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Lyra Etna SL review
Hi-Fi News, May 2018

Lyra Etna SL

With a radically different design to other MCs, Lyra's second-to-top cartridge has a sound unlike anything else around. Costly yes, but what price the pursuit of perfection?

Review: **David Price** Lab: **Paul Miller**

Analogue addicts find themselves with a bewildering array of choices that extends way past which turntable and/or tonearm to buy. The world of cartridges is complex and potentially baffling, especially with moving-coil types. Many eventually progress from buying the big brands to trying out specialist makers – and it's here that we find Lyra. Its products inhabit a niche within a niche: they are all hand-built, low-volume devices that for nearly a generation now have sold largely to devotees of the brand.

AVOIDING RESONANCES

The company's house sound – if you can call it that – is a tantalising blend of delicacy, subtlety and finesse, with detail and drive aplenty. Unhappily, some vinylistas don't like it because it's just not romantic enough, for there's still a school of thought that vinyl LPs should sound warm and fluffy rather than truthful. Yet many think the marque's sound to be deeply special – coming very close to the ideal of a truly modern MC transducer.

Designed by Jonathan Carr in Tokyo, [see boxout, p43], the cartridges themselves are built by associates Yoshinori Mishima, with Akiko Ishiyama assisting in the production of the more affordable Delos [*HFN* May '13] and Kleos. Here though, we sample the penultimate £6495 Etna SL (Single Layer), second only to the flagship Atlas – and in this low output guise a special order product that attracts a 10% surcharge. Output is rated at 0.25mV for 5cm/sec.

Described as a low impedance, low output design, the Etna SL sports an open body, unconventionally shaped coils, asymmetric suspension, exotic

cantilever materials and a special Japanese-sourced diamond stylus. In engineering terms it's a good way away from the majority of moving-coils on sale, at this or any other price, although its medium 9.2g bodyweight and remarkably low 1.72g recommended downforce suggest that it is compatible with most contemporary tonearms [see PM's Lab Report, p45].

The Etna SL is assembled onto a solid titanium core, machined with non-parallel surfaces to inhibit internal reflections wherever possible, just like its Titan i antecedent. Where it differs is in its asymmetric duralumin outer body that locks tightly over the core and which, along with pressure-fit bronze and stainless-steel vibration control rods, is claimed to dramatically reduce any structural resonances.

'It just sounds delighted to get into the groove and play'

Lyra stresses the importance of this control as the vibrational energy created as the stylus passes through the record groove is reflected inside the cartridge, its cantilever damping coping with only so much. The Etna SL attempts to create a seamless connection between the cantilever assembly and tonearm

headshell, where this resonance can be better dissipated. Its asymmetric shape moves the front magnet carrier, mounting screw and screw hole out of this mechanical path. The latter two components are at the front of the

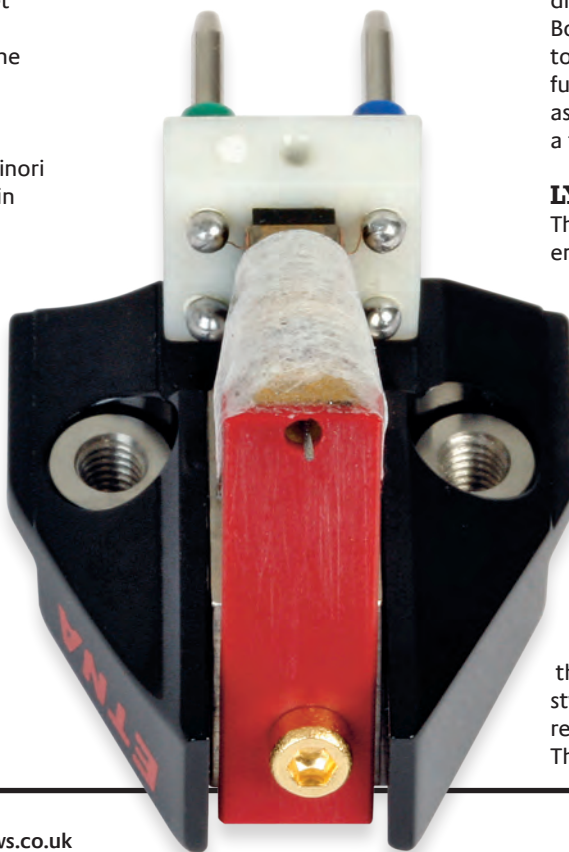
cartridge, and there's an additional bronze damping barrier between these and the mechanical route from the cantilever to the headshell.

Another distinctive feature involves the way the cantilever assembly is fitted directly into the titanium body structure. Both are shaped so that joining the two together creates a double-knife-edge fulcrum, which focuses as much pressure as possible on the joint area and achieves a type of 'cold weld', says Jonathan Carr.

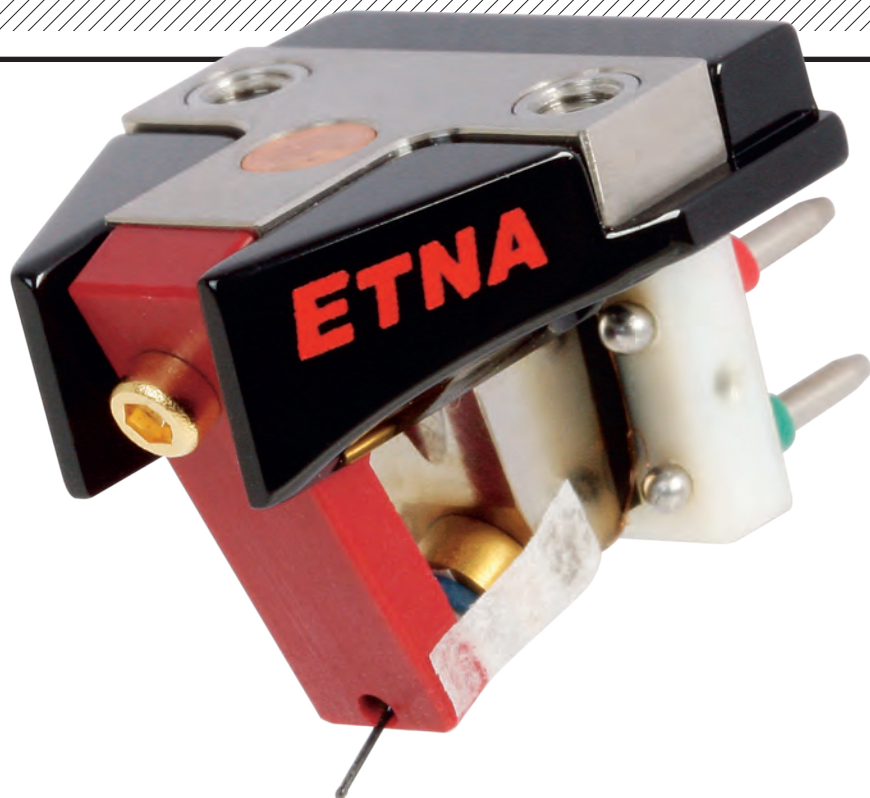
LYRA'S 'NEW ANGLE'

The coil array itself is X-shaped and employs 6N high-purity copper, in common with the flagship Atlas. While promising improved channel separation, Lyra's X-core coils are also configured for improved efficiency over traditional 'square-coil' cartridge designs. This in turn has meant slightly higher output with less wire in the coils (22% less than the Titan i, for example) while also improving tracking performance.

Even the way the signal coils are mounted is unconventional. The Etna is the latest MC to use Lyra's 'New Angle' system of mechanically pre-biasing the coils so that they accurately align with the front and rear magnets when the stylus is sitting square in the groove at the recommended tracking force of 1.72g. This system also equalises the vertical and



RIGHT: Tracking performance is first-class thanks to the line contact (3µm x 70µm) diamond, wire suspension and moderate compliance. Output is 'low/medium' at a measured 0.29mV, 1kHz/5cm/sec



LEFT: The multi-part (titanium, duralumin, bronze and stainless steel) main body offers a rigid clamping surface and good damping. The exposed boron cantilever, while demanding caution in use, makes precise cueing very easy

takes you right into the studio. It's almost as if you're hearing a feed taken straight out of the mixing desk, such is the clarity of the sound. There's no sense of any added bass warmth – although it certainly has ample power – and at the other end things are as pure as the driven snow. The hi-hat sound, for example, is absolutely as it should be, and delivered with the certainty that you usually only get from high speed open-reel tape.

MUSIC IN ABSENTIA

Between the frequency extremes, the Etna SL serves up a wide-open window on the world. Haircut 100's 'Kingsize' [Pelican West; Arista HCC 100] is a delicious slice of funk from around the same time as *Dare*, and really well recorded too, at arguably the high watermark of analogue. The Etna SL in effect 'absents itself' from the proceedings – it's as if it leaves the event and lets you and the music get on with it. It has a wonderfully delicate and detailed sound, bristling with filigree detail, yet this never comes over as forced or artificial.

The cartridge just seems to let things flow, putting you right there in the studio. I was beguiled by the beautifully etched guitar sound, the eerie smoothness of Nick Heyward's vocals and the cartridge's sense of unflappability even on dynamic peaks. Drums sounded supple and

vibrant, the bursts of brass had a wonderful rawness and rasp, yet guitars were just as warm as the recording engineer intended.

This track was a great test of the Etna SL's mettle: it was revelatory in the way it managed to pull all these disparate strands within the mix into focus and deliver it all so coherently. Many other moving-coils that I've heard seem to trip over their own shadows when attempting to convey so much detail. Others simply give a plodding, workmanlike rendition of the music. Yet the Lyra Etna SL does neither of these things – it just sounds delighted to have been given the chance to get into the groove.

Everything it touches is rendered in an invigorating fashion. Suzanne Vega's 'Cracking' [Suzanne Vega; A&M Records CDA 5072] is a beautiful, lilting folk ballad with little in the way of accompaniment ➔

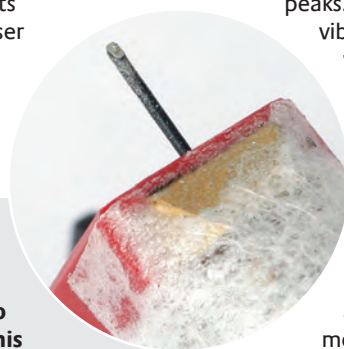
horizontal compliances, allowing the coils to move equally easily in all directions. In turn, says Lyra, this makes for better dynamics and tracking. Incidentally, the cantilever is a diamond-coated boron rod, with a Lyra-designed variable-radius 3x70µm line-contact stylus, which is slot-mounted into it.

RIDE OF YOUR LIFE

Once you've got over the emotional rollercoaster of installing this skeletal moving-coil into your favoured tonearm, the fun can begin. Just a few minutes from cold, it's obvious that the Etna SL is an exceptional pick-up cartridge – more than just 'great', it is quite remarkable and one of the finest I have heard. These things are a matter of taste of course, but I fail to

see how its heady combination of forensic accuracy allied to a wonderful *joie de vivre* would fail to impress anyone. It is not a cold and soulless excavator of detail yet it does this brilliantly. Neither does it offer a louche, euphonic nostalgia trip, but pulls you, instead, into the beauty of the vinyl LP as effectively as anything I have yet heard.

Tonally, it is pure Lyra. This means it's highly neutral. The Human League's 'Sound Of The Crowd' [Dare; Virgin V2192], is a pretty chilly-sounding track with glacial production from the late, great, Martin Rushent. It starts with the bass synthesiser and drum machine pounding out a metronomic beat and the Etna SL



JONATHAN CARR

American-born Jonathan Carr is a Japanophile – having lived in there for over thirty years he's a fluent Japanese speaker and very much a connoisseur of the country's culture. He is also a committed 'analogue audiophile', and this led him to create his own moving-coil cartridges. Based in central Tokyo, he partnered with Managing Director and CEO Stig Bjorge, the Norwegian-born former Japanese Ortofon distributor. Lyra first entered the cartridge market under the name of Scan-Tech in 1986, only to rebrand in 1991. Carr deliberately did not ape existing designs, choosing to go his own way. He initially intended to outsource manufacturing to Supex, but the company reportedly felt they were too difficult to implement. Carr duly took the manufacturing in-house, under the expertise of Japanese master craftsman Yoshinori Mishima. Jonathan Carr is in love with the country's artisan culture, and regards Mishima-san as a perfect example of this. Lyra's moving-coil cartridge debut was the Clavis, soon followed by the Clavis DC, Parnassus, Lydian, Argo, Dorian, Helikon, Titan, Olympos, Skala, Etna and Atlas.

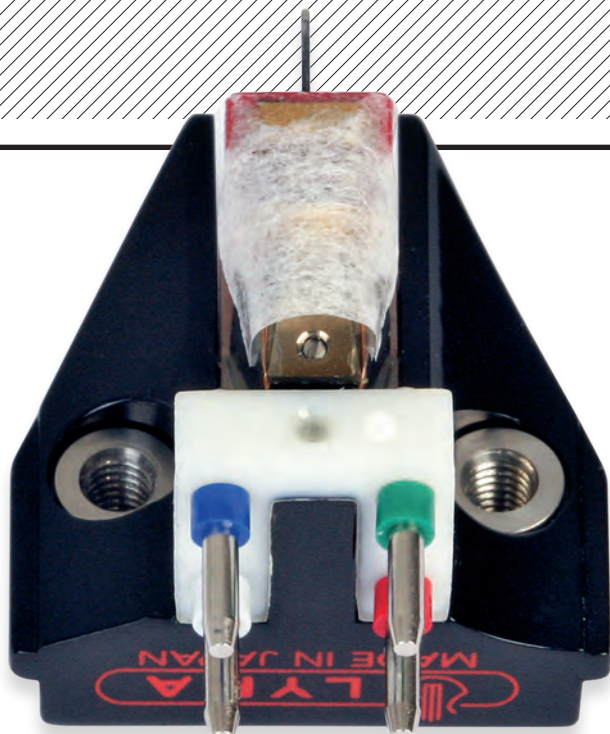
LAB REPORT

LYRA ETNA SL

This 'naked' but rigidly-constructed cartridge offers just about the best combination of extended response, low distortion, generator uniformity and trackability that I've measured in years, if not decades. Its 285 μ V output (re. 1kHz at 5cm/sec into 50-200ohm) is on target and the stereo separation is quite spectacular at close to 40dB through the midrange, even though the channel balance is slightly wayward at 0.55dB. The response extends up to 30kHz, the Etna SL engineered to fine tolerances of ± 1 dB over a full 20Hz-7kHz and ± 2 dB to 20kHz (vertical). The symmetry between lateral and vertical responses is deeply impressive [see Graph 1, below], with just a hint of a treble lift bringing a little extra brilliance to images across a very uniform soundfield. Distortion, too, is tightly controlled through bass, midrange and presence at <2-3% with both L+R and L-R cuts, the peak at 10kHz simply a reflection of the Etna SL's very extended ultrasonic response [see Graph 2].

Moreover, the Etna SL tracks like it's on rails, sailing through the maximum 80 μ m groove pitch and clearing the +18dB test (315Hz lateral cut, re. 11.2 μ m) at a mere 0.5% THD. If this sounds unlikely for an MC secured by a mere 1.75g downforce that's because its dynamic compliance is a much softer 'MM-like' 30cu, rather than the 12cu quoted by Lyra. VTA, also, is closer to 26° than the claimed 20°. Taking into account the Etna's 9.2g bodyweight, a 10-11g effective mass arm like the SME V yields a low 6Hz resonance, indicating that lower mass arms might be better suited. Fortunately, because the Etna's mechanism is very well controlled at resonance (the peak is very low Q and extending upwards to 9Hz), no extra damping is required. PM

LEFT: With the outer 'shell' of this naked MC composed of a lightweight alloy, overall weight is brought down to 9.2g. The rear pins are clearly marked and well spaced to accept over-sized tonearm leads/connections



aside from powerfully played guitar. The guitar here dived right in and showed the subtlest accenting of the playing, and the beautiful phrasing of Vega's vocals. There's something about this song that can sound a bit plodding and laboured in the wrong system, yet here it was like being held in a *Star Trek*-style 'tractor beam'. The cartridge managed to pull me in and then keep me transfixed.

GENTLE CARESSES

At the same time, it's important to note that this isn't a showy cartridge – it doesn't add any artificial edge to the proceedings or puff things up in a bombastic way. That's why you can spin up some pretty lively uptempo rock such as REM's 'These Days' [*Life's Rich Pageant*; IRS Records IRS-5783] and it keeps a sense of poise and balance.

It has the ability to intuit what it's playing, rather than trying to editorialise and make every record sound the same. One of the reasons for this is the cartridge's delicacy – it's as if it's gently caressing the record groove in order to find out what's inside, rather than steamrollering through it. The result is that big, thumping rock is handled with surprising sensitivity, while music that is precisely the reverse still sounds upbeat and fun.

There are few, if any, cartridges that I have heard that track better than this. It's almost as if it was a waste of time inventing laser discs, if a mechanical interface can function

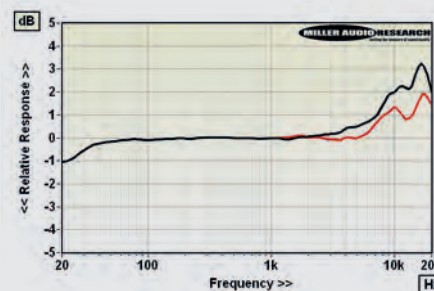
so securely and consistently. Thanks largely to the fact that the Etna SL stayed in the record groove like a limpet anchored to the bottom of a boat, I found that it could track some pretty poor discs. Some of my 'had to buy despite the condition' LPs, often wrestled from charity shops, seemed to get a new lease of life. Isaac Hayes's 'Cafe Regio's' [*Shaft: Original Soundtrack*; Enterprise ENS-2-5002] is one such.

Despite being played to death by its previous owner(s) it seemed to acquire a new lease of life. Surface noise was spookily low and end-of-side distortion just fell away. This album was recorded in Stax's famous Memphis studio, and it has an amazing acoustic that the Etna SL proved exceptionally good at recreating in all its expansive glory, left to right and front to back. ☺

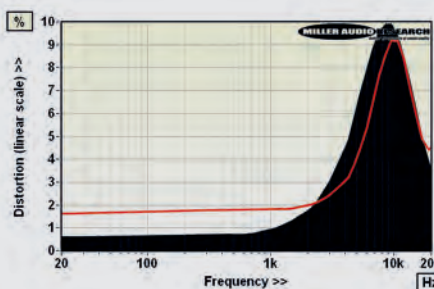
HI-FI NEWS VERDICT

One of the finest MC cartridges I have ever heard, the Lyra Etna SL brings breathtaking delicacy and insight to vinyl LPs. It comes over as being absolutely unflappable – totally uninterested in the vagaries of the groove, yet so obviously in love with the music. The only downside – if you can call it that – is a lack of euphony. On audition however, most people lucky enough to afford this will adore it.

Sound Quality: 90%



ABOVE: Frequency response curves (–8dB re. 5cm/sec) lateral (L+R, black) versus vertical (L–R, red)



ABOVE: Lateral (L+R, black infill) and vertical (L–R, red) tracing and generator distortion (2nd-4th harmonics) vs. frequency from 20Hz-20kHz (–8dB re. 5cm/sec)

HI-FI NEWS SPECIFICATIONS

Generator type/weight	Moving-coil / 9.2g
Recommended tracking force	1.68-1.78mN (1.75mN)
Sensitivity/balance (re. 5cm/sec)	285 μ V / 0.55dB
Compliance (vertical/lateral)	30cu / 35cu
Vertical tracking angle	26 degrees
L/R Tracking ability	>80 μ m / >80 μ m
L/R Distortion (–8dB, 20Hz-20kHz)	0.65–9.9% / 0.55–9.5%
L/R Frequency resp. (20Hz-20kHz)	–1.0 to +3.1dB / –1.1 to +5.2dB
Stereo separation (1kHz / 20kHz)	38dB / 28dB