## EQUIPMENT REVIEW

## Vertere Acoustics MG-1 turntable, SG-1 arm, and PHONO-1 phono stage

by Alan Sircom

$\square$ven by the standards of the average workaholic, Touraj Moghaddam of Vertere Acoustics has had a busy few years. First came the cables, then that tonearm (the one that costs as much as a new BMW), followed by a matching turntable, more cables, another, more attainable, turntable and tonearm, a complete revision of the cable line, then a turntable platform and equipment stands, taking on the UK distribution of FM Acoustics, and now a third, still cheaper, turntable, and a new phono stage. All this in less than half the time it takes to mature a barrel of whisky. What a slacker!

If Vertere's top deck's RG-1 handle stands for 'Reference Groove' and the SG-1 is short for 'Standard Groove', then the new MG-1 tested here means 'Magic Groove'. Doubtless,
the joy-sponges who seems determined to suck the fun out of life will start foaming at the mouth about this name (as they did when they took Apple to task about where they kept the magic in 'the magical iPad'), but when you actually listen to the thing, 'Magic Groove' fits well.

Followers of the Vertere range will notice that it's not hard to see the family resemblance. The 'good', 'better', and 'best' nature of the turntable line-up can clearly be seen in the thickness of the two-layer plinth and sub-chassis. There's a lot more to that than meets the eye, but the fact the largest is almost twice the thickness of the smallest is the immediate take-away detail. Vertere has also recently discovered a metallic black print material that works with acrylic, which looks good without sounding bad.



The MG－1 turntable itself really is like a scaled－down version of the SG－1，which is itself like a scaled－down version of the RG－1，so if you like the sound of the big one，but can＇t quite reach that kind of outlay，the SG－1 and now the MG－1 will perform in the same vein．The MG－1 retains scaled－down versions of the main bearing and platter assembly，the plinth， and isolation system．The big change between the bigger decks and the MG－1 is perhaps the removal of the middle layer of isolation．The three－layer decoupled sandwich layout of the SG－1 and RG－1 is replaced by a smaller，two－layer decoupled platform with rigid insert，and both the one－piece platter and the bearing housing are smaller and lighter．

What is unchanged，however，is the excellent record player motor assembly from its bigger brothers．This assembly is basically floating in a rigid mount，so it delivers constant belt tension，which means it drives the platter at constant speed as the motor compensating frequency is below 1 Hz ．As the three elements of this whole unit（motor，sub－chassis，and platter）are designed to move as one，even belt wear over the years is less of an issue，and－aside from the odd drop of oil to the bearing every year or so－the Vertere turntable designs are made to be maintenance－free．

Unlike the SG－1，there is no immediate upgrade pathway in the turntable itself（you can upgrade the SG－1 to RG－1 by replacing the main bearing and platter assembly），but I suspect that might not be a big concern for people who go for the MG－1．The deck shares the same external power supply as used in the bigger designs，and there is an optional dust cover，although not a hinged lid．Touraj has found a way of making a hinged lid that doesn＇t interfere with the sound quality，and it even has a support system for the turntable． However，it is still in prototype form and you could buy something in the region of eight MG－1 designs for the same price as this when it comes to market．A larger dust cover designed for the SG－1 and RG－1 also fits．

We won＇t spend too long on the SG－1 tonearm，primarily because it would be going over old ground．We reviewed it when we looked at the RG－1 turntable back in Issue 114，and it remains unchanged．To recap，the SG－1 arm uses what Vertere calls a Tri－Point Articulated（TPA）bearing，made up of three silicon nitride balls forming an equilateral triangle below the stainless steel pivot point，all bonded into the aluminium yoke．This supports an underslung counterweight（which is also good for correcting azimuth）on an aluminium outrigger，

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and a carbon-fibre wrap armtube ending in a bonded machined aluminium alloy headshell. Along the length of the armtube is a fine-tuning weight adjustment that doubles as a resonance control. Anti-skate is through the typical hanging weight system, although there are actually no OEM parts in the SG-1. The arm comes in two basic guises, with standard or handmade wiring, and there is a large range of arm cables.

The new kid in town, however, is the phono stage, called the PHONO-1. This one-input, single output, solid-state MM/ MC stage is designed to have maximum flexibility in cartridge loading. It has two sets of DIP switches flanking the shielded central RIAA and preamplifier stages. The input loading sections (made up of two banks of eight switches each) allow for 15 resistance and nine capacitance settings, while the eight-switch bank for gain allows for ten different positions. Having these DIP switches on the main PCB prevents them from being accidentally moved, but it does mean you need to open the top of the case each time you want to adjust the settings. There is also a three-way ground switch at the rear of the PHONO-1. This allows for 'hard ground', 'ground lift' and 'soft ground' and depending on your system, one of these will produce very slightly less hum than the others.

The assemblies for power supply and phono stage, both use gold-plated PCBs chosen for best performance, and the two sections are physically separated and partially shielded from one another in the case itself. The screening can surrounding the RIAA and amplifier stages isolates the cartridge input from the noisier active stages.
"You can use the PHONO-1 with any cartridge!" Said Touraj. I took him at his word, and out came an old Ortofon MC7500 cartridge. This was - how can I put it nicely? - evil. The MC7500 is a fabulous cartridge from the 1990s, but it was virtually a cartridge in search of a phono stage good enough to cope. When it was launched, most were supplied with Ortofon's own step-up transformer, because it delivered 0.15 mV . Say that figure to most phono stage makers and you can see the blood drain from their faces. "That's not a moving coil," they say, "that's a single piece of wire wrapped around a magnet." They then mumble something that makes them sound like a muted McEnroe. Touraj just smiled and said, "Cool, let's try it!"

This was a doubly difficult test for Vertere, because the MC7500 is not the kind of cartridge you would normally put on a deck and arm at this level. In 2017 prices, it would be north of about five grand in terms of index-linking and performance. The bigger RG-1 and SG-1 package could more than handle such a task, but could the MG-1, SG-1 and PHONO-1?

Of course it could! The MG-1's two-compliant, onerigid isolation system, offset with nine decoupling points may be scaled down from the SG-1, but it has the same basic concept, and returns the same basic performance, just in microcosm. It has the same sense of extremely dynamic, exciting sound, coupled with the same sense of that sound rising out of the darkest of backgrounds. It's perhaps not quite the 'sound of no turntable' (the bigger decks achieve that goal), but the influence on the music is minimal.
> "You really jump out of your seat when the drums kick in. It's absolute maximum excitement."

- The dynamic range on this turntable is phenomenal, bettered only by a few, and two of those in the Vertere range. Play 'Where Is My Mind' by The Pixies on their awesome Surfer Rosa LP [4AD] and that quiet-loud-quiet structure that defined many of their songs takes on an edge-of-the-seat quality. You really jump out of your seat when the drums kick in. It's absolute maximum excitement. Couple this with being in lock-step to the timing, and huge amounts of detail, and it's hard not to be swept up by the presentation.

The soundstage is impressive, too, with a great sense of presence and lots of room filling detail. My go-to record for testing this is the Decca SXL of the Overture to The Pirates of Penzance, by the D'Oyly Carte and the LSO, and the Vertere doesn't disappoint. It's full of foot-stamping energy and entertainment, with an infectious sense of rhythm (again), but the width, depth, and even height of the image is impressive. It presents the music forward of the loudspeakers slightly, which is part of the whole 'excitement' thing, and fun too.

Where the cost-cutting exercise shows itself probably doesn't matter in context. Use it with really full-range loudspeakers in a big room, and compare the MG-1 package with one of vinyl's big guns and the bottom end is a little reticent. The VPI Prime Signature tested in this issue, for example, has a more stentorian, deeper bass than the Vertere design. But, in the context of fast-moving, brisk and clean sounding loudspeakers that might not excavate that last octave (as might be partnered with a turntable of this price), the MG-1 frequently wins out in the speed stakes, and the dynamic range it produces in this kind of setting makes it hard to beat.

This is one of the most confident vinyl front-ends you can buy, and not just 'at the price'. The MG-1 turntable delivers much of what the better and best Vertere turntables can produce, the SG-1 arm is already a known good 'un, and the PHONO-1 is one of the most naturally sounding phono stages l've heard in a long time. I subjected all three to some hardcore, old-school Ortofon torture cartridge of doom, and the only limitation it presented was the phono stage didn't go quite as loud as possible. This whole package - preferably armed with a more real-world, but still very good, cartridge will give you such a strong taste of the top-end of the high-end and more. Highly recommended! +

## TECHNICAL SPECIFICATIONS

Vertere Acoustics MG-1 turntable
Type: Belt Drive Turntable
Platter: Single piece precision aluminium alloy, 3 mm bonded acrylic record surface
Bearing: Precision hardened stainless steel, in high copper content Phosphor Bronze housing
Plinth Structure: $2 \times 20 \mathrm{~mm}$ clear cast acrylic
Isolation System: Two-stage compliant and single-
stage rigid system, with nine decoupler sets and
combination alloy/foam/SS ball feet
Motor Drive P/S: Precision Crystal Referenced
Speeds: 33.3 and $45 \mathrm{rpm}(<0.2 \%$ )
Wow and Flutter: <0.02\%
Rumble: <-85dB
Price: £4,500

Vertere Acoustics SG-1 arm tonearm
Type: Tri-point articulated tonearm
Effective length: 240 mm
Overhang: 17.5 mm
Offset angle: $22^{\circ}$
Construction: Aluminium headshell, wrapped carbon fibre armtube, stainles steel counterweight, carbon silicon Nitride ball bearing ( $\times 3$ )
Weight: 387 g
Price: $£ 1,800$

Vertere Acoustics PHONO-1 phono stage
Type: MC/MM preamplifier
Inputs: $1 \times$ RCA stereo pair, earth tag
Outputs: $1 \times$ RCA stereo pair
Frequency Response: $20 \mathrm{~Hz}-20 \mathrm{kHz} \pm 0.2 \mathrm{~dB}$
Noise: <-78dB (AWD)
THD+N: 0.03\%
Gain: $45.4 \mathrm{~dB}-61.4 \mathrm{~dB}$
Impedance settings: $47 \mathrm{k} \Omega$ (MM), $78 \Omega-1.45 \mathrm{k} \Omega$ (MC)
Capacitance (MM): 100pF, 470pF
Capacitance (MC): 100pF-1.02 $\mu \mathrm{F}$
Dimensions $(W \times H \times D): 21 \times 23.5 \times 5.5 \mathrm{~cm}$
Price: £999

Manufactured by: Vertere Acoustics
URL: www.vertereacoustics.com
Tel: +44(0)2031764888

