.13) within the range associated with non-ferrous metals, it signifies that there is a high probability the target is made of a single non-ferrous metal.

However, when dealing with a hodograph graph that is visibly bent, curved, or spreads across the entire display, it shows a more complex material composition. This implies that the target could consist of multiple components or possess varying properties. For instance, a hodograph graph spread across the display might indicate the presence of different materials, similar to an object like a can made from various metals or alloys. On the other hand, a curved hodograph graph might suggest a material with combined magnetic and conductive properties, such as a thin steel sheet or a steel object with lower magnetic properties compared to its conductive properties. A great little tool that I have very much loved in previous Rutus machines.

Fig.11. Simple 'no leads' software update on the Versa.

First Day Out

I am very fortunate that most days I drive past one of my permissions – I have lost count how many times I have found a car just millimetres from my rear bumper wondering what is wrong with me. This is a common occurrence where I have slowed down to look to see if the farmer has harvested yet or deep ploughed any of the fields. The permission is large (Fig.14) and has previously produced a mix of Roman and Iron Age coins and artefacts spread over many fields. In recent years I have unfortunately discovered a few 'green waste' areas which, although not good to encounter, are however a great test bed for new machines and provide a challenge which I enjoy.

With the Versa and low latency SR-1 headphones (Fig.15) fully charged overnight (Rutus recommend 6 hours to charge the Versa), I loaded it into my car, along with a few other machines (Deus II, Nokta Legend and the Minelab Manticore). I often take at least a couple of machines with me and although the Versa is in theory not in the Manticore or XP Deus II league, I was interested to establish how it would perform against them.

With only a few fields being harvested on my permission, I parked up amongst the stubble which had only recently been cut. With stubble not being everyone's cup of tea, especially when high, I felt it would be a good challenge for the Versa, especially

Fig.12. The wavy / horizontal display on the hodograph display.

Fig.13. Nice straight vertical line on the hodograph display.

to assess how sensitive the coil was. Despite being early summer it was more like late October, with the ground softer than usual and very mild in temperature which, although not everyone would be pleased with, I was, as at least I could get my spade into the ground, unlike during last year's heat wave.

Ground Balance

Turning on the Versa, the first thing you are greeted with is the ground balance screen. You can opt for auto ground balance (the most common option for many users) by simply lifting the coil off the ground and giving a quick press of a button and off you go (Fig.16). However, if you prefer you can manually ground balance by giving the machine a little pump – it only takes seconds and you can get an understanding of the ground conditions from the reading on the display. The reading I was given was -85, which I knew from my other Rutus machines meant the land was good and non-conductive. A low reading indicates a lower conductivity in the ground, where choosing a single frequency may cause issues with your searching, so multi-frequency is advised. Ground balance is something that I have found to be key on other Rutus machines, hence why I have briefly highlighted the process. A new option within the ground balance function is the ability to mask 'hot rocks'. You can increase the

Fig.14. First day out on the stubble with the Versa.

Fig.15. Low latency SR-1 headphones.

Fig.16. Auto Ground Balance option.

masking by using the (-) minus button to set it to negative values, but this can also be masked using the discrimination option on the machine.

Multi-Frequency Options

If you opt for the Field option on the Versa, you can then choose from 10 multi-frequency options. Why 10 I hear you say? The reasoning behind this is quite clever. From the frequency screen, you can visually see how much EMI interference there is from electric fences, pylons, underground cables or other nearby detectors. This gives you the option to pick the most optimal frequency for the machine. Each frequency is very slightly different but these options should not be taken as different programs that will affect your detecting, they are only there to reduce any interference.

Next, set the sensitivity, which runs in steps from 0-30 – on the day, I managed to run at 25/26 in stubble and the coil coped very well with very minimal falsing. Now the tones: the Versa in Field mode has 6 tones which are customisable similar to the Deus and can be assigned to a range of ID numbers. I left this on the standard settings for now but like the ability to be able to change the tones very much. With all other options left as it came out of the box, I moved on to pair the SR-1 Rutus headphones. They connect via Bluetooth and have a range of up to 10M – as ‘Nox’ users will be aware, they are very comfortable and a proven design. Pairing the SR-1 headphones took seconds and was a very simple operation on the Versa – they did not cut out in all the time I was using them.

Versa Performance

The first signal from the stubble was coming in at 76, with a dead straight line on the hodograph display and a lovely tone. I knew from experience this would be a large coin. I lay down the Versa and locked the machine by pressing the minus (-) button – this is a useful function which not only locks the keypad but also mutes the sound. I wiggled my pinpointer down the 9-inch hole and at the bottom of the side wall there it was – a pretty corroded George V penny. Not the greatest of finds, but was the Versa going to be a coin magnet? As the next few hours passed by, I was desperate to have a tweak with the settings but kept the Versa in Field mode.


Figs.17a & b. Obverse and reverse of a James I shilling dated 1605.

Finds continued to come up on the stubble field, including a couple of crotal bells (often confusing the hodograph display when their iron ‘pea’ is still inside) but with a lovely tone and again from around 8-9 inches in depth. Like the Manticore it is nice having three levels of target ID: tone, number and the hodograph. The only setting I did change was the sensitivity – moving only one digit seemed to make the machine overly sensitive at times, making me have to move it back to 25. I did carry out the odd ground balance when moving across the field as the soil conditions varied in places.

With only a small amount of the field harvested I moved onto a grassed paddock used to graze horses. This has an electric fence which did cause a slight amount of interference with the Versa when I got up close (3-4 feet). I opened up the other multi-frequency channels and moved from 1 to 4, (4 having less interference) and carried out a ground balance. I was then able to get a little closer to the fence which was nearer the road. Here I was able to run the sensitivity at 26 without any problems and began to detect among the bewildered horses.

Coin Magnet

As I detected along the side of the road, the Versa was becoming a coin magnet like I had suspected – after a couple of hours dodging the horses and their liberally scattered deposits, I managed to pull up seven coins, mainly old pennies, a modern twentypence and a somewhat grotty but welcome Roman. Once again not the greatest of finds, but still worthy of recovery. The Versa hodograph screen clearly identifies drinks cans very well: the number and tone sounds good, but on digging up three or four cans to test the Versa, the hodograph display was right.

Throughout the day I also ran the other machines over many of the targets to see how the Versa differed. The recovery speed of the Versa on the day was right up there with the Legend and Deus II and very close at times to the Manticore. I did have a little play with the reaction setting, especially on a large flint-ridden area. Filter 3 is the base option but I hoped that moving it to Filter 5 would help punch through the stones. Within half an hour the Versa gave a booming tone through the SR-1 headphones, resulting in the unearthing of a lovely James I shilling dated 1605 (Figs.17a & b) some 10 inches

Fig.18. Rutus Versa with smaller DD 23cm coil.

down. All the other machines picked this up, but both the Deus II and Legend did struggle a little, although a few tweaks on both machines like I did on the Versa might have changed this.

Smaller Coil

Later on, I saw the farmer was doing a light plough on an area where sweetcorn is often cultivated, providing game cover. I headed on over and showed him my finds (much better than having to send them via WhatsApp, which I normally only remember to do just before bedtime). "Would it be okay to go on here too?" I said. "Sure, no problem," he replied. Heading back to my machines I remembered I had the other, smaller DD 23cm coil with me – perfect for getting between the old corn stalks and light plough. I thought this coil might also perform well on the beach (Fig.18) which would be a future test objective for me. The DD 23cm coil felt a little lighter on the Versa and more compact compared to the 28cm coil, even though it is only 5cm smaller. With no information available about this coil at the time of testing I was intrigued to find out how it would perform.

The area in question, being game cover, was naturally packed with rubbish and full of shotgun cartridge tips, I did dig up a fair few just to see what kind of VDI, tone and hodograph display the Versa gave. Using the Park mode, it was hard to clearly identify them on many occasions – in one instance, an iffy signal was showing a straight vertical line next to an erratic one. I dug down only to see another, very aged, shotgun shell, but right next to it was a lovely gold gilded button, as yet unidentified.

Much of the area also contained a lot of iron, ranging from nails to bits of plough – at some point I think a barn housing farm machinery possibly stood here. The Versa clearly identified iron well in the multi-frequency setting, and digging a few pieces enabled me to carry out a few tests with the James I hammered. Discriminating between both in the ground in depths ranging from 3-12 inches was very impressive and better than any other Rutus machine I have used before. This could be down to the more powerful processor on the Versa compared to the Alter 71 and Atrex. At this point I did not have my other machines to compare with as being near a busy road they were safely locked away in the car. The range for the iron volume spans from 0-30, enabling you to find the perfect sweet spot. A selection of my finds made during this first day can be seen in Fig.19.

Fig.19. Selection of small finds from the first test.

Conclusion

After a few days out with the Versa, my initial impressions are that this is a powerful machine which can, in theory, only grow with the software updates. The thing that really ticked the boxes for me was the new design and ergonomics compared to older models. I know many other manufacturers have had collapsible shafts, re-chargeable batteries and so on for years. But I personally feel that in the past people have been put off Rutus machines due to their more traditional, even old-fashioned construction. This is no doubt down to cost as they are not a big company with investors willing to pump in lots of cash to aid the development of a machine.

Now however, they are right up there with a decent looking machine packed with lots of features. Not only does the machine look more dapper, it is also waterproof although so far I have only tested this during a heavy rain shower. In regard to waterproof headphones, these are not available from Rutus, but they are readily available elsewhere. I do know there are plans to develop a USB power bank to attach behind the arm cuff on the machine – although despite running the machine in multi-frequency with headphones I managed two solid days detecting without charging. There are also future plans for additional coils for the Versa as well. The Versa is placed as a mid to high range machine and could easily be operated by a beginner with the new intuitive controls and display, however, some in the past have felt Rutus machines can be complicated. I feel this could be down to the manual – although it is easily navigable and provides good illustrations on all the machine's features and how they will impact your detecting (which is great if you want to really open up the Versa and your detecting knowledge), I do feel that a 'quick start guide' or similar maybe a good idea – perhaps Rutus will make this available when the machine ships to the UK?

Overall, the Versa impressed me with its performance, ergonomics and processing power as well as the multi-frequency on the machine which was very stable. How it deals with the potentially problematic issues often encountered by multi-frequency machines in freshly ploughed fields later in the year we will see. The same applies to the beach, which is the next journey for the Versa, feedback from others who have used the machine on the beach is that it performs well. Well done Rutus on a cracking machine which I know both new and existing Rutus adopters will love.

The Versa is available from Detecnicks for £699 – a price point which I think represents good value for this machine.