

Styli, cartridges and accessories with the authentic vinyl sound



Nagaoka is unique in the cartridge business having produced styli, cartridges and accessories for records since 1940. Nagaoka has endeavoured manufacturing styli and pick-up cartridges of the best possible quality to satisfy the expectations of true vinyl connoisseurs — bringing the highest musical and creative expression from the concert hall to the comfort of your home.

Through its long track record in the field of phonograph technology, Nagaoka has perfected the stylus manufacturing technologies and continues to develop new innovative solutions to improve a full audio experience. Each Nagaoka phono cartridge is produced with precision craftsmanship, stringent quality control, careful assembly and thorough inspection. Nagaoka is the world's only cartridge producer that manufactures all high precision parts of the cartridge in its own factories: from the diamond tips, the cantilevers and the samarium cobalt magnets, as well as the coils.

As we share a passion for analogue sound reproduction, Nagaoka helps to provide you with all essential tools from hi-fi styli and cartridges to accessories for sound enhancement and record cleaning — so you can enjoy the authentic vinyl sound.



Nagaoka presents:

The phonograph cartridge is perhaps the most important component of your whole vinyl sound system. The cartridge converts the vibrations of the stylus into audio signals. The quality and shape of the stylus and the tolerances in the manufacturing process are of the utmost importance to ensure that the translation of the information in the grooves is perfect and no sound is lost or noise is added in the process.

The high performance Nagaoka MP (Moving Permalloy) cartridge line incorporates the state-of-the-art materials. The cartridges of the MP Series provide an equal sound reproduction in all frequency ranges: from the super deep low tones to the crystal clear high notes. The MP-cartridges clearly accentuate and separate every detail — however small — of the musical instruments and voices of the artists.

An oscillation system aimed at perfect tracking capability

Central to the high performance of the Nagaoka MP Series is the development of an oscillation system that perfectly captures the information engraved in the grooves of the record. Originally, in order to transform the vibrations of the stylus into soundwaves, a cartridge makes use of two essential components: a moving magnet and fixed coils. As the stylus tracks the record groove, the modulations of the groove move the stylus back and forth and up and down. The stylus in turn moves the cantilever, which moves the magnet attached to its opposite end, which ultimately creates a current in the fixed coils located in the cartridge body that is sent to the (pre)amplifier.

The way MP cartridges work is slightly different. Instead of a real magnet at the opposite end of the cantilever there is Permalloy material (a nickle-iron alloy). This material is not itself a magnet, but in the field of a

tonar

Nagaoka is exclusively represented in Europe by Tonar International. Both companies share a long history of fruitful cooperation, that goes back to Tonar's foundation in 1954. Ever since, Tonar has become the specialist for phonograph styli, cartridges and accessories for your turntable and vinyl collection. Nagaoka is the world's only cartridge producer that manufactures all high precision parts of the cartridge in its own factories: from the diamond tips, the cantilevers and the samarium cobalt magnets, as well as the coils.

the Moving Permalloy (MP)

NAGAOKA

Cartridge Series

powerful magnet it acts as if it were a magnet – we call it Induced Magnet or IM (also known in some cartridge models as moving Iron). The fixed Samarium Cobalt magnet in the cartridge body activates this magnetic property in the Permalloy and so the coils in the cartridge see a "moving magnet". The big advantage of MP is that the Permalloy material is substantially lighter in weight than a real magnet and so the moving mass of the tip-cantilever-Permalloy combination is considerably lower, making it much easier for the combination to follow the modulations in the groove accurately.

Samarium cobalt magnet

The MP-cartridges are equipped with a fixed samarium cobalt magnet. This magnet has an extremely powerful magnetic field, much stronger than any other type of magnet. The weight of this magnet in comparison to the power is much smaller than other magnets reducing the weight of the cartridge considerably and enabling the magnet to be mounted much closer to the Permalloy tip of the cantilever. By reducing the distance less magnetic energy will be lost, which has a very positive effect on the sound quality.

The stylus tip and the cantilever

Since its founding, Nagaoka has developed a strong track record on precision processing and microfabrication of difficultto-cut materials such as sapphire and diamond. The MP-series cartridges have a low mass naked diamond tip (except



for the MP-100 and MP-110 which have a light weight bonded diamond tip), which is only one third of the mass of conventional diamond tips. It is manufactured by super fine particle grinding, based on extended stylus technology.

The cantilever is designed with a unique hollow construction, fabricated with high precision at the micro-world level. Since high rigidity is essential for a cantilever, Nagaoka has selected the most lightweight and strong materials. The MP-500, the MP-300 and the MP-200 have a cantilever made out of Boron, a material that is ultra-light weight, extremely rigid and more durable than granite, beryllium or carbon fibre. The MP-150 has a hardened tapered aluminium cantilever which is more rigid than normal aluminium cantilevers because of it's shape.The rigid cantilever of the MP-cartridges ensures an even and distortion free sound reproduction.

Avoiding unnecessary resonance

Every material used for the production of the MP-cartridges has been critically

- (1) Samarium cobalt magnet
- 2 Stylus tip
- (3) Cantilever
- (4) Shield case
- (5) Permalloy oscillator
- 6 Cylinder
- (1) Gold plated terminal pins
- (8) Coils
- Anti-resonance screw
- 10 Housing

selected to eliminate unnecessary resonance. The frame of the cartridges is made from high purity aluminum, which is light in weight and has a high physical strength. Because of its even density, sound distortion caused by vibration of the frame body is minimal. In addition, the replaceable stylus and the bodies of the MP-500 and MP-300 have been completely tightened with a special screw. This eliminates the occurrence of resonance of the plastic knob of the replaceable stylus.

Due to Nagaoka's dedication to precision craftsmanship and their continuous pursuit of perfect sound reproduction, the MP-line will not fail to provide you with the best musical satisfaction. With this *Master Piece* collection, Nagaoka invites you to enjoy your record collection in excellent audio quality with vivid, colourful and dimensional clarity and detailed sound.



Hi-Fi Moving Permalloy (MP) Cartridges

NAGAOKA MP-500

The MP-500 is Nagaoka's top-of-the-line phonograph cartridge. It offers the finest audio experience of the MP-series. The cartridge features an exclusive super-rigid body for ultra low resonance and superlative fidelity with a fine polished line contact diamond stylus. Its characteristics include a powerful samarium cobalt magnet, low-mass high-strength rigid boron cantilever, carbon fiber reinforced plastic shoe and anti-ferro magnetic permalloy shield casing. The MP-500 plays your records with image solidity, detailed resolution, and bass extension.



NAGAOKA MP-300

The Nagaoka MP-300 is an advanced technology cartridge that features a special elliptical diamond mounted on a boron cantilever for superior record groove retrieval. It offers harmonically accurate and excellent rendition of voice and music. As such, the MP-300 stands for sophistication, refinement and high-definition at all audible frequencies to be easy on the ears.





Output Voltage Frequency characteristics 20-25.000 Hz Channel Separation Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

3,0 mV (5 cm/sec) 27 dB (1 KHz) 1.0 dB or less 47 KΩ Boron Line contact naked diamond 1,3 – 1,8 g 8,0 g

Tonar article no. 9353

Tonar article no. 9401 (mounted in head shell)



Output Voltage Frequency characteristics 20-25.000 Hz Channel Separation Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

3,0 mV (5 cm/sec) 25 dB (1 KHz) 1.0 dB or less 47 KΩ Boron 0.4 x 0.7 mil elliptical naked diamond 1,3 – 1,8 g 8,0 g

Tonar article no. 9351

Tonar article no. 9399 (mounted in head shell)

NAGAOKA MP-200



The Nagaoka MP-200 is a cartridge of musical contrasts. On the one hand, it offers an organic, fluid presentation with an engaging midrange reproduction of vocals and instruments. On the other hand, it retains the detail, lustre, dynamics and presence of music that are so often buried and attenuated by smooth sounding cartridges.

NAGAOKA MP-150

The Nagaoka MP-150 phono cartridge gives a fine solid bass, superb fluidity across the frequency spectrum, and sweet highs. To an artful listener who aspires for warm and accurate eloquence the Nagaoka MP-150 will be an endearing and lasting treasure.

Output Voltage Frequency characteristics 20-23.000 Hz **Channel Separation** Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

4,0 mV (5 cm/sec) 25 dB (1 KHz) 1.5 dB or less 47 KΩ Boron 0.4 x 0.7 mil elliptical naked diamond 1,5 – 2,0 g 6,5 g

Tonar article no. 9349 ■ Tonar article no. 9397 (mounted in head shell)

NAGAOKA MP-110



The Nagaoka MP-110 cartridge is world famous for its outstanding sound performance. Tracking and bass impact of this cartridge are exceptional, no matter if you are listening to classical music or rock, with everything in-between. The MP-110 has been selected by many leading high-end manufactures for standard mounting in their turntables.

Output Voltage Frequency characteristics 20-20.000 Hz **Channel Separation** Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

5,0 mV (5 cm/sec) 23 dB (1 KHz) 1.5 dB or less 47 KΩ aluminum alloy 0.4 x 0.7 mil elliptical bonded diamond 1,5 - 2,0 g 6,5 g

Tonar article no. 9345

Tonar article no. 9393 (mounted in head shell)

Output Voltage Frequency characteristics 20-20.000 Hz Channel Separation Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

4,5 mV (5 cm/sec) 24 dB (1 KHz) 1.5 dB or less 47 KΩ hardened tapered aluminum alloy 0.4 x 0.7 mil elliptical naked diamond 1,5 – 2,0 g 6,5 g

Tonar article no. 9347 Tonar article no. 9395 (mounted in head shell)

NAGAOKA MP-100



The entry level Nagaoka MP-100 phono cartridge offers musical clarity and expression beyond its price - a splendid upward start toward long term musical enjoyment with the fine quality of Nagaoka.

Output Voltage Frequency characteristics 20-20.000 Hz **Channel Separation** Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

5.0 mV (5 cm/sec) 22 dB (1 KHz) 2.0 dB or less 47 KΩ aluminum alloy 0.6 mil spherical bonded diamond 1,8 – 2,3 g 6,5 g

Tonar article no. 9343

Tonar article no. 9391 (mounted in head shell)

Special Purpose Styli & Cartridges

NAGAOKA 78 RPM styli series

assorted tip sizes for improved playback of Shellac records

The generally accepted tip radius for playback of 78 RPM records is 3.0 mil (0.003 inch). Due to the playback in the past of these very old records with very high stylus pressure and often with steel needles a lot of damage has been made to the grooves. This damage is the cause of a lot of distortion and background noise. Sometimes better results can be achieved by playing the record either on a lower part or a higher part of the groove which may have been damaged less than the damage found on the average playback height. To play-back at a higher level in the groove, use either the 3.5 mil or the 4.0 mil tip. To playback at a lower groove level use either the 2.0 mil, or 2.5 mil tip. When you have found the best height affix a sticker to the record so you will know the next time which stylus tip to use for best results.



MP - 1.0



MP - 2.0

Tonar article no. 6839

MP - 2.5 Tonar article no. 6845



MP-30

MP - 3.0

Tonar article no. 6835

MP - 3.5 Tonar article no. 6841

MP - 4.0Tonar article no. 6843





NAGAOKA DJ-03HD DJ cartridge for scratching

The Nagaoka DJ-03D is designed with precision for excellent skip resistance. This powerful cartridge ensures a continuous connection to the record during even the most energetic scratch performances. The fluorescent tip makes it easy for the DJ to put the stylus in the desired part of the groove. The cartridge is premounted in a SME connection type DJ head shell and fits directly onto the arm of the Technics SL-1200 DJ type turntables and its clones. The inside of the DJ-03D cartridge has been incorporated into a number of private label cartridges by well knows DJ turntable manufacturers.

Output Voltage Frequency characteristics 20-20.000 Hz Channel Separation Channel balance Load resistance Cantilever Stylus tip shape/radius Stylus tip material Stylus pressure Cartridge weight

6,0 mV (5 cm/sec) 20 dB (1 KHz) 1.5 dB 47 KΩ aluminum alloy 0.6 mil conical bonded diamond 3 – 5 g 5,2 g



Tonar article no. 9502 (premounted in SME connection type DJ head shell)

Accessories for Styli & Cartridges

NAGAOKA

NAGAOKA Hi Clean AM-801 stylus cleaning fluid

Your phonograph stylus also needs cleaning and care. Due to air pollution caused by both outside influences (traffic exhaust fumes) and domestic influences (kitchen, fumes and smoking) a sticky film is deposited over time on to your records. During playback the stylus will scrape this deposit from the groove which in turn causes a sticky film to form around the stylus tip. This grime traps other dirt and dust found on your record. This easily visible thick deposit not only influences the quality of the sound but if allowed to build up further may even cause the stylus to jump out of the groove and to do damage to your favourite records. The special formula of the Nagaoka AM-801 efficiently dissolves all the sticky substance caught on the stylus and removes this as well as all the dirt trapped.



Tonar article no. 3281

NAGAOKA Cartridge Mounting Screws

assorted packs of cartridge screws and nuts

BN-7b (black) BN-7s (aluminum)

 Screw Sizes and Quantity:

 M2.6 x 3mm
 - 4x

 M2.6 x 6mm
 - 2x

 M2.6 x 8mm
 - 2x

 M2.6 x 10mm
 - 2x

 M2.6 x 12mm
 - 2x

 M2.6 x 14mm
 - 2x

 M2.6 x 14mm
 - 4x

 M2.6 x 18mm
 - 4x

 M2.6 x 18mm
 - 4x

 M2.6 Nut
 - 4x

 Nylon Washer
 - 4x

Tonar article no. 3085

Tonar article no. 3084

Vinyl Cleaning Accessories

NAGAOKA Rolling Cleaner CL-1000 silicone record cleaning roll

Conventional record cleaners attempt to wipe away the dust and dirt. The Nagaoka Rolling Cleaner uses a special grade of silicone rubber-elastomer which has the property that it's sticky. Just rolling over the record surface while applying a little pressure is enough to remove all dust and dirt in the grooves. The very soft silicone rubber will deform and take the shape of the record groove, being able to clean even the hard-toreach bottom of the groove. The silicone rubber literally sticks to the dust and dirt like a limpet and any dust particles will be removed.

When the roll has become dusty, simply wash it under tap water using a little hand soap. The dust will easily be rinsed off. After drying the roll with lint free paper, it will become just as sticky as when it was new. There is no danger that you will damage the label when rolling over the complete record. Important! Always roll in straight lines over the grooves and the record label and do not attempt to follow the grooves in curves as this could do irreparable damage to the silicone rubber.



Tonar article no. 5929

NAGAOKA Recopack DC-203

record cleaning system

This is a cleaning system for very dirty records. A special syrup is distributed on the record using the supplied dispenser. A removal tag is placed on the edge of the record, halfway, in the still fluid syrup. Then the syrup is allowed to dry into a film during 24 hours. Once the film is dry you can remove it carefully by lifting the tab. All parts that do not belong to the record are now trapped in the film, even residue from previous use of for instance Lenco clean fluid.

Tonar article no. 3114

NAGAOKA Argento CL-118 velvet record cleaning brush

The Nagaoka Argento record brush uses the finest velvet available on the market and comes with a compact storage container and a built-in brush cleaner. The velvet reaches deep into the grooves and removes even the smallest dust particles.



Tonar article no. 5534

Anti-Static Record Sleeves

NAGAOKA

NAGAOKA RS-LP II (formerly Discfile No: 102)

the improved Nagaoka 25 micron anti-static record sleeves



Paper sleeves leave dust on the record and poly ethylene sleeves cling to the record. When removing the record from the sleeve, the polyethylene generates static charge which attracts the sleeve to the record and causes the dust caught between the sleeve and the record to scratch the record. The Nagaoka RS-LP II new improved version of the world famous Nagaoka Discfile no: 102 is anti-static and super slippery thus leaving the record completely unharmed.

Tonar article no. 3073

NAGAOKA 108/3 jacket cover for LP albums

Protect your valuable record albums covers from dust, grease and scratches with these Nagaoka outer sleeves. Nagaoka album covers for LP albums are supplied in packs of 10.

Tonar article no. 4643



NAGAOKA JC 30 LP improved outer-sleeves for LP albums

With a thickness of 100μ , these improved Nagaoka strong outer-sleeves protect your important record album covers from scratches greasy fingers and dust.

Dimensions: 325 mm in width × 325 mm in height. Supplied in packs of 30.

Tonar article no. 5540



High End Accessories

NAGAOKA Audio Isolators combining Ruby with metal for better isolation

The Nagaoka Audio Isolators isolate your audio equipment from unwanted vibrations in the room, hence reducing the effect of acoustic feedback. As one of the cardinal gems, the Ruby is the only crystal material which is close to the hardness of the diamond. As such, the Ruby gem used in the Insulator helps to suppress resonance and avoid vibrations. The Insulator is available in two combinations: Ruby & Stainless Steel (INS-SU01) and Ruby & Brass (INS-BR02).

When the product is installed, the Ruby gem remains visible, providing a luxurious feeling due to the contrast between the metallic lustre and the ruby gloss.

Isolator INS-SU01 ■ Tonar article no. 4368





Isolator INS-BR02 ■ Tonar article no. 4370





NAGAOKA Disc Stabilizer record weight

The Nagaoka Disc Stabilizer, made from stainless steel, ensures a good contact between the record and the turntable platter. Pressing the record during playback will temporarily flatten warped records. In addition, the sound will improve, as unwanted resonances are suppressed and the grooves can be traced more accurately. Dimensions: 74 mm diameter x 22 mm. Caution: Please ensure that the platter bearing of your turntable is able to accept the additional weight of 600 grams. If in any doubt, please consult your record player instructions or your dealer.





Tonar article no. 5539

NAGAOKA 45 RPM Aluminum Adaptor record adaptor

This record adaptor has been designed to be used with your 45 RPM records that no longer have the centres in them enabling you to play your old favourites.

Tonar article no. 3031



NAGAOKA In-Ear Headphones

world's first in-ear headphones using Ruby in the acoustic filter

Nagaoka is famous for its high precision processing and micro fabrication for difficult-to-cut materials. Now, Nagaoka has applied the red coloured Ruby in the acoustic filter of the in-ear headphones. Ruby is a material of high hardness and is able to suppress internal resonance and compensate for the low frequencies. The special design makes the Ruby on the inside visible from the outside. In addition, these in-ear headphones are equipped with a one pole-type balanced armature for the speaker unit. This results in a multi dimensional sound, with excellent resolution, detail and sensitivity.



Specifications

Unit type: Sensitivity: Frequency range: Input power: Impedance: Weight: Input Connector: Cable: Included accessories: balanced armature x 1 113 dB / 1 kHz / 1 mW 4 - 90.000 Hz 20 mW 31 Ω 8 g L type Φ3.5 mm(1/8") Gold-plated 1.2m Silver-plated 4N-OFC Silicon ear pieces(S,M,L) COMPLY™ form ear pieces(T-400 L) Real leather Carrying pouch Ear wax filter replacement parts Instruction Manual One pole-type balanced armature unit



NAGAOKA x TENDO HPS-1K original headphone stand made of Japanese Keyaki wood

In close cooperation with the renowned Japanese furniture maker Tendo Mokko, Nagaoka has designed a headphone stand made of molded Japanese keyaki wood (zelkova). This luxury stand is completely produced by hand and combines a touch of smoothness with refined elegance. Tendo has been one of the first companies in Japan to use formed plywood to massproduce good-quality furniture. Tendo has collaborated with top architects and designers worldwide to create the most complicated curved lines with natural wood.

Size: 127 mm (w) x 157 mm (d) x 350 mm (h) Weight: 520 g.



Tonar article no. 5543





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