

SANSUI FR5080S

DIRECT-DRIVE AUTOMATIC TURNTABLE



Sansui agrees with you. It *should* be possible to combine automatic convenience and direct-drive precision in a turntable. Without compromising musical performance. Without sacrificing high fidelity standards. We looked closely at several turntables that claim to do it. Then we built one that *does* it—the Sansui FR-5080S.

A transistorized differential servo-amplifier sees that the direct-drive DC

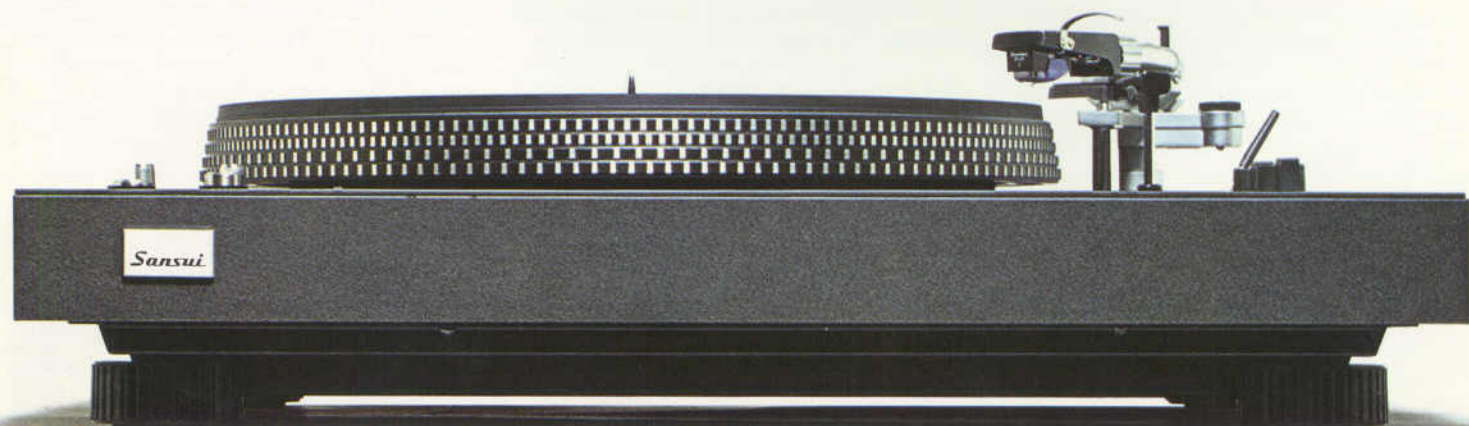
motor maintains perfect platter speeds at all times. No speed drift. Practically unmeasurable wow/flutter (0.03% WRMS). This is the kind of precision you *should* get from any direct-drive manual. But remember that the FR-5080S is a direct-drive single-play *automatic*. Fully automatic lead-in, cut, return, repeat and shut-off is yours at the touch of one simple control. A separate little motor handles these functions independently and silently.

The tonearm tracks freely during actual play.

These and other features, including a wide response Dual-Magnet* cartridge, are detailed in the following pages. Together in the fully automatic, direct-drive FR-5080S they turn should-be's into realities. From Sansui, where it's *all* hi-fi.

*TM Audio-Technica Corp.
No cartridge is provided with the FR-5080S models sold in the U.S.A., Europe and Canada.

Sansui



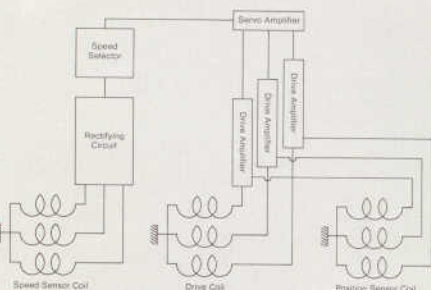
Every Direct-Drive Automatic should give you this kind of performance: wow/flutter 0.03%, S/N 62dB and full auto convenience.

SUPER-STEADY DIRECT DRIVE

Brushless DC Servomotor

Dazzling accuracy. That's the best description of the performance of the direct-drive motor in the Sansui fully automatic direct-drive FR-5080S. Speed drift is effectively eliminated by a Sansui-exclusive rotor-position sensor mechanism coupled with the bias-controlled saturable core (Sansui Pat. Pend.) in the newly-developed 20-pole, 30-slot brushless DC servomotor. A transistorized differential servo-amplifier keeps the high-torque motor at constant speed (33/45rpm) regardless of changes in record load, tracking force or line voltage. Wow/flutter is an amazing 0.03% WRMS or less. Signal-to-noise is better than 62dB (IEC-B). Dazzling.

DC SERVMOTOR SCHEMATIC DIAGRAM



Precision-Finished Spindle/Bearing

The center spindle is made from a specially sintered and micron-finished super-hard material. The bearing is of the finest carbon-chrome steel, finished to mirror-hard perfection to minimize friction. Changes in temperature, humidity never affect original performance quality.

Strobo Fine-Adjust

The stroboscopic calibrations on the edge of the platter are simple to use in adjusting the rotation speeds to absolute perfection. If the dots, illuminated by the built-in strobo light, appear to creep forward or backward, adjust the speed of the platter with the Pitch Controls ($\pm 3.5\%$) until they appear to stand still.



AUTOMATIC OPERATION

Independent Automatic Mechanism

Why are manual turntables thought to be better than automatics? Because for years, makers of automatics sacrificed quality for convenience by employing complicated devices, mechanically linking the platter-drive motor with the tonearm, to perform tonearm lead-in and return operations. Some still do. But Sansui doesn't. There's a *completely* independent 16-pole, 3-rpm gear motor for the FR-5080S' automatic section. And the tonearm linkage is *completely* disengaged during actual play. A special Sansui galvano-magnet detection mechanism triggers automatic operation.

Fully Automatic Convenience

One simple control handles all automatic operation: lead-in, cut, return, repeat and shut-off. Set the speed control, put a record on the platter, set the size control, then pull the Cue lever. The tonearm lifts gently from its rest, moves to the lead-in groove on the record, and gently descends. When the stylus enters the lead-out groove, the galvano-magnet detector re-engages the auto section. The tonearm lifts up and returns to its rest. Then power is shut off, unless you have set the Cue lever to the REPEAT position, which allows the whole process to repeat itself infinitely until you reset the controls. Also, pulling the Cue lever at any time during play will lift the tonearm, return it to its rest and shut the power off. If you touch the tonearm at any time during auto operation or during play, the operational mode is converted to manual.

Integrated Anti-Skate Bias Knob

A separate control knob is provided to allow you to set the built-in anti-skate bias device to correspond with applied tracking force. The device can be adjusted even while a record is being played.

Damped S-Shaped Tubular Tonearm

Perfect lateral balance is assured with Sansui's special S-shaped tubular tonearm. Your stylus tracks the complex contours of the record groove faithfully, avoiding distortion, and never bouncing out of the groove. Inside the strong, lightweight arm itself is a newly-developed acoustic absorbent (Sansui Pat. Pend.) which effectively damps all resonance. A simple-to-use, direct-readout tracking-force dial is provided on the main weight assembly. The tonearm rest is angled 10° upward and locks the arm in place when required. Still more assurance of high fidelity performance is provided in the tonearm's rugged, die-cast zinc base, plastic-sleeved weight shaft, gold-plated headshell connectors and other quality touches.

HEAVY SLIM-LINE CABINET

Anti-Howl Base

The solid mass and high internal loss of the FR-5080S thick (40mm) particle-board base puts an end to cabinet resonance ("howling") for good. Musical images are never blurred in the lower frequencies. The one-piece base is carved out and finished with precision to accommodate the motors, etc., while the rest is left solid. A motorboard of 2mm gauge steel further reduces resonance. The entire assembly is unprecedentedly heavy (12.8kg) for extra stability.

Natural Rubber Insulators

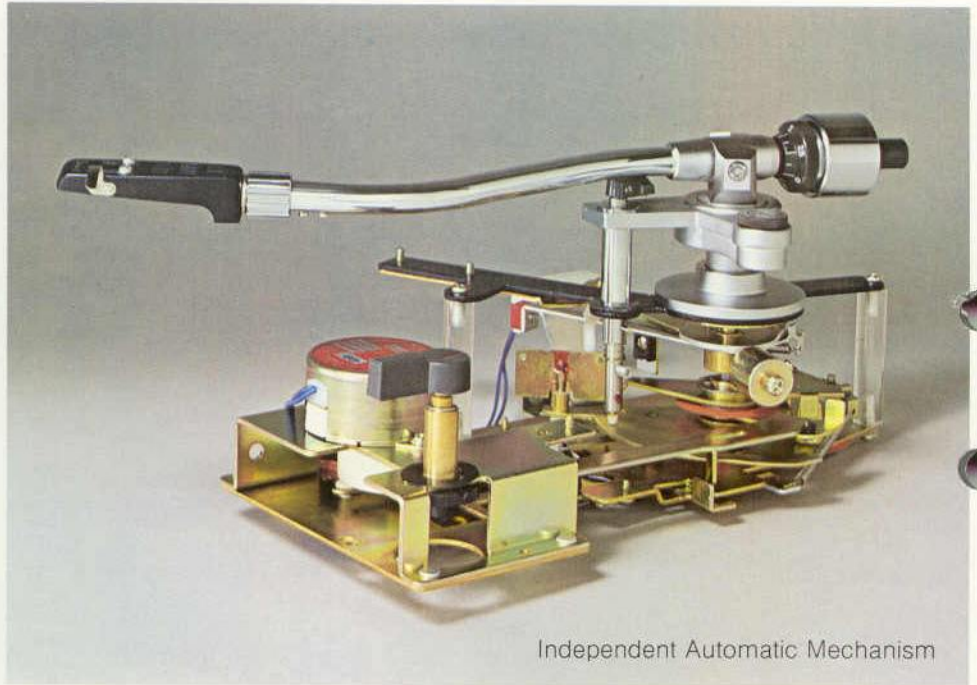
External vibrations never cause mistracking or other problems. Large insulators of natural rubber absorb such potential hazards before they can reach tonearm, cartridge and platter.

Slim-Silhouette Acrylic Cover

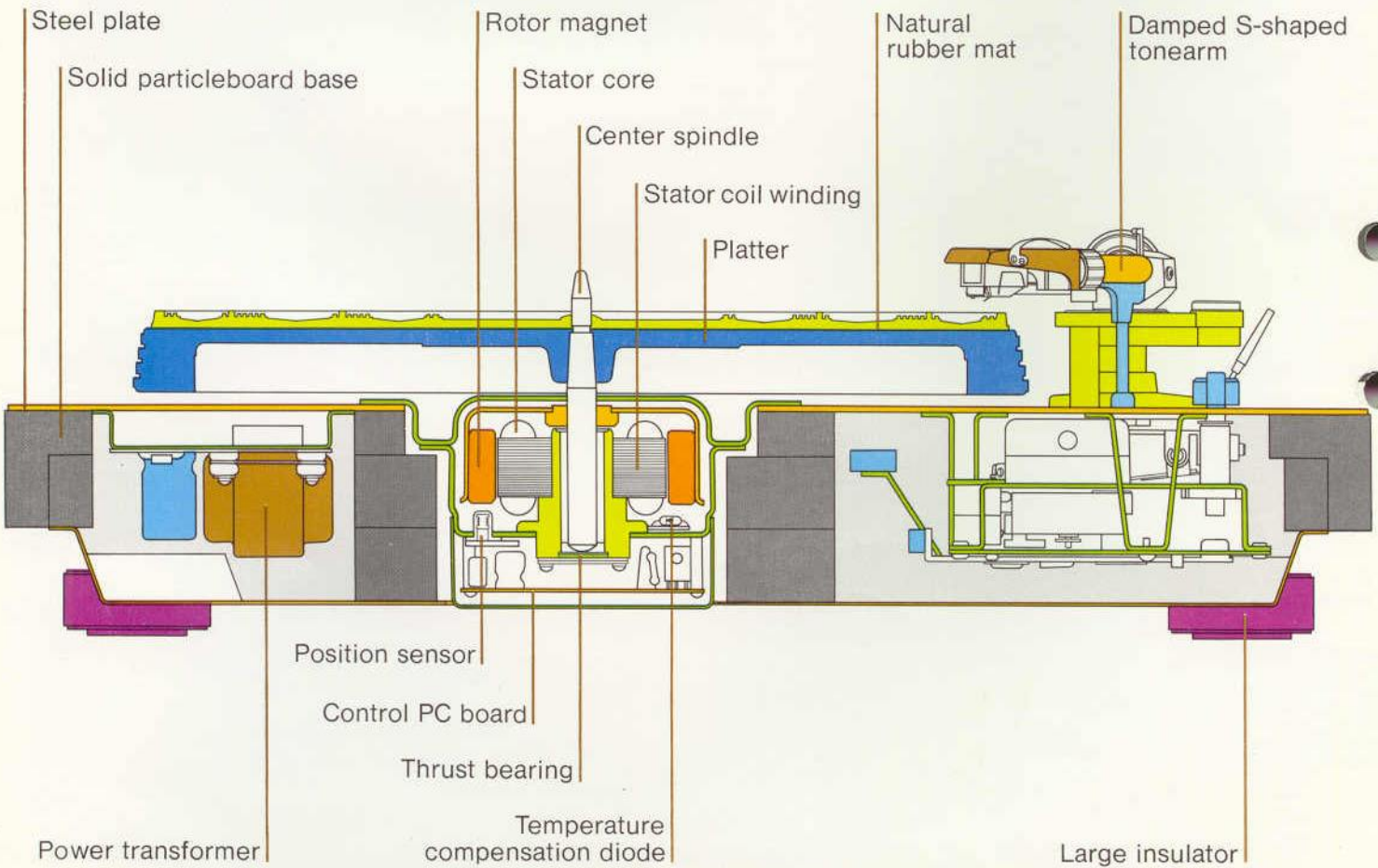
Even the shape of the tinted acrylic cover has been carefully calculated to avoid resonance. It has free-stop hinges for convenience.

Other Quality Features

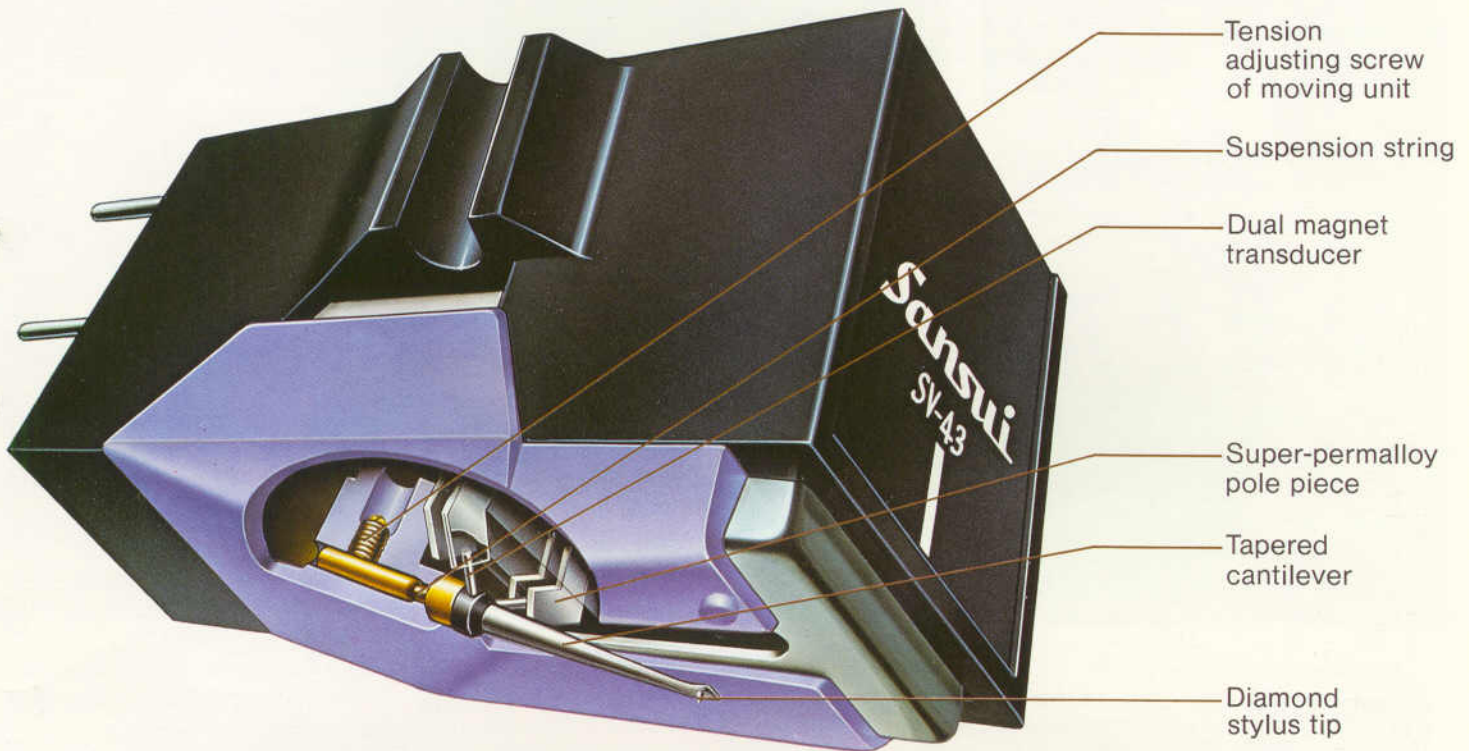
- 4-CHANNEL/2-CHANNEL — Output cables are the low-capacitance type (40pF/m) to protect high-frequency signals from attenuation. Ideal performance from CD-4, QS and SQ 4-channel as well as all stereo discs. (CD-4 TM JVC Inc. QS TM Sansui SQ TM CBS Inc.)
- ACCESSORIES — Included are 45rpm disc spindle adaptor and overhang gauge.



Independent Automatic Mechanism



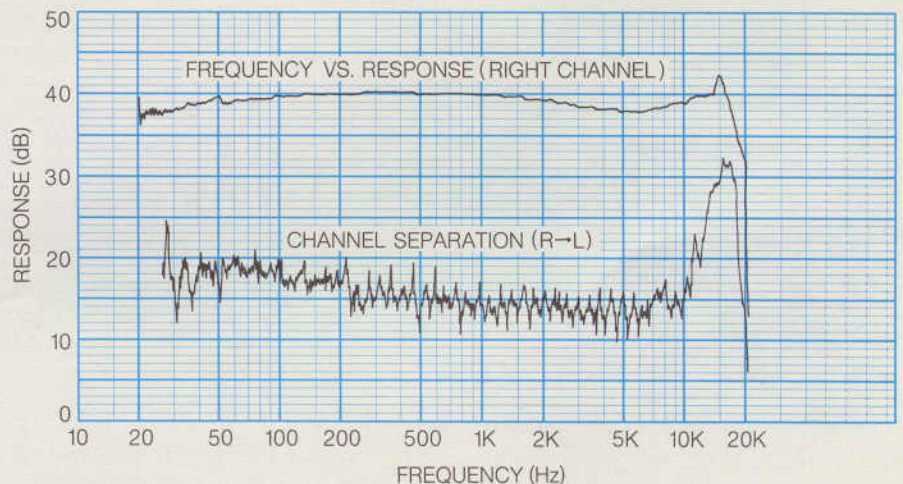
Sansui's FR-5080S Direct-Drive Automatic Features New Dual-Magnet Cartridge.



WIDE-RESPONSE DUAL-MAGNET CARTRIDGE

The fully automatic direct-drive FR-5080S turntable is equipped with a special Dual-Magnet cartridge, Sansui SV-43. This amazing cartridge employs the smallest moving magnets possible to manufacture. And because it has a magnet-coil assembly for each channel, irregularities are eliminated and a flat response is achieved over a very wide (10Hz to 20kHz) audio spectrum to assure brilliant and accurate high fidelity reproduction of all discs.

*No cartridge is provided with the FR-5080S models sold in the U.S.A., Europe and Canada.



SPECIFICATIONS

TYPE	Two-speed, single-play, direct-drive automatic turntable
MOTORS	20-pole, 30-slot DC brushless for platter drive 16-pole (3rpm) geared synchronous for automatic operation
DRIVE SYSTEM	Direct spindle drive, electronically servo-controlled
PLATTER	310mm (12 $\frac{1}{8}$ ") aluminum die-cast weighing 1.4 kg (3.1 lbs)
PERFORMANCE	
WOW & FLUTTER	less than 0.03% (WRMS)
SIGNAL TO NOISE RATIO	better than 62dB (IEC-B) better than -70dB (DIN-B)
RUMBLE	
PLATTER SPEEDS	33 $\frac{1}{3}$, 45 rpm
FINE SPEED ADJUSTMENT	\pm 3.5% (separate knobs 33 $\frac{1}{3}$ and 45 rpm)
SPEED CONTROL	Illuminated stroboscope with markings on the platter periphery
TONARM	Statically-balanced S-shaped resonance-free tonearm with two-point pivot support
LENGTH	220mm (8 $\frac{1}{8}$ ") pivot to stylus tip
OVERHANG	15mm ($\frac{9}{16}$ ")
MINIMUM TRACKING FORCE SETTING	0.8g (when using cartridge guaranteed to operate at 0.8g tracking force)
ACCEPTABLE CARTRIDGE WEIGHT	4 to 10g
COMPENSATION	Bias and lateral balance
CUEING	Separate lever at base
CARTRIDGE	SV-43 (for FR-5080S sold outside the U.S.A., Europe and Canada)
TYPE	Dual-magnet
FREQUENCY RESPONSE	10 to 20,000Hz
CHANNEL SEPARATION	25dB (at 1,000Hz)
OUTPUT VOLTAGE	3.3mV (1,000Hz 50mm/sec)
OPTIMUM LOAD	47,000 ohms
TRACKING FORCE	2g
STYLUS	Diamond (SN-43)
CABINETY	40mm thick particleboard base with anti-howling insulators and hinged free-stop tinted dust-cover
POWER REQUIREMENTS	100/ 120/ 220/ 240V, 50/ 60Hz U.S.A. and Canada models: 120V 60Hz only European models: 220V 50Hz only UK models: 240V 50Hz only
POWER CONSUMPTION	6 watts (rated)
DIMENSIONS	470mm (18 $\frac{3}{8}$ ") W 154mm (6 $\frac{1}{8}$ ") H 375mm (14 $\frac{3}{8}$ ") D
WEIGHT	12.8kg (28.2 lbs) net 15.0kg (33.1 lbs) packed

Design and specifications subject to change without notice for improvements.

