RCF

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
- On-board Speaker Presets Library
- Class-D Modules with SMPS and Advanced PFC

TECHNICAL SPECIFICATIONS

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
	Distortion (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	Yes
	EQ Filters	Yes
	Advanced algorithms	FiRPHASE technology	BASS shaper	air compensation	mid-low correction	driver excursion control	dynamic PEQ	multi-band compressor	pilot tone detection	backup recovery strategy	impedance load measurement
	Compressors	Yes
	Delay	Yes
	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
	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, UL 62368-1, 3rd Ed. CSA C22.2 No. 62368-1:19, 3rd Ed.

Physical specifications	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**
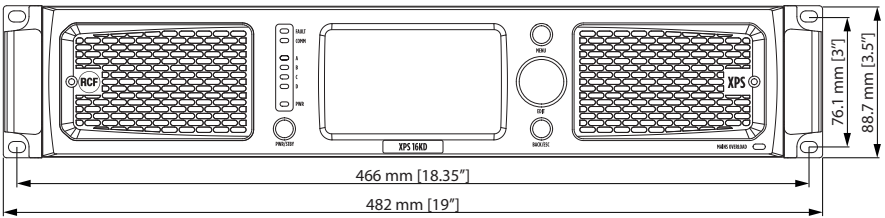
  XPS 16KD

  US

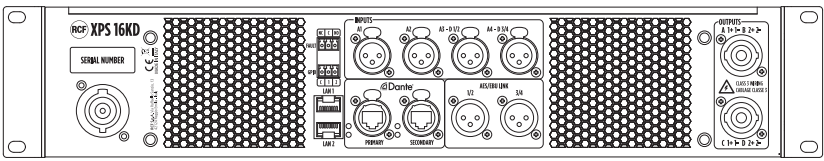 EAN 8024530020392

- **12100064**

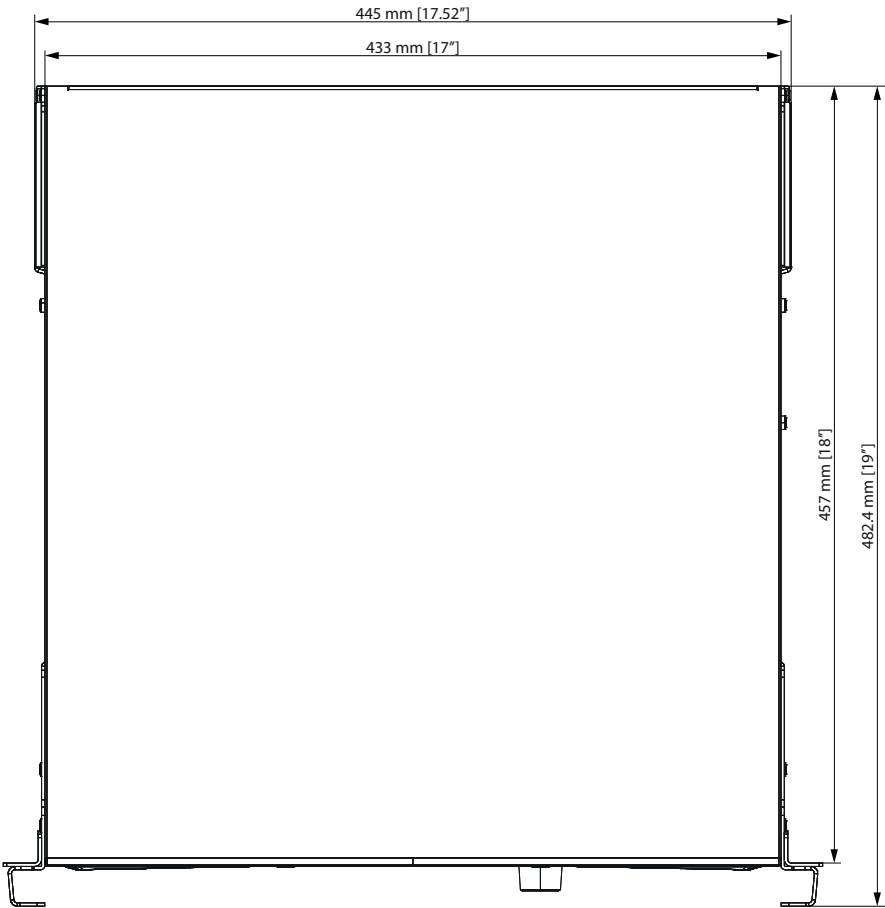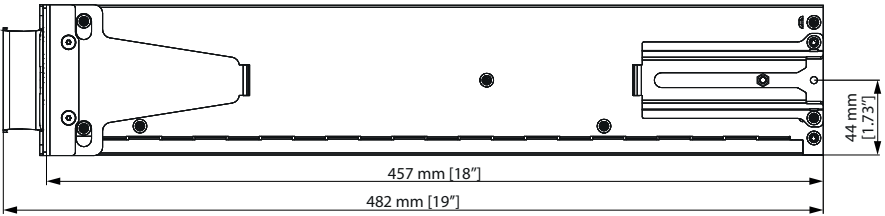 XPS 16KD

  EU

  EAN 8024530020125

DRAWINGS

Front view

466 mm [18.35"]
482 mm [19"]
76.1 mm [3"]
88.7 mm [3.5"]

Rear view

Top view

445 mm [17.52"]
433 mm [17"]
457 mm [18"]
482.4 mm [19"]

Side view

457 mm [18"]
482 mm [19"]
44 mm [1.73"]

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.