

# clearaudio

## MM Tonabnehmer / MM cartridges



Loving music

User manual

Bedienungsanleitung





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Dear **Clearaudio** customer,

Thank you for choosing a high-quality **Clearaudio** V2 moving magnet (MM) cartridge.

Each component part that makes up a **Clearaudio** V2 MM cartridge is measured, analysed and hand-selected.

Every cartridge is 100% 'Made in Germany' by **Clearaudio's** own dedicated in-house team, ensuring its uniqueness and quality.

**Please note:**

This user manual gives you valuable information for the correct installation of your cartridge. For fine adjustment, however, we can only provide general guidelines, since the optimal adjustment depends primarily on your specific tonearm and turntable.

Many thanks again for choosing **Clearaudio**.

We wish you much musical enjoyment with your new MM cartridge.

**Clearaudio electronic GmbH**



## Safety instructions

### 1. Maintenance

- Before playing a record, please remove all dust and dirt from the record's surface using a quality cleaning device. For the best results, a record cleaning machine should be used.  
Ask your dealer about **Clearaudio**'s matrix cleaning machines.
- Always keep the stylus tip clean. Clean the needle regularly with a soft brush or with a commercially available cleaning fluid (**Clearaudio** Elixir of Sound Art. No. AC003).  
Please make sure that no liquid gets on the cartridge body.
- Avoid storing the cartridge near devices with electrical transformers and motors that can generate magnetic fields.  
Any demagnetization could result in a loss of output voltage and thus distortion or deterioration in the sound.
- Please note:  
Never disconnect your tonearm cable from your pre-amplifier while your unit is still on. Please switch your pre-amplifier off before starting to disconnecting your tonearm connectors from the phono inputs of your pre-amplifier.

### **Important - please note:**

Do not try to remove the stylus assembly yourself.

Any damage caused by failure to follow the advice given in the **Clearaudio** user manual will invalidate the product warranty.

**Clearaudio** will assume no liability for any such damage.

## 2. Transportation

Should further transportation of the cartridge be necessary, please always use the original packing material and secure the needle protector with a rubber band. Otherwise serious damage could occur.

## 3. Service

If any servicing or repair of a **Clearaudio** product is necessary, please first contact your dealer or distributor. Alternatively contact **Clearaudio** directly and we will inform you about your nearest service location.

PLEASE RETAIN ALL ORIGINAL PACKAGING.

You will need it if this product has to be transported and/or shipped. Any further questions you may have about this product should be directed to your local dealer.

## 4. Safety instructions



### Disposal

This product is not allowed to be disposed with household waste.

WEEE Reg.No.: DE26004446



Contains swallowable parts, not for small children.

**Not suitable for shellac records (78rpm).**

**This phono cartridge is only for mounting on tonearms and must not be used for other purposes.**



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## 1. Included accessories

- Allen key 2mm
- Cartridge mounting screws (2pcs. M2.5 x 10mm)
- User manual

Additional analogue accessories are available at: [www.analogshop.de](http://www.analogshop.de)

The following are recommended:

- **Clearaudio** *Test Record* (Art. No. LP43033)
- **Clearaudio** *Break-In Test Record* (Art. No. BIN070904)
- **Clearaudio** *Setting Template* (Art. No. AC005/IEC)
- **Clearaudio** *Stylus Gauge* (Art. No. AC094)
- **Clearaudio** *Weight Watcher touch* (Art. No. AC0163)
- **Clearaudio** *Elixir of Sound* (Art. No. AC003)
- **Clearaudio** *Diamond cleaner brush* (Art. No. AC014)
- **Clearaudio** *Mini Level Gauge* (Art. No. AK001)



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## 2. Mounting procedure


Take the cartridge out of the packaging. To avoid any damage, we recommend leaving the stylus guard on the cartridge while mounting the cartridge onto the tonearm.

Use the screws provided to mount your **Clearaudio** MM cartridge (the cartridge threads in the body comply with the metric standard for M 2.5mm screws and have the standard spacing of 12.7mm).

**Be careful not to over-tighten the screws as they may strip the threaded holes.**

Now connect the pins of your **Clearaudio** cartridge to the jacks of the headshell or tonearm cable, taking care not to use too much force. If necessary, you can use suitable precision pliers or tweezers for assistance.

Please note the colour coding below in order to ensure the correct phase in music playback, otherwise an audible sound deterioration would result.

	Left output (L+) >>	white
	Left output (L-) >>	blue
	Right output (R+) >>	red
	Right output (R-) >>	green

**Fig. 1:** Color marking of the signal pins

**We recommend the following order of assembly:**

- 1. Mount the MM cartridge on the tonearm.**
- 2. Connect the tonearm or turntable ground with the preamplifier ground (before plugging in the electrical power supply).**
- 3. Plug the tonearm cable into the phono inputs of your preamplifier.**
- 4. Turn down the volume control to a minimum position (position 0).**
- 5. Plug the mains power cord into your electrical power supply.**

**Our tip for mounting the cartridge:**

Choose a bright workplace and good tools, and take your time so you can concentrate.





### 3. Adjustment of the tracking force

Carefully remove the stylus guard from the cartridge by grasping it with your thumb and forefinger and gently pulling it forward.

The correct tracking force for your MM cartridge can be found in the technical data in this user manual. Please only use these values, since if the tracking force is too light (1g or less) the cartridge could jump out of the record groove and damage the needle.

However, you should never set a tracking force of more than 5g as this could cause damage to the diamond and thus to the cartridge. In case that it is not possible to set the optimal tracking force due the cartridge being too light, you should use a spacer plate, available from your **Clearaudio** importer/dealer.

Further valuable information for the correct adjustment of your cartridge can be found in the respective user manual of the turntable and/or tonearm manufacturer.

#### 4. Technical data

	<b>concept V2</b>	<b>Performer V2</b>
Total mass:	8.6g ( $\pm$ 0.2g)	8.4g ( $\pm$ 0.4g)
Frequency response:	20Hz - 20kHz	20Hz - 20kHz
Output voltage (1kHz, 5cm/s):	$\sim$ 3.3mV	$\sim$ 3.3mV
Channel separation (1kHz):	20dB	20dB
Channel balance (1kHz):	2dB	1.5dB
Tracking ability:	80 $\mu$ m	80 $\mu$ m
Recommended tracking force:	2.2g ( $\pm$ 0.3g)	2.2g ( $\pm$ 0.3g)
Coil impedance (1kHz):	0.66k $\Omega$	0.66k $\Omega$
Coil inductance:	400mH	400mH
Load resistance:	47k $\Omega$	47k $\Omega$
Load capacitance:	100pF	100pF
Cantilever / stylus shape:	Aluminium / elliptical	Aluminium / elliptical
Compliance:	15 $\mu$ /mN	15 $\mu$ /mN
Cartridge body:	Aluminium	Ebony wood
Manufacturer warranty:	2 years*	2 years*

\* Provided that the warranty card is correctly completed and returned to

**Clearaudio**, or your product is registered online at

<https://clearaudio.de/en/service/registration.php>, within 14 days of purchase.



<b>Artist V2</b>	<b>Virtuoso V2</b>	<b>Maestro V2</b>
8.4g ( $\pm 0.4g$ )	8.4g ( $\pm 0.4g$ )	8.4g ( $\pm 0.4g$ )
20Hz - 20kHz	20Hz - 20kHz	20Hz - 20kHz
$\sim 3.6mV$	$\sim 3.6mV$	$\sim 3.6mV$
24dB	26dB	25dB
0.8dB	0.4dB	0.3dB
80 $\mu m$	80 $\mu m$	80 $\mu m$
2.2g ( $\pm 0.3g$ )	2.2g ( $\pm 0.3g$ )	2.2g ( $\pm 0.3g$ )
0.66k $\Omega$	0.66k $\Omega$	0.66k $\Omega$
400mH	400mH	400mH
47k $\Omega$	47k $\Omega$	47k $\Omega$
100pF	100pF	100pF
Aluminium / elliptical	Aluminium / elliptical	Boron / Shibata
15 $\mu mN$	15 $\mu mN$	16 $\mu mN$
Ebony wood	Ebony wood	Ebony wood
2 years*	2 years*	2 years*

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The full, extended warranty period for the **clearaudio MM** cartridge is 2 years. To receive this full **Clearaudio** warranty, you must either complete and return the relevant section of the warranty registration card to **Clearaudio**, or register your product online at <https://clearaudio.de/en/service/registration.php>, within 14 days of purchase. Otherwise only the legal warranty of 1 years can be considered. The full 2 year warranty can only be honoured if the product is returned in its original packing.

Um für die **clearaudio MM** Tonabnehmer die volle **clearaudio** Garantie von zwei (2) Jahren in Anspruch nehmen zu können, senden Sie uns bitte die beigelegte Garantiekarte innerhalb von zwei Wochen korrekt und vollständig ausgefüllt zu oder registrieren Sie das Produkt online unter <https://clearaudio.de/de/service/registration.php>, da sonst nur die gesetzliche Gewährleistung von einem (1) Jahr berücksichtigt werden kann. Nur wenn das Produkt in der Originalverpackung zurückgeschickt wurde, kann **clearaudio** die volle Garantiezeit gewährleisten.



### ENGLISH WARRANTY

For warranty information, contact your local **Clearaudio** distributor.

#### RETAIN YOUR PURCHASE RECEIPT

Your purchase receipt is your permanent record of a valuable purchase. It should be kept in a safe place to be referred to as necessary for insurance purposes or when corresponding with **Clearaudio**.

#### IMPORTANT

When seeking warranty service, it is the responsibility of the consumer to establish proof and date of purchase. Your purchase receipt or invoice is adequate for such proof.

FOR U.K. ONLY

This undertaking is in addition to a consumer's statutory rights and does not affect those rights in any way.



### FRANÇAIS GARANTIE

Pour des informations sur la garantie, contacter le distributeur local **Clearaudio**.

#### CONSERVER L'ATTESTATION D'ACHAT

L'attestation d'achat est la preuve permanente d'un achat de valeur. La conserver en lieu sûr pour s'y reporter aux fins d'obtention d'une couverture d'assurance ou dans le cadre de correspondances avec **Clearaudio**.

#### IMPORTANT

Pour l'obtention d'un service couvert par la garantie, il incombe au client d'établir la preuve de l'achat et d'en corroborer la date. Le reçu ou la facture constituent des preuves suffisantes.



### DEUTSCH GARANTIE

Bei Garantiefragen wenden Sie sich bitte zunächst an Ihren **Clearaudio** Händler. Heben Sie Ihren Kaufbeleg gut auf.

#### WICHTIG!

Die Angaben auf Ihrer Quittung erlauben uns die Identifizierung Ihres Gerätes und belegen mit dem Kaufdatum die Dauer Ihrer Garantie-Ansprüche. Für Serviceleistungen benötigen wir stets die Gerätenummer. Diese finden Sie auf dem Typenschild auf der Rückseite des Gerätes oder auch in der beigefügten Garantie-Registrierkarte.



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### **NEDERLANDS GARANTIE**

Voor inlichtingen omtrent garantie dient u zich tot uw plaatselijke **Clearaudio**.

#### **UW KWITANTIE, KASSABON E.D. BEWAREN**

Uw kwitantie, kassabon e.d. vormen uw bewijs van aankoop van een waardevol artikel en dienen op een veilige plaats bewaard te worden voor evt, verwijzing bijv, in verbend met verzekering of bij correspondentie met **Clearaudio**.

#### **BELANGRIJK**

Bij een evt, beroep op de garantie is het de verantwoordelijkheid van de consument een gedateerd bewijs van aankoop te tonen. Uw kassabon of factuurzijn voldoende bewijs.

### **ITALIANO GARANZIA**

L'apparecchio è coperto da una garanzia di buon funzionamento della durata di un anno, o del periodo previsto dalla legge, a partire dalla data di acquisto comprovata da un documento attestante il nominativo del Rivenditore e la data di vendita. La garanzia sarà prestata con la sostituzione o la riparazione gratuita delle parti difettose. Non sono coperti da garanzia difetti derivanti da uso improprio, errata installazione, manutenzione effettuata da personale non autorizzato o, comunque, da circostanze che non possano riferirsi a difetti di funzionamento dell'apparecchio. Sono inoltre esclusi dalla garanzia gli interventi inerenti l'installazione e l'allacciamento agli impianti di alimentazione.

Gli apparecchi verranno riparati presso i nostri Centri di Assistenza Autorizzati. Le spese ed i rischi di trasporto sono a carico del cliente. La casa costruttrice declina ogni responsabilità per danni diretti o indiretti provocati dalla inosservanza delle prescrizio-ni di installazione, uso e manutenzione dettagliate nel presente manuale o per guasti dovuti ad uso continuato a fini professionali.

### **ESPAÑOL GARANTIA**

Para obtener información acerca de la garantía póngase en contacto con su distribuidor **Clearaudio**.

#### **GUARDE SU RECIBO DE COMPRA**

Su recibo de compra es su prueba permanente de haber adquirido un aparato de valor, Este recibo deberá guardarlo en un lugar seguro y utilizarlo como referencia cuando tenga que hacer uso del seguro o se ponga en contacto con **Clearaudio**.

#### **IMPORTANTE**

Quando solicite el servicio otorgado por la garantía el usuario tiene la responsabilidad de demostrar cuándo efectuó la compra. En este caso, su recibo de compra será la prueba apropiada.



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