

YAMAHA YP-D6

Natural Sound Stereo Turntable

Direct drive 12-pole, 24-slot DC servomotor

Ultra low wow and flutter

Auto return and auto cut convenience features

Sensitive S-type static balance tonearm



Yamaha: Dedication to Musical Excellence

The YP-D6 is Yamaha's proud answer to the challenge of turntable design: to rotate the record smoothly and steadily at the rated speed, to hold the stylus tip at the correct angle and with the right tracking force, and to do it in an easy-to-use, esthetically pleasing and reliable unit, essentially independent of external influences.

This sophisticated turntable unit is convincing evidence of Yamaha's excellence in audio engineering and musical craftsmanship. For Yamaha is a very special kind of company, where craftsmanship has been honed to the level of an art over generations of musical instrument building...pianos, organs, woodwind and brass instruments, guitars, drums. And at Yamaha the audio engineers and musicians talk the same language and share the same objectives: total responsibility for music fidelity and complete customer satisfaction.

The YP-D6 is just the latest in a long series of pace-setting audio achievements, originating in a vision of how audio equipment should perform, and based on intimate knowledge of music, musical instruments, and musicians. So when conventional materials and technologies are inadequate, Yamaha engineers have the creative ability, and the technical resources, to advance significantly the state-of-the-art. As they did with the development of vertical FETs; the all-FET B-I and C-I basic and control amplifiers; the use of the space-age metal, beryllium, in speaker diaphragms; and as they are continuing to do in a prestigious new line of amplifiers, tuners, and receivers.

Yamaha ensures total consumer satisfaction by taking overall responsibility for each stage of manufacture, with rigid in-house quality control, something no mere assembler of parts could do. The YP-D6 is a product in the finest Yamaha tradition: combining unique design concepts and musical quality in a turntable which gives unrivalled performance at a hard-to-beat price.

THE YP-D6 – POWERFUL, PRECISE

Direct Drive for High Performance and Long Term Reliability

Yamaha's choice for the YP-D6 drive system is a powerful direct drive DC servomotor. With nothing between the motor and platter except the precision bearing shaft. Platter and rotor lock integrally together, turning smoothly and evenly as one unit at precisely the required speed

Powerful, Fully Smoothed Drive

Also helping to achieve the excellent wow/flutter figure is the dynamically balanced platter. Heavy, and with most of the weight concentrated around the rim, it provides the greatest moment of inertia and the best flywheel smoothing effect. But despite its heavy weight (over 2 kg or nearly 4.5 lbs., including the special

platter mat), the powerful, high torque motor achieves full speed in 1/3 revolution. This power-to-spare design means the YP-D6 will never slow significantly when the stylus is lowered onto the record surface, nor if a groove riding dust cleaner is used. And what's more, since this motor is a 12-pole servo type, with 24-slot configuration, it's every bit as smooth as it is powerful.



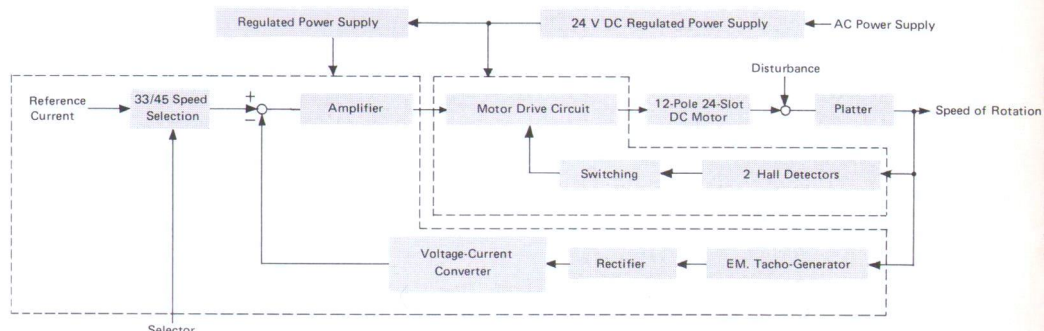
Advanced Servo-Control for Top Direct Drive Performance

To make sure that the YP-D6 gives the very best performance possible, direct drive, Hall-effect generators and an electro-

magnetic tacho-generator are built into a fast response super-stable control circuit. The slightest variation in platter speed is detected well before it becomes audible, and corrected instantly. The result: a wow/flutter figure of 0.035% wrms, comparable to professional disc-cutting machines.

with absolutely minimal vibration. But low wow and flutter, and correspondingly high signal-to-noise ratio, are not the only advantages of the YP-D6 direct drive system. With so few moving parts to wear out, you'll enjoy long years of top performance, with no appreciable decline in quality.

Servo Motor Block Diagram



PRECISE, RELIABLE AND CONVENIENT

A Tonearm for Top Performance from High Grade Cartridges

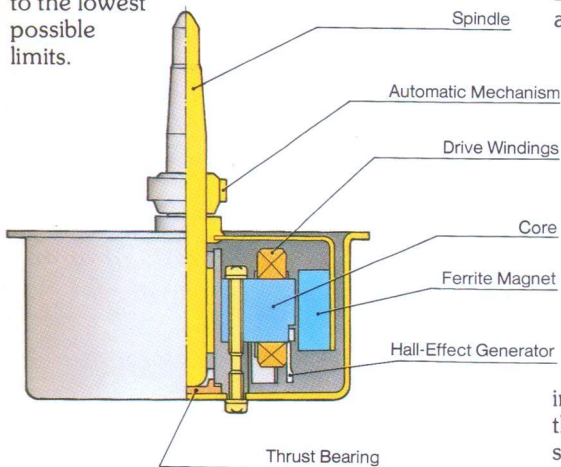
Ultra high sensitivity, precisely the same in both horizontal and vertical directions, is one distinctive mark of the new generation of Yamaha turntables, and of the YP-D6 in particular. An almost incredible 5 mg in both directions. High sensitivity means a minimum of lateral and vertical forces on the stylus tip as it is forced to move the tonearm assembly while tracking the record groove. Common sense says that since the groove is modulated in both the horizontal and vertical directions,

sensitivity too, should be the same. On the YP-D6, and other Yamaha turntables, it is. Something that calls for some very uncommon precision engineering.

Angular Contact Cr-Mo-Steel Bearings

The reason for this astonishingly high sensitivity is the use of angular contact bearings with chromium-molybdenum steel pivots, super-finished, and then carburized for extra surface hardness. The bearings are supported, completely free from mechanical play, by special rubber insulators, preventing vibrations from reaching the tonearm.

Pivot supporting rings are of brass, and radial ball bearings reduce friction to the lowest possible limits.



The Heart of the System

The motor's Hall-effect semiconductors constantly monitor its motion. Combined with the high torque, this assures incredible speed stability: less than 0.05% loss with a one-gram tracking force.

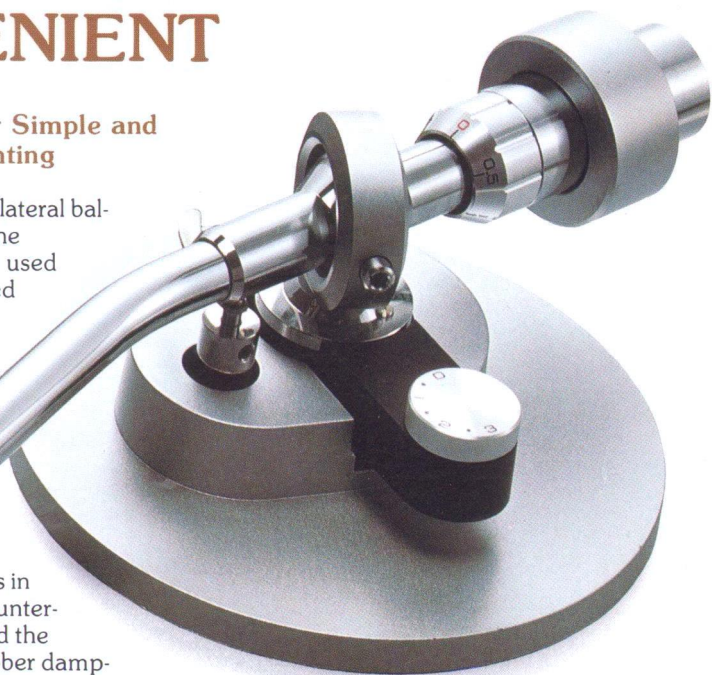
Everything Necessary for Simple and Accurate Cartridge Mounting

The S-type tonearm needs no lateral balance weight adjustment, and the extremely light aluminum pipe used in the YP-D6 tonearm is packed with anti-resonant material to eliminate unnatural coloration of the sound, and to impart added clarity to the reproduction. Increased clarity and purity were also the design

objectives in selecting counterweight mass and the stiffness of the rubber damping insulator to give a low resonant frequency. This dynamic damping reduces the tendency of the cartridge to leave the groove, and also reduces intermodulation distortion. The double counterweight makes possible the use of cartridges with a wide range of weights, and the direct-reading tracking force dial makes balancing and stylus force adjustments simple.

All the Convenience of Auto Cut and Play Without the Disadvantages

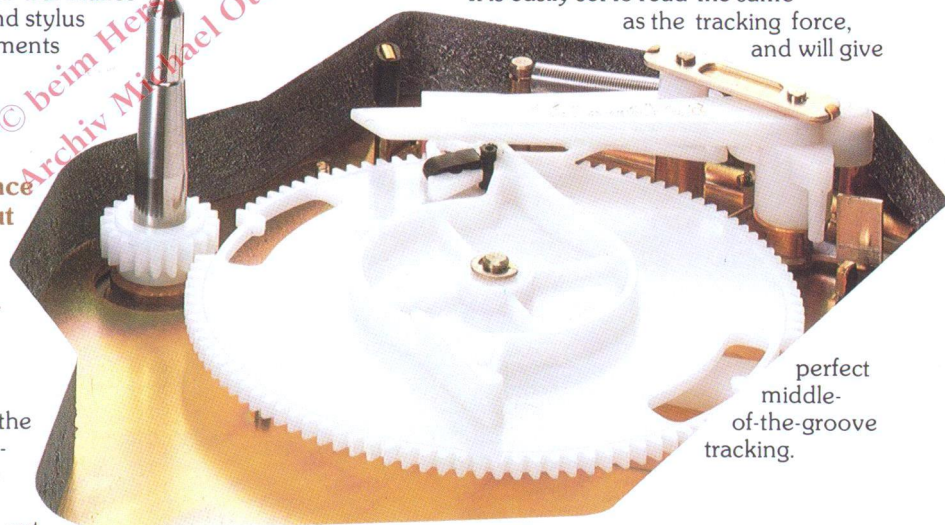
Everyone appreciates the added convenience of auto play and cut functions. Many will wonder why they are not fitted to more high quality direct drive turntables. The fact is that all too often, mechanical contact between tonearm assembly and auto mechanism imposes unbalanced forces that rule out the use of high performance, high compliance cartridges. Not, however, in the YP-D6. The end of the record is detected by the faster stylus movement in the last, eccentric groove. Response is positive and immediate, and there is absolutely no extra restraint on the tonearm until the end of the record is reached. So you can choose your cartridge for the YP-D6 from the whole available range of ultra-compliant types, and know that it will give its best. Free yourself from lowering the



Dial-Setting Inside Force Canceled

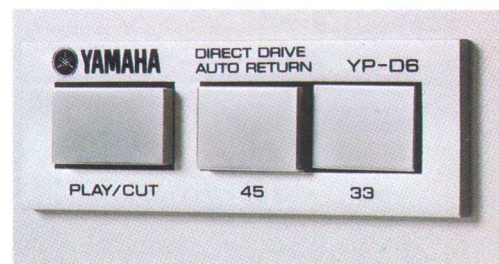
This anti-skating device provides complete elimination of the unbalanced inside force which can degrade stereo balance, increase distortion, and prevent accurate tracking.

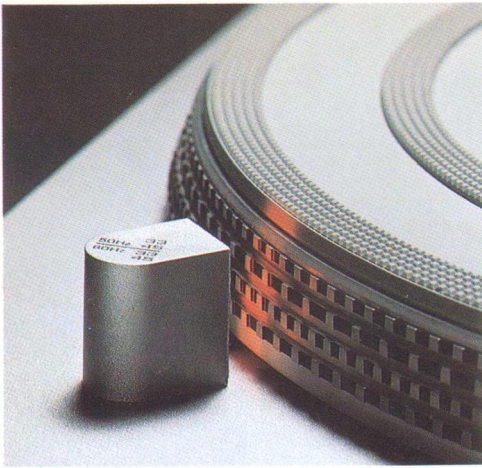
It is easily set to read the same as the tracking force, and will give



perfect middle-of-the-groove tracking.

stylus to the easily damaged record surface. Leave it all to the YP-D6. And you no longer have to worry about unnecessary stylus wear if you don't jump up at the end of each record. You can also interrupt a record at any point, switching it off without risk of damage to stylus or record. All this, at no sacrifice to the ultimate in quality.





Motorboard Material and Acoustic Insulator Feet

Yamaha care is also evident in the choice of motorboard: a resonance-inhibiting high-density particle board whose effectiveness was first proven in the NS-1000M speaker cabinet. It combines structural toughness with well-damped dynamic strength to cut out harmful vibrations that could degrade audio performance. The acoustic insulator feet utilize damper elements under both tension and compression for a double-action that effectively isolates the YP-D6 from vibrations, greatly reducing acoustic feedback from speakers via the turntable cabinet.

Stroboscopic Speed Indication

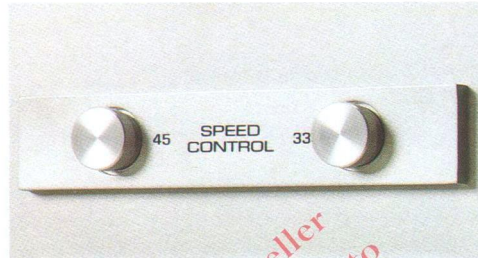
The YP-D6 features accurate indication of the turntable speed by stroboscopic illumination of the engraved skirt of the turntable platter.

A Heavyweight Performer

With a high total weight of 10.6 kg (23 lbs., 5 oz.), the YP-D6 is surprisingly heavy for its attractively slim design. It provides a stable, solid base for the operation of the extremely sensitive tonearm. An ideal combination for the reproduction of delicate nuances and strong, resonance-free peaks.

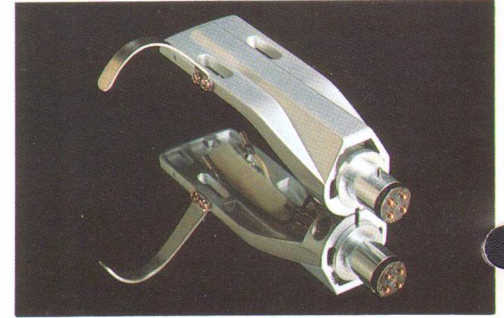
Fine-Speed Adjustment Controls

Completely independent controls provide approximately $\pm 3\%$ adjustment in the speed of turntable rotation at 45 and 33 $\frac{1}{3}$ rpm.



High Performance Headshell Unit

The diecast aluminum headshell is specially ribbed and reinforced to eliminate standing-wave resonances. The contacts of the universal connector are gold plated for low contact resistance. This expensive step is taken because the slightest resistive loss can seriously affect both channel balance and overall quality. Overhang adjustments are a simple matter of alignment with the indicator mark on the headshell.



Additional Features

- Oil-damped cueing lever
- Detachable acrylic dust cover
- Well laid out controls for convenient operation

SPECIFICATIONS

TURNTABLE		Suitable Cartridge Weight	4 to 15 g
DRIVE SYSTEM	Direct drive	Headshell	Aluminum die-cast plug-in type with gold plated contacts, to EIA standards
Motor	12-pole, 24-slot DC servomotor	SPECIAL FEATURES	
Turntable Platter	30 cm (12") die-cast aluminum, 1.6 kg (3½ lbs.) excluding platter mat, with stroboscopic speed markings engraved on the rim	Automatic Operation: Auto Return, Auto Stop	
Speeds	33 $\frac{1}{3}$ and 45 rpm	Large Tension/Compression Acoustic Insulator Feet	
Speed Variation	$\pm 3\%$ (independent for each speed)	Stroboscopic Speed Indication on Turntable Rim	
Signal-to-Noise Ratio	Better than 60 dB (IEC-B)	Free Setting Dust Cover Hinges (Detachable)	
	Better than 70 dB (DIN-B)	Cueing Lever (Arm Lifter)	
Wow and Flutter	Less than 0.035% wrms	OTHERS	
TONEARM		Power Supplies	U.S.A. and Canada: AC 120 V, 60 Hz
Type	S-type static balance	Power Consumption	Other Areas: AC 110-130/220-240 V, 50/60 Hz
Effective Length	222 mm (8¾")		110/120/130 V: 5 watts
Overhang	17 mm (11/16")	Dimensions (W x H x D)	220/240 V: 4 watts
Tracking Force Range	Direct-reading 0 to 3 grams (0.5-g steps)		470 x 156 x 359 mm
Anti-Skate Device	Direct-reading spring operated	Weight	18½" x 6½" x 14½"
			10.6 kg (23 lbs. 5 oz.)

Specifications subject to change without notice.

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SINCE 1887



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