

XPS 16KD

DANTE-EQUIPPED 4-CHANNEL DSP POWER AMPLIFIER

DESCRIPTION

XPS 16KD is a four-channel power amplifier with advanced processing and advanced routing with Dante, digital and analog I/O for both touring and install use. With 4x4000 W Class D continuous power at 2.7 ohms, 40-bit floating-point processing at 96 kHz, and 32-bit internal routing, XPS 16K packs extreme power density in a 2U chassis.

Designed for both touring and installed sound systems, XPS is intended for use with high-performance speakers and provides ready-to-use configurations and presets. It can also be used in linear mode with advanced tuning capabilities.

Each output features: 4000 ms output delay (1372 m / 4501 ft), EQ Filters, Crossovers, FIR Filters, Multiband Compressor, RMS Limiter, and Thermal limiter.

XPS delivers rider-friendly premium sound with full RDNet remote management, large touch interface onboard, exceptional signal/noise ratio, ultra-low distortion, and extreme dynamic range.



FEATURES

- 16000 W Total Continuous Power
- 40-bit Floating-point DSP and 32-bit routing up to 96 kHz
- Dante Audio Network
- FiRPHASE, Bass Motion Control, Bass Shaper
- RDNet Networked Management
- Touch 4.3" Color TFT Interface
- Full On-board Processing with Delay, EQ. Comp/Limiter
- RCF Speaker Presets Library
- Class-D Modules with SMPS and Advanced PFC

Rev. J Last update: 01/06/2023



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICA	ATIONS	
Amplifier specifications	Amplifier Class:	D
	Output power (EIAJ 8:32 all channels driven):	4 x 4000 W @ 2.7 ohm 4 x 2600 W @ 4 ohm 4 x 1400 W @ 8 ohm
	Frequency Response (-3dB):	20 Hz ÷ 23000 Hz
	SNR Analog inputs (unweighted):	>111 dB
	SNR Digital inputs (unweighted):	>115 dB
	Crosstalk:	<70 dB
	THD+N (20 Hz ÷ 20000 Hz,1000 W @ 4 ohm):	<0.2 %
	Gain (linear mode @ 0 dB):	32 dB
	Damping factor (@ 8 ohm, 20 Hz ÷ 1500 Hz):	>95
	Max burst length (@ 50 Hz, CF = 7 dB, 4 ohm, 1% THD+N):	200 ms
Input section	Total number of inputs:	16
	Line inputs:	4
	Line connectors:	XLR
	Digital inputs:	12
	Digital connectors:	Ethercon, XLR
	Digital type:	AES/EBU, DANTE
	General Purpose Inputs (GPI):	2
	Programmable GPI:	Yes
	Photo-coupled GPI:	2
Output section	Signal output number:	4
	Signal output connectors:	XLR
	Power output connectors:	Speakon
	General Purpose Outputs (GPO):	3
	Programmable GPO:	Yes
Processing	DSP:	2 SHARC, 40-bit floating point, 96 kHz 2 ADAU, 32-bit fixed point, 96 kHz
	EQ Filters:	Peaking HI/LO-shelving HI/LO-pass (Butterworth, Linkwitz-Riley, Bessel)
	Advanced algorithms:	FiRPHASE technology BASS shaper air compensation mid-low correction driver excursion control dynamic PEQ multiband compressor pilot tone detection backup recovery strategy impedance load measurement
	Compressors:	RMS limiter dynamic compressor power limiter thermal compressor
	Delay:	0 ÷ 4000 ms (each channel)
	Tone controls:	Yes
	High-pass filter:	10 Hz ÷ 1000 Hz
	Crossover:	2500 ÷ 3500 Hz
	Automatic Gain Control (ACG):	Yes



Configuration and control	Configuration:	Front panel touch screen, PC Software
	Network:	Gigabit ethernet
	RCF speakers presets:	Yes
	Priority:	Yes
	Protocols for system integration:	Proprietary OSC based protocol, Q-SYS
	RDNet:	Yes
Protections	Cooling:	Forced
	Short circuit:	Yes
	Thermal:	Yes
	DC:	Yes
	Fuses:	Yes
	VHF (Very High Frequencies):	Yes
Operating conditions	Temperature range - Continuous operation:	-5°C ÷ +40°C / +23°F ÷ +104°F
	Temperature range - Reduced output power:	-5°C to +50°C / +23°F to +122°F
	Fan noise idle:	<35 dBA
	Fan noise max:	<64 dBA
Power requirement	Operating voltage:	90-240 V~ 50/60Hz
	Nominal current AC @ 100-120 V:	30 A
	Nominal current AC @ 220-240 V:	16 A
	Stand by power consumption:	20 W
	Idle power consumption:	90 W
	Power consumption:	5800 W
	Main fuse:	Internal
	Fuses Model:	F 315 mA H 100 V
Standard compliance	Safety agency:	CE compliant
Physical specifications	Cabinet/Case Material:	Metal
	Handles:	2 metal handles for rack mount
	Color:	Black - RAL 9005
	Rack mounting:	19", 2U
Size	Height:	88.7 mm / 3.49 inches
	Width:	482 mm / 18.98 inches
	Depth:	482.4 mm / 18.99 inches
	Weight:	15 kg / 33.07 lbs
Shipping information	Package Height:	150 mm / 5.91 inches
	Package Width:	580 mm / 22.83 inches
	Package Depth:	600 mm / 23.62 inches
	Package Weight:	18 kg / 39.68 lbs



PART NUMBER

· 12100077

XPS 16KD

UK

EAN 8024530020859

· 12100075

XPS 16KD

US

EAN 8024530020392

· 12100064

XPS 16KD

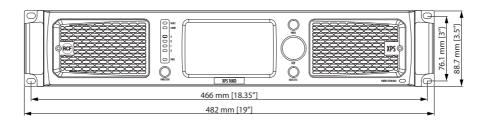
EU

EAN 8024530020125

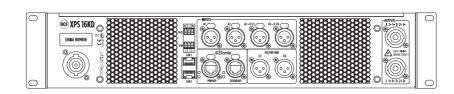


DRAWINGS

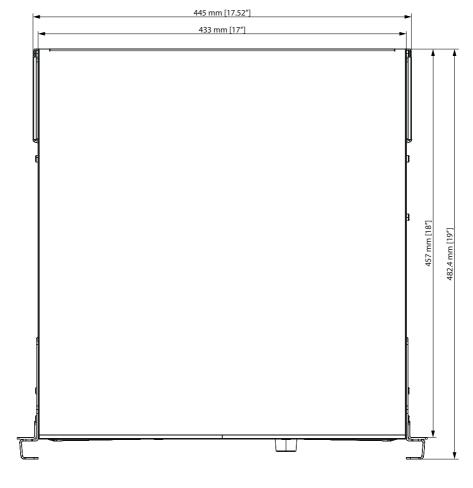
Front view



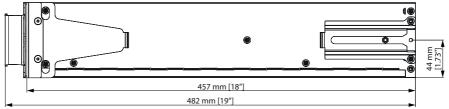
Rear view



Top view



Side view





A&E SPECIFICATIONS

The product shall offer a full package of high power amplification (4 x 4000W @ 2.7 ohm), innovative processing, analog and digital audio management in a single solution. It shall be a high power amplifier with an on-board dedicated preset library. It shall offer four independent, processed channels of audio amplification and be capable of driving professional speaker systems. The main user interface shall be a control and monitoring PC software, allowing to discover, monitor and control a virtually unlimited number of amplifier. Users will find ready to use definable parametric equalizations, multiband compressors, bass shaper, air absorption compensation, delays and levels. The time delay shall be up to four second per channel. Most of settings and monitored parameters (channel information, presets, levels, status, grouping and naming as well as user presets) shall be also accessible through a front panel user interface, made of a capacitive touch screen and other ergonomic controls. It shall be equipped with a Dante board that makes 8 additional digital inputs available.