

Epic Proportions

Blacklight nights at Nocturnal Wonderland 2016

By: Sharon Stancavage

In the world of EDM festivals, Insomniac, founded and lead by Pasquale Rotella, is a force to be reckoned with. The firm, based in Los Angeles since 1993, produces some of the most extraordinary EDM events around the world, including Electric Daisy Carnival, Dreamstate, and Life Is Beautiful. Insomniac is also the producer of Nocturnal Wonderland, a three-day event that, this year, was host to Bassnectar, Sacha Robotti, Hot Since 82, Knife Party, Evil Activities, and more on five separate stages. It took place at the San Manuel Amphitheater and Grounds, located in San Bernardino, California in early September.

"When it comes to electronic dance music festivals, they're unique in their own way, but, at the same time, the philosophy is the same: We're always trying to deliver something different. There's not always a specific design philosophy, outside of 'Let's give the customer a new experience'," explains Stephen Lieberman, of SJ Lighting, headquartered in Westlake Village, California. This year, Lieberman did the production and lighting design for four of the stages; he has worked with Insomniac for 16 years, and has literally hundreds of stage designs under his belt. He explains, "They give me the latitude as a designer to do what I want; obviously, we still need to get them approved, but they're not micromanaging what we're doing on a day-to-day basis."

This year, the creative team at Insomniac put a twist on the Nocturnal Wonderland festival: UV lighting. Lieberman explains, "We tried to theme this as a blacklight festival. All around the site and for all the stages, we rented hundreds of UV fixtures and created kind of a UV experience." These included tunnels, he adds: "All the performers and some of our scenic elements had UV paint on them."

The UV fixtures on site—as

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118 Elation Professional Colour Chorus 72s provided both lighting and video at the Wolves' Den stage.

opposed to those onstage—came from a variety of instruments, including units from Altman and Wildfire, from PRG's Los Angeles office, 4Wall Entertainment Lighting's office in Los Angeles, Felix Lighting [based in La Mirada, California], and Visions Lighting [located in Brea, California]. Lieberman says, "We had Chauvet [Professional] LEDs, we had Altman LEDs, we had Wildfire LEDs; we had anything we could get our hands on. We literally had hundreds of fixtures on the site. The moving lights have their congo UV filters, but that's not true UV; however, we can trick it a little bit: On the LED fixtures, we'll dial in congo or indigo and then I'll push a little bit more red into it to get it more glow, to make it look more UV instead of true blue."

There were MA Lighting grandMA2 consoles, as well as programmers/lighting directors, for every stage. Lieberman says, "If you get into a jam with a grandMA console, there's always someone out there who is available to assist you, as opposed to other consoles that might be very clever desks but have fewer resources." Some artists brought in their own shows and lighting directors; others made use of the lighting director provided through SJ Lighting.

Each stage also has its own video control. "Our VJ has his own computer with his software; the software is typically Resolume or Arena," Lieberman says. "When guest artists come in, they'll typically bring a VJ who plugs in and runs their own equipment." Headliners usually bring in a VJ, as well as an LD; others might arrive with a VJ only. "The guest artist simply plugs in, and then they run their own equipment." Lieberman adds. "We'll deliver them content [provided by Insomniac] related to the show, so they have things for transitions and changeovers; also, any branding we'll give to them."

Speaking about the video, Lieberman says, "We're doing basically a glorified one-off, and I'm renting so much product for these things that I don't say, 'I have to have the 6mm X5 tiles.' I don't get that forensic into the equipment. I'd love to have six mil, but it can't be less than ten. Then we send it out and see what we get back."

"With all of our vendors, we're their biggest client," he adds. "We rent the most moving lights and video tiles, because we're doing multiple stages. Anything west of the Mississippi, we're renting it."

Wolves' Den

"There are some things for me, philosophically, that need to get done for a main stage," Lieberman says. "It needs to have large-format video and large-format lighting. I want the stage to look monolithic, with epic proportions. When the audience stands in front of it, it needs to be proportional to up to 60,000 attendees; I want you to come in front of this monolithic stage where you have to tilt your head back to see the top of it. I'm not trying to create something intimate." At 250' wide x 80' tall, the Wolves' Den, the main stage, fit the bill.

The design was based around 118 Elation Professional Colour Chorus 72s, which could be used for both lighting and video. Lieberman says, "We tried to push and pull the perspective, so that we could go wide, but also give a lot

Fabricated by StageCo, the Wolves' Den was an imposing 250' wide by 80' tall.

of depth. We wanted large-format video, so it's 250' wide of video, but we're trying to create these stacked perspective layers and, on top of that, squeeze all the lighting in."

When the Colour Chorus units were on, the feel was linear and architectural; when they were off, the stage looked completely different. Lieberman says, "I like to highlight all the geometry of the space, and then design it and hide it in plain sight, so that when it's off you don't see it. When it's on, it gives you all a very delineated detail of the structure."

For the lighting rig, Lieberman says, "We had LED bars, we had strobes [44 Martin by Harman Atomic 3000s], we had blinders [34 Elation CUEPIX Blinder WW2s] and moving lights, all proportioned evenly throughout the space. When we're laying fixtures out—and, obviously, we using CAD and other modeling programs, and everything is on layers—I'll have the guys in the office turn each layer on, one at a time, and if it's not a full rig, just by that one fixture type, they've done something wrong. This way, no matter what we're doing, when we want to layer it, it layers evenly; it's a very clean, very fluid layout."

The moving light package for the main stage, provided by Las Vegas-based AG Production Services, included 32 Coemar Infinity Wash XLs and 10 Elements KR-10s. "We had [50] Clay Paky Mythos and [76] Sharpys as our workhorses," the designer adds. AG also provided the center 60'-wide LED wall, shaped like an inverted pyramid.

During the show, Lieberman served as lighting director at the Wolves' Den stage. "Who wants to let someone else have all the fun after you've put together a big beast like that?" he asks. "When it comes to setting up your rig and programming it, do you take an LED strip that's a 4' or 6' strip and do you put it in fifty-billion-channel mode, or do you put it into eight-channel mode? When you have a 250'-wide stage, is the audience really going to notice when you've chased pixels on 6" increments or 2' increments? Is it really worth it to do things like that? Are you going to get bang for your buck out of that? Or are you going to be able to bang it out quicker, get up faster, use half the cable, be a little bit more efficient with your processing, and get the show done?" Nocturnal Wonderland took place on a Friday-through-Sunday schedule. Lieberman had the stage up and programmed by Wednesday. He notes, "Because we were done so early, we set out a patch with a 3-D file program, so if you wanted to program before you got there, you could. We give each guy a programming slot—typically, about two hours on the rig to just dial their stuff in. Most guys who are touring with an act aren't coming in programming from scratch—they have a show file, and they're merging their information into our show file and updating their position presets."

Construction of the Wolves' Den—including the lighting—took place off-site. Lieberman says, "There was a lot of back and forth with StageCo [Staging Group, the scenic fabricator] in regard to what the infrastructure was going to be on the main stage and how we would support the monster video wall. We needed to bring in some StageCo towers. We also had to figure out how my lighting vendor was going to get the equipment in there. In the end, some of the budget was allocated to send stagehands to the AG shop in Las Vegas to prep and build the rig there, so we

could flatbed it in, fully assembled and cabled, and crane it into place. That way, we didn't have to send guys up into the rig and hang fixtures individually."

The Wolves' Den was awash in effects, provided by the Los Angeles office of Pyrotecnico FX; the firm handles clients throughout the US. Lieberman says, "I've been using Pyrotecnico for years; their work ethic is fantastic and their products are amazing." The effects on three of the Nocturnal Wonderland stages were handled by Pyrotecnico's creative director, Rocco Vitale. "We had six Pyrotecnico Stadium Shot streamer cannons on the stage and ten CO2 jets, with 12 Isopar flame units on the roof and ten on the stage. Anytime you have that scale of a stage and you're able to put that many flame units on it and that many stadium shots, you can really end up with some unique visuals. For all our DMX-based units, we use [MA Lighting] Dot2s. We invested heavily in them last year, and our technicians in the field really love them, as do our programmers. It's turned out to be a very good system for us to use out in the field."

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Six pyro positions were contained on the roof, with ten more on deck. "We use multiple manufacturers in the US for our material, and each has its own little nuances in regards to particular products," Vitale says. "From the roof of the stage, we used our comet mine combinations, which are really two effects in one." The pyro aspect of the event relied heavily on comets, gerbs, and mines.

The Martin Audio MLA PA used for the Wolves' Den was provided by 3G Productions, which has offices in Los Angeles and Las Vegas. "Martin Audio MLA has become our go-to system when we need the sound to be loud and fat in the audience area and quiet everywhere else," notes 3G system engineer Manny Perez.

The MLA system included the main and side hangs, as well as a significant quantity of MLX subs ground-stacked in front of the stage; there was also a sub arc configuration to control noise beyond the audience area. "The amphitheater is in a valley and if you're not careful, the sound can travel through it and over the hills into surrounding neighborhoods," Perez notes. "We used the MLA's control capability to create a hard-avoid area beyond the audience area over 500' away, eliminating issues with off-site noise complaints, which can be a problem with EDM shows." There were also Martin DD12 cabinets used for center front fill, as well as stacks of MLA compact cabinets used off center on either side of the stage for center fill.

Labyrinth

"On stage two, the Labyrinth, Insomniac brought in a scenic stage designer [Gerard Minikawa, of Bamboo DNA], who designed everything out of bamboo, which was really cool," explains Lieberman. "We had a lot of conference calls with their team; we showed them where we needed to put lights to make sure they were accommodated, and he basically put infrastructure into the bamboo to support our equipment. There was a lot of coordination on this stage."

The design brief was straightforward for Lieberman and his team. He says, "For us, the first and foremost detail—and my directive to the guys in my office—was to make sure that it was illuminated. I didn't want any audience member to be uncertain about what this environment was. We spent a lot of time on the details of this stage, making sure that there were uplights and scenic lights everywhere and that the stage popped; it was also covered in UV paint to go with the broad scope of the show's theme."

The stage was something of a hybrid, combining bamboo and traditional staging materials. Lieberman says, "All the structures were bamboo [there was the main stage and several satellite structures], but there was hardware holding it together." The stage also included an arch with a custom fabricated sign. Lieberman adds, "We needed to come up with lighting for the sign, and that's how we came up with the overhung pipe with an LED in front of it."

The 40'-wide Labyrinth stage was home to electronic dance music, and hosted Big Gigantic, TroyBoi, Black Tiger Sex Machine, Chromeo, and more. Within the bamboo stage, Lieberman says, "We had the performance box where we had to put on a show. So we hung a truss circle with video in it, we put a muslin in back, and had a nice heavy stage package as well. That way, we could get those big looks, and give these kids the big show

The Labyrinth stage combined bamboo scenic elements with UV lighting and video.

that they want."

The lighting and video rigs for Labyrinth were provided by Visions Lighting; Sean Guarino was the lighting director. Lieberman notes, "The workhorse on this stage was the Elation Platinum BX," 26 of which were located on the arch, around the video screen, and across the front of the stage. The rig also included 38 Robe BMFL Blades, eight Martin by Harman MAC Profile Vipers, 18 Elation Professional Lumina Strips, 50 Elation SixPAR 300s, and 39 James Thomas Engineering PixelLine 1044s.

"I'm really fond of Elation's new Protron 3K [LED strobe], which has a similar form factor to the Martin Atomic and is LED," Lieberman says. "It looks great. It's really bright and it behaves just like an Atomic. You can mix and match it into an Atomic rig, and it doesn't thermal out; it probably takes 1/10 of the power consumption that an Atomic would." Twenty Elation Proton 3Ks were featured on the Labyrinth stage.

The Labyrinth stage had its share of effects. "We had five isopar flame units on the top of the stage; the units were pushed upstage to get the required safety distances that were needed to be away from the bamboo," explains Vitale. There were pyro positions backstage for comets and mines, as well as ten CO2 jets on stage.

Sunken Garden

The 98'-wide Sunken Garden stage was devoted to house and dark techno music. "We were trying to recreate a mid-'90s-era nightclub with no video in it," Lieberman says. "Back in the '90s, there weren't huge LED walls in every nightclub. The DJ wasn't on the stage, the DJ was in a DJ booth with a closet and window that looked out onto the dance floor. He wasn't front and center; front and center was dance floor and the show. We were really trying to create that, except that we put the DJ on the stage, because that's what a festival environment is."

While the Wolves' Den and Labyrinth stages were outdoors, the Sunken Garden was located inside a king pole tent, a traditional circus-type tent, which is a bit of a departure for Nocturnal Wonderland. The tents were sourced directly by Insomniac. "This year, at Nocturnal, it was the best I've seen this whole festival site look,

because we brought in king pole tents, which were exactly what you would image a carnival would look like," Lieberman says. "ClearSpan tents, as functional as they are, make me feel like I'm going to a wedding outdoors. But you bring in these circus tents, these colorful skins with huge poles, and that's a festival environment." He adds, "What's great about these tents is that they're structural. They can handle 10,000lb per pole."

The tent structure enabled Lieberman and his team to hang a massive '90s-era mirrorball in the center of the space, over the audience. To hang the mirrorball, which weighed 1,500lb, he says, "We brought in 30" super truss, spanned it from leg to leg, and that worked great; the king pole tents can easily handle that kind of infrastructure."

The overall feel of the space was low-tech and analog. "It was reminiscent of how things used to be, not like this whole technology arms race that everybody is involved in: How many LED tiles can I put onto a stage, how many moving lights can I use," Lieberman adds.

This retro look was accomplished using state-of-the-art gear. The production designer explains, "It was a very pixelated design. The whole front of stage was comprised of 80 Elation CUEPIX Panels. We also had Elation ACL 360 Bars [48 of them], Elation ACL 360 Matrix units [28 in total], and 88 [Martin by Harman] Mac Auras. We ran MADRIX software to pixelate all of it and create some dynamic LED effects. Essentially, we used the tools available to us today to create an eight-bit display of the stage." Bobby Grey was the lighting director for the Sunken Garden; the lighting gear was provided by Felix Lighting.

"The Sunken Garden was in a tent structure, so we had to stay away from any pyro or fire; we used CO2 jets," Vitale says. "I think CO2 always works, and it was the right fit for that particular environment." Eight CO2 jets were placed across the front of the Sunken Garden stage.

Audio for the Sunken Garden stage was provided by Paramount, California-based Sound Factory Systems. The system was designed by Jose "Wetdoe" Peregrina, who also served as the stage's sound engineer. He says, "We used 16 L-Acoustic K-2s in all, powered by L-Acoustic LA8 amps, and 24 Birchwerks dual 18 subs powered by

The Sunken Garden stage was housed in a king pole tent, which gave the site a carnival-esque feeling.

A 1,500lb mirror ball helped give the Sunken Garden a retro '90's feel.

LabGruppen fp14000 amps. The Birchwerks subs are my personal favorite subs—they have so much power and provide so much detail."

At the front of house was a DiGiCo SD9 console. Peregrina explains, "This is a very powerful surface to work on, it's easy to use, has exceptional dynamics, and the surface is bar none. DiGiCo is our preferred console of choice." The only outboard gear with Peregrina at the front of house was an Audiocore XTA DP448 processor used for EQ and crossover for the Birchwerks subs. The microphone package was simple: a two pack of Shure UHF-R4Ds with SM58 capsules.

"On this stage, our biggest challenge was the dB level: Trying to tame a lion in a small cage and still have one of the best sounding-system was not an easy task," says Peregrina. The physical construction of the tent was another issue that had to be confronted. "The focusing of the arrays in a plastic environment made the stage more difficult to work with as well," he notes.

"Martin Audio MLA has become our go-to system when we need the sound to be loud and fat in the audience area and quiet everywhere else. The amphitheater is in a valley and if you're not careful, the sound can travel through it and over the hills into surrounding neighborhoods. We used the MLA's control capability to create a hard-avoid area beyond the audience area over 500' away, eliminating issues with off-site noise complaints, which can be a problem with EDM shows." — Perez

Temple Noctem

"The musical genre at Temple Noctem was something called hardstyle; it's also called gabber or side trance," Lieberman says. "I would say on slow end, it's 140 to 150 beats a minute and they take it all the way up to 200." The Temple Noctem stage was open on Saturday and Sunday only. "For those two days, the place was packed," Lieberman says. It, too, was housed inside a king pole tent.

"The design aesthetic is one word: aggressive. Because the music is so aggressive, the show needs to reflect

Above: The Temple Noctem stage had an aggressive feel, much like the hardstyle music performed there. Below: The gas mask featured on the set is a veteran of other Insomniac productions.

that," the designer adds. The visual centerpiece was a massive gas mask that has been featured in other Insomniac productions, he notes: "We have a lot of set pieces that we recycle. Insomniac spends a lot of money on them, so it makes sense for us to use them and repurpose them for different shows." The gas mask was designed by Insomniac's art department and is stored by SJ Lighting when not in use.

For this intense form of music, "the lighting rig was very strobe-heavy," Lieberman says. "It was a very in-your-face design." Thus there were 20 Elation Protron LED strobes in the rig. The designer adds, "I'm not a big believer in color-changing strobes; to me that's a strobing LED that changes colors. A strobe light to me is white. I have plenty of other things I can strobe in color."

The rig also included eight Martin by Harman Mac Auras, 12 Elation Professional Platinum FLX units, 30 Elation ELED QW Strips, and 10 Elation CUEPIX Blinder WW2s; the gear was provided by Visions Lighting. Lieberman adds, "There were no guest LDs in there, so I had one of my guys in there—Max Robin—and he sat in front of the desk from doors open until doors close."

Attendance at Nocturnal Wonderland topped 67,100 over three days. Insomniac's next festival in Southern California is Dreamstate at the end of this month. Lieberman is doing the production and lighting design for the event.

The Upside-Down House

The fourth stage at Insomniac's Nocturnal Wonderland premiered earlier this year, at the firm's Beyond Wonderland festival. Insomniac had specific ideas regarding this Seussian space. "Pasquale [Rotella, CEO of Insomniac Events] wanted the Upside-Down House to be fun and organic, and to have a house-party, old-school-rave feeling for 500 — 700 people," explains Stephen Mitchell, of Los Angeles-based Micciolo Productions. "He also requested that a few parts of the house accommodate dancers. We had to work in various dance platforms, making sure they were accessible to performers wearing high heels, big costumes, and wigs." He adds, "It was originally called the Upside Down Room, but we realized that a giant upside-down house was more fitting to the size and scale of a massive outdoor festival. A house party and an upside-down house make a lot of sense."

The 36'-tall and 50'-wide stage featured several different performance areas: a DJ area, front porch, and go-go hallway located stage left of the front porch. "It has a full scaffolding infrastructure. Our wood panels are 4' x 10' with ¾" plywood, and then we attach them with grid clamps," explains Mitchell. The Upside-Down House was fabricated by Bruce Rosier at Wolf Wood Studio [headquartered in Los Angeles], while the scaffolding structure was provided by Mike Hellyar, of South El Monte, California-based G&C Event Productions.

"For Nocturnal, the theme was blacklight," Mitchell says. With something like that, you don't half-ass it, you just go all in. This isn't your bedroom; this is a stage at an electronic music festival, so you go all in and over the top with it." The designer was initially apprehensive regarding the UV concept. "The UV really accentuated the trim and made the broken foundation at the top appear to be floating and more stratified." However, he adds, "The UV really helped execute the overall look of the house, and it turned out better than any of us could have imagined."

"We used Rosco paint [Vivid FX] on all the trim of the house, all the roof lines, window trim, window panes, and DJ booth," says Mitchell. The Rosco colors were yellow, light green, forest green, red, blue, and pink. "We also used Wildfire Clear-Color polyurethane top coat on the shingles, the walls of the front porch, and interior walls of the go-go dancer hallway. That paint allows the normal façade paint to show through it and only goes UV when you turn on the UV lighting."

One of the biggest challenges for Mitchell and his design partner, Ben Schearn, was simple communication in regards to the structure. "There's the roof of front porch, which is pointed downwards and upside-down, but the floor of the porch has really become the roof, so if you say the roof of the front porch, what are you really talking about? It was fun, but it was hard finding the right words at times during the build," Mitchell admits.

Lighting for Upside-Down House was designed by Michael Keeling, VP of entertainment at Los Angeles based Seibo. "I had never done one of these EDM shows before and had always been intrigued by the massive stages and the amount of technology involved," he says. "The design itself is a quirky one, because there are so many angles and variable height positions."

"Michael really took the UV challenge and ran with it," Mitchell says. "He spent a lot of time on the photometrics of various blacklight fixtures weeks before the show and made sure we had optimal coverage on every surface."

Keeling had two UV workhorses; the first was the Double Kino Flo with UV tubes, of which there were 22 on site. He explains, "I didn't want to light from below, because you had so many kids there and UV wouldn't carry. Literally every angle on the set had 4' double tubes of Kino Flos."

Next were 12 Zylight F8-B UV Fresnels with manually collapsible focusing systems that takes each unit down to a mere 4" deep. The unit is IP54-rated, features clear Schott Glass optics, and uses Neutrik connectors for all DMX and power connections. Keeling adds, "It's a replacement for a [Mole-Richardson] Baby 2K Fresnel. I like the compactness of it, as well as the fact that it's an LED source, versatile and lightweight; a normal Fresnel is 45lb, but this unit is 9lb." The designer also used six Wildfire 4' two-lamp T-12 Effects Master Series fixtures.

Keeling adds, "The UV was a scary proposition for me. The transmission of UV drops drastically after 20'. Well, my throw from stage left to stage right was 60'. Even though I did downlight on everything with the Kino Flos, I knew they would only travel half of the 30'."

"Ultimately, he says, "I used the Zylights on top of the left and right front-of-house towers to display across the set." Also on the towers were Elation Professional SixPAR

100IP RGBWA-UV units, Martin by Harman MAC Viper Profiles, Clay Paky Sharpys, and a single Philips Vari*Lite VL4000 Spot. Keeling adds, “We also projected bold gobo patterns on the front of the house with the Vipers.”

The lighting rig on the house included more Elation SixPAR 100IPs for the vertical corners, Chroma-Q Color Force LED battens on the floor, as well as SGM Q-7 strobes located behind the windows in the structure. “I decided to put half of the look in UV, but I needed to some great wiggly lamps up there as well; I had six Sharpys in the rig, and added six Sharpys to backlight through the scenic lattice work,” Keeling says. The stage was also home to six Barco High End Systems F-100 fog generators and eight Reel-EFX DF 50 diffusion hazers. Seibo, LLC was the lighting contractor and subcontracted San Fernando California-based Acey Decy Equipment Company to provide the lighting gear for the Upside-Down House.

Programming was done by Geoffrey Galper on an MA Lighting grandMA2 full-size console; Galper has worked with Keeling in the past. “I gave Jeffrey some latitude and let him take the looks and the chases and the colors and have some fun with it,” Keeling says “Overall, though, I wanted to create an engaging, dance-friendly, and music-enhanced design environment, including bold saturated scenes at time, and a lot of eye candy chases with multiple lights and strobing effects.”

Sound Factory Systems, headquartered in Paramount, California, provided audio gear for the Upside-Down House. “The main PA was a total of 28 speakers: 12 L-Acoustics dV-DOSC cabinets, and 16 L-Acoustics SB28 subs. We also had four L-Acoustic X15 HiQs as fills. Everything was powered by L-Acoustics LA8 amps,” explains sound designer Jose “Wetdoe” Peregrina. The mains and subs were inside each of Upside-Down Outhouse towers while the fills were located under the DJ booth. “This was really the only possible place for them,” Peregrina says. “The entire look of this was based around not seeing the PA and there was no other place for it to go.”

At the front of house was a DiGiCo SD11 console, with no outboard gear. “We chose this console for its powerful platform and ease of use; it’s just a great surface to work with,” says the sound designer. A two-pack of Shure UHF-R4D wireless systems with SM58 caps completed the audio package.

In the end, Mitchell says, “Insomniac is a really inspiring client to have; they push the boundaries of production in ways that no one else does and they encourage me to bring my own ideas and concepts to the table. It’s really fun working with a client who doesn’t have predetermined ideas of footprints, or this or that; they want to do the best, and they’re into taking all of their teams input.”

—Sharon Stancavage