Underwater Wonderland:
Scenery and Video for a Top EDM Event

Insomniac, the Los Angeles-based firm founded and led by Pasquale Rotella, annually puts on a full schedule of EDM festivals in US. Heather Shaw, of Vita Motus Design Studio, says, “Insomniac consistently sets the production bar very high; they look for designers to push the creative limits. That’s something we’re always aware of when we’re putting together a design for them.” Shaw and her team have worked on several Insomniac events in the past, for example designing the main stage [the Queen’s Domain] for this year’s Beyond Wonderland. “EDM is a music culture that is kind of demanding,” she says. “Everything is a little bit otherworldly and has to be different and special; the audience has extremely high expectations.”

Beyond Wonderland took place in San Bernardino, California in March; the extensive lineup included Sander Van Doorn, Diplo, GTA, and Yellow Claw. Shaw says, “Beyond Wonderland is very Alice in Wonderland-inspired,” adding that this year’s theme, “The Endless Sea,” refers to the scene in which Alice cries enough tears to create an ocean. “This year, we created more of a digital scenic, instead of fabricating sculptural pieces.” She used soft goods in combination with projection and a LED wall to create a unique, underwater on-stage environment.

For the Queen’s Domain, Shaw explains, “We had originally designed big scenic fabric tears that would come off the upstage LED wall. The idea was that the eyes would cry media and the media would envelop the whole room, as if it was underwater.” As the design progressed, the layers of fabric were draped dramatically over the audience inside the king pole tent. Shaw and her team turned to Rose Brand for a blue sharkstooth scrim to create a ceiling over the audience. Joshua Alemany, Rose Brand director of products, explains, “Originally, it was going to be a sewn scrim that was 98’ x 240’ and it would have been the largest single piece of scrim we think that Rose Brand has ever manufactured.” However, for ease of installation, it was divided into four pieces and assembled on site. “We tried to make the sharkstooth scrim as unassuming as possible, so you really wouldn’t see it until there was media on it,” explains Shaw.

To project on the sharkstooth scrim, Shaw used twelve 20K Barco HDX-W20-FLEX and four 30K Barco W6 HDFW 30 FLEX projectors working with one d3 Technologies 4x4 media server. “There were projectors mounted on vertical truss,” Shaw says. “They were about 12’ above the fabric, shooting down. The projectors created the below-the-sea look. The intention was for the ceiling to feel like the ocean floor with media.” In most areas, the space between the audience and the sharkstooth scrim was approximately 22’. “The sharkstooth scrim was static, but the wind would come in every once and a while and blow it around.”

As the design progressed, Shaw and her team decided to bring a bit of magic to the underwater realm. Alemany says, “Heather contacted Rose Brand with some very loose specification for the illusions and lighting gags that she wanted to create. After hearing her ideas and looking through her concept drawings, we realized our new Nebula Net would be the perfect solution. We didn’t even have samples to send her yet, so we described exactly what it would do. Heather made her decision virtually sight unseen, based solely on the magical effect it can create.”
Nebula Net is a fabric-based projection surface being released this month. “It’s a very fine-weave netting treated with a proprietary coating, which transforms it into a high-gain projection surface,” Alemany says. “When stretched taut in front of the stage, the fine thread and the openness of the weave make it invisible to the eye. Then when you hit it with light or a projection, the image appears out of nowhere.” Shaw placed the Nebula Net downstage, between the audience and DJ booth, to create a type of holographic layer. “The ceiling of scrim and layer of net in front would play as different layers of the ocean,” she says.

When working with Nebula, Alemany says, “Typically, you want content that shows your subject floating in black space—so that when it’s projected, your black space doesn’t illuminate the net; the only thing that reflects back is the image in your video or still photo. In the case of Beyond Wonderland, the video projects undersea elements like swimming jellyfish, mermaids, and bubbles.”

The 22'-high by 82'-wide Nebula Net was up to Shaw’s undersea challenge, Alemany says: “We had this invisible surface between the DJ booth and the audience that was completely unnoticed until their gorgeous video content was turned on; then we had this fantastical environment that appeared out of nowhere and framed the stage with these undersea elements. In terms of what Nebula is intended to do—the way it was used and the content her team was able to create—it was exactly what Heather envisioned.”

Four Barco 30 Barco HDF-W30-FLEX projectors were used on the Nebula screen; behind it was a 31'-tall by 100'-wide Screenworks’ proprietary X-10T ten-millimeter LED wall. Shaw reports, “We would play back and forth between the Nebula Net and the LED wall, so there was a play between what is brighter at certain moments, which was kind of exciting.”

Screenworks also provided one long -ens Sony HXC-100 with 100x lens and two Panasonic AW-HE130 PTZ cameras IMAG; they were used with the Rose Brand Nebula layer. Shaw explains, “We did shoot IMAG and project it back onto the back media [LED] wall, and sometimes it would pop it back and forth between the holo [holographic] layer and the LED wall, so it would play on both surfaces.”

The design itself was also transformational. “The event started at five, so it had some daytime hours, which were predominantly LED. Then, as it got darker, we started to unleash the other layers that were there,” Shaw says. Confetti and cryo, provided by Pyrotecnico FX, based in New Castle, Pennsylvania] were part of the experience, as well as lasers provided by an undisclosed firm.

The next Insomniac event is Dreamstate San Francisco, at the end of this month. —Sharon Stancavage