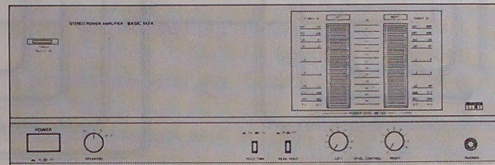




STEREO POWER AMPLIFIER

# BASIC M2A

INSTRUCTION MANUAL



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

<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>



## Dear audio fan

The purpose of this manual is to acquaint you with the operating features of your new amplifier. You will notice that in every detail of planning, engineering, styling, operating convenience, and adaptability, we have sought to anticipate your needs and desires.

We suggest that you read this manual carefully. Knowing how to set up your amplifier to the best advantage will enhance your listening pleasure right from the start. You will also become aware of the ease with which you can adjust your amplifier to meet your special requirements.

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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 Kenwood dealer for information or service on this product.

Model BASIC M2A Serial number \_\_\_\_\_

## Unpacking

Unpack the unit carefully and make sure that all accessories and cables 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.

## IMPORTANT!

### U.S.A. and 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 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. and Canada are equipped with an AC voltage selector switch on the rear panel.

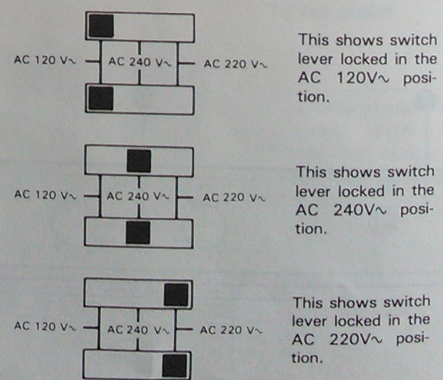
Refer to the following paragraph for the proper setting of this switch.

## 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.



Move switch lever to match your line voltage.

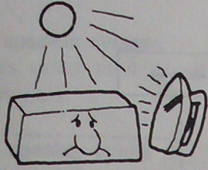
### AC voltage selector switch



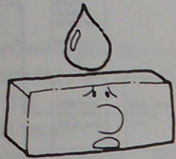
## Before operation

### Notes on installation

Do not place the unit in a place which is exposed to direct sunlight, near a heating appliance, etc.



Do not place a vase containing water, makeup, etc. on the unit. Do not use in a humid place.



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.

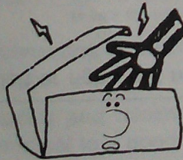


Choose a location that is relatively free from vibration or excessive dust.



### 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.

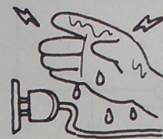


Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical appliances, such as an iron or toaster.



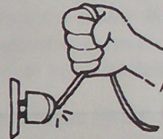
Never connect other electrical appliances.

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



Never touch with wet hands.

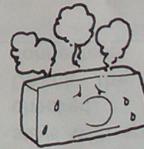
Never pull, bend or extend the power cord. This could damage the power cord, resulting in a broken cord or short-circuit.



Always grasp the plug.

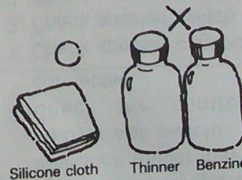
### In case of abnormal smell

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



### Cleaning

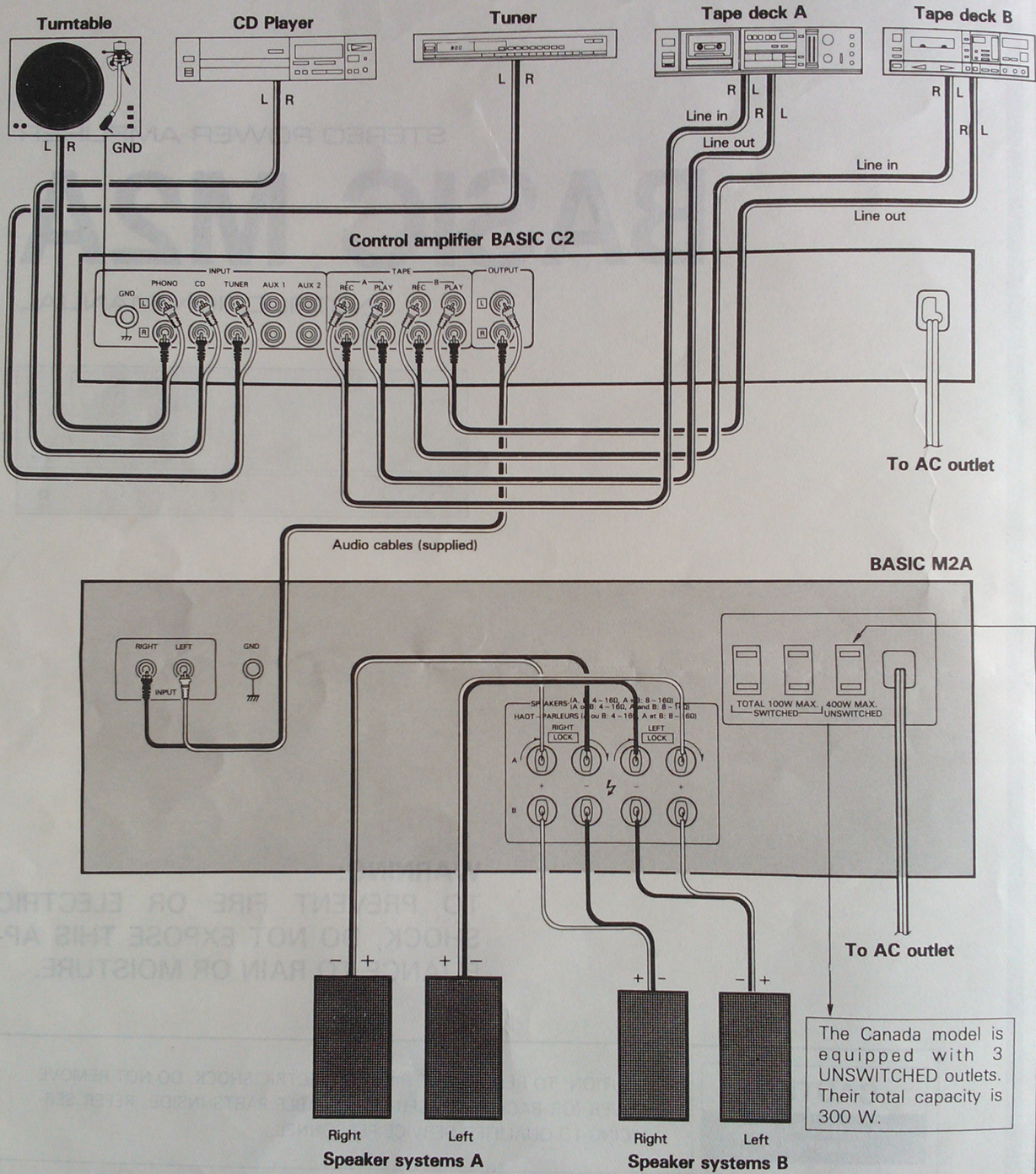
Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet. Use a silicone cloth or a clean dry cloth.



Silicone cloth Thinner Benzine



# System connections



Safety precaution for AC plug (for Canada)

**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.



## 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.

### Connecting an ordinary speaker system

Connect the left speaker to the LEFT SPEAKERS A or B terminals and the right speaker to the RIGHT SPEAKERS A or B terminals.

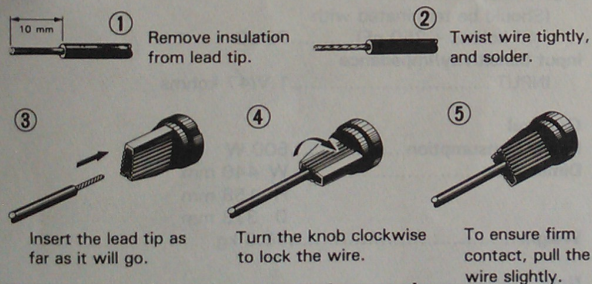
At this time, be sure to connect the (+) terminals of the speakers to the (+) terminals of the amplifier and (-) terminals in the same manner respectively.

#### Note:

The tips of the connected wires should not touch adjacent terminals.

### 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.



### Connecting speaker cords

### 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.

### INPUT jacks

Connect these jacks and the OUTPUT jacks of a control amplifier with audio cables equipped with pin plugs on each end.

#### Note:

To prevent possible trouble, always disconnect the power plug or turn off the POWER switch before connecting or disconnecting the audio cables.

### AC outlets (Except Europe)

The AC outlets on the rear panel 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.

### 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.

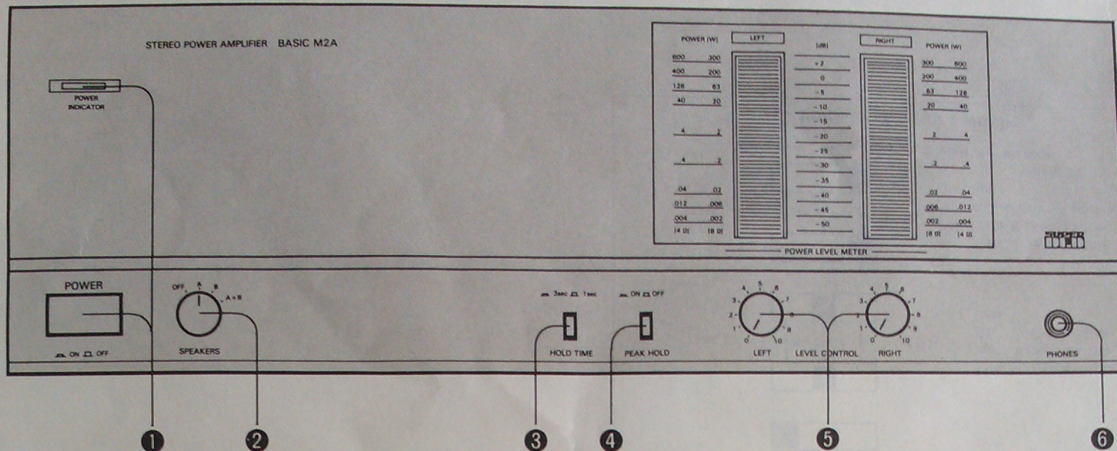
### Speaker protection circuit

Should the POWER switch be set to ON with the speaker cords short circuited, the speaker protection circuit functions and the power indicator flickers.

At that time, the muting circuit still functions even if the short circuit is eliminated. Turn the power off once, then supply power again.



## Controls, indicators and connectors



### 1 POWER switch/indicator

Press the power 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 HOLD TIME switch

This switch is used to hold the peak values of the power level.

**3 sec.** — In this setting, the peak values hold for approx. 3 seconds.

**1 sec.** — In this setting, the peak values hold for approx. 1 second.

### 4 PEAK HOLD switch

Pressing this switch to ON holds the peak levels of the signal input from the INPUT jacks.

### 5 LEVEL CONTROLS

Used to adjust the sound level of the speakers and headphones. The knob marked LEFT is used to adjust the left channel sound level; the knob marked RIGHT is used to adjust the right channel sound level.

As the knobs are set to 10, a standard sensitivity of 1 V is obtained. For normal use, set to 10. If the residual noise is distinctive or the pre-amplifier output is large, turn the knobs counterclockwise.

Using these controls, the balance between right and left channel sound level can be adjusted. For total sound level adjustment, use the pre-amplifier volume control.

### 6 PHONES jack

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

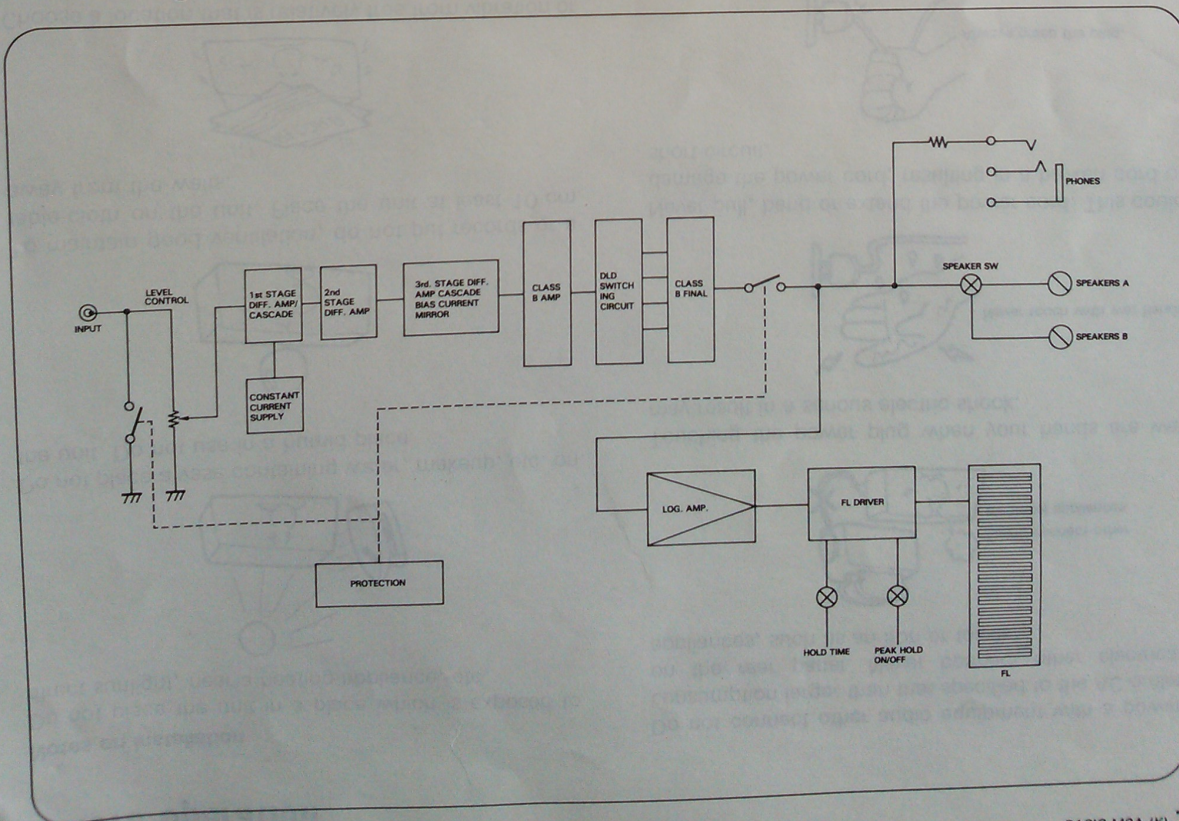


## In case of difficulty

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.

AM, FM, PHONO or Tape playback	Cause	Remedy
Power on but no sound.	<ol style="list-style-type: none"> <li>1. Power cord not plugged in.</li> <li>2. Poor connection at wall outlet. Power outlet inactive.</li> <li>3. LEVEL CONTROLS set fully counterclockwise.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check plug contact.</li> <li>2. Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch).</li> <li>3. Check the control amplifier connected.</li> </ol>
No sound from left or right.	<ol style="list-style-type: none"> <li>1. Speaker cords disconnected.</li> <li>2. Speakers switched off.</li> <li>3. No input selector switch is in use.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check speaker connections.</li> <li>2. Check speaker switch.</li> <li>3. Check the control amplifier connected.</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 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 the control amplifier connected.</li> </ol>

## Block diagram





# Specifications

## IHF '66

### Rated Power Output

220 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.

### Clipping Headroom

at 8 ohms .....0.5 dB

### Dynamic Headroom

at 8 ohms .....2.0 dB

### Total Harmonic Distortion

#### MAIN IN

(20 Hz to 20,000 Hz) .....0.004% at rated power into 8 ohms  
(1 kHz) .....0.001% at rated power into 8 ohms

Intermodulation Distortion .....0.004% at rated power into (60 Hz:7 kHz=4:1) 8 ohms

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

### Transient Response

Rise Time .....1.6 $\mu$ s

Frequency Response .....DC to 300 kHz, +0, -3 dB

Signal-to-Noise Ratio .....120 dB

### Input Sensitivity/Impedance

INPUT .....1 V/47 kohms

### General

Power Consumption .....6.9 A (USA)

7.9 A (Canada)

500 W (Others)

A.C. Outlets .....Switched 2, Unswitched 1

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

H 158 mm (6-7/32")

D 373 mm (14-11/16")

Weight .....15.5 kg (34.1 lb)

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

## IEC/NF

### Clipping Power

at 8 ohms .....247 W/ch. (1 kHz)

at 4 ohms .....350 W/ch. (1 kHz)

### Clipping Headroom

at 8 ohms .....0.5 dB

at 4 ohms .....2.0 dB

### Dynamic Power

at 8 ohms .....346 W/ch. (1 kHz)

at 4 ohms .....526 W/ch. (1 kHz)

### Dynamic Headroom

at 8 ohms .....2 dB

at 4 ohms .....3.7 dB

### Maximum Continuous Power Output (IEC/NF)

at 8 ohms, 0.7% T.H.D.,

63 Hz - 12.5 kHz .....230 W + 230 W

### Rated Power Output

220 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. (FTC)

### Maximum Continuous Power Output (DIN)

at 8 ohms, 1% T.H.D., 1 kHz .....230 W + 230 W

at 4 ohms, 1% T.H.D., 1 kHz .....250 W + 250 W

### Total Harmonic Distortion

(20 Hz to 20,000 Hz) .....0.004% at rated power into

8 ohms

(1 kHz) .....0.001% at rated power into

8 ohms

Intermodulation Distortion .....0.004% at rated power into

(60 Hz:7 kHz=4:1) 8 ohms

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

### Transient Response

Rise Time .....1.6 $\mu$ s

Frequency Response .....DC to 300 kHz, +0, -3 dB

### Signal-to-Noise Ratio

Unweighted:50 mW (DIN)

MAIN IN .....70 dB

### Channel Separation

at 1 kHz, MAIN IN

(Should be terminated with

47 kohms + 250 pF) .....70 dB

### Input Sensitivity/Impedance

INPUT .....1 V/47 kohms

### General

Power Consumption .....500 W

Dimensions .....W 440 mm

H 158 mm

D 373 mm

Weight .....15.5 kg

### Note:

We follow a policy of continuous advancements in developments.

For this reason specifications may be changed without notice.

# KENWOOD