Dangerous Music D-Box

Combining summing and monitoring control in one unit sounds like a good idea providing neither aspect is compromised by the other. GEORGE SHILLING **reminds us that this is a Dangerous box…**

Dangerous Music of Edmeston, upstate New York, is best known for its summing boxes — it was onto the concept early on and offers a range of high-end solutions that are widely regarded for their sonic integrity. It also makes quality monitor controllers — essential for those determined to dodge using a traditional console. The D-Box brings both these concepts together in one handy 1U, with the aim of providing the best bits from its high-end solutions into a cheaper (despite using the same components) product for the professional or project studio working to a budget, or even for mobile situations. It has been dubbed the DAW user's Swiss Army Knife.

The brushed aluminium front panel is littered with knobs that have a quality feel to their damping, with dual rubber grips around them — they feel very smooth. Pushbuttons illuminate with integrated LEDs, switching smoothly, with the only audible clicks emanating physically as (silver contact) relay switches latch reassuringly. Function buttons feature a novel 'Momentoggle' operation: a brief touch latches the button On or Off, while a longer press is momentary. Most other functions are obvious, but for Setup mode you will need to refer to the manual (or read on!)

The rear of the box is crammed with connectors and they're quality components and clearly labelled. Power enters from a proprietary in-line transformer via a 5-pin DIN. There is no Power button and the possibility exists of a loud blatt on the monitors if this plug is pulled out or power is killed — I know because I tried it. A number of XLRs provide analogue and digital audio connections, along with a multipin D connector for summing input.

For basic monitor control, you will obviously need to position the D-Box within easy reach, which is not always straightforward with a rackmount unit. But when reachable, the large Volume knob is a joy to use. It is exceptionally smooth, and tracks perfectly down to very low levels with no hint of the image shifting sideways or dropping off suddenly.

On the left of the front panel are two headphone jack outputs that mirror the Input Select and Speaker Outputs. There is, unfortunately, no way of deriving a different cue mix but each has its own independent level control, and a healthy volume is available from the clean and powerful amplification — you should easily be able to run several sets from one output. It's a small point, but it might have been better for one of these to appear on the rear panel for neater integration into a studio system, especially as the provision of an in-built Talkback mic implies that the talent is likely to be in another room. But Talkback level is independent of headphone level — a nice touch — so that when the talent wants the mix louder, your next comment shouldn't hurt!

The summing section of the D-Box comprises eight mono inputs that connect using a Tascam-wired D-type 25-pin connector on the rear, so a custom cable will need to be sourced *(George's cable was specially prepared for him by Sommer Cable. Ed)*. The first six of these inputs are arranged as three hard panned stereo pairs, with inputs seven and eight coming via front panel pan pots with (subtle) centre détente positions. There are eight Signal LEDs that indicate music flowing into each input. There are no level trims, but there is one overall Sum Output Trim knob, which is set so that full tilt equates to unity. However, this is not the recommended position of the knob. Ingeniously, the D-Box allows you to, er, gain some extra headroom, by running your eight DAW outputs into the D-Box's summing input stage which is at -6dBu.

This results in the possibility of running the DAW's faders higher — closer to unity — and also effectively lowers the noise floor of the DAW's outputs by 6dB.

There is tremendous headroom in the D-Box, so you can then use the Trim to optimise the level returning into the DAW for mixdown. The only obvious downside to this is the lack of precision recall of the Sum knob, but in practise this is not a major problem, as the range of the knob is only about 12dB, and once it is optimally set you probably won't move it much, if at all.

There are four buttons for Input selection, these comprise Sum, which is self-explanatory, Analog (an external stereo input on a pair of XLRs), DAW and CD, the last two comprising external digital inputs on XLR connectors. There are no settings for the last two inputs; AES or SPDIF is supported, the only caveat being that only one digital source can be monitored at a time. These will lock to any digital signal from 32kHz up to 100kHz, and the convertor sounds remarkably clean, stable and neutral as expected. In fact, the D-AC sounds rather better than most 'standard' convertors, so this is definitely the best way to connect the DAW main outputs (if you can).

Talkback, Mono and Alt Speaker selector buttons operate using the aforementioned Momentoggle mode, this is handy for quick checks or comments via Talkback, although care will need to be exercised in the latter case to make sure you don't accidentally latch it. However, this possibility can be eliminated with a jack in the Talkback pedal socket on the rear.

The hidden Setup mode is entered by simultaneously pressing the Mono and Alt Speaker buttons, which then start flashing alternately. Two parameters can be set from here. First, by illuminating the Sum button (and exiting Setup) you are able to monitor multiple input sources — Sum, Analog and DAW or CD. This has myriad uses, for example, when composing or practising and this makes the D-Box a useful helper even in the writing and demoing stages. Or you could monitor programme while working on Foley or effects tracks. In standard mode, selecting a source is exclusive, and you can also select 'no input' in either mode to mute the outputs. However, there is no way of muting the speakers without muting the headphones (apart from lowering the Volume), and that might have been useful for control room overdubs. The other Setup parameter relates to the external Analog inputs. These are normally set to accept +4dBu sources but to enable connection of -10dBV devices, illuminating the Analog button before exiting Setup mode adds 11.7dB of gain.

With regard to summing, the figures in the back of the manual imply that the D-Box's audio performance is just about as transparent as is technically possible. For example, the frequency response quoted is 1Hz to 100kHz within 0.1dB, with distortion, crosstalk and noise boasting similarly impressive figures. Despite the accuracy of the figures, there is undoubtedly an audible difference when summing with the D-Box compared to in-the-box mixing. *(The difference is said to be due to the use of multiple D-ACs feeding a quality analogue summing circuit and thus running hotter than the internal DAW's stereo bus would permit. Ed)*

In the grand scheme of things, it is subtle, but the difference is apparent when sending subgroups via the D-Box. The vocals and bass end seem more present in the mix, and there is a clarity in the high frequencies that breaks out of that yucky 'closed-in' digital character that is apparent even with 96kHz material. Despite careful level matching, it all seems louder. However, I also bounced mixes in-the-box but ran them out through my convertors in stereo and back in for comparison, and there are certain aspects of the sound that change purely due to conversion — going out and back through boutique high-end convertors seemed to open out the sound a little in itself. But the winner was always the D-Box version, and although the difference was very small, there were richer sounding drums, a better defined stereo image, and a general crispness missing from stereo bounces.

Another benefit to external summing that occurred to me during the review period is the ease with which you can introduce external bus processing. Taking the drum and bass bus, or the vocal bus and compressing using outboard on the way into the D-Box encourages experimentation and a re-acquaintance with some neglected toys.

The D-Box's manual is clear, and any concerns or queries were quickly explained by Dangerous Music's eager to help co-owner and founder Bob Muller. Co-owner Chris Muth has spent more than 20 years as a chief studio tech in such establishments as Sterling Sound Mastering, designing and building custom mastering consoles, monitor controllers and digital routers. The D-Box inspires confidence, sounds great, and is truly 'Pro'. Yet the price makes this something almost any project studio owner can aspire to. There are cheaper solutions, and summing is not a priority for everyone, but investing in a top-notch monitoring controller should be, and you certainly won't regret getting a D-Box. ■

PROS A great value way of acquiring a premium summing mixer and monitor controller in one box; crystal clear sonic integrity; compact 1U format — great for portable rigs; simple to operate.

CONS All small things, but... no Alt Speaker level trim; no speaker mute button; no Power button; headphone sockets both on front panel; no headphone cue input; no remote (apart from Talkback socket).

EXTRAS Dangerous Music's Additional Switching System is a 1U expander for its Monitor ST and SR controllers. The ASS offers two banks of two options each, allowing four additional capabilities for the monitor controller available directly from the ST-SR remote.

Options introduced include mastering quality stereo D-A conversion — DAC-ST — and dual-format video input switching for Monitor ST and ST-SR systems — Vidswitch.

Upcoming options include 5.1 surround bass management with selectable filters and crossover points (Bass-SR), comprehensive subwoofer control (Sub-ST), comprehensive 5.1 to stereo fold-down and downmix control (Folddown), meter feed and selected output source for Monitor ST (Meter-ST), 6-channel D-AC for surround setups (DAC-SR), and multiple input listening and input mixing for Monitor ST (Mix-ST).