

## More Large Tour Logistics

Getting the kinks out across Europe

By Dave Rat

**W**hen we left Dave Rat (August 2004 issue), he had just embarked on a 14-date swing through Europe with the Red Hot Chili Peppers. Essentially, the strategy is to work toward a “worldwide sonic consistency,” even though systems will be provided by eight sound vendors from seven different countries.

– Keith Clark

**Day 4, Saturday – Nuerburg, Germany:** Playing at a famous auto racetrack today, wish I had taken the time to go the race museum that I heard rumors about.

Huge fields of Germans! Carrying around a quart of orange juice seems to be overwhelmingly popular, in

addition to the beer, of course. They must be a healthy audience. It’s just a big musical camping trip – cold, dark, but people are having a lot of fun.

I hear last night’s show here was cold, wet and windy, but we faired a bit better in the wet/windy area; however, still froze. Mental note: add warm jacket to Euro checklist. I’ve only been doing this touring thing for 20 years, arghh...

Line check at 8:30 am went a bit sluggish as each department smoothed out the rough edges. The main thing for me was that our (BSS) Soundweb units interfaced almost seamlessly. We were able to transfer over a level change on the center clusters from the local XTA units, transfer over delay times, and away we went.

Our advance tech skipped this show, so this was our first real test of the “B” drive. The show came up a bit coarse; it’s been seven months since we’ve done this as a cohesive group, so I expected to have some rough edges.

### Checklist of things to deal with:

- Sort out the guitar setup/mic’ing – there have been some changes in the guitar since rehearsals and the guitar sounds are coming down the wrong mics.
- Talk to John Fruciante (Peppers guitarist) and confirm which songs he will be playing through the other guitar rig – I got caught off guard on that one.
- Put some time into the tom tom sounds.
- See if I can persuade Dave Lee (John’s tech) into pointing the guitar rig further off stage to reduce bleed into his mic.
- Make sure my vocal compressor inserts are punched in before the show starts.

All in all, the show went well, the audience was excited, and though each department must be self-critical to refine and bring the presentation to its fullest, it was amazingly together. I was more in shock than anything else, trying to remember how to mix the band after a seven-month break. New set, new songs, first show, lots of “spinney and slidey” things. Cold.

The new show videos are cool; lights don’t have their full rig yet and won’t have it until Milan. The general feeling is that we made it through



New sound guy fashion trend? Dave models his new “line array earrings.”



The view from the back of a friendly "sound cop's" scooter.

without any significant hitches. Off to acclimate to bus world.

**Day 5, Sunday – Nuernburg, Germany:** New city but almost the same name as the last one – I talked

to several people on the tour who thought it was a typo and we were going do two nights in the same place.

The first sight upon opening the bus door was a huge structure that Hitler used to address the forces dur-

ing World War II. Frightening and majestic, we're playing in Zeppelinfeld – Nazi rally grounds and blimp parking.

Standing on the podium area overlooking an encompassed field was spooky stuff, right out of the documentaries and movies, with the mounts for Nazi flags and spotlights surrounding a partially restored historical relic of a twisted past.

Tonight I'm looking forward to (hopefully) starting where I left off yesterday. It'll be the first test of how transferable the consistency truly is. I hear "The Muse" playing, so time to wander out front, say hello and have a listen.

**Day 6, Monday – Milan, Italy:** Day off, sort of, and only for some of us. First order of business: find a cup of Italian espresso.

We're staying two blocks from Central Station. One of the down sides of being on a big tour is hotel check-

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in – there seems to be a whole bunch of vaguely familiar people all checking in at the same time. I was up early and want to get into my room, but there are people that have to go straight to the gig, so I'm hanging back, letting them get their rooms to grab a shower.

Last night went O.K. Still not up to

speed but the “powers that be” seem pleased – I personally was happier than the night before, but it's still not fully there. The processor interface works, no problems, and there were minimal to non-existent level and sound quality discrepancies between our Soundweb units and the processors that we swapped out.

A surprising amount of concern has arisen from a select few of the companies about the changing out the processors. Worries over sound quality differences, limiter settings and just lack of familiarity have all been brought up.

We still have one company holding out on us; now that we have a few successful shows under our belts, we'll ramp up the pressure to acquiesce.

I have a two-hour window to make noise today, and it will be our first “real” show with the full stage, lights, video and sound configurations. There are 22 flown clusters, two sets of delay cluster rings, formed by nearly 350 L-ACOUSTICS loudspeakers.

**Day 7, Tuesday – Milan, Italy** (show day): Regarding the earlier checklist, I did the following:

- The guitar sound versus mic issue, it turns out, came about because the physical order of the guitar rigs was changed by the back-line/band departments while the sound department was un-aware and placed the mics visually where they always are. No big deal, but nice to have the mics in correct order.

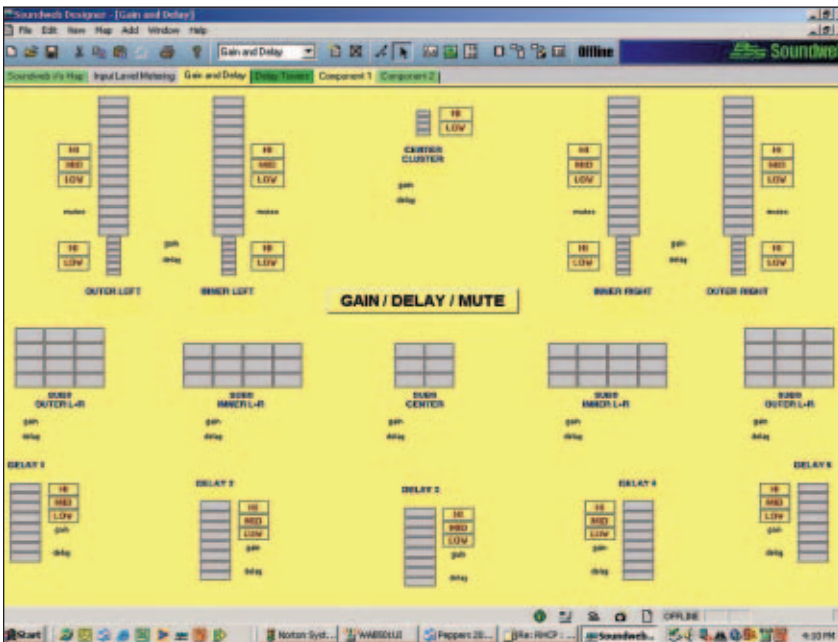
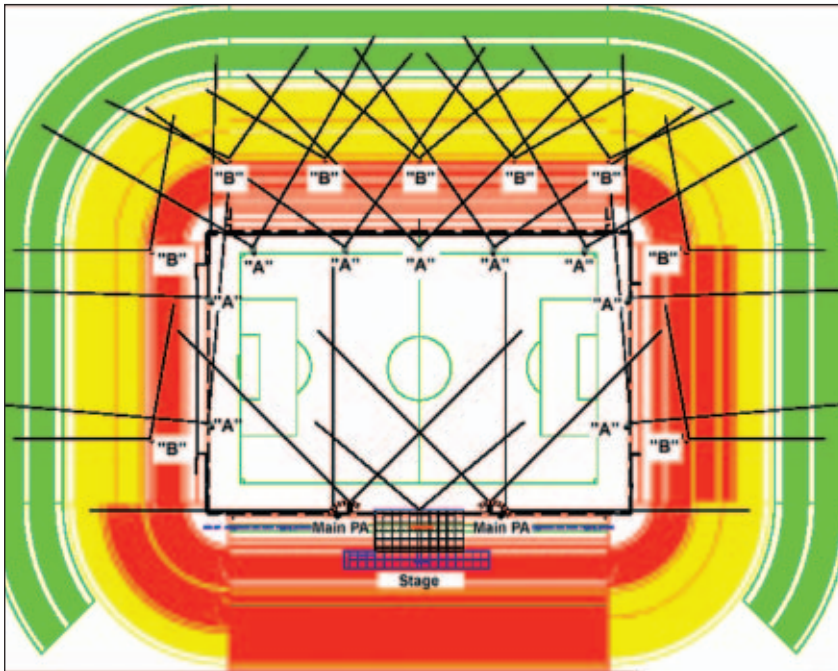
- Spoke with John (Fruciante) to find out which songs he was going to the third guitar stack and got that sorted before the show. During the show, though, just to be sure, John decides to remind me over the PA, “DAVE RAT, I AM GOING TO PLAY THE GRETCH!” All I can do is smile – for some reason, it truly does make me happy.

- Stage audio did some work on the drum fill sound before the show and that also fixed the tom-tom sounds for me, so I was able to keep the same channel EQ I've had on them for three years.

- A slight change in the guitar rig angle reduced the bleed into “Guit Vox Mic” to a manageable level.

- As far as Vox comps, just a dumb oversight on my part – it won't happen again (at least on this tour).

My feet are tired, catering is on the next continent and I spent yesterday riding a bike around the venue with a walkie-talkie while subjecting poor working souls to the same song over



Above, the coverage approach at San Siro Stadium in Milan; below, a screen capture of Soundweb Designer software showing gain and delay as well as the subwoofer configuration.

and over again.

The venue/system combo was already as (SIA) “SMAART” and “pink” as can be. I mainly needed to know the volume/tonal relationship between the various coverage zones, and also wanted to take a photo from the back of the house.

**Day 8, Wednesday – Vienna, Austria:** Just pondering the show yesterday. Sound limits can be very frustrating – I’m not sure exactly what the limits were, but I recall something about 92 dB and 98 dB. (92 averaged over the entire show and 98 averaged over the set is what I think I heard someone say.)

Does not matter much. I feel that I fared exceptionally well considering the parameters, partially due to approach and partially due to pure luck. I always make a point of meeting, talking to and taking interest in the SPL-monitoring humans at every show where they’re working.

The SPL guy in Milan was cool; I ran into him backstage after line check while trying to make my way back to the hotel and avoid sitting at the venue for three hours until the next runner/shuttle. He found a spare helmet and gave me a ride on his scooter to the Metro station. (Must admit that flying through Italian traffic not only scared the crap out of me, it was the best part of my day.)

At show time, two songs in, and we’re at 102 dB. This means I need two songs at 94 dB to get back to the 98 dB average. Yikes! I’m already starving for more volume as it is.

There had already been more than a few radio calls the day before about noise limits, signing contracts, financial penalties and all that wonderful stuff. If only the audience would shut up – they were pushing past my 98 dB limit between songs.

Then it happens – the computer for SPL monitoring overheats, and the super-cool “sound cop” simply gives me the international palms-up sign for “oh well.” We go on to see what 350 loudspeakers can really do, even though only a mere 100 or so are pointed in my general direction.

**The system configuration:**

- Four main PA clusters consisting

of 16 V-DOSC and six dV-DOSC.

- 54 SB 218 subwoofers.
- Nine primary delay clusters of nineV-DOSC and six dV-DOSC.
- Nine secondary delay clusters of nine dV-DOSC and two dV-Subs.

For me, mixing a stadium is about as fun and exciting as it is for a fighter pilot to steer a luxury liner. Challenging, yes, but mostly in a big, slow, lumbering way. Huge backlash delays, not only from the seats but

also from delay clusters hitting seats, with sound then traveling all the way back. Direct sound and stereo imaging are wonderful things to imagine.

There is something to be said for volume, though. I know there are issues with loud and hurting ears, but there are also issues with water/drowning, snowboarding/broken bones and driving cars/crashing. Drag races are loud – really loud – they put us rock show people to shame in the loud category.

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On the flip side, fast and loud provides a thrill, a rush and excitement (or fear, depending on your age and life experience). Loud is a matter of opinion, and when that SPL computer stopped working, it was clear that the opinion of 60,000 Italians was pretty much unanimous that a bit louder was a lot better.

**Day 9, Thursday – Vienna, Austria** (show day): Festival with the Pixies on right before us! One of my favorite bands!! Today is more of a standard festival setup, and as long as we don't get a repeat of last night's wind/dust/thunder/rainstorm, it should all be good.

The main challenge I face today is boredom. Without a proper place to work, the nine-hour time change and blasting metal bands coming from all directions, being productive is a battle not worth fighting. This is my biggest issue with touring – being trapped, far away, and keeping a steady flow of interesting things in my day.



*The haunting view of the Nuernburg concert site.*

A very important facet I'm continuing to address is subwoofer coverage. It's amazing that it is considered acceptable to have a tremendous low-frequency peak creating a power alley for the sound engineer, with greatly reduced low-end coverage off to the sides.

For all of the technology and effort

taken to cover the audience with smooth, even sound, why are subwoofer coverage issues not more seriously addressed?

Our subwoofer design template for this tour is based on a five-point system. The general theory is to create multiple "power alleys." Placing the outside subs farther upstage increases the coverage pattern. The center fill is run at a lower volume and just fills in the hole right up front and center.

I was a bit unprepared for the lack of understanding about this setup, so the "no delays will be needed" had to be quickly revised: individual vendors, site plans and conventional thinking all conspired to severely limit our ability to put the outside subs sufficiently upstage for most shows.

To resolve this, we added delay to the outside sub clusters, which helped further increase the coverage to the sides. When properly positioned, increasing level and/or delay time to outside clusters widens the low-frequency coverage. Meanwhile, increasing level/delay time to the center cluster can reduce some central holes/peaks down the middle.

Tomorrow's another travel day, and it's also my birthday. Will it be a happy one? ■

*Dave Rat, who heads up Rat Sound, based in California, will continue this discussion with us in the next (October) issue. By the way, if you have comments or questions for Dave, he's monitoring the Rat Sound message board at [www.ratsound.com/wwwboard/wwwboard.shtml](http://www.ratsound.com/wwwboard/wwwboard.shtml).*



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