



# RENKUS-HEINZ MODELS P-2000

*Smart Systems*

## POWER AMPLIFIERS P-2500



### **HIGH POWER**

500 watts/channel into 4 ohms, P-2000

600 watts/channel into 4 ohms, P-2500

### **SAFE OPERATION WITH "CLIP-GARD"**

Built-in automatic clipping limiter prevents driver overload.

### **EXCELLENT SOUND**

High current reserves guarantee strong, tight bass. High Slew Rate for clear highs

### **COMPACT, RUGGED CONSTRUCTION**

Two rack mount units high (3 1/2" )

Solid, road-worthy construction

### **ECONOMIC, 2 OHM OPERATION**

Reliable, long term operation into 2  $\Omega$  load for maximum amplifier utilization.

### **Built For Reliability.**

Designed for touring sound systems and concert sound reinforcement, where reliability considerations are of utmost importance, the P-2000 and P-2500 amplifiers perform equally well powering installations requiring maximum headroom, sonic fidelity, and trouble free operation. Careful selection of components, rugged physical design, numerous protection circuits, and extensive quality assurance procedures all play an important part in ensuring the long-term reliability of these professional amplifiers.

### **Clip-Gard Protection.**

The P-2000 and P-2500 provide extensive self-diagnostics, signal conditioning, and automatic anti-clip limiting. The protection functions include high temperature sensing, DC output detection, subsonic and ultrasonic signal filtering, and short circuit control. These features complement processor protection and safeguard drivers against damage by power amplifier failure or abuse.

### **Natural Sound Reproduction.**

Sonic performance and reliability are the bottom line of amplifier performance. Both the P-2000 and P-2500 feature a very stable high speed fully complementary

circuit design. The P-2500 uses twelve 200 watt output devices while the P-2000 provides ten 200 watt devices. This extremely conservative design provides a wide safe operating area for maximum reliability. Both amplifiers also feature a no-nonsense high current capacity power supply.

### **Useful Convenience Features.**

Both the P-2000 and P-2500 include numerous convenience features. LED indicators on the front panel indicate channel status at a glance. Included for each channel are channel active, signal present, limiter active, and protect indicators. The separate channel level controls are detented and recessed to provide ease of adjustment and protection from accidental change. A magnetic type power-line circuit breaker is also provided on the front panel.

The rear panel provides electronically balanced XLR input connectors and 5 way binding post output connections for each channel. A switch provides easy selection of stereo, two channel mono, or bridged mono operation. A convenient ground strap is also provided on the rear panel terminal strip. The fan(s) include a removable and washable dust filter.

**P-2000/2500**  
**TECHNICAL SPECIFICATIONS**

**Power Output P-2000:** 600 watts/ch 2Ω  
(20Hz to 20kHz < 0.1% THD) 500 watts/ch 4Ω  
300 watts/ch 8Ω  
**P-2500:** 700 watts/ch 2Ω  
600 watts/ch 4Ω  
400 watts/ch 8Ω

**Frequency Response:** 20Hz to 20kHz, +0, -5dB

**THD (1kHz) P-2000:** <.025% @ 480 watts, 4Ω  
**P-2500:** <.025% @ 600 watts, 4Ω

**SMPTE IMD P-2000:** <.015% @ 300 watts, 8Ω  
**P-2500:** <.05% @ 400 watts, 8Ω

**Hum & Noise:** -105dB "A"

**Slew Rate:** > 35V/μsec

**Damping Factor:** 400 @ 1kHz, 8Ω

**Protection:** High Temperature  
DC Output  
Turn-on Delay  
Subsonic Filter  
Ultrasonic Filter  
Clipping Limiter

**Cooling:** Rear to Front Forced Air  
P-2000; 1 variable speed fan  
P-2500; 2 variable speed fans

**Controls, Front:** Power On/Off  
Channel A Level  
Channel B Level  
**Rear:** Stereo, Mono, Bridge Switch

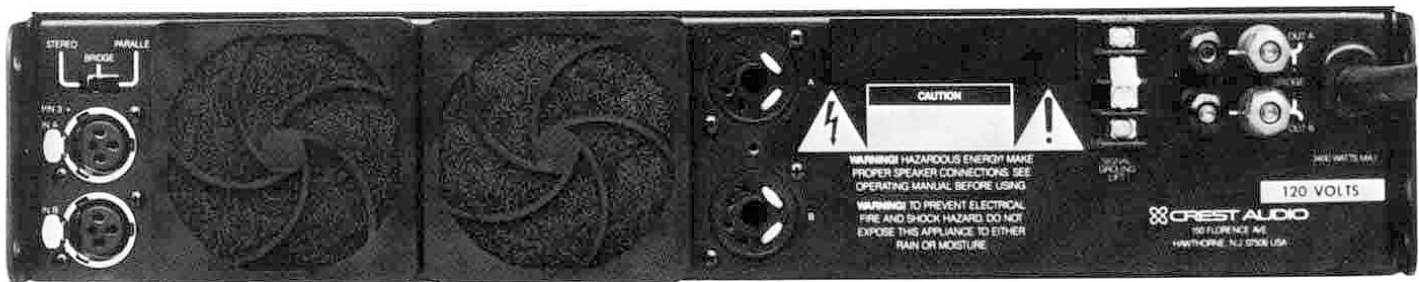
**Indicators (each ch):** Channel Active  
Protect  
Signal Present  
Limiter Active

**Rear Panel Connectors:** XLR Balanced Input  
(Pin 3,+; Pin 2,-; Pin 1, Gnd)  
5Way Binding Post Outputs  
Octal Accessory

**Dimensions:** 19" (48.3 cm) Rack Mount  
3.5" (8.9 cm) High  
16" (40.6 cm) Deep

**Net Weight P-2000:** 45.5 Lbs. (20.6 Kg)  
**P-2500:** 48.5 Lbs. (22 Kg)

**REAR PANEL**



**ARCHITECTS AND ENGINEERS SPECIFICATIONS**

The power amplifier shall be two channel type rated not less than 300 (P-2000) or 400 (P-2500) watts per channel into 8 ohms, and 500 (P-2000) or 600 (P2500) watts per channel at 4 ohms, with not more than 0.1% THD from 20 Hz to 20 kHz. Bridged mono operation shall provide at least 1200 (P-2000) or 1400 (P2500) watts into 4 ohms. The amplifier shall contain circuitry to prevent sustained clipping, excessive subsonic or super-sonic signals, and damage as a result of DC output. The "A weighted" noise level shall be no higher than -105dB. Cooling shall be provided by servo-controlled variable speed fan(s). Size shall be 19" rack width, not more than 16" deep, and not more than 31/2" high. LED indicators shall be provided for signal presence, limiting, protection activated, and channel active. Rear panel shall have balanced XLR input, and 5 way binding post output connectors. The power amplifier shall be Renkus-Heinz model P-2000 (P-2500).

**rh RENKUS-HEINZ INC.** Smart Systems Division

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