Review - ISOkinetik Upgraded Rega Turntable

Neville Roberts

Rega is one of the first names that comes to mind when thinking about tonearms and decks that are suitable for upgrading. Neville Roberts looks at what ISOkinetik can bring to the turntable...

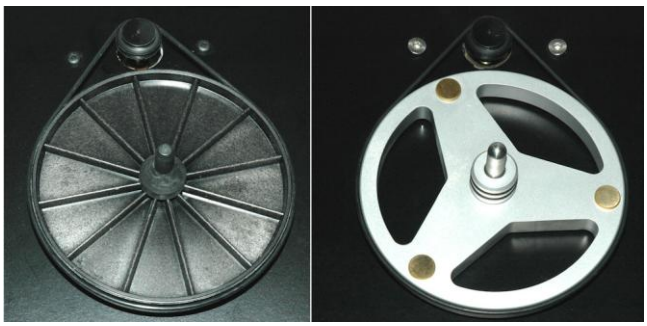
It is universally accepted that the RB (Rega Britain) range comprises some of the best tonearms ever produced, punching way above their price point. Furthermore, Rega equipment seems to lend itself well to upgrading – in fact, I have an RB250 that has been given the Audio Origami treatment! Companies like AO, Origin Live and Michell have for many years been producing aftermarket upgrades for the Rega Planar and its iconic tonearms such as the RB200 and 300 series.

ISOkinetik is also a company that is dedicated to developing upgrades and enhancements to existing audio equipment, especially turntables and tonearms. Although the company has only recently been involved in Hi-FI manufacturing (since the mid '90s), they nevertheless have decades of involvement in audio equipment design and their mechanical engineers have been producing precision engineered products for many years. They also have experience in sound recording in both live and studio environments and have a number of award winning albums to their credit. Their love of good music means that they approach the development of enhancements and upgrades to existing quality products with the aim of reproducing music that is as close to the live experience as possible.

The upgrades

Decks and tonearms can be upgraded in a variety of ways. These upgrades fall into two categories: those that are easily reversible without permanently altering the original item and those that require a more committed approach, for example, tonearm rewiring. These simple enhancements can breathe new life into an audio system, without breaking the bank!

One of the simplest and best value for money products is the ISOweight, an under slung counterbalance which lowers the centre of gravity to a point closer in line with the cartridge. This should improve the tracking resulting in better focus and clarity. The ISOweight is used in conjunction with the ISOend, which replaces the plastic end stub on Rega RB250/251 arms with a stainless steel stub.



The ISOsub sub-platter kit comprises a replacement phosphor-bronze bearing supplied with either a ruby (as reviewed here) or ceramic 4.7mm diameter ball, together with an aluminium and ground-steel sub-platter assembly. The sub-platter is precision engineered with 0.001mm concentricity between the axle and hub. This greatly improves pitch control and should add grip to the lower and sub frequency ranges. The ISOsub is supplied together with some "ISOlube" long chain carbon spindle oil.

The choice of materials for the bearing ball is interesting. Both the ceramic and ruby balls are essentially aluminium oxide Al_2O_3 and are extremely hard materials. The ceramic has a hardness of 1900 HV (Vickers hardness) and the ruby is slightly harder at around 2300 HV. A hardened steel ball would have a hardness < 1000 HV. As it happened, I did have the opportunity to try all three materials in the upgraded Rega, but found it difficult to quantify any audible differences between them within the time frame of the review. I think further listening tests may be called for here.

There are two ISOplatters available: the 12mm deep acrylic platter and the 25mm deep acrylic platter. The latter was used for this review. ISOkinetik considers that these platters change the overall presentation by reducing some of the harshness which can be associated with glass platters. The ISOplatters are used without felt mats as the vinyl mates well with the acrylic surface.

Moving on to the tonearm, ISOkinetik can supply shielded external only interconnects and internal/external one-piece kits using several conductors, including Cardas golden section Litz, silver-plated copper, copper Litz and 99% pure silver in air/PTFE dielectric. Internal rewire kits are also available that use the above conductors supplied with a Cardas 5 pin mini DIN connector and Delrin acetal resin sleeve for installing in the arm pillar, thus allowing a choice of external tonearm to pre-amp interconnects. However, the RB300 for this review has had the low-cost black interconnects and internal arm wiring replaced with ISOkinetik's ISOtone upgrade, which incorporates Cardas golden section Litz wire and their distinctive purple interconnect cable.

The ISOdrive turntable motor drive system regulates the turntable motor using a quadrature-quartz speed generator to improve pitch stability and speed accuracy. As well as the Rega Planar 3 used here, the ISOdrive is suitable for the Rega Planar 2, P2, P3 and P25 as well as for various turntables manufactured by Linn, Manticore, NAD, Kuzma, Thorens and Systemdek. The ISOdrive produces switchable 50Hz or 67.5Hz at 115VAC to run the synchronous motor. This means that instead of having to remove the turntable and move the belt from the smaller top pulley to the larger lower one to effect the speed change, the drive belt can be left on the upper '$33^{1}/_{3}$rpm' pulley and the button on the ISOdrive used to set the speed.

Finally, a trio of ISOrbfeet were supplied, which are spiked aluminium feet incorporating sorbothane isolation These are placed or glued under the turntable to help isolate external vibration from the turntable.

Let the trial begin!

For the tests, I was supplied with two early model Rega Planar 3 turntables, both with fairly close serial numbers – one in its standard form fitted with an RB300 arm and the other deck fitted with the upgrades. A Denon DL-103 moving coil cartridge that had been fully run-in for around 30 hours and fitted with an ISO cartridge stabilisation upgrade was used on both decks. Incidentally, this threaded stabiliser is simply a support assembly that increases the mass by 3g and lowers the cartridge in the headshell and is a great improvement to the Denon for only £15.

The first thing I noticed about the ISOkinetik/Rega unit was the overall sense of quality. The upgrades seem to have blended well with the original Rega unit and there was no sense of bolt-on extras being fitted. I was familiar with the rather stunning look of the ISOplatter and ISOsub from my pervious review of the Modular One turntable and, to my eye, it transforms the appearance of the fairly bland 'black-on-black' look of the Rega Planar deck.

Starting with the unmodified turntable, I slipped on a copy of 'Music for Four Harpsichords – C P E Bach Concerto in F major' (Decca Ace of Diamonds SDD 451). This is a great recording and it is quite a demanding test to be able to separate the furious plucking of the strings on four separate harpsichords! All four harpsichords were clearly and distinctly audible and were never lost in the orchestral accompaniment.

The first thing this shows is what a great sounding cartridge the Denon DL-103 really is. For a moving coil cartridge that retails for around £120, it is a bargain – and very much at home in the RB300 arm as my later tests also confirmed. The overall performance demonstrated why the Rega Planar has a well-deserved following amongst audiophiles. A swift check with my trusty 'Vinyl Essentials' test record, showed that the arm/cartridge resonance was at 8Hz – just in the acceptable range of 6-14Hz. However, the tracking ability of the Denon was scary – it stayed firmly in the groove at the maximum 100 microns test track without any audible miss-tracking.

With full orchestral performances, such as 'Prokofiev Piano Concerto No 1' (from a Decca boxed set 15BB 218-220, The LSO with Vladimir Ashkenazy & Andre Previn), the music came across as clear and transparent, regardless of the complexities of the composition. The piano sparkled with a delightfully tuneful Ashkenazy touch.

My half-speed mastered audiophile recording by Mobile Fidelity Sound of Pink Floyd's legendary 'Dark Side of the Moon' (MFSL 1-017) was very revealing. 'Money' came across as clear, detailed and open. The bass was well-controlled, splendidly punchy and tight.

Switching over to the ISOkinetik modified Rega and repeating the same tracks was very enlightening indeed! My 'eyes-closed' test of realism in the performance of the harpsichords in the C P E Bach showed that things had clearly

improved. What was particularly noticeable was the greater depth to the sound stage – the harpsichords were not just positioned left to right, but front to back as well!

The Prokofiev again gave an altogether more believable performance than without the upgrades and the clarity and smoothness of the strings was an absolute delight. The bass guitar in the Pink Floyd was somehow more tuneful and definitely tighter and better controlled. The raspy vocals were altogether cleaner better reproduced. Even the cash registers glittered with clarity! The overall dynamic range had also improved.

A re-check of the tracking showed that, unsurprisingly, it was the same as with the unmodified arm, but the arm/cartridge resonance had increased to a very satisfactory 12Hz. Having the two decks side-by-side made it relatively easy to swap components between them and I was able to attribute the increase in resonant frequency to the ISOweight.

Conclusions

The nice thing about deck upgrading is that it can be done in stages as funds permit. Obviously, some items cost more than others and some make a more marked improvement than others, but there is no doubt that each item makes a positive contribution to the overall sound produced by the standard record deck.

So, what gives you the best 'bang for your buck'? Swapping around the various bits of the two turntables, I was able to come up with a winner - the ISOweight at under £50 is the first thing to have on your shopping list – great value and a surprising huge improvement. Being a larger and heavier under-slung weight meant that it could be positioned closer to the arm pivot (which is a good thing) and this would also have contributed to the increase in arm/cartridge resonance that I found with the upgrade that brought it more comfortably into the good zone. In addition, the similarly priced ISOrbfeet appear to have contributed the tighter bass and they also represent an excellent value for money upgrade to replace the flimsy rubber originals.

Next on the list should be the ISOsub sub-platter and its matching ISOplatter – not just because it looks great, but it plays a very important part in improved dynamics. The Cardas arm re-wiring certainly contributed to the better imaging. Finally, the imaging was further improved by the ISOdrive (I know, how can a turntable motor power supply improve imaging? But it does!) and this power supply seemed to be largely responsible for cleaning up the vocals.

The costs of each item are comparable with similar products from other suppliers. However, the quality of all the items is consistently high and the end result will be a turntable and arm that would cost considerably more to buy as a ready-made product. All-in-all, they make an already good deck great!

Product list

- ISOend £19.99
- ISOweight £49.99
- ISOsub kit including a ruby bearing unit £99.99
- ISOplatter 25mm £119.99
- ISOtone - Rega Cardas version £99.99
- ISOdrive £329.99
- ISOrbfeet x 3 £44.99

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