OPERATING INSTRUCTIONS & SERVICE MANUAL

AM/FM STEREO AMPLIFIER

SANSUI AU-7500





SANSUI ELECTRIC CO., LTD.

We are grateful for your choice of the AU-7500 Integrated Amplifier.

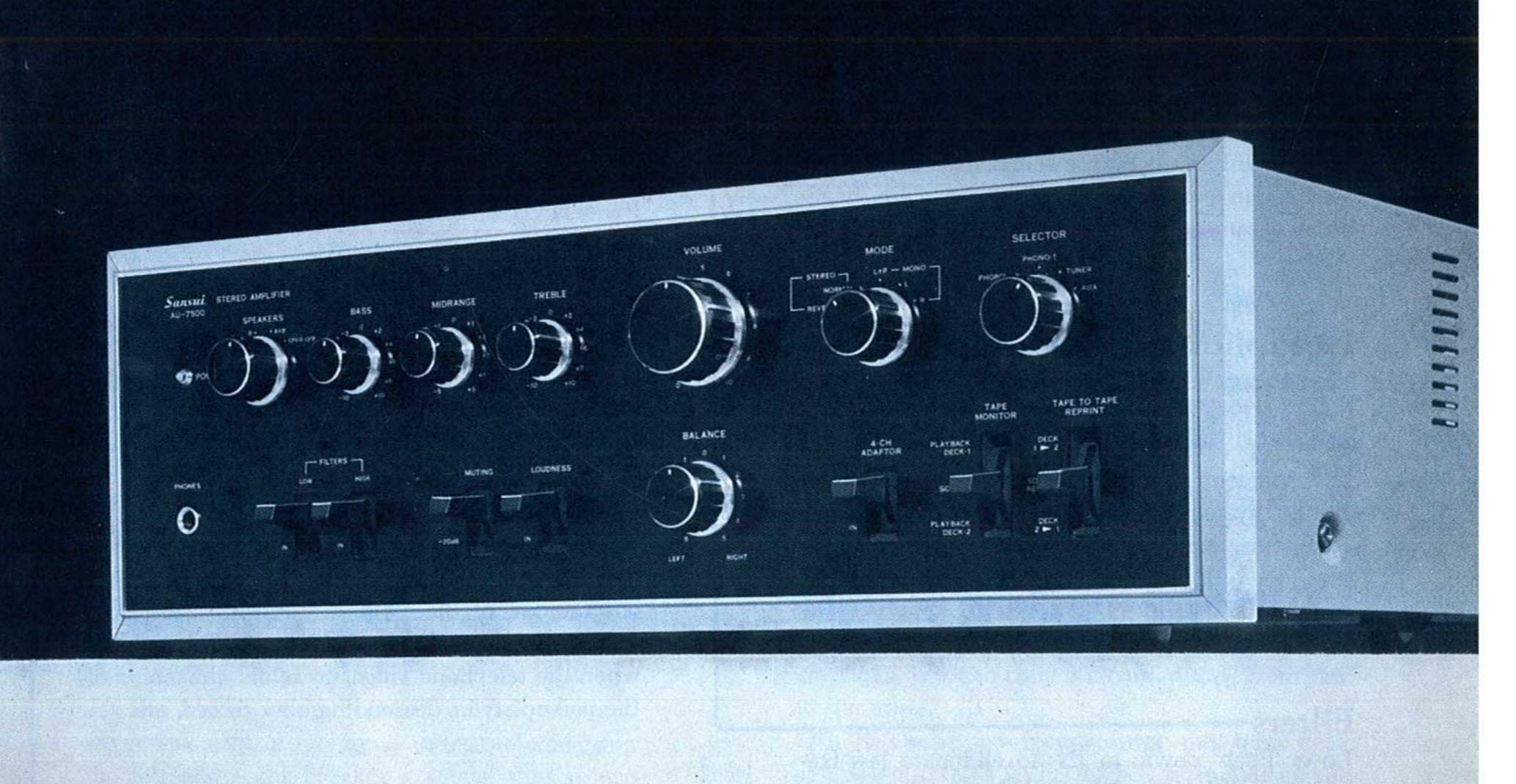
For over a quarter of a century, Sansui has been building hi-fi audio equipment, and nothing else. Our mission is very old and at once ever new to us: to bring the reproduced sound closer and closer to the original.

The AU-7500 now in your hands is one answer from us to this never-ending quest. It is a product of the cream of sophisticated modern audio-electronics knowhow, coupled with our long experience, and as such, we present it to you with our full confidence. The AU-7500 is a new breed of Sansui's AU series integrated amplifiers. Its tone quality has been polished and perfected through an unprecedented number of listening tests in different acoustic environments. We feel certain that you will like it, but you will find this out as soon as you play your first record through it.

This manual has been prepared to guide you in operating and caring for the amplifier correctly, so that you will get the most out of its built-in high performance and exceptional versatility.

May we suggest that you read it once carefully?

CONTENTS



SWITCHES AND CONTROLS

Power Indicator

Lights when you turn on the Power/Speakers Switch, and remains lit until you turn off the switch.

Power/Speakers Switch

Controls both the power supply and selection of speaker systems.

POWER OFF: Cuts off power supply for the amplifier.

A: Turns on power supply and energizes the speaker systems connected to SYSTEM-A speaker terminals on the rear. Because of the builtin amplifier/ speaker protection circuit, sound will come out with a delay of a few seconds.

B: Energizes speaker systems connected to SYSTEM-B speaker terminals.

A+B: Energizes both A and B pairs of speaker systems.

SPKR OFF: Cuts off the sound from all speaker systems to permit private listening with headphones connected to the Headphone Jack.

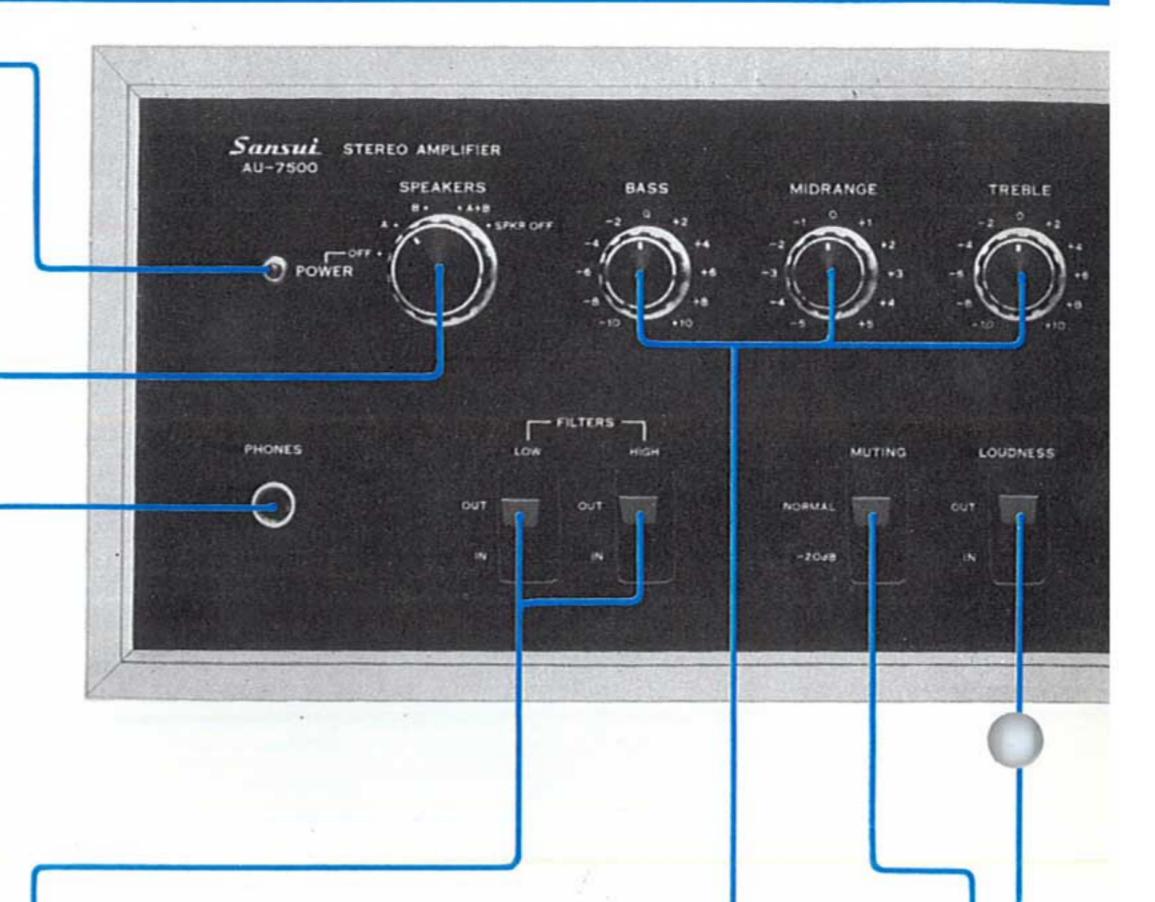
Headphone Jack

Plug stereo headphones into this jack for private listening or monitoring, but be sure to turn the Power/Speakers Switch to SPKR OFF first unless someone is listening to the sound from speaker systems in another room. The jack will accept any standard stereo phone plug, but for best tone quality, we recommend a dynamic type such as the Sansui SS-20 or SS-10.

Filters-

Low: Push down to IN to eliminate low-frequency noise such as the rumbling of your turntable motor. If no such noise is present, be sure to keep it off.

High: Push down to IN to eliminate high-frequency noise such as the surface noise from a worn record or as the fluorescent lamp noise mixed in radio broadcasts.



Triple Tone Controls

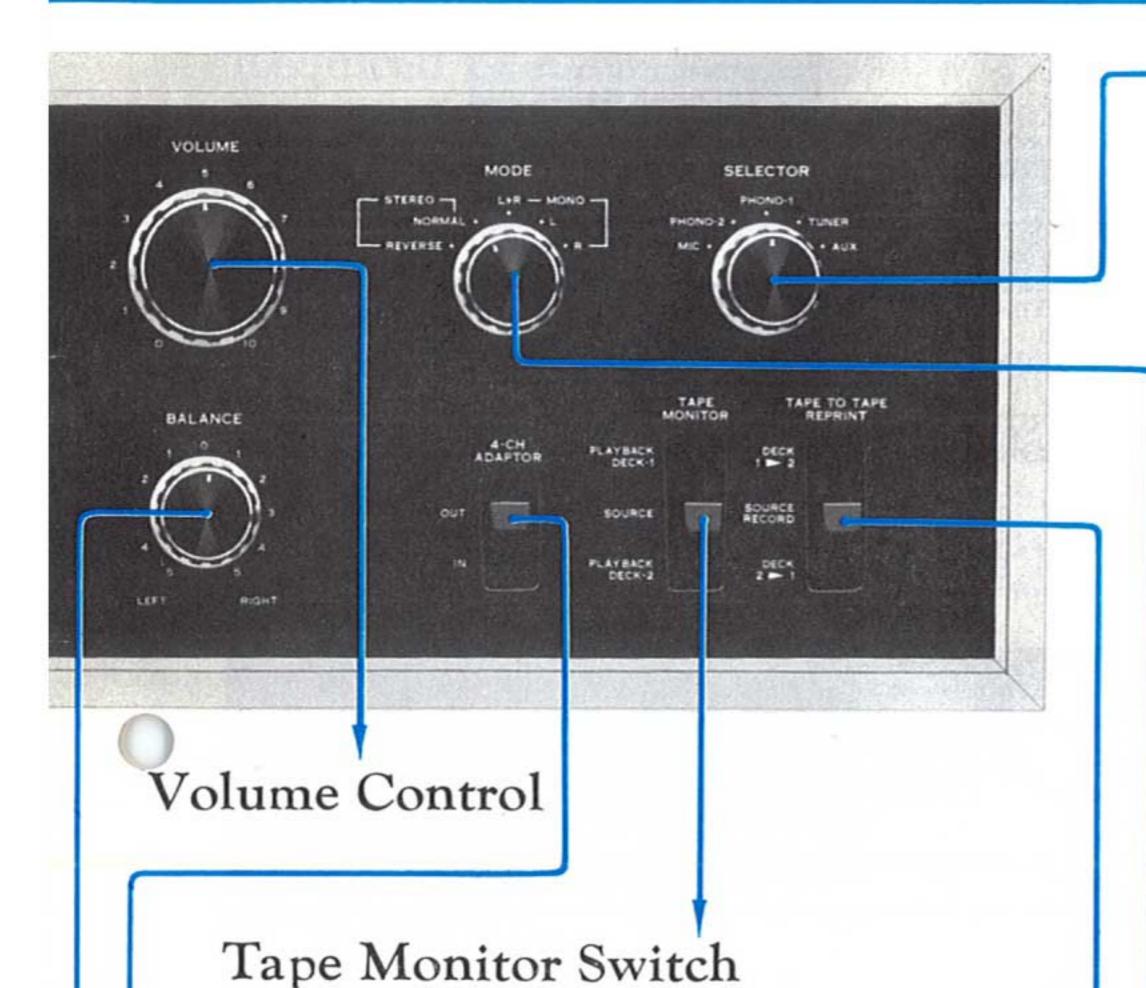
Let you tailor the tone quality of reproduced sound to your taste by adjusting the amplifier's frequency response curve. The Bass Control is for adjusting the loudness of bass notes as may be produced by a bass; the Midrange one for adjusting that of middle range notes as may be produced by the human voice, and the Treble one for adjusting that of treble notes as may be produced by cymbals.

Muting Switch-

Reduces the sound volume by 20dB at once without the use of the Volume Control. Most convenient to lower the sound volume temporarily when the telephone rings, to avoid the noise of the pickup stylus descending on a record, etc.

Loudness Switch

If desired, push down to IN to emphasize the highs and lows when listening at low volume levels. This is because the mechanism of human hearing is such that the high and low notes seem greatly enfeebled at low listening levels.



The AU-7500 connects two tape decks at a time. Set this switch to PLAYBACK DECK-1 or PLAYBACK DECK-2 to reproduce a recorded tape or monitor a recording as you make it on a tape deck connected to the amplifier (monitoring is possible only if the tape deck is equipped with separate recording and playback heads). Otherwise, be sure to keep it at SOURCE.

4-Channel Adaptor Switch

If you connect a 4-channel adaptor to the AU-7500 and make other necessary connections, you can upgrade this 2-channel stereo amplifier to hear 4-channel stereo sound by pushing this switch down to IN (refer to page 8).

Balance Control

Set the Mode Switch to MONO L+R once and adjust this control for equal sound volume from the left and right speaker systems, then return the switch to STEREO NORMAL. If there is a large difference in the sound volumes from the two speaker systems even with this control set near the center, it may be because left and right output signal levels from the program source component (turntable, tuner, tape deck, etc.) are different. Check the component once.

Selector Control

Turn to an appropriate position to hear the desired program source.

MIC: To use microphones (high impedance type of 10 kilo-ohms or more) plugged into the Mic Jacks on the rear.

PHONO-2, PHONO-1: To play records on a turntable connected to the PHONO 2 or 1 terminals on the rear. The input impedance of the PHONO-2 circuit is adjustable with the rear-panel Pickup Load Switch to match the load impedance of the cartridge in use.

TUNER: To hear a radio broadcast from a tuner connected to the TUNER terminals on the rear.

AUX: To reproduce whatever program source is connected to the AUX terminals on the rear. (Connect a turntable with a crystal or ceramic cartridge, the audio outputs of a television, the playback outputs of a tape recorder, etc. to the AUX terminals.)

Mode Switch

STEREO: The NORMAL position is normal. If you have connected the left and right speaker systems in reverse, set this switch to REVERSE to restore the normal stereo effect without physically changing the speaker connections.

MONO: Set to L+R, and the monophonic mixture of the left and right channel signals is heard from both speaker systems. Set to L(R), and only the left (right) channel signal is heard from both speaker systems.

Tape-to-Tape Reprint Switch

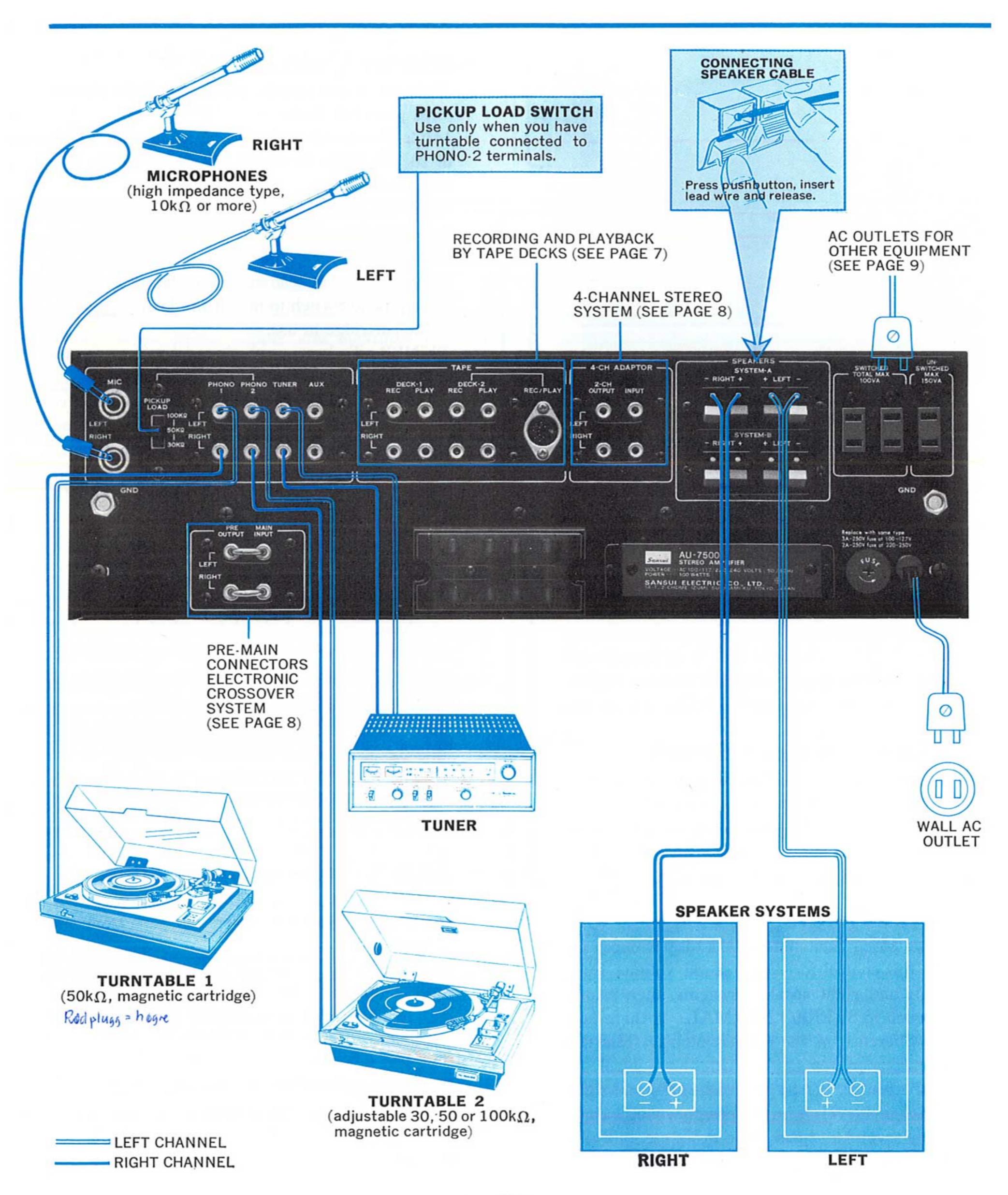
If you have two tape decks connected to the amplifier, you can copy a recorded tape from one to the other.

DECK 1 ▶ 2: To record from the tape deck connected to the TAPE DECK-1 terminals on the rear to the one connected to the TAPE DECK-2 terminals.

DECK 2 ▶ 1: Reverse of the above.

SOURCE RECORD: To record or play on one tape deck alone. When neither of the above procedures is desired, keep the switch in this position.

SETTING UP YOUR AU-7500/OPERATING PROCEDURE



Required Connections

Speaker Systems: If you are connecting only one pair of speaker systems to the AU-7500, they may have any impedance from 4 to 16 ohms. Connect them to the SYSTEM-A or -B terminals on the rear, making sure not to confuse the left and right cables, plus and minus leads on the amplifier and speaker ends.

But if you wish to connect **two pairs of speaker** systems and drive them simultaneously by turning the Power/Speakers Switch to A+B, each speaker system should have impedance of 8 to 16 ohms. Using a system with lower impedance could result in a breakdown of the amplifier.

Turntable: Connect it to the PHONO 1 or 2 terminals on the rear. For best results, use a turntable with a magnetic pickup cartridge.

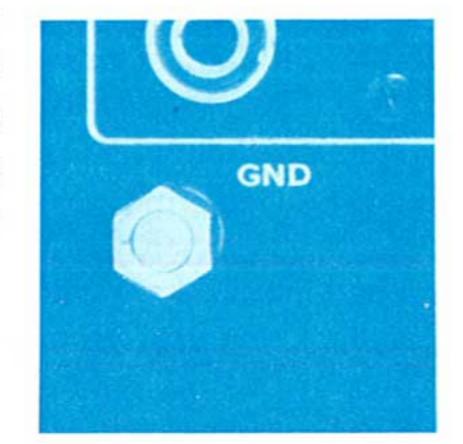
The PHONO-1 input circuit has impedance of 50 kilo-ohms, enabling it to accept most cartridges. The impedance of the PHONO-2 circuit, however, is adjustable between 30 and 100 kilo-ohms with the Pickup Load Switch. If your cartridge requires load resistance considerably smaller or greater than 50 kilo-ohms, connect it to the PHONO 2 terminals and set the switch to the nearest ohm value.

Microphone: Connect high-impedance (10 kiloohms or more) microphones to the Mic Jacks on the rear. If you want to use low-impedance (e.g., 600 ohms) microphones, you need an impedance matching transformer between the amplifier and microphones.

Tuner: Connect the output terminals of a tuner to the TUNER input terminals on the amplifier's rear panel.

Grounding: Besure to connect the grounding ter-

minal (or lead) of the turntable and tuner to the grounding terminal of the amplifier. It may suppress the hum noise which may otherwise occur.



Operating Procedure

- 1. Set the Selector Control to the desired program source.
- **2.** Turn the Mode Switch to STEREO NORMAL. If you are using a monophonic turntable or a single microphone, set the switch to either L or R, whichever input circuit is connecting the device.
- **3.** Set the 4-channel Adaptor Switch to OUT and the Tape Monitor Switch to SOURCE, unless you want to use them.
- 4. Set the Power/Speakers Switch to as required.
- **5.** Start the program source component and play the program source.
- **6.** Use the amplifier's other controls and switches to suit your taste or room acoustics.

Note:

- 1. To play a monophonic record on a stereo turntable, follow the same procedure as for playing a stereo record. Better results are normally obtained.
- 2. If you raise the sound volume when you are using a microphone or microphones in an acoustically reflective room, loud oscillating noise may be emitted from the speaker systems. This is a phenomenon called howling and is no fault of the amplifier. It can be corrected either by lowering the volume or directing or moving the microphone(s) away from the speaker systems.

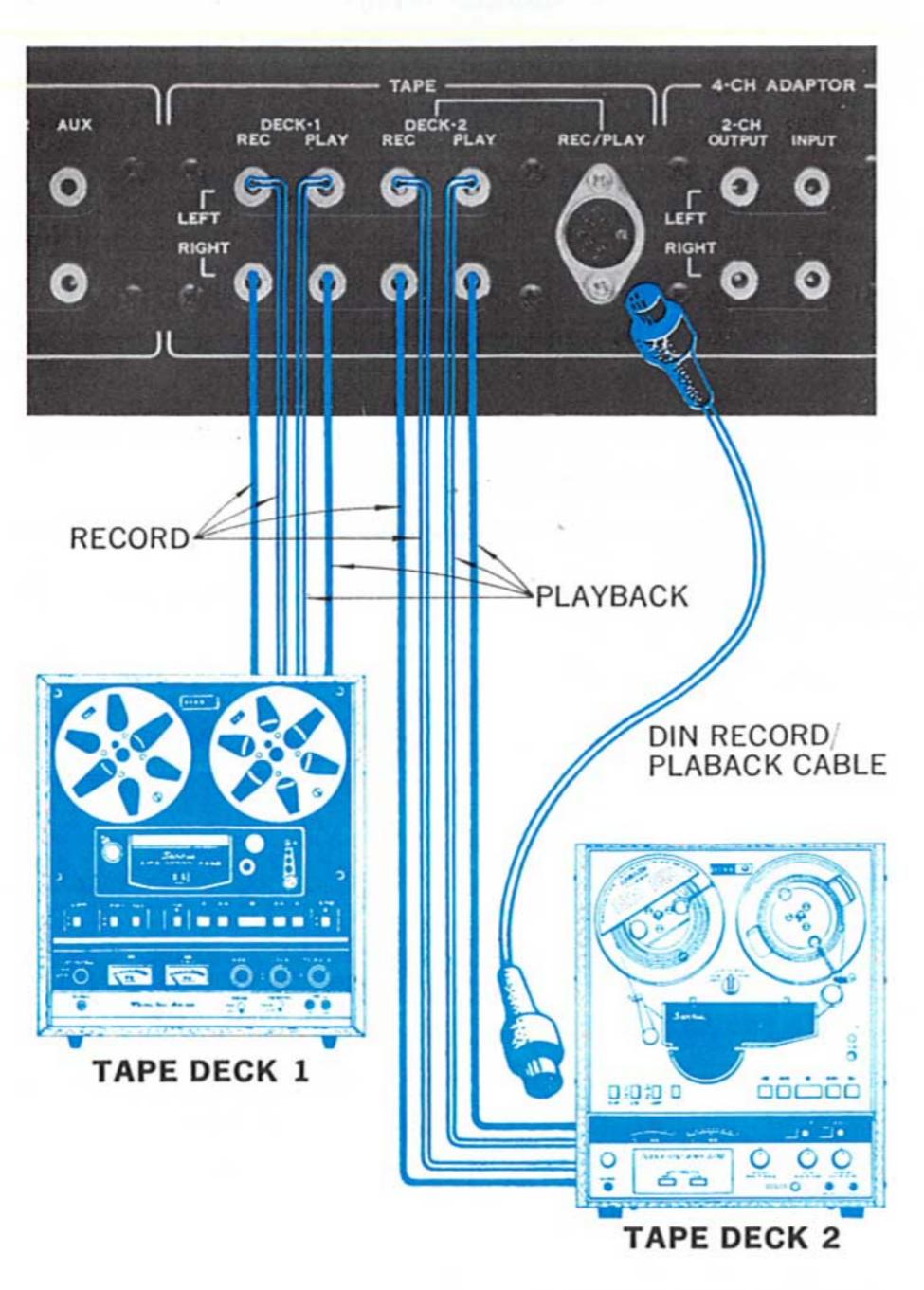
RECORDING AND PLAYBACK BY TAPE DECKS

Connecting Tape Decks

The AU-7500 connects up to two tape decks for recording and playback. Connect the input terminals of a tape deck to either TAPE DECK-1 or 2 REC terminals of the amplifier, and its output terminals to the PLAY terminals of the same circuit.

The DIN socket is a part of the TAPE DECK-2 circuit and can be used only if your tape deck is equipped with a similar socket. It is manufactured according to the German industrial standard to permit tape recording and playback from a single cable with a special 5-pin plug on each end.

Should you wish to connect more than two tape decks, you may connect it to the 4-CH ADAPTOR terminals. The OUTPUT terminals have the same electrical function as the REC terminals, while the INPUT terminals are equivalent to the PLAY terminals.



LEFT CHANNEL
RIGHT CHANNEL

NOTE: Do not connect tape deck(s) to pin jack terminals and DIN socket of TAPE DECK-2 circuit simultaneoulsy.

Recording & Playback Procedure Recording

- 1. Set the Selector Control to the program source you wish to record.
- **2.** Adjust the recording volume control of the tape deck to preset the recording level.
- 3. Start the tape deck in the recording mode.
- **4.** To monitor, follow the same procedure as indicated in the section entitled 'Playback'.

Playback

- 1. Set the Tape Monitor Switch to PLAYBACK DECK-1 or 2.
- 2. Start the tape deck in the playback mode.
- **3.** Use the amplifier's other switches and controls to suit your taste and room acoustics.

Procedure for Copying a Recorded Tape

Depending on which tape deck you wish to use for recording, set the Tape-to-Tape Reprint Switch correctly. That is, if you are copying from the tape deck connected to the TAPE DECK-1 terminals to the one connected to the TAPE DECK-2 terminals, set it to DECK 1▶2. If you want to do it the other way around, set it to DECK 2▶1.

By operating the Tape Monitor Switch, you can monitor the recording as you copy it from one tape deck to the other. Set the switch to the tape deck you are using to reproduce, and you can monitor the recording before it is copied. Set it to the tape deck you are using to record, and you can monitor the recording after it is copied.

Notes about Recording

- 1. Monitoring of recorded sound is possible only if the recording tape deck is equipped with separate heads for recording and playback. Otherwise, set the Tape Monitor Switch to SOURCE and listen to the original input sound before it is recorded.
- 2. The various switches and controls on the AU-7500 do not affect the sound recorded into the tape deck. They only adjust the sound from the speaker systems or headphones.
- **3.** When copying a recorded tape from one tape deck to the other, setting the Tape Monitor Switch to SOURCE electrically separates the tape record/playback circuits from the rest of the amplifier. You can use the amplifier to play records or hear radio broadcasts while the copying is underway.

UPGRADING YOUR STEREO

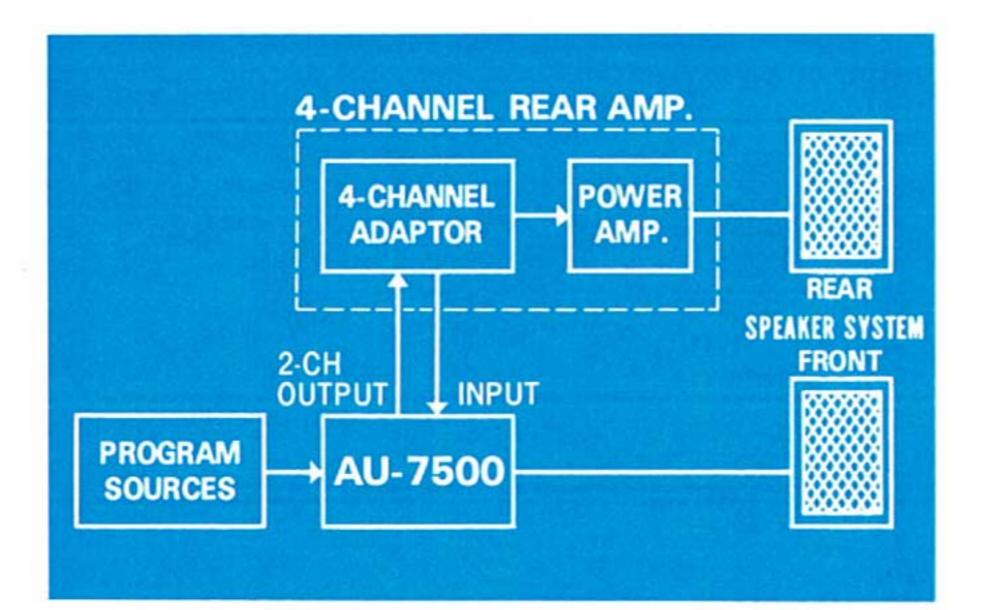
4-Channel Stereo System

The sound we hear daily is a mixture of the sound that reaches our ears straight from the sound source—be it a musical instrument, a jet, a man's mouth or what have you—and the 'indirect sounds' that arrive at your ears only after they are reflected off various surfaces, such as the walls, ceiling and so forth.

Four-channel recordings are made using two microphones in the front of the concert hall and two in the rear (to simplify the explanation). The 'indirect sounds' with their complicated waveforms are mainly picked up by the two microphones in the rear, and reproduced out of the two rear speakers in a 4-channel stereo set-up for greatly enhanced 'ambience' effects. The effect is almost as if the original live performance were re-played right in your own room. This new approach can now be yours simply by adding certain equipment—mainly, a Sansui 4-channel rear amplifier with its unique QS (RM) synthesizer decoder matrix (patents pending), and a second pair of speaker systems—to your 2-channel stereo system.

Connection of such a rear amplifier or 4-channel adaptor is easy. Just connect the 4-CH ADAPTOR 2-CH OUTPUT terminals of the AU-7500 with the input terminals of such rear amplifier or 4-channel adaptor, then connect its 4-CH ADAPTOR INPUT terminals with the output terminals of such unit.

To operate the rear amplifier or 4-channel adaptor so connected, push the 4-Channel Adaptor Switch on the amplifier's front panel, and otherwise follow its manufacturer's instructions. Electrically, the 4-CH ADAPTOR 2-CH OUTPUT and INPUT terminals possess the same functions as the TAPE REC and MON terminals, respectively.



Electronic Crossover System

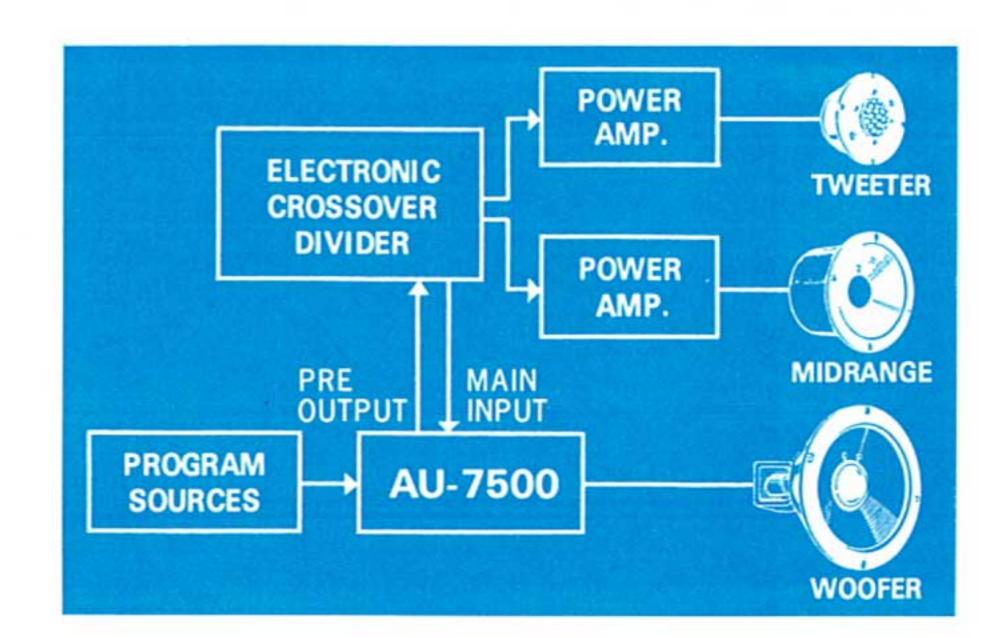
The electronic crossover system affords these advantages:

- 1. It enables the tweeters, midranges and woofers to be driven by separate power amplifiers. So you can make optimum use of speakers of different impedances and efficiencies, as well as power amplifiers of different output capacities and tone qualities.
- 2. It eliminates the need for the conventional LC type crossover network. With the electronic crossover divider, the amplifier's damping factor is no longer affected and you can set crossover frequencies as you like.

Electronic Crossover System Using the AU-7500

The preamplifier and power amplifier sections of the AU-7500 can be disconnected for independent usage, the latter section being available for driving a separate speaker in an electronic crossover system. To build such a system, you will need two- or three-way speaker systems and an electronic crossover divider, along with and at least one or two additional power amplifiers.

Connection is not all that difficult. First remove the Pre-Main Connectors uniting the amplifier's pre-amplifier outputs and main (power) amplifier inputs. Then just connect the PRE OUTPUT to the input terminals of the electronic crossover divider, which divides the input signals into high, medium and low range(s). Finally, couple the separate output terminals of the electronic crossover divider to the amplifier's MAIN INPUT and the additional power amplifier(s), feeding their outputs separately into individual speakers, as illustrated below.



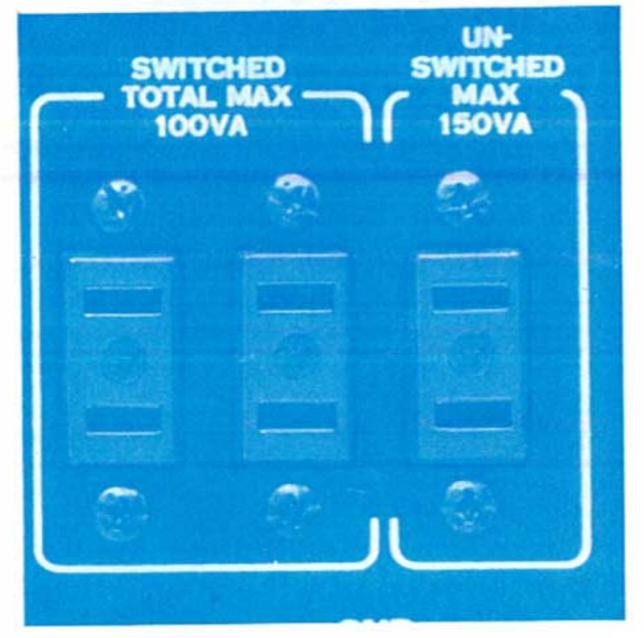
SIMPLE MAINTENANCE HINTS/ACCESSORY LIST

Real-Panel AC Outlets

Of the three AC outlets provided on the rear panel, the ones marked 'SWITCHED' are controlled by the front-panel Power/Speakers Switch. The third one, marked 'UNSWITCHED,' is always 'live' and independent of the Power/Speakers Switch. The voltage delivered at these AC outlets is the same as the power supply voltage used.

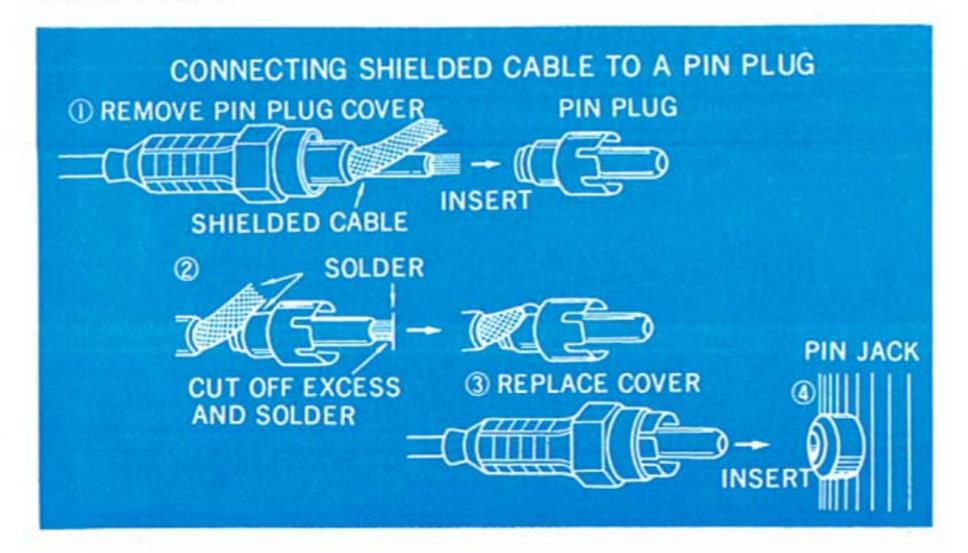
The two 'SWITCHED' outlets have a total power capacity of 100VA, and the UNSWITCHED one 150VA. Before you connect any appliance to them, be sure that it is adjusted for use at the same power supply voltage, and that its power consumption is not beyond these figures. Otherwise, serious danger

could result.



Make Proper Connections

Connect the leadwires of speaker cables properly. If they are loose or touch other parts, the amplifier may produce noise and eventually break down. Also, before connecting a turntable, tuner and/or tape deck, be sure to read their manufacturers' instructors.



Speaker Impedance

Do not ever connect two pairs of speaker systems with impedance of less than 8 ohms each. Doing so will reduce the composite speaker impedance in each channel to less than 4 ohms, and may cause the quick-acting fuses to blow or result in a more serious breakdown over a long period of time.

Phasing of Speakers

Listen to any monophonic reproduction. If the speaker systems are correctly phased, the sound will seem to come from a point midway between the left and right speaker systems. If the sound is not directly in front of you, however, the speaker systems are out of phase. If you notice this condition, check the speaker connections once. To correct the condition, switch the amplifier off and reverse the connection of plus and minus leadwires of one speaker cable. Also, be careful not to connect a single speaker system between the SYSTEM-A and SYSTEM-B terminals by mistake.

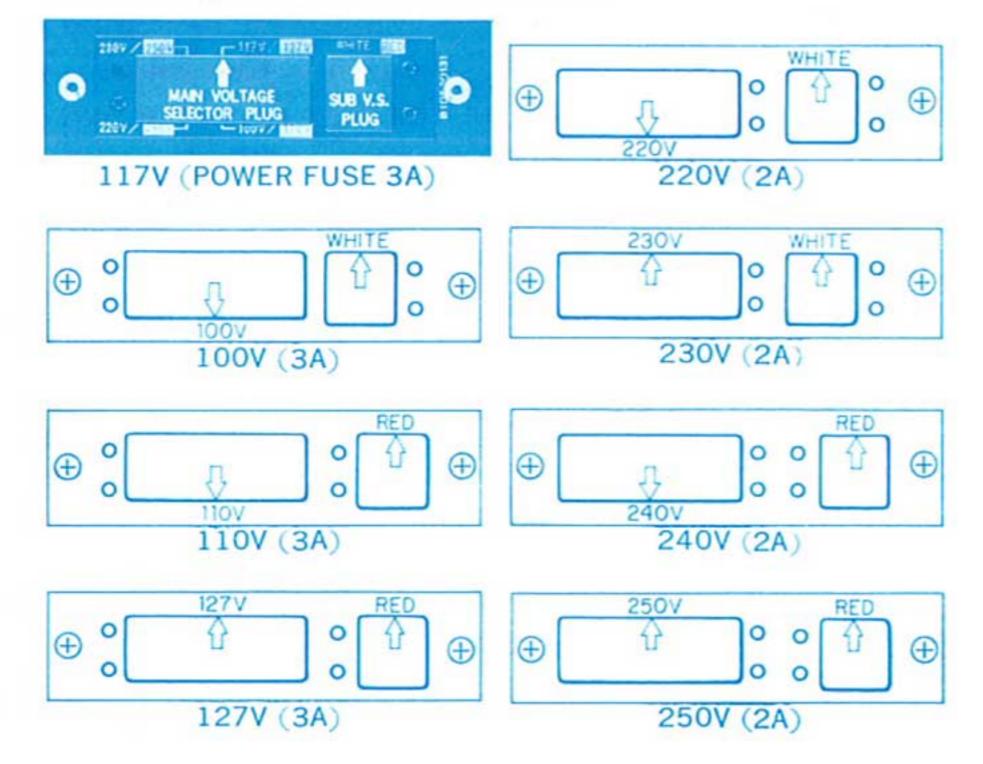
Howling and Hum

Take care never to place a turntable on or too near a speaker system, or the vibration produced by the speaker system is transmitted and causes an oscillating phenomenon called howling. It is best to keep these components completely separated, but if this is impossible, place a thick cushion between them. Humming, in contrast, is a phenomenon caused by incomplete or incorrect turntable-amplifier connections. Should this occur, check to see if all connections are completely made and if the connecting cables are sufficiently thick. Hum noise may sometimes be eliminated by connecting the grounding lead of the turntable to the GND terminal on the amplifier's rear panel.

Voltage Adjustment

Your AU-7500 is adjusted in our factory to operate at the power supply voltage of your area. That voltage is indicated on the amplifier. Should you, after purchasing the amplifier, move to an area where the power supply voltage is different from the one indicated, adjust the amplifier's voltage selector plugs as follows:

- 1. Remove the two screws securing the name plate on the rear, then remove the name plate.
- 2. Set the arrow mark on the Main Voltage Selector Plug to the new voltage: 100, 110, 117, 127, 220, 230, 240 or 250 volts.
- **3.** If the new voltage is indicated in red, set the arrow mark on the adjacent Sub Voltage Selector Plug to "RED". If it is indicated in white, however, set that arrow to "WHITE".
- **4.** Change the power fuse as well whenever the power supply voltage has changed. For 100—127 volt operation, use a 3-ampere glass-tubed fuse. For 220—250 volt operation, use a 2-ampere one.
- **5.** Where the power supply voltage considerably fluctuates, the Main Voltage Selector Plug may be reset to avoid unpleasant side effects of such fluctuation. Reset it to the voltage immediately higher than the peak of the fluctuation.



Heat Radiated inside the Amplifier

The bonnet of the AU-7500 is designed so that any heat radiated inside will effectively escape through it. Proper care should therefore be taken of the dissipation of such heat if you wish to place something on top of the amplifier or place it inside a closed box, etc. Above all, avoid placing it where it may be exposed to the direct sunlight.

It is prohibited, however, to remove the amplifier's bonnet or bottom plate to improve the ventilation.

Accessory List

1.	OPERATING INSTRUCTIONS AND	
	SERVICE MANUAL	1
2.	OPERATING INSTRUCTIONS SHEET	1
	PIN PLUGS	
4.	BUTTERFLY BOLTS	2
5.	WASHERS	2
6.	POLISHING CLOTH	1
7.	OUICK-ACTING FUSES (4A)	2

QUICK CHECK LIST OF SIMPLE MISTAKES

Some of the troubles which seem to result from a malfunction of the amplifier are caused by wrong operation and the negligence of simple maintenance, and can be quickly corrected by making a simple investigation and providing simple cures. To make sure you haven't made any of these mistakes, go over the following check list once.

Connections

- 1. Have you connected the power cord to a wall AC outlet?
- **2.** Are the connecting cables for the turntable and tape deck not loose?
- **3.** Are the speaker cables not loose from the amplifier's jacks or the speaker systems?
- **4.** Do your speaker systems have impedance of 8 ohms or more? (They must, if you want to drive two pairs at one time.)
- **5.** Have the power fuse or quick-acting fuses not blown?

Operating Procedure

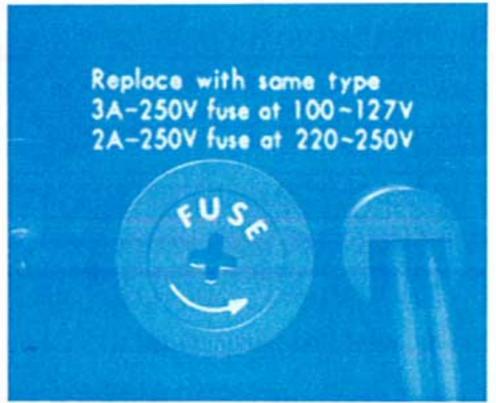
- 1. Have you turned on the Power/Speakers Switch?
- **2.** Is the Tape Monitor Switch not set to PLAY-BACK position, though you don't want to reproduce a tape?
- **3.** Is the Selector Control set to the correct position?
- **4.** Is the Power/Speakers Switch set to the correct position?
- **5.** Is the 4-Channel Adaptor Switch not pushed down, though you are not using a 4-channel rear amplifier or adaptor?

If, even after these examinations, the amplifier does not return to normal, it may be faulty. Contact the Sansui dealer from whom you purchased the amplifier or your nearest Sansui Authorized Service Station. Do not attempt opening the bonnet for yourself. Such repair must be left to a qualified service man.

Should the Power Fuse Blow

If the amplifier simply remains dead even after you have turned on its Power/Speakers Switch, it is possible that its power fuse has blown.

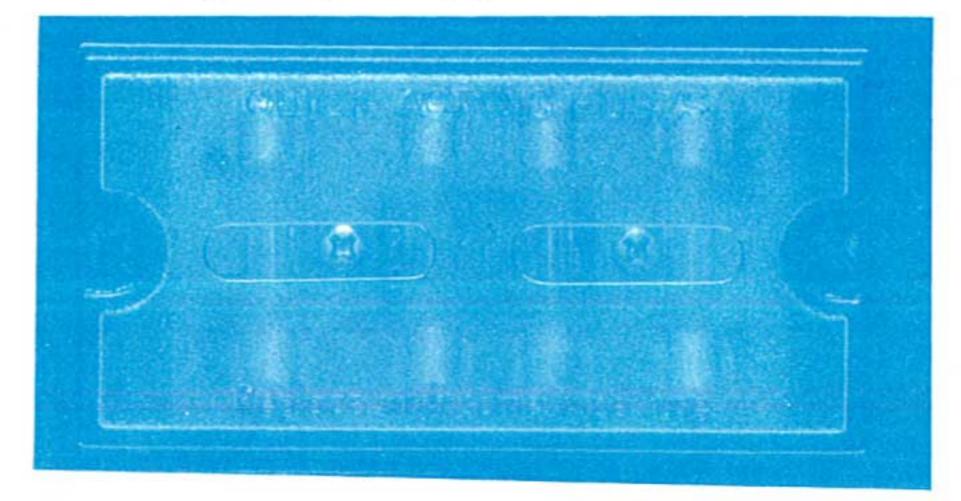
If this happens, switch off the amplifier, disconnect the power cord from the wall AC outlet at once and examine the power fuse on the amplifier's rear panel. If you find it blown, replace it with a new glass-tubed fuse of the rated capacity (3-ampere for 100 to 127 volts, 2-ampere for 220 to 250 volts). Never use a fuse of a different capacity or a piece of wire, even as a stop-gap measure, or serious danger could result.



Quick-Acting Fuses

The AU-7500 is doubly protected with a relayequipped protection circuit and four quick-acting fuses. If no sound or distorted sound is heard from either or both speaker systems, switch off the amplifier, disconnect the power cord from the wall AC outlet, remove the cover on the rear panel concealing the quick-acting fuses and examine them. If you find any of them blown, find and eliminate the cause of the blowout, then replace it with a new glass-tubed quick-acting fuse supplied.

If the relay-equipped protection circuit ever goes to work, the sound may come out intermittently. If it happens, check the connections of various equipment and your operating procedure once.



SPECIFICATIONS

POWER OUTPUT: IHF MUSIC POWER 150W (4Ω , 1,000Hz) CONTINUOUS RMS POWER (each channel driven) $43/43W (4\Omega, 1,000Hz)$ CONTINUOUS RMS POWER (both channels driven) 40+40W (8 Ω , 1,000Hz) CONTINUOUS RMS POWER (both channels driven at rated distortion, 20 to 20,000Hz) $32 + 32W (8\Omega)$ TOTAL HARMONIC DISTORTION: less than 0.1% at rated output INTERMODULATION DISTORTION (70Hz:7,000Hz=4:1 SMPTE method):less than 0.1% at rated output IHF POWER BANDWIDTH (each channel driven at 8Ω): 5 to 40,000Hz FREQUENCY RESPONSE (at 1 watt power output): PHONO-1 and 2 RIAA equalization curve ± 0.5 dB (30 to 15,000Hz) 10 to 30,000Hz ± 1.0 dB OVER-ALL (from AUX) MAIN INPUT 10 to 50,000Hz ± 1.0 dB LOAD IMPEDANCE: 4 to 16 ohms DAMPING FACTOR: approx. 40 at 8 ohms load INPUT SENSITIVITY AND IMPEDANCE (at 1,000Hz): PHONO-1 $2.5 \text{mV} (50 \text{k}\Omega)$ PHONO-2 $2.5 \text{mV} (30 \text{k}\Omega, 50 \text{k}\Omega, 100 \text{k}\Omega)$ Max. Input Capability 300mV (THD: less than 0.5%) $2.5 \text{mV} (50 \text{k}\Omega)$ MIC $100 \text{mV} (50 \text{k}\Omega)$ TUNER AUX $100 \text{mV} (50 \text{k}\Omega)$ TAPE DECK-1 and 2 (Pin) $100 \text{mV} (50 \text{k}\Omega)$ $100 \text{mV} (50 \text{k}\Omega)$ TAPE DECK-2 (DIN) 4-CH ADAPTOR $100 \text{mV} (50 \text{k}\Omega)$ 800mV $(40k\Omega)$ MAIN INPUT OUTPUT VOLTAGE (at 1,000Hz): TAPE DECK-1 and 2 (Pin) 100mV TAPE DECK-2 (DIN) 30mV 4-CH ADAPTOR 100mV PRE-OUTPUT 0.8V (THD: less than 0.08%) Max. Output Voltage 4.0V (THD: less than 0.5%) CROSSTALK (at rated output, 1,000Hz): PHONO-1 and 2 better than 50dB MIC better than 50dB TUNER better than 50dB better than 50dB AUX better than 65dB MAIN INPUT

better than 75dB

IHF HUM AND NOISE:

PHONO-1

PHONO-2 better than 75dB
MIC better than 75dB
TUNER better than 80dB
AUX better than 80dB
MAIN INPUT better than 100dB

CONTROLS & SWITCHES:

BASS +15 dB, -15 dB at 50 Hz + 5 dB, -5 dB at 1,500 Hz TREBLE +15 dB, -15 dB at 15,000 Hz

LOUDNESS +10 dB at 50 Hz,

+10dB at 15,000Hz

(volume control at -30dB) -12dB at 50Hz (12dB/oct) -11dB at 10,000Hz (12dB/oct)

SEMICONDUCTORS: transistors 38, diodes 15

zener diode 1

POWER REQUIREMENTS: 100, 110, 117, 127, 220 30, 2,

240, 250V, 50/60Hz

POWER CONSUMPTION:

LOW FILTER

HIGH FILTER

MAXIMUM 315VA RATED 100W

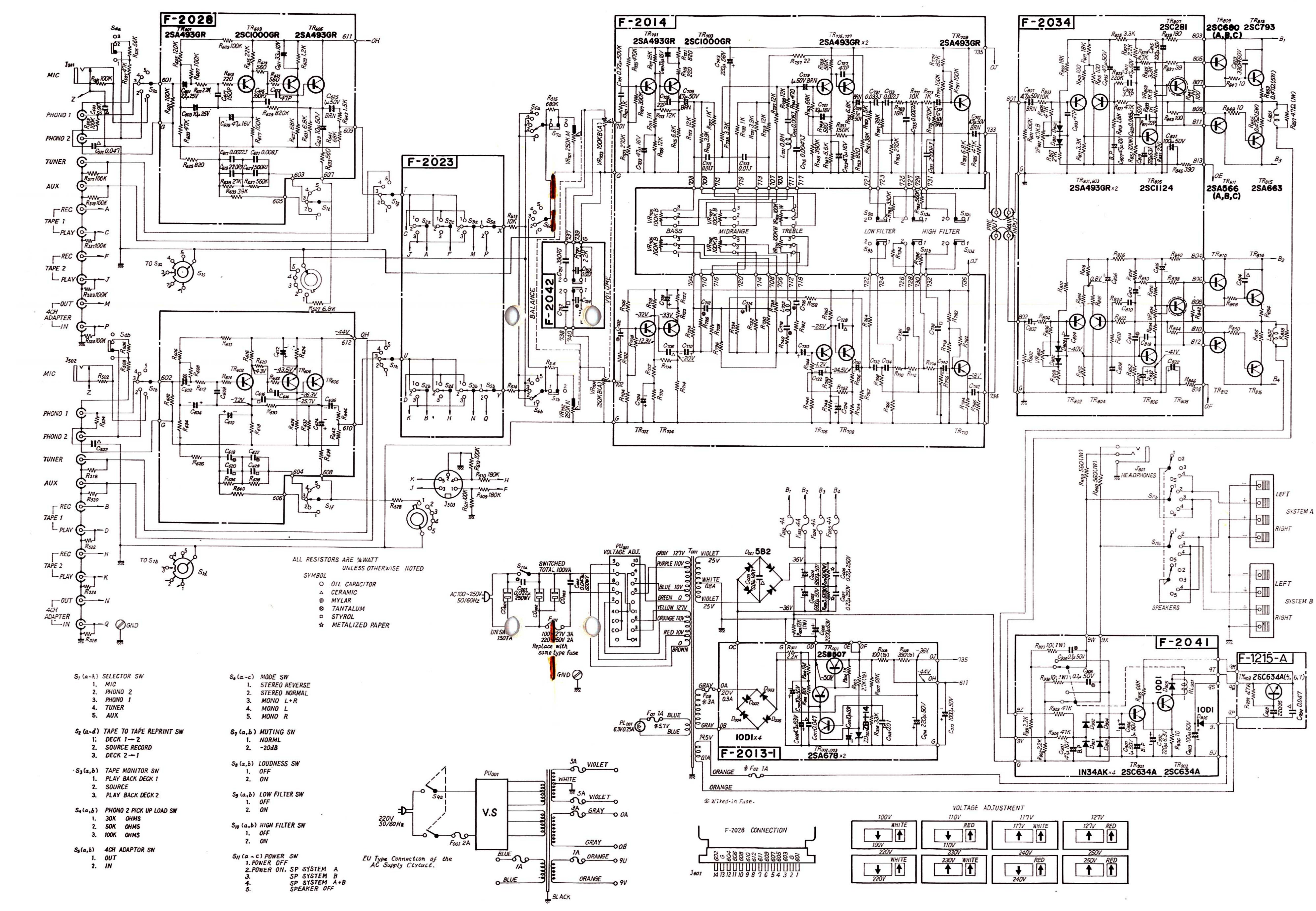
DIMENSIONS: 140mm $(5\frac{9}{16}")$ H

440mm (173/8") W 322mm (1211/1") D

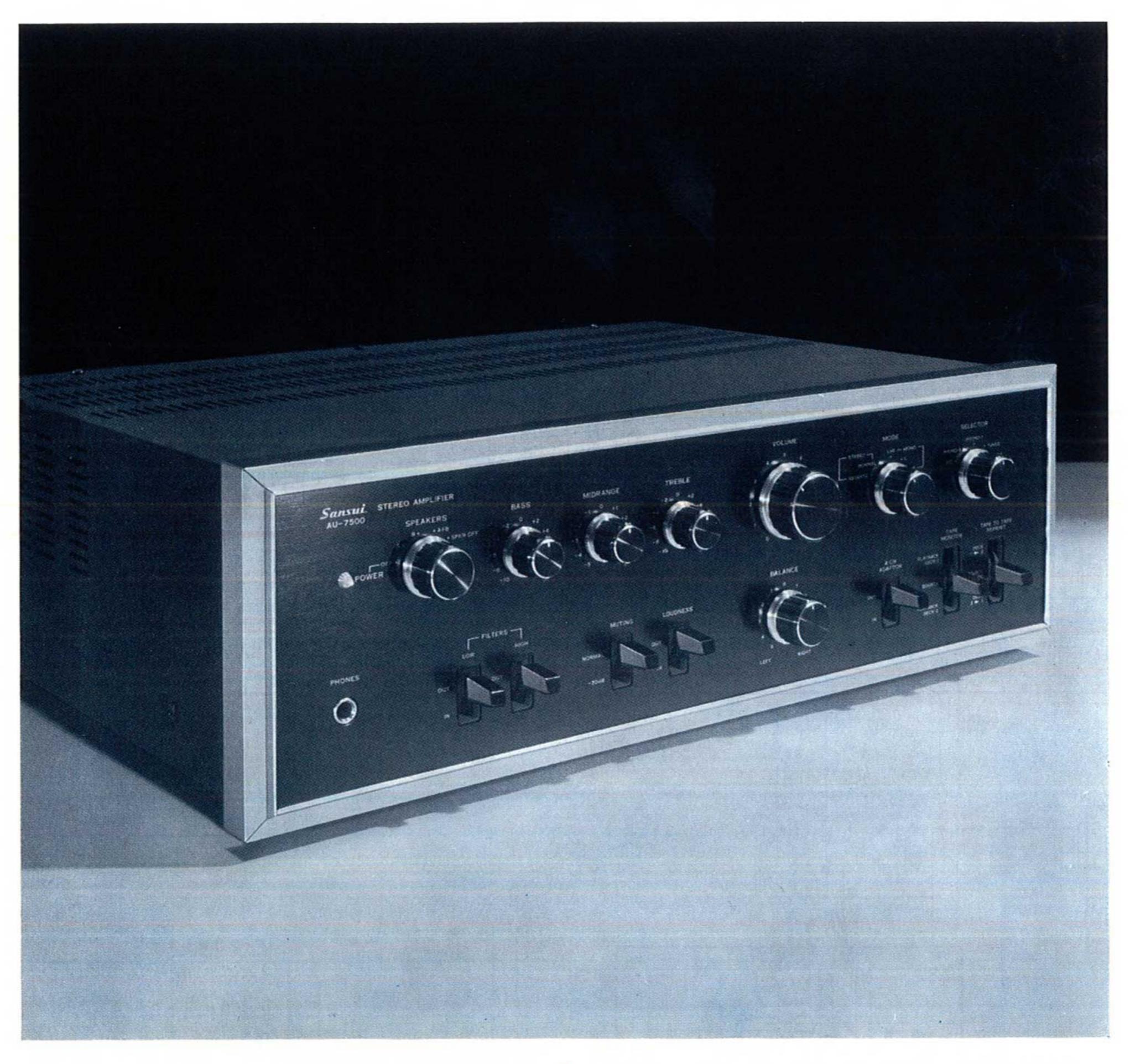
WEIGHT: 12.7kg (28.0 lbs.)

__ 12 ___

SCHEMATIC DIAGRAM



NOTES TO SERVICE ENGINEERS



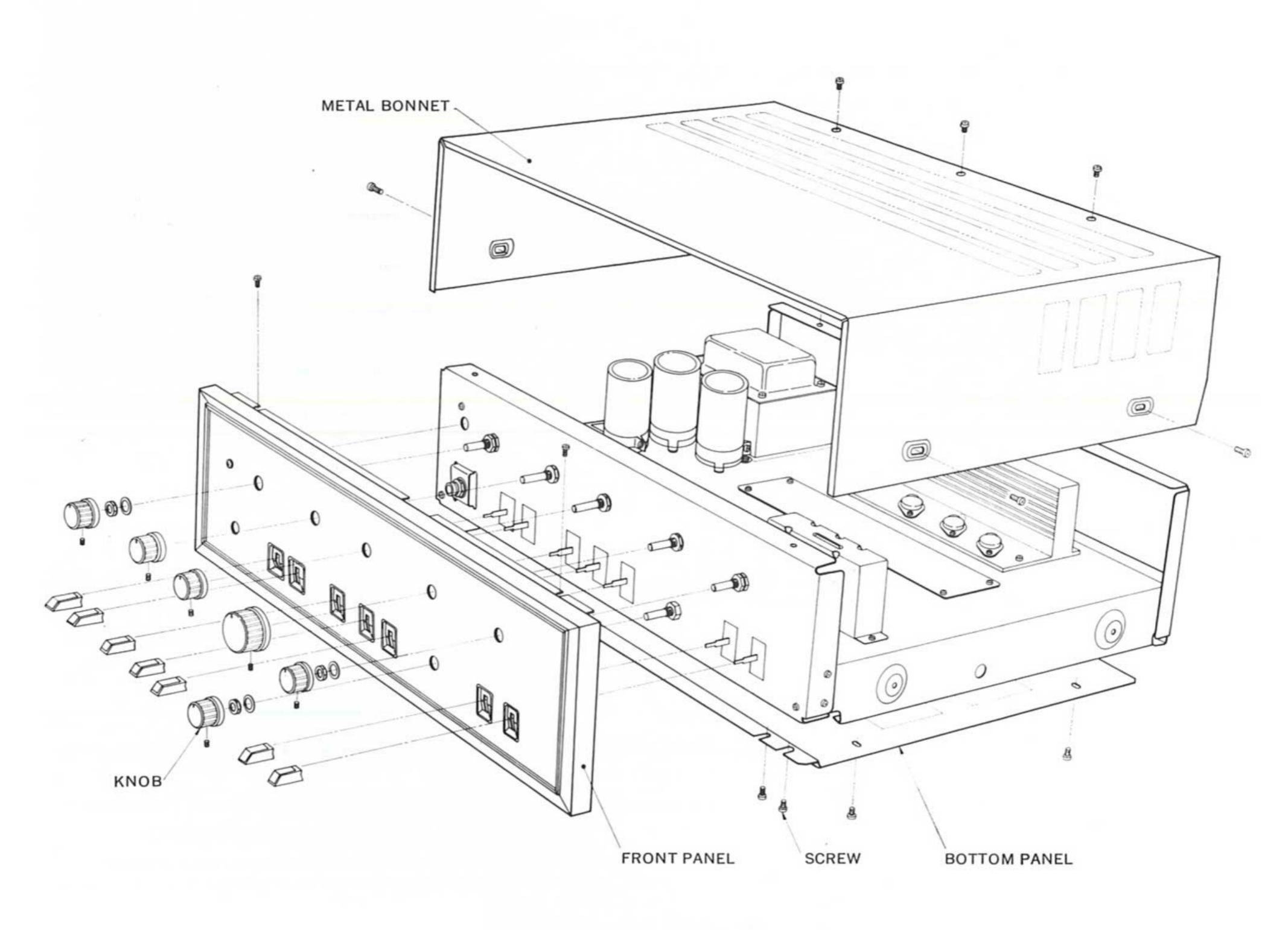
Plase contact the nearest Sansui Authorized Service Station for replacement parts. When ordering them, look up the part lists on pages 19 to 26 and let us know (1) the amplifier's model number, (2) name of the printed circuit board, (3) part No., (4) name of the part, and (5) its stock No. Using nonstandard parts for temporary relief often impairs the sound quality and over-all reliability of the amplifier. Please take the trouble to contact your nearest Sansui Authorized Service Station.

Consult pages 17 to 26 when making repairs or adjustments. To check or measure the amplifier performance, connect a load resistance of 4 to 16 ohms to the amplifier's speaker output terminals first. To check the electrical output characteristics, do not remove the bonnet and bottom plate.

GENERAL TROUBLESHOOTING CHART

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
Tuner.	* Noise during AM reception.	* Interference by adjacent sta- tions (called beat interfer- ence). * TV set is being used simul- taneously.	* Peculiar to AM waves, and unavoidabole to some extent. * Move TV set away from tuner and amplifier.
	* Noise heard at certain hours, in certain areas or over part of dial during AM reception.	* Interference by nearby elect- rical appliances.	* Attach noise limiter to appliance producing noise. * In some cases, can be eliminated by reversing power cord plug-AC outlet connections.
	* Pop noise during FM reception.	* Ignition noise from nearby automobile, motorcycle, etc.	* Adjust antenna location and height for maximum sensitivity. * Keep antenna away from streets.
		be entirely eliminated.	uency noise during radio reception cannot Try turning on amplifier's High Filter Control counterclockwise.
Turntable.	* Hum noise.	 * Unshielded cables used to connect turntable. * Minus (ground) wire of connecting cable is not connected completely. * Turntable motor or tonearm is not grounded. 	 * Use regular shielded cables. * Examine connecting cables, especially their plugs. * Connect grounding lead of turntable to amplifier's GND terminal.
	* Loud oscillating noise.	* Turntable is placed on top of or too close to speaker systems.	* Place thick cushion between turntable and speaker systems. * Change location of turntable and speaker systems. * If using microphone(s), move or direct them away from speaker systems
	* Sound is shaky.	* Dust on record or pickup stylus. * Worn pickup stylus. * Improper stylus pressure.	* Clean record and pickup stylus. * Replace pickup stylus. * Adjust stylus pressure.
Tape Deck.	* Hiss noise.	* Magnetic heads are magnet- ized.	* Demagnetize heads. * Turn on High Filter Switch. * Connect noise reduction adaptor.
	* Sound is not clear.	* Dust on magnetic heads. * Tape is not pressed tight to heads.	* Clean heads. * Align tape transport mechanism.
General.	* When left and right channel sound volumes are balanced with ampli- fier's Balance Control, it does not come to center position.	 * Left and right channel signal strengths vary with program source. * Left and right speaker systems have different efficiencies. 	* Never mind. Optimum stereo effect is obtained by adjusting Balance Control so that sound comes from midway point between two speaker systems with Mode Switch set to MONO L+R.
	* Musical instruments and singer not located clearly.	* Left-right, plus-minus con- nections of speaker systems, input cables are wrong.	* Examine connections once.
	* Want to listen at very low volume level at night.	* Fine adjustment of very low volume cannot be done with Volume Control.	* Turn on Muting Switch, then adjust Volume Control.

DISASSEMBLY PROCEDURE

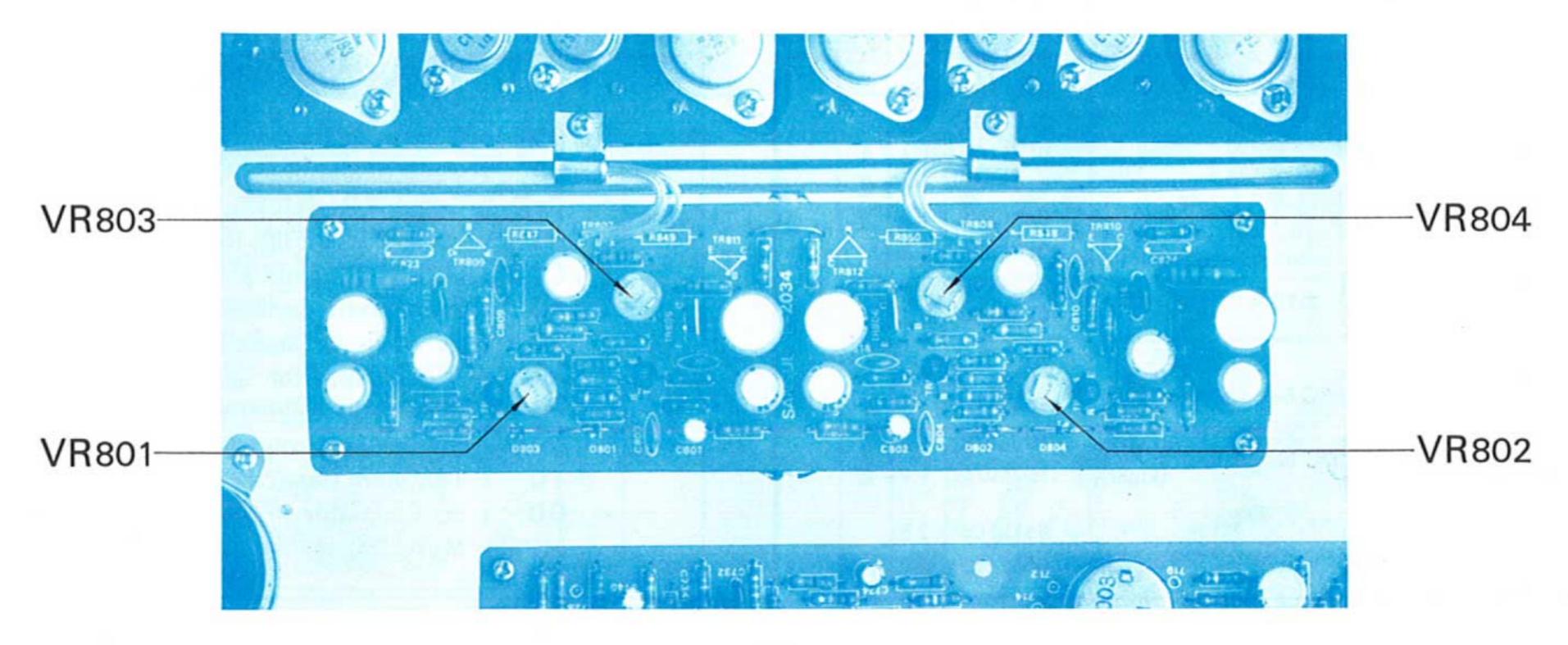


Output of Power Amplifier Section

STEP	CONNECT/ADJUST	REMARKS
1.	Connect load resistance [8 to 16 ohms] to left (right) channel SYSTEM-A speaker terminals.	
2.	Connect voltmeter in par- allel with load resistance.	Set voltmeter to 0.5V~3V range.
3.	Turn Power/Speakers Swith to SYSTEM-A.	
4.	Adjust VR ₈₀₁ (VR ₈₀₂) so that voltmeter indicates $0\pm50\text{mA}$. Repeat above procedure for right channel (notations in parentheses are for right channel).	

Current Alignment of Power Amplifier Section

STEP	(TESTER)	CONNECT/ADJUST	REMARKS
1.		Remove F ₀₀₂ and F ₀₀₃ .	Use
2.		Turn VR ₈₀₃ and VR ₈₀₄ fully counterclockwise.	ammeter with 100mA or 50mA
3.		Turn Power/Speakers Switch to SPKR OFF.	range.
4.	Set to 100mA range.	Connect ammeter where F ₀₀₂ was. (Connect (21) on schematic to minus terminal of ammeter, other end to plus terminal.)	
5.		Adjust VR ₈₀₃ (left channel) so that ammeter indicates 28 to 32mA.	
6.		Turn off Power/Speakers Switch and replace F ₀₀₂ .	
7.	Set to 100mA range.	Turn Power/Speakers Switch to SPKR OFF, then connect ammeter where F ₀₀₃ was. (Connect (22) on circuit schematic to minus terminal of ammeter, other end to plus terminal.)	
8.		Adjust VR ₈₀₄ (right channel) so that ammeter indicates 28 to 32mA.	
9.		Turn off Power/Speakers Switch and replace F_{003} .	



PRINTED CIRCUIT BOARDS AND PARTS LIST

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

DRIVER BLOCK (F-2034)

Stock No. 7570670

w	X	YZ
R801	330kΩ	0101334 2 B
R802	330kΩ	0101334 2 B
R803	10kΩ	0101103 2 B
R804	10kΩ	0101103 2 B
R805	47kΩ	0101473 2 A
R806	47kΩ	0101473 2C
R807	27kΩ	0101273 2 A , B
R808	27kΩ	0101273 2B, C
R809	18kΩ	0101183 2 A
R810	18kΩ	0101183 2C
R811	3.3kΩ	0101332 2 A
R812	3.3kΩ	0101332 2C
R813	100Ω	0101101 2 A
R814	100Ω	0101101 2C
R815	100Ω	0101101 2 A
R816	100Ω	0101101 2C
R817	18kΩ	0101183 2 A
R818	18kΩ	0101183 2C
R819	1.8kΩ	0101182 2 A
R820	1.8kΩ	0101182 2C
R821	47kΩ	0101473 1,2A
R822	47kΩ	0101473 1,2C
R823	220kΩ	0101224 1, 2 A
R824	220kΩ (±10% ¼W	CR. 0101224 1, 2C
R825	3.3kΩ	0101332 2 A
R826	3.3kΩ	0101332 2C
R827	2.2kΩ	0101222 1, 2 A
R828	2.2kΩ	0101222 1, 2C
R829	4.7kΩ	0101472 1,2A
R830	4.7kΩ	0101472 1,2C
R831	220Ω	0101221 2 B
R832	220Ω	0101221 2 B
R833	lkΩ	0101102 1 B
R834	lkΩ	0101102 1 B
R835	3.3kΩ	0101332 2A, B
R836	3.3kΩ	0101332 2B, C
R837	39Ω	0101390 1 A
R838	39Ω	0101390 1 C
R839	180Ω	0101181 1 A
R840	180Ω	0101181 1 C
R841	100Ω	0101101 1 A
R842	100Ω	0101101 1C
R843	100Ω	0101101 1 A, B
R844	100Ω	0101101 1B,C
R845	390Ω	0101391 1 B
R846	390Ω)	0101391 1 B
R851	10Ω)	OD 0104100 1 A
R852	10Ω $\pm 10\%$ 1W	CR. 0104100 1 A
VR801	$4.7k\Omega(B)$ AC Balance Adj. (R	eft) 1035110 2 A
VR802	4.7kΩ(B)	ight) 1035110 2C
VR803	SDC Bigs Adi	eft) 1035070 1 A , B
VR804	$1k\Omega(B)$ (R	ight) 1035070 1 B , C
	>	0510104 0.0
C801 C802	$4.7 \mu F$ $4.7 \mu F$ $50V E$	C. 0519106 2 B

W		х			Υ	Z
C803	47 μF)	±10%	50V	66	0660470	2 B
C804	47 μF)	±10%	30 V	CC.	0660470	2 B
C805	47 μF)		FOV		0515470	2 A
C806	47 μF }		50V	EC.	0515470	2 C
C807	47 μF)		101/	DDEC	0531470	2 A
C808	47 μF)		10V	BPEC.	0531470	2 C
C809	3.3pF)	±10%	50V	cc	0660339	1 A
C810	3.3pF)	±10/0	301	CC.	0660339	1 C
C811	47 μF)		50V	EC.	0515470	1 A
C812	47 μF S		301	EC.	0515470	1 C
C813	0.068μF)	±10%	50V	MC.	0601687	1 A
C814	0.068µF∫	110/0	301	MC.	0601687	1 C
C815	100μF)		50V	EC.	0515101	1, 2 A
C816	100µF∫		301	EC.	0515101	1, 2C
C817	22pF)	±10%	50V	CC.	0660220	2 B
C818	22pF)	10/0	301	CC.	0660220	2 B
C819	220μF)		6.3V	EC.	0510221	2 B
C820	220μF)		0.54	EC.	0510221	2 B
C821	100μF)		50V	EC.	0515101	1,2B
C822	100μF)		301	EC.	0515101	1,2B
TR801	1				0300450	2 B
TR802	2SA493 (0	`n\			0300450	2 B
TR803	23A493 (C	3K)			0300450	2 A
TR804	J				0300450	2C
TR805	} 2SC1124	(0.2)			0305901, 2	1,2B
TR806	3501124	(2, 3)			0305901, 2	1,2B
TR807	} 2SC281 (E	()			0305121, 2	1 A
TR808	350201 (6	s, C)			0305121, 2	1 C
D801	1				0311040	2 A
D802	151555				0311040	2 C
D803	131333				0311040	2 A
D804	J				0311040	2C
	Printed C	ircuit Boa	rd F-	2034	2570460	

- Abbreviations -

CR: Carbon ResistorSR: Solid ResistorCeR: Cement Resistor

MFR: Metal Oxide Film Resistor
CC: Ceramic Canacitor

CC: Ceramic Capacitor

EC: Electrolytic Capacitor

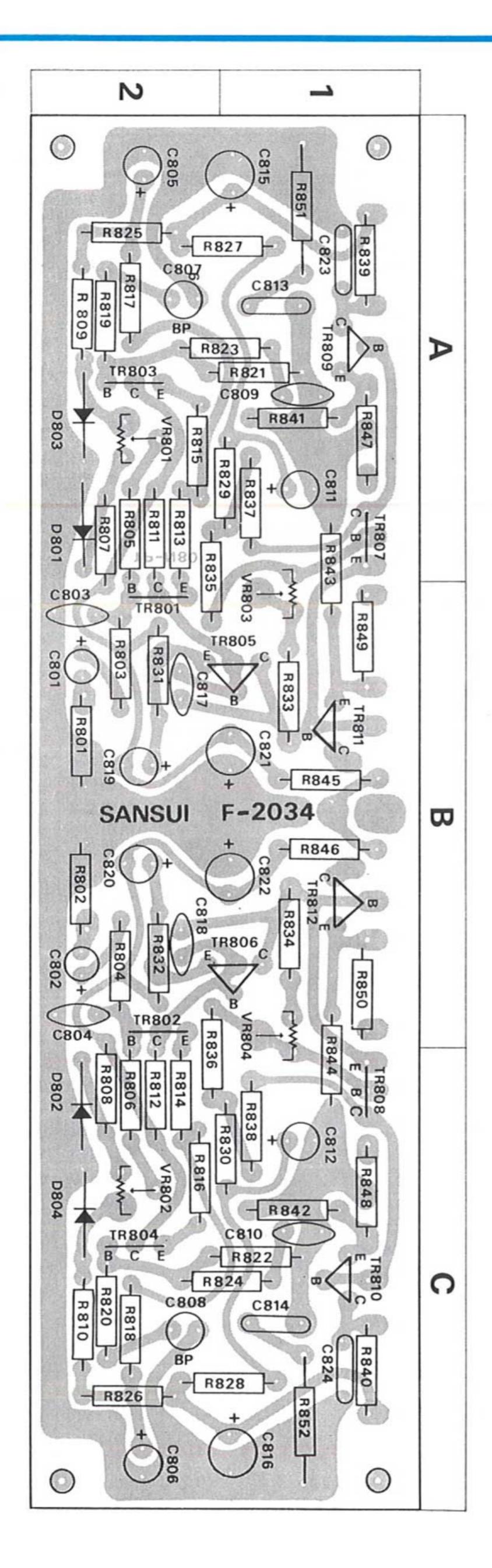
SC: Polystyrene Capacitor

MC: Mylar Capacitor

MPC: Metallized Polyester Capacitor BPEC: Bipolar Electrolytic Capacitor

TC: Tantalum Capacitor
OC: Oil Capacitor

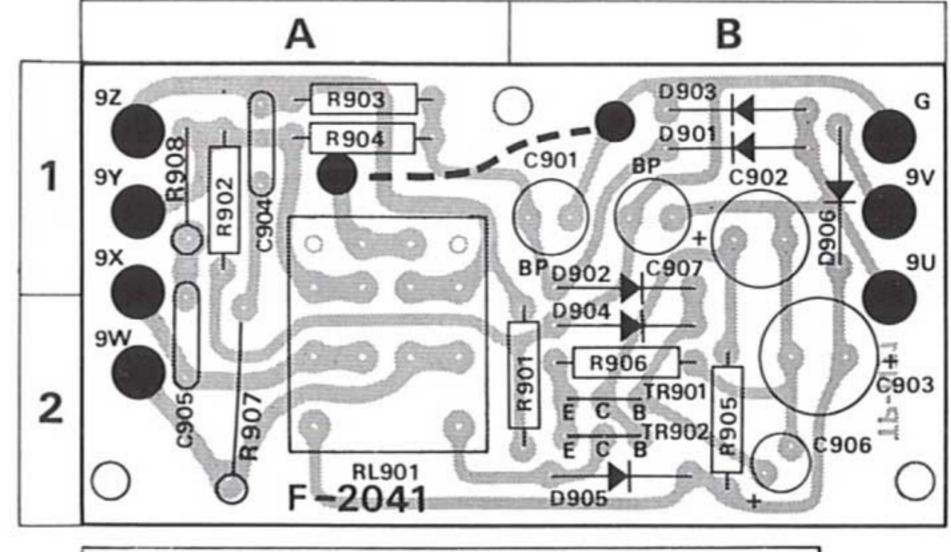
MP : Metal Paper Film Capacitor

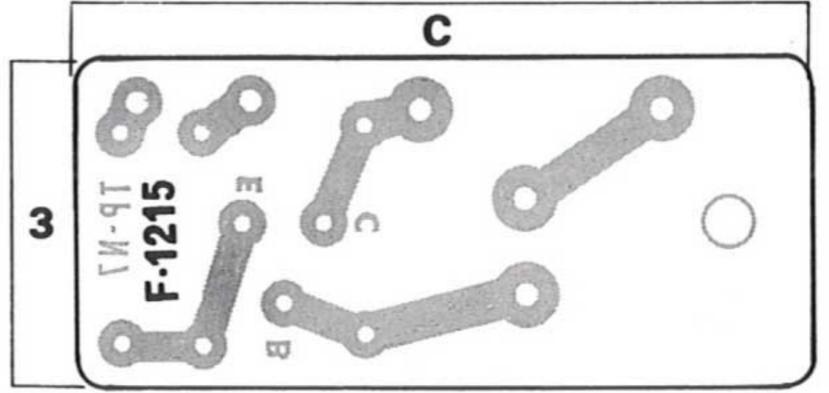


PROTECTOR BLOCK

 $\begin{array}{ll} \langle \text{F-2041} \rangle & \text{Stock No. 7591230} \\ \langle \text{F-1215A} \rangle & \text{Stock No- 7591300} \end{array}$

W	X			Υ	Z
R001	2.2kΩ)			0101222	В
R902	2.2kΩ			0101222	Α
R903	47kΩ	1/14/	CD	0101473	Α
R904	$47k\Omega$ $\pm 10\%$	$\frac{1}{4}W$	CR.	0101473	Α
R905	68kΩ			0101683	В
R906	10Ω)			0101100	В
R907	10Ω) +10%	1/14/	1450	0171100	Α
R908	10Ω ±10%	$\frac{1}{2}W$	MFR.	0171100	Α
R909	$22k\Omega$ ± 5%	1/4W	CR.	0107223	3 C
R910	47kΩ) ± 5/6	74 VV	CK.	0107473	3 C
C901	47 μF	10V	BPEC.	0531470	В
C902	220μF	6.3V	EC.	0510221	В
C903	100μF	50V	EC.	0515101	В
C904	$0.1 \mu\text{F}$ $\pm 10\%$	50V	MC.	0601108	Α
C905	0.1 µF) - 10/8	30 4	MC.	0601108	Α
C906	1 μF	50V	EC.	0515109	В
C907	1 μF	50V	BPEC.	0535109	В
C908	220μF	35V	EC.	0514222	3 C
C909	$0.047 \mu \text{F} ^{+80}_{-20}\%$	50V	CC.	0657473	3 C
TR901	000(244 (4 7 0)			0305891,2,3	В
TR902	2SC634A (6, 7, 8)			0305891,2,3	В
TR903	2SC634A (5, 6, 7)			0305890,1,2	3 C
D901)			0310402	В
D902	INIDAA (V)			0310402	В
D903	IN34A (K)			0310402	В
D904)			0310402	В
D905	100 1			0310340	В
D906	10D-1			0310340	В
RL901	Relay			1150101	Α
	Printed Circuit Boa	rd F-2	2041	2591230	
		F-1	215	2590230	





PRINTED CIRCUIT BOARDS AND PARTS LIST

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

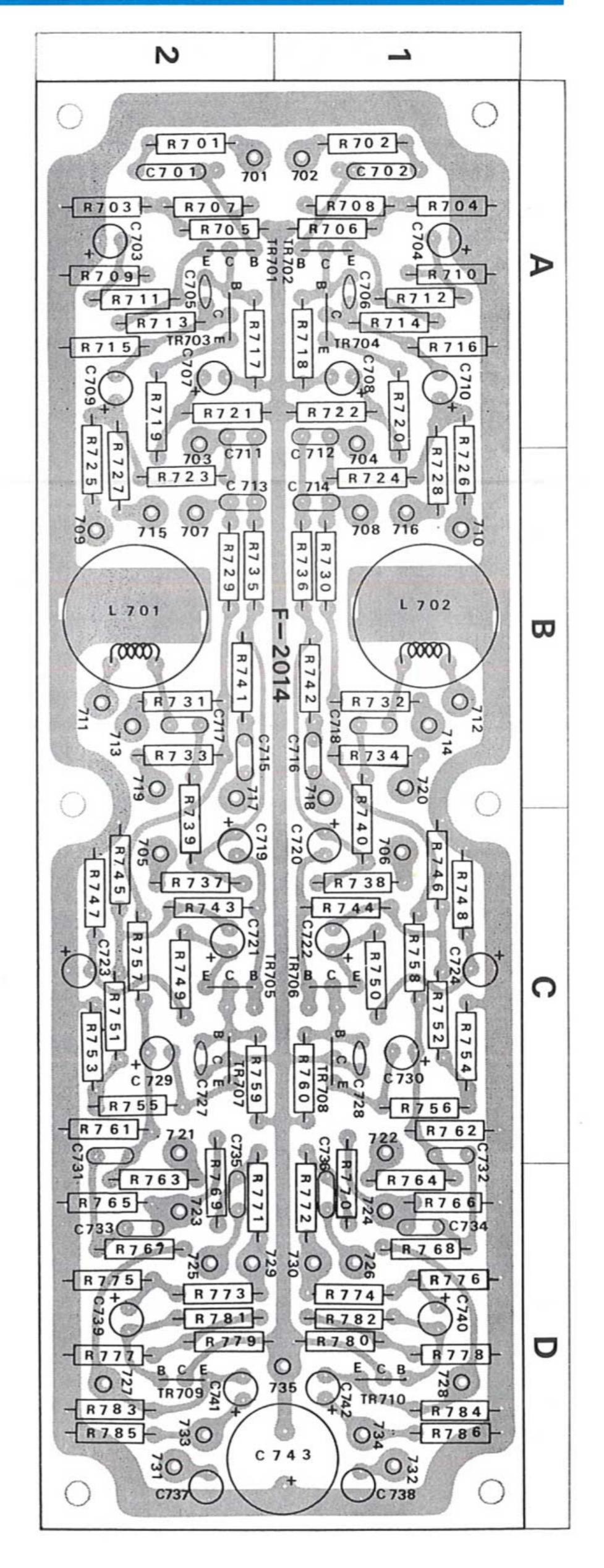
TONE CONTROL BLOCK (F-2014)

Stock No. 7560570

W	X				X			Z
R701	1kΩ\				0101102	2 A		
R702	1kΩ				0101102	1 A		
R703	270kΩ				0101274	2 A		
R704	270kΩ				0101274	1 A		
R705	470kΩ				0101474	2 A		
R706	470kΩ				0101474	1 A		
R707	390kΩ				0101394	2 A		
R708	390kΩ				0101394	1 A		
R709	12kΩ				0101123	2 A		
R710	12kΩ				0101123	1 A		
R711	1kΩ				0101102	2 A		
R712	1kΩ				0101102	1 A		
R713	12kΩ				0101123	2 A		
R714	12kΩ				0101123	1 A		
R715	6.8kΩ				0101682	2 A		
R716	6.8kΩ				0101682	1 A		
R717	18kΩ				0101183	2 A		
R718	18kΩ				0101183	1 A		
R719	220Ω				0101221	2 A		
R720	220Ω				0101221	1 A		
R721	820Ω				0101821	2 A		
R722	820Ω				0101821	1 A		
R723	12kΩ				0101123	2 A		
R724	12kΩ				0101123	1 A		
R725	3.9kΩ				0101392	2 A		
R726	3.9kΩ				0101392	1 A		
R727	1kΩ				0101102	2 A		
R728	1kΩ	±10% 1/4	íW	CR.	0101102	1 A		
R729	12kΩ	2 10/0 /4		CK.	0101123	2A, B		
R730	12kΩ				0101123	1 A , B		
R731	3.9kΩ				0101392	2 B		
R732	3.9kΩ				0101392	1 B		
R733	1kΩ				0101102	2 B		
R734	1kΩ				0101102	1 B		
R735	3.3kΩ				0101332	2 A , B		
R736	3.3kΩ				0101332	1 A , B		
R737	12kΩ				0101123	2 B		
R738	12kΩ				0101123	1 B		
R739	12kΩ				0101123	2 B		
R740	12kΩ				0101123	1 B		
R741	470Ω				0101471	2 B		
R742	470Ω				0101471	1 B		
R743	68kΩ				0101683	2 B		
R744	68kΩ				0101683	1 B		
R745	390kΩ				0101394	2 B		
R746	390kΩ				0101394	1 B		
R747	5.6kΩ				0101562	2 B		
R748	5.6kΩ				0101562	1 B		
R749	560Ω				0101561	2 B		
R750	560Ω				0101561	1 B		
R751	150kΩ				0101154	2 B		
R752	150kΩ				0101154	1 B		
R753	820Ω				0101821	2B, C		
R754	820Ω				0101821	1 B , C		
R755	6.8kΩ				0101682	2C		
R756	6.8kΩ)		- 1	0101682	1 C		

w	х		Υ	Z
R757	22Ω)		0101220	2 B
R758	22Ω		0101220	1 B
R759	56kΩ		0101563	2B, C
R760	56kΩ		0101563	1 B , C
R761	39kΩ		0101393	2B, C
R762	39kΩ		0101393	1 C
R763	1.5kΩ		0101152	2C
R764	1.5kΩ		0101152	1 C
R765 -	270kΩ		0101274	2C
R766	270kΩ		0101274	1 C
R767	39kΩ		0101393	2C
R768	39kΩ		0101393	1 C
R769	10kΩ		0101103	2C
R770	10kΩ	-	0101103	1 C
R771	$10k\Omega$ $\pm 10\%$	1/4W CR.	0101103	2C
R772	10kΩ (-10%	/4 VV CR.	0101103	1 C
R773	1kΩ		0101102	2C
R774	1kΩ		0101102	1 C
R775	470kΩ		0101474	2C
R776	470kΩ		0101474	1 C
R777	100kΩ		0101104	2C
R778	100kΩ		0101104	1 C
R779	82kΩ		0101823	2C
R780	82kΩ		0101823	1 C
R781	100kΩ		0101104	2 C
R782	100kΩ		0101104	1 C
R783	6.8kΩ		0101682	2C
R784	6.8kΩ		0101682	1 C
R785	47kΩ		0101473	2C
R786	47kΩ)		0101473	1 C
C701	0.22μF)	501/ 146	0601228	2 A
C702	$0.22\mu F \ 0.22\mu F \ \pm 10\%$	50V MC.	0601228	1 A
C703	47 μF)	16V EC.	0511470	2 A
C704	47 μF }	10V EC.	0511470	1 A
C705	$22pF$ $\pm 10\%$	50V CC.	0660220	2 A
C706	22pF) -10/8	30V CC.	0660220	1 A
C707	33μF)	16V EC.	0511330	2 A
C708	33μF)	101 20.	0511330	1 A
C709	$4.7\mu\text{F}$	50V EC.	0519106	2 A
C710	4.7 μF)		0519106	1 A
C711	0.01 μF		0600107	2 A
C712	0.01 μF		0600107	1 A
C713	0.01 μF		0600107	2 A
C714	$0.01 \mu F \pm 5\%$	50V MC.	0600107	1 A
C715	0.0047 μF		0600476	2 B
C716	0.0047 μF		0600476	1 B
C717	0.008μF		0600806	2 B
C718	0.008μF)		0600806	1 B
C719	$1 \mu F$	50V EC.	0519101	2 B
C720	1 μF J		0519101	1 B
C721	10μF		0512100	2 B
C722	10μF \	16V EC.	0512100	1 B
C723	4.7 μΕ		0519106 0519106	2 B 1 B
C724	4.7 μF)		0317100	10

W	х			Υ	Z
C727	47pF) ±10%	50V	cc.	0660470	2B, C
C728	47 pF \ \(\frac{\pm 10}{6}	301	CC.	0660470	1B, C
C729	1 μF)	50V	50	0519101	2B, C
C730	1 <i>µ</i> F∫	307	EC.	0519101	1B, C
C731	0.033µF)			0600337	2C
C732	0.033μF			0600337	1 C
C733	$0.022 \mu F$ $\pm 5\%$	50V	140	0600227	2C
C734	0.022μF \ ± 5%	50V	MC.	0600227	1 C
C735	0.0022μF			0600226	2C
C736	0.0022μF)			0600226	1 C
C737	2700pF) . 50/	501/		0610272	2C
C738	2700pF ± 5%	50V	SC.	0610272	1 C
C739	1 μF)			0519101	2C
C740	1μΕ			0519101	1 C
C741	4.7 µF	50V	EC.	0519106	2C
C742	4.7 µF			0519106	1 C
C743	220μF)			0515221	1,2C
L 701	Peaking Coil			4010030	2A, B
TR701	054402(00)			0300450	1,2A
TR702	} 2SA493 (GR)			0300450	1 A
TR703	000000000000			0305880	2 A
TR704	2SC1000 (GR)			0305880	1 A
TR705)			0300450	2 B
TR706				0300450	1 B
TR707	001100(00)			0300450	2C
TR708	2SA493 (GR)			0300450	1 C
TR709				0300450	2C
TR710	J			0300450	1 C
	Printed Circuit Board	d F-2	2014	2560530	



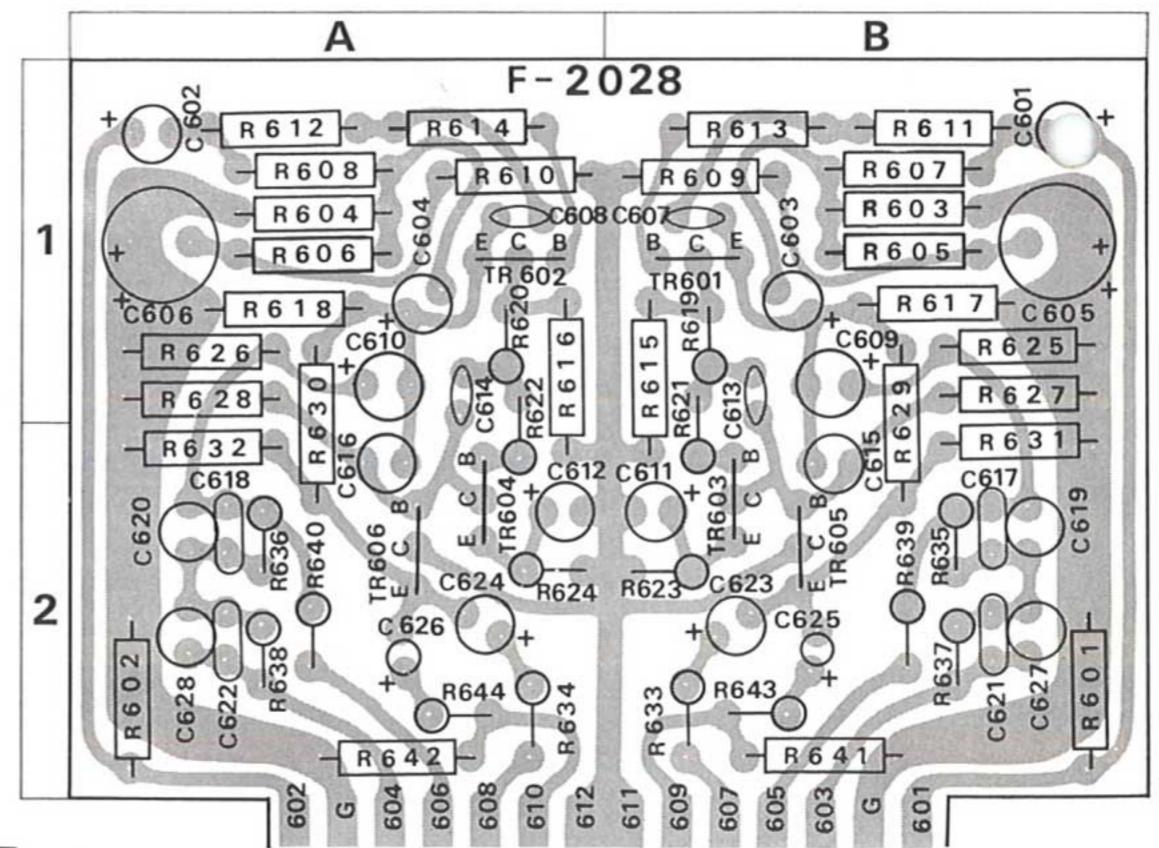
PRINTED CIRCUIT BOARDS AND PARTS LIST

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

EQUALIZER BLOCK (F-2028)

		Stock No. 755042					
w		х			Y	Z	
R601	100kΩ)				0100104	2 B	
R602	100kΩ				0100104	2 A	
R603	47kΩ				0100473	1 B	
R604	47kΩ				0100473	1 A	
R605	120kΩ				0100124	1 B	
R606	120kΩ			-	0100124	1 A	
R607	100kΩ				0100104	1 B	
R608	100kΩ				0100104	1 A	
R609	100kΩ				0100104	1 B	
R610	100kΩ				0100104	1 A	
R611	2.2kΩ				0100222	1 B	
R612	2.2kΩ				0100222	1 A	
R613	220Ω				0100221	1 B	
R614	220Ω				0100221	1 A	
R615	22kΩ				0100223	1, 2 B	
R616	22kΩ				0100223	1 A	
R617	100kΩ				0100104	1 B	
R618	100kΩ				0100104	1 A	
R619	560Ω				0100561	1 B	
R620	560Ω				0100561	1 A	
R621	560Ω				0100561	1, 2 B	
R622	5600				0100561	1,2A	
R623	1.2kΩ	±10%	$\frac{1}{4}W$	CR.	0100122	2 B	
R624	1.2kΩ				0100122	2 A	
R625	820Ω				0100821	1 B	
R626	820Ω				0100821	1 A	
R627	68kΩ				0100683	1 B	
R628	68kΩ				0100683	1 A	
R629	820kΩ				0100824	1,2B	
R630	820kΩ				0100824	1,2A	
R631	6.8kΩ				0100682	2 B	
R632	6.8kΩ				0100682	2 A	
R633	560Ω				0100561	2 B	
R634	560Ω				0100561	2 A	
R635	27kΩ				0100273	2 B	
R636	27kΩ				0100273	2 A	
R637	560kΩ				0100564	2 B	
R638	560kΩ				0100564	2 A	
R639	39kΩ				0100393	2 A	
R640	39kΩ				0100393	2 A	
R641	68kΩ				0100683	2 B	
R642	68kΩ				0100683	2 A	
R643	1.5kΩ				0100152	2 B	
R644	1.5kΩ)				0100152	2 A	
C601	2.2μF)	±20%	25V	TC.	0573229	1 B	
C602	2.2μ1)				0573229	1 A	
C603	10μF}		25V	EC.	0513100	1 B	
C604	10μFJ			1000000	0513100	1 A	
C607	150pF)	±10%	50V	CC.	0660151	1 B	
C608	150pF)				0660151	1 A	
C609	47 μF		167	EC.	0512470	1 B	
C610	47 μF J				0512470	1 A	
C611	33μF)		10V	EC.	0511330	2 B	
C612	33μFJ	+100/	501/	CC	0511330	2 A	
C613	47 pF	±10%	50V	CC.	0660470	1 B	

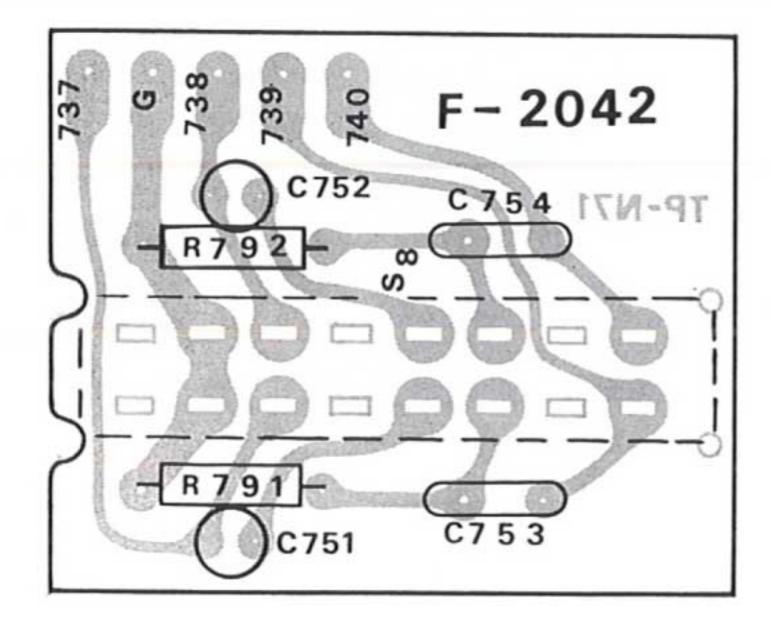
W	X			Υ	Z
C614	47pF ±10%	507	CC.	0660470	1 A
C615	390pF) _ = 50/	501/	22	0610391	2 B
C616	390pF) ± 5/0	± 5% 50V SC	SC.	0610391	2 A
C617	0.0022µF) + 5%	± 5% 50V M	MC	0600226	2 B
C618	$0.0022\mu F$ $\pm 5\%$	307	MC.	0600226	2 A
C619	220pF 220pF ± 5%	9/ 501/ 50	SC.	0610221	2 B
C620	220pF) - 3/6	307	30.	0610221	2 A
C621	0.008 uF) + 5%	± 5% 507	MC.	0600806	2 B
C622	0.008μF) - 576		MC.	0600806	2 A
C623	10μF)			0515100	2 B
C624	10μF	50V	EC	0515100	2 A
C625	1 μF (301		0519101	2 B
C626	1 μF)			0519101	2 A
C627	1500pF ± 5%	50V	SC.	0610152	2 B
C628	1500pF) - 576	3/0 30V		0610152	2 A
TR601	} 2SA493 (GR)			0300450	1 B
TR602) 23A493 (GK)		0300450	1 A	
TR603	} 2SC1000 (GR) } 2SA493 (GR)			0305880	2 B
TR604				0305880	2 A
TR605				0300450	2 B
TR606) 25/14/0 (OK)			0300450	2 A
Printed Circuit Board F-2028		2550330			



LOUDNESS BLOCK (F-2042)

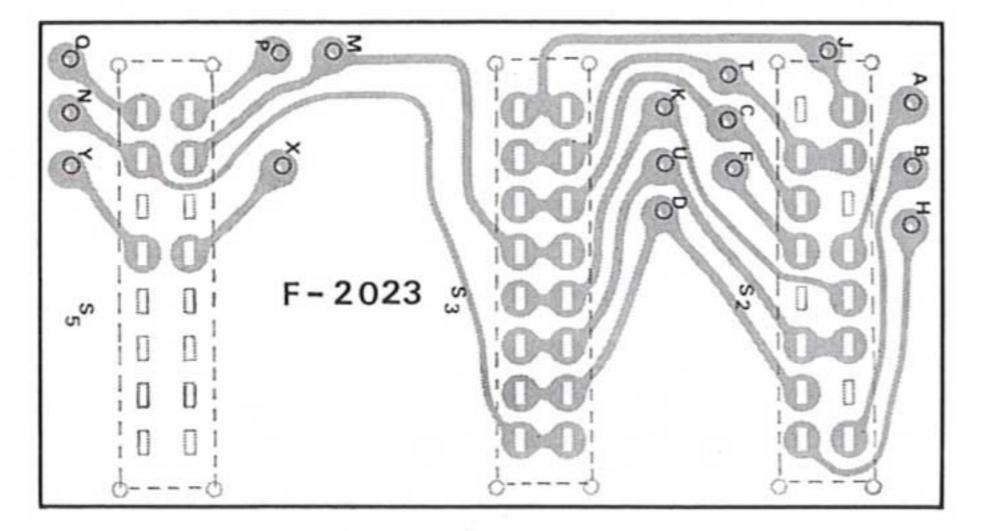
Stock No. 7591240

W	X	Y	Z
R791	22kΩ) 1,000 1/W CD	0101223	
R792	$\frac{22k\Omega}{22k\Omega}$ $\pm 10\%$ $\frac{1}{4}$ W CR.	0101223	
C751	390pF) , 50/ 50/ 50	0610391	
C752	390pF 390pF ± 5% 50V SC.	0610391	
C753	0.02µF) . 50% 50% 146	0600207	
C754	$0.02\mu F \ 0.02\mu F \ \pm 5\%$ 50V MC.	0600207	
	Printed Circuit Board F-2042	2591240	



SWITCH BLOCK (F-2023)

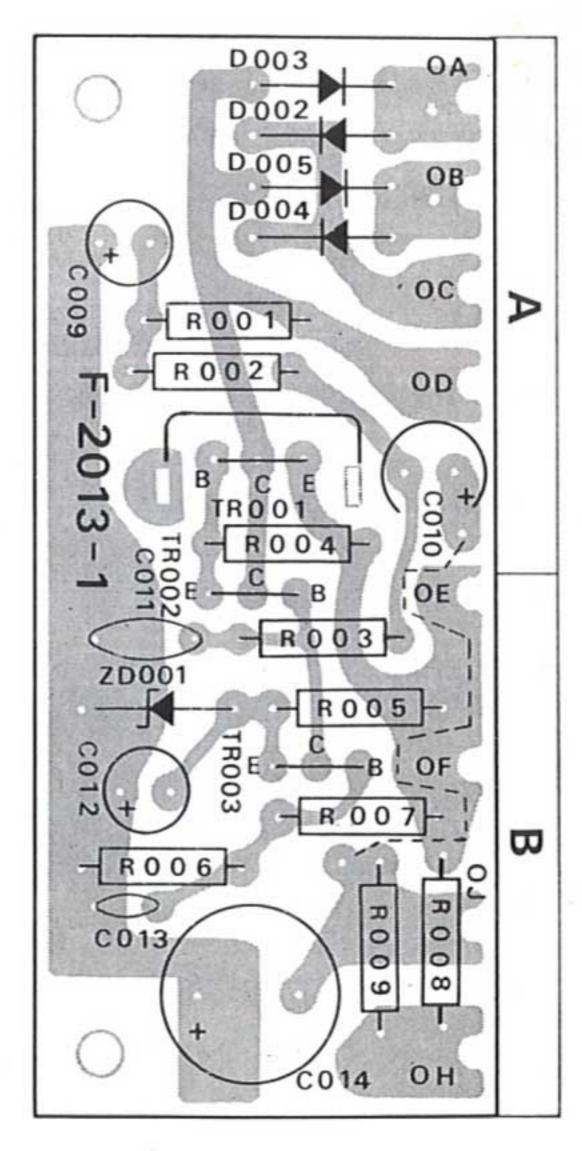
Stock No. 2591200



POWER SUPPLY BLOCK (F-2013-1)

Stock No. 7500690

W	x			Y	Z
R001	2.2kΩ)			0101222	Α
R002	18kΩ			0101183	Α
R003	18kΩ			0101183	В
R004	1kΩ > ±10%	1/4 W	CR.	0101102	Α
R005	2.7kΩ			0101272	В
R006	33kΩ			0101333	В
R007	68kΩ)			0101683	В
R008	100Ω)10%	1/\\	CD	0103101	В
R009	390Ω ±10%	/2 VV	CR.	0103391	В
C009	4.7 μF	63V	EC.	0516479	Α
C010	10μF	50V	EC.	0515100	Α
C011	$0.047 \mu F + \frac{+80}{-20}\%$	50V	CC.	0657473	В
C012	10μF)			0515100	В
C013	0.01 μF }	50V	EC.	0515107	В
C014	220μF J			0515221	В
TRooi	2SB507 (C, D, E, F)			0303230,1,2,3	Α
TR002	054470(4 7 0)			0300291,2,3	В
TR003	} 2SA678 (6, 7, 8)			0300291,2,3	В
ZD001	ZB-1-14			0315071	В
D002)			0310340	Α
D003	100 1			0310340	Α
D004	10D-1			0310340	Α
D005	J			0310340	Α
	Printed Circuit Board	d F-20	13-1	2500571	

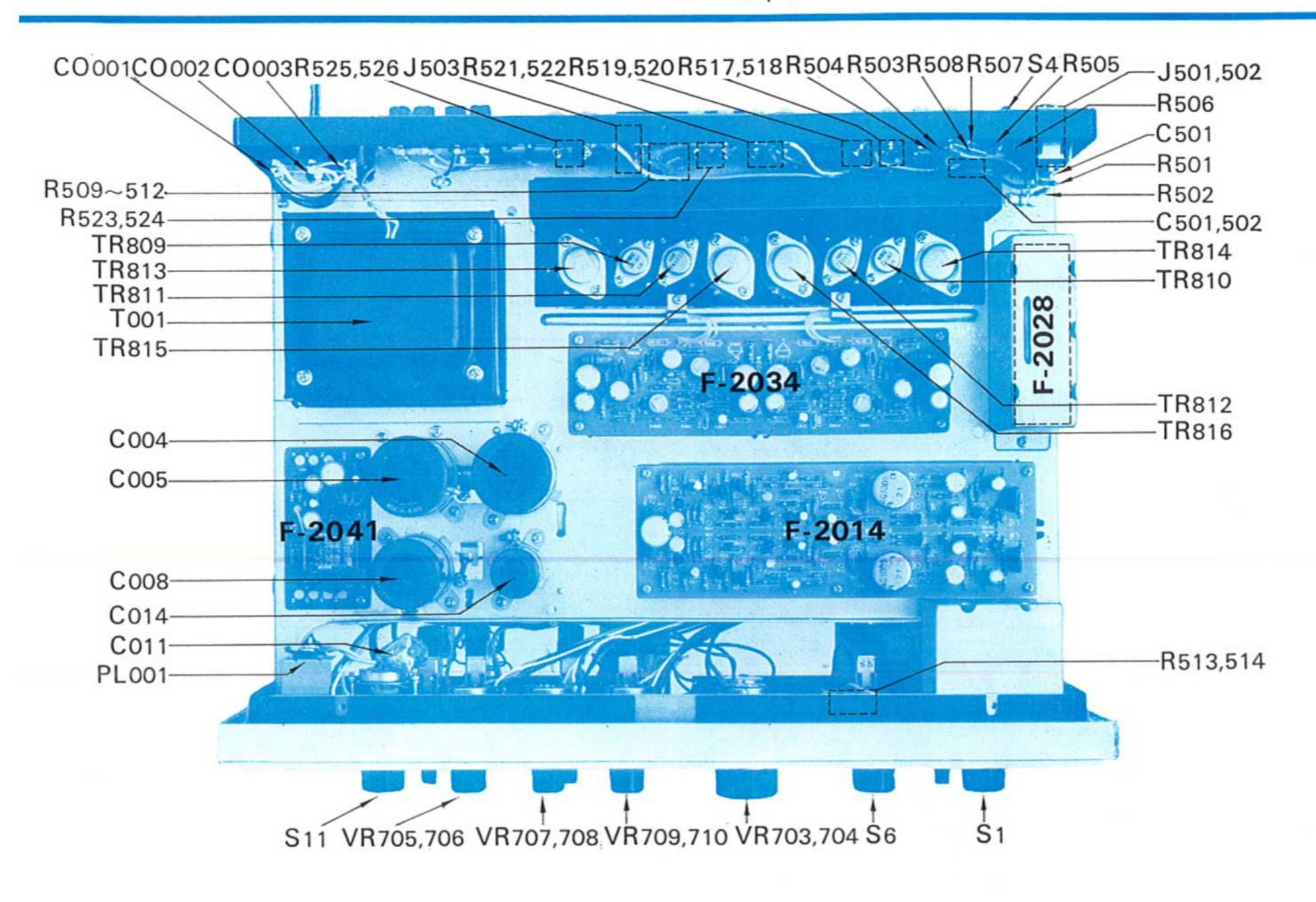


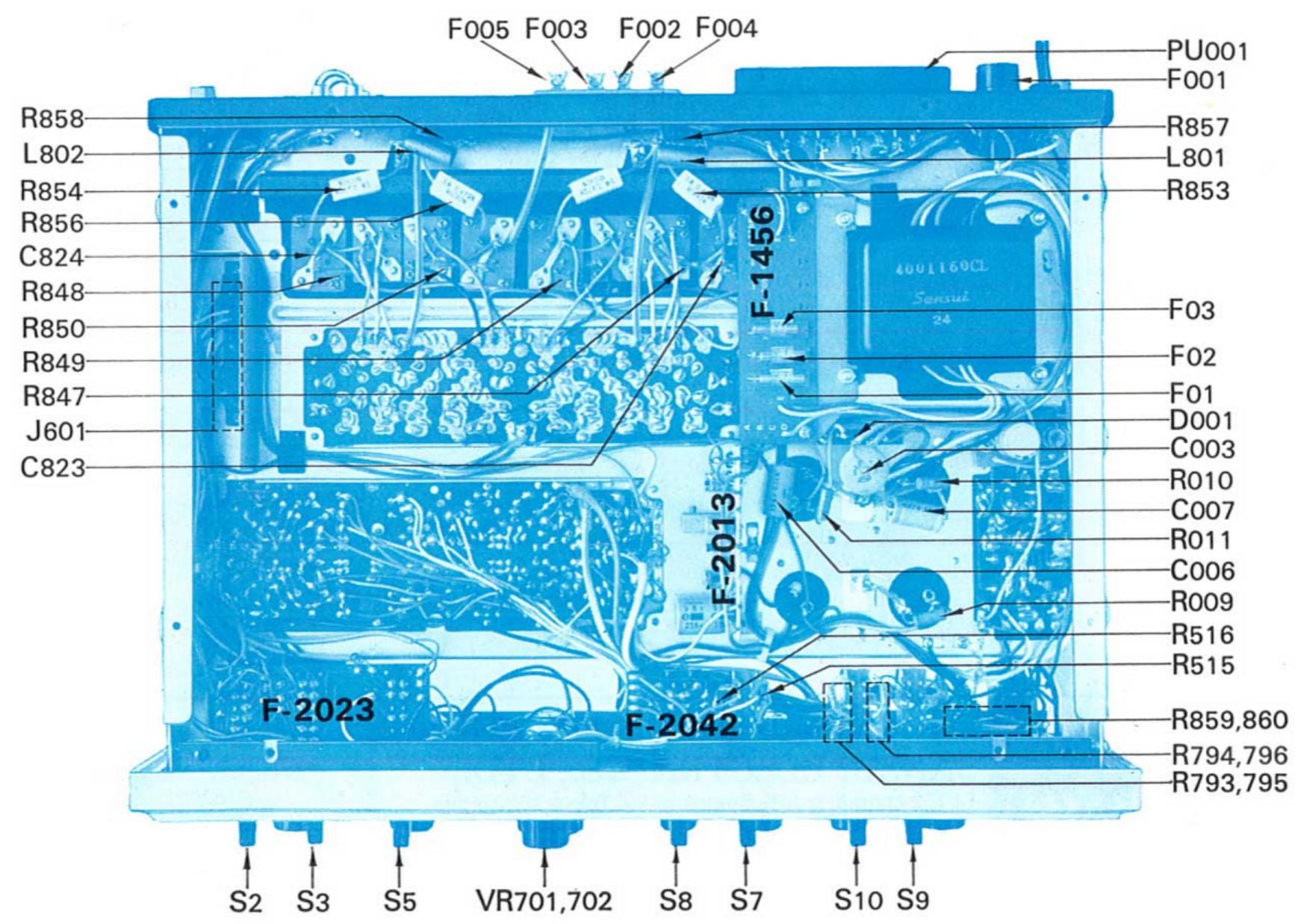
OTHER PARTS AND THEIR POSITION ON CHASSIS

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

W	X	Y
R501	100kΩ)	0101104
R502	100kΩ	0101104
R503	100kΩ	0101104
R504	100kΩ	0101104
R505	56kΩ	0101164
R506	56kΩ	0101563
R507	1000	577 X 1057 F 1541 F 1657
	47kΩ	0101473
R 508	47kΩ	0101473
R509 R510	180kΩ	0101184
P. S. D. T. Servin	180kΩ	0101184
R511	100kΩ	0101104
R512	$100k\Omega$ \\ $10k\Omega$ \\ $\pm 10\%$ \\ \\ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0101104
R513	10842	0101103
R514	10kΩ	0101103
R515	680kΩ	0101684
R516	680kΩ	0101684
R517 R518	100kΩ 100kΩ	0101104
R519	100kΩ	0101104
R520	100kΩ	0101104
R521	100kΩ	
R521	100kΩ	0101104
R523	100kΩ	0101104
R524	100kΩ	0101104
R525	100kΩ	0101104
R526	100kΩ	0101104
R527	6 8kO)	0107682
R528	$\frac{6.8k\Omega}{6.8k\Omega}$ ± 5% $\frac{1}{4}$ W CR.	0107682
	$330k\Omega$	
R793 R794	330kΩ	0101334
R794 R795	560kΩ	0101564
R796	56040	0101564
R847	10Ω $\pm 10\%$ $\frac{1}{4}$ W CR.	0101100
R848	10Ω	0101100
R849	10Ω	0101100
R850	10Ω	0101100
R853	0.47Ω	0155478
R854	0.47.0	0155478
R855	$0.47\Omega \pm 10\%$ 5W CeR.	0155478
R856	0.47 Ω	0155478
R857	4.7Ω	0104479
R858	4.7 Ω	0104479
R859	560Ω	0104561
R860	560Ω $\geq \pm 10\%$ 1W CR.	0104561
R009	12kΩ	0104123
R010	5.6kΩ	010456
Roll	5.6kΩ)	010456
VR701	} 250kΩ (M, N) BALANCE	101085
VR702	į.	
VR703	250k Ω (B) \times 2 VOLUME	101085
VR704)	
VR705	$100k\Omega (B) \times 2$ BASS	101086
V R706) 100k12 (b) \ 2 BA33	101000
VR707	1 .001 0 (0)	101007
VR708	$100k\Omega$ (B) × 2 MIDRANGE	101086
VR709	j	
VR710	100kΩ (W)×2 TREBLE	101084
C003	0.01μF ±10% 1.4kV CC.	065980
C004	6800μF) cc	051568
C005	6800μF 50V CC.	051568

W	X	Υ
C006 C007 C008 C011 C014 C501	$0.22\mu F$ $\pm 10\%$ 250V MP. $0.22\mu F$ $\pm 200\mu F$ 63V EC. $0.022\mu F$ $\pm 20\%$ 250V MPC. $1000\mu F$ 50V EC.	0592228 0592228 0559505 0605227 0559302 0660473
C502 C803 C823 C824	$0.047 \mu F$ $0.047 \mu F$ 0.0	0660473 0660473 0660331 0660331
TR809 TR810 TR811	} 2SC680 (A, B, C)	0305620,1,2 0305620,1,2 0300150,1,2
TR812 TR813 TR814	2SA566 (A, B, C) 2SC793 (R, Y, BL)	0300150,1,5 0305450,1,5 0305450,1,5
TR815 TR816	2SA663 (R, Y, BL)	0300350,1,
	Power Transistor Socket (Big) Power Transistor Socket (Small)	2030020
D001	5B2	0310660
L801 L802	} Stabilizing Coil for High Frequency Range	4290221 4290221
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11	SELECTOR TAPE TO TAPE REPRINT TAPE MONITOR PHONO 2 PICK-UP LO AD 4CH ADAPTOR MODE SWITCH MUTING LOUDNESS LOW FILTER HIGH FILTER POWER/SPEAKERS	1105130 1170290 1170290 1110110 1170300 1101190 1170270 1170270 1170270 1170270 1170270
J501 J502 J503 J601 J801	MIC Jack DIN Socket Multi-Connector (F-2028) HEADPHONES	2430190 2430190 2430040 2420040 2430220
T001	Power Transformer	4001150
CO001 CO002 CO003	AC Outlet (UNSWITCHED) AC Outlet (SWITCHED) AC Outlet (SWITCHED)	2450040 2450040 2450040
F001	Power Fuse (3A) Power Fuse Holder	0433840 2300060
F002 F003 F004 F005 F01	Quick-Acting Fuse (+Power Supply, Lch.) 4A (-Power Supply, Rch.) (-Power Supply, Rch.) (-Power Supply, Rch.)	0433272 0433272 0433272 0433272 0432830
F02 F03	1A Wired-in Fuse 3A,	0432830 0432870
PL001 PU001	Power Indicator (6.3V 250mA) Power Indicator Socket Voltage Selector	0400090 2320080
	Main Plug Sub Plug Socket Printed Circuit Board for Protector Fuse F-1456	2410180 2410190 2410170 2598120







SANSUI ELECTRIC CO., LTD.
14-1, 2-chome, Izumi, Suginami-ku, Tokyo 168, Japan.
TELEPHONE: (03) 323-1111 /TELEX: 232-2076