

Creating distinctive looks for NBC's World of Dance

By: Sharon Stancavage





hen World of Dance premiered on NBC in May 2017, "the executives wanted it to look different from other dance shows," explains scenic design Florian Wieder, of Wieder Design LLC. "NBC was looking for an iconic, more physical environment; [the film] Fight Club was one of the references. I tried to turn this information into something as unique as possible-something that would become the signature look for the show and feels like 'the home' of World of Dance."

For the stage, a 360° configuration was the way to go, the designer says. "The idea was to create a circular room that feels tight and intimate; on the other hand, it's a prime-time show that can't feel small. I decided to go as high as possible to get the scale it needs. The same goes for the performance area; it had to be big enough for the dancers, but I wanted to make sure that they don't look lost if there are fewer people performing." The main stage circle, which is 35' in diameter with a camera track at 33' diameter, was fabricated by Scenic Express.

"On one hand," Wieder says, "the concept was to create a real environment with less video. On the other hand, this show needs a lot of variety for individual performances. I tried to find the right balance of scenic and video. The header LED is a 7.5mm ROE [Visual] product, while the surround LED around the entire set is a 2.9mm Absen product. The stage floor is a Zircon 7mm glass product, and, finally, the judge's desk was a Unilumin 2.5mm product. We also have Martin [by Harman] Sceptrons sprinkled around the set. PRG/VER has provided the LED for the last few seasons.

"Getting the wireless rail cam embedded into the stage was a bit of

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a challenge," the designer says. "Also, blacking out the ceiling wasn't easy—especially during installation—because the beams [in the studio] are wood. The 360° atmosphere required a lot of planning in terms of camera placement. I had to make sure cameras weren't seen by other cameras. Alex Rudzinski, the director, was involved in the development process from the beginning. His expertise helped to make it work. A circular room—especially when it's a 360° concept—is extremely difficult to shoot. Of course, there is the judges' desk as a landmark, giving you some orientation in the room. To make it a bit more understandable, I created a clearly visible entrance for the talent."

Numerous ancillary areas were designed by James Connelly, of JP Connelly Production Design. He says, "This season was re-envisioned and broken out in its format to include surprise auditions, callbacks, and a round called duels, in which dance groups face off against each other to make it to the final performance stage. That said, we had to find a warehouse with enough room that could control the surprise so that when contestants showed up,

they thought they were going to another casting callback. We wanted something that looked artistic, authentic, and rough but, at the same time, didn't reveal too much of the production footprint and also had high camera positions hidden in the stage."

In the warehouse, Connelly says, "We had to hide all the cameras, and, as it turns out, the ceiling could not have anything attached to it. So, we constructed a fake ceiling, covered with scenic wood to match the wood on-site. The windows had to be treated with Neutral Density, and we had to add old-looking mullions to some of them. We had to build in additional walls and wall finishes to enclose the space and provide a backstage area." Scenic fabrication was by Scenic Express; the mullions were graphics provided by Trio Entertainment Services Group. "We have some platforms for the audience in the second round of duels," Connelly says. "They are provided by All Access [Staging and Productions] as well as the camera decks." The dance floor was fabricated in-house. "It's linoleum," Connelly says, "with a woodgrain pattern, and underneath that is



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some hardboard and then a carpet cushion, I think it's 1/4" and then a subfloor. Dancers are on their feet every day, so [the floor] needs to be very particular.

"Behind the windows and judges, as well as embedded in the architecture behind the performers, are 25' x 10' LED screens," Connelly continues. At first, they project an image of brick walls, but, once the dancers go into in their act, they switch to a more exciting performance look. "The walls are ROE Visual Black Onyx 3 [3.47mm, behind the dancers] and Everbrighten BR5C [5mm, behind the judges] and were provided by PRG.

Connelly says, "As always, we showed the executives a lot of different options. We explored some that were very industrial-looking and others that were very theatrical-looking. It was really about finding a balance, and in a perfect balance you have to have a lot of trial and error."

Connelly and his team also do extensive previsualizations. "We develop all our design and our previz rendering in Unreal Engine by Epic Games. It's exciting for me as a designer that we do it that way because I get to see everything in real time. The advantage of doing it this way is that we can do immersive fly throughs for the client and we can invite the director to our studio to previz his camera angles. I can also use Unreal Engine for virtual scenery, which is great during this lockdown. If you want to broadcast it, Unreal can do real-time compositing in terms of putting 3D elements on camera that the cameras can react to. The tal-

ent won't see it but the camera will and the audience at home will."

Lighting

Lighting designer Oscar Dominguez, of Darkfire Lighting Design, and his lighting director, Brandon Davis, have been involved in *World of Dance* since it premiered four years ago. "The initial concepts are always predicated on the set design," Dominguez says. "The set concept comes in and we figure out how to maximize the design and get the biggest bang for the buck. It being 360°, trying to get everything to look good is a big challenge.

"At Darkfire, we pride ourselves on unique truss design," Dominguez continues. "However, it has to work with the set; it has to be another scenic element. It's an accent, and when the truss design and the scenic don't work together, you have a hideous truss rig that is a big monster.

"The entire set is circular, so we started doing circles on top of circles," he says. "It has this nice cylindrical drum feeling, with a theatre-in-the-round vibe to it. It was just basically playing off the scenery, and letting that lead where the truss design could go because they all work together.

"What's interesting about the circles, where you get into danger, is this pile-on you get in the center. You'll start doing a focus and you'll get these insane light levels for the core. Naturally, all the lights are essentially pointing in the



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same direction, so you have to be mindful of exposure. When you want to do a really dramatic look with a lot of backlight, it looks amazing from the front, but when you get to the back, everything is blown out. Trying to find that balance was the biggest challenge in the show."

To solve the problem, Dominguez and Davis used a two-pronged approach. "I think it's just about bringing in the right bits of gear, the right amount of lights, and the right placement to get that look," Dominguez says. "You also have to be cautious and disciplined in the programming, as you're building these looks and focuses and as you get into the center. It becomes about discipline in programming." On World of Dance, programming on an MA Lighting grandMA3 console is handled by Dan Boland, who, Dominguez says, "has become a true master in TV. It's about understanding contrast range and understanding the way cameras work.

"There is no lighting specifically built into the scenery other than the entrance door and these tunnels, which have [TMB] Solaris products, "Dominguez says "We use the Solaris Mozart and the Mozart LR, a little linear light that is one of my favorites. All the little Solaris stuff is just amazing. They are bolted into the doors in the tunnel left and right and are basically the bookends to the tunnel."

For spotlights, Robe's BMFL remote followspot system was introduced this season. "We have ten; five in front and

five in back," Davis says. "I personally love them. It saves the guys from having to climb the ladders and sit up there for five hours before we can get a break. It's a little bit of a learning curve for some of the guys, but for the most part, most of the guys are getting it. Out of the products we've tested, the Robe system seems to be the best, and it's the one the guys seem to enjoy the most." Gear is provided by Illumination Dynamics and the Universal Lamp Doc [aka Universal Studios Lot Set Lighting]. "The Uni Lamp Doc is amazing," Dominguez says. "They are super-helpful, and they really operate in an old-school way. They are a great partner."

Dominguez notes, "The [Chroma-Q] Color Blocks and [Robe] BMFL followspots are the workhorses on the main stage. The venerable Robe [Robin] 150 is one of our favorite lights: It's a much smaller wash unit, a quick, little, 7" zoomable RGBW fixture." The main stage has 500 Color Blocks, 60 Color Block VWs, and 24 Robe 150s. The lighting package also includes 23 Vari-Lite VL4000 Spots, 20 VL2500 Spots, 180 Chauvet COLORdash 6s, 12 Elation TVL cyc lights, Ayrton Mistral-S units, and ETC Source Four LEDs in various degrees.

In terms of the warehouse episodes, Dominguez says, "Weight was the big challenge going into that place; we had to figure out what we could hang here. The engineers said, 'Well, nothing'."

Thankfully, Dominguez continues, "We have our great friends at Kish Rigging who are very, very clever. They said, 'We can span the whole warehouse with ground support,' and that's what we ended up doing, basically via ground support."

Dominguez says, "The workhorse for the warehouse is a light that, for some reason, is not as wildly popular as I think it should be, because of how good the color system is. That's the Claypaky [A.leda] B-EYE K10 [40 units] and B-EYE K20 [24 units]. What I like about it is that it doesn't have crazy gags; there are no rings, there are no effects. Its only job is to be a wash light. I like a specialized tool as opposed to something that is 'value-added,' which means more gobos, more colors, and so on." The warehouse lighting package includes two Elation Q7 Pars, eight Hive Lighting Wasp 100s, eight Hive Hornet 200s, and 12 Vari-Lite VL400 Spots.

Audio

A1 audio mixer and supervisor Sean Prickett came to World of Dance during the second season. "There was already some groundwork in place," he says. "I made little



gear changes here and there but just kept it rolling. I had already done a few seasons of another dance show, so I was pretty familiar with the general workflow on dance productions."

When he joined the show, Prickett says, "They had a traditional trap box PA, which is more of a conventional system. We moved to a distributed line array system, and







This page and opposite: Various aspects of the warehouse. Connelly says, "We had to find a warehouse with enough room that could control the surprise so that when contestants showed up, they thought they were going to another casting callback."

we did multiple hangs. There are two hangs above the judge's desk, and all of the loudspeakers are JBL VT4886s; it's a much smaller line array box than we're used to seeing, but we did a lot of them. Our idea was to do smaller line arrays; we could position more of them around, to give us more of a full sound." Also used are two side hangs of JBL VT4886s. And, Prickett says, "There are scattered dialogue-only speakers for the judges, about 24. They are JBL AC15s."

Prickett works out of a TV truck provided by NEP Denali. "Universal only has one stage that has a built-in control room," he says. "For every other stage, they bring in a TV truck to do the shows. There is no control room. When we got to the studio portion of the show, I was on a Calrec Apollo, which is my preferred console." The Apollo has up to 1,020 channel processing paths, 128 program busses, 96 IFB/track outputs, and 48 auxes.

Prickett also uses Avid Pro Tools. "I record all of the microphone ISO tracks, as well as my mix, the audience mix, and all the music with Pro Tools. I have a 64-track Pro Tools rig, which is how I record the show."

Working along with Prickett are Eric Johnston and Joey Adelman. "The music is a big element, and the guys are on a [Sigma Broadcast] SpotOn rig," Prickett says. "They sit in the television truck behind me and do all the music playback, all the judge walk-on tracks, and so on. There are many more recorded voiceovers; they do a lot more of that on this show than others I've worked on. They have discrete channels for VOs, and I have channels for the music." Spot On playback software works with AES, MADI, Analog, Dante VSC, and Lawo Relay VSC soundcards.

An engineer in the studio provides a mix for the audience. "The front-of-house mixer is Mike Parker, who also does *Masked Singer*, and uses a Yamaha CL5," Prickett says. "The show itself doesn't necessarily require as many things, and it's the right console for the job—financially, as

well as in terms of what we need it to do."

Prickett adds, "I use Waves in the truck to do my dialogue processing, as well as some noise reduction on the audience group. Overall, *World of Dance* is much more dialogue-centric and less of a demanding audio workflow than other shows I've worked on."

In the studio, Prickett says, "We have a wide variety of Sennheiser 8000 Series microphones. There are Sennheiser 8040s around the front of the stage and a collection of 8060 shotgun microphones around the audience. We also have DPA 4016 lav mics on the judges; they're connected to Sennheiser SK 5212 transmitters." Gear is provided by Soundtronics. For the dancers, he says, "We're using Sennheiser 6000 Series hand mics with [Neumann] KK 204 capsules on them."

Prickett continues, "When we have tap dancers on the stage—and we did on this season—we use two lav mics, one on each shoe. The wiring goes up their legs and to a belt-pack transmitter, capturing the sound of the taps. We use Voice Technologies VT500s. They're not terribly expensive, they sound good, and they're fairly durable in the big scheme of things. They're very widely available and people don't scream if they get broken."

Describing the distribution setup, Prickett says, "All my signals came to the truck via fiber, using Calrec stage boxes called Hydras. They come out of the mic splitter into the Hydra boxes and are transported, via fiber, to the television truck, which is about 500' away from the stage."

When the show moves the warehouse, Prickett has different challenges. "We do a very scaled-down version of the studio set; we just have ground stacks, the 4886 line array, on carts left and right. There was no audience for the first round; they brought in about 100 people for the last round."

He adds, "For auditions, they didn't want to look at dancers talking into a handheld microphone, so lavs were sewn into their costumes; we used Shure TwinPlex; we had about 40. The wardrobe department sewed the micro-







phone cable and the element right into the costume.

"The one big challenge this season was that the ware-house where they shot the first round sounded like a ware-house, which is a much different acoustic environment; it took different precautions to get rid of the room reverberation and to keep the dialogue as clean as possible. That being said, you want it to match the picture; you don't want it to sound like you're in a tight little room. There was a fine line of making it sound like the way it looks, but not making it sound too open or reverberant in that space."

In the TV truck, he says, "I was on a smaller Calrec console called the Artemis for the first round, and then when we went into the studio, I was on a Calrec Apollo. So, it was a bit of a challenge to go from two different television trucks; I had to build a new file for each, but it also made it a little exciting. I had been on the show for multiple years, so I knew what to do; I knew what the show was so it wasn't too hard to build the files and what the director was looking for in terms of workflow."

World of Dance airs on NBC Tuesdays at 10pm.



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