

LUXMAN

BELT DRIVE ANALOG PLAYER
PD-151



PD-151. Preserving the fragile beauty of analog music reproduction.



Audiophiles love the warmth, organic texture and uncanny beauty of analog music reproduction.

But that beauty is notoriously fragile. Even slight variations in platter speed can blur the musical pitch, placing the sound behind an unnatural veil. And when music lovers turn up the volume, the phono cartridge can pick up even subtle chassis vibration and resonance

– distortions the cartridge cannot distinguish from the desired tracking of the record groove.

At LUXMAN, we understand. And we built that understanding into the PD-151 analog player, a more accessible alternative to our highly regarded PD-171A / AL.

From the 10 mm thick aluminum top plate to the high-torque motor, the ultra-wide drive belt and the 4.0 kg platter, every aspect of the PD-151 pursues just one purpose.

To do full justice to the ineffable beauty of analog sound.

Proprietary high-torque brushless DC motor



Brushless DC motor

The purity of musical pitch depends entirely on the stability of platter rotation. That's why LUXMAN engineers went to extraordinary lengths. We start with our unique sine wave/Pulse Width Modulation power supply, which provides ultra-stable direct current to our proprietary DC brushless motor. The result of years of development, this high-torque motor incorporates low-noise acoustic bearings and an optimized number of coil turns. The drive system monitors and maintains speed with our Proportional-Integral-Derivative (PID) feedback control loop. Proportional means quick achievement of target speed. Integral means fast correction of minor errors. And differential means control over rapid fluctuations. For added precision, the motor drives the outside flange of the platter through an uncommonly wide belt.



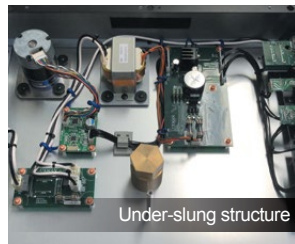
Tone arm

Single point cross tonearm

The tone arm incorporates the classic single point cross suspension bearing for ultra-smooth motion. Static balance accommodates different cartridge-headshell combinations.
Note : the cartridge is not included.

Underslung chassis fights vibration

LUXMAN engineered an underslung, suspended structure with components mounted under the 10 mm thick aluminum upper chassis. This achieves high rigidity while suppressing vibration.



Under-slung structure

Transformer and motorisolation damping

LUXMAN understands that even the player's internal components can cause distortion-inducing vibration. That's why the PD-151 isolates the chassis from the motor and power transformer with advanced rubber damping mounts. Sight unseen, these mounts help enable music reproduction of the highest order.



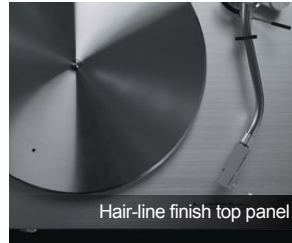
Damping material

Separate 33-1/3, 45 and 78 rpm pitch adjustments

You can fine-tune the musical pitch of playback with separate front panel adjustments for 33-1/3, 45 and 78 rpm. An LED indicator flashes green when the pitch is flat, flashes blue when it's sharp, and lights solid green when the PD-151 is precisely on-pitch.



Pitch adjustments



Hair-line finish top panel

10mm thick aluminum top plate

Our latest design, mounting the three major elements of a turntable - tone arm, motor and platter, onto a hair-line finished 10mm thick top panel, aims to achieve beauty, simplicity and functionality. The matt black lower chassis creates a bold, yet sensitive contrast.

Heavy-duty insulator feet

A player this massive requires specially engineered feet. We created large insulators from rubber carefully selected for superb damping across all operating temperatures. Each insulator offers 8 mm of independent height adjustment.



Insulator with special damping rubber



Magnesium headshell

Headshell

We make the supplied headshell from magnesium alloy for reduced weight and high strength.

Phono cable

As you would expect, the supplied DIN-RCA output cable uses audiophile grade Oxygen Free Copper.



Phono cable

4.0 kg machined aluminum platter and stainless steel spindle



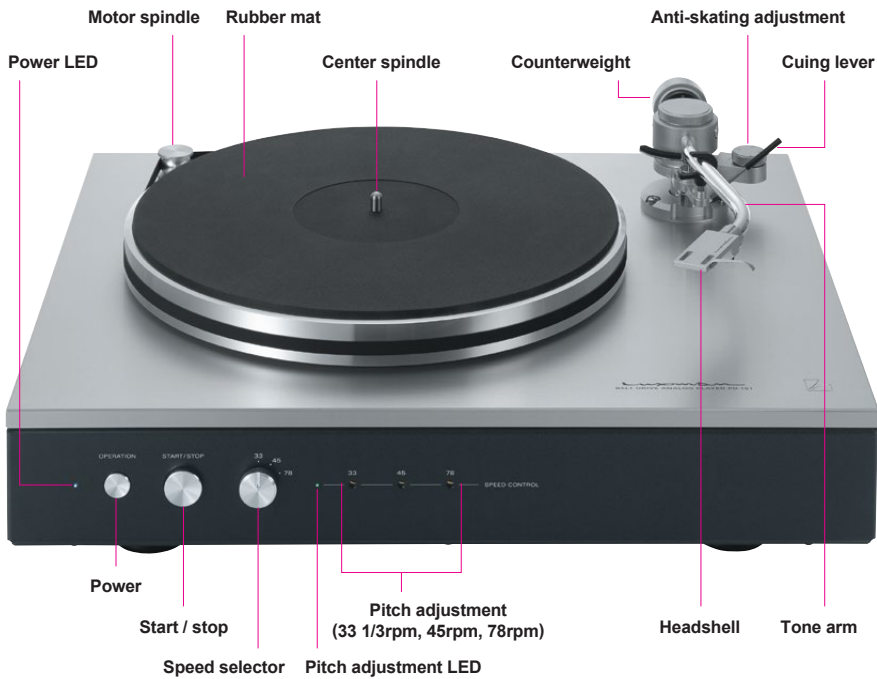
High precision spindle

Machined aluminum turntable

After going to extremes on the power supply, drive motor and belt, LUXMAN engineers were determined to optimize the last guarantor of stable speed: the platter itself. The 4.0 kg platter acts as a flywheel with extremely high moment of inertia, 21.9N-cm², to suppress even minuscule speed variations. A platter this heavy requires bearings capable of sustaining extremely high pressure. LUXMAN engineers specified polyether ether ketone (PEEK) thrust bearings and a brass radial bearing filled with organic molybdenum oil for effortlessly smooth rotation and long life. These exhaustive measures require time, attention and cost. But they pay off in exceptionally stable platter rotation. Conservatively rated, wow & flutter is less than 0.04%, weighted RMS. In this way, the PD-151 delivers music with uncommon clarity, faithfully reproducing the original.

PD-151 BELT DRIVE ANALOG PLAYER

SPECIFICATIONS



Phono motor section

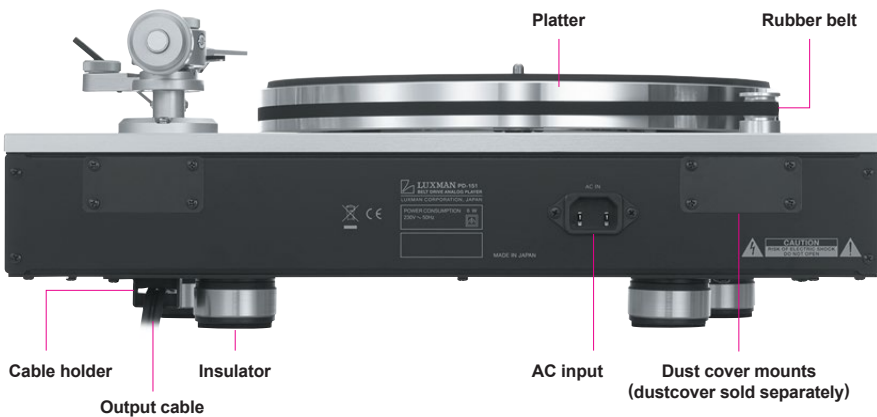
Drive system	Belt drive system
Motor	Brushless DC motor with PID control
Platter	30cm machined aluminum plate
Revolution	33 1/3rpm, 45rpm, 78rpm (3 speeds selectable)
Revolution adjustment range	±6% (each rotation speed adjustable independently)
Wow and flutter	0.04% or less (W.R.M.S.)
Weight (Platter)	4.0kg

Tone arm section * Cartridge is not included

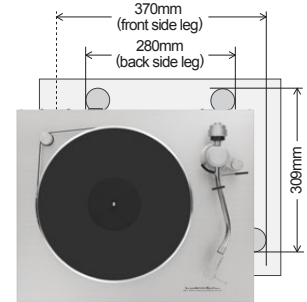
Type	Static balanced, S shaped, universal type
Bearing	Single point cross suspension
Effective length	229mm
Overhang	15mm
Tracking error angle	+1.9° to -1.1°
Applicable cartridge weight	4 to 12g (including headshell 17 to 25g)
Adjustable height range	38 to 60mm
Anti-skating	0 to 3g

Power source and others * Dust cover is not included

Power source	230V~50Hz
Power consumption	6W
Dimensions	465(W) × 133(up to top face of platter) (H) × 393(D) mm
Net weight	15.7kg (main unit)
Accessories	Platter, Headshell, Rubber mat, Rubber belt, Platter mount handle (2pieces), EP adaptor, Counterweight, Arm adjustment hex wrench set (3types), Flathead screwdriver for rotation speed adjustment, phono cable (DIN→RCA : already installed on the unit), Power cable



Dust cover (sold separately)



Insulator position / dimensions

*Dust cover is sold separately as an optional extra.

Accessories (available as service parts)



Dust cover OPPD-DSC151
Specific to the PD-151, 4mm thick acrylic, cam support hinges



Heavy counterbalance weight OPPD-HW1
For cartridges of 9 to 19g (22 to 32g including headshell)



Headshell OPPD-SH1
Light magnesium alloy, 13g (including wires)



Rubber drive belt

LUXMAN

LUXMAN CORPORATION, 1-3-1 Shinyokohama, Kouhoku-ku, Yokohama-shi, Kanagawa 222-0033, Japan
Tel: +81-45-470-6980 Fax: +81-45-470-6997 www.luxman.co.jp
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Safety Cautions

To ensure correct use of this product, read the "Owner's Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents.

