



CARVER
P R O F E S S I O N A L

pm1400

FEATURES

- 475W per channel into 8 ohms
700W per channel into 4 ohms
- XLR and 1/4" TRS input connectors
- Accepts balanced or unbalanced lines
- Independent CH 1 and CH 2 Level Controls with 11 detented positions
- Level Control Defeat Switch
- Dual Mono mode for operating both channels with a single mono input
- Bridged Mono mode for combining the power of both channels into a single higher powered channel
- Internally configurable for Parallel Mono mode for single channel low impedance operation
- Internally configurable for 0.775V or 1.5V rms input sensitivity
- Internally configurable input polarity
- Internal connection points for add-on accessories
- Power ON Sequencer
- Class H dual-rail power supply
- Independent CH 1/CH 2 Speaker relays will instantaneously disconnect if one of the following fault conditions are detected:
 - D.C. Offset
 - Over Temperature
 - Short Circuit
- Additional protection circuitry includes:
 - Clipping Eliminator
 - AC Line Fuse
- Power Connected/Standby indicator
- 7 LED display per channel, including Power Ready and Clip/Protect indicators
- 2-speed Fan cooled
- 70-volt stereo direct drive operation
- C/UL, CE, CSA approved

CARVER

180 DAY
Performance
Guarantee



5 Year
Warranty

CARVER
PROFESSIONAL



Power Output:

Continuous Average Output Power, both channels driven:

475 watts per channel into 8 ohms from 20 Hz to 20kHz, with no more than 0.1% THD
700 watts per channel into 4 ohms at 1kHz, with no more than 0.1% THD

Bridged-mono operation:

1400 watts into 8 ohms at 1kHz, with no more than 0.1% THD

Parallel-mono operation:

900 watts into 4 ohms from 20 Hz to 20 kHz, with no more than 0.1% THD

Dynamic Headroom: > 2.0 dB

Frequency Response: 20Hz to 20kHz (±0.75 dB)

Channel Separation: > 65 dB @ 1kHz

Damping Factor: >200

Input Impedance: 25 kilohms unbalanced, 50 kilohms balanced

Sensitivity:

High: 0.775V rms for rated power into 4 ohms
58mV rms for 1W into 4 ohms
Low: 1.5 V rms for rated power into 4ohms
116mV rms for 1W into 4 ohms

Gain:

High: 36.7 dB (± 0.5 dB)
Low: 30.7 dB (± 0.5 dB)

Input Overload:

+18 dBu

IM Distortion:

< 0.1%

Signal-to-Noise Ratio:

> 100 dB, A-weighted, ref. to rated power into 4 ohms

Slew Rate:

40V/μS (Bandwidth limited)

CMRR:

> 80dB @ 1kHz

Power Consumption:

40W at idle
800W with musical program
1500W at full power into 8 ohms (continuous)
2400W at full power into 4 ohms (continuous)

Power Requirements:

120VAC/60Hz (USA and Canada) Other voltages as required for export

Fusing:

15 amp slo-blo (120V/60Hz)
8 amp slo-blo (230V/50Hz)

Sequence Receive Terminal:

+7V to +15V DC
50mA minimum current requirement
7 LED indicators per channel
1 green READY, 5 yellow SIGNAL, 1 red CLIP/PROTECT

Display:

Size:

(H x W x D):
3.50" (2U) x 19" x 13.25" 89mm x 483mm x 337mm

Net Weight:

34.2 lbs. (15.5 kgs)

Shipping Weight:

39 lbs. (17.73 kgs)

Features and specifications are subject to change without notice.

Limited Warranty

Carver Professional provides a limited warranty on all amplifiers (free of manufacturing defects in materials and/or workmanship) to the original consumer/purchaser for a period of 5 years when purchased from an authorized Carver Professional dealer. Please consult your dealer or the factory for specific warranty information.

pm1400 Architects' and Engineers' Specifications

The power amplifier being of two channels, shall deliver 475W into 8 per channel with both channels operating, and 700W into 4 per channel with both channels operating. The amplifier shall be capable of bridged-mono operation thereby providing 1400W RMS output into 8 . The amplifier shall be capable of parallel-mono operation for low impedance operation, thereby providing 900W RMS output into 4 . Each channel shall be equipped with compression circuitry that electronically senses the onset of clipping and engages a specially-designed circuit which virtually eliminates the possibility of driving the amplifier into distortion. A switch shall be provided to activate the Clipping Eliminator circuit for both channels. Internal components shall be fan-cooled. The fan shall operate at two speeds, the speed being determined by internal operating temperatures. The amplifier shall have a thermal shutdown system to protect the power devices from over-temperature operation. This thermal protection system shall be self-resetting. A protection LED indicator shall illuminate and electronically activated relays shall disconnect the speaker outputs to protect against over-temperature, short circuits, DC offset present at the outputs or an internal power supply fault. The amplifier shall provide delayed activation of the speaker output relays at turn-on. The amplifier shall have a voltage gain of 30.7dB (1.5V RMS sensitivity), with a provision for internal jumpers to change the gain to 36.7dB (0.775V RMS sensitivity). Noise shall be at least 100 dB below 700W/4 A-weighted.

Total harmonic distortion shall be less than 0.1% at 1.5V sensitivity. The front panel controls shall consist of a master power switch and a fuseholder containing a replaceable 15A slo-blo fuse. Front panel indicators shall include a green Ready LED which shall illuminate red when a protection circuit is activated, five yellow Signal Present LEDs and a red Clip/Protect LED for each channel. Independent level controls shall be provided for each channel. The level controls shall have an easily accessible internal defeat switch. The rear panel connections shall include a 1/4-inch TRS jack and an XLR connector for the input to each channel. Pin 2 of the XLR connector shall be non-inverting, providing the option of changing the input polarity with internal jumpers. One pair of multi-way binding posts shall be provided for the output from each channel. An easily accessible internal switch shall be provided for selecting Normal Stereo, Dual Mono or Bridged Mono operation. A 2-position screw terminal barrier strip shall be provided for operating a sequential turn on circuit. The dimensions shall allow for standard 19" EIA rack mounting. It shall be 3.5" high and 13.25" deep. The amplifier shall weigh 34 pounds. The power requirements shall be 120V, 60Hz for domestic versions, and 230V, 50Hz for export versions. The frequency response shall be +0, -3 dB at 5Hz and 40kHz. The maximum input current requirement for a 700W output into 4 with both channels operating shall be 20 amps at 120V, 60Hz. The power amplifier shall be a CARVER Professional pm1400.