®clearaudio

Emotion SE

Loving music

User manual Bedienungsanleitung



Pic. similar / Abb. ähnlich

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Dear Clearaudio customer,

Thank you for purchasing the **Clearaudio** *Emotion SE* turntable.

A resonance minimized shape in combination with a stand alone motor unit, guarantees total isolation of resonances from the turntable chassis, providing the best music reproduction and authentic High End imaging. A high precision, patented **Clearaudio** - *CMB-bearing-technology* is completing the analogue pleasure.

Please read the instruction manual for easy setup and to discover how to care for your *Emotion SE* turntable to enjoy music for many years. Follow the instructions carefully to avoid any potential damage. Not following our instructions could void your warranty.

We wish you a lot of musical enjoyment with your new **Clearaudio** *Emotion SE* turntable.

Clearaudio electronic GmbH



Safety instructions

1. General information

Check the turntable for any damage before using it. Do not connect the turntable if damaged!

Never connect the turntable if it has been dropped or gotten wet, contact your dealer to have the turntable checked.

Never expose the turntable to rain or moisture.

Never touch the power cord of the device with wet hands.

Regular visual inspections for defective insulation on the connection cable are also recommended for your own safety. A damaged cable should be replaced immediately by a specialist!

Never pull on the power cord to unplug the device. Always pull directly on the plug!

The inside of the turntable is maintenance free. Never open the case or attempt to repair the unit yourself, since this can lead to loss of warranty!

We recommend disconnecting the power supply from the mains if you do not operate the device for a longer period of time.

The turntable does not feature an automatic shut-off mechanism.

Therefore, as soon as the stylus has reached the run-out groove, engage the tonearm lift and switch the turntable off.

Not suitable for children! Scope of delivery may contain small parts that can be swallowed.

2. Intended use

The *Emotion SE* is a turntable for playing records.

The intended use of the *Emotion SE* in accordance with the information provided in the user manual only.

The power supply may only be operated with maximum permissible connection values according to the technical data. Any other use or modification of this product is not intended.

3. Location of installation

Avoid locations with direct sunlight, temperature fluctuations and high humidity.

Likewise, avoid placing electronic devices near heaters, heat lamps, or other devices that produce heat.

The device is designed for operation at room temperature.

No objects with an open flame may be placed on or near the device (burning candles or similar).

4. Overload

The product is designed to comply with all necessary safety regulations. However, you should not leave the device unattended under extreme loads.

5. Maintenance

Never use agressive cleaning detergent.

Do not use dry cloths for cleaning as this generates static electricity. Suitable cleaning and care products from **Clearaudio** are available from www.analogshop.de or from specialist retailers.

The bearing of the turntable platter can be lubricated every 2 years with the oil provided. Put 1 or 2 drops of the oil into the bearing for lubrication.

6. Health information

Permanently high volume can lead to various types of hearing damage. Use high volume responsibly!

7. Service

The *Emotion SE* turntable should be repaired during the guarantee period by the manufacturer only, otherwise the warranty claim expires. All **Clearaudio** products should only be serviced by specialist retailers.

If, despite the high production standard, a service is necessary, the *Emotion SE* turntable must be send to **Clearaudio** through your dealer.

8. Transport

Use the original packing material for further transportation of the *Emotion SE* turntable, otherwise serious damage could occur.

Be sure to pack the device exactly as it was shipped. Safe transport is only guaranteed in the original packaging.

Proceed in reverse as described for assembly when packing.

Always remove the turntable platter and replace the foam securing the sub-platter and cover the bearing with tape as well. Otherwise serious damage can occur.

Remove also the pulley from the motor axle to avoid any damage during transport.

Clearaudio assumes no liability for any damage that may occur due to incorrect packing.

9. Disposal

Do not dispose this product together with other waste. WEEE Reg. No.: DE26004446

10. CE Marking

This electronic product corresponds to the applicable guidelines for obtaining the CE mark.

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1. Packing overview

1. Layer (top):

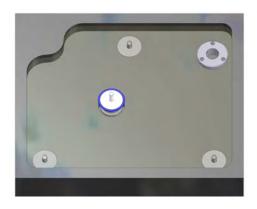
Motor-unit, motor-base (not shown) top of bearing, belt, pulley, fittings and accessories.

If ordered as package: **Clearaudio** Satisfy Kardan tonearm and/ or **Clearaudio** pickup



2. layer (middle):

Turntable – chassis with integrated lower bearing part



3. layer (bottom):

Platter





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2. List of components

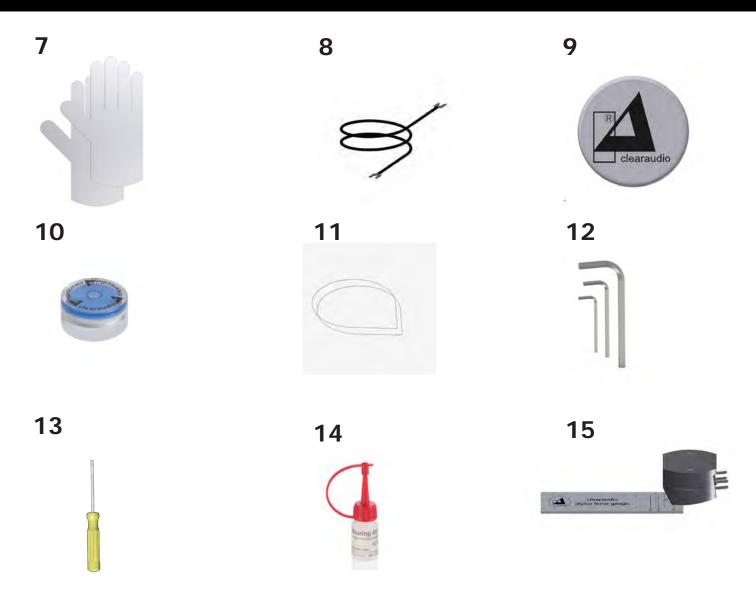
Clearaudio has developed a special and secure turntable packing to prevent your *Emotion SE* turntable from any transportation damage.

Please store this original packing, in case you need to ship the turntable. Below you can find the content of delivery of your **Clearaudio** *Emotion SE* turntable:



Pic. 2.1: List of components

1	Turntable chassis with mounted lower bearing part, tonearm base and height adjustable feets	l	Motor drive unit with main lead and motor base
2	Turntable platter	5	Acrylic motor pulley
3	Bearing (upper part) with adjusted bearing shaft	6	Optional: Clearaudio Satisfy Kardan tonearm directwired, when ordered as a package



Pic. 2.2: List of components

7	1 Pair of gloves	13	Screw driver
8	Grounding wire for the <i>Emotion SE</i> turntable	14	Bearing oil
9	Clearaudio logo, self-adhesive	15	Clearaudio Smart Stylus Gauge (without cartridge)
10	Level gauge for the turntable alignment	16	Not shown: User Manual
11	2 pcs. drive belt (2 x 292 mm)	17	Not shown: Warranty card, Clearaudio Quality Certificate and return delivery note
12	3 pcs. hex wrench (sizes: 1.5 / 2.5 / 3)	18	Not shown: Optional: Clearaudio MM Cartridge and <i>Smart Stylus Gauge</i> , only when ordered as package

3. Installation and set up

The setup and installation of the *Emotion SE* is done quickly and very easy. Please use the white gloves during this procedure, to avoid scratches.

1.)

You should consider a safe and clean working area for the installation, as near as possible to the final position of the *Emotion SE* turntable.

First take out the motor and tonearm of the packing. Now you should take out the first packing layer. After that you can take out the *Emotion SE* turntable chassis from the next packing layer. Place the turntable body on a clean underlay.

To avoid any damages to your bearing, the turntable platter should achieve room temperature before the set up begin (approx. 20 ° Celsius).

2.)

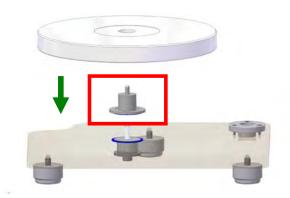
Take the upper bearing part and place it on the lower bearing part, which is already integrated in the chassis (picture 3).

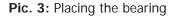
3.)

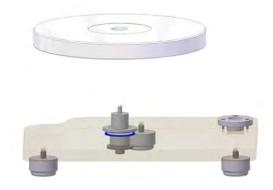
Place the platter with both hands carefully onto the bearing.

Through a lightly (!!) up and down movement the platter will slip onto the bearing upper part (picture 4).

Avoid major side force to prevent any damages to the ceramic bearing!







Pic. 4: Placing the platter

Make sure with gentle pressure that the platter is applying on the complete surface of the bearing.

4.) Alignment of the turntable

The following adjustment is very important!

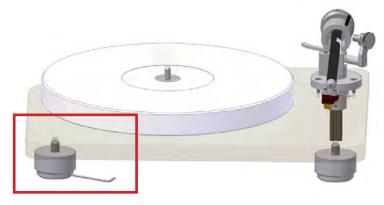
Place the **Clearaudio** *level gauge* on the platter (see Pic. 5) and bring the turntable in level by turning the corresponding feet in the right direction.



Pic. 5: Alignment of the turntable

The turntable is in level, when the air bubble in the level gauge is in the center.

Adjust the height of the turntable by turning the feet counter wise with the delivered hex wrench (shown in picture 6).



Pic. 6: Height adjustment

Only if the turntable is proper aligned you will receive the best possible sound.

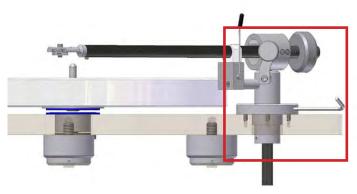
The following instructions are for *Emotion SE* packages.

If you use a tonearm and / or cartridge from different manufacturer please follow the instruction manual of the particular manufacturer.

3.1 Tonearm set-up

1.)

Take the *Satisfy Kardan* tonearm and slide first the signal cable and then the tonearm shaft into the hole of the tonearm base at the right upper corner of the *Emotion SE* turntable chassis. Please ensure that the tonearm tube is parallel to the side edge of the chassis turntable. Tighten the tonearm only slightly with the provided hex wrench and screws.



Pic. 7: Setup of the tonearm

Before you finish the tonearm setup, please proceed with the cartridge setup.

The correct height adjustment that is going to be used for the tonearm is depending on the cartridge you install.

2.)

For the next steps, please mount your cartridge on your tonearm (optional as a package: **Clearaudio** *Satisfy Kardan* tonearm). Please leave the stylus protector on the cartridge. Use the manufacturer's instruction manual during this installation procedure and follow the appropriate instructions.

The headshell wires (cartridge connection leads) are colour coded according to the international standard:

Colour code of the <i>Satisfy Kardan</i> tonearm wire:		
+) >> white -) >> blue		
+) >> red -) >> green		

Please pay attention on every step to avoid any damages to the cartridge!

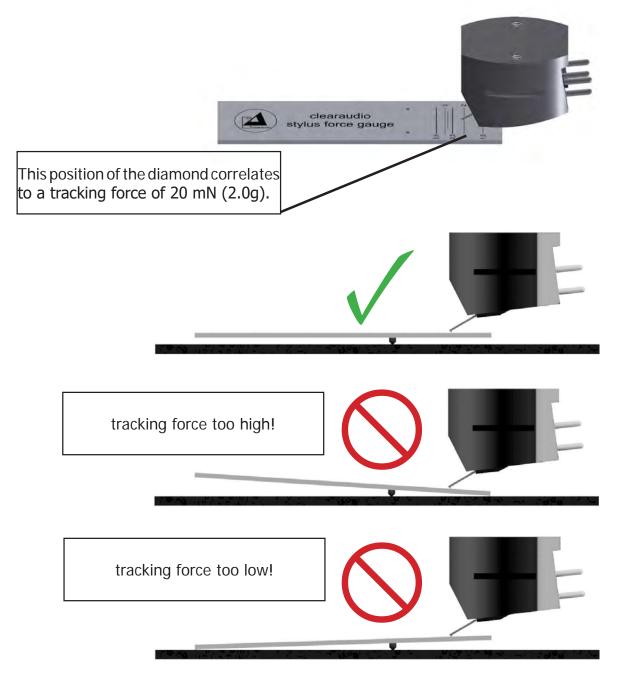
Now adjust the tracking force of the cartridge.

Please follow the instructions according the manual of the cartridge you use.

If you are using a **Clearaudio** Moving Magnet cartridge you can adjust the tracking force or the wiring of the tonearm (about 20 mN), by turning the tonearm's counter weight on the threaded bolt (backside view of the tonearm).

3.)

For a more comfortable adjustment, please take the delivered *Smart Stylus gauge* (only in the *Emotion SE* package with tonearm and cartridge) and adjust the tracking force by using the gauge. Please place the *Smart Stylus gauge* on the platter and put the cartridge on the fine line which is marked with the recommend tracking force for your cartridge (e.g. **Clearaudio** MM cartridge 20 mN (2.0 gram)).



Pic. 8: Use of the Smart Stylus Gauge

If you would like even more professional set up tools, you can also use other tools like the **clearaudio** *Weight Watcher gauge* (Art. No. AC094).

For more information on that, please contact your specialist dealer or directly **Clearaudio** www.analogshop.de. For contact address see page 14.

4.)

For the next settings, place any LP on the platter and remove the stylus protector.

If you now lift down the cartridge to the middle of the turntable platter, you must see (from the side) that the lower edge of the tonearm tube is parallel to the surface of the record. You can use the tonearm tube as orientation.



Pic. 9: Setting the VTA

If it is necessary you can adjust the height of the tonearm (VTA). For that you have to move the tonearm in the chassis's hole in the right direction (up an down). Fix the tonearm in its correct position by locking the allen screw in the tonearm base.

5.) Azimuth adjustment

If you now lift down the cartridge again and take a look at the front side of the cartridge.

You have to make sure that the upper edge of the cartridge is parallel to the record surface.

This adjustment had been set up perfectly by Clearaudio. Only if it is necessary, you can adjust the cartridge position, while carefully screw the small allen screw on the bottom side of the tonearm tube near the headshell (Caution: please don't unscrew the allen screw completely).

Now you can twist the headshell with the mounted cartridge around his roll-axis. To achieve the most precise adjustment you can use a set square.

If you have found the right position you can carefully lock the small allen screw without changing the position defined before.



Don't twist the headshell when the cartridge is lifted down and the diamond tip is on the record. It is necessary to lift the tip from the record, before you can check the position again.

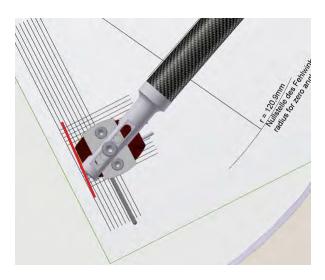
6.)

For the final setup of the tonearm, you need the cartridge alignment gauge which is included as well.



Slide the gauge over the spindle of the turntable platter and turn the platter into the position as shown in the picture 9.

Pic. 10: Alignment of the cartridge



Pic. 11: Top view: cartride body aligned to the pringted lines

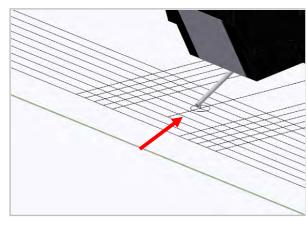
Lift down the cartridge and place the diamond tip of the cartridge on the reference point on the *alignment* gauge and make sure that the edges of the tonearm tube and the cartridge are absolutely parallel to the marking lines printed on the cartridge alignment gauge.

For that adjustment it is necessary to take a look directly from the top on the tonearm and the alignment gauge.

If you have to change the position of the diamond tip you can unscrew the allen screw on the top of the tonearm's headshell and move the cartridge into the corresponding position.

Please make also sure that the leading edge of the cartridge is parallel to the marker lines of the cartridge alignment gauge. Fix the right position through looking the headshell screw on the top.

During final tonearm and cartridge installation, always take a look from the top onto the alignment gauge, to avoid any parallax errors.



Pic. 12: Correct installation

The installation is done correctly, when at the same time the armtube is parallel to the marking lines on the gauge, the diamond tip is on the reference point and the leading edge of the cartridge is parallel to the lines on the gauge. Finally lock all screws that had been involved during the adjustments.

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

After setting up the cartridge, please tighten the tonearm in its base to fix it in this position.

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3.2 Adjustment of the Antiskating

alignment of the antiskating	tracking force	posiion of the antiskating screw
minimal antiskating medium antiskating	10 - 15 mN 15 - 20 mN	see illustration 1 see illustration 2
maximum antiskating	20 mN and more	see illustration 3



Illustration 1 : Minimal antiskating (Screw is almost removed)

Pic. 11: Antiskating adjustment



Illustration 2 : Medium antiskating (Screw is at half position)



Illustration 3 : Maximum antiskating (Screw is screwed in)

3.3 Setting-up of the motor

Take the motor-pulley out of the accessory bag and shift the motor pulley as far as on the motors shaft until you have a distance of approximately 1 mm between the upper edge of the motor and the lower edge of the pulley.

Now tighten the three screws in the pulley one after the other with the precision screw driver.



Pic. 12: Mounting the pulley

Now place the motor unit into the stainless steel motor stand and fix the motor with the two screws on the side of the motor stand. Place the motor unit into the cut out on the left side of the turntable chassis and pay attention, that the switch of the motor faces outside. Now you can connect the power cord to your power outlet.

Place one drive belt around the platter and around the pulley.

The smaller diameter of the pulley is used for 33 1/3 rpm and the larger diameter for 45 rpm.

The position $_{"}I"$ on the motor-switches the motor on.

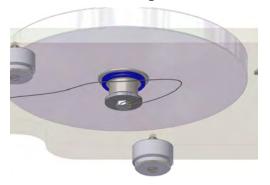


Pic. 13: Drive belt mounting

Before first use, let the turntable run in for the first 15 to 30 minutes.

Now connect your *Satisfy Kardan* tonearm with the phono input of your phono-preamplifier. You can find more information on adequate phono-preamplifiers and interconnects on our Website: www.clearaudio.de

Only if you have static problems with your record, then it is necessary to ground your bearing. Please connect the ground wire with the bearing on the upper side of the chassis (see pic. 14).



Pic. 14: Connecting the ground wire to the turntable

The setup is now completed.

Please pay attention!

If the *Emotion SE* is a longer time not in use, please switch the turntable on the main switch on the motor completely off!

You will find the main switch on the motor (see picture):



Pic. 15: Main switch

We wish you a lot of pleasure with your new *Emotion SE* turntable.

Your Clearaudio Team

4. Troubleshooting

If you have a problem with your *Emotion SE* turntable, first check the possible causes to rule out incorrect operation.

If the error persists, please contact your dealer!

Never try to open the device and/or repair it yourself, this will void the warranty!

Error	Cause	Measure
Device does not work	Is the power cord plugged in?	Check the connection.
	The tonearm and phono stage are not properly connected.	Check the cable connection between the tonearm and the phono stage.
	Is the amp turned on?	Check the power supply to the amplifier.
No sound	The volume on the amplifier/loudspeaker is set too low or on "mute".	Check the volume settings.
110 00 0110	Is the cartridge protective cap still attached?	Remove the cartridge's protective cap.
	Is the tonearm in the raised position?	Lower the tonearm into the lead-in groove.
	Is the stylus damaged?	Check the stylus and have the cartridge checked by a specialist if necessary.
	Is the record or the stylus dirty or damaged?	Clean the record / or the cartridge. Clearaudio offers many helpful accessories for care and cleaning. In the event of damage, we recommend an assessment by a specialist and, if necessary, an exchange.
	Is the cartridge properly mounted into the tonearm?	Check the installation using the relevant user manual and correct them if necessary.
Bad sound / noise	Has the tracking force been set too high?	Adjust the tracking force.
	Is the correct operating mode (MM / MC) set on the amplifier?	Check the settings of your phono stage.
	The pre/amp does not have enough gain.	Check the settings of your phono stage.
	Pre/amp is mismatched.	Swap the plugs of the turntable that are connected to the left and right outputs.

Needle bounces or slides across	Is the record or the stylus dirty or damaged?	Clean the record / or the cartridge. Clearaudio offers many helpful accessories for care and cleaning. In the event of damage, we recommend an assessment by a specialist and, if necessary, an exchange. Adjust the tracking force.
record	Has the tracking force been set too high?	Adjust the tracking force.
	Is the record deformed or scratched?	Use a record clamp or replace the record.
	Is the turntable level?	Check the alignment of the turntable and adjust if necessary.
Diatton days not	Is the drive belt properly attached?	Check the position of the drive belt.
Platter does not turn	Is the power cord connected properly?	Check the connection.
	No speed was selected / speed selection in position "0"/"OFF".	Select a speed and start the turntable.
Noisy sound	Is the drive belt properly attached?	Check the position of the drive belt. Is it too loose and needs to be changed?
	Contact problems with the signal connections (e.g. cinch plugs, adapters for extensions)	Check all connections; reduce the level on the (pre-)amplifier to a low volume for acoustic checking of gross errors.
Humming noises	Metal housing acts as an antenna and catches hum.	It can be helpful for conductivity to connect the metal parts of the turntable to the ground of the (phono) preamplifier. The turntable provides a grounding terminal for this purpose. Use a sufficiently thick wire to establish the ground connection.
	The pickup pins are mixed up, not connected correctly or defective.	Check the pin assignment of the pickup.
The music doesn't sound like usual	Wrong speed selected.	Check the record for recommended speed. There are also records in LP format (30 cm) that have to be played at 45 rpm ("maxi singles") and small records in single format (17 cm) that have to be played at 33 rpm (so-called "EP's").
	The turntable is spinning too fast/too slow.	Adjust the speed according to the operating instructions.

5. Technical data

Construction details:	Resonance optimized chassis shape made out of satined acrylic, belt driven
Speed options:	33 1/3, 45rpm (78rpm with optional motor pulley)
Drive unit:	Decoupled synchronous motor (230V or 110V) embedded in a massive metalhousing
Bearing:	Patented, Inverted bearing and polished ceramic axle, incl. CMB-magnetic-bearing-technology
Platter:	GS-PMMA acrylic, precision CNC machined surface
Speed accuracy (measured):	± 0.2%
Power consumption:	Max. consumption: 2.0 watts Consumption in operation: 1.6 watts Off mode: 0.0 watts (if main switch is in "O" position)
Total weight:	Approx: 7kg (incl. Motor)
Dimensions (W/D/H):	Approx. 400 x 330 x 100mm (without tonearm)
Dimensions (W/D/H):	Approx. 15.75 x 12.99 x 3.94 inches (without tonearm)
Manufacturer's warranty:	3 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.