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The Masked Singer

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MASKED

UNMASKED

Design secrets from television's most eccentric reality competition

By: Sharon Stancavage



Photo: Courtesy of JP Connolly Production Design

T

he premise of *The Masked Singer*, developed for Fox TV by Craig Plestis, is certainly creative: Singers—all of them celebrities of various types—clad in the most extravagant costumes—as characters named, among others, Taco, Black

Widow, Unicorn, and Alien—perform for four panelists. As they are eliminated, the panelists try to guess who they really are. With the song “Who Are You” playing in the background, and the audience chanting “Take it off,” masks are removed, and identities revealed. Those taking

part have included Lil Wayne, Dionne Warwick, Seal, Kelly Osbourne, Sarah Palin, and Dr. Drew Pinsky.

The lighting designer Simon Miles, of Vx, Inc., notes that *The Masked Singer* “originated in South Korea and was then franchised to a Thai production company, which expanded on the Korean concept.” The latter, he adds, “was what we looked at as the model.” “I watched the Thai show online and it was crazy,” chuckles production designer James Connelly, of JP Connelly Production Design.

Nevertheless, Connelly was intrigued. “I really wanted to do another big-stage event-type show for Fox,” he says. “I appreciate somebody who believes in my creativity, so I was really into it. But when I thought about the show format, it was a little challenging, to say the least.

“When I started the design process, we kept everything open and loose,” he continues. “We need costumes to walk onstage to a live audience, with a screen behind them. We need a table for four, and that’s it.”

Connelly took inspiration from another, rather unexpected, genre. “To me, connecting with it meant [realizing] that this is, to all intents and purposes, a modern-day opera. It celebrates art and music. And the audience should love those costumes. Where else do you see big, ostentatious costumes walk out on the stage and sing?”

However, the designer says he wondered, “How do you make an opera cool? I looked at where young kids congregate.” The result of this research was a kind of hybrid concept; *The Masked Singer*, he says, is “a mix of a music festival—like Coachella or Ultra—and an opera.” In such a setup, he says, “The entry of the big masked faces feels appropriate.” The set “is this art installation piece that you

can walk through, but it is also serious, in a way, and elevated.”

The Masked Singer is recorded at Television City in Hollywood, on the same stage as *Dancing with the Stars* and *American Idol*. “The overall footprint of the stage and the audience is 135' x 100'. It’s probably the same as a traditional stage, but it’s designed to look like a club with a wraparound audience.” Other features include an X-shaped runway and two 26'-tall, 17'-wide masks that also function as entryways.

Located upstage is a 13'-high by 50'-wide 3mm SV3 LED screen. “I designed it to be low and panoramic,” Connelly says. “It’s not your typical 16 x 9 on-demand screen; it uses custom content and it wraps around you. It does not look standard. It is there to provide tonality and atmosphere.” Also, he says, “The desk has 2mm SV2 video tiles.” All video gear is supplied by NEP Sweetwater.

Also functioning as a video surface is the floor, which consists of 5mm SV5 LED tiles under tempered glass. “At the beginning, we reached out to All Access Staging [one of the production’s scenic fabricators] to help us engineer the video floor,” Connelly says. “There are a lot of things to consider when designing a floor with high-resolution video: ventilation, weight load, protection from wheels for rolling carts, and clarity of the images. All Access was the immediate go-to for consultation on this. We love working with their entire team.”

The Masked Singer recently wrapped its third season, and, over time, the design has changed in subtle ways. “We’ve brought the judges a little closer and a little lower,” Connelly says. “We dropped them 4'; they are closer to the costumes, so they can talk to Nick [Cannon, the show’s





Opposite: The set features an X-shaped runway consisting of 5mm SV5 LED tiles under tempered glass. Above: A performance is swathed in fog; the gear list includes four Ultratec Radiance DMX hazers and two Le Maitre G300s.

host] more easily. It's nice to see that relationship. It's not drastic, and I'm sure no one even noticed but it's quite significant." When working on a long-running show, he notes the importance of "changing it up and keeping it fresh."

Also integrated into the scenic design are 400 Martin by Harman VDO Sceptron 10s. "I wanted all of the diffusers to come off the Sceptrons. I didn't want soft light, I wanted really harsh LED nodes, so you could see all of those dots."

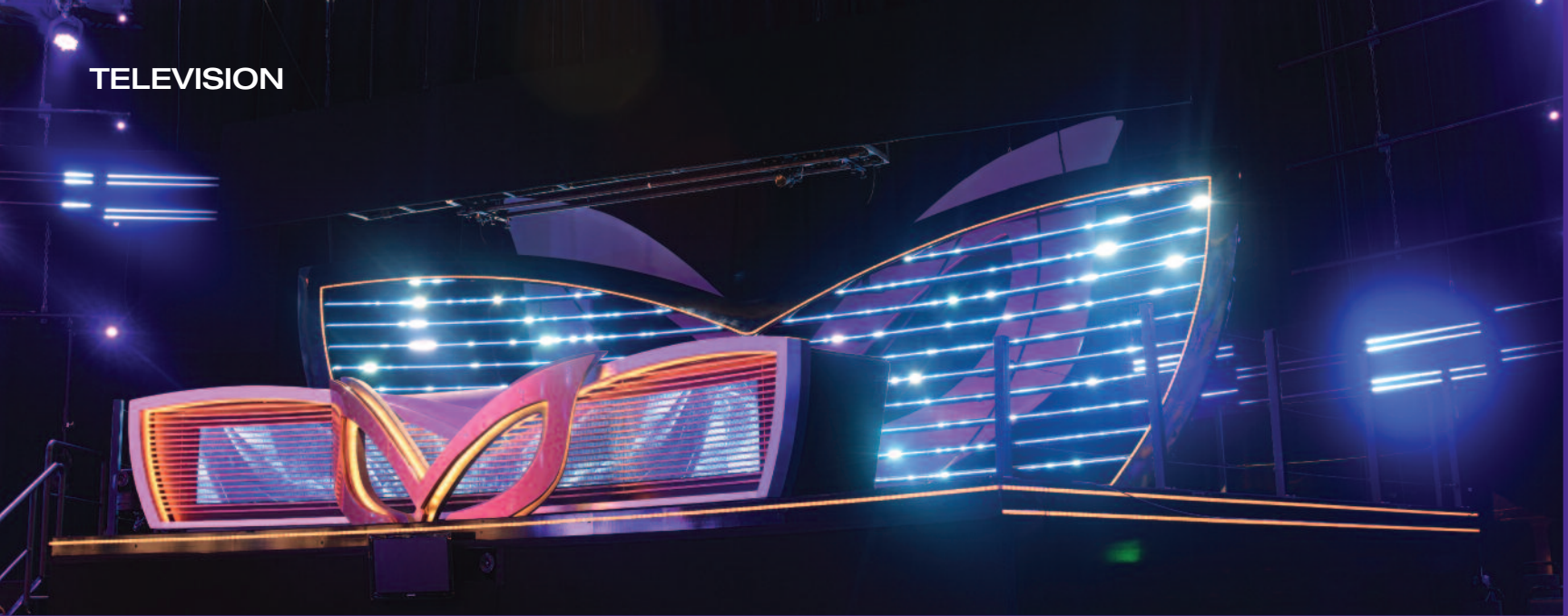
The set also incorporates an extensive amount of LED tape, a tool much-favored by scenic designers. "The set doesn't have that much lighting in it," Miles says. "But it has a lot of accenting around it. Basically, it's a lot of LED tape in channels with diffuser on top of it, skillfully placed by Mr. Connelly." The tape extends along the perimeter of the large masks at right and left and the mask logo at

upstage center. It was sourced from Environmental Lights in San Diego.

Lighting

During the taping of the first season, Miles faced certain gear challenges. "Our green light was fairly close to the beginning of production, and it also happened at an extraordinarily busy time of year, so the rental inventory available was eclectic," he says. "It was really interesting designing a show using a lot of instruments I wouldn't normally choose, but I enjoyed the challenge."

The primary lighting vendor is PRG. "If you need a million lights, they probably have them," Miles says with a chuckle. The secondary vendor is Miles' company, Vx Inc. "We buy bits and pieces that other people don't want because they don't recognize them as revenue-producing



The panel's desk has 2mm SV2 video tiles built into the front.

gear. But they are very useful for me. I can use them as instant scenery.”

Miles has a variety of items on the recent iteration of *The Masked Singer*, many of which are industry staples. “The mainstay is [81] GLP impression X4 wash lights,” he notes. “We have [75] good old Claypaky Sharpys for effects and a few [35] Sharpy Wash 330s. The GLP X4s are used for audience light, area wash, and for lighting bits of scenery and props that get thrown out there from time to time. We use the Sharpys for most of the music cueing. They are majorly visible; I think they’re in virtually every shot. We use [16] Robe Spikies, placed very low; they’re not technically on the floor, but are very low at the back of the audience.” Also used are Sharpys and Sharpy Washes on the stage floor. “We also have hundreds of Chauvet [COLORdash] Accents,” Miles says. “There are about 300 of them around the perimeter of the audience, used as decoration and effects lights for reverse angles.”

As for followspots, Miles says, “There are five front lights: three short-throw 2K Strong Super Troupers and two of my favorite light, the Robert Juliat Heloise. We also use a PRG GroundControl followspot system, with PRG Best Boys, for back light. Finally, for our panel of celebrity detectives, we’re using the fabulous Vari-Lite VL2600 LED Profile as a key light. We put it up, focused it, color-corrected it, and I don’t think we touched it again for the rest of the season. The color correction is always dead on.”

Lighting the masked performers may require additional gear, depending on the vision of creative directors Michael Schwandt and Tiana Gandelman. “If we need to add lights,” Miles says, “we rent for the week. Some of that kit could be GLP JDC1s—we’ve used those quite a bit—or Robe PATT 2017s; they’re nice to look at. We’ve also used Claypaky A.Leda B-EYE K20s. We’ve had a dozen Chauvet COLORado 1m battens—basically, the sorts of

things we could throw out when needed in a hurry. We also used some old-school stuff—PRG has police beacons equipped with ACL PAR 46 bulbs that are super-bright—and PAR bars, ACL bars, and incandescent scoop lights.

The lighting is calculated to work with the costumes. For example, Miles says, “In season three, one of the singing characters—Night Angel—had a very dark costume. It was a purple-like color with glittery gold accents on it. It was beautiful, but the gold elements did not translate very well on camera when she was having a chat with our host or performing in a followspot.” To provide some glitter, he says, “I had eight half-meter Astera tube lights,



Two 26'-tall, 17'-wide masks built into the set function as entryways.

lined along the front of the stage, in a kind of gold that brought out the embellishments in her costume.” The gear list also includes six VL2500s, six VL3000s, nine VL3500s, 12 Color Kinetics ColorBlasts, eight Martin by Harman Atomic 3000s, six TMB Solaris Flares, four Ultratec Radiance DMX hazers, two Le Maitre G300s, nine Elation Professional Opti Quad Pars, and 16 ETC Source Four Lekos, featuring gel from Lee Filters and Rosco.

In general, Miles says, “The show’s color temperature is 4,300K, which has become a bit of a standard for television. That is our white point, and it is used for lighting the people not in masks, like our panel and Nick Cannon. I only need to light the masked characters so that you can

Audio

Like Connelly and Miles, A1 audio mixer and audio supervisor Sean Prickett, of Drop Ship Audio, has been with *The Masked Singer* since the beginning. “We watched an episode of [the Korean show] and we decided what we wanted to do differently on our end,” he says. “We were not married to what they did, audio-wise.”

One initial challenge involved the performers’ voices. “Because they are physically masked, they are audio-masked when talking to the judges,” Prickett notes. “How do we do this reliably and professionally, so it can be recorded and used with an audience? That was the first hurdle.”

His solution, he says, is to “use Pro Tools, live, with a plug-in to create that sound. Nothing has been custom-written for us. We’re probably one of a few using it for a live application, since it’s designed primarily for film and remixing.

“Sometimes we do a lot of corrective equalization with the performers,” Prickett continues, “basically fixing the fact that they’re singing into masks. Luckily, this has gotten better, season-to-season; like on Broadway, I have a very open dialogue with [Marina Toybina,] the costume designer for the show, who also looks after the masks. We have figured out what works.”

When the performers sing, Prickett stresses, “It is truly their voices. We don’t do anything other than the stuff you’d do to a live vocal. We are not doing anything to mask who it is.”

Prickett handles the broadcast mix on a Calrec Apollo console. “My biggest preference when it comes to Calrec is that I am never technically limited on what I want to do,” he says. “I don’t have to reverse-engineer around its limitations. It’s a powerhouse.” The Calrec Apollo offers users up to 1,020 channel processing paths, 128 program busses, 96 IFB/track outputs, and 48 auxes, as well as six bands of fully parametric EQ/filters on each channel, two compressor/limiters, an expander/gate, and sidechain EQ/filter on each channel.

Mixing the show is a busy, complicated task and again the Calrec proves helpful, Prickett says, “We have 23 cameras, and each gets ISO-recorded individually, so that they have different shots. In post, when they edit the show, each machine has different audio associated with it. That’s 23 machines with different sources that I have to route and map on my console. With all these sources and destinations, I never have to worry about a workaround to get a signal to a certain place. It’s the Ferrari of broadcast consoles.”

Mike Parker, the front-of-house mixer, is on a DiGiCo SD5 with Waves processing. Prickett says Parker “plays a very delicate role. When we’re doing a performance, he mixes it like he’s mixing a concert. When we get into dialogue, it’s an intricate dance between him and me; it has



The panoramic screen behind the judges is a 3mm SV3 wall. Video gear is supplied by NEP Sweetwater.

see who they are. I don’t have to be as worried about their faces. I get a lot more leeway with a turtle, a black widow, a pineapple, or an alien than I do with a recognizable human face. That’s one of the fun things about the show.”

Describing his two-color approach, Miles says, “I can use a followspot from one side in white light or a warm white; I like to shift the color temperature of my spots for performances—warming them up or cooling them down. I typically don’t go with highly saturated colors, because the video rendering doesn’t look so good. But I could light a character from one side with white or warm white and saturated red on the other side. It’s unconventional keying, but it’s fun to do.”

Corey Fournier is Miles’ programmer and lighting director; Maurice Dupleasis is his gaffer. “I work with a lean team,” Miles says. “We have one console—a MA Lighting grandMA2—that controls everything.”



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to be loud enough for the audience to hear but not loud enough so that it affects the dialogue that I’m recording or mixing in my room.” The monitor engineer, Jason Sears, is on a DiGiCo SD10. Front of house and monitors share two DiGiCo SD racks on a fiber loop. Prickett adds, “I take everything direct and record everything; they get a direct split of all the microphones, except for the audience mix; they are for me to hear the audience for the broadcast mix. I also create mixes of video playback sources and a dialogue mix for the monitor mixes.”

Prickett is using Waves externally. “It connects to the console via MADI,” he says. “This season, I’m using Waves SuperRack as the controller for the environment that the plug-ins run in. I create a vocal chain that is applied to all of the performance mics and for the dialogue processing.” He also relies on “a Waves noise suppressor called the WNS; we use it to clean up the dialogue and it helps to polish up the audience mics. I also use the Dan Dugan Automixer; it will automatically mix between my

open mic from the panelist to the host.”

In the audio booth, Prickett says, “I have two people sitting behind me: J.P. Velasco who plays back all the music stems and does the vocal effects and Eric Johnston, who plays the interstitial music—bumps in and out of commercials, sound effects, and prerecorded voiceovers.” Three Pro Tools units record all the individual audio sources used for virtual playback and remixes. Johnston “operates SpotOn; it’s a Windows playback machine, and it’s redundant, so there are two PCs that run with an automatic failover switch. It plays back the theme music at the top of the show, the tension beds for voting, and any voiceovers that are prerecorded. SpotOn is designed specifically for television playback; it is similar to Ableton Live. It is nonlinear, and based on button cues, so you can cue on your own beat.”

In terms of microphones, Prickett says, “I have 16 audience mics spread throughout the audience, and 28 wireless microphones.” The wireless units are Sennheiser

Digital 6000. “We’re also using the brand-new SK 6212 micro transmitters from Sennheiser, and we’ve had a great success with them in terms of size and their ridiculous battery life.”

The production also uses something new from Shure. “Even though I use Sennheiser wireless a lot,” Prickett says, “I have a very good relationship with Shure microphones, and I was lucky enough to do some Beta testing of their TwinPlex lav mics, which came out last year.”

For most productions, Prickett doesn’t use headset mics. “Right before *Masked Singer* started,” he says, “[Shure] had started working on a headset developed with the same TwinPlex lav mic as the capsule. They said, ‘If you ever do a show with headset mics, we have these new Beta prototype headsets that we’re trying to get some field exposure with.’”

The *Masked Singer* team also needed headset mics; nobody wanted the panelists tied to the desk and Prickett didn’t like using a lav, given the noise levels in the studio. He took up Shure’s offer of the TwinPlex. “For the first two seasons we were using this Beta headset, they weren’t even out to the general public. Overall, we’re very with how they sound, as well as their ruggedness.”

The studio’s loudspeaker system is provided by ATK Audiotek, the RF vendor is Soundtronics, and communica-

tions gear is from ATK Versacom. “The line arrays are JBL VTXs, specifically V20s; the side arrays are JBL VT4886s,” Prickett says. “We have flown side fills, left and right of the stage, for dancers and people on in-ears; they are 4886s as well.” Also featured are JBL AC15s, along the front of the stage, for standing members of the audience.

A supplemental PA consists of “JBL Control 25s under the seats, which handle dialogue,” Prickett says. “After a performance, we transition; the dialogue goes into that speaker system. The Control 25s keep the energy in the room low, but they allow me to capture clean dialogue without it being very loud in the room.” Approximately 200 Control 25s are spaced every 2’ to 3’.

Prickett adds, “Communications has a large role to play in a production that has so many moving parts. We have over 40 Riedel Bolero wireless users operating in various RF zones, alongside several Riedel RCP-1028 E/Os, Riedel 1012 E/Os, and DCP 1016E/Os across a distributed Riedel Matrix backbone. *The Masked Singer* is definitely a team effort in regard to audio and I am honored to have such a powerhouse team supporting myself and the show.”

The finale for season three of *The Masked Singer* aired May 27; the show is expected to be renewed for a fourth season on Fox. 📡



A rendering of the panel’s desk, with the mask logo, and behind the judges, a video screen and lighting.