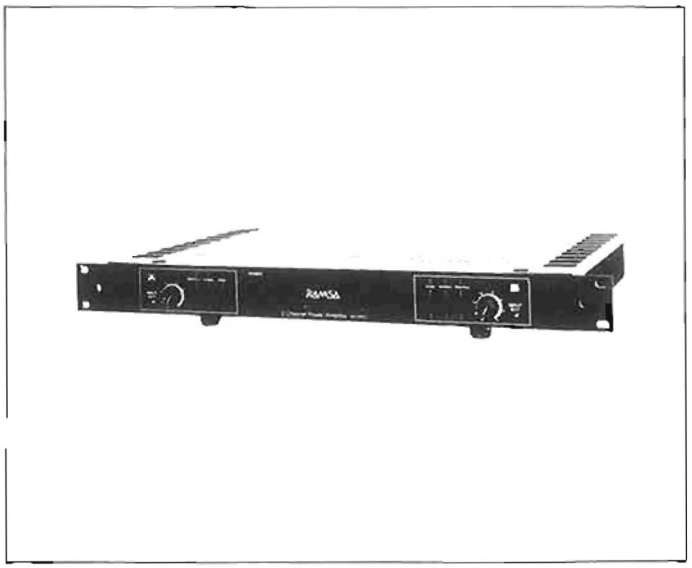


RAMSA

2-channel power amplifier

50W (RMS) + 50W (RMS)/8 ohms

WP-9055

Operating Instructions

Panasonic

Before attempting to use the product, please read these instructions completely

FEATURES

- This unit is compact and will fit into a single rack space.
- The WP-9055 in 2-channel power amplifier providing continuous outputs of 50 W (RMS) + 50 W (RMS) (THD 0.05% or less for 8Ω load 20 Hz to 20 kHz) employing electronic balanced input circuits.
- In bridge mono mode, the power amplifier provides a 100 W (RMS) output (THD 0.05% or less, for 16Ω load 20 Hz to 20 kHz).
- The input circuit is electronically balanced employing an operational amplifier of excellent transient response and wide bandwidth. As a result, deterioration of response caused by the transformer and the effect of induction noise are minimized
- Two types of input connectors are provided on each channel: XLR-type connectors (female) and 1/4" TRS phone jacks
- Output level can be monitored by LED's.
- Remote monitor outputs are provided on each channel. These include VU meter outputs and external access to relay contacts allowing complete indication of operating status of amplifier
- The amplifier is protected by a VI-type energy limiter (voltage/current sensing protection circuit) that limits the power supply in the event of a short circuit and cuts off the output in the event of overheating or malfunction.

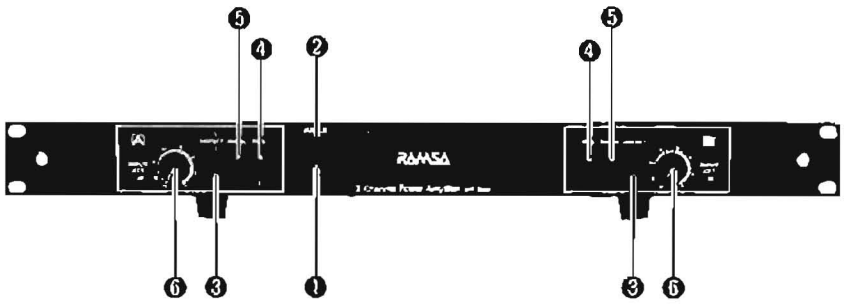
READ THE FOLLOWING INSTRUCTIONS BEFORE USE

- This unit should be installed on a rigid, flat surface or secured in a rack.
- Do not install the unit with the rear side facing down.
- Do not put any object on top of the unit.
- Due to the muting circuit incorporated, no sound is produced for 4 to 6 seconds after turning on the power supply
- Always use a power source of adequate capacity
- Do not turn on the power of multiple power amplifiers at the same time. Never allow the ventilation holes on the top and bottom of the amplifier to get obstructed in any way.
- This unit is self-cooled. Always be sure there is adequate ventilation in installation. Never block the vent holes on the top and bottom.
- To clean the amplifier, wipe it with a dry cloth. If the case is very dirty, wipe it with a cloth dampened in water or mild soapy water, then wipe dry thoroughly. Never use solvents or chemical cloth; similarly, never spray insecticides as they may cause discoloration or peeling.
- If any trouble is found, disconnect the power cord and contact your dealer.

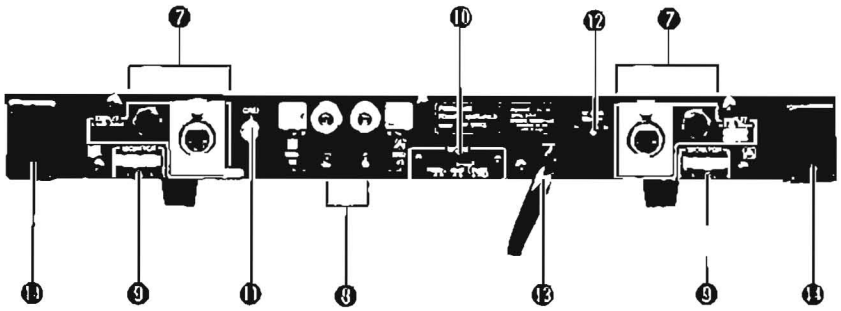
WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

MAJOR OPERATING CONTROLS

■ **Front panel:**



■ **Rear panel:**



❶ **Power switch [POWER]**

- The power amplifier reaches the operating conditions within 4 to 6 seconds after turning on the Power switch, due to a muting circuit which prevents switching noise at power-up.

CAUTION:

When using the WP-9055 in a system with other equipment such as a mixer, equalizer, crossover, etc., always turn the amplifier on last as switching noise from the other equipment can damage the speakers.
Similarly, at system power-down always turn the amplifier off first.

❷ **Power ON indicator lamp [POWER] (red)**

Indicates that the amplifier is turned on.

❸ **Protect indicator lamp [PROTECT] (red)**

This LED indicates that the muting circuit is activated and therefore sound cannot be produced at the output. This occurs for 4 to 6 seconds when the amplifier is turned on, and also during overheating or any malfunction that may cause damage to the speakers.

❹ **Peak level indicator lamp**
[PEAK (red) Ⓐ , Ⓑ]

Sound is distorted as soon as PEAK lamp (red) lights. Should this occur, either adjust the output level of the mixer or adjust the power amplifier Input Level control so that the PEAK LED turns off.

❺ **Signal level indicator lamp [SIGNAL (green) Ⓐ , Ⓑ]**

Lights when the signal level reaches – 20 dB below the rated output level.

❻ **Input level control [INPUT ATT Ⓐ , Ⓑ]**

- When this control is at "0" the amplifier will reach its rated power output when the input signal is at a level of + 4 dB.
- The calibrated markings on the front panel indicate the amount of attenuation applied to the input signal in 1 dB steps up to –19 dB. This allows proper volume setting of the speakers when the input signal source is at its rated output level.
- No sound is produced when the control is in the " ∞ " position

❼ **Input connectors [INPUT Ⓐ , Ⓑ]**

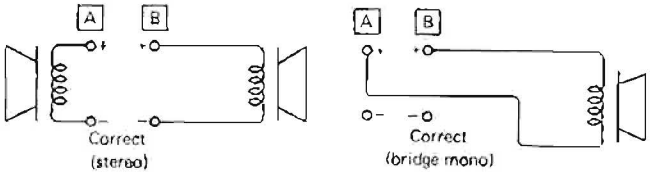
- +4 dB 40 kΩ Balanced.
- The input connectors are of two different types 3-pin XLR-type connectors (female) and 1/4" tip-ring-sleeve phone jacks.
- These input connectors are connected in parallel internally. Do not connect more than one input signal to these connectors at the same time.
- When using amplifier in bridge-mono mode, connect the input signal to Ⓐ channel only. Any signal connected to Ⓑ channel will not be passed.

❽ **Output terminals [SPEAKER 8 Ω MIN Ⓐ , Ⓑ]**

- 8 Ω . . . . . 50 W + 50 W
  Bridge 16Ω 100W.
- When using in bridge mode, the + side of the Ⓐ CH output terminals becomes the hot side, and the + side of the Ⓑ CH output terminal becomes the cold.

CAUTIONS:

- **Do not connect the output channels in parallel. (See fig.)**
- **When using bridge connection, always use 16Ω speakers. Never connect the speakers between + and – of Ⓐ CH, or Ⓑ CH.**



❾ **Remote monitor output connector**
[MONITOR Ⓐ , Ⓑ] (4-pin)

Connect this terminal for remote monitoring of the amplifier output.

* The remote monitoring operates as soon as the muting is released after switching on the power supply.

❿ **Mode selector switch**
- **STEREO Ⓐ · Ⓑ**
- **MONO Ⓐ · Ⓑ**
- **BRIDGE Ⓐ ONLY**

- Set this switch according to the application.
- See page 4 for hookup method of each mode

* When using either Mono mode or bridge mode, the input signal must be applied to the Ⓐ channel only.

⓫ **Ground terminal [GND]**

An external amplifier ground terminal.

- Turntable ground leads may be connected here. Ungrounded turntables may produce hum-noise.

⓬ **BREAKER [AC MAIN BREAKER] (red)**

- The AC circuit breaker will trip when there is an overload or excessive input.
- Turn off the power immediately and determine the cause (shorted speaker wires, excessive or distorted input signal, etc.)
- After the malfunction has been corrected, depress the circuit breaker knob and turn the power back on.
- If the breaker trips again and cause cannot be determined, contact your dealer or an authorized service center.

⓭ **Power supply cord**

- 120 V AC 60 Hz Approx. 8.2 feet

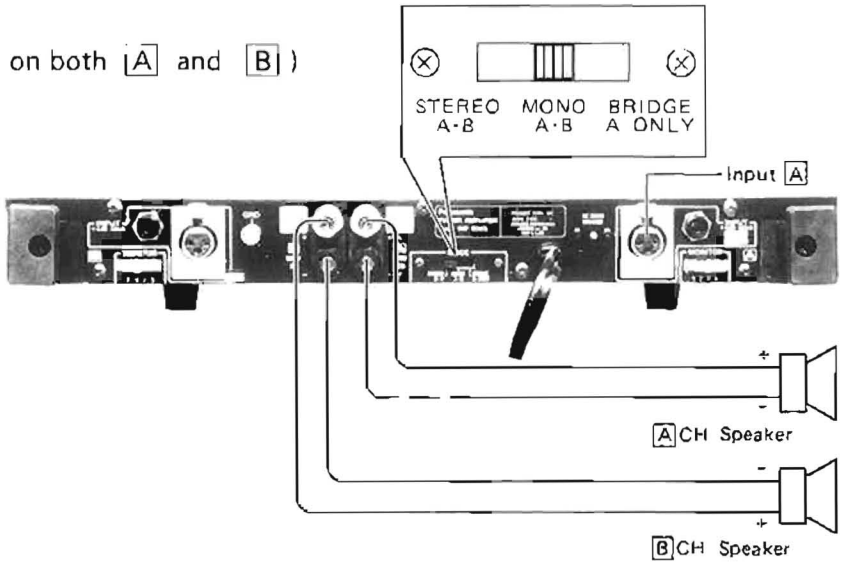
⓮ **Rear panel rubber feet**

These are rubber feet to protect the input and output terminals against damage. However, do not stand the power amplifier on them during performance.

CONNECTIONS

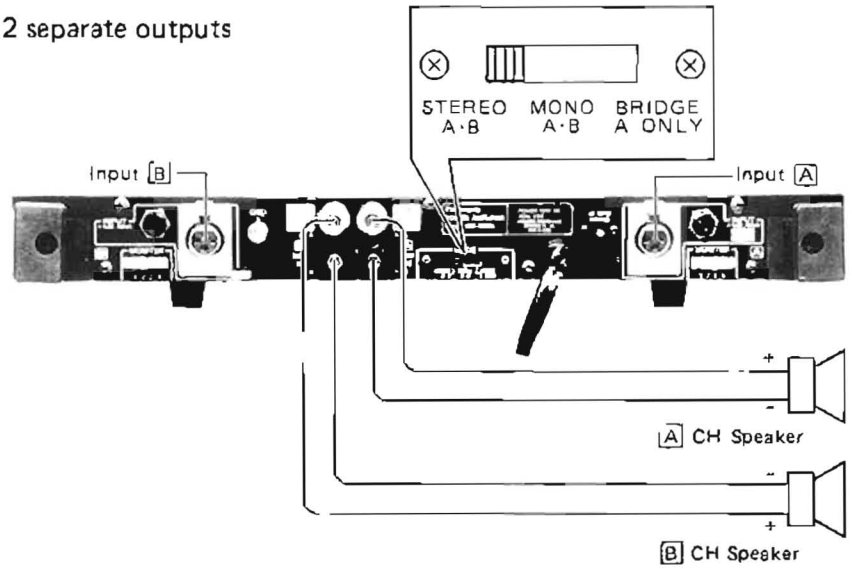
MONO

1 input / 2 outputs
(same output signal on both [A] and [B])



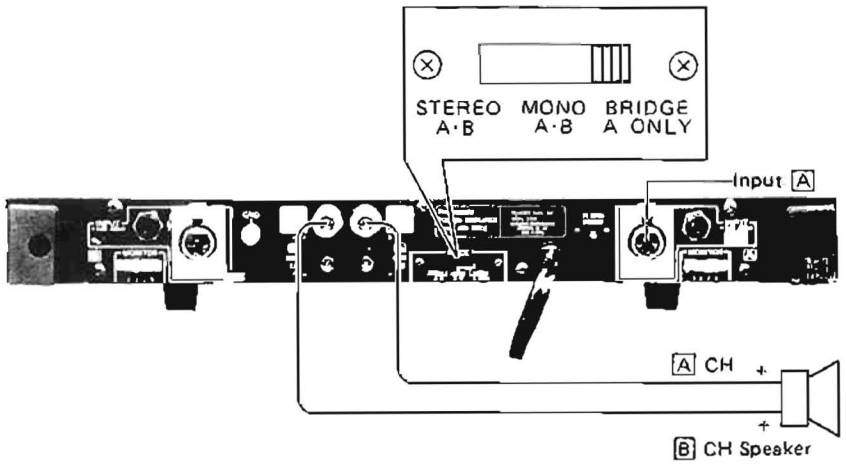
STEREO

2 separate inputs / 2 separate outputs



BRIDGE

1 input / 1 output



CAUTIONS:

- Connect speakers after selecting the Mode selector switch as shown above.
- When using bridge connection, never connect the speakers between + and - of A CH or B CH

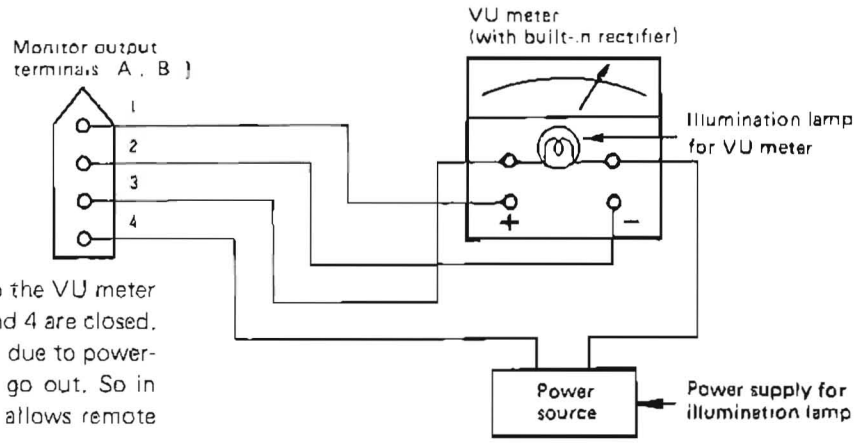
■ Connections of Remote Monitor Output Connectors:

(Example)

1 +14dB 300Ω
(optimum impedance 7 5kΩ)

2 Grounding

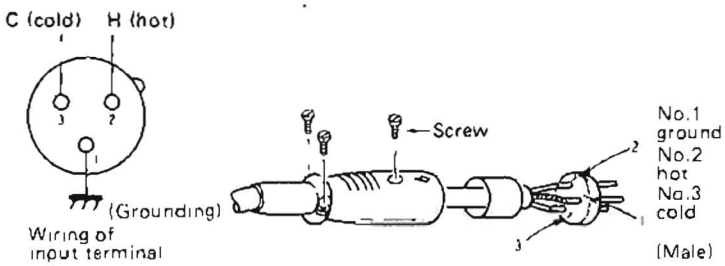
3 } Relay contact
4 } (contact capac ty up to DC24V 1A)



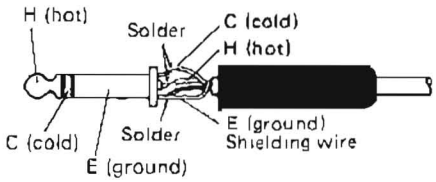
In this configuration, power will be supplied to the VU meter lamp when the relay contacts between pins 3 and 4 are closed. Therefore, when the muting circuit is activated due to power-up or an amplifier malfunction, the light will go out. So in combination with the external VU meter, this allows remote monitoring of amplifier signal and status

■ Connection of Plug and Connector:

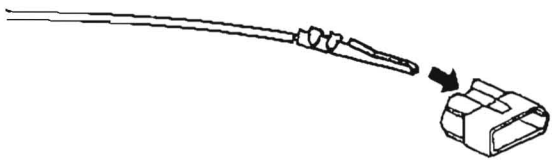
1. Inprt connector (3-pin XLR-type connector, male)



2. Tip-ring-sleeve phone plug



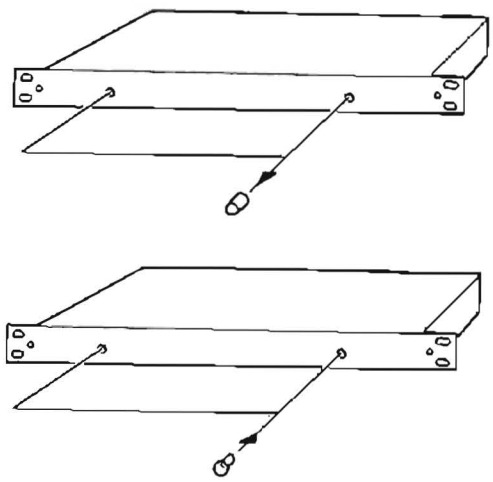
3. Nylon connector for monitor output (4-pin) [option]



■ Protective Cap Installation (Option)

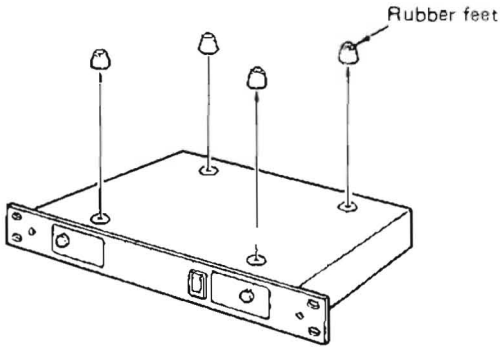
After adjusting the input level controls, install the protective covers to protect the controls from tampering as follows:

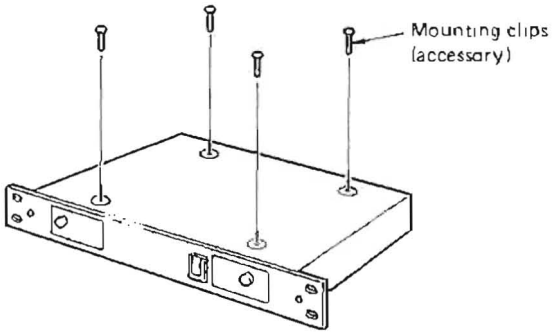
1. Detach the knobs from the front panel.
2. Insert the protective caps (option) in the holes.

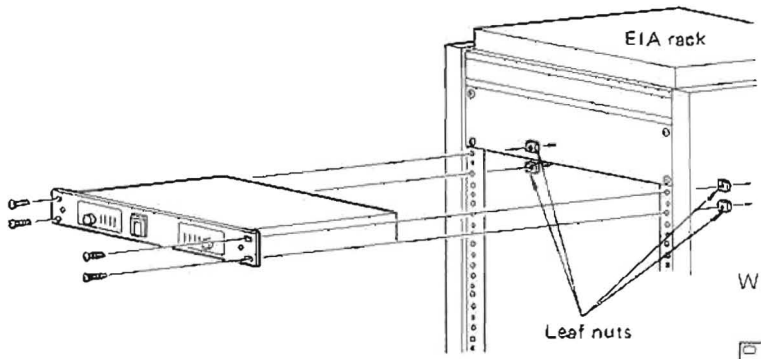


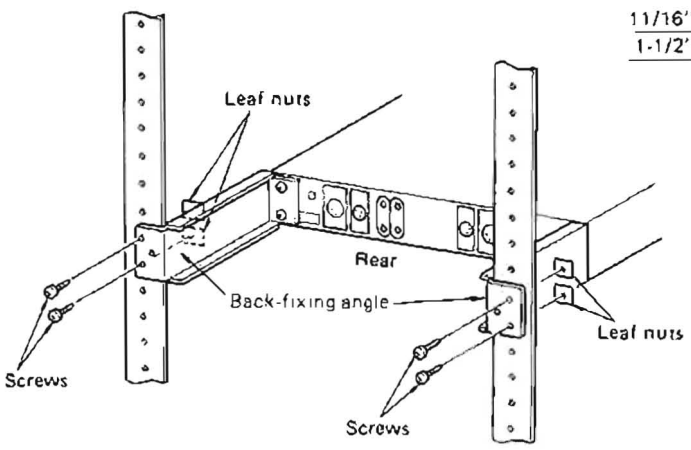
RACK MOUNTING

1. Loosen the fixing screws and detach the four rubber feet from the bottom.
2. Insert the mounting clips in the holes for the rubber feet.
3. Mount the power amplifier to the rack with four rack mounting screws (M5 x 12) (not provided)

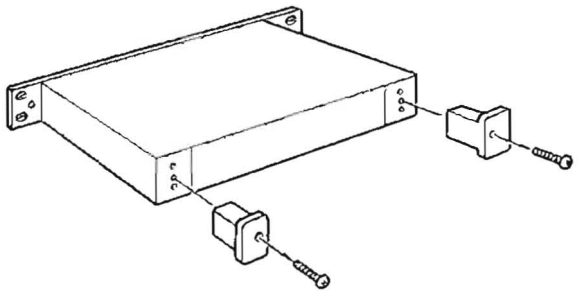








Remove the rear panel rubber feet.

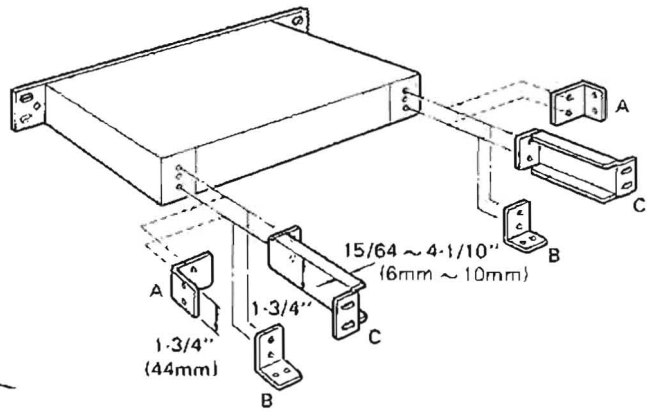


Rear-fixing angle:

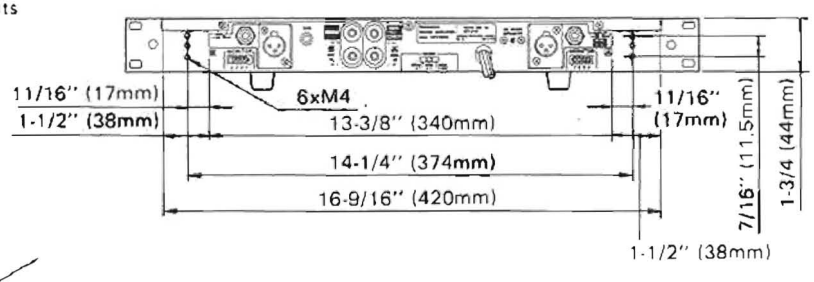
A . . . . Rear-fixing angle for mounting on the side of rack

B . . . . Rear-fixing angle for mounting on the bottom of rack

C . . . . Rear-fixing angle for mounting on the rear of rack



WP-9055 Rear view



Note: When transporting the machine in a rack-mounted manner, rear fixing angles must be installed, so that the rear of the amplifier will be secure during transportation.
Use an angle with a thickness of at least 2 mm.

SPECIFICATIONS AND ACCESSORIES

• Specifications

Power supply:	120 V AC 60 Hz
Power consumption:	Approx. 245 W at the rated output of 50 W + 50 W 8 Ω
Rated power output:	50 W + 50 W (8 Ω Continuous output)
Bridge output:	100 W (16Ω Continuous output)
Frequency response:	20 to 20,000 Hz ± 0.5 dB
Total harmonic distortion:	Less than 0.05% (8 Ω, 50 W + 50 W, 20 to 20,000 Hz) Less than 0.05% (Bridge 16Ω, 100W, 20 to 20,000 Hz
Crosstalk:	More than 60 dB (20,000 Hz)
Intermodulation distortion:	Less than 0.05% (8 Ω, 50 W, 60 Hz 7,000 Hz = 4 : 1)
Damping factor:	More than 100 (8 Ω, 1 kHz)
Signal-to-noise ratio:	More than 100 dB (DIN-AUDIO W." D)
Input level:	+4 dB
Voltage gain:	24 dB
Input impedance:	40 kΩ (Balanced)
Remote monitor output:	
VU meter output:	+14 dB 300 Ω (7.5 kΩ optimum)
Relay terminals:	No-voltage make contact (contact capacity: DC 24V 1A)
Connectors:	Input: 3-pin XLR-type connector (female) 1/4" Tip-ring-sleeve phone jack (3-pin connection) Output Screw terminals
Dimensions:	'3-7/8" (W) x 2-5/16" (H) x 13-1/8" (D) [480 (W) x 59 (H) x 333 (D) mm]
Weight:	Approx 19 .bs (8.5 kg)
Finish:	Panel: Black alumite hairline Cabinet Dull black painting

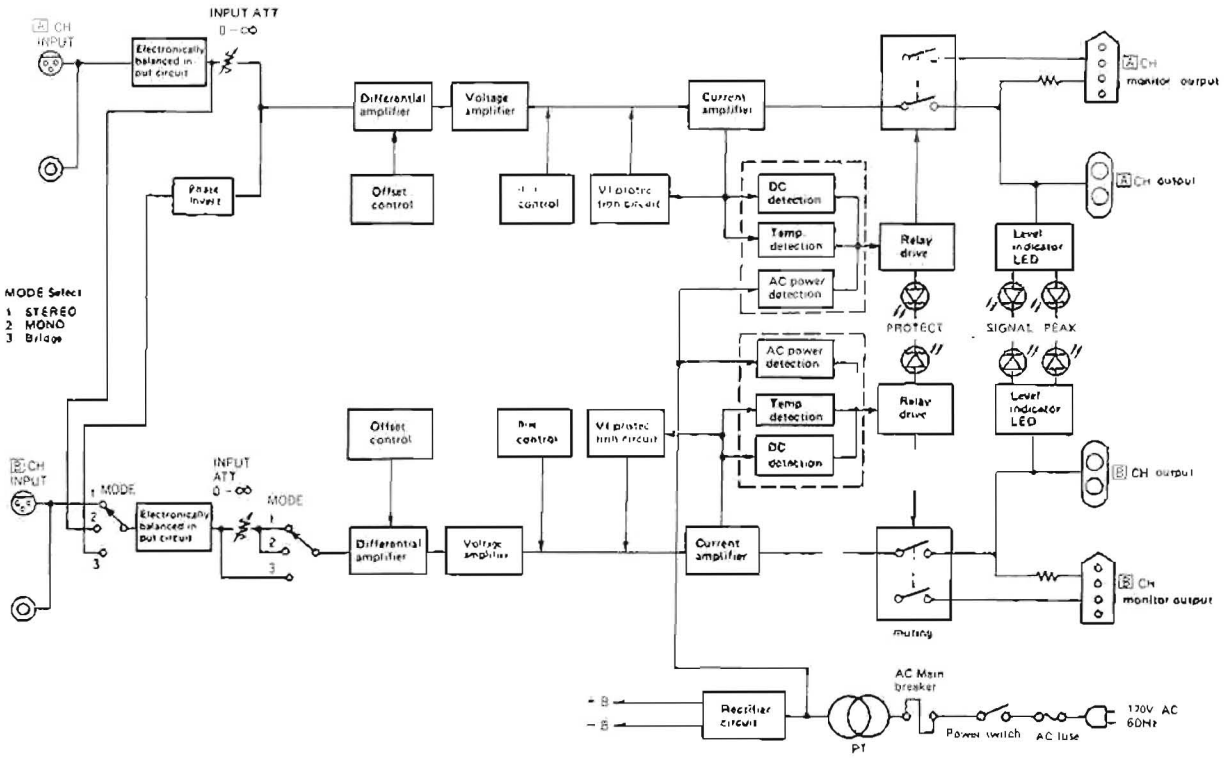
• Accessories

Mounting clips	4
Operating Instructions	1

• Option (WP-Q01)

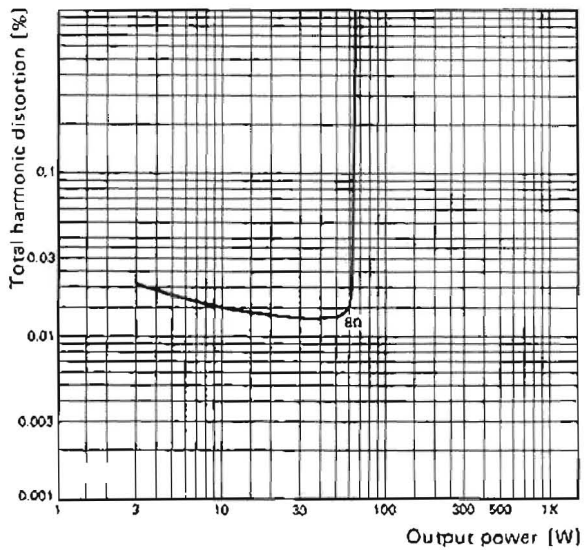
Connector pin	8
Nylon connector	2
Protective cap	2

BLOCK DIAGRAM

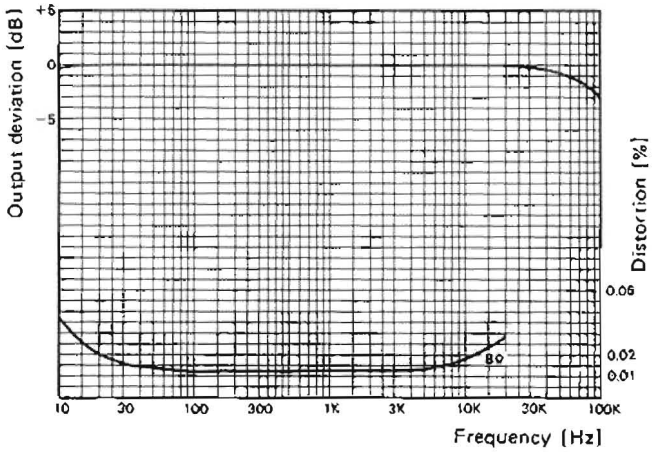


TYPICAL PERFORMANCE

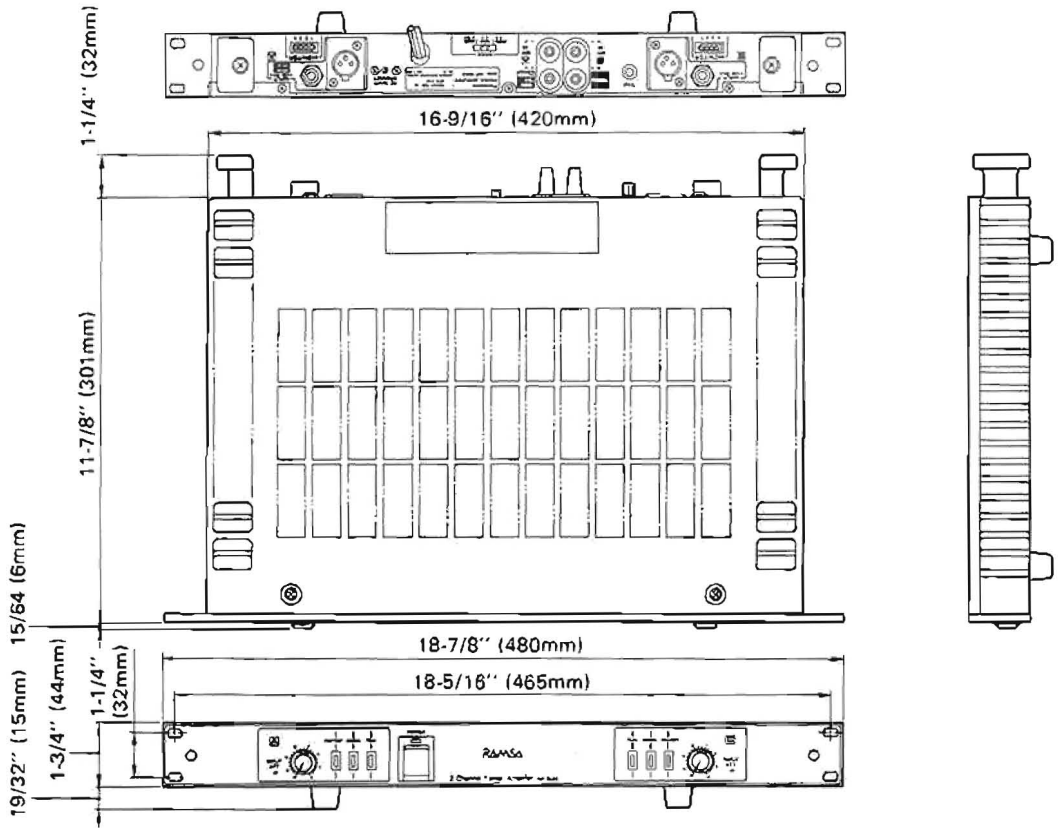
● Output versus distortion



● Frequency versus output distortion



APPEARANCE



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