



**TURNTABLE** 

**OWNER'S INFORMATION** 



## CONTENTS

- 1) IMPORTANT SAFETY INFORMATION
- 2) CE DECLARATION OF CONFORMITY DISPOSAL POWER REQUIREMENTS
- 3) INTRODUCTION
- 4) **OVERVIEW**
- 5) UNPACKING AND INSTALLATION
- 23) CONNECTION
- 24) OPERATION
- **26) WARRANTY INFORMATION**
- 27) CONTACT INFORMATION

## ! IMPORTANT SAFETY INFORMATION!



# RISK OF SHOCK OR ELECTROCUTION! INTERNAL OPERATING VOLTAGES ARE LETHAL!

Do not remove top cover, unless specifically instructed to do so in the user manual.

This unit contains fuses and other safety components in accordance with BS60065 requirements.

In the event of failure, replacement fuse or safety component must be of the same part type and value.

# SUCH REPLACEMENT MUST ONLY BE CARRIED OUT BY A QUALIFIED SERVICE TECHNICIAN.



Do not attempt to replace any fuses without first disconnecting the unit from the mains electricity supply.

This product must be earthed – ensure that the mains supply cable earth / ground is correctly connected.



This product generates high levels of heat. Adequate ventilation must be provided. Do not restrict airflow through any ventilation slots or place the unit on any surface that may restrict airflow.

Valve equipment operates at extremely high temperatures; **KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.** 



Do not store or operate this unit in areas of high humidity or in close proximity to water / moisture.

Do not expose or immerse the unit in liquid of any kind.

#### **OTHER SAFETY PRECAUTIONS: -**

Never touch the power cord with wet hands.

Always remove the power cord by grasping the plug, not the cable.

Never expose the unit to excessive heat or magnetism.

Never let an inexperienced person repair or reassemble the unit.

Never put anything, especially metal objects, inside the unit.

Never place excessive weight on the unit.

## **CE DECLARATION OF CONFORMITY**



We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents:

BS EN 60065 in accordance with the regulations 73/23/EEC, 89/336/EEC (from 1 January 1997)

**CE 94** 

Peter Qvortrup,
Director
Audio Note (UK) Limited
Viscount House
Star Road, Star Trading Estate
Partridge Green
West Sussex
RH13 8RA
United Kingdom

Tel: +44 (0)1273 830 800 Fax: +44 (0)1273 731 498



#### **DISPOSAL**

This product must not be disposed of as normal household waste. To prevent possible harm to the environment please separate the product from other waste to ensure that it can be recycled in an environmentally safe manner. Please contact your retailer or the appropriate local government office for collection facilities.

#### **POWER REQUIREMENTS**

Power requirements for electrical equipment vary depending on your geographical location. Please ensure that your unit meets the power requirements in your area. The power requirement for your unit is marked on the serial number plate, located on the rear panel.

If you are in doubt, please contact your dealer before connecting the unit to the mains supply.

## INTRODUCTION

Thank you for purchasing this Audio Note (UK) product. With the correct care it should give you many years of pleasure and enjoyment.

Please take the time to read all of the information in this manual before connecting your new component to an electrical supply or your system, to ensure both your safety and satisfaction.

Please note that due to our desire to continually improve products, specifications are subject to change without notice. Therefore it is important to refer to the manual that is supplied with your product for the most accurate information; manuals downloaded from our website or obtained from other sources may no longer fully apply to your product.

If you have any questions regarding the information contained within this document or your new component, please feel free to contact us: -

Audio Note (UK) Limited
Viscount House
Star Road, Star Trading Estate
Partridge Green
West Sussex
RH13 8RA
United Kingdom

Tel: +44 (0)1273 830 800 Fax: +44 (0)1273 731 498 e-mail: info@audionote.co.uk



#### **TT-THREE TURNTABLE**

Congratulations on your purchase of the Audio Note (UK) TT-Three turntable.

It is a three motor, fully suspended design, equipped with a dedicated external power supply.

It has been specifically engineered for sonic performance rather than technical specification, and fulfills all Audio Note (UK) Level 3 criteria.

The TT-Three can be supplied with three different power supplies, each of which is designed to offer the best possible performance at its given price point: -

- **PSU 1** The power supply 1 offers an excellent level of musical engagement without compromise of the component quality. 0.5W Tantalum Resistors and Audio Note Electrolytic capacitors are used throughout. The special CODE, analogue modules and output stages are all coded, modeled and designed in-house.
- **PSU 2** The power supply 2 features improved local power supply regulation for the signal generator, improvements to the clock line and the output stage offering great improvements in refinement, tonal density, palette and definition over the power supply 1.
- PSU 3 The power supply 3 is a unique product in every respect, producing significantly better sonic results. A superior level of control is achieved by using a specifically designed analogue computer, unique analogue oscillators and fully discrete component design, from start to finish. The discrete component output stage offers far more freedom to achieve a perfect balance both electronically and sonically, achieving optimal damping and energy transfer.
- **PSU 4** The ultimate power supply for the TT-Three, achieving the best level of performance. Taking the circuit and design of the PSU3, the PSU4 offers a significantly improved component selection.

Audio Note (UK) offers the possibility to upgrade your power supply, from PSU1 to PSU 2 / PSU 3 / PSU 4, PSU 2 to PSU 3 / PSU 4, or PSU 3 to PSU4. Please contact your authorized Audio Note (UK) Dealer or Distributor for further information.

## **UNPACKING AND INSTALLATION**

Please take care when unpacking your TT-Three turntable and power supply. Choose a clean, clear location to unpack your units. Be aware that the turntable and power supply are surprisingly heavy; before attempting to unpack or lift the units, check the weight and if necessary use more than one person so that they can be moved safely and easily.

We recommend that you retain and carefully store all of the original packing materials, in case transportation / shipping is required at a later date.

Select a suitable location for the units. This should be a dry, dust free and level area, preferably shielded from direct sunlight and free from vibration. Also ensure that the location is stable and capable of carrying the weight of the units. It would be preferably to position the power supply for the turntable either on a separate shelf or a suitable distance away from the turntable, cartridge, phonostage and any sensitive areas of the amplifier / preamplifier. Phono cartridges and the circuitry inside phonostages are extremely sensitive to electromagnetic interference from the power supplies of other electronic devices, so keeping a sensible distance between these items will result in better performance.

A suitable mains power outlet must be close to the location; power cords must not be pulled or stretched tightly in an attempt to reach a wall socket. If the power cord will not easily reach the socket, choose a closer location!

Please ensure that adequate ventilation for the power supply is provided, and that airflow through any ventilation slots in the chassis is not restricted.

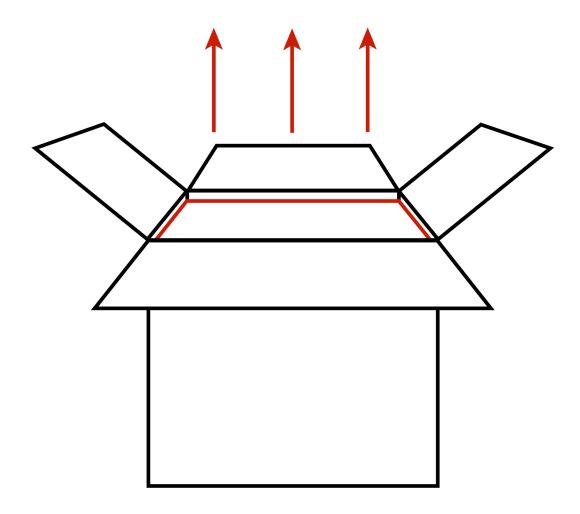
The turntable is shipped in a semi-disassembled form, and must be correctly reassembled before use.

It is essential that this reassembly is performed correctly or *serious damage that is* not covered by the warranty will result. We recommend that your dealer performs this procedure for you if you are in any way unsure.

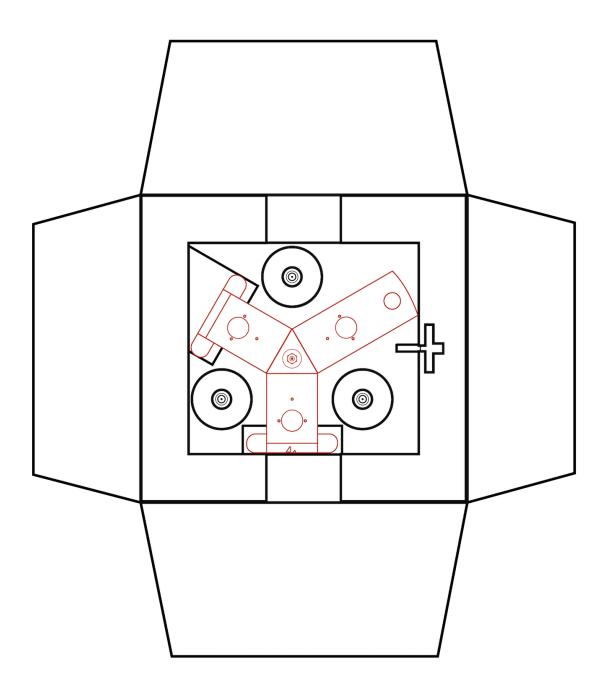
Follow the unpacking and assembly instructions below.

(The main components are shipped inside protective foam or plastic bags, but for clarity, they are shown without bags in the following diagrams): -

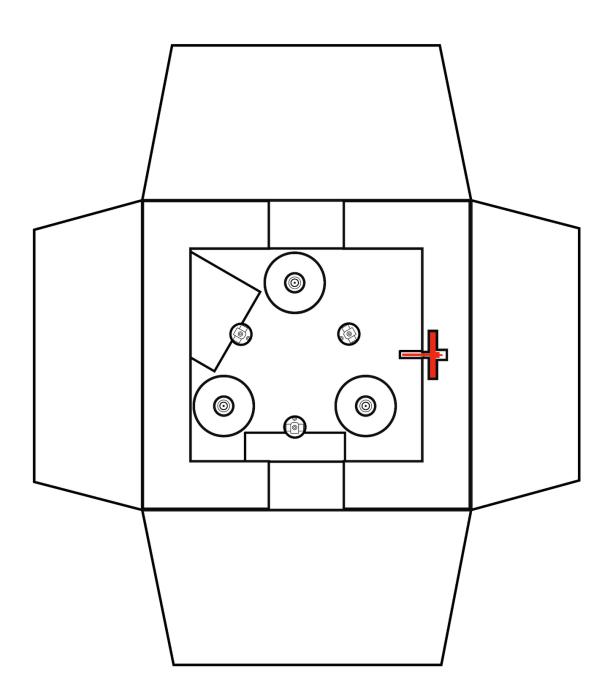
Once the box is open, remove the top layer of white packing foam:



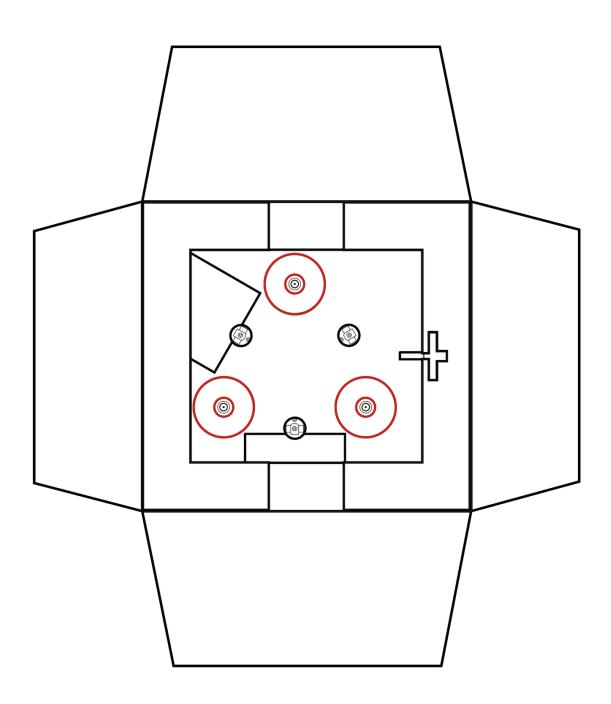
Remove the sub-chassis from the box (shown in RED):



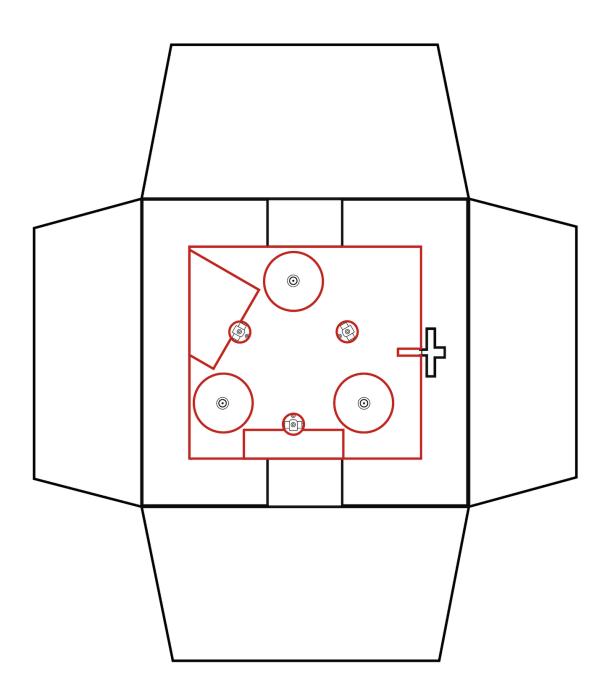
Locate and remove the sub platter / bearing (shown in RED):



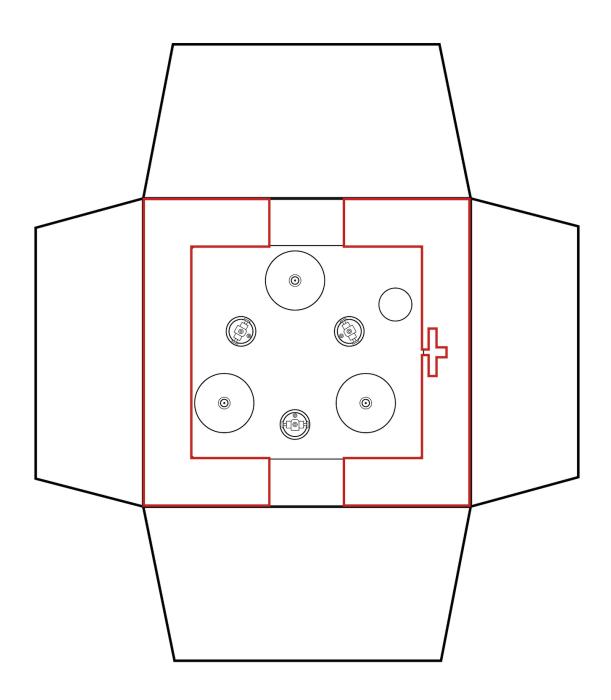
Locate and remove the motor protection foam rings (shown in RED):



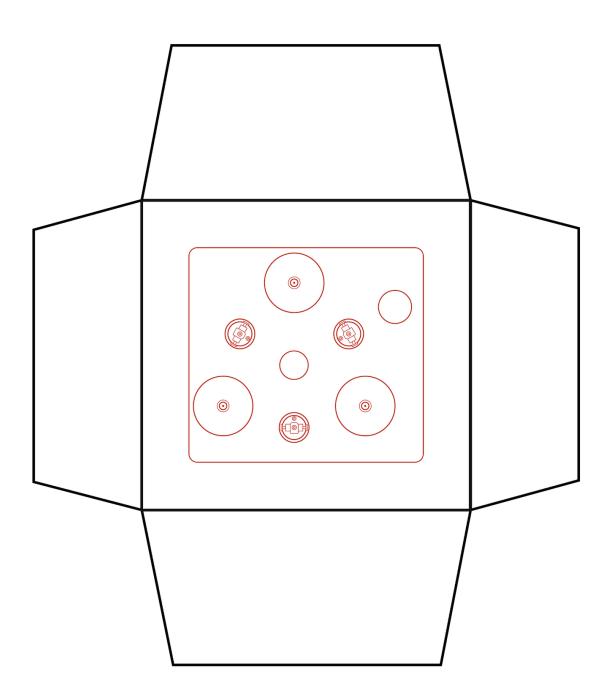
Remove the foam slab covering the base / motors (shown in RED):



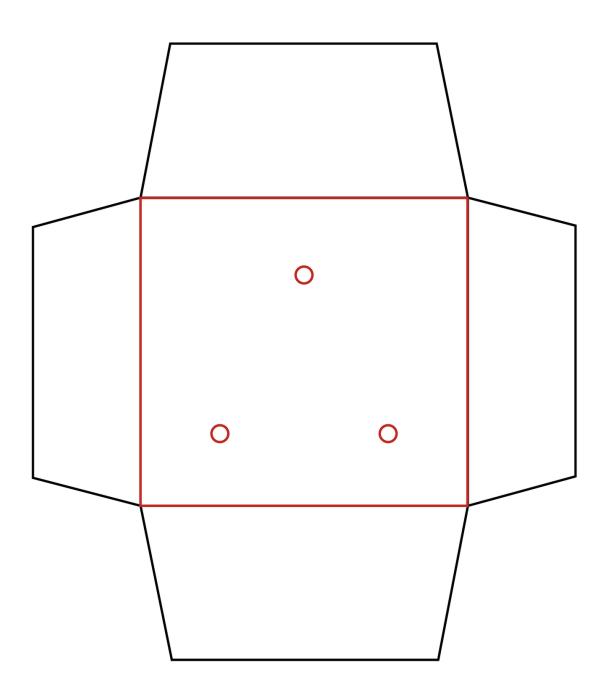
Remove the two large side protection foam blocks (shown in RED):



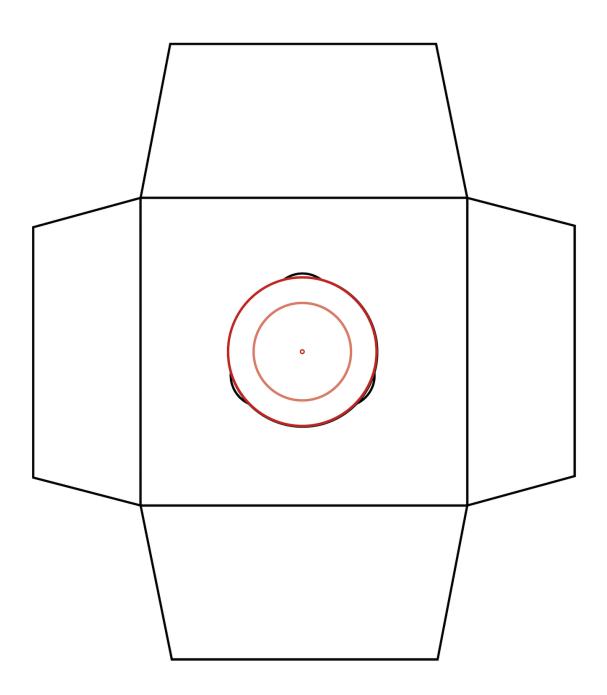
Remove the main base / motor unit (shown in RED):



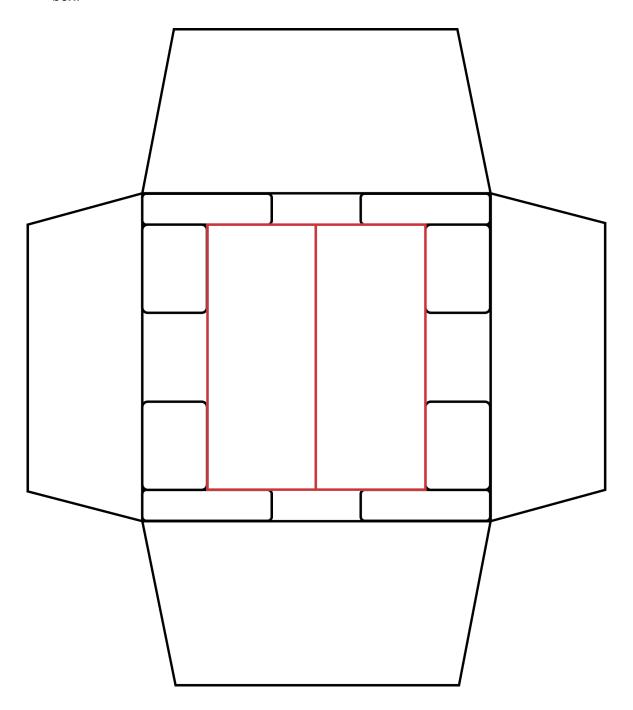
Remove the base foam slab (shown in RED):



Remove the platter and its packing foam slab (shown in RED):



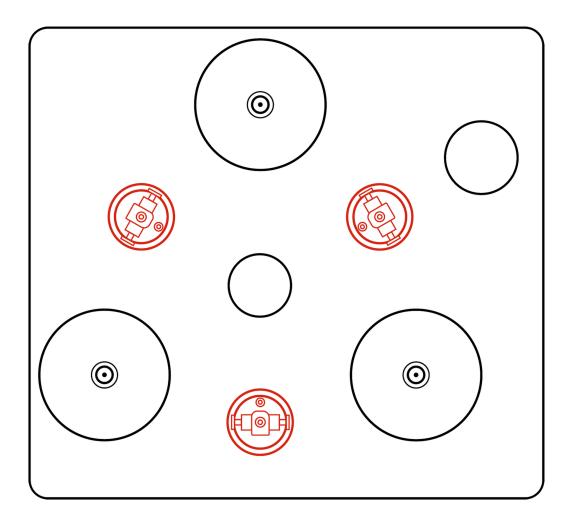
Remove the power supply (shown below in RED) from the bottom of the box. You will also find the accessories (belt, bearing oil etc) in a plastic bag at the side of the PSU box:



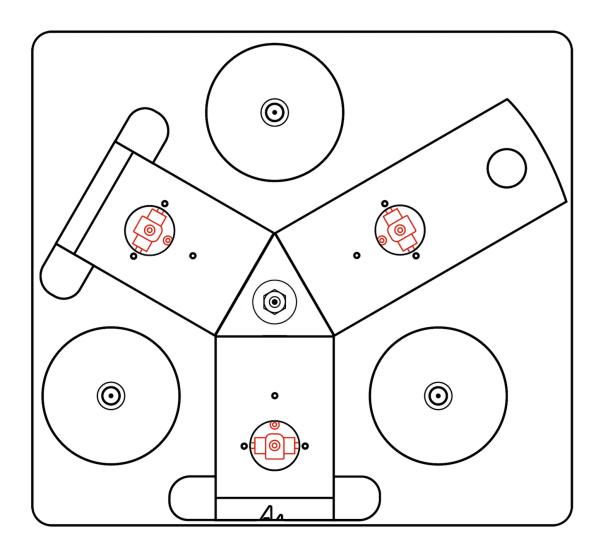
Once the turntable components have been fully unpacked, place all of the packing materials back inside the main box and store in a safe, dry place for future use.

Place the main base / motor unit on a clean, solid, level surface. *IT IS ESSENTAIL THAT THIS SURFACE IS LEVEL*. If it is not, the suspension set up will be compromised and optimal performance will not be achievable.

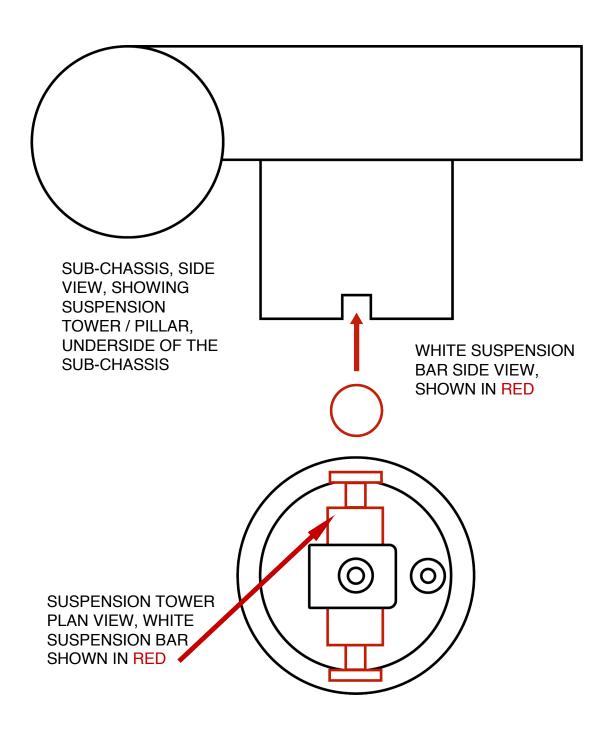
Locate the three suspension towers (shown in RED):



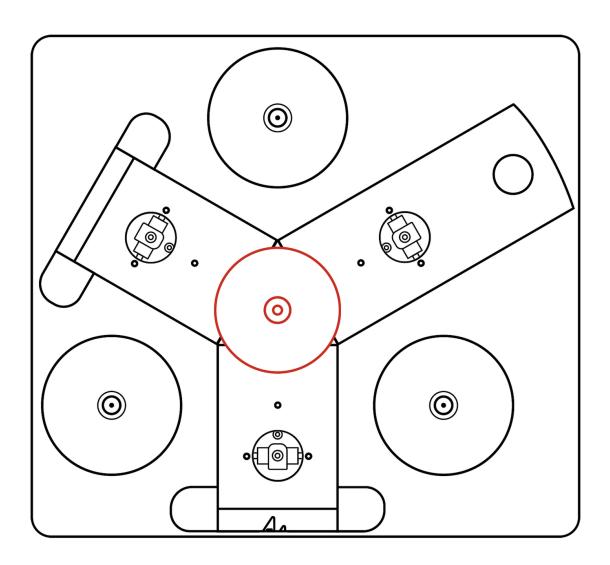
Place the sub-chassis on the base / motor unit. IT IS ESSENTAIL THAT THE SUSPENSION TOWERS ARE CORRECTLY ALIGNED WITH THE PILLARS / TUBES ON THE UNDERSIDE OF THE SUB-CHASSIS:



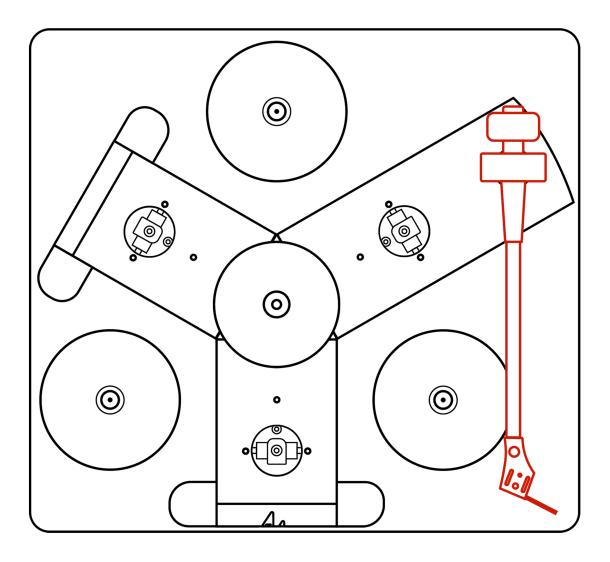
The ends of the white suspension bars (shown below in RED) must be located correctly in the two notches, located on either side of the bottom of each of the three suspension tower pillars / tubes, which are on the underside of the sub-chassis. CHECK THAT THIS IS CORRECT FOR ALL THREE SUSPENSION TOWERS:



Once the sub-chassis has been correctly installed on the main base / motor unit, install the sub-platter. Before the sub-platter can be installed, remove the protective tape from the top of the main bearing well. **No additional oil needs to be added to the bearing at this time; the bearing has been fully charged with oil at the factory**. Once this has been done, carefully insert the sub-platter bearing shaft into the bearing well. There is no need to press the sub-platter down into the bearing well, it will eventually settle into place.



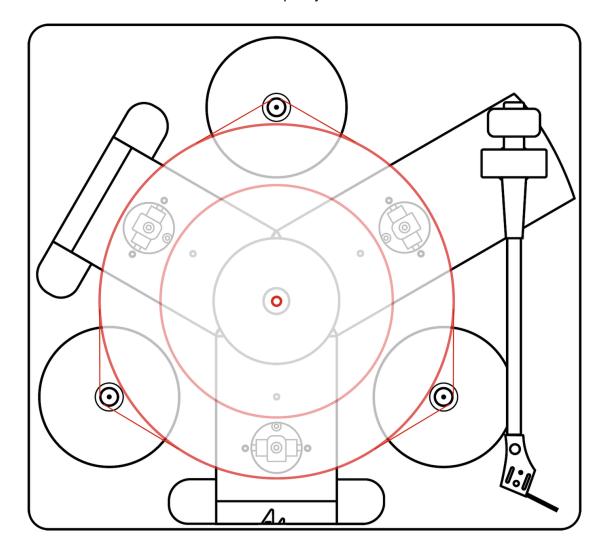
Before the suspension can be adjusted, the tonearm must be installed. It is not necessary to install the cartridge at this time, but the tonearm and its counter-weight must be installed on the sub-chassis:



Once the tonearm has been installed, final adjustment of the suspension can be performed. (The suspension is adjusted at the factory, but this setup can move during transit).

First, install the platter and belt. Examine the platter; you will see one side has a wide and deep indentation; the other side has a shallow and smaller indentation at the centre. The smaller, more shallow indentation must face UP; this is the playing surface that will come into contact with the record.

The belt must run over all three motor pulleys:

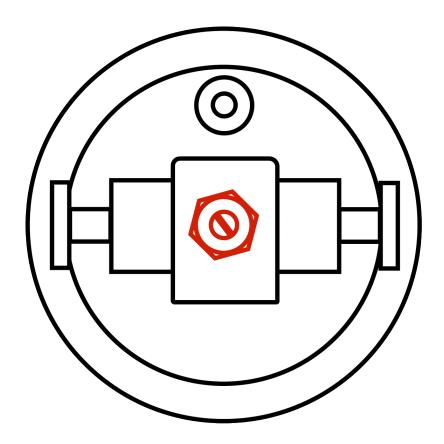


The belt should settle at the centre of the platter's edge, all the way around the circumference of the platter. If this is the case once the belt and platter have been installed, then simply check that the platter is level with a spirit level (both from front to back and left to right) and if so, the suspension set up is complete and you can install the cartridge.

If the belt does not run at the centre of the platter's edge, or if the platter is not level when tested with a spirit level, then some adjustment of the suspension is required.

Examine the areas where the belt contacts the platter either side of each motor pulley. Look for the position of the belt at the platter's edge at these points. You should be able to ascertain which suspension tower(s) require adjustment; if the belt is running low on the platter (below the centre line of the platter), then the suspension tower at this point needs to be lowered. If the belt is running high on the platter at this point (above the centre line of the platter), then the suspension tower at this point needs to be raised. You can also use a spirit level to work out which tower(s) need to be adjusted.

Once you have identified which towers need to be adjusted, remove the belt and platter. Looking at the top of each suspension tower, you should see a small locking nut and the central adjustment screw:



Loosen the locking nut with an appropriately sized spanner, and then adjust the height of the suspension up or down. Make small adjustments and then replace the platter and belt to see if more adjustment is required. Once the belt is running at the central point on the platter edge all the way around and the platter is level, remove the belt and platter one more time and – while keeping a screwdriver in the slot of the adjustment screw to stop it moving – tighten the locking nut. Once this is done, replace the platter and belt, check the belt position and platter one more time, check that the platter is level with a spirit level, and if all is correct, you may install the suspension covers and proceed with installing the cartridge.

#### CONNECTION

#### Tonearm

Connect the tonearm cables and earth wire to your amplifier / preamplifier's 'Phono' input, or to the input on your Step Up Transformer if you are using one. The tonearm earth cable should be connected to the earth / ground post on your amplifier / preamplifier.

#### Umbilical

The TT-Three deck is connected to the PSU by a specific, supplied umbilical cable. This cable is equipped with locking connectors and can only be installed one way.

On the rear of the TT-Three plinth is a circular four pin 'male' socket; connect the 'female' end of the umbilical cable to this (it can only be inserted on way) and tighten the locking ring 'finger tight'.

On the rear of the TT-Three PSU is a four pin circular 'female' socket; connect the 'male' end of the umbilical cable to this (again, it can only be inserted one way), and tighten the locking ring.

#### **PSU**

The TT-Three PSU is equipped with an IEC 320 mains inlet socket. Once the umbilical cable has been installed, use the supplied mains cable to connect the unit to the local mains supply. The mains fuse is located in the fuse holder on the rear of the unit, just below the mains inlet socket.

Special Note – Make sure that all connections are tight and clean. For best results use good quality audio interconnects and mains cables. For best results and performance, we recommend our own Audio Note (UK) range of power, interconnects and loudspeaker cables. For further information, please consult your nearest Audio Note (UK) dealer, or alternatively please feel free to contact us directly.

#### **OPERATION**

Once all the connections are completed and checked, ensure that the volume control on your amplifier / preamplifier is at the minimum setting.

Turn on the TT-Three PSU BEFORE turning on the amplification; the amplifier should be the LAST item to be turned on when you are ready to listen to your system, and the FIRST item to be turned off when the listening session is over.

Turn on the TT-Three by using the rocker switch located on the rear top right of the PSU's back panel, just below the mains inlet socket.

The red front panel light should now be lit.

Speed Selector Turn the selector to the required playback speed; move the

switch 'clockwise' / to the right for 33, and 'counter-clockwise' /

to the left for 45.

Start / Stop As the name suggests, this switch is used to start / stop the

rotation of the TT-Three platter. Turn the knob 'counter-clockwise' / to the left to start the platter turning, and

'clockwise' / to the right to stop the platter.

The TT-Three combined with PSU 1 and PSU 2 takes around 1 second to reach correct speed from start up.

With the PSU 3 or PSU 4, correct speed is reached after around four seconds, due to this superior power supply's use of a combination of first digital, then analogue signal generation system.

Special Note – the TT-Three uses three very powerful high torque motors, far more powerful than are used in most other belt drive turntable designs. These motors are chosen for their drive capabilities and not for their operational quietness, so a small amount of physical noise in perfectly normal.

#### **OPERATION** continued...

#### Bedding in

The new turntable and PSU require roughly 200 hours of initial use (called "bedding in") before the circuitry becomes stable and optimum performance is realized.

As the turntable "beds in" the sound will become increasingly more smooth, detailed and open.

Once the turntable has "bedded in" a warm up time of approximately 10 - 15 minutes is required each time the unit is switched on before optimum sonic performance is reached.

#### Cleaning

No special maintenance is required for the turntable. Use a soft, clean lint free cloth to remove any surface marks from the casework / platter. For finger marks / grease, use a soft, clean lint free cloth, lightly moistened with a solution of warm water and mild detergent. Do not use any alcohol or solvent based cleaning products, as they may damage the finish.

ENSURE THAT THE TURNTABLE IS SWITCHED OFF AND DISCONNECTED FROM THE MAINS ELECTRICITY SUPPLY BEFORE UNDERTAKING ANY CLEANING.

#### **Bearing Oil**

A syringe of bearing oil is supplied with the TT-Three. If the bearing requires re-oiling, place 2 – 3 drops of oil directly into the bearing well. The bearing oil only needs to be checked and renewed roughly every 2 years.

#### **Belt Life**

The belt supplied with the TT-Three should easily provide many years of excellent, trouble-free service. It should not need to be changed for at least 5 years. In the event that it requires cleaning (and this should only really be the case if grease, oil or some similar substance comes in contact with it), it can be cleaned with a very mild detergent and water. Make sure it is thoroughly dry before it is re-installed on the turntable.

## WARRANTY INFORMATION

Audio Note (UK) warrants this product to be free from defects in materials and workmanship for two years from the original date of purchase from an appointed Audio Note (UK) dealer, and agrees to cover the cost of parts and associated labour required to correct such defects, subject to terms & conditions.

This Warranty is offered to the first purchaser only.

If the product fails in normal domestic use and during the Warranty period due to the above described faults or defects, Audio Note (UK) will, at its discretion, repair or replace the item free of charge within a reasonable time once it has been returned to Audio Note (UK) or an appointed Audio Note (UK) dealer or service engineer.

Audio Note (UK) is not liable for any shipping charges incurred whilst transporting the product to or from Audio Note (UK) or an appointed Audio Note (UK) dealer or service engineer, should the item require service or repair during or after the Warranty period.

If the product must be shipped, please use the original packaging materials and include a copy of the original sales receipt along with a note explaining, in as much detail as possible, the problems you are experiencing with the unit.

Only use a reputable Courier Service or Shipping Agent, and ensure that your product is insured during transit.

Any servicing, repairs or modifications not authorized by Audio Note (UK), or carried out by persons other than appointed Audio Note (UK) service engineers will invalidate any warranty.

This Warranty does NOT cover: -

Damage sustained whilst in the possession of a shipping agent, retailer or consumer and not caused as a direct result of defects in materials or workmanship.

Damage caused by normal wear and tear.

Damage or defects caused by abnormal or unreasonable use.

Damage caused by accident, acts of nature, misuse or neglect.

Damage caused by a failure to follow the operating and installation instructions supplied with the product.

Damage caused by improper or careless cleaning.

Audio Note (UK) reserves the right to refuse warranty for any component of which the serial number has been removed, defaced or tampered with.

## **CONTACT INFORMATION**

If in the future your Audio Note (UK) product requires servicing, or if you require technical support or have any questions regarding this or any of our other products, please contact your local Audio Note (UK) dealer.

Alternatively, please feel free to contact us directly: -

Audio Note (UK) Limited
Viscount House
Star Road, Star Trading Estate
Partridge Green
West Sussex
RH13 8RA
United Kingdom

Tel: +44 (0)1273 830 800 Fax: +44 (0)1273 731 498 e-mail: info@audionote.co.uk

www.audionote.co.uk

f Audio Note (UK) Ltd

