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Introducing the world's first asymmetric MC phono cartridge by Lyra

Lyra's exquisite phono cartridges are the beautiful result of a collaboration between a remarkable trio: Jonathan Carr, the American conceptualizer and designer, Yoshinori Mishima, the Japanese master-craftsman whose watchful eye ensures state-of-the-art manufacturing and assembly, and Norwegian Stig Bjorge, the business head, who ties the enterprise together.

All three share an intense passion for audio and are fanatical about creating and producing the most advanced phono cartridges possible. This Tokyo-based team not only lives on the frontier of design and manufacturing, they are constantly moving that frontier forward.

Lyra's mission is to create long lasting products that combine original thinking, advanced engineering, and ideal materials application. Lyra cartridges are built 100% from the ground up in Japan, with the artisanal craftsmanship that Japan is revered for. The result is a family of transducers that extract an unprecedented level of revealed texture, transparency, and dynamic contrast from an analog music collection, ensuring maximum immersion and emotional involvement in the music.

Music can inspire, energize, or relax. Immersion into our personal music can rejuvenate us, nourish us intellectually and emotionally, and can stimulate our imaginations. Listening to music can be an effortless form of meditation.

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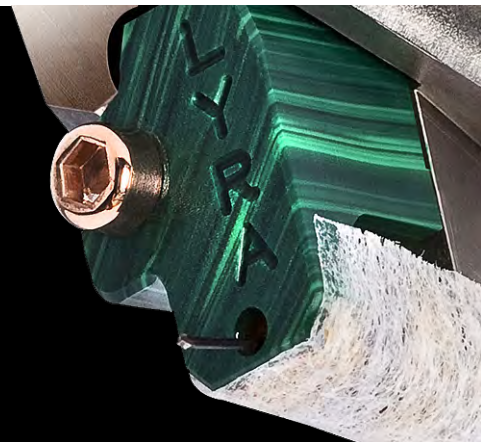
The flagship Atlas incorporates a yokeless dual magnet system, diamond-coated boron rod cantilever and variable-radius line-contact stylus.



Introducing the ATLAS, the world's first asymmetric MC phono cartridge

The Atlas is Lyra's new flagship. It is also the first time that anyone has made an asymmetrically structured phono cartridge. Why asymmetric? Because, by literally misplacing the barriers to great sound that are present in every other cartridge today, it confers a number of important performance benefits.

First, having differently-shaped structures on the left and right sides suppresses the formation of standing waves inside the cartridge body, thereby creating a less resonant, more neutral cartridge body. Second, the asymmetric construction offsets the front magnet carrier and its associated mounting system so that it is no longer in line with the cantilever assembly. Doing so opens up a direct, solid path between the cantilever assembly and tonearm headshell so that vibrations from the cantilever can be quickly drained away once they have been converted into electrical signals, again suppressing resonances.

> "The Atlas has 12% higher output voltage than the Titan and impressively accomplishes this while reducing the amount of wire in the coils by 22%."

Cantilever assembly mounted directly into the cartridge body

Lyra remains the only cartridge manufacturer to mount the cantilever assembly directly into the cartridge body and thereby achieve a seamless, totally rigid connection between cantilever assembly and headshell. The effectiveness of this system has been increased with the asymmetrical structure of the Atlas. Control over spurious resonances is further assisted by the use of a narrowed mounting area, which couples the Atlas more tightly to the headshell and facilitates the transfer of vibrational energy into the tonearm.

Rather than a square, the coil former is in the shape of an X. This allows each channel to operate with greater independence from the other, giving better tracking, tighter channel matching, improved separation, and lower distortion due to crosstalk.

The Atlas is fitted with the latest generation cantilever system. This consists of a diamond coated solid boron rod with short 1-point wire suspension, this directly mounts into the cartridge body, via a high-pressure knife edge mounting system.

A further refinement was developed for Lyra's new stylus. The Atlas is fitted with a long footprint variable radius line contact nude diamond.

X shape

While the Atlas retains the yokeless dual magnet system, diamond-coated boron rod cantilever and variable-radius line-contact stylus of the Titan, the double knife-edge cantilever assembly mounting structure has been revised for greater rigidity, and the signal coil system is completely new. Rather than a square, the coil former is in the shape of an X, which allows each channel to operate with greater independence from the other. This gives better tracking, tighter channel matching, improved separation, and lower distortion due to crosstalk.

12% higher output voltage and a 22% reduction in wire in the coils

At the same time Lyra were able to increase both the performance and efficiency of the generator coils. The Atlas has 12% higher output voltage than the Titan, but accomplishes this while reducing the amount of wire in the coils by 22%. The mass reduction further improves tracking performance, while the enhanced output and electrical characteristics allow phono stages to perform better.

> " The Atlas uses Lyra's "New Angle" technology, which mechanically pre-biases the signal coils so that they are perfectly aligned to the front and rear magnets when LP playback takes place. "

The Atlas uses a body that is meticulously carved from a solid billet of titanium.

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“New Angle” technology

The Atlas uses Lyra’s “New Angle” technology, which mechanically pre-biases the signal coils so that they are perfectly aligned to the front and rear magnets when LP playback takes place. This equalizes out discrepancies in vertical and horizontal compliances, and enables the Atlas’ coils to move with equal ease in all directions for optimal performance.

Meticulously carved from a solid billet of titanium

As with the Titan and Olympos, the Atlas uses a body that is meticulously carved from a solid billet of titanium, through a process that involves both contact (for the exterior) and non-contact machining (for the interior body structures). But by making most of the Atlas’ body surfaces non-parallel, avoiding dimensions that are multiples of other dimensions, and adding a pre-stressed phase-interference resonance-controlling system, resonances have been inhibited further.

Just like a live performance, analog playback has the unique ability to allow us to relax and become immersed in the music

Atlas is the culmination of generations of previous Lyra’s, where each and every detail of record playback was reexamined and where possible new solutions were found.

Lyra phono cartridges provide a direct and transparent path to the music. The Lyra design team are very proud to present their latest work of art, **the Atlas.**

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To find out more about the Lyra Atlas, please contact Nigel Crump at Symmetry.

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Lyra Atlas specifications

Designer	Jonathan Carr
Builder	Yoshinori Mishima
Type	Medium weight, medium compliance, low-impedance moving coil cartridge
Stylus	Lyra-designed long-footprint variable-radius line-contact nude diamond (3um x 70um), slot-mounted
Cantilever system	Diamond-coated solid boron rod with short one-point wire suspension, directly mounted into cartridge body via high-pressure knife-edge system
Coils	2-layer deep, 6N high-purity copper, cross-shaped chemically-purified high-purity iron former, 4.2ohm self-impedance, 11uH inductance
Output voltage	0.56mV@5cm/sec., zero to peak, 45 degrees (CBS test record, other test records may alter results)
Frequency range	10Hz ~ 50kHz
Channel separation	35dB or better at 1kHz
Compliance	Approx. 12 x 10-6cm/dyne at 100Hz
Vertical tracking angle	20 degrees
Cartridge body	One-piece machining from solid titanium billet, with reduced-surface higher-pressure headshell contact area, predominately non-parallel and asymmetrical shaping, phase-interference resonance-controlling mechanism, and body threaded directly for mounting screws
Cartridge mounting screws	2.6mm 0.45 pitch JIS standard
Distance from mounting holes to stylus tip	9.5mm
Cartridge weight (without stylus cover)	11.6g
Recommended tracking force	1.65 ~ 1.75g (1.72g recommended)
Recommended load directly into MC phono input	104ohm ~ 887ohm (determine by listening, or follow detailed guidelines in user manual)
Recommended load via step-up transformer	5 ~ 15ohm (step-up transformer's output must be connected to 10kohm ~ 47kohm MM-level RIAA input, preferably via short, low-capacitance cable)
Recommended tonearms	High-quality pivoted or linear (tangential) tonearms with rigid bearing(s), adjustable anti-skating force, preferably VTA adjustment