4-CHANNEL RECEIVER SANSUI QRX3500

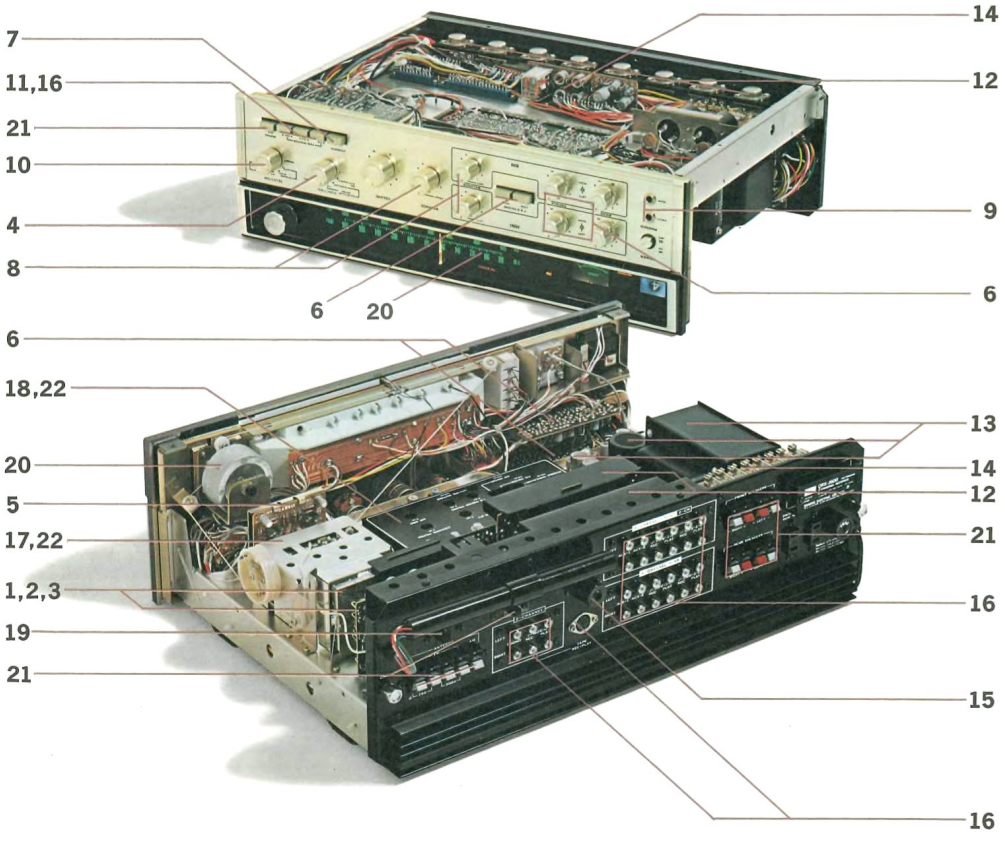
SANSUI QRX-3500 4-CHANNEL RECEIVER Exceptional versatility in a moderately-priced but full-fledged 4-channel receiver is now yours. This all-new model's magnificent cost-to-performance ratio is made possible by Sansui's new QS regular matrix system with the exclusive QS vario-matrix circuitry, discussed in detail elsewhere in this brochure. This unique development decodes all regular matrix 4-channel records to reproduce a natural 4-channel sound field of richly enhanced inter-channel separation, AND transforms conventional 2-channel stereo program sources into authentic 4-channel sound, truly more effectively than ever with the help of the exclusive 2-4 Synthesizer Encoder. What's more, an ingenious circuit coupled to the QS vario-matrix uses that circuit's inherent front-rear logic to decode all SQ* system records with perfect results—a tribute to the masterful design of Sansui's QS vario-matrix technique. The QRX-3500's generous array of input and output connections are intended to give you true versatility. These connections allow you to plug in *and* control two 4-channel tape decks, a 2-channel tape deck and turntable and still have room to incorporate a discrete 4-channel disc demodulator *and* a discrete 4-channel FM demodulator (when on the market) or other 4-channel sources. There is a connection jack, also, for an optional remote 4-channel balance/volume controller.

Besides the QS 4-channel synthesizer decoder section, the QRX-3500 includes a mighty 180-watt 4-channel amplifier (IHF, 4 ohms) and a super-sensitive FM/AM stereo tuner equipped with a sophisticated dual-gated MOS FET for unexcelled FM sensitivity. The receiver's total harmonic distortion is kept to an impressive 0.5% by means of an advanced OTL/OCL pure complementary power amplifier section. Judged by its impressive tonal quality, 4-channel versatility, accurate and consistant power levels or by any standard you care to apply, the QRX-3500 is a superb bargain and a superior example of 4-channel audio engineering excellence. From Sansui, Japan's most prestigious audio-only manufacturer.

**SQ is a trademark of Columbia Broadcasting System, Inc.*

Sansui

The Sansui QRX-3500 with QS Vario-Matrix: Optimum Channel Separation from Any 4-channel Source



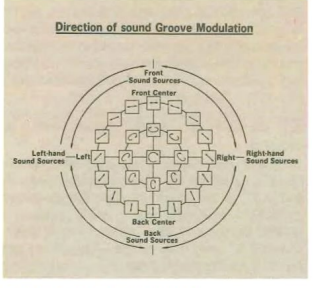
Understanding QS Four-Channel

TOTAL SOUND FIELD INFORMATION

Two-channel stereo has a disadvantage. It reproduces only two sound source points and a number of phantom images along the line between the two speakers. The QS regular matrix 4-channel system incorporated in Sansui's QRX-3500 is different, since it reproduces the *total acoustic information* present in any live situation—including all the direct sounds as well as the indirect sounds, and even the delicate reverberation. With this capability the QS system approximates with startling reality the original sound field—and, for the first time, right in your own music listening room. The extra pair of rear speakers, are the "resources" required for reproducing this additional acoustic information.

THE QS REGULAR MATRIX SYSTEM

This is the Sansui innovation that makes the QRX-3500 such an exclusive. Widely acclaimed since its introduction as the Sansui QS system at the Consumer Electronics Show in New York in 1970, the system has been refined and perfected through the years. It also has acquired a new name—Regular Matrix—in comformity with the standardization and renaming of the system by the audio and recording industries of Japan. The QS regular matrix system consists of a Square 4-channel Matrix and ±90-degree phase shifters. Their function is then greatly enhanced by another exclusive, the QS vario-matrix circuitry that controls the electronic parameter of the matrix from moment to moment. Additionally, the 2-4 Synthesizer Encoder, another Sansui exclusive, reorganizes and prepares conventional 2-channel signals for optimum conversion into 4-channel.



SQUARE MATRIX

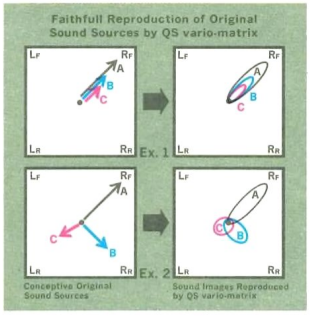
As designated in the terminology of 4-channel stereo, the matrix is an electronic *logical* network designed to encode four separate signals into two, and decode these two signals back into four. A matrix 4-channel system thus offers the advantage of storing total sound field information in conventional 2-channel sources—records, FM and tapes—which can be enjoyed as stereo sound by the millions of stereo owners around the world, or as exciting 4-channel sound if these same persons own a decoder like the QRX-3500 and a second pair of speakers. Of greater significance, the matrix employed in the QS regular matrix system is a square matrix that is rotationally symmetrical and circumferentially uniform. This gives it a number of very important technical advantages: 1) It does not lose or mislocate any part of the original sound field information through the encode-decode process; 2) it provides for excellent inter-channel separation; 3) It gives an outstanding "surround" 4-channel effect since it treats equally all signals originated anywhere in 360 degrees; 4) It does not deteriorate the current standards of hi-fi sound reproduction at all.

PLUS/MINUS 90-DEGREE PHASE SHIFTERS

While the most technically advantageous, the square matrix has one drawback that is inherent in any matrix system—and that is it puts the two rear signals out of phase with each other. This is easily corrected by what is called a phase shifter circuit, placed after the matrix, that phase-shifts the right rear signal by plus 90 degrees from the front signal and the left rear signal by minus 90 degrees. This puts the two rear signals back in phase and helps to locate all sound sources distinctively in their proper positions.

QS VARIO-MATRIX

Sansui's latest 4-channel innovation adds a distinguished finishing touch to the QS regular matrix system. It is made possible by the various psycho-acoustic phenomena of the human hearing mechanism, especially the "directional masking." Non-technically speaking, our ears are such that when sounds of different loudness arrive simultaneously from different directions, the quietest sound is "masked" by the loudest sound, and, naturally, the ears become insensitive to the direction from which it came. We know that this happens whenever there is a difference of 10dB or so in loudness among those sounds. The QS vario-matrix simply controls the matrix parameter from moment to monent so as to increase the separation of the loudest sound in proportion to the difference in loudness. This approach, by the way, is entirely different from the complex "gain control" approach, and ensures that the quantity of the original sound field information is kept completely intact in reproduction. The QS vario-matrix thus provides for almost infinite inter-channel separation in principle, and Sansui has enhanced it by setting the value for optimum separation to the ears from the valid standpoint of music reproduction.



NEW QS SYNTHESIZER

The QS Synthesizer employed by Sansui in the QRX-3500 is highly significant since it lets you enjoy your present collection of stereo records and tapes, as well as FM stereo broadcasts, in the immensely richer and more satisfying 4-channel format. This QS Synthesizer has an exclusive "2-4 Synthesizer Encoder" that works in coordination with the QS regular matrix system. What it does is sort of "pre-process" 2-channel signals from regular stereo program sources, reorganize them and prepare them for optimum conversion into 4-channel.

QS REGULAR MATRIX DECODER

This ingenious piece of circuitry houses the QS regular matrix system and the QS Vario-Matrix circuit. Its task is to handle the reproducing end of the QS regular matrix system—in contrast to its recording end—decoding the 4-channel recordings encoded with the system and restoring the encoded two signals back to the original four signals for 4-channel sound. Of course, there is an ample and interesting selection of 4-channel records and tapes available today, so you can get maximum enjoyment from this decoder.

PHASE MATRIX

Another new feature of the QRX-3500 is the Phase Matrix. This is actually an extra circuit added to the QS vario-matrix to fully exploit Sansui's own front-rear logic included in the latter. The result of this circuitry is that you can decode all disc records made by the CBS SQ 4-channel system with stunning front-rear separation.

QS 4-CHANNEL SYNTHESIZER DECODER SECTION

1 CONVERTS 2-CHANNEL SIGNALS TO 4-CHANNEL

Existing 2-channel stereo program sources are converted to immensely richer 4-channel sound with the new QS Synthesizer in the QRX-3500. None of your existing record and tape collection becomes obsolete, for this 4-channel conversion works for all available sources—records, tapes and even FM stereo broadcasts.

2 DECODES ENCODED 4-CHANNEL SOURCES

The QRX-3500 incorporates a QS regular matrix system which decodes all 4-channel program sources made with that system. The original total sound field signals from encoded records, tapes and FM stereo broadcasts are retrieved and the actual live performance is reconstructed in your music listening room.

3 HIGH FIDELITY TONAL QUALITY

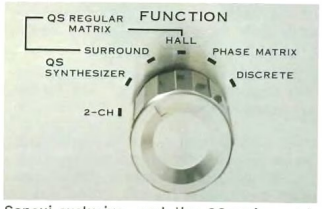
The tonal quality of any original sound is reproduced without change or distortion by fully electronic means in the 2- to 4-channel synthesizing and decoding functions described above. No mechanical time delay or echo device is employed, nor is the oft-used "gain control logic" which prohibits reproduction of the original musical expressions. The QRX-3500 strictly maintains current standards of high-fidelity sound reproduction. Standards of dynamic range, frequency response, distortion and signal-to-noise ratio are all completely preserved. In this way, the reproduced "sound field" is hardly discernible from that of discrete 4-channel tape reproduction, the ultimate in 4-channel sound.

4 CONVENIENT FUNCTION CONTROL

The QRX-3500 is equipped with Sansui's unique six-position function control. Each position mark is clearly identified on the control panel and offers the following variety of reproduction modes:

Two channel Lets you hear all conventional 2-channel records, tapes and stereo FM broadcasts in the normal 2-channel mode, with sound emanating from the front two speakers only.

QS synthesizer Conventional 2-channel program sources are converted into 4-channel. A built-in 2-4 Synthesizer Encoder—a



Sansui exclusive—and the QS vario-matrix work hand in hand with the QS regular matrix system in this mode to give your 2-channel sources the most authentic 4-channel sound.

QS regular matrix-surround Program sources encoded with the QS regular matrix system are widely available and this mode decodes them with ease. Such sources contain far more acoustic information, resulting in a surround effect far more advanced than that available from any other source. The Square Matrix construction of the QS regular matrix surround allows a recording engineer to place a sound source—such as a voice or instrument—in any desired position, and this mode lets you hear what he intended you to hear.

QS regular matrix-hall The rich feeling of a concert hall is created from QS-encoded 4-channel sources in this mode. But it also gives you more, since the sound field reproduced is immensely fuller and closer to the original performance for such sources contain greater information.

Phase matrix CBS SQ tapes and records or stereo broadcasts of sources made with the CBS SQ system are decoded into 4-channel sound in this mode with exceptionally high inter-channel separation.

Discrete Use this position to reproduce all discrete 4-channel program sources, such as 4-channel open-reel tapes, discrete 4-channel discs and 4-channel 8-track cartriges.

4-CHANNEL AMPLIFIER SECTION

5 WIDE DYNAMIC RANGE, LOW DISTORTION EQUALIZER

The QRX-3500's equalizer circuit incorporates a two-stage direct-coupled negative feedback design utilizing select low-noise PNP silicon transistors. A wide dynamic range is assured as are a high signal to noise ratio and high linearity to keep deviations from the RIAA curve minimal.

6 LOW/HIGH FILTERS & NEGATIVE FEEDBACK TONE CONTROLS

For minimal distortion and maximum signal to noise ratio, the bass and treble tone controls are the negative feedback type employing a carefully chosen PNP silicon transistor in each of their amplifier stages. Click stops on all tone controls guarantee precision control from deep lows to super highs. Bass and treble tones can be adjusted separately for the front left and right, rear left and right channels to suit the personal tastes of the listener and match the acoustics of the listening room for accurate 4-channel reproduction. There are also high and low filter switches to eliminate high and low frequency noises from front and rear channels at the same time if necessary.

7 LOUDNESS CONTROL

When listening at a low volume level, the Loudness Control emphasizes the low and high tones properly to provide good 4-channel effects and to compensate for the shortcomings of the human hearing mechanism.

8 SEPARATE FRONT & REAR LEFT/RIGHT BALANCE CONTROLS, FRONT/REAR BALANCE CONTROL

Separate left/right balance controls for the front speaker systems and the rear speaker systems are provided on the QRX-3500 in addition to a front/rear balance control. Wherever the listener may be seated, optimum 4-channel sound balance can be enjoyed at the touch of a simple lever.

9 SEPARATE FRONT & REAR HEADPHONE JACKS

Separate headphone jacks for the front and rear channels are provided to permit private listening of either 4-channel or 2-channel sounds.

10 PROGRAM 6-POSITION SELECTOR

Each of the six clearly-identified program source selector positions allow you to switch from one program source to another with ease. Included are 1) PHONO, 2) FM AUTO, 3) FM MONO, 4) AM, 5) 4CH AUX-1, 6) 4CH AUX-2. There are two sets of 4-channel AUX inputs on the rear panel of the receiver. These allow you to connect a third 4-channel tape deck (or two 2-channel tape decks) in addition to the two which can be connected to the 4-channel tape record/playback jacks. Or, these 4-channel AUX inputs can be used to connect a discrete 4-channel disc demodulator and a discrete 4-channel FM adaptor (when available on the market) or any other matrix decoder or other 4-channel input device.

11 4-CHANNEL/2-CHANNEL TAPE RECORD/PLAYBACK CIRCUITS

There are no less than three tape record/playback circuits in the QRX-3500—two for 4-channel, one for 2-channel. Together they enable such tape recording versatility as: 1) 2-channel recording, and playback of 2-channel tapes in either 2-channel or synthesized 4-channel stereo; 2) copying (reprinting) a 2-channel recorded tape from one tape deck to another; 3) ordinary 4-channel recording and playback (2-channel tapes can be played on a 4-channel tape deck without changing the tape deck connections); 4) copying (reprinting) a recorded 4-channel tape from one tape deck to another.

12 ALL-STAGE DIRECT-COUPLED OCL PURE COMPLEMENTARY POWER AMPLIFIER

The power amplifier of the QRX-3500 features an all-stage direct-coupled OCL design free of any inter-stage coupling capacity (harmful for its deterioration of amplifier damping), in combination with a pure complementary circuit system made possible by the use of a differential amplifier as its first amplifier stage and of a dual power supply. The sum effect of this design is a very wide power bandwidth of 10—33,000Hz, with total harmonic distortion of 0.5%. This means that a virtually distortion-free range of sound—well beyond the high and low frequency ends of the range of human hearing—is consistantly delivered. And to top it all, a big power output rated at 180 watts (IHF music power into 4 ohms) or 22 watts per channel (RMS power into 8 ohms, each channel driven) is yours—big enough to fill any listening room with resounding 4-channel sound without overloading.

13 STABILIZED POWER SUPPLY CIRCUIT

The power supply circuit in the QRX-3500 combines a pair of heavy-duty 6,800μF capacitors and a jumbo transformer in a dual (plus-and-minus) power supply system. Each and every amplifier stage receives ample, stabilized power.

14 COMPLETE PROTECTION CIRCUIT

Four quick-acting fuses and a newly-designed relay-equipped protective circuit are provided especially to insure the complete protection of your valuable speakers and the receiver's own direct-coupled power amplifier. The protective circuit also eliminates the irritating "pop" noises usually heard when the receiver is turned on. Also, large heat sinks prevent overheating of the power transistors, even when the receiver is driven at high volume for hours at a time.

15 OPTIONAL REMOTE CONTROLLER CONNECTIONS

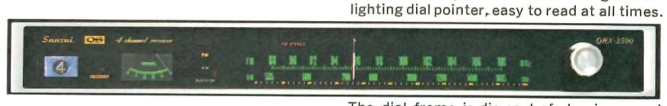
The back panel of the receiver has a simplified jack for connecting an optional 4-channel balance/volume controller, the Sansui QBL-100. This handy unit enables you to adjust the front-rear, left/right balance and control the sound volume from anywhere in the room.

QBL-100

16 OTHER FEATURES

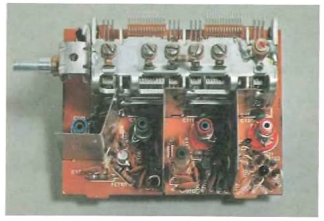
The amplifier section of the QRX-3500 is loaded with other convenient features to increase its versatility. The complete system of inputs and outputs includes 1) two sets of AUX 4-channel inputs; 2) two sets of 4-channel record outputs and playback inputs; 3) a set of 2-channel recording outputs and playback inputs; 4) a DIN socket for 2-channel recording and playback, and 5) a set of phono inputs. Other features includes two headphone jacks for the front and rear channels, program source indicator, digital 4-channel/2-channel mode indicator, plus synthesizer/decoder function indicator.

TUNER SECTION



17 MOS FET-EQUIPPED SENSITIVE FM FRONTEND

The FM frontend combines an expensive dual-gated MOS FET (metal oxide semiconductor field effect transistor) known for its low noise characteristics with a frequency-linear super-precision 4-gang variable capacity for measurably increased sensitivity and signal selectivity. In addition, the RF amplifier and the mixer stages of the tuner section are double-tuned to achieve excellent IF, spurious and image rejection ratios, which in turn guarantee outstandingly low intermodulation distortion of 0.4%. Steady, clean FM reception in both strong and weak signal areas is the result of this highly advanced, trouble-free FM frontend.



18 FM MULTIPLEX DEMODULATOR

A carefully chosen pair of diodes with compatible electrical properties are employed in the switching circuit in the FM multiplex demodulator, adding up to increased stereo separation and reduced carrier leakage to insure steady, clean FM stereo reception at all times. When the dial is tuned to a station broadcasting in stereo, the tuner automatically switches to stereo reception and the legend FM STEREO appears in the black dial face.

19 FM LOCAL/DISTANT SWITCH

Excessively strong broadcast signals from close-by transmitters sometimes cause distortion, and to prevent this, the FM LOCAL/DISTANT switch on the rear panel may be switched to LOCAL to enable the tuner to bring in clean, accurate signals.

20 WIDE DIAL WITH FM LINEAR SCALE

The use of a frequency-linear 4-gang variable capacitor in the FM frontend makes it possible to equip the tuner with a wide lateral dial with a linear FM scale evenly graduated from 88MHz to 108MHz in steps of 250kHz each. Sansui's unique black-out dial (which remains a pleasing, overall black unless either the FM or AM program source position is selected) is a beauty. It features a bright self-lighting dial pointer, easy to read at all times. The dial frame is die-cast of aluminum and solidly mounted. A large flywheel in the dial mechanism ensures smooth tuning and an oversized signal-strength meter indicates broadcast signal strength.

21 OTHER FEATURES

This FM tuner has a built-in FM-muting circuit that eliminates the harsh inter-station noise commonly heard during FM tuning. Also, an FM de-emphasis switch changes FM de-emphasis characteristics from 50μ sec. to 75μ sec. so that the FM signal is reproduced exactly as broadcast from any FM station in the world. As is the case in all Sansui receivers, the QRX-3500 has terminals for either 300-ohm or 75-ohm antenna leads, permitting the connection of the standard feeder cable antenna or the more sophisticated coaxial cable antenna. All terminals, including speaker output, are of Sansui's unique one-touch foolproof type.

22 SENSITIVE AND SELECTIVE AM TUNER

Ordinary AM radio broadcasts are pulled in clear as a bell by this remarkably clean AM tuner. The tuner has a delicate sensitivity to distant stations and a wide selectivity, thanks to the use of a Jaumann type filter in the AM IF amplifier stage. This filter combines a newly developed wide-band coil and a bi-resonator ceramic filter. And finally, a large, space-wound ferrite bar antenna adds to trouble-free AM listening pleasure.

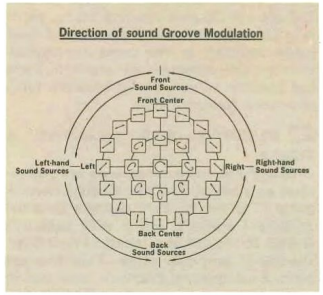
Understanding QS Four-Channel

TOTAL SOUND FIELD INFORMATION

Two-channel stereo has a disadvantage. It reproduces only two sound source points and a number of phantom images along the line between the two speakers. The QS regular matrix 4-channel system incorporated in Sansui's QRX-3500 is different, since it reproduces the *total acoustic information* present in any live situation—including all the direct sounds as well as the indirect sounds, and even the delicate reverberation. With this capability the QS system approximates with startling reality the original sound field—and, for the first time, right in your own music listening room. The extra pair of rear speakers, are the "resources" required for reproducing this additional acoustic information.

THE QS REGULAR MATRIX SYSTEM

This is the Sansui innovation that makes the QRX-3500 such an exclusive. Widely acclaimed since its introduction as the Sansui QS system at the Consumer Electronics Show in New York in 1970, the system has been refined and perfected through the years. It also has acquired a new name—Regular Matrix—in comformity with the standardization and renaming of the system by the audio and recording industries of Japan. The QS regular matrix system consists of a Square 4-channel Matrix and ±90-degree phase shifters. Their function is then greatly enhanced by another exclusive, the QS vario-matrix circuitry that controls the electronic parameter of the matrix from moment to moment. Additionally, the 2-4 Synthesizer Encoder, another Sansui exclusive, reorganizes and prepares conventional 2-channel signals for optimum conversion into 4-channel.



SQUARE MATRIX

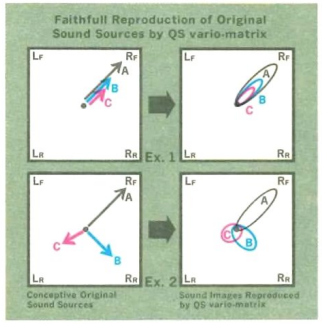
As designated in the terminology of 4-channel stereo, the matrix is an electronic *logical* network designed to encode four separate signals into two, and decode these two signals back into four. A matrix 4-channel system thus offers the advantage of storing total sound field information in conventional 2-channel sources—records, FM and tapes—which can be enjoyed as stereo sound by the millions of stereo owners around the world, or as exciting 4-channel sound if these same persons own a decoder like the QRX-3500 and a second pair of speakers. Of greater significance, the matrix employed in the QS regular matrix system is a square matrix that is rotationally symmetrical and circumferentially uniform. This gives it a number of very important technical advantages: 1) It does not lose or mislocate any part of the original sound field information through the encode-decode process; 2) it provides for excellent inter-channel separation; 3) It gives an outstanding "surround" 4-channel effect since it treats equally all signals originated anywhere in 360 degrees; 4) It does not deteriorate the current standards of hi-fi sound reproduction at all.

PLUS/MINUS 90-DEGREE PHASE SHIFTERS

While the most technically advantageous, the square matrix has one drawback that is inherent in any matrix system—and that is it puts the two rear signals out of phase with each other. This is easily corrected by what is called a phase shifter circuit, placed after the matrix, that phase-shifts the right rear signal by plus 90 degrees from the front signal and the left rear signal by minus 90 degrees. This puts the two rear signals back in phase and helps to locate all sound sources distinctively in their proper positions.

QS VARIO-MATRIX

Sansui's latest 4-channel innovation adds a distinguished finishing touch to the QS regular matrix system. It is made possible by the various psycho-acoustic phenomena of the human hearing mechanism, especially the "directional masking." Non-technically speaking, our ears are such that when sounds of different loudness arrive simultaneously from different directions, the quietest sound is "masked" by the loudest sound, and, naturally, the ears become insensitive to the direction from which it came. We know that this happens whenever there is a difference of 10dB or so in loudness among those sounds. The QS vario-matrix simply controls the matrix parameter from moment to monent so as to increase the separation of the loudest sound in proportion to the difference in loudness. This approach, by the way, is entirely different from the complex "gain control" approach, and ensures that the quantity of the original sound field information is kept completely intact in reproduction. The QS vario-matrix thus provides for almost infinite inter-channel separation in principle, and Sansui has enhanced it by setting the value for optimum separation to the ears from the valid standpoint of music reproduction.



NEW QS SYNTHESIZER

The QS Synthesizer employed by Sansui in the QRX-3500 is highly significant since it lets you enjoy your present collection of stereo records and tapes, as well as FM stereo broadcasts, in the immensely richer and more satisfying 4-channel format. This QS Synthesizer has an exclusive "2-4 Synthesizer Encoder" that works in coordination with the QS regular matrix system. What it does is sort of "pre-process" 2-channel signals from regular stereo program sources, reorganize them and prepare them for optimum conversion into 4-channel.

QS REGULAR MATRIX DECODER

This ingenious piece of circuitry houses the QS regular matrix system and the QS Vario-Matrix circuit. Its task is to handle the reproducing end of the QS regular matrix system—in contrast to its recording end—decoding the 4-channel recordings encoded with the system and restoring the encoded two signals back to the original four signals for 4-channel sound. Of course, there is an ample and interesting selection of 4-channel records and tapes available today, so you can get maximum enjoyment from this decoder.

PHASE MATRIX

Another new feature of the QRX-3500 is the Phase Matrix. This is actually an extra circuit added to the QS vario-matrix to fully exploit Sansui's own front-rear logic included in the latter. The result of this circuitry is that you can decode all disc records made by the CBS SQ 4-channel system with stunning front-rear separation.

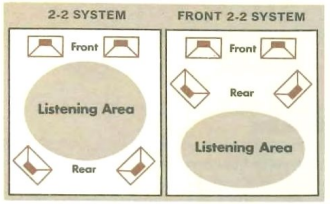
SELECTING AND POSITIONING SPEAKER SYSTEMS

A little knowledge about speaker placement and a little experimentation will go a long ways toward providing you with the finest 4-channel sound reproduction possible. Always try to choose four identical speakers. For best results, use speaker systems especially designed for broad sound dispersion.

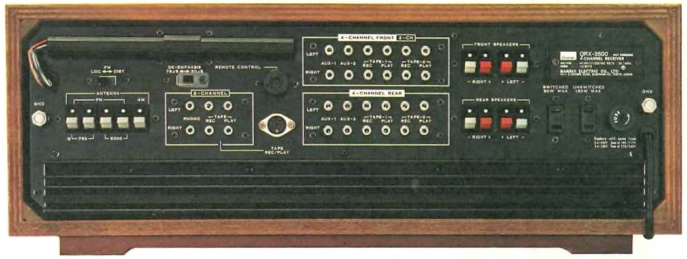
Basically, there are two common—and recommended placement systems, which we've illustrated below.

2-2 SYSTEM: Regular 4-corner position widely accepted as "standard." Ideal for the rich surround effect.

FRONT 2-2 SYSTEM: Moves the rear speaker systems up front. Best for the concert hall effect, it recreates the stage in front of you and the ambience of the hall around you.



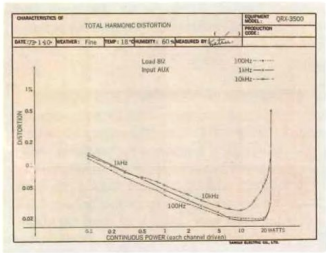
SPECIFICATIONS



AUDIO SECTION

POWER OUTPUT (at rated distortion)
MUSIC POWER (IHF) 180 Watts into 4Ω
130 Watts into 8Ω
CONTINUOUS RMS POWER
(1kHz, each channel driven)
30 Watts×4 into 4Ω
22 Watts×4 into 8Ω
CONTINUOUS RMS POWER
(1kHz, four channels driven)
64 Watts (16 Watts per channel) into 8Ω
CONTINUOUS RMS POWER
(20Hz to 20,000Hz, four channels driven)
60 Watts (15 Watts per channel) into 8Ω

TOTAL HARMONIC DISTORTION
less than 0.5%
at any power level up to rated output.



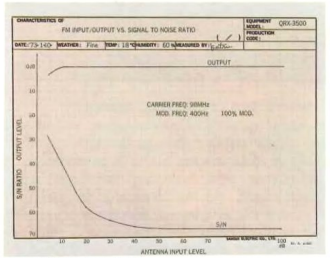
INTERMODURATION DISTORTION
less than 0.5%
at rated output
(70Hz : 7,000Hz=4:1 SMPTE method)
POWER BANDWIDTH (IHF)
10 to 33,000Hz
LOAD IMPEDANCE 4 to 16Ω
DAMPING FACTOR approximately 30 at 8Ω load

INPUT SENSITIVITY AND IMPEDANCE
(1kHz, for rated output)
PHONO 2.5mV (50kΩ)
Max. input capability
more than 100mV RMS (at 0.5% distortion)
AUX 150mV (50kΩ)
TAPE MONITOR (pin) 150mV (50kΩ)
(DIN) 150mV (50kΩ)
RECORDING OUTPUT
(pin) 150mV
(DIN) 30mV

FREQUENCY RESPONSE (at 1 Watt output)
from AUX 30 to 30,000Hz
+1.5dB, −1.5dB
EQUALIZATION RIAA Curve
(30 to 15,000Hz ±1dB)
CROSSTALK (at rated output 1,000Hz) better than 45dB
HUM AND NOISE (IHF)
PHONO better than 70dB
AUX better than 75dB
CONTROLS
BASS +12dB, −12dB at 50Hz
TREBLE +12dB, −12dB at 15,000Hz
LOUDNESS +8dB at 50Hz, +3dB at 10,000Hz
FILTERS
LOW −10dB at 50Hz (6dB/oct)
HIGH −10dB at 10,000Hz (6dB/oct)

SYNTHESIZER/DECODER SECTION
QS regular matrix system with QS vario-matrix circuit.

FM TUNER SECTION
TUNING RANGE 88 to 108MHz
SENSITIVITY (IHF) 2.2μV
TOTAL HARMONIC DISTORTION
MONO less than 0.4%
STEREO less than 0.6%
SIGNAL TO NOISE RATIO (MONO) better than 65dB
CAPTURE RATIO (IHF) less than 2dB
IMAGE REJECTION better than 75dB
IF REJECTION better than 90dB
SPURIOUS RESPONSE REJECTION better than 80dB
STEREO SEPARATION better than 35dB at 1,000Hz
FREQUENCY RESPONSE 30 to 12,000Hz+1dB, −2dB
ANTENNA IMPEDANCE 300Ω balanced, 75Ω unbalanced
SELECTIVITY better than 50dB



AM TUNER SECTION
TUNING RANGE 535 to 1605kHz
SENSITIVITY (Bar antenna) 50dB/m
IMAGE REJECTION better than 80dB/m at 1,000kHz
IF REJECTION better than 80dB/m at 1,000kHz
SELECTIVITY better than 25dB
SEMICONDUCTORS 110 Transistors, 61 Diodes, 3 FET's, 1 IC, 3 Zener Diodes

POWER REQUIREMENTS
VOLTAGE 100, 117, 220, 240V 50/60Hz
CONSUMPTION 110 Watts (rated), 300 VA (max.)
DIMENSIONS 181mm(7⅛")H×526mm(20¾")W×350mm(13⅞")D
WEIGHT 18.5kg (40.8 lbs.)

Design and specifications subject to change without notice for improvements.

SANSUI ELECTRIC CO., LTD. 14-1, 2-CHOME, IZUMI, SUGINAMI-KU, TOKYO 168, JAPAN/TELEPHONE: 323-1111/TELEX: 232-2076
SANSUI ELECTRONICS CORPORATION 55-11 QUEENS BLVD. WOODSIDE, NEW YORK 11377, U.S.A./TELEX: NEW YORK 422633 SEC UI
SANSUI AUDIO EUROPE S.A. DIACEM BUILDING, VESTINGSTRAAT 53-55, 2000 ANTWERP, BELGIUM/TELEX: ANTWERP 33538

Sansui

Printed in Japan (36005K4)