# clearaudio Charisma V2.1 MM



Loving music

## User manual Bedienungsanleitung





User manual ...... 2 - 11



Bedienungsanleitung ......12 - 20

Dear audio enthusiast,

each component part that makes up a Clearaudio V2.1 MM cartridge is measured several times, analysed and hand-selected, as is the final, completed cartridge. Every cartridge is 100% "Made in Germany" by Clearaudio's own dedicated in-house team, thus ensuring its uniqueness and quality.

From the concept V2.1 to the Maestro V2.1, our MM cartridges have long been at the forefront of the moving magnet field and have proved popular among music lovers for their distinctive high quality.

The Charisma V2.1 is the new flagship of the Clearaudio MM cartridge range. Only the finest materials qualified for inclusion, including the same Boron cantilever found in our world-leading Goldfinger Statement MC cartridge.

The use of highly efficient magnets gives the dynamic Charisma V2.1 an almost record-breaking output, easily enough to amply drive less sensitive phono stages.

The diamond stylus is mounted on the cantilever with matchless precision, ensuring excellent frequency response and the highest channel separation. The cartridge body is made from the finest ebony wood and is set with a German silver inlay.



#### 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 depend primarily on your specific tonearm and turntable.

Many thanks again for choosing Clearaudio.

We wish you much musical enjoyment with your new *Charisma V2.1 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.

## Contents

1. Included accessories	.7
2. Mounting procedure	.8 - 9
3. Adjustment of the tracking force	.10
4. Technical data	.11
Warranty information	.22 - 23



#### 1. Included accessories

- · Allen key 2mm
- Cartridge mounting screws (2pcs. M2.5 x 10mm; 2 pcs. M2.5 x 8mm)
- User manual

Additional analogue accessories are available at: 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. AC163)
- Clearaudio Elixir of Sound (Art. No. AC003)
- Clearaudio Diamond cleaner brush (Art. No. AC014)
- Clearaudio Mini Level Gauge (Art. No. AK001)

### 2. Mounting procedure

Take the cartridge out of the packaging. To avoid 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** *Charisma V2 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 ground (L-)	>>	blue
Right output (R+)	>>	red
Right ground (R-)	>>	green

Pic. 1: Colour marking of the signal pins



### We recommend the following order of assembly:

- 1. Mount the Charisma V2.1 MM cartridge into the tonearm.
- Connect the tonearm or turntable ground with the preampli ier 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

Total mass:	9.0g (± 1g)
Frequency response:	20Hz - 20kHz
Output voltage (1kHz, 5cm/s):	~ 3.6mV
Channel separation (1kHz):	30dB
Channel balance (1kHz):	0.2dB
Tracking ability:	90µm
Recommended tracking force:	2.4g (± 0.3g)
Coil impedance (1kHz):	0.66kΩ
Coil inductance:	400mH
Load resistance:	47kΩ
Load capacitance:	100pF
Cantilever / stylus shape:	Boron / Clearaudio Prime Line
Compliance:	17μ/mN
Cartridge body:	Ebony wood with German Silver inlay
Manufacturer's warranty:	2 years



Loving music

### clearaudio electronic GmbH

Spardorfer Straße 150 91054 Erlangen Germany

Phone /Tel.: +49 9131 40300 100 Fax: +49 9131 40300 119

www.clearaudio.de www.analogshop.de info@clearaudio.de

fyp⊙ Din

**Handmade in Germany** 

Clearaudio Electronic accepts no liability for any misprints.

Technical specifications are subject to change or improvement without prior notice. Product availability is as long as stock lasts.

Copies and reprints of this document, including extracts, require written consent from **Clearaudio Electronic GmbH**, **Germany**.

Änderungen bleiben vorbehalten. Lieferbar solange Vorrat reicht.

Für Druckfehler keine Haftung.

Irrtümer vorbehalten- Kopien und Abdrucke – auch nur auszugsweise – bedürfen der schriftlichen Genehmigung durch die

clearaudio electronic GmbH.

#### 2022