

# LIVEDESIGN



## Korn Brings LED Video Mirrors On The Nothing Tour

Natalie Robin | Oct 17, 2019

Metal band Korn has been touring since its creation in 1993. Originally formed by three members of the band L.A.P.D., Korn still features founding members James "Munky" Shaffer (rhythm guitar), Reginald "Fieldy" Arvizu (bass), Brian "Head" Welch (lead guitar, backing vocals), and Jonathan Davis (lead vocals, bagpipes). Ray Luzier (drums) joined the band in 2007. Lighting designer Thomas "Church" Christmann began working with Korn in 2016. For the 2019 *The Nothing Tour*, the set was designed by

Christmann in collaboration with sound engineer Marko Vujovic, who has been working with Korn for 10 years now.

The team worked with LMG , a subsidiary of Entertainment Technology Partners , to develop the right kind of new LED technology. “With the popularity of LED walls today, Korn has taken them to a whole new level,” says Jennifer Gorham from Entertainment Technology Partners. “If a cityscape of three-sided LED towers that move back and forth across the stage wasn’t different enough, the towers are also two-way mirrors giving a unique perspective, merging scenic and video. When the LED is off, the tech completely disappears, revealing the crowd’s reflection behind the band, making for a uniquely interactive and dynamic show.”

Click through the slideshow for an in-depth look into the dynamic video design and lighting.

## Credits

- Production Designers: Thomas “Church” Christmann, Marko Vujovic
- Tour Manager: Matt Peloquin
- Production Manager: Paul Binder
- Stage Manager: Albert Bermudez
- Lighting designer & Video Designer: Thomas “Church” Christmann
- Rigging / Automation: ARS Entertainment Rigging
- Head Rigger: Alex Dew

- Automation: Michele Maglich
- Fabrication: Gallagher
- Video: LMG Touring
- Video crew: Martin Calcagno, Marco Hernandez, Sebastian Martinez
- Video content: Schoenman TV - Chris Schoenman
- Lights: Morpheus Lighting
- Light crew: Greg Nunz, Olu Kiara, Luis Herrera
- Carps: Steve Ward, Charles Phillips

## Lighting

- 70 Robe LEDBeam 150
- 26 Ayrton Ghibli
- 30 Ayrton NandoBeam S3
- 10 Ayrton NandoBeam S6
- 19 Chauvet Professional Strike 4 Blinder
- 7 GLP impression X4 Bar 20
- 15 Portman P2 Hexaline
- 17 GLP JDC1
- 4 Ultratec FX Radiance Hazer
- 2 Chamsys MagicQ MQ500 Stadium Console

## Video

- 245 Roe Visual Carbon CB8 8mm, Full Tile Kit (plus 25 spare)
- 32 Roe Visual Carbon CB8 8mm, Half Tile Kit (plus 5 spare)
- 6 Brompton Technology Tessera S4 LED Processor
- 75 Custom Mirrored Plexiglas
- 1 SAMSC Catalyst V5 Media Server



### 1.

Based on conversations Vujovic had been having with the band for several years, he and Christmann began to develop their new design in October 2018 right after the *Follow The Leader* anniversary

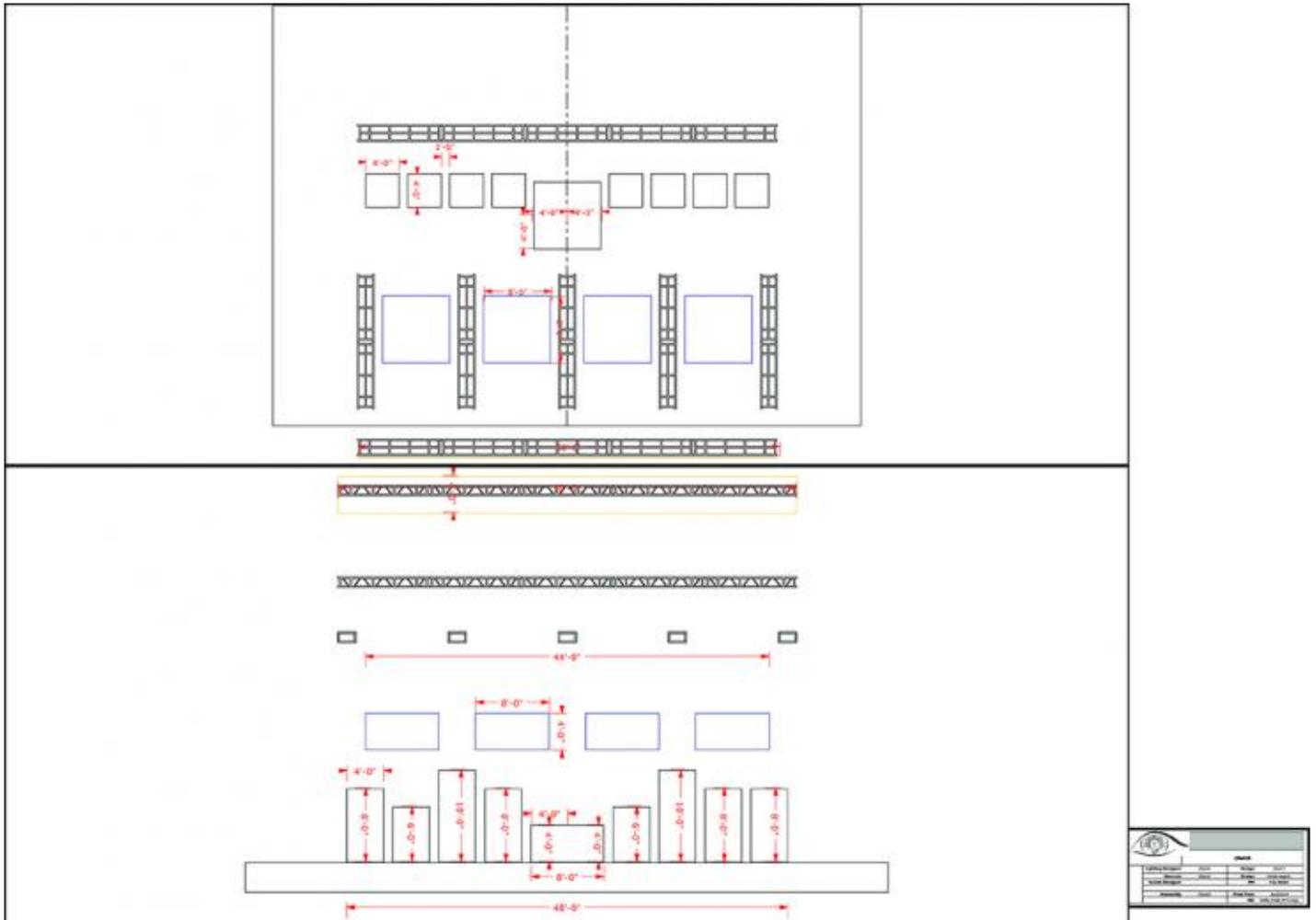
shows. As Christmann explains, “Since Marko has worked with them for so long, he collected most of the band’s imaginations and wishes over the years. That’s why we were able to create something that contains a lot of what the band asked for over the last couple years.”



## 2.

Christmann and Vujovic wanted something that felt new and different. They knew they wanted to incorporate video beyond the expected video wall of so many concert designs. “We had something more three-dimensional in mind,” says Christmann. “That’s why we came up with the idea to have LED video tiles on all three visible sides of each element (the video cubes on the ground, the drum riser, and the pods up in the air). In combination with the idea to have gaps in between these elements and to let them move back and

forward and up and down, we came very close to what we had in mind.” In his research, Christmann came across LMG’s Instagram account, featuring posts about the mirror faces, and “knew right away [he could] create a show that would be a nice blend out of video and lights.”



### 3.

[Click here to enlarge drawing to PDF.](#)

Christmann and Vujovic wanted to present their ideas to the band before they went with another design team so they used the Vive Latino Festival in Mexico City as an opportunity to do so. They weren’t perhaps as prepared as they would have liked. “Actually, this was quite funny when we showed it to them,” admits

Christmann. “Based on a very busy schedule I had beside my Korn job, I simply did not have enough time to create an animation or simulation in wysiwyg of all the moving parts in our design. So long story short, we ended up showing them the static drawings I did in wysiwyg, and Marko brought some of his son’s wood blocks and some smurfs. That’s how we explained all the movements we were planning to do with all of the video they saw in my drawings. Still hard for me to believe that we really convinced them with some toys.” It was from that conversation that the idea to put mirrored plexiglass elements in front of all the video tiles emerged.



#### 4.

Christmann loves working with the mirror-covered video tiles. “I can create a really nice mix out of lighting and video. For example, when you turn off the video you have all these mirror surfaces on

stage that you can use to reflect lighting beams. Also the three dimensional effect you get out of the movements of all these cubes and pods helps to create constantly new lighting scenes. I have never been so happy about this nice blend between video and lighting like we have right now with this rig. You can't say that either lights or video would dominate our show over the other one.” For Christmann, the fluidity of the technology really allowed him freedom in his design. Rather than having to choose to focus on lighting or video in a given song, “with all these automation options, it is possible to have a different looking lighting rig for almost every song,” he says, “and the mirrors are also a huge key to keep this rig surprising and interesting with or without video content over an 80-90 minute set.”



## 5.

This new technology of course included some challenges, beginning with attaching the two-way mirrors to the LED tiles. Christmann explains, “LMG had to be very creative to figure out a system that does not hurt the tiles, is not visible from the audience perspective, and is stable enough to survive all the truck rides. What made it even harder was the fact that we could not use very thick plexiglass for these mirrors. Otherwise, the video would not cut through strong enough. That means the plexiglass we are using right now is as thin as possible.” As if that wasn’t complicated enough, Korn is touring with Alice in Chains, so they have to find space in a shared overhead for all of the rigging points needed for the video and lighting elements.



6.

In order to make the video cubes move, they also had to develop a system to communicate location and cueing to the stagehands doing the actual moves. “Marko called a friend of his who runs a company for integrated systems specialized in smart homing. They came up with six little RTI displays that show the stagehands the individual position they are supposed to push their individual cube to. These displays are controlled by a custom program/app that runs on one of our laptops in FOH. The connectivity works via a PoE switch.”

Overall, the seamless blending of lighting and video creates a dynamic scenic experience for Korn which feels new, exciting, and like nothing we have seen before!

**Source URL:** <https://www.livedesignonline.com/concerts/korn-brings-led-video-mirrors-nothing-tour>