POWERLIGHT

PROFESSIONAL POWER AMPLIFIERS

POWERWAVE With an unequaled reputation for sound quality and reliability, the PowerLight Series is a range of advanced-technology professional audio amplifiers designed for touring professionals. PowerLights feature QSC's exclusive PowerWave technology for extraordinary audio performance, reliability and reduced weight. Six models offer a range of power from 725 to 4,500 watts per channel, allowing you to choose the right power for your special application. Power Factor Correction (PFC) on the PowerLight 6.0 and PowerLight 9.0 lowers current draw by over 40%, making them the most efficient amplifiers available.

With PowerWave technology, PowerLight 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 and boosts reliability. 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 though an ultra-low impedance circuit. So unlike amplifiers that use conventional supplies, the audio signal is never starved prematurely and remains crisp and clean.

PowerLight Series amplifiers also boast a set of useful features. Individually selectable clip limiters lower distortion and protect speakers, and a standby mode allows remote AC control.

PowerLight Features

- **PowerWave switching technology—for improved audio performance**
- **High efficiency, Class H linear output circuit lowers AC current consumption and cooling requirements by 40% or more (on selected models)**
- **PFC on PL 6.0 and 9.0 improves audio performance and lowers AC current requirements**
- **DataPort for remote computer control**
- **User defeatable clip limiter reduces distortion, protects speakers**
- **Advanced thermal management system for superior cooling**
- **Detented gain controls with 2 dB steps for easy resetting**
- **Comprehensive LED status arrays**
- **Variable speed fan for quiet operation**
- **Remote AC power control**
- **DC, subsonic audio, and thermal overload protection**
- **Neutrik "Combo" (XLR & 1/4") and barrier balanced input connectors**
- **3 year warranty plus optional 3 year extended service contract**

Model		Watts per Channel		
PowerLight		8 Ω	4 Ω	2 Ω*
PL3.4		725	1150	1700
PL3.8[X]	Ch-1	900	1400	2400
	Ch-2	450	800	1400
PL4.0		900	1400	2000
PL6.0II		1150	2050	3500
PL6.0[PFC]		1500	2500	3150
PL9.0[PFC]		1800	3200	4500

20 Hz–20 kHz, 0.1% THD *1 kHz, 1% THD

QSC™

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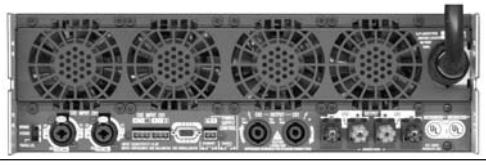
POWERLIGHT SPECIFICATIONS	PL3.4	PL3.8^{X}		PL4.0	PL6.0II	PL6.0^{PFC}	PL9.0^{PFC}
Stereo Mode (both channels driven)	**Continuous Average Output Power Per Channel**						
		Ch1	Ch2				
8 ohms FTC 0.1% THD 20 Hz-20 kHz	725W	900W	450W	900W	1150W	1500W	1800W*
8 ohms EIA 1.0% THD 1 kHz	750W	–		1000W	1300W	1625W	1950W
4 ohms FTC 0.1% THD 20 Hz-20 kHz	1150W	1400W	800W	1400W	2050W	2500W	3200W*
4 ohms EIA 1.0% THD 1 kHz	1225W	–		1600W	2200W	2650W	3400W
2 ohms EIA 1.0% THD 1 kHz	1700W	2400W	1400W	2000W	3500W	3150W	4500W
Bridge Mono Mode	**Continuous Average Output Power**						
8 ohms FTC 0.1% THD 20 Hz-20 kHz	2300W	-		2800W	4400W**	5000W	6400W
4 ohms EIA 1.0 % THD 1 kHz	3400W	-		4000W	7000W	6300W	9000W
Distortion (SMPTE-IM)	<0.05%	<0.01%		<0.05%	<0.02%	<0.02%	<0.02%
THD (Typical) (4 to 8 ohms: 20 Hz–20kHz, 10 db below rated power. 1.0 kHz and below, full rated power	0.01%	0.01%		0.01%	0.06%	0.06%	0.06%
Damping Factor (1 kHz and below)	>500	>500		>500	>2000	>2000	>2000
Signal to Noise (20 Hz-20 kHz)	108 dB	105 dB		105 dB	107 dB	107 dB	107 dB
Input Sensitivity @ 8 ohms (in Vrms)	0.96	1.08	1.24	1.06	2.40	2.70	3.00
Voltage Gain (in dB)	80x (38)	80x(38)	49x(34)	80x (38)	40x (32)	40x (32)	40x (32)
Output Circuitry	H (3-Step)	3-Step	2-Step	H (3-Step)	H (4-Step)	H (4-Step)	H (4-Step)
Cooling (Variable speed fans, rear-to-front air flow)	Single Fan	Single Fan		Single Fan	Four Fans	Four Fans	Four Fans
Height (1 RU=1.75" (4.45cm))	3 RU	3 RU		3 RU	3 RU	3 RU	3 RU
Weight (net)	30 lbs (13.6 kg)	30 lbs (13.6 kg)		30 lbs (13.6 kg)	53 lbs (24 kg)	59 lbs (27 kg)	59 lbs (27 kg)
120v Current Consumption (1/8 Power Pink Noise @ 4 ohms) Multiply current by 0.5 for 230V units.	11.5 A	15.2 A		15.2 A	16 A	16 A	19 A

All models	All models
Connectors (each channel)	Input: Neutrik "Combo" XLR + 1/4" TRS input and Barrier strip (Eurostyle detachable headers on PL 6.0^{PFC}, PL 6.0II and 9.0^{PFC} only) Output: "Touch-proof" binding posts (PL 6.0^{PFC} and 9.0^{PFC} include Neutrik Speakon and 60A rated binding post)
Frequency Response	20 Hz–20 kHz, ± 0.15 dB / 2 Hz–50 kHz, +0, -3 dB (6.0^{PFC}, 6.0II & 9.0^{PFC} only) 5 Hz–60 kHz, +0, -3 dB (3.4 & 4.0 only) 8 Hz–100 kHz, +0, -3 dB (all other models)
Input Impedance	10 kΩ unbalanced, 20 kΩ balanced
Amplifier Protection	Full short circuit, open circuit, thermal, ultrasonic and RF protection. Stable into reactive or mismatched loads.
Controls	Front: AC switch, Ch.1 and Ch.2 gain knobs, Ch.1 and Ch.2 clip limiter switches Rear: Parallel/Stereo/Bridge switch, Remote AC Control terminal strip
Load Protection	On/off muting, DC-fault power supply shutdown
Indicators	PROT: Red LED (each channel) CLIP: Red LED STANDBY: Yellow LED LEVEL -10 dB: Yellow LED PWR-ON: Green LED LEVEL -20 dB: Yellow LED SIGNAL: Green LED
	
Power Requirements	120, 230 Vac, 50-60 Hz
Power Connectors	30 amp twist lock (PL 3.8^{X}, PL 4.0, PL 6.0^{PFC}, PL 6.0II & PL 9.0^{PFC}) 15 amp edison (PL 3.4) Export versions have removable IEC connectors
Width / Height	19.0" (48.3 cm) rack mounting (all models) 17.9" (45.5 cm) deep behind front mounting rails (all models) Overall Depth on PL 6.0^{PFC}, PL 6.0II & PL 9.0^{PFC} (19.5")

** @ 0.2% THD; ** EIA 1.0% THD 1 kHz*

Specifications subject to change without notice.

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