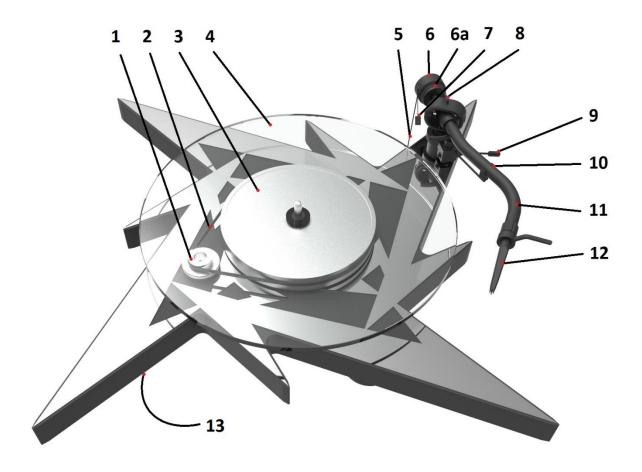


# INSTRUCTIONS FOR USE METALLICA Limited Edition Turntable





# Metallica Limited Edition Turntable

# Controls, features, and connections

- (1) Motor with stepped drive pulley
- (2) Drive belt
- (3) Aluminium sub-platter
- (4) Heavy glass platter
- (5) Anti-skating weight support hoop
- (6) Tonearm counterweight 6a Downforce scale
- (7) Anti-skating weight
- (8) Anti-skating weight adjustment scale
- (9) Tonearm lift lever
- (10) Tonearm rest and removable transport lock
- (11) Tonearm tube
- (12) Pro-Ject Pick IT S2 C cartridge
- (13) Speed selector
- (14) Phono output socket and earth connection
- (15) Height adjustable feet with TPE damping
- (16) Power supply socket

Single adapter (not shown)

Allen keys (not shown)

Signal cable Connect IT E RCA (not shown)

Round belt for 78rpm (not shown)

White cotton gloves (not shown)

Cartridge alignment protractor (not shown)

Universal power supply (not shown)

Dear music lover,

Thank you for purchasing a Pro-Ject Audio Systems record player.

In order to achieve maximum performance and reliability with this record player you should study these instructions for use carefully.



Warning of a hazard for the user, the unit or possible misuse.



Important notice.

The following instructions for adjusting the cartridge are provided in case the cartridge is replaced by a different model at a later date.

During assembly and adjustment of the deck small parts could be lost if not carefully placed in a suitable receptacle. Before starting to assemble, get familiar with the parts listed above and correspondingly numbered in the technical drawings above.

# Safety instructions

The power supply is used to connect and disconnect the unit from the mains. Make sure that the plug is always easily accessible. Hold the plug when unplugging the power cord. Never handle the power cord while your hands are wet or damp.



Avoid letting liquids enter the device. Never place any item containing liquid, like a flower vase, on or near the device. Never spill any liquid on the device. Never place any naked flame sources, like lighted candles, on or near the device. The product shall not be used in damp or wet locations, next to a bathtub, sink, swimming pool or any other similar conditions.

Keep plastic bags away from children to prevent any risk of suffocation.

# Set-up

The deck is supplied partially disassembled and carefully packaged for safe transport. Carefully remove all parts from the transport packaging.

Make sure the surface you wish to use the turntable on is level (use a spirit level) before placing the turntable on it. Remove the transport lock (10) from the tonearm. Store it in the original packaging so it is available for any future transportation.

Fit the drive belt (2) around the sub-platter (3) and the smaller diameter part of the motor pulley (1). Avoid getting sweat or grease on the belt as these will deteriorate the performance and reduce the belt's lifespan. Use absorbent kitchen paper to remove any oil or grease from the outer edge of the hub and the belt. Fit the platter (4) and felt mat over the spindle of the sub-platter (3).

# Cartridge downforce adjustment

The counterweight (6) supplied is suitable for cartridges weighing between 5.5 – 8g and for Pick IT S2 C (weight no. 98).

Pushing carefully, turn the counterweight (6) onto the rear end of the tonearm tube (9), so that the downforce scale (6a) shows towards the front of the player. Lower the armlift and position the cartridge in the space between arm rest and platter. Carefully rotate the counterweight (6) until the armtube balances out. The arm should return to the balanced position if it is moved up or down. This adjustment must be done carefully. Do not forget to remove the cartridge protection cap if fitted.

Once the arm is correctly balanced return it to the rest. Hold the counterweight (6) without moving it, and gently revolve the downforce scale ring (6a) until the zero is in line with the anti-skating weight adjustment scale (8). Check whether the arm still balances out.

Rotate the counterweight counter clockwise (seen from the front) to adjust the downforce according to the cartridge manufacturer's recommendations. One mark on the scale represents 1 mN (= 0.1g / 0.1 Pond) of downforce.



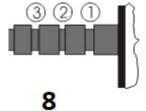
Please note: Adjust the downforce prior to installing the anti-skating weight.

The recommended downforce for the Pick IT S2 C cartridge is 30mN.

# Anti-skating force adjustment

The anti-skating force must be adjusted corresponding to the downforce as follows:

<u>Downforce</u>	Groove in the stub (17)		
10 - 14mN	1 <sup>st</sup> from bearing rings		
15 - 19mN	2 <sup>nd</sup> "	II	II
20mN and bigger	3 <sup>rd</sup> "	Ш	П



Slip the loop of the anti-skating weight's thread over the second groove of the stub to set the correct anti-skating force for the factory-fitted cartridge. Feed the thread through the loop of the wire support (15).

#### Connection to the amplifier

The record player has gold plated female RCA Phono sockets (14) so you can substitute the interconnect cables supplied with higher quality cables such as the **Pro-Ject Connect IT C, CC or Si** interconnect cables for connection to the amplifier if you wish.

Use the Phono input (sometimes labelled gram, disc or RIAA) on your amplifier. Make sure that the phono input offers correct matching and amplification for the type of cartridge used. Line inputs (such as CD, Tuner, Tape or Video) are not suitable.

Take care to connect the left and right channels correctly. The right channel is usually marked red, the left channel black or white. Check the manual supplied with your amplifier for relevant information. The earthing wire of the tonearm lead should be connected to the earth terminal on your amplifier (if provided).

If your amplifier does not have an input suitable for phono cartridges you will require a separate phono amplifier stage for MM or MC cartridges which is then connected between the record player and a free line level input of the amplifier.

For detailed product information regarding Pro-Ject Audio interconnect cables and phono amplifiers please refer to the Pro-Ject web site www.project-audio.com.



The recommended load impedance for the factory fitted cartridges is: 47kohms/MM-input

#### Mains power connection

The turntable is supplied with the universal power supply with 3 exchangeable sockets adapters suitable for all countries. Select the correct adapter for your country and insert the adapter to the exchangeable part of the power supply.

Connect the low voltage plug from the power supply to the socket (16) on the rear of the record player before connecting the power supply to the mains.

# Switching on and off, changing replay speed

The turntable is equipped with a three-position switch for ON/OFF and electronic speed change. To play records at 33 r.p.m. press this switch (13) to the front side to position no. 1. To play records at 45 r.p.m. press this switch (13) to the rear side to position no.2. To be able to play 78 r.p.m. the flat drive belt has to be removed and the round drive belt has to be fitted around the sub-platter (3) and the larger diameter part of the motor pulley (1). To do so, the platter (4) has to be removed.

After the round drive belt has been fitted, pressing the ON/OFF switch to the rear position no. 2 selects 78 r.p.m.



#### Useful tips

The record player should be positioned on a low-resonance surface such as wood or multiple layer ply board to avoid structural vibrations disturbing replay.

### Adjusting the azimuth

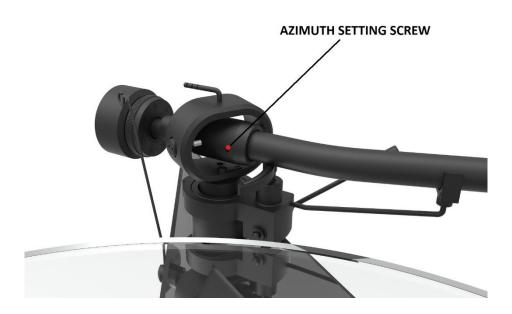
\*\* The cartridge needle must be vertical in the record groove in order to trace the groove wall modulations correctly.

A small screw at the bearing end of the arm allows incorrect azimuth to be corrected if your needle is not mounted exactly perpendicular to the cartridge body (which is often the case).

Slacken off the screw just enough to be able to revolve the arm tube without applying force. Please note: do not remove the screw completely!

With the aid of a good magnifying glass adjust the needle until it is vertical in the groove (i.e. perpendicular to the record's surface). Ideally this should correspond to the top surface of the cartridge body being parallel to the record surface.

When you are satisfied that the needle is vertical retighten the screw carefully.





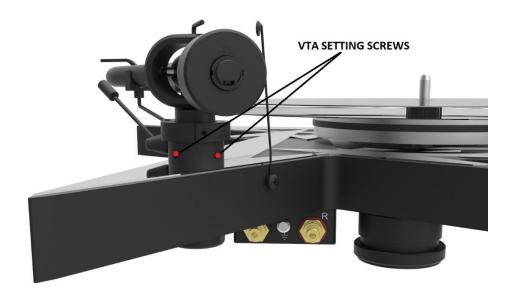
Please note: Under no circumstances should the arm tube be adjusted with the needle still in the record groove! Irreparable damage may be caused to the cantilever suspension! The arm must be lifted to make each adjustment and lowered afterwards to check it.

#### VTA adjustment

Put a record on the platter. When the needle is lowered into the record groove and the tonearm is not resting on the lift arm, the tube of the tonearm should be parallel to the surface of the record.

If it is not, loosen both hexagon 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.

Retighten the hexagon screws without applying excessive force (which would deform the arm pillar) – finger tight is quite sufficient.



# Fitting and connecting the cartridge

\*\* All cartridges with half inch mounting holes can be fitted. Leaving the needle's protection cover on, fit the cartridge to the headshell using the screws supplied with the cartridge by passing one screw through each slot in the headshell (20). Do not tighten the nuts yet.

Connect the tonearm wires to the cartridge pins as follows:

white left channel positive (L+) red right channel pos. (R+) green right channel return (R -) left channel return (L -)

The full sound quality of the record player can only be achieved if the cartridge is correctly adjusted. Particular tools like the Pro-Ject alignment tool are required to accomplish this job properly.

If you are not well acquainted with the adjustment of cartridges you are advised to call upon the willing help of your Pro-Ject dealer to accomplish this task for you.



Please note: Adjusting a cartridge and tonearm calls for the greatest care in order to avoid damaging the cartridge or tonearm bearings. Leave this work to your dealer if you are in any way unsure of the necessary steps and precautions to be taken.

#### Maintenance and cleaning

Your record player requires little or no regular maintenance. Remove dust with a slightly moistened antistatic cloth. Never use a dry cloth because this will create static electricity which attract more dust! Antistatic cleaning fluids are available at specialist stores but must be applied sparingly to avoid damage to rubber parts. It is recommended to fit the needle cover before cleaning or maintenance is carried out to avoid damage.

If the player is not used over a long period of time the drive belt can be removed to prevent unequal stretching.



Always disconnect the record player from the mains power supply as a precaution before maintenance!

# Technical specifications Metallica / Pro-Ject 8.6" S-Shape, SME

Nominal speeds 33/45 r.p.m. \*\*\* 78 r.p.m. optional Speed variance 33:  $\pm 0.16\%$  45:  $\pm 0.14\%$  Wow and flutter 33:  $\pm 0.40\%$  45:  $\pm 0.30\%$ 

Signal to noise 68dB Effective tonearm mass 7.5g

Effective tonearm length 8.6 " (218.5mm)

Overhang 18.5mm

Power consumption 4W/OW in Stand-By

Outboard power supply 15V / 0 - 0.8mA DC (set at 0.5mA), universal power supply

Weight 4.5kg

Dimensions packaging (WxHxD) 430 x 120 x 430mm

# Technical specifications Pick it S2 C

Frequency range 20-22.000Hz Channel separation 24dB/1kHz

Output voltage 6mV

Recommended load impedance 47kohms/amplifier connection – MM-input

Compliance/stylus type  $7\mu$ m/mN – elliptical

Recommended force 20 - 50mN Weight 18.5g

#### Potential incorrect use and fault conditions

Pro-Ject turntables are manufactured to the highest standards and undergo strict quality controls before leaving the factory. Faults that may possibly occur are not necessarily due to material or production faults but can sometimes be caused by incorrect use or unfortunate circumstances. Therefore the following list of common fault symptoms is included.

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

The unit is not connected to the mains power supply.

No mains at the socket.

Drive belt is not fitted or has slipped off.

## No signal through one or other channel 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 solder joint or simply loose plug/socket connection.

Phono input not selected at amplifier.

Amplifier not switched on.

Amplifier or speakers defective or muted.

No connection to the loudspeakers.

#### Strong hum on phono input:

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

#### Distorted or inconsistent sound from one or both channels:

Record player is connected to wrong input of amplifier, or MM/MC switch incorrectly set.

Needle or cantilever damaged.

Wrong r.p.m., drive belt overstretched or dirty, platter bearing without oil, dirty or damaged.

#### Service

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

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

Never return a record player without making sure that is it safely disassembled and correctly packaged in the original packaging according to the diagrams on the last page of this user guide. Please remove these parts and pack them separately: lid (10), counterweight (6), anti-skating weight (15) platter (5) and belt (3). Fit the cartridge protection cap. Insert the transport lock for the tonearm (8) prior to carefully packaging the record player.

#### Warranty



The manufacturer accepts no responsibility for damage caused by not adhering 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 release the manufacturer from any liability over and above the lawful rights of the customer.

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