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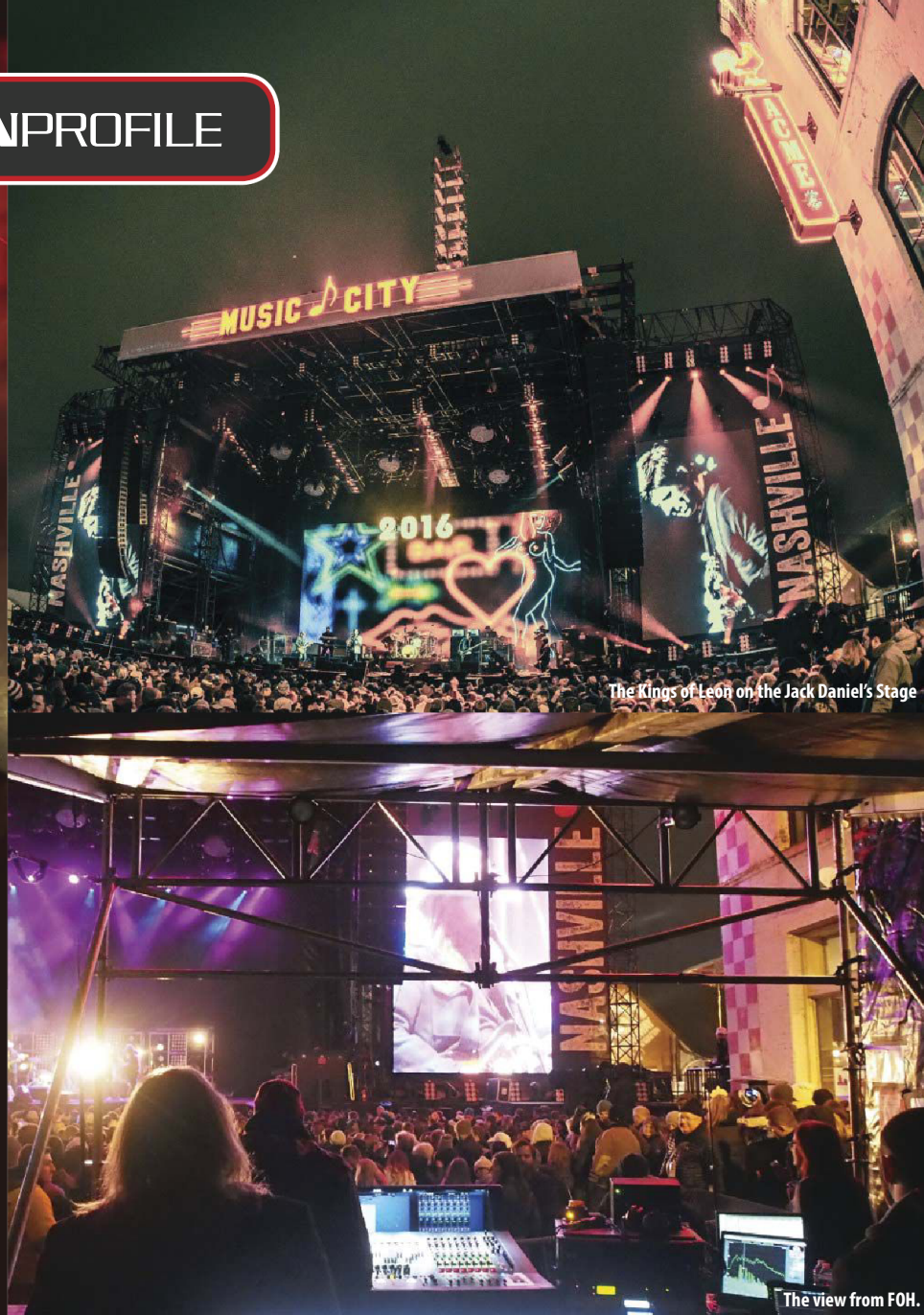
Great Artists, Legendary IEMs



NASHVILLE Does NYE Right

It's all about the music for
150,000 revelers at this year's
"Jack Daniel's Bash on Broadway"

By Kevin M. Mitchell



The Kings of Leon on the Jack Daniel's Stage

The view from FOH.

Nashville knows how to bring a crowd out: First of all, name it "Jack Daniel's Bash on Broadway." What's not to like about *any* of those words? An annual event since 2009, this party keeps getting bigger and better. Making it more so is that Sound Image was brought in to handle the sound — which they accomplished by pretty much clearing out their warehouse for this end of 2015 event (188 speakers were used on the two stages) and bringing out all their top-notch crew.

The celebration, which took place in downtown Nashville's Lower Broadway between 1st and 6th avenues, featured Kings of Leon as the headliner. Also performing on the main Jack Daniel's Stage (JDS) were Sixwire, Big & Rich, Jason Eskridge, Sugar & The Hi-Lows, Kelsea Ballerini and Chris Stapleton. A second Music City Stage (MCS) at the other end of the festival featured Wild Cub, The Whigs and LANco. Adding to the fun was that bewitching moment when 2015 became 2016, where a 15-foot-tall red "Music Note Drop" slowly descended on the party hardy crowd of 150,000. Cue fireworks and confetti cannons. But this ain't no New York City, so not surprisingly, it was *really* all about the *music*. And when you're there with tens of thousands of your closest friends, you want a quality audio experience.

The band on one stage never played while music was coming from the other, something that Sound Image's Hugh Johnson said took a little planning from all the production parties involved. "When one band ended, the emcee would announce that they were taking it down to the other stage," he says. "Not that there was a lot of migrating with 150,000 people! People mostly stayed at the stage where the band

they wanted to hear was playing. It was a mass of humanity out having a large time."

» Jack Daniel's Stage

The JDS was fitted with an L-Acoustics rig. The FOH engineer was Brent Rawlings, and the L-Acoustics pieces at his fingertips were specifically the K1, K2 line arrays, along with K1-SB and SB28 subwoofers. "The design approach for that stage was to optimize for broadband throw and seamless SPL coverage down the narrow and long audience area," explains Vic Wagner, who was systems engineer and crew chief for the event. "Because the audience space is relatively narrow, it was critical to arrange and consider time alignment and positioning of the K1/K1SB/SB28." For this reason, they decided to place the K1SB's behind the K1 (about five feet upstage) using the K1SB_60 preset. The SB28 sub arrays were spaced evenly across the front and mechanically arranged and electronically timed to sum with flown elements. This provided for consistent horizontal coverage and high directivity as far as possible down Broadway. "Because there was very little flexibility in delay positions and limited weight allowances on the scaffold structures, the K2-JACKS proved instrumental in maintaining clear transitions and even coverage. Also, due to the complexity and time constraints during setup, L-Acoustics SoundVision 3D sound system design software became instrumental in figuring time alignment, zone shading and SPL coverage," Wagner added.

At an event this big, managing the delay is always a challenge. Most of the delay positions used K2 ground stacks. Because all of the delay speakers would be lifted with a crane into a small footprint on top of ground sup-

port structures, the K2 rigging features were ideal. "The K2 SPL output and extended LF contour allowed for seamless fidelity between the main K1 system and each delay stack in regard to the cold weather and weight and trim limits," Wagner says. "In addition, all of the K2/KUDO stacks along Broadway facing west used the 90/80 degree asymmetrical preset to minimize reflection off the buildings along the street while maintaining stereo imaging for the audience area."

For Wagner, one of the most exciting aspects of the event was the use of the Riedel's RockNet system for AES signal distribution and network control tunneling to all the amplifiers. Using LA-NWM from JDS and Harman Performance Manager from the MCS, they were able to set delay positions throughout the large site. "Because of this capability, all of the system tuning could easily be done within the amplified controllers. This optimized system resources, fidelity and reliability."

Using the RockNet system in conjunction with two Yamaha DME64s and its flexible programming, they were able to provide intelligible coverage for the massive crowd via the delay speakers. "They allowed us to tunnel reference pink noise to any delay position so the delay system could be tuned and time aligned remotely. This was helpful, as much of the delay system was built in while bands were playing on the stages. Using 'delay mode' in SoundVision, myself and Bill Chase [system engineer on the MCS] had an idea of how much delay to apply while considering frequency response between each tower before physical deployment."

There was also a VIP tent off the JDS that needed some audio attention. This was handled via a distributed system of 10 VUE Au-

diotechnik H-12W speakers on stands. The SystemVUE network was used to tune all the speakers to achieve even coverage.

» Music City Stage

Meanwhile, a few blocks away, The Whigs, Wild Cub and LANco played through a JBL line array rig. Johnson, longtime production manager/FOH engineer for Vince Gill, says they had JBL VerTec and VTX boxes firing down toward the L-Acoustics rig, a mere five and a half blocks apart. "The challenge was to be able to properly cover in two directions," Johnson says. "In hindsight, we probably should have sent signal down both lines at one time, but we wanted the audience to perceive the audio coming from whichever stage was being performed on."

Johnson says the JBL VTX mains and 4889 VerTec delays performed flawlessly and that all parties involved couldn't have been more pleased. "We bid the JBLs on that stage and delays for several reasons," he explains. Factors included cost, effectiveness, weight, ease of deployment "and, last but not least, inventory availability. This was the first time for the city to have two 'main' stages, as previously there had been secondary stages. But this was the first year they alternated bands from stage to stage. The city was trying to eliminate the set change breaks between bands, as the flow went back and forth continuously from 4 p.m. until about 12:30 a.m. I think the city accomplished just that and producers of the show were extremely happy with the outcome."

The JDS was a Stageco-built stage that was considerably larger than the MCS — a G2-provided Stageline 575 — that Johnson points out is not a small stage by any means. "I wouldn't consider the talent on that stage

Jack Daniel's Bash on Broadway

EVENT DETAILS

Where: Lower Broadway Street, Downtown Nashville

When: New Year's Eve, 2015-2016

Sound Co: Sound Image

CREW

Audio Supervisor: Hugh Johnson

JDS Systems Engineers: Vic Wagner (also crew chief); Preston Soper (SE2)

JDS FOH Engineers: Brent Rawlings (Kings of Leon); Preston Soper (Sixwire, Jason Eskridge Sugar and The Hi-Lows); Richie Gibson (KOL FOH tech)

JDS Monitors: Saul Skoutarides (KOL); Chris Demonbreun (Sixwire, Kelsea Ballerini Jason Eskridge, Sugar and The Hi-Lows); Eoin Collins (KOL mon tech)

JDS Stage Patch: Brittini Werner

MCS Systems Engineer: Bill Chase

MCS FOH/SE2: Paul Fuerstenberger (all MCS bands)

MCS Monitors: Kyle Herbert (all MCS bands)

MCS Stage Patch: Katlyn Mountain

Delay P.A. Techs: Jim Miller, Emily Philips

JACK DANIEL'S STAGE

P.A. SYSTEM

Main Hang: (28) L-Acoustics K1, 14/side; (16) K1SB flown subs, 8/side

Underhang: (8) L-Acoustics K2, 4/side

Ground Subs: (30) L-Acoustics SB28

Front Fills: (10) L-Acoustics KARA

Outfill: (4) L-Acoustics ARCS

Amplification: All L-Acoustics LA-RAKS (LA8)

FOH GEAR

FOH Consoles: (2) AVID 48-channel Profile

Production Console: Yamaha LS9

Processing: Yamaha DME64N

System Drive: L-Acoustics LA-NWM

MONITOR GEAR

Monitor Console: AVID 48-channel Profile

Splitter: Sound Image custom

Wedges: (10) Sound Image MA212

Side Fills: (2) JBL VT4889/side, (2) JBL VT4880/side

Amplification: (4) Crown 4X3500HD on wedges, Crown iTech 12000HD on side fills

IEM Hardware: (6) Shure PSM1000 transmitters; PWS HA8089 helical antenna; PWS GX8 combiner

Wireless Mics: (6) Shure UR4D+ with Shure UA847 antennas

Hardwired Mics: Sound Image standard festival mic package

MUSIC CITY STAGE

P.A. SYSTEM

Main Hang: (28) JBL VTX V25-II-CS, 14/side

Ground Subs: (18) JBL VTX S28

Front Fills: (12) Sound Image WideLines

Amplification: Crown iTech 12000HD

FOH GEAR

FOH Console: AVID 48-channel Profile

Production Console: Soundcraft SiCompact32

FOH Control: Yamaha DME64N; Harman Performance Manager 1.9.2

MONITOR GEAR

Monitor Console: AVID 48-channel Profile

Splitter: Sound Image custom

Wedges: (10) Sound Image MA115

Amplification: (4) Crown 4X3500HD

IEM Hardware: Shure PSM900 transmitters, with Shure PA821A combiner and PWS HA8089 helical antenna

Wireless Mics: (6) Shure UR4D+ with (2) Shure UA847 antennas

Hardwired Mics: Sound Image standard festival mic package

DELAY RIG

Delay System: Four sets of stereo towers (some shared with MCS) along Broadway at 330, 595, 983 and 1,383 feet from JDS, deploying 38 L-Acoustics K2 and 12 KUDO line arrays and 32 JBL VerTec VT 4889. An additional tower at 2nd and Commerce streets (475 feet from Broadway) had four north-facing JBL VT 4889 and four south-facing L-Acoustics K2.

Delay Amplification: L-Acoustics LA-RAKS (LA8); VerTec VT 4889s were powered by Sound Image ARV racks, each with (8) Crown iTech 12000HD amps.

Networking/Signal Distribution: Riedel RockNet; Shure PSM-900 with UR4D PTP as analog delay signal backup.

to be any less prestigious, as all the other acts on both stages have had national success on some platform or another. I think the larger Jack Daniel's Stage was also mandated by the size and weight of the lighting rig, video and P.A. hangs."

This is the first year Sound Image was involved, due largely to Johnson's efforts. "Once the bid was accepted, I think Kings of Leon had some input with the city as to who got the bid, and I know that K1 was on their list of acceptable P.A.s. I think the city's main concern — and Kings of Leon's main concern as well — was that one sound company [could] provide all of the gear without a whole lot of cross-renting and so forth. We were one of the companies in town that had the inventory to be able to do it, and we have by far the lion's share of K1 in town. And we also had the whole crew available."

» "Thrilled"

The crew had to hang the P.A. up in the driving rain on Dec. 28. "Chris Demonbreun [Zac Brown Band systems/P.A. tech], and Brittini Werner was hanging P.A., and the water was coming off the roof, and it just looked like they were getting hit with a fire hose," Johnson says, shaking his head. "But they all forged right through it, got the P.A. in the air, then landed it because the wind started to blow hard. But by the end of the day, the rain moved on and it was in the air and tuned."

The city had restrictions on the footprint and height of the delay towers, and Sound Image had never put up two sets of delays firing in each direction before. This was a first for them. And it was specifically on their RFP for that, so, by design, they wanted one stage to carry all the way to the other stage and vice versa. But they were looking at this in terms of two performance areas because, obviously, with this many people, the crowd was not going to be able to move back and forth. They'd just turn around where they were standing.

The delays were placed at intersections along Broadway. They went down and laser-shot the delay distances so they could pre-load the delay times. But it was about 250 feet to the first delay tower, and the next jump was about 300. The middle blocks are the widest so that set was at almost 400 feet. And then the delay times got shorter as you got up towards Bridgestone.

Going forward, Johnson says, "We have some things that we want to work on for next year, should we get the bid. We saw the opportunity to make some improvement in the placement and quality of the delay towers. I don't think anybody has ever deployed as much delay as we have, so we want to work closer with the city on getting our delay deployment a little bit more efficient. Once it was all put together and said and done, it was fine. But getting it in there, since it was not a hanging situation—we had to forklift the boxes into a scaffolding bay—it was time consuming." He also wants to tweak the comm system to make it a little more efficient; otherwise, "I really feel like we hit the ball out of the park from an audio standpoint. I really felt confident that everybody could hear what the bands were doing and the communication between the two stages."

Johnson says the Nashville Convention & Visitors Corp was thrilled. "Let me put it this way: because of the size of the delay towers, we were not able to make it consistently the same volume all the way up and down the street. However, that being said, we did have clarity all the way up and down the street. It was very apparent that you could hear everything that happened. It was very consistent, and you still had low-end, high-end — and intelligibility. At 600 feet, you could hear perfectly what was going on."

"It was a lot of fun. I really enjoyed myself, even though I was tired from walking up and down Broadway for three days, as all the crew did. They all worked very hard." **FOH**



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