

DIGIDESIGN 003 RACK

There haven't been any great costume changes or radical technical innovations with the 003 Rack, 'backstage' it's all about the sound.

Text: Brad Watts



► And lo! Digidesign continued their relentless propulsion of ProTools LE platforms into the marketplace.

This will be the third interface in six months to bolt from the Digidesign stable, following the Mbox2 Pro and Mbox 2 Mini. I must say I'm a tad surprised to see the successor to the Digi 002 range appear so early on in the piece. That successor is unsurprisingly named the 003. We've managed to get our mits on the rack version only – the 003 Rack... the control surface-augmented edition is still wending its way into the country at the time of this review – a shame really, as the 003 console obviously offers more bells and whistles than its rack-eared brother. Saying that, the 003 Rack will offer some insights at least into the MkIII improvements in audio quality. With the jump from the now old-fashioned Digi 002 into 003 territory you'd expect there to be an improvement in the sound, and there most definitely is.

However, we should first inspect the cosmetic changes and the smattering of new facilities that have been added to the 003 Rack. At first glance you could be forgiven for thinking the 003 *was* the 002 box, albeit with different knobs. These knobs are the nifty little mushroom-shaped numbers from Digi's D-Command control surfaces. They're a useful shape when skirted by a ring of LEDs – it's easier to see the LEDs when you're tweaking them – but seeing as the 003 doesn't have the LED carousels, it's safe to assume the mushroom knobs are simply there for product uniformity. Regardless, I like them, they remind me of various Dr Who episodes where the aliens operate those biological instrument panels.

FRONT TO BACK

The front panel of the 003 Rack offers some important enhancements. The first of these is dual headphone outputs, each with individual volume control. Most interface manufacturers have worked out by now that two headphone outs are a minimum requirement for those that record and perform in the same room. There's also a new button to instigate a second set of control room outputs. The second headphone output can also be configured to reflect the signal sent to Outputs 3 and 4, allowing a separate headphone mix for the talent wearing that pair of

cans. Plugging in a second set of powered monitors is now possible without the aid of a separate monitoring device or switch box – such as the Mackie Big Knob or Presonus Central Station, for instance. Everything else (front panel-wise) remains pretty much the same as the Digi 002 Rack, although there are changes to the switches for flipping between the four mic and instrument inputs – these are now backlit and infinitely more revealing of their current setting.

Jumping around to the back of the 003 Rack you'll find pretty much the same I/O as the 002 – albeit a slightly different layout. The only new addition is the wordclock I/O on standard BNC connections. This is good news for facilities wishing to integrate a cost-effective ProTools system in with their other DAW systems. Until now the only budget Digidesign interface to offer wordclock was the recently launched Mbox2 Pro. Line Inputs 5-8 all still have individual –10/+4 switches and the phantom power switches are still located here beside their respective mic inputs. Now it's here I take slight umbrage with the 003 Rack. Why on earth are the two phantom power switches for channels 1+2 and 3+4 still located at the back of the unit? This is a rack for pete's sake! How am I supposed to switch phantom power on and off when I've got the 003R bolted into a rack? Phantom power switches should really reside with the preamp controls in my opinion, and this was a problem on the 002 Rack as well – Digidesign should really have moved these to the front panel for the 003 Rack. Individual 48V switches per preamp could have made it into the 003 Rack as well. They could also have put a '48V on' LED on the front panel. Seriously, this is not a 'set and forget' parameter.

The remaining I/O is a facsimile of the Digi 002 Rack, with all remaining connections as balanced TRS jacks. Coaxial S/PDIF is still RCA, of course, and the optical I/O remains a standard Adat configuration – no additional pair of optical ports for either S/MUX operation and therefore a full 16 channels of 96k sampling, or for 24 channels of 44.1/48k recording. (But then, the 003 offers only 18 simultaneous channels – just like the 002 and 001.) If you're hoping to record at high sample rates with a 003 you're still limited to eight analogue inputs. Oh, and there's a Kensington lock port for the institutionalised 003 Racks.

HOW THEY COMPARE

002 Rack

Dynamic Range

Inputs 1-4: 101dB (A-weighted)
Inputs 5-8: 108dB (A-weighted)
Alt Inputs: 99dB (A-weighted)
Main Outputs: 114dB (A-weighted)
Monitor Outputs: 112dB (A-weighted)
Outputs 3-8: 114dB (A-weighted)

Mic preamps

Dynamic Range: 101dB (A-weighted)
THD+N: 0.004% z
Mic EIN: -127dBu @ 65dB gain,
150Ω source, 20Hz–20kHz

003 Rack

Dynamic Range

Inputs 1-4: 107dB (A-weighted)
Inputs 5-8: 113dB (A-weighted)
Alt Inputs: 113dB (A-weighted)
Main Outputs: 113dB (A-weighted)
Monitor Outputs: 112dB (A-weighted)
Outputs 3-8: 113dB (A-weighted)

Mic preamps

Dynamic Range: 105dB/107dB (A-weighted)
THD+N: 0.0007%
Mic EIN: -129dBu



CALM THE JITTERS

So now you've got some idea just how similar the 003 Rack is to its predecessor, I'll point out its major difference: the sound quality of the 003 is far superior to the 002. I suspected this when first reading the specs for each model and my suspicions were confirmed when running the 003 alongside a 002. To begin with, the specs show a huge increase in THD+noise performance. Just look at the jump from the 002's mic preamps THD+N quotient of .004% compared with the 003's mic pre THD+N measurement of .0007%. Notice the extra zero in there, taking the 003's distortion figures into the millionths of a percent. This trend is carried throughout all of the 003's analogue I/O specifications.

Listening tests revealed the old and new '00' boxes to be vastly different, with the 003 Rack unquestionably offering the more accurate listening experience. I suspect there's been a lot of work done in jitter stabilisation with the 003, as there's far less of the smearing and glazing effect you'll notice with the 002. The top end of the 003 Rack is clearer and more defined, bottom end is more stable, and 'up-front' vocals remain just that. I never became a fan of the Digi 002 sound and, at the time, most Firewire interfaces exhibited similar smearing effects. But times have changed, with most manufacturers these days paying a lot more attention to jitter issues.

As is DigiDesign's custom, the 003 Rack comes in two flavours: Regular (a 003 with ProTools LE 7.3 software

and a stack of plug-ins) and King Size (the 'Factory Bundle' that includes oodles of additional instrument and processing plug-ins – definitely the model to go for if your budget will stretch that far). DigiDesign recommends v7.3 to be hosted by a G4 running at 1GHz with 768MB RAM – at a bare minimum. I had no joy booting 7.3 until I upgraded to 7.3.1cs2 – a free download from DigiDesign. Windows XP users know what they have to do.

RE: ITERATION

To leave you with my overall impression of the 003 Rack, I'm disappointed that there are no whiz-bang additions, especially considering the huge leap that occurred from the Digi 001 to the 002. I'm also disappointed the opportunity wasn't taken to make some real ergonomic changes to the unit – phantom power switches remaining in inaccessible positions being my personal bugbear of late. With DigiDesign not adding too many new features to the 003 Rack one would hope this reinvention has completely eradicated the manufacturing foibles that turned up with the 002. For instance, the 002 units suffered from the dreaded 'corroding ribbon cable connector' issue – if you own one you'll know the problem I'm referring to. The bottom line here is that the 003 Rack sounds a whole lot better than the 002 Rack, with a specification approaching that of the entry-level ProTools HD 96 I/O interface. For the growing number of professional ProTools LE users, that's got to be very good news. ■



NEED TO KNOW

Price

003 Rack: \$2000; 003 Rack Factory: \$2615; 003 Factory \$3845

Contact

DigiDesign
(02) 9698 9089
www.digidesign.com

Pros

Sounds much better.
Jitter specifications would appear to have been improved greatly.
Wordclock.
Two headphone channels.

Cons

Hang on. Why are the phantom power switches at the back? For 16 channels at 96k you'll need HD or M-Powered.

Summary

DigiDesign has neglected a number of opportunities with the 003 Rack. Its saving grace is that it sounds a good deal better than its predecessor. Can't wait to see the 003 controller edition – more tinsel to get engrossed in and promises to be a killer box.

