

Turntables

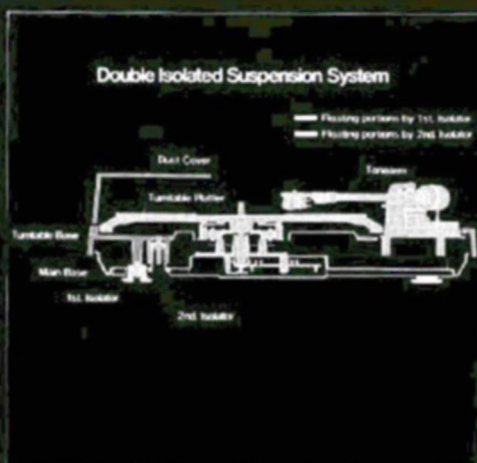
The direct-drive turntable—first developed and perfected by Technics—must certainly rank as one of the most revolutionary developments in the entire history of gramophones, phonographs, record players and turntables. With one stroke we virtually eliminated the need to even consider the existence of rumble and of wow and flutter. But we have not permitted a good development—no matter how excellent—to remain as it is. We have even further perfected this now much-copied principle to the point of virtual perfection! Belt-drive turntables too have felt the excitement of the changes which have transformed them to a point where the best models are virtually on a par with direct-drive models. IC technology and micro-processors—the computer on a chip—are extensively used throughout the line too. And tonearms and cartridges are now recognized as the leaders throughout the industry. A position we don't intend to relinquish!

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Ultra-Low Speed Direct-Drive Motor

Every Technics direct-drive turntable employs a brushless, electronically controlled DC motor that rotates at the same speed as the platter— $33\frac{1}{3}$ or 45 rpm. Other drive systems can't match and retain the extremely low rumble, wow and flutter attainable with direct-drive. It's little wonder that FM stations have used our direct-drive systems for years.



Double Isolated Suspension System

Our models SL-1300MK2, 1400MK2, 1500MK2, 1600, 1650, 1700 and 1800 use a double isolated suspension system. The first stage is comprised of isolators in each of the turntable feet, effectively damping vibrations which exist in the unit's resting surface. The second stage isolates the all-important platter, motor and tonearm assembly from the external turntable base. This system affords superb protection against feedback and other external vibrations.



Three Direct-Drive Changers

Technics' SL-1350, the world's first direct-drive changer, is now joined by two others—the SL-1650 and 1950. You get all the precision of direct-drive combined with the convenience of an automatic record changer. With the Memo-Gram control, you can program sequential play of up to six records, or use it to repeat a single record.



SL-1000MK II Quartz Phase-Locked Control Direct-Drive Turntable with Variable Dynamic Damping Tonearm and Obsidian Base

Although they are, of course, available separately, these three impressive pieces of audio equipment were ideally meant to go together to form perhaps the world's finest turntable system.



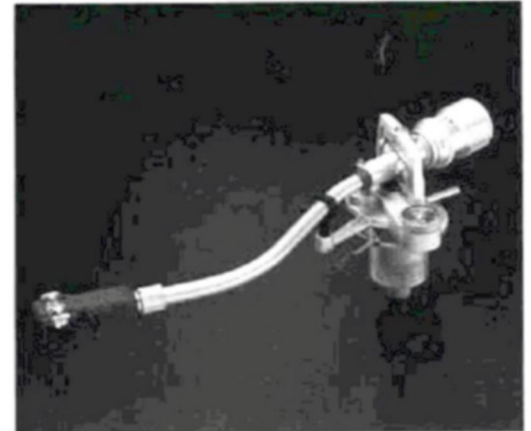
SP-10MK II

Quartz-Controlled Direct-Drive Turntable

- New generation of direct-drive turntable for professional and semi-professional use
- Quartz-controlled phase-locked servo circuit.
- High load torque of 5 kg. cm.
- High starting torque of 6 kg. cm

brings the platter to a rated $33\frac{1}{3}$ rpm within 0.25 second...extremely low build-up time.

- A combination of electrical and mechanical braking system brings the turntable to a complete stop from $33\frac{1}{3}$ rpm within 0.3 second.
- Wow and flutter: 0.025% WRMS
- Rumble: -50 dB (DIN A), -73 dB (DIN B).
- 3 speeds: $33\frac{1}{3}$, 45 and 78.26 rpm.



EPA-100

Universal Tonearm

- With a built-in dynamic damping device which is designed to adjust damping to an optimum level.
- The gimballed suspension uses unique "Ruby" bearings three times more efficient than steel ball bearings.
- Titanium-nitride is used for the tempered tonearm pipe.

SH-10B3

Turntable Base

- A massive stone block of gleaming black obsidian, mounted on a rubber and rosewood veneered base.
- The heavy acrylic dust cover is provided.

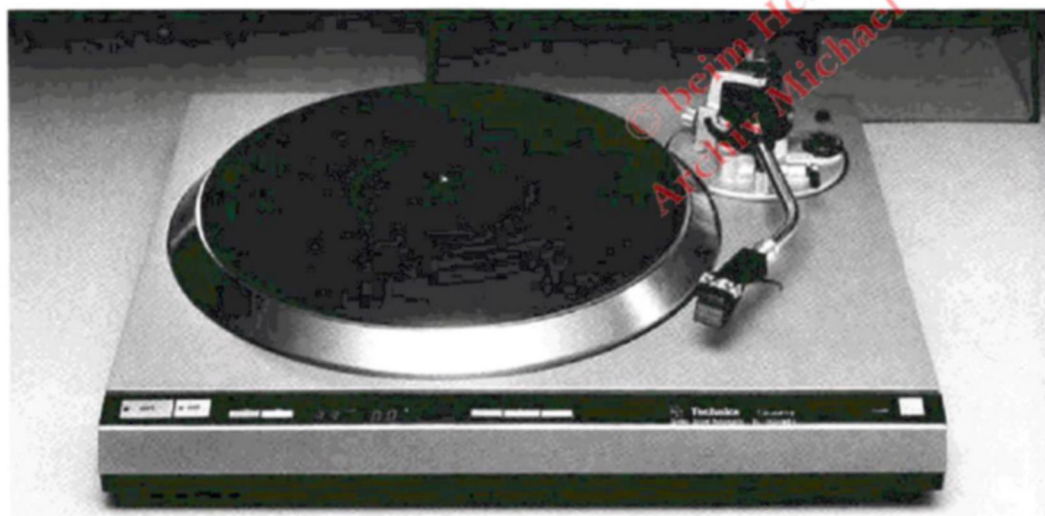


SL-1300MK2

**Quartz-Phase-Locked Control
Direct-Drive Fully-Automatic
Turntable with Quartz
Synthesizer Pitch Control**

- The total quartz phase locked control at 199-speed increments (The speed can be raised or lowered in exact 0.1% increments, by as much as $\pm 9.9\%$).
- Digital LED readout of quartz synthesizer pitch control.

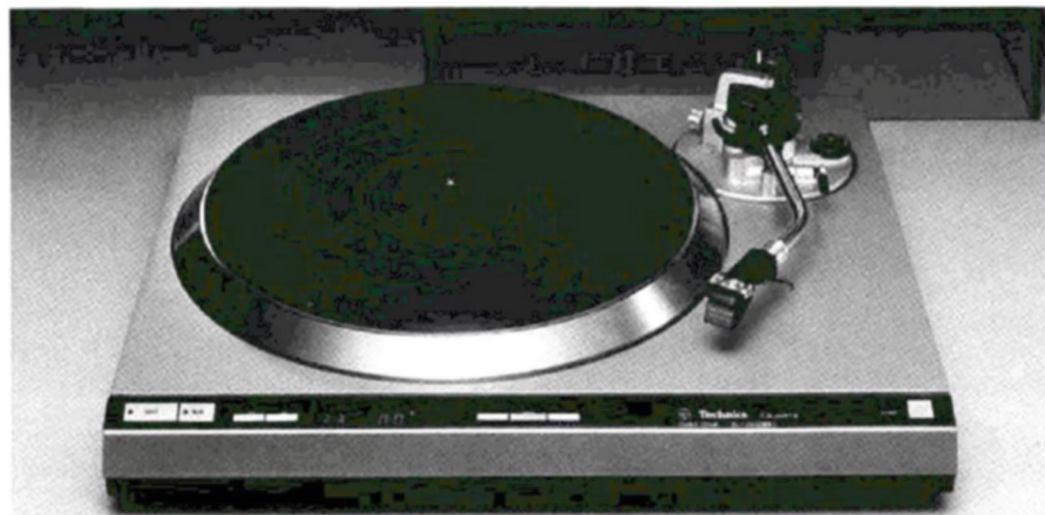
- With the 4 high density IC's doint the jobs of more than 3,000 discrete elements.
- Sensitive gimbal suspension tonearm wich respond to forces as tiny as 7mg.
- Double isolated suspension system which prevents acoustic feedback.



SL-1400MK2

**Quartz-Phase-Locked Control
Direct-Drive Semi-Automatic
Turntable with Quartz
Synthesizer Pitch Control**

- Auto-return of the tonearm with a new optical sensor system.
- The total quartz phase locked control at 199-speed increments (The speed can be raised or lowered in exact 0.1% increments, by as much as $\pm 9.9\%$).
- Digital LED readout of quartz synthesizer pitch control.
- With the 4 high density IC's doing the jobs of more than 3,000 discrete elements.



SL-1500MK2

**Quartz-Phase-Locked Control
Direct-Drive Turntable with
Quartz Synthesizer Pitch Control**

- The total quartz phase locked control at 199-speed increments (The speed can be raised or lowered in exact 0.1% increments, by as much as $\pm 9.9\%$).
- Digital LED readout of quartz synthesizer pitch control.
- With the 4 high density IC's doing the jobs of more than 3,000 discrete elements.
- Fully automatic tonearm function, controlled by IC logic.
- Sensitive gimbal suspension tonearm.
- Double isolated suspension system.



SL-1700

Direct-Drive Semi-Automatic Turntable

- Direct-drive system with ultra-low speed DC brushless motor yields wow/flutter of 0.025% WRMS and rumble -73 dB DIN B.

- Integral rotor/platter structure.
- One-chip IC for motor control, incorporating 321 elements, yields high starting torque, with excellent load and transient characteristics.
- B·FG principle used in speed detection/correction.
- Double isolated suspension system provides highly effective protection against feedback.

- Automatic tonearm lift-off, return and shut-off.
- Precision tonearm with low-friction gimbal suspension system.
- Viscous-damped cueing.
- Independent pitch controls for each speed (33 $\frac{1}{3}$ and 45 rpm).
- Illuminated stroboscope.
- MM cartridge (EPC-270C-II) supplied.
- Hinged, removable dust cover.



SL-1600

Direct-Drive Fully-Automatic Turntable

- Ultra-low speed DC brushless motor.
- Wow and flutter of 0.025% WRMS, and rumble -73 dB DIN B.
- Integral rotor/platter structure.
- One-chip, 321 element IC.
- B·FG principle.
- Double isolated suspension system.
- Automatic tonearm start, stop and return.
- Memo-Repeat control.
- Precision, low-friction tonearm.
- Viscous-damped cueing.
- Independent variable pitch controls.
- MM cartridge (EPC-270C-II) supplied.



SL-1800

Direct-Drive Turntable

- Ultra-low speed DC brushless motor.
- Wow/flutter of 0.025% WRMS and rumble -73 dB DIN B.
- Integral rotor/platter structure.
- One-chip IC for motor control.
- B·FG principle.
- Double isolated suspension system.
- Precision tonearm with low-friction gimbal suspension system.
- Viscous-damped cueing.
- Independent pitch controls.
- Illuminated stroboscope.
- MM cartridge (EPC-270C-II) supplied.
- Hinged, removable dust cover.



SL-1900

Direct-Drive Fully-Automatic Turntable

- Direct-drive turntable with fully-automatic single-disc play.
- One-chip IC incorporating 321 elements controls motor speed for superb accuracy with B·FG servo control.
- Integral rotor/platter structure.
- Automatic tonearm operation gives you convenient automatic set-down, lift-off and stop.
- Memo-Repeat control permits up to six repeated plays of record—or continuous play.
- Heavy monolithic base and isolator system protects against external vibrations.
- Viscous-damped cueing.
- Anti-skating control.
- Two speeds: 33 $\frac{1}{3}$ and 45 rpm, with variable pitch control for each speed.
- Stroboscope facilitates precise speed setting.
- MM cartridge (EPC-270C-II) supplied.
- Hinged, easily detachable dust cover.



SL-2000

Direct-Drive Turntable

- Direct-drive turntable with ultra-low speed DC brushless motor.
- One-chip IC controls motor speed for superb accuracy.
- Wow and flutter of 0.045% WRMS and rumble -70 dB DIN B.
- Insulation Fiber Board (IFB) and isolator system protects turntable from external vibrations.
- Viscous-damped cueing.
- Independent variable pitch controls for each speed, with illuminated stroboscope for accurate speed setting.
- MM cartridge (EPC-270C-II) supplied.
- Hinged, removable dust cover.



SL-1950

Direct-Drive Automatic Changer/ Turntable

- One-chip IC of 321-element density controls motor speed for accuracy and reliability with B·FG servo control.
- Integral rotor/platter structure.
- Automatic changer functions include automatic start, tonearm set-down, lift-off and return, and record change.
- Accommodates 6 records.
- Memo-Gram dial programs record change.

- In the single-play mode, the Memo-Gram control allows six repeated plays of a record, or continuous play.
- Heavy monolithic base and isolator system protect turntable from external vibrations.
- Viscous-damped cueing.
- Independent variable pitch controls.
- Stroboscope facilitates speed setting.
- MM cartridge (EPC-270C-II) supplied.
- Hinged, detachable dust cover.



SL-1650

Direct-Drive Automatic Changer/ Turntable

- Ultra-low speed DC brushless motor.
- Integral rotor/platter structure.
- One-chip, 321-element IC.
- B·FG principle.
- Double isolated suspension system.
- Automatic start, tonearm lift-off and return, record change and turntable shut-off.
- Accommodates 6 records.
- Memo-Gram dial programs record change.
- Precision, low-friction tonearm.
- Viscous-damped cueing.
- Independent variable pitch control.
- MM cartridge (EPC-270C-II) supplied.
- Hinged, detachable dust cover.



SL-23

F.G. Belt-Drive Semi-Automatic Turntable

- High-quality belt-drive turntable with a newly developed FG (frequency generator) servo-controlled DC motor with IC.
- Fabulous wow and flutter, rumble rating.
- Automatic tonearm return/shut off.
- Low power consumption for greater efficiency.
- Static-balanced S-shaped tonearm.
- MM cartridge integrally combined with the head shell for high compliance support and good channel separation.

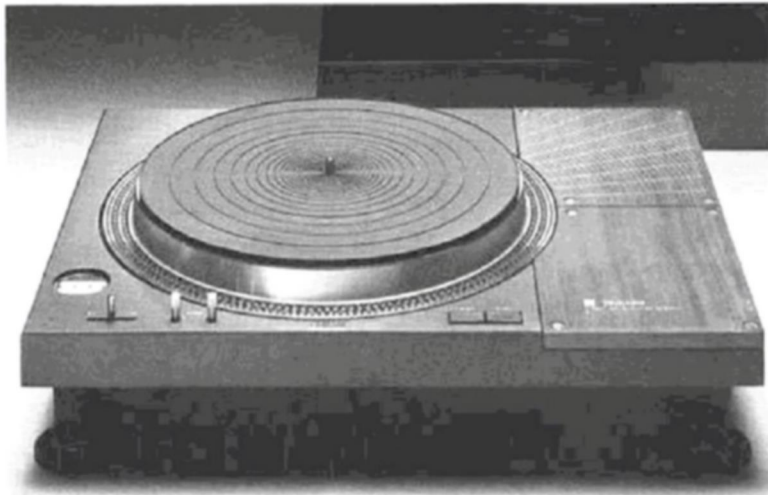
SL-23K A black facia model is also available as the SL-23K.



SL-20

F.G. Belt-Drive Turntable

- High-quality belt-drive turntable with a newly developed FG (frequency generator) servo-controlled DC motor with IC.
- Fabulous wow and flutter, rumble rating.
- Low power consumption for greater efficiency.
- Static-balanced S-shaped tonearm.
- MM cartridge integrally combined with the head shell for high compliance support and good channel separation.



SL-110

Direct-Drive Turntable without Tonearm

- Direct-drive brushless DC motor.
- Ultra-smooth operation.
- Wow and flutter: 0.025% WRMS
- Rumble: -50 dB (DIN A), -73 dB (DIN B)
- Fast build-up time.
- Stroboscope speed indication.
- Wooden tonearm base board for easy installation of any tonearm.



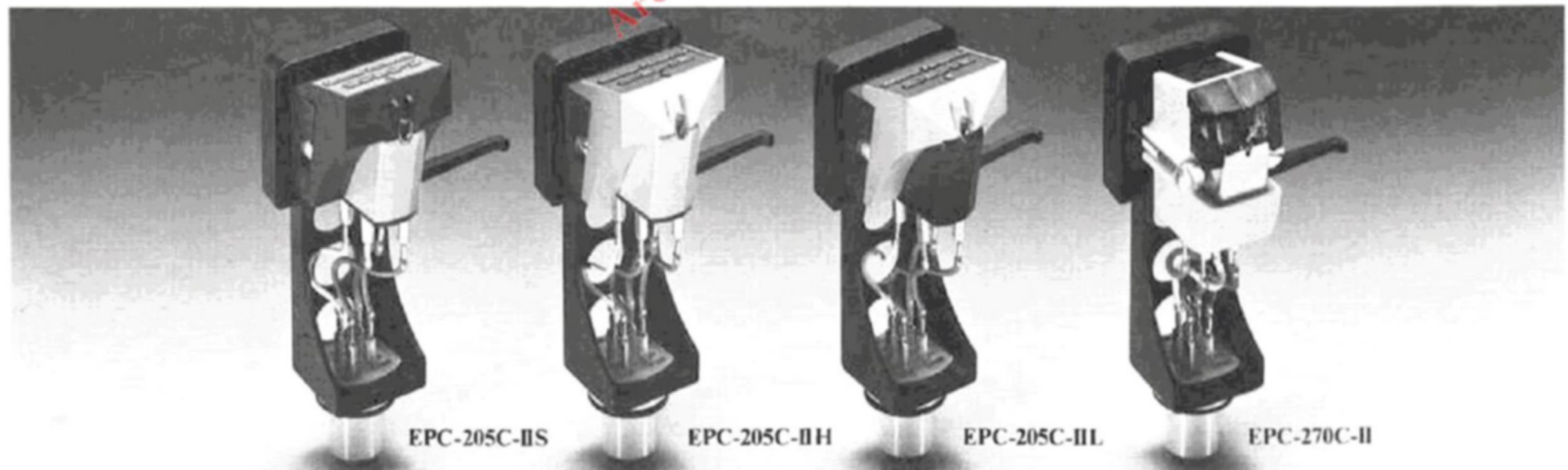
SL-120

Direct-Drive Turntable without Tonearm

- Direct-drive brushless DC motor.
- Ultra-smooth operation.
- Wow and flutter: 0.025% WRMS
- Rumble: -50 dB (DIN A), -73 dB (DIN B)
- 35 cm aluminium diecast turntable platter.
- 33 cm aluminium diecast turntable platter, dynamically balanced.
- Stroboscope speed indication for easier checking.
- Variable pitch controls.

Cartridges

National Panasonic



EPC-205C-IIS

A standard type with output voltage of 3.5 mV (at 5cm/s. 1 kHz). Samarium-cobalt magnet is flat disc shaped to allow low effective moving mass to be combined with high output voltage. Piped cantilever construction gives rigidity for high tracing fidelity.

EPC-205C-IIH

A high S/N ratio MM cartridge with high output voltage of 7 mV (5 cm/s. 1 kHz). This design gives four times higher amplifier power at the same volume setting compared with our standard type. S/N ratio is also better by 6 dB with reduced pick-up of leakage hum.

EPC-205C-IIIL

Extremely low impedance design allows use in any turntable and with any amplifier regardless of their capacitance and impedance characteristics. Output voltage is 2 mV (5 cm/s. 1 kHz). Tapered pipe titanium cantilever construction combines high rigidity with light weight.

EPC-270C-II

Uses new magnetic material (acronym CKS) which eliminates the coupler for lower overall mass and reduced partial vibrations. Output voltage is 3.2 mV (5 cm/s. 1 kHz). High strength aluminium alloy tube cantilever gives low effective mass.