

# MC Anna MC Anna Diamond

Moving Coil Cartridges



**ortofon**  
accuracy in sound



# The MC Anna & MC Anna Diamond Moving Coil Cartridges

The Ortofon Exclusives series of our highest-performing Moving Coil cartridges has now been expanded to include a new premier model: the MC Anna Diamond.

As its name suggests, the MC Anna Diamond uses a solid Diamond cantilever that in combination with Ortofon Replicant 100 diamond offers extreme transparency, speed and responsiveness beyond that of any other combination.

Both MC Anna and MC Anna Diamond models represent the highest echelon of Moving Coil cartridges. These state of the art products, representative of numerous Ortofon design elements and ideals, are truly exemplary of the highest degree of performance possible in contemporary analogue playback technology.



# MC Anna & MC Anna Diamond



The MC Anna and MC Anna Diamond cartridges represent a landmark in Ortofon's research and development

- The housing and the body of the cartridge are made in Titanium with the Selective Laser Melting (SLM) technique. The SLM technique was pioneered by Ortofon for manufacturing of the MC A90 and the SPU A90 cartridges, and was refined in subsequent Exclusive Series models.
- High-performance iron-cobalt alloy is applied for select parts of the magnet system.
- The WRD armature damping system provides complete elimination of unwanted resonance.
- The Ortofon Replicant 100 diamond, thin and light, with an extraordinarily large contact surface, provides tracing accuracy unparalleled by any other needle in existence.
- The MC Anna uses a Boron cantilever which is strong, stiff, light and 100% inert.
- The MC Anna Diamond features a new Diamond cantilever that ensures the best possible interface between the stylus

and the armature. It offers speed, fluidity, and harmonic reproduction beyond that of any other material. The use of Diamond cantilever in the MC Anna Diamond has prompted a paradigm shift in our understanding of analogue reproduction.

## Benefits of high-end materials and advancements in technology

An engineering feature adding to the damping capability of the MC Anna and the MC Anna Diamond cartridges is **the SLM technique** 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 Anna and the MC Anna Diamond cartridges 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.

Arguably one of the most significant advancements in the MC Anna and the MC Anna Diamond is our dramatically higher





efficiency **magnet system**. The optimized geometry of the magnet system combined with choice 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.

The use of this new optimized magnet system allows for the use of **a lightweight, non-magnetic armature**, which also provides noteworthy benefit to the dynamic capability of the MC Anna and the MC Anna Diamond cartridges. The reason for this is that our specially designed precision moulded non-magnetic armature does not alter the magnetic field during movement. Hence when combined with ultrapure oxygen-free copper coil wire, it delivers perfect reproduction of the cantilever movements without compromise. The material applied for the armature has very high strength and rigidity.

Because the new magnet system delivers a tremendous magnetic flux density, the need for design compromises is effectively eliminated. It is due to this aspect that the amount of coil windings required to achieve significant output voltages is reduced to a minimum, resulting in a further reduction in moving mass.

The new magnet system has also allowed for more spaciousness within the air gap, allowing for coil windings to be done completely independent of each other, without any overlap or interaction between them and with an extreme precision in each coil turn in all layers. The cumulative result of these improvements simply delivers more lifelike reproduction, with nearly boundless imaging, dimensionality and dynamics.

## Increase in dynamics, resolution and richness in details

The MC Anna and the MC Anna Diamond also employ a greater 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. System resonances are also damped by the use of the Thermo Plastic Elastomer (TPE) compound which comprises the bottom cover assembly.

As in the entire Exclusives series cartridges, the MC Anna and MC Anna Diamond make use of **Ortofon's Replicant 100**



Historically, Ortofon has a long tradition of paying tribute to persons who have been highly influential within the high-end audio culture and in music culture and history in general. In honor of these remarkable persons, Ortofon has introduced numerous products throughout the years, including the SPU Meister, MC Rohmann, Kontrapunkt series and Windfeld cartridges.

Continuing this tradition with the MC Anna and the MC Anna Diamond, Ortofon dedicates these flagship cartridges to the opera singer Anna Netrebko, a virtuoso whose performance displays a formidable technical arsenal of endless versatility. With the dedication of the MC Anna, Ortofon once again emphasizes the company's unchanging commitment and devotion to the music and to the purest delivery of recorded sound. Much like Anna Netrebko, Ortofon aspires to provide the ultimate musical experience through a mixture of innovation and technical expertise, combined with inspiration that goes beyond mere thought to reveal true inner emotion.



**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 Boron cantilever in the MC Anna model offer extreme transparency, speed and responsiveness. The addition of a solid **Diamond cantilever** found in the MC Anna Diamond provides the best possible interface between the stylus and armature, owing to its hardness and crystal structure. The improvements found in the use of a Diamond cantilever have redefined the boundaries of analog reproduction, presenting greater inner detail, subtlety, and depth like never before.

Both the MC Anna and the MC Anna Diamond focus on providing music in its entirety without compromise, offering an ideal balance of precision and musicality to provide an engaging experience on a whole new level. With fine attention to both micro and macro dynamics combined with fluid tonality and texture, the MC Anna and MC Anna Diamond will shatter the boundaries of recorded music forever.

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

## 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 Anna cartridges perfect partners for most MC phono preamps and step-up transformers, including the Ortofon ST-80 SE MC transformer. Both models are a perfect match for a high-mass, high-precision tonearm with gimbaled bearing.



## Technical Data

Output voltage at 1 kHz, 5cm/sec.  
 Channel balance at 1 kHz  
 Channel separation at 1 kHz  
 Channel separation at 15 kHz  
 Frequency response  
 Tracking ability at 315 Hz at recommended tracking force  
 Compliance, dynamic, lateral  
 Stylus type

Stylus tip radius  
 Tracking force, recommended  
 Tracking angle  
 Internal impedance, DC resistance  
 Recommended load impedance  
 Cartridge body material  
 Cartridge colour  
 Cartridge weight

## MC Anna

0.2 mV  
 0.5 dB  
 25 dB  
 22 dB  
 20 Hz - 20 kHz + / - 1.5 dB  
 80 µm

9 µm/mN  
 Special polished Nude Ortofon Replicant 100 on Boron cantilever  
 r/R 5/100 µm  
 2.6 g (26 mN)  
 23°  
 6 Ohm  
 > 10 Ohm  
 SLM Titanium  
 Silver/Black  
 16 g

## MC Anna Diamond

0.2 mV  
 0.5 dB  
 25 dB  
 22 dB  
 20 Hz - 20 kHz +/-1.5 dB  
 80 µm

9 µm/mN  
 Special polished Nude Ortofon Replicant 100 on Diamond cantilever  
 r/R 5/100 µm  
 2.4 g (24 mN)  
 23°  
 6 Ohm  
 > 10 Ohm  
 SLM Titanium  
 Silver/Black  
 16 g