

G-4500

Sansui Pure Power FM/AM Stereo Receiver Featuring 40 Watts/Ch Minimum RMS, 20 to 20kHz, with 0.1% Total Harmonic Distortion with Mic Mixing.



Only hi-fi, everything hi-fi.



The Sansui G-4500: Heads-Up Audio Engineering for Cleaner Sound, Better Looks and Wider Versatility.

Phono Equalizer—Accurate and Uncolored Performance

Sansui's G-4500 features a very advanced phono equalizer with two low-noise PNP and NPN transistors connected in a Darlington-pair arrangement. Your records are reproduced with low noise and wide dynamic range. For accurate, uncolored reproduction, the RIAA equalization is $\pm 0.5\text{dB}$ from 30 to 15,000Hz, a specification that can be equalled only by component-quality amplifiers of the latest design. This carefully designed and assembled equalizer permits you to enjoy music even from the most complex, widely undulating record grooves with no trace of clipping nor loss of transient immediacy.

Low-Distortion Tone Control Circuit

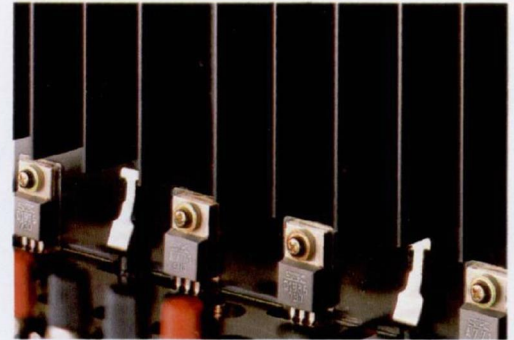
The "flat amp" in the tone control circuit of the Sansui G-4500 is built around exactly the same circuit configuration as the phono equalizer, using two low-noise transistors.

This design, together with the precision parts employed, keeps distortion to a minimum. The BASS and TREBLE tone pots have click stops for convenience and permit smooth, fine adjustments. They let you compensate for deficiencies in your listening-room acoustics, or to get the best results from your speakers and other hi-fi components.

True Complementary Direct-Coupled Power Amplifier

Clean, full-bodied musical performance is guaranteed in the G-4500 with the use of a sophisticated power amplifier that delivers 40 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 to 20,000Hz, with no more than 0.1% total harmonic distortion. Sansui engineers chose the most advantageous circuitry for its size: a dual-PNP-transistor differential input stage, class-A single-amp driver stage and a true complementary direct-coupled power output configuration. Transient response, tonal balance and rich

sonority are yours to enjoy when you connect any well-damped, high-performance speaker system.



Sensitive FM Frontend in Advanced Tuner

Clear reception of FM signals whether faint or overstrong is assured with the use of an FET RF amp and two stages of ceramic filters in the FM frontend and IF sections of the G-4500. The sensitivity is a high 11.0dBf (1.95 μV) and the selectivity is also high 50dB. Twin meters



help you tune in the station you want quickly and with a minimum of noise and distortion.

High Fidelity Stereo Sound

Distortion is lowered to assure hi-fi reproduction with the use of a quadrature detector to convert modulated signals into audio signals. For wide-separation, clean stereo FM, the multiplex demodulator is the advanced PLL (Phase-Locked Loop) type that never varies in its performance. The stereo separation is 40dB at 1kHz. A sharp-attenuating filter is circuited at the tuner output to eliminate the beat noise when you make stereo FM recordings off the air.

Select Components Improve AM Sound

New ceramic filters and an IC equivalent to a 20-transistor amplifier are employed in the AM section so that sensitivity, selectivity and overall sound approach the best possible in the medium. A beat filter rejects interference from neighboring

stations, a detail you'll appreciate when you want to pull in distant stations at night.

Microphone Mixing Circuit

There's a microphone input on the G-4500 with its own mic level control and amp. You can mix microphone sounds with any program source—records, tapes or radio broadcasts—and send them to your speakers. You'll find numerous uses for this handy facility.

Power Supply Ensures Energy Reserve

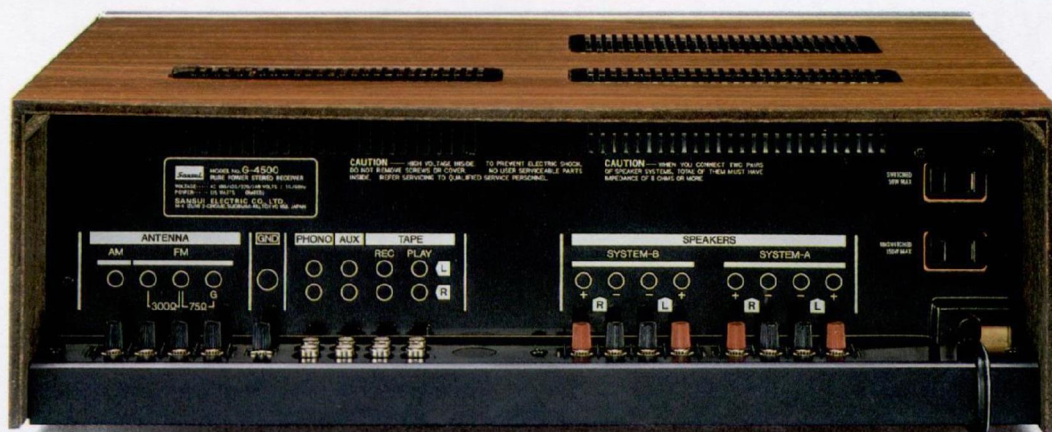
Sansui pays particular attention to the power supplies on all our hi-fi components, for power supply is the key to high tonal quality. In the G-4500 we use a large, well-regulated power transformer and two large capacitors ($6,800\mu\text{F} \times 2$) so that even during loud passages of music, when the demand for power is high, there is always enough reserve. Clean, undistorted reproduction from the most dynamic of recent-vintage recordings is just one of the advantages.

Heads-Up Convenience Details

- Tape Monitor—A set of stereo input/output terminals is provided on the back panel of the G-4500 to allow you to connect a tape deck for recording and playback. The front-panel monitor switch is the pushbutton type for convenience.
- Loudness Switch—This is used when you listen to music at low level or volume; it boosts the low and high ends of the spectrum to achieve a balanced frequency response.
- FM Muting—Eliminates the irritating "hiss and thump" of inter-station tuning noise. You can switch it out to pull in weak stations when necessary.
- Stereo Headphones—A standard jack accepts the plug from stereo headphones for your private listening enjoyment.
- Speaker Selection—A front-panel switch and rear-panel terminals are provided to let you connect two stereo pairs of speaker systems and hear either, both or turn both off.



SPECIFICATIONS



AUDIO SECTION

POWER OUTPUT*

Min. RMS, both channels driven, from 20Hz to 20,000Hz, with no more than 0.1% total harmonic distortion
40 watts per channel into 8 ohms

Min. RMS, both channels driven, at 1,000Hz, with no more than 0.1% total harmonic distortion.
42 watts per channel into 8 ohms

TOTAL HARMONIC DISTORTION*

OVERALL (from AUX) less than 0.1% at or below rated min. RMS power output

OVERALL: less than 0.04% at 1kHz, 40W power output

INTERMODULATION DISTORTION

(70Hz:7,000Hz=4:1 SMPTE method)

OVERALL (from AUX) less than 0.1% at or below rated min. RMS power output

DAMPING FACTOR

30 into 8 ohms

LOAD IMPEDANCE*

8 ohms

FREQUENCY RESPONSE (at 1 watt)

OVERALL (from AUX) 10 to 50,000Hz +1dB, -2dB

RIAA CURVE DEVIATION (30 to 15kHz)

+0.5dB, -0.5dB

HUM AND NOISE (IHF)

PHONO 75dB

AUX 95dB

CHANNEL SEPARATION (at 1,000Hz)

PHONO 50dB

AUX 50dB

INPUT SENSITIVITY AND IMPEDANCE (at 1,000Hz)

MIC 8mV, 10k ohms

PHONO 2.5mV, 47k ohms

AUX 150mV, 47k ohms

(PHONO: Max. input capability more than 200mV

RMS at 0.5% distortion)

OUTPUT VOLTAGE AND IMPEDANCE (at 1,000Hz)

TAPE REC (PIN) 150mV, 47k ohms

CONTROLS

BASS +10dB, -10dB at 50Hz

TREBLE +10dB, -10dB at 10kHz

LOUDNESS (Volume) at -30dB

+7dB at 50Hz

+5dB at 10kHz

FM SECTION

TUNING RANGE

88 to 108MHz

SENSITIVITY

MONO (IHF) 11dBf (1.95μV IHF T-100)

(DIN) 1.2μV

STEREO 19dBf

50dB QUIETING SENSITIVITY

MONO 15dBf

STEREO 38dBf

SIGNAL TO NOISE RATIO AT 65dBf

MONO 71dB

STEREO 68dB

DISTORTION AT 65dBf

MONO less than 0.18% at 100Hz

less than 0.15% at 1,000Hz

less than 0.25% at 6,000Hz

less than 0.3% at 100Hz

less than 0.25% at 1,000Hz

less than 0.3% at 6,000Hz

STEREO

CAPTURE RATIO

1.3dB

ALTERNATE CHANNEL SELECTIVITY

50dB at 400kHz

SPURIOUS RESPONSE RATIO

70dB at 98MHz

IMAGE RESPONSE RATIO

48dB at 98MHz

IF RESPONSE RATIO

Balanced 90dB at 98MHz

AM SUPPRESSION RATIO

55dB at 98MHz

STEREO SEPARATION

30dB at 100Hz

40dB at 1,000Hz

28dB at 10kHz

FREQUENCY RESPONSE

MONO 30 to 15,000Hz +0.5dB, -1dB

STEREO 30 to 15,000Hz +0.5dB, -1dB

ANTENNA INPUT IMPEDANCE

300 ohms balanced

75 ohms unbalanced

AM SECTION

TUNING RANGE

530 to 1,600kHz

SENSITIVITY (Bar antenna) 50dB/m (300μV/m)

SELECTIVITY ±10kHz 35dB at 1,000kHz

IMAGE RESPONSE RATIO 50dB at 1,000kHz

IF RESPONSE RATIO 38dB at 1,000kHz

SIGNAL TO NOISE RATIO

46dB at 1,000kHz

GENERAL

AC OUTLETS

switched max. 50 watts

unswitched total 150 watts

SEMICONDUCTORS

33 Transistors; 16 Diodes;

1 FET; 5 ICs; 1 LED

POWER REQUIREMENTS

POWER VOLTAGE 100, 120, 220, 240V 50/60Hz

POWER CONSUMPTION

115W

DIMENSIONS

433mm (17 1/8") W

153mm (6 1/8") H

354mm (14") D

WEIGHT

8.1kg (17.9lbs.) Net

9.5kg (20.9lbs.) Packed

FINISH

Simulated walnut grain

*Power specifications measured pursuant to U.S. Federal Trade Commission trade regulation on power output claims for amplifiers.

●The FM performance of the HG-4500 is measured pursuant to the new Institute of High Fidelity standard, IHF-T-200, except specifications with the legend IHF-T-100.

●Design and specifications subject to change without notice for improvements.

