TECH. SPECIFICATIONS

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DDX3216
AUTOMATED DIGITAL MIXING CONSOLE

BEHRINGER®

www.behringer.com

DDX3216

Fully automated 32-channel 16-bus 24-bit digital mixing console

▲ State-of-the-art 32-channel 24-bit digital mixing console

▲ 32 full-fledged channels, 12 ULN (Ultra Low-Noise) mic preamps with analog inserts and switchable phantom power

▲ 16 busses, 8 aux sends and internal input/output patchbay for comprehensive routing options

▲ Fully featured dynamic and snapshot automation

▲ 17 ultra-precise, low-noise 100-mm motorized ALPS® faders

▲ Compressor/limiter plus gate on all 32 channels

▲ 4-band fully parametric EQ, sweepable high-pass filter and phase reverse on all 32 channels

▲ Additional delay on channels 1-16

▲ Four simultaneously operable effects processors with dozens of first-class algorithms, accessible from all 32 channels

▲ Additional compressor/limiter (switchable pre/post) and EQ for stereo main mix

▲ Two option slots, three power-packed options for unlimited connectivity (16-channel ADAT®, 16-channel TDIF, 8-channel AES/EBU)

▲ Analog feel, intuitive user interface

▲ High-power floating point DSP technology (32-/40-bit) ensures virtually unlimited internal dynamic range

▲ Ultra high-resolution 24-bit AKM® A/D and CRYSTAL® D/A converters

▲ Freely configurable level meters on all channels

▲ Channel controlllers with LED rings control any of nine parameters, selectable per channel

▲ Four freely assignable analog outputs on balanced 1/4" TRS connectors

▲ Six master controllers with comfortable push-and-turn functionality

▲ Large, easy-to-read LCD display with adjustable contrast

▲ Synchronization via SMPTE, MTC or internal clock

▲ Dither, word length and noise shaping adjustable for digital main outputs

▲ MIDI and RS232 connectors allow communication with a PC or other devices

▲ Extensive MIDI implementation (MMC, program changes, control changes, MIDI sysex)

▲ PCM/CIA card slot for saving/loading various libraries and other settings

▲ Free PC software for data transmission and management downloadable at www.ddx3216.com (serial cable included)

▲ 19" rack-mounting kit included

▲ Comprehensive Web support area with downloads, tips, application examples and more: www.ddx3216.com

▲ Manufactured under ISO9000 certified management system

DDX3216

SPECIFICATIONS

Mono inputs 1-12
Microphone input

	Type	electronically balanced, discrete input stage
	Connector	XLR
	Gain	+10 to +60 dB (PAD = -20 dB)
	Input impedance	approx. 1,5k Ω @ 1 kHz
	THD + Noise	0.05 %, 20 Hz to 20 kHz, +60 dB gain, -42 dBu at input
	Max. input level	+1 dBu (minimum gain)
	S/N ratio	95 dB, 20 Hz to 20 kHz, gain 1, 0 dBu at input
	Equivalent noise	-90 dB, 20 Hz to 20 kHz, input termination: 150 Ω
	Crosstalk	< -85 dB (channel 1 against channel 2), +60 dB gain, -42 dBu at input

Line input

	Type	electronically balanced
	Connector	1/4" TRS connector
	Gain	-10 to +40 dB (PAD = -20 dB)
	Input impedance	approx. 16k Ω @ 1 kHz
	THD + Noise	0.02 %, 20 Hz to 20 kHz, +20 dB gain, -20 dBu at input
	Max. input level	+24 dBu (minimum gain)
	S/N ratio	92 dB, 20 Hz to 20 kHz, gain 1, 0 dBu at input
	Equivalent noise	-88 dB, 20 Hz to 20 kHz, input termination: 150 Ω
	Crosstalk	< -90 dB (channel 1 against channel 2), gain 1, 0 dBu at input

Stereo inputs 13-16

Type	electronically balanced
Connector	1/4" TRS connector
Gain	-20 to +20 dB
Input impedance	approx. 20k Ω @ 1 kHz
THD + Noise	0.015 %, gain 1, 0 dB at input, measured at main out
Max. input level	+22 dBu (minimum gain)
S/N ratio (measured at main out)	86 dB, 20 Hz to 20 kHz, gain 1
Equivalent noise (measured at main out)	-85 dB, 20 Hz to 20 kHz, input termination: 150 Ω
Crosstalk (measured at main out)	< -85 dB (channel 13 against channel 14), gain 1, 0 dBu at input

Main outputs

Type	servo-balanced
Connector	XLR
Output impedance	approx. 160 Ω @ 1 kHz
Max. output level	+16 dBu

Multi outputs

Type	servo-balanced
Connector	1/4" TRS connector
Output impedance	approx. 160 Ω @ 1 kHz
Max. output level	+16 dBu

Control Room outputs

Type	servo-balanced
Connector	1/4" TRS connector
Output impedance	approx. 160 Ω @ 1 kHz
Max. output level	+16 dBu

S/PDIF digital input/output
Input

	Connector	RCA
	Special feature	Sample rate converter (32 to 50 kHz)

Output

	Connector	RCA
	Dither	16, 20 and 24 bits
	Special feature	Noise shaping

Wordclock input/output
Input

	Connector	BNC
	Input impedance	20 kΩ

Output

	Connector	BNC
	Output impedance	30 Ω
	Signal type	TTL level square wave

SMPTE input

	Connector	XLR
	Input impedance	20k Ω

RS232 port

	Connector	9-pin DIN jack
	Transmission	115,200 bauds, 8 data bits, 1 stop bit, no parity

System specifications

Sampling rate	44.1 and 48 kHz (internal and external)
Signal delay	<1.6 ms at 48 kHz, channel input against main out
Frequency response	20 Hz to 20 kHz, +/- 0.1 dB

Faders

Type	100-mm ALPS® motorized faders
Resolution	+12 from 0 to -∞ dB (256 increments)

Converters
A/D converters

	Resolution	24-bit delta-sigma AKM®
	Oversampling	128 times
	Dynamic range	116 dB typ.

D/A converters

	Resolution	24-bit delta-sigma CRYSTAL®
	Oversampling	128 times
	Dynamic range	106 dB typ.

MIDI interface

Type	5-pin DIN jacks
Connectors	MIDI IN, MIDI THRU and MIDI OUT

Level meters

Channel	16-digit LED display
Main	2 x 16-digit LED display
Special feature	Peak-hold function (off, 0-29 s, and ∞)

Mono inputs 1-12, microphone	(minimum gain)
Sig LED	-46 dBu at input
Clip LED	0 dBu at input
Mono inputs 1-12, line	(minimum gain)
Sig LED	-25 dBu at input
Clip LED	+23 dBu at input
Stereo inputs 13-16	(gain at center position)
Sig LED	-36 dBu at input
Clip LED	+10 dBu at input

Accessories

ADT1616	16 (2 x 8) inputs and 16 (2 x 8) output, ADAT® digital interface (optical)
TDIF1616	16 (2 x 8) inputs and 16 (2 x 8) outputs, TDIF digital interface (25-pin D-Sub)
AES808	8 inputs and 8 outputs, AES/EBU digital interface (25-pin D-Sub)
ACB808P	19" interface box for AES808, with 4 x XLR inputs and 4 x XLR outputs

Power supply

Power consumption	approx. 68 W
Fuse	100 to 240 V ~: **T 4 A H**
Mains connector	Standard IEC receptacle

Physical

Dimensions (H * W * D)	approx. 6 ½" x 17 ¼" x 22 ½" (163 mm x 438 mm x 572 mm)
Weight (net)	approx. 29 ¾" lbs (13.5 kg)

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.