

CONCERT

# TENSION TAMER

## Roy Bennett brings new technology to bear on Nine Inch Nails' latest tour

By: Sharon Stancavage

It's a visual experience, it's an emotional experience, and it's an art statement at times. It is high art, it is installation art, and a piece of performance art as well." So states production designer Roy Bennett, of Seven Design Works. The visual, emotional, and instinctual experience he is describing is the current Nine Inch Nails *Tension Tour*, which concluded its US run last month. The designer adds, "Trent Reznor's [lead singer of Nine Inch Nails] music is not like anyone's stuff, and anything I do with Trent and Rob [Sheridan, Reznor's art director] is not just a rock show—it's a combination of many things. For me, this is a production where I can push the design envelope and the artist understands it."

The beginning and end of the production design for *Tension* were two utterly different places, stylistically. "Originally, it was a very physically interactive and interesting concept. However, it was more than what could be dealt with on this tour at the time," Bennett says. So Reznor and Sheridan suggested a completely different direction. "They wanted to revisit the *Lights In the Sky [Tour]* production but do a more advanced version of it. And so that's what we ended up with," explains Bennett.

*The Lights In the Sky Tour*, mounted in 2008, was based around three automated LED walls: one high-

resolution upstage and lower-resolution, semi-transparent walls midstage and downstage. For the current tour, the upstage wall is a 16'-high-by-70'-wide V9 9mm wall, while the two transparent walls are 13' high x 54' wide. The transparent walls used for the last production "had so much structure to them and bulk on the backside, so the marching orders for this one were to make it the least amount of structure as possible and as transparent as possible," Bennett says.

Those marching orders went to PRG Nocturne, located in DeKalb, Illinois. Bob Brigham, co-president of PRG Nocturne, explains, "No existing screen would work for their needs, so Ron Proesel, my co-president, working in conjunction with LSI Industries—formerly Saco Technologies—created what we now refer to as V-Thru. From the date Trent approved moving forward, we designed and built V-Thru, from scratch to the first day of rehearsals, in 87 days." Typically, a product of this nature could indeed take years to bring to market, but, Brigham says, "We have a very special relationship with Roy and Trent. The words 'can't be done' and 'not possible' are never used. If a product doesn't exist and the investment makes sense, Ron will custom-build what they need."

The V-Thru is a 28mm LED wall that is 68% transparent and less than 1" thick. Brigham explains, "Trent and Roy needed both screens to be as transparent as possible but still maintain really good resolution, and 28mm was the perfect pixel pitch that allowed us to achieve both goals." Currently, the V-Thru screens on the tour are the only ones in the world. The video content is controlled via two Green Hippo Hippotizer HD units. The video content, much of which is abstract, comes from Sheridan as well as from the Montreal-based firm Moment Factory.

Photos: Todd Kaplan



PRG Nocturne collaborated with LSI Industries to create the V-Thru, a 28mm LED wall that is 68% transparent and less than 1" thick.



Automation is also an integral part of the design. The walls move in and out, as do various elements of the lighting rig. Ampco Flashlight Rental, supported by CyberHoist North-America provided the XLNT CyberHoists that enable the automated movement. "I've been using CyberHoists for quite a while; it's always been a reliable system for me over the years," Bennett says. The stage was supplied by All Access of Torrance, California and facilitated by Nine Inch Nails' production manager, Chris Fussell.

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Bennett's production design for the 2008 tour featured a ceiling; this time, it was comprised of 14 automated pods of Ayrton MagicPanel 602 units, which are distributed in the US by Morpheus Lights. Bennett says he originally planned to use pods of SGM X-5 white LED strobes. After learning more about the MagicPanel, he gave them the overhead position and the SGMs were moved elsewhere within the lighting rig. The MagicPanel "is a fascinating fixture," he says. "John Huddleston at Upstaging [the

show's lighting vendor] had some in the shop. He called me and said, 'They're super-bright and they function great.' I haven't found anything I don't like about them yet. They're bright, they're seemingly quite reliable, and they have continuous 360° pan and tilt. It's an extremely flexible light." The MagicPanel also has another advantage as a luminaire, he notes: "You can pixel-map and get one pixel lit up and it looks like a small moving light, but it's also a 1'-square panel of LEDs that sends out a square beam of light." Each pod consists of nine MagicPanel units, with a total of 126 on the production.

The MagicPanel is a moving head LED beam projector that configures thirty-six 15W Osram RGBW emitters in a six-by-six array. Each emitter projects a 7.5° beam, which can be controlled individually or as a group to produce a 15,000-lumen shaft of light. They provided Bennett with a dual solution in terms of lighting and video. "The MagicPanel units gave me a lot more flexibility to do what I planned on in my original design, which had video elements in the air at varying heights," he says.

Bennett's media programmer, Loren Barton, and operator, Morgan Brown, managed the video content driven through the MagicPanels. Barton explains, "We had two Hippotizer HippoCriter machines that we used to run a pixel map that gave us the option to drive the



The upstage wall is a 16'-high-x-70'-wide V9 9mm wall with abstract video content from Sheridan and Moment Factory.

to run a pixel map that gave us the option to drive the MagicPanel pods with video. [The HippoCriter is a small rack-mount media server that can be used on projects requiring four layers or less.] The pixel map only sent data to the Art-Net addresses of the RGB functions of each MagicPanel pixel, enabling us to merge the color data within the [MA Lighting] grandMA2 console and switch between conventional and video control of the pixels while maintaining control over the rest of the fixture functions, such as the white channel and pan/tilt. This gave us a much more dynamic effect and tie-in with the content being run on the main LED screens."

Programming was complex. "The MagicPanel units use a large number of addresses, and driving that many universes over Art-Net in broadcast mode from one pixel map in the Hippotizer gave us some steppy results when running initial video tests," Barton says. "Since the master grandMA2 is the device doing the Art-Net merge, we didn't have the option to multicast the data and keep a fully functional backup console. We ended up splitting the rig into three different pixel maps in the Hippotizer to achieve smooth video playback."

The rig also includes upstage columns comprised of the previously mentioned SGM X-5 white LED strobes, Martin Professional MAC Auras, and Clay Paky Sharpys,

which are revealed when the upstage screen is flown. There are also two automated side trusses that run up and downstage. "The side trusses are all [Clay Paky] Sharpys; there are also [Philips Vari\*Lite] VL3500s on the side and on the floor and some Vari\*Lite VL3015 Spots on the downstage edge of the stage," Bennett says. The show has no front-of-house spotlights. "If there's front light, it's off the floor, it's downstage, or it's from the sides. There have never been any spots on a Nine Inch Nails production," he says.

Programming was "cue-intensive, as always," Bennett says. His lighting programmer was Jason Baeri, who also worked with the band on this summer's festival tour. The production uses two full-size grandMAs as well as a significant quantity of MA Lighting Network Processing Units. "There are 40 universes just for the MagicPanel units," Bennett says.

As a band, Nine Inch Nails has a reputation for having drama within its camp; this tour was no exception. "Trent had added three new musicians into the band pretty much last minute in the last two weeks of rehearsals. That's not a problem. He was making new arrangements of some songs and trying to figure out the running order because of the new musicians and how it was going to work." Reznor's tinkering with the set list, structure, and



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transitions continued until the last moment. "Within the last three hours of rehearsals before loading out of LA, he came out with a new set list," Bennett explains. Because the set list changed drastically, the transitions had to be

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changed; in fact, the entire show had to be changed. Bennett says, "It was completely different, and once you've done that, if you start swapping songs around when you've already programmed some things, the dynamics and choreography of how everything works,

and it throws everything off. So we had to do that in Minneapolis overnight before the first show. We got most of it done, but I had to leave at that point because of other obligations."

With 95% of the show completed, Bennett needed someone else to come in for the last 5%. That someone was Paul "Arlo" Guthrie, who worked with Bennett and the band over the summer during the band's festival tour. Bennett says, "Because I was not there anymore, Trent knew Arlo was the last person who was there who knew what I was thinking and could fix the things that needed to be fixed." Guthrie was out with the tour for about a week as an operator; the show is now in the hands of Brian Jenkins.

Nine Inch Nails' *Tension Tour* ended in North America in November; it continues in Australia and New Zealand in March. 



The 14 automated pods of Ayrton MagicPanel 602 units float above the band.