

TAPE OP

The Creative Music Recording Magazine

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A JOE MEEK PRIMER
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**THE FUTURE OF
AUDIO ENGINEERING**

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MUSIC REVIEWS

*The Tape Op Soundtrack
and Glyn Johns on mixing Patty Griffin*

GEAR REVIEWS

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Mar/Apr 2014

Coleman Audio

RED48 Summing Console

The *RED48* is the love child of a control-room monitoring system and a 48-channel summing mixer, housed in a 2RU-height rackmount box with a companion desktop remote. I don't know if anyone else offers all of this functionality in a similar package. Moreover, the sound quality is top-notch. Looking at the back of the main unit gives you an idea of what this thing can do. DB25 connectors handle the 48 input channels as 24 stereo pairs, while three stereo source inputs and one stereo mix output are on XLR jacks. XLRs also handle two sets of stereo speaker outs. Stereo cue in and cue out are on 1/4" TRS jacks, as are mix insert send and return. 1/8" jacks are used for a slate output and to optionally connect a remote talkback switch.

Out front is Coleman Audio's signature array of white pushbuttons for master source selection. Mix output level is controlled by a precision stepped-attenuator switch from Elma. There are potentiometers for headphone volume (for the front-panel headphone jack), cue level, and talkback level. Smaller pushbuttons are employed for speaker selection, headphone source, and cue source. Dim, talkback, and slate buttons are available here on the main unit as well as on the included desktop remote. Also on the remote is a Penny + Giles master fader for the mix output. The long-throw fader can do fades that are near-impossible with a mouse. Note that the remote is light on controls, so the main unit will need to be installed within arm's length of the engineer. The remote is an integral part of the system and needs to be connected at all times, even if you don't want to use the master fader. Without the remote, the mix output drops 20 dB below the master fader's zero level.

An included talkback mic, which looks like a mini hockey puck, connects to the front of the unit. Moving the mic from mix position to a producer's table is easy enough — no need for the producer (or bass player) to scream from the couch. The best way to describe the monitoring functionality of the *RED48* would be to say that someone shrunk the communications section of a large-format analog console and put it in these two small boxes. As such, it's important for DAW users to understand the workflow. Pressing the talkback button dims the speaker levels while injecting the talkback mic into the cue output — exactly what you'd expect. Therefore, setting up the artist headphones with a stereo cue mix is dead simple; feed your cue mix from your DAW into the *RED48*'s cue input, then feed the cue output to an external headphone amp. If your studio uses a multichannel headphone distributor that allows each artist to dial a personal mix (e.g., Furman, Aviom, Hear, etc.), and you want to dedicate a channel in the personal mix to talkback, just feed the *RED48*'s cue output to that channel. Thoughtfully, the headphone source and cue source buttons allow engineers to quickly audition the cue mix on their headphones, or assign the engineer's mix to the artist's headphones. Or, if you want to streamline and forgo connecting a headphone amp to the cue output, you could employ the front-panel headphone jack for the artist mix. And a further option would be to patch two separate artist mixes from the DAW into the *RED48*, assigning one to the cue output and the other to the headphone jack. Yes, options abound. In all cases, turning on the talkback mic will send talkback to both the headphone jack and the cue out.

The slate button and associated slate output let you really go old-school and record yourself announcing song titles, take numbers, and whatnot into your DAW.

Moving to the mixing section, 48 balanced inputs (which are panned hard left/right to make 24 stereo pairs) are summed to a stereo mix. (You'll need to do all your channel level/pan moves in your DAW.) Importantly, the *RED48*'s mix insert provides a pre-master-fader patchpoint for outboard processors. If you're going to go through the trouble of making a combined summing mixer and monitoring system, there should be at least one insert point for the stereo bus! I've seen some other brands that do not provide this necessity. Moreover, Coleman includes a front-panel bypass switch that allows A/B'ing of the mix with and without bus processing.

All in all, the controls throughout are ergonomically satisfying, and interestingly, they seem grime resistant. Have guest engineers? Then you've seen how gross, caramel-like goo always shows up on buttons and knobs. Thankfully, the *RED48* cleans up easily, even if less-mannered engineers are using it after "mining for gold" up their nose.

The real goldmine here is the transparent sound of the summing mixer. It is difficult to characterize, as Coleman Audio doesn't have a noticeable sonic "personality" like some brands do (e.g., Tonelux, AMS Neve, API). "High fidelity" and "high headroom" are descriptors I would use for the *RED48*, along with "broad stereo field" — not unnaturally broad, but something definitely collapses as soon as I switch over to the DAW's internal summing. Furthermore, the bass frequency response seems especially extended, which makes the *RED48* ideal for hip-hop or pulsing rock mixes — or for revealing a sloppy low end. As I write this, I have multiple summing boxes on test, and I'm having a hard time sorting out the "best." In a blind test, I would pick the *RED48* as one of the most expensive, hi-fi models available. I would be right on sound but wrong on cost! A similar-quality monitor controller and summing mixer is more than twice the price.

If I could make any changes to the *RED48*, I would gladly trade one of the stereo source inputs for an additional speaker output, especially if I were a mix engineer. Coleman Audio's product line does include a number of input and output matrix selectors to augment the *RED48* to meet specific needs like mine, but that means more precious rackspace would be required at mix position, given that the remote has only a small subset of the controls found on the main unit.

What I don't need are pretty lights or complex meters on my control system. It's clear that all of the money in the *RED48* went into the design and the components. The sound of the summing mixer is at the top of the class. Plus, Coleman Audio gear rarely fails, and only when subjected to extreme handling, like a drop into a bathtub. These are big boy/girl tools that actually are Pro with a capital P.

If you grew up on a large-format console, you'll find that the *RED48* combines many familiar features into a smaller package. If you're looking to improve the quality of your monitor controller and have an interest in analog summing, this is a very economical way to make two acquisitions with one purchase. Project studio owners wanting to upgrade their sound take note: buy a *RED48* and have an extra few grand left for the DACs you'll need for summing. Your clients will hear the difference. Having used Coleman products in a production environment, I can say they are all but bulletproof, and even if you do shoot them, there is a strong chance Glenn Coleman [Tape Op #88] himself will fix them for you in no time. If you want sexy Star Trek lights, look elsewhere. If you want a reliable, phenomenal-sounding unit, demo the *RED48*. (\$2500 street; www.colemanaudio.com)
-Garrett Haines <www.treelady.com>