

# rat

Whether talking about the early days of the SoCal punk scene or the state-of-the-art dual PA he's using on the current Chili Peppers' tour, Dave Rat knows his stuff.

## What bands have you worked with over the years?

I started recording punk bands like Black Flag, Redd Kross and the Descendents that rehearsed at an old church near where I grew up in Hermosa Beach. I've worked in various capacities ranging from PA tech on Sonic Youth, Fugazi and Pearl Jam to front-of-house engineer on Offspring, Blink 182, Beck, Rage Against the Machine, Foo Fighters and Red Hot Chili Peppers.

## Do you have a preferred vocal mic?

I personally use the Audix OM7 for almost every act. I have yet to find another mic that has the off-axis and background rejection I get from the OM7. Plus it gives me this up close and intimate vocal sound that I shoot for, especially in the large reverberant venues I am so often working. Because of the high rejection it is definitely a 'lips-on-grill' type of mic. I will use a Sennheiser 900 series mic for singers that pull away while singing.

## Are there any mics that you have to have for every show?

I love Shure SM 98's and/or Beta 98's and use them on snare top and toms. Have you ever tried a Shure Beta 98 as the bass guitar mic? I never understood why people put large-diaphragm, floppy sounding mics on the already floppy sounding bass speakers. I started with 98's on the bass when the 98's were first released and have yet to beat it, live. Other than that I try and mix it up a bit. I pair up a Shure Beta 91 and an Audix D6 on the kick drum.

## Are you a minimalist when it comes to signal processing?

Ha ha! Where would you get that idea? I have a huge processing rack consisting of 2 effects, 6 gates and 12

comps and that's all I need for a stadium. I would say I am a minimalist when it comes to gear, in general, except for the main PA and subs. I memorize all the gear I use, I mix in the dark, I watch the band and for a piece of equipment to make it into my signal chain it must be intuitive, sonically correct, compact and reliable.

## In what ways do you use compression?

I rely almost entirely on sub group compression. I have found that it gives me accessible, logical and manageable control over the various instruments. I combine all of the vocals and then compress them as a stereo sub group pair. That way, if one person sings or all people sing the overall vocal level stays fairly constant, same with guitars in stereo and bass in mono, each into their own compressed groups. I mix the kick and snare together into a single compressed subgroup to contain them as a binary pair. Toms get a stereo group and the metal things like cymbals get a stereo group as well.

## On what sources do you use gates?

I like to have a stereo gate on the two kick mics triggered off of one of them. The same goes with the snare top and bottom. For Peppers, three more on the toms and that's it. I like gates that will properly trigger with as few knobs as possible. I set up one gate and copy it over to the rest of the drums.

## Do you have any general tips for EQing?

The way I go about it is this: The job of the console's channel EQ is to achieve the correct sound from the microphone/instrument combination. The job of the house EQ is to correct for the system/venue combination. The job of the system processor's EQ is to correct for internal speaker/cabinet/construction and cabinet-to-cabinet interaction. By using the proper EQ for the proper job it will highly simplify setting up the system each day and reduce confusion.

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If the console EQ's are doing what they should, then you should be able to record a tonally correct mix right off of the console left and right outs, pre system EQ, and have it sound great. Also, as long as you use the same mics everyday and the stage sounds are the same, your channel EQ's should almost never change, regardless of the venue.

**Do you use high-pass filtering to clean up mixes?**

Absolutely. I use a lot of subs. Currently I have 44 dual 18's out on the Pepper's tour and with all that power below 60hz, I have to be careful not to let low frequency gremlins wander around. Not only do I use the filters on the channels but also by using subwoofers on an aux send it gives me the ultimate high-pass as in the "it can't get there from here" version. Low frequencies tend to accumulate from the various mics and sources on stage. Though using the high pass filters can be helpful, they are just attenuating the lows sent from that particular source. Since only the inputs that are sent to the subs can get to the subs, a dramatic improvement in low frequency clarity can be realized. With most systems, I mix the show with only kick drum and bass DI sent to the subwoofers though floor toms and sometimes keyboards are also contenders.

For bands that have a singer, "Can you hear the vocals?" is high on the list. A majority of live shows happen in crappy acoustic environments. Sonic perfection is just not going to happen. Sonic perfection is the job of the recording engineer. The live engineer's task is to present the audio in such a way that people attending the show can walk away with a memory they love to hold onto. I want to hear all of the instruments clearly and make sure it's not painful, either tonally or volume-wise. The most important thing is to connect the impact and excitement generated by the band to the audience.

**Got any advice for someone wanting to get into live sound?**

Learn everything, the more you know the more valuable you are. No task is too menial. Know how to load trucks and solder cables, listen to everything, help out, volunteer to assist, go to a sound school, intern at a sound company, read the message boards. It is a tough business, but hard-working, honest people with a positive attitude and a friendly personality are an asset to any industry. If you stay focused and put in your time, success is just a matter of time.

**For the rest of the interview please visit [www.guitarcenter.com/daverat](http://www.guitarcenter.com/daverat)**

**What are the main components of a great sounding live mix?**

**To read Dave's tour blog please visit [www.ratsound.com/blognav.htm](http://www.ratsound.com/blognav.htm)**