

# MC Century

Moving Coil Cartridges



## Exclusive anniversary model

Ortofon celebrates 100 year anniversary with the company's most ambitious cartridge ever.





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In a very limited edition of 100, Ortofon released its no-expense-spared anniversary model – the MC Century.

Only the year before, Leif Johannsen, Chief Acoustics and the Head of R&D, had designed an updated version of the cartridge made as a tribute to Ortofon's chief engineer called the MC Windfeld TI. "We want all our exclusive cartridges to have a body made by Additive Manufacturing. We did not

do that for the original Windfeld. The TI stands for Titanium because, in the latest Windfeld cartridge, the central frame which carries the cartridge is made out of titanium. We had also used that metal for the MC A95 and MC Anna. We try to reuse the good stuff. A good idea is not just confined to one cartridge, so the MC Century also has a titanium housing made by SLM. One of the most striking things about it, which has a big impact on the sound, is its cantilever. We've used diamond for this. The sound is extreme! It is really high-end."

The MC Century represents the absolute top of Moving Coil cartridges. This state of the art product is truly exemplary of the highest degree of performance possible in contemporary analogue playback technology.

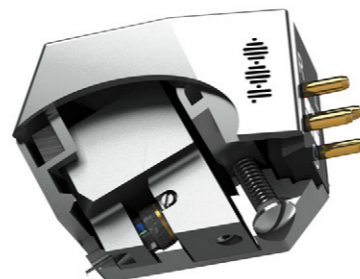
The MC Century represents numerous Ortofon design elements and ideals:

- The housing and the body of the cartridge are made in Titanium with SLM technique. The Selective Laser Melting technique was pioneered by Ortofon for manufacturing of the MC A90 and the SPU A90 cartridges.
- The magnet system is heavily based on that used in the MC Anna cartridge. High performance iron-cobalt alloy is applied for some parts of the magnet system.
- The armature damping system provides complete elimination of unwanted resonance.
- Ortofon Replicant 100 diamond, thin and light, with an extraordinarily large contact surface, tracing accuracy unparalleled by any other needle in existence.
- The crystal structure and exceptional hardness of the new Diamond cantilever ensures the best possible interface between the stylus and the armature.

## Benefits of high-end materials

An engineering feature adding to the damping capability of the MC Century cartridge is the Selective Laser Melting process in which fine particles of Titanium are welded together, layer-by-layer, to construct a single piece body devoid of unnecessary material. Using this technique the density of the body can be precisely controlled, allowing for extremely high internal damping. The final result provides absolute freedom from resonances existing in the cartridge body material and allows for the MC Century to be perfectly matched with an extremely wide array of different tonearms. Because of the nature of SLM-based construction, each cartridge body is cosmetically unique and will show small dimples or lines under close examination.

The optimized geometry of the high efficiency magnet system combined with choice of materials like neodymium and iron-cobalt offers an unprecedented consistency of the flux density within the system's air gap. Due to an increase of active material inside of the magnet system, the magnetic field strength is delivered more uniformly, allowing each coil to sense identical flux density



regardless of its position. Because of this, dynamics and impulse linearity are preserved to an overwhelming extent.

Using expensive ultrapure oxygen free copper allows for zero-loss transmission of the diamonds movements via Diamond cantilever. This configuration combines low moving mass with an extremely high degree of rigidity.

The specially designed precision moulded non-magnetic armature achieves an extreme precision in each coil turn in all layers. The armature design allows a very well-defined interface to the rubber absorbers. The material applied for the armature has very high strength and rigidity.

The bottom cover has been constructed from a special proprietary TPE (Thermo-Plastic Elastomer) material, which provides extremely high damping.

## Increase in dynamics, resolution and richness in details

The MC Century also uses a new degree of control over vibrations by a way of a newly-improved wide-range armature damping system (WRD). By extending the armature beyond the coils, it can interface directly with the rubber dampers, which sandwich a small heavy disc of platinum. This offers more consistent movement, and thereby better stereo perspective and transient delineation.

As in the Exclusives series cartridges, the MC Century makes use of Ortofon's Replicant 100 diamond, known for its thin and light profile and extraordinarily large contact surface.

Since the Replicant 100 is closest to the shape of the cutting stylus, it can trace with accuracy unparalleled by any other needle in existence. Special polishing of the diamond along with the use of a Diamond cantilever offer extremely transparency, speed, and responsiveness beyond that of any other combination.

## Flexibility and performance with a range of compatibility

Output impedance of 6 Ohm and a low to medium output voltage of 0.2 mV make the MC Century a perfect partner for most phono preamps and step-up transformers, including the Ortofon ST-80 SE.

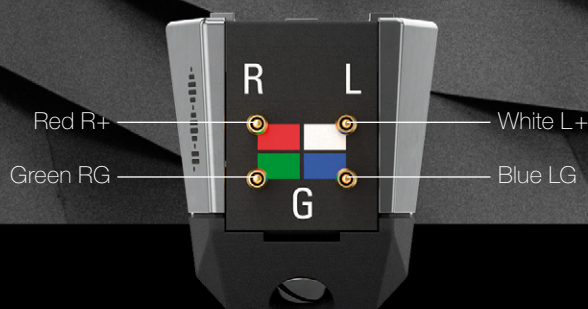
When combined with Ortofon's world-class knowledge in analogue sound reproduction, the new MC Century will undoubtedly provide sound which is literally unsurpassed and simply has to be experienced.





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## Technical Data

Output voltage at 1 kHz, 5 cm/sec.	0.2 mV
Channel balance at 1 kHz	0.5 dB
Channel separation at 1 kHz	25 dB
Channel separation at 15 kHz	22 dB
Frequency response	20 Hz – 20 kHz +/-1.5 dB
Tracking ability at 315 Hz at recommended tracking force	80 µm
Compliance, dynamic, lateral	9 µm/mN
Stylus type	Special polished Nude Ortofon Replicant 100 on Diamond Cantilever
Stylus tip radius	r/R 5/100 µm
Tracking force range	2.2 – 2.6 g (22 – 26 mN)
Tracking force, recommended	2.4 g (24 mN)
Tracking angle	23°
Internal impedance, DC resistance	6 Ohm
Recommended load impedance	> 10 Ohm
Cartridge body material	SLM Titanium
Cartridge colour	Silver/Black
Cartridge weight	15 g