

# Behringer DDX3216

Some measure of Yamaha's success in creating small digital consoles is the impossibility of evaluating other examples without conscious or subconscious reference. Behringer's DDX3216 follows the same basic control layout as the rest but a number of important differences mark it out from the 'me-too' herd. A recent software upgrade to 5.1, a price-cut, and the availability of a new interface means it's time for a quick review.

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**YOU GET A LOT FOR** your money here. The DDX3216 is UK£971 (inc. VAT), the 16-channel ADT1616 ADAT interface or 16-channel TDIF interface is UK£143 (inc. VAT) and the AES808 AES interface, with ACB808P rackmount breakout box and connection cable is UK£242 (inc. VAT). The new rackmount ADA8000 ADAT interface 8-channel A-DC, D-AC with mic amps is UK£196 (inc. VAT). That's UK£1552 inc. VAT for the lot.

Although there are only(?) 32 inputs, there are a lot of buses. Stereo Main and Monitor are supplemented by 16 output buses, four effects sends and four aux sends. There is comprehensive patching of physical I-O to the channel inputs and output buses and buses can be rerouted back into inputs for sub-grouping purposes. Four independent effects processors cater for most eventualities, the first two are full function while the second pair are limited to less processor intensive effects. An independent 12dB/octave high pass filter per channel supplements the usual four bands of EQ.

A small point I know, but the Mute keys light up when the channels are muted, not the other way round, just like the big desks I grew up with.

Compression and gating can be keyed from other channels, 1-24 on channels 1-8 and 16-24; 9-32 on channels 9-16 and 25-32. Odd but useful. Channel delay up to 300ms is available on the 16 analogue inputs with wet/dry level control and feedback.

Two expansion slots accept 8 or 16 channel interfaces. I used an AES 808 with the breakout box and an ADT1616 card connected to the new ADA8000 8-channel A-D/D-A, increasing the number of available mic preamps to 20. Signal conversion is 44.1

or 48kHz with up to 24-bit resolution throughout.

Even at first glance, it is pretty obvious anyone with a nodding acquaintance of any of the other popular digital assignable consoles will soon be at home here. More significantly, newcomers should find this one easy to get into. With audio running straight through the board, first impressions were favourable, no discernible change to the sound and plenty of headroom. The EQ is powerful (+/-18dB) and clean. Dynamics are as we have come to expect from digital, transparent unless abused and variable knee compression. The four built-in effects processors are adequate rather than spectacular. Reverb is OK but some of the time-domain stuff, phasing and flanging, seemed a bit thin. Welcome are LoFi and Ring-Modulator.

Faders are 256 step with 0.2dB resolution between +12dB and -10dB, 1db between -10db and -75dB. I couldn't detect any zipper noise so maybe it interpolates.

The latest software upgrade brings 5.1 surround and buses 11 to 16 are used as outputs. Set-up is straightforward with one checkbox in the Preferences page invoking surround mode. Turn on the surround outputs in the surround pan page for each input, sort the routing out, then off you go. The six built-in analogue outputs can be used for monitoring but it is preferable to use outputs from an option card. Simultaneous stereo and surround mixes can be generated pre or post the input faders. The essentials are present, panning, LFE level and divergence but I missed linked surround panning of stereo sources.

At this price you have to look for the downsides. First, this is a 44.1kHz/48kHz console, there is no MIDI fader layer for controlling external devices, such as

## Nuts and bolts

Seventeen 100mm motorised Alps faders span the full surface width. Each of the first 16 strips has a rotary encoder with a red LED skirt indicating the current parameter value. Dynamic automation Auto/Rec keys supplement the usual Mute, Solo and Select keys. Sixteen-segment assignable LED meters run beside the faders. The Main output strip is physically identical apart from not having a LED meter. The Mute key functions as Monitor -20dB dim and the Solo becomes global Solo Enable.

Four layers allow the 16 strips to control all input channels 1-16 and 17-32, bus out 1-16, with the four aux send masters, four FX send masters and the four FX returns on the fourth layer.

At top left a block of 32 keys gives fast access to the many options. Only the more esoteric set-up functions sent me scurrying for the manual. The green LCD screen is less bright than electroluminescent types but perfectly visible. A further six rotary encoder 'Master Controllers' below the screen are also switches when pressed. Function varies according to the current page.

Most of the I-O is on the top surface. Channels 1-12 have mic and line inputs with 60dB of gain adjustment, a 20dB pad, signal present and clip LEDs. Mic input is XLR, line is balanced jack and insert is TRS jack. Channels 13-16 are line only without inserts. Phantom power is switched in two, six channel blocks.

Two-track I-O is on phonos with a switch to route the return to Channel 15/16 and a Control Room monitor switch for checking the 2-track return. Two pots adjust the main monitor output and the headphone jack output level.

Stereo main analogue out is on XLR, stereo control room out on jacks, and four 'multi outputs' on jacks populate the rear panel along with SPDIF I-O on phonos, Word clock I-O on BNC (external termination necessary when required), SMPTE timecode on XLR, and a 9-pin D-sub serial port. Files can be swapped and the operating system upgraded from the PCMCIA card slot or via RS232 to PC.

DAWs, the cooling fan is a bit noisy, and that's about it.

By way of compensation it has snapshot and dynamic automation, built in timecode and, the soft transport buttons can control other devices using MMC.

At these prices, Behringer's digital mixing solution represents good value for money. If that was all there is to it, it would be well worth considering, but there is more. If you need a console configured with 16 output buses plus four auxes and four effects sends, stereo Main and Monitor, this is the only game in town at anything like the price point. The DDX3216 is easy to get your head around for an assignable and should make a lot of people very happy. ■

### PROS

The price; subjectively clean audio; 4-band EQ and filter; number of output buses and their configuration.

### CONS

No high sampling rates; no MIDI layer; no EQ/dynamics on the 16 output bus sends; fan noise.

### Contact

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