
DENON
DIRECT DRIVE TURNTABLE
DENON Quartz
DP-75
STOP
33 — START — 45
DENON QUARTZ
DIRECT DRIVE TURNTABLE DP-75
DOUBLE CONSTRUCTION PLATTER

THE ACCURATE OF MUSIC FINALLY HAS BEEN ACHIEVED THROUGH THE ELIMINATION OF ALL VIBRATIONS

The design of the DP-75 and its performance strictly adhere to the standards established with the legendary DP-80. Thus the DP-75 is equally able to recreate music with such transparancy that it approaches the original performance.
The split platter construction of DENON turntables such as the DP-80 has demonstrated the importance, in terms of high-fidelity reproduction, of eliminating unwanted vibrations (any vibrations other than those contained in the record grooves) from reaching the stylus.

Split platter construction helped DENON achieve new levels of clarify and transparency in record playback.

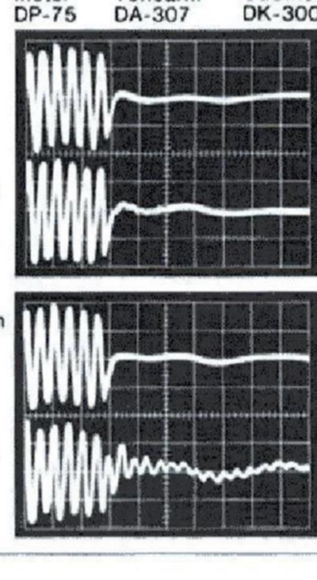
For turntables, rotational accuracy and high S/N ratio are essential to high-fidelity sound reproduction.
Through the development of the most advanced servo techniques, the finest quality AC servo motors and the latest high-precision manufacturing techniques, DENON has established new standards for evaluating turntable quality and performance.
However, with the availability of such high performance products as the DENON DL-303 moving-coil cartridge and DA-401 tonearm, alone with the evergrowing trend in upgrading the quality of discs, the problem of cancelling acoustic feedback and external vibrations has become a major concern.
Here is where the tremendous merits of DENON's split-platter construction turntables are truly realized. While playing a record, the phono cartridge can also pick up vibrations other than those presented by the record grooves.
Thus, even though the reproduced sound may at first seem impressive, the fullest fidelity playback often impeded by "echos", which "muddy up" the sound.
Photo 1 illustrates the influence of acoustic feedback from the speakers. This "echo" phenomenon is inevitable, considering the turntable's weight and the magnitude of its inertia mass.
On the split platter construction DP-75, the successful separation of musical sounds from feedback has been accomplished, as seen in Photo 1-(b) along with a significant improvement in sound quality as shown in photo 1-(a).

Photo-1 Comparare the influence of feedback

Motor DP-75 | Tonearm DA-307 | Cabinet DK-300

a) Split platter construction
Non feedback
Feedback influence

b) Conventional platter construction
Non feedback
Feedback influence



The Benefits of the Split Platter Construction Turntable

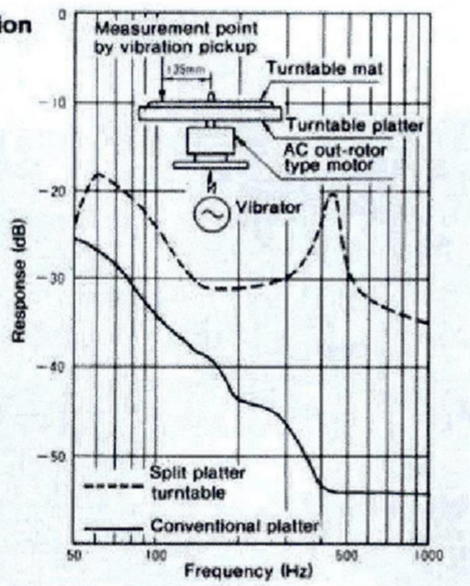
In terms of construction, the top and bottom sections of the platter are coupled together by means of springs and dampers, with the bottom section secured to the motor shaft.

The top portion of the platter upon which the record are placed is thus cut-off from the motor and the cabinet in terms of vibrations. Through the compliance of the mass of the platter's top portion and the spring, a form of high-cut filter is created. The top and bottom portions of the platter are arranged so that they will not shift other their relative position with rotation.

This simultaneously eliminates any possibility of wow and flutter caused by deviations in the relative positions of the two sections. Because the two sections of the platter have different vibrational modes, they mutually function to supress acoustical feedback (vibrations caused by the sound pressure exerted from the speakers and directly transmitted to the record surfaced and top portion of the platter).

Vibrations are further reduced through absorption by the damper effect of the split platter-construction section and the special turntable mat. The result is remarkable immunity to indirect external vibrations as well as those caused by sound pressure coming directly from the speakers.

Vibration transmission characteristics of the turntable



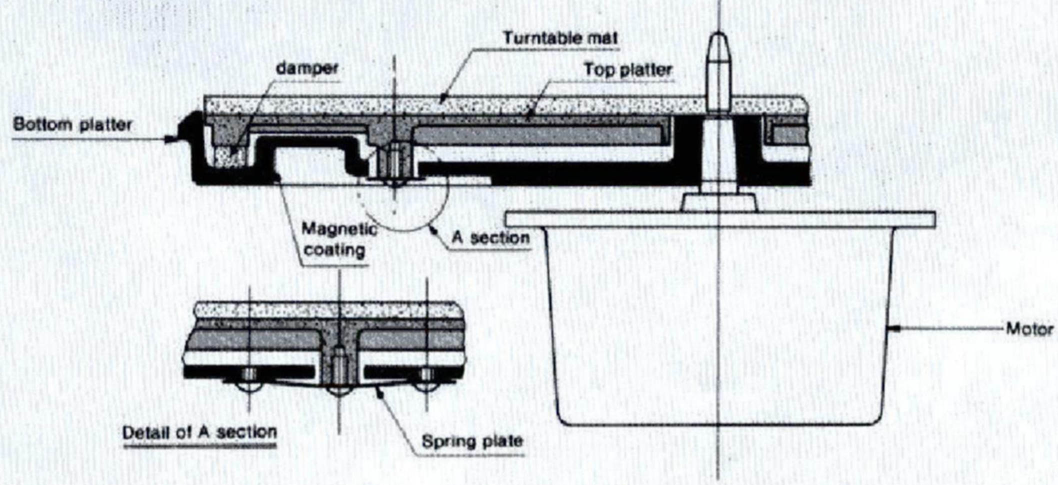
The DP-75's Turntable Mat Was Developed Through Vibration Analysis

The DP-75's turntable mat was developed through vibration analysis based on laser holography interference.

It is in keeping with the DP-75's design philosophy that even its turntable mat contributes to improving sound quality prevent the sound quality from deteriorating.

AC out-rotor type servo motor

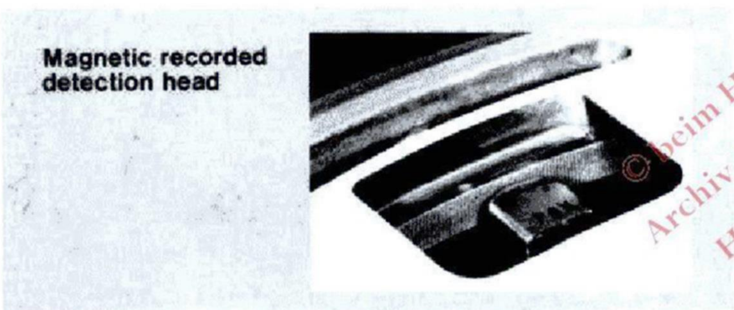
Split platter construction



Yields Wow-Flutter of less than 0.015% and a Ratio of Greater than 80 dB. The Perfection of the DP-75's Rotating System and Servo Mechanism

The rotating system constitutes the mainstay of a turntable's performance. DENON's high performance rotational system comes closest to the ideal limits, with specifications such as wow and flutter of less than 0.015 wrms (by the rigorous DENON Measuring system), speed deviation within ±0.002% and a S/N ratio of 80 dB (DIN-B), or better. Much of this performance can be attributed to the smooth, silent rotation of the DP-75's outer rotor type AC servo motor and the high-speed response of DENON's Quartz and unique detection system.

The DENON Quartz, magnetic recorded detection system uses 1,000 magnetic pulses recorded on the inner rim of the platter. Together with phase control by quartz lock, the DP-75 has vastly improved static and dynamic load characteristics.



Sophisticated Technology Creates Ease-of-Operation.

- Bi-directional servo and electronic brake Quick rise and fall characteristics for starting and speed changeover, plus positive braking (free of reversing for stopping) are made possible through the use of a bi-directional servo and an electronic brake.
- Operating functions use power supply ralays. When the STOP button is depressed, it causes the brake to be activated. When the turntable stops, the power supply is automatically turned off.
- The easy-to-see and accurate single strip stroboscope is based on crystal oscillation synchronization.
- Wide variety of separately sold bases including the DENON DK-110 are available for the DP-75. (Bases used currently for turntables such as the DENON DP-3000 and DP-6000 can be used for the DP-75)

Specifications

Drive system:	Direct drive servo system
Speed control:	Frequency detection servo system phase locked to a quartz crystal oscillation
Speed:	33-1/3 rpm, 45 rpm.
Speed deviation:	Less than 0.002%
Wow/flutter:	Less than 0.015% wrms *
Rumble:	Less than – 80 dB (DIN-B)
Turntable platter:	Double construction platter aluminium alloy diecast 308 mm dia.
Power supply, Power consumption:	AC 120/200/220/240 V 50/60 Hz 15W
Dimensions:	376 dia. 140 (H) mm
Weight:	10 kg

* Measured by DENON's methord using a magnetic pulse wheel.
** Specifications are subject to change without notice.

NIPPON COLUMBIA CO. LTD. NO. 14-14, AKASAKA 4-CHOME, MINATO-KU, TOKYO, 107, JAPAN.

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DENON
DENON
トーンアーム・パイプ 2本装備
DP-75M