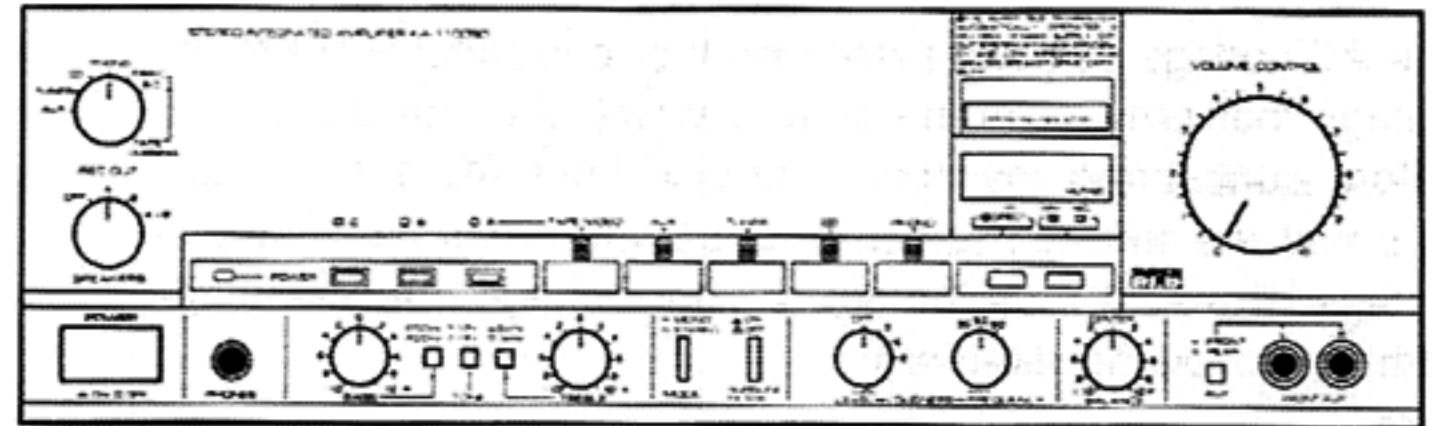



STEREO INTEGRATED AMPLIFIER

# KA-1100SD

INSTRUCTION MANUAL



# KENWOOD

PRINTED IN JAPAN B50-5335-00 (K,P,U,M,UE,X,E) (T) 

89101112/85 123456789101112/86

## Important!

### U.S.A., Canada

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only. These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows should be disregarded.

### All other countries

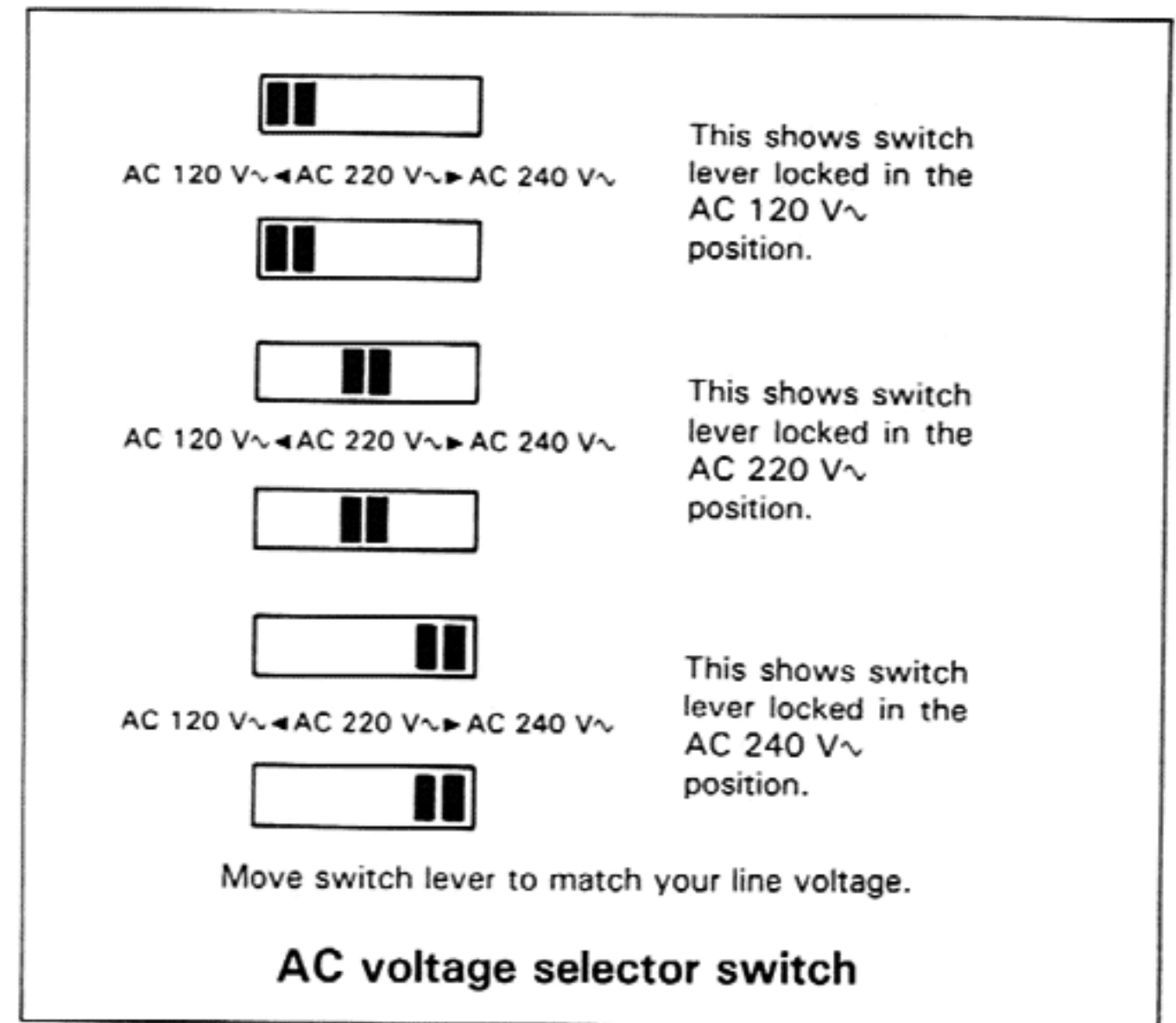
Units shipped to countries other than the U.S.A., Canada are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

### AC voltage selection

This unit operates on 120 volts, 220 volts or 240 volts AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

#### Note:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.



### For United Kingdom

The mains plug must be removed from the wall socket prior to any internal examination.

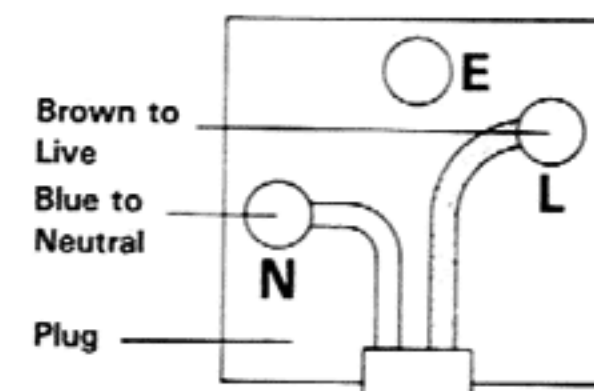
#### Important

The wires in this mains lead are coloured in accordance with the following code:

Blue ..... Neutral  
Brown ..... Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

Wire Colour	Plug Terminal Marking
Blue .....	N or Black
Brown .....	L or Red



#### Notes:

- 1) If a 13-amp plug is used, this must be fitted with a 5-amp fuse.
- 2) If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

## WARNING:

TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

## Rear panel safety precautions

<p><b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN</p>	<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>
	<p>The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p>
	<p>The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>

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## For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model KA-1100SD Serial number \_\_\_\_\_

## Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

## Before operation

### Safety precautions

Never remove the case. If the internal parts are touched, accidentally, a serious electric shock might occur.



Never touch internal parts.

If a metal object, such as a hair pin or a needle, comes into contact with the power socket on the rear panel, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical appliances, such as an iron or toaster.



Never connect other electrical appliances.

Touching the power plug when your hands are wet may result in a serious electric shock.



Never touch with wet hands.

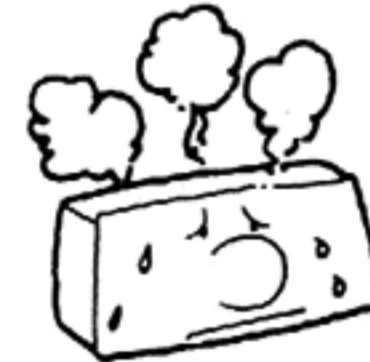
Never pull, bend or extend the power cord. This could damage the power cord, resulting in a broken cord or short-circuit.



Never pull or stretch the cord.

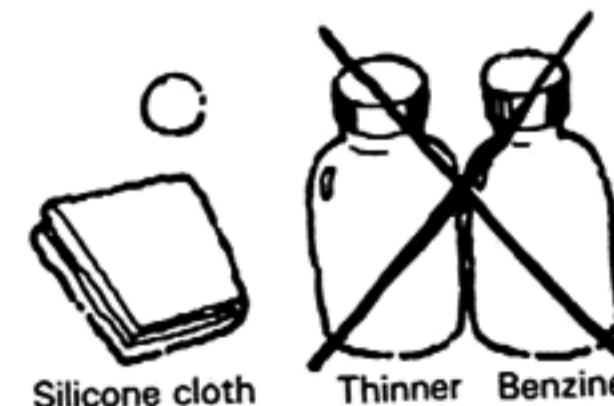
### In case of abnormal smell

If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service station.



### Cleaning

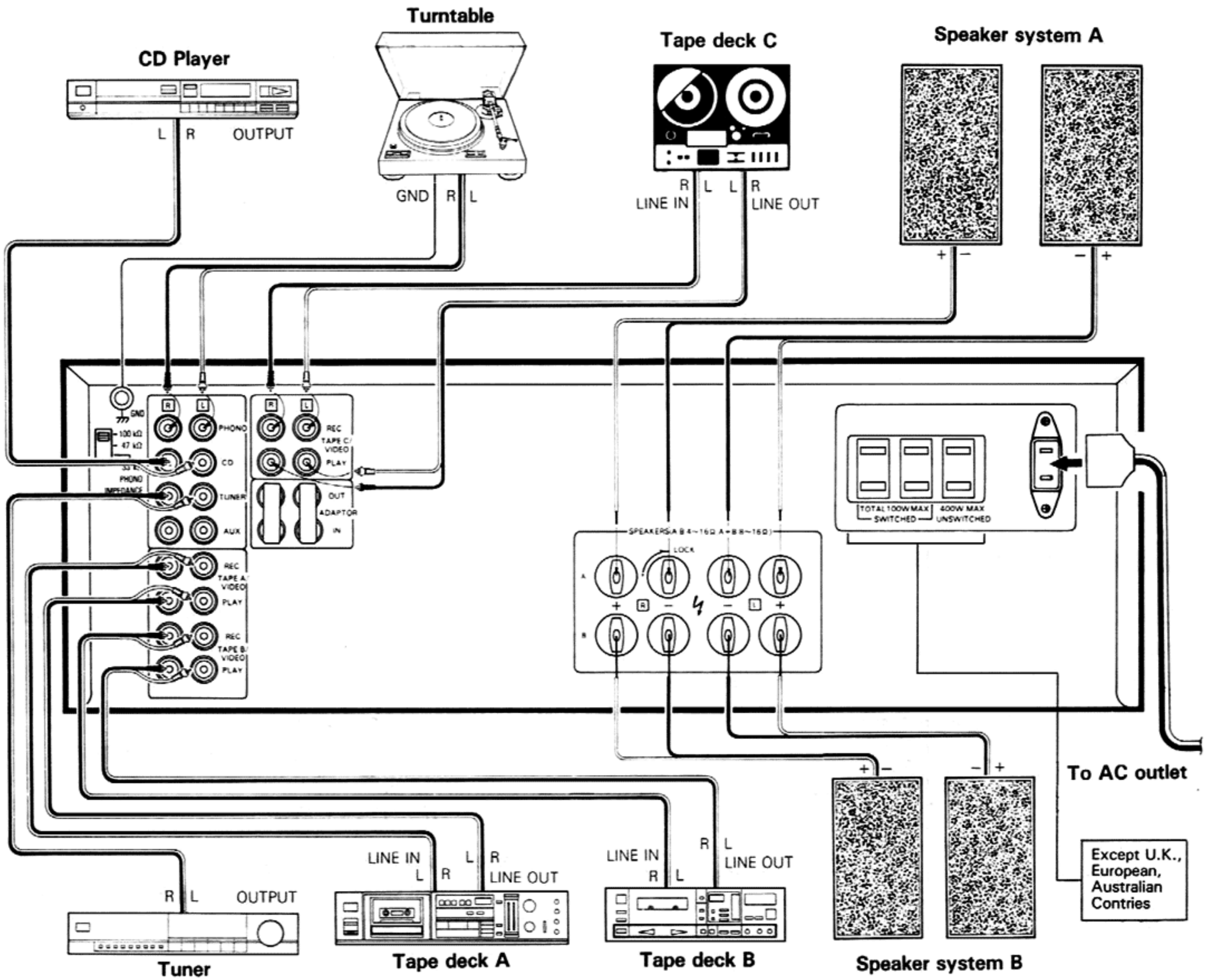
Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet. Use a silicone cloth or a clean dry cloth.



Silicone cloth Thinner Benzine

### Installation precautions

- Avoid locations subject to direct sunlight.
- Avoid high or low temperature extremes.
- Keep the unit away from heat radiating sources.
- Choose a location that is relatively free of vibration or excessive dust.
- Make sure power is off before making any system connections.



### Speakers

This amplifier has two pairs of speaker terminals, SPEAKERS A and SPEAKERS B.

#### Connecting one speaker system

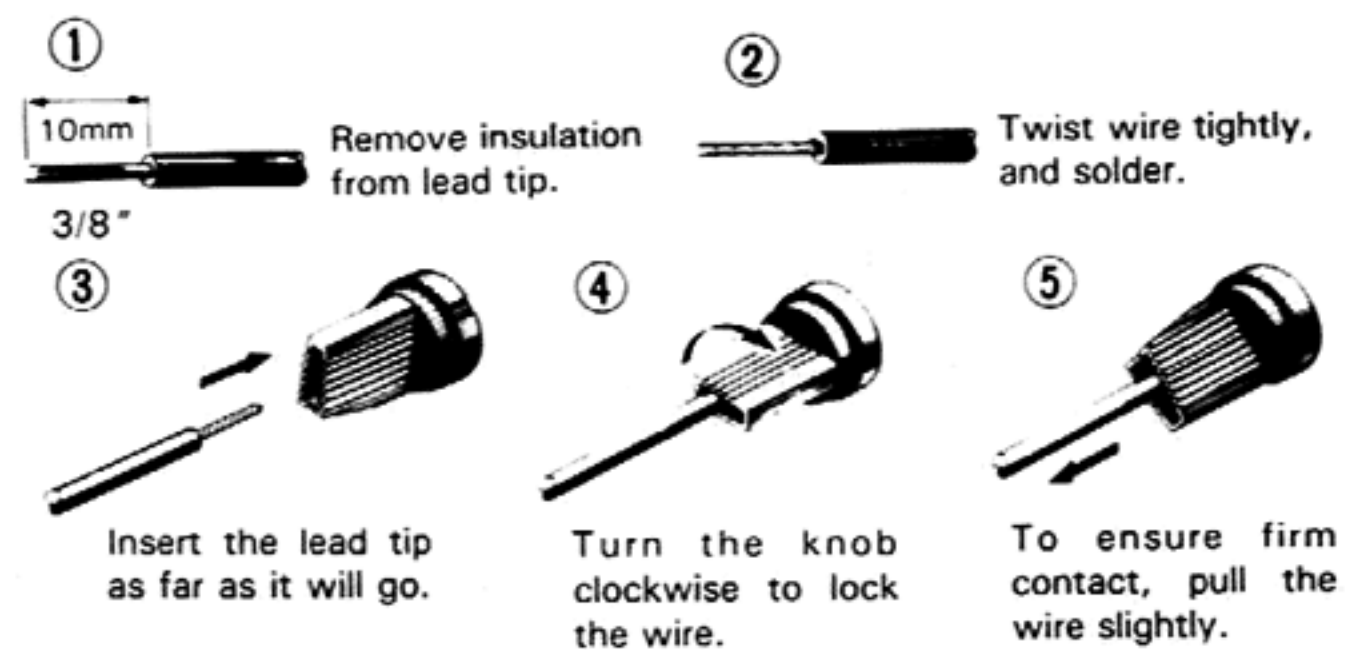
Connect speakers rated at 4 ohms or more to the SPEAKERS A terminals.

#### Connecting two speaker systems

To connect an additional pair of speakers, use the B terminals. In this case, each speaker must be rated at 8 ohms or more.

### WARNING!

Particular attention must be given to making good electrical contact at the amplifier-output and speaker terminals. Poor or loose connections can cause sparking or burning at the terminals because of the very high power that the amplifier can deliver. Follow these steps carefully.



Connecting speaker cords

## **Turntable**

Your stereo turntable has two audio cables that are terminated with phono plugs. Plug the left channel plug into the [L] and the right channel plug into the [R] PHONO INPUT jacks as shown on page 4.

If the turntable has a ground wire, connect it to the unit's GND terminal to avoid hum.

## **CD**

Connect the left channel of the CD player to the [L] CD input jack and the right channel of the CD player to the [R] CD input jack.

## **Tuner**

Use the TUNER terminals for connection to an FM stereo or AM-FM stereo tuner.

Connect the left channel of the tuner to the [L] TUNER input jack and the right channel of the tuner to the [R] TUNER input jack.

## **AUX**

Additional AUX jacks (FRONT AUX) are equipped with this unit on the front panel to facilitate an operation of an equipment to be connected to these jacks. Selecting the source equipments connected to the AUX jacks on the rear/front panel is performed with the AUX (REAR/FRONT) switch. To these jacks, high-level signal sources such as, tuner, extra tape decks, TV, VTR sound outputs, mic preamps, etc. can be connected.

## **Ground**

For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable. A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

## **Tape deck**

If only one tape deck is to be connected to the unit it is recommended that it be connected to the jacks marked TAPE A/VIDEO.

Tape deck input and output cables are normally terminated with phono plugs.

## **Playback**

Plug the left and right output cables of the tape deck into the [L] and [R] TAPE A/VIDEO PLAY jacks.

## **Record**

Plug the left and right input cables of the tape deck into the [L] and [R] TAPE A/VIDEO REC jacks.

## **Second and/or third tape deck**

Plug the input and output cables from the second and/or third tape deck into the REC and PLAY jacks marked TAPE B/VIDEO and/or TAPE C/VIDEO.

## **AC outlets (Except U.K., European, Australian countries)**

The AC outlets on the rear panel of the unit may be used to supply power to other components in the system, such as turntables, tape decks, etc. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

**1. SWITCHED outlets:** These outlets supply power only when the unit is turned on. The maximum total capacity (both outlets) is 100 watts.

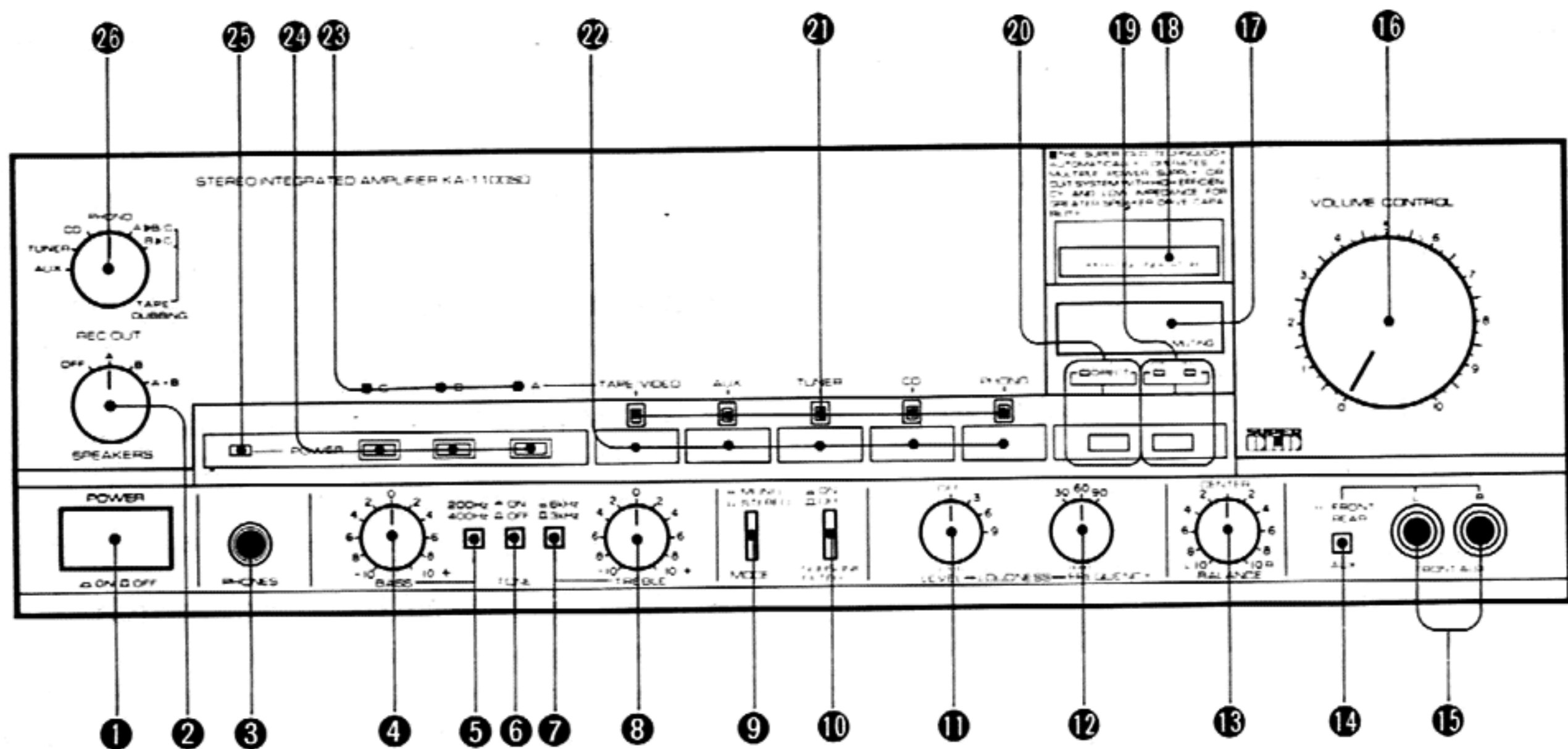
**2. UNSWITCHED outlet:** The outlet provides power when the unit is plugged into an active AC wall outlet, regardless of the setting of the POWER switch. The maximum capacity is 400 watts.

## **PHONO IMPEDANCE selector switch**

In turntable operation, when using an MM (moving magnet) cartridge, set this switch to appropriate position according to the impedance of cartridge with the MM/MC selector switch on the front panel set to MM.

## **ADAPTOR IN OUT jacks**

See page 9.



**1 POWER switch**

Press this switch to turn on the power. To turn the power off, press the switch again to set it to the out position.

**2 SPEAKERS switch**

**OFF** — This position disconnects the speakers to permit private listening with headphones.

**A** — Activates speakers connected to the SPEAKERS A terminals on the rear panel.

**B** — Activates speakers connected to the SPEAKERS B terminals on the rear panel.

**A + B** — Activates speakers connected to the SPEAKERS A and B terminals simultaneously.

**3 PHONES jack**

Plug stereo headphones into this jack for private listening. The speakers are silenced when the SPEAKERS switch is set to OFF.

**4 BASS control**

Turn clockwise to increase bass response, counter-clockwise to reduce bass response. The "0" setting provides a flat bass response.

**5 200 Hz/400 Hz selector switch**

This switch is used to change between the 200 Hz or 400 Hz of low frequency range (BASS control) with the TONE switch set to ON.

**6 TONE switch**

This switch provides flat frequency response by deactivating the tone control circuit. BASS and TREBLE controls do not operate when this switch is set to OFF. Set this switch to ON when the BASS and TREBLE controls are used.

**7 6 kHz/3 kHz selector switch**

This switch is used to change between the 6 kHz or 3 kHz of high frequency range (TREBLE control) with the TONE switch set to ON.

**8 TREBLE control**

Turn clockwise to increase treble response, counter-clockwise to reduce treble response. The "0" setting provides a flat treble response.

**9 MODE switch**

**STEREO** — This provides stereophonic reproduction of any stereo program source. The left channel is heard from the left speaker, and the right channel is heard from the right speaker.

**MONO** — Monophonic reproduction. The left and right channels are mixed together and heard from both speakers.

**10 SUBSONIC FILTER switch**

**ON** — With the switch in this setting, signals below 18 Hz are attenuated at the rate of 6 dB per octave. Although such signals are inaudible, they can cause intermodulation distortion components in the audible range. It is recommended that this switch be depressed at all times, even if no turntable rumble is apparent.

**11 LOUDNESS LEVEL control**

This control is used to select the boost level of 3, 6 or 9 in dB. The OFF position employs flat frequency response and deactivates the LOUDNESS controls. The boost values apply at the VOLUME CONTROL setting of -30 dB, the larger values signify greater boosting.

**12 LOUDNESS FREQUENCY control**

This can be selected the low frequency of 30, 60 or 90 Hz with the LOUDNESS LEVEL control set to 3, 6 or 9.

**13 BALANCE control**

This control permits balancing of the left and right channels when an imbalance exists from the sound source, or to correct acoustic imbalance due to room conditions. Turn it to the left from the CENTER position to raise the left channel; turn it to the right of CENTER to raise the level of the right channel.

#### 14 **AUX switch**

Pressing this switch selects source equipments connected to the AUX jacks on the front or rear panel.

#### 15 **FRONT AUX jacks**

Temporarily used high-level signal sources such as, tuner, C.D. player, extra tape decks, TV, VTR sound outputs, mic preamps, etc. are connected to these jacks.

#### 16 **VOLUME CONTROL**

This control adjusts left- and right-channel volume simultaneously. Set it for the desired listening level.

#### 17 **MUTING switch**

Pressing this switch cuts off the sound output. To release muting, press this switch again.

#### 18 **OPERATING INDICATOR**

Lights when the MUTING switch is not set to ON.

#### 19 **MM/MC selector switch and indicator**

This switch is used to select the type of cartridge of the turntable connected.

**MM** — When using an MM (moving magnet) and an high output MC (moving coil) cartridge, set the switch to this position. The MM indicator above will light.

**MC** — When using an MC cartridge set the switch to this position. The MC indicator above will light.

#### 20 **CD DIRECT selector switch and indicator**

When this switch is set to ON (the indicator lights), the signal applied to the CD jacks is selected and high quality sound is heard from the speakers. In this setting, controls other than the VOLUME CONTROL, BASS and TREBLE controls, MUTING switch and MODE switch do not function. When this switch is set to OFF, the source sound selected by input selectors is heard from the speakers. Even when a tuner is connected instead of the CD player, high quality sound is obtained.

#### **Note:**

When this switch is set to ON, other sound sources (PHONO, TUNER, TAPE, AUX) cannot be heard from the speakers. To listen to these sound sources, be sure to set the switch to OFF.

#### 21 **Input selector indicators**

One of these indicators lights according to the input selector pressed to indicate that one of TAPE/VIDEO, AUX, TUNER, CD or PHONO is selected. (When the CD DIRECT selector switch is set to ON, the CD sound has priority.)

#### 22 **Input selectors**

**TAPE/VIDEO** — To listen to or to record the sound of tape deck or video deck connected to the TAPE A/VIDEO, TAPE B/VIDEO and/or TAPE C/VIDEO jacks.

**AUX** — To listen to the sound source connected to AUX jacks.

**TUNER** — To listen to the tuner sound connected to the TUNER jacks.

**CD** — To listen to the CD sound connected to the CD jacks.

**PHONO** — To listen to the record sound connected to the PHONO jacks.

#### **Note:**

If all the input selectors are set to OFF, the input selector indicators go off to indicate incorrect setting. Be sure to press the appropriate input selector.

#### 23 **Tape/video input indicators**

Light according to the tape/video input selectors pressed (TAPE/VIDEO-A, TAPE/VIDEO-B, TAPE/VIDEO-C).

#### 24 **Tape/video input selectors (TAPE/VIDEO-A, TAPE/VIDEO-B, TAPE/VIDEO-C)**

Press the TAPE/VIDEO input selector, then press one of these selectors to select the tape deck or video deck connected to the TAPE A/VIDEO, TAPE B/VIDEO and/or TAPE C/VIDEO jacks.

#### 25 **POWER indicator**

Lights when the POWER switch is set to ON.

#### 26 **REC OUT switch**

This switch is designed to record from a source other than that selected by the input selector switches.

**PHONO** — This setting permits the recording of the record played on the turntable connected to the PHONO jacks.

**CD** — This setting makes the CD player for recording.

**TUNER** — This setting makes the tuner the program source for recording.

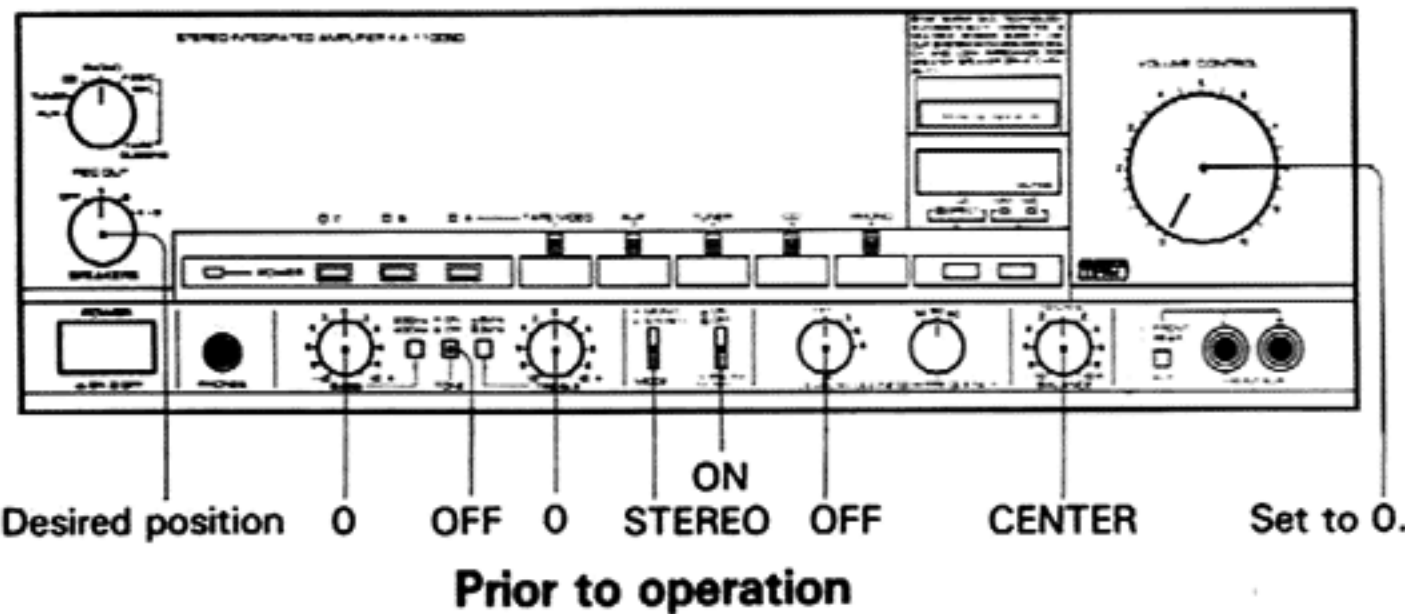
**AUX** — This setting permits a recording of the program source connected to the AUX jacks.

**TAPE DUBBING A ▶ B/C** — When dubbing from the tape deck connected to the TAPE A/VIDEO jacks to the tape deck connected to the TAPE B/VIDEO and/or TAPE C/VIDEO jacks.

**TAPE DUBBING B ▶ C** — When dubbing from the tape deck connected to the TAPE B/VIDEO jacks to the tape deck connected to the TAPE C/VIDEO jacks.

## Prior to operation

It is recommended that rarely used controls and switches be preset in accordance with your preference in order to simplify operation. Once these controls and switches have been preset, normal operation is simply turning on the POWER switch and selecting the desired program source by depressing one of the input selector switches.



## To listen to CD

1. Press the CD input selector. The corresponding indicator lights. Press the CD DIRECT switch. The indicator lights.
2. Operate the CD player connected to the CD jacks.
3. Adjust the volume and tone. When the CD DIRECT switch is set to ON, superior sound may be obtained.

### Note:

When the CD DIRECT switch is set to ON, other sound sources cannot be heard. To listen to other sound sources, be sure to set the CD DIRECT switch to OFF.

## Tuner

1. With your tuner connected to the TUNER jacks, press the TUNER input selector switch so that the corresponding indicator will go on.
2. Tune to the desired station.
3. Adjust the volume and/or tone controls for your preference.

## Turntable

1. Press the MUTING switch to temporarily reduce the output volume level.
2. Press the PHONO input selector switch so that the corresponding indicator will go on.
3. According to the type of phono-cartridge used, set the MM/MC selector switch to appropriate position.
4. Press the MUTING switch again to release the muting function.
5. Adjust the volume and/or tone controls for your preference.

## AUX

1. With your additional program source connected to the AUX jacks (on the front/rear panel), press the AUX input selector switch so that the corresponding indicator will go on.
2. Operate the component connected to the AUX jacks.
3. Adjust the volume and/or tone controls for your preference.

## Tape decks

### Tape playback

1. Select the tape deck connected to the TAPE A/VIDEO, TAPE B/VIDEO or TAPE C/VIDEO jacks with the input selector switches (TAPE/VIDEO-A, TAPE/VIDEO-B or TAPE/VIDEO-C) so that the indicator corresponding to the desired tape deck (A, B, C) goes on.
2. Operate the tape deck to playback your recorded tape.
3. Adjust the volume and/or tone controls for your preference.

### Recording (with one tape deck)

1. Select the tape deck connected to the TAPE A/VIDEO, TAPE B/VIDEO or TAPE C/VIDEO jacks.
2. Set the REC OUT switch to PHONO, TUNER, AUX or CD in accordance with the desired source.
3. Set up the program source component for operation and set up your tape deck for recording.
4. Set recording levels with the controls on your tape deck. The controls other than the REC OUT switch on the amplifier do not affect the signal output to the tape deck.

### Recording (with two and/or three tape decks)

1. Select the tape deck connected to the TAPE A/VIDEO, TAPE B/VIDEO and/or TAPE C/VIDEO jacks.
2. Set the REC OUT switch to PHONO, TUNER, AUX or CD in accordance with the desired source.
3. Set up your two and/or three tape decks for recording.
4. Recording levels should be set using controls on the individual tape decks.

### Monitoring

If your tape deck is equipped with three heads, you can compare the sound quality of the recording in progress with that of the program source; the recorded sound can be heard by pressing the input selector switch (TAPE/VIDEO-A, TAPE/VIDEO-B, TAPE/VIDEO-C).

### Tape-to-tape dubbing

When two tape decks are connected to the TAPE A and TAPE B/C jacks, tape recordings may be duplicated easily using one tape deck to play the prerecorded tape and the other tape deck to record the copy. Set the REC OUT switch as follows:

**TAPE DUBBING A ▷ B/C** — To record a copy on tape deck B and/or tape deck C from a tape played on tape deck A.

**TAPE DUBBING B ▷ C** — To record a copy on tape deck C from a tape played on tape deck B.

### Note:

The settings of the input selector switches do not affect dubbing. Adjust the recording level on the deck that is making the copy using that deck's operating controls. Start both decks (play and record) simultaneously.



Instead of the tape deck sound a Hi-Fi video deck sound can be played back. For details, refer to the Instruction Manual of the Hi-Fi video deck.

### REC OUT operation

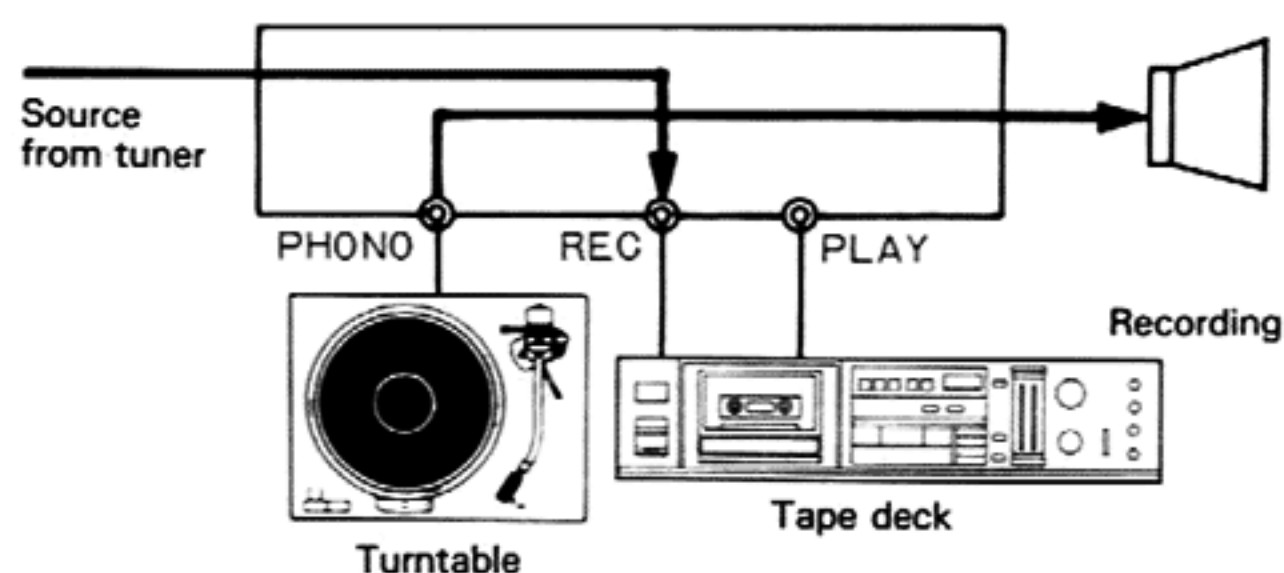
The setting of the REC OUT switch to PHONO, TUNER, AUX or CD directly connects the tape deck to the source signals; that is, the desired source signal for the recording is fed to the TAPE REC jacks regardless of the setting of the input selector switches.

### To listen to other audio sources while tape dubbing

1. Set the REC OUT switch to TAPE DUBBING A►B/C or B►C for dubbing.
2. Press the required input selector switch (PHONO, CD, TUNER or AUX).
3. Operate the selected unit.
4. Adjust the volume and/or tone controls for your preference.

### Recording of AM/FM broadcasts while listening to records

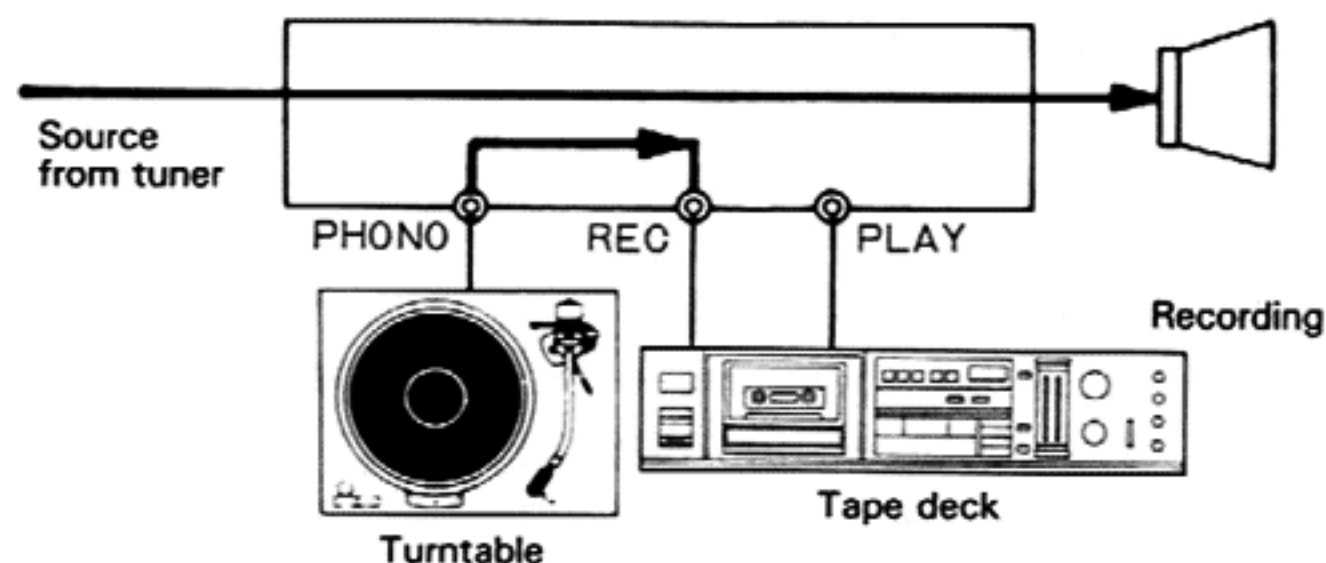
1. Press the PHONO input selector switch.
2. Operate the turntable.
3. Set the REC OUT switch to TUNER and receive the AM/FM broadcast.
4. Operate the tape deck to record the AM/FM broadcast. Adjust the recording level with the recording level controls of the tape deck.
5. To listen to the AM/FM broadcast, simply press the TUNER input selector switch. The recording of the AM/FM broadcast will continue.



**Recording of a broadcast while listening to records**

### Recording of records while listening to an AM/FM broadcast

1. Press the TUNER input selector switch.
2. Operate the tuner.
3. Set the REC OUT switch to PHONO and operate the turntable.
4. Operate the tape deck to record the record. Adjust the recording level with the recording level controls of the tape deck.
5. To listen to the record, simply press the PHONO input selector switch. The recording of the record will continue.



**Recording of records while listening to a broadcast**

### ADAPTOR jacks

For normal operation, the input and output ADAPTOR jacks are short circuited with short pins. An audio/video selector, graphic equalizer, reverberation amplifier, etc. can be connected to these jacks. To connect these units, remove the short pins and connect the output jacks of the unit to the input ADAPTOR jacks and input jacks to the output ADAPTOR jacks with an audio cord. The unit to be connected is usually equipped with tape input/output jacks. Connect a tape deck to the unit connected to the ADAPTOR jacks.

For details, refer to the instruction manual of the connected unit.

Instead of the tape deck sound, a Hi-Fi video deck sound can be recorded. For details, refer to the Instruction Manual of the Hi-Fi video deck.

**Thermal protector**

This unit employs the thermal protector circuits which automatically shuts off the power or operates muting if the temperature inside the amplifier becomes unusually high. The protector automatically restores the power when the temperature drops to the normal level and the cause of the unusual temperature rise must be removed before the power is restored. Unusually high temperatures may be caused in poor ventilation condition or by a shorted output circuit.

**Speaker protection**

The speaker protection circuit equipped with this amplifier may be operated if the speaker terminals are shorted accidentally when the power is on. At this time, the muting circuit may be operated continuously even though the protection circuit restores after a few seconds. Turn the POWER switch off and make a correct speaker connection and then turn the POWER switch on.

**In case of difficulty**

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

<b>AM, FM, PHONO or Tape playback</b>	<b>Cause</b>	<b>Remedy</b>
No sound from left or right.	<ol style="list-style-type: none"> <li>1. Speakers switched off.</li> <li>2. Speaker cords disconnected.</li> <li>3. VOLUME CONTROL set fully counterclockwise.</li> <li>4. OPERATING INDICATOR does not light.</li> <li>5. CD DIRECT selector switch set to ON.</li> <li>6. Power cord not plugged in.</li> <li>7. Poor connection at wall outlet. Power outlet inactive.</li> <li>8. No input selector switch is in use.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check speaker switch.</li> <li>2. Check speaker connections.</li> <li>3. Set the control to your preference.</li> <li>4. Press the MUTING switch after checking the volume values.</li> <li>5. Set the switch to OFF.</li> <li>6. Check plug contact.</li> <li>7. Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch).</li> <li>8. Press one of the selector switches to select the desired program.</li> </ol>
Sound from left or right, but not both.	<ol style="list-style-type: none"> <li>1. Poor speaker connections.</li> <li>2. Defective speaker.</li> <li>3. BALANCE control set to one extreme or the other.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check connections at both ends of speaker cord.</li> <li>2. Reverse speakers, if problem stays with speaker have speaker checked.</li> <li>3. Check BALANCE control setting.</li> </ol>
<b>PHONO playback only</b>	<b>Cause</b>	<b>Remedy</b>
No sound from both or one speaker.	Turntable output disconnected.	Check phono cables.
Loud hum drowns out sound.	Poor ground connection at phono cable connections.	Check phono plugs, particularly outershell connections.
Low background hum.	Hum Picked up in turntable or turntable cables.	Keep cables away from power cords. Twist left and right cables together. Reverse AC plug of turntable. Connect ground wire between turntable and GND terminal.
Background buzz.	TV signal picked up by phono cable (especially near transmitter).	Route phono cables to minimize buzz.
Howling noise at maximum volume settings.	Acoustic pickup from speaker.	Increase distance between speaker and turntable. Choose speaker locations carefully. Check turntable suspension.

**Power Amplifier Section****Power Output**

150 watts\* per channel minimum RMS, both channels driven at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.004% total harmonic distortion

**Both Channels Driven into**

8 ohms at 1 kHz..... 160 W + 160 W (Except USA and Canada)

**Dynamic Power Output into**

4 ohms ..... 368 W (Except USA and Canada)

**Total Harmonic Distortion (20 Hz to 20,000 Hz)****AUX input to SPEAKER**

output ..... 0.004% at rated power into 8 ohms  
0.003% at 1/2 rated power into 8 ohms

**Intermodulation Distortion**

(60 Hz:7 kHz = 4:1)..... 0.003% at rated power into 8 ohms

**Damping Factor**

..... 1,000, at 50 Hz

**Transient Response**

Rise Time ..... 1.7  $\mu$ s

Slew Rate .....  $\pm 100$  V/ $\mu$ s

**Frequency Response**

..... DC to 200 kHz,  
+0 dB, -3 dB

**Speaker Impedance**

..... Accept 4 ohms to 16 ohms

**Input Sensitivity/Impedance**

Phono MM ..... 2.5 mV/47 k ohms

Phono MC ..... 0.1 mV/100 ohms

**Tuner, CD/AUX., Tape,**

ADAPTOR IN ..... 150 mV/47 k ohms

**Signal-to-Noise Ratio (IEC-A)**

Phono MM ..... 88 dB for 2.5 mV input

Phono MC ..... 70 dB for 100  $\mu$ V input

Tuner, CD/AUX, Tape ..... 108 dB

**Maximum Input Level for Phono**

MM ..... 200 mV (RMS), T.H.D. 0.003%  
at 1 kHz

MC ..... 8 mV (RMS), T.H.D. 0.003% at  
1 kHz

**Output Level/Impedance**

Tape REC (Pin), ADAPTOR OUT .. 150 mV/680 ohms

**Frequency Response for Phono**

..... RIAA standard curve  $\pm 0.2$  dB  
(20 Hz to 20,000 Hz)

**Tone Control**

Bass .....  $\pm 10$  dB at 50 Hz, 100 Hz

Treble .....  $\pm 10$  dB at 10 kHz, 20 kHz

**Loudness Control**

(at -30 dB VOLUME Level) ..... +3/6/9 dB at 30/60/90 Hz

**Subsonic Filter**

..... 18 Hz, 6 dB/oct.

**General**

**Power Consumption** ..... 4 A (USA and Canada)  
550 W (U.K., European, Australian  
countries)  
1500 W (Others)

**AC Outlets** ..... Switched 2, Unswitched 1  
(Except U.K., European, Australian  
countries)

**Dimensions** ..... W: 440 mm (17-5/16")  
H: 158 mm (6-7/32")  
D: 383 mm (15-3/32")

**Weight (Net)** ..... 14.7 kg (32.3 lb)

\* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

**Note:**

We follow a policy of continuous advancements in development. For this reason specifications may be changed without notice.

**Power Amplifier Section****Rated Power Output**

8 ohms at 20 Hz to 20,000 Hz

no more than 0.004% THD (FTC) ..... 150 W + 150 W

4 ohms at 63 Hz to 12.5 kHz

no more than 0.7% THD (IEC/NF) ..... 160 W + 160 W

**Total Harmonic Distortion**

Rated Power Output into 8 ohms ..... 0.004%

Intermodulation Distortion ..... 0.003%

Frequency Response ..... DC ~ 200 kHz

+0 dB, -3 dB

**S/N Weighted: Rated Output Power (IEC-A)**

( ) = Unweighted at 50 mW (DIN)

Phono MM ..... 88 dB (63 dB)

Phono MC ..... 70 dB (60 dB)

Tuner, AUX, Tape ..... 108 dB (64 dB)

Damping Factor at 8 ohms, 50 Hz ..... 1,000

**Transient Response**

Rise Time ..... 1.7  $\mu$ s

Slew Rate .....  $\pm 100$  V/ $\mu$ s

**Input Sensitivity/Impedance**

Phono MM ..... 2.5 mV, 47 k $\Omega$

Phono MC ..... 0.1 mV/100  $\Omega$

Tuner, CD/AUX, Tape, ADAPTOR IN ..... 150 mV/47 k $\Omega$

**Tone Control**

Bass 50 Hz/100 Hz .....  $\pm 10$  dB

Treble 10 kHz/20 kHz .....  $\pm 10$  dB

Loudness Control (-30 dB) ..... +3/6/9 dB at 30/60/90 Hz

Subsonic Filter ..... 18 Hz, 6 dB/oct.

**General****Power Consumption**

IEC ..... 550 W

**Dimensions** ..... W: 440 mm

H: 158 mm

D: 383 mm

**Weight (Net)** ..... 14.7 kg

KENWOOD