

STEREO REVERBERATION AMPLIFIER

**RA-59**

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# INSTRUCTION MANUAL

KENWOOD CORPORATION

# KENWOOD

# Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.

We appreciate your patronage and take pride in the long tradition of quality components that our company represents.

So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features and system-connection considerations so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability we have sought to anticipate your needs and desires.

**Keep this manual handy for future reference.**

## 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 \_\_\_\_\_ 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.

## Accessories

Audio cord ..... 2



AC plug adaptor ..... 1  
For the unit with a European AC  
plug in areas other than Europe.  
(except for some areas)



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Caution: Read the pages marked  carefully to ensure safe operation.

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**⚠ Caution: Read this page carefully to ensure safe operation.**

## Before applying power

### For the U.S.A. and Canada

#### Important!

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only.

#### Safety precaution for a Polarized AC plug

However, some products may be supplied with a non-polarized plug.

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

### For the United Kingdom

#### Important!

Units shipped to the U.K. are designed for operation on 240 volts AC only.

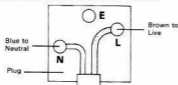
The mains plug must be removed from the wall socket prior to any internal examination.

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.

### For Australia and Europe

#### Important!

Units shipped to Australia are designed for operation on 240 V AC only.

Units shipped to Europe are designed for operation on 220 V AC only.

### For other countries

#### Important!

Units shipped to countries other than the above countries 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

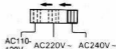
This unit operates on 110-120 or 220-240 volts AC. The AC voltage selector switch Type A or Type B on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches 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.

#### AC voltage selector switch

##### Type A



##### Type B



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

## Safety precautions

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



#### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



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.



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.



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.

# Important safeguards Caution: Read this page carefully to ensure safe operation.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

**1. Power sources** — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**2. Power-cord protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.



**3. Ventilation** — The unit should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.



**4. Water and moisture** — The unit should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.



**5. Temperature** — The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

**6. Heat** — The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



**7. Electric shock** — If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



**8. Enclosure removal** — Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



**9. AC outlets** — 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 units, such as an iron or toaster, to it to prevent fire or electric shock.



The maximum capacities indicated for the AC outlets on the rear panel of this unit are as follows.

UNSWITCHED outlet : 200 W

**10. Cleaning** — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzene, etc. to clean the cabinet. Use a clean dry cloth.



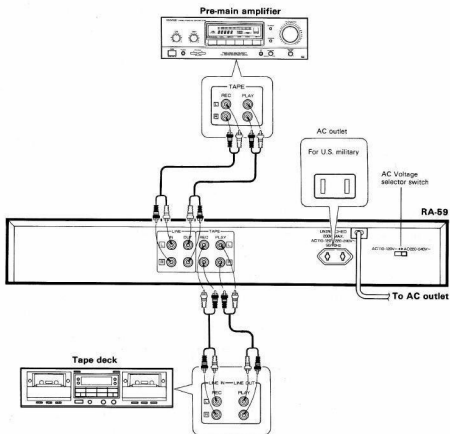
**11. Abnormal smell** — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service station.

**POWER OFF!**



# System connections

When this unit is connected to an integrated amplifier



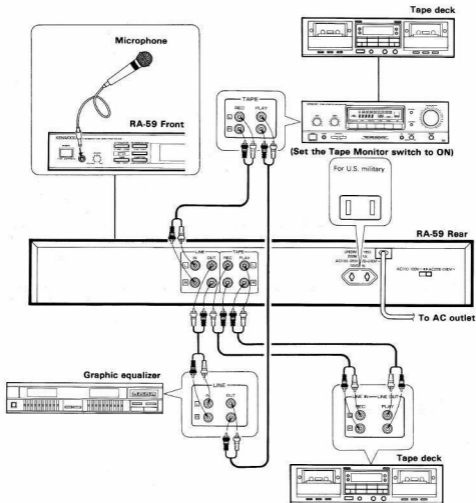
## Precautions

1. Before connecting or disconnecting any cord, be sure to turn OFF the power switches of the unit and amplifier.
2. Each audio cord must be connected securely to the corresponding terminals (L to L and R to R).
3. Do not bind the input/output cords with the power cord or speaker cords. Do not extend the input/output cords unnecessarily to avoid the possibility of noise or deterioration of tone quality.

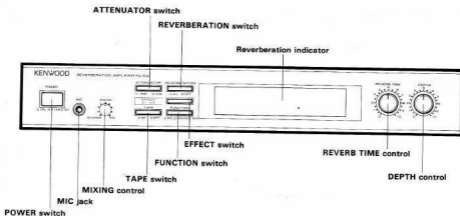
## AC outlet (UNSWITCHED)

This outlet provides power when the unit is plugged into an active AC wall outlet, regardless of the setting of the POWER switch. Its total maximum capacity is 200 watts.

When a graphic equalizer is connected to this unit



## Controls and indicators



## Operating instructions

### ■ To play source with reverb effect

1. Set the TAPE switch of the integrated amplifier to which this unit is connected to ON.
2. Play the source connected to the integrated amplifier.
3. Press the REVERBERATION switch to ON.
4. Press the EFFECT switch to select the position which provide the desired effect.
5. Adjust the REVERB TIME and DEPTH controls to obtain the desired effect.

### ■ To play the cassette deck connected to this unit

1. Press the TAPE switch to ON.
2. Play the cassette deck.

### ■ To perform microphone mixing (Karaoke singing-along)

The microphone mixing feature of this unit can be used for singing along with accompaniment music tape.

1. Press the FUNCTION switch to SOURCE MIC.
  - The reverb effect is applied to both the source and microphone sounds.
  - To apply reverb effect only to the microphone sound, set the FUNCTION switch to MIC.
2. Play the accompaniment music tape on the cassette deck connected to this unit.
3. Adjust the MIXING control to balance the accompaniment music and microphone sound volumes.
  - The tone can be adjusted by the graphic equalizer.

### ■ To record microphone mixing sound

The microphone mixing sound can be recorded on the tape deck connected to the integrated amplifier.

## In case of difficulty

What appears to be a malfunction may not always be serious. 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.

Symptom	Cause	Remedy
No sound although AC is switched on. Indicator not illuminated	<ul style="list-style-type: none"><li>● Poor AC plug connection</li></ul>	<ul style="list-style-type: none"><li>● Check plug contact.</li></ul>
No sound from LEFT and RIGHT	<ul style="list-style-type: none"><li>● Speaker cables disconnected.</li><li>● Volume control of amplifier fully counterclockwise.</li><li>● Tape monitor switch of amplifier set to SOURCE.</li><li>● Tape monitor switch of graphic equalizer or RA-59 set to ON.</li></ul>	<ul style="list-style-type: none"><li>● Check speaker connections.</li><li>● Turn up volume control.</li><li>● Set tape monitor switch of amplifier to TAPE.</li><li>● Set tape monitor switch to OFF except when using tape deck.</li></ul>
Sound from one side only	<ul style="list-style-type: none"><li>● Speaker cords disconnected.</li><li>● Input or output cable disconnected.</li><li>● Balance control of amplifier set to one extreme or the other.</li></ul>	<ul style="list-style-type: none"><li>● Check speaker connections.</li><li>● Check input or output connections.</li><li>● Adjust the balance control of amplifier.</li></ul>

## Specifications

### Reverberation time

Reverberating time ..... 0 - 2.5 sec. (Effect 1)

Delay time ..... 30 - 80 msec. (Effect 2)

Frequency response ..... 10 Hz - 35 kHz, +0 dB,

-0.5 dB

Harmonic distortion ..... Less than 0.01 %

(20 Hz - 20 kHz, output 1 V)

S/N ratio ..... 100 dB (Short-circuited IHF-A network)

Maximum output ..... 7 V (1 kHz, THD 0.01 %,

RL47 k $\Omega$ )

Gain ..... 0 dB

Input impedance ..... 47 k $\Omega$

Output impedance ..... 600  $\Omega$

Mic input sensitivity ..... 1 mV

Mic input impedance ..... 36 k $\Omega$

Attenuation ..... -6 dB at 1 kHz

Input sensitivity ..... 150 mV

Power consumption ..... 18 W

Dimensions ..... W: 440 mm (17-5/16")

H: 74 mm (2-15/16")

D: 278 mm (10-15/16")

Weight (net) ..... 2.9 kg (6.4 lb)

### Note:

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