

Lyra Delos

Lyra's new entry-level moving-coil cartridge costs as much as many manufacturers' range-toppers, so does it justify its price?

Review: **Nick Tate** Lab: **Paul Miller**

Vinyl giveth and vinyl taketh away. On one hand, you have the last physical music carrier that represents the signal in analogue form (unlike CD). On the other, you have a precision mechanical engineering challenge that would seem almost impossible to overcome. Cartridges have to ride the groove in an accurate yet compliant way – in effect measuring it, while at the same time not imposing their own physical presence.

To this end, Lyra designer Jonathan Carr has devoted a large part of his life to developing a range of moving-coil pick-ups, and they're expertly built by Akiko Ishiyama and Yoshinori Mishima in Japan where the company is based. The Delos is the latest in a long line, and costs a whisker under £1000. Being the baby of the range, it's designed to be tonearm and phono-stage friendly: of medium weight and compliance it pushes out a claimed output of 0.6mV at 5cm/sec [see Lab Report]. Recommended load into a phono stage is from 98ohm to 806ohm (Lyra says the final value should be determined by listening) – step-up transformer users should expect a 5 to 15ohm load; the transformer's output must be connected to a 10kohm to 47kohm MM-level RIAA input, says Lyra.

The cartridge body is in Carr's preferred skeletal style – encasing a startlingly sensitive mechanical measuring instrument in a resonant metal body never seemed like a good idea to him – and is machined

RIGHT: Lyra's partially exposed MC generator is mounted onto a machined, one-piece alloy body/mounting-plate

from a solid 6063 aluminium billet, which is partially non-parallel in its shape, in order to help minimise resonances. High purity (6N) copper signal coils are fitted, with square-shaped high-purity iron formers. A solid boron cantilever is mounted directly into the cartridge body via a novel asymmetric single-point suspension system [see boxout], and a Japanese-sourced Namiki microridge line-contact nude diamond stylus is used. Thanks to the clever stylus guard design the cartridge proved relatively easy to install into my SME Series V tonearm atop a Michell GyroDec, and it tracked rock-solidly at the recommended 1.75g.

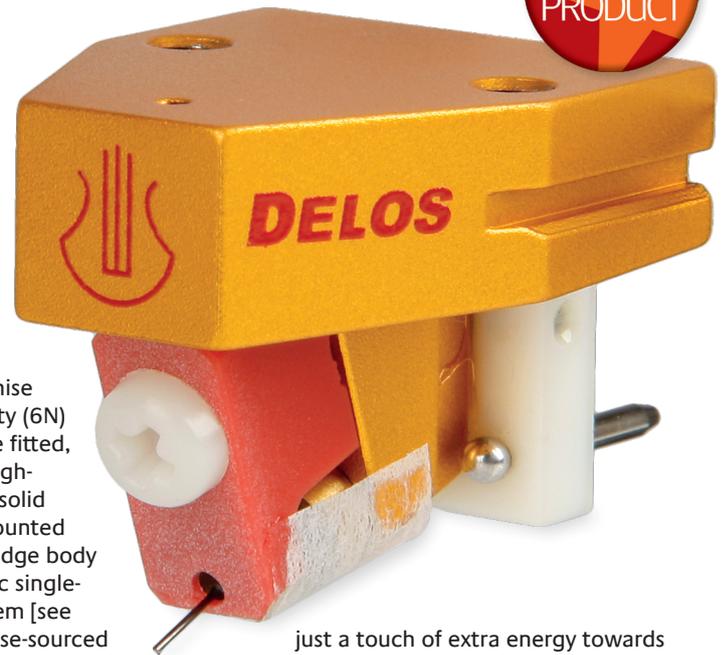
LIKE A BALLERINA

The Delos showed itself to be a balletic performer, possessed of a far more graceful, supple and lithe sound that you have a right to expect for under £1000. Essentially it's a very neutral device, with

just a touch of extra energy towards the high frequencies – but so civilised is the Delos that it never once seems so much as forward, let alone harsh. Instead, you get a seamless, even sound with civility and sophistication at its very core...

Scritti Politti's 'Small Talk' [Virgin 25VC-1028] showed the Lyra's amazing blend of couthness and lyricism; the song's complex, high tempo sequenced percussion is something of a white-knuckle ride for any cartridge, but the Delos proved utterly unflustered, tracing the groove as assuredly as magnetic tape past a pick-up head. It was able to throw out vast amounts of detail and thread it altogether in a fluent and musically communicative way, never once getting fazed by the crashing Yamaha DX7 keyboard stabs or singer Green Gartside's falsetto vocals.

Moving to some classic 1970s rock, and Al Stewart's 'Year Of The Cat' [RCA RVP6 166] served up that smooth Abbey Road studio sound with voice hovering ethereally over the recorded acoustic. Still, this cartridge didn't get all nostalgic, giving instead an extremely spry rendition of the recording. The Delos has massive speed, so the strummed steel-string guitars came over with great impact, and it was able to



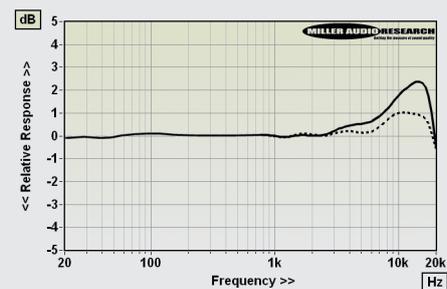
ASYMMETRIC SUSPENSION

Lyra's designer says the aim of the suspension system developed for the Delos was 'to enable the stylus to respond to any kind of groove modulation with equal facility. Normally, applying a tracking force changes the stiffness according to the direction of movement. Vertical compliance becomes stiffer than horizontal, and even *within* the vertical plane upward compliance becomes stiffer than downwards.' But to work properly, the suspension should facilitate equal movement in all directions, so Carr's asymmetrical suspension doesn't use up any of its available stroke when a tracking force is applied. It achieves this by recourse to an offset (excess) vertical stroke, so when the needle is in the groove it centres itself perfectly, he claims. 'This allows the stylus to move with equal ease in any direction, as dictated by the undulations of the LP groove.'

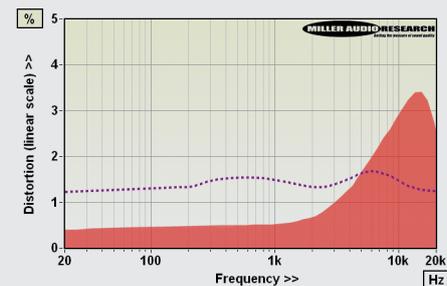
LYRA DELOS

Although far from Lyra's costliest MC, the Delos' DNA is unmistakable. Its 0.63mV output (re. 1kHz/5cm/sec) is bang-on specification and while this sample's 0.4dB channel imbalance might have been tighter at least the 80ohm coil impedance confers broad compatibility with most >100ohm head amps. The response is very extended too, the Delos engineered to fine tolerances of ± 1 dB over a full 20Hz-9kHz and ± 2.5 dB to 20kHz while its stereo separation sits between 33 and 35dB through bass and midrange. The symmetry between lateral and vertical responses is quite impressive [see Graph 1, below], although the stronger treble from L+R cuts will bring a little extra brilliance to central (mono) images in the soundfield.

The MC's compliance is also slightly 'stiffer' laterally at 18cu although both vertical and lateral figures are higher, and the suspension softer, than Lyra's 12cu specification would suggest. Although the Delos' bodyweight is relatively low at 7.3g, I would not recommend substantial mounting bolts or tonearms beyond the effective mass of - say - the SME V if low resonant frequencies are to be avoided. Nevertheless the behaviour of the Delos is very well controlled at resonance, so extra damping will not be required. Furthermore, VTA is ideal at 22° and tracking very impressive at >75 μ m for the recommended 1.75g, the Delos only just letting go on the right channel through the +15dB/300Hz track. Distortion, typically <1% lateral up to 5kHz/-8dB is as low as I've measured from a modern MC [see Graph 2]. Readers may view a comprehensive QC Suite test report for the Lyra Delos by navigating to www.hifinews.com and clicking on the red 'Download' button. **PM**



ABOVE: Frequency response curves (-8dB re. 5cm/sec) lateral (L+R, solid) versus vertical (L-R, dashed)



ABOVE: Lateral (L+R, solid) and vertical (L-R, dashed) 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 / 7.3g
Recommended tracking force	1.7-1.8mN (1.75 mN)
Sensitivity/balance (re. 5cm/sec)	630 μ V / 0.37dB
Compliance (vertical/lateral)	23cu / 18cu
Vertical tracking angle	22 degrees
L/R Tracking ability	>80 μ m / 75 μ m
L/R Distortion (-8dB, 20Hz-20kHz)	0.49-3.5% / 0.45-4.4%
L/R Frequency resp. (20Hz-20kHz)	-0.5 to +2.4dB / -0.5 to +2.2dB
Stereo separation (1kHz / 20kHz)	34dB / 22dB

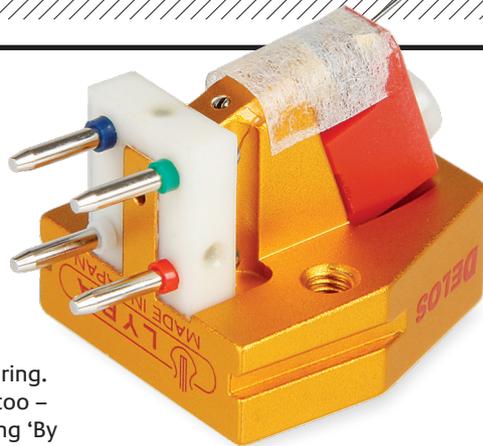
signpost their percussive significance to the song brilliantly. Such delicacy and insight extended to the treble too - the hi-hats and ride cymbal work was totally devoid of splash or sibilance yet possessed a wonderfully authentic steely ring.

Dynamically it impressed too - Alphonse Mouzon's pile-driving 'By All Means' is a beautifully recorded late-'70s jazz-funk standard [MPS JS-035] with Herbie Hancock bashing the ivories over Mouzon's virtuoso drumming. The Delos was in its element and caught the spaces between the notes deftly, making the beat all the more impactful.

SPATIAL RESOLUTION

Better still, it was able to carry the phrasing of the musicians artfully, showing this song to be the roof-raiser that it really is. Despite serving up a rock-solid bass-drum and snare sound, allied to a super-taut bass guitar and sparkling hi-hats, it still had enough left to render the choppy rhythm guitar and raspy brass brilliantly.

Spatially the Delos doesn't let the side down either: a Karajan recording of Beethoven's *Pastoral* Symphony [DG SLPM 138 805] showed the beauty of classical music from vinyl, with a wonderfully atmospheric and immersive recorded acoustic, seemingly falling



ABOVE: 2.5x75 μ m Namiki line contact stylus and solid boron rod cantilever
BELOW: Output pins are colour-coded and well spaced while the body has pre-tapped mounting holes

back forever. This pick-up doesn't inject artificial body and bulk into solo instruments as some more euphonic designs can, but instead chooses to lock on to them and project them in correct proportions with tremendous solidity and composure.

Therein lies the beauty of the Lyra. It has uncanny stability and forensic detail retrieval, allied to real rhythmic and dynamic alacrity. It's not, however, a 'romantic' sounding performer - those who want a sepia-tinged sound from their vinyl should probably look elsewhere.

I honestly cannot think of any similarly priced moving-coil that offers such a stirring combination of insight and musicality. ☺

'The Delos was never fazed by the crashing Yamaha keyboard stabs'

HI-FI NEWS VERDICT

A thoroughly modern moving-coil, the Delos has ability that totally transcends its price point. Technically brilliant and musically accomplished, it does everything you could reasonably expect of it, and more besides. Indeed it is so good that it may make prospective purchasers of pricier Lyras wonder why they're spending the extra, and will surely entice fans of rival cartridge brands over to this marque.

Sound Quality: 85%

