

# FREE READER CLASSIFIED ADS IN THIS ISSUE!



PRIMALUNA PROLOGUE **PREMIUM** amplifier



AVID INGENIUM EXCLUSIVE! turntable



**ASTELL&KERN AK100** portable player exclusivi



**KEF Q100 LOUDSPEAKERS! (UK ONLY)** 



# Ingenious!

Avid has been determined to produce an entry-level turntable, Paul Rigby reviews their new disc-spinner, the Ingenium.

or some time, I've had customer requests for a less expensive turntable than the Diva, Avid boss, Conrad Mas, told me. "I've always, however, not wanted to make another turntable in that price range. I want to make the best turntable in that price range".

That was why the Ingenium was created. The model is actually a base for a range of

turntables
that
provide
a wealth
of
choice.
The basic
Ingenium
costs £800,
arriving with a
standard spindle and

no clamp. You can add the signature Avid screw spindle and clamp for an extra £120 before delivery or for £240 if you upgrade later, "I think that most people will buy the turntable with the £120 upgrade but we can also supply the Pro-Ject Carbon 9CC arm which totals £1,260 or £1,380 with that upgraded spindle and clamp. Incidentally, the arms arrives with an arm cable. A lot of the time, this arm doesn't arrive with a cable at all. Incidentally, this is the same arm supplied to Linn for their LP12 Majik turntable (approx £2,500)".

Mas described the arm as, "functional...it does a service, has good bearings and is well made for the money. It's ideally suited to the Ingenium and is easy to use."

Of course, the Pro-Ject is not the only game in town. Users might wish to fit their own arm. As an alternative, Avid is prepared to fit a 9in SME base that adds £25 to the basic price of the turntable, "We can also supply a M2-9 arm, if required but a 309 or 3009 would be equally viable. Because of the way we manufacture the turntable we can include features that are also found on the more expensive Diva Mk.I That means that we can supply a fitting for a 12in SME arm (raising the base price of the deck to £930). The turntable configuration also means that we can extend the length of the chassis to include two arms with a variety of arm combinations (basic price of £1,200 with an extra £120 with a screw spindle and clamp).

As long as it fits, we can mount any other arm but we recommend that people ask us first." Custom order arm fittings demand a £300 charge. "That said, while fitting an SME arm that you already have is one thing, we wouldn't recommend



An anti-skate weight hangs on a thread over a wire support.

buying a costly, brand new SME M2-9 arm (£900) to fit to the Ingenium. If you wanted to do that, we'd recommend buying a better turntable, such as a Diva, to take such an arm".

So why produce the Ingenium in the first place? Because the original Diva occupied that same position when it was initially released but then was subject to technological improvements that transformed it into the Diva II which then succumbed to price increases in materials and manufacturing. Hence, the former 'entry level' turntable now fetches £1,600. "This means that the Diva is more of an entry level 'aspiration'. That is, it's a little bit beyond many people's budget. When you put an arm/cartridge on it you're looking at more like £2,500. What I wanted to do was produce something that provided an entry level product but not join the ranks of companies that produce an MDF or plastic slab with a moving bit in the middle that they call a turntable or buy an OEM turntable from Rega. I also didn't want to make something that's for every man and his dog. I wanted to keep to an audiophile product but not compromise on the previous turntables, so you can see a family tree. Hence, we have kept the design philosophy of the more expensive turntables within the Ingenium. For example, to feature a sapphire bearing in a turntable priced at under £1,000 is, as far as I'm aware, unique. We've managed to

keep the prices down because we have the engineering expertise inhouse and we buy the raw material in at a good rate because of the volume of work that we are doing with other products".

In technical terms, the platter, drive hub and bearing are identical to the more expensive Diva turntable. The sub-chassis offers a substantial casting: a 2.5" thick, solid bar of aluminium which provides a substantial mass and rigidity that almost totals the same weight as the Diva. To provide additional stability Avid has added a rigidly bolted cross-bar from front to back from aluminium. The same Sorbothane compound used within the Diva has been used to make the isolation feet for the Ingenium and rather than use a separate power supply Avid has used a mains-powered motor but it's the same motor as used in the Diva. Instead of a low voltage, 24V version it's a mains voltage version.

You can fine-tune the speed by pulling and shifting the position of the motor — so it's a good idea to invest in a decent strobe for final checks. Putting tension on the drive belt either increases or decreases speed. This is a basic speed variable method that does the same job as the fancier system seen on the top-of-the-range Acutus but, on that model, you use a system of buttons.

"Because the motor tucks under the platter and is mains driven, the wire goes straight to the mains but you need some way of turning it on and off. I explored having a switch on the motor itself but you have an accessibility problem if it's on a shelf or tucked away: you can't get to the motor to access the switch. I didn't want to get into the realms of a separate power supply because that just adds to the cost. The obvious thing was to have a switch on the cable itself. It doesn't compromise sound at all. The whole switch is soldiered in place to ensure a good

connection and the switch is flat on the sides to aid mounting to the surface of the side of a shelf".

Again, the essence of the in-line switch reflects the overall philosophy on prioritising sound quality and not aesthetics, "If you want a fancy box to turn the thing on and off, it's another product that you need to buy" said Mas. "Adding a power supply box might add £150 to the cost of the turntable".

As Avid has it, the Ingenium is its budget turntable. The company makes great play upon the fact it's an 'entry level' deck, in fact. Hi-fi enthusiasts and the cognoscenti might agree. In the real world, however, it's nothing of the sort. No truly budget turntable costs £1,380 to get up and running



(unless you decide to split genre hairs by calling it 'upper budget level' or some such). If you are examining the true budget sector, then you are looking at something like a Rega RPI turntable for around £240, sporting an internal power supply, resin platter, RBIOI arm and Moving Magnet cartridge.

Of course, Avid's Conrad Mas would exclaim that the RPI is aimed at exactly the audience which Avid has no wish to plunder. It's the audiophile market where Avid maintains its interest. I would disagree, to some extent. Audiophiles would, I believe, find the RPI a very pleasant listen indeed. It is a wellregarded budget deck, offering a clean midrange and a speedy attack. So, in sound terms, what does a budget Avid give you that a genuine budget deck, like the RPI, does not? Why would a first-time audiophile buyer bother to save all that extra cash to purchase an Ingenium when they could just as easily get a RPI and lots of vinyl? Relative to the money spent, is an Ingenium worth it?

The free standing motor must be positioned manually for correct speed and least wow. Our measurements showed around 105mm between spindle centres was optimum.



SOUND QUALITY After setting up the Ingenium, as suggested by our tests, I began with Neil Young's portentous and brooding 'Safeway Cart' which is bass heavy with a rolling percussion and a quiet delivery. This rock track displayed a focused bass, as predicted during testing with rim shots that were hit with real precision. There was also appreciable bass shimmer from the electric guitar which throbbed with potential power. It sat behind Young's voice, glowering with primeval authority like a thick-necked night-club doorman.

Upper mids displayed a decidedly rich tonality, occupying the wide soundstage. For example, Young's vocals were opened up to reveal a host of new detail. The subtlety and nuance in Young's quiet delivery was full of emotive layering that worked well in portraying his message. There was also space and air in between each instrument that enabled the track to relay detail in a considered and complimentary way.

On Anita O'Day's version of 'Sweet Georgia Brown' from Verve's 'the Jazz Stylings Of ...', the turntable didn't provide the smoothest progression when moving through the upper mid registers up to the treble at high volumes. Sometimes, when pushed, the Ingenium was a tad too lively as it bit and barked a little as control was lost but, as our tests confirm, this may have more to do with the arm than the inherent design of the turntable.

The Ingenium did offer a free, shimmering treble via the delicate cymbal strikes, with instrumental separation allowing the creation of a melange of interesting detail as brass and double bass formed a solid foundation to the rhythm while the electric guitar played around the feet of the piano to give syncopation to the track. The Avid provided space

arrangement. Meanwhile, O'Day had a clear tone to her delivery that was expressive and animated.

Moving to classical and Sullivan & Mackerras' 'Pineapple Poll' a Gilbert & Sullivan-inspired comic ballet score. On the 'Opening Dance', the brass expulsion was a little strident at high volumes which, again, may connect to arm issues but there was also plenty to like on this track including a rich sweep of the strings over the entire soundstage which not only had breadth but a distinct 3D effect to its depth. The lower frequency areas of the strings were rich and confident too. Detail could be a delight. The delicate triangle interruptions were tantalising, gentle yet elusive while the wind instruments projected a distinct woody nature.

Sustained piano notes in Chopin's Nocturne, Opus 48 No1, were 'swimmy' due to wow, not uncommon with budget belt drive turntables and a criticism of Regas too. Classical piano is not served well by these conditions.

### CONCLUSION

Should audiophiles save their pennies for an Ingenium rather than buy cheaper and invest in more vinyl? That depends on your needs and requirements. If you want a creditable playback system that supplies the essentials of each record in lively and concise terms, then a well-designed budget deck will serve you well.

If, on the other hand, you want to get to the bottom of your music, to peel back the layers and reveal the truth of what the music is trying to say and to key into the vocalist's emotive pathways then a true audiophile deck is what you need.

As such, the Ingenium is a good entry point to such a world providing classical piano is not your interest. Otherwise, this is an affordable turntable that oozes quality in both construction and sound and offers an excellent entry point into serious music listening.

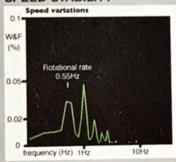
# REFERENCE SYSTEM

Rega RP1 turntable/RB101 arm/Rega Carbon cartridge T+A G10 turntable/SME M2-9 arm/Benz Glider cartridge Trichord Dino phono amp Rega Brio-R amplifier Black Rhodium Twist interconnects Spendor S3/5R2 speakers Black Rhodium Twirl speaker cables Track Audio Precision 600 speaker stands

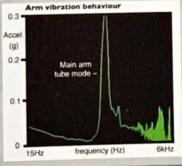
# MEASURED PERFORMANCE

The motor is free standing, raising the issue of belt tension, as this affects speed stability. We received no figure for this but tests showed a distance of approx.105mm between spindle centres was optimal. As this point the belt just

#### SPEED STABILITY



# ARM VIBRATION



loses slackness, but is not stretched. There was some low rate speed drift that resulted in erratic wow, but for the most part speed variation (Wow & Flutter) was consistent at around 0.2% DIN weighted, a normal enough result for a budget belt drive turntable. This is good enough for most Rock but sustained piano notes may well waver a little. Our analysis shows equal amounts of wow at basic rotational rate of 0.55Hz (33rpm) and second harmonic of 1.1Hz, but flutter

The Pro-Ject 9cc arm is very stiff, but undamped. It rings strongly, hitting 0.4g, but at a very high frequency of 600Hz our analysis shows; most arms ring around 200Hz. Bass should be well defined but the arm may well have a characteristic flavour to its sound and not be dead-pan neutral. It needs internal damping. The headshell is quite lively too. NK

Wow	0.4%
Flutter	0.4%
Total unwtd	0.4%
Total DIN weighted	0.2%
Speed	+0.2%

# AVID INGENUIM FROM £800





#### VERDICT

A deck that offers quality in sound and design but also enough flexibility to provide users with everything they need.

#### FOR

- bass response
- upper mid detail
- clarity

#### **AGAINST**

- some wow

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