





# WORKING TOGETHER

## SOUND IN THE DESERT FOR COACHELLA

**The Coachella Festival, held each spring in the desert outside of Palm Springs, California, brings several adjectives to mind: big, hot, cool and invigorating are some of the first to come to mind.**

**By Daniella Shepherd  
Photos by Jimi Giannatti**

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“Big” as in the largest music festival in the U.S., attracting audiences in excess of 100,000 to five stages, with big concert sound to match. (This year saw 15,000 more in attendance each day in comparison to past years.)

“Hot” as in heat, with the thermometer pegging 100-plus degrees both festival days.

“Cool” as in a bill featuring many top live rock performers playing back-to-back, early afternoon into late night, with one of this year’s highlights the long-awaited reunion of the fabled Pixies after more than a decade.

And “invigorating” as in the vibe shared by a hard-working crew of every production discipline uniting to work closely to successfully pull it all off.

In addition to the return of the Pixies, this year’s Coachella Festival included headliners like The Cure, Radiohead, Kraftwerk, Flaming Lips... Even the smaller stages hosted heavy hitters such as an acoustical performance by Beck that had the enthusiastic audience spilling into the aisles.

Festivals in general often present a



*Frank Black leading the triumphant return of the Pixies.*

great vibe for sound crew, artists and the public alike, but a really nifty aspect of Coachella is that it brings

together long-time pro audio industry friends. They, in turn, are able to share their experience with some of the newer faces in the mixing/engineering community.

I overheard excited crew stating that they chose to work this gig “as a chance to see the Pixies and Kraftwerk.” And it’s true.

Backstage, the show is not just a “who’s who of rock star world” but also a similar opportunity for sound pros. Long-time Flaming Lips front-of-house mixer Chris Chandler was seen working throughout the day, often side-by-side Roly from Britannia Row and John Shearman (to name just a few).

## HUNDREDS OF HOURS

For the third year running, California-based Rat Sound supplied a large-scale L’ACOUSTICS V-DOSC line array system for the Main Stage, along with similar components, albeit smaller in count/scale, for the Mohave Stage. And, Rat provided a rig based upon its proprietary Rat Trap 5 loudspeakers for the Gobi Stage.

Meanwhile, U.S. Audio (marking its fourth straight year at Coachella) was also on hand to supply V-DOSC rigs for the second-largest venue called the



*The big view of the coverage area presented by the Coachella Main Stage.*

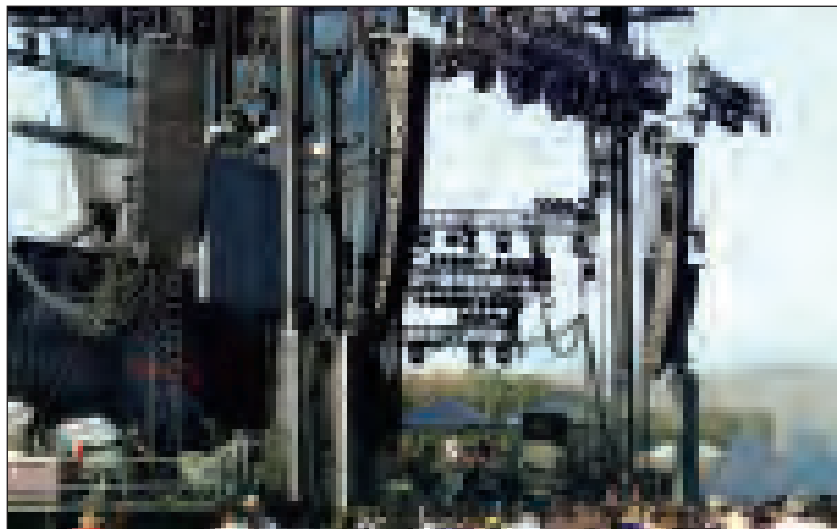
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Outdoor Stage along with the large Sahara Dance Tent, featuring top DJs. In total, more than 100 V-DOSC cabinets as well as 50 of the smaller dV-DOSC and ARCS loudspeakers were utilized.

Hundreds of hours dedicated months in advance of the festival go into preparing and implementing each sound design and preparation into preparation beforehand. There's also good communication between the sound companies, the promoter (Goldenvoice) and the artists themselves.

For example, this year Radiohead had definitive ideas regarding the Main Stage PA, and were involved in its design and configuration from the outset. Sound designs for all stages were plotted in CAD files by Satellite Images, providing a handy virtual format for everyone to be on the same page.

"The detail of the CAD drawings were a huge help in planning the main system," notes Rat Sound's Jon Monson. "Goldenvoice and Radiohead – who were on tour in Australia at the time – were both able to look at the CAD files and provide us with their input on the main and delay systems well in



*Arrays flown to cover the front and extreme sides.*

advance. I was even able to approximate cable runs for the delay towers to within a few feet of accuracy."

The Main Stage system was based upon two primary arrays (flown left and right) of 15 V-DOSC modules above three dV-DOSC compact modules covering the extreme front areas, in tandem with ARCS loudspeakers on cases in front of the stage.

Asymmetric arrays of the same components filled out the side coverage areas, with 48 18-inch-loaded subwoofers, stacked on the ground 24 per side, moving plenty of low-end air, with all of these loudspeakers driven by a potpourri of Crown, Lab.Gruppen and QSC power amplifiers.

Monitors and FOH alike were headed by Midas Heritage 3000 con-

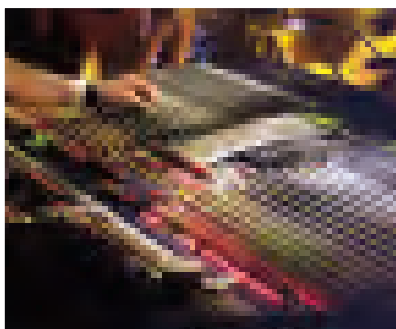
soles, fed by a custom Rat Sound-built 24 by 12 switching system allowed toggling between consoles. Radian MicroWedge 12s were the stage monitors de jour, with many artists electing to swap in their own wedge choices to go with in-ear personal monitoring systems (IEM) of virtually every stripe.

"Artist riders usually drove processing, wedges, microphones and the like, but for the most part, the gear we supplied is accepted by most sound crews and artists," Monson adds. "If you start bringing out rare or specialized pieces of gear, you never know if you're going to have to end up teaching some engineers how to use it. So best to stick with what's known."

## ODD-SOUNDING POCKET

Both Radiohead and The Cure chose to bring in their own complete monitor and control systems, provided by Wigwam and Rat Sound respectively. The Cure opted for Rat's large, more conventional "L" tri-amped wedges with BSS crossovers.

"The band also requested no sidefill, which was great; I'd like to get away with that more in the future if I can," says Kevin Glendinning, monitor engineer for The Cure. "If you think about it, in most cases sidefill is made up of PA cabinets, which are intended to throw great distances. What ends up happening on narrower stages is that stage right gets what you intended for stage left to hear, and unless time alignment and placement is exact, the sum – or where the two



*It was all Midas Heritage channels at the Main Stage, both mains and monitors.*

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boxes meet – can actually create a really odd-sounding pocket in the center of the stage.

“This band will actually call out frequencies,” he continues, “especially (lead singer) Robert Smith. Rarely do you see artists with a greater knowledge of audio. It’s not a feedback/safety thing, but rather is all about fidelity. Working for Robert is a lot to handle, but can really make you good. He actually asked for the (dbx) 160A to be taken off his vocal, where the ratio was just two to one.”

For U.S. Audio meanwhile, the same sort of preparation took place at the Outdoor Stage and Sahara Tent, with the L’ACOUSTICS line array contingents all powered by Crown. “We just love the Crown stuff – it stands up to just about anything, from heat to extreme power output,” notes Dan Simcox of U.S. Audio. “You’d think that the heat would have affected things more, but no.”

Goldenoice requested that there be no dead spots in the tent, which led to no less than six distinct soundfields to accommodate the promoter’s goal. “We knew about all this extra need for power beforehand,” Simcox adds, “but there were other challenges. For example, with 2,000 pounds of speakers already flying in the tent, other cover-



*These boots were made for walkin’ – on a MicroWedge.*

age had to come from groundstacks. We did this with V-DOSC, even though it’s normally not done.

“In addition, Brian Murray of our staff designed and built some custom ‘spacing wedges’ just to meet the needs of the system for the tent,” he

adds. “Kind of radical stuff, but there was no other way to do it.”

The approach worked, and at one point in the proceedings, the U.S. Audio team stopped by the nearby Gobi Stage to make sure there wasn’t too much output straying over from the Sahara Tent system. By definition, it was loud in the strictest sense. But the cool vibes of the event leads to collaboration rather than infighting among the tech crews.

“Everyone has to work together at Coachella – spare parts and last-minute needs are several hours away,” concludes Rat Sound’s Monson. “If I need something, the first place I turn is U.S. Audio at their stages, and this reciprocates from us to them as well. After these years of working together out here, when they ask me for anything I am more than happy to help. We have learned to fairly easily manage the audio, it’s all about the little things and cooperation.” ■



*The spirit of collaboration alive and well at FOH for the Outdoor Stage.*

*This is Daniella Shepherd’s first article for Live Sound. Welcome aboard, and thanks for this fine account. Daniella works for Rat Sound and can be reached at [Daniellarat@aol.com](mailto:Daniellarat@aol.com).*