



# RCF 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 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 Processing, up to 96 kHz
- › 32-bit Fixed-point Internal Routing
- › 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

### Part Number

12100037	EU	EAN 8024530019952
12100074	US	EAN 8024530020385
12100076	UK	EAN 8024530020842



# RCF XPS 16K

## FOUR CHANNELS DSP AMPLIFIER

### 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 (@ 4 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:	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

### 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

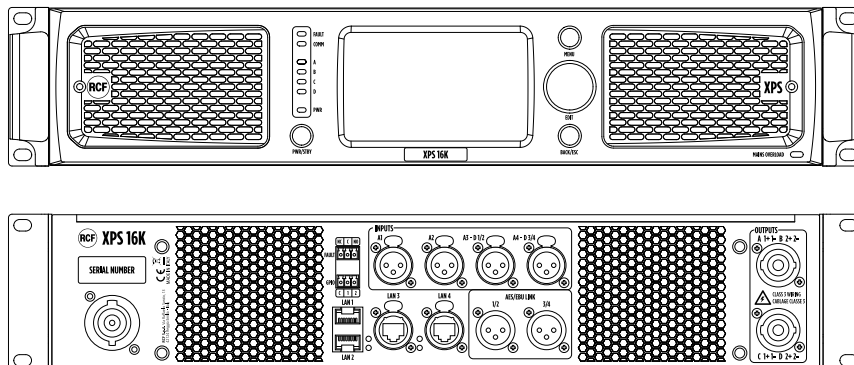


# RCF XPS 16K

## FOUR CHANNELS DSP AMPLIFIER

<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: $-5^{\circ}\text{C} \div +40^{\circ}\text{C} / +23^{\circ}\text{F} \div +104^{\circ}\text{F}$ Temperature range - Reduced output power: $-5^{\circ}\text{C} \text{ to } +50^{\circ}\text{C} / +23^{\circ}\text{F} \text{ to } +122^{\circ}\text{F}$ 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

### Line Art 2D





# RCF XPS 16KD

DANTE-EQUIPPED FOUR CHANNELS DSP 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 RDNNet 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
- › RDNNet 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

## Part Number

12100064	EU	EAN 8024530020125
12100075	US	EAN 8024530020392
12100077	UK	EAN 8024530020859



# RCF XPS 16KD

## DANTE-EQUIPPED FOUR CHANNELS DSP AMPLIFIER

### 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 (@ 4 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
RNet:	Yes



# RCF XPS 16KD

DANTE-EQUIPPED FOUR CHANNELS DSP AMPLIFIER

<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: $-5^{\circ}\text{C} \div +40^{\circ}\text{C} / +23^{\circ}\text{F} \div +104^{\circ}\text{F}$ Temperature range - Reduced output power: $-5^{\circ}\text{C} \text{ to } +50^{\circ}\text{C} / +23^{\circ}\text{F} \text{ to } +122^{\circ}\text{F}$ 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 Fuses Model: F 315 mA H 100 V
<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

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