

PowerLight

1.6^{HVX}

The PowerLight™ 1.6^{HVX} is an advanced dual power professional audio amplifier featuring uncompromised audio performance. Designed specifically for use with bi-amplified speaker systems, power and performance of each channel is tailored for its intended load. A new high frequency power supply, utilizing QSC's *PowerWave™ Switching Technology*, has been combined with the rugged audio amplification

circuits of traditional QSC amplifiers to produce an amplifier with incredible audio performance, reliability, and thermal capacity. A special "High Voltage" output circuit provides maximum power at 16, 8, 4 ohm loads. The PowerLight 1.6^{HVX} is rated at 725 watts/channel into 8 ohms and 1100 watts/channel into 4 ohms for the low frequency channel, making it ideal for powering stage monitors and any high power, bi-amplified speaker systems.

PowerWave Switching Technology provides increased power supply regulation to maintain excellent low frequency response to 20 Hz. Outstanding audio performance and reliability, networkability, and light weight make this amplifier ideal for all critical sound system applications.

LOAD	20Hz-20kHz, 0.1% THD	
	LOW FREQ.	HIGH FREQ.
Both Channels Driven		
8Ω	725 watts	300 watts
4Ω	1100 watts	450 watts
2Ω	not rated	not rated
Single Channel Driven		
8Ω	750 watts	325 watts
4Ω	1200 watts	550 watts
2Ω	not rated	not rated

PRELIMINARY SPECIFICATIONS

OUTPUT POWER (CH 1 Low Frequency)

8 ohms, 20 Hz to 20 kHz, 0.1% THD, 725 watts
4 ohms, 20 Hz to 20 kHz, 0.1% THD, 1100 watts
2 ohms, not rated

OUTPUT POWER (CH 2 High Frequency)

8 ohms, 20 Hz to 20 kHz, 0.1% THD, 300 watts
4 ohms, 20 Hz to 20 kHz, 0.1% THD, 450 watts
2 ohms, not rated

DISTORTION (SMPTE-IM): less than 0.05%

DISTORTION (typical): less than 0.01% THD

4Ω to 8Ω:
20Hz-20kHz, 10 dB below rated power
1.0 kHz and below, full rated power

FREQUENCY RESPONSE:

20 Hz to 20 kHz, ±0.15 dB
8 Hz to 100 kHz, +0/-3 dB

DAMPING FACTOR:

Greater than 350

DYNAMIC HEADROOM: 1.9 dB at 4 ohms

NOISE: 108 dB below rated output (20 Hz to 20 kHz)

SENSITIVITY: CH 1: 1.12 Vrms; CH 2: 1.0 Vrms, for rated power (8 ohms)

CONTROLS:

Front: AC Switch, Ch 1 and Ch 2 Gain Knobs, Ch 1 and Ch 2 Clip Limiter Switches
Back: Remote A.C. Power, Control Terminal Strip

VOLTAGE GAIN: CH 1: 63 (36 dB); CH 2: 50 (34 dB)

INPUT IMPEDANCE: 10K unbalanced, 20K balanced

INDICATORS:

PROT: Red LED CLIP: Red LED, 1 per ch.
STANDBY: Yellow LED LEVEL -10: Yellow LED, 1 per ch.
PWR-ON: Green LED LEVEL -20: Yellow LED, 1 per ch.
SIG-PRESENT: Green LED, 1 per ch.

CONNECTORS: (each channel)

Input: Barrier strip and Neutrik "Combo" XLR and 1/4" input

Speakers: "Touch proof" binding posts

Data Port: HD15 female

COOLING: Two variable speed fans, rear-to-front air flow.

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 shut down.

OUTPUT CIRCUIT TYPE:

CH 1: Complementary linear outputs. 2-step high efficiency circuit

CH 2: Complementary linear outputs. Class AB circuit

DIMENSIONS:

19.0" (48.3 cm) rack mounting
3.5" (8.9 cm) tall (2 spaces)
17.9" (45.5 cm) deep (rear support ears)

WEIGHT: 18 lbs (8.2 kg) net, 24 lbs (10.6 kg) shipping

Designed specifically for bi-amp applications

1100 watt Low Frequency power at 4 Ω

725 watt Low Frequency power at 8 Ω

450 watt High Frequency power at 4Ω

300 watt High Frequency power at 8 Ω

Low Frequency channel features a high efficiency, Class H, 2-step output circuit for high power output, improved thermal performance and lower AC current consumption

High Frequency channel features a full complementary class AB output circuit for ultra-low distortion and smooth frequency response

Advanced thermal management system

Clip Limiter (user defeatable)—reduces distortion, protects loud speakers

PowerWave™ Switching Technology—for improved audio performance

Detented gain controls with 2 dB steps for easy resetting

Comprehensive LED status arrays

Two variable speed fans, for quiet operation

DC, sub audio, and thermal overload protection

Patented Output Averaging™ short-circuit protection

Neutrik "Combo" (XLR & 1/4") and barrier balanced input connectors

"Touch proof" binding post output connectors

Remote AC power control

Data port for MultiSignal Processing

3 year warranty PLUS optional 3 year extended service contract



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