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# Twenty One Pilots

New Design Ideas on *The Bandito Tour* 

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Twenty One Pilots' design team delivers on the promise to create something totally original

By: Sharon Stancavage



"We presented 107 pages of creative elements in the second meeting," Slezinger notes, adding that virtually all of them were employed.

wenty One Pilots' *The Bandito Tour* is codesigned by Daniel Slezinger and Tyler Shapard; both handle the production design, lighting design, and programming. Shapard, who also serves as lighting director, says, "Daniel and I wanted to find things that had never been done before. The motto we took on was: 'If it's easy, everyone would do it'."

Nashville-based Concert Investor produces the tour's live elements, helps with TV moments, manages the production budget, production design, programming, vendor selection, and coordination, and deals with hiring touring personnel; all other firms involved are subcontractors. "Concert Investor bent over backwards for this tour, time and time again," Shapard says. "They did everything you could ask of a production company and more." Justin Roddick, production broker and co-owner of Concert Investor with Slezinger and Michael Gibson, says, "We have been extremely fortunate to be a part of the Twenty One Pilots team since 2013. Key partnerships with our close-knit group of vendors allow us to really maximize the art without sacrifice. Tony Macre, Brent Dannen [both of VER], Molly Gray [video content provider Tantrum], and Ted Maccabee [Strictly FX] have been instrumental partners who haven't missed a beat over the years."

Initially, Tyler Joseph [the band's front man] worked with Brandon Rike, at TNSN DVSN, which offers creative direction, and Mark Eshleman, at Reel Bear Media, to develop the general tone of *The Bandito Tour*. Slezinger explains, "After the first meeting, the production puzzle pieces were created by the creative team, taking into consideration the vibe painted by the TNSN DVSN and Real Bear Media collaboration. We presented 107 pages of creative elements in the second meeting. The idea was that all the production ideas could stand on their own but could fit together if desired, so that the artist and management could decide which elements made it into the show. Pretty much all of the ideas became part of the tour in some fashion."

One issue the design team faced was the production's song list, which took in more than the numbers featured on the 2018 album *Trench*. Slezinger says, "We didn't want to go so scenic around *Trench* because we wanted to keep [the 2015 album] *Blurryface* songs' developed brand-



The tour draws on the albums *Trench* and *Blurryface*. "We relied heavily on video content to move back and forth between the environments," Slezinger says.

ing intact and have the ability to transition freely with our color schemes. We relied heavily on video content to move back and forth between the environments. There are some subliminal production elements; for example, the bridge [a key scenic element] illustrates the struggle between two places, which is part of the *Trench* theme. It can represent anything in your life...maybe a relationship, a decision you have to make, or a life struggle."

The onstage bridge has a Plexiglas walking surface as well as netting; the latter is a safety feature masquerading as a scenic detail. Shapard notes, "We had two problems. For one, the lower the bridge hung, the more obstruction there would be for the audience; next, we had to have a safety element, which could prevent it from hanging correctly. VER rigging took generic GT truss, put Plexi on top of it, and, using the holes that you'd typically use to stack them, built custom arms for the netting that is rounded so we can put our bridge 6" to 1' from the mother grid. The whole concept of the bridge was for it not to look like a walking surface until it comes down. Up in the air, it looks like a lighting truss." Sixteen Robe Pointes and 16 GLP

JDC1 strobes are hung off the bridge.

The bridge leads to a B stage. "We found out that our B stage was going to be a low-key moment within the show," Shapard says, "so it had to stand on its own when the guys sit there and play. Daniel came up with the idea of putting the scrim around it and shooting it with projection." However, he adds, "How do you shoot the upstage side? There is nowhere to hang projectors. I came up with the idea of putting them on automation points." Thus, eight Barco UDX-4K32 laser projectors deliver images to a Rose Brand sharkstooth scrim. Shapard adds, "The biggest concern was shooting on the scrim, which is black. We were pumping light from inside it and we wondered if the projectors would be bright enough." During rehearsals at Rock Lititz, in Lititz, Pennsylvania, this scheme was found to work well. The projectors are subcontracted through VER's Nashville office and the B stage was subcontracted through TAIT, also based in Lititz.

Also at the B stage are 14 Kinetik LED battens provided by Nashville-based Glow Motion, a wireless LED company owned by Roddick and Slezinger. "They move up and down independently inside of the projection Austrian to create three-dimensional shapes that mirror the content," Slezinger says.

The main stage—which includes an 8' thrust—also features three Winvision Air 9 LED screens, from VER, placed upstage. "I love their size and portrait style; they really work for us," Shapard says. Control is handled by three disguise [formerly D3] media servers: two 4x4 pros and a 4x2 pro, acting as a pure master. The IMAG package is subcontracted through Nashville's High End TV; as mentioned earlier, content is provided by Tantrum, located in Cincinnati.

In addition to the upstage LED walls, Slezinger says, "We wanted something upstage that would fill in the camera shot, so whenever the cameras are tight on them there's something cool in the background. We wanted to create depth and have layers, so I drew in an LED grid of three-dimensional cubes."

This led to Symmetry Labs, based in San Francisco. "They already had a cube product," Slezinger says, "but we wanted to build something custom. We reached out to them because they had already created volumetric software, so we could create 3D content and push it through a three-dimensional surface. It's not just a flat LED wall; you have three-dimensional control over the content in X, Y, and Z planes. We used their volumetric-based software and worked with their programmer; they even sat with Shap [Shapard] and me during some pre-viz sessions." One hundred sixty-eight LED cubes span the width of the main stage; they are assembled and transported using carts. "They're on their own separate network," Shapard says, "so there is no control over them other than the operator on the side stage. We're just sending them time code."

### Lighting

Slezinger says, "One our kinetic goals was to hang an automated truss pod directly over another automated truss pod taking up the same vertical footprint, but which could be controlled independently. This is where four automated squares above the downstage area came about. They were positioned in a way that they could be lowered around and under the stage lifts directly below. This, for example, allows us to put Josh [Dun, on drums] 'inside' of the automation at the end of the song 'Lane Boy'."

The pods, made of 12" box truss, posed a bit of a rigging challenge. "I can take the bottom pod, bring it down, and oscillate it, then take the top pod and do whatever I want," Shapard says. "There was a lot of R&D on that, trying to figure out the parameters of tilt that we could use for the pods, considering how the chains and cabling lay inside of them; it's another moment of the show that no one else has done before."

A Kinesys system is used to control the lighting rig and



At the B stage, eight Barco UDX-4K32 projectors deliver images to a sharkstooth scrim.

pods; the latter are filled with Robe Spikies. "We were looking for a very small fixture that could stand on its own for the automated pods," Shapard says. "The Spikie has a prism; it rotates, zooms, and has gobos; and, for us, it was a no-brainer. We were both nervous about putting it on the show, because to me it's not quite bright enough—but when you have 256 of them, you're good, because you have so many beams." The pods are assembled using prerigged carts.

Also featured in the rib are 80 Robe MegaPointes. "In terms of picking the fixtures, Daniel lets me drive that train, and I was very adamant about the MegaPointes," Shapard says. "There is no other light in the world like the MegaPointe," Slezinger adds.

"Twenty One Pilots has never toured without Robe fixtures," Slezinger continues. "The workhorse on the *Blurryface* and *Emotional Roadshow Tours* was the Robe Pointe. Its only shortfall was that it did not have color mixing. Not only did Robe add this into the new fixture, it is extremely bright even when layering in multiple items like

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gobos and prisms. We were able to pull some looks out of these fixtures that we've never seen before. Even though most of our main stage [lighting] rig is over the stage, the beams reach really pulls the audience in the back of the room into the show. It almost becomes an optical illusion that you are closer to the stage than you really are."

"We saw the [Robe BMFL] WashBeam, which we saw before in a shoot-out, and were taken aback by how bright it was," Shapard says. "We ended up adding them into the show because of that." Twenty WashBeams are located on the downstage angled trusses. The lighting rig, provided through VER, includes Robe Pointes, GLP impression X4S units, Ayrton MagicPanel-FX units, and GLP impression X Bar 20s.

For spotlights, the initial plan was to use PRG's GroundControl remote followspot system; however, a visit to Robe caused a change. "The Robe [RoboSpot] followspot system is something we fell in love with," Slezinger says. It's being used with eight Robe BMFL FollowSpots; two supplemental house spots are also employed.

Control is provided by a slew of MA Lighting consoles, including three grandMA2s. "We have our Notch [workflow for media production content] and media server programming, which are done in real time, off of a grandMA2 light," Shapard says. "The Glow Motion Kinetiks are driven from a grandMA2 light, and the pyro is time-coded off a dot."

Speaking of the show's palette, Shapard says, "Color means a lot to our brand; red means *Blurryface*, while yellow equals *Trench*. More specifically, red and white is bad and yellow and green is good. In the very first song ["Jumpsuit"], our color palette goes back and forth from red and white to green and yellow, because there is a battle going on between the antagonists and the banditos, our heroes. The second song ["Levitate"] is yellow and red, to show that the battle has become a constant struggle. 'Stressed Out' is a *Blurryface* song, so that is red and white. 'Bandito' is yellow and green." Certain songs don't fit the paradigm: "'Car Radio' will always be blue, which doesn't mean anything to our branding; 'Trees' will always be green. In this story, 'Trees' is green and yellow, because that is the last song and the resolve."

Slezinger and Shapard started work on the production 14 months before the tour started and did pre-viz at VER in Nashville. "It's the coolest part of the creative process," Slezinger says, "because we got to sit in a room for 60 days and take our time to program, sometimes up to 1,000 lighting cues per song."

Key to the preproduction process were David Perkins, of Orlando-based Imaginary Lights, who built a 3D environment in LightConverse, and Thomas Krautscheid, who built a "markers-to-cues" app for the pair. "Basically," Slezinger says, "I tracked every song, and created cue



lists, go cues, flash buttons, etc., all in [the audio production application] Reaper while looking at the waveforms of every single snare, kick, cymbal, tom, piano hit, vocal, weird sound, and so on. Then, using the app Thomas made, I pushed the information over the network, into the console, and it dropped in everything I've created—the sequences, executors, time code pools, time code data for every cue, and even complex selection order groupings into the group pool. By the time we got in front of the console, we didn't have to think about the logistics of time anymore and everything was already labeled. After the upload, it was all about the creative. When we played songs back, time code was already synched up perfectly



"Color means a lot to our brand," Shapard says. "Red means *Blurryface* while yellow means *Trench*." A handful of numbers exist outside this dichotomy.

with the track before any cue data was created in the console. Even video was laid into the Reaper timeline and pushed into the previz machine, so we could see everything playing together at once. Then, using a custom fixture in the console, we could control my computer over the network from the desk and jump around a song, between the verse and chorus, without touching the computer."

Shapard and Slezinger had time during programming to explore all the facets of the MegaPointe. "We do some-

thing with it that I've never seen before. Basically, we make a beam inside a beam," Shapard says. The effect makes an appearance during the songs "Morph" and "Lane Boy."

### Effects

One of the production's most stunning moments comes near the beginning, when a 1991 Cadillac DeVille is revealed, engulfed in flames. "The car was a complete accident," Shapard admits.



In addition to its striking visuals, the show relies on an extensive Meyer Sound PA to reach audiences.

The concept came through the design team's friend and mentor, Bruce Rodgers, of Tribe Design. "Bruce sent me a page of visual references of cool things, one of which was a car being blown up," Slezinger says. The pair included it in their original 107-page design brief. Much to their surprise, "Tyler said, 'You're telling me we can blow up a car onstage?' I said it was more of a visual reference, but sure, why not?

"We found some cars that matched the band's music video 'Heavy Dirty Soul'," Slezinger continues, "and we had a local company in Nashville, called Driven, strip out the engine and the floor. We reinforced it, cut it in half, and put it on casters to move it around. Then we had [the Nashville office of] Strictly FX go in there; by the time they were done, it looked like the inside of the space shuttle."

The ominous, apocalyptic Cadillac is an engineering marvel. "We wanted to focus on it looking and acting organic to execute any possible variant that the design team and artist required," notes Strictly FX partner Ted Maccabee. All of the physical control mechanisms, as well as the tubing and the welding, were done by hand. The control software, which is managed via a PLC touch screen, was created in-house at Strictly FX by Reid Nofsinger. "Everything was built from scratch to our spec, and had to fit inside the vehicle," Maccabee adds.

Fabricating and touring a custom—and safe—flamebased effect isn't the easiest task. "It was a challenge making a magic effect out of it," Maccabee notes. "We had to resolve the control issues, the interior is tight, and we have to control a total of 13 different quadrants within the vehicle." The project was a perfect fit for the firm, however. "Our goal is to give the customer something they can't get anywhere else. There is pressure on all designers to come up with something unique; we want to be someone they can partner with to create an effect or a gag that is safe and amazing."

A dozen of Strictly FX's proprietary 15W Coral Series RGB lasers also make several appearances. Maccabee notes: "The lasers were programmed by Grant Sellers on Pangolin Beyond software; Jackson Frazier is handling them on the road." They appear during "Fairly Local," "Stressed Out," "Heathens," "Lane Boy," "Pet Cheetah," "My Blood," "Car Radio," and the finale, "Trees."

The effects package also includes Le Maitre MKII low smoke generators, working with the company's G300 smoke machines; four MagicFX Swirl fans; and 12 Magic FX DMX CO2 units that blast out custom-cut confetti. Pyro, in the form of concussion blasts, appears in "Jumpsuit" and "My Pet Cheetah." The downstage is also lined by cryojets that are owned by the band.

### Audio

For sound reinforcement, the band's longtime front-ofhouse audio engineer, Shane Bardiau, is using a Meyer Sound LEO/LYON PA, provided through VER Tour Sound. "It's good for so many reasons," he says, "but, most of all, it's one of the few boxes I've mixed this artist on where I can push it to what I would consider a high SPL and it still doesn't hurt. The main factor for carrying Meyer is the 1100-LFC; I've never heard a sub so controlled in an arena environment. I've got a lot of digital sub frequencies that my mix depends on and the 1100s are not only audible, but they are clean. It's also easy to keep my mix from getting muddy, which is a hard thing to do in a boomy arena."

Bardiau's rig consists of 138 cabinets. "The main hang is 14 Leos over four Lyon Ws a side and the side hang is eight Leos over eight Lyon Ms a side; the 220 hang is 16 Lyon Ws per side. There are six 1100-LFCs flown a side, and fourteen 1100-LFCs on the ground, which are in seven stacks of two in an arc across the front of the stage." Finally, there are eight MINAs and two UPMs for front fills, with two UPJ-1Ps as utility fills. The system drive and optimization are supplied by nine Meyer Galileo GALAXY and two Meyer Galaxy AES processors.

Bardiau runs the show on a DiGiCo SD5; he's been using it for about a year and a half. "It is amazing, and the open architecture is a game-changer," he notes. "The fact that I can put whatever channel strip/fader wherever I want is nice." He's also a fan of the SD5's macros: "I've got a macro for everything! One button to switch between live input or virtual playback, one button to switch from my Waves world to bypassing my inserts and using only the console features in order to compare the differences, and one button to switch between the various vocal mics that we use on stage. I've got alternate inputs setup in case my main inputs die and there's just one button for that—one button to save my snapshot and show file. DiGiCo really has thought of it all."

In terms of plug-ins, Bardiau says, "They're the cherry on top." He's using Waves SoundGrid Extreme Server, two DiGiGrid MGBs, and a network switch. "I switched this up from the last tour, freeing up some CPU on the console. It runs much faster and smoother than having my plug-ins in the desk. With the new way of integrating waves on DiGiCo, it still follows my snapshots and pulls up the plugins when I solo things."

Bardiau makes ample use of plug-ins: "They're on my master bus, parallel drum bus, vocal bus, almost all my drum inputs, piano, bass guitar, ukulele, and playback, which is just about everything. I've got a few that I just can't go without: MaxxVolume [volume leveler] on my vocals has been a game-changer. I really like the API 2500 compressor on my piano, SSL G-Master Buss Compressor on my busses, and, of course, the one plug-in that makes it all fit together is the C6 [multiband compressor]. I actually use all Waves plug-ins, as well as their multi-tracking software called Tracks Live."

Bardiau adds, "The vocal is very important to me; my artist has a very clear message he's trying to portray to the audience and it's very important for it to be understood. I've got my vocals going through the console channel strip using EQ and compressors; then it goes to Waves for C6 and then MaxxVolume, as well as my vocal effects. For the vocal effects, I'm using the Waves H-Series plug-ins." He also has a vocal trick or two up his sleeve: "I'm side-chaining his vocal bus to the master bus C6 on the 1K band so that when he sings, I squash it a little for his vocal to pop out of the mix. It works pretty well."

For those considering a move to the SD5, Bardiau says, "It may look daunting and complicated at first sight, but it's really intuitive once you start pushing buttons. When I made the switch to DiGiCo I didn't do any previous research; I wanted to learn it on my own. I walked into the shop and had it dialed in on my first day of prep."

The microphone package on stage can be described in one word: Shure. Bardiau has a Shure 91A and Beta 52 on the kick, and a combination of a Beta 57 and a SM57 on all the snares. On the toms there are [Beta] 98AMPs and "137s for the hat and ride and KSM32s for overheads," he remarks. For vocals, he's using a Shure KSM9HS. "I chose this mic from day one and it really works for my artist's voice. It's so crisp and you can really understand every



nuance and subtlety in every word." He manages the bass, ukulele, piano and synth all via DIs.

On the B stage is an electronic drum kit and a piano. "For the kit," Bardiau, says, "we took the samples from the record and imported them into the Roland Drum Brain; I'm taking those straight out of the Brain into my console to mix via a [DiGiCo] SD-Mini Rack at the front of house. The piano is a keyboard with a stereo DI. Simple and easy."



Strictly FX provided the stunning confetti effects, made by MagicFX.

Bardiau concludes, "We've really taken this tour to the next level; we've added 10 more trucks making it a 19-truck tour, and we've added a ton of crew, which now puts us at 65-plus touring crew members. There are lots of things moving, lots of fire, confetti and cryo. It's quite the show!" Twenty One Pilot's *Bandito Tour* continues through June.