



European Audio Team

# INSTRUCTIONS FOR USE E.A.T. Fortissimo S

Dear Music Lover,

#### Welcome!

Congratulations on your purchase of our E.A.T. Fortissimo S turntable. Your E.A.T. Fortissimo S was handcrafted by our skilled technicians here at the European Audio Team. It has been rigorously tested and is ready and waiting for your enjoyment.

Please take the time to read this manual carefully to ensure that you obtain the ultimate performance from your E.A.T. Fortissimo S. The tips contained within will ensure that your Fortissimo S's condition will remain like new for many years to come!

Please contact your dealer, should you require further assistance in setting up and maintaining your new turntable.

#### Important:

Your turntable was shipped partially disassembled in order to avoid damage to sensitive parts. Please check immediately to make sure that neither the packaging nor the device was damaged in transit.

If damaged, please do not operate and contact your dealer.

#### Please do your part to help protect the environment:

#### Disposal of packaging material

E.A.T. packaging is carefully designed to protect your component from damage in transit and you are strongly urged to keep the original packaging in order to safely ship or otherwise transport your turntable in the future.

However, the packaging materials were chosen to be environmentally friendly, so if you must discard the packaging, please recycle.

#### Disposal of old equipment

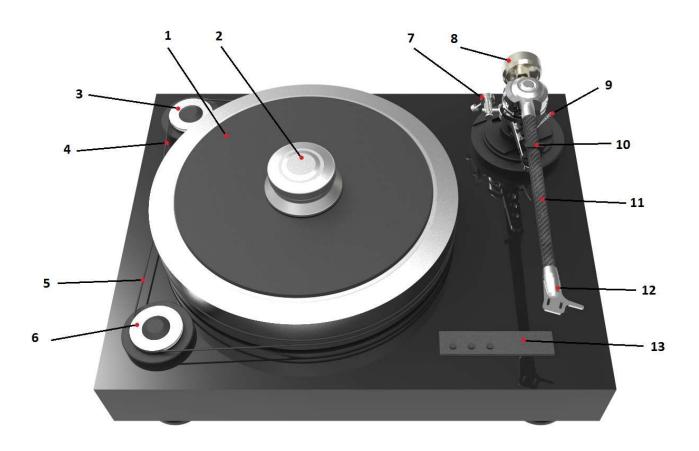
If you're disposing of old electronic equipment, please use a local waste facility designated for that purpose.

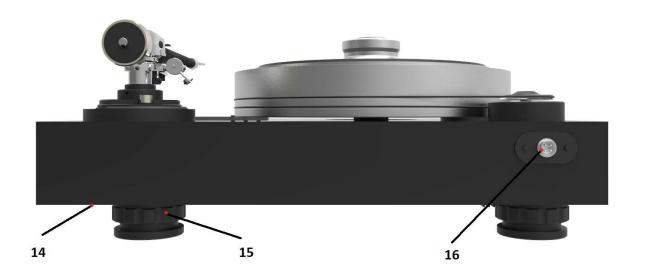


Throughout the manual, this symbol will alert you to potential hazards for the user or the unit, and how to avoid possible misuse.

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# KEY: CONTROLS, FEATURES AND CONNECTIONS

- 1. Platter switch bonded vinyl mat
- 2. Record clamp
- 3. Rear motor
- 4. Rear drive belt
- 5. Front motor
- 6. Front drive belt
- 7. Anti-skating mechanism
- 8. Tonearm counterweight
- 9. Tonearm lift lever
- 10. Tonearm rest position
- 11. Tonearm tube
- 12. Headshell with finger lift
- 13. Speed control panel
- 14. Tonearm 5 PIN output connector
- 15. Heigh adjustable, magnetic supported and damped feet
- 16. Power supply connector

# **SETUP**

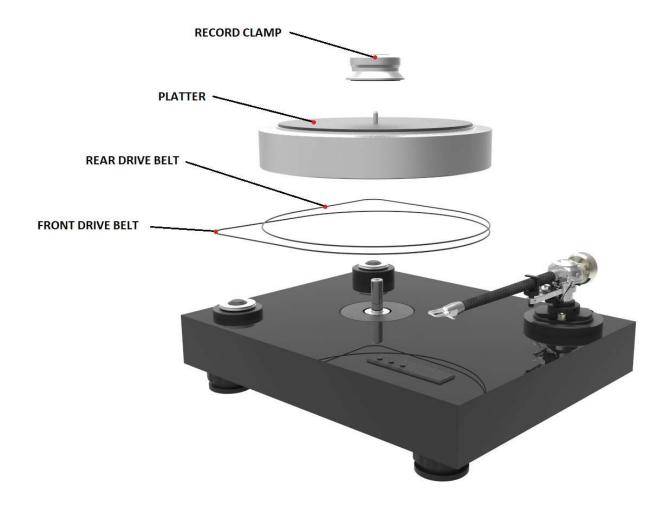
# 1. Protective covers and drive belt installation

The main bearing shaft and housing in the platter are protected by special plastic covers. These covers shield against dust and dirt and keep the bearing shaft and housing sufficiently lubricated. If necessary, lubricate the shaft with grease from the enclosed accessories. Maximum amount is 0.5 ml. Use the scale on the supplied syringe to measure the desired quantity and distribute the lubricant evenly.

Remove the protective covers from the main bearing shaft and from the platter. Install the platter and the drive belts as shown in the following illustrations.



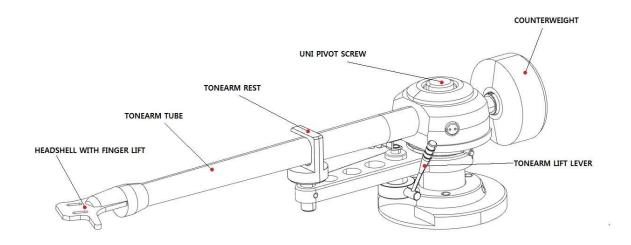
Please install front drive belt prior to the rear drive belt because of lower front motor position.

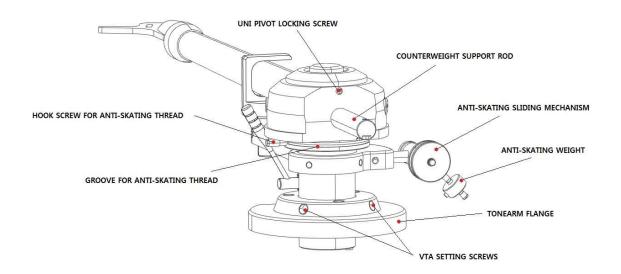


# 2. Tonearm assembly

The tonearm includes a combination of cardan and uni pivot bearings, immersed in special damping fluid.

See the next steps to set up your tonearm.





# a) Cartridge installation

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

Connect the cartridge as indicated below:

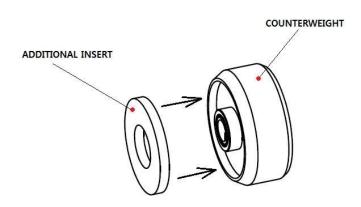
White left channel L+
 Red right channel R+
 Green right channel R Blue left channel L-

For correct cartridge alignment, use the two-point cartridge alignment protractor provided with your C-Note accessories. If unfamiliar with two-point setup, please refer to your dealer.

# b) Counterweight assembly

The counterweight has two separate 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 9 g**. (The weight of the counterweight itself is **125 g**.)

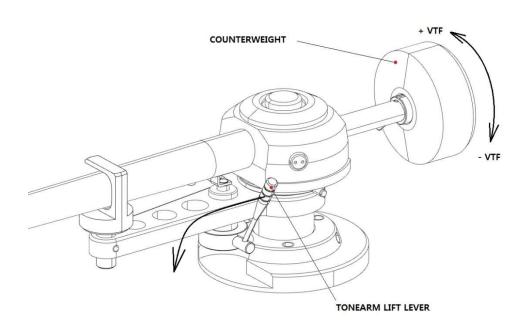
The counterweight with the additional insert can balance cartridges from 8.5 to 13 g. (The weight of the counterweight with the additional insert is 142 g.)

# c) Vertical Tracking Force setting (VTF)

Before setting the Vertical Tracking Force, 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, move the counterweight in the counterweight groove as shown in the illustration below. Place the 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 headshell, moving the counterweight closer toward the tonearm increases the VTF, moving away from the tonearm reduces the VTF. Move the counterweight appropriately until the VTF shown on the pressure gauge matches your cartridge's recommended vertical tracking force specifications. Tighten the locking nut.



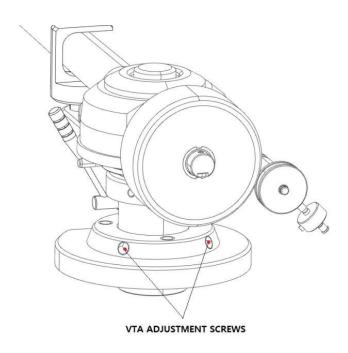
# d) Tonearm output connection

Connect the tonearm cable provided with the accessories to the 5-PIN tonearm connector that is located at the rear of the turntable, under the tonearm. To avoid damaging your equipment, make sure to align the connector pins in the proper position!

# e) Vertical Tracking Angle setting (VTA)

To set the Vertical Tracking Angle, first put a record on the platter. When the needle is lowered into the record groove, the tonearm tube 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 retighten the hexagon screws without applying excessive force (which could deform the arm pillar).



# f) Azimuth setting

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 that you need to modify this setting, however, follow the instructions below.

## Step 1:

Unscrew the small UNI PIVOT LOCKING SCREW using the 1.5 mm hexagonal key provided in the accessories. Then carefully lift the UNI PIVOT cover, setting it and the UNI PIVOT LOCKING screw aside in a safe and clean place.

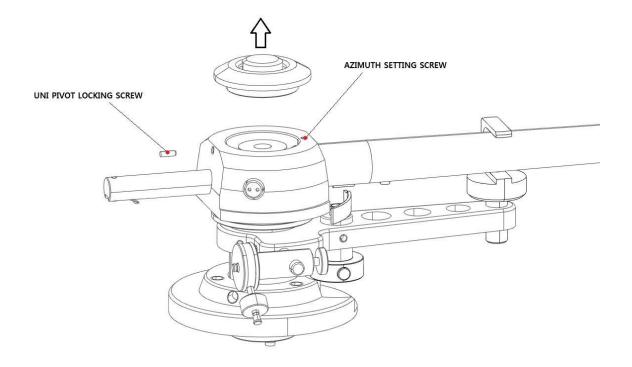
## Step 2:

Loosen the small AZIMUTH SET SCREW, again using the 1.5 mm hexagonal key.



DO NOT REMOVE THE AZIMUTH SET SCREW COMPLETELY!

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 and replace the UNI PIVOT COVER and the UNI PIVOT LOCKING SCREW.



# **Examples of incorrect azimuth setup:**

Too much left angle:



Too much right angle:



The correct position is 100% perpendicular to the record.



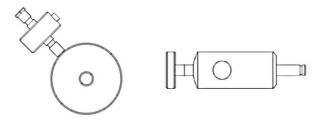
# g) Anti-skating assembly and adjustment

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

#### Step 1:

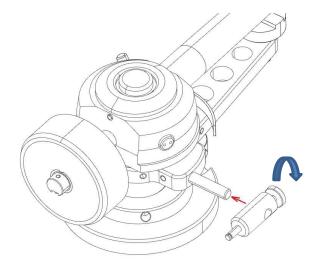
Prepare all parts supplied from the accessories bag:

- Anti-skating sliding mechanism with anti-skating weight and thread for mounting on the tonearm
- Anti-skating support rod



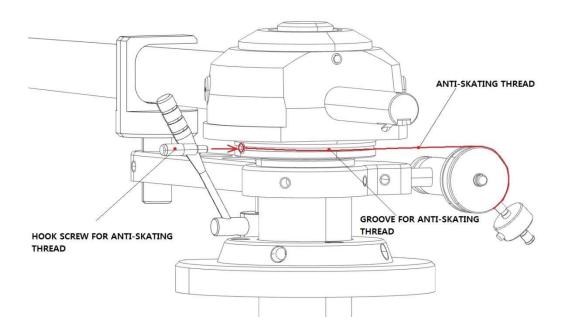
#### Step 2:

Put the anti-skating support rod on the shaft mounted on the side of the tonearm so that it is parallel to the sub-chassis, as pictured in the illustration below. Then tighten the screw to prevent movement on the shaft.



## 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.

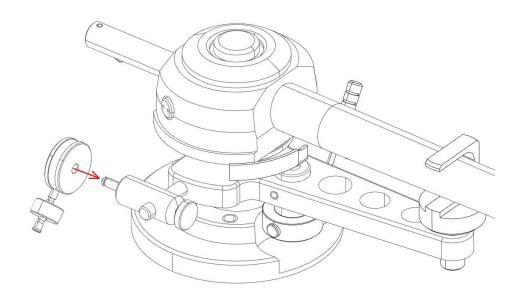


## <u>Step 4:</u>

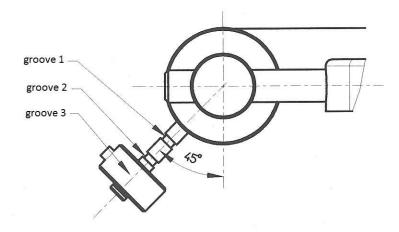
Put the anti-skating sliding mechanism on the end of the anti-skating support rod. The antiskating thread should fit into the groove in the tonearm.



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



Step 5:
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 downforce should be adjusted in correspondence with the tonearm downforce as follows:

## **Tonearm downforce:**

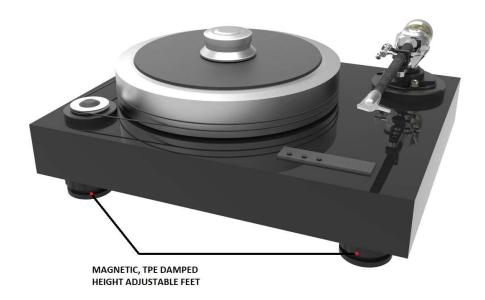
Lower than 13 mN or 1.3 grams 14–18 mN or 1.3–1.8 grams 19–25 mN or 1.8–2.5 grams

# Anti-skating groove:

1<sup>st</sup> groove from bearing 2<sup>nd</sup> groove from bearing 3<sup>rd</sup> groove from bearing

## 3. <u>Leveling the turntable</u>

Four precision adjustable damped magnetic feet are mounted under the turntable for leveling the turntable. Once the turntable is in final position, put the supplied spirit level on the chassis, and then level the turntable by screwing or unscrewing the feet as needed. It is advisable to check level from several positions on the chassis.



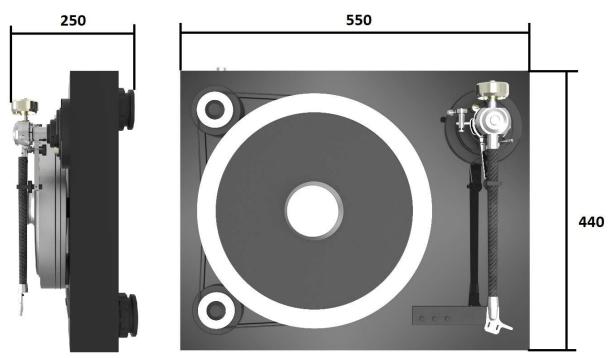
# 4. Using the clamp, starting the motor, changing the speed

Using the clamp – after placing a record on the platter, place the record clamp on the spindle and record.

Controling the turntable using the "Speed Control" panel:

- To start rotation of the platter, press either the button labeled **33** or **45**, depending on the speed of the record to be played, 33 rpm or 45 rpm.
- When you want to stop the turntable, or when it is not in use, switch it to **STANDBY** mode by pressing the button labeled **STBY-STOP**.





# 5. <u>Technical Specifications E.A.T. Fortissimo S</u>

Model	Fortissimo S with C-Note 12"
Nominal speed	<b>33/45 rpm</b> , driven by microprocessor, lighted control buttons
Speed variance	33rpm: ± < 0.07%, 45rpm: ± < 0.08%
Wow and flutter	33rpm: ± <0.008 %, 45rpm: ± <0.008 %
Signal to noise	S/N Ration (electrical noise): -73 dB
Downforce range	0 - 30 mN 0 - 3.0 grams
Supplied counterweight system	Counterweight without insert: 5–9 g Counterweight with insert: 8.5–13 g
Effective tonearm mass	19.2 g
Effective tonearm lenght	304.8 mm
Overhang	13.2 mm

Power consumption	8.5 W max/ 0.5W standby
Voltage	Universal swith mode power supply 15 V DC/1.6 A, 90-264 V AC, 47 - 63Hz
Dimensions (W x H x D)	550 x 250 x 440 mm
Weight (without box)	<b>47 kg</b> (turntable)
Weight (with box)	83 kg

#### **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.

#### 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 is it 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.

#### 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.

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