

PEAVEY[®]
ARCHITECTURAL ACOUSTICS[®]

IPS™ -800 Dual Channel Industrial Power Amplifier

SPECIFICATIONS

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IPS™-800

RATED POWER

240W RMS per channel into 8 ohms
400W RMS per channel into 4 ohms
(Both channels driven)
800W RMS into 8 ohms
(Bridge mode)
(Continuous sine wave with less than 0.03% THD, 20 Hz to 20 kHz, 120V AC)
Bridge mode capable of driving a 70V distribution system to 400W RMS

POWER @ CLIPPING (Typical)

270W RMS per channel into 8 ohms
450W RMS per channel into 4 ohms
300W RMS per channel into 2 ohms
(Both channels driven)
900W RMS into 8 ohms
(Bridge mode)
(Continuous sine wave with less than 1.0% THD, 20 Hz to 20 kHz, 120V AC)

TOTAL HARMONIC DISTORTION

Less than 0.05% @ 400W RMS per channel into 4 ohms, 10 Hz to 30 kHz
(Typically below 0.03%)

FREQUENCY RESPONSE

+0, -0.2 dB @ 400W RMS per channel into 4 ohms, 20 Hz to 20 kHz
+0, -1 dB @ 1W RMS per channel into 4 ohms, 5 Hz to 50 kHz

POWER BANDWIDTH

10 Hz to 50 kHz @ 400W RMS per channel into 4 ohms, less than 0.1% THD

SLEW RATE

40 Volts/microsecond
(Dual channel mode, each channel)
70 Volts/microsecond
(Bridge mode)

DAMPING FACTOR

Greater than 200 @ 4 ohms;
400 @ 8 ohms
(Dual channel mode, each channel, f = 1 kHz)

HUM & NOISE

100 dB below full rated power
(Dual channel mode, each channel or bridge mode, 20 Hz to 20 kHz, unweighted)

INPUT SENSITIVITY & IMPEDANCE

+3 dBV (1.4V RMS) into 20K ohms for rated power
(Sensitivity control full clockwise)

DIMENSIONS & WEIGHT

19" W x 5¼" H x 14¾" D
45 lbs.

GENERAL FEATURES:

- 400W RMS @ 400 ohm per channel
- Automatic two-speed fan cooling system/tunnel
- Independent channel thermal/fault protection
- Transient free turn-on/off operation (relays)

FRONT PANEL:

- 19" rack-mount configuration with integral handles
- Heavy-duty rocker type power switch
- SPS™ activation LED and power LED each channel

REAR PANEL:

- Screw terminal QUASI-ELECTRONIC BALANCED inputs for each channel
- One XLR connector patchable to either or both channel inputs
- One recessed balanced input transformer socket for PL™-2 module
- XLR can be QUASI-ELECTRONIC BALANCED or TRANSFORMER BALANCED
- Recessed, calibrated input attenuator controls for each channel
- Screw terminal output connector
- SPS™ defeat & bridge mode select slide switches

DESCRIPTION

The IPS™-800 is a rugged, "high-power" amplifier with features that stand alone in the industry. It is rack-mountable and occupies only three rack spaces vertically (5¼"). The IPS-800 features massive handles on the front panel to aid in installing and removing them from 19" rack systems. The unit is capable of "bridge-mode" operation for those applications requiring large quantities of speakers and/or high level reproduction. There is automatic two-speed fan cooling with a unique tunnel ventilation system that switches to "high-efficiency" when the amplifier demand is at peak operating levels. Each channel is protected from excessive operating temperatures with a separate thermal/fault system that is automatic and only activates under extreme conditions.

All controls and connecting points are located on the rear panel of the amplifier and each channel is equipped with a separate level control. The inputs are QUASI-Electronic Balanced via the screw terminal connection or the XLR. When transformer balancing is necessary, it is easily accomplished with the addition of a PL-2 line balancing transformer. The XLR connection is patchable to either or both channel inputs, allowing single or dual channel operation from one balanced feed. High slew rate and high damping factor make the IPS-800 the obvious choice for demanding commercial/professional applications.

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The amplifier shall have two channels each capable of producing an output of more than 400 watts RMS into a 4 ohm load and 240 watts into an 8 ohm load, both channels operating from 20 Hz to 20 kHz continuously at less than 0.03% THD. In the bridge mode the amplifier shall be capable of producing an output of more than 800 watts RMS into an 8 ohm load operating from 20 Hz to 20 kHz continuously at less than 0.03% THD. Full output shall be achieved by an input signal of not more than 1.4V RMS (+3 dBV) per channel. Each channel shall be equipped with compression circuitry that electronically senses the onset of clipping and engages a unique, specially designed circuit which virtually eliminates the possibility of driving the amplifier into distortion. An LED shall indicate when this patented SPS™ compression is activated.

Each channel shall have a +0, -1 dB frequency response from 5 Hz to 50 kHz at 1 watt RMS into 4 ohms, and a +0, -0.2 dB frequency response from 20 Hz to 20 kHz at 400 watts RMS into 4 ohms. Additionally, each channel shall have a power bandwidth of 10 Hz to 50 kHz at 400 watts RMS into 4 ohms at less than 0.1% THD, and a slew rate of at least 40 volts per microsecond. The total harmonic distortion shall be less than 0.05% at 200 watts RMS into 4 ohms from 10 Hz to 30 kHz. The damping factor shall be greater than 200 at 4 ohms and greater than 400 at 8 ohms at a frequency of 1 kHz, and the hum and noise shall be at least 100 dB below full rated output power measured from 20 Hz to 20 kHz with a 600 ohm termination at the input for each channel.

The amplifier shall be stable into any load configuration with any value of input termination, including open or grounded. The output shall be short, mismatch, or open-circuit proof using special circuitry that completely eliminates any turn-on or turn-off transients and has an instantaneous

crowbar circuit that clamps the output upon the advent of power amplifier failure, thereby protecting the associated speaker system from damaging offset voltages. It shall have an automatic two-speed internal fan to provide positive forced air cooling and a thermal limit system to protect the power transistors and other components from over-temperature operation. This thermal protection system shall be automatic and self-resetting.

The amplifier shall have all input and output patching capability on the rear panel. Each amplifier channel shall contain input terminal strips and calibrated input attenuator controls. Both channel outputs shall be combined in a single terminal strip with additional grounding terminals. The rear panel shall contain the SPS defeat and bridge mode select switches and further include a low Z balanced XLR input and receptacle to allow the use of a plug-in input transformer for full balanced input capability.

The front panel features shall include the SPS activation and power (active) LED's, and one heavy-duty rocker type (mains) power switch.

The unit shall be rack-mountable in a standard 19" rack requiring 5¼" height. The unit weight shall be 45 lbs., with dimensions 19" wide x 5¼" high x 14³/₈" deep. The amplifier shall operate on 120V AC, 50/60 Hz, and consume 1500 watts. The published specifications shall be met or exceeded. The amplifier shall be a Peavey IPS™-800.

LIMITED WARRANTY

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defects in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States.

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Peavey's liability to the original purchaser for damages for any cause whatsoever and regardless of the form of action, is limited to the actual damages up to the greater of Five Hundred Dollars (\$500) or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. For information on service under this warranty, call a Peavey customer service representative at (601) 483-5376.

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Features and specifications subject to change without notice.

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#80301274

Printed in U.S.A. 5/90