PROFESSIONAL POWER AMPLIFIERS **Preliminary Specifications**

POWERLIGHT 2

The PowerLight 2 Series is a high performance line of amplifiers designed exclusively for the touring and live sound professional. Four models range in power from 900 watts to 1850 watts per channel, all in two-rack space chassis that are only 14" deep and 21 lbs.

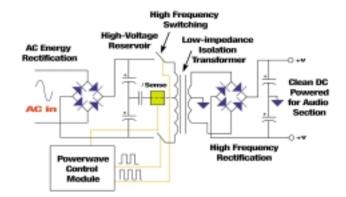
Each of these models will be available in three versions: a base model, an "A" version and a "D" version. Base models are ideal for systems using external signal processing. For those looking for integrated solutions, "A" versions offer internal analog signal processing while "D" versions will include full DSP capability. Base models are available mid February 2000; "A" and "D" versions will be available later in 2000.



PowerLight 2 Features

- PowerWave[™] Switching Technology for improved audio performance
- High-efficiency Class H output circuits lower AC current consumption and cooling requirements by over 40% (PowerLight 224, 230, & 236)
- Intake housing allows addition of optional air filter
- Increased airflow for improved thermal performance
- DataPort for remote computer control or compatibility with external DSP
- Detented gain controls with 1 dB steps for precise calibration
- Removable knobs with lock-out security plate prevents unauthorized tampering
- Selectable low-frequency roll off filters (5 Hz, 30 Hz or 50 Hz)
- User defeatable clip limiters
- 1/4" TRS**, 3-pin XLR and 3-pin detachable terminal block input connectors
- Neutrik Speakon and "Touch Proof" binding post outputs
- "Locking" IEC power cable remains secure on the road
- Compact 2 RU, 14" deep chassis fits any rack
- Personalized badging available
- Selectable input sensitivity/voltage gain (+4 dBu or 32 dB, 26 dB)*
- Adjustable internal analog or digital signal processors*
- Adjustable internal power limiters on each channel for bi-amp or speaker protection applications*
- Watts per channel PL 2 4Ω $2\Omega^*$ Ω 8 PL 218 310 525 900 PL 224 440 740 1200 PL 230 575 900 1500 PL 236 725 1100 1850

POWERWAYE™ With PowerWave™ technology, PowerLight 2 amplifiers take your sound to a whole new level. Not only does it give you tighter bass and clean transparent highs, PowerWave also cuts waste heat, boosts reliability and gets rid of unwanted noise and hum. PowerWave is a revolutionary switching power supply technology that provides ample current to the audio power circuitry by charging the supply rails 230,000 times a second through an ultra-low impedance circuit. So unlike amplifiers that use conventional supplies, the audio signal is never starved prematurely and remains crisp and clean.





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FTC rating: 20Hz -20kHz, 0.03% THD

^{* &}quot;A" and "D" versions only

^{**} Base models only

PL 2 BASE MODEL SPECS	PL 218	PL 224	PL 230	PL 236	
Stereo Mode (both channels driven)		Continuous Average Output Power Per Channel			
8 ohms FTC 20 Hz-20 kHz 0.03% THD	310W	440W	575W	725W	
8 ohms EIA 1 kHz 1% THD	340W	475W	625W	800W	
4 ohms FTC 20 Hz-20 kHz 0.05% THD	525W	740W	900W	1100W	
4 ohms EIA 1 kHz 1% THD	600W	825W	1050W	1300W	
2 ohms EIA 1 kHz 1% THD	900W	1200W	1500W	1850W	
Bridge Mono Mode	Bridge-Mono Mode Operation				
16 ohms FTC 20 Hz-20 kHz 0.1% THD	650W	900W	1200W	1500W	
8 ohms FTC 20 Hz-20 kHz 0.1% THD	1100W	1500W	1800W	2400W	
4 ohms EIA 1 kHz 1% THD	1800W	2400W	3000W	3600W	
Noise (20 Hz-20 kHz)	-107 dB	-108 dB	-107 dB	< -107 dB	
Input Sensitivity @ 8 ohms	1.25 Vrms	1.18 Vrms	1.20 Vrms	1.22 Vrms	
Input Sensitivity @ 4 ohms	1.15 Vrms	1.08 Vrms	1.06 Vrms	1.06 Vrms	
Voltage Gain	32dB	34dB	35dB	36dB	
Output Circuitry	AB	2-Step Class H	2-Step Class H	2-Step Class H	
120V Power Requirements (1/8 power pink noise @ 48	8 A*	8 A*	9 A*	12 A*	
All models All models					
Distortion (SMPTE-IM)	Less than 0.01%				
Distortion (typical)					
10 dB below rated power: 20 Hz-20 kHz	10 dB below rated power: 20 Hz-20 kHz Less than 0.015% THD				
Full rated power: 5.0 kHz and below	Less than 0.01% THD				
Frequency Response	20 Hz-20 kHz, ± 0.2 dB / 8 Hz-100 kHz, +0, -3 dB				
Damping Factor	greater than 500				
Input Impedance	6 K Ω unbalanced, 12 K Ω balanced				
Input Clipping	10 Vrms (+22dBu)				
Cooling	Variable-speed fan, rear-to-front air flow				
Connectors (each channel)	Input: 1/4" TRS**, 3-pin XLR and 3-pin detachable terminal blocks (1 each per channel)				
	Output: Neutrik Speakon™ and touch-proof binding post				
Controls	Front: AC switch, Ch.1 and Ch.2 gain knobs				
Rear: DIP switch for Ch.1 and Ch.2: clip limiter on/off, LF filter on/off, LF filter				off, LF filter	
	freq select-30 or 50 Hz; inputs parallel or stereo; bridge mode				
Indicators	PARALLEL INPUTS:	Orange LED CLIP/PROT:	Red LED (1 per channel)		
	BRIDGED:	Yellow LED LEVEL -10 d	dB: Amber LED (1 per channel)		
	PWR-ON:	Green LED LEVEL -20 di	B: Green LED (1 per chann	el)	
		SIGNAL -35d	B: Green LED (1 per chann	el)	
Amplifier Protection	Full short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into reactive or mismatched loads				
Load Protection	On/off muting, DC-fault power supply shutdown				
Dimensions	19" (48.3 cm) rack mounting, 3.5"(8.9 cm) tall (2 rack spaces), 14" (35.6 cm) deep (from front mounting rails)				
Weight	21 lb (9.5 kg) net, 27 lbs (12.3 kg) shipping				

^{* @ 120} VAC, both channels driven; multiply current by 0.5 for 230V units ** Base models only



Rear View of PL 2 Base Model Version

