

# XPS 16K

## FOUR CHANNELS DSP AMPLIFIER

### DESCRIPTION

XPS 16K is a four-channel power amplifier with advanced processing and analog/digital routing options 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 RNet 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 Processing, up to 96 kHz
- 32-bit Fixed-point Internal Routing
- FiRPHASE, Bass Motion Control, Bass Shaper
- RNet Networked Management
- Touch 4.3" Color TFT Interface
- Full On-board Processing with Delay, EQ, Comp/Limiter
- RCF Speaker Presets Library



**TECHNICAL SPECIFICATIONS**

<b>Amplifier specifications</b>	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 (@ 4 ohm, 20 Hz ÷ 1500 Hz):	>95
	Max burst length (@ 50 Hz, CF = 7 dB, 4 ohm, 1% THD+N):	200 ms
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<b>Input section</b>	Total number of inputs:	8
	Line inputs:	4
	Line connectors:	XLR
	Digital inputs:	4
	Digital connectors:	XLR
	Digital type:	AES/EBU
	General Purpose Inputs (GPI):	2
	Programmable GPI:	Yes
Photo-coupled GPI:	2	
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<b>Output section</b>	Signal output number:	4
	Signal output connectors:	XLR
	Power output connectors:	Speakon
	General Purpose Outputs (GPO):	3
	Programmable GPO:	Yes
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<b>Processing</b>	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   multi-band 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



<b>Configuration and control</b>	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
	RNet:	Yes
<b>Protections</b>	Cooling:	Forced
	Short circuit:	Yes
	Thermal:	Yes
	DC:	Yes
	Fuses:	Yes
	VHF (Very High Frequencies):	Yes
<b>Operating conditions</b>	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
<b>Power requirement</b>	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
<b>Standard compliance</b>	Safety agency:	CE compliant
<b>Physical specifications</b>	Cabinet/Case Material:	Metal
	Handles:	2 metal handles for rack mount
	Color:	Black - RAL 9005
	Rack mounting:	19", 2U
<b>Size</b>	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
<b>Shipping information</b>	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**

• **12100076**

XPS 16K

UK

EAN 8024530020842

• **12100074**

XPS 16K

US

EAN 8024530020385

• **12100037**

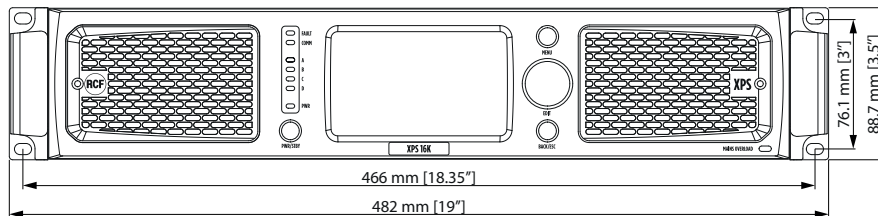
XPS 16K

EU

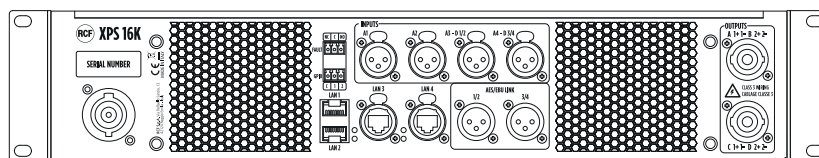
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**DRAWINGS**

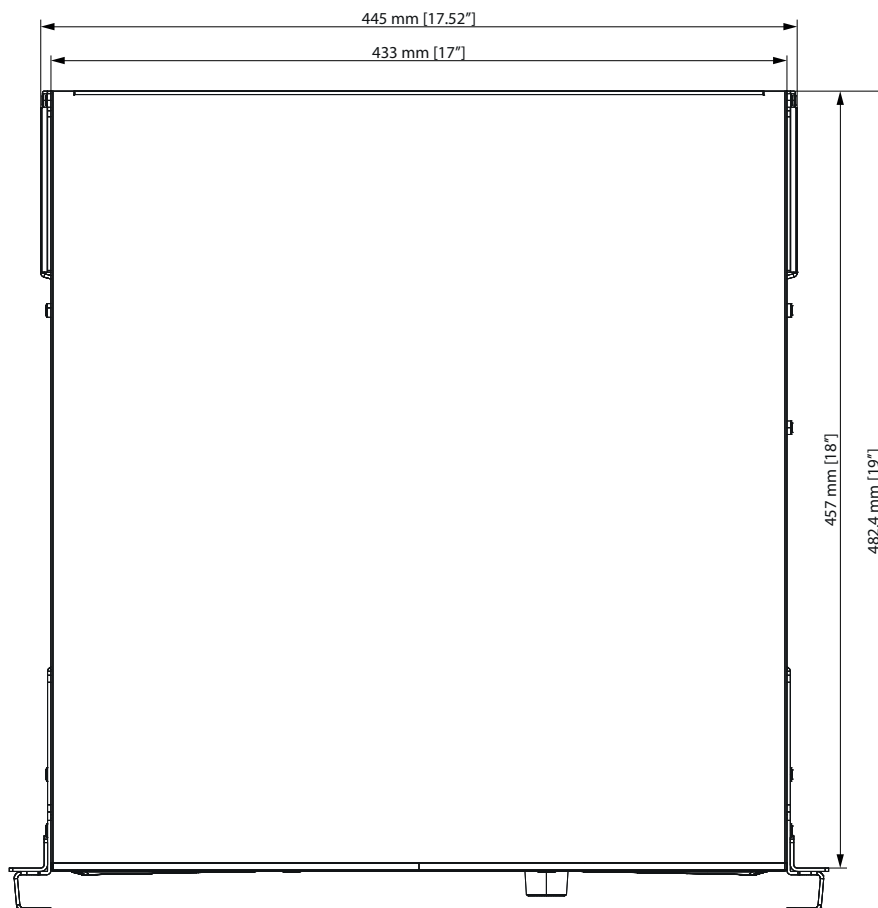
Front view



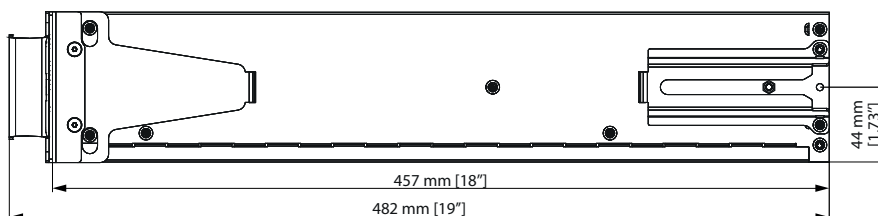
Rear view



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.

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