

POWER-TECH SERIES



t's hard to please every crowd. But you'll have a better chance when you use a Crown Power-Tech .1 Series amplifier. Musicians and DJs alike demand a lot from their systems—clean, punchy sound; reliability; ruggedness; smaller size; less weight—all at a reasonable price. And Crown PT .1s bring these benefits and much more to the table. That's because at Crown, we've built our reputation around legendary sound and support.

Power-Tech .1 Series amplifiers are compact, professional stereo power amplifiers engineered to meet the most demanding sound reinforcement needs. They compare very favorably to more expensive amplifiers, providing uncolored sound and signal-to-noise ratios commonly associated with recording studios. Plus, every Power-Tech .1 amplifier is backed by Crown's unequaled Three-Year, No-Fault, fully-transferrable warranty that covers everything.

With over five decades of experience designing and building rock-solid products, Crown is the standard in amp technology. So check out the affordable, "all-Crown" Power-Tech .1. They are a powerful argument for guality and value!

For more details about the Power-Tech .1 Series, contact the Crown Technical Support Group at 800-342-6939 or 219-294-8200. Also, visit the Crown Audio website at www.crownaudio.com.

Specifications

The following applies to units in Stereo mode with 8-ohm loads and an input sensitivity of 26 dB unless otherwise specified. **120 VAC, 60 Hz Units:** refers to amplifiers with dedicated

transformers for 120 VAC, 60 Hz power mains. **International Units:** refers to amplifiers with special multi-tap transformers that make them configurable for several AC mains voltages and line frequencies.

Performance

Frequency Response: ±0.1 dB from 20 Hz to 20 kHz at 1 watt.

Phase Response: ±10 degrees from 10 Hz to 20 kHz at 1 watt.

Signal-to-Noise: A-weighted, better than 105 dB below full bandwidth power. Better than 100 dB below full bandwidth power from 20 Hz to 20 kHz.

Total Harmonic Distortion (THD): Less than 0.05% at full bandwidth power from 20 Hz to 1 kHz increasing linearly to 0.1% at 20 kHz.



Features

- Rugged, professional power amplifier built for the road.
- Quick-access front panel power switch and level controls. Turn-on delay for loudspeaker protection.
- Patented ODEP[®] circuitry and Grounded Bridge[™] design combine to provide performance and reliability that surpass traditional designs.
- Easy to read signal presence (SPI) and distortion (IOC[®]) indicator for each channel.
- High damping factor provides superior control over low-frequency drivers for a

Intermodulation Distortion (IMD): (60 Hz and 7 kHz 4:1) Less than 0.05% from less than 171 milliwatts to full bandwidth power.

Damping Factor: Greater than 1,000 from 10 Hz to 400 Hz.

Crosstalk: Greater than 90 dB below full bandwidth power from 50 Hz to 4 kHz, rising linearly to greater than 70 dB at 20 kHz.

Controlled Slew Rate: Greater than 13 volts/ms.

Voltage Gain: $84:1 \pm 6\%$ or $38 \text{ dB} \pm 0.5 \text{ dB}$ at 0.775-volt sensitivity; $46:1 \pm 6\%$ or $33 \text{ dB} \pm 0.5$ dB at 1.4-volt sensitivity; $20:1 \pm 6\%$ or $26 \text{ dB} \pm 0.5$ dB at the maximum level setting.

Power

Output Power:

PT 3.1	*1 kHz ** Power	20 Hz–20 kHz Power
4-ohm Dual (per ch.)	760W	715W
8-ohm Dual (per ch.)	540W	525W
8-ohm Bridge-Mono	1,525W	1,430W
*1 kHz Power: refers to maximum average power in watts at 1 kHz with 0.1% THD.		
**20 Hz–20 kHz Power: refers to maximum average power in watts from 20 Hz to 20 kHz with 0.1% THD.		

Load Impedance: Safe with all types of loads. Rated for 4 to 8 ohms in Stereo, 8 to 16 ohms clean, accurate low end.

- Bridge-Mono and Parallel-Mono modes make it easy to optimize the amplifier's performance for a wide range of loads.
- Balanced phone jack inputs in parallel with XLR input connectors.
- Complete protection against shorted outputs, mismatched loads, overheating, input/output DC and high-frequency overload; full internal fault protection.
- Three-year, No-Fault, fully-transferrable warranty completely protects your investment and guarantees its specifications.

in Bridge-Mono and 2 to 4 ohms in Parallel-Mono mode.

Required AC Mains: Power requirements are provided on each unit's back panel. 120 VAC, 60 Hz and 100/120/220/240 VAC, 50 to 60 Hz (non-convertible) units are available. Rated AC mains voltages are $\pm 10\%$. Quiescent power draw is 90 watts or less. 100 and 120 VAC units draw up to 15 amps of current; 220 and 240 VAC units draw up to 7 amps.

Low-Voltage Power Supply: A ± 24 VDC fanformer supply (fan motor winding) regulated to ± 15 VDC.

AC Connector: An appropriate AC line cord and plug are provided. North American units have a standard 3-wire, 15-amp grounded connector (NEMA 5-15P).

Controls

Power: A front panel push button switch used to turn the amplifier on and off.

Level: A front panel rotary potentiometer for each channel used to control the output level.

Stereo/Mono: A three-position back panel switch used to select Stereo, Bridge-Mono or Parallel-Mono mode.

Sensitivity: A three-position switch behind the input module used to select the input sensitivity for both channels: 0.775 volts or 1.4 volts for standard 1 kHz power, or 26 dB voltage gain.

Reset: A back panel push button switch used to reset the circuit braker that protects the power supplies.



Indicators

Enable: This red indicator shows the on/off status of the low voltage power supply.

Signal/IOC: Each channel has a two color indicator that flashes green to show signal presence and yellow if the amplifier causes distortion of 0.05% or more.

Input/Output

Input Connector: Balanced 1/4-inch phone jacks and XLR connectors in parallel.

Input Impedance: Nominally 20 K ohms, balanced; 10 K ohms, unbalanced.

Output Connector: Two sets of color-coded binding posts.

Output Impedance: Less than 10 milliohms in series with less than 2 microhenries.

DC Output Offset: Less than 10 millivolts.

Output Signal

Stereo: Unbalanced, two-channel.

Bridge-Mono: Balanced, single-channel. Channel 1 controls are active; Channel 2 controls should be turned down and not used.

Parallel-Mono: Unbalanced, single-channel. Channel 1 controls are active; Channel 2 controls should be turned down and not used.

Protection

Power-Tech .1 Series amplifiers are protected against shorted, open or mismatched loads; overloaded power supplies; excessive temperature; chain destruction phenomena; input overload and high-frequency blowups. They also protect loudspeakers from input and output DC, as well as providing protection from turn-on/ turn-off transients.

If operating conditions are unreasonable, the patented ODEP circuitry proportionally limits the drive level to protect the output transistors, particularly in the case of elevated temperature. A thermal switch imbedded in the transformer protects the power supplies from overload. In the rare event that a transformer overheats, the thermal switch removes power, waits until the unit has cooled to a safe temperature and then resets itself.

Turn On: Four-second delay with no dangerous transients. Contact us if you need to change the delay.

PT 3.1

Construction

Durable black finish on steel chassis with special "flow-through" ventilation from front to side panels.

Cooling: Internal heat sinks with forced-air cooling for rapid, uniform heat dissipation.

Dimensions: Standard 19-inch (48.3-cm) rack mount width (EIA RS-310-B), 3.5-inch (8.9-cm) height and 16-inch (40.6-cm) depth behind the mounting surface.

Approximate Weight: Center of gravity is 6 inches (15.2 cm) behind front mounting surface.

120 VAC, 60 Hz Units: 36 pounds, 8 ounces (16.6 kg) net; 40 pounds, 8 ounces (18.4 kg) shipping weight.

International Units: 37 pounds, 3 ounces (16.6 kg) net; 40 pounds, 15 ounces (18.6 kg) shipping weight.

Crown's Three-Year, No-Fault, Fully Transferable Warranty

Crown offers a Three-Year, No-Fault, Fully Transferable Warranty for every new Crown amplifier—an unsurpassed industry standard. With this unprecedented No-Fault protection, your new Crown amplifier is warranted to meet or exceed original specifications for the first three years of ownership. During this time, if your amplifier fails, or does not perform to original specifications, it will be repaired or replaced at our expense. About the only things not covered by this warranty are those losses normally covered by insurance and those caused by intentional abuse. And the coverage is transferable, should you sell your amplifier.

See your authorized Crown dealer for full warranty disclosure and details. For customers outside of the USA, please contact your authorized Crown distributor for warranty information or call 219-294-8200.



H A Harman International Company

Crown International P.O. Box 1000 Elkhart, IN 46515-1000 TEL: 219-294-8200 FAX: 219-294-8FAX www.crownaudio.com

Specifications subject to change without prior notice. Latest information available at www.crownaudio.com.

Crown, IOC, ODEP and Grounded Bridge are registered trademarks of Crown International. Other trademarks are the property of their respective owners. Printed in U.S.A.

© 2001 Crown Audio, Inc.

06/01