SANSUI TU7700

FM/AM STEREO TUNER WITH HIGH-INTEGRATED IC'S

Sansui's in-depth research into the nature of good sound makes the TU-7700 one of the finest FM/AM stereo tuners we've ever created.

That extra bit of sound thinking from Sansui deals with undesirable phase distortion, insufficient FM selectivity and more to give you a tuner you can depend on always, and one that adds no false voice of its own to your music.

The TU-7700 is crafted in the fine tradition of Sansui's TU/AU series of top-quality tuners and integrated stereo amplifiers. Extensive use of IC's, three in the IF stage, independent IC's for multiplex, muting and AM tuner circuits, contributes to overall performance and characterizes the TU-7700 as one of the best tuners available today. New performance conveniences like a front-panel antenna attenuator to compensate for overstrength inputs, a linear signal strength meter that doubles as a multipath meter, and others give you more control over the quality of FM signal you wish to hear.

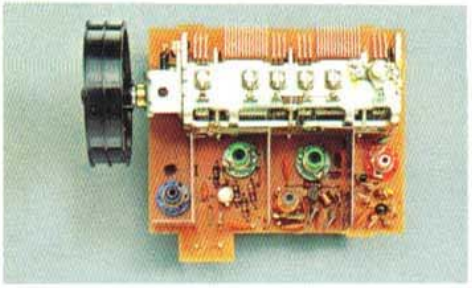
Check out the TU-7700. Sansui research *does* make the difference.

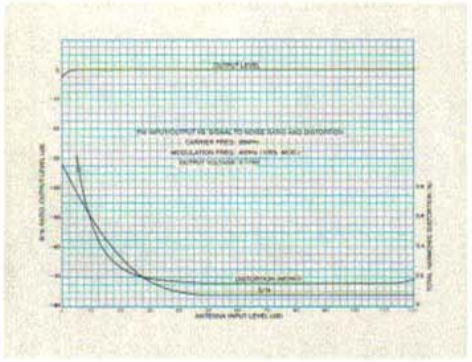
Sansui

Sansui research creates another dependable one: the TU-7700 tuner.

Maximum Sensitivity in FM Frontend

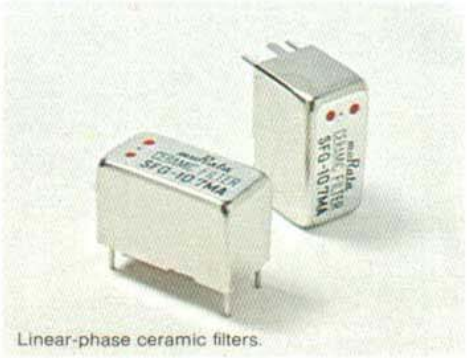
Several features make the FM frontend of the TU-7700 one of the most sensitive of all tuners. It has a low-noise dual-gated MOS FET (Metal Oxide Semiconductor FET) as well as a precision 4-gang frequency-linear tuning capacitor which assure maximum sensitivity (1.8μV), low distortion and high signal-to-noise ratio. Furthermore, coupling of the FM RF amplifier and mixer stages through a double tuning circuit contributes to excellent selectivity (better than 75dB) and spurious response (better than 80dB).



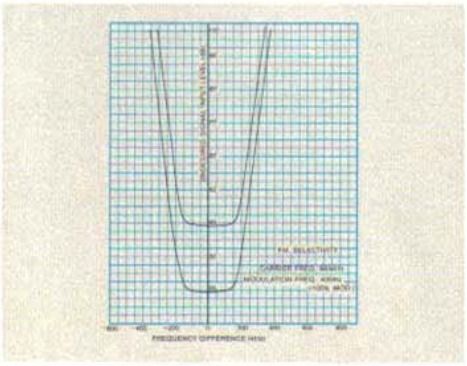


FM Linear-Phase IF Amplifier/Limiter

Excellent low distortion and a high signal-to-noise ratio are assured with the TU-7700. This is made possible by a two-stage IF amplifier employing differential amplifiers and two newly-developed linear-phase 4-resonator ceramic filters, and three IC limiters. The overall circuit design eliminates group-delay and phase distortion; but it also sharply limits signals received from adjacent stations and beat interference. Overall, the tuner benefits from less intermodulation, improved AM suppression, capture ratio and selectivity. And then, because of internal construction that places the filter before the amplifier to limit distortion, you will discover that all FM stations, weak or strong, are received with improved clarity, free from interference from adjacent strong stations.



Linear-phase ceramic filters.

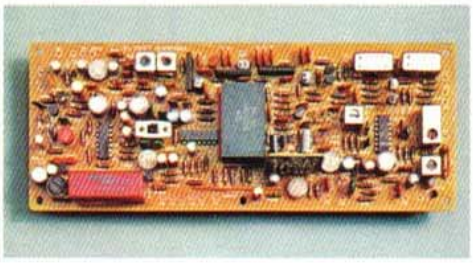


Stable FM Multiplex Demodulator

The FM multiplex demodulator in the TU-7700 uses a high-density IC for improved stability. The performance specifications speak for themselves: stereo separation is better than 40dB at 1kHz and total harmonic distortion in stereo FM reception is less than 0.3%.

FM Muting Circuit with IC

Unlike conventional tuners, the IC-equipped FM muting circuit operates from the center voltage of the discriminator, not from the signal-strength meter circuit. All signals having distortion above a certain level are cut, regardless of the meter reading. Only noise and distortion-free signals are tuned in; inter-station noises are eliminated. Always count on quiet tuning and clear reception with the TU-7700.



High-Intergrated IC AM Amplifier

The "high-integrated" type IC employed in the AM tuner section is the equivalent of 22 transistors and 11 diodes. The result is increased stability and reliability. Use of a bi-resonator Jaumann ceramic filter sharpens AM selectivity and eliminates AM whine, while a space-wound FM ferrite bar antenna further increases sensitivity.

Responsive Signal Strength Meter and Accurate Center-Tune Meter

The signal strength meter of the TU-7700 responds linearly to the strength of

incoming signals up to as high as 60dB or 1mV. The TU-7700's meter always pinpoints your desired station, unlike conventional meter circuits that are easily saturated by low level signals. The pointer of a second meter—called the center-of-tune meter—aligns itself precisely at the center of the meter when distortion is minimum.

Multipath Detection Device

The signal strength meter can be switched to work as a multipath detection meter. This operation is made by flipping the meter selector and adjusting the antenna. When the pointer shows the least deflection, you are assured of receiving optimum FM reception, free of noise and distortion, and with maximum separation. More critical multipath observation may be achieved by connecting an oscilloscope on the unit's rear panel, for which suitable connections are provided.

Easy-To-Read Slanted Tuning Dial

The dial, which is slanted, provides fast and easy observation. It is etched to provide all readings in relief, while its panel is black with silver readings to lend a touch of design elegance to the TU-7700. Both the stereo indicator and dial pointer use LEDs (Light-Emitting Diodes) for extra long-life and pleasing glow. The contrasting aluminum diecast frame lends a highly distinctive look to the tuner, as well as to your interior decor.

FM Linear Scale and Smooth Dial Mechanism

Tuning is easy with the TU-7700, thanks to the use of a wide linear dial scale for FM that is evenly graduated in 250kHz steps. This feature is especially valuable if you're living in an urban area congested by FM signals. The dial mechanism is exceptionally smooth and easy-to-adjust, thanks to the use of an oversized flywheel and special tension design.

Effective Antenna Input Attenuator

This important device is situated on the tuner's front panel. When switched in, it reduces the amplifier gain by 20dB instantly, providing distortion-free and steady FM reception in areas where signal strengths are excessive.

Multiplex Noise Canceller

This switch suppresses high-frequency noise, the kind that inevitably disturbs quality FM stereo broadcasts. It is very handy especially when you are receiving weak stereo signals.

Four-Channel Adaptability

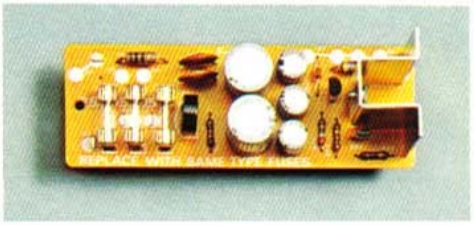
When discrete 4-channel broadcasts become a reality, the TU-7700 is ready to receive them. A discriminator output jack situated on the rear panel connects a 4-channel FM demodulator.

Two Convenient Output Terminals

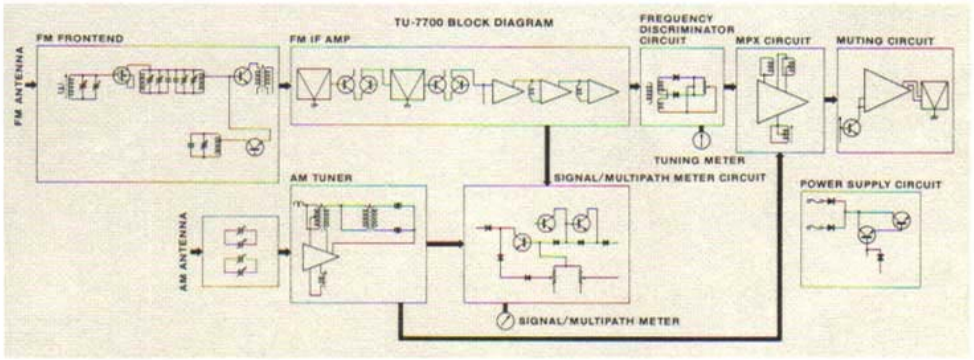
The TU-7700 provides two pairs of output terminals. One has a variable output level (0 to 0.775V); the other has a fixed level (0.4V). The output level of the first can be adjusted by a front-panel control to match the levels of other sources connected to your amplifier, such as a tape deck and a turntable.

Other TU-7700 Features

- Constant voltage power supply feeds all stages for precise and stable reception.



- 50μs / 75μs FM DE-EMPHASIS SWITCH for ideal FM reception anywhere in the world.
- 300-Ohm, 75-Ohm Antenna Terminals
- AC OUTLET ("UNSWITCHED") to provide constant power to a connected source such as a turntable, tape deck, or other components. Maximum capacity is 150 watts.
- ATTRACTIVE BRUSHED HAIRLINE FRONT PANEL



SPECIFICATIONS

FM SECTION

TUNING RANGE 88 to 108MHz
SENSITIVITY (IHF) 1.8μV
QUIETING SLOPE 40dB 1.8μV, 50dB 3μV, 60dB 10μV, 70dB 50μV
TOTAL HARMONIC DISTORTION
MONO less than 0.2%
STEREO less than 0.3%
SIGNAL TO NOISE RATIO better than 75dB
SELECTIVITY better than 80dB
CAPTURE RATIO less than 1.5dB
IMAGE FREQUENCY REJECTION better than 75dB at 98MHz
IF REJECTION better than 90dB at 98MHz
SPURIOUS RESPONSE REJECTION better than 80dB at 98MHz
SPURIOUS RADIATION less than 34dB
STEREO SEPARATION better than 40dB at 1,000Hz, better than 30dB at 10,000Hz
FREQUENCY RESPONSE 20 to 15,000Hz
ANTENNA INPUT IMPEDANCE 300Ω balanced, 75Ω unbalanced
FM ANTENNA ATT. −20dB

AM SECTION

TUNING RANGE 535 to 1,605kHz
SENSITIVITY (Bar Antenna) 50dB/m at 1,000kHz
SELECTIVITY (±10kHz) better than 30dB at 1,000kHz
IMAGE FREQUENCY REJECTION better than 80dB/m at 1,000kHz
IF REJECTION better than 80dB/m at 1,000kHz

OUTPUT LEVEL
OUTPUT 0 to 0.775V at FM 100% mod. (Variable)
REC OUTPUT 0.4V

GENERAL

SEMICONDUCTORS 14 Transistors, 1 FET, 14 Diodes, 1 Zener Diode, 6 ICs, 2 LEDs
POWER REQUIREMENTS
POWER VOLTAGE 100, 117, 220, 240V, 50/60Hz
POWER CONSUMPTION 9 Watts (Rated)

DIMENSIONS 434mm (17⅛") W
130mm (5⅛") H
243mm (9⅝") D
WEIGHT 6.9kg (15.2 lbs) Net
8.3kg (18.3 lbs) Packed

Note: No AC outlet is provided on the model sold in Europe.
Design and specifications subject to change without notice for improvements.

Matching integrated amplifier AU-7700

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SANSUI AUDIO EUROPE S.A. DIACEM BUILDING, VESTINGSTRAAT 53-55, 2000 ANTWERP, BELGIUM/TELEX: ANTWERP 33538

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Printed in Japan 510001P6