specialist in styli, cartridges and accessories for vinyl www.tonar.eu

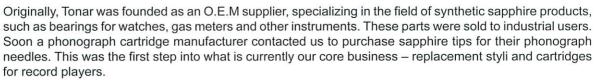


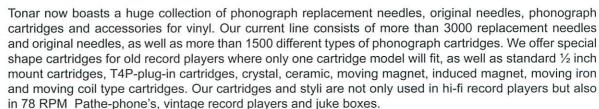
### specialist in styli, cartridges and accessories for vinyl www.tonar.eu



Since 1954, Tonar has become the specialist for phonograph styli, cartridges and accessories for your turntable and vinyl collection. Whether you belong to the new generation of vinyl lovers, or are already an experienced analogue High End HiFi enthusiast, our aim is to provide you with all essential tools necessary to fully enjoy your record collection.

While the concept of the record player is old, the means to enjoy analogue audio stay up-to-date. As we speak, new innovations are developed to improve every aspect of the turntable as well as the quality of vinyl records. Yet, with our longstanding experience, we are also committed to keep vintage parts and technologies available.







As we share a passion for analogue sound reproduction, Tonar tries to keep supplying you with every item you may require to bring or keep your HiFi record player up and running, whether it be a stylus, a cartridge, a new turntable belt or even many other original or replacement parts that you require in order to enjoy listening to your vinyl records. You will find many examples of these products in this leaflet which only barely touches the surface of our complete assortment.



#### Vinyl Cleaning Essentials

When playing a record or even when taking the record out of its sleeve, it becomes static. This is because the surface of a vinyl record is not conductive and any static charge that develops remains. A static record attracts lots of dust and (pet) hairs, which not only affects the sound quality, but ultimately degrades the life of your vinyl collection, or damages the stylus of your record player. Tonar offers various easy-to-use tools to keep your valuable vinyl collection dust free, extending the life of your favorite recordings.

3180 – Tonar Nostatic Brush (carbon fibres)

3434 - Tonar Classic Brush (velvet)

4365 - Tonar Dustaway (velvet + carbon fibres)







The Tonar Nostatic Brush contains more than one million ultra fine carbon fibre bristles. The cross section of these bristles is so small that they can easily get into all the nooks and crannies of the record groove. Because the carbon fibre conducts electricity, it takes away all the static to earth via the metal handle when holding the brush. After the dust lies loose in the groove, the next set of bristles can easily pick them up and remove them from the groove.

The Tonar Classic Brush is manufactured using a very soft long fibre velvet, especially selected for this purpose. The velvet reaches deep into the grooves and removes even the finest dust particles. The brush itself can easily be cleaned using the two foam rubber scrapers located on both sides of the plastic brush base.

Hi-Fi This state-of-the-art cleaning brush combines the properties of the Tonar Classic brush and the Nostatic brush into one brush! The center part of the brush is made of ultrafine pole high quality velvet. This velvet is flanked on both sides by a thick layer of very fine carbon fibres. The carbon fibres remove the static from the record so the dust comes loose and can be easily picked up by the velvet centre brush even from deep in the grooves. A small tooth-brush is included to easily clean the dust off the velvet after use.

5973 – Tonar Tacky Cleaner (rolling cleaner)

4475 - Tonar Nostatic Arm

4272 - Tonar Dust Jockey (velvet + carbon fibres)







The Tonar Tacky Cleaner is a record cleaner featuring a roll made out of silicone rubber. The property of this rubber is that it is sticky. When rolling the cleaner over the record while applying a little pressure, the rubber will take the shape of the groove and all dust particles in the groove will stick to the rolling cleaner and be removed in that way. 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 label.

The Nostatic Arm is the modern version of the formerly well known "Dust Bug" by Cecil Watts. The Nostatic arm incorporates a carbon fibre brush that removes the static charge from the record during playback, and at the same time picks up the loose dust before the stylus reaches that part of the record. The Nostatic arm has an earth wire which is connected to the earth of the record player or the amplifier. The height can easily be adjusted to suit most record players. It also has a sliding weight in order to adjust the "dusting force" of the brush.

The Tonar Dust Jockey combines the very best ultra-fine pole velvet available on the market with two rows of carbon fibres on both sides of the velvet. The carbon fibres remove the static charge and then the velvet can easily pick up the loose dust from the record. A small toothbrush is included to easily clean the dust off the velvet after use. This ultimate brush is simply a must for serious vinyl fans and DJs.

#### Vinyl Washing Essentials

Records do not only gather dust. Air pollution from the traffic outside, cooking fat, grease and tobacco smoke causes a tough film to form on the surface of the record. Sometimes even molds and fungi are present if the records have been stored for a prolonged period in a humid environment. The stylus tracking the record will scrape part of this dirt off the groove and this causes a thick build-up of grime on the stylus. Ultimately, this will result in complete miss tracking or groove skipping with permanent damage to your stylus and records. Tonar offers effective solutions to keep your precious record collection impeccable.

#### 5938 - Tonar Wetgoat

#### 5379 - Tonar Woodgoat

#### 4250 - Tonar Clean-Tip (stylus cleaning)







When cleaning records with fluid, a special fluid resistant brush is required. The Tonar Wetgoat is made of the finest natural goat hair which has the perfect shape to enter deep into the grooves and clean them thoroughly. Goats hair is known for its ultra-soft qualities. and demonstrable anti-static properties.

The Tonar Woodgoat is a premium record brush that features two rows of real goats hair. Goat hair is used as it is fine, soft and perfect for use when wet, making this brush ideal for any fluid based cleaning liquid you use on your records. The anti-static property of goats hair makes this brush also perfect to clean dusty records without liquid.

The Tonar Clean-Tip carbon fibre stylus cleaning brush is one of the best stylus cleaning brushes available on the market. The Tonar Clean-Tip stylus brush, with its tightly packed carbon fibres, used together with the Nagaoka AM-801 stylus cleaning fluid does an excellent job to remove the tough dirt and dust from the stylus tip.

#### **QS-Tonar Vinyl Cleaning Fluid**

QS-TONAR vinyl cleaning fluid can be used in all record cleaning machines that are currently on the market and is only suitable for vinyl records. Important: do not use with old 78 RPM shellac records as the liquid may do irreparable damage. Now what is so special about the QS-TONAR vinyl cleaner compared to similar looking competing products on the market?

#### QS-TONAR liquid has an extremely low surface tension

Only because of this reason QS-TONAR liquid can penetrate right to the bottom of the groove. Other fluids

while they seem to penetrate, actually just lie on top of the record surface. Only QS-TONAR liquid cleaner soaks the dust, dirt, air pollution, residue from previously used cleaners, fatty deposits remaining from the original record pressing process, even fungi and moulds caused by records having been stored in humid conditions etc. QS-TONAR liquid detaches all of the before mentioned dirt from the walls of the grove after which the brushes in the machine can easily wipe the groove completely clean. The amount of residue remaining in the grove is negligible - this contrary to other

liquids currently on the market. QS-TONAR liquid is much more volatile than other liquids reducing the drying time of the record to a minimum. QS-TONAR liquid also has another additive causing the dirt to remain floating in the liquid rather than settling back at the bottom of the groove.

QS-TONAR liquid is available in three formats: as a 0.5 litre pump spray flask for spraying onto records for small cleaning jobs, as 1 litre bottle and as a 5 litre tank for big users with washing machines of all types



3514 – QS-Tonar Vinyl cleaner 0.5 Litre pump-spray flask



3503 – QS-Tonar Vinyl cleaner 1 Litre bottle



4262 – QS-Tonar Vinyl cleaner 5 Litre tank

#### Tonar Knosti Disco-Antistat Vinyl Washing Machines

No matter how much you spend on the complete set-up of your analogue sound system, it is ultimately the vinyl itself that is the source of the sound that you hear from your speakers. Therefore, effective and proper cleaning of your records is vital. The Tonar Knosti Disco-Antistat is a unique manual vinyl washing system that cleans even the dirtiest records and prevents static charges. Every groove of your precious records will be cleaned thoroughly. The Disco-Antistat is easy-to-use and doesn't cost a fortune by comparison with noisy vacuum record cleaning machines.

#### 5412 – Tonar Knosti Disco-Antistat Generation II



The Tonar Knosti Disco-Antistat Generation II is the new and improved manual vinyl washing machine. What are the new features?

NEW: The washing cabinet has practical arms to lock the axis in place. This avoids spilling of the cleaning liquid while rotating the record.

NEW: The included rubber seal in the protective record clamps prevents liquid to reach the label.

NEW: Using the crank-arm, you can easily rotate the record, without getting the cleaning liquid on your hands.



#### How the Disco-Antistat works:

The Tonar Knosti Disco-Antistat makes it fun and easy to clean your record collection. Each set includes a rectangular washing cabinet, a clamp to protect the label, 1 litre of special vinyl cleaning fluid, a drying rack and a funnel to put the fluid back into the bottle after use.

The washing tub is filled with vinyl cleaning fluid up to the top of the goats hair brushes that are premounted inside.

Next, a dirty record is placed between the two halves of the record clamp and screwed tight. A rubber seal inside the clamp prevents moister from reaching the label. Protruding from the outer sides of the clamp are two pegs, which sit in slots atop the Tonar Knosti machine. The new Generation II Disco-Antistat includes two arms to lock the record in the slots.

The vinyl is then rotated by hand, or by using the spindle that is included in the Generation II Disco-Antistat. It's recommended to rotate the record 5 to 10 times through the bath in both directions.

As the record passes through the washing tub, two sets of brushes clean each side of the record. The brushes are made using the finest natural goats hair, which has the unique property to enter deep into the grooves and the hair is not attacked by the fluid.

Once you're happy with the result, simply remove the record from the protective clamps, and place your clean record on the rack to dry. When cleaning is complete, pour your used cleaning fluid from the washing tub back into you cleaning fluid bottle for re-use using the funnel and filter provided.

A regular washing of your records at least once a year can increase your listening pleasure dramatically.

3508 - Tonar Knosti Disco-Antistat



The Tonar Knosti Disco-Antistat is the classic manual vinyl washing machine as successfully produced since 1978.

The Disco-Antistat set includes:

- Washing cabinet with integrated brushes made out of goats hair.
- Label protecting clamshell with axis for 12 inch LPs, 10 inch Long Play records and 7 inch 45 RPM Singles and EP records.
- A funnel with filters is provided to allow re-use of your cleaning fluid if desired.
- Drip-dry rack with catch basin for up to 15 records of any size.
- 1 liter Knosti anti-static cleaning fluid

New records as well as old ones from the attic..

The Disco-Antistat makes them clean and anti-static!



#### Record Sleeves

Protect your fragile vinyl records and record albums from dust, air pollution, tobacco smoke, fungi and other contaminants with Tonar anti-static record sleeves





#### Record Sleeves

Dust and air pollution are the biggest enemies of your fragile vinyl records and your record album covers. Pollution from cooking grease, smoking and outside pollution (like exhaust fumes from cars) causes a sticky aggressive film to build up on your records. This sticky film attracts and grabs even more dust and spoils the sound on playback. It is very important to protect your vinyl and keep your records clean. Good quality anti-static dust free record inner sleeves and sturdy outer sleeves will protect your records and albums from these influences.

#### **Tonar Inner Sleeves**

# .ar tonar tonar tonar tonar 'cm-12 inch - 40 mu HDPE \* tonar nostatic sleeves 5961/LP 30 cm-12 inch - 40: "ar.eu \* www.tonar.eu \* www.tonar.eu \* www.t "5961/LP 30 cm-12 inch - 40 mu HDPE \* tonar nostatic sleeves 5961/L

The Tonar Nostatic Inner Sleeves are made of 2 layers 40 micron thick HDPE super anti-static plastic. The Nostatic sleeves are available in three sizes: 12 inch, 10 inch and 7 inch. So there is a Tonar Nostatic sleeve available for every format whether 12 inch LP, 10 inch Long play and 78 RPM Shellac and 7 inch 45 RPM and EP records.

#### available sizes



#### 12 inch

5961 – Tonar Nostatic sleeves for 12 inch (30cm) LP records (50 sleeves per package).



#### 10 inch

5315 – Tonar Nostatic sleeves for 10 inch Long Play records as well as 78 RPM shellac records. Contains 50 sleeves per package.



#### 7 inch

5983 – Tonar Nostatic sleeves for 7 inch (17.8 cm) 45 RPM records. Contains 50 sleeves per package.

#### **Tonar Plastipap**

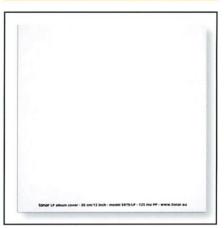


Tonar's best solution is the already world famous 'Plastipap inner sleeve'. This very strong sleeve consists of 4 layers with 40 micron thick HDPE super anti-static plastic and two layers of 100% sealed paper reinforcements in between. This product is currently only available for 12 inch LP records.



5311 – Tonar Plastipap inner sleeves Contains 25 pieces per package.

#### **Tonar Outer Sleeves**



Your valuable record albums will easily get soiled due to air pollution and handling with (greasy) fingers. Use the Tonar heavy duty outer sleeves made from Crystal Clear 125 micron thick PP plastic. The Tonar outer sleeves are also available in three sizes for 12 inch LP, 10 inch Long play or 78 RPM Shellac and 7 inch 45 RPM or EP records.

#### available sizes

#### 12 inch

5979 – Tonar 12 inch heavy duty outer sleeves for LP records. Contains 25 sleeves per package.



#### 10 inch

5313 – Tonar 10 inch heavy duty outer sleeves for LP records as well as 78 RPM shellac records. Contains 25 sleeves per package.



#### 7 inch

5317 - Tonar 7 inch heavy duty outer sleeves for 45 RPM records. Contains 50 sleeves per package.



The best solution to store and preserve your record collection

#### Record Weights and Clamps

There are two distinct advantages to using a record clamp or weight on your turntable. First, they help to flatten warped records. Many of the older records are either warped from the time they were pressed or have become warped in time due to bad storage. A warped record causes enormous problems for the cartridge and stylus to track the groove properly. Secondly, vinyl records vibrate along with the music as the stylus traces the groove. This can cause internal resonances. By using a record clamp or a weight, warped records will be flattened and the sound quality will be improved.

5464 - Tonar misty clear clamp

#### **Tonar Record Clamps**

5470 - Tonar misty black clamp



The aesthetically designed Tonar clamps couple your vinyl tightly to the platter. This will help to flatten out any warps and assures that internal resonances can be drained away from the stylus. The clamps are available in five different colors, to match your record player.



5478 - Tonar misty green clamp

5475 - Tonar misty red clamp

5467 - Tonar misty blue clamp







The Tonar clamps are available in five different colors, to match every record player

4611 – Tonar Record Weight Black (760 grams)



#### **Tonar Record Weights**

By using a Tonar record weight, the record will be pressed flat against the turntable platter causing it to become temporarily less warped during playback and making good contact with the platter. The weights are either nickle colour or covered with black enamel and a felt cushion on the base to protect the label of the record against scratching. Dimensions: 78 mm diameter x 25 mm. Caution: Please ensure that the platter bearing of your turntable is able to accept the additional weight of 760 grams. If in any doubt please consult your record player instructions or your dealer.

5964 – Tonar Record Weight Nickle (760 grams)





#### Turntable Mats

Acoustic feedback is one of the big problems when playing records. It occurs when sound vibrations from your loud speakers are picked up by your turntable, amplified, and then sent out to the speakers again. The same information is reproduced by the cartridge with a very slight time difference. This results in a big loss of detail and clarity and makes the sound 'muddy'. Tonar has developed turntable mats that reduce acoustic feedback, thus maintaining separation and detail. The mats isolate the record from the turntable platter and absorb unwanted vibrations. That is why using turntable mats really matters!

#### **Tonar Turntable Mats**

#### Turntable Mats Matter!

The Tonar turntable mats have been developed through experiments with different materials. Apart from absorbing and dampening unwanted vibrations, the mats have their own effect to enhance the sound. Some audiophiles even combine different materials as a 'sandwich' to create even better results.

Tonar offers a large selection of commercially manufactured mats made from various materials for you to be able to experiment yourself and to find the best mat for the different recordings in your collection. All Tonar mats (except the Nostatic Mat and the Leather Mat) have a depressed centre section, allowing space for the thicker record label so the vinyl record can lay perfectly flat on the mat. All mats have a diameter of 295 mm, except for the Rubber Mat (diameter: 298 mm). Now start testing your own combination of mats to fit your musical taste and improve the quality of the sound!

#### 5972 – Tonar Pure Cork turntable mat



Cork material is known to dampen and absorb unwanted vibrations. The Tonar cork mat works very well on most turntables, due to its non-resonant properties.

#### 5978 – Tonar Black Natural leather turntable mat



The Tonar Black Leather Platter Mat is a premium mat made from real leather/ suede. With its luxury look, this leather mat dampens and absorbs unwanted vibrations.

#### 5312 - Tonar Nostatic Mat II Improved



The Tonar Nostatic mat is a mat made of industrial felt mixed with carbon fibres. The carbon fibres release the static charge from the record and conduct it to earth using the metal spindle of the record player.

#### 5976 – Tonar Pure White Perspex mat



Perspex is a kind of acrylic. The mat enhances in particular the higher frequencies. Also in terms of aesthetics, this white coloured mat can perfectly match your modern turntable.

#### 5391 - Tonar Crystal Mat



This luxury mat is made of pure glass and enhances the detail of the various instruments or vocals on your records. It is lighter and harder than aluminium. and produces a crystal clear sound.

#### 5974 - Tonar Cork & Rubber mixture turntable mat



Both cork and rubber are known to dampen and absorb unwanted vibrations. The Tonar composite cork/ rubber mat works very well on many turntables, particularly on steel and lightweight turntable platters, due to its highly non-resonant properties.

#### 5988 – Tonar Rubber turntable mat



Sometimes, the original rubber mat on the turnplayer has become dirty or even has chemically decomposed. Tonar offers a fresh new rubber turntable mat to replace the old one.

#### Turntable Essentials

Everyone who puts on a vinyl record, will soon realize that a turntable is actually an engineering work of art and a musical instrument itself. Perhaps it is the beauty of analogue audio, that as a user, you have almost every possibility to fully fine-tune your equipment. Tonar offers various affordable tools that are not only effective, but also easy-to-use and will benefit your listening pleasure.

#### 5944 - The Q UP automatic tonearm lifter



Using the Q UP tonearm lifter, extends the life of your stylus

The Q UP is a high precision device that safely lifts your tonearm at the end of the record. This will extend the life of your stylus significantly. The Q UP can be installed in minutes, without tools, and is designed to fit on most manual turntables. The Q UP can be configured for a variety of tonearm heights, thicknesses and shapes. This unique automatic tonearm lifter only interacts with the tonearm at the end of record and does not adversely effect the tonal quality of your system in any way. Thanks to the Q UP, you don't need to worry about getting distracted or falling asleep while you play your records.



5462 - Tonar Ecolevel Yellow

**Tonar Turntable Levels** 

5469 - Tonar Luxlevel Black



For the best sound reproduction your turntable has to be installed precisely horizontal. These simple but effective levels from Tonar will tell you if your turntable is mounted on a flat surface for optimal performance.



#### 4189 - Tonar Vinyline MC/MM Pre-Amplifier



The Tonar Vinvline phono MM/MC Pre-Amplifier is a very affordable solution to connect High End phonograph cartridges whether moving magnet (MM) or moving coil (MC) to the AUX port of your amplifier. A switch on the back switches it from high output MM to low output MC mode.

#### Specifications:

Input (MM):

47 KΩ / 100 p.Farad

Input (MC): Output MM:

100 KΩ / 100 p.Farad 200 mV/1 KHz at 5mV/1KHz MM

200 mV/1 KHz at 0.45 mV/1KHz MC Output MC: Gain: Noise floor:

MM: 32 dB / MC: 53 dB MM: -88 dB / MC: -79 dB

THD:

RIAA curve acc.: 20 - 20.000 Hz / max: 0.5 dB

0.005%

Power supply:

16V/200 mA AC



#### Turntable Essentials

#### Tonar Trackurate digital stylus force gauge



4293 – Tonar Trackurate (yellow)



3583 – Tonar Professional alignment protractor



This Protractor is a unique alignment gauge which allows you to check the tone arm geometry and to install the cartridge ideally aligned to keep distortion to a minimum. It offers every essential information in order to install and align your cartridge professionally. English and German instructions included.

A must for the very serious Hi-Fi enthusiast.

#### 3193 - Tonar No Rumble Pads



These pads, supplied in sets of 8 pieces, isolate your audio equipement from vibrations in the room. For turntables, speakers, and any other delicate systems. The No Rumble Pads are an effective solution for reducing rumble and vibration at the source before it passes through your system.

Getting the most out of any turntable requires an accurate vertical tracking force setting. Every cartridge on the market has a preferred tracking force range recommended by the manufacturer. Depending on the arm used you may have to be lower in the range or higher in the range. The Tonar Trackurate helps you adjust the tracking force very accurately. The easy to use Tonar Trackurate is the one case where digital makes more sense when it comes to fine-tuning your analog.

The Tonar Trackurate includes a soft case, batteries (AG12 button cell) and a weight to calibrate.

#### 4208 – Tonar simple alignment protractor



A proper alignment of your cartridge will help you to enjoy the best possible sound. The Tonar Simple Alignment Protractor is an inexpensive device that allows you to properly mount and adjust your cartridge stylus for optimal groove tracking and music retrieval. The mirror makes it easy to check the azimuth of the cantilever.

#### 5953 – Tonar 45 RPM adapter aluminum



The Tonar 45-rpm adapter is made of solid aluminum and is perfectly centered so you can optimally enjoy your favorite singles. It fits all modern turntables and can also be used on older turntables.

## tonar trackurate

#### 4367 – Tonar Trackurate (black)

#### Specifications:

Capacity: 0 - 5 grams Accuracy: 0.01 grams

Weighing modes: g; oz; ozt; TL; ct

#### 4614 - Tonar Anti-Skate Weight



Using an Anti-Skate Weight helps to bring a perfect amount of counter-drag on the tonearm, reducing the inclination for the arm to 'skip' or 'skate' across the record.

#### **Tonar Turntable Belts**



Worn and stretched belts are the largest contributor to turntable speed fluctuations which destroy your sound-stage. Tonar can supply replacement belts for almost any brand and model turntable.

#### Stroboscope Discs

Records over the years have been cut at many different speeds. Originally they were cut at '78 RPM' or speeds around that value. Later the industry decided to cut all records at 33 1/3 or 45 RPM. For speech recordings even slower speeds were used in order to increase the amount of time recorded on each side of the record: 16 % and 8 % RPM. Of course you want to enjoy a recording at the correct tempo, but sometimes record players do not play at the proper speed and need adjusting. For that purpose Tonar now offers a total of three different Stroboscope Discs.

The detailed and easy-to-use Tonar Stroboscope Discs are created in three versions to measure different ranges of speed:

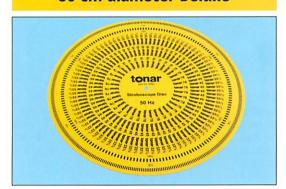
- A simple Tonar part 5468 Aluminium stroboscope disc of 10 cm diameter with the speeds 8 1/3, 16 2/3, 33 1/3, 45 and 78 RPM.
- For more accurate use we also offer Tonar part 5463 12 inch yellow acrylic stroboscope also with the speeds 8  $\frac{1}{3}$ , 16  $\frac{2}{3}$ , 33  $\frac{1}{3}$ , 45 and 78 RPM.
- Finally for the 78 RPM shellac record collector we offer a very special Tonar part 5466 - 12 inch yellow acrylic Stroboscope disc offering all speeds: 8 1/3; 16 3; 33 1; 45; 70; 72; 73; 75; 76; 78; 80; 81; 83; 85; 87; 90 RPM. The reason for this is that in the beginning of the record industry every record manufacturer recorded at their own speed. This is apparent from the old Pathé phones which even had a speed control. As modern players offer a strict 78 RPM speed many of the really old shellac records sound odd because they are playing at either a too slow speed (tones are too low) or a too fast speed (tones are too high).

#### Enjoy your records at the proper speed

#### How to use the **Tonar Stroboscope Discs**

If you have a record player with pitch (speed) control like a DJ-record player you can adjust the speed. Put the record on the player at 78 RPM and listen, then adjust the speed up or down until the record sounds normal. Then replace the record with the Stroboscope and read the speed that you selected and make a note of this on the album. Next time you want to play the record, first put the stroboscope to adjust to the proper speed setting and then play the record immediately at the proper

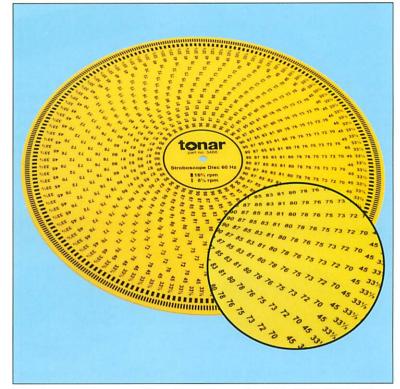
#### 5463 - Stroboscope 30 cm diameter Deluxe



5468 - Aluminium Stroboscope 10 cm diameter Standard

Speeds: 8 1/3; 16 2/3; 33 1/3; 45; 78 RPM.

#### 5466 – 12 inch Yellow Acrylic Stroboscope Disc for all speeds



70; 72; 73; 75; 76; 78; 80; 81; 83; 85; 87; 90 RPM. The ultimate stroboscope disc for the 78 RPM shellac record collector!

Speeds: 8 1/3; 16 2/3; 33 1/3; 45; 78 RPM.

This Tonar Stroboscope Disc offers all speeds: 8 1/3; 16 2/3; 33 1/3; 45;

Tonar Stroboscopes, a must for every record collector!

#### High End Head Shells and Wiring

Most turntables are supplied with a standard entry level head shell. The sound quality can be strongly improved by using a so-called "high end shell". Some shells have the possibility to adjust the pitch of the shell axial wise, as compared to the tone arm. This allows an exact vertical mounting of the cartridge and stylus tip onto the record. Further improvements can be made by using high quality head shell lead wires.

#### **Tonar TopQ High End head shells**

Tonar TopQ High End head shells come in two versions, one with a removable arm lifter and one with a fixed arm lifter. Both models have the possibility to adjust the pitch of the shell axial wise, as compared to the tone arm. This allows an exact vertical mounting of the cartridge and stylus tip onto the record. The finest quality OFC (Oxygen Free Copper) lead wires are used in the Tonar TopQ head shells. Both models are available in black or in silver/bronze. All Tonar TopQ models have a SME type connector for use on S-shaped tone arms.



4420 - Tonar TopQ head shell (black) removable arm lifter



5330 - Tonar TopQ head shell (black)

fixed arm lifter



5386 - Tonar TopQ head shell (silver/bronze) fixed arm lifter

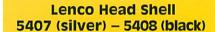
Tonar SME type High End head shells

Light weight entry level shells suitable for most tone arms with SME type connector.

5405 - Tonar Cherry Wood head shell

5907 - Tonar TopQ head shell

(silver/bronze) removable arm lifter





The Tonar head shell made of cherry wood, is a high quality audiophile head shell and provides an elegant solution with a variety of cartridges. It has a SME style locking collar (as found on most tone arms with removable head shells). The connectors are gold plated and the included head shell leads are silver plated.

Fits vintage Lenco player models B52; B55; L72; L75 and L78. Includes a set of mounting plates.



3197 - Tonar SME type shell (black)



3196 - Tonar SME type shell (silver) 4612 - Tonar High End

Tone arm wires sets

5970 - Tonar Shell wire CU-litz (OFC copper)

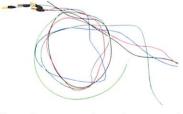


Our finest Oxygen Free Copper (OFC) head shell wires with gold plated clips as used in the Tonar TopQ shells.

4613 - Tonar Gold Plate terminal pins for cartridges



gold plated enhance a low resistance electrical connection with the wires, because they cannot oxidize.



The Tonar tone arm wire sets are made of 99.99% Oxygen free copper and are available in a length of 53 cm with gold plated terminal pin lugs on one side.

#### HiFi Cartridges 1/2 Inch Mounting

#### **Tonar Flip Series Cartridges** 1/2 Inch Mounting

The cartridge is perhaps the most important component of your whole audio system. The cartridge converts the vibrations of the stylus into audio signals, which are amplified in the rest of your system. Hence, the cartridge determines largely the quality of the sound that you hear. What doesn't go in, doesn't come out. For that matter, selecting a cartridge is vital for your listening pleasure.

In order to provide excellent sound reproduction at a modest price, Tonar has launched the Tonar Flip-series of cartridges with high end models available to suit all budgets. The Tonar ½ inch standard mount Flip cartridges are now also available with a hyperelliptical or with a Shibata stylus tip. These cartridges offer excellent sound reproduction in the higher frequency ranges. The use of the Shibata tip also reduces record and stylus wear to the absolute minimum.

#### 9511 - Tonar C - Flip Spherical tip



Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Tip diameter Cantilever

3.5 mV at 1 KHz 5.0 cm/sec more than 18 dB at 1 KHz 100 pF 12 x 10<sup>-6</sup> cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.5 – 2.5 gram (opt. 2.0 gr.) 0.6 mil spherical bonded diamond 0.3 mm carbon fibre Cartridge weight 5.0 grams ± 0.5 gr. Frequency response 20 – 20.000 Hz. ± 3 dB

#### 9583 - Tonar H - Flip Hyper Elliptical tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance **Dynamic compliance** Tracking force Stylus tip radius Stylus tip material Tip diameter Cartridge weight Frequency response 15 - 25.000 Hz. ± 2.5 dB

3.5 mV at 1 KHz 5.0 cm/sec within 1.5 dB at 1 KHz more than 22 dB at 1 KHz 100 pF 12 x 10<sup>-6</sup> cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.5 – 2.0 gram (opt. 1.75 gr.) 0.2 x 0.7 mil hyper elliptical bonded diamond 0.25 mm aluminium pipe 5.0 grams ± 0.5 gr

#### 9513 - Tonar E - Flip Elliptical tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Tip diameter Cantilever Cartridge weight Cartridge weight 5.0 grams ± 0.5 gr. Frequency response 20 – 20.000 Hz. ± 3 dB

3.5 mV at 1 KHz 5.0 cm/sec within 2.5 dB at 1 KHz more than 18 dB at 1 KHz 100 pF 12 x 10<sup>-6</sup> cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.5 – 2.5 gram (opt. 2.0 gr.) 0.3 x 0.7 mil elliptical bonded diamond 0.3 mm aluminium

#### 9586 - Tonar S - Flip Shibata tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Tip diameter Cantilever Cartridge weight Frequency response

3.5 mV at 1 KHz 5.0 cm/sec within 1.5 dB at 1 KHz more than 28 dB at 1 KHz 100 pF 12 x 10-6 cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.5 – 2.0 gram (opt. 1.50 gr.) shibata - line contact bonded diamond 0.25 mm aluminium pipe 5.0 grams ± 0.5 gr. 15 - 30.000 Hz. ± 2.5 dB

#### HiFi Cartridges T4P (Plug-In) Mounting

#### **Tonar Plugger Series Cartridges** T4P (Plug-In) Mounting

Once, T4P (plug in) was a very popular option for easily mounting and changing cartridges. The record players using this mounting standard have become more rare. Because of that, most cartridge have manufacturers discontinued producing T4P-type plug-in cartiridges Now Tonar has launched the Tonar Plugger series of T4P plug-in cartridges with high end models available again to suit all budgets. These T4P cartridges provide excellent sound reproduction at a modest price.

Very few cartridge manufacturers offer T4P cartridges with Hyper-Elliptical and/or Shibata tips. Tonar is happy to provide these models. These Tonar Plugger cartridges offer excellent sound reproduction in the higher frequency ranges. The use of the Shibata tip also reduces record and stylus wear to the absolute minimum.

#### 9496 - Tonar C - Plugger Spherical tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Cantilever Cartridge weight 5.0 grams ± 0.5 gr. Frequency response 0 – 20.000 Hz. ± 2.5 dB

5.0 mV at 1 KHz 5.0 cm/sec within 1.5 dB at 1 KHz more than 24 dB at 1 KHz 47 KΩ 100 pF 12 x 10-6 cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.5 – 2.0 gram (opt. 1.75 gr.) 0.6 mil spherical bonded diamond carbon fibre

#### 9588 - Tonar H - Plugger Hyper Elliptical tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Tip diameter Cantilever Cartridge weight

5.0 mV at 1 KHz 5.0 cm/sec within 1.5 dB at 1 KHz more than 26 dB at 1 KHz 47 KΩ 100 pF 12 x 10<sup>-6</sup> cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.0 – 1.5 gram (opt. 1.50 gr.) 0.2 x 0.7 mil hyper elliptical bonded diamond 0.25 mm aluminium pipe 5.0 grams ± 0.5 gr. Frequency response 15 - 25.000 Hz. ± 2.5 dB

#### 9513 - Tonar E - Plugger Elliptical tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Tip diameter cantilever Cartridge weight 5.0 grams ± 0.5 gr. Frequency response 20 – 23.000 Hz. ± 2.5 dB

5.0 mV at 1 KHz 5.0 cm/sec within 1.5 dB at 1 KHz more than 24 dB at 1 KHz 47 KΩ 100 pF 12 x 10<sup>-6</sup> cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.0 – 1.5 gram (opt. 1.50 gr.) 0.3 x 0.7 mil elliptical bonded diamond 0.3 mm aluminium pipe

#### 9590 - Tonar S - Plugger Shibata tip



Output Channel balance Channel separation Load impedance Load capacitance Static compliance Dynamic compliance Tracking force Stylus tip radius Stylus tip material Tip diameter Cantilever Cartridge weight

5.0 mV at 1 KHz 5.0 cm/sec within 1.5 dB at 1 KHz more than 28 dB at 1 KHz 47 KΩ 100 pF 12 x 10<sup>-6</sup> cm/dyne 5 x 10<sup>-6</sup> cm/dyne 1.0 – 1.5 gram (opt. 1.50 gr.) shibata - line contact bonded diamond 0.25 mm aluminium pipe 5.0 grams ± 0.5 gr Frequency response 15 - 30.000 Hz. ± 2.5 dB

#### DJ Cartridges and Head Shells

#### 2994 – Tonar Birdie DJ cartridge

#### 2735 – Tonar Banana DJ cartridge

#### 2987 – Tonar Diabolic - E DJ cartridge



The Tonar DJ Birdie is a great DJ cartridge at a modest price. The fluorescent tip makes it easy for the DJ to put the stylus in the desired part of the groove. Many jukebox collectors have also discovered this cartridge to replace their no-longer available original jukebox cartridges.

Cartridge weight
Stylus tip shape/radius
Frequency characteristics
Output Voltage
Channel Separation
Channel balance
Compliance
Stylus pressure
Load resistance
Stylus tip material
Tip diameter
Vertical tracking angle
Recommended load resistance
Recommended load capacitance
Scratching
Cartridge mounting system

4.1 g
0.7 mil spherical diamond
20-20,000 Hz +/- 4 dB
5.0 mV (5 cm/sec)
17 dB (1 KHz)
2.0 dB or less (1 KHz)
3.5 x 10\* cm/dyne
2.0 – 3.0 g (2.5 g opt)
47 KΩ
400 pF
suitable for scratching
½ inch



The Banana is Tonar's legendary yellow DJ cartridge, designed to meet the high demands of DJs. Its integrated design connecting directly to the SME-type tonearm connector, makes it very easy for the DJ to mount his cartridges on tour. The Tonar Banana provides the essential vitamines for your audience.

Cartridge weight
Stylus tip shape/radius
Frequency characteristics
Output Voltage
Channel Separation
Channel balance
Dynamic compliance
Stylus pressure
Load resistance
Stylus tip material
Vertical tracking angle
FIM distortion
DC resistance
Recommended load resistance
Recommended load resistance
Recommended load capacitance
Scratching
Cartridge mounting system
Tracking ability at 315 Hz lateral

16.0 g 0.7 mil spherical diamond 20-20.000 Hz 5.0 mV (5 cm/sec) 20 dB (1 KHz) 2.0 dB or less (1 KHz) 8 μm/mN 3.0 – 5.0 g (4.0 g opt.) 47 KΩ bonded diamond 20° 1.8% 600 Ω 47 kΩ

600 Ω 47 kΩ 400 pF suitable for scratching for SME-type arm only 70 μM



Diabolic E

The devil is in the detail! With its unique 8 millivolt output, the Diabolic-E is full of DJ power. Many audiophiles favour the Diabolic-E thanks to its sound quality and elliptical diamond stylus.

 $\begin{array}{cccc} \text{Cartridge weight} & 5.0 \, \text{g} \\ \text{Stylus tip shape/radius} & \text{elliptica} \\ \text{Frequency characteristics} & 20.24 \, \text{M} \\ \text{Coutput Voltage} & 8.0 \, \text{mV} \\ \text{Channel Separation} & 18 \, \text{dB} \, \text{G} \\ \text{Compliance} & 6.0 \, \text{x} \, \text{I} \\ \text{Stylus pressure} & 4.0 - 5 \, \text{Load resistance} \\ \text{Stylus tip material} & \text{bonder} \\ \text{Tip diameter} & 0.3 \, \text{mm} \\ \text{Vertical tracking angle} & 20^{\circ} \\ \text{Recommended load resistance} & 47 \, \text{k}\Omega \\ \text{Recommended load capacitance} & 400 \, \text{pF} \\ \text{Scratching} & \text{suitabl} \\ \text{Cartridge mounting system} & \text{\% inch} \\ \end{array}$ 

5.0 g elliptical diamond 20-24,000 Hz +/- 4 dB 8.0 mV (5 cm/sec) 18 dB (1 KHz) 2.0 dB or less (1 KHz) 6.0 x 10 $^{\circ}$  cm/dyne 4.0 – 5.0 g (4,5 g opt.) 47 K $\Omega$  bonded diamond 0.3 mm 20 $^{\circ}$  47 k $\Omega$  consider the following the form of the following the fol



specialist in styli, cartridges and accessories for vinyl www.tonar.eu

