DX 1616

MATRIX AUDIO PROCESSING UNIT



Description

The RCF DX 1616 is a 16×16 matrix DSP audio processor designed for flexible routing and system processing in touring and installed sound. It runs a 48 kHz/40-bit floating-point engine with low latency (up to 3 ms) and combines Dante AoIP, 16 analog I/O, 8 AES I/O, and custom GPIO I/O in a single platform, with Ethernet connectivity, a dedicated Windows/macOS browser-based control panel, and XTouchApp for iOS and Android. On the processing side, it provides full input and output DSP blocks including HPF/LPF (6–48 dB/oct), 5-band parametric EQ, delay (up to 500 ms on inputs), compressor, plus output-stage tools such as shelving EQ, all-pass, additional delay, and limiting, enabling complete zone/array/feed management from one unit.

Features

› Hybrid architecture DSP
› 48 KHz sampling, 40 bit floating point engine
› 16 x 16 I/O matrix
› Dante enabled network audio transport
› 8 AES/EBU inputs - 8 AES/EBU outputs
› Ethernet connectivity and control
› Maximum latency 3 ms
› Easy to use software GUI

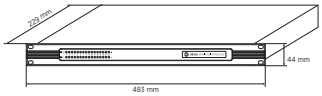
Part Number

12399033	DX 1616	90-240 V	Black	EAN 8024530013752

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Line Art 2D







TECHNICAL SPECIFICATIONS

Audio performance	Frequency Response (-3dB)	20 Hz - 22 kHz
	Crosstalk (on the whole bandwitch)	<-100 dB
	Distortion (THD+N) @ 1 kHz nominal power	<0.001 %
	Dynamic range	>110 dB
	Common Mode Rejection Ratio (50 Hz to 10 kHz)	>100 dB
Digital audio performance	Resolution	40
	Sampling rate	48
	A/D - D/A converters	24
	Propagation delay	3
Input section	Total number of inputs	17
	Balanced	17
	Mono	16
	Mic+Line inputs	16
	Mic+Line Phantom	21 V DC - 44 V DC
	Digital inputs	1
Output section	Signal output number	16
Processing	DSP	Yes
	EQ Filters	Yes
	Delay	Yes
	Tone controls	Yes
	High-pass filter	20 Hz - 20000 Hz
	Crossover	20 - 20000 Hz

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Controls	Number of programs/presets	70
Protections	Cooling	Convection/Forced
	Fuses	Yes
Power requirement	Operating voltage	90-240 V~ 50/60Hz
	Power consumption	20 W
Standard compliance	Safety agency	CE compliant
Physical specifications	Cabinet/Case Material	Metal
	Color	Black
	Rack mounting	19", 1U
Size / Weight	Height	44 mm / 1.73 inches
	Width	483 mm / 19.02 inches
	Depth	229 mm / 9.02 inches
	Weight	3.31 kg / 7.3 lbs