



INSTRUCTIONS FOR USE
Pro-Ject Debut Carbon DC

Dear music lover,

thank you for purchasing a Pro-Ject Audio record player.

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

**** Your turntable has been delivered with a factory fitted and adjusted cartridge. Please ignore the cartridge set up instructions unless changing the cartridge at a later date.**

During assembling and adjusting of the deck, small parts could be lost if not carefully placed in a suitable receptacle. Before starting the assembly, make yourself acquainted with the parts listed below and correspondingly numbered in the technical drawings above. Separately packed items are marked with an asterisk *.

Parts list

- | | | | |
|------|---|----|-----------------|
| 1 | Motor brackets with Ortofon® pads | | |
| 2 | Stepped drive pulley | | |
| 3 | Drive belt * | 3a | Hook * |
| 4 | Hub | | |
| 5 | Platter with felt mat * | | |
| 6 | Tonearm counterweight * | 6a | Downforce scale |
| 7 | Tonearm lift lever | | |
| 8/18 | Tonearm rest and removable transport lock | | |
| 9 | Tonearm tube | 9a | Tonearm base |
| 10 | Lid * | | |
| 11 | Lid hinges | | |
| 12 | Hinge fasteners | | |
| 13 | Power supply socket | | |
| 14 | Phono output sockets and earth connection | | |
| 15 | Anti-skating weight adjustment scale | | |
| 16 | Anti-skating weight * | | |
| 17 | Anti-skating weight support hoop | | |
| 19 | Power switch | | |
| 20 | Headshell with finger lift and fitted Ortofon OM 10 or Ortofon 2M Red cartridge | | |
| 21 | Motor | | |
| 22 | Single adapter * | | |
| | Connection cable (not shown) * | | |



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



Important notice.

Safety instructions

Make sure that the plug and the switch are 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, such as a flower vase on or near the device. Never spill any liquid on the device. Never place any naked flame sources, such as 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 packed to guarantee a safe transport. Remove all parts from the transport packaging carefully.

Make sure the surface you want to place the turntable is levelled (use a spirit level).

Remove the transport lock (18) from the tonearm. Store it in the original packaging so it is available for future transportations.

Fit the drive belt (3) around the hub (4) and the smaller diameter part of the motor pulley (2). 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. Put the platter (5) and felt mat over the spindle of the hub (4).

Cartridge downforce adjustment

The counterweights (6) supplied are suitable for cartridges weighing between 4,5 - 6g (**Ortofon OM 10** - weight no. **80**) and 6,5 - 8,5g (**Ortofon 2M Red** - weight no. **8**).

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 arm lift and place the cartridge in the space between arm rest and platter. Rotate the counterweight (6) until the arm tube is balanced. 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 before balancing the arm tube.

Once the arm is balanced correctly, 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 prong (15). Check if the arm is still balanced.

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 before installing the anti-skating weight.

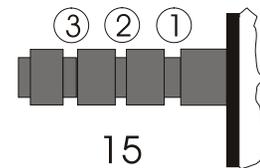
*The recommended downforce for Ortofon OM 10 cartridge is **15mN**.*

*The recommended downforce for Ortofon 2M Red cartridge is **17,5mN**.*

Anti-skating force adjustment

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

<u>Downforce</u>	<u>Groove in the stub (15)</u>
10 - 14mN	1 st bearing ring
15 - 19mN	2 nd bearing ring
20mN and higher	3 rd bearing ring



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 (17).

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** interconnect cables for connection to the amplifier.

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 used cartridge. Line inputs (such as CD, Tuner, Tape or Video) are not suitable.

Take care of connecting 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 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 visit 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 (13) on the rear of the record player before connecting the power supply to the mains.

Mounting the lid

Put the lid (dust cover 10) carefully over the hinge prongs and adjust the screws (12) until the lid stays open where you want it to without being too stiff to open or close.

Switching on and off

Pressing the power switch (19) alternately starts or stops the motor.

Changing replay speed

To play records at 45 r.p.m. remove the platter (5). Use the accessory tool provided (3a) and hook the belt (3) over the larger diameter part of the motor pulley (2). Put the platter on. To revert to 33 r.p.m. repeat the proceedings using the smaller step on the pulley.



*** In addition, 78 r.p.m. is available after mounting a special pulley, which may be purchased as an optional extra.

For detailed product information please visit the Pro-Ject web site www.project-audio.com.

Useful tips

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

Adjusting the azimuth

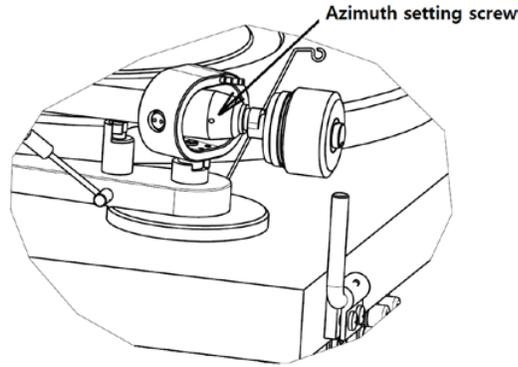
** The cartridge needle must be vertical in the record groove in order to trace the groove wall modulations correctly.

A small screw at the bearing end of the arm allows to correct incorrect azimuth if your needle is not mounted exactly perpendicular to the cartridge body.

Open 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.

After adjusting the needle parallel, retight 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.

Mounting and connecting the cartridge

** All cartridges with half inch mounting holes can be fitted. Leave the needle's protection cover on and put the cartridge on the headshell by using the cartridge supplied screws. Pass 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 adjusted correctly. Particular tools like the Pro-Ject Audio Systems 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 it 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. To avoid static electricity (which attracts even more dust), do not use a dry cloth! Antistatic cleaning fluids are available at specialist stores but must be applied sparingly to avoid damage to rubber parts. It is recommended to put on the needle cover before cleaning to avoid damage.

If the player is not used for a long time, the drive belt should be removed to prevent unequal stretching.



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

Technical specifications Pro-Ject Debut Carbon DC/ Pro-Ject 8.6cc

Nominal speeds	33/45 r.p.m.. *** 78 r.p.m. optional
Speed variance	33: 0,2% 45: 0,16%
Wow and flutter	33: 0,12% 45: 0,11%
Signal to noise	68dB
Effective tonearm mass	6g
Effective tonearm length	8,6 " (218,5mm)
Overhang	18,5mm
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 5,6kg

Technical specifications MM-Cartridge Ortofon OM 10

Frequency range 20-22.000Hz
Channel separation 22dB/1kHz
Output voltage 4mV
Recommended load impedance 47kohms/amplifier connection – MM-input
Compliance/stylus type 25 μ m/mN – elliptical
Recommended tracking force 15mN
Weight 5g

Technical specifications MM-Cartridge Ortofon 2M Red

Frequency range 20-22.000Hz
Channel separation 22dB/1kHz
Output voltage 5,5mV
Recommended load impedance 47kohms/amplifier connection – MM-input
Compliance/stylus type 20 μ m/mN – elliptical
Recommended tracking force 18mN
Weight 7,2g

Potential incorrect use and fault conditions

Pro-Ject Audio Systems 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 does not 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 missing plug/socket connection.
- Phono input is not selected at amplifier.
- Amplifier is not switched on.
- Amplifier or speakers are 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 a wrong input on the amplifier, or MM/MC switch is setted incorrectly.
- Needle or cantilever is damaged.
- Wrong r.p.m., drive belt is overstretched or dirty, platter bearing is 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 if the problem cannot be resolved there, the unit should be sent to the responsible distributor in your country.

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

Never return a record player without making sure that it is disassembled safely and packed correctly 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 (16) platter (5) and belt (3). Put on the cartridge protection cap. Insert the transport lock for the tonearm (18) before packing the record player.

Warranty

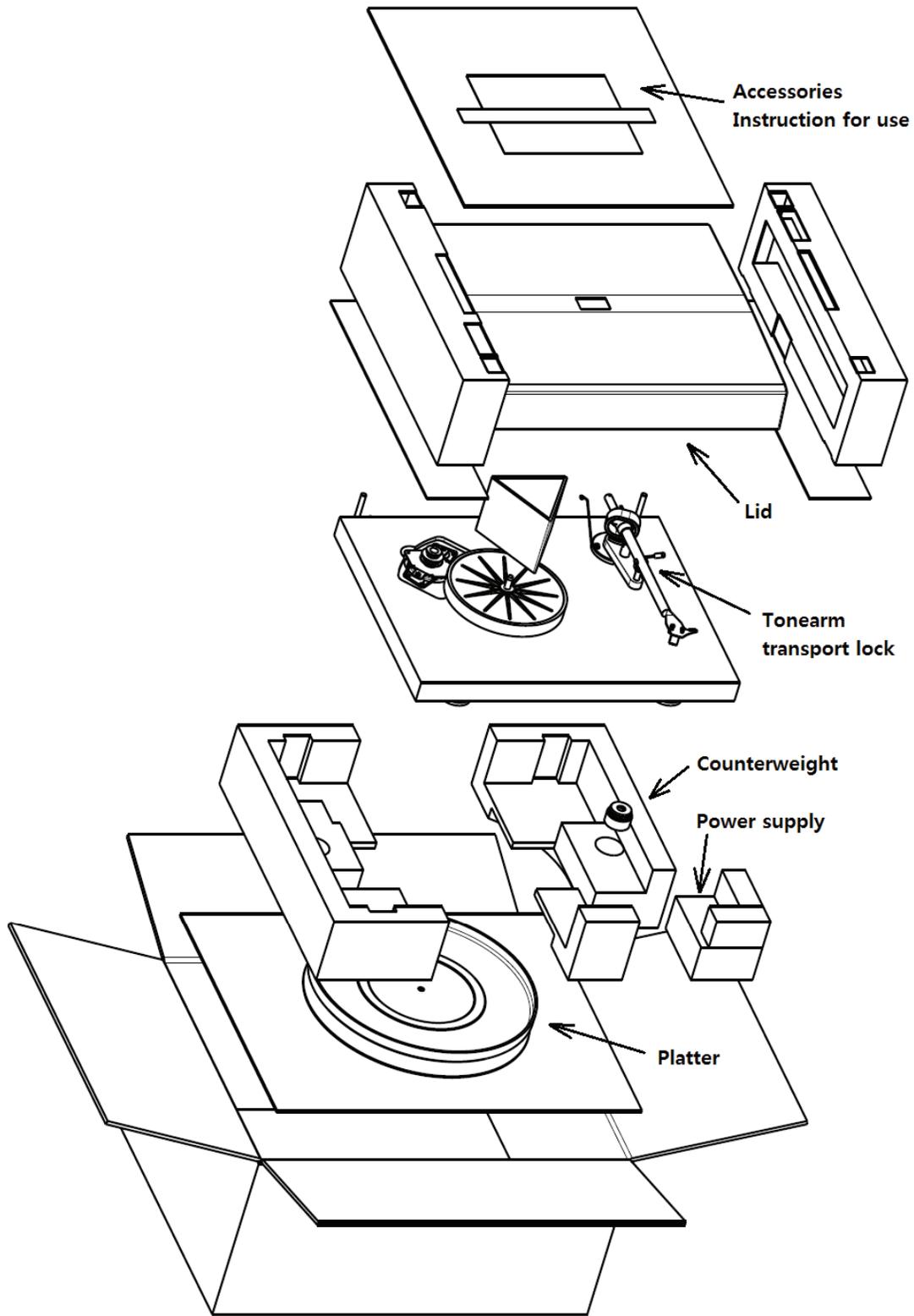


The manufacturer accepts no responsibility for damage caused by not adhering to these instructions for use and/or by transportation without the original packaging. Modification or changes to any part of the product by unauthorized persons, releases the manufacturer from any liability over and above the lawful rights of the customer.

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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.



Debut Carbon (DC)

Audiophile „best buy“ turntable

- 8,6" carbon tonearm
- Increased platter size with more weight
- Precision belt drive with synchronous motor
- New DC power supply with ultra precision frequency DC-driven AC generator (like Speed Box) for ultimate speed stability.
- New TPE motor suspension
- Felt mat
- magnetic cartridge options OM 10
2M red from Ortofon
- 7 high-gloss colours

Speed	33, 45 (manual speed change)
Drive principle	belt drive
Platter	300mm metal with felt mat
Mains bearing	stainless steel
Wow & flutter	+/- 0,10%
Speed drift	+/- 0,80%
Signal to noise	- 68dB
Tonearm	8,6", Carbon
Effective arm length	218,5 mm
Effective arm mass	6,0 g
Overhang	18,5mm
Tracking force	10 - 30mN
Power connection	110/120 or 230/240 Volt - 50 or 60 Hz
included accessories	15 volts DC /0,8A power supply, dust cover
Standby power consumption	< 1 watt
Dimensions	415 x 118 x 320mm (WxHxD) lid closed
Weight	5,6 kg net



The best-buy turntable classic with carbon tonearm and DC power supply!

The first Debut turntable, introduced in the late 1990s, was a revolution for the hi-fi industry. For the first time after the arrival of Compact Disc and the assumed demise of vinyl records, an analogue product re-emerged in the "mass market" – something all music lovers could afford. The new DEBUT Carbon DC has been designed to set new standards in this category for the coming decade – perfectly timed as analogue today is again a respected source, while the demand for good turntables is growing again!

The most obvious improvement is the inclusion of a CARBON TUBE for the tonearm, which increases stiffness and decreases unwanted resonance. This material normally is extensively used in high-end tonearms, but – because of cost reasons – was never used in products at lower price levels. Together with other improvements like an increase in platter size and weight to realize even smoother rotation, the overall sound quality is greatly improved. The approved belt drive design offers low noise AC motor with effective motor decoupling (utilising TPE-damping) and ultra precision frequency DC-driven AC generator (like Speed Box) for ultimate speed stability without unwanted vibration.

The DEBUT CARBON DC will be offered in high-gloss black or shiny red, green, blue, yellow, silver or white as no-added-cost option.

