

S: ANTHONY PIDGEON



By Sarah Benzuly

Nine Inch Nails

LONGTIME ENGINEER COHORTS TAKE ON ELECTRO-ROCK HEROES

When Nine Inch Nails finally hit the stage on a rare hot evening at the Oakland Coliseum in September, the fans were ready for a blistering three-set show, and so were their engineers: front-of-house engineer Pete Keppler and monitor engineer Michael Prowda. With all systems go

moments before the band launched into tracks from their new album, *The Slip*, both engineers had their hands on the faders, their ears at attention and were confident they could rely on each other after years of working side-by-side.

Keppler and Prowda mixed David

Bowie's tours for many years before hooking up with NIN (in 2004 for Prowda and 2006 for Keppler). "Trent [Reznor, lead vocalist, multi-instrumentalist] saw a few Bowie shows in 2004 and asked me to join the NIN crew in early '06," Keppler says. "I'm sure Mike was behind this somehow,



too!" At that time, Prowda was also on the Bowie tours and had mixed for the 1995 Bowie/NIN tour, "so I had seen what it was all about." Prowda says. "The working chemistry is great. We work out what we need to get done and get results. Anyone who has had the Nine Inch Nails experience knows it's a very technical and intense show, which keeps all of us-including Todd Tiedemann, who has the 'front line' job of dealing with Trent's mics, stands and other bits of things-on our toes, start to finish."

Having worked together for many years, Keppler and Prowda are able to focus their time on their own mixes, knowing that there is no slack to be taken up. "I think one of the most important elements of the show, especially because the monitor system is entirely in-ears, is the stage mixes," Keppler says. "Mike is an artist in his



From left: Todd Tiedemann, Michael Prowda and Pete Keppler

own right, and he has this show dialed in. If the performers can't hear themselves properly, I'll have a lot less to work with mixing at FOH. Mike and I have worked a lot of tours together, and it's to the point where we barely even need to talk about it. It comes together very quickly. I never have to wonder if the band's hearing what they like, and that takes a lot of stress out of the day."

LITTLE GEAR TO PACK

Like most bands traveling on the festival circuit, NIN is carrying a slim-and-trim rig to keep foot-

prints small and make it easy to get in and out of gigs. Both FOH and monitor worlds see Digidesign Profile boards. Keppler recently used the Profile during a Rufus Wainwright tour. "I found I like the horizontal EQ layout and the faders being closer together," Keppler explains. To also help create a smaller FOH footprint, Keppler is not carrying any outboard, using all onboard FX, including Digidesign's ReVibe, Reverb One, Reel Tape Suite and Flanger, SansAmp, Smack! and Echo Farm; third-party plug-ins include Waves' Live Bundle, McDSP MC2000 and FilterBank, and Crane Song Phoenix. "I'm anxiously awaiting SoundToys' D-Show-ready plug-ins, as I've been using their software in the studio for years and it rocks!" Keppler adds.

Prowda also has a long history with the

board-and the manufacturer. "When I started with the With Teeth project," he says, "Digidesign asked me if I was interested in demoing a pre-production VENUE. The OS software was in its infant stages, but I liked the way the console sounded and have grown with Digi in its development. When I first began using the VENUE, I went plugin-manic and was able to try out a lot of different options. I have some favorites that I've stayed with, and

some new things such as the Sony Oxford reverb and the Tube-Tech CLiB limiter. Others include the ReVibe, D-Verb, Smack! and Impact, which makes a great stereo dynamic solution. Properly mixing in-ear monitors requires a high level of dynamic control and reverbs to make realistic spaces. I feel it's possible to find all I need in the plug-ins available for this mixing platform."

However, Prowda does carry a few choice pieces of outboard: Aphex Dominator IIs, which he's been using since he began mixing in-ear monitors. He calls them his final dynamic control stage before the stereo mixes go to the Sennheiser G2 IEM radios. "They are a broadcast-specific device and have been used in the radio industry to control modulation," Prowda explains. "Used properly, they are most effective-I can use all the help I can get."

As can most engineers, who are watching frequencies become harder and harder to lock into during load in. "Sennheiser and Shure have a database of TV stations on a city-to-city basis," Prowda says. "I'm using Sennheiser and start with their data on what to expect when I get into the venue. By the nature of the construction material used in each building, there is a degree of built-in shielding from external TV sources. This helps a lot in the presently expanding frequency battle. This is keeping the manufacturing side of things on its toes, and we will see new products available soon to help us deal with what was once an easy part of our jobs.

"Once I've gotten to the venue," he continues, "I have an RF scanner that I use: the PST 1301 T. It's a cost-effective handheld device that I've found to be efficient and good enough for what I'm using it for. This is the reality check as to what is really going on RF-wise. We have to go to frequencies that are not used by the local TV stations, and at this point I use Sennheiser's SIMF calculator to set up my 10 intermodulation-free frequencies. Sometimes it's easy, and sometimes not so easy. I also use the Sennheiser Nett, which networks all my radios and works with my Mac running Parallels Windows OS, which means I don't need a device-specific Windows computer to run this one piece of software. SIFM also runs on Windows, After this, I do a walk-around and check to make sure I've made the proper decisions as far as frequency allocation."

While Prowda is searching for a free frequency, Keppler and FOH tech Chris "Radar" Russo are busy soundchecking the JBL VerTec array with Version 4 presets, "designed by the amazing Paul Bauman at JBL," Keppler enthuses. "I had used the VerTec previously with both Bowie and Nine Inch Nails, but Paul has definitely taken this P.A. to the next level."

The standard configuration comprises 28 VerTec 4889 full-range boxes (14 per side) for the front arrays, with 16 flown 4880a subs (eight per side). There are 16 to 20 more 4889s for the side arrays and another 12 to 14 4880a subs on the floor, with six to eight 4887s for front fill. Crown iT 6000 and 8000 software handle speaker management, crossover and protection duties, all controlled by System Architect. System zoning/tuning are handled by Dolby Lake Processors, while Keppler tunes with a wireless tablet.

Onstage, there is a guitar cab for Robin Finck, a drum system and a ButtKicker for Josh Freese and two small L-Acoustics dV subs on either side of the stage. "This combination gives

Mike 'Em Up

Drums: Royer R-121; Shure 91, Beta 57, SM57, KSM32; Sennheiser 902, 904, 509, 905 Guitar: Sennheiser 509 Vocals: Shure Beta 58

Percussion: Royer SF-24; Shure KSM32, Beta 98; Sennheiser 509

us the cleanest stage sound for a brilliant frontof-house mix and the right feel for the band," says Prowda. "Simplest is most often times the best. It's not at all loud onstage."

ENTER THE BAND

Straying from previous Nine Inch Nails outing, the band has divvied up its show into three segments (tracks from their recent album, acoustic [aka Ghosts] and classic NIN tunes)-plus an incredible display of lighting and video technology. While this may pose some serious mixing issues for Keppler and Prowda, these engineers are up to the challenge.

"All three sections of the show can be intensely dynamic, so I have to be ready for that, but overall, the acoustic portion of the show is the most different. Trent is often playing five and a half-octave marimba, while Justin [Meldal-Johnson] is playing upright bass, Alessandro [Cortini] is playing harmonium, Robin is playing flutes/mandolin/guitars and Josh is playing bells, timpani, glockenspiel and a drum kit made of trash cans and found objects."

"Miking a marimba turned out to be one of the most challenging aspects, and our friends at Royer Mics helped us find the best alternative to contact pickups we could find," Prowda adds. "For that situation, the Royer SF-24 stereo ribbon mic was the most elegant, best-sounding option."

"There's a large number of live mics onstage during this section, and they're mostly on quiet(er) instruments," Keppler continues. "This can be challenging for leakage issues, but sometimes it's difficult just trying to keep the SPLs up above the audience. They love this part of the show, and often I can hear the cheering from the front rows coming through the stage mics." III

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