

Pro-LITE™ DSP Series

Lightweight Power Amplifiers



Pro-LITE 7.5 DSP | Pro-LITE 5.0 DSP | Pro-LITE 3.0 DSP | Pro-LITE 2.0 DSP



Description

Featuring an efficient design and built on the solid, three-decade legacy of Crest Audio amplifiers, the Pro-LITE® Series power amps provide high power and rock solid performance in an ultra-efficient lightweight package for all professional audio applications. The Crest Audio Pro-LITE amplifiers, are designed with an advanced, high-speed class D design, with a switch-mode power supply that reduces weight while increasing reliability, thermal efficiency and output power in parallel, stereo and bridged modes.

Features

- Pro-LITE DSP models include onboard Digital Signal Processing that provides ACL™ protection
- Revolutionary Pro-LITE class D topology
- Detented input controls
- Combination XLR 1/4" inputs
- Combination 1/4" or 1/4" pole twist lock output connector
- Light weight; Individual signal pass-thru 1/4" jacks on each channel
- LED illuminated
- DSP-based Loudspeaker Management System
- 120 ms of delay per channel; 4 bands of parametric equalization per channel
- Security lock
- Adjustable fourth-order Linkwitz-Riley Crossover
- Adjustable fourth-order high-pass filter each channel
- Setup Wizard
- MAXX Bass®
- Horn EQ each channel
- Blue, blacklit LCD screen



Pro-LITE™ DSP Series Amplifiers

Specifications

	Pro-LITE™ 7.5 DSP	Pro-LITE™ 5.0 DSP	Pro-LITE™ 3.0 DSP	Pro-LITE™ 2.0 DSP
Rated Watts 2ch x 2 ohms	4780 watts 20ms repetitive burst / 3740 watts 1% THD both channels driven @ 1kHz	3300 watts 20ms repetitive burst / 2600 watts 1% THD both channels driven @ 1kHz	1825 watts 20ms repetitive burst / 1480 watts 1% THD both channels driven @ 1kHz	1100 watts 20ms repetitive burst / 900 watts 1% THD both channels driven @ 1kHz
Rated Watts 2ch x 4 ohms	2810 watts 20ms repetitive burst / 2475 watts 1% THD / 2160 watts 0.2% THD, both channels driven @ 1kHz	2025 watts 20ms repetitive burst / 1725 watts 1% THD / 1500 watts 0.2% THD, both channels driven @ 1kHz	1025 watts 20ms repetitive burst / 925 watts 1% THD / 840 watts 0.2% THD, both channels driven @ 1kHz	600 watts 20ms repetitive burst / 570 watts 1% THD / 530 watts 0.15% THD, both channels driven @ 1kHz
Rated Watts 2ch x 8 ohms	1550 watts 20ms repetitive burst / 1475 watts 1% THD / 1270 watts 0.2% THD, both channels driven @ 1kHz	1175 watts 20ms repetitive burst / 1000 watts 1% THD / 1270 watts 0.2% THD, both channels driven @ 1kHz	1175 watts 20ms repetitive burst / 1000 watts 1% THD / 1270 watts 0.2% THD, both channels driven @ 1kHz	370 watts 20ms repetitive burst / 325 watts 1% THD / 300 watts 0.15% THD, both channels driven @ 1kHz
Minimum Load Impedance	2 ohms	2 ohms	2 ohms	2 ohms
Maximum RMS Voltage Swing	124 volts	105 volts	70 volts	56 volts
Frequency Response	20 Hz - 25 kHz; +0dB, -3dB	20 Hz - 22kHz; +/- 0.5dB at 1 watt	20 Hz - 22kHz; +/- 0.5dB @ 4 ohms	10 Hz - 30kHz; +/- 3 dB at 1 watt, 8 ohms
20Hz - 20kHz 2 ch x 2 ohms	<0.5% @ 3390 watts 20Hz to 4kHz, decreasing to 2000 watts @ 20kHz, both channels driven	<0.5% @ 3390 watts 20Hz to 4kHz, decreasing to 1650 watts @ 20kHz, both channels driven	<0.15% @ 1300 watts 20Hz to 3kHz, decreasing to 1000 watts @ 20kHz, both channels driven	<0.25% @ 800 watts 20Hz to 4kHz, decreasing to 760 watts @ 20kHz, both channels driven
20Hz - 20kHz 2 ch x 4 ohms	<0.15% @ 2000 watts 20Hz to 20kHz, both channels driven	<0.15% @ 1400 watts 20Hz to 10kHz, decreasing to 1350 watts @ 20kHz, both channels driven	<0.15% @ 800 watts 20Hz to 20kHz, both channels driven	<0.15% @ 540 watts 20Hz to 20kHz, both channels driven
20Hz - 20kHz 2 ch x 8 ohms	<0.15% @ 1150 watts 20Hz to 20kHz, both channels driven	<0.15% @ 800 watts 20Hz to 4kHz, both channels driven	<0.15% @ 420 watts 20Hz to 20kHz, both channels driven	<0.15% @ 300 watts 20Hz to 20kHz, both channels driven
Input CMRR	< -75 dB at 1kHz	< -75 dB at 1kHz	< -76 dB at 1kHz	< -69 dB at 1kHz
Voltage Gain	x 70 (+37 dB)	x 40 (+32.0 dB)	x 37.75 (+31.5 dB)	x 30 (+29.5 dB)
Crossover	Adjustable High Pass and Low Pass filter per channel. Filter Types: 12dB/oct 2nd order, 18dB/oct 3rd order, 24dB/oct 4th order Butterworth and 24dB/oct 4th order Linkwitz-Riley.	Adjustable High Pass and Low Pass filter per channel. Filter Types: 12dB/oct 2nd order, 18dB/oct 3rd order, 24dB/oct 4th order Butterworth and 24dB/oct 4th order Linkwitz-Riley.	Adjustable High Pass and Low Pass filter per channel. Filter Types: 12dB/oct 2nd order, 18dB/oct 3rd order, 24dB/oct 4th order Butterworth and 24dB/oct 4th order Linkwitz-Riley.	Adjustable High Pass and Low Pass filter per channel. Filter Types: 12dB/oct 2nd order, 18dB/oct 3rd order, 24dB/oct 4th order Butterworth and 24dB/oct 4th order Linkwitz-Riley.
Hum and Noise	> -96dB, "A" weighted reference to rated power @ 4 ohms	> -105dB, "A" weighted reference to rated power @ 4 ohms	> -93dB, "A" weighted reference to rated power @ 4 ohms	> -100dB, "A" weighted reference to rated power @ 4 ohms
Slew Rate	> 12V/μs	> 12V/μs	> 12V/μs	> 12V/μs
Damping Factor (8 ohms)	>200:1 @ 20 Hz - 1 kHz @ 8 ohms	>210:1 @ 20 Hz - 1 kHz @ 8 ohms	>255:1 @ 20 Hz - 1 kHz @ 8 ohms	>170:1 @ 20 Hz - 1 kHz @ 8 ohms
Input Sensitivity	1.340V +/- 3% for 1kHz 4 ohm rated power, 1.250V +/- 3% for 1kHz 2 ohm rated power	1.95V +/- 3% for 1kHz 4 ohm rated power, 1.83V +/- 3% for 1kHz 2 ohm rated power	1.54V +/- 3% for 1kHz 4 ohm rated power, 1.47V +/- 3% for 1kHz 2 ohm rated power	1.53V +/- 3% for 1kHz 4 ohm rated power, 1.4V +/- 3% for 1kHz 2 ohm rated power
Input Impedance	12 kilohms, balanced and 10 kilohms unbalanced	20 kilohms, balanced and 10 kilohms unbalanced	12 kilohms, balanced and 6 kilohms unbalanced	12 kilohms, balanced and 6 kilohms unbalanced
Current Draw @ 1/8 in VA (watts):	2210 (1440) @ 2 ohms, 1550 (950) @ 4 ohms, 985 (560) @ 8 ohms	1435 (890) @ 2 ohms, 920 (525) @ 4 ohms, 625 (335) @ 8 ohms	960 (535) @ 2 ohms, 615 (315) @ 4 ohms, 400 (200) @ 8 ohms	540 (315) @ 2 ohms, 370 (180) @ 4 ohms, 240 (115) @ 8 ohms
Current Draw @ 1/3 in VA (watts):	4260 (3150) @ 2 ohms, 3120 (2160) @ 4 ohms, 1890 (1200) @ 8 ohms	3050 (2155) @ 2 ohms, 1880 (1200) @ 4 ohms, 1200 (715) @ 8 ohms	2065 (1360) @ 2 ohms, 1215 (735) @ 4 ohms, 740 (420) @ 8 ohms	1250 (760) @ 2 ohms, 750 (425) @ 4 ohms, 460 (240) @ 8 ohms
Idle Consumption:	250VA, 120 watts	195VA, 90 watts	160VA, 75 watts	90VA, 40 watts
Cooling	3 temperature dependent variable speed fans	3 temperature dependent variable speed fans	temperature dependent variable speed fan	temperature dependent variable speed fan
CONTROLS	2 front panel attenuators, push-button navigation encoder to navigate through the menus on the LCD screen for input mode, parametric EQ, crossover select switch for HPF, Normal and LPF			
Front:	Five LED indicators per channel: Active, Signal, ACL, Temperature, and DC			
INDICATOR LEDs:	Thermal, DC, subsonic, incorrect loads, under and over voltage			
Protection	Thermal, DC, subsonic, incorrect loads, under and over voltage			
CONNECTORS	Dual combination 1/4" XLR			
Inputs:	Dual male XLR input thru, one 2-pin & one 4 pin twist-lock connector			
Outputs:	Dual male XLR input thru, one 2-pin & one 4 pin twist-lock connector		Three 4-pin twist lock connectors for 2 channels plus bridge	
Construction	0.062" thick aluminum		18 ga. galvanized steel	
DIMENSIONS	3.5" x 19" x 17.25" behind front panel + 0.75" for handle		3.5" x 19" x 17.25" behind front panel + 0.6" for handle	
Gross Weight	19.0 lbs* (8.6 kg)		12.4 lbs (5.62 kg)	
Net Weight	15.2 lbs (6.9 kg)		15.0 lbs (6.80 kg)	

Rated power readings made with BW: 20 Hz to 22 kHz. All power measurements made @ 120 VAC or 240VAC.

2 ohm steady state sine wave power is time limited by circuit breaker.

Bridge operation is not possible.

*Net Weight does not include power cord

Architect's & Engineer's Specifications

Crest Audio Pro-LITE™ Series Power Amplifiers

The dual channel power amplifiers shall be ultra-high efficient, high-power, lightweight Class D designs. The power amplifiers shall be available in four power levels with and without onboard Digital Signal Processing for each channel. Each channel shall be low impedance output with power levels of 900, 1,500, 2,600 and 4,800 watts per channel at 2-ohms (at 1% THD both channels driven at 1kHz). Channels shall be bridgeable on the two lower wattage models. Bridged power shall be 1,950 and 3,000 watts at 4-ohms (at 1% THD both channels driven at 1 kHz).

Input signals shall be connected via two combination XLR and 1/4" phono jacks. Inputs shall be selectable as parallel, stereo or bridged inputs. Input functions shall be selectable as full-range, sub or through inputs. On the two higher powered models, additional 1/4" phono jacks shall provide paralleled output signals for patching line level outputs to other amplifier channels.

Amplified outputs shall be connected via three Speakon type jacks, with two jacks providing discrete outputs for channels A and B, and a third jack providing the bridged output on the models capable of bridging channels. On the two higher powered models, there shall be two Speakon type jacks providing discrete outputs for channels A and B.

Attenuation controls for each channel shall be located on the front panel, along with LED signal lamps for each channel showing that the channel is active, and showing fault conditions for DC, temperature, signal presence and automatic clip limiting.

Each model shall also be available with onboard Digital Signal Processing, which shall include delay, parametric equalization, adjustable crossover, adjustable high-pass filter, horn EQ and MAXX Bass® low-frequency augmentation per channel.

The multi-channel power amplifiers shall be the Crest Audio ProLITE 2.0, ProLITE 3.0, ProLITE 5.0, ProLITE 7.5, ProLITE 2.0 DSP, ProLITE 3.0 DSP, ProLITE 5.0 DSP and ProLITE 7.5 DSP.



Features and specifications subject to change without notice.

Peavey Electronics Corporation • 5022 Hartley Peavey Drive • Meridian, MS 39305
Phone: (601) 483-5365 • Fax: (601) 486-1278 • www.peaveycommercialaudio.com



Commercial Audio