



Pro-Ject Essential III Flexi-Range Turntable Instruction Manual

[Home](#) » [Pro-Ject](#) » Pro-Ject Essential III Flexi-Range Turntable Instruction Manual 

Pro-Ject Essential III Flexi-Range Turntable



Dear Music Lover,

Congratulations and thank you for choosing Pro-Ject Audio Systems record player. Your Essential III turntable has been handcrafted and rigorously tested by skilled technicians to give you years of enjoyable, trouble free service. Please contact your dealer if you require additional assistance.

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 you are missing parts or if the unit is damaged, please do not operate and contact your dealer.

Contents

1 GENERAL INFORMATIONS

- 1.1 Controls, features and connections
- 1.2 Accessories

2 SETUP

- 2.1 Platter and drive belt installation
- 2.2 Cartridge installation, stylus exchange
- 2.3 Vertical Tracking Force setting (VTF)
- 2.4 Anti-skating force adjustment
- 2.5 Azimuth setting

3 ESSENTIAL III

- 3.1 Controls, features and connections
- 3.2 Switching on and off
- 3.3 Changing replay speed
- 3.4 Connection to the amplifier

4 ESSENTIAL III BT

- 4.1 Controls, features and connections
- 4.2 Switching on and off
- 4.3 Changing replay speed
- 4.4 Connection to the amplifier
- 4.5 BT pairing

5 ESSENTIAL III Phono

- 5.1 Controls, features and connections
- 5.2 Switching on and off
- 5.3 Changing replay speed
- 5.4 Connection to the amplifier

6 ESSENTIAL III SB

- 6.1 Controls, features and connections
- 6.2 Switching on and off, changing replay speed
- 6.3 Connection to the amplifier

7 ESSENTIAL III Digital

- 7.1 Controls, features and connections
- 7.2 Switching on and off
- 7.3 Changing replay speed
- 7.4 Connection to the amplifier

8 ESSENTIAL III Recordmaster

- 8.1 Controls, features and connections
- 8.2 Switching on and off, changing replay speed
- 8.3 Connection to the amplifier
- 8.4 Connecting to a Computer
- 8.5 Recording Programme

9 ESSENTIAL III HP

- 9.1 Controls, features and connections
- 9.2 Switching on and off
- 9.3 Changing replay speed
- 9.4 Connection to the amplifier
- 9.5 Connecting a headphone
- 9.6 Volume control knob
- 9.7 Technical specifications MM phono pre-amplifier (Essential III Headphone)
- 9.8 Technical specifications MM phono pre-amplifier (Essential III Headphone)
- 9.9 Technical specifications Pro-Ject Essential III Flexi-Range / Pro-Ject 8.6
- 9.10 Technical specifications MM-Cartridge Ortofon OM 10
- 9.11 Technical specifications MM phono pre-amplifier (Essential III Digital)
- 9.12 Technical specifications MM phono pre-amplifier (Essential III Phono, RecordMaster)

[Recordmaster\)](#)

[9.13 Potential incorrect use and fault conditions](#)

[9.14 Service](#)

[9.15 Warranty](#)

[10 Documents / Resources](#)

[11 Related Posts](#)

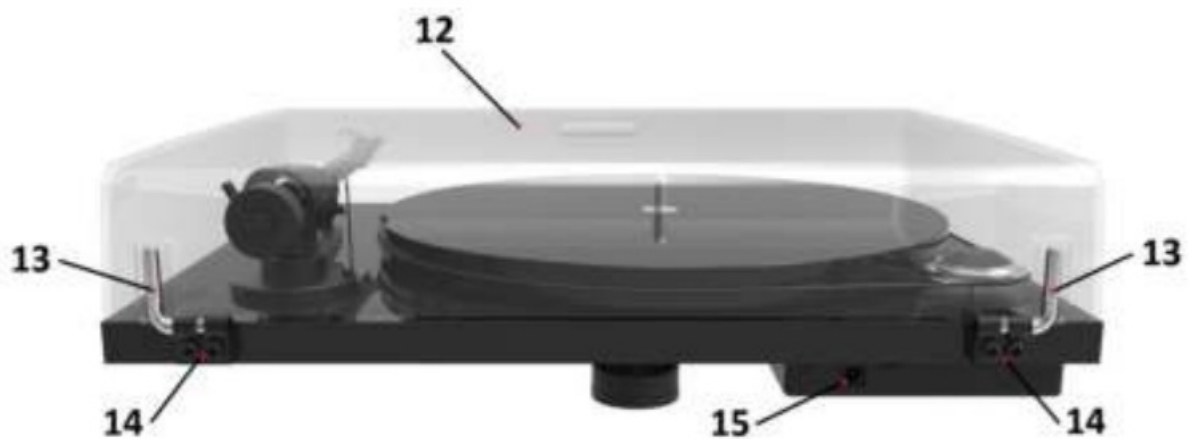
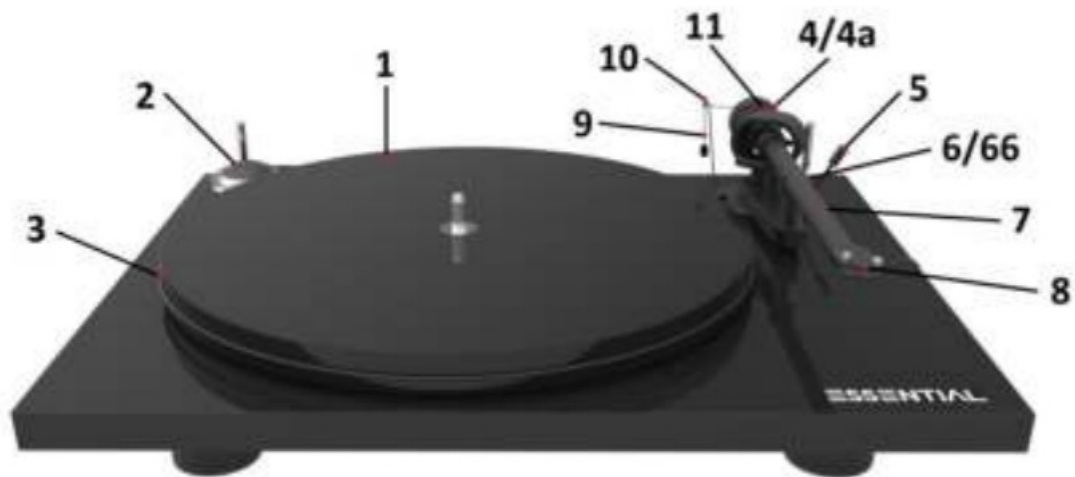
GENERAL INFORMATION

Controls, features and connections

1. PLATTER & FELT MAT
2. DRIVE PULLEY
3. DRIVE BELT
4. TONEARM COUNTERWEIGHT (4a) DOWNFORCE SCALE
5. TONEARM LIFT LEVER
6. TONEARM REST (66) REMOVABLE TRANSPORT LOCK
7. TONEARM TUBE
8. HEADSHELL WITH FINGER LIFT AND PRE-MOUNTED ORTOFON OM10
9. ANTI-SKATING WEIGHT WITH WIRE
10. ANTI-SKATING WEIGHT SUPPORT HOOP
11. ANTI-SKATING STUB WITH ADJUSTMENT SCALE
12. LID
13. LID HINGES
14. HINGE FASTENERS
15. POWER SUPPLY SOCKET

Accessories

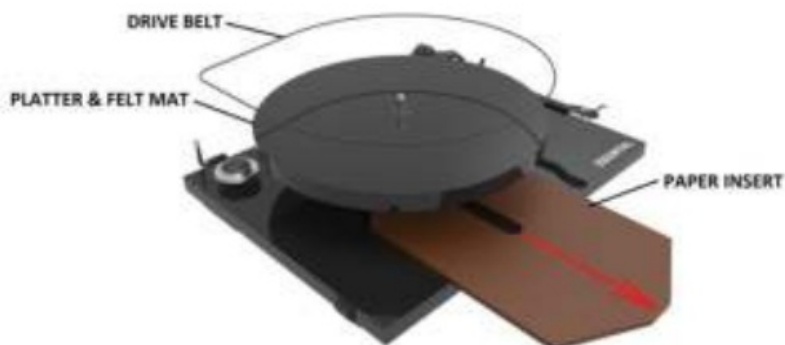
1. ANTI-SKATING WEIGHT
2. HOOK TOOL FOR SPEED CHANGE
3. SINGLE ADAPTOR
4. ALLEN KEY 1,5mm
5. COUNTERWEIGHT no. 00
6. TWO-POINT CARTRIDGE ALIGNMENT PROTRACTOR
7. UNIVERSAL POWER SUPPLY
8. CONNECTION CABLE (CONNECT IT E RCA)
9. INSTRUCTION FOR USE



SETUP

Platter and drive belt installation

Please remove brown paper insert which holds the platter in transport position. Put the felt mat on the top of the platter. Install the drive belt as shown in the following illustration.



Cartridge installation, stylus exchange

* If you purchased this turntable in a package that included the cartridge, this has already been done for you.

Install the cartridge into the aluminum headshell, using the appropriate hardware included with your cartridge. All cartridges with half inch mounting holes can be fitted. 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 Essential III accessories. If unfamiliar with two-point setup, please refer to your dealer. A damaged or worn stylus may harm your record collection and should be replaced. Please remove stylus protection before pulling the stylus from the cartridge and replace for a new one. Stylus type is exchange for pre-mounted cartridge Ortofon OM 10: Stylus OM 10. If in doubt, consult your local dealer or distributor.

Vertical Tracking Force setting (VTF)

Before setting the Vertical Tracking Force, confirm the exact weight of your cartridge. The counterweight supplied (no. **00**) is suitable for cartridges from 3,5 to 5,5g. An alternative counterweight (no. **01**) for cartridges between 6 – 9g is available on request. Pushing carefully, turn the counterweight onto the rear end of the tonearm tube. With the tonearm lift in lower position, carefully rotate the counterweight until the tonearm tube balances out. Once the tonearm is correctly balanced, return it to the rest. Hold the counterweight without moving it, and gently revolve the downforce scale ring until the zero is in line with the anti-skating stub. 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 VTF prior to installing the anti-skating weight.*



Anti-skating force adjustment

Hang the loop of the thread of the anti-skating weight in the groove of the anti-skating stub corresponding to the downforce applied to your cartridge and feed the thread through the loop of the wire support. The anti-skating force must be adjusted corresponding to the downforce as follows:

VTF	Groove in the stub
10 – 14mN	1 st from bearing rings
15 – 19mN	2 nd " " "
20mN and bigger	3 rd " " "



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. Loosen the small azimuth screw, again using the 1.5 mm allen 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.



ESSENTIAL III

Controls, features and connections

1. ON/OFF SWITCH
2. STEPPED DRIVE PULLEY
3. OUTPUT CABLE CONNECT IT E



Switching on and off

Pressing the ON/OFF switch alternately starts or stops the motor.

Changing replay speed

To play 45 r.p.m., put the drive belt over the larger diameter part of the motor pulley. To revert to 33 r.p.m. repeat the proceedings using the smaller step on the pulley.

Connection to the amplifier

The record player has a captive tonearm signal lead for connection to the amplifier. Use the Phono input 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.

ESSENTIAL III BT

Controls, features and connections

1. ON/OFF SWITCH
2. STEPPED DRIVE PULLEY
3. PHONO/LINE OUTPUT, EARTH CONNECTION
4. BT SWITCH



Switching on and off

Pressing the ON/OFF switch alternately starts or stops the motor.

Changing replay speed

To play 45 r.p.m., put the drive belt over the larger diameter part of the motor pulley. To revert to 33 r.p.m. repeat the proceedings using the smaller step on the pulley.

Connection to the amplifier

The record player has two possible outputs – Line OUT with integrated preamplifier and Phono OUT for connection to the preamplifier. If you choose Phono OUT, then 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. If you choose Line OUT, then use the Line inputs (like CD, Tuner, Tape oVideo). Take care about connecting the left and right channel correctly. The right channel is usually marked red, the left channel black or white. Check the manual of your amplifier for relevant information. An earthing wire may be connected to the screw terminal between the sockets if you encounter humming problems.

BT pairing

The record player has BT output and transmit signal automatically when is connected to mains. It is paired automatically with any device with BT receiver (such as Pro-Ject MaiA, MaiA DS, BT Box s and BT Box E). For pairing with other devices and portable speakers use the manual of the given product. For restart of the BT transmitter, please turn OFF and ON the BT module by using the switch. Restart is needed only when there is a change of the BT receiver.

ESSENTIAL III Phono

Controls, features and connections

1. ON/OFF SWITCH
2. STEPPED DRIVE PULLEY
3. PHONO/LINE OUTPUT, EARTH CONNECTION
4. PHONO/LINE OUTPUT SWITCH



Switching on and off

Pressing the ON/OFF switch alternately starts or stops the motor.

Changing replay speed

To play 45 r.p.m., put the drive belt over the larger diameter part of the motor pulley. To revert to 33 r.p.m. repeat the proceedings using the smaller step on the pulley.

Connection to the amplifier

The record player has gold plated female RCA phono sockets and possibility to choose between Phono and LINE output. With LINE OUT on, you can use a line input (such as AUX, CD, Tuner, Tape or Video) on your amplifier. With PHONO OUT on, you can use your own phono pre-amplifier (sometimes labelled gram, disc or RIAA).



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

ESSENTIAL III SB

Controls, features and connections

1. SPEED CONTROL
2. DRIVE PULLEY
3. PHONO OUTPUT, EARTH CONNECTION



Switching on and off, changing replay speed

To play records at 33 r.p.m. press the speed control switch to starts the motor. Pressing the ON/OFF switch two times selects 45 r.p.m.. The selected speed is shown respectively by the flashing LED. When the platter has attained full speed, the LEDs stop flashing. A long (more than three seconds) press on the ON/OFF switch stops the motor.

Connection to the amplifier

Connect the tonearm cable provided with the accessories to the RCA tonearm output that is located at the rear of the turntable, behind the tonearm. Connect the grounding cable on the earth connection screw. 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.



ESSENTIAL III Digital

Controls, features and connections

1. ON/OFF SWITCH
2. STEPPED DRIVE PULLEY
3. PHONO/LINE OUTPUT, EARTH CONNECTION
4. PHONO/LINE OUTPUT SWITCH
5. DIGITAL OUTPUT SWITCH (24bit/48kHz or 24bit/96kHz)



Switching on and off

Pressing the ON/OFF switch alternately starts or stops the motor.

Changing replay speed

To play 45 r.p.m., put the drive belt over the larger diameter part of the motor pulley. To revert to 33 r.p.m. repeat the proceedings using the smaller step on the pulley.

Connection to the amplifier

The record player has two possibilities of connection to the amplifier.

The analog output:

The record player has gold plated female RCA phono sockets and possibility to choose between Phono and LINE output. With LINE OUT on, you can use a line input (such as AUX, CD, Tuner, Tape or Video) on your amplifier. With PHONO OUT on, you can use your own phono pre-amplifier (sometimes labelled gram, disc or RIAA).



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

The digital output:

The record player has digital S/PDIF output through optical connector with switch between 24bit/48kHz and 24bit/96kHz. Use the optical input on your amplifier, AV receiver or D/A converter. Optical cable is not supplied with the record player. Your dealer can help you with selection of the optical cable.

ESSENTIAL III Recordmaster

Controls, features and connections

1. SPEED CONTROL
2. DRIVE PULLEY
3. PHONO/LINE OUTPUT, EARTH CONNECTION
4. PHONO/LINE OUTPUT SWITCH



Switching on and off, changing replay speed

To play records at 33 r.p.m. press the speed control switch to start the motor. Pressing the ON/OFF switch two times selects 45 r.p.m.. The selected speed is shown respectively by the flashing LED. When the platter has attained full speed, the LEDs stop flashing. A long (more than three seconds) press on the ON/OFF switch stops the motor.

Connection to the amplifier

The record player has gold plated female RCA phono sockets (14) and possibility to choose between Phono and LINE output. With LINE OUT on, you can use a line input (such as AUX, CD, Tuner, Tape or Video) on your amplifier. With PHONO OUT on, you can use your own phono pre-amplifier (sometimes labelled gram, disc or RIAA).



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

Connecting to a Computer

Connect the USB-output of the unit to a free USB-socket on your computer and turn it on/make sure it is powered on. The “new hardware found assistant” will automatically detect the unit and announces it as a **Microphone USB audio codec**. There is no need to install a driver manually. After installation, one setting has to be done. For example – Windows 7® operating system: → Control Panel → Sound → Recording → **Microphone USB Audio CODEC** → Properties → Advanced: set to **2 channel, 16 bit, 48000 Hz (DVD Quality)**



Please note: Connection should be made to an USB-socket of your computer directly. Connecting to USB-hubs or switches can cause problems.

Recording Programme

In case you do not have a recording programme installed on your computer, you may download one free from the Internet. Recording programmes may be found by searching Google.



In the menu of the recording programme, source or input may have to be set to Microphone USB audio codec. Please be aware that downloads from the Internet are made entirely at your own risk. Under no circumstances can we carry responsibility or provide support for third-party software products sourced from the internet or for any damage or problems arising from the use thereof. All downloads should be checked with an up-to-date anti-virus programme. License fees may be applicable.

ESSENTIAL III HP

Controls, features and connections

1. ON/OFF SWITCH
2. STEPPED DRIVE PULLEY
3. PHONO/LINE OUTPUT, EARTH CONNECTION
4. HEADPHONE OUTPUT
5. HEADPHONE VOLUME CONTROL



Switching on and off

Pressing the ON/OFF switch alternately starts or stops the motor.

Changing replay speed

To play 45 r.p.m., put the drive belt over the larger diameter part of the motor pulley. To revert to 33 r.p.m. repeat the proceedings using the smaller step on the pulley.

Connection to the amplifier

The record player has two possible outputs – Line OUT with integrated preamplifier and Phono OUT for connection to the preamplifier. If you choose Phono OUT, than 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. If you choose Line OUT, than use the Line inputs (like CD, Tuner, Tape or Video). Take care about connecting the left and right channel correctly. The right channel is usually marked red, the left channel black or white. Check the manual of your amplifier for relevant information. An earthing wire may be connected to the screw terminal between the sockets if you encounter humming problems.

Connecting a headphone

Connect the headphones to the ¼" (6,3mm) jack socket on the front of the Turntable.

Volume control knob

The headphone amplifier is turned off when the volume knob is turned to its end anti-clockwise. To turn the headphone amplifier on, turn the volume knob clockwise and then adjust the level to the required volume.

Technical specifications MM phono pre-amplifier (Essential III Headphone)

Gain	40dB
Output voltage typically	500mV/1kHz at 5mV/1kHz
Input impedance	47kohms/120pF
Noise floor	88dB (A weighted)
RIAA-equalisation curve accuracy	20Hz-20kHz / max. 0,5d
THD:	<0,05%
Headphone Output Power	61wM (16 Ohm)/32mW (32 Ohm)

Technical specifications MM phono pre-amplifier (Essential III Headphone)

Gain	40dB
Output voltage typically	500mV/1kHz at 5mV/1kHz
Input impedance	47kohms/120pF
Noise floor	88dB (A weighted)
RIAA-equalisation curve accuracy	20Hz-20kHz / max. 0,5d
THD:	<0,05%

Technical specifications Pro-Ject Essential III Flexi-Range / Pro-Ject 8.6

Nominal speeds	33/45 r.p.m.
Speed variance	33: $\pm 0,70\%$ 45: $\pm 0,60\%$
Wow and flutter	33: $\pm 0,21\%$ 45: $\pm 0,19\%$
Signal to noise	-66dB
Effective tonearm mass	8,0g
Effective tonearm length	8,6" (218,5mm)
Overhang	22,0mm
Power consumption	4,5W
Outboard power supply	15V/500mA DC, suitable for your country's mains supply
Dimensions (W x H x D)	420 x 112 x 330mm
Weight	5,0kg
Dimensions packaging (W x H x D)	488 x 235 x 393mm
Weight incl. packaging	7,0kg

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	20 μ m/mN – elliptical
Recommended tracking force	15mN
Weight	5g

Technical specifications MM phono pre-amplifier (Essential III Digital)

Gain	34dB
Output voltage typically	160mV/1kHz at 4mV/1kHz input
Input impedance	47kohms/100pF
Noise floor	>73dB
RIAA-equalisation curve accuracy	20Hz-20kHz / max. 0,5dB
Optical output:	24/48 kHz or 24/96 kHz (bit depth/sampling frequency)

Technical specifications MM phono pre-amplifier (Essential III Phono, RecordMaster)

Gain	34dB
Output voltage typically	200mV/1kHz at 5mV/1kHz input
Input impedance	47kohms/100pF
Noise floor	-68dB
RIAA-equalisation curve accuracy	20Hz-20kHz / max. 0,5dB
Weight	2,8 kg

BT

Maximum transmit power per operated frequency band

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 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 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.

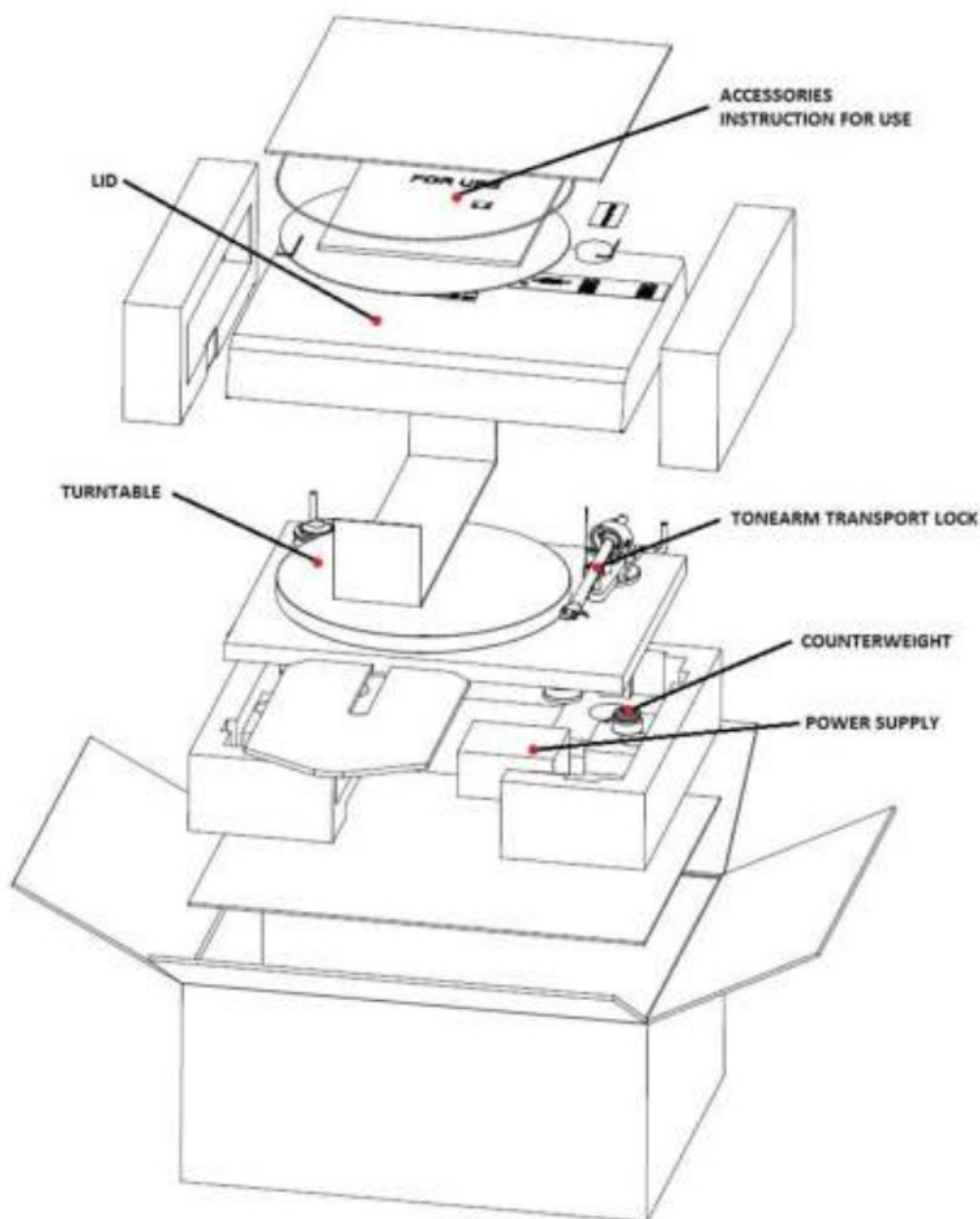
Service

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 affected 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, counterweight, anti-skating weight and belt. Fit the cartridge protection cap and the transport lock for the tonearm tube, 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. Pro-Ject Audio Systems is a Registered Trademark of H. Lichtenberger. This guide was produced by: Pro-Ject Audio Systems. 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.





Litovel, s.r.o.

CE 18

DECLARATION OF CONFORMITY

We, **SEV Litovel, s.r.o.**
(Manufacturer's name)

Palackého 1160/34, 784 01 Litovel, CZECH REPUBLIC
(Manufacturer's address)

declare under our responsibility that the turntable with mains adapter:

Essential III BT

(Turntable + BT modul)

to which this declaration relates is in conformity with the provisions of directives:

2014/35/EU including amendments

2014/30/EU including amendments

2014/53/EU including amendments

and the following standards:

A 3.1 a) Health **EN 62479:2010**; Safety **EN 60950-1:2006+A11:2009**
+A1:2010+A12:2011+A2:2013

A 3.1 b) EMC **EN 301 489-1 v 1.9.2**; **EN 301 489-17 v 2.2.1**

A 3.2 Radio Spectrum **EN 300 328 v 2.1.1**

Test Report EMC Essential III BT No.: 414103765AE2

issue Date 11.04.2018

issued by **INSTITUTE FOR TESTING AND CERTIFICATION, a.s.**
Uherské Hradiště, Czech Republic

EC-RED CERTIFICATE Bluetooth Audio Transmitter Module

No.: HTT17305039

Issue Date 10.2017


issued by **SHENZHEN HTT TECHNOLOGY CO., LTD**
Shenzhen, Guangdong, China

Litovel 12.04.2018
(Place, date)


Ing. Jiří Menci
Director corporation
(Signature, name and function)

 **Pro-Ject**
AUDIO SYSTEMS

Documents / Resources

 <small>INSTRUCTIONS FOR USE Pro-Ject Essential III Flexi-Range</small>	Pro-Ject Essential III Flexi-Range Turntable [pdf] Instruction Manual Essential III, Flexi-Range Turntable, Essential III Flexi-Range Turntable, Range Turntable, Turntable
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