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Blue Sky
Bass-Management Controller

It's hard to believe, but console manufacturers still build surround-capable mixers with no provision for 5.1 monitoring control. That's like building a car without a steering wheel. However, if pressed for details, console-makers explain you can assign buses or auxes to control your studio playback levels. If you have an 8-bus console and you've used five or six as a volume control, then you end up with a 2- or 3-bus board. Scary.

A number of companies build third-party systems that address the volume issue, but many of these also include busing and stem-routing features that increase the product's complexity and pricing. Aware of this situation, Blue Sky — manu-facturer of the acclaimed Sky System One and the new ProDesk monitors — offers the Bass-Management Controller (BMC), which addresses the need for 5.1 bass management and volume control in a simple, $725 system. I used the BMC with Blue Sky's Sky System One, although it's important to note that the BMC functions just fine with any monitors (self-powered or amp-driven) with balanced +4dBu XLR connections. I also used the BMC on a number of other moni-tors, including Meyer HD-1s, JBL LSR28Ps, Mackie HR824s, Event 20/20s (powered via Bryston amps) and a variety of subwoofers: Mackie HRS120, Event 20/20 S250, JBL LSR 12P and the Blue Sky Sub 12.

The BMC's single-rackspace controller offers a Spartan front panel: Just an AC switch and power LED. Rear-panel con-nections are simple, with balanced XLR in/outs for the five main (LCRSS) channels and an XLR LFE input and two paral-lel XLR outs to feed one or two subwoofers. In addition to the removable IEC power cord, the back panel also has a standard 6-conductor RJ-11 jack that connects the unit to the console-top remote.

The 6×8-inch remote links to the BMC main unit via an included 25-foot RJ-11 cable (the standard phone-type cable available everywhere). For longer runs or custom installs, users can substitute any RJ-11 cable (phone, not data) up to 100 feet long. As the remote gets its power feed via the RJ-11 line, no wall wart or external power is required. The remote also includes a second RJ-11 jack labeled Aux. The manual mysteriously notes that it's "reserved for future expansion."

The remote's top panel is deceptively simple. There's a large rotary volume control, switches (with LEDs) for selecting a preset reference level or speaker playback muting, and a set of menu keys (up/down, yes/no, select and cancel) to tweak parameters. The remote also has a two-line LCD screen that shows operational status, menus and settings, and indicates all parameters during setup. The screen is fairly small, but you don't use it much, other than during the setup/ calibration period. In operation, the LCD screen shows the exact amount of system gain.
Speaking of gain, the volume knob sets overall gain from -50 to 0 dB in 0.5dB steps; this is handled entirely using analog circuitry under digital control. The system boasts impressive specs, such as a 20 to 20k Hz bandwidth (±0.25 dB) and 0.002% THD (1 kHz at +10 dBu). However, to optimize performance and keep any possible noise to a minimum, it's best to drive the BMC as hot as possible and keep the level going to the speakers as high as possible; necessary attenu-ation is best done at the speaker.

The menu-driven calibration routine is straightforward and offers a ±6dB trim adjustment on the mains. Users can choose between 80Hz (12 or 24dB/octave) high/lowpass Linkwitz-Riley filters and a 120Hz (24dB/octave) lowpass filter or neither. The final selection will depend on whether you require bass-management functions or plan to use the BME with five full-range speakers and no sub at all.

The calibration procedure mostly consists of matching the five main monitor levels among themselves and with the sub, and requires a 0dB pink-noise source. If you don't have a noise generator, a decent audio test CD — such as the Mix Reference Disc from www.artistpro.com — will suffice. Blue Sky also recommends using an RTA and an SPL meter to calibrate an 85dB reference level setting, but as long as all of your monitors/amps are the same model and you're not fussy about needing an absolute reference level, the system can be set up without the meter/RTA. Bass levels can be

tweaked to taste: There is a +10/0dB setting on the sub outs in addition to the ±6dB trims on the mains. In any case, the BMC's menu access to mute the sub and the individual speakers greatly simplifies setups, and the entire procedure is much easier to perform than described.

After using the BMC on several systems, I'd like to see a few tweaks. For instance, the volume knob does not have a dot or line indicating where it's set. To be fair, the LCD screen does display the current gain level, but when you're across the room (or console), it's not always visible. Also, although individual channels can be muted via a few keystrokes, it's a lot of work for quick production muting, such as soloing the sub or rear surrounds to check panning and mix levels. Perhaps that second RJ-11 jack on the remote could come into play for a future add-on bank of solo/mute switches for the 5.1 outputs. Hmmm…

Overall, the BMC does exactly what it promises. Unless your system has unruly gain problems — such as a feeble output requiring lots of maximum gain boost — the BMC's audio output is clean, quiet and essentially transparent. The bottom line (pun intended) is that the BMC rocks. It's a simple, affordable solution to a problem facing a lot of people in the industry, whether you're mixing on a traditional console or going console-less on a DAW. Thumbs up on this one!

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