

SANSUI 8080

FM/AM STEREO RECEIVER WITH FOUR METERS



Sansui power. A must for musical fidelity. And there's power aplenty in the outstanding 8080 stereo receiver, one in our rugged new line of components created to get the most out of today's better sounding records, tapes and FM. All the musical nuances of dynamic range and frequency response come through clean, thanks to its abundant power reserve and beefed-up pre-amp circuitry.

As rated by the U.S. Federal Trade

Commission's ruling on power, the 8080 delivers a continuous 80 watts, min. RMS, per channel, both channels driven into 8 ohms, over the entire 20 to 20,000Hz spectrum, with no more than 0.2% total harmonic distortion. Such high-power/low-distortion performance makes itself clear to your ears at first hearing.

For superb FM stereo listening, the 8080 features exactly the same tuner section as found in the more expensive

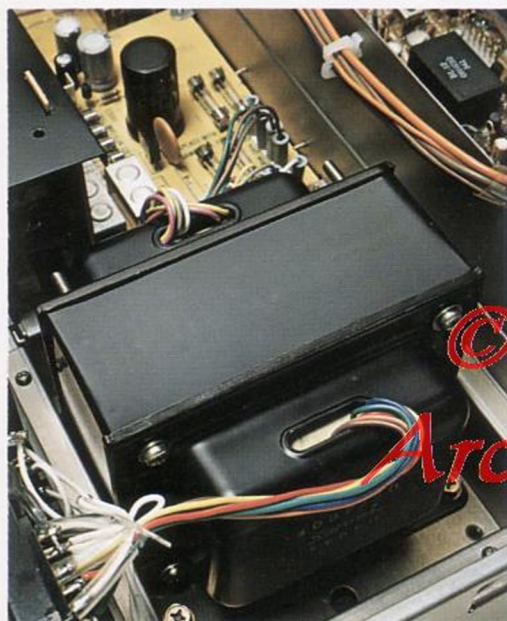
Sansui 9090. It includes PLL for better stereo separation, IC MOS FET for sharper sensitivity and a number of fail-free filters for noiseless operation. There's even an IC AM section for people who hate AM. Wide source and control features, a total of four meters, and strong, independent power supplies throughout complete the picture. Hear the 8080. From Sansui, where it's all hi-fi.

Sansui

THE SANSUI 8080

Sansui makes a powerful point about musical performance with the new receivers 8080 and the slightly more powerful, more expensive 9090 in our stereo line. Today's records, tapes and broadcasts must be handled with high power for best results. And any amp or receiver that can't deliver the power you

need at soft as well as loud volumes is sure to let you down. This is why at the heart of the 8080 we've put one of the most powerful, most reliable power amplifiers ever built. Learn more about it below.



POWER AMPLIFIER SECTION

Abundant Power Reserve

The 8080's all-stage direct-coupled OCL push-pull power amplifier delivers clean-cut high fidelity at all listening levels and from all sources. The dual plus/minus power supply is independent from the power supplies for the rest of the receiver. And the power delivery, as rated according to the U.S. Federal Trade Commission, is a continuous 60 watts per channel, min. RMS, both channels driven into 8 ohms, over the entire 20 to 20,000Hz spectrum, with no more than 0.2% total harmonic distortion.

Active-Loaded Driver Amplifier

Active-loaded drive is applied to the driver stage to eliminate crossover distortion and other abnormalities which otherwise would be heard at low volumes.

Power Protection

The independent power supply section has two oversized capacitors and a huge and closely-regulated power supply transformer. To protect the vital power transistors from unexpected surges or shorts, four quick-acting fuses and a relay-operated protector are used. The latter also prevents speaker damage and power on/off crackling noise.

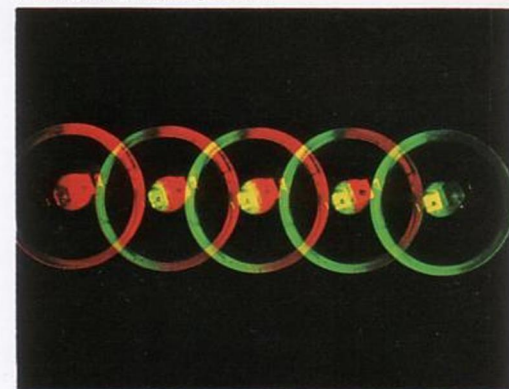
Twin Power Meters

The two meters (see illustration) indicate your exact, instant-by-instant power output over the wide range of 0.5 to 200 watts (8 ohms).



Power/Protector Indicator

An LED (Light-Emitting Diode) lets you know instantly if danger to the power circuit threatens. If and when the automatic power protection circuit operates, the red light will continue to flicker until the relay is automatically restored, then the light glows green.



A BIG RMS 80 WATTS PER CHANNEL, PRECISE RIAA EQUALIZATION, AND FAULTLESS FM STEREO PERFORMANCE



CONTROL/PREAMP SECTION

Wide Dynamic Range

The advanced phono equalizer has a high 40V DC voltage supply for a very wide phono overload of 200mV RMS (560mV p-p). This means that all of the information on the records you play is reproduced exactly as intended by the recording engineers. Precision equalization of phono signals is within a $\pm 0.5\text{dB}$ deviation of the standard RIAA curve between the frequencies of 30 to 15,000Hz.

reduced time constant, phase margin is more than enough for ever stable performance. The reduced input capacitance of the circuit means better high frequency response from any cartridge.

Triple Tone Controls

Sansui has gained many new friends among audiophiles and professionals as the result of this sophisticated tone equalization convenience. Triple Tone Control offers a precisely calibrated midrange control in addition to the usual bass and treble. This means you can tailor the all-important middle range or mid-spectrum frequencies where the "presence" and fundamentals of most music is found.

IC Construction

Phono equalizer construction centers on an IC in a three-stage direct-coupled SEPP configuration. Since it has a

Baxandall NF Tone Control Amp

High signal-to-noise performance and smooth tonal characteristics are assured with the Baxandall circuit in the tone control amplifier using the NF (negative feedback) format. Each tone control has 11 click stops, each representing a fixed resistor, for precise acoustic tailoring.

Tape and Source Selection

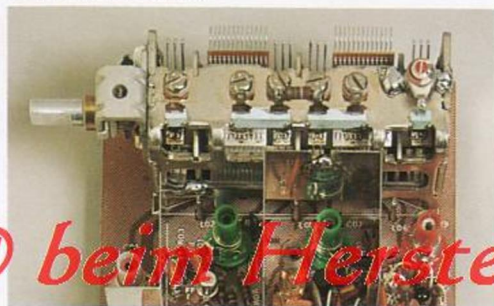
The 8080 has two full sets of tape terminals (input/output) for the connection of a pair of stereo tape decks. The seven-position tape monitor and dubbing switch on the front panel lets you monitor either deck, and also dub one onto the other while monitoring either.



TUNER SECTION

The Finest FM Sound Around

A frequency-linear variable 4-gang capacitor in the FM frontend increases sensitivity to faint broadcasts and suppresses interference. The dual-gated, low-noise MOS FET, selected and installed by hand, accepts very strong inputs without overload and is free from temperature drift.



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Archiv Michael-Otto*

Hear the Station You Want

Improved FM selectivity in the 8080 accurately pulls in only the station you wish to hear, rejecting others. Try it. The three stage IF amplifier built around an array of ceramic filters (ten elements total) lets you select stations as close as 200kHz to 300kHz apart with ease while improving phase response and group-delay characteristics. The three differential amplifier IC limiters completely suppress AM amplitude for very high sensitivity and signal-to-noise ratio. Extraneous noise is eliminated by a newly-developed adjacent station interference filter.

PLL for FM Stereo

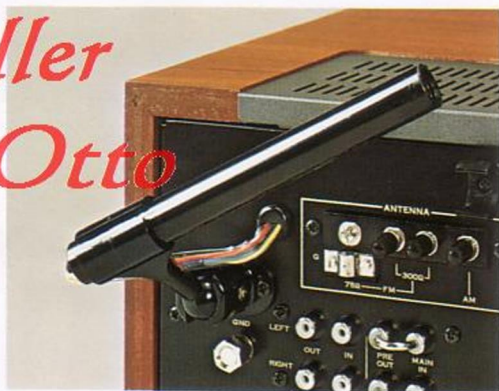
An advanced PLL circuit, one specially developed by Sansui, improves channel separation in stereo FM. This Phase-Locked Loop circuit also eliminates phase deviation by automatically locking the 19kHz pilot and 38kHz switching signals. Since it has no coils nor capacitors it suffers no deterioration by time. High-gain amplification and improved signal-to-noise are assured with the negative feedback differential amplifier, while a 2-stage LC carrier leak filter cuts extraneous signals sharply and eliminates the beat sound otherwise heard when recording FM stereo to tape.

Accurate Meters for Tuning

Inputs as high as 60dB are met with linear response in the new signal-strength meter in the 8080. It is never saturated (or "fooled") by a weak signal, and aids FM and AM tuning. The second meter is a center-tune indicator to show when your FM station is tuned to the place where distortion is minimal and stereo separation is best.

AM for People Who Hate AM

Booms, whines and whistles in AM reception are gone forever. A high-integrated IC (equivalent to 22 transistors and 11 diodes) increases AM stability and reliability. The addition of an AM RF stage of high-gain amplification improves sensitivity. A bi-resonator Jaumann ceramic filter, and a jointed, adjustable AM ferrite space-wound bar antenna, also improve AM sound.



Other Convenient Controls

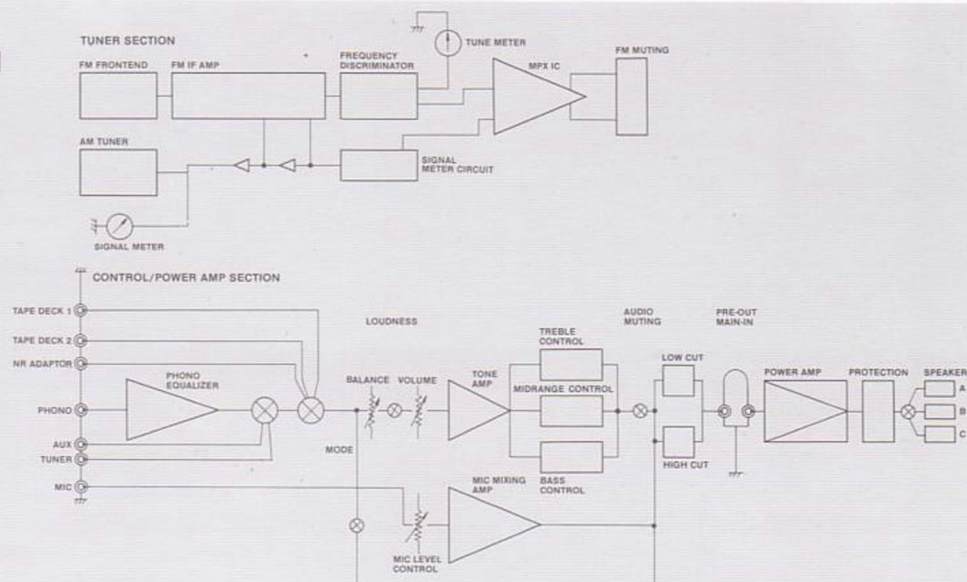
Controls also include a mono/stereo mode switch, loudness, high/low filters, source selector (PHONO, FM AUTO, DOLBY FM ADAPTOR, AM and AUX), an audio muting (-20dB) switch and more. The 8080 also features a professional-quality mic-mixing circuit with level control so that you may blend any microphone signal with any source for PA amplification or recording.

And That's Not All

- Dolby Adaptor/4-Channel Adaptor Circuit with Switch
- FM Muting
- Special FM 25μsec de-emphasis curve to aid Dolby FM reception when Dolby adaptor is connected.
- Separable Pre and Power Amplifiers
- Liberal Sansui Warranty

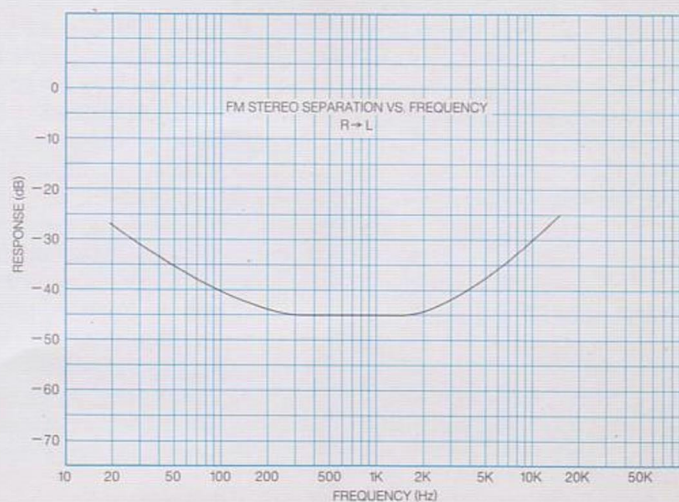
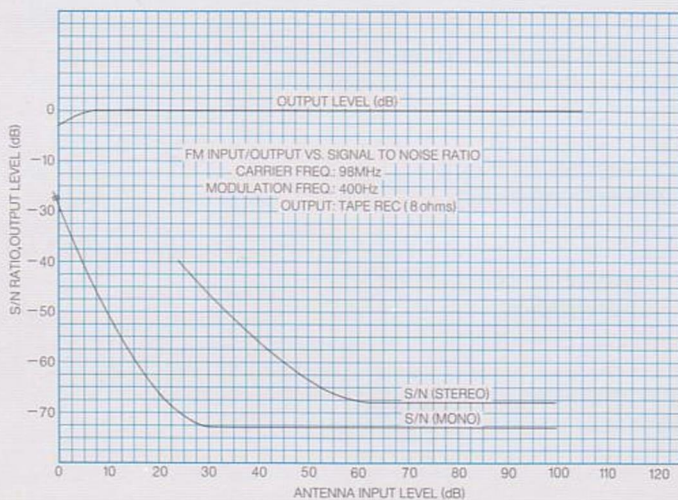
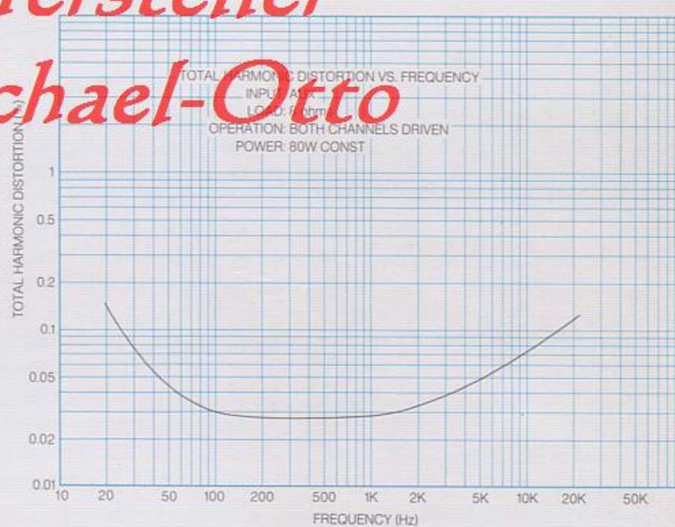
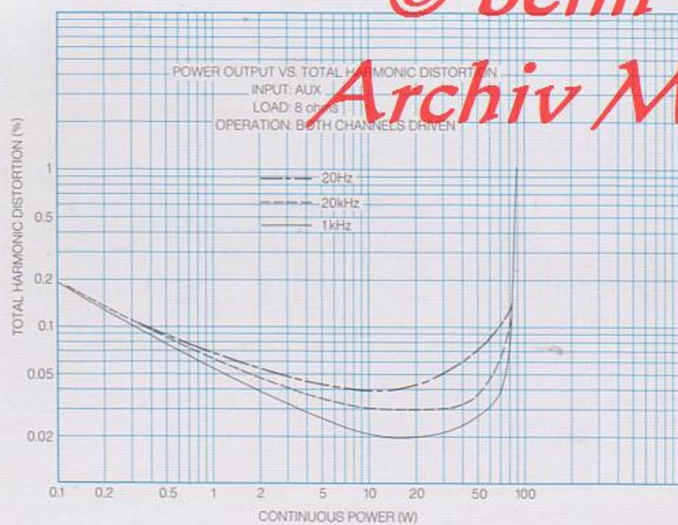
ABUNDANT POWER FOR THE BEST IN RECEIVER SOUND

BLOCK DIAGRAM

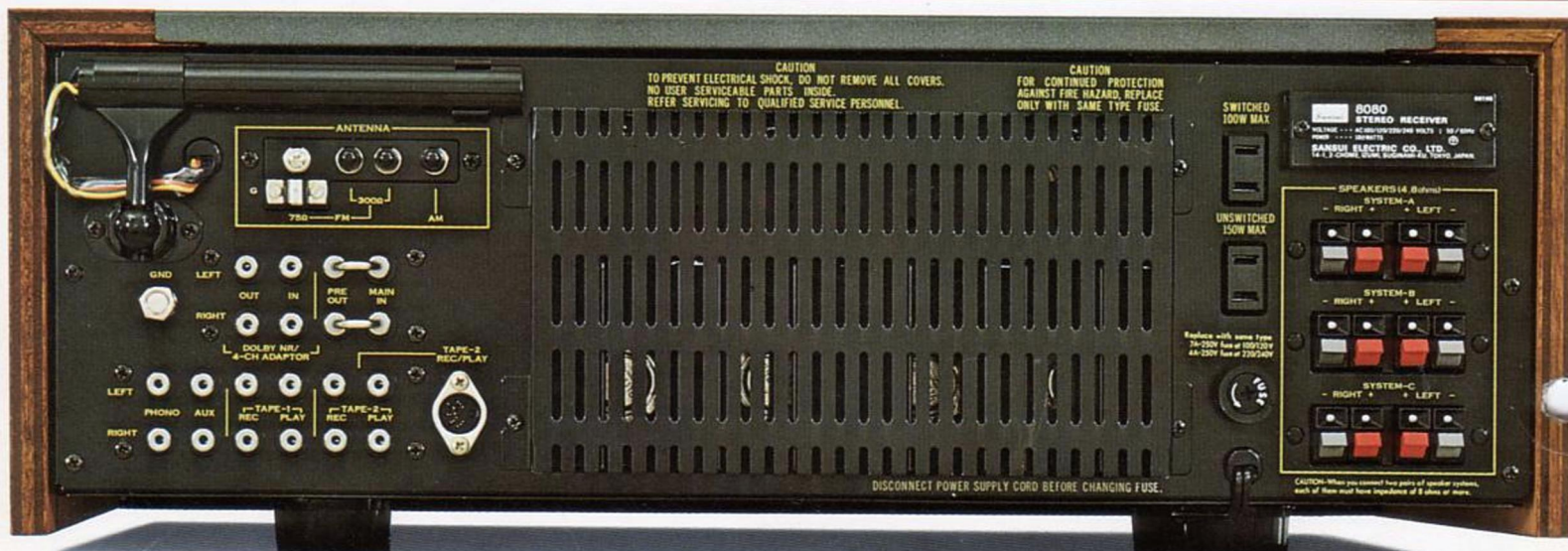


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SPECIFICATIONS



AUDIO SECTION

POWER OUTPUT (at rated distortion)

MUSIC POWER (IHF) 250 watts into 4 ohms at 1,000Hz
230 watts into 8 ohms at 1,000Hz

CONTINUOUS RMS POWER

both channels driven 110 watts per channel into 4 ohms at 1,000Hz
90 watts per channel into 8 ohms at 1,000Hz
80 watts per channel into 8 ohms from 20 to 20,000Hz

TOTAL HARMONIC DISTORTION

OVERALL (AUX to speaker terminals) less than 0.2% at rated power output

INTERMODULATION DISTORTION

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

OVERALL (AUX to speaker terminals) less than 0.2% at rated power output

POWER BANDWIDTH

(IHF) 5 to 45,000Hz at rated distortion

LOAD IMPEDANCE

4 to 16 ohms

FREQUENCY RESPONSE (at 1 watt)

OVERALL (from AUX) 10Hz to 30kHz +1dB, -1dB

RIAA CURVE DEVIATION (PHONO)

30Hz to 15kHz

+0.5dB, -0.5dB

DAMPING FACTOR

approximately 10 at 8 ohm load

CHANNEL SEPARATION (at rated output 1,000Hz)

PHONO better than 50dB

AUX better than 50dB

TAPE MONITOR better than 50dB

HUM AND NOISE

PHONO better than 70dB

AUX better than 80dB

TAPE MONITOR better than 80dB

INPUT SENSITIVITY AND IMPEDANCE

(1,000Hz for rated output)

PHONO 25mV 50k ohms

AUX 100mV 50k ohms

TAPE (PLAY/REC) 100mV 50k ohms

IF-HONG. Max. input capability more than 200mV

RMS at 0.2% distortion)

RECORDING OUTPUT

TAPE 100mV

CONTROLS

BASS -10dB, -10dB at 50Hz

MIDRANGE +5dB, -5dB at 1.5kHz

TREBLE +10dB, -10dB at 10kHz

LOUDNESS +10dB at 50Hz

+8dB at 10kHz

FILTERS

LOW -10dB at 50Hz

HIGH -10dB at 10kHz

MUTING (Audio)

-20dB

FM SECTION

TUNING RANGE 88 to 108MHz

SENSITIVITY (IHF) 1.7µV

(DIN) 0.9µV

QUIETING SLOPE (MONO)

3µV 50dB

TOTAL HARMONIC DISTORTION

MONO less than 0.2%

STEREO less than 0.3%

SIGNAL TO NOISE RATIO (MONO)

better than 70dB

better than 85dB

SELECTIVITY better than 1.5dB

CAPTURE RATIO

IMAGE FREQUENCY REJECTION

better than 75dB at 98MHz

better than 100dB at 98MHz

IF REJECTION

SPURIOUS RESPONSE REJECTION

better than 90dB at 98MHz

SPURIOUS RADIATION

less than 34dB

STEREO SEPARATION

better than 40dB at 1kHz

FREQUENCY RESPONSE

30Hz to 15kHz

+0.5dB, -2dB

ANTENNA IMPEDANCE

300 ohms balanced

75 ohms unbalanced

AM SECTION

TUNING RANGE 535 to 1,605kHz

SENSITIVITY (Bar Antenna)

50dB/m at 1,000kHz

better than 50dB at 1,000kHz

SELECTIVITY better than 80dB/m at 1,000kHz

IMAGE REJECTION better than 80dB/m at 1,000kHz

IF REJECTION better than 80dB/m at 1,000kHz

GENERAL

AC OUTLETS

switched max. 100 watts

unswitched total 150 watts

SEMICONDUCTORS

45 Transistors, 31 Diodes,

1 FET, 10 ICs, 1 LED,

4 Zener Diodes

POWER REQUIREMENTS

POWER VOLTAGE 100, 120, 220, 240V,

50/60Hz

POWER CONSUMPTION

MAXIMUM 520 watts

RATED 180 watts

DIMENSIONS

540 mm (21 1/8") W

182 mm (7 1/8") H

397 mm (15 5/8") D

WEIGHT 20.9 kg (46.1 lbs) NET

23.3 kg (51.4 lbs) PACKED

Design and specifications subject to change without notice for improvements.