

# Panasonic

# WP-1000 SERIES

Professional Power Amplifiers



# RAMSA

# RAMSA WP-1000 Series Power Amplifiers, The Foundation of a Great Sound System.



WP-1400 (400W+400W/4Ω)



WP-1200 (200W+200W/4Ω)

*From the clean, uncluttered appearance and simple operation, to their uncompromising reliability and professional performance, RAMSA's WP-1000 Series Power Amplifiers are the ideal foundation of a great sound system.*

### Simple Sophistication

Behind their sleek, modern front panels, RAMSA's WP-1200 and WP-1400 hide sophisticated circuit design and legendary RAMSA quality.

### Class H Circuit Design

Unlike conventional amplifiers, which use only a single output-stage power supply voltage, RAMSA's WP-1200 and WP-1400 use a high-

technology, dual-voltage supply in a "Class H" circuit configuration. RAMSA's Class H circuitry continuously evaluates the amplifier's input signal. When the input signal is low, the Class H circuitry switches in the amplifier's lower-level power supply voltage helping the amplifier run cooler and more efficiently. When a higher-level input signal appears, the Class H circuitry instantaneously switches in the amplifier's higher-voltage power supply. This higher-voltage power supply enables the amplifier's maximum output power and helps minimize distortion.

### Cooling System

To cool the WP-1200 and WP-1400 Panasonic engineers installed the amplifiers' output transistors in a wind-

tunnel style heat sink. From the filter-less air inlets to the outlets efficient air flow helps maintain a constant low case temperature, regardless of output level. The amplifiers also assure stable temperature even when stack mounted. And they installed a quiet, long-life fan to pull cool air from the front of the amplifier through the wind-tunnel and vent it out the rear. A servo control system monitors heat-sink temperature and automatically varies the fan speed to keep the amplifier at a low operating temperature while minimizing fan noise and maximizing fan lifetime.

### Controls and Connectors

The features include balanced XLR and TRS phone jack inputs. "5-way binding post" (dual banana) outputs,

stereo or mono-bridge operation, rear-panel level controls and "Peak" and "Protect" LED indicators.

### Designed for Reliability

RAMSA products have a reputation for quality and reliability. For the WP-1000 Series, Panasonic engineers combined Class H circuitry and servo-controlled cooling fans with conservative output stage "safe operating area", a clean and simple layout easy repairs and overall attention to high-quality design and construction.

### Professional Performance

Sophisticated features and uncompromising reliability are an appropriate foundation for great listening performance and impressive written specifications.

The WP-1000 Series gains this kind of performance from its low negative feedback, its low-distortion circuit design and its fast Class H switching action.

To protect the amplifier against turn-on/turn-off transients, Panasonic engineers added muting system. To protect the loudspeaker load against DC voltage generated at the output terminals, they included an intelligent, high-speed "crowbar" circuit.

To further improve its real-world performance the WP-1000 Series includes balanced "instrumentation" quality inputs.

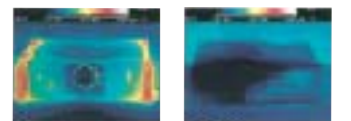
### Competitive Price

Sophisticated features, high reliability and great performance might com-

mand a premium price. But RAMSA's WP-1000 Series are competitively priced allowing them to be used in both high-performance and budget-conscious system designs.



Wind-tunnel style heat sink



Conventional WP-1400 Thermal distribution

### WP-1400



### WP-1200



# Specifications

## WP-1400

**Rated Power Output:** 240W+240W/8Ω, 20Hz to 20kHz Less than 0.3% THD  
400W+400W/4Ω, 40Hz to 20kHz Less than 0.3% THD  
800W/8Ω 20Hz to 20kHz

**Bridged Output:** 800W/8Ω 20Hz to 20kHz

**Frequency Response:** 20Hz to 20kHz +0, -0.5dB at 4Ω 1W output

**THD 4Ω Load:** Less than 0.3%, 40Hz to 20kHz  
Less than 0.1%, 1kHz

**IM Distortion:** (SMPTE,CCIF,DIM 100) Less than 0.3%

**Channel Separation:** Greater than 60dB at 20kHz

**Voltage Gain:** 30.3dB at 1kHz

**Input Sensitivity:** +4dBu at Rated output/4Ω

**Input Impedance:** 40kΩ

**Input CMRR:** Greater than 40dB at 1kHz

**Damping Factor:** Greater than 100 at 1kHz 8Ω Load

**SN Ratio (DIN):** Greater than 100dB below 8Ω Rated

**Source Voltage/Frequency:** 220V/240V AC, 50Hz

### Front Panel Facilities

**Power Switch:** Push Type Switch

**Power Indicator:** LED Red

**Peak Indicator:** LED Red × 2

**Protection Indicator:** LED Amber × 2

### Rear Panel Facilities

**Input Sensitivity Adjuster:** Rotary Potentiometer

**Input Connectors:** Female XLR Half Lock Type  
Phone TRS 1/4"

**Speaker Output Terminals:** 5-Way Binding Posts

**Stereo/Bridged Mono Selector:** Recessed Slide Switch

### Others

**Dimensions:** 480mm (W) × 132mm (H) × 393mm (D) (excluding feet)

**Weight:** 17.4kg

## WP-1200

**Rated Power Output:** 120W+120W/8Ω, 20Hz to 20kHz Less than 0.3% THD  
200W+200W/4Ω, 40Hz to 20kHz Less than 0.3% THD  
400W/8Ω 20Hz to 20kHz

**Bridged Output:** 400W/8Ω 20Hz to 20kHz

**Frequency Response:** 20Hz to 20kHz+0dB, -0.5dB at 4Ω 1W output

**THD 4Ω Load:** Less than 0.3%, 40Hz to 20kHz  
Less than 0.1%, 1kHz

**IM Distortion:** (SMPTE,CCIF,DIM 100) Less than 0.3%

**Channel Separation:** Greater than 60dB at 20kHz

**Voltage Gain:** 27.2dB at 1kHz

**Input Sensitivity:** +4dBu at Rated output/4Ω

**Input Impedance:** 40kΩ

**Input CMRR:** Greater than 40dB at 1kHz

**Damping Factor:** Greater than 100 at 1kHz 8Ω Load

**SN Ratio (DIN):** Greater than 100dB below 8Ω Rated

**Source Voltage/Frequency:** 220V/240V AC, 50Hz

### Front Panel Facilities

**Power Switch:** Push Type Switch

**Power Indicator:** LED Red

**Peak Indicator:** LED Red × 2

**Protection Indicator:** LED Amber × 2

### Rear Panel Facilities

**Input Sensitivity Adjuster:** Rotary Potentiometer

**Input Connectors:** Female XLR Half Lock Type  
Phone TRS 1/4"

**Speaker Output Terminals:** 5-Way Binding Posts

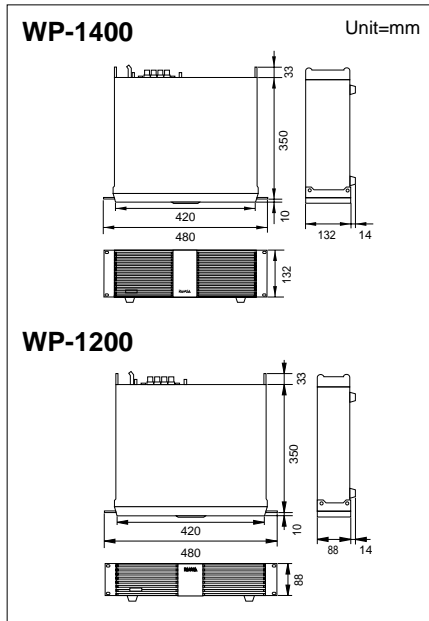
**Stereo/Bridged Mono Selector:** Recessed Slide Switch

### Others

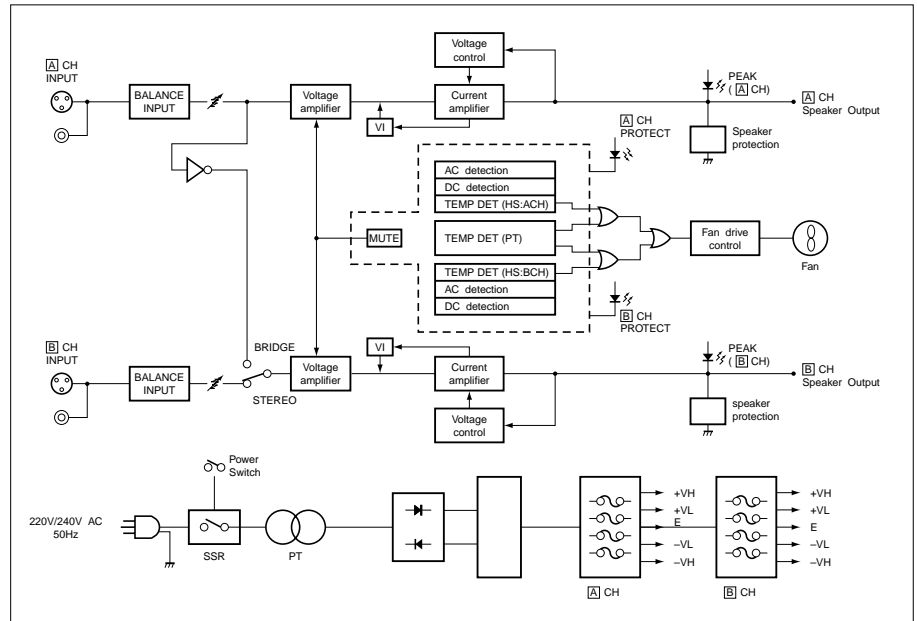
**Dimensions:** 480mm (W) × 88mm (H) × 393mm (D) (excluding feet)

**Weight:** 11.8kg

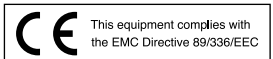
## Dimensional Drawings



## Block Diagram



- Weights and dimensions are approximate. ● Specifications are subject to change without notice.
- These products may be subject to export control regulations.



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