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The Point Where Everything Aligns

In every pursuit, there is a point where alignment reaches its peak, where direction becomes clear, effort transforms into momentum, and potential becomes achievement. That moment is the vertex.

With MC Vertex, Ortofon introduces a cartridge that represents the culmination of precision engineering and acoustic refinement. It is the point where design, materials, and performance converge into a singular expression of analog excellence.

MC Vertex represents the most advanced moving coil cartridge Ortofon has ever developed, setting a new reference for precision, transparency, and musical performance.

MC Vertex is the result of an extensive and uncompromising development process, shaped by dedicated Ortofon engineers and product leadership, working across acoustics, materials science, mechanics, and advanced manufacturing. Every detail has been challenged, refined, and validated through critical listening, precise measurement, and deep craftsmanship.

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A New Reference Diamond

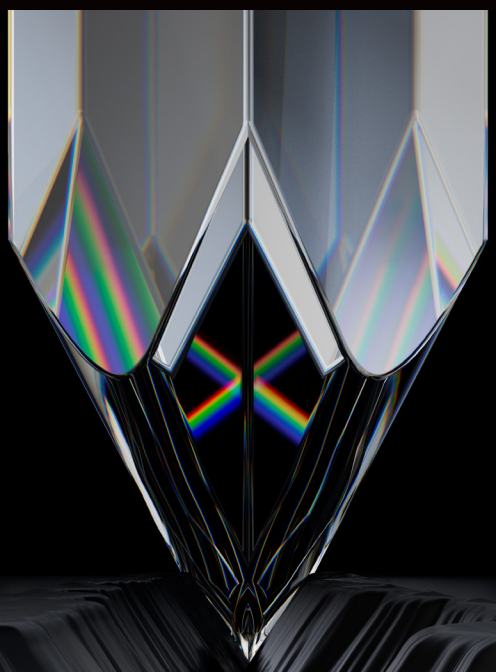
At the core of MC Vertex is a newly developed diamond, engineered by Ortofon and defined by an advanced line contact geometry. This new stylus design is introduced as the Vertex diamond, representing a new reference in Ortofon diamond technology.

The stylus profile has been developed with a specific focus on how it engages the groove walls at a microscopic level, where both contact accuracy and mechanical stability are critical. Rather than relying solely on established geometries, the profile has been refined to precisely control the effective contact area, scanning radius, and pressure distribution, ensuring consistent contact across a wide range of modulations under dynamic conditions.

The Vertex diamond features a finely optimized scanning radius of 4 µm, combined with an extended contact radius of 110 µm. While the scanning radius is within the upper tier of advanced stylus designs, the contact radius represents an exceptionally large profile, enabling a significantly increased contact area along the groove walls.
This combination allows the diamond to trace fine groove structures with high precision, while distributing contact forces more effectively across the groove surface.

The Vertex diamond is mounted in a solid diamond cantilever, forming an extremely rigid and lightweight structure that supports efficient energy transfer from the stylus to the generator system.

As a result, low-level detail is retrieved with clarity and stability. Fine groove modulations are followed with high accuracy, improving resolution, transparency, and spatial definition. Subtle variations in texture and timing are preserved, presenting the acoustic image with precise localization and structure.

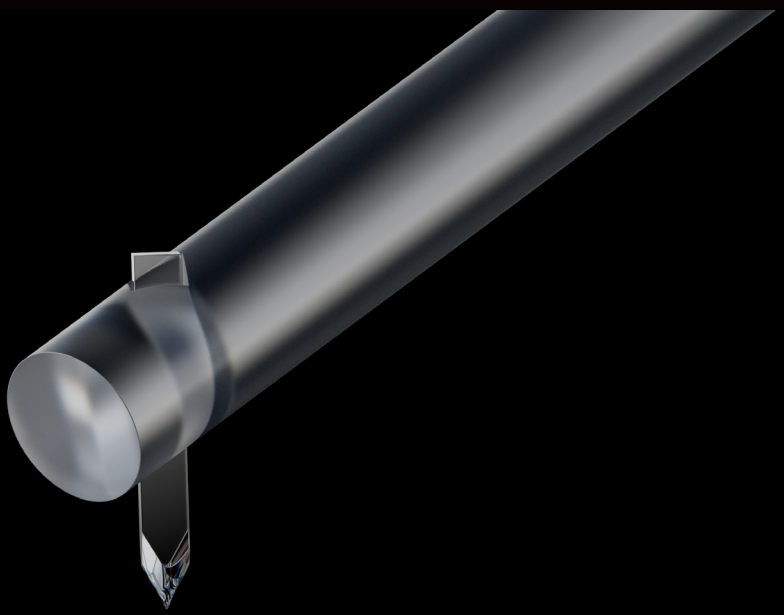


The diamond-to-cantilever interface is manufactured using laser-cut processes with extremely tight tolerances. A precisely defined micro-bore is formed in the cantilever, allowing the diamond to be mounted with a highly controlled mechanical fit. This ensures accurate alignment and repeatability, while creating a rigid and stable interface for efficient energy transfer.

The cantilever is laser-polished to achieve a uniform surface finish, minimizing irregularities that could introduce mechanical artifacts.

This level of precision results in stable tracking, low distortion, and a linear response to groove input. Both micro dynamic nuance and large-scale dynamics are reproduced without compression or loss of detail.

The result is the Vertex diamond, combining advanced geometry, diamond-on-diamond construction, and precision manufacturing to deliver high resolution, clarity, and long-term consistency.



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Structure Shaped for Sound

The cartridge housing and internal core structure are produced in titanium using Ortofon's established Selective Laser Melting technology.

This advanced manufacturing method enables a level of structural control not possible with conventional techniques. Material density, wall thickness, and internal geometry are precisely defined throughout the structure, allowing complex internal architectures to be formed directly within the titanium body.

A special cavity is intentionally incorporated to enhance internal damping and reduce unwanted resonances.

The structure is finished with a DLC surface treatment, providing a refined black finish with enhanced durability.

All logos are laser-engraved directly into the titanium surface, reflecting the precision of the manufacturing process.

The result is a mechanically inert structure that effectively suppresses unwanted vibrations, allowing the musical signal to emerge with greater clarity, purity, and accuracy.


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Updated Wide Range Damping Technology

Magnetic Precision and Control

MC Vertex features a refined generator system built around a non-magnetic armature, precision-wound coils, and a highly optimized magnet configuration.

The non-magnetic armature provides a stable mechanical structure for the coils, without introducing magnetic material into the moving system.

The Wide Range Damping system, developed and patented by Ortofon, is designed to control mechanical resonance across the entire audible frequency range.

At its core is a platinum disc positioned between two rubber compounds with distinctly different mechanical properties. The platinum disc acts as a rigid mechanical interface, allowing the two rubber compounds to operate both independently and in interaction, depending on frequency.

This dual-behavior damping structure enables precise control of resonance characteristics across the frequency spectrum, while maintaining dynamic responsiveness.

Ortofon's in-house development and production of rubber compounds ensure consistent material quality, and allow fine-tuning of damping performance. Even minor adjustments in formulation or processing can significantly influence how energy is absorbed and controlled within the system.

The result is a more accurate and natural sound reproduction across the entire frequency range.

This prevents the armature itself from interacting with the magnetic field, ensuring controlled and consistent generator performance.

By keeping magnetic material out of the armature, the coil assembly can operate within the magnetic system, without unwanted magnetic influence from the armature itself. This contributes to stable signal generation, precise channel performance, and consistent reproduction of groove modulations.

The coils are precision-wound using high-purity silver and are carefully integrated with the optimized magnet configuration, to support accurate conversion of mechanical movement into an electrical signal.

Together, the non-magnetic armature, coil system, and magnet configuration allow MC Vertex to deliver high precision, strong channel separation, and a natural, coherent presentation of music.

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A Unified Design Approach

Developed and manufactured by Ortofon, MC Vertex reflects a holistic approach to cartridge design, where each element is defined in relation to the others and optimized as part of a complete system.

MC Vertex is conceived as a unified structure, where the Vertex diamond, materials, and mechanical and magnetic design are specified in direct relation to one another. Every interface is controlled to ensure consistency and predictable performance.

Energy is transferred from groove to output with precision and stability, enabling accurate tracking, low distortion, and a controlled response across the frequency range.

The result is a cartridge that reveals fine structure, preserves dynamic contrast, and presents music with clarity. Spatial information remains stable and well-defined, even in complex passages.

MC Vertex is where everything aligns.

SCAN FOR MORE INFORMATION

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Specifications

Output voltage 1kHz, 5cm/s	0.3 mV
Cantilever material	Solid Diamond
Cantilever surface	Laser Polished
Stylus type	Vertex Diamond
Stylus tip radius	r/R 4/110 µm
Coil wire material	High-purity silver
Channel balance at 1 kHz	0.1 dB
Channel separation at 1 kHz	30 dB
Frequency response 20 kHz – 20 kHz	+/-1 dB
Dynamic lateral compliance	9 µm/mN
Recommended load impedance	>100 Ω
Recommended tracking force	2.5 grams
Tracking angle	23°
Internal impedance DC resistance	19 Ω
Cartridge body material	SLM Titanium
Cartridge suface	DLC Coating
Cartridge weight	15 grams

The specifications are indicative of typical values and are subject to revision without prior notice.

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