

SANSUI SC636

HI-FI STEREO CASSETTE DECK WITH DOLBY* AND M-C FERRITE HEAD



The SC-636 is a compact, easily-operated, fine-sounding stereo cassette tape deck complete in every way that a quality deck should be, yet minus some of the cassette frills that often lead to inflated prices. The wise audiophile will want to compare its performance with that of a quality open-reel deck, and, if

he does, he will be pleasantly surprised. Its control arrangement and solid, precision mechanism enhance Sansui's first-rate reputation as an audio-specialty manufacturer. And there are other important features, too. Its Magni-Crystal (M-C) ferrite head, developed by Sansui, the 4-pole hysteresis synchronous motor

unaffected by fluctuations in power and load, and its auto-stop release mechanism and pre-amplifier are very near the top of professional hi-fi standards. Open-reel deck performance at a surprisingly practical price? That's Sansui's SC-636.

*Dolby is a trademark of Dolby Laboratories, Inc.

Sansui

Professional features without costly frills— The Sansui does-everything budget deck

TAPE TRANSPORT— PRACTICAL, EASY OPERATION

Sizing up a quality tape deck requires a close look *both* at performance specifications and actual performance. The latter will almost always be judged on the basis of its overall tape transport system: how it is designed and machined, how easy and comfortable it is to operate, its important mechanisms. Each metallic and non-metallic part of the system designed for the SC-636 is machined, matched and hand assembled with care usually reserved for the finest reel-to-reel decks. Each part has been laboratory-tested for precision and accuracy in a variety of play-stop-record-stop-play operations. The rugged construction of this deck is evident in countless ways. Its new 4-pole hysteresis

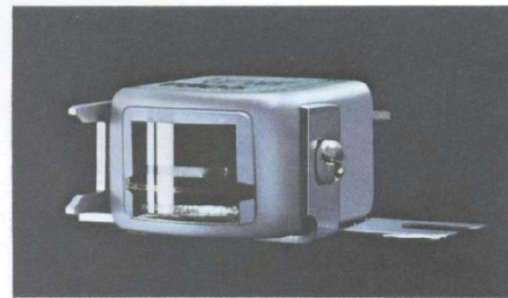
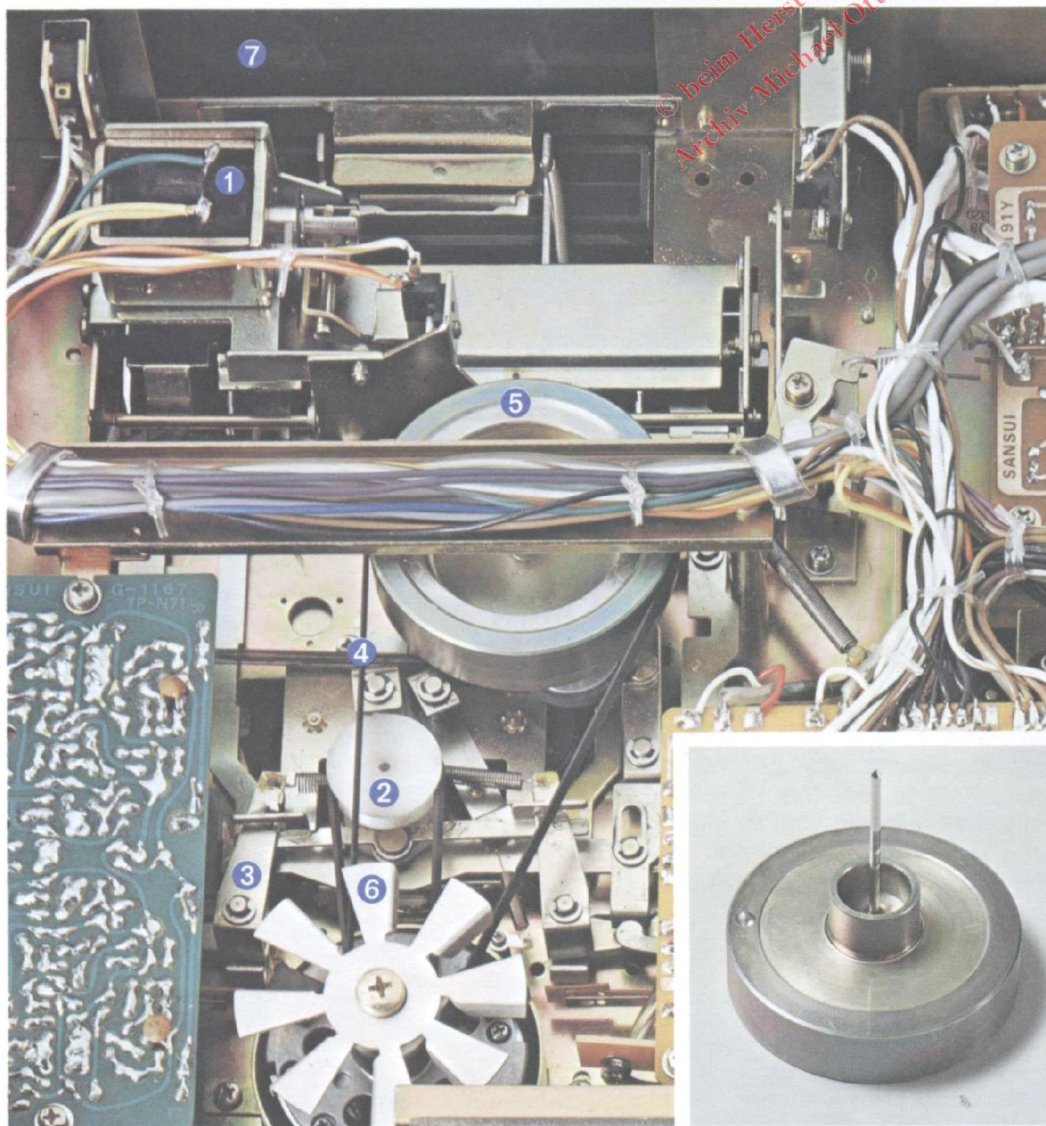
synchronous drive motor is entirely unaffected by fluctuations of load or power supply voltage, and it drives a large, high-inertia flywheel by a super-polished flat belt and mirror-like capstan. The latter is finished with a tolerance of within 4/10th of a micron to achieve constant tape speed and smooth tape transport at all times, with minimum wow and flutter factors. The reel drum clutches, used for braking action, are of a "fur felt" construction, a material unaffected by changes in temperature or humidity that retains appropriate friction property over a long period of use. Then, to ensure maximum tape protection, the transport system has fail-safe devices that eliminate tape jamming, breakage and stretching. There are safety features to prevent accidental erasure, feather-touch control keys spaced for easy operation that are interlocked to prevent jamming, and

a large cassette compartment, easy to load and unload, designed for noiseless operation.

- ① ③ AUTOMATIC SHUT-OFF MECHANISM
- ② PULLEY FOR SMOOTH REEL DRIVE
- ④ SUPER-POLISHED FLAT DRIVE BELT
- ⑤ LARGE HIGH-INERTIA FLYWHEEL
- ⑥ FOUR-POLE HYSTERESIS SYNCHRONOUS DRIVE MOTOR
- ⑦ FULL-SIZE SOFT TOUCH STOP BUTTON

HIGH-DENSITY MAGNI-CRYSTAL FERRITE RECORD/PLAY HEAD

The surface of the unique record/playback tape head used in the SC-636 is precision polished by a special process to eliminate potentially harmful friction against tape surface yet provide excellent tape-to-head contact. A high-density, large-grain ferrite material, developed by Sansui and named Magni-Crystal (M-C) because of its unique properties, assures optimum electrical performance and long-life, while the M-C record/playback head contains large grains which do not scrape away, unlike conventional ferrite heads. The extraordinary high-frequency characteristics of the SC-636 are due, in large part, to the care with which the headgaps are set with microscopic precision. To provide sure and complete erasing, even with chrome dioxide and other newly-created tapes, the erase head is also of a ferrite material and shaped to reduce tape wear.



M-C ferrite head resists abrasion much more times than conventional heads. (Enlarged to 500 Times Actual Size)



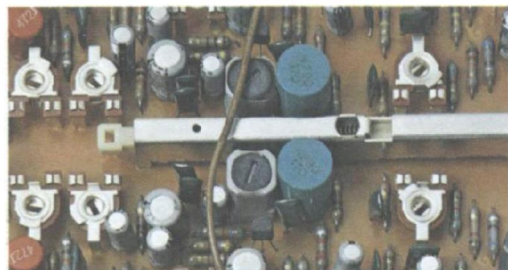
Gap Environs of Magni-Crystal Ferrite Head



Gap Environs of Conventional Ferrite Head

RECORD/PLAYBACK PREAMPLIFIER

The use of carefully-selected low-noise transistors means that the record/playback preamplifier in the SC-636 provides consistently high S/N ratio, a wide dynamic range and improved high-frequency response that is on a par with a good open-reel deck. An "emitter-follower" circuit is employed in the line-out circuit to provide very low output impedance. The result is that, unlike a more common "emitter-grounded" circuit, with this circuit the signal is unaffected by the length or type of connection cables, or by external noises. Also, because it suffers fewer fluctuations in load, the SC-636 operates stable no matter what make of amplifier it is connected to.



TAPE SELECTOR SWITCH

Like any quality tape deck, the SC-636 features a tape selector switch. This means you can use all types of cassette tapes as they are meant to be used. The selector changes both the bias and equalization performance of the SC-636 to result in a wider frequency response, wider dynamic range, better S/N ratio and improved tonal quality from low-noise/high-output tapes as well as from the more expensive but also higher performance chromium dioxide (CrO₂) tape.

VU METERS

The self-illuminated VU meters for left and right channels let you set the input levels for the most appropriate recording levels. The line-out circuit is not affected by distortion or other noises since it is

independent from the amplifier circuit for the VU meters.

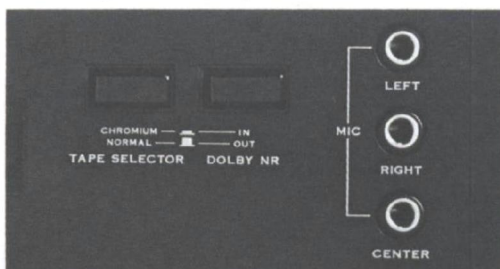


PHOTO-ELECTRIC SENSOR SHUT-OFF

An automatic shut-off device, complete with photo-electric sensor, releases the drive mechanism in all transport modes and switches it to stop at the end of the tape. This helps to prevent tape damage, as well as damage to the transport mechanism itself, and also eliminates the need for you to manually shut off the deck.

CENTER-CHANNEL MICROPHONE MIXING

The SC-636 lets you mix signals from the line input jacks (or DIN connector socket) with those from the center microphone, or signals from the center microphone with those from the left and right microphones. If you connect a stereo amplifier to the line input jacks (or DIN connector socket), you can mix any sounds processed through the amplifier with your own voice, or with voices picked up by the center mic. When you do live stereo recording, adding the center microphone will avoid the center void effect often experienced with only two microphones.



CONSTANT-VOLTAGE POWER SUPPLY AND CUT-CORE TRANSFORMER

Like a quality open-reel deck, the SC-636 is equipped with a constant

voltage power supply feeding all amplifying stages. Since the bias voltage does not change with power voltage fluctuations, your recordings are never subjected to attenuation or accentuation in the high frequency range; the obtained frequency response is always flat. The SC-636's performance is further enhanced by the use of a cut-core transformer, usually found only in precision measuring instruments and oscilloscopes. The construction uses a coiled core transformer, instead of a conventional laminate-core transformer, to reduce leakage flux and provide better S/N. This also eliminates the inductive influence on heads, tapes and electrical circuitry.



MUTING CIRCUIT

The muting circuit in the SC-636 allows the electric circuit to be activated with a brief delay after the operating button is pressed. This eliminates the annoying "click" noise, otherwise usually heard from speakers, when the mode is changed from RECORD (or FAST FORWARD or STOP) to PLAY. Your speakers are fully protected.

OTHER MAJOR FEATURES

- Built-In Push/Pull 85kHz Bias Oscillator
- Line/Mic Shorting Circuit—eliminates hum and other noise otherwise audible when microphone inputs are not used.
- Dolby and Record Mode Indicators
- International Voltage and Cycle Selectors
- Stereo Headphone Jack
- No-Click Pause Button
- Standard DIN Connector Socket
- Standard Accessories—including Head-Cleaning Pen and Operation Manual
- Stereo Headphones, Microphones and other Sanusi tape deck accessories are optional extras.

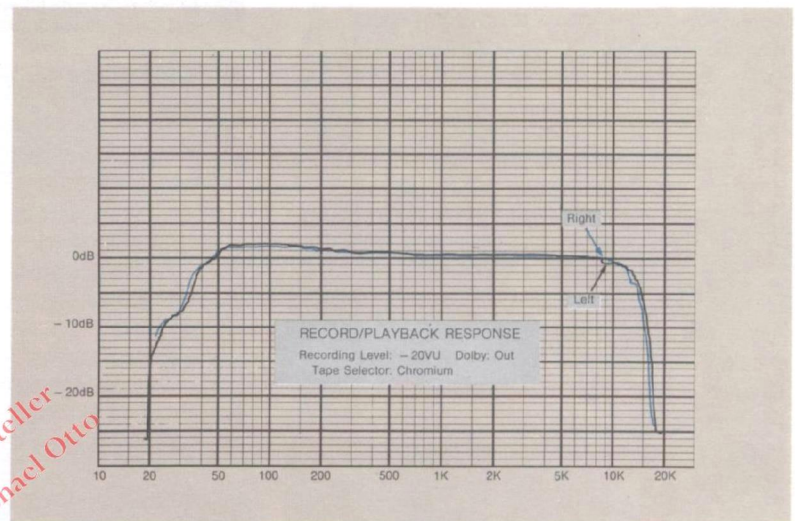
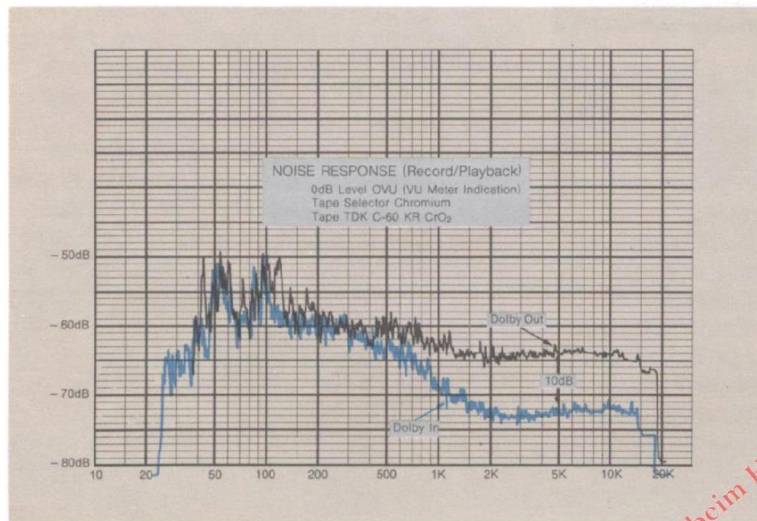
Reduced noise for fine performance— Your ears will tell the difference

BUILT-IN DOLBY TYPE-B NOISE REDUCTION SYSTEM

The SC-636 incorporates a highly-effective Dolby Type-B Noise Reduction

System which reduces tape hiss and other unwanted noise by about 10dB. The operation of this system is extremely easy—one pushbutton on the SC-636 operating panel engages the system for either playback of Dolbyized tapes or

recording your own. It assures quieter and cleaner response with all types of cassette tape—another reason the SC-636 is able to provide sound which is entirely comparable to that of the best open-reel tape decks.



SPECIFICATIONS

TRACK SYSTEM

4-track 2-channel record/
playback

TAPE STANDARD

Philips cassette standard

TAPE SPEED

4.8cm/sec. (1½ips)

HEADS

record/playback head
(M-C ferrite head)
erase head (ferrite head)

MOTOR

hysteresis synchronous type

TAPE DRIVING SYSTEM

belt driving system

WOW AND FLUTTER

less than 0.12% (WRMS)

TAPE SPEED ACCURACY

within ±1.5%

FAST WIND TIME

less than 70 seconds (C-60)

FREQUENCY RESPONSE (RECORD/PLAYBACK)

NORMAL TAPE (L.H.)

30–13,000Hz,

35–10,000Hz ±3dB

CHROMIUM TAPE

30–16,000Hz,
35–13,000Hz ±3dB

SIGNAL TO NOISE RATIO

CHROMIUM TAPE (DOLBY OUT)

better than 50dB (weighted)

DOLBY NOISE REDUCTION EFFECT

better than 8dB (above 5kHz)

CHANNEL SEPARATION

better than 38dB (1kHz)

ERASURE FACTOR

better than 60dB (1kHz)

INPUT SENSITIVITY AND IMPEDANCE

(O VU 1kHz)

MIC (L.R.)

0.5mV/600Ω ~10kΩ

MIC (CENTER)

0.5mV/600Ω ~10kΩ

LINE

70mV/100kΩ

DIN

14mV/30kΩ

OUTPUT LEVEL (O VU 1kHz)

LINE

0.56V

DIN 0.56V

HEADPHONES

0.12mW / 8Ω

BIAS FREQUENCY

85kHz nominal

INDICATORS

Dolby NR,
Record

POWER REQUIREMENTS

100, 117, 220, 240V 50/60Hz

POWER CONSUMPTION

22W (rated)

SEMICONDUCTORS

35 Transistors, 2 EFT's,
3 Zener Diodes, 11 Diodes,
8 Varistors, 1 Cds Cell

DIMENSIONS

408mm (16½") W × 118mm
(4⅞") H × 295mm (11⅞") D

WEIGHT

6.7kg (14.8lbs.) net
8.6kg (19.0lbs.) packed

Design and specifications subject to change without notice for improvements.