

SANSUI 661



661 FM/AM STEREO RECEIVER, 54 WATTS RMS When Sansui announced the price of this revolutionary new FM/AM stereo receiver, many high-fidelity experts were greatly surprised, just as you were. The name Sansui has long meant innovation and excellence in sophisticated audio electronics. But it has also meant, usually, that any high-fidelity equipment bearing the Sansui name also carried an expensive price tag.

But now, thanks to a startling innovation called CBM (Circuit Board Module) developed specifically by Sansui for its finest professional studio equipment, you can forget about price and concentrate on the outstanding Sansui quality and performance of the all-new 661.

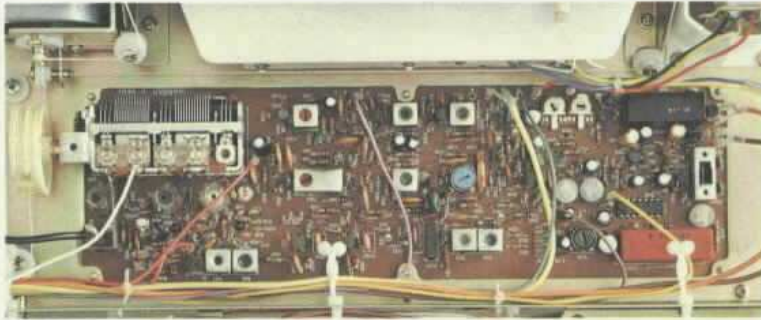
This is a *budget-priced* stereo receiver that delivers "expensive" tonal quality and performance. Its power amplifier is of a very advanced all-stage direct-coupled OCL design providing RMS continuous power of 27 fully useable watts *per channel* (total music power 110 watts) with a surprisingly wide power bandwidth of 15 to 40,000Hz with very low overall distortion. Its MOS FET-equipped tuner and highly versatile preamplifier and control sections with two stereo tape record/monitor circuits, stereo AUX inputs and much more would normally mean a far higher price tag. Check out the details of these and other features of the Sansui 661—your best bargain in Sansui stereo excellence.

Sansui

Sansui's 661 FM/AM receiver is engineered for excellence and priced for economy

IMPROVED PERFORMANCE AND REDUCED COSTS WITH SANSUI'S CBM

Sansui's CBM (Circuit Board Module) technique greatly increases electronic capability and dependability, reduces wiring and size and significantly lowers the expense of quality-controlled mass-production of highly sophisticated electronic circuits. In turn, this means that the construction and chassis assembly of the 661 can be performed in less time and at greater savings to you. The 661 incorporates four CBM units, one each for its tuner, preamplifier, power amplifier and power supply sections. Many ordinary receivers with considerably higher prices require up to a dozen complicated and potentially troublesome circuit boards to achieve the same results.



FM FRONTEND WITH FET AND LINEAR VARIABLE CAPACITOR

A dual-gate low-noise MOS FET (metal oxide semiconductor FET) and a frequency-linear variable capacitor are used in the RF amplifier stage of the FM tuner in the 661. These combined with its 3-transistor converter stage composed of a local oscillator and buffer circuit, each regulated by a separate constant-voltage power supply, provide excellent distortion characteristics, superior signal-to-noise ratio and very high FM sensitivity.

FM IF AMPLIFIER WITH TWO BI-RESONATOR CERAMIC FILTERS

The 661's IC-equipped FM IF amplifier provides high station selectivity and reception of both local and distant FM signals with exceptional clarity. The super-wide selectivity bandwidth (1.1MHz peak to peak) and the sharp cut-off ceramic filters in its circuits have vastly improved the dynamic range of the FM section.

NEWLY-DEVELOPED IC-EQUIPPED FM MULTIPLEX DEMODULATOR

The 661's new FM multiplex demodulator features a high-density IC for improved stability. Stereo separation is better than 35dB and Total Harmonic Distortion in stereo FM reception is less than 0.7%. An FM de-emphasis switch inside the chassis allows the 661 to be easily converted for ideal reception of FM signals anywhere in the world.

AM TUNER SECTION

The enhanced selectivity and sensitivity of the AM tuner in the 661 results from the use of newly-developed, highly selective coils and a bi-resonator ceramic filter in its IF amplifier stage. The tuner's design also eliminates the annoying whine and boom of AM reception.

STABILIZED FM/AM TUNER POWER SUPPLY WITH RIPPLE FILTERS

Both the FM and the AM sections of the 661 benefit from the elimination of ripples and fluctuations in power supply thanks to a new stabilized supply technique. This results in a greatly improved signal-to-noise ratio, as well.

SMOOTH-TUNE MECHANISM AND LINEAR TUNING SCALE

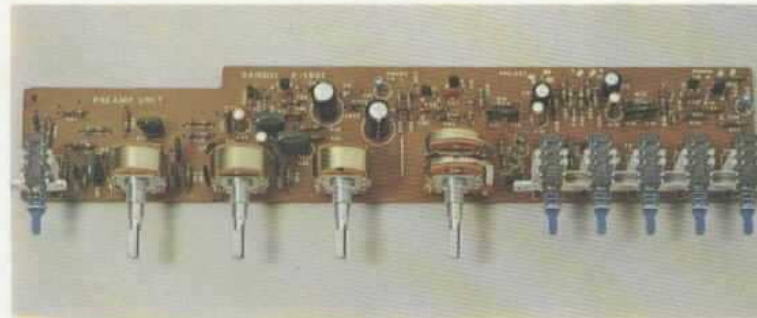
An attractive, easy-to-read black-out dial panel of glare-free smoked glass is provided on the 661. Its tuning scale is FM linear, calibrated in equal sections of 250kHz each for easy and fast reading. An oversized, brightly-lighted signal-strength meter facilitates both AM and FM tuning. The smooth-tune dial mechanism in the 661 has been engineered to incorporate an extra-large flywheel, special tension mechanism, and dial string of no-stretch/no-shrink polyester for stability under all temperature and humidity conditions.

DIRECT COUPLED LOW-NOISE PHONO EQUALIZER

Carefully-selected low-noise silicon transistors are used in the phono equalizer amplifier of the 661 to provide excellent signal-to-noise ratio, minimum distortion and wide dynamic range. Its phono overload capacity, an important factor in any phono equalizer for it determines the ability of the unit to respond properly to all signals no matter how strong or weak, is as high as 150mV RMS (420mV p-p), allowing a wide dynamic range and reducing Total Harmonic Distortion to less than 0.5%.

MORE PRECISE CONTROL OF TONE

The bass and treble tone controls in the 661 are of the CR type in a carefully-engineered design to minimize distortion and provide more precise control of tone coloration.



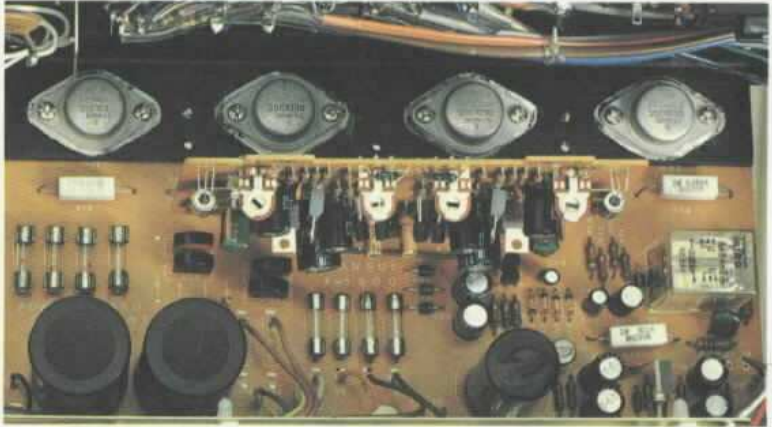
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TWO TAPE RECORD/MONITOR CIRCUITS WITH REPRINTING AND STEREO AUX

The 661 features two separate tape recording and monitor circuits. These are capable of handling two stereo tape decks at the same time and permit tape-to-tape reprinting from Tape-1 to Tape-2 at the touch of a switch. Tape-1 can be connected either through the pin-type jacks provided or through the DIN socket while Tape-2 can be connected directly or coupled with a 4-channel adaptor (decoder). Separate tape monitor controls are provided on the front panel. The 661's stereo AUX circuit also can come in handy for connecting an extra tape deck, cartridge tape player, additional tuner or a number of other units.

INDEPENDENT POWER AMPLIFICATION

The all-stage direct-coupled OCL semi-complementary power amplifier provided in the 661 affords dependable and extremely clean stereo power to drive even the largest of stereo speaker systems. The differential amplifier in the initial stage and the dual plus/minus power supply system greatly improves the performance of this advanced system. You have at your command a full 27 watts of continuous RMS power *per channel* (into 8 ohms at 1kHz, both channels driven). Its power bandwidth is surprisingly wide—from 15 to 40,000Hz—while its Total Harmonic Distortion and Intermodulation figures are both held to a low, low 0.5% or less.



SUPERIOR POWER SUPPLY AND POWER PROTECTION CIRCUITS

Since the power supply for the 661's power amplifier is entirely independent from those which feed its preamplifier and tuner sections, two oversized capacitors of 4700µF each and an extra large, closely-regulated power supply transformer see that this supply remains stable and always available. The vital power transistors in the all-stage direct-coupled OCL power amplifier are protected from damaging power surges

with several elaborate power protection devices. These include four quick-acting fuses and a positive-action relay circuit. The latter also acts to protect your valuable speakers from damage or from the annoying "popping" noise by providing a momentary delay between the time the 661 is switched on and the release of any signal to those speakers.



OTHER SPECIAL FEATURES OF THE 661 RECEIVER

- STEREO/MONO MODE SWITCH which also by-passes FM multiplex demodulator when it is turned to Mono position.
- BALANCE CONTROL to provide continuous balance of left and right channels.
- LOUDNESS SWITCH adjusts for low-volume listening.
- HIGH FILTER to eliminate tape hiss and record surface noise.
- STEREO HEADPHONE JACK for private listening.
- FM MUTING SWITCH to eliminate inter-station noise during FM tuning.
- TERMINALS FOR TWO PAIRS OF STEREO SPEAKERS (A and B with position for A, B or A+B).
- TWO AC OUTLETS (one "switched").
- ATTRACTIVE CHAMPAGNE-GOLD FRONT PANEL with user-oriented control display.
- ALL-WOOD CABINET with cushioned no-mar feet.



Specifications

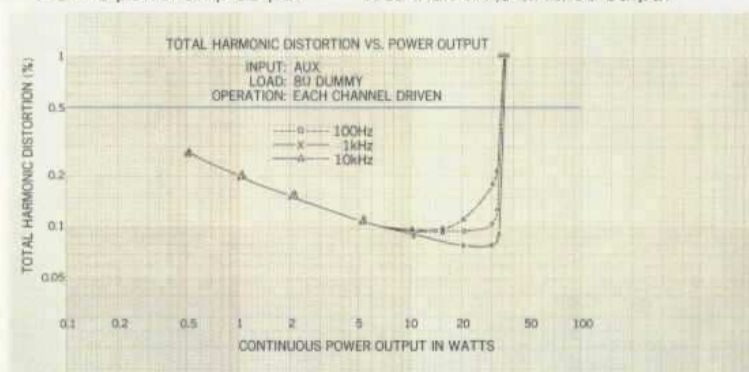
AUDIO SECTION

POWER OUTPUT (AT RATED DISTORTION)

CONTINUOUS RMS POWER	
both channels driven	20 Watts + 20 Watts into 8Ω (20—20,000Hz)
each channel driven	27 Watts + 27 Watts into 8Ω at 1,000Hz 40/40 Watts into 4Ω at 1,000Hz 32/32 Watts into 8Ω at 1,000Hz
MUSIC POWER (IHF)	
	110 Watts into 4Ω at 1,000Hz 75 Watts into 8Ω at 1,000Hz

TOTAL HARMONIC DISTORTION

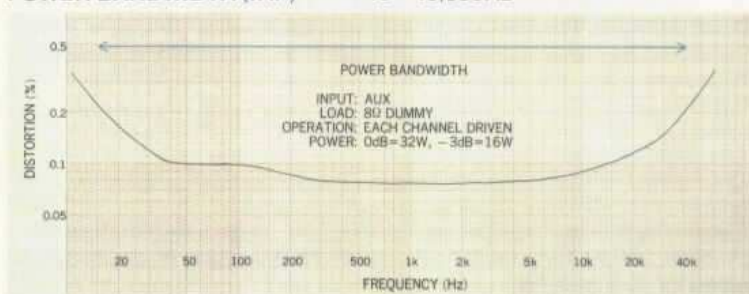
AUX to power amp output	less than 0.5% at rated output
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INTERMODULATION DISTORTION

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

AUX to power amp output	less than 0.5% at rated output
POWER BANDWIDTH (IHF)	15—40,000Hz



FREQUENCY RESPONSE

AUX to power amp output	15—30,000Hz +1.0dB, -2.0dB
EQUALIZATION (AT REC OUT)	RIAA Curve 30—15,000Hz ±1.0dB

LOAD IMPEDANCE	4—16Ω
DAMPING FACTOR	approximately 60 at 8Ω load
CHANNEL SEPARATION (AT RATED OUTPUT AT 1,000Hz)	

PHONO to power amp output	better than 45dB
AUX to power amp output	better than 45dB

HUM AND NOISE (IHF)

PHONO to power amp output	better than 70dB
AUX to power amp output	better than 80dB

INPUT SENSITIVITY (FOR RATED OUTPUT AT 1,000Hz)

PHONO	2.5mV 50kΩ
Overload capacity	more than 150mV at 0.5% distortion
AUX	100mV 50kΩ
TAPE MONITOR 1, 2 (4-CH)	100mV 50kΩ

OUTPUT LEVEL

TAPE MONITOR (DIN)	30mV
(Pin)	100mV

CONTROLS

BASS	+10dB, -10dB at 50Hz
TREBLE	+10dB, -10dB at 10,000Hz

FILTER

HIGH	-10dB at 10,000Hz (6dB/oct)
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LOUDNESS

	+10dB at 50Hz, +8dB at 10,000Hz
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TUNER SECTION

FM:

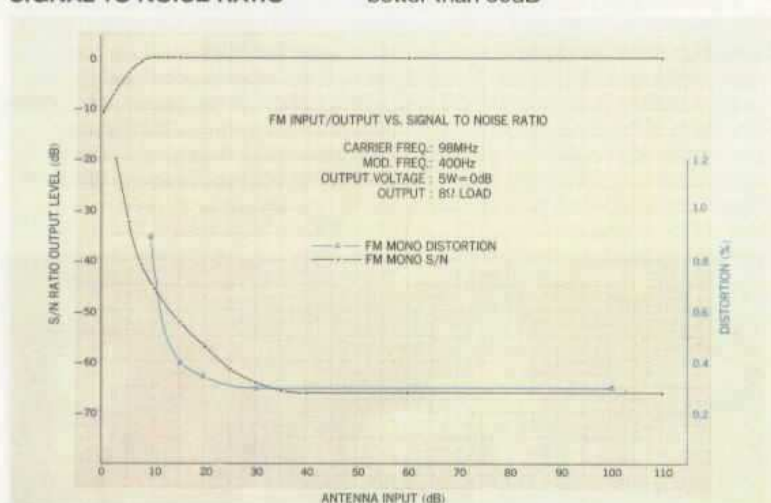
TUNING RANGE	88—108MHz
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SENSITIVITY (IHF)	2.2μV
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TOTAL HARMONIC DISTORTION

MONO	0.5%
STEREO	0.7%

SIGNAL TO NOISE RATIO	better than 60dB
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SELECTIVITY

	better than 50dB
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CAPTURE RATIO

	2.5dB
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IMAGE REJECTION

	better than 55dB at 98MHz
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IF REJECTION

	better than 60dB at 98MHz
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SPURIOUS RESPONSE REJECTION

	better than 60dB at 98MHz
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SPURIOUS RADIATION

	less than 34dB
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STEREO SEPARATION

	better than 35dB at 400Hz
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FREQUENCY RESPONSE

	30—12,000Hz +1.0dB, -3.0dB
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ANTENNA INPUT IMPEDANCE

	300Ω balanced, 75Ω unbalanced
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AM:

TUNING RANGE

	535—1605kHz
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SENSITIVITY (BAR ANTENNA)

	50dB/m at 1,000Hz
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SELECTIVITY

	better than 28dB at 1,000kHz ±10kHz
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IMAGE FREQUENCY REJECTION

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

GENERAL

SEMICONDUCTORS

	45 Transistors; 25 Diodes; 1 FET; 2 ICs;
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	4 Zener Diodes
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POWER REQUIREMENTS

VOLTAGE	100, 117, 220, 240V 50/60Hz
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CONSUMPTION	70 Watts (rated), 210VA (max.)
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DIMENSIONS

	444mm (17½")W × 135mm (5⅜")H ×
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	300mm (11⅞")D
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WEIGHT	10kg (22 lbs) Net
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	12.4kg (27.3 lbs) Packed
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Design and specifications subject to change without notice for improvements.