



Belt-driven turntable with manual speed control Made by: Inspire Hi-Fi Ltd, Derbyshire Supplied by: Inspire Hi-Fi Ltd Telephone: 01246 472222 Web: www.inspirehifi.co.uk Price: £560 (with Rega RB202 tonearm)



Inspire Hi-Fi Black Magic Si

With its curvy lines, expanses of acrylic and luxurious deep-red paint, this turntable's certainly got the looks, but are its sonics enough to get our pulses racing too? Review: **Andrew Simpson** Lab: **Paul Miller**

If you're looking for a belt-drive turntable at moderate cost, chances are you'll be picking from established models that follow a well trodden design aesthetic – something, say, in a rectangular plinth with motor, platter and arm assembly sitting under a square-edged Perspex lid. Finding something a little more stylish usually requires digging a little deeper into your pocket, which makes Inspire's Black Magic Si a welcome alternative at its price, with its curvy lines and glossy finish.

Inspire Hi-Fi is a turntable manufacturer that's equally at home with belt, direct or idler-drive decks, its philosophy being to wring the optimum performance from whichever method it chooses. Witness its range of upgrades to some of the most iconic decks of the last few decades from the likes of Linn, Technics and Lenco.

What's equally refreshing is that no two Inspire decks look the same; and so, whether wood, bold colours or funky acrylic is your thing, it's probable that the Derbyshire-based company has a model in its catalogue to suit.

PLENTY OF CHOICES

At £560, the Black Magic Si is the entry-level model in the firm's home-grown belt-drive range, and it includes an Inspire-branded Rega RB202 tonearm. Rubbing shoulders with the Si model is the Quest Clear deck (£750) and the Apollo (£875) – which both offer unique takes on the acrylic platter and plinth approach. Further up the chain comes the Eclipse SEV2 (£2000 with neither arm nor cartridge). This represents the pinnacle of Inspire's belt-drive models, using a high mass acrylic/stainless steel platter and bearing spindle machined from a billet of stainless steel.

Those of the direct-drive persuasion can look towards the company's Monarch models (£2500-£4500) which are stylish

RIGHT: AC motor mounted at the 12 o'clock position drives the deck's sub-platter. Manual speed change means lifting the platter to move the belt on the two-stepped motor pulley wooden affairs built around Technics 1210 motors [HFN Oct '12]. Finally, for the idler-drive enthusiast there's the classy looking Enigma [HFN Dec '12], a re-imagined Goldring Lenco GL75 brought up to modern standards and boasting a choice of resplendent gloss finishes.

POWER SUPPLY UPGRADE

The Black Magic's platter is a precision cut

20mm frosted acrylic disc which has a recessed area in its underside to accept the deck's subplatter, motor pulley and round section belt. The sub-platter is Inspire's own design, precision machined from a block of

acetyl resin. This, in turn, is bonded to an aluminium shaft that runs inside a bronze bearing sleeve.

The deck's curvy plinth is made from a single slab of acoustically rigid 25mm MDF,

with the main circular shape measuring around 340mm in diameter, and with a 13.5mm diameter circular armboard stemming from the main board at the two o'clock position. To achieve the chassis's deep gloss finish, Inspire applies no fewer than seven coats of paint.

The Black Magic's plinth rests on three cone-shaped, chunky acrylic feet, attached via a fixed layer of Sorbothane to its base,

with two feet spaced under the plinth's front and a third positioned at the deck's rear. While mirroring the design aesthetic of the deck's platter, these feet also bring plenty of stability, although they're pin

sharp, so owners of hi-fi racks prone to scratches should be prepared to invest in a few protective pads to site the deck on.

In keeping with its upgrade philosophy, Inspire offers plenty of options to take the



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unit to the next level, including a £150 supporting platform from its Quest range and its £65 polished Puka record weight.

You can also upgrade the Black Magic by plugging the deck into Inspire's £320 off-board PSU, a steel-cased quartz-locked speed generator, which works with the deck's onboard PSU and offers electronic speed change between 33.3 and 45rpm. This external PSU boasts two mainsfiltering transformers and a high-current amplification circuit to ensure a smooth and constant supply to the motor.

The second model up in Rega's range and sporting a die-cast tube and steel counterweight, the supplied RB202 tonearm warrants no criticism from us at the price. The arm employs Rega's standard three-point mounting system, so you could upgrade this at a later date to a higher-spec model from Rega's stable or Inspire's own Rega derived X100 Mk2 tonearm (£850), which boasts a carbon fibre arm wand, high-specification cabling and an under-slung counterweight. Because the arm comes ready mounted, setting up the

Black Magic is a doddle. Once unboxed, simply fit the drive belt around the motor pulley and sub-platter, gently place the platter on top and level the deck (which may require using spacers under the feet as they are non-adjustable).

All that's left to do is install a cartridge of your choice, which is made easy because of the way the arm overhangs in free space. Inspire can also supply the Black Magic with a range of pick-ups fitted at extra cost. As the deck comes without a lid, it's worth investing in a soft cover to keep dust at bay when the deck's not in use.

INSIGHTS INTO THE MUSIC

Our review sample came supplied with an Ortofon 2M Blue cartridge, which at £170 is typical of the type of moving-magnet pick-up that's likely to partner a deck at this price level. With this installed, I listened via a Primare R32 phono stage, Musical Fidelity M6PRE/PRX amps and Dynaudio Focus 260 loudspeakers.

From Kwaakhu Baah's opening conga slaps and taps in 'Three Hours', on Nick

ABOVE: No mat required as LPs are placed directly on the acrylic platter. Nightfire red plinth also comes in black or metallic blue while the Rega arm is a classic choice

Drake's *Made To Love Magic* album [Island Records ILPS 8141/986 631-9], my attention was grabbed by the Black Magic's way with the music as it opened up the track. Each instrument sounded nice and clear with acoustic guitar and congas working within their own spaces, allowing me to hear how they complement and feed off each other during the song.

Notwithstanding the Black Magic's strong analytical abilities, it's no cold or soulless performer. Instead its delivery is distinctly 'analogue', which brings lots of realism to the music. Sticking with the *Made To Love Magic* cut of 'Three Hours', the way the Black Magic lets you hear the air passing through the flute and sets its notes free to fly from within the soundstage – soaring around my listening room like a metaphorical sonic bird – was just captivating.

The Black Magic's modest physical footprint belies its ability to throw out a generous and balanced soundstage. Turning to Tracy Chapman's self-titled 1988 album [Elektra/Asylum Records EKT 44 960 774-1] showed that the Black Magic can indeed conjure a sizeable sonic picture. With the Spanish guitar on 'She's Got Her Ticket' voiced well out in the left channel and the track's bass guitar resonating from behind my speaker plane, I was pulled deep into the recording from all round, with Chapman's voice of course taking centre stage.

The bass is also surprisingly well controlled for a deck at this price point. While my Dynaudios are blessed with \hookrightarrow

GETTING INSPIRED

Formed in 2006 by Robert Isherwood, Inspire Hi-Fi launched its first turntable, the Eclipse, in 2009, which has since gone through a few iterations to morph into its current Mk2 SEV2 guise. Then came the company's flagship Monarch direct-drive deck, which was quickly followed by the company's idler driven Enigma [HFN Oct and Dec '12]. Inspire's South Yorkshire facilities are home to a metal engineering and prototype designing area, alongside its own modern demo facility which boasts over 20 decks on permanent demonstration. For the parts not produced in-house, Inspire calls upon carefully selected local companies for specialist electronics and acrylic machining work. Unlike most hi-fi manufacturers, Inspire prides itself on selling direct to the customer. Robert says this helps to keep costs down while allowing it to offer a more bespoke service. So what's next? Says Robert: 'A new product for 2014 that will certainly give fans of classic '70s and '80s high-end sprung designs something to smile about!'



ABOVE: On / off switch sits at the chassis's rear next to its captive mains lead. Rear pointed foot and onboard PSU can be seen attached to the plinth's underside

ample low end grunt, they're also quick to highlight any flaws in this department. Thankfully, the Black Magic is designed to err on the side of a controlled response, rather than attempting earth-pounding levels of low-down wallop.

However, this deck is no bass lightweight (especially when compared to its nearest price rivals), but its strengths lie in ensuring the bass it produces is articulate and well rounded, yet without sacrificing detail in the process.

As the Black Magic got to grips with the lower frequencies of Tracy Chapman's 'She's Got Her Ticket'. I could clearly the hear the tone and texture of the track's bass guitar notes, as its addictive melody bopped along. What was perhaps more admirable was how the Inspire didn't let the bass overwhelm the track, or compete with other instruments in the lower midrange, when I began cranking up the volume. Instead, it was kept in check within the mix, underpinning the track with exactly the right amount of punch.

Timing is another key string to the Black Magic's bow. Put to the test via Goldfrapp's *Tales Of Us* [Mute Records STUMM356], the Black Magic caught my ear early on with the opening, looping piano riff on 'Drew', before moving on to the rapid start/stop style of the opening strings, which the deck nailed with effortless precision.



ABOVE: The optional 500g polished stainless steel Puka record weight

Despite the track's changing tempo, the Inspire never sounded as if it was playing 'catch up' and remained poised as the song gathered pace to build to its musical zenith. Demonstrated during the quieter and slower passages of this track was the deck's ability to be cool under pressure when handling music's dynamic swings, an area where many a mid-priced deck can get a little flustered.

A LIFT IN PERFORMANCE

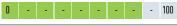
The Black Magic package with Ortofon MM cartridge clearly makes for an impressive pairing and so it was interesting to test the deck's talents further via my reference Benz Micro ACE SH high output MC pick-up. This lifted the performance considerably. Revisiting 'Three Hours' showed that this deck can support a more revealing cartridge before its limits are reached; and now the track really began to open up. While bringing more detail to proceedings, this combination sounded far smoother in the midrange across the a range of test material.

What this ultimately serves to highlight is the Black Magic Si's transparent nature – it truly does provide a platform that adds little of its own sonic colour. (b)

HI-FI NEWS VERDICT

By keeping things simple and investing in the areas that matter, Inspire has created a vinyl spinner that sounds superb for the money, with a neutral tone that delivers bags of musical detail. And because it looks a million dollars, you'll have no problems getting this past the front door. Add a decent MM cartridge of the Ortofon or Nagaoka ilk and you'll be blessed with a package that punches well above its weight.

Sound Quality: 80%

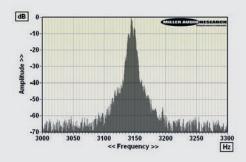


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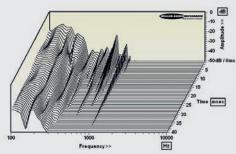
INSPIRE HI-FI BLACK MAGIC SI

With an eye to simplicity, Inspire Hi-Fi has engineered a cracking little deck in the Black Magic Si. This belt-driven design employs a 'low vibration' Premotec AC motor driving a sub-platter machined from a block of acetyl resin, its aluminium/bronze bearing assembly achieving an impressively low rumble figure of -71.9dB (DIN-B wtd re. 1kHz/5cm/sec). The in-groove rumble is necessarily slightly worse, but at -68.0dB is still creditable and, with the optional record weight squeezing the vinyl LP to the acrylic platter, improves further to -68.8dB. Absolute speed was slightly slow on our sample but at -0.19% will not be audible. Similarly, while wow and flutter is not in the same class as its exceptional rumble figures a peak-weighted 0.04% for both low and high-rate speed variations (0.08% total) is perfectly typical for a deck at this price. The ±5Hz wow component is clear enough [see Graph 1, below] but the general 'sharpness' of the main peak illustrates the Black Magic's lack of drift – a boon to pitch-stable bass.

The partnering Rega RB202 tonearm is similar to both the RB101 and RB303 [HFN Oct '11] in performance terms with an 11g effective mass and rigid tube that offers a well-defined main resonance at 150Hz followed by other modes at 200-300Hz at lower amplitude. The higher-Q resonances at 750Hz and 1kHz decay quickly and, as we saw them in the RB101 and 303, are probably linked to the bias and cueing mechanisms. Play is minimal and friction <10mg in both planes. Readers may view full QC Suite reports for Inspire Hi-Fi's Black Magic Si turntable and Rega RB202 arm by navigating to www.hifinews. co.uk and clicking on the red 'download' button. PM



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec (plotted ±150Hz, 5Hz per minor division). Absolute speed accuracy is imperceptibly slow



ABOVE: Cumulative tonearm resonant decay spectrum, illustrating various bearing, pillar and 'tube' vibration modes spanning 100Hz-10kHz over 40msec

HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.27rpm (-0.19%)
Time to audible stabilisation	4sec
Peak Wow/Flutter	0.04% / 0.04%
Rumble (silent groove, DIN B wtd)	-68.8dB (with record weight)
Rumble (through bearing, DIN B wtd)	-71.9dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-55.3dB
Power Consumption	3W
Dimensions (WHD inc arm)	450x120x335mm