Hafler®

P4000 trans•nova Amplifier

Features

Circuitry

- trans• nova Amplifier Topology
- MOSFET Output Devices
- DIAMOND Driver Stage
- Electronic Fuse
- No Fan! Convection Cooled

Controls & Indicators

- 5.25” Rack Mount (3-rack spaces)
- Stereo/Bridged Mono
- XLR or 1/4” Balanced Inputs
- Gold-Plated 5-Way Binding Posts
- Power Lamp, Signal, Clip, Thermal, Short LEDs
- Full Range Gain Controls
- Chassis/Float Ground Switch
- Serviceable Modules

Warranty

- 5 Year Warranty

Description

The P4000 trans•nova DIAMOND (patent pending) amplifier is perfect for many studio monitoring, touring sound and fixed installations. It features Jim Strickland’s trans•nova circuitry (patent #4467288) and his brilliant discovery, Dynamically Invariant AMplification Optimized Nodal Drive. The DIAMOND transconductance driver stage combines the linearity of Class A operation with the current headroom of a Class B system resulting in a significant advancement in the art of power amplifier design. The sonic result of all this unique technology is very easily heard. The P4000 presents a deep, wide sound stage with incredible musical transparency and detail.

New LED indicators allow visually monitoring the operating status of each channel. The Thermal and Short indicators light when these protection circuits have been activated. The Clip indicator assists in protecting the speakers by showing when the amp is overdriven and the output signal is distorted. The Signal indicator lights to show the presence of an audio signal.

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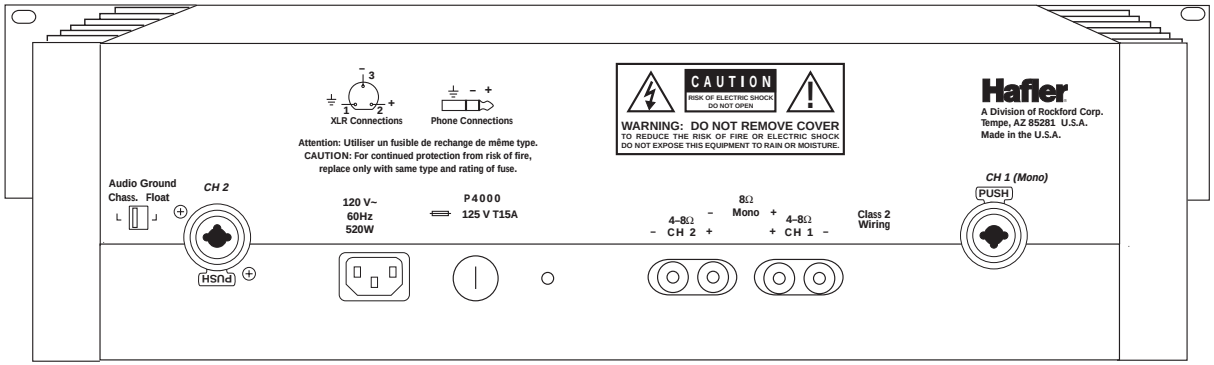
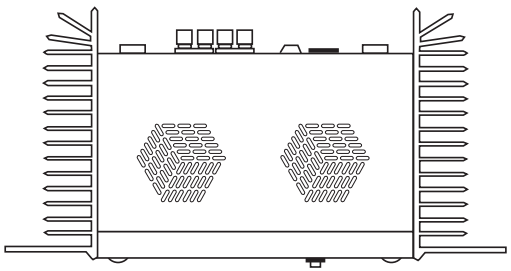


Specifications

P4000

Power Rating ..... 200 Watts/channel @ 8Ω
275 Watts/channel @ 4Ω
550 Watts bridged/mono @ 8Ω
Total Harmonic Distortion (THD) ..... <0.2% (20Hz-20kHz)
Signal-to-Noise ..... 100dB "A" Weighted
Full Power Bandwidth ..... 0.2Hz to 200kHz (+0/–3dB)
Slew Rate 100V/µs
CMRR (Common Mode Rejection Ratio) ..... 75dB at 1kHz
Input Impedance ..... 47kΩ per phase balanced
Gain ..... –29dB min. / +29dB max.
Input Sensitivity Range ..... 710mV to 4V (@ 8Ω) per phase balanced
592mV to 4V (@ 4Ω) per phase balanced
Damping Factor ..... 500 (to 1kHz)
150 (to 10kHz)
18 (to 100kHz)
Power Consumption ..... 120W / 1.0A @ 120VAC (idle power)
250W / 2.1A @ 120VAC (1/8 power – 8Ω)
720W / 6.0A @ 120VAC (max. power – 8Ω)
Indicators ..... Power, Signal, Clipping, Thermal, Short
Dimensions ..... 19"W x 11"D x 5¼"H (3-rack spaces)
(48.26cm x 27.94cm x 13.34cm)
Net Weight ..... 34 lbs. (15.42kg)



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Architect's and Engineer's Specifications

The audio power amplifier shall be solid state design employing 12 lateral power MOSFET output devices. It shall be constructed on a 16 gauge steel chassis utilizing convection cooling and be technician friendly using modular construction.

Each channel shall be rated for a minimum of 200 watts into an 8 ohm load and 275 watts into a 4 ohm load with both channels driven. In bridged mono mode, the amplifier shall produce at least 550 watts into an 8 ohm load. A switch shall be provided for stereo or bridged mono operation and all power ratings shall be measured from 20Hz-20kHz with less than 0.2% THD.

The amplifier's back panel shall provide Balanced inputs via combination XLR and 1/4" phone jacks. The back shall also utilize gold-plated 5-way binding posts for output connectors and a switch to isolate or connect the signal ground to the chassis ground. The amplifier shall include a 3-wire grounded AC line cord and UI power transformer operating on 120V/60Hz AC mains. An optional transformer for 230V 50-60Hz operation shall be available.

The amplifier's front panel shall provide full range level controls with optional security covers. The front shall also incorporate a lighted main power switch and indicators for each amplifier channel. The indicators shall display signal present when 30mV of signal is detected, signal clipping when distortion rises above 1%, thermal protection should the heatsink temperature become excessive, and short circuit protection in case a problem on the speaker system arises.

The amplifier shall fit standard 19" EIA rack mounting requirements utilizing 3-rack spaces. The dimensions shall be 19" Wide, 11" Deep, 5¼" High, and be finished in black with a net weight of 34 pounds. It shall be a Hafler P4000.