

HEAD: A Better Mix...

DECK: ...starts with a better sound check

WORD COUNT:

By Dave Rat

So much of what we do as sound engineers is based on habit and repetition. Better safe than sorry, if it ain't broke don't fix it, that's the way everyone does it, and so on. I enjoy questioning and testing that validity of these patterns. One of the beautiful aspects of live sound is that there is no true right or wrong way, but rather, certain approaches are more likely to result in preferable outcomes than others.

With that in mind, let's focus on process called 'sound check.' Why EQ the kick drum by itself with all the other microphones turned off? How often during the actual show do you mute every other mic to just hear that kick drum sound? How relevant and useful is it to waste oh-so-valuable sound check time EQ'ing solitary mics only to start over once the rest of the stage mic interactions are introduced? Of course I understand doing a quick test of every mic individually, but beyond that, what we really need to know is how that instrument sounds with all the other mics turned on as well. Seems we forget that every mic hears everything on stage at some level.

Want way more time to really get your sound dialed in and have the band love you at the same time? At the next, gig walk in and tell the band, "O.K., this is how I would like to sound check. After a quick tap line check to make sure everything works, you guys come on up and do whatever you want, rock some tunes, rehearse and jam. First we'll get monitors sorted and close. To avoid confusion, here is a simple hand signal method, point at what you want and then point at where you want it and then point up or down so we know what to do. And while you're rocking out, I'll get all your sounds dialed in out front. I may stop you for a moment if there's a particular problem, but what's best for me is for you to play as many tunes as you possible and get comfortable on this stage. Oh, and drummer person, if you can, lean into some extra toms so I can grab them as well."

Congratulations - you've just gone from having your band annoyed with being subjected to 50 hits on each drum to having a happy musicians doing what they hopefully truly love. With the artists playing, bring up each instrument and get a rough EQ and meanwhile, you also learn important things like how much the cymbals bleed into the toms, or how much guitar is getting into the vocal mics while you are EQ'ing them.

As the band kicks out the jams, my approach is to bring up drums one at a time and do a rough EQ, then all the drums and refine the EQ. Add bass, check the drums and bass combo, then EQ the bass. Next, lay guitars on top, get a rough EQ, and touch up bass and drums. Then give a listen to just guitar and bass without drums, and EQ them to fit. All the while, I'm dialing in my compressors and gates. I finish with muting all the other mics and EQ'ing vocals with the full band playing. Then vocals add in guitars, add bass, and then add drums. My headphones are always at the ready for cuing up and checking certain things.

If specific issues come up while the band is playing, hey, don't worry about it yet. Get the rest of the sounds together first. The goal is obtaining a solid grasp of the bigger picture in the time it takes to test one mic at a time. Plus you're actually mixing, and are free to make drastic changes to hear those blends and combinations in a way that you can never do during an actual show. You're also now the coolest engineer the band's ever worked with.

I started using a version of this approach about 25 years ago with a 60-piece orchestra I mixed weekly on Sundays in a park. Due to wind and the size of the area being covered, I had to rely on fairly close mic'ing, and ended up with about 24 inputs. I learned pretty quickly that the whole "O.K., now will the third flute please play" method was a complete waste of time and left me scrambling to try to scrape a mix together when the show began.

So I devised a plan. Turn every gain knob all the way up, and have every channel muted with the fader down. As the various orchestra members showed up, tuned their instruments, and began playing, the clip light for the mic(s) near them would come on. I would crank the gain down to below clip, PFL that channel to make sure it sounded fine, and then un-mute so I knew which channels had the gains set.

As the channels were un-muted, I brought those faders up and began blending and EQ'ing, while waiting for the next clip light. Finally, the conductor would have the orchestra play a short segment, and that was that. The whole process took about 15 to 20 minutes, I had the mix together, and then had time to go to the stage to fix any issues before the show started.

BIO: Dave Rat ([www.daverat.com](http://www.daverat.com)) heads up Rat Sound Systems Inc, based in Southern California, and has also been a mix engineer for more than 25 years.