

# FR-D35|D25

Sansui Auto-Return/Shutoff Direct- and Belt-Drive Turntables with Up-Front Operation and Slim Design.



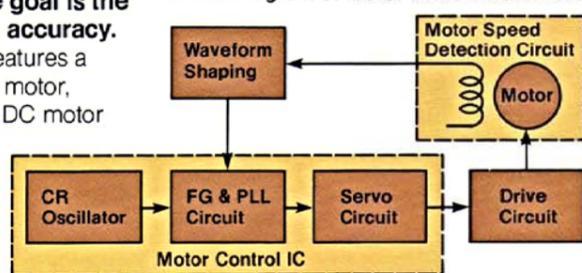
Two new turntables from Sansui—the FR-D35 direct drive and FR-D25 PLL-servo-controlled belt drive. Their specs are first-class, yet you'll find them in a price range you can easily afford. Turntable controls are all positioned on the front panel—just like front-loading cassette decks. No longer do you have to pull up the cover completely to play a record, nor do you have to leave a foot (30cm) clearance above the turntable. You'll appreciate this feature most if you organize your hi-fi system into a rack or shelf, but even if you place it elsewhere, you'll be happier with front-panel operation. It makes turntable operation close to luxurious. From Sansui, where it's *all* hi-fi.

**High-Torque Direct-Drive Motor (FR-D35) and Highly-Responsive PLL Servo (FR-D25):** The goal is the same: **impeccable speed accuracy.** The higher-priced FR-D35 features a time-tested Sansui-exclusive motor, a 20-pole, 30-slot brushless DC motor

with a saturable core. This responsive motor is guided—moment-to-moment—by a highly effective servo control to ensure impeccable accuracy, and minimum long-term drift and wow. Its high torque smooths out even the slightest flutter.

In the FR-D25, a dependable belt-drive motor design—with a surprising Sansui twist—keeps wow low and vibrations effectively shut out. The surprise is a PLL (Phase-Locked Loop) servo control. It's proven to be one of the most effective ways of controlling a belt-drive motor (as well as costlier direct-drive motors, where it's more commonly found). In this Sansui design, a speed error detection device produces an output proportionate to the speed error (if any), which is

Block Diagram of Motor Drive Mechanism



compared for phase difference with a reference signal provided by a precise CR oscillator. The servo then reduces the difference between the two signals to zero, and locks accurate platter speed in for rotational steadiness rivalled only by the Planet Earth's. This level of accuracy will be maintained over long years of use.

**Sansui Tonearm: Low mass, low friction, high sensitivity.**

Ideally, the tonearm on a turntable should hold the cartridge without subjecting it to stress or friction. Sansui's tonearm comes close to achieving this ideal thanks to its high sensitivity and its ability to track at a force as low as 1.0 grams. Also noteworthy are its low-mass design, the low-friction balls in the pivot bearings, and, of course, the precision machining Sansui products are famous for.

Tonearm resonance—the source of unwanted coloration—has been overcome with: one, Sansui-exclusive "fishbone" sound absorbent material, and, two, a rubber damper which decouples the weight shaft from the tonearm tube. A solid headshell with a universal joint for quick and easy cartridge replacement tops this advanced design off.

**Automatic Tonearm: Simple, smooth, safe.**

Put a record on the platter and cue the tonearm onto the lead-in groove with the smooth-acting Cue lever: the automatic mechanism takes care of the rest. At end of play, the arm is automatically lifted and returned—gently—to its rest. Power is then shut off. Safe record handling is one big advantage of this design; clean hi-fi performance is another.

**Convenient Up-Front Controls: "Touch" Operation.**

All of the controls (except the "Cue" lever) are positioned up front for maximum access. This means that you can control operation without lifting up the cover all the way, thus decreasing the amount of



"clearance" space necessary. You'll find this feature—and the slim design—especially convenient if you place the FR-D35 or D25 in an audio rack, cabinet or shelf. Speed-switching and other operations are accomplished simply by pushing a button.

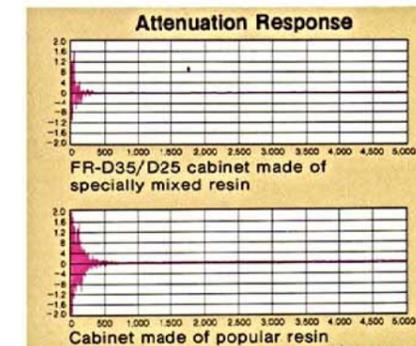
**Disc-Hugging Mat: No resonance, no slips, no slurs.**

Did you know that today's long-playing records are tapered from the center to the edge at a gradient of 1:350? That's too slight a "slope" to be seen by the naked eye, but it's more than a slight threat to high-quality record reproduction if the mat under the record assumes it doesn't exist. That's why Sansui provides a mat cupped at the same 1:350 ratio. It hugs your records to prevent slips and slurs and to cancel any dead space under the record that might cause resonance.

**And we haven't forgotten:**

● A Direct Readoff Strobe—allows you to read the strobe pattern directly off the illuminated platter rim.

- Anti-Skating Device—an accurate lever and weight system prevents uneven stylus wear and channel imbalance.
- Large (315-mm) Platter with Tapered Skirt—for quick and secure record placement.
- Arm Elevation ("Cue") Lever—for safe lifting and lowering of your stylus during manual operation.
- Electronic Speed Switching—for fast, smooth changes from 33½ rpm to 45 rpm or vice versa.
- Pitch Control—with a range wide enough (±3%) for perfect tuning with musical instruments.



**Controls are all up front—  
a feature you'll appreciate even if you don't put  
your turntable in an audio rack.**





## Specifications

### FR-D35

<b>TYPE</b>	Two-speed, automatic return/shutoff DC-servo direct drive turntable
<b>MOTOR</b>	20-pole, 30-slot DC brushless
<b>DRIVE SYSTEM</b>	Direct spindle drive
<b>PLATTER</b>	315mm (12 <sup>1</sup> / <sub>2</sub> " ) die-cast aluminum alloy,
<b>SPEEDS</b>	33 <sup>1</sup> / <sub>3</sub> , 45 rpm
<b>PERFORMANCE</b>	
WOW & FLUTTER	less than 0.025% (WRMS)
SIGNAL TO NOISE RATIO	better than 72dB (DIN-B)
FINE SPEED ADJUSTMENT	±3%
<b>TO NEARM</b>	Statically-balanced S-shaped tonearm with two-point pivot support
LENGTH	220mm (8 <sup>1</sup> / <sub>16</sub> " ) pivot to stylus
OVERHANG	17.5mm (3/4" )
OFFSET ANGLE	24.5°
MINIMUM TRACKING FORCE SETTING	1.0g (when using cartridge guaranteed to operate at 1.0g stylus pressure)
<b>ACCEPTABLE CARTRIDGE WEIGHT</b>	4 to 9g
<b>CABINTRY</b>	Slim-line cabinet with anti-howling insulators and hinged dust cover
<b>POWER REQUIREMENTS</b>	100-120/220-240V 50/60Hz U.S.A. and Canada models: 120V 60Hz European and UK models: 220, 240V 50Hz
<b>POWER CONSUMPTION</b>	less than 9 watts
<b>DIMENSIONS</b>	440mm (17 <sup>1</sup> / <sub>16</sub> " )W 119mm (4 <sup>1</sup> / <sub>16</sub> " )H 370mm (14 <sup>9</sup> / <sub>16</sub> " )D
<b>WEIGHT</b>	4.8kg (10.6 lbs.) Net 5.8kg (12.8 lbs.) Packed
<b>CARTRIDGE</b>	SC-50
TYPE	IM Type
FREQUENCY RESPONSE	10 to 20,000Hz
OUTPUT VOLTAGE	3mV per channel (1,000Hz, 35.4mm/sec.)
OPTIMUM LOAD	47k ohms
TRACKING FORCE	2.5 ±0.4g
STYLUS	0.6 mil diamond spherical (SN-50)

No Sansui cartridge is provided on FR-D35 model sold in U.S. and Canada. Cartridge supplied along with the turntable varies depending on sales area.

### FR-D25

<b>TYPE</b>	Two-speed, automatic return/shutoff belt drive turntable
<b>MOTOR</b>	PLL servo controlled DC motor
<b>DRIVE SYSTEM</b>	PLL servo-controlled belt drive
<b>PLATTER</b>	315mm (12 <sup>1</sup> / <sub>2</sub> " ) die-cast aluminum alloy,
<b>SPEEDS</b>	33 <sup>1</sup> / <sub>3</sub> , 45 rpm
<b>PERFORMANCE</b>	
WOW & FLUTTER	less than 0.03% (WRMS)
SIGNAL TO NOISE RATIO	better than 65dB (DIN-B)
FINE SPEED ADJUSTMENT	±3%
<b>TO NEARM</b>	Statically-balanced S-shaped tonearm with two-point pivot support
LENGTH	220mm (8 <sup>1</sup> / <sub>16</sub> " )
OVERHANG	17.5mm (3/4" )
OFFSET ANGLE	24.5°
MINIMUM TRACKING FORCE SETTING	1.0g (when using cartridge guaranteed to operate at 1.0g stylus pressure)
<b>ACCEPTABLE CARTRIDGE WEIGHT</b>	4 to 9g
<b>CABINTRY</b>	Slim-line cabinet with anti-howling insulators and hinged dust cover
<b>POWER REQUIREMENTS</b>	100-120/220-240V 50/60Hz U.S.A. and Canada models: 120V 60Hz European and UK models: 220, 240V 50Hz
<b>POWER CONSUMPTION</b>	less than 7 watts
<b>DIMENSIONS</b>	440mm (17 <sup>1</sup> / <sub>16</sub> " )W 119mm (4 <sup>1</sup> / <sub>16</sub> " )H 370mm (14 <sup>9</sup> / <sub>16</sub> " )D
<b>WEIGHT</b>	4.3kg (9.5 lbs.) Net 5.3kg (11.7 lbs.) Packed
<b>CARTRIDGE</b>	SC-37
TYPE	IM Type
FREQUENCY RESPONSE	20 to 20,000Hz
OUTPUT VOLTAGE	3.5mV per channel (1,000Hz 35.4mm/sec.)
OPTIMUM LOAD	47k ohms
TRACKING FORCE	2.5 ±0.4g
STYLUS	0.5 mil diamond spherical (SN-37)

No Sansui cartridge is provided on FR-D25 model sold in U.S. and Canada. Cartridge supplied along with the turntable varies depending on sales area.

Design and specifications subject to change without notice for improvements.



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