



DISCOVERY

ASSEMBLY INSTRUCTIONS

THANK YOU
for purchasing the Kronos turntable.

The Kronos has been designed to produce the best sound reproduction possible from a vinyl record. It is built without compromise for this single purpose. It is a state-of-the-art hand built instrument. Each Kronos is individually constructed, assembled and tested to ensure years of musical enjoyment.

It is important that you take the time to read this manual before assembling, installing and operating your Kronos. Assembly is simple, provided you follow all the necessary steps. Leveling of the turntable is particularly important.

Once this is done, you will find the Kronos will not require frequent adjustments as it is a very stable platform. Of course, mandatory care must be given to setting up the tone arm and cartridge, as in any other turntable. Make sure you use a quality protractor to properly align the cartridge.

Please keep in mind that your Kronos will need to settle for its first few days of operation. The self-learning speed guidance system will calibrate itself with use. After a few hours it will attain speed more quickly with a minimum of fluctuation. The micro-processor controlled speed adjustments are deliberately done in a slow and deliberate manner. This use of minimal power reduces motor induced vibration and hence optimum musical enjoyment.

Enjoy.

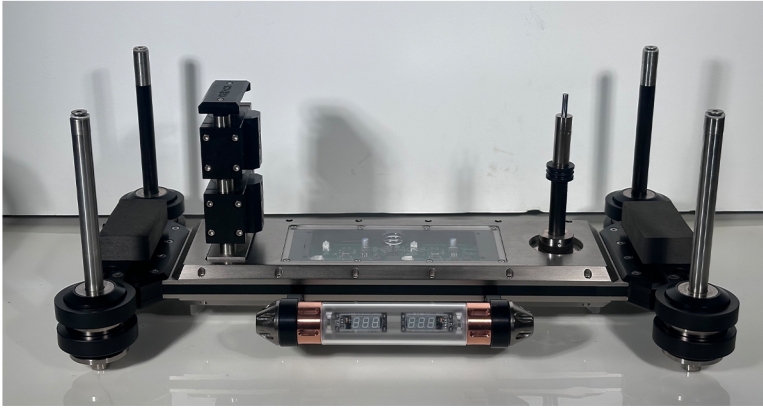
Louis Desjardins
Designer and CEO of Kronos Audio Products inc.

1

Install the DISCOVERY base on your equipment rack.

Ensure the unit is positioned on a stable and level surface before proceeding

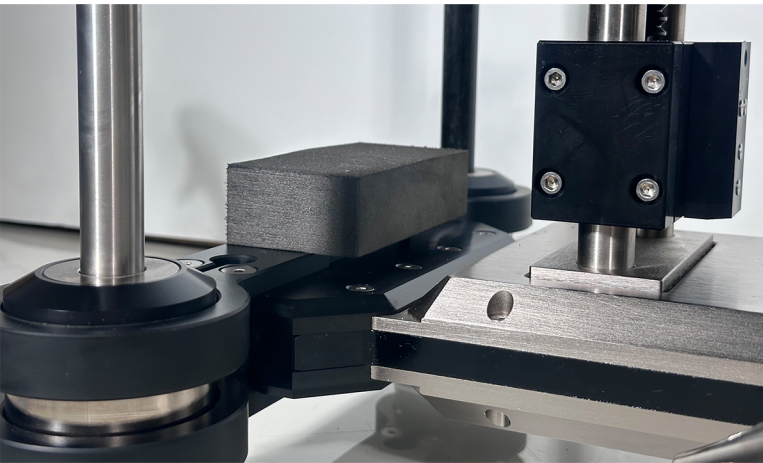
If you are installing DISCOVERY along with SCPS-D, please refer to APPENDIX A, INSTALLING SCPS-D



2

Please make sure the spacer foam is in place over the base of the DISCOVERY.

The spacer foam must remain in position until the upper assembly is installed.



3

Connect the 6 PIN control cable to the rear panel of the DISCOVERY.

please make sure the cable connector properly **CLICK-IN** before proceeding.

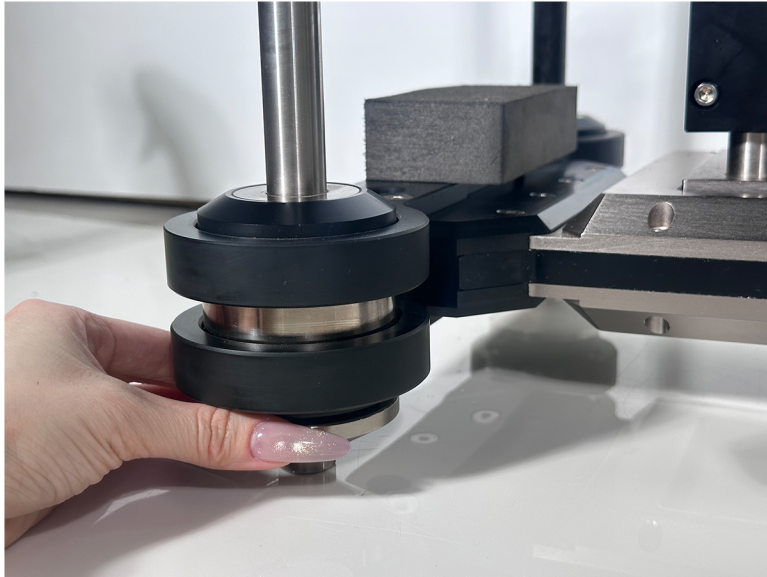


4

Connect 2 grounding cables to the rear panel of the DISCOVERY.

The other end of these cables will later connect to the two upper plinths.

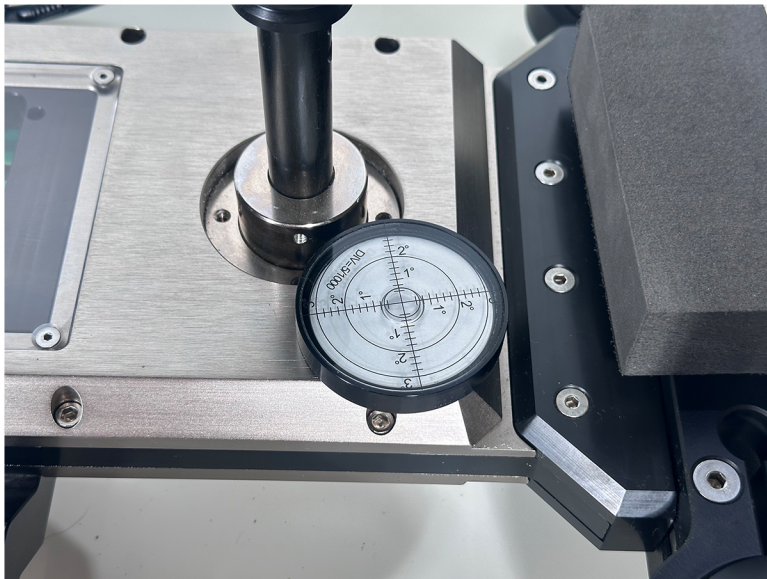




5

Adjust the level of the DISCOVERY base by unscrewing/screwing the 4 adjustable feet.

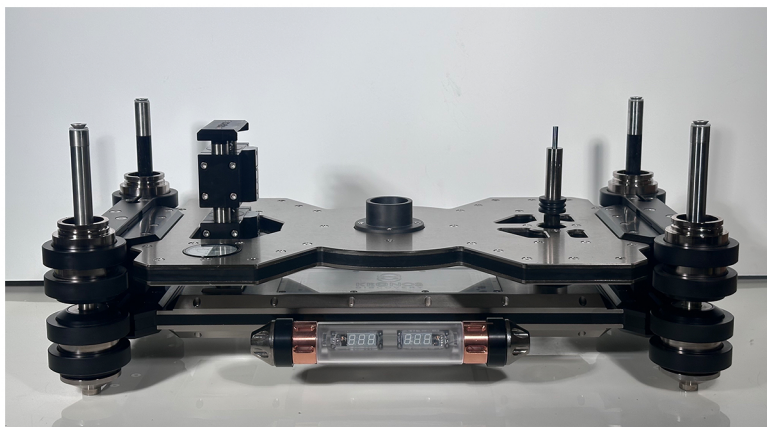
Rotate the feet as required until the base is approximately level.



6

Use the supplied precision level to verify the DISCOVERY base is perfectly level.

Check the level in multiple positions and make further adjustments to the feet if necessary.



7

Install the bottom plinth onto the DISCOVERY base.

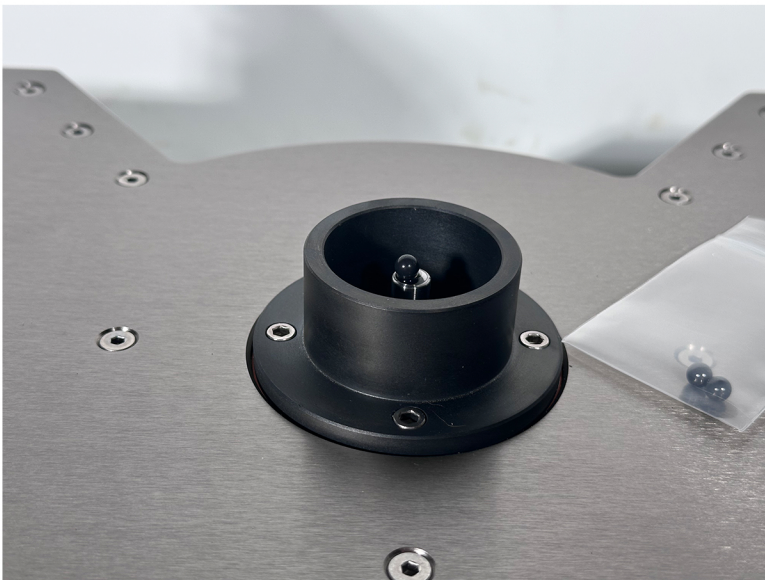
Lower the bottom plinth **carefully** and evenly into position.



8

Add 8 ml of BEARING OIL to the bearing cup well.

Please ensure a small amount of oil is also applied to the bearing shaft.



9

Place the bearing ball on top of the bearing shaft.

PLEASE MAKE SURE THE BALL DOES NOT FALL OFF THE SHAFT.



10

Install the bottom platter onto the bearing shaft.

Lower the bottom platter carefully into position and PLEASE MAKE SURE THE PLATTER IS FULLY SEATED ON THE SHAFT.

PLEASE MAKE SURE THE BALL DOES NOT FALL OFF THE SHAFT.

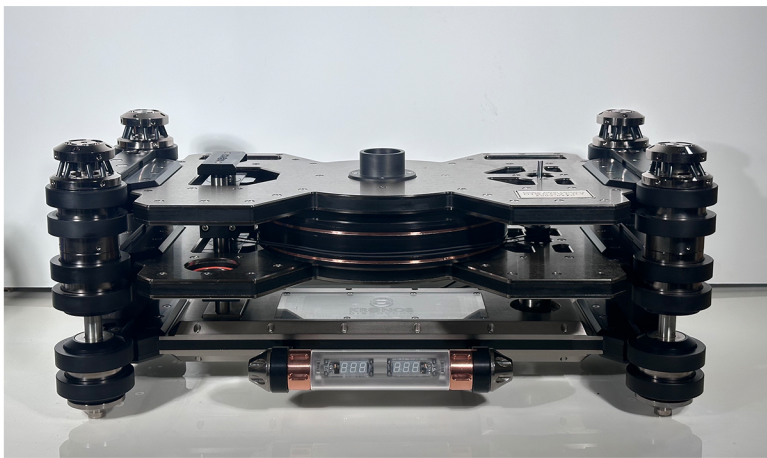


11

Install 2 belts onto the motor pulleys and the passive pulleys.

Please make sure the belts are properly seated in the pulley grooves and **are not twisted or crossed.**

Rotate the platter by hand and verify smooth operation.



12

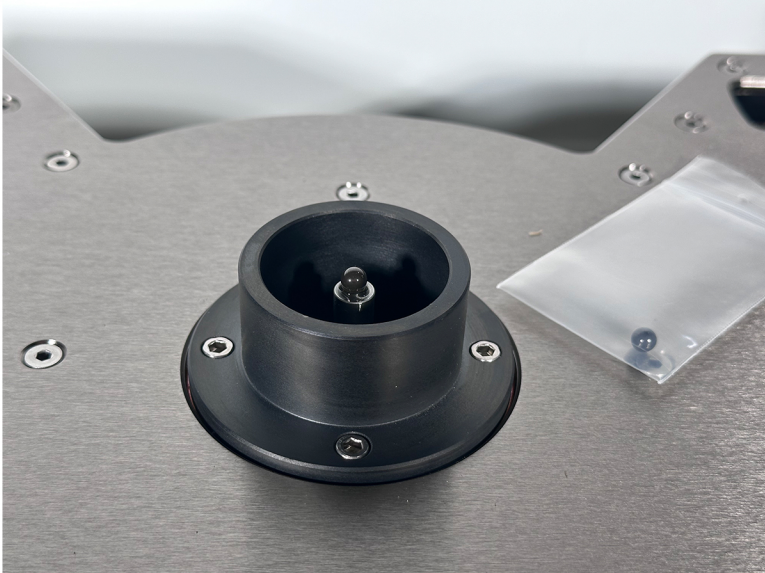
Place the top plinth onto the bottom plinth as shown below.



13

Add 8 ml of BEARING OIL to the bearing cup well.

Please ensure a small amount of oil is also applied to the bearing shaft.



14

Place the bearing ball on top of the bearing shaft.

PLEASE MAKE SURE THE BALL DOES NOT FALL OFF THE SHAFT.

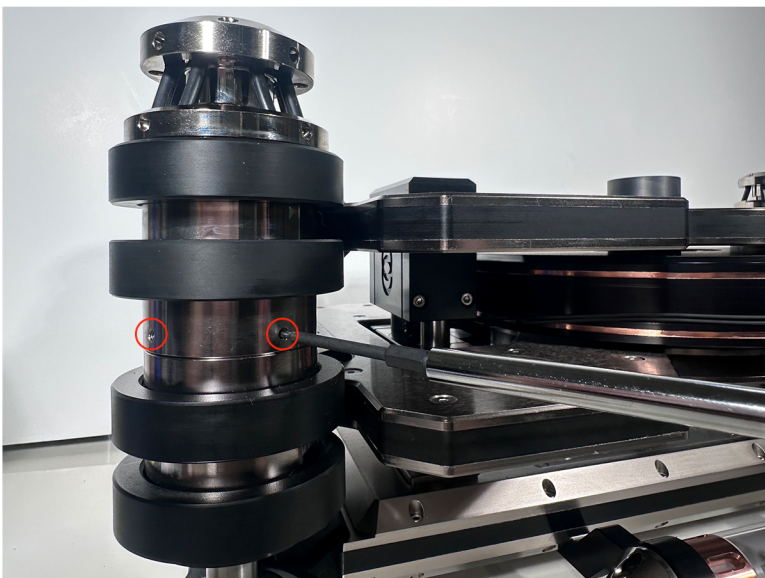


15

Install the top platter onto the bearing shaft.

Lower the top platter carefully into position and **PLEASE MAKE SURE THE PLATTER IS FULLY SEATED ON THE SHAFT.**

PLEASE MAKE SURE THE BALL DOES NOT FALL OFF THE SHAFT.



16

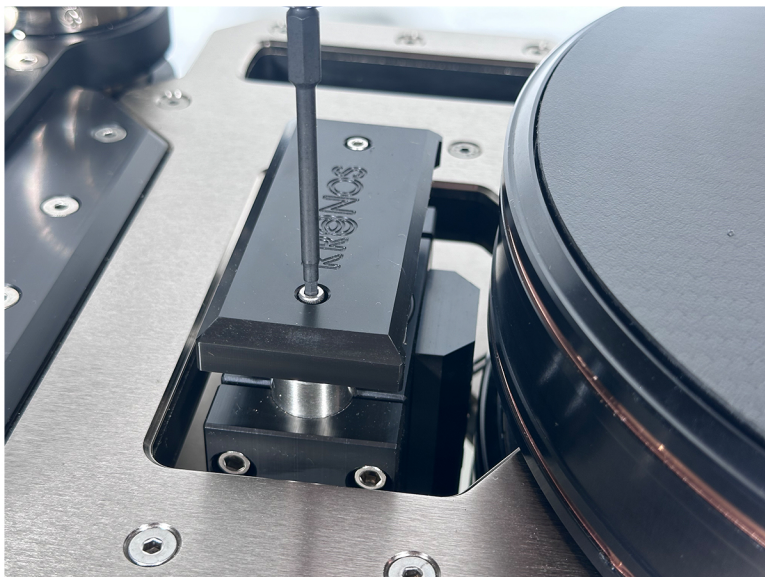
Tighten the 8 set screws on the coupling tubes.

Please ensure all set screws are securely tightened.



17

Remove the foam spacing blocks on the right and left side.



18

Remove the top motor cover.
This will permit you to install the drive belts.



19

Put some vaseline grease (supplied) on the passive pulley shaft and the ceramic washer as per photo.

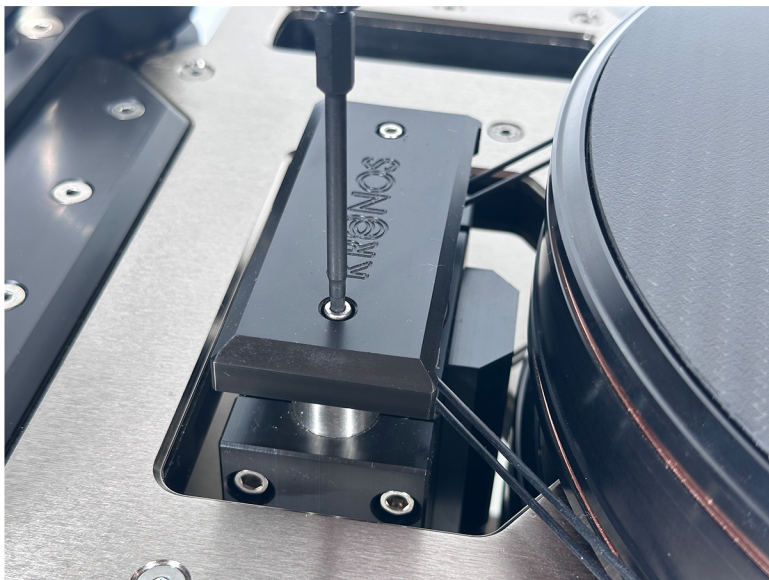
This is a very important step.



20

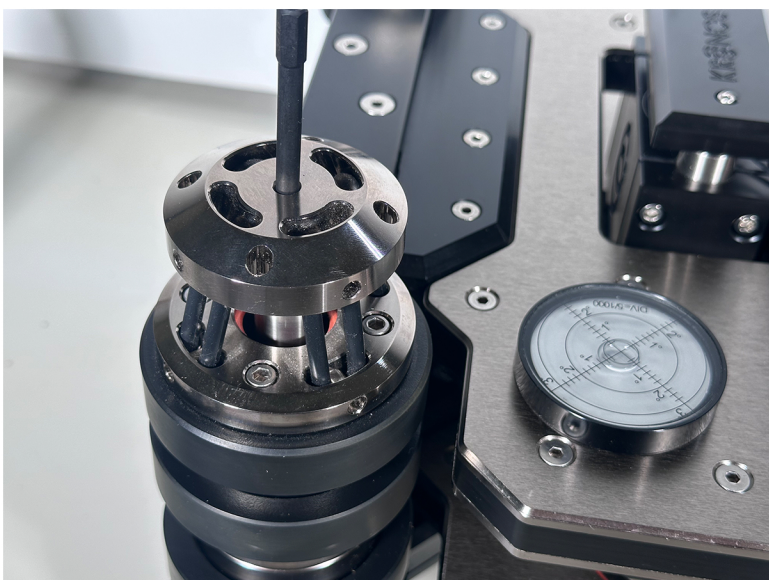
Install 2 drive belts onto the motor pulley and the passive pulley.

Please make sure the belts are properly seated in the pulley grooves and **are not twisted or crossed.**



21

Reinstall the top motor cover.



22

After installing the tonearm, verify that the plinths are level.

If necessary, adjust the suspension using the adjustment screws shown below.



23

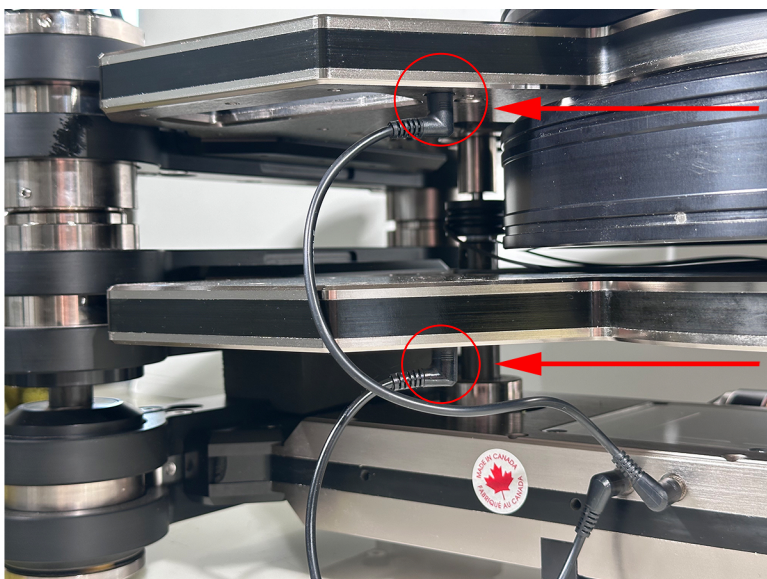
This adjustment was completed at the KRONOS factory. Minimal adjustment should be necessary.



24

Loosen (DO NOT REMOVE) the 6 set screws as shown below.

The screws should remain only lightly tightened, leaving approximately 0.2 mm of clearance.



25

Connect the grounding cables to the top and bottom plinths as shown below.

Please make sure both grounding cables are securely fastened before proceeding.

26

Connect the DC power cable to the appropriate connector.



If NOT using the SCPS-D:

Connect the cable to the **8V** output socket located on the rear panel of the DISCOVERY power supply.



If using the SCPS-D:

Connect the cable to the **20V** output socket located on the rear panel of the DISCOVERY power supply.

TECHNICAL SPECIFICATIONS:

| | |
|-----------------------------|---|
| rotational speed: | 33.3 rpm and 45 rpm |
| tonearm length: | 9 inches to 12 inches |
| dimensions (inches) : | 24.5 in (W) x 15 in (D) x 10.5 in (H) |
| dimensions (cm) : | 62 cm (W) x 38 cm (D) x 27 cm (H) |
| turntable weight : | 120 lbs / 54 kg |
| power supply weight : | 52 lbs / 24 kg |
| SCPS-D weight : | 43 lbs / 20 kg |
| crate dimensions (inches) : | 37 in (W) x 17.5 in (D) x 13 in (H), |
| crate dimensions (cm) : | 94 cm (W) × 44.5 cm (D) × 33 cm (H) |
| shipping weight: | 250 lbs / 113 kg |
| SCPS-D shipping weight: | 48 lbs / 21.5 kg |
| power supply: | dedicated external low-noise linear DC power supply |
| ac voltage input: | 110V or 220V factory set |
| dc voltage output: | 0 to 5 volt, dual mono cpu controlled, factory calibrated |
| drive system: | dual counter-rotating platter architecture |
| motors: | DCX precious metal brushes dc motors (qty 2) |
| motor mounts: | delrin enclosure, height adjustable |
| speed guidance system: | 2 continuous open feedback hall effect |
| sensors type: | 2 optical diode I/O and 2 motor tachymeter |
| speed accuracy: | adaptive closed-loop monitoring system |
| correction cycle: | 60 times / rotation. 0.1% max., 0.05% min. |
| platter type: | composite layers with copper and encapsulated, balanced |
| platter weight: | 17 lbs (7.7 kg) / platter |
| drive: | 2 silicone/viton 2.3 string belts / platter |
| compensation pulley: | teflon and chrome steel bearing |
| lubricant: | petroleum grease |
| service interval: | 3 months (clean and re-grease) |
| main bearings: | dual hydraulic isolated inverted sleeve and ball |
| shaft type: | ground heat-hardened tool steel |
| ball type: | precision ceramic |
| lubricant: | 8 ml variable viscosity synthetic oil |
| service interval: | 5 years (clean and re-oil) |
| suspension: | full floating top suspended |
| elastomers: | 317 o-rings, viton/silicone proprietary mix |

KRONOS

TIME FOR MUSIC®

4035, rue Saint-Ambroise, suite 414,
Montreal (Quebec) Canada H4C 2E1
www.kronosaudio.com • info@kronosaudio.com
© 2014 Kronos audio