


clearaudio AC168 Concept Signature

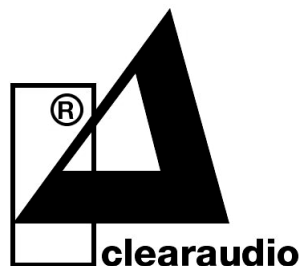


clearaudio AC168 Concept Signature User Manual

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clearaudio AC168 Concept Signature



Specifications:

- Model: Clearaudio concept Signature
- Origin: Made in Germany
- Features: Self-calibration, Tacho Speed Control (TSC), sensor switch, improved motor suspension (ISM)
- Accessories: Dustcover, concept clamp, replacement belt, power supply options

Product Usage Instructions

Setup:

1. Check for any damage before use.
2. Ensure the turntable is on a stable surface.
3. Connect the power cord to a suitable power source.
4. Place the tonearm and cartridge carefully on the record.

Operation:

1. Turn on the turntable using the power switch.
2. Use the sensor switch and encoder for setting options.
3. Adjust settings as needed for optimal performance.

Maintenance:

1. Avoid exposing the turntable to rain or moisture.
2. Regularly clean the surface and tonearm to prevent dust buildup.
3. Refer to the instruction manual for care guidelines.

FAQ:

Q: Can I use any power supply with the Clearaudio concept Signature turntable?

A: It is recommended to use the Professional Power 12V transformer power supply or the smart power 12V battery power supply for optimal performance and compatibility.

Q: How often should I replace the belt on the turntable?

A: The replacement belt for the concept series turntable should be replaced periodically according to usage and wear. It is recommended to check and replace if necessary during regular maintenance.

Dear Clearaudio customer,

the concept already caused a sensation when it was launched on the market in 2009.

As an entry-level package with a specially developed tonearm and cartridge, a revolutionary sound package with an undisputed price, design and performance range was created and enjoys worldwide fame with over 20.000 units sold.

After more than 10 years of consistency, the concept gets an update and becomes concept Signature. The new control technology with integrated self-calibration, new setting options and additional Tacho Speed Control ("TSC") achieve even better measured values in synchronization, wow and flutter and impulse stability.

The new design of the surface – now with sensor switch – also combines variable setting options and functions, while at the same time the new encoder also serves as the basis for further generations and expansion stages. In addition, there is also the improved motor suspension using several O-rings (“ISM”), which completely decouple the motor from the chassis and were adopted in a simplified form from the Reference Jubilee.

The concept Signature is another milestone and the result of our consistent research and constant development of our products.

Please read the instruction manual for easy setup and to discover how to care for your concept Signature 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 great musical experience with your new Clearaudio concept Signature turntable.

Clearaudio electronic GmbH

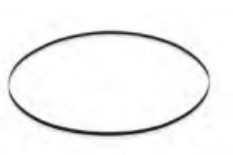
Matching accessories from Clearaudio



Dustcover for *concept Signature* turntable
(Art. No. AC168)



concept clamp
(Art. No. AC122)



Replacement belt for *concept* series turntable
(Art. No. AC123)



Professional Power 12V transformer power supply
(Art. No. EL039/S)
Also available in black.



smart power 12V battery power supply
(Art. No. EL035/B/S)
Also available in all black finish.

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 concept Signature is a turntable for playing records.

The intended use of the concept Signature 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 aggressive 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 concept Signature turntable should be repaired during the guarantee period by the manufacturer or authorized dealer 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 concept Signature turntable must be sent to Clearaudio through your dealer.

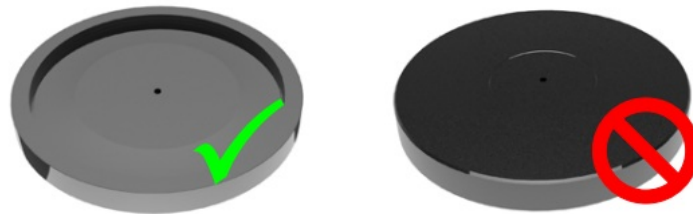
8. Transport

Use the original packing material for further transportation of the concept Signature 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 as well as the tape securing the tonearm and the cartridge stylus protection. Otherwise serious damage can occur.
Please also ensure that you fully retract the turntable feet.

For any transportation of the concept Signature turntable, please ensure that the platter is packed with the upper surface facing downwards into the packaging.



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

Disposal

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

CE Marking

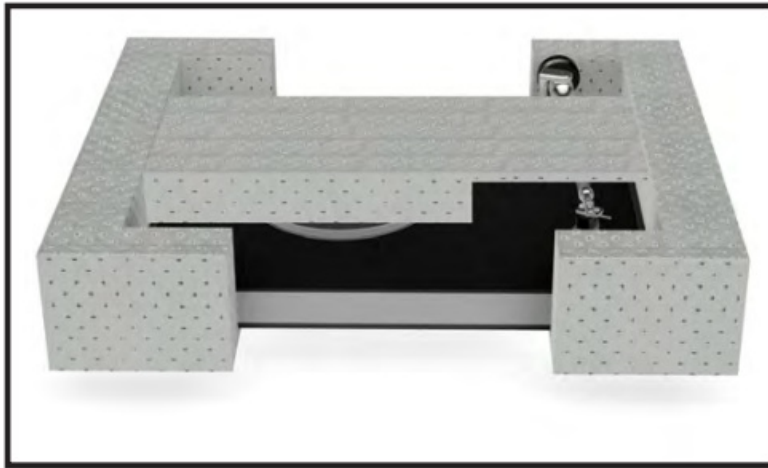
This electronic product corresponds to the applicable guidelines for obtaining the CE mark.

Packaging overview

The Clearaudio concept Signature turntable is delivered in a customized packing to ensure its safe transport.
Please retain the original packaging for any future transportation and shipping.
Please see the list below to check the contents of your Clearaudio concept Signature turntable.

First layer:

concept Signature turntable chassis including integrated motor unit and tonearm with cartridge.



Pic. 1: Packaging overview

Second layer:

Turntable platter, accessories box, user manual, Clearaudio return delivery note, warranty card

List of components

1. Turntable chassis with tonearm, cartridge and drive belt on sub-platter.
2. Turntable platter.
3. Accessories:
 - Level gauge, smart stylus force gauge, hex wrench (size 2 / 2.5), power supply incl. adapter, user manual, Clearaudio return delivery note, warranty card.

Set-up

Setting up the concept Signature turntable is easy. The turntable chassis, tonearm and cartridge are already assembled and all key parameters have been pre-adjusted and tested at the Clearaudio factory.

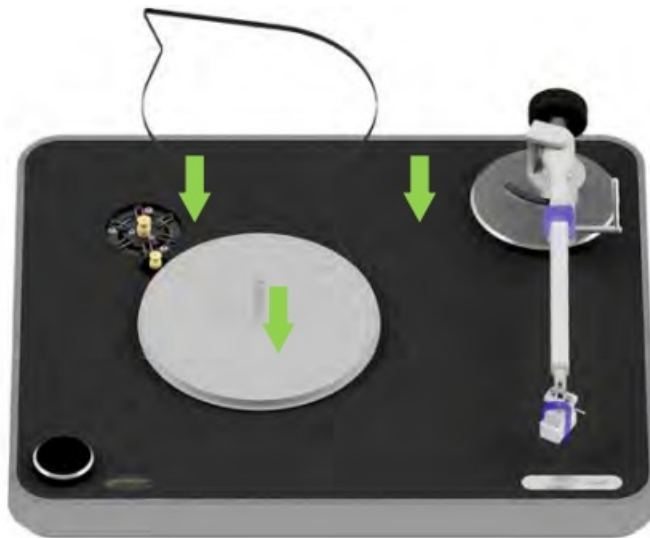
The concept Signature turntable needs a set-up space of at least 17 x 14 inches.

1. First take the concept Signature turntable chassis out of the package and place it on a suitable surface.
Then remove the drive belt from the plastic bag.



Pic. 2: Placing the turntable

2. Place the drive belt around the sub-platter and around the motor pulley and the tachometer.



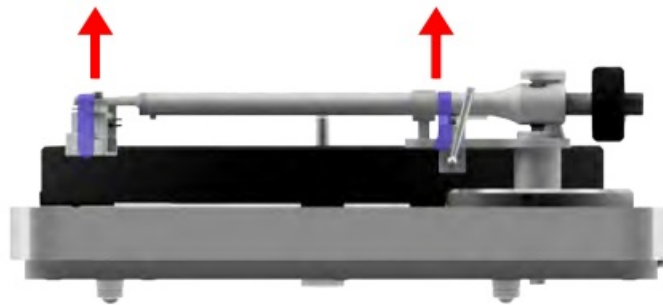
Pic. 3: Mounting the drive belt

3. Take the platter out of the package and carefully place it with both hands onto the shaft. Make sure that the hollowed side faces down towards the subplatter.



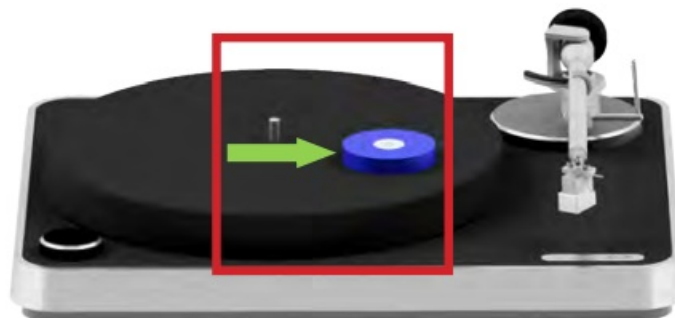
Pic. 4: Placing the platter

4. Carefully remove the adhesive security tape and other security materials from the tonearm and the cartridge.



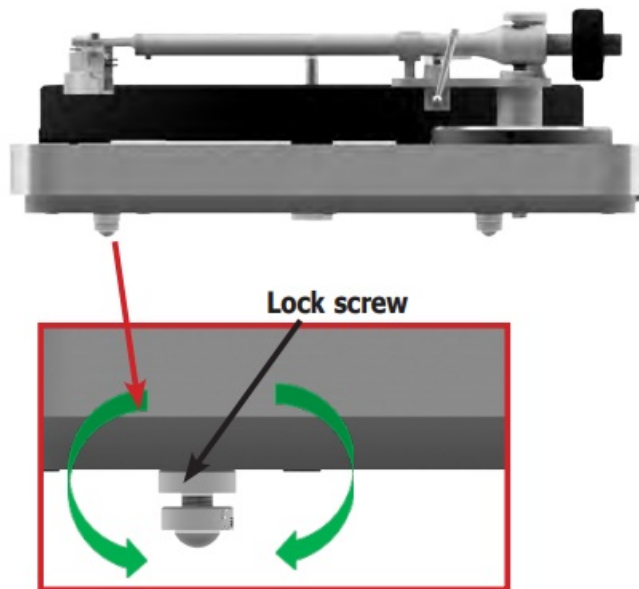
Pic. 5: Removing the adhesive security tape

5. Please level the turntable using the level gauge provided.
All key parameters have been adjusted at the Clearaudio factory.



Pic. 6: Levelling the turntable

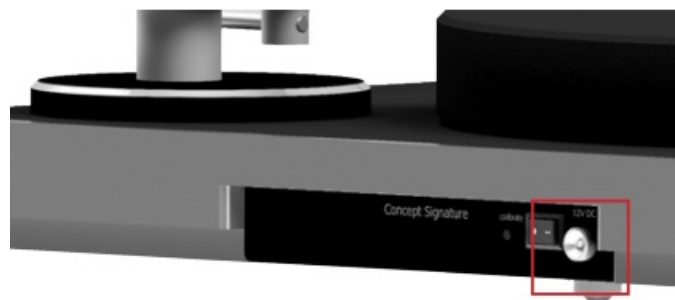
6. If the bubble of the level gauge is not centered within the black circle, please turn the turntables feet clockwise or anti-clockwise until you reach the perfectly leveled position.
You will only get the best sound from your concept Signature turntable if it is perfectly leveled.



Pic. 7: Adjustment of the turntable feet

7. Connect one end of the external power supply provided to the socket on the rear of the concept Signature turntable and the other end to a live AC outlet.

Then connect the tonearm cable to your phono stage (red plug = right channel, black plug = left channel). Finally, connect the grounding and switch on the device on the back using the “On/Off” switch.



Pic. 8: Power supply of the turntable

Your concept Signature turntable is now completely assembled and ready to play.

Initial operation and calibration of speed

1. Initial operation

If the concept Signature is in standby, press the button once to put the drive into operation at the basic speed of 33 1/3 rpm.

Press again to change the speed to 45 rpm. Another press puts the drive back into standby mode. We recommend to let the turntable run in for around 15-30 minutes when using it for the first time.



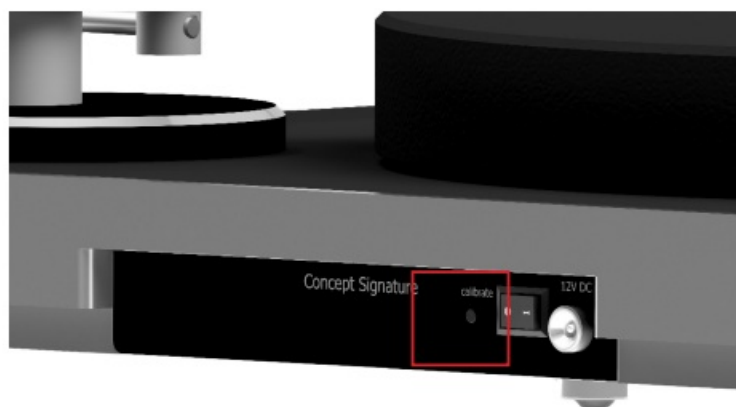
Pic. 9: Control unit of the *concept Signature*

2. Calibration of speeds

Thanks to the newly developed motor control, the concept Signature calibrates itself to always maintain the perfect speed.

However, manual calibration is possible. This is particularly recommended if the turntable has not been in use for a long time, wearing parts (e.g. belts) have been replaced or the drive is being repositioned after moving, for example.

If you would like to start the calibration manually, please proceed as follows to recalibrate both speeds. This process can take up to 10 minutes.



Pic. 10: Calibration of the *concept Signature*

The turntable has to be in standby mode to start the calibration. On the back of the turntable you will find the calibration button next to the “On/Off” switch.

Since this is recessed in the chassis, you need a narrow screwdriver or alternatively a ballpoint pen or something similar to press the button.

Hold this down for approx. 5 seconds. As the turntable calibrates itself, the platter rotates and the display quickly changes between 33 (=33 1/3) and 45.

After calibration is complete, the turntable stops and switches to standby mode by itself.

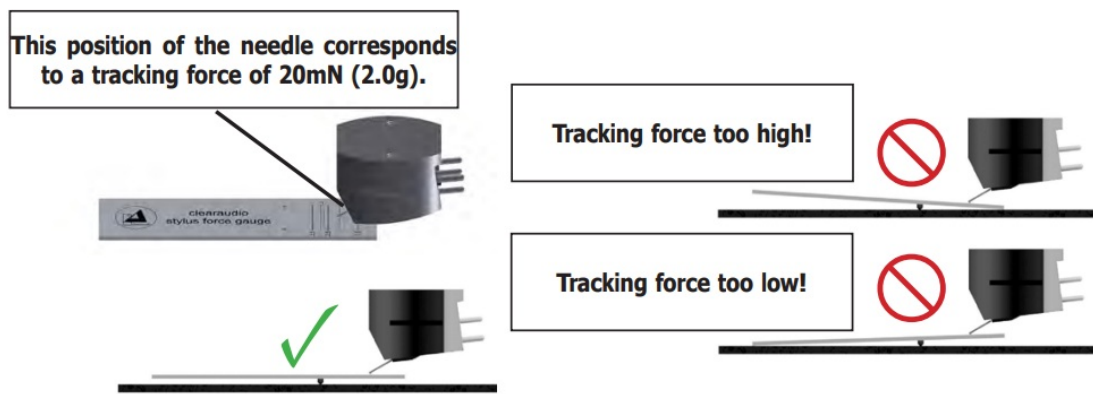
Important notes

1. Adjustment of the tracking force

The tracking force is already preset at the factory.

Please always remove the record from the turntable if you want to check or adjust the tracking force. To check the values, we recommend using the delivered smart stylus force gauge or the Clearaudio Weight Watcher touch (Art. No. AC 163).

The recommended tracking force for the Clearaudio concept MM cartridge is 2.2g ($\pm 0.3g$) and for the Clearaudio concept mc cartridge is 2.2g ($\pm 0.2g$).



Pic. 11: Using the smart stylus gauge

To adjust the tracking force, the counterweight at the end of the tonearm must be turned.

Attention: Please hold the tonearm firmly on the tonearm tube while turning the counterweight to avoid damage!

Red arrow (shift towards tonearm end)

= less tracking force -> turn counterweight counterclockwise (left)

Green arrow (shift towards the start of the tonearm)

= more tracking force -> turn counterweight

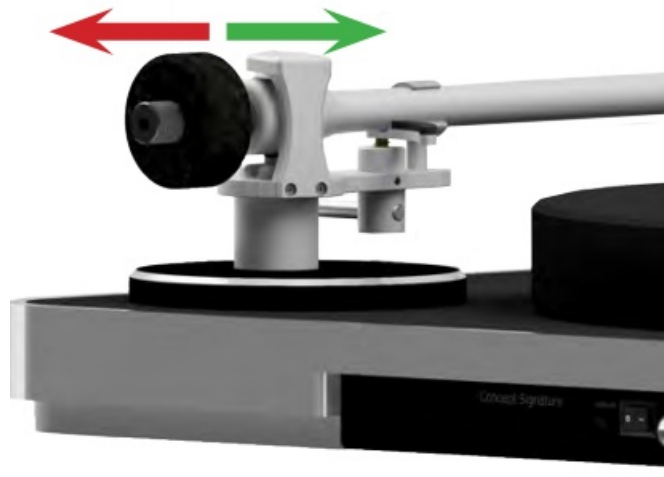


Abb. 12: Einstellen des Auflagegewichts

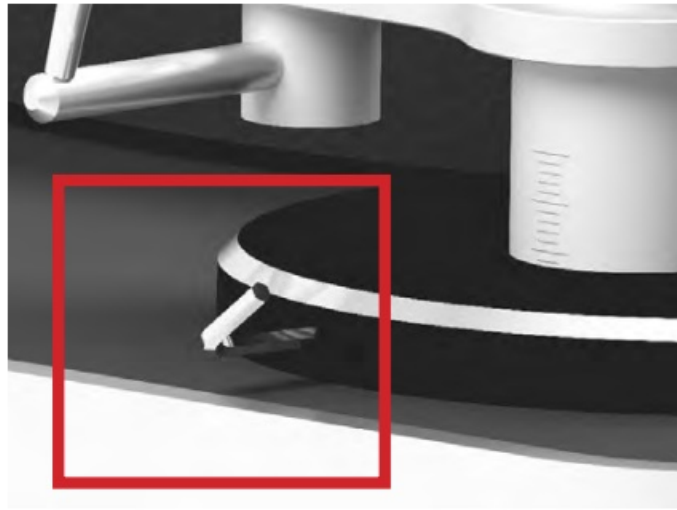
Set the correct tracking force of your pickup according to the manufacturer's instructions.

2. Adjustment of the tonearm height

Since everything on the turntable is pre-assembled and tested, including tonearm and cartridge, there is usually no need to change any parameters on the concept Signature turntable. If you wish to change the height of your tonearm, please refer to your nearest qualified dealer or service personnel.

Your dealer can make the height adjustment by loosening the locking screw on the side of the tonearm base of your turntable.

Please note that the basic setting is made without an additional mat on the plate.



Pic. 13: Adjustment of the tonearm height

Clearaudio assumes no liability for incorrect handling or any damage caused if non-qualified persons attempt the above adjustments.

3. Adjustment of the anti-skating force

Again, since everything on the turntable is pre-assembled and tested, including tonearm and cartridge, there is usually no need to change any of the concept Signature turntable parameters.

If you still want to change the anti-skating, please contact your dealer, who has the necessary accessories, e.g. test record, measuring tool.

Your specialist dealer will find the anti-skating screw on the underside of the concept Signature turntable.



Pic. 14: Adjustment of the anti-skating

Clearaudio assumes no liability for incorrect handling or any damage caused if non-qualified persons attempt these adjustments.

Troubleshooting

If you have a problem with your concept Signature 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.
	Is the power switch in the correct position?	Check the switch on the back of the device.
No sound	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.
	The volume on the amplifier/ loudspeaker is set too low or on „mute“.	Check the volume settings.
	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.
Bad sound / noise	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.
	Has the tracking force been set too high or too low?	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 record	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.
	Has the tracking force been set too high or too low?	Adjust the tracking force.
	Is the record deformed or scratched?	Use a record clamp or replace the record.
	Is the turntable leveled?	Check the alignment of the turntable and adjust if necessary.
	Is the antiskating set too high/ low?	Contact your dealer to have the setting checked and corrected if necessary.
Platter does not turn	Is the drive belt properly attached?	Check the position of the drive belt.
	Is the power cord connected properly?	Check the connection.
	Is the power switch in the correct position?	Check the switch on the back of the device.
	The turntable is still in standby mode.	Activate the drive by pressing the button.
Noisy sound	Is the drive belt properly attached?	Check the position of the drive belt. Is it too loose and needs to be changed? Please note: After changing the belt, we recommend recalibrating the turntable.
Humming noises	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.
	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.	Start the self-calibration using the operating instructions.

Technical data

Construction details:	<ul style="list-style-type: none"> • Resonance-optimised turntable. • Upper layer incorporates a high-tech satined plastic compound. • Chassis comprises medium-density wood fibre (silver / black) or pressure-formed solid wood (wood / dark wood). • Bottom plate medium-density wood fibre • Height-adjustable turntable feet.
Speed options:	33 1/3, 45rpm
Drive unit:	<ul style="list-style-type: none"> • Decoupled and resonance damped 12V DC motor. • Flat belt-drive • Plug-in power supply unit, designed for worldwide use with all networks and power frequencies. • „IMS light – Innovative Motor Suspension“ (Suspension design of the motor using O-rings) • „TSC“ Tacho speed control (speed monitoring) <p>Automatic compensation of friction and temperature changes on platter bearings and belts</p>
Bearing:	Polished and tempered steel spindle in a sintered bronze bushing, running on a teflon thrust pad.
Platter:	30mm / 1.18 inch main platter, made out of synthetic material with high-density and excellent dimension/precision CNC machined aluminium sub-platter.
Speed accuracy (measured):	± 0,05%
Power consumption:	<p>Max. consumption: 3.6 watts Consumption in operation: 1.92 watts Standby: 0.74 watts</p> <p>Off mode: 0.0 watts (switched off at the rear)</p>
Total weight:	Approx. 7.5kg (incl. tonearm and cartridge)
Dimensions (W/D/H):	ca. 420 x 350 x 125 mm (mit Tonarm)
Dimensions (W/D/H):	Approx. 16.54 x 13.78 x 4.92 inches (with tonearm)
Manufacturer's warranty:	2 years*

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Technical specifications are subject to change or improvement without prior notice.

Product availability is as long as stock lasts.

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Documents / Resources



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AC168 Concept Signature, AC168, Concept Signature, Signature

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- [clearaudio electronic GmbH | High End - made in Germany](#)
- [clearaudio electronic GmbH - Produkt-/Garantieregistrierung](#)
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