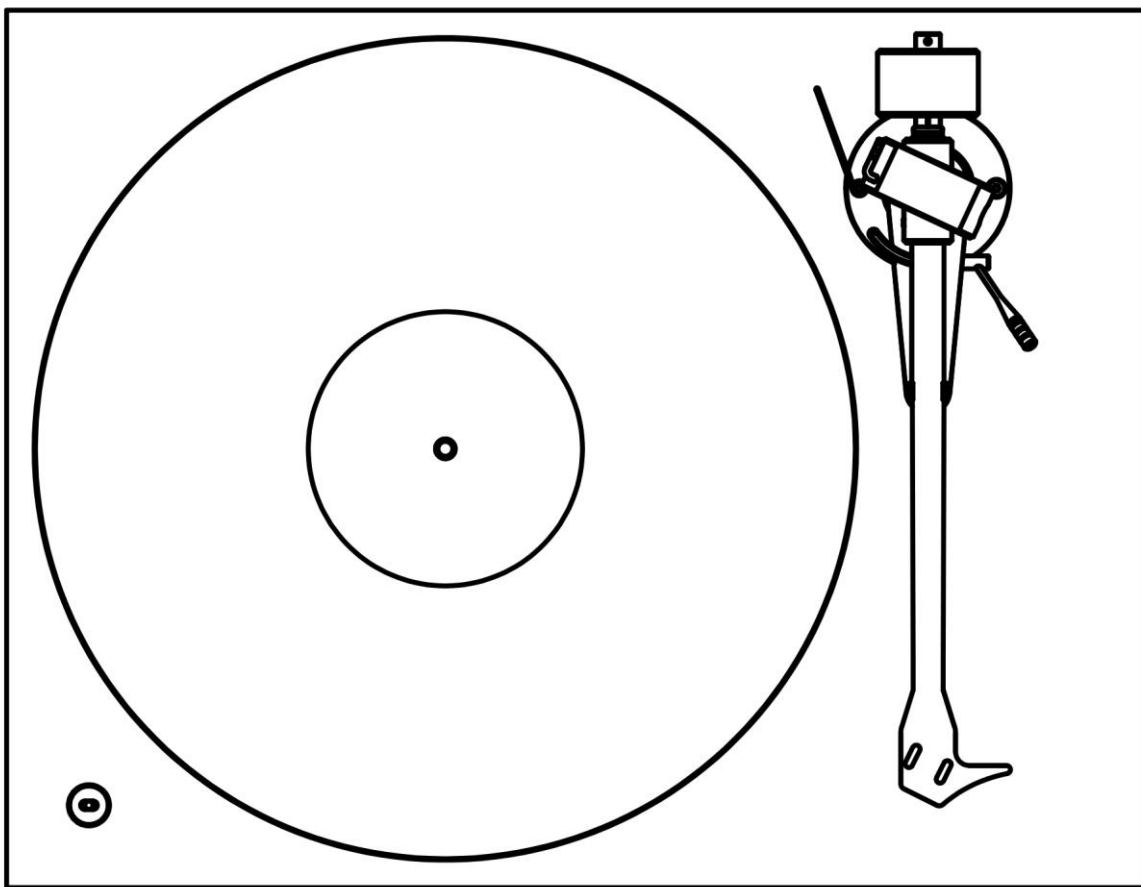
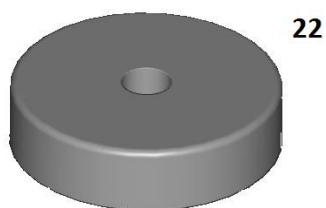
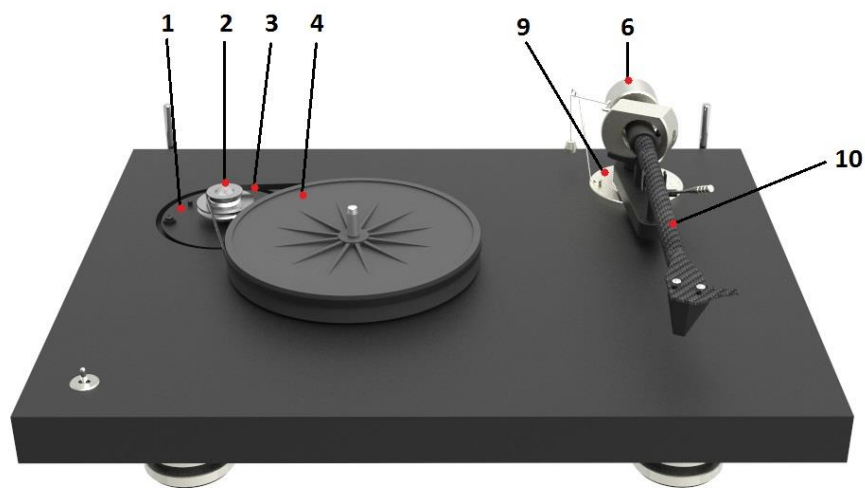
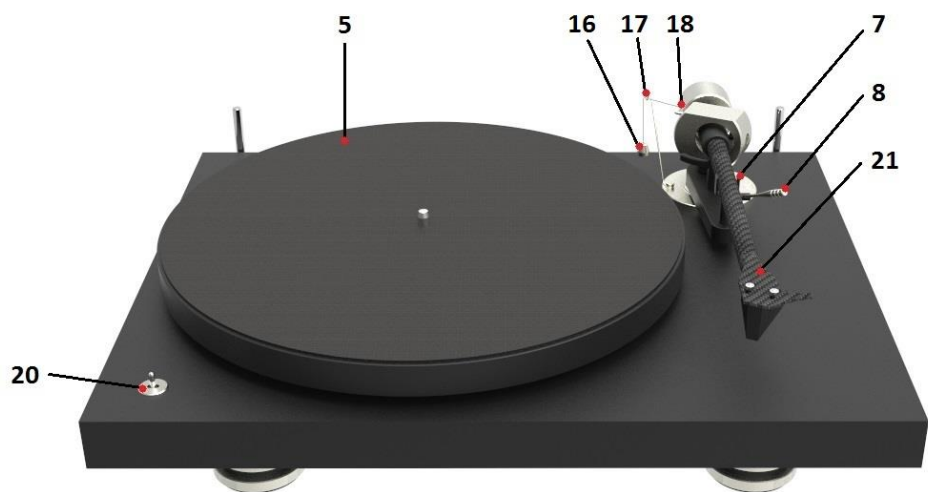




DEBUT PRO B



Pro-Ject Debut PRO B

Controls, features and connections

- 1 Motor with TPE damped flange
- 2 Stepped drive pulley
- 3 Drive belt
- 4 Sub-platter
- 5 Platter with TPE damping and felt mat
- 6 Tonearm counterweight
- 7 Tonearm rest and removable transport lock
- 8 Tonearm lift lever
- 9 Tonearm base with VTA adjustment
- 10 Tonearm tube
- 11 Lid
- 12 Lid hinges
- 13 Hinge fasteners
- 14 Phono outputs: RCA with earth connection & balanced mini XLR output
- 15 Power supply socket
- 16 Anti-skating weight
- 17 Anti-skating weight support hoop
- 18 Anti-skating weight adjustment scale
- 19 Height adjustable feet with TPE damping
- 20 Speed selector
- 21 Headshell with finger lift and fitted Pro-Ject Pick it PRO Balanced
- 22 Single adapter

Accessories:

- a Phono cable Connect it E
- b Stylus pressure gauge
- c Two-point cartridge alignment protractor
- d Round drive belt (78 RPM)
- e Flat drive belt (33, 45 RPM)
- f Allen key 1.5mm, 2mm
- g Universal power supply
- h Manual or Setup Guide



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.

Dear music lover,

Thank you for purchasing your Debut PRO B.

Since 1991 we have been offering high-quality hi-fi products at a reasonable price for discerning music lovers. We started with turntables because they are the first choice for the most natural and affordable music reproduction. Our main focus is always on the materials and technology used. The shape and design of our turntables are always dictated by the functionality.

To this day, our designs have always been kept functional and clean, so the first Pro-Ject product was very simple but made from the highest quality materials: MDF, steel, aluminium, glass, and carbon. Plastic was not used for reasons of sound, durability, and the love of the environment.

The result was a high-quality but simple-looking product with great sound at a low price.

After the Debut Carbon EVO revolutionized the Debut series in 2020, the Debut PRO raised the bar even higher. Now, the Debut PRO B revision also features a balanced mini XLR output together with our new Pick it PRO Balanced cartridge. The first ever balanced MM cartridge!

In order to achieve maximum performance and reliability with new Debut PRO B please read this guide carefully!



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



Important notice.

Safety instructions

The power supply is used to connect and disconnect the unit from the mains. Make sure that the plug is easily accessible at all times. 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.

First Set-up – Making your Debut PRO B ready for playback

The deck is supplied partially disassembled and carefully packaged for safe transport. The Setup Guide, included in the packaging with your Debut PRO B, explains the setup process step by step with pictures, so be sure to follow it first and then refer to this guide should you want more detailed explanations. Here, some of the more technical set-up steps are covered in detail and you will gain a lot of important background information which will make you more comfortable with everything your new Debut PRO B has to offer.

1. Positioning and levelling your turntable

Make sure the surface you wish to use the turntable on is level (use a spirit level) before placing the turntable on it. The height adjustable aluminium feet (19) on the Debut PRO B will also allow you to level the turntable itself, in case you cannot get the surface it is placed on to be level. Great surfaces to put your record player on are typically massive, heavy, stable and also as far as possible away from your speakers. This will avoid the sound of footsteps and other low frequency rumble noises to be transmitted via your floor and furniture/surface and picked up by your turntable. If your record player is super close to your speakers and/or placed on the same surface as your speakers are, then the sound from your speakers will be picked up by your turntable over the sound pressure waves in the air and vibrations from speakers to the surface. It will be a great idea to decouple the speakers from the surface (for example with our Damp it) and/or get a really heavy, massive and decoupled surface for your turntable (for example our Ground it range of accessories). Different locations/rooms/set-up places have different requirements and if you think you might be running into troubles with your set-up, definitely do check these upgrades out, so your Debut PRO B can unfold all of its performance.



2. Cartridge tracking force adjustment (VTF = vertical tracking force)

The counterweight (6) supplied is suitable for cartridges weighing between 7 – 10.5g (**Pro-Ject Pick it PRO Balanced** - weight no. 58).

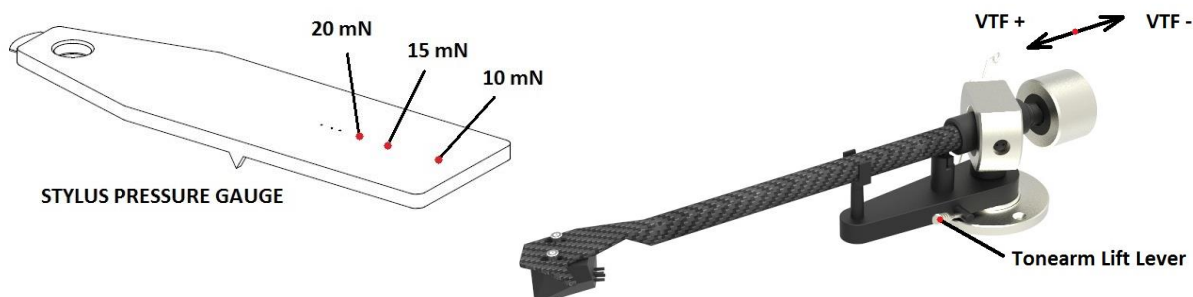
When using different cartridges than the ones supplied with the Debut PRO B, confirm the exact weight of your cartridge before you set the VTF.



Pushing carefully, move the counterweight (6) onto the rear end of the counterweight support rod as shown in the picture below.

Place the stylus pressure gauge 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 exactly in the point marked 20mN (20mN = 2g). If

the stylus gauge becomes level, then the correct pressure has been achieved. However, if there is insufficient or excessive pressure the gauge will either not move or tilt down.



To adjust the amount of pressure, carefully move the counterweight (6) along the support rod, until the stylus pressure is sufficient to raise the pressure gauge to the level position. Moving the counterweight (6) away from the cartridge will reduce pressure and towards will increase pressure.

 Please note: Adjust the tracking force prior to installing the anti-skating weight.
The recommended tracking force for the Pro-Ject Pick IT PRO Balanced cartridge is **20 mN = 2g**.
Use electronic tracking force scales (like Measure it E) for more accurate results.

3. Anti-skating force adjustment

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

<u>Downforce</u>	<u>Groove in the stub (18)</u>
10 - 14mN	1 st from bearing rings
15 - 19mN	2 nd " " "
20mN and bigger	3 rd " " "



Slip the loop of the anti-skating weight's thread over the third 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 (17).

 The Pick it PRO Balanced cartridge on your new Debut PRO B has a recommended tracking force of 20mN (2 grams) so the correct groove for the anti-skating is the 3rd groove.

4. Connection to an amplifier (integrated amplifier or phono preamplifier)

The record player has gold plated female RCA Phono sockets (14) on the back. Use the included Connect it E phono RCA cable to connect your Debut PRO B to your amplifier. The cable ends with the yellow markings are plugged into the phono inputs (sometimes also 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.

 The recommended load impedance for the Pick it PRO Balanced is: **47 kohms**
The recommended load capacitance for the Pick it PRO Balanced is: **150 – 300 pF**
Check your amplifier documentation!

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 your amplifier does not have an input suitable for phono cartridges you will require a separate phono amplifier stage for MM cartridges which is then connected between the record player and a free line level input of the amplifier. A separate phono preamplifier can also be helpful if you want to upgrade your sound experience, as external phono preamps are 100% dedicated to making your turntable sound as good as it can possibly be. They are not limited by other restrictions typically found in integrated amplifiers, which are almost always compromising sound quality a bit.

If you have a balanced phono preamplifier (like our Phono Box S3 B) you can use your Debut PRO B's full potential by running it in a true balanced configuration. With a separately available **Connect it Phono E RCA/miniXLR** you can connect your Debut PRO B to balanced phono preamplifiers and use your cartridge's full potential. Usually this is only possible with MC cartridges, as typical MM cartridges cannot be ran in a fully balanced configuration. The **Pick it PRO Balanced** is the first MM cartridge of its kind, specifically modified to be compatible with balanced phono preamplifiers!

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.

5. 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 (15) on the rear of the record player before connecting the power supply to the mains.

6. Fitting the lid

Fit the lid (dust cover 11) carefully over the hinge prongs and adjust the screws (13) until the lid stays open where you want it to without being too stiff to open or close.

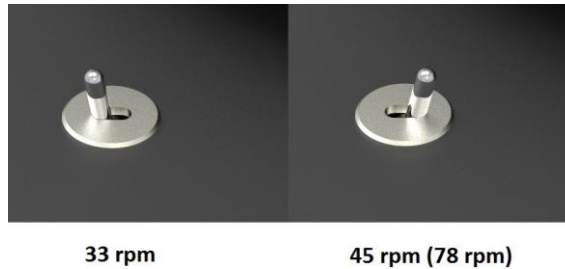


The lid is not only a dust cover but also a resonant structure likely to be excited by and to pass into the plinth the acoustic energy emanating from your loudspeakers during replay. Therefore, it is recommended to remove the lid completely during vinyl playback for achieving a better sound quality.

7. Switching on and off, changing replay speed

The turntable is equipped with a rocker switch for electronic speed change. To play records at 33 rpm, move the rocker switch to the left side. To play records at 45 rpm, move the rocker switch to the right side. To be able to play 78 rpm the flat drive belt has to be removed and the round drive belt has to be fitted around the sub-platter (4) and the larger diameter part of the motor pulley (2). To do so, the platter (5) has to be removed.

After the round drive belt has been fitted, moving the rocker switch to the right selects 78 rpm.



Advanced Debut PRO B adjustment options



The following adjustments are NOT necessary for first time set-up but important later on when changing or upgrading the cartridge! For the included cartridge these settings are factory set correctly.

1. Adjusting the azimuth

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



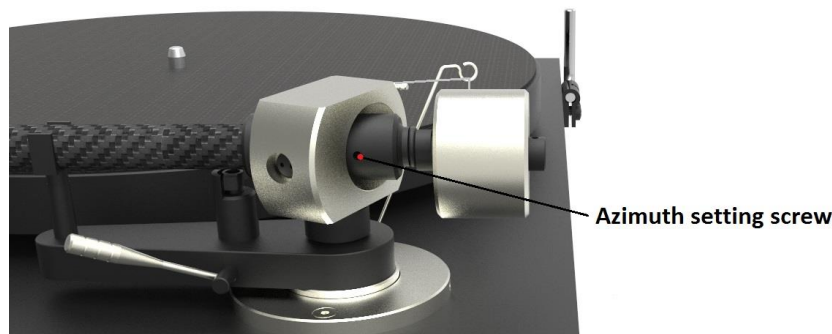
The cartridge on your Debut PRO B that comes pre-adjusted by the factory, is already correctly set up and you do not need to adjust the azimuth anymore! You should check and/or re-adjust the azimuth if you change or upgrade your cartridge.

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.

2. Fitting and connecting a cartridge

The following instructions for fitting and connecting a cartridge are provided in case the cartridge is replaced by a different model at a later date, the included cartridge comes fully adjusted and aligned from the factory.

****** 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 -)
blue	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. Refer to the documentation of the alignment tools you are using for setting up your cartridge correctly. Leave this work to your dealer if you are in any way unsure of the necessary steps and precautions to be taken.

3. Adjusting the vertical tracking angle (VTA)

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.



4. 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. The platter bearing is important for the correct speed and overall lifetime of the turntable. The oil can disappear by playing regularly or it gets dirty by rubbing of the metal (turns from grey to black). You should continually check if there is oil on the axle. In any case, it is a good idea to renew the lubrication after 3 years at the latest.



We recommend using Lube it to lubricate your platter bearing.



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

Technical specifications Pro-Ject Debut PRO B/ Pro-Ject 8.6 PRO

Nominal speeds	33/45 r.p.m.. *** 78 r.p.m. optional
Speed variance	33: $\pm 0.40\%$ 45: $\pm 0.50\%$
Wow and flutter	33: $\pm 0.16\%$ 45: $\pm 0.14\%$
Signal to noise	68dB
Effective tonearm mass	10g
Effective tonearm length	8.6 " (218.5mm)
Overhang	18.5 mm
Power consumption	4W/0W in Stand-By
Outboard power supply	15V / 0 – 0.8mA DC (set at 0.5mA), universal power supply
Dimensions (W x H x D)	415 x 118 x 320mm, dust cover open 415 x 365 x 405mm
Weight	6.0kg
Dimensions packaging (W x H x D)	488 x 235 x 393mm
Weight incl. packaging	8.0kg

Technical specifications Pro-Ject Pick it PRO Balanced

Frequency range	20-20.000 Hz +/-2 dB
Channel separation	22dB/1kHz
Tracking ability	70 μ m
Output voltage	4mV
Recommended load impedance	47kohms
Recommended load capacitance	150-300 pF
Compliance/stylus type	12 μ m/mN – elliptical
Recommended tracking force	20mN (2g)
Tracking angle	20°
Internal impedance, DC resistance	750 Ohm
Internal inductance	450 mH
Weight	7.2g

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 it is 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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This guide was produced by: Pro-Ject Audio Systems
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The information was correct at the time of going to press. The manufacturer reserves the right to make changes to the technical specification without prior notice as deemed necessary to uphold the ongoing process of technical development. . Product images and illustrations can differ from final production specifications.

Declaration of Conformity

We, **SEV Litovel, s r.o.**
Palackého 1160/34
78401 Litovel
Czech Republic
(manufacturer)

and

Pro-Ject Audio Systems a division of Audio Tuning GmbH
Margaretenstrasse 98
1050 Vienna,
Austria
(distributor)

declare under our responsibility that the product is in conformity with the provisions of Directives:
2014/35/EU including amendments
2014/30/EU including amendments
2014/53/EU including amendments

The following harmonised standards were applied:

Health: EN62479:2010

Safety: EN60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013, EN62368-1:2014/A11:2017,
EN61558-1:2005/A1:2009, EN61558-2-16:2009/A1:2013

EMC: EN301489-1 V2.2.0: 2017-03, EN301489-17 V3.2.0:2017-03, EN55032:2015, EN55035:2017,
EN61000-3-2:2014, EN61000-3-3:2013

Radio Spectrum: EN300328 V2.1.1 (2016-11)

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