

AND JUSTIN FOR ALL

Inside the
ever-morphing
design of
Justin Bieber's
Justice Tour

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Left: Bieber, Ebdon says, is on “a Sennheiser 6000 [Digital Wireless System] with a Sennheiser MM 435.” Above: “We have a massive inflatable airplane that Landmark Creations built,” DeMoura says. “They did a really good job with it. Tait built the structure inside it, so that [Bieber] can sit on top of it when it’s in the air.”



Our goal every night with this show is to try to inspire as many people as possible and to give as many positive messages to the world as we can. We know everyone is always going through something, so we wanted to create something that is a visually pleasing, positive pop show that also has positive messaging behind it,” explains Nick DeMoura, principal of The Concept Club and creative director/production designer for Justin Bieber’s *Justice Tour*. “The show is not just something that people can escape from; they can come and be inspired by it.

“I’ve had this design in my computer for over three years,” he adds, “and I’ve been waiting for the right time and right artist to build it for. When I showed this to Justin, he loved it, so we went with it.”

The designer says the production’s layout “is a little different. It’s not a typical wide stage with a runway; the main stage is funneled into the runway. The stage is longer than it is wider. I didn’t want to do a typical runway; Justin likes people on his left and right and likes the energy from them.” Fabricated by TAIT, it is stepped from upstage to downstage and is 63’ wide by 84’ deep. The stage also includes “five 36”-by-36” Tait toaster lifts and one 2.25m-by-8m prop lift,” notes project manager Kevin Donnelly.

The production features “a massive wave of LEDs,” DeMoura says. The set, which can morph into a variety of configurations, features a floor, upstage wall, and ceiling covered with LED panels supplied by PRG. “We purchased [ROE Visual] CB8 LED tiles, the Yes Tech floor LED, Panasonic 4K PTZ cameras, a Ross Ultrix switcher, and a



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variety of 12G video gear,” explains Anthony “Looch” Ciampa, VP sales, music at PRG. The stage panels are “made from a combination of stock and custom Tait Video MagDecks,” Donnelly says. “This uses a special deck frame similar to the traditional MagDeck that receives four 500mm-by-500mm video tiles. The stage can be built with the same speed and precision of a traditional Tait stage while utilizing any 500mm-by-500mm floor tile provided by video vendors.”

The ceiling pieces are moved on the Tait Navigator automation platform. “Three panels of the LED ceiling create stages that fly at all different heights and tilt at different angles,” DeMoura says. The overhead panels are 11' by 43', 11' by 35', and 11' by 23', respectively.

DeMoura says the biggest challenge was screen movement. “[Tait’s] Vince Gallegos programmed all my screens. I rendered all the looks that the stage could have with every song and sent them to him ahead of time.”

But the virtual world does not always reflect the time it takes for a singer or a dancer to get to a certain position for a cue, and more work had to be done on-site. “We had to go through a lot of programming to get the screens to look like they are effortlessly there, on cue, for when [Bieber] needs to get on or get off, or when the dancers need to get to the home position during a transition. Once we got it, it was perfect.” Video content was provided by Possible Productions; it is delivered via a disguise gx 2c

media server, programmed and operated by Kayla Humphries.

For the opening, DeMoura says. “We have a massive inflatable airplane that Landmark Creations built; they did a really good job with it. Tait built the structure inside it, so that [Bieber] can sit on top of it when it’s in the air.” Donnelly adds, “The inflatable plane is flown by a pair of BT200 winches that support the central platform Justin stands on. There are also four additional Tait Smart Winches that support the wings and tail of the inflatable. All are controlled by Navigator, which allows the plane to pitch and roll during the show.”

Lighting

“This was an interesting project because of the size of the video,” explains lighting designer Nick Van Nostrand, of A Real Company. “It’s not a conventional stage where you can hang anything overhead; the entire canopy is video, so you’re pushed off to the side, and you’re also dealing with the PA. We basically decided to make the lighting just an extension of the video. We do have our moments, but I like the fact that we did not make it the focus, and, in some cases, it just disappears. We are lighting up the people, we are still hitting accents, but it’s not as obvious.”

The lighting rig, also provided by PRG, includes the Elation Professional Proteus Maximus. “I wanted something with an LED engine in it for consistency between all

the lights and for maintenance on the road,” Van Nostrand says. “And I wanted something bright [the unit is 50,000 lumens] that would cut through the video. I got back to PRG with that; they said, ‘We really want to invest in IP65 stuff that can work outside as well.’ We don’t need IP65 at all; we’re completely indoors. But they provided the Proteus Maximus because it met their needs and ours; it worked out well for everyone.” The unit features CMY color mixing and variable CTO, an indexable full blackout framing system, six rotating and seven fixed glass gobos, a full animation wheel, dual prisms, dual frost, and a high-speed iris.

Also featured is GLP’s new impression FR10 Bar, which, Van Nostrand says, is “the big brother of the [impression] X4 Bar 20s; it is half as many pixels, but considerably brighter. It’s definitely punchy. We went with those instead of X4s because there is so much video; we wanted something that would cut through, and the X4s just wouldn’t have enough punch.” The unit features RGBW color mixing, full pixel-mapping control, an electronic shutter, and a virtual color wheel with 15 colors and random effects.

On the road, Ciampa says, “The new gear has been holding up pretty good so far. It’s always nice to have new products that don’t break down as much as the older gear. Don’t get me wrong, when you’re dealing with electronics new or old, every so often you’re going to have some issues, especially when it’s being loaded in and out of trucks every day. But, overall, the gear is doing fairly well.”

The rig also includes Ayrton MagicPanel FXs and “a bunch of [GLP] JDC1s. We also have [Vari-Lite] VL2600s, on the downstage truss, to do all the band’s key lighting,” Van Nostrand says, along with “GLP [impression] X4 Bar 20s, which flank the stage on either side, providing key light for the dancers.”

For Bieber’s key light, Van Nostrand says, “We have [PRG] GroundControl out front and in the rear; we also put two GroundControl spots on the floor. They are upside down on shelves on either side at mid-stage. We use them as tracking sidelight for him.” Working with GroundControl are PRG Best Boy HP spots. “They are the only arc fixtures in the entire rig; everything else is LED, which is super-nice,” he adds.





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"Justin and Nick wanted a certain aesthetic for the show, a little edgier," Van Nostrand says. "All of our angles are steep, and the colors are very saturated; that's a stylistic choice, and the angles were chosen keeping in mind what makes him comfortable. It's hard to feel like yourself when you feel like a deer in the headlights. We lit it in such a way so that it's less obvious for him and feels more natural; at the same time, those steep angles gave us the edginess we wanted. It's not perfectly lit like for a magazine or a TV broadcast, but that's what we wanted—a bit bolder and less perfect."

Davey Martinez, the show's lighting director, programmed the show on an MA Lighting grandMA3 with grand MA2 software. "The 3 hardware was strictly a reliability choice," Van Nostrand says. "I think people are 50/50 on whether or not they like to program on the 2 or the 3 but when it comes to going out on the road, the 2s are getting a bit long in the tooth."

"The pandemic has changed a lot of the budget and what is available for tours," Van Nostrand continues. "For

a tour that was designed pre-pandemic, we also had to deal with a lot of things that came up—for example, after the pandemic, a lot of the costs had changed. Now, with things like bussing, getting your hands on equipment when there are shortages, and even people—a lot of people have moved on to other things—the costs have changed across the board."

"It's nice to see the industry coming back from the pandemic full force," Ciampa says, "but it has created this tidal wave of business that has crashed down on us; every vendor is completely slammed. There has been a big shortage of gear and crew trying to keep up with the demand of shows being booked at the same time. Logistically, the challenge of today is managing a touring crew with the concerns of getting COVID, having people on standby to fly out whenever you have someone go down on the crew. Before you know it, you have five to 10 people quarantining in separate cities scattered throughout the country. But we have been maintaining as best we can and keep the tour going on all eight cylinders."



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Effects

The production includes 120 drones from Verity Studios. "We use them once as a transition," DeMoura says. "We create a funnel above a toaster lift, and they light up Justin as he lifts onto the stage. It's a cool transition for getting him on the stage. For the song 'Ghost,' which is one of Justin's biggest hits, they're like little spirits, surrounding him throughout the song and creating some really beautiful looks." The drones, he adds "are super-reliable. The only time they don't work, it's because of human error. I would recommend them forever."

Lasers and pyro from Pyrotecnico FX are scattered throughout the show. "We have eight FX Series Laser 25 RGBY KVANT Beam Brush high-power lasers and eight Kvant 25 RGB high-power lasers on a Pyrotecnico brand FX integrated laser control and safety network," explains Rocco Vitale, EVP of SFX at Pyrotecnico. Laser programming was done by Jesse Parker on Pangolin Beyond software; pyro programming was handled by Ron Bleggi.

Also featured are Evolution Pyrotechnics products, used

with "a Pyrodigital firing system with 2FC-A controllers," Vitale says. DeMoura adds, "Anyone, the finale, is a great pop-rock record. When you hear that song live, you think, that song needs pyro. Justin does a march with the pyro, and it's a great sign-off."

Audio

"We are using the Clair Global CO-12, the Cohesion series," explains front-of-house sound engineer Jim Ebdon. "My system engineer and audio crew chief for this tour is Andrew Dowling. Andrew is an extremely experienced system engineer and I'm lucky to have him. He and I have worked on one other tour together and he came up with an impressive design for this show."

This is Ebdon's first time on tour with the Cohesion loudspeaker system. "I'm really impressed with the low end, the sub bass; it's very directional without not waffling around the room. It translates well with the low-frequency parts in Bieber's music. The coverage is as good as anything else, and I'm really pleased with it."



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The main PA is comprised of "16 Clair CO-12s. The sides are 16 CO-10s and the rear are 12 CO-10s, all per side," explains Dowling. There are also "six Clair CP-218s

in cardioid configuration flown, six Clair CP-218s in end fire on the ground, and there are four Clair CO-8s, all per side." Amplification is via Lab Gruppen PLM 20K44.



At the front of house, Ebdon is on “a Solid State Logic L650. It’s the first one in the country; they got it for me. I’ve been a Solid State Logic user for about seven years

now; I’ll use anything, but I just prefer this console. I love the sound of the mix buss; it’s a very open-sounding console and very analog-sounding. I always say it’s like an analog desk with a save button.”

The console features 312 input channels, 96 stem groups, 32 masters, 96 effects slots, 48 VCAs, and six coax/two optical MADi ports. Ebdon notes, “I get great support from SSL, and, in seven years, I’ve never had a console go down—or even one that has failed in any way.”

“Everyone is familiar with DiGiCo, they’re very easy, and anyone can walk up and know how they work,” Ebdon remarks. “There is a learning curve to an SSL console, and you have to get over the hurdle. To me, it is definitely worth listening to. Forget all your plug-ins, just listen to what is coming through the console. Listen to how the EQ works, how the compressors work, and take it from there.

“I have two Universal Audio UAD-2 Live racks, and I really just use emulations of old things I know,” Ebdon continues. For hardware, he has a TUBE-TECH CL1B, a Teletronix LA-2A for the vocal chain, and an onboard De-Esser, an API 2500, two Bricasti M7s, and a Neve 504I. “I double Justin’s vocal chain in the UAD, so I have the Tube-Tech and an LA2 on Justin’s vocal.” Ebdon also uses the SSL Fusion analog master processor. “There are different elements to it,” he says. “It’s something I love and helps smooth the overall digital sound.” The Fusion includes Vintage Drive, a non-linear harmonic enhancement circuit; Violet EQ, a minimum phase-shift; two-band shelving EQ; a high-frequency compressor; and a mic compressor with wet/dry control, and more.

As for microphones: “I have [Shure] SM7s on two of the snares. We have SE [V Beat] large diaphragm tom mics; the V Kick is on the kick. I have Austrian Audio 818s for overheads; they are fantastic overhead microphones. I highly recommend them.” The microphone package also includes models from AKG, Neumann, and Sennheiser.

Bieber, Ebdon says, is on “a Sennheiser 6000 [Digital Wireless System] with a Sennheiser MM 435. I sort of inherited it; Jim Roach, our monitor mixer, likes it and has great results, so I went with it. When Bieber cups the microphone, it doesn’t sound too weird. I suppose it’s the most forgiving capsule for that particular mic technique.”

Ebdon concludes, “We are very much a team, and this standard of audio quality could not be achieved without that close teamwork; the standard of crew from Clair is exceptional.” The Bieber audio crew also includes monitor engineer Jim Roach, RF tech Erick Ruiz, monitor tech Steven Snider, stage patch Jorden Howard, and PA techs John Muesel, Bobby Taylor, and Kyle Busch.

Justin Bieber’s *Justice Tour* is in the US until early July. 📶