

# **Ambient**

### **User manual**



**Made in Germany** 

# Hi-Fi Components Clearaudio electronic GmbH

Spardorfer Str. 150 ● D-91054 Erlangen ● Tel. +49(0) 1805/059595 ● FAX +49(0) 09131/51683 www.clearaudio.de ● www.analogshop.de ● info@clearaudio.de ● copyright clearaudio© 2008

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#### Dear clearaudio-customer,

you have purchased a state-of-the-art turntable, the *Ambient*, a world class product of clearaudio **electronic** GmbH.

The special resonance-optimised construction, the external motor-unit and the patented **clearaudio** - CMB-bearing-technology guarantees absolute speed stability, pure pleasure in listening and reproduction in accordance to the original.

Thank you very much your confidence.

Please read this guide carefully so that you can enjoy all advantages of your *Ambient*-turntable. All information given will help to generate best set up and avoid any possible damages.

We hope you will enjoy your new **clearaudio** *Ambient* -turntable.

#### clearaudio electronic GmbH

Please read the warnings before connecting your *Ambient* -turntable to the mains supply.

#### **WARNINGS**

Don't expose your performance-turntable to rain or humidity.

Don't handle the mains leads with wet hands.

Don't place or insert anything into the equipment or through ventilation holes.

No naked flame sources, such as lighted candles, should be placed on the equipment.

#### **CE-MARKING**



The **clearaudio** *Ambient* meets the regulations concerning electromagnetic disturbance (EMC) and low-voltage appliances.

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- Copyright Act 1956,
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- Performers Protection Acts 1963 and 1072,
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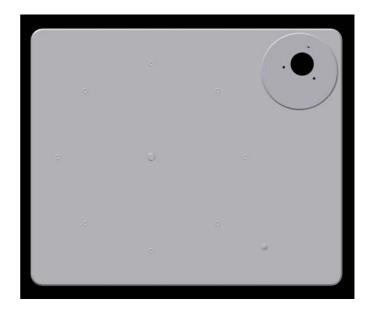




# 1. Packaging Overview

### 1. floor:

#### **Turntablechassis**

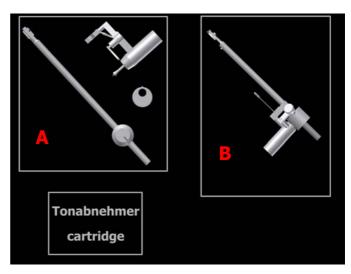


# 2. floor:

Motorunit
Power supply unit
Platter incl. Upper part of bearing



# 3. floor Optional, if the Ambient is ordered in a package: A: Unify tonearm B: Satisfy tonearm (according your order) cartridge, accessories







# 2. Package contents

The **clearaudio** *Ambient* turntable is delivered in a special packaging to ensure its safe transport. Please check the contents as per list below:





| 1 | Motorunit with included<br>"mini Syncro" unit  | 2 | Chassisplate 70-layers wood sandwich, silver anodised aluminum top & bottom plate        |
|---|--|---|--|
| 3 | Tonearmbase (preassambled)                     | 4 | High-precision turntable platter made of solid silicon acrylic with patented CMB bearing |
| 5 | Pulley made of acrylic including fixing screws | 6 | Power supply unit(incl. 3 different plug units; EU, USA and GB)                          |

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| 7  | Optional tonearm: (A-Unify/B-Satisfy) incl. accessory | 8  | Groundingcable for the bearingscrew |
|----|---|----|-------------------------------------|
| 9  | Clearaudio Clever Clamp                               | 10 | Shynthetic bearing oil (2.5 ml)     |
| 11 | Screwdriver (for fixing the pulley)                   | 12 | levelgauge                          |
| 13 | Silent Belt Ø 1mm (2 x,<br>therefrom 1 x spare)       |    | Pair of white gloves                |
| 15 | hexkeywrench  |    | Warranty card (not shown)           |

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# 3. Set-up and operation

After you have checked the package contents as described in section 2, lay the parts out on a clean, safe flat surface for the **clearaudio** *Ambient* assembly. Assembly is fairly simple and straight forward as many parts have been preassembled at the factory. Please use the white gloves provided to prevent scratches and/or fingerprints during assembly. The smallest placing area for your **clearaudio** *Ambient* is 530 x 330 mm.

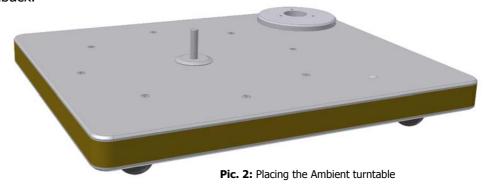


Pic. 1: Placing area Ambient turntable

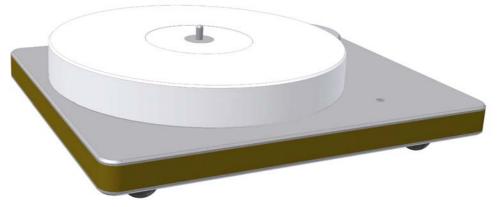




Place the premounted chassisplate on a good turntable rack area optimised for low sensitivity of acoustical feedback.

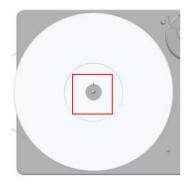


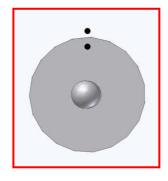
Unpack the turntable platter with the upper part of the platter bearing. Remove the protective security tape from the bearing housing and place this unit carefully over the spindle mounted in the turntable chassis. Do not use too much pressure for this step otherwise you will cause damage to the bearing. Caution: pay attention not to place any of the grease on the acrylic surface of the chassis!



Pic. 3: Placing the turntable platter

Due to the high precision machining there could be left some air inside the bearing. The air will flow out after several turns of the platter. Please make sure that the two markings on the turntable platter and on the bearing are in one line (as shown in figure below). The correct position of these markings is very important, because they had been calibrated at the factory.





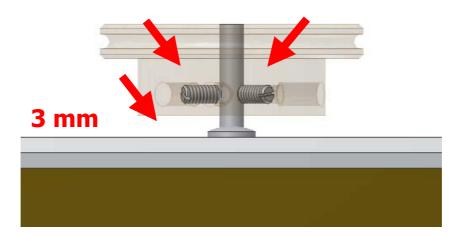
Pic. 4: Correct position of turntable platter and bearing

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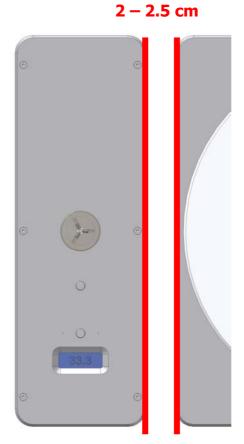


Place the pulley on the motor spindle. The distance between the pulley and the motor housing should be approx. 3 mm. Tighten the three little screws inside the pulley with the aluminium screwdriver provided.



Pic. 5: Placing the pulley on the motor spindle

Place now the motorunit beside your Ambient turntable. The distance between the motorunit and the turntable should be 2 - 2,5 cm!



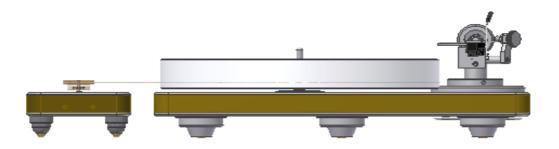
Pic. 6: Distance between motor unit and Ambient turntable

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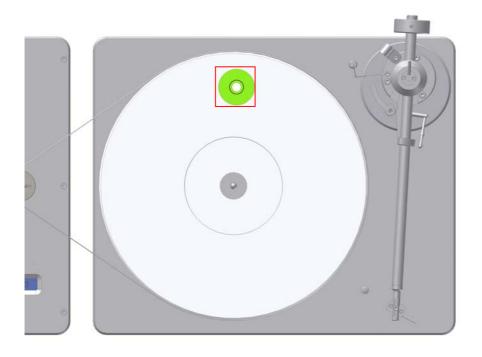
Place the belt on the pulley of the motor unit. Please turn with your hand the platter some turns, that the belt is parallel.



Pic. 7: Placing the belt on the pulley

#### The following adjustment is very important:

Should the air bubble in the level gauge not be in the black circle (see at the blow up), please ensure then that your underground so will be according aligned. Only if the turntable will be aligned you will receive the optimum on sound.



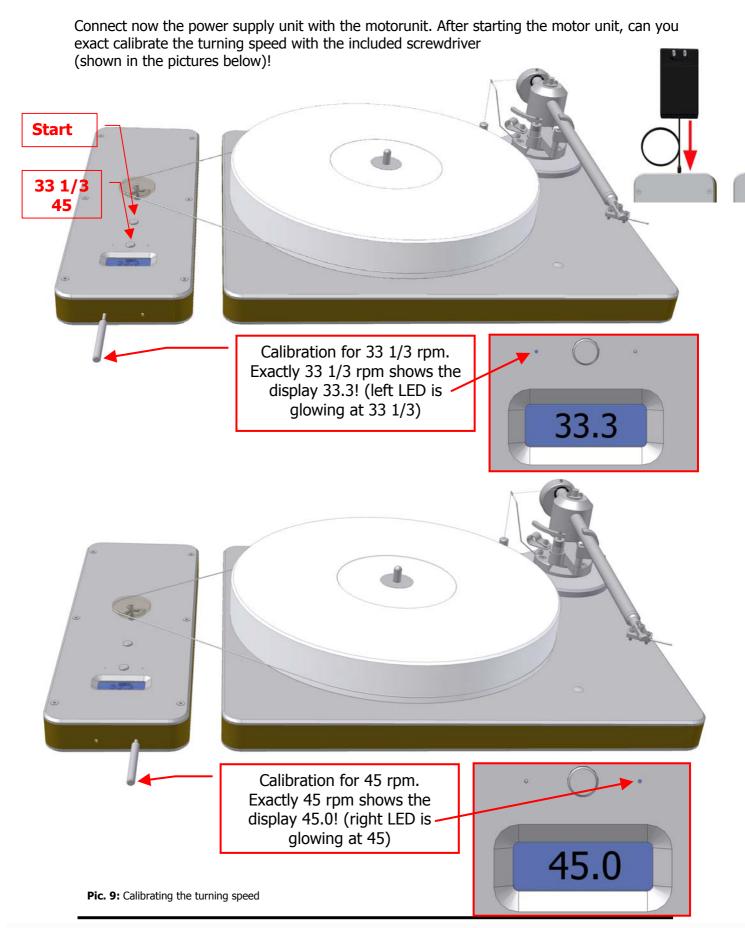


Pic. 8: To align the turntable

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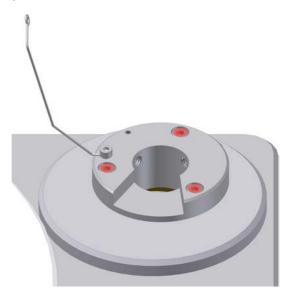




# 4 Tonearm mounting

# 4.1 Unify mounting

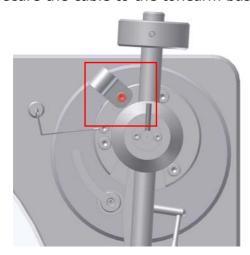
To mount the tonearm base to the Ambient armboard, please use the screws without nuts (M4x20) and place it like the red marked screws.

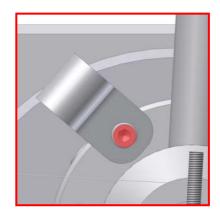


Pic. 10: Mounting the tonearm base

**Carefully** remove the security zip tie and unwrap the arm tube. **Caution:** *Once the security zip tie is removed not to inadvertently pull it out of the armwand.* 

Place the arm tube on to the pivot point and lock it into it's arm rest. Use the cable strain relief screw (M4x10) and washer (red marked screw in the picture below) to secure the cable to the tonearm base.





**Pic. 11:** Mounting the tonearm

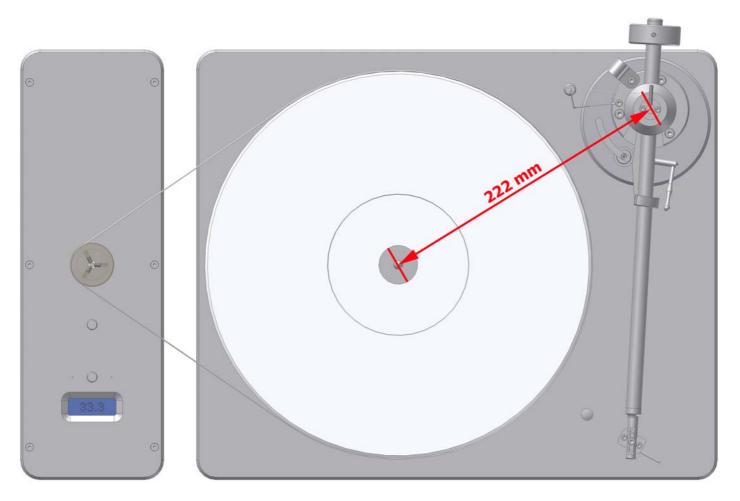
Insure that the distance from the spindle to the pivot point of the tonearm is exactly 222 mm. Moving the armboard in one direction or another will allow you to locate the correct position. Once located, tighten the armboard down. Shown in the picture below. You can also use the optional clearaudio cartridge alignment gauge.

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# For the exact adjustemts should be the cartridge mounted! Please follow therefor the instructions of the cartridge user manual!

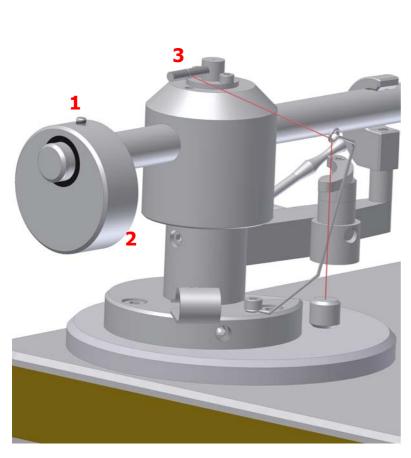


Pic. 12: Mounting the tonearm

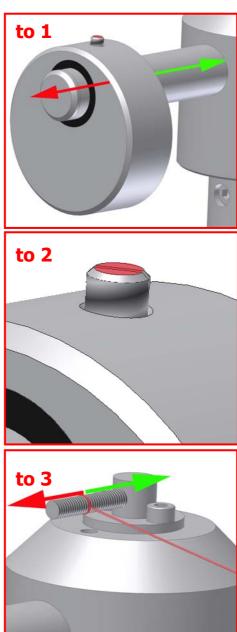


**Ambient** 

Attach the clearaudio Turbo Weight on the end of the tonearm (1). Set tracking force using the clearaudio Exact stylus preassure gauge (see cartridge instructions for recommended tracking force renge). Adjusting tracking force is accomplished by moving the weight towards or away from the pivot point on the shaft (to 1). **Note:** When tightening the counter-weight, insure that the weight is perfectly vertical otherwise this may affect your cartridges azimuth settings.







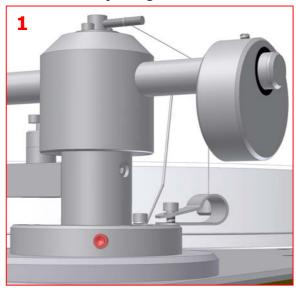
Feed the anti-skate weight through the anti-skate support wand and secure it to the threaded shaft at the top of the tonearm bell (to 3). **Note:** Attaching the string to the position closes to the pivot point is equal to approx 0.5 gramms of anti-skate. Each additional 1/8" out on the shaft will give you another 0.5 gramms of anti-skate force with a maximum of 3.0 gramms if affixed to the end of the shaft. (green arrow = lesser antiskating / red arrow = more antiskating).

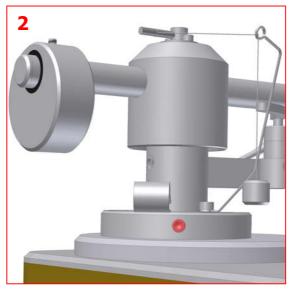
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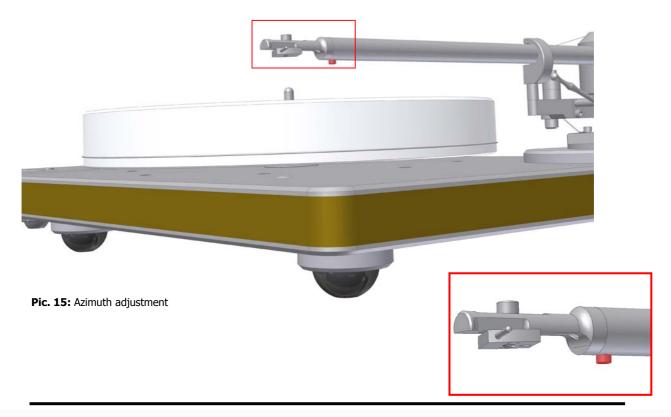
VTA adjustments are accomplished by loosening the two lock screws an the side of the armboard base (shown in picture 1 and 2). Once loose, you can moove the arm up or down to achieve the desired VTA. Tighten both screws when finished. Re-check tracking force after adjusting VTA.





Pic. 14: VTA-adjustment

Azimuth adjustments are facilitated through the small (1,5 mm) Allen screw (red marked screw) on the bottom side of the armwand where the headshell enters the carbon fiber. Once you loosen this screw, you'll be able to rotate the headshell a small amount in either direction. Be sure to tighten the screw when done.



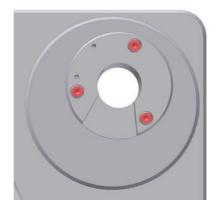
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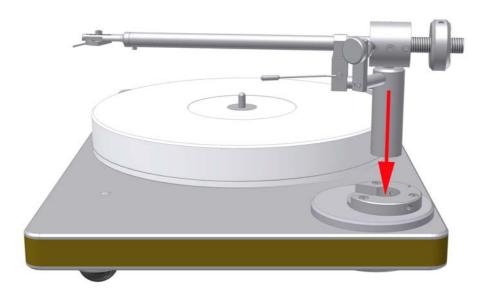
# 4.2 Satisfy mounting

To mount the tonearm base to the Ambient armboard please use the screws without nuts (M4x20) and place it like the red marked screws.



Pic. 16: Mounting the tonearm base for Satisfy

Please put careful the cables and the tonearm through the armboard, pay attention that no wire will be damaged! Now fix the tonearm with the 2 screws ont the right and the left side, not to much, so that you can adjust it in the next steps!



Pic. 17: Mounting the clearaudio Satisfy tonearm

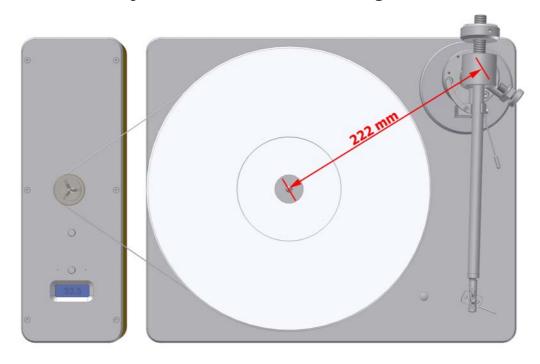
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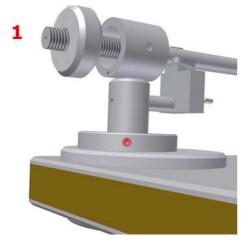
Insure that the distance from the spindle to the pivot point of the tonearm is exactly 222 mm. Moving the armboard in one direction or another will allow you to locate the correct position. Once located, tighten the armboard down. Shown in the picture below. You can also use the optional clearaudio cartridge alignment gauge.

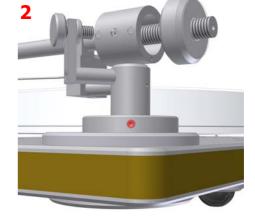
## For the exact adjustemts should be the cartridge mounted!



Pic. 18: Mounting the clearaudio Satisfy tonearm

VTA adjustments are accomplished by loosening the two lock screws an the side of the armboard base (shown in picture 1 and 2). Once loose, you can moove the arm up or down to achieve the desired VTA. Tighten both screws when finished. Re-check tracking force after adjusting VTA.





Pic. 19: VTA adjustment

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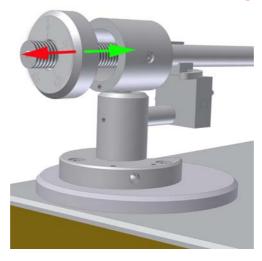




Azimuth adjustments are facilitated through the small (1,5 mm) Allen screw (red marked screw) on the bottom side of the armwand where the headshell enters the carbon fiber. Once you loosen this screw, you'll be able to rotate the headshell a small amount in either direction. Be sure to tighten the screw when done.



Wind the counterweight on the tonearm-tube. You can adjust the tracking force of your cartridge by turning the counterweight (shown in the picture below) **(green arrow = more tracking force / red arrow = lesser tracking force)**.



Pic. 21: Adjustment of the tracking force

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Now you are ready for the antiskating adjustment. This also depends on the tracking force of the cartridge and the diamond shape.

| alignment of the antiskati                                       | ng  | tracking force                          |   | position of the antiskating-screw                              |
|--|---|---|---|--|
| minimal antiskating<br>medium antiskating<br>maximum antiskating | $\begin{array}{c} \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$ | 10 – 15mN<br>15 – 20mN<br>20mN and more | $\begin{array}{c} \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$ | see illustration 1<br>see illustration 2<br>see illustration 3 |

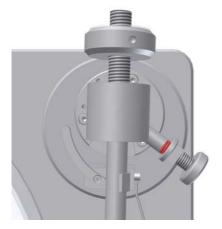


Illustration 1 (minimal Antiskating)

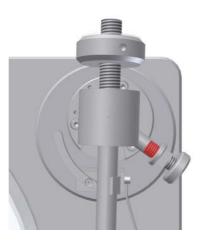


Illustration 2 (medium Antiskating)

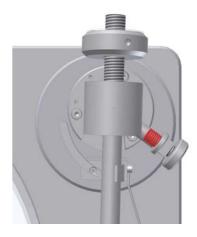


Illustration 3 (maximum Antiskating)

Pic. 21: Alignment of the antiskating

# The general set-up is now finished.

Connect your *Satisfy*-tonearm now with the phono input of your phono-preamplifier. (More information on adequate phono-preamplifiers and interconnects you can find on our Website www.clearaudio.com).

You can now place a record on the platter, affix it with the enclosed clever-clamp and finish your cartridge adjustments.



Now you are finally ready to play your vinyl records. We wish you a lot of pleasure with your new *Ambient*-turntable.

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# 5. Special information

To achieve the full **clearaudio** warranty, it is necessary that you fill out and send the corresponding part of the warranty registration card back to clearaudio, within two weeks after purchase. Only if the product is returned in it's original packing **clearaudio** can provide the warranty.

**Transportation advice:** If any transportation of the *Ambient*-turntable should be necessary, please always remove the turntable platter. Otherwise serious damage can occur! The bearing hole needs to be covered as well, to avoid any dust coming into the bearing. Always take of the pulley of the motor unit as well, to prevent the motor shaft from any damages.

If the *Ambient*-turntable is a longer time not in use, please disconnect the motor from the mains supply.

Every two years you can lubricate (only if you will recognize speed variations) the bearing of the turntable platter with the delivered oil. In this case it is enough to put 4 or 5 drops of the oil into bearing.

Please take special caution to any damages of the power cord. Any damages should only be repaired only by authorized personal. A damaged power cord must be exchanged immediately!

### 6. Service

If any service or repair on all **clearaudio** products is necessary, please contact your dealer / distributor or contact **clearaudio** directly. We will inform you about your nearest service location.

PLEASE RETAIN ALL ORIGINAL PACKAGING. You will need it if this unit has to be transported and/or shipped. Any further questions you may have about this turntable should be directed to the distributor or directly to **clearaudio** at

clearaudio electronic GmbH

Spardorfer Str 150 91054 Erlangen Germany

Tel/Phone: +49-(0)1805/059595

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





### 7. Technical data

Construction principle: Resonance optimised chassis's shape, belt driven, 70-layers

wood sandwich, silver anodised aluminum top & bottom

plate

Speed possibillities: 33 1/3 U/min or 45 U/min

(optional with pulley 78 U/min)

Drive unit: Decoupled synchronious motor, belt drive

Rumble: DIN IEC 98 procedure A / 83 dB

Bearing: CMB, **clearaudio** patended Magnetic ceramic bearing

Platter: Silicon acrylic, surface absolutely plain, 40 mm

Speed variation: +- 0,1 %

Weight: approx 12 kg, incl. motor

Dimensions: approx 535 mm x 330 mm x 150 mm

Warranty: 5 years\* (see chapter 5)

Illustrations and technical information not binding Subject to change without notice.

Stand: April 08

<sup>\*</sup> Only if the warranty card is filled out correctly and sent back to **clearaudio**.





To achieve the full **clearaudio** warranty (*Ambient* 5 years), it is necessary that you fill out and send the corresponding part of the warranty registration certificate /card back to **clearaudio**, within two weeks after purchase. Only if the product is returned in it's original packing **clearaudio** can provide the warranty of 5 years.

#### **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 sur 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.

#### **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 prescrizioni 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 garantia 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

Cuando solicite el servicio otorgado por la garantia el usuario tiene la responsabilidad de demonstrar cuándo efectuó la compra. En este caso, su recibo de compra será la prueba apropiada.

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