

Dangerous Music Monitor ST-SR

Monitor controllers are now part of DAW furniture but not all are created equal and not all hit all the buttons for all the people. It's about feel and it's about features, says button-pushing **ROB JAMES**.



ONE CONSEQUENCE OF production techniques shifting to the workstation has been the rise in popularity of certain peripherals. The most obvious example is the plethora of mic amps and input channels. However, one device really has come out of the high-end closet into the mainstream — the monitor controller.

Once the message penetrated that monitor controllers were not just a good idea but an absolute essential in the DAW environment, manufacturers were quick to offer a variety of hardware. The category divides broadly into stereo and surround units and then subdivides by application, music, film and broadcast. The simplest devices are passive with few bells and whistles. The most complex offer input summing, cue, talkback and signal routing. For surround, 5.1 capability is the norm with only one or two examples going all the way to 10.1 and beyond.

Dangerous Music is a new name to me but the company principals, Bob Muller and Chris Muth, have an enviable combination of hands-on recording experience and analogue design expertise. Chris was building high-end mastering controllers in the early 1990s and the first rackmount 'Dangerous Monitor' appeared in 2002. With a product already out there Dangerous was able to look at what works and what doesn't, then improve and innovate when developing a modular controller system.

At UK£1276 (+ VAT), the ST unit with remote is a stereo controller offering cue and talkback facilities including, unusually, a 40W headphone amp. Adding the UK£900 (+ VAT) SR unit transforms the system into a full-blown 5.1 surround monitor controller.

The Dangerous remote wins the golden paperweight award for being quite the prettiest I've seen to date. It is nicely weighted too, with thick rubber feet, so it won't go skittering off the desk. Unusually for this day and age the volume control is an absolute position knob: it is not a continuous rotary encoder, neither is it a pot. In reality it is the positive operational control for the Dangerous 'Computer Controlled Gain System' switching 31 1.5dB steps of pure attenuation. No VCAs or DCAs here, a laser trimmed resistor ladder offering inter-channel tracking with a claimed tolerance of 0.02dB does the business.

Also unusual is the absence of an overall Mute button. The function is in fact present; you simply press the currently selected speaker set button to de-

select it. With familiarity this is perfectly satisfactory. While on the learning curve, just try to avoid the DAW outputting full-level digital shash...

Buttons are colour-coded and have two modes of operation, Press and Hold. Press equals less than half a second, hold is anything longer — also known as 'momentoggle'. For example, the Talkback button will latch with a quick press but is momentary when held for longer then released. Blue buttons are for programming gain offsets and system configurations, Green signifies Input sources, speaker selection and subwoofer/filter assignments, Mono, Aux, Talkback and Dim are Orange as are the four Additional

Switching buttons for future expansion. Red is used for speaker Mute and Solo functions.

One Blue button is enigmatically labelled 'PPI', standing for Producer Pacifier Indicator. In operational mode this actually does nothing at all except light up the pretty blue LED. It is intended for those annoying occasions when the producer/director doesn't know what they want. You ask them if they prefer version A or version B, pressing the PPI button between two playbacks of the same take. They will usually say they think one or the other is great. Works like a charm.

With Setup mode engaged, each input can be set

In, out and about Both SR and ST system units are 1U rackmounts with external in-line brick power supplies. Unfortunately the DC connection from these to the units is a standard 5-pin DIN plug. I would have preferred to see an XLR 5 or other more substantial locking connector used for this purpose. The ST has half a dozen knobs on the front and a microphone for talkback, plus jacks for an external mic and headphones. This output allows the engineer to hear the cue signal being sent to the studio. The associated level control only affects this socket.

The Remote Mic jack expects to see a high impedance input and the level pot affects internal or remote mics. Main to Cue level sends the selected source to the Cue amplifier. Two pots control Aux input level To Cue



and To Main. A switch on the remote adds the Aux signal to the Main for control room monitoring. Last pot on the right attenuates Input 4. This enables a high-level guide track, e.g. a 'compressed to whatsis!' CD, to be compared realistically with the main mix.

The SR front panel simply has four holes to access level trim pots that enable the Left and Right Rear, Centre and LFE channels to be balanced with Left and Right Front, handled by the SR. It's a shame they aren't multitrurn. Curiously neither unit has a power indicator LED.

Around the back of the ST, two 25-way D-sub connectors wired in Tascam format handle the main audio inputs and outputs. XLRs cater for Aux 1 and 2 input, Cue amp out, Talkback remote (switch) and Slate, which outputs the talkback mic signal only when Talkback is invoked. Remote is an RJ-45 using standard Cat 5-e networking cable for distances up to 30m.

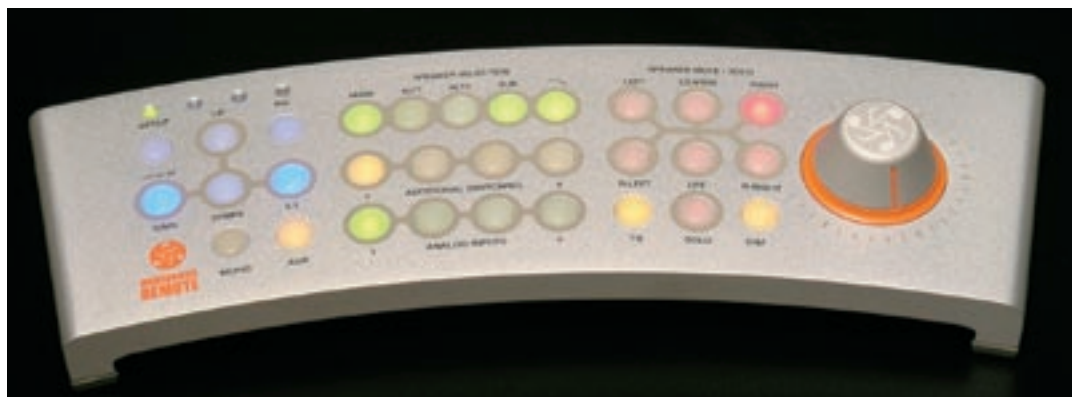
In a system that includes the SR, the input and output D-sub connectors are connected via ribbon cables to the To Monitor ST and From Monitor ST D-sub connectors respectively. A short Cat-5-e also goes between the units to link the remote functions and in surround configuration the remote connects to the SR unit.

A further eight 25-way D-sub connectors deal with up to four 5.1 inputs, two sets of 5.1 speakers plus a stereo output with a subwoofer switching feature. In stereo mode the sub feeds take the front channel signals, in surround the three sub outputs (Left, Right and Mono combined) take the LFE channel signal. Last, but by no means least, is a separate meter feed that outputs the selected input at +4dBu nominal. Maximum input level is +25dBu.

as stereo or 5.1. The Gain button caters for -10dB consumer levels. Input levels can be further adjusted by up to 4.5dB to match others using the Up and Down buttons. This level change is achieved by offsetting the main volume control by up to three steps upwards. Four LEDs indicate where you are, with the original setting showing green and any change red. Ideally, levels should be matched at source but this feature is a convenient and quick real-world fix. Similarly, each Speaker set can be attenuated by up to 9dB in 3dB steps with the sub default at -3dB. With everything at unity gain the units present an insertion loss of 6dB, very sensible. Each speaker set can have the sub engaged with or without the 57Hz LPF provided to limit sub output to the bottom octave. Other thoughtful setup options include Talkback to Dim and/or Aux-to-Main linking.

Six individual Speaker Mute/Solo buttons lie adjacent to the volume knob. Solo logically inverts the mute function so if, say, the left channel is muted by a quick press on its button, subsequently pressing Solo mutes all the other channels and solos Left. The converse also applies, if a channel is solo latched it will be muted when solo mode is cancelled. This is different to many other controllers where solo and mute are independent, but with familiarity it makes a lot of sense when diagnosing in surround. Dim lowers the selected speaker set's gain by a fixed 18dB. I would have liked to have seen a button for a fixed (calibrated) monitor level.

Since even sound engineers are subject to oversights, I always check what happens when monitor controllers are powered up or down with the speaker amps on. In this case there is a thump, but this is mitigated considerably since it wakes up with Dim engaged. Buttons and relays click positively. There are two schools



of thought on this — it does provide additional user feedback but may be annoying in some situations.

Ironically, although the ST or SR come from a company with a reputation for summing units, neither can sum inputs, so if you want film-style monitoring of multiple 5.1 stems the only way to get it is to sum externally.

Four Additional Switching buttons will control functions on future Dangerous Music products. One such forthcoming item will be another 1U box with 2-card slots. There will be a choice of optional cards including digital input with stereo and 6-channel D-A conversion, multiformat video switching, 5.1 to stereo fold-down, and bass management for surround applications. There can be up to four units allowing 16 additional function paths.

Dangerous Music's monitor controllers exhibit strong evidence of a careful and recursive design process. The result is devices that not only have impeccable audio fidelity credentials but also some extremely well thought out features, especially

for music. The omissions noted earlier are mainly applicable to film and broadcast. Perhaps just as importantly, since this will become one of the most heavily used devices in the purchaser's studio, it looks and feels the part. The remote is elegant and unobtrusive and quickly becomes completely intuitive in operation.

I've looked at a lot of monitor controllers over the last eight years. There is a lot to like about this one. For music it should be guaranteed a place on any shortlist. ■

PROS Great remote; high-end, audiophile design; future expansion.

CONS No input summing; no direct mute; fixed dim level.

Contact

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