



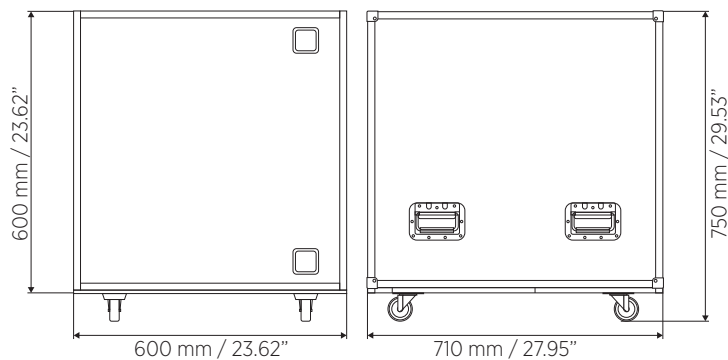
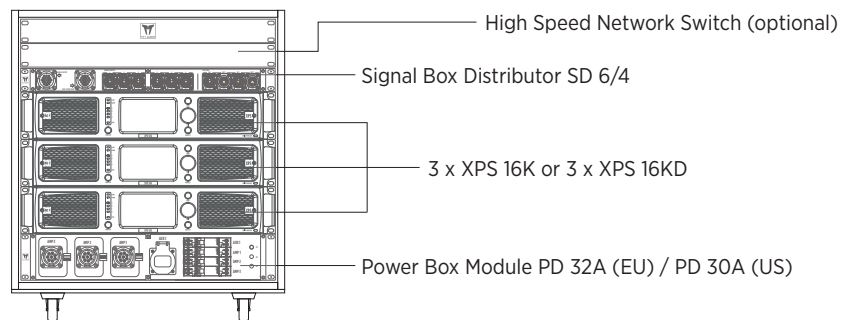
TTR 16K

TOURING RACK ASSEMBLY



Description

The TTR 16K is a ready-to-use amplifier rack for GTX systems. The shock-mounted 11 rack-unit flight case is configurable with three XPS 16K 4x4,000 Watt amplifiers, one SD 6/4 signal distribution box, and one PD 32A 220V power distribution box (or PD 30A for US/115V). Six analog line inputs feed the TTR 16K rack via rugged 19-pin S-COM connectors or traditional XLR sockets. All signal wiring is completed internally for analog, AES/EBU digital audio, amplifier mains power, and powered lines. The XPS 16K amplifiers are daisy-chained to the RDNET-OE control network via Ethernet connections. All four output power signals are routed to GTX or GTS speakers via 8-pin P-COM connectors. The TTR 16K can optionally be provided with 3 XPS 16KD amplifiers and a dedicated managed Ethernet switch to support Dante Audio Network. The flight case is equipped with four 100mm wheels.





SD 6/4 BOX

SIGNAL DISTRIBUTION BOX



Description

SD 6/4 is an input signal box that distributes the signals from S-COM 19 connector or the six female XLR connectors on the front panel to ten male XLRs on the back panel. The four AES/EBU IN/OUT connectors are linked to the back panel. Inputs 1 and 2 are respectively paralleled to three XLR connectors on the back panel.

Features

- › 6 Channels signal distributor
- › 2 S-COM 19 connectors on front panel
- › Easy signal distributor for up to three XPS 16K amplifier
- › Rugged steel chassis

Part Number

17100019



SD 6/4 BOX

SIGNAL DISTRIBUTION BOX

General specifications

Front connectors: 1x Analog input 6 channel connector (SCOM 19 pin)
 1x Analog Link 6 channel connector (SCOM 19 pin)
 6x Analog XLR input connector (female XLR 3 pin)
 2x AES input (female XLR 3 pin)
 2x AES output (male XLR 3 pin)

Rear connectors: 3x Analog XLR output connector (male XLR 3 pin)
 3x Analog XLR output connector (male XLR 3 pin)
 4x Analog XLR output connector (male XLR 3 pin)
 2x AES output (male XLR 3 pin) - LINK
 2x AES input (female XLR 3 pin) - LINK

Standard compliance

Safety agency: CE compliant

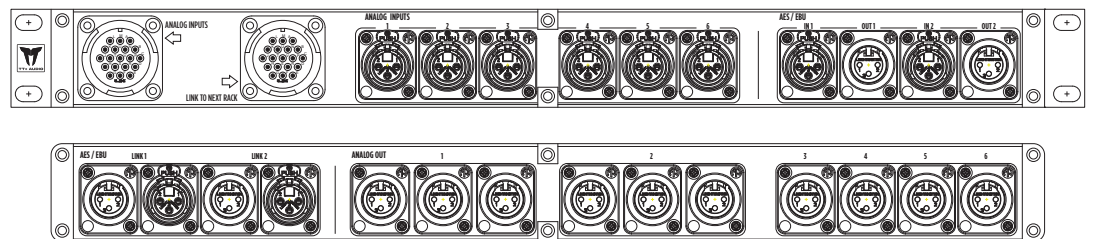
Physical specifications

Cabinet/Case Material: Steel
 Color: Black
 Rack mounting: 19", 1U

Size

Height: 44 mm / 1.73 inches
 Width: 480 mm / 18.9 inches
 Depth: 370 mm / 14.57 inches
 Weight: 3.5 kg / 7.72 lbs

Line Art 2D





PD 32A

POWER DISTRIBUTION BOX



Description

PD 32A is an AC power distribution box able to distribute power to three XPS 16K amplifiers inside a 19" rack and to auxiliary services. The box is 2U high. It is powered by a 1.5m long cord equipped with a 32 A CEE 5-pin plug and includes a 32 A CEE 5-pin socket in order to connect energy to a second rack when powered at 230V. The front panel offers one AUX Schuko power inlet and three P-COM 8 connectors as AC power signal distribution for each group of loudspeakers. The back panel offers two powerCON AUX inlets.

Features

- › Distributes power to 3 XPS 16K amplifiers
- › Nominal voltage 400V
- › Safety circuits breakers on each power line
- › Rack optimized cables length
- › Front panel phase presence neon indicators

Part Number

17100016 EU



PD 32A

POWER DISTRIBUTION BOX

General specifications

Reference standard:	CEI EN 61439-1 (CEI 17-113) CEI EN 61439-2 (CEI 17-114)
Nominal voltage:	400V
Nominal current:	32A
Frequency:	50-60Hz
Contemporary factor:	0.7
Power supply:	1 x INPUT via 1.5m cable with male connector CEE 32A 400V IP44 3P+N+E
General:	1 x Circuit breaker 4,5kA, 1P+N 10A, C 3 x Circuit breaker 4,5kA, 1P+N 32A, C 6 x INPUT via flying cables with Speakon NL4 connectors 3 x phase signal lamps
Distribution:	1 x plug CEE OUTPUT 16A 230V 50-60Hz 2P+T 2 x auxiliary connectors AUX - PowerCon NAC3MPB-1 3 x OUTPUT via flying cables with connector PowerCon NAC3FCH 3 x OUTPUT via P-COM 8POLE 1 x plug CEE OUT 32A 230V 50-60Hz 3P+N +T

Standard compliance

Safety agency: CE compliant

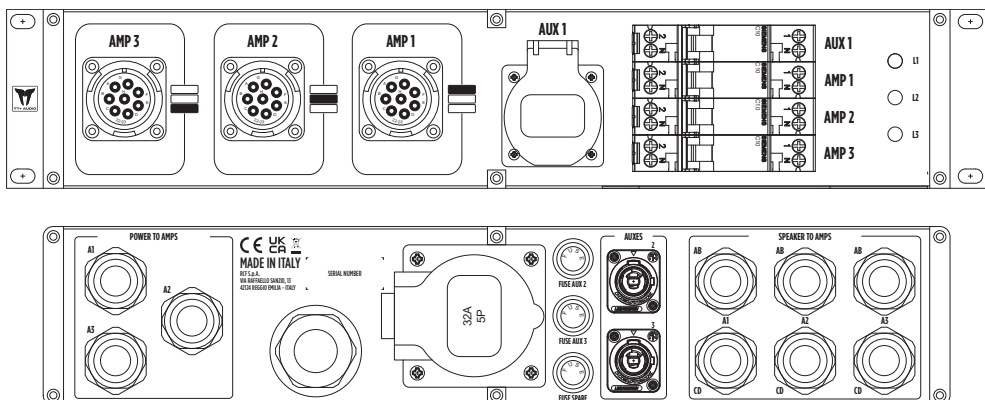
Physical specifications

Cabinet/Case Material: Metal
Handles: 2 x handles for rack mount
Color: Black
Rack mounting: 19", 2U

Size

Height: 88 mm / 3.46 inches
Width: 482 mm / 18.98 inches
Depth: 270 mm / 10.63 inches
Weight: 3.5 kg / 7.72 lbs

Line Art 2D





PD 30A

POWER DISTRIBUTION BOX

Description

PD 30A is an AC power distribution box able to distribute power to three XPS 16K amplifiers inside a 19" rack to auxiliary services intended for the 110V US market. The box is 2U high. It is powered by a 1.5m (5 ft.) long cord equipped with a 30A NEMA plug. A rotary switch on the back panel allows combining the live phases to obtain 115 or 208V on the power plugs and AUX. The front panel offers one AUX NEMA 5-15 power inlet and three P-COM 8 connectors as power signal distribution for each group of loudspeakers. The back panel offers two powerCON AUX inlets.

Features

- › Distributes power to 3 XPS 16K amplifiers
- › Nominal voltage 120V-208V
- › Safety circuits breakers on each power line
- › Rack optimized cables length
- › Front panel phase presence neon indicators

General specifications

Nominal voltage:	250V
Nominal current:	30A
Frequency:	50-60Hz
Power supply:	1 x INPUT via 1.5m cable with NEMA L21-30P male connector 30A 120V-208V IP44 3P+N+E
General:	1 x Circuit breaker 4,5kA, 1P+N 10A, C 3 x Circuit breaker 4,5kA, 1P+N 32A, C 6 x INPUT via flying cables with Speakon NL4 connectors 3 x phase signal lamps
Distribution:	1 x NEMA 5-15 OUTPUT 10A 115V 50-60Hz 2P+T 1 x phase selector: N-L, L-L with OFF central position 2 x auxiliary connectors AUX - PowerCon NAC3MPB-1 3 x OUTPUT via flying cables with connector PowerCon NAC3FCH 3 x OUTPUT via P-COM 8POLE

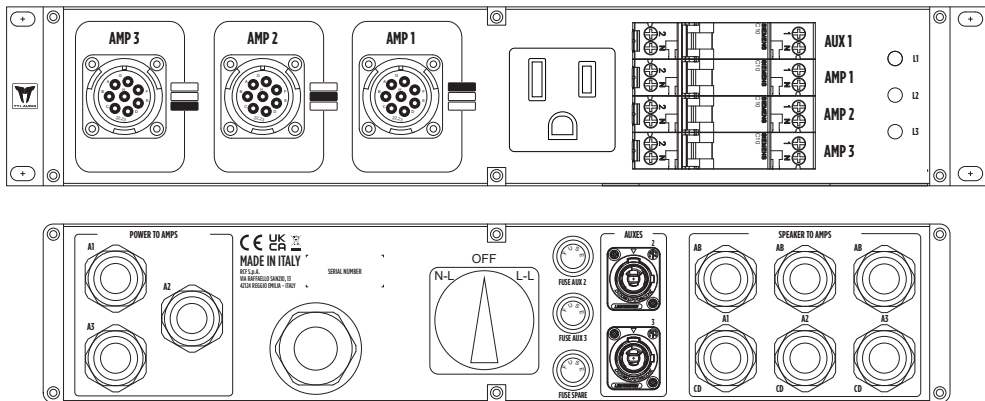
Physical specifications

Cabinet/Case Material:	Metal
Color:	Black
Rack mounting:	19", 2U

Size

Height:	88 mm / 3.46 inches
Width:	482 mm / 18.98 inches
Depth:	270 mm / 10.63 inches
Weight:	3.5 kg / 7.72 lbs

Line Art 2D



Part Number

17100018 US



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
RNet:	Yes

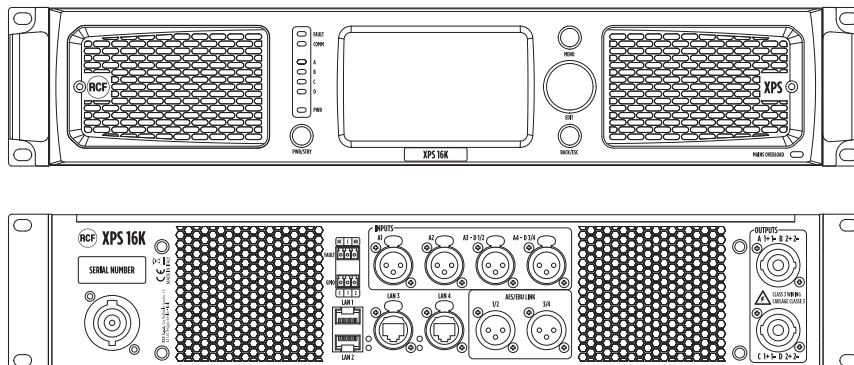


RCF XPS 16K

FOUR CHANNELS DSP AMPLIFIER

Protections	Cooling: Forced Short circuit: Yes Thermal: Yes DC: Yes Fuses: Yes VHF (Very High Frequencies): Yes
Operating conditions	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
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
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

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 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

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

Protections	Cooling:	Forced
	Short circuit:	Yes
	Thermal:	Yes
	DC:	Yes
	Fuses:	Yes
Operating conditions	VHF (Very High Frequencies):	Yes
	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
Standard compliance	Fuses Model:	F 315 mA H 100 V
	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

Line Art 2D

