



# QXD-10K

4-Channel 10000W Power Amplifier  
with DSP and Network Capability



The QXD-10K is a flagship 2RU, 4 x 2500W Class-D amplifier designed for the most demanding installed sound applications. It delivers exceptionally high output with refined efficiency and ultra-low distortion, supporting 8Ω, 4Ω, 70V, and 100V operation, and providing up to 10,000W total continuous power.

Leveraging UMAC™ Class-D technology, the QXD-10K integrates a 32bit/96kHz DSP for advanced signal processing. This includes FIR/IIR filters, peak and RMS limiters, and Quest's proprietary speaker tuning libraries.

A front-mounted high-resolution TFT display with an LED encoder allows for intuitive configuration. System-wide control and monitoring are supported by RJ45 (network port) and GPIO connectivity, enabling seamless integration into larger control systems.

Equipped with Neutrik speakON® outputs and a powerCON® mains input, the QXD-10K ensures secure connections in high-power environments. Optional Dante™/AES67 audio-over-IP integration provides full compatibility with networked audio systems.

## KEY SPECIFICATIONS

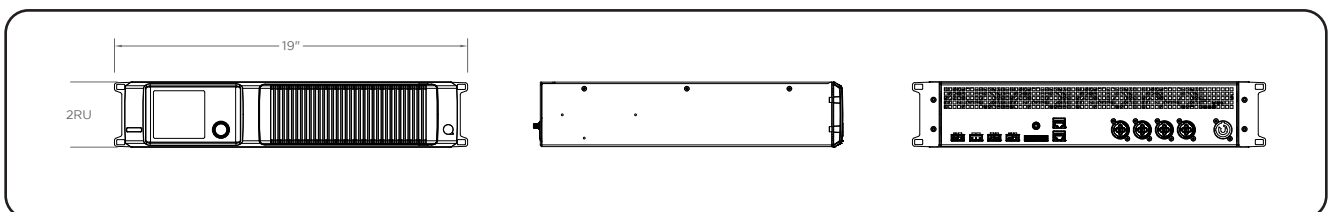
Channels	4 x 2500W (Low-Z, 70V, or 100V)
DSP	32bit/96kHz FIR/IIR Filters, Limiters, Speaker Libraries
Mounting	2RU Rack
Control	RJ45 & GPIO, Front TFT Display
Options	Dante™/AES67 Expansion Card

# SPECIFICATIONS



NORMAL OPERATION (PEAK)										
POWER	Load	Total Power	8Ω	4Ω	70V	100V	8Ω	4Ω	70V	100V
		Maximum Dynamic Power (@1kHz, 1% THD)	10000W	4 x 1500W	4 x 2500W	4 x 1200W	4 x 1500W	N/A	N/A	N/A
NORMAL OPERATION (RMS)										
POWER	Load	Total Power	8Ω	4Ω	70V	100V	8Ω	4Ω	70V	100V
		Maximum Continuous Power (@1kHz, 1% THD)	10000W	4 x 1500W	4 x 2500W	4 x 1200W	4 x 1500W	N/A	N/A	N/A
I/O	OUTPUT CIRCUITRY				UMAC™ Class-D - full bandwidth PWM modulator with ultra-low distortion					
	OUTPUT CHANNELS				Four Speaker Level Output via Neutrik speakON® connectors					
	INPUT CHANNELS				Four Balanced Line Level Inputs via 3-pin Euroblock/Phoenix connector with 5.08mm pitch and screw-lock					
	INPUT SENSITIVITY (ANALOG)				-10dbv, +4dbu, +12dbu & +28dbu					
	DEFAULT GAIN				31dB					
	FREQUENCY RESPONSE				20Hz - 20kHz (±0.25dB), 4Hz - 40kHz (-3dB)					
	TOTAL HARMONIC DISTORTION				< 0.008% (1kHz, 5W, 8Ω load)					
	DYNAMIC RANGE				> 108dBA					
	MAXIMUM INPUT LEVEL				+28dBu					
	INPUT IMPEDANCE				10kΩ Unbalanced, 20kΩ Balanced					
C	LATENCY				<350µs, flat setup					
	CONTROLS AND INDICATORS (FRONT)				High-Resolution TFT Display with Rotary Encoder with LED Halo					
	CONTROLS AND INDICATORS (REAR)				N/A					
	CONTROL AND MONITORING				RJ45 & GPIO					
	DIGITAL SIGNAL PROCESSING				32bit/96kHz with FIR/IIR Filters, Peak and RMS Limiters, Digital Delay & Custom Quest Speaker Libraries					
P	PROTECTION CIRCUITS				Thermal Protection, Over-Current Protection, DC Protection, HF Protection					
	MAINS POWER INPUT				Universal Mains, 100-240VAC, 50-60Hz					
	MAINS CONNECTOR				Neutrik powerCON®					
	POWER CONSUMPTION - STANDBY				<0.5W					
	POWER CONSUMPTION - IDLE				50W					
H	POWER CONSUMPTION - 1/8TH POWER / 8 Ω Load				850W					
	POWER CONSUMPTION - 1/3RD POWER / 8 Ω Load				2230W					
	HEAT GENERATED - STANDBY				1.7BTU/hr / 1.7kJ per hour					
	HEAT GENERATED - 1/8TH POWER / 8 Ω Load				341BTU/hr / 356kJ per hour					
	COOLING				Fan-Forced Air Cooling - User-Selectable Temperature-Dependent Control Curves					
S	FAN NOISE				36dB(A) (Anechoic Chamber, @ 1m)					
	RACK SIZE				2RU					
	DIMENSIONS (W x H x D)				482 x 88 x 415mm (19" x 3.5" x 16.4")					
	WEIGHT				12.4kg (27.3lbs)					
	SHIPPING DIMENSIONS (W x H x D)				610 x 135 x 550mm (24" x 5.3" x 21.6")					
A	SHIPPING WEIGHT				15kg (33lbs)					
	ACCESSORIES (INCLUDED)				Mains Cable, Euroblock/Phoenix Plugs, Wi-Fi Antenna					
	ACCESSORIES (AVAILABLE SEPARATELY)				None					
OPTIONS				Dante® Expansion Card (additional 4 inputs, Dante® AoIP, AES67 compatible)						

\*Quest Engineering reserves the right to make changes in specifications, or products without prior notice.



# QXD-10K

The amplifier shall be a four-channel Class D power amplifier employing UMAC™ full-bandwidth PWM modulation with ultra-low distortion.

The amplifier shall provide a maximum dynamic and continuous power output of 4 × 2500 W into 4 ohms, 4 × 1500 W into 8 ohms, 4 × 1200 W into 70 V lines, and 4 × 1500 W into 100 V lines. Bridged-mono operation shall not be available on this model.

Frequency response shall be 20 Hz to 20 kHz ( $\pm 0.25$  dB), with a -3 dB bandwidth from 4 Hz to 40 kHz. Total harmonic distortion shall be less than 0.008% (1 kHz, 5 W, 8-ohm load). The amplifier shall provide a dynamic range greater than 108 dBA, a maximum input level of +28 dBu, and an input impedance of 10 k $\Omega$  unbalanced or 20 k $\Omega$  balanced. Default voltage gain shall be 31 dB. Latency shall be less than 350  $\mu$ s under flat DSP conditions.

Input connections shall consist of four analogue balanced line-level inputs via 3-pin Euroblock/Phoenix connectors with 5.08 mm pitch and screw-lock. Output connections shall be via four Neutrik speakON® connectors.

Front panel controls shall include a high-resolution TFT display with an encoder featuring an LED halo. Control and monitoring interfaces shall include RJ45 and GPIO. Digital signal processing shall operate at 32-bit/96 kHz and include FIR/IIR filters, peak and RMS limiters, and access to custom Quest speaker libraries. Protection circuits shall include thermal, over-current, DC, and high-frequency protection.

The amplifier shall operate on universal mains voltage, 100-240 V AC, 50/60 Hz, with a Neutrik powerCON® mains connector. Power consumption shall not exceed 0.5 W (standby), 50 W (idle), 850 W (1/8 power, 8-ohm load), or 2230 W (1/3 power, 8-ohm load). Cooling shall be provided by temperature-dependent fan-forced air cooling. Fan noise shall not exceed 36 dB(A) at 1 metre under anechoic conditions.

The amplifier shall occupy 2RU of vertical rack space. Physical dimensions shall be 482 mm (W) × 88 mm (H) × 415 mm (D). Shipping dimensions shall be 610 mm (W) × 135 mm (H) × 550 mm (D). Net weight shall be 12.4 kg; shipping weight shall be 15 kg.

The amplifier shall be supplied with mains cable, Euroblock connectors, and Wi-Fi antenna. Optional accessories shall include rear rack ears and a Dante® expansion card (providing an additional 4 inputs with Dante® AoIP and AES67 compatibility). The amplifier shall be the Quest QXD-10K.

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