

NAGRA



Nagra REFERENCE MC CARTRIDGE

The Nagra Reference MC cartridge is the product of a number of years of intense R&D supplemented by extensive listening tests. This moving coil cartridge is available in 4 and 6 Ohm variants. Designed in parallel with the Nagra 70th Anniversary Reference turntable/tonearm system, it is an ideal companion component to complete the ultimate LP playback platform.

First 100 units will be delivered in a special luxury aluminum box.

The Reference MC cartridge features a number of significant and unique elements. While traditional moving coil transducers utilize a single layer coil body, the Nagra Reference MC cartridge employs a multi-layer transducer featuring a double layer coil body wound with hyper-pure silver windings.

The 6 Ohm Reference outputs 0.45mV @ 5cm/S.

The 4 Ohm Reference achieves an output of 0.30mV @ 5 cm/S.



Cantilever

A stiff ruby cantilever is mated to a high strength titanium structure featuring a DLC (diamond-like carbon) coating. The titanium structure utilized in the coil body/cantilever interface addresses a traditional source of resonance and substantially reduces vibration unrelated to the musical signal. The stylus tip is a Swiss produced, Fritz Gyger S profile chosen for its wonderful combination of detail retrieval and musicality.



Connectors

Further evidence of the obsessive attention to detail in the cartridge's design is found in the connector pins. Those employed in the Reference MC cartridge eliminate the commonly found connection joint between the pin and the coil. In the case of the Reference MC, the pin is a continuous single piece from its external end point to its internal point of contact with the coil, resulting in a welcomed lowering of inductance.

Body

In addition to the extensive focus on the generator system and groove/stylus/ cantilever interface, Nagra's team of engineers and designers paid great attention to the Reference MC cartridge body. Substantial material science investigation led the team to a unique, non-ferrous alloy called EXIUM® AM. Born from aerospace materials research, EXIUM® AM is the result of a collaboration between the CNES (the French equivalent of NASA), the Ecole de Mines de Paris and the French firm LBI Foundries.

It was developed to address the need for an alloy with very high damping properties – a necessary attribute for a particular Mars mission whose purpose was to measure minute seismic activities on the red planet.



Nagra engineers determined that this high damping characteristic alloy was perfect for use in audio applications where the elimination of unwanted vibrations and resonances is an extreme priority. As a result, the Reference cartridge utilizes an EXIUM® AM inlay at the critical interface between cartridge generator and the cartridge body. (An examination of Nagra's 70th Anniversary Reference turntable will reveal that the table's platter features a precisely CNC machined ring of EXIUM® AM.) Nagra's use of EXIUM® AM is exclusive. Nagra has secured the sole worldwide right to use EXIUM® AM in audio products. In order to produce a cartridge of optimal weight for

the Reference Anniversary tonearm, while maintaining high internal damping properties, a proprietary super magnesium alloy is utilized for the balance of the cartridge body.

The Nagra Reference cartridge has exceptional tracking ability, resonance control and exemplary specifications. It will match most tonearms and phono stages but will reach its ultimate potential when paired with the Nagra Reference turntable/tonearm system and Nagra phono stages.



Technical specification

GENERAL

Impedance:	4 or 6 Ohms
Compliance:	12 $\mu\text{m}/\text{mN}$
Output voltage:	0.45 mV (6 Ohm) / 0.3mV (4 Ohm) @ 5 cm/S
Channel balance:	< 0.5 dB
Crosstalk:	> 30 dB
Weight:	14.3 g
Stylus:	FGS
Cantilever:	Titanium / Ruby
Transducer:	Multi-Layer Core
Coil material:	Pure Silver
Tracking force:	2 – 2.2 g

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