



TONEARM

KRONOSCOPE RS & DISCOVERY RS

ASSEMBLY INSTRUCTIONS

THANK YOU

for purchasing the KRONOSCOPE RS & DISCOVERY RS Tonearm.

The KRONOSCOPE RS and DISCOVERY RS Tonearms have been designed to deliver exceptional tracking precision, mechanical stability, and musical transparency. Our unique, patent-protected resonance suppression technology minimizes unwanted resonance while preserving the finest details of the recorded performance, allowing your analog system to perform at its highest level.

Each RS Tonearm is individually assembled, adjusted, and tested at the KRONOS factory to ensure years of reliable operation and outstanding musical enjoyment.

It is important that you take the time to read this manual before installing and adjusting your RS Tonearm. Following the recommended installation procedure carefully will ensure optimum performance and allow the tonearm to achieve its full potential.

Proper cartridge alignment, tracking force, anti-skating, and Vertical Tracking Angle (VTA) adjustment are essential for obtaining the best possible playback performance. Taking the time to complete these adjustments accurately will maximize musical performance while helping to protect your valuable record collection.

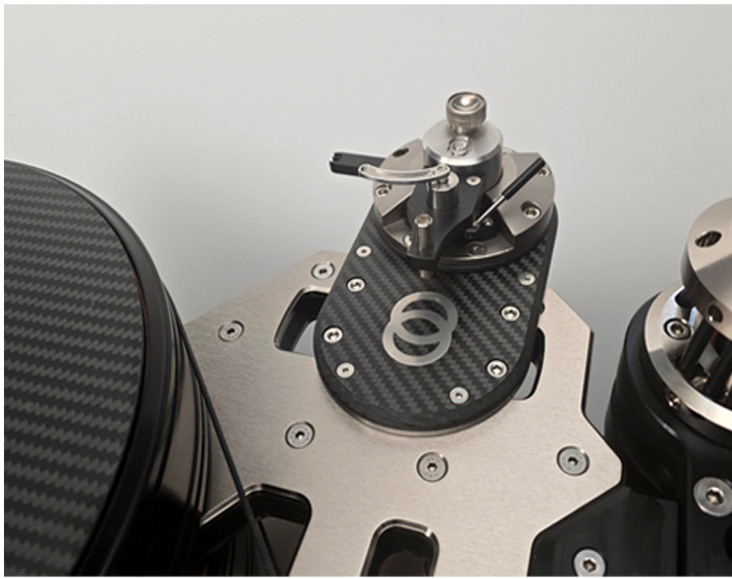
Designed for precision adjustment and long-term stability, the RS Tonearm requires only minimal maintenance once it has been correctly installed and calibrated.

Thank you for choosing KRONOS Audio.

Enjoy.

A handwritten signature in black ink, reading "Louis Desjardins". The signature is fluid and cursive, with a large initial "L" and "D".

Louis Desjardins
Designer and CEO of Kronos Audio Products inc.

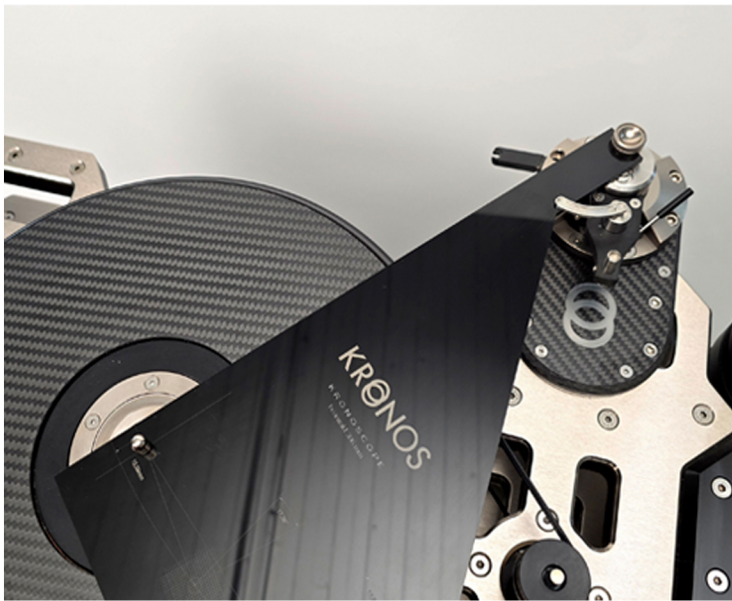


1

Install the Tonearm Base

Install the tonearm base onto the turntable using the mounting screws. Leave the screws slightly loose until the alignment has been completed.

Do not fully tighten the mounting screws at this stage.



2

Set the Pivot Distance

Using the supplied alignment protractor, slide the mounting plate until the correct pivot-to-spindle distance is achieved.

Move the tonearm lift if required to allow the protractor to sit correctly.



3

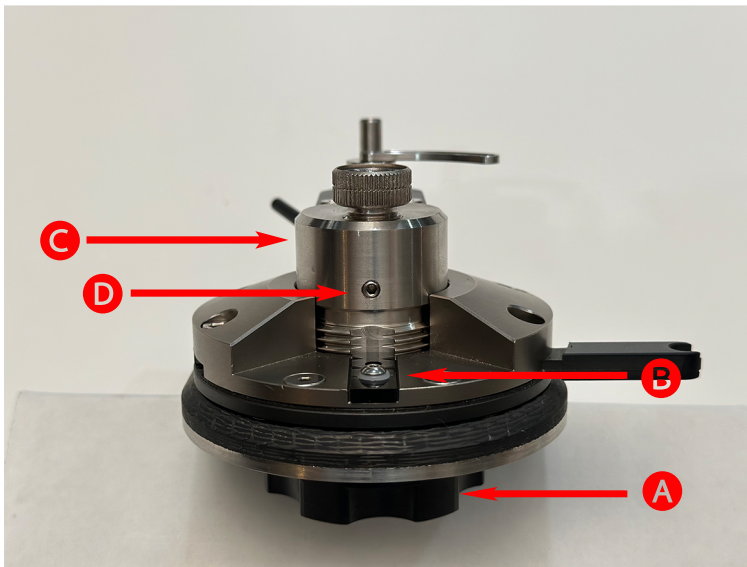
Tighten the Mounting Screws

Discovery RS:

Tighten the mounting screws using the supplied torque screwdriver (preset to 0.16 N·m).

Kronoscope RS:

Lightly tighten the mounting screws using a 5/32 in Allen key.



4

Set the Coarse VTA

Loosen the large thumb nut **(A)** beneath the tonearm base.

Slide back the small locking key **(B)** to unlock the bearing cup assembly.

Rotate the large cylinder **(C)** until the desired coarse VTA height is reached.

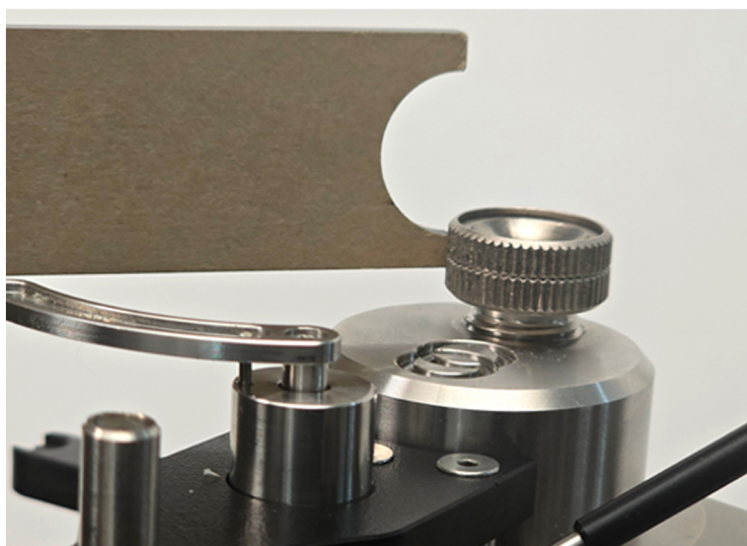


5

Set the Bearing Cup Height

Place the supplied alignment protractor flat on the platter.

Using the bottom edge of the protractor as a straight edge, adjust the bearing cup until it is level with the top of the platter surface.



6

Lock the VTA Adjustment

Ensure the bottom edge of the protractor aligns with the center reference line on the bearing cup.

Slide the locking key back into position and lightly tighten the rear locking screw **(D)** to secure the adjustment.

7

Install the Wire Guide

Install the wire guide into the threaded hole in the tonearm base.

Holding the wire guide as shown in the photo

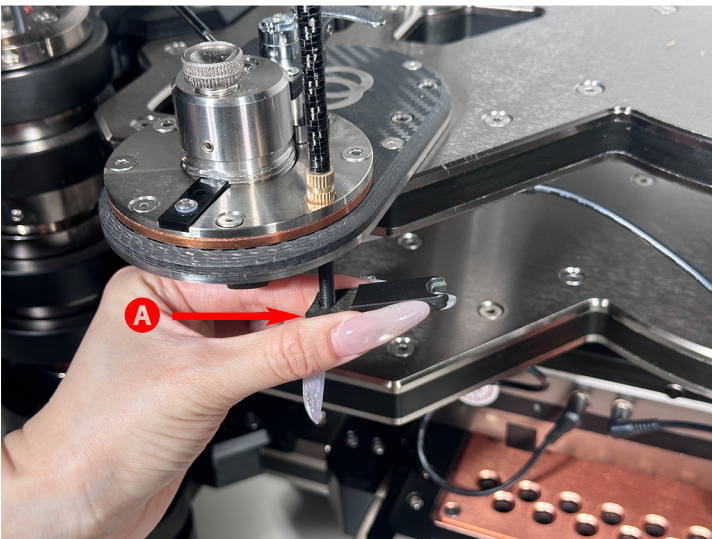
Thread it **fully into** place, then rotate it until the upper guide is centered with the bearing cup.

Do not over-tighten the wire guide.
Lightly secure it using the small thumb screw.



If you are installing Kronoscope RS Tonearm

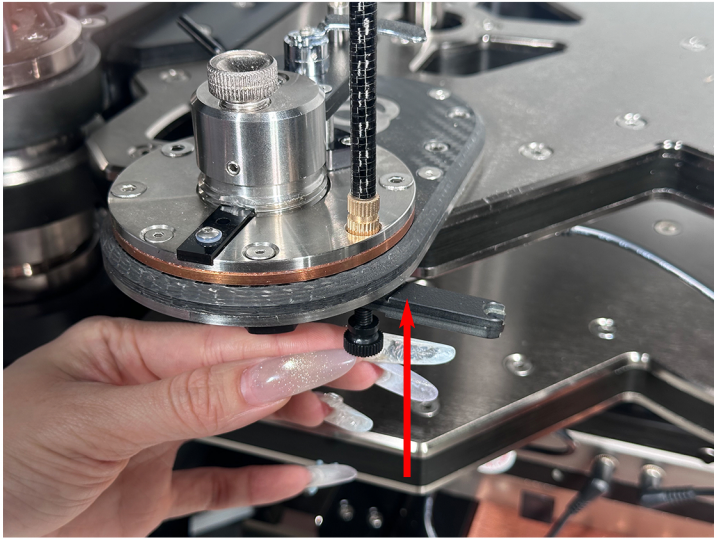
The Kronoscope RS requires the following **two additional** installation steps after the wire guide has been installed.



Step 7.1

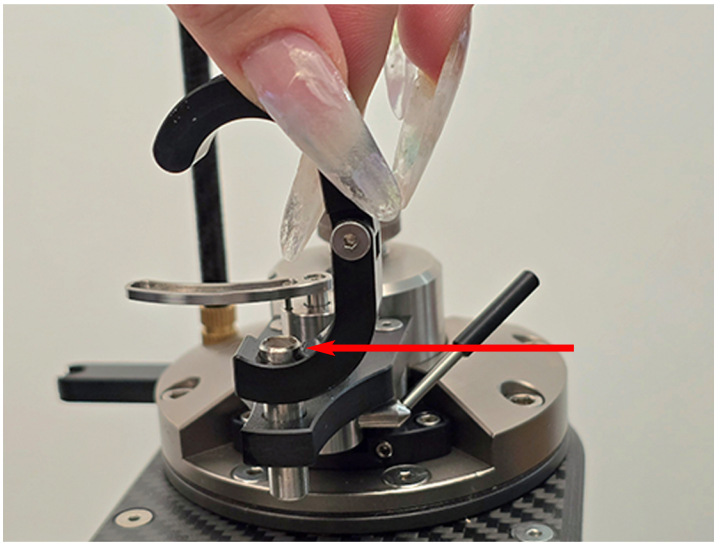
After threading the wire guide into place, install the wire holder (A) beneath the tonearm base.

Orient the wire holder so that **the long arm** faces the direction shown in the illustration.



Step 7.2

Insert the supplied retaining screw from the right side of the wire holder and tighten it until the wire holder is securely fastened.



8

Install the Tonearm Rest

Press the tonearm rest onto the magnetic mounting pin.
Apply firm, even pressure until it is fully seated.

Note: The magnetic pin should remain visible above the tonearm rest, as shown.



9

Install the Cartridge

Install the cartridge onto the tonearm using the supplied brass mounting screws.

Route the tonearm wire through the wire guides, allowing it to form a gentle loop.

Important:

Avoid sharp bends in the tonearm wire, as excessive bending may damage the conductors.



10

Align the Cartridge

Reinstall the supplied alignment protractor.

Adjust the cartridge until the stylus follows the **ARC** line and the cantilever is **parallel** with the alignment grid.

This sets the correct effective length and cartridge alignment.



11

Connect the Tonearm Cable

Connect the tonearm cable to the supplied connector box.

Alternatively, the tonearm cable can also be connected directly to KRONOS phono preamplifier.

12

Connect the Ground Cable

Connect the supplied ground cable to the 1/8 in (3.5 mm) ground jack on the underside of the tonearm base.

Discovery TT:

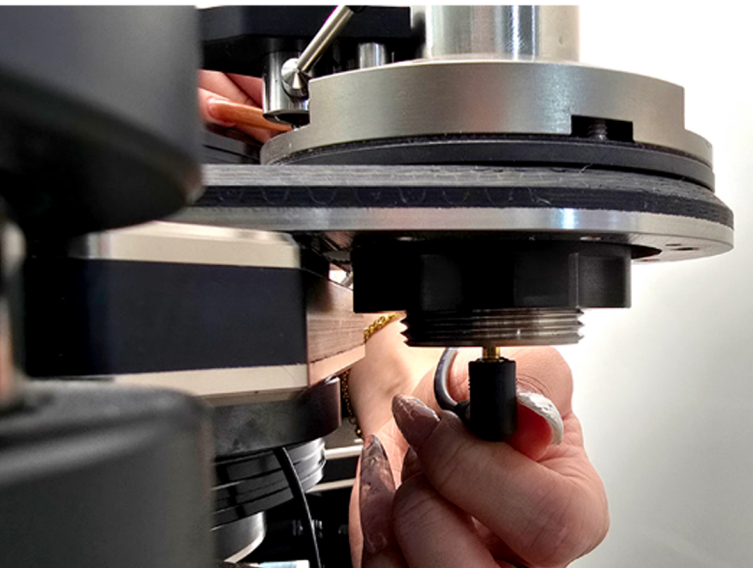
Connect the other end to the ground terminal beneath the rear of the top plinth.

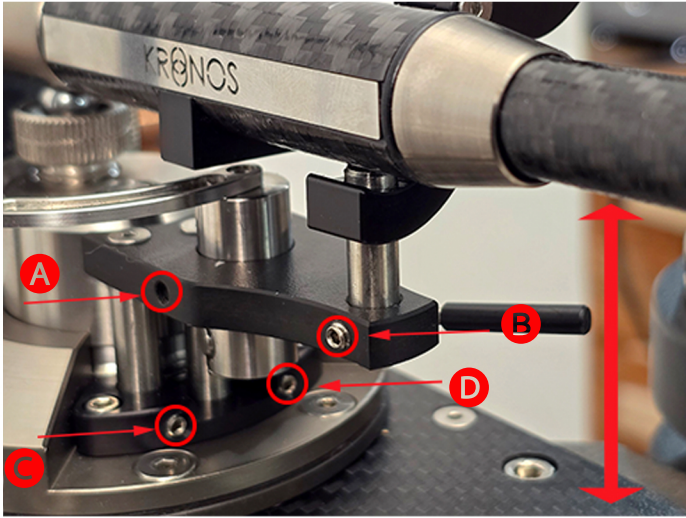
Perpetual:

Connect the other end to either of the two ground jacks located behind the turntable base.

Kronos Pro & Sparta:

Use the supplied longer ground cable and connect the other end to the KRONOS power supply.





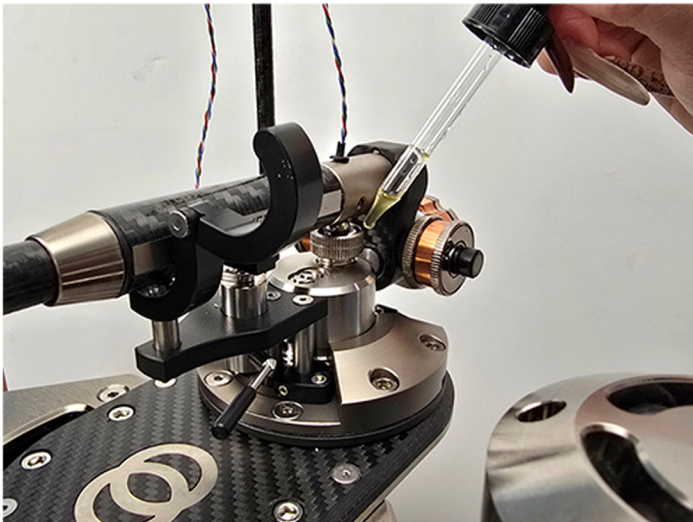
13

Adjust the Hydraulic Lift

Adjust the height of the hydraulic lift and the tonearm rest as required.

The two side set screws (**A, B**) allow independent height adjustment.

The two front set screws (**C, D**) adjust the height of the entire lift assembly.



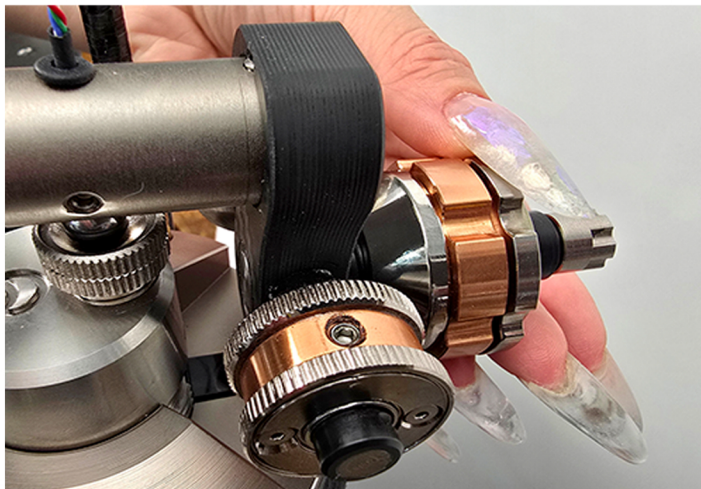
14

Lubricate the Bearing Cup

Apply **one drop** of the supplied tonearm bearing oil into the bearing cup.

**Do not overfill the bearing cup.
One drop is sufficient.**

the only recommended oil is TRI-FLOW (supplied)



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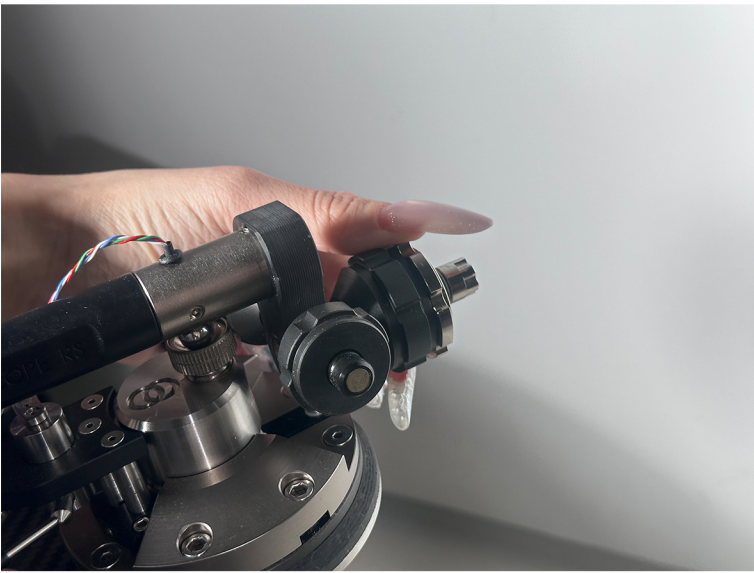
Set the Tracking Force (VTF)

Discovery RS:

Adjust the tracking force using the large counterweight at the rear of the tonearm.

Use the supplied auxiliary weights when installing heavier cartridges.

The fine adjustment mechanism can be used for precise VTF adjustment.



Kronoscope RS

Adjust the tracking force using the rear counterweight.

Rotate the counterweight to obtain the desired tracking force, then use the fine adjustment mechanism for precise VTF adjustment.

Use the supplied auxiliary weights when installing heavier cartridges, if required.



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Verify the Tracking Force

Measure the tracking force using a stylus force gauge.

Lower the stylus onto the gauge manually. **Do not use the hydraulic lift**, as this may result in an inaccurate reading.



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Adjust the Azimuth

Discovery RS

Adjust the azimuth using the side counterweights.

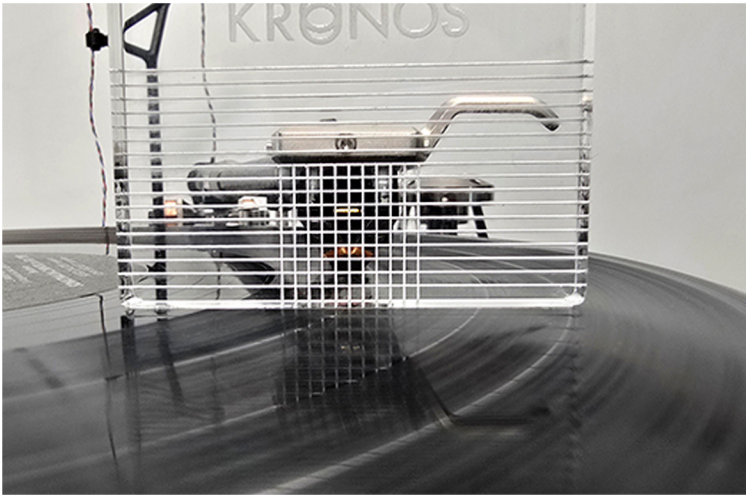
Begin with the counterweight closest to the tonearm and adjust **only one** of the two counterweights until the cartridge is level.



Kronoscope RS

Adjust the azimuth by rotating the side counterweight assembly until the cartridge is level.

Make small adjustments and verify cartridge alignment after each adjustment.

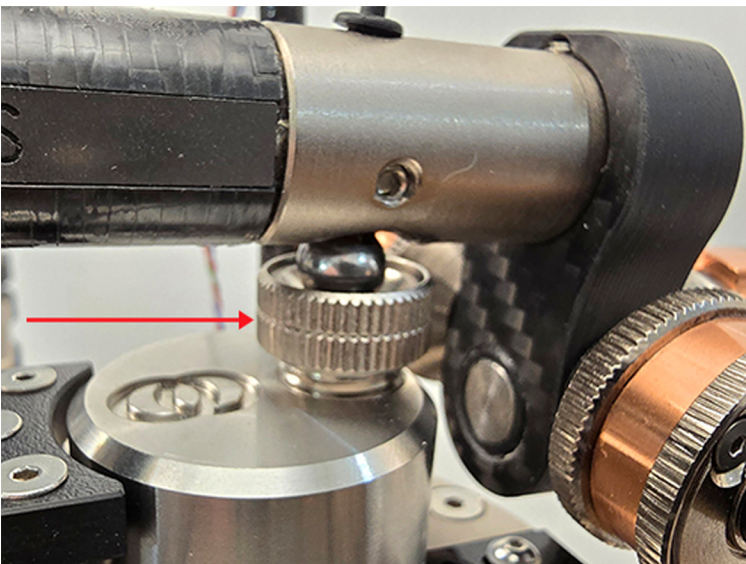


18

Verify the Azimuth

Use the supplied acrylic alignment block to verify the azimuth adjustment.

Fine-tune the counterweight if necessary until the cartridge is perfectly vertical.



19

Adjust the Fine VTA

Adjust the VTA by rotating the bearing cup.

Rotate the bearing cup clockwise or counterclockwise until the desired VTA is achieved.

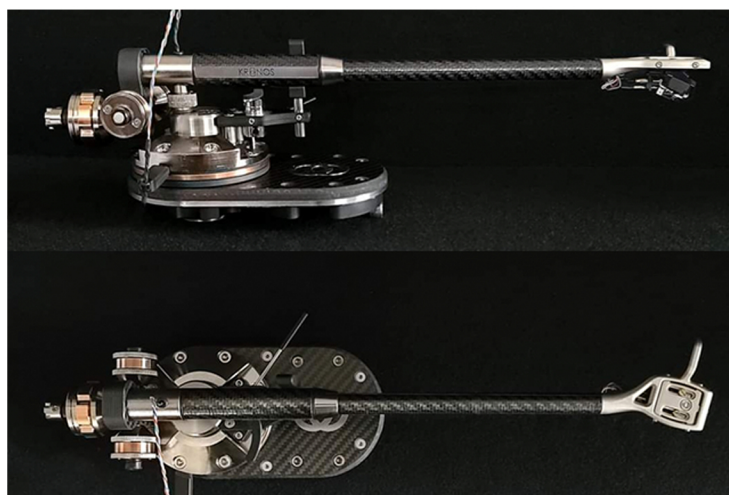
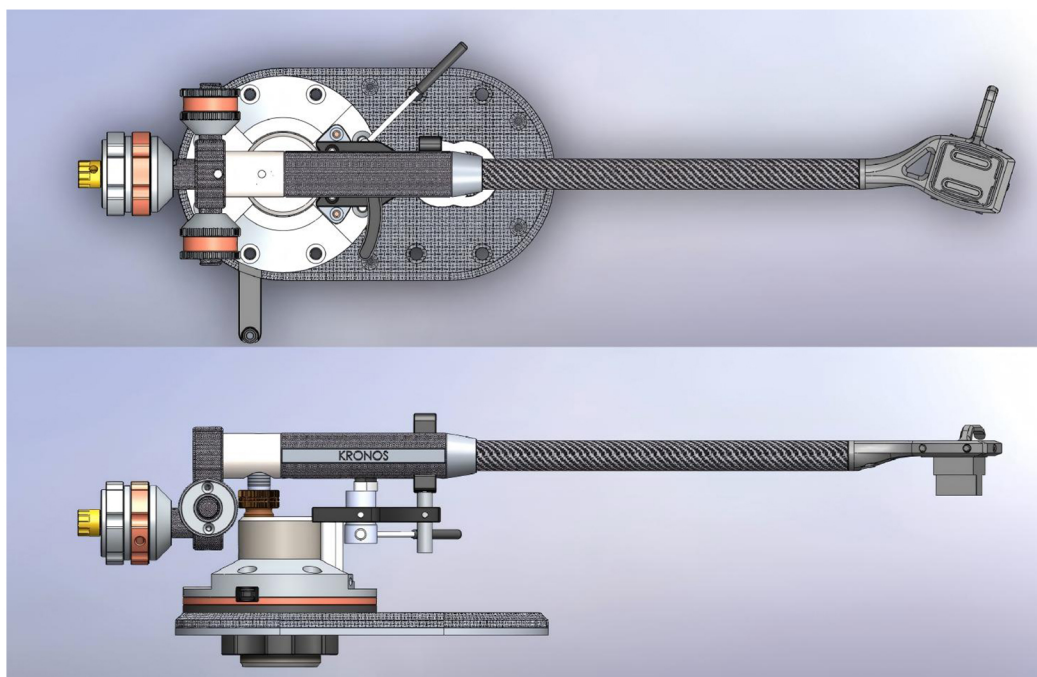


Fine-Tune the VTA

Using the supplied acrylic alignment block, adjust the tonearm until the bottom of the headshell is parallel with the record surface.

Once parallel, **counter clockwise** rotate the bearing cup approximately **one full turn** to establish the recommended starting VTA.

Use these settings as a starting point, then fine-tune VTA and VTF by ear to achieve the best musical performance.



Technical Specifications

Overview:

The Discovery and Kronoscope RS Tonearm are 12 inch (306 mm effective length) unipivot tonearm featuring KRONOS Resonance Suppressor (RS) technology. Designed for maximum mechanical stability and resonance control, it combines precision engineering with advanced composite materials to deliver exceptional tracking performance and musical accuracy.

Unipivot bearing:

The RS Tonearm utilizes a precision ball-and-cup unipivot bearing system. Both the bearing point and receiver cup are height adjustable, allowing the bearing contact point to align with the stylus contact point for improved azimuth stability and reduced oscillation.

Azimuth adjustment:

Azimuth is adjusted using a pair of outrigger counterweights. The self-locking screw mechanism provides precise and repeatable adjustment while maintaining long-term stability.

VTF adjustment:

Tracking force is adjusted using interchangeable counterweight combinations. Positioning the counterweight as close as possible to the pivot minimizes rotational inertia and improves dynamic tracking.

Decoupled Headshell:

The proprietary two-piece ceramic / nickel headshell features a mechanically decoupled cartridge mounting plate supported by five adjustable contact points. This design minimizes unwanted energy transfer between the cartridge and headshell.

Composite Wand:

The tonearm wand features a multi-layer concentric composite construction.

DISCOVERY RS: Four-layer composite structure

KRONOSCOPE RS: Three-layer composite structure

Each layer is bonded using carefully tuned flexible adhesives to suppress resonance while preserving rigidity and transient response.

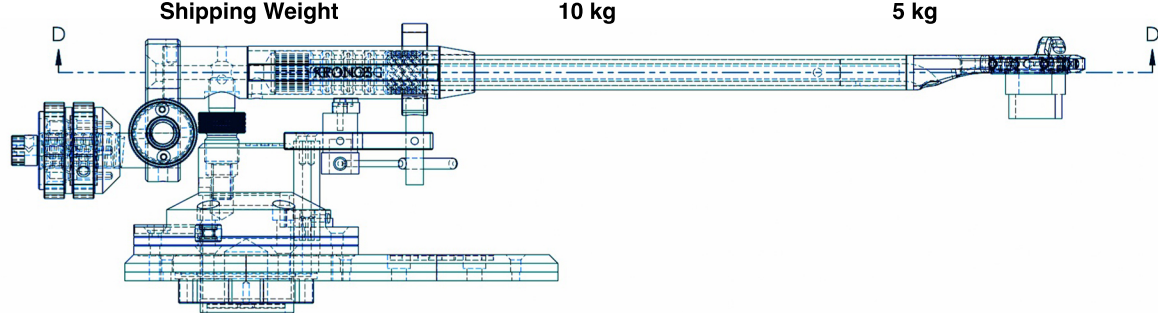
Resonance Suppressor :

RS Technology mechanically decouples the tonearm wand from the pivot and counterweight assembly. Internal resonance paths are interrupted to reduce standing waves and minimize energy storage throughout the arm.

Tuned Tonearm Base:

The arm base combines multiple constrained-layer materials to optimize vibration control between the tonearm and turntable. Full adjustment is provided for VTA, azimuth, and overall alignment.

SPECIFICATION	DISCOEVRY RS	KRONOSCOPE
Effective Length	306 mm	306 mm
Pivot to Spindle	292 mm	292 mm
Effective Mass	Medium	Medium
Overhang	13.2 mm	13.2 mm
Shipping Weight	10 kg	5 kg



KRONOS

TIME FOR MUSIC®

4035, rue Saint-Ambroise, suite 414,
Montreal (Quebec) Canada H4C 2E1
www.kronosaudio.com • info@kronosaudio.com
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