



SERVICE MANUAL

4-CHANNEL MUSIC CENTER

SANSUI MQ-2000



Sansui

SANSUI ELECTRIC COMPANY LIMITED.

Dear Service Engineer:

Thank you for the trouble you are taking to service our MQ-2000.

The MQ-2000 4-Channel Music Center is designed for people who want to enter the world of 4-channel stereo without much fuss and without making too big an investment. Like other quality 4-channel stereo equipment from Sansui, it incorporates our unique QS synthesizer/decoder circuit. It is this circuit that enables this compact music center to recover the original four channels of signal from 2-channel program sources encoded from four channels by a Sansui QS encoder. Equally important, it is this circuit that enables the music center to produce exciting 4-channel stereo sound from today's 2-channel stereo sources, by the simple changeover of its Synthesizer/Decoder Function Control.

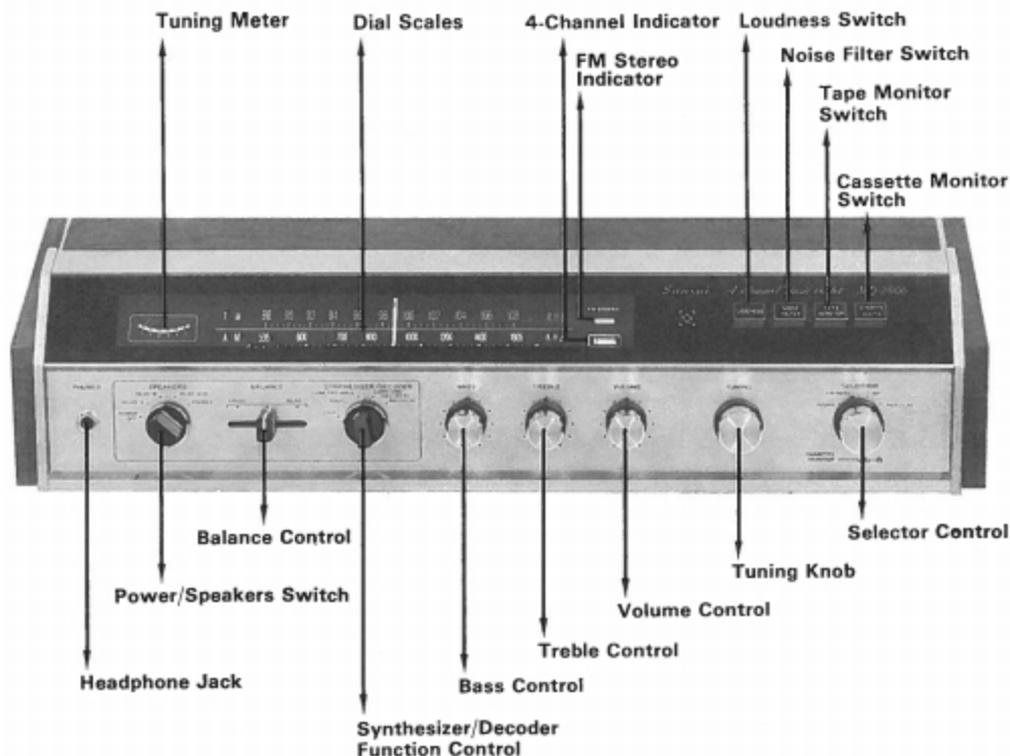
The matrixing or coding system of 4-channel stereo offers these and several other advantages. Since the Sansui QS synthesizer/decoder circuit employs a quite universal decoding matrix, once you understand its design and function, you would most likely find it easy to service matrixing system 4-channel equipment of other makes as well.

It is our sincere hope that this manual, along with the Service Manual for the automatic changer, provides you with all the detailed information required to maintain and service the MQ-2000.

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SWITCHES AND CONTROLS



This Service Manual is concerned only with the receiver part of the MQ-2000. A separate service manual is available for the automatic changer section, and can be obtained simply by writing to SANSUI ELECTRONICS CORPORATION.

GENERAL TROUBLESHOOTING CHART

If the receiver is otherwise operating satisfactorily, the more common causes of trouble may generally be attributed to the following:

1. Incorrect connections or loose terminal contacts. Check the speakers, turntable, tape deck, antenna and power cord.

2. Improper operation. Before operating any audio com-

ponent, be sure to read its manufacturer's instructions.

3. Improper location of audio components. The proper positioning of components, such as speakers and turntable, is essential to maximum stereo enjoyment.

4. Defective audio components.

The following are some other common causes of malfunction and what to do about them.

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
AM, FM or MPX reception	A. Constant or intermittent noise heard at times or in certain areas	<ul style="list-style-type: none"> * Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor rectifier or oscillator. * Natural phenomena, such as atmospheric, static or thunderbolts * Insufficient antenna input due to ferroconcrete wall or long distance from station 	<ul style="list-style-type: none"> * Attach noise limiter to electrical appliance producing noise, or attach it to the receiver's power source * Install outdoor antenna and ground receiver to raise SN ratio * Reverse power cord plug/receptacle connections * If noise occurs at certain frequency, attach wave trap to input * Keep receiver at proper distance from other electrical appliances
AM reception	A. Noise heard at a particular time of a day, in a certain area or over part of dial	* Peculiar to AM broadcasts	<ul style="list-style-type: none"> * Install antenna for maximum antenna efficiency. See "RADIO RECEPTION" in operating instructions booklet * In some cases, noise can be eliminated by grounding receiver or reversing power cord plug/receptacle connections
	B. High-frequency noise	<ul style="list-style-type: none"> * Adjacent-channel interference or beat interference * TV set too close to audio system 	<ul style="list-style-type: none"> * Such noise cannot be completely eliminated by the receiver, but it is advisable to turn Treble control counterclockwise and turn on Noise Filter * Keep TV set at proper distance from stereo system
FM reception	A. Noisy	* Poor noise limiter effect or too low SN ratio due to insufficient antenna input	<ul style="list-style-type: none"> * Change the set position or install antenna for maximum signal strength * If this does not prove effective, use exclusive FM outdoor antenna. If using TV antenna for both TV and FM with a divider, make sure TV reception is not affected * Exclusively long lead-in wire of an antenna may cause noise
	Note: FM reception is affected considerably by transmission conditions of station, such as power and antenna efficiency. As a result, you may receive one station quite well while receiving another station poorly.		
	B. A series of pops	* Ignition noise caused by starting of nearby automobile engine	* Install antenna and its lead-in wire at proper distance from street or increase antenna input as described before
	C. Tuning noise between stations	* Results from nature of FM reception	* Turn Volume control counterclockwise

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
FM-MPX reception	A. Noise heard during FM-MPX reception but inaudible during FM mono reception	* Weaker signal because service area of FM-MPX broadcast is only half that of FM mono broadcast	* Orient antenna for maximum antenna input * Switch on Noise Filter and/or turn Treble control counterclockwise
	B. Channel separation deteriorates during reception	* Excess heat	* Circulation of room air is important to receiver. Be sure that receiver is well ventilated
	C. Stereo indicator blinks on and off	* Interference	* Indicator is not faulty
Record playing or tape playback	A. Hum or howling	* Set placed directly on speaker * Wire other than shielded cable used * Loose terminal contact * Shielded cable too close to power cord, fluorescent lamp or other appliances * Nearby amateur radio station or TV transmission antenna	* Place cushion between turntable and speaker cabinet or place them away from each other * Connecting shielded cables should be as short as possible * Turn Bass control counterclockwise * Consult nearest Radio Regulatory Bureau
	B. Surface noise	* Worn or old record * Worn phono stylus * Phono stylus is dusty * Improper stylus pressure	* Recondition playback head of tape deck or the stylus of turntable * Turn Treble control counterclockwise * Turn Noise Filter on
4-channel stereo playback	A. Position of musical instruments and voice not clear	* Incorrect phasing of speakers or input connections	* Check phasing of speakers and input connections * Change rear speaker position and/or direction

On the QS Synthesizer/Decoder Circuit

This circuit comprises a matrix to recover four channels—left front, right front, left rear and right rear—of information from two channels, and unique phase shifters (patents pending) to closely approximate the delicate ambience of the live performance. The matrixing system of 4-channel stereo is particularly fit to reproduce all those delicate shades and nuances of concert hall performances. In a concert hall, not only the direct sounds from the musical instruments and singers but the indirect sounds reflected off the walls, ceiling and floor play a vital role in the enjoyment of music by the audience. The matrix in the MQ-2000 performs complex additions and subtractions on the input two channels of signal to separate them into four channels, i.e., into direct sounds and indirect sounds with varying phase differences from the former.

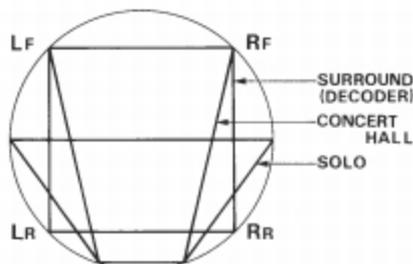
The Synthesizer/Decoder Function Control of the MQ-2000 enables the operator to alter the 'blending coefficient' (additions and subtractions) of the matrix to suit the type of music to be played.

SOLO: The input two channels of signal are released from the front without any blending for very broad separation, but the rear channels are rendered the narrowest of all three positions for 4-channel reproduction. Good for hearing solo and small-band performances where the left-right stereo separation is very limited and there is little expansion of the indirect sounds.

CONCERT HALL: The front left-right separation is a little narrower than SOLO, but the rear channels are separated wider. Appropriate for hearing orchestras and big bands where the stage is wide and the indirect sounds disperse to the left and right.

SURROUND/DECODER: In this position, the matrix provides a square sound field, producing interesting effects with mood music, rock-'n'-roll and other types of music by scattering the musical instruments all around the listener. When made to reproduce 4-channel sources encoded by the Sansui QS 4-channel encoder into a 2-channel form, it

delivers particularly enthralling 4-channel stereo music combining the charm of sound source reproduction of the discrete 4-channel system and the advantage of the sound field reproduction of the matrixing system.



The phase shifters are a circuit to remedy the inherent shortcoming of the matrix circuit. When the original four channels of signal are converted to two channels and then back to four by an encoder and decoder, they are processed through two—encoding and decoding—matrix circuits.

As a result of this process, the sound reproduced in any given channel is a product of several channels of original signal blended together. For example, the sound reproduced out of the left rear speaker system is a mixture of the original left rear channel signal and the two adjacent channel signals—the right rear and left front channels.

These adjacent channel components are required to produce the delicate ambience of the original sound field.

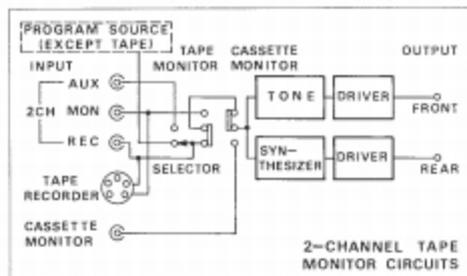
Unfortunately, in this case, the right rear channel component is 180 degrees out of phase with the original left rear channel signal, obscuring the sense of sound image position and directionality.

Sansui engineers have resolved this problem by phase-shifting the left rear channel by -90 degrees from the front, and the right rear channel by $+90$ degrees. The result is a most natural 4-channel stereo sound field.

The ± 90 -degree phase shifters are exclusive to Sansui's QS Coding System of 4-channel stereo.

On 2-Channel Tape Monitor Circuits

The MQ-2000 is equipped with recording and playback terminals for an open-reel 2-channel stereo tape deck, and with playback terminals for a cassette stereo tape deck. The former, located on the rear panel, and the latter, located on the front, are connected in series and therefore possess identical electric input specifications, but no dubbing (copying of recorded tapes) can be done between the two tape circuits. To dub a tape, connect the playback tape deck to the 2CH AUX terminals and the recording tape deck to the 2CH REC (and MON) terminals.



Replacement of Pickup Cartridge

To replace the pickup cartridge of the automatic changer, consult the separate Service Manual for the changer and use the screws supplied for this purpose. The phono input sensitivity of the MQ-2000's receiver section is 4mV. If you're replacing the cartridge with a new cartridge of a different make (i.e., other than SHURE M75-6), make certain its output voltage matches or exceeds this level. Or else, not only the rated power output will fail to be delivered, but the reproduced sound may be distorted in some cases.

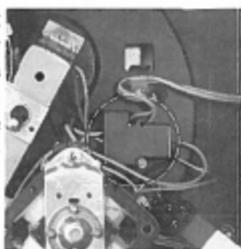
On the Power Supply Voltage and Frequency

If the purchaser is using the MQ-2000 in an area where the power supply voltage and/or frequency are different from those indicated on the unit's carton box, they need be adjusted.

The frequency affects the revolution of the automatic changer. The pulley attached to the motor shaft need be exchanged for the one matching the frequency of the area. Remove the changer platter first.

The voltage influences the performance of both the amplifier section and automatic changer. First adjust the amplifier by re-setting the Voltage Selector Plug inside the amplifier section so that its arrow faces the correct voltage indication of the area.

Then alter the wiring inside the changer after removing the cover, as shown in the photograph, referring to the changer's Service Manual.



BEFORE YOU BEGIN SERVICING

Before you actually set out to service the MQ-2000, it is advisable to check if all connections are properly made and if the operation is correct. Examine these simple check points once more:

Connections

1. Is the power cord connected to the wall AC outlet?
2. Is the required power voltage being supplied to the unit?
3. Is the antenna(s) properly connected?
4. Is the tape deck(s) connected to the correct terminals?
5. Are the output plug and power plug of the automatic changer properly connected to the receiver section? Check inside the unit.
6. If two or more speaker systems are connected to the MQ-2000's speaker terminals in parallel with each other, is their composite impedance 4Ω or greater? This is necessary for the speaker systems to produce natural sounds.
7. Has the power fuse or any of the quick-acting fuses blown?

Operation

1. Is the Power Switch turned on?
2. Are the Selector Control, Synthesizer/Decoder Function Control, and the Power/Speakers Switch set to the respective correct positions?
3. Isn't the Tape Monitor Switch pushed down, though you don't want to reproduce a tape?
4. Aren't both the Tape Monitor Switch and Cassette Monitor Switch pushed down? If they are, the cassette monitor circuit takes precedence.
5. Isn't the Synthesizer/Decoder Function Control set to AUX (4CH)? This position should be selected only when you wish to play back a discrete 4-channel music tape on a 4-channel tape deck.
6. Is the Volume Control turned to a proper position?

Basic Service Hints

■ The receiver section can always be serviced more easily by removing the base board on which the automatic changer is mounted. The board can be removed by taking off the four screws securing it.

■ For detailed servicing instructions, see pp. 8-26. To examine or service the tuner section without the help of a measuring instrument, take care to maximize the antenna input signal level. This is especially important with the FM tuner, because the FM wave is more directional.

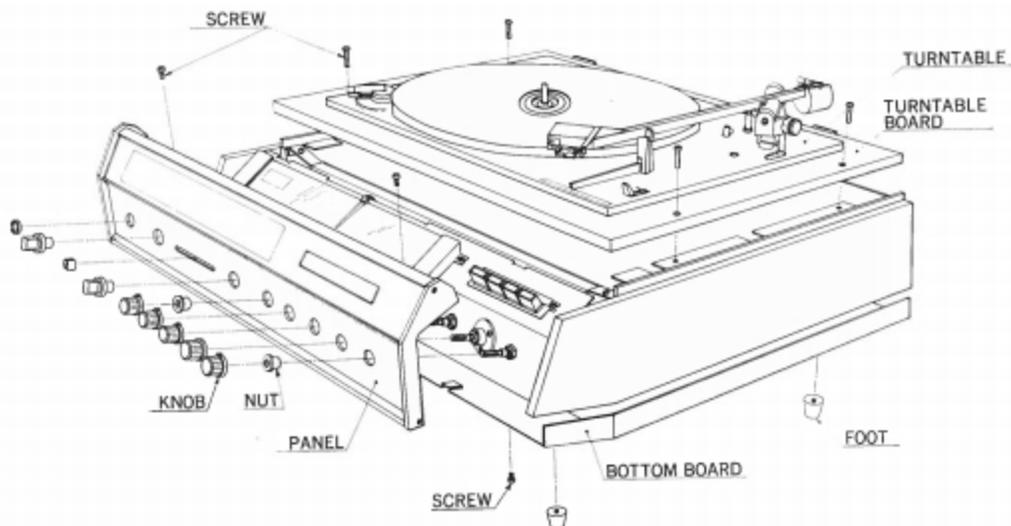
If you're only using the built-in FM loop antenna, the receiving sensitivity could change considerably depending on the position and direction in which the MQ-2000 is placed. In a fringe FM signal area, it would help greatly just to stretch 300 Ω balanced feeder cable (supplied) to a T shape.

To examine or service the audio amplifier section, connect a four to 16 Ω load to the speaker output terminals. If you wish to check such electric output characteristics as the power bandwidth, feed the input signals to the 2CH AUX input terminals. When replacing the R843-846 resistors (0.5 Ω , 2W) on F-1162-2, fix the new resistor(s) away from the printed circuit board itself, so that the heat radiated by the resistor(s) may be dispersed by convection. On the other hand, if you ever replace the power transistor(s) (TR821-828), mount them firmly to the chassis, so that the radiated heat may escape by conduction.

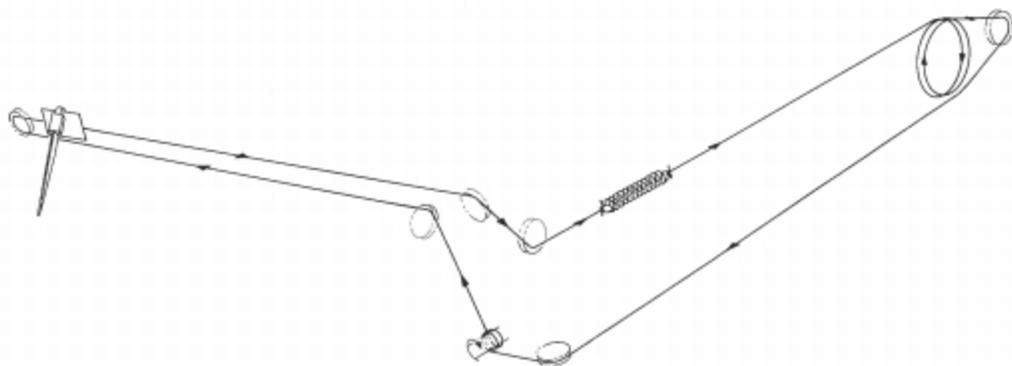
■ Order the necessary parts from your nearest authorized Sansui Service Station. When you order, specify the name of the printed circuit board on which the part is located, the parts number, parts name and stock number. Please be advised beforehand, however, that if the particular part you ordered is out of stock, we may send you a substitute.

DISASSEMBLY PROCEDURE / DIAL MECHANISM

REMOVING THE FRONT PANEL AND BOARDS

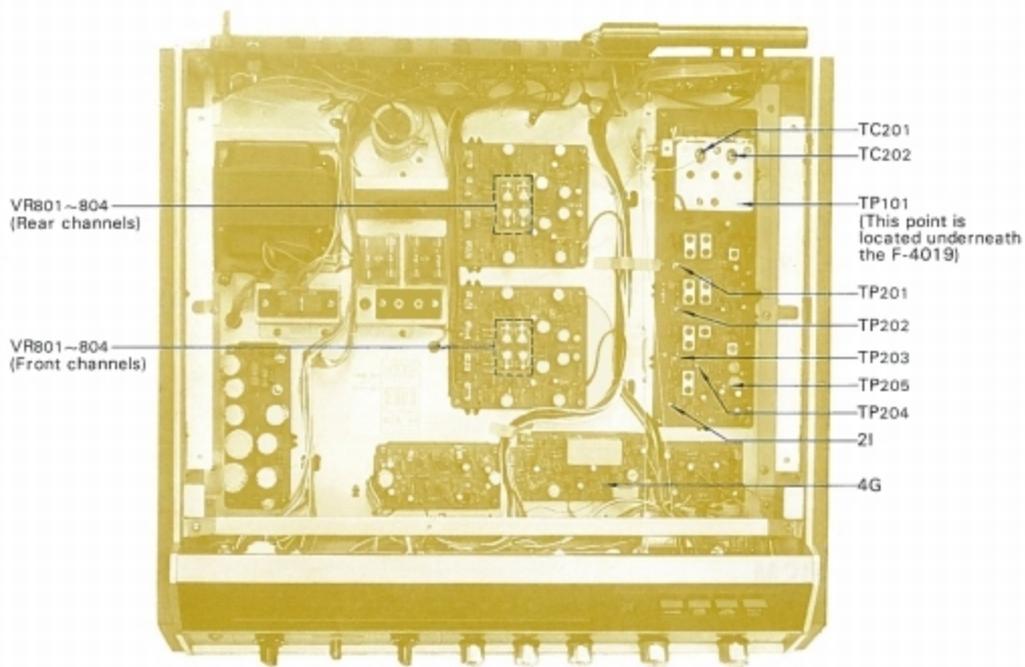


DIAL MECHANISM



ALIGNMENT

TEST POINTS



FM ALIGNMENT PROCEDURE

NOTE: To align, set the signal generator level to minimum.
Turn tuning gang fully.
Center carrier wave.
Set pointer at reference mark.

STEP	ALIGN.	GENERATOR	FEED SIGNAL	CONNECT	DIAL SETTING	ADJUST	ADJUST FOR
1.	IF Transformer	10.7 MHz ± 200 kHz	Sweep signal to TP ₁₀₁ via the 0.022 μ F ceramic capacitor	Oscilloscope to TP ₂₀₂₋₂₀₂ and ₂₀₃ via the 0.022 μ F ceramic capacitor with probe Grounding TP ₂₀₄ via the 0.022 μ F ceramic capacitor		Primary and secondary coils of T ₂₀₁₋₂₀₂₋₂₀₃	Best I.F. wave form
2.	Discriminator	10.7 MHz ± 200 kHz	Sweep signal to TP ₁₀₁ via the 0.022 μ F ceramic capacitor	Oscilloscope to 2I (Remove the 0.022 μ F and the grounding connected to TP ₂₀₄)		FM Discriminator transformer T ₂₀₄ top primary and secondary	S curve
3.	O.S.C.	90 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	90 MHz	O.S.C. coil L ₀	Maximum
4.	O.S.C.	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	106 MHz	O.S.C. trimmer TC ₁	Maximum
5.	Reiterate 3 and 4.						
6.	High-frequency Amp. Circuit	90 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	90 MHz	Antenna coil L ₁ and L ₂	Maximum
7.	High-frequency Amp. Circuit	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	106 MHz	Trimmer TC ₁ and TC ₂	Maximum
8.	Reiterate 6 and 7.						

FM MULTIPLEX ALIGNMENT PROCEDURE

1. Do not attempt to align the Multiplex Circuit unless the following equipments are available:

a. Multiplex Stereo Generator b. Oscilloscope c. AC. V.T.V.M. d. Audio Oscillator e. FM Signal Generator

STEP	ALIGN.	GENERATOR	FEED SIGNAL TO	TEST EQUIPMENT (S)	ADJUST	ADJUST FOR
1	19kHz Transformer	FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at 4G	L ₄₀₁	Maximum
2	38kHz Transformer and Separation VR	FM Signal Gen. Modulated 30% by STEREO Signal Gen. channel-L	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at output load, (channel-R)	T ₄₀₂ or T ₄₀₃ within $\frac{1}{4}$ turn and Separation VR ₄₀₁	Minimum (Channel-R)

ALIGNMENT

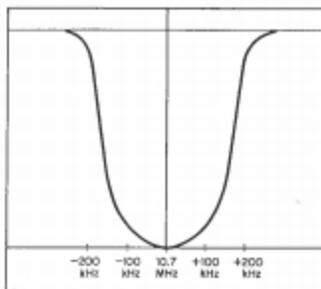
AM ALIGNMENT PROCEDURE

NOTE: To align, set the signal generator level to minimum.

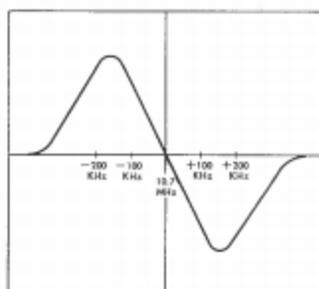
STEP	ALIGN.	GENERATOR	FEED SIGNAL TO	TEST EQUIPMENTS	DIAL SETTING	ADJUST	ADJUST FOR
1.	I.F. Transformer	455 kHz ± 30 kHz Sweep-generator	Antenna terminals	Oscilloscope and V.T.V.M. at TP ₂₀₅		Primary and Secondary from the 1st I.F.T (T ₂₀₇) to the 3rd I.F.T. (203)	Best I.F. wave form
2.	O.S.C.	AM-generator 535 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	535 kHz	O.S.C. Coil T ₂₀₆	Maximum
3.	O.S.C.	AM-generator 1(1600kHz)600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1600 kHz	O.S.C. Trimmer TC ₂₀₂	Maximum
4.	Reiterate 2 and 3						
5.	Antenna circuit	AM-generator 1600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600 kHz	Ferrite bar Antenna L ₂₀₁	Maximum
6.	Antenna circuit	AM-generator 1400 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400 kHz	Antenna circuit Trimmer TC ₂₀₁	Maximum
7.	Reiterate 5. 6. 7.						

STANDARD WAVE FORMS

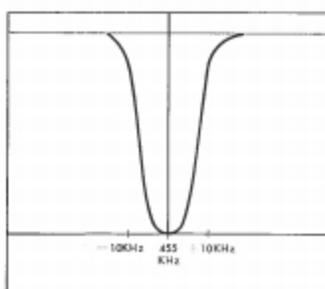
FM IF WAVE FORM



FM DISCRIMINATOR WAVE FORM

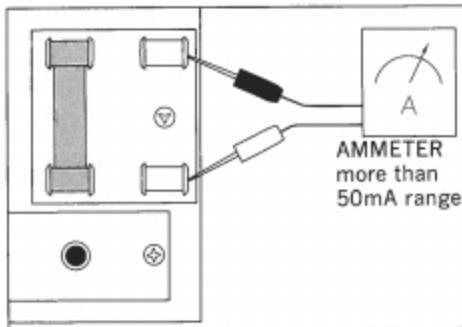


AM IF WAVE FORM



CURRENT ADJUSTMENT

STEP	SETTING OF AMMETER (TESTER)	WHAT TO DO	NOTE
1.		Remove F_{801} and F_{802}	Use an ammeter with 50mA range
2.		Set $VR_{803, 804}$ (front channels) to minimum	
3.		Set Volume Control to minimum	
4.		Turn on the receiver	Be sure to switch on 1st and then connect the ammeter
5.	50mA range.	Connect ammeter to F_{803} as illustrated in Fig. 1	
6.		Turn VR_{803} (left channel) clockwise and adjust current to 20 to 15 mA	
7.	50mA range.	Turn off the receiver and replace F_{801}	
8.		Turn on the receiver and connect ammeter to F_{802} as illustrated in Fig. 1	
9.		Turn VR_{804} (right channel) clockwise and adjust current to 30 to 25mA	
10.		Replace F_{802}	
11.		Adjust the rear channels as above	



(Fig. 1) Quick-Acting FUSE HOLDER

OUTPUT ADJUSTMENT

STEP	WHAT TO DO	NOTE
1.	Adjust volume control to minimum	
2.	Set oscillator to 1,000Hz and connect it to 4CH, AUX LEFT FRONT input	Oscillator used should have oscillation frequency of 20 to 20,000Hz and output voltage of more than 200mV
3.	Set Synthesizer/Decoder Function control to AUX (4CH)	Set other controls and switches as follows: Balance to CENTER Tape Monitor to OFF Tone to CENTER Other to OFF
4.	Connect 8- or 16-ohm load resistor with capacity of more than 14 watts to LEFT SPEAKER output	
5.	Connect oscilloscope to SPEAKER terminal	
6.	Turn on the receiver and slowly raise volume. Check output at terminal by means of oscilloscope	
7.	Adjust VR_{801} (left channel) so that peak of sine wave is clipped simultaneously	
8.	Adjust right channel similarly, and then rear channels	

SPECIFICATIONS

AUDIO SECTION

POWER OUTPUT

MUSIC POWER (IHF): 74W at 4-ohm load
70W at 8-ohm load

CONTINUOUS POWER: 15W x 4 at 4-ohm load
14W x 4 at 8-ohm load

TOTAL HARMONIC DISTORTION:

less than 1% at rated output

INTERMODULATION DISTORTION:

(60Hz, 7,000Hz = 4:1, SMPTE method)
less than 1%

POWER BANDWIDTH: 30 to 30,000Hz at 8-ohm load

FREQUENCY RESPONSE: (at normal listening level)
30 to 30,000Hz \pm 2dB

CHANNEL SEPARATION: (at 1,000Hz, rated output)
better than 50dB

HUM AND NOISE (IHF)

PHONO: better than -60dB
AUX: better than -70dB

INPUT SENSITIVITY (at rated output, 1,000Hz)

PHONO (2-CHANNEL): 4mV (50k ohms)
AUX (2-CHANNEL): 180mV (50k ohms)
4-CHANNEL INPUT: 180mV (50k ohms)
TAPE MON (pin): 180mV (50k ohms)
TAPE RECORDER (DIN): 180mV (50k ohms)

RECORDING OUTPUT (at rated output, 1,000Hz)

TAPE REC (pin): 180mV
TAPE RECORDER (DIN): 30mV

LOAD IMPEDANCE: 4 to 16 ohms

DAMPING FACTOR: 50 at 8 ohm load

EQUALIZER

PHONO: RIAA NF Type

STONE CONTROLS (Front channel only)

BASS: +10dB -10dB at 50Hz
TREBLE: +10dB -10dB at 10,000Hz
LOUDNESS: +6dB at 50Hz, +4dB at 10kHz
(Volume Control at -30dB)

TUNER SECTION

<FM>

TUNING RANGE: 88 to 108MHz
SENSITIVITY: 2.5 μ V 20dB quieting
5.0 μ V IHF

TOTAL HARMONIC DISTORTION:

less than 1%

SIGNAL TO NOISE RATIO: better than 50dB

SELECTIVITY: better than 35dB

CAPTURE RATIO: 3dB

IMAGE REJECTION: better than 45dB

IF REJECTION: better than 60dB

SPURIOUS RESPONSE REJECTION:

better than 60dB

STEREO SEPARATION: better than 30dB at 400Hz

SPURIOUS RADIATION: less than 34dB

ANTENNA INPUT IMPEDANCE:

300-ohm balanced

<AM>

TUNING RANGE: 535 to 1,605kHz
SENSITIVITY: 350 μ V at 1,000kHz (bar antenna)
IMAGE FREQUENCY REJECTION:

better than 50dB at 1,000Hz

IF REJECTION: better than 50dB at 1,000Hz

SELECTIVITY: better than 20dB

CONTROLS/SWITCHES

SWITCHES

SELECTOR: PHONO, FM-AUTO, AM, AUX (2CH)
SYNTHESIZER/DECODER: 2CH, SOLO, CONCERT HALL SURROUND
(DECODER) AUX (4CH)

SPEAKERS SELECTOR: POWER OFF, REAR A, REAR B, REAR A +
B, PHONES

TAPE MONITOR (2CH): SOURCE, PLAYBACK

CASSETTE MONITOR: PLA/BACK

LOUDNESS: OFF, ON (Front only)

NOISE FILTER: OFF, ON (Front only)

CONTROLS

VOLUME,
BASS (Front only),
TREBLE (Front only),
BALANCE (Front \rightarrow Rear)

OTHER SPECIAL FEATURES

Signal Strength Meter, FET Frontend,
FM Mono/Stereo Automatic Switching and Stereo Indicator, AM Ferrite
Bar Antenna, Stereo Headphone Jack (Front only),
Cassette Monitor,
4-Channel Indicator

SYNTHESIZER/DECODER SECTION

INPUT LEVEL:

RATED INPUT 2-CHANNEL:

183mV (50k ohms)

FREQUENCY RESPONSE:

FRONT CHANNEL: 30 to 20,000Hz \pm 1dB

REAR CHANNEL: 30 to 20,000Hz +1dB -2dB

REAR CHANNEL PHASE SHIFT:

LEFT: -90 degree at 300Hz

RIGHT: +90 degree at 600Hz

SEMICONDUCTORS

TRANSISTORS: 53

DIODES: 22

FET: 1

POWER REQUIREMENTS

POWER VOLTAGE: 100, 117, 220, 240V 50/60Hz

POWER CONSUMPTION: 150VA (max. signal)

DIMENSIONS

486mm (19 $\frac{1}{2}$ "^W)

443.5mm (17 $\frac{3}{8}$ "^D)

115mm (4 $\frac{5}{8}$ "^H)

WEIGHT

17.1kg (37.6 lbs)

RECORD CHANGER SECTION

TYPE: 3-Speed Automatic Changer

MOTOR: 2-Coil 4-Pole Induction Type

SPEEDS: 33 $\frac{1}{3}$, 45, 78 rpm

CHANGER PLATTER: Sheet Metal 273mm (10 $\frac{3}{4}$ "^R)

Weight 1.1kg (2 $\frac{1}{2}$ lbs)

ANTI-SKATING DEVICE: Automatic Adjustment

FLUTTER AND WOW: \pm 0.20%

FINE ADJUSTMENT OF THE

REVOLUTION SPEED

(PITCH CONTROL): \pm 3%

STYLUS PRESSURE: 3.0 Grams (0-6 Grams Adjustable)

CARTRIDGE: SHURE M75-6 (With the Changer Stylus)

CHANNEL SEPARATION: 25dB (at 1 kHz)

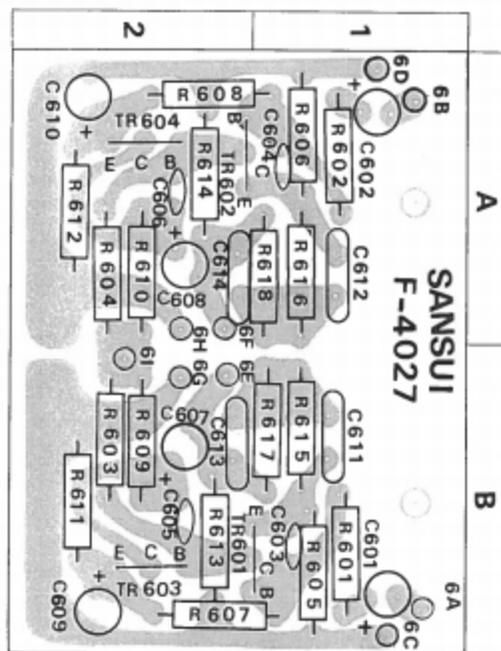
OUTPUT LEVEL: 5mV (50mV/sec)

FREQUENCY RANGE: 20 to 20,000Hz

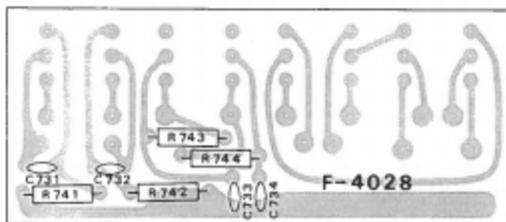
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

EQUALIZER BLOCK (F-4027)



W	X	Y	Z
R601	1k Ω	0101102	1 B
R602	1k Ω	0101102	1 A
R603	220k Ω	0101224	2 B
R604	220k Ω	0101224	2 A
R605	560 Ω	0101561	1 B
R606	560 Ω	0101561	1 A
R607	270k Ω	0101274	1, 2 B
R608	270k Ω	0101274	1, 2 A
R609	6.8k Ω	0101682	2 B
R610	6.8k Ω	0101682	2 A
R611	470 Ω	0101471	2 B
R612	470 Ω	0101471	2 A
R613	82k Ω	0101823	2 B
R614	82k Ω	0101823	2 A
R615	270k Ω	0101274	1 B
R616	270k Ω	0101274	1 A
R617	22k Ω	0101223	1 B
R618	22k Ω	0101223	1 A
C601	1.5 μ F	0571159	1 B
C602	1.5 μ F	0571159	1 A
C603	47 pF	0660470	1 B
C604	47 pF	0660470	1 A
C605	150 pF	0660151	2 B
C606	150 pF	0660151	2 A
C607	10 μ F	0513100	2 B
C608	10 μ F	0513100	2 A
C609	47 pF	0510470	2 B
C610	47 pF	0510470	2 A
C611	0.012 μ F	0601127	1 B
C612	0.012 μ F	0601127	1 A
C613	0.0033 μ F	0601336	2 B
C614	0.0033 μ F	0601336	2 A
TR601		0305474, 5	1 B
TR602		0305474, 5	1, 2 A
TR603	2SC871R (E, F)	0305474, 5	2 B
TR604		0305474, 5	2 A



PUSH BUTTON BLOCK (F-4028)

W	X	Y
R741	15k Ω	0101153
R742	15k Ω	0101153
R743	470k Ω	0101474
R744	470k Ω	0101474
C731	0.022 μ F	0601227
C732	0.022 μ F	0601227
C733	0.008 μ F	0601806
C734	0.008 μ F	0601806
S4	Cassette Monitor	1130300
S5	Tape Monitor	
S6	Noise Filter	
S7	Loudness	

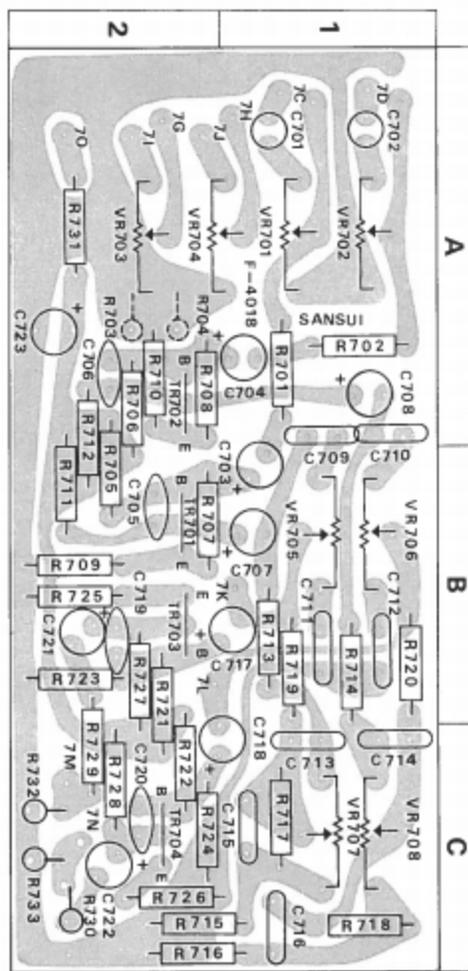
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

TONE CONTROL BLOCK <F-4018>

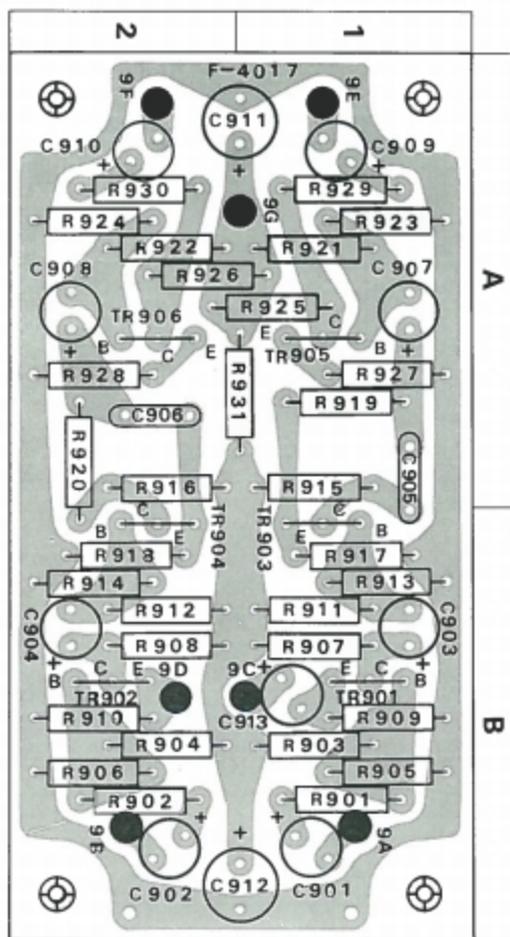
W	X	Y	Z
R701	1kΩ	0101102	1 A
R702	1kΩ	0101102	1 A
R703	15kΩ	0101153	2 A
R704	15kΩ	0101153	2 A
R705	1MΩ	0101105	2 A, B
R706	1MΩ	0101105	2 A, B
R707	47kΩ	0101473	2 B
R708	47kΩ	0101473	2 A
R709	1.2kΩ	0101122	2 B
R710	1.2kΩ	0101122	2 A
R711	4.7kΩ	0101472	2 A, B
R712	4.7kΩ	0101472	2 A, B
R713	18kΩ	0101183	1 B
R714	18kΩ	0101183	1 B
R715	3.3kΩ	0101332	1, 2 C
R716	3.3kΩ	0101332	1, 2 C
R717	22kΩ	0101223	1 U
R718	22kΩ	0101223	1 C
R719	10kΩ	0101103	1 B
R720	10kΩ	0101103	1 B
R721	680kΩ	0101684	2 B, C
R722	680kΩ	0101684	2 B, C
R723	82kΩ	0101823	2 B
R724	82kΩ	0101823	2 C
R725	1kΩ	0101102	2 B
R726	1kΩ	0101102	1, 2 C
R727	2.2kΩ	0101222	2 B, C
R728	2.2kΩ	0101222	2 C
R729	10kΩ	0101103	2 B, C
R730	10kΩ	0101103	2 C
R731	150Ω	0101151	2 A
R732	100kΩ	0101104	2 C
R733	100kΩ	0101104	2 C
VR701~704	100kΩ(B) × 4	1060070	1, 2 A
VR705, 706	100kΩ(A) × 2	1010790	1 B
VR707, 708	100kΩ(A) × 2	1010790	1 C
C701	470pF	0611471	1 A
C702	470pF	0611471	1 A
C703	1μF	0515109	1 A, B
C704	1μF	0515109	1 A
C705	22pF	0660220	2 B
C706	22pF	0660220	2 A
C707	3.3μF	0513339	1 B
C708	3.3μF	0513339	1 A
C709	0.001μF	0601106	1 A
C710	0.001μF	0601106	1 A
C711	0.01μF	0601107	1 B
C712	0.01μF	0601107	1 B
C713	0.015μF	0601157	1 C
C714	0.015μF	0601157	1 C
C715	0.1μF	0601108	1 C
C716	0.1μF	0601108	1 C
C717	1μF	0515109	1, 2 B
C718	1μF	0515109	1, 2 B C
C719	22pF	0660220	2 B
C720	22pF	0660220	2 C

W	X	Y	Z	
C721	1μF	0515109	2 B	
C722	1μF	50 V EC.	0515109	2 C
C723	100μF	25 V EC.	0513101	2 A
TR701	25C871 (D, E)	0305470	1 2 B	
TR702		0305470	1 2 A	
TR703		0305470	1 2 B	
TR704		0305470	1 2 C	



SYNTHESIZER BLOCK (F-4017)

W	X	Y	Z
R901	100k Ω	0101104	1 B
R902	100k Ω	0101104	2 B
R903	120k Ω	0101124	1 B
R904	120k Ω	0101124	2 B
R905	47k Ω	0101473	1 B
R906	47k Ω	0101473	2 B
R907	2.2k Ω	0101222	1 B
R908	2.2k Ω	0101222	2 B
R909	2.2k Ω	0101222	1 B
R910	2.2k Ω	0101222	2 B
R911	120k Ω	0101124	1 B
R912	120k Ω	0101124	2 B
R913	47k Ω	0101473	1 B
R914	47k Ω	0101473	2 B
R915	2.2k Ω	0101222	1 A
R916	2.2k Ω	0101222	2 A
R917	2.2k Ω	0101222	1 B
R918	2.2k Ω	0101222	2 B
R919	5.6k Ω	0101562	1 A
R920	5.6k Ω	0101562	2 A, B
R921	680k Ω	0101684	1 A
R922	680k Ω	0101684	2 A
R923	82k Ω	0101823	1 A
R924	82k Ω	0101823	2 A
R925	2.2k Ω	0101222	1, 2 A
R926	2.2k Ω	0101222	1, 2 A
R927	1k Ω	0101102	1 A
R928	1k Ω	0101102	2 A
R929	1k Ω	0101102	1 A
R930	1k Ω	0101102	2 A
R931	150 Ω	0101151	1, 2 A
C901	1 μ F	0515109	1 B
C902	1 μ F	0515109	2 B
C903	1 μ F	0515109	1 B
C904	1 μ F	0515109	2 B
C905	0.1 μ F	0601108	1 A, B
C906	0.047 μ F	0601477	2 A
C907	1 μ F	0515109	1 A
C908	1 μ F	0515109	2 A
C909	1 μ F	0515109	1 A
C910	1 μ F	0515109	2 A
C911	220 μ F	0513221	1, 2 A
C912	100 μ F	0513101	1, 2 B
C913	47 μ F	0510470	1 B
TR901	25C871 (D, E)	0305470	1 B
TR902		0305470	1 B
TR903		0305470	1 B
TR904		0305470	1 B
TR905		0305470	1 A
TR906		0305470	1 A



PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

DRIVER BLOCK (F-1162-2)

W	X	Y	Z
R201	4.7k Ω	0101472	2 A
R202	4.7k Ω	0101472	1 A
R203	560k Ω	0101564	2 A
R204	560k Ω	0101564	1 A
R205	220k Ω	0101224	2 A
R206	220k Ω	0101224	1 A
R207	2.2k Ω	0101222	2 A
R208	2.2k Ω	0101222	1 A
R209	3.3k Ω	0101332	2 A
R210	3.3k Ω	0101332	1 A
R211	100 Ω	0101101	2 A
R212	100 Ω	0101101	1 A
R213	8.2k Ω	0101822	2 A
R214	8.2k Ω	0101822	1 A
R215	10k Ω	0101103	2 A
R216	10k Ω	0101103	1 A
R217	1k Ω	0101102	2 A
R218	1k Ω	0101102	1 A
R219	56k Ω	0101563	2 A
R220	56k Ω	0101563	1 A
R221	27k Ω	0101273	2 A
R222	27k Ω	0101273	1 A
R223	3.3k Ω	0101332	2 B
R224	3.3k Ω	0101332	1 B
R227	330 Ω	0101331	2 A
R228	330 Ω	0101331	1 A
R229	47 Ω	0101470	2 B
R230	47 Ω	0101470	1 B
R231	47 Ω	0101470	2 B
R232	47 Ω	0101470	1 B
R233	12 Ω	0101120	2 B
R234	12 Ω	0101120	1 B
R235	270 Ω	0101271	2 B
R236	270 Ω	0101271	1 B
R237	12 Ω	0101120	2 B
R238	12 Ω	0101120	1 B
R239	270 Ω	0101271	2 B
R240	270 Ω	0101271	1 B
R241	12 Ω	0101120	2 B
R242	12 Ω	0101120	1 B
R243	0.5 Ω	0152508	2 B
R244	0.5 Ω	0152508	1 B
R245	0.5 Ω	0152508	2 B
R246	0.5 Ω	0152508	1 B
VR201	200k Ω (B) AC Balance Adj. (Left)	1030351	2 A
VR202	200k Ω (B) AC Balance Adj. (Right)	1030351	1 A
VR203	200 Ω Bias Adj. (Left)	1032021	2 B
VR204	200 Ω Bias Adj. (Right)	1032021	1 B
C201	0.68 μ F	0563688	2 A
C202	0.68 μ F	0563688	1 A
C203	33 μ F	0515330	2 A
C204	33 μ F	0515330	1 A
C205	100 μ F	0511101	2 A
C206	100 μ F	0511101	1 A

W	X	Y	Z
C207	1 μ F	0515109	2 A
C208	1 μ F	0515109	1 A
C211	100 μ F	0514101	2 A
C212	100 μ F	0514101	1 A
C213	10 μ F	0513100	2 A
C214	10 μ F	0513100	1 A
C215	150pF	0660151	2 A
C216	150pF	0660151	1 A
C217	150pF	0660151	2 B
C218	150pF	0660151	1 B
C219	220 μ F	0510221	2 B
C220	220 μ F	0510221	1 B
C221	0.047 μ F	0601477	2 B
C222	0.047 μ F	0601477	1 B
TR201	25C871 (E, F)	0305471, 2	2 A
TR202		0305471, 2	1 A
TR203	25C870 (E, F)	0305510, 1	2 B
TR204		0305510, 1	1 B
TR205	25C634A-5, 6	0305890, 1	2 B
TR206		0305890, 1	1 B
TR207	25A678-5, 6	0300290, 1	2 B
TR208		0300290, 1	1 B
D201	5V-02	0310490	2 B
D202	5V-02	0310490	1 B

PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

FM/AM BLOCK <F-4019>

W	X	Y	Z
R201	12kΩ	0101123	1 A
R202	1kΩ	0101102	2 A
R203	470Ω	0101471	2 A
R204	1kΩ	0101102	2 B
R205	560Ω	0101561	2 A
R206	1kΩ	0101102	2 B
R207	1kΩ	0101102	2 B
R208	1kΩ	0101102	2 C
R209	1.2kΩ	0101122	2 C
R210	1kΩ	0101102	2 C
R211	1kΩ	0101102	2 C
R212	10kΩ	0101103	2 C
R213	10kΩ	0101103	2 C
R214	120Ω	0101121	2 C
R215	8.2kΩ	0101822	1 A
R216	22Ω	0101220	1 A
R217	6.8kΩ	0101682	1, 2 A
R218	82kΩ	0101823	1, 2 A
R219	390kΩ	0101394	1, 2 A
R220	82kΩ	0101823	1 B
R221	120Ω	0101121	1 B
R222	6.8kΩ	0101682	1, 2 B
R223	22Ω	0101220	1 B
R224	12kΩ	0101123	1, 2 B
R225	12kΩ	0101123	1 B
R226	1.5kΩ	0101152	1 C
R227	270kΩ	0101274	1 C
R228	47kΩ	0101473	1 C
R229	1kΩ	0101102	1 C
R230	2.2kΩ	0101222	1 C
R231	47kΩ	0101473	1 C
R232	27kΩ	0101273	1 B
R233	10kΩ	0101103	1 B
R234	1kΩ	0101102	1 B
R235	22Ω	0101220	1 B
R236	22Ω	0101220	1 C
R237	10kΩ	0101103	1, 2 C
R238	6.8kΩ	0101682	2 C
R239	22Ω	0101220	1 C
R240	10Ω	0101100	1, 2 A
R241	39kΩ	0101393	1 A
R242	4.7kΩ	0101472	1 A
R243	1kΩ	0101102	1 A
R244	68Ω	0101680	1 B
R245	22Ω	0101220	1 B
R246	120Ω	0101121	1 B
R247	1.5kΩ	0101152	1 A, B
R248	1.5kΩ	0101152	1 B
VR251	47kΩ(B) Tuning Meter Adj. (FM)	1035170	1 C
VR252	10kΩ(B) Tuning Meter Adj. (AM)	1035130	1 C
C201	0.022μF ±80% 25 V CC.	0656223	2 A
C202	0.01μF ±10% 50 V MC.	0601107	2 A
C203	0.01μF ±20% 50 V CC.	0652103	2 A
C204	0.047μF ±80% 25 V CC.	0656473	2 B
C205	0.047μF ±80% 25 V CC.	0656473	2 B
C206	0.022μF ±80% 25 V CC.	0656223	2 C
C207	220pF ±10% 50 V CC.	0660221	2 C
C208	220pF ±10% 50 V CC.	0660221	2 C

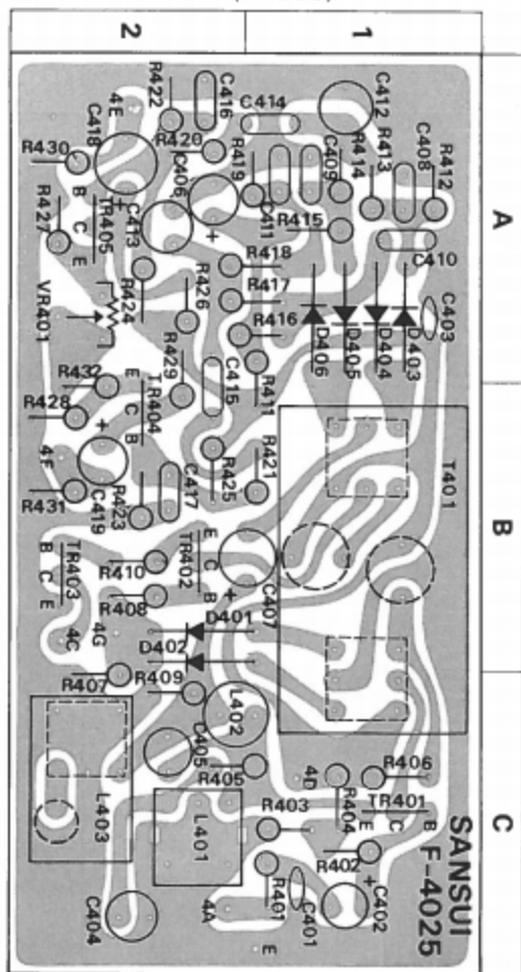
±10% 1/4W CR.

W	X	Y	Z	
C209	3.3μF	25 V EC.	0513339	2 C
C210	150pF ±10% 50 V CC.		0660151	2 C
C211	0.022μF ±80% 25 V CC.		0656223	1 A
C212	1μF	50 V EC.	0505109	1 A
C213	0.022μF		0656223	1 A
C214	0.022μF		0656223	1 B
C215	0.022μF		0656223	1 A
C216	0.022μF ±80% 25 V CC.		0656223	1 A
C217	0.022μF		0656223	1 B
C218	0.022μF		0656223	1 B
C219	0.022μF		0656223	1 B
C220	3.3μF	25 V EC.	0513339	1 B
C221	0.022μF ±80% 25 V CC.		0656223	1 B
C222	22pF ±10% 50 V CC.		0660220	1, 2 B
C223	0.022μF ±80% 25 V CC.		0656223	1 B
C224	0.022μF ±80% 25 V CC.		0656223	2 B, C
C225	330pF ±10% 50 V CC.		0660331	2 B
C226	0.022μF		0656223	1 C
C227	0.022μF ±80% 25 V CC.		0656223	2 C
C228	0.022μF ±80% 25 V CC.		0656223	1, 2 C
C229	0.022μF		0656223	1, 2 C
C230	10μF	16 V EC.	0512100	1 A
C231	0.047μF ±80% 25 V CC.		0656473	1 A
C232	0.047μF ±80% 25 V CC.		0656473	1 A
C233	0.01μF ±10% 50 V MC.		0601107	1 A
C234	47pF ±10% 50 V CC.		0660470	1 A
C235	47pF ±10% 50 V SC.		0610401	1 A
C236	10pF ±10% 50 V CC.		0660100	1 A
C237	0.022μF ±80% 25 V CC.		0656223	1 B
C238	0.022μF ±80% 25 V CC.		0656223	1 B
C239	0.022μF ±80% 25 V CC.		0660471	1 C
C240	470pF		0515109	1 C
C241	1μF	50 V EC.	0515109	1 C
C242	1μF	50 V EC.	0515109	1 C
C243	0.022μF ±80% 25 V CC.		0656223	1 B
C244	0.022μF ±80% 25 V CC.		0656223	1 C
C245	0.022μF ±80% 25 V CC.		0556223	1 C
C246	47μF	6.3 V EC.	0510470	1 C
TR251			0305460	1 A
TR252			0305460	1 A
TR253			0305460	1 B
TR254			0305460	1 C
TR255			0305460	1 A
TR256			0305460	1 A
TR257			0305470	1 B
D251			0310330	1 A
D252			0310330	2 C
D253			0310330	2 C
D254			0310330	2 B, C
D255			0310330	2 B, C
D256			0310330	1 C
D257			0310330	1 C
T201			4235610	2 A
T202			4235610	2 B
T203			4235600	2 B
T204			4235620	2 C
T205			4230370	2 A
T206			4230370	2 B
T207			4230380	2 B
T208			4220330	1 A
T209			4235400	1 B
T210			7510470	1, 2 A

PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

FM MPX BLOCK <F-4025>

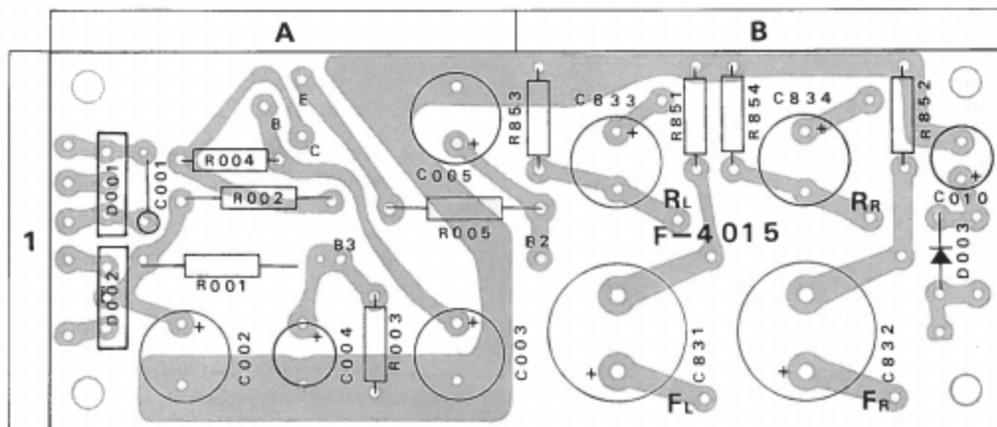


W	X	Y	Z
R401	1kΩ	0101102	1C
R402	100kΩ	0101104	1C
R403	15kΩ	0101153	1C
R404	22kΩ	0101223	1C
R405	47kΩ	0101473	1,2C
R406	68kΩ	0101683	1C
R407	100kΩ	0101104	2C
R408	5.6kΩ	0101562	2B
R409	2.2kΩ	0101222	2C
R410	330Ω	0101331	2B
R411	220kΩ	0101224	1A, B
R412	220kΩ	0101224	1A
R413	10kΩ	0101103	1A
R414	10kΩ	0101103	1A
R415	220kΩ	0101224	1A
R416	220kΩ	0101224	1,2A
R417	10kΩ	0101103	1,2A
R418	10kΩ	0101103	1,2A
R419	220kΩ	0101224	1A
R420	56kΩ	0101563	2A
R421	56kΩ	0101563	1B
R422	82kΩ	0101823	2A
R423	82kΩ	0101823	2B
R424	1MΩ	0101105	2A
R425	1MΩ	0101105	2B
R426	5.6kΩ	0101562	2A
R427	1kΩ	0101102	2A
R428	1kΩ	0101102	2B
R429	5.6kΩ	0101562	2A, B
R430	47kΩ	0101473	2A
R431	47kΩ	0101473	2B
R432	2.2kΩ	0101222	2A, B
R433	39kΩ	0101393	2B
		(undersmath)	
VR401	10kΩ (B) FM Separation Adj.	1035130	2A
C401	68pF ±10% 50 V CC.	0660680	1C
C402	10μF 10 V EC.	0511100	1C
C403	0.047μF +8% -20% 50 V CC.	0657473	1A
C404	10000pF ±10% 50 V SC.	0611103	2C
C405	22000pF ±5% 50 V SC.	0610222	2C
C406	1μF 50 V EC.	0515109	2A
C407	10μF 25 V EC.	0513100	1,2B
C408	0.001μF	0601106	1A
C409	0.001μF	0601106	1A
C410	0.001μF	0601106	1A
C411	0.001μF	0601106	1A
C412	0.001μF	0601106	1A
C413	0.001μF ±10% 50 V MC.	0601106	1A
C414	0.047μF	0601477	1A
C415	0.047μF	0601477	2A, B
C416	0.002μF	0601206	2A
C417	0.002μF	0601206	2B
C418	1μF 50 V EC.	0515109	2A
C419	1μF	0515109	2B
C420	0.022μF +80% -20% 25 V CC.	0656223	2A
C421	3.3μF 25 V EC.	0513339	2B
		(undersmath)	

W	X	Y	Z
TR401	25C711 (F, G)	0305732, 3	1 C
TR402		0305732, 3	2 B
TR403		0305732, 3	2 B
TR404		0305470, 1	2 A, B
TR405		0305470, 1	2 A
D401	1N34A	0310400	1, 2 B
D402		0310400	1, 2 B
D403		0310401	1 A
D404		0310401	1 A
D405		0310401	1 A
D406		0310401	1 A
D407		DS-410	0340030
T401	19kHz, 38kHz MPX Coil	4240670	1 B, C
L401	19kHz MPX Coil	4240590	2 C
L402	Micro-Inductor	4900090	1, 2 C
L403	67kHz MPX Coil	4240680	2 C

POWER BLOCK <F-4015>

W	X	Y	Z
R001	560Ω	±10% 1 W CR.	0104561 1 A
R002	82Ω		0104820 1 A
R003	820Ω		0111821 1 A
R004	4.7kΩ		0111472 1 A
R005	220Ω		0104221 2 A, B
R651	470Ω	±10% 1/2 W SR.	0111471 1 B
R652	470Ω		0111471 1 B
R653	470Ω		0111471 1 B
R654	470Ω		0111471 1 B
R655	470Ω		0111471 1 B
C001	0.001μF	±20% 400 V CC.	0590106 1 A
C002	470μF		0515471 1 A
C003	220μF	50 V EC.	0515221 1 A
C004	1000μF	16 V EC.	0512102 1 A
C005	470μF	25 V EC.	0513471 1 A
C810	220μF	10 V EC.	0511221 1 B
C831	1000μF	35 V EC.	0549004 1 B
C832	1000μF		0549004 1 B
C833	470μF		0514371 1 B
C834	470μF		0514371 1 B
C835	470μF		0514371 1 B
TR001	25C971	0305531	1 A
D001	100C-1	0310680	1 A
D002		0310680	1 A
D003	100-1	0310340	1 B



OTHER PARTS AND THEIR POSITIONS ON CHASSIS

W: Parts No. X: Parts Name Y: Stock No.

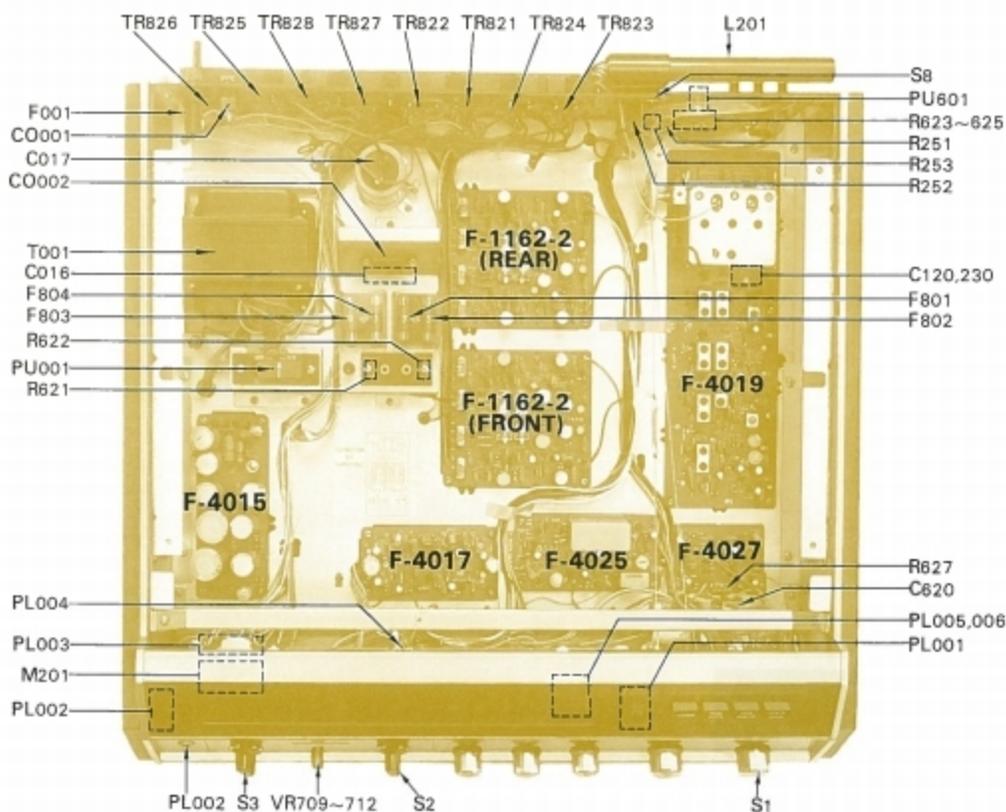
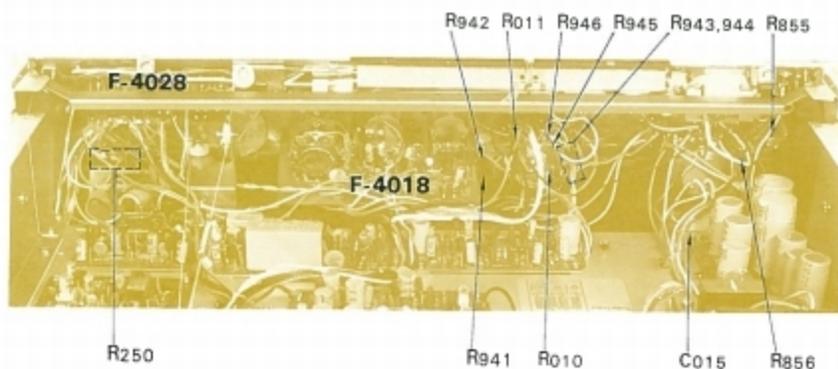
W	X	Y
R250	1k Ω	0101102
R251	1.2k Ω	0101122
R252	1.2k Ω	0101122
R253	330 Ω	0101331
R251	56k Ω	0101563
R252	56k Ω	0101563
R253	100k Ω	0101104
R254	100k Ω	0101104
R255	470k Ω	0101104
R256	470k Ω	0101104
R257	150 Ω	0101151
R245	15k Ω	0101153
R255	470 Ω	0111471
R256	470 Ω	0111471
R241	2.7k Ω	0101272
R242	1.5k Ω	0101152
R243	15k Ω	0101153
R244	15k Ω	0101153
R245	39k Ω	0101393
R246	39k Ω	0101393
R010	22 Ω	0111220
R011	47 Ω	0101470
VR209~712	250k Ω (MIN) \times 4	Balance Control 1040130
C120	0.001 μ F \pm 20%	50V CC. 0652102
C230	0.022 μ F \pm 20%	25V CC. 0656223
C230	220 μ F	25V EC. 0513221
C215	0.022 μ F	\pm 20% 600V OC. 0591227
C016	0.0047 μ F	0591476
C017	2200 μ F	50V EC. 0559307
TR601		Left Front 0308330,1 or 0308320,1
TR602		Left Front 0308330,1 or 0308320,1
TR603		Right Front 0308330,1 or 0308320,1
TR604	25D315 (C, D) or 25D155 (N, M)	Right Front 0308330,1 or 0308320,1
TR605		Left Rear 0308330,1 or 0308320,1
TR606		Left Rear 0308330,1 or 0308320,1
TR607		Right Rear 0308330,1 or 0308320,1
TR608		Right Rear 0308330,1 or 0308320,1
T001	Power Transformer	4001020
L201	Ferrite Bar Antenna	4200280
M201	Tuning Meter (200 μ A)	4300390, 1
S1	Selector Control	1102340, 50
S2	Synthesizer/Decoder Function Control	1103420
S3	Power/Speakers Switch	1102330, 60
S4	FM DIST./LOC Switch	1110040
F001	Power Fuse 100~117V 2A 220~240V 1A	0430241
F001	Power Fuse Holder	2300040
F001	Quick Acting Fuse 1.5A	Left Front 0430101
F002		Right Front 0430101

W	X	Y
F003	Quick Acting Fuse 1.5A	Left Rear 0430101
F004		Right Rear 0430101
	Quick Acting Fuse Holder	2310070
PL001	Dial Indicator 6.3V 250mA	0420020
PL002		0420020
PL003		Tuning Meter Lamp Lamp Holder PL001~003 0420020
PL004	Needle Lamp	0400101
PL005	FM Stereo Indicator 4 CHANNEL Indicator	0400190
PL006		
CO001	AC Outlet	2450040
CO002		2450040
J001	Headphone Jack	2430060
PU001	DI/N Socket	2430040
PU001	Voltage Selector Plug Socket	2410090 2410080

Abbreviations

- CR** : Carbon Resistor
- SR** : Solid Resistor
- CoR** : Cement Resistor
- CC** : Ceramic Capacitor
- EC** : Electrolytic Capacitor
- AEC** : Aluminium Electrolytic Capacitor
- MC** : Mylar Capacitor
- SC** : Polystyrene Capacitor
- OC** : Oil Capacitor
- TC** : Tantalum Capacitor

* Manufacturer reserves right to change design and/or specifications without notice for purpose of improvement.



The Sansui logo consists of the word "Sansui" in a white, italicized serif font, set against a solid black rectangular background.

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