



PL-50L:85,000yen(around the 1980 time)

Description

The record player which inherited the technology cultivated by PL-70 which is a high-end model, and applied the polish to the tone quality.

Usually, there were two kinds, PL-50 of a version and PL-50L which carries the newly developed moving coil scheme silence lift up functionality.

having adopted SH and the rotor scheme motor made to move the supporting point (bearing) of the rotor which suited the motor bottom immediately under a turntable, in order to investigate the threshold of a rotation precision -- thereby -- the centroid of a motor, and the location of the supporting point -- about -- it has succeeded in making it do one.

For this reason, the reverse cone motion which uses as the supporting point the motor shaft bottom where the location of a centroid and the supporting point happens by the slight path clearance between a motor shaft and a bearing which was not able to be prevented with a structure conventionally which had shifted sharply was canceled, and the outstanding rotation property is secured.

Furthermore, in order that the needle point may banish the load variation produced by the resistor received from a record sound track, the large-sized turntable with a diameter [with the Quartz PLL DC servo hall motor of starting torque 1.6 kg-cm and the inertial mass of 330 kg-cm² of 31cm is adopted.

And the detailed noise is banished by finishing in the manipulation precision of micra order until it is using three hall devices in which Pioneer did the process development for the magnetic pole change organization of a motor, in addition results in the part of a detail.

The special vibration proof agent is applied to the rear view of a turntable. The resonance which has an ill effect on a tone quality by this is prevented.

In order to realize banishment and the high sensitivity of a low-pass vibration simultaneously, the silicon oil braking scheme tone arm (on/off is possible) is adopted.

This sinks a braking fin (the shape of a ring) into the silicon oil poured into the oil cup of the arm axis upper portion, and it is a structure to which a dumping is applied, and it is designed so that braking for which it was horizontally and perpendicularly suitable by moreover cutting the leading end of a fin into 45 degrees, respectively may be applied simultaneously.

The synergistic effect with the mass centralization system which had attained flat-ization of the mechanical impedance of a tone arm, and also brought the main wait of the arm close to an axis of revolution while reducing Q (the degree of 共振鋭) of the low-pass vibration by this, Cross modulation distortion has been improved sharply and clear play sound is realized covering a total audio frequency band.

The heavy weight class arm base made from die-casting which gave the stabilizer effect to the arm base is adopted, an arm is fixed firmly, and the partial vibration is suppressed.

250mm of effective lengths' long type arm is adopted as an arm.

The high-density cabinet which combined native wood (marble ebony finish) and the solid board of the four-layers laminating is adopted as a cabinet, and the deflection of the cabinet by the reaction of the angular moment of a high torque motor is prevented especially effectively. Moreover, the newly developed low centroid structure insulator was carried in the insulator, and the stability which was excellent to oscillations from the outside, such as a howling, has been acquired.

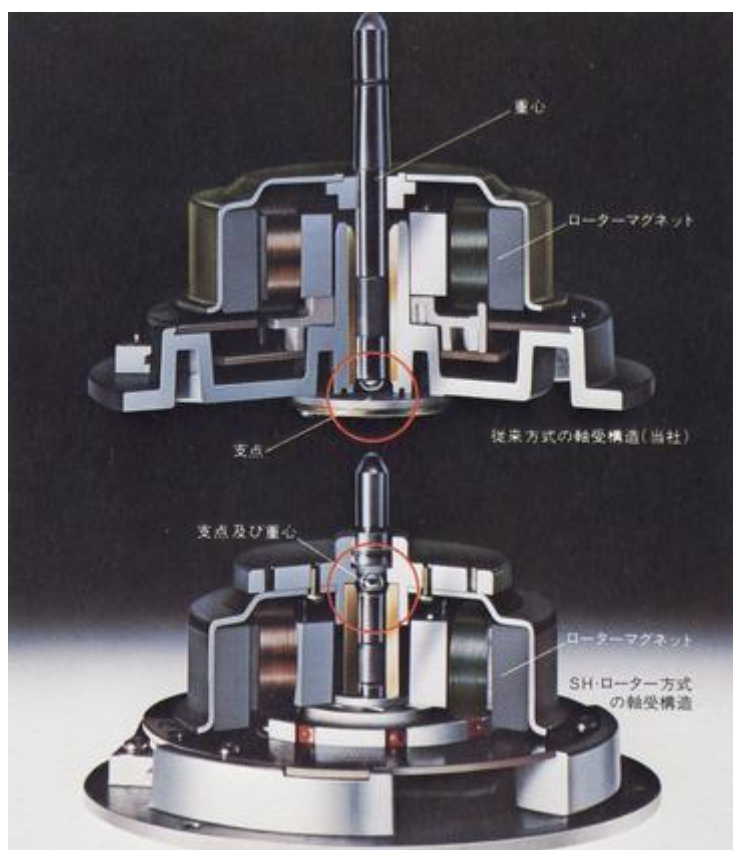
By using an optional dumping coordination adapter, it becomes a braking level good transformation arm like PL-70, and the amount coordination of braking according to the compliance of the cartridge is possible.

Moreover, when equipping with the heavy cartridges (alt. phone SPU-GT type etc.) of a self-weight, the optional switching wait using is recommended.

In PL-50L, the silence lift up organization out of which mechanism sound does not come is carried.

This is what adopted the moving coil scheme which applied the principle of operation of the speaker to the elevation organization which goes up and down an arm, and serves as a scheme which carries out a uncontacted operation on DC voltage.

Moreover, the scheme which performs a uncontacted detection with the hall device and magnet inside an arm axis is adopted as a termination location detection of a record sound track, there is no occurrence of side pressure in it, and the sensitivity of an arm is not spoiled.



Rating of a mode

Form	Cartridgeless player system
<Phone motor part>	
Motor	Quartz PLL DC servo hall motor
Drive system	Direct-drive
Bearing structure	SH and a rotor scheme
Turntable diameter	31cm
Turntable inertial mass	330kg-cm ² (turntable sheet included)
Rotational frequency	33 1 / 3 or 45rpm
Rotational frequency change	The electronic formula by a short stroke switchpoint
Rotation unevenness	0.012% or less (PL-50L, WRMS/FG Direct-reading method) 0.013% or less (PL-50, WRMS/FG Direct-reading method) 0.023% or less (WRMS/Japanese Industrial Standard)
S/N	78dB or more (DIN-B) 65dB or more (Japanese Industrial Standard)
Load variation	0% (less than 200g of stylus forces)
Startup property	Less than 1/3 rotation
Starting torque	1.6kg-cm
Velocity detection scheme	Perimeter integrator type FG
Rotational frequency deflection	0.002% or less
Drift	Time drift : 0.00008%/h Temperature drift : 0.00003%/degree C

Braking mechanism	Pure electronic formula
<Tone arm part>	
Form	Oil braking scheme static balance S character type pipe arm
Effective length	250mm
Overhang	14mm
Tracking error	+ 2.1 degrees-1.2 degrees
Stylus-force coordination	1g (0.1g tick mark) of wait 1 rotations
Conformity cartridge self-weight	4g-13g (at the time of an attached shell using)
Height adjustable range	±3mm
Head shell	An aluminum impact press head shell, 10.5g of self-weights
<Synthesis>	
An attached organization	Quartz locking-in Decatur Quick stop Silence lift up (only an electronic formula and PL-50L)
The semiconductor used etc.	Quartz crystal: One IC:6 Hall device: Four (PL-50 is 3) light-emitting-diode: Four (PL-50 is 3) Transistor: Four Diode: Four
Power source	AC100V, 50Hz/60Hz
Power consumption	PL-50:8W PL-50L:13W
Dimensions	Width 490x height 190x depth of 401mm
Weight	15kg
Option	Dumping coordination adapter JP-506 (8,500yen) Switching wait JP-507 (2,400yen)