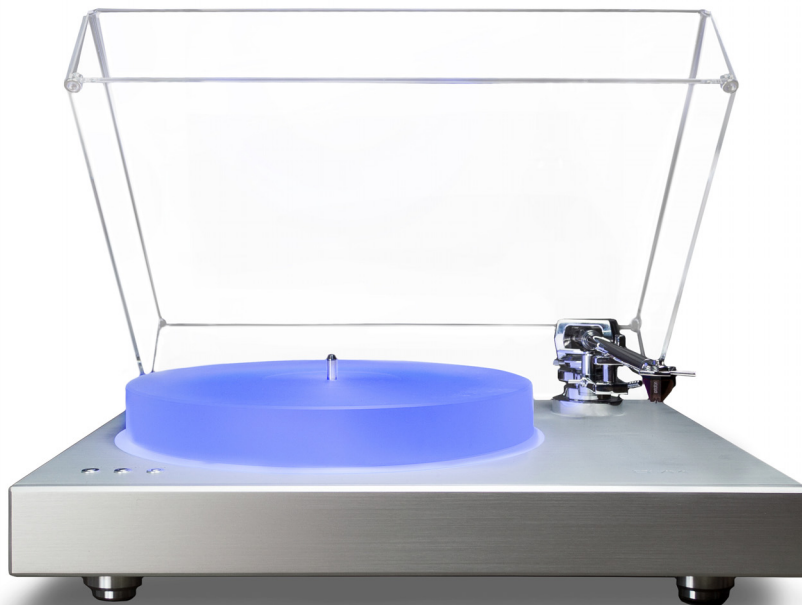


ROTATION R 5.3

Operating Instructions



Declaration of conformity (for EC only)

We herewith confirm, that the unit to which this manual belongs, fulfills the EC rules necessary to obtain the sign



the necessary measurements were taken with positive results.

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CHAPTER

1

Getting started

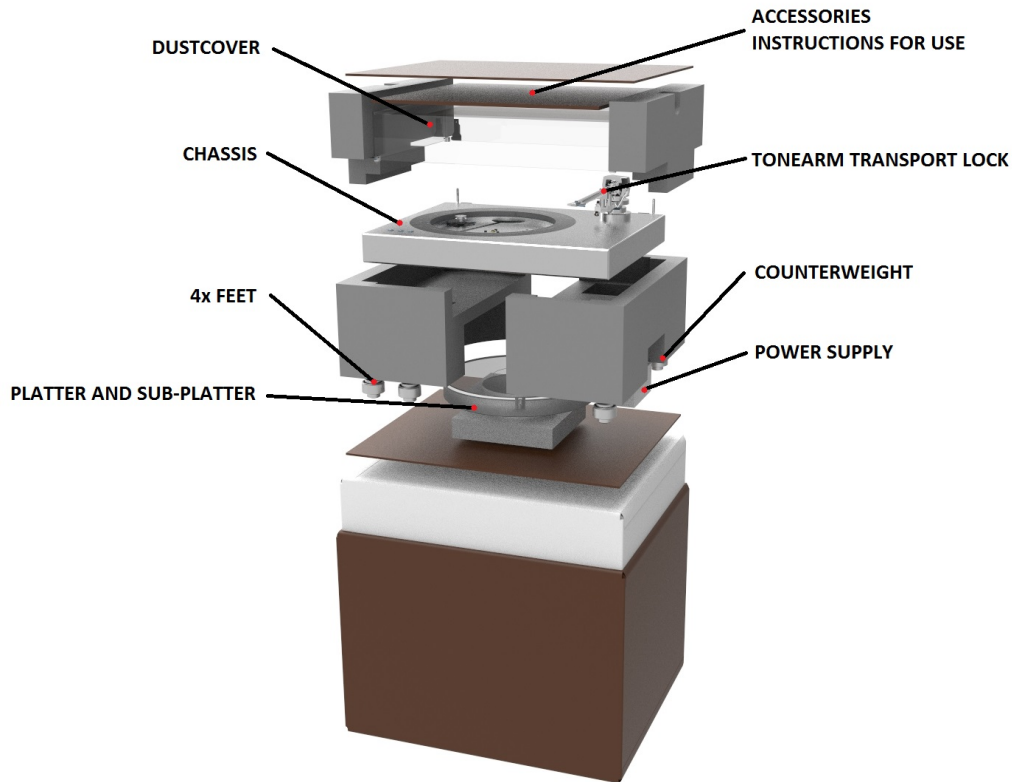
1.1 Important

CAUTION

Throughout the manual, the section labeled **CAUTION** will alert you to potential hazards for the user or the unit, and how to avoid possible misuse.

Your turntable was shipped partially disassembled in order to avoid damage to sensitive parts. Please check immediately to make sure neither the packaging nor the device was damaged during transport. If you miss parts or the unit is damaged, please do not operate and contact your dealer.

1.2 What's in the box?

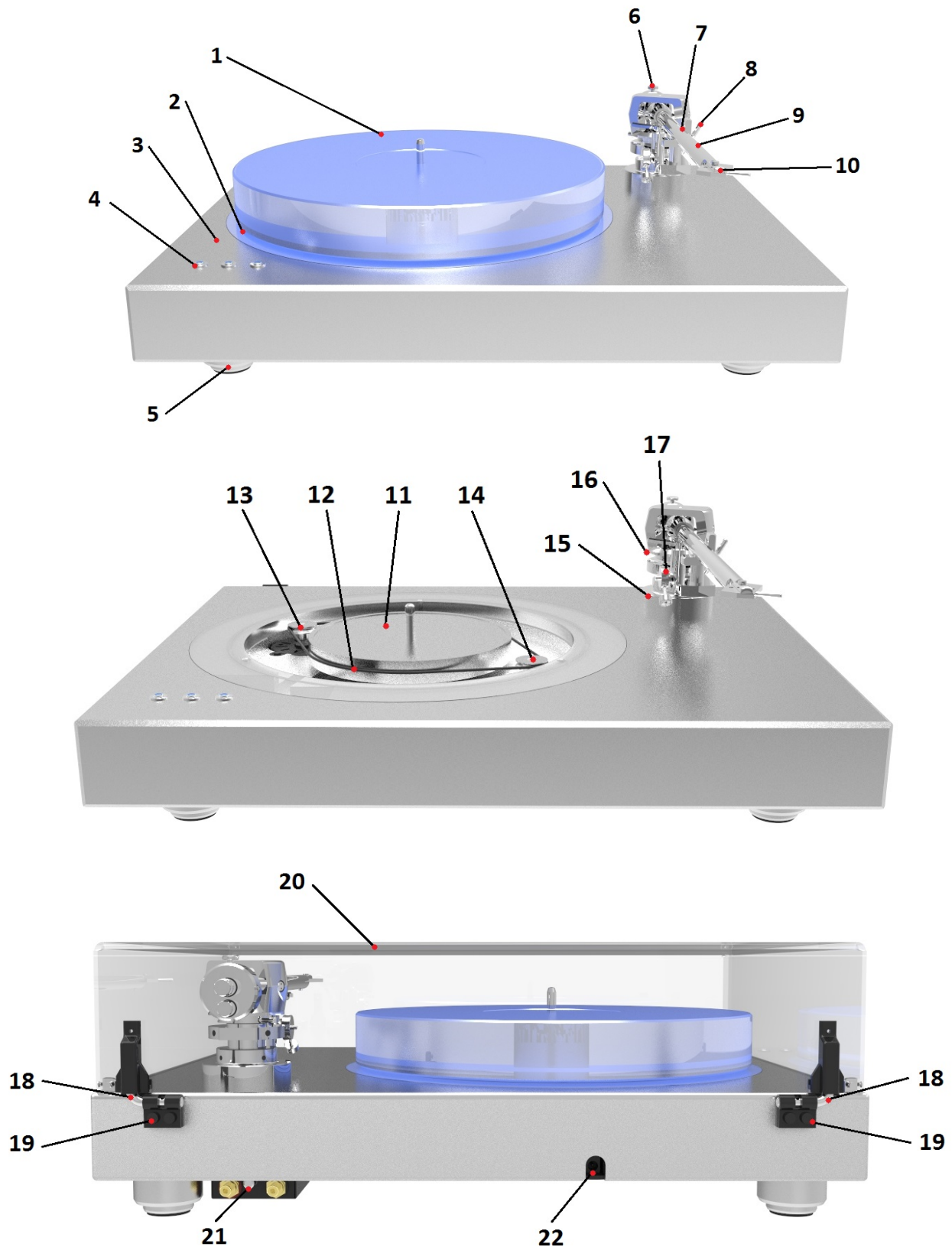


1.3 Packaging

AVM packaging is carefully designed to protect your component from damage during transport. We highly recommend you keep the original packaging in order to safely ship or otherwise transport your turntable going forward.

The packaging materials were chosen to be environmentally friendly. In case you need discard the packaging material, please do your part to help protect the environment and recycle properly.

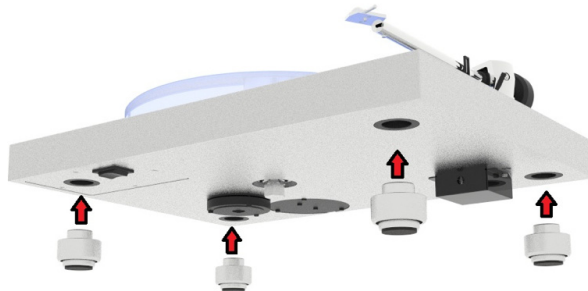
1.4 Control and operating elements



1. Acrylic platter
2. Acrylic lighting panel
3. Aluminium / MDF chassis
4. Speed control buttons
5. Damped adjustable feet
6. Tonearm counterweight
7. Tonearm rest and removable transport lock
8. Tonearm lift
9. Tonearm tube
10. Head shell with finger lift
11. Sub-platter
12. Drive belt
13. Motor with pulley
14. Guide pulley
15. Tonearm flange
16. Hook screw for anti-skating thread
17. Anti-skating mechanism
18. Dustcover hinge
19. Hinge fasteners
20. Dustcover
21. RCA output with earth connection
22. Power supply socket

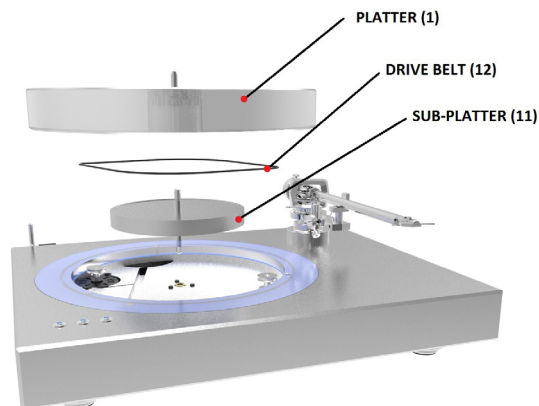
1.5 Setup

1.5.1 Feet assembly



Remove the three feet (5) from the grey foam insert which holds the turntable chassis. Carefully lift the turntable and screw the feet into the thread inserts on the bottom of the turntable. Balance the turntable by using a spirit level before next steps.

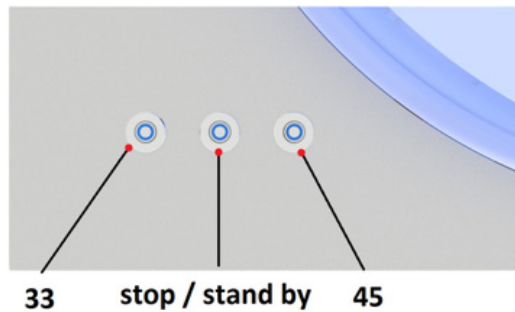
1.5.2 Platter, sub-platter and drive belt installation



Remove the protective cover from the sub-platter (11). Install the sub-platter (11), drive belt (12) and platter (1) as shown in the above illustration.

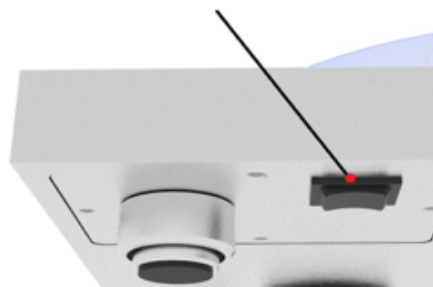
1.5.3 Speed control

To start the rotation of the platter for 33 r.p.m., press the left speed control button (4). To play 45 r.p.m., press the right-speed control button (4). To stop the motor of the turntable, press the middle speed control button and the turntable will switch to standby mode.



1.5.4 Light control

The turntable is equipped with blue LED diodes under the platter controlled by a 3-way switch.

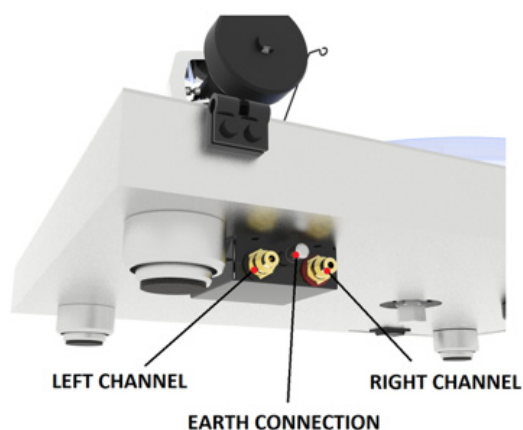


Left position – light LED back light

Middle position – no light

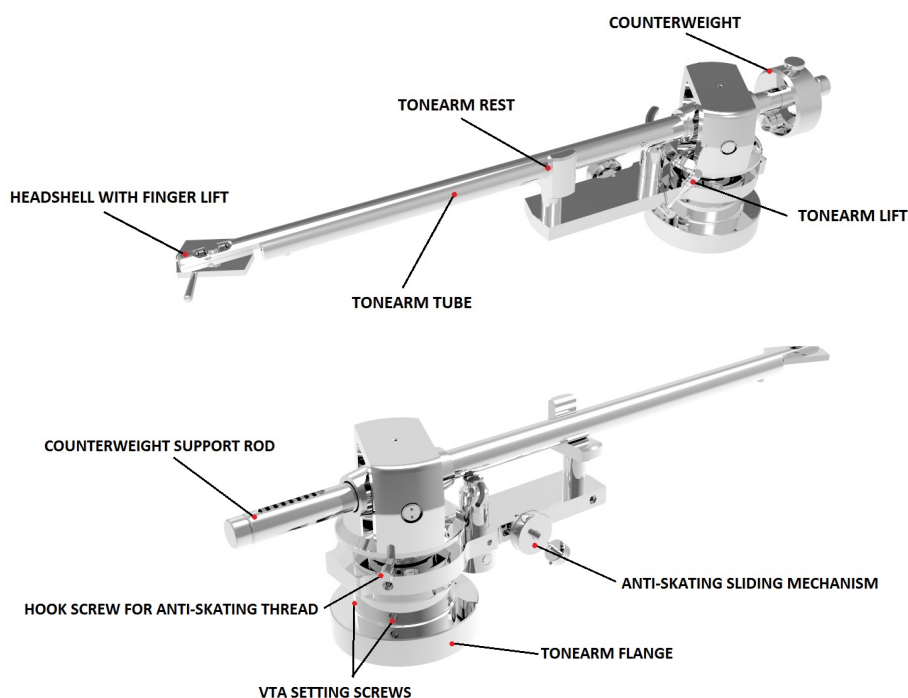
Right position – full LED back light

1.5.5 Output connection



Connect the tonearm cable provided with the accessories to the RCA tonearm output that is located at the rear of the turntable, behind the tonearm. Connect a grounding cable on the earth connection screw.

1.5.6 Tonearm setting



1.5.7 Cartridge installation

Install the cartridge into the aluminium head shell, using the appropriate hardware included with your cartridge.

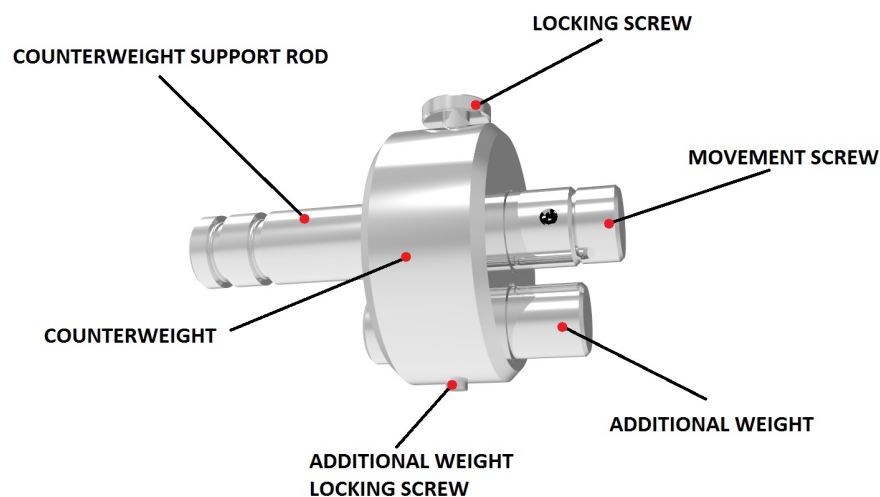
Connect the cartridge as indicated below:

- **White:** Left channel L+
- **Red:** Right channel R+
- **Green:** Right channel R-
- **Blue:** Left channel L-

If unfamiliar with cartridge setups, please refer to your dealer.

1.5.8 Counterweight assembly

The counterweight has two separate main parts:

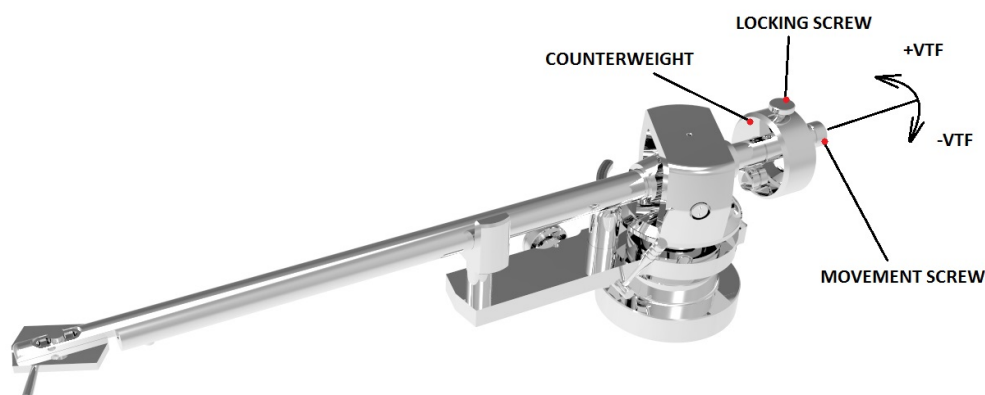


The first part is the counterweight itself. The second part is an additional insert that enables optimal balancing of heavier cartridges.

The counterweight without the additional insert can balance cartridges from 5 to 8 g. The weight of the counterweight itself is 104 g.

The counterweight with the additional insert can balance cartridges from 8 to 16 g. The weight of the counterweight with the additional insert is 124 g.

1.5.9 Vertical Tracking Force setting (VTF)



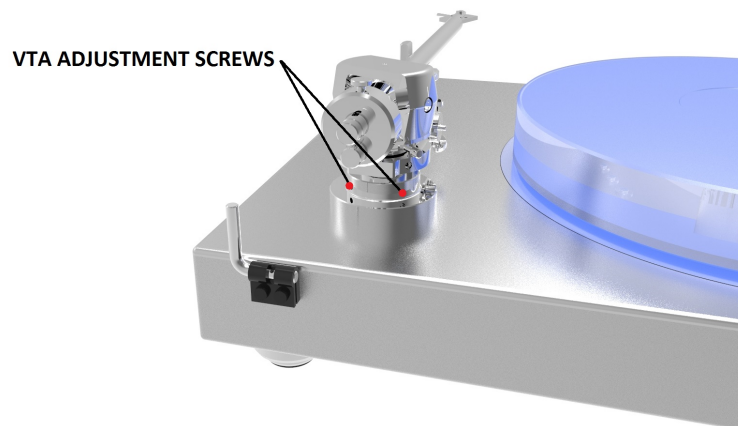
Before setting the **Vertical Tracking Force (VTF)**, confirm the exact weight of your cartridge. Depending on your cartridge weight, determine whether to use the counterweight with or without the additional insert, in accordance with the specifications above.

Pushing carefully, turn the counterweight onto the rear end of the counterweight support rod as shown in the illustration above. Place a stylus pressure gauge (not supplied) onto the platter. To set the required VTF, lower the tonearm lift lever as indicated in the illustration and place the tip of the stylus on the pressure gauge.

As viewed from the head shell, turning the movement screw counterclockwise (closer towards the tonearm) increases the VTF, turning it clockwise (away from the tonearm) reduces the VTF. Turn the counterweight appropriately until the VTF shown on the pressure gauge matches your cartridge's recommended vertical tracking force specifications.

When the VTF is set for a required value, lock the counterweight by its locking screw. Please make sure to lock the additional weight if used.

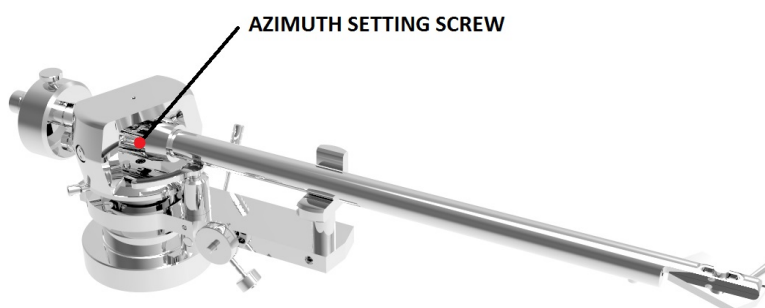
1.5.10 Vertical Tracking Angle setting (VTA)



To set the **Vertical Tracking Angle (VTA)**, first put a record (VTF) on the platter. When the needle is lowered into the record groove, the tube of the tonearm should be parallel to the surface of the record. If it is not, loosen both hexagonal screws in the tonearm base, just enough to allow vertical movement of the arm pillar without force, and slide the arm up or down until it is parallel.

Carefully and evenly re-tighten the hexagon screws without applying excessive force (which may deform the arm pillar).

1.5.11 Azimuth setting

**CAUTION**

Do not remove the **Azimuth setting screw** completely!

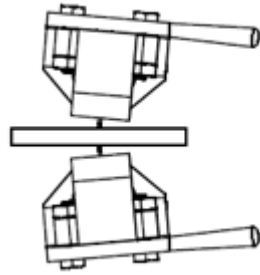
The cartridge needle must be perpendicular to the record in order to trace the groove wall modulations correctly.

The azimuth (angle) is precisely set by the factory. In the event you need to modify this setting, please follow the instructions below.

Loosen the small **Azimuth setting screw** using the 1.5 mm hexagonal allen key.

Loosen the screw just enough to be able to gently rotate the arm tube and set the azimuth to the correct position. The correct position can be checked from the front view, preferably with the needle placed on a mirror placed on the platter. Once the azimuth setting is correct, gently re-tighten the **Azimuth setting screw**.

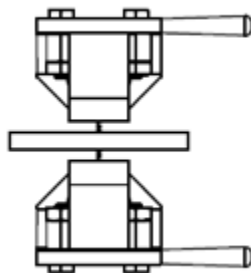
Examples of incorrect and correct azimuth setups:



FALSE: Too much left angle



FALSE: Too much right angle



CORRECT: 100% perpendicular to the record.

1.5.12 Anti-skating assembly and adjustment

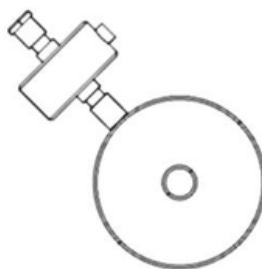
CAUTION

Be careful when handling the anti-skating thread in order to avoid damaging it.

The anti-skating mechanism is shipped partially disassembled to avoid damage during transport. For correct installation, please follow the steps below.

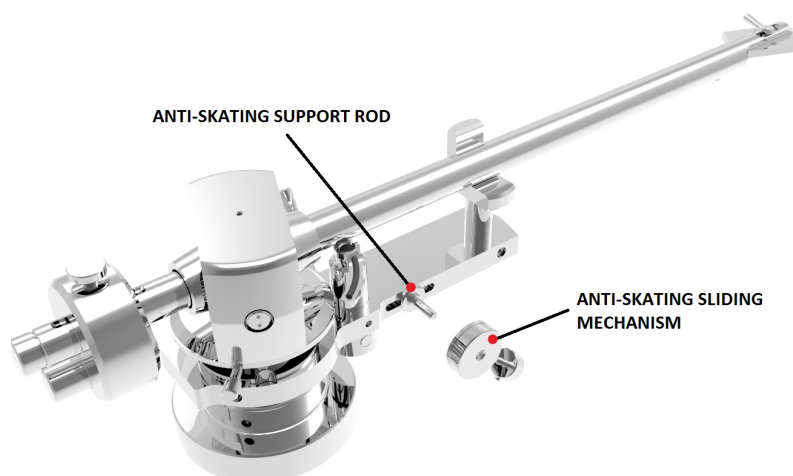
Step 1

Prepare the following parts supplied from the accessories bag: Anti-skating sliding mechanism with anti-skating weight and thread for mounting on the tonearm.



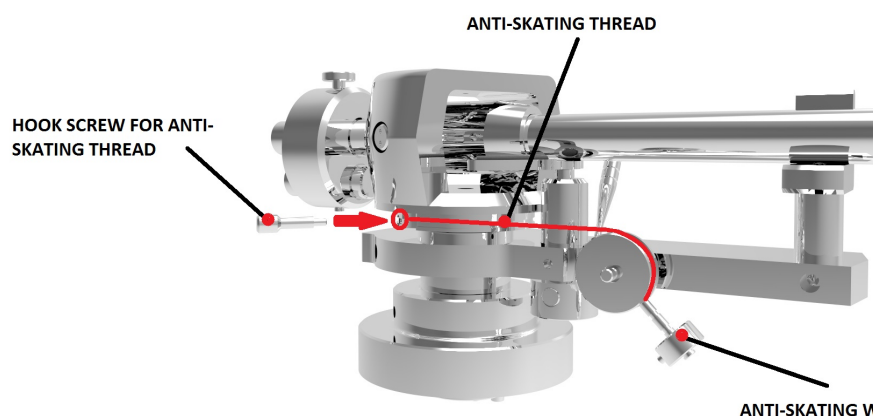
Step 2

Put the anti-skating sliding mechanism on the end of the anti-skating support rod.



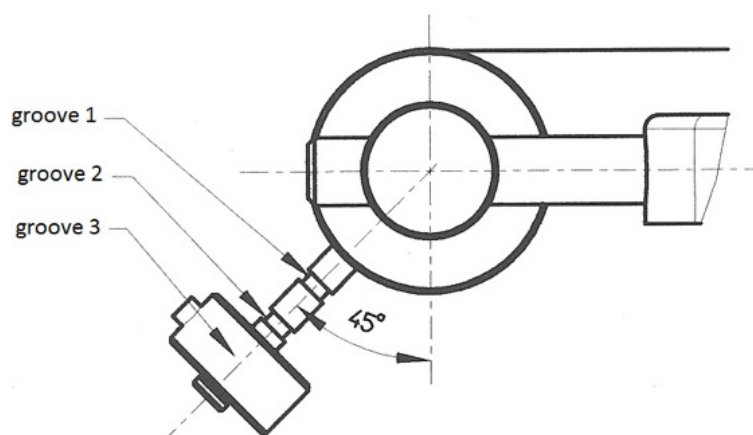
Step 3

The anti-skating sliding mechanism is supplied with a pre-mounted anti-skating weight and anti-skating thread. Put the eye of the anti-skating thread around the hole for the **HOOK SCREW** and screw the **HOOK SCREW** into the tonearm through the eye of the anti-skating thread as shown in the illustration below.



Step 4

Anti-skating force adjustment



Adjust the anti-skating force by positioning the weight on the appropriate groove of the anti-skating sliding mechanism. Anti-skating down force should be adjusted in correspondence with the tonearm down force as follows:

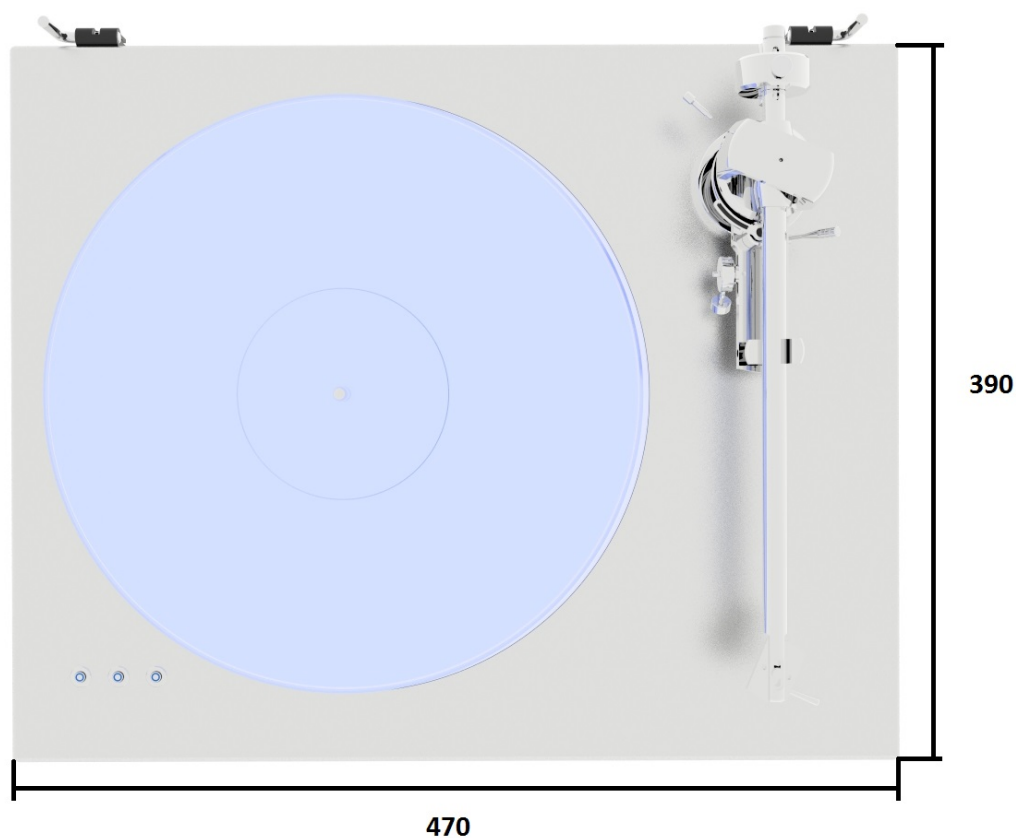
Tonearm Downforce	Anti-Skating Groove
Lower than 13 mN or 1.3 g	1st groove from bearing
14-18 mN or 1.3- 1.8 g	2nd groove from bearing
19-25mN or 1.9- 2.5 g	3rd groove from bearing

CHAPTER

2

Appendix

2.1 Technical specifications



Nominal speed	33/45 rpm, electronic speed change (micro-processor controlled)
Speed variance	33rpm: $\pm < 0.12\%$, 45rpm: $\pm < 0.10\%$
Wow and flutter	33rpm: $\pm < 0.10\%$, 45rpm: $\pm < 0.09\%$
Signal to noise	S/N Ratio: -72 dB
Downforce range	0-35mN 0 - 3.5 grams
Supplied counterweight system	Counterweight 104 g without additional insert > for cartridges 5 – 8 g Counterweight with additional insert 123 g > for cartridges 8 – 16 g
Effective tone-arm mass	15 g
Head-shell	0,5" (12,7mm) standard
Mounting distance	238mm (platter – tonearm base)
Effective tone-arm length	254 mm
Overhang	16 mm
Power consumption	5 W max/ 0.3W standby

Voltage	Universal switch mode power supply 15 V DC/ 1.6 A (100-240 V AC, 47 - 63Hz)
Dimensions (W x H x D)	470 x 390 x 175mm
Weight (without box)	12 kg (turntable) 5 kg (platter)
Weight (with box)	13 kg

2.2 Accessories list

- Instructions for use
- Power supply 15V DC / 1.6 A
- Anti-skating weight
- Single adaptor
- RCA output cable
- White cotton gloves
- Cloth
- Allen keys (1.5,mm, 2mm, 2.5mm)
- Counterweight
- Counterweight insert
- 2 x Anti-skating thread
- Anti-skating sliding mechanism

2.3 Troubleshooting

The platter doesn't turn although the unit is switched on

- The unit is not connected to the mains power supply (the building's electrical system).
- No mains power is being delivered at the socket.
- The drive belt is not fitted properly or has slipped off.

No signal through one or both channels

- No signal contact from the cartridge to the internal tonearm wiring; or from that to the arm lead; or from that to the phono box; or between that and the amplifier. This could be due to a faulty plug, broken wire or loose solder joint in the plug/socket connection.
- Phono input not selected at amplifier.
- Amplifier not switched on.
- Amplifier or speakers are defective or muted.
- No connection to the loudspeakers

Strong hum on phono input

- No ground connection from cartridge or arm or arm cable to amplifier, or ground loop.

Distorted or inconsistent sound from one or both channels:

- Turntable is connected to wrong input of amplifier, or MM/MC switch is incorrectly set. Needle or cantilever damaged. Wrong rpm; drive belt overstretched or dirty; platter bearing needs lubrication or is dirty or damaged.

2.4 Service

Should you encounter a problem that you are not able to identify or alleviate despite the above information, please contact your dealer for further advice. Only when the problem cannot be resolved should the unit be sent to the responsible distributor in your country.

Guarantee repairs will only be effected if the unit is returned in appropriate packaging. For this reason we recommend keeping the original packaging.

Never return a turntable without making sure that it is properly disassembled and correctly packaged in the original packaging according to the supplied diagram. Please: Remove the feet, counterweight, platter, cartridge and belt and pack them separately. Fit the cartridge protection cap. Insert the transport lock for the tonearm prior to carefully packaging the turntable.

2.5 Warranty

The manufacturer accepts no responsibility for damage caused by failing to adhere to these instructions for use and/or by transportation without the original packaging. Modification or change to any part of the product by unauthorized persons releases the manufacturer from any liability over and above the lawful rights of the customer.

The information above was correct at the time of going to press. The manufacturer reserves the right to make changes to the technical specifications without prior notice as deemed necessary to uphold the ongoing process of technical development.

This guide was produced by:

AVM Audio Video Manufaktur GmbH.

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August 15th 2018.