

SPIN DOCTOR BY MICHAEL TREI

THIS ISSUE: The Spin Doctor auditions a new record player from venerable British company Rega and cleans his cartridges' styli with an ultrasonic machine from Hong Kong.

The Rega Naia Turntable. Add Lightness.

To watch as Rega very slowly expands its turntable offerings upmarket requires the patience of a Thomas Pynchon addict waiting for each new tome from the notoriously slow-working and reclusive author. Starting out 51 years ago with just one turntable model, Rega now offers turntables at seven different price levels, plus a few minor variations in between. During the “lost years” of waning turntable and vinyl sales in the 1990s and early 2000s, Rega boss Roy Gandy¹ candidly admits that the company put little effort into advancing its turntable designs, as sales at the time didn't really justify the investment. Rega had shifted its focus to digital source components, amplifiers, and loudspeakers, and even introduced a tube CD player.

That momentum finally started to reverse about 15 years ago, as the vinyl revival started to kick in and turntable sales began to pick up again. By this point, Rega was a much larger company and was able to leverage its growing reputation to engage with cutting-edge high-tech manufacturing subcontractors. Through these new relationships, they created a test bed turntable called the Naiad that would extend their design philosophies as far as was feasibly possible. I wrote about Rega's early years and guiding principles back in Spin Doctor #6,² but in 2009, with 35 years of success behind them, they had reached a point where they had the resources to explore what was ultimately possible, and not just what they could sell to their customers.

In 2017, following seven years of development, Rega announced the Naiad turntable. This was not intended to be a commercial product for sale, but more of a proof of concept, confirming their faith in the lightweight yet ultrarigid approach they had been guided by since day one. The Naiad used a skeletal plinth made from carbon fiber built for them by a F1 race car subcontractor, a ceramic platter, and a zirconium dioxide main bearing created by a British defense department contractor. Gandy says the resulting performance stunned them, confirming that they were on the right track and giving them confidence to develop new upgrades for all of their turntables. In May 2010, the first fruit of this revived faith in their principles was introduced, a new phenolic resin platter for the entry-level RP1 turntable, which had required a substantial investment in new tooling.

While there was never any intention to put the Naiad into production, Rega didn't keep it under wraps, and would proudly demonstrate it to trade visitors at the Rega

factory. When the French distributor heard it, he was so impressed that he immediately wanted to place an order for five units, but was told that it wasn't for sale. By that point Rega had spent well into six figures developing and building a couple of prototype units, but after a bunch of arm twisting by various dealers and distributors, they eventually succumbed and explored the possibility of building a limited run. With only a handful of employees possessing the skills required to assemble it, they figured a run of 40 units was about right, matching the number of years the company had existed for at the time. However, they soon discovered that some of the subcontractors required a minimum order

of 50 pieces, so that number then became the new production run total. Unfortunately, while they were actually assembling them, they found a few parts that didn't completely meet their standards, so the final Naiad production run was shortened to just 47 units, with each one carrying a price tag of \$45,000 in the United States.

The Naiad's high price was the result of some of the design choices that had already been made, when scaling up for production wasn't even under consideration. Rega knew it wouldn't be too difficult to create a more production-ready version, into which they could distill most of what they had learned from building the Naiad. The result is the Naia, where with just a few simple changes, they have managed to undercut the Naiad's price by more than 70%, down to \$12,995. That's still big money by normal Rega standards, and more than double the price of the prior flagship Planar 10, but it's still pretty reasonable compared to many

¹ See stereophile.com/content/roy-gandy-40-years-reganomics.

² See stereophile.com/content/spin-doctor-6-rega-planar-3-50th-anniversary-edition-turntable.



other top-of-the-line turntables that shoot for the stars.

The Naia Examined

At first glance, the Naia looks remarkably similar to both the Planar 10 and Planar 8 models that sit below it in Rega's lineup, with all three sharing the same basic layout including what I like to call the pretzel plinth. This skeletal structure is built from a lightweight polyurethane foam core called Tancast 8, sandwiched between top and bottom layers of laminate. While the Planar 10 uses a high-pressure plastic laminate, the Naia steps that up to graphene-impregnated carbon fiber, which Gandy says makes it even stiffer than the Naiad's pure carbon fiber plinth. Everything possible has been done to minimize the mass while maximizing stiffness, including paring down the three supporting feet to minimalist aluminum cones.

Rega says that the one place where higher mass is important is with the platter itself, where increased stability is gained by concentrating the mass and thereby the inertia near the platter's outer perimeter. To achieve this, the lower surface of the solid ceramic platter has a tapered profile that gradually thickens as it goes from the interface with the inner hub, towards the

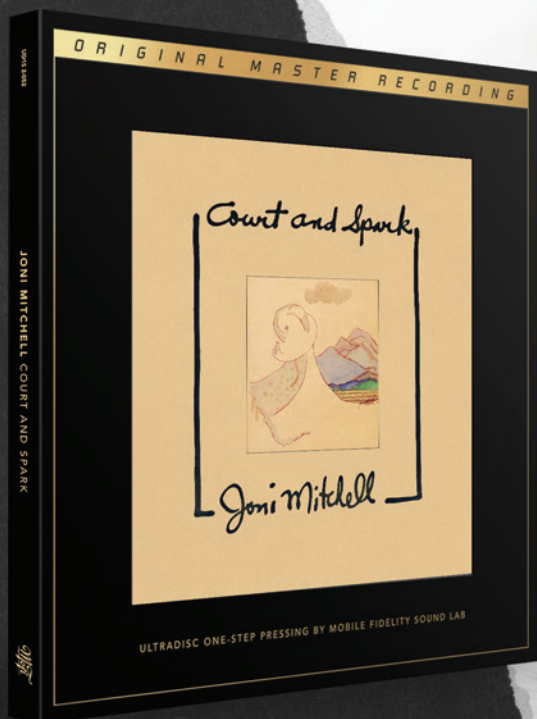
platter's outside edge. Rega has always promoted a felt mat as the best interface between a perfectly flat platter and a less than perfectly flat record. The mats Rega supplies have become progressively thinner over the years, and that thinking continues with the Naia. The exceptionally thin woven cloth mat supplied with the Naia is pure white to match the ceramic platter it rests on, and is supplied by the makers of the Collaro mat I reviewed back in Spin Doctor #6.

Materials upgrades over the Planar 10 can be found everywhere on the Naia, from the dual ceramic braces coupling the base of the arm to the main bearing for even more rigidity at the most critical part of the structure, to the RB Titanium tonearm which despite the name still uses Rega's familiar one-piece aluminum armtube and headshell. The denser aluminum allows the arm to maintain its optimum effective mass, while the ultralightweight titanium that gives the arm its name is used for the bearing structure to minimize resonances. As with all Rega arms, there is no provision for adjusting the cartridge's azimuth or stylus rake angle, because Rega is adamant that this would compromise the structural rigidity that it insists is so critical. They do, however, offer a 2mm shim that can be

added at the arm mount if you want to use a particularly tall cartridge.

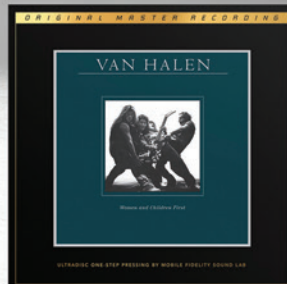
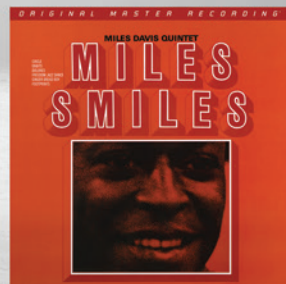
The review Naia was supplied with Rega's top moving coil cartridge, the Aphelion 2, and I expect most Naias will be delivered with this combination. More than with most brands, I tend to think of Regas as preconfigured packages of turntable, tonearm, and cartridge, with less of a temptation to mix and match components. Sold separately, the Aphelion 2 costs \$5545, but when sold with a Naia the combination is \$16,995, a savings of \$1545 over buying them separately.

Rega resisted moving coil cartridges for a long time, before finally launching the original Apheta in 2005. In the nearly 20 years since then, it has expanded the line to four models, including the top-of-the-range Aphelion 2, which has a boron cantilever and a fine-line stylus. Output is lowish at 0.35mV, and Rega recommends loading the 10 ohm coil at 100 ohms. Tracking force is 1.9gm. One big advantage of using Rega cartridges and arms together is the proprietary three-point mount that positions the cartridge in the headshell at Rega's preferred alignment. Rega says that screw torque is critical when installing its three-point mount cartridges, so a torque wrench is provided for tightening the screws should you need to replace the cartridge.



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Setup

When you unbox a new Naia with a pre-mounted cartridge, you'll discover what must be the simplest ultrahigh-performance turntable to set up and get running. The entire process takes about 10 minutes, with no special tools or fancy skills required. As someone who makes a living doing this type of work, I feel a bit like Rega is conspiring to put me out of business!

First you need to ensure that your supporting surface is perfectly level, because the Naia's minimalist feet are not adjustable. Without the platter, the main turntable chassis and arm is shockingly lightweight at around 2.5lb, while adding the platter and dust cover more than triples the overall weight, to just over 10lb. The early pretzel-plinthed Regas came with an outer framework that the plinth could be nestled in, and this allowed for a conventional hinged dust cover. More recently, Rega has abandoned this approach, and the dust cover is now an acrylic sheet that sits directly on the platter, with a raised flap that extends over the tonearm. I suppose this is better than nothing, but it really doesn't provide much protection against small children's fingers or overzealous dust-averse housekeepers. The Aphelion 2 cartridge comes with a small cover that you can slip on to protect its stylus, but as with many stylus protectors, I feel that simply installing it may be the act that exposes the stylus to its greatest peril.

With the cartridge pre-installed at the factory, all you need to do is to put on the arm's counterweight, balance the arm at zero grams, apply the desired tracking

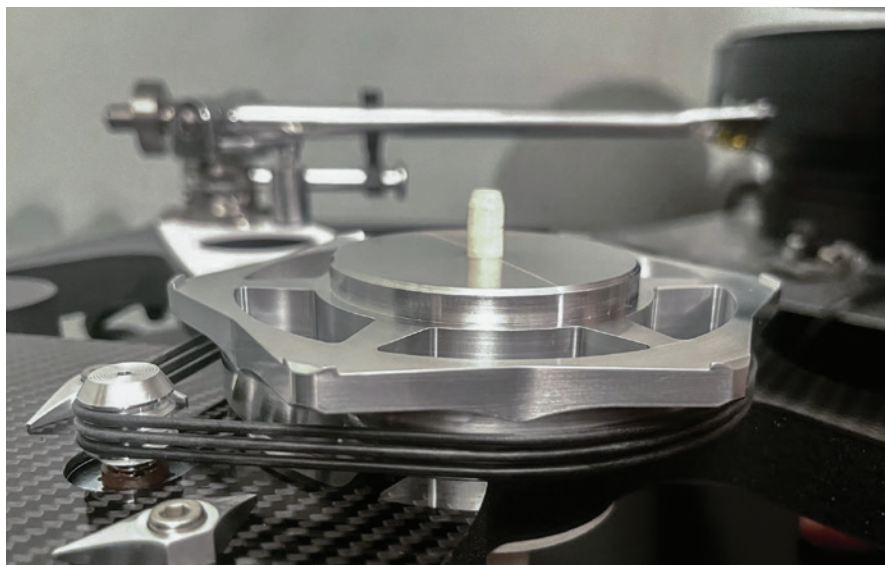
force with the dial on the arm, then move the antiskating plunger to the required position. As with all Rega arms, the magnetic antiskating can never be completely turned off, so the arm tends to drift to the right when you're trying to zero balance the arm. Therefore, I find it's easier to use an external scale to set the tracking force with a Rega arm. It would be nice if Rega included its own Atlas Mk.2 gauge in the box, along with a spirit level to help ensure that your shelf is level.

All Rega turntables from the Planar 6 up come with an external power supply, and the Naia's is called the Reference Power Supply. Rega hand-adjusts each power supply to match the actual motor and turntable it will be paired with, so while there is a way to fine-tune the speed, I found that the

Naia was set perfectly right out of the box with no additional tweaking required. The power supply lets you change the speed between $33\frac{1}{3}$ rpm and 45rpm—there's no 78 speed—and turn the motor off. This is certainly a far cry from my own original Planar 3 over 40 years ago, where I would have to remove the glass platter and shift the belt between two steps on the motor pulley to change speeds.

Rega tonearms have always used an unusual grounding arrangement, where the arm chassis ground is simply connected to the shield of one of the signal cables. This works fine in most situations, and eliminates the need to deal with a fiddly ground connection, but I found it was incompatible with the floating balanced connections used by some current-mode phono stages





like the CH Precision P1. Thankfully, when I switched over to the P1's voltage input there was no problem.³

Sound Quality

Perhaps it's because I first owned a Rega Planar 3 in the early 1980s when I was in college, but for some reason I tend to associate Rega turntables with British

music from that era. With that in mind, I played "Mayor of Simpleton" from XTC's 1989 album *Oranges and Lemons* (Geffen GHS 24218) and was immediately struck by how tidy and controlled the Naia/Aphelion 2 combination sounded. This lack of any rough edges allowed me to focus on the music making with its driving rhythm and jangly sounding guitars. Some British au-

diophiles like to talk about a component's PRaT, or pace, rhythm, and timing, and the Naia nails those qualities with extreme confidence.

The opening movement of Shostakovich's Second String Quartet can be a tough challenge for any record-playing system. With the players leaning hard into their instruments, it's easy for a cartridge to get caught out, resulting in strident and screechy string tone. I played the Fitzwilliam String Quartet's mid-1970s recording from the *String Quartets* box set (Decca D188 D7) and was amazed by the Rega's ability to maintain its composure and clarity as it sailed through even the toughest passages. The pizzicato sections were clean and sweet, with a clear insight into the body and tone of each player's instrument. The pitch stability and tunefulness were both exceptional, helping to make this somewhat complex music easier to follow and digest.

Next I spun the Teddy Edwards Quartet album *Teddy's Ready!* on a British Boplicity pressing (COP003), which somehow doesn't show up on Discogs. This is another great Roy DuNann recording from 1960, but I'm not convinced this is the best version. Still, with the Naia, the typically excellent Roy DuNann sound still shone through. Bassist



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Ray Brown always managed to deliver great drive and power from his instrument, and the Naia provided an exceptionally clear window onto his performance. Again, I was hearing how the Naia had an impressive ability to clear out the spaces between the notes.

The Naia proves that there is more than one valid way to tackle the challenge of playing a record, while still achieving spectacular results. There's a lot to like here. The Naia is compact, lightweight, and supremely easy to set up and get the best from. Most importantly, it sounds superb and pulls music from the grooves of a record better than the vast majority of turntables.

HUMMINGURU S-DUO PRO ULTRASONIC STYLUS CLEANER

Last month, in Spin Doctor #19, I discussed my preferred method for cleaning a stylus, including how to examine it properly under a microscope, and what tools and fluids to use. I have tried pretty much everything that's out there, some of which I consider perilous to the life of your stylus, and many of which are pretty ineffective. But what about a stylus cleaner that is probably dangerous, but also manages to be incredibly effective?

For at least 40 years, there have been vibrating pad cleaners that look a bit like the round pad brushes I prefer to use, but they are built into some kind of battery-powered mechanism that vibrates the pad at high speed to add a scrubbing action. The first one I owned was the Audio-Technica AT637, but this was followed by many more, often badge-engineered with brands like Sumiko, Goldring, and Ortofon. I never found any of them to be more effective than a carefully wielded handheld brush, and with some of them, the vibrations would cause the cleaner to start walking across your platter, endangering the stylus. Most of these have since disappeared, but you can still get versions from Hudson Hi-Fi and Flux HiFi. I commonly see these referred to as "ultrasonic" cleaners, but that's a misnomer; if you can hear the pitch it's vibrating at, it ain't ultrasonic.

But what if someone made a real ultrasonic stylus cleaner? That's what the S-DUO Pro from Hong Kong-based HumminGuru claims to be.

The DUO part of the name is because one end of the S-DUO Pro is the ultrasonic stylus cleaner, while the other end has an electronic stylus pressure gauge. While that sounds handy, I found that the measuring platform of the stylus pressure gauge sits too high off the record to be truly accurate, so I'm going to focus on the cleaner end.



A silver disc, which is presumably the ultrasonic transducer itself, sits in a shallow well about 0.5" across, into which you insert a rubber ring. You then fill the area inside the ring with two to three drops of tap water using a supplied dropper. The ring is there to support the body and generator of your cartridge, so its most fragile bits don't get doused in water. Three rings of different sizes are provided, and you are directed to find the size that will allow the stylus to go inside the ring, while the rest stays suspended above the water. This is tricky, and submerging any part of your cartridge laughs in the face of those cartridge makers who tell you to never use liquid cleaners. Once your stylus is in the water, you start the cleaner, which counts down a 20-second cleaning cycle on its display. Unlike with ultrasonic record cleaners, you don't actually see or hear anything during the cycle; there's no buzzing or rippling of the water.

To test the S-DUO, I went on a hunt for the grungiest cartridge I could find. Searching through my own stash, I found a Shelter 501 moving coil that a customer said was completely worn out. At the time I just put it away without checking it further, but when I pulled it out again, I discovered that it was truly crusty and deeply buried in goop. Under the scope it showed signs of deposits from a deteriorating Onzow Zerodust gel cleaner, and the stylus itself was deeply embedded in black crud. So I mounted it in a headshell on my Technics SL-1200, lowered it into the S-DUO, and ran it through the 20-second cycle. Another inspection showed that it was still pretty caked, but the results were promising, as some of the black goop was starting to peel away from the stylus tip. After about four

more cycles, things were really looking pretty darn clean, and after a follow-up using a more conventional brush, it was immaculately clean. The S-DUO even softened up the Zerodust residue, making it easy to scrub off by hand, a remarkable result. Best of all, I then hooked up the Shelter and played it, and everything sounded fine. This "completely worn out" cartridge was actually just very dirty!

As I said earlier, using the \$129 S-DUO makes me a bit nervous. There are plenty of potential ways to have an accident with this thing, and dunking your stylus into water is not for the faint of heart. Having said that, it can be insanely effective with heavily encrusted cartridges. If you want to try one, I would suggest practicing first on something old, worn, and cheap, before dipping your precious Koetsu into the HumminGuru's bath. ■

3 See my Follow-Up on the T+A R 2500 R's optional phono stage on p.107, which also had problems with a grounded phono cartridge connection. —John Atkinson

CONTACTS

Rega Research Ltd.,
Southend-on-Sea, Essex SS2 5TE, UK.
Web: rega.co.uk

US distributor:
The Sound Organisation,
1009 Oakmead Dr.,
Arlington, TX 76011.
Tel: (972) 234-0182
Email: support@soundorg.com
Web: soundorg.com

HumminGuru S-DUO Pro,
Email: support@happywell.com.hk
Web: humminguru.com