

# prosound

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**AUDIO ALL-STARS AUGMENT AWARDS**—The 61st Annual GRAMMY Awards, held Feb. 10 at the Staples Center in Los Angeles, took advantage of the latest technology to provide television viewers around the world with a high-definition/5.1 surround sound event. Only minutes before the start of the ceremony, members of the 2019 audio team gathered for a photo at the foot of the stage. For more on the GRAMMYS, see pages 14 and 36.

KEVIN WINTER/GETTY IMAGES FOR NAMM

## Women in Production Face 'Invisibility'

BY CLIVE YOUNG

SANTA MONICA, CA—On Feb. 1, the Recording Academy introduced the Producer & Engineer Inclusion Initiative, intended to create more opportunities for female music producers and engineers. Developed by the Recording Academy's Task Force on Diversity and Inclusion, the move comes on the

heels of an extensive study released Jan. 25 by the USC Annenberg School for Communication and Journalism, which found women's representation across the music industry lacking, most notably in behind-the-glass production roles, where, it stated, "female producers face an epidemic of invisibility when it comes to

(continued on page 49)

## Rosica Reviews Year One

Jeff Rosica became the CEO of Avid a year ago, ushering in a new era at the company. Now, in an exclusive interview, he looks back at his first 12 months and hints at what's ahead.



## Milan Gains Momentum in Pro AV

BY STEVE HARVEY

A group of manufacturers made something of a splash when,

at InfoComm 2018, they announced Milan, said to be the first fully realized standards-based protocol built for deterministic, interoperable,

future-proof media networking in the pro AV market. More recently, at the 2019 ISE (Integrated Systems Europe) show in Amsterdam in early February, many of Milan's supporters—a group that includes AudioScience, Avid, Biamp, d&b audiotechnik, L-Acoustics, Luminex and Meyer Sound—expanded their Milan-capable product catalogs.

Milan (Media-integrated local area network) incorporates a subset of specifications defined particularly for

the pro AV market—specifically media streams, formats, clocking and redundancy—that are built on top of the AVB (Audio Video Bridging) open standard networking protocol developed by the IEEE (Institute of Electrical and Electronics Engineers). Milan's supporters are all members of the Avnu Alliance, the consortium promoting the AVB/TSN (Time-Sensitive Networking) standards and their certification.

(continued on page 48)

## Panic! at the Disco's Calm Tour

Fueled by a hit album and the omnipresent single "High Hopes," Panic! at the Disco takes a victory lap around North America's arenas with an Eighth Day Sound-supplied system combining the best of digital and analog worlds, not to mention a brand-new d&b audiotechnik P.A.



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## Spider-Verse

(continued from page 25)

*Spider-Man: Homecoming*, and used Dolby's immersive system to bring new dimensions to the sound effects. "This was Sony Pictures Animation's first native Atmos show, so we took the time to use the system and the format to get the most out of it," he said.

The original Spider-Man, Peter Parker, makes an early appearance before the film introduces versions from alternate realities, including Miles Morales from Brooklyn and Peni Parker from the distant future. One early direction, according to supervising sound editor Geoffrey Rubay, was to reference the signature sounds from previous *Spider-Man* films before introducing updated versions for the new characters. "Wink at the old movies and move on," he said.

By applying sounds to everything on the screen, some of the more visually stimulating scenes—the film features clashing timelines and parallel universes—could have been chaotic. But as Rubay commented, "We didn't keep adding; we were done when there wasn't anything to take away. You don't have to hear every little thing. If we were as complicated with sound as those visuals are, your head would explode."

With so many creative minds involved, decisions were hashed out on the stage, with Lord getting the deciding vote. "Everyone had a voice



From left, panel moderator Carolyn Giardina, tech editor at *The Hollywood Reporter*; Tony Lamberti, re-recording mixer; Curt Schulkey, supervising sound editor; Geoffrey Rubay, supervising sound editor; Michael Semanick, re-recording mixer; and Vivek Sharma, associate editor, at Sony Pictures Studios.

and Phil's good at listening to everyone," said Semanick.

There was a lot of give and take between departments in service of the storytelling. "You start stripping things out. What if we yank the music out right here? Does it feel better, does it feel funnier? They just want to tell a great story," said Semanick.

The soundtrack is very dynamic at the insistence of the head creatives, said Semanick. "In order to make something loud, you have to get quiet before. Otherwise you're just continually trying to raise the ceiling. They're very concerned about how loud we are getting; we want to save the loud spots for when we want to be loud."

Digging in to some of the signature sounds, most notably the "spidey-sense" associated with each character, Rubay said, "The visual and

the sound don't sync up as much as you'd think. A lot of times we're early or late," he observed. And each one was different for each character and depending on context. "There was kind of a kit—we had a recording session with some instruments, running bows over them then stretching the sounds."

The team was more hands-off with the web-sling sound. "There was that classic sound that you can't get too far away from. So that's there," said Rubay.

Lamberti leveraged the Dolby technology to bring a new dimension to Miles' newfound abilities, spinning and panning those things around the room, and trying to get the motion out of them. "I did a ton of that on the previous film. On this one, I took that and used the Atmos

mixing environment to really work its magic."

The mixers offered some insights into their favorite tools. Lamberti reported that he has been leaning on Exponential Audio's reverb plug-ins such as Stratus 3D and Symphony 3D when working in Atmos. "They really create a sense of space that completely opens the imagination in terms of what you can do with placement in the room," he said.

Semanick is more traditional, he said. "I'm still on the [Lexicon] 960 and the TC 6000, as well as analog futzboxes." Critical to this project was the Lexicon 2400, released in the 1980s. "It's one of the most amazing pitch-shifters created, ever. It does one thing and one thing only."

Lord encouraged the team to pitch-shift all sorts of sounds. "He's very into experimenting and pushing the limits."

At one point, Semanick was challenged by having to interweave Daniel Pemberton's score with a song, "What's Up Danger," by Blackway and Black Caviar, when Miles becomes Spider-Man, a key moment in the film. "For the song, I had all the elements; the score plays underneath, and it takes over, then the song takes back over. By the end, the score has taken over from the song. I know the guys in the band loved how it played in the film."

AES  
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## Podcasting

(continued from page 25)

Bates. For their studio recordings, the presenters use Shure's SM7B microphone.

"If you have guests in the studio, this is \$200," Marolf added, holding up their Yamaha MG10XU, a 10-input mixer with four mic preamps and USB connectivity. "It's not going to do anything special, but it allows you to have really good sound for four people live in the studio."

As for audio processing, such as EQ or compression, there's always Apple's GarageBand, Marolf suggested, which is already installed on many people's computers or devices. In reference to processing, he stressed that "you don't need much." Reaper is a no-cost alternative, he said.

What if the host and the guest are not in the same room? Marolf asked, "How would you like them to sound as if they are in the exact same room as you?"

Tools are available that enable two or more sides of a conversation to be recorded simultaneously from the conferencing platform, but Marolf offered another method. The trick is to synchronize via a videoconferencing platform—FaceTime, Skype, Zoom—while each participant individually records his or her contribution.

Communicating face to face, albeit through a video screen, enables conversation to flow naturally, as if the participants are in the same room. Everyone wears headphones to monitor the conversation and records their own contributions, with the host counting down to synchronize everyone pressing record on their respective devices. At the end, the guest transfers his or her recording via Dropbox, Google Drive or the like to the host, who drops them onto the audio editing program timeline. "At that point, both voices sound like they are in the room," said Marolf.

"When you hear guests on podcasts, that's how we do it," said Bates. "Basically it's a phone call or videoconferencing recording into our own

devices, then editing it together. It's pretty simple."

Podcast distribution can be achieved through a variety of platforms. Episodes can be hosted on the podcaster's business or brand website, of course, but platforms such as Spreaker, Libsyn and others offer a variety of tools that can help the podcast reach a wider audience.

Podcasters can also post directly to Google Play, Apple iTunes, Spotify and others. Bates elaborated that for distribution directly to Apple, "You use your Apple ID and submit, and they approve you in about 48 hours. For Spotify and iHeartMedia, I believe you must have five public episodes first."

But an online platform such as Spreaker—which Bates and Marolf use but were not advocating for—can push podcasts out automatically, including to the big social media outlets. "You can Google the top 10 podcasting software," said Bates. "There's a small monthly fee, \$30 or \$40 a month, and you can do all the editing inside it or broadcast live."

Because both presenters are musicians—indeed, they are in a band together—they have a supply of music available for their podcasts with no rights issues. But there are alternatives, Marolf noted, such as free music libraries.

Bates suggested embracing Facebook private groups, too. "We all used to be on forums; Facebook private groups have taken their place. If you don't have one for your brand already, create one. It becomes the portal for people who have listened to your podcast, and other things with regard to your brand."

Bates advised fine-tuning scripts and avoiding cramming too much into an episode; themes can always be expanded in subsequent episodes. "Humans have been sitting around campfires listening to stories, learning from one another. The podcast medium is very much like that, and it's why it's such a powerful trust builder. It gives us a voice. So organize your voice a little bit."

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## innovations: the manufacturer's view

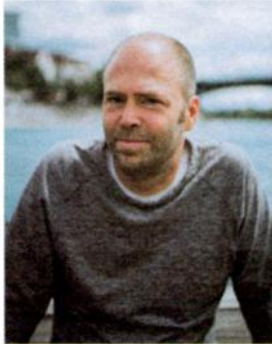
# The Power and the Glory:

## POWERSOFT T SERIES AMPLIFIERS

BY KLAS DALBJÖRN

If we look at the development of electronics, we see tremendous improvements over time. This progress is largely due to the miniaturization of components, new process efficiencies, the lowering cost of integrated circuits and an overall increase in their capacity. These improvements not only apply to processors (an observation known as Moore's law), they also apply to other solutions—for example, the lowering cost of converting between analog and digital signals.

If we look at the size and weight of power amplifiers, we see a similar phenomenon. Over the past 40 years, we have seen the density roughly double if we consider items such as channel count and total program power. Indeed, we have seen the physical size of amplifiers become twice as small or achieve twice the capacity for a given size every six years. Some of this is the result of new materials



Powersoft has had good success establishing itself as a leading supplier of very reliable, very efficient, lightweight amplifiers for demanding high-end applications in live sound. The headroom in the amplifiers guarantees pristine sound and dependable performance from the loudspeakers.

The most competitive, best-in-class products for large, high-performance systems are able to integrate advanced loudspeaker processing and can accommodate features like audio networking and loudspeaker monitoring. This turns what some might still want to refer to as a *power amplifier* into a *loudspeaker processor* that integrates a power amplifier: the networking capabilities make it scalable, and if it's done well, it can become a distributed loudspeaker management system.

When our development team was faced with the challenge of creating the next generation of a cost-effective amplifier for smaller systems on a tighter budget, we had some tough

choices. To reduce the risk of errors and to help guide the user, we went with dedicated buttons for navigating, as well as enabling value editing. The menu system is shallow and based on just 10 main pages, while the navigation buttons scroll between each of these. The buttons around the display change functionality depending on the page.

Another product feature is the extensive preset library and the powerful processing power; FIR filters allow preset designers to give the loudspeakers optimal transient responses, and cables can be compensated for, ensuring optimal performance at low frequencies.

Audio transmission over the network has become very common for large events, but until now it has not been widely available on more cost-efficient products. Configuring network equipment can be a challenge. For users who want to explore this, the Powersoft T Series makes it possible without any configuration on the network side; all that's required is connecting all the amplifier in a daisy chain, with the sound source at one end and the PC for control at the other end. We hope customers take advantage of this valuable feature.

To help our new users learn new skills (and help existing ones deploy their existing skills into smaller systems), the T Series includes full integration with Armonia+, our system control software. It facilitates tuning the system via overlapping groups with raised cosine filters, or by ear using an integration of Smaart. Many parameters that require settings per channel or per amplifier on other platforms can be performed directly on arrays or other selected groups of speakers in the software. Using Armonia+, it's also possible to troubleshoot a system and to look at the impedance of the connected loudspeaker(s) on each channel.

Most live sound amplifier product families will feature lower voltages for smaller, lower-cost models. In smaller systems, however, it is quite common to have a single 8 ohm loudspeaker per channel. This presented an opportunity for our development team: why not make a very homogenous amplifier range in which all models could deliver the same high output voltage so that smaller models could

### Power Sharing Explained

Many loudspeaker systems are bi-amped, using an 8 ohm LF that is rated at 600 W<sub>AES</sub>—requiring an amplifier rated for 1200 W<sub>BURST</sub> for full SPL. The second channel will often be an 8 or 16 ohm HF rated at 150 W<sub>AES</sub> and requiring an amplifier rated for 300 W<sub>BURST</sub>. If you wanted to drive two of these systems in the past, you would have had to look for an amplifier that wasn't designed for power sharing and typically was designed to deliver twice the power in 4 ohm. As such, you would normally have bought an amplifier capable of 4 x 2400 W<sub>BURST</sub> model (around 10 kW in total).

With the high voltage and power sharing of a Powersoft T Series, it is enough to buy a model with a max power capacity less than one-third of that. The T 304 can drive 4 x 750 W, but it can also give the above speaker all the power it needs: 1200+300+1200+300 = 3,000 W.

also play "full SPL" on 8 ohm speakers? This would allow for power sharing between channels and make the smaller models more affordable by saving in the power supply and output current capacity, while providing a solid feature set for the entire product family. The larger models would only be needed if all channels required full power, or if more loudspeakers needed to be used in parallel. The example presented in the sidebar shows how a small amplifier can outperform amplifiers that are twice the size and match models three times their size. For a user who sees these benefits, it becomes possible to compare T with other products and get the benefit of a product with a richer feature set for the same money instead. Please take a look at our website to find out more.

Klas Dalbjörn is product manager at Powersoft.

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and components arriving on the market, some is from clever product design, and some is from the increased knowledge of real-life requirements for a given application.

When it becomes time to invest in the development of a new product family, such as our new T Series amplifiers, these developments need to be taken into consideration—particularly if a new product family is to remain competitive ten years or more after its launch.

choices to make. In order to reach a larger user group, we had to make it simple to operate, resulting in a guaranteed behavior, but we didn't want to remove the ability to control advanced processing or audio networking—two things we feel will become industry standards in the years to come.

The front panel is super easy to use. We spent a lot of time on the user interface here because we wanted it to be fast to operate and intuitive.





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# TheMETAllianceREPORT

## Where We Are

BY ED CHERNEY, WITH A HAT TIP TO MAUREEN DRONEY

One of my great joys when listening to music when I was younger was reading the liner notes on the album package. I was really interested in who played, who wrote, who produced, who engineered, what studios were used and any artwork or photos. I could listen and imagine to the point of where, when and with whom it was happening. It was all a big part of the experience.

Well, that all went away, as many good things do, with the passage of time and changes in our culture, technology and how we consume our music today.

As a studio professional and music lover, losing the story of how the music that I love was made has diminished the listening experience for me and many of my peers. As the founder of the Recording Academy's Producers and Engineers Wing, I figured this would be a great topic we could tackle, as a group, and perhaps devise a remedy. For a long time that solution proved to be pretty elusive. I despaired that there would never be a solution—that it was just the way things were going to be.

I would be remiss if I did not mention that many professionals' work comes from the credits that appeared on albums we played on, recorded, produced and mixed. Those credits also informed my parents (and my wife) about where I had been and what I had been doing, mostly all night.

Although there is still a lot of work to be done, we're excited to say that there is good news on the credit issue. YouTube announced last May that it is going to show full credits, and it's going to register artists and performers on YouTube artist channels with a standard unique international identifier (ISNI) that will make people and payments easier to track.

Spotify has also agreed to start showing songwriter and producer credits. We're seeing examples of full credits on Tidal. At recent music conferences, Amazon and Apple have been starting to say what we have been talking about for years. They need and want to show credits. Artists speaking out on crediting have also been instrumental in raising awareness.

I am encouraged that the industry as a whole is beginning to recognize the importance of displaying credits, and almost everyone has acknowledged the added value that credits and notes bring.

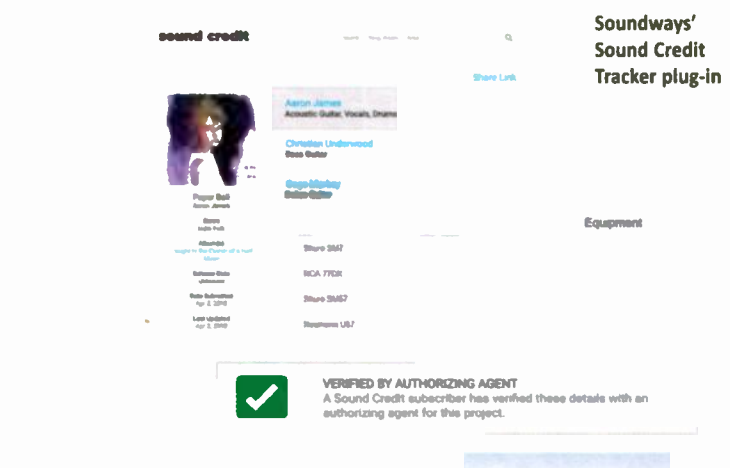
Unfortunately, the way a lot of music is made and distributed today, it is not always easy to identify and credit every person who contributed work. To this end, many now recognize that the people in the studio (or spare room, or garage, et cetera) at the point of creation are the ones who know who did what, where and when. The labels and distributors see the value in tracking this information and want that data from the studio.

For the moment, it may be up to engineers and producers to make this work. There is currently software that will run on Pro Tools, Logic and other digital production platforms and workstations that can be used to collect studio data in a simple way while the work is being done or after the fact. One example is Soundways' Sound Credit Tracker plug-in, which offers a free version.

Everybody in this ecosystem has a role to play—DSPs, labels and distributors. The studio professional's role is to collect and document as much of the credit and song data as we have access to so it can be passed forward into the digital supply chain. For now, this is the role that producers and engineers have to take on.

Next Time: METADATA—The future of how your music will be tracked and how you will be paid. Grammy and TEC Award-winning producer/engineer Ed Cherney is known for his work with a wide array of artists, among them Iggy Pop, Bob Seger, Bette Midler, Bonnie Raitt, Wynonna, Eric Clapton, Jann Arden, Jackson Browne, Keb' Mo', Bob Dylan and the Rolling Stones, to name just a few. A founding member of the Music Producers Guild of America, Cherney has also served as governor of the L.A. Chapter of the Recording Academy, and was honored with the Mix Foundation TEC Award as Engineer of the Year.

Look them up! You'll hear their recordings on the radio, streaming, in movies, at audiophile shows to demonstrate high-fidelity equipment, and more. You dance to them, you sing along with them. They'll make you happy, they'll make you sad, you may even cry. You'll hear those legendary songs in your head.



## Who Is the METAlliance?

The METAlliance is a group of engineers with an unparalleled track record who are responsible for the recording of legendary songs that resulted in unit sales in the hundreds of millions—most from a time when people paid a lot for music, went out of their way to find good music, and were constantly exposed to new and varying styles of music.

These are people who sat in the chair and represented you, the listener. They helped create the space and managed the latest technology—then and now—to capture the performance. That *one* performance.

With 40-plus GRAMMYS plus numerous Emmy Awards for engineering excellence, in addition to noteworthy AES recognition for outstanding contributions, the METAlliance is (alphabetically):

- Chuck Ainlay
- Ed Cherney
- Frank Filipetti
- George Massenburg
- Al Schmitt
- Elliot Scheiner

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This collective group of recording engineers has a mission: to elevate the quality of recorded music

performances, to make people aware of how truly great music can be, and to not let the magic of music go extinct. There are many ways to make music—playing an instrument, singing in an ensemble with others—and each one deserves support.

Performances are special and unique. In the creation of new music, the artist's initial expression and intent make the ability to capture those moments an art form unto itself that deserve preservation.

Experienced in a wide range of music styles, METAlliance members have worked with artists including Frank Sinatra, Taylor Swift, Barbra Streisand, Neil Young, Bob Dylan, Usher, Dr. Dre, Paul McCartney, Foo Fighters, George Strait, the Rolling Stones, Steve Earle, the Dixie Chicks, Dire Straits, The Eagles, Jackson Browne, Peter Frampton, Lionel Richie, Steely Dan, Bonnie Raitt, Toto, James Taylor, Steve Miller, Luciano Pavarotti, Korn, Eric Clapton, Jewel, Bob Seger, Sheryl Crow, Elton John, Ringo Starr, Fleetwood Mac, Iggy Pop, The B-52's, Aerosmith, R.E.M., Beck, the Doobie Brothers, Jimmy Buffett, Van Morrison, Meatloaf, Billy Joel, Dolly Parton, Rod Stewart, George Michael, Carly Simon, Foreigner, Kiss, The Bangles, Earth, Wind & Fire, Journey, Linda Ronstadt, Jennifer Warnes, Herbie Hancock, Phish, Little Feat and Frank Zappa.

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The METAlliance includes (l-r) Frank Filipetti, Elliot Scheiner, Chuck Ainlay, Al Schmitt, Ed Cherney and George Massenburg.





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# NAMM 2019

## PRO AUDIO/LIVE SOUND BOOM IN ANAHEIM

BY THE EDITORS OF PRO SOUND NEWS AND MIX

The NAMM Show has grown massively over the past decade, with 115,000-plus attendees descending on Anaheim in late January. Pro audio's presence at NAMM has likewise grown, resulting in the show becoming a crucial spot for companies to launch new products to audio aspirants and professionals alike.

There were lots of interfaces, lots of high-profile engineers speaking to big crowds, and a whole lot of new products, most aimed at the recording musician. There was also a coordinated growth in live sound product debuts, aided by the centralized location in North Hall and the new addition of P.A. demos in the Arena.

There were too many introductions to include them all here; more will be shown in future issues. Products are listed alphabetically. In the meantime, some debuts definitely caught our eyes, so look for our Editor's Choice logo as you read.



### API CELEBRATES 50-YEAR ANNIVERSARY

API made a big splash at NAMM in kicking off its yearlong 50th anniversary celebration. With the entire team clad in gold button-downs, owner Larry Droppa used the occasion to honor the company's founder, the late Saul Walker, who in February received a coveted Technical Grammy Award. Droppa then brought out producer/engineer Val Garay to introduce two limited-edition classic API products: the 550A discrete 3-band EQ, and the 312 mic preamp. Each was hand-assembled and wired, and each features an exact reproduction of Walker's original design and printed circuit board. Only 50 of the 550A units were made, along with 150 of the 312. Meanwhile, back to the present, the newest version of the BOX Console offers eight input channels and eight 500 Series slots, with LED metering for each of its 24 summing channels.



### APOGEE HYPEMIC

Apogee continues to straddle the pro and consumer audio worlds, and its main release at NAMM continues that emphasis. The company introduced HypeMic, a studio-quality USB condenser microphone with built-in analog compressor. HypeMiC features a PureDIGITAL connection for up to 24-bit/96 kHz recording, and a headphone output with Blend feature offers zero-latency recording. No configuration required, just plug in and record; works with iOS, Mac and PC.

### AUDIANT SONO AUDIO INTERFACE FOR GUITARISTS

Audient has teamed up with cab simulation pioneers Two Notes Audio Engineering for the creation of the Sono audio interface for guitarists. Combining Audient's analog and digital conversion recording technology with the speaker-cab simulation from Two Notes, Sono features an onboard 12AX7 analog valve and 3-band tone control alongside Two Notes' Torpedo power amp modeling and cab simulation. Sono provides many tonal options for guitarists, whether they're recording, practicing or gigging. Monitor mix allows blending between the guitar input signal and DAW playback, ensuring delay-free recording, playback and monitoring. In addition, Audient encourages Sono users to integrate their existing pedalboard.

### AUDIO-TECHNICA ATH-M50XBT WIRELESS HEADPHONES

Like Apogee, Audio-Technica is one of those companies that maintains quality and development across both pro and consumer lines. At NAMM, the focus was more on the casual/pro listener with the release of the ATH-M50 studio headphones in a Bluetooth wireless over-ear version. The closed-back ATH-M50xBT includes a 45mm large-aperture driver, with stated frequency range of 15–28,000 Hz, and the same fold-flat design, 90° swiveling earcups, and earpads



and headband of the ATH-M50x. The ATH-M50xBT utilizes Bluetooth 5.0 and is compatible with aptX and AAC codecs for wireless audio reproduction. An internal battery provides up to 40 hours on a full charge; a USB charging cable is supplied, along with a detachable 3.9-foot cable with mic for wired operation.

### AUDIONAMIX XTRAX STEMS 2

Audionamix continues to refine its audio extraction process and share it with the world in new permutations. XTRAX Stems 2, the DJ/prosumer version of the company's offerings, brings to the table an entirely new algorithm that significantly improves the speed and quality of the tool's cloud-based extraction. It also includes the introduction of a Separation Balance for fine-tuning the stems in relation to each other. In a livestreamed interview with *Mix* magazine, producer/artists/DJs Joachim Garraud and Venomisto talked about how the new algorithm and processing got them to nearly 95 percent of a finished track, with just a little polishing required to fit into pro studio and live productions. This audio extraction category is only getting better and improving rapidly, with more refined and customizable integration into workflows.

### AURALEX ACOUSTICS RLX: ROOM LAYOUT EXPRESS

Auralex introduced several new fabrics and new packages of acoustic materials tailored to the private studio owner, but the company also showed the first version of its new standalone app, RLX, designed to give instantaneous recommendations about acoustical treatment for a variety of small room types.



### BETTERMAKER BUS COMPRESSOR

TransAudio Group, the company's U.S. distributor, showed the new Bettermaker Bus Compressor at NAMM 2019. Like the rest of the Bettermaker line, the Bus Compressor combines a stereo analog signal path with digital recall and parameter control, and/or automation from a cross-platform plug-in. Besides the basic compression parameters like attack, release, threshold, ratio and so on, the Bus Compressor can be upgraded via expansion packs with more specialized functions like M/S, dry/wet mixing, highpass sidechain filtering, different compressor modeling modes and more. Expected by the second quarter of 2019.

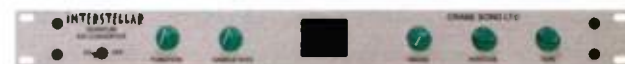


### CRANBORNE CAMDEN 500 EQ

This relatively new company, founded by former Soundcraft employees, spent its NAMM debuting the Camden EC2 2-channel, 19-inch rackmount preamp, Mojo signal processor and dual headphone mixer based on the Camden 500 preamp. Featuring two Camden preamps with the same Mojo analog saturation circuit, Camden EC2 achieves low noise and low distortion performance, as well as frequency and phase linearity at all gain settings. The Camden EC2 can take on the persona of a vintage British-style transformer-based preamp using Thump, a gooey tube-based preamp using Cream, or a clean and natural preamp when Mojo is bypassed. Switch each Camden preamp into its line mode and the Mojo saturation circuits can apply vintage coloration onto stereo stems during the mix phase. It features two reference-quality headphone amplifiers with discrete line mixers and independent CH1, CH2 and aux input level controls.

### CRANE SONG INTERSTELLAR A/D CONVERTER

Crane Song showed Interstellar, a stereo ADC incorporating the company's Quantum sub-picosecond clocking technology. The unit includes DSP emulation for triode and pentode tubes, tape emulation, dithering to 16 bits and world clock outputs, allowing Interstellar to function as a master clock. When used as a USB interface, the SPDIF output can be used to connect to a DAC, making it a USB bidirectional interface. The AES, SPDIF and optical outputs are active and can be used at the same time as the USB connection. The level of the DSP functions is set by front-panel controls.







#### FOCAL TRIO11 BE STUDIO MONITOR

Focal unveiled its new flagship monitor, the Trio11 Be, featuring a 5-inch midrange, 10-inch subwoofer, and the company's signature pure beryllium inverted dome tweeter. Like Trio6 Be, Trio11 Be comprises a 3-way monitor and a 2-way monitor, which makes it possible to check the sound quality of the mix by using Focus mode, a Focal innovation. Because of the Class-G amplification used on the midrange and subwoofer, Trio11 Be delivers an SPL of 118 dB at 1 meter; bandwidth is measured at 30 Hz-40 kHz. The aluminum baffle incorporating the tweeter and woofer is adjustable through 360°, in 90° increments, so Trio11 Be can be used either vertically or horizontally. Trio11 Be is set for March availability. Focal is distributed in the U.S. and Canada by Focal Naim America (formerly known as Audio Plus Services; see story on page 17).



#### JBL ONE SERIES 104 MONITORS

On the heels of JBL's M2 Reference Monitor System comes the JBL One Series 104 monitors, which include newly engineered JBL 4.5-inch coaxial drivers contoured using the same research that led to the waveguide found in M2, 7-Series and 3-Series monitors. The One Series includes



integrated 60-watt Class-D amplification that can drive to 104 dB SPL (peak). A front-panel headphone jack automatically mutes the speakers, providing isolation in one simple step, and dual 1/4-inch balanced and single 1/8-inch unbalanced TRS inputs accommodate a range of sources.



#### JOECO CELLO AUDIO INTERFACE

We stopped in the FullScale AV booth and met up with Joe Bull, the namesake behind the JoeCo Blackbox Recorder. At NAMM, he was showing Cello, a 22-input, 4-output USB 2.0 interface for Mac and PC with a true analog front end and tactile control surface. Cello features 125 dB dynamic range, operation up to 384k and Adaptive Conversion technology, offering new ADC and DAC filtering options. Also included are a built-in talkback microphone and monitor controls. The front end includes two microphone inputs with discrete analog mic preamps with 80 dB gain, highpass filter, Pad and Phase Reverse, with two dedicated preamp-only channels to ensure signal purity. S/PDIF and 16 channels of ADAT Lightpipe input are provided. Finally, mastering-grade monitor outputs are on hand, while the unit can also accept external word clock.



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**NEUTRIK**



**KRK ROKIT GENERATION 4**

KRK made a splash with the release of the fourth generation of its ROKIT studio monitors. All system elements are cohesively de-

signed and engineered to work with the advanced drivers made with Kevlar, Class-D power amplifiers and front-firing port to extend accurate and tight bass reproduction. ROKIT G4s also include onboard room tuning, with 25 visual room-correction EQ combinations. The G4 range includes RP5 (5-inch), RP7 (7-inch) and RP8 (8-inch) models for nearfield monitoring, and the RP103 configuration, which adds a 4.5-inch midrange woofer and 1-inch tweeter for midfield monitoring. The RP103 also features a horizontal mode that aligns the mid-woofer and tweeter vertically for improved listening accuracy.

**LAUTEN AUDIO LS-108 AND LS-308 MICROPHONES**

Lauten Audio showed two microphones in its new Synergy Series: the LS-308 large-diaphragm condenser instrument and voice microphone, and its first handheld vocal condenser mic, the LS-108. They join the LS-208 live version, released just a few months ago. The LS-308 boasts 270 degrees of side and rear off-axis rejection, reducing ambient sound from nearby sources by up to 25 dB. Features include 120 dB of dynamic range, two-stage low-cut (50 and 120 Hz) filters, two-stage high-cut (8 and 10 kHz) filters and internally shock-mounted condenser elements. The mics require 48V phantom power and feature a JFET transistor circuit with a transformer-based balanced output. The LS-208 features a cardioid polar pattern; the LS-308 features a second-order cardioid pattern.

**PMC/DOLBY/CAPITOL STUDIOS**

The Best Demo Award had to go to PMC, which

built an immersive playback room on the show floor to showcase its commitment to the format and its ongoing partnership with Dolby and Capitol Studios. Capitol engineer Steve Genewick was on hand to play back tracks from all genres, all remixed for the 7.1.4 Dolby Atmos-enabled format. PMC's 3-way MB3-XBD-A monitors formed the left, right and center channels, with the rest of the system comprising four PMC twotwoSub2 monitors and 16 Wafer 1 compact slimline monitors for the surround, rear and height channels. Content was played back using the Dolby Atmos renderer software, Pro Tools and Focusrite RedNet I/O.

**PRESONUS STUDIO USB-C INTERFACES**

At NAMM, PreSonus unveiled its Studio Series USB-C 24-bit, 192 kHz audio interfaces, with five models: the Studio 24c, Studio 26c, Studio 68c, Studio 1810c and Studio 1824c. All but the Studio 24c include DC-coupled outputs for sending control voltages, and all five models offer MIDI I/O. USB-C to USB-C and USB-C to USB-A cables are provided for compatibility with most computers. All models come with PreSonus XMAX preamps, Studio One Artist music production software and the Studio Magic Plug-In Suite.

**STEINBERG AXR-4 AUDIO INTERFACE**

Steinberg unveiled its highest-end audio interface to date, the AXR4, a 28x24 Thunderbolt 2 model with the ability to record and play back at a 384 kHz sampling rate with 32-bit-integer resolution. The unit includes four Neutrik combo mic inputs,

eight line inputs and outputs, and a pair of ADAT inputs and outputs that can also accommodate S/PDIF and AES/EBU connections. Also on board are MIDI and world clock ports, and two Thunderbolt connectors. The latter make it easy to daisy-chain the AXR4 with other gear. The 1U rackmount unit features new AXR hybrid mic pre-



amps, and like the UR models, the AXR4 offers Rupert Neve Designs SILK Processing. The interface also comes with a 28x24 DSP mixer, which features Yamaha DSP effects including the VCM 276 compressor, VCM EQ601 equalizer, Sweet Spot Morphing Channel Strip and Rev X Reverb. The unit is bundled with Cubase AI DAW software, which supports 32-bit-integer operation but not 384 kHz audio. It is expected to be available by end of Q1.

**STEINBERG CUBASE 10 DAW**

Steinberg has billed the release of Cubase Pro 10 as "a milestone in the innovative history of Cubase." Available in Cubase Pro 10: VariAudio 3, a pitch correction tool; MixConsole Snapshots for saving and recalling a current mix within the mixer, or for creating and comparing alternate mixes of a project; Audio Alignment, for aligning stacked recordings quickly so that vocal and other tracks are in complete sync; and 20 new impulse responses for REVerbence, the convolution reverb. The audio engine has also been refined, now supporting 32-bit integer and 64-bit floating point audio for recording, importing/exporting and converting.

**TASCAM EXPANDABLE SERIES INTERFACES**

TASCAM's new SERIES 102i 10-in, 2-out and SERIES 208i 20-in, 8-out audio-MIDI interfaces deliver 24-bit, 192 kHz recording and playback to a Mac, Windows PC or iPad. Controllable with included custom software, the two interfaces feature DSP input and



output mixers with built-in digital reverb, compressor, phase invert and 4-band EQ for each channel. The 102i provides two analog mic/line/instrument combo inputs with Ultra-HDDA mic preamps and individually switched +48V phantom power. The interface can be expanded up to 10 total inputs using its optical S/MUX port, which can accept up to eight channels of audio input from an ADAT- or S/MUX-compatible device. The 208i features four analog mic/line/instrument combo inputs and eight balanced, 1/4-inch line outputs to enable multiple monitor mixes or up to 7.1 surround monitoring. A large front-panel monitor knob and monitor balance control enables mixing live input with computer playback for zero-latency overdubs. Rear-panel 5-pin DIN MIDI in and out jacks allows connection of favorite MIDI devices.

**WARM AUDIO WA-84 MICROPHONE**

NAMM marked the debut of Warm Audio's WA-84, a cardioid, small-diaphragm condenser based on classic microphone circuit topology. The WA-84 sports a fully discrete signal path, a CineMag USA transformer, Fairchild transistors and Wima capacitors. The WA-84 has a large sound for its small size, using a heavy nickel CineMag signal transformer to warm up and enlarge sound sources. Features include three polar patterns (cardioid, omni, figure-8), 125 dB dynamic range, frequency range of 20 Hz to 20 kHz, and max SPL of 132 dB (<0.5 percent THD). The WA-84 is offered in both nickel and black colors, and in single and stereo pair quantities.

**WAVES CLA MIXHUB**

Waves made big noise with the introduction of the CLA MixHub plug-in, developed in conjunction with Grammy-winning engineer Chris Lord-Alge, who was on stage throughout the show to give enthusiastic demonstrations to crowds around the booth. The first plug-in of its kind, CLA MixHub captures the console workflow and analog sound of Lord-Alge's mixes—up to 64 tracks—all from the same plug-in window using channel strips modeled from CLA's personal console. CLA MixHub is the first plug-in to work in buckets—groupings of up to eight channels, in up to eight buckets in total. In other words, you can mix up to 64 channels from one CLA MixHub plug-in window. Once CLA MixHub is inserted on the channels in your mix, you can assign your tracks to buckets and begin making adjustments on the fly—mixing dynamics, EQ, saturation and more. Each channel consists of five sections: input, dynamics, EQ, output and an insert point. Each processing module can be expanded to reveal additional functionality.





## THE BOOM IN LIVE SOUND



### ADAMSON SYSTEMS ENGINEERING CS7p

Adamson unveiled its CS7p point source enclosure. The enclosure kicks off the new CS-Series, reportedly the world's first family of mobile loudspeakers to feature onboard Class-D amplification, DSP and Milan-ready (AVB) network endpoints. Road-tested, the CS7p has been used as a FOH nearfield monitor at high-profile events such as the Hillsong Conference (Australia) and on the recent Drake and Migos North American tour. The CS7p employs Milan-ready redundant AVB technology with the ability to daisy-chain networked audio between multiple sources, in addition to an analog XLR input and output. Acoustically, the CS7p contains two 7-inch Kevlar neodymium transducers and a 3-inch compression driver, loaded with a rotatable 70° x 40° (H x V) waveguide. The dipole arrangement of the cabinet provides a stable polar response, and the CS7p can be paired to increase horizontal coverage and overall output.

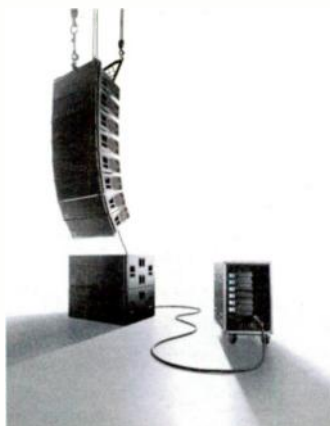
### ASHLY AUDIO MXA-1502 AMPLIFIER

Ashly's new amplifier checks a lot of boxes for many small to midrange installs. The mXa-1502 offers four zones of mixing and DSP, 2 x 150W of power, programmable mic pre's and more. Housed in one rackspace are eight balanced mic/line inputs, four stereo line inputs, four outputs, 2 x 150W Class-D amplifiers with selectable multi-mode operation; four front-panel buttons for source/preset selection; and comprehensive DSP on all inputs and outputs. Additionally, there's a scheduler and RTC; new Ashly-Control software, and it works with WR-1.1 and WR-1.8 remotes. Expected to ship around June, the mXa-1502 will be followed in the coming months with many more "related" products, according to the company's upper brass.



### D&B AUDIOTECHNIK KSL SYSTEM

d&b's SL-Series now has a second edition. The KSL System is the smaller sibling of the company's flagship GSL. KSL offers full-range broadband directivity, extended LF response and advanced rigging options, according to the company, and can be used in mobile or install capacities, able to cover arenas, stadiums and festivals, or conversely, clubs, theaters, houses of worship and performing arts venues. The KSL8 and KSL12 loudspeakers, with 80° and 120° horizontal dispersion, respectively, are said to provide consistent pattern control down to the lowest frequencies, in part due to the geometry of two front-facing 10-inch drivers and two side-firing 8-inch drivers, which couple and apply cardioid techniques to cause directivity with low-frequency headroom. Midrange is delivered by a high-sensitivity horn loaded with an 8-inch driver, while two custom designed 3-inch voice coil HF drivers are mounted on a wave-shaping device to provide high-frequency resolution and output.



### MACKIE DRM SERIES LOUDSPEAKERS

It was a big NAMM Show for Mackie, with daily festivities, a spirit of independence and an appearance by company founder Greg Mackie in celebration of the company's 30-year anniversary. The company also found the time to introduce an all-new flagship: DRM professional powered loudspeakers, packed with up to 2,300 watts of power, cutting-edge DSP and built-in full-color displays. Designed for mobile DJs, bands, install, houses of worship, rental systems and more, models include the 1,600W 12-inch DRM212, 1,600W 15-inch DRM215, 2,300W 15-inch 3-way DRM315, 2,000W 12-inch DRM12A Array and 2,000W 18-inch DRM18S subwoofer; all models are also available in passive boxes. At the heart of every DRM Series loudspeaker is Mackie's Advanced Impulse DSP module, which features precision crossovers, transducer time alignment and meticulously tuned FIR filters.

### MEYER SOUND M-NOISE

At NAMM, John Meyer and Bob McCarthy received a TECnology Hall of Fame Award for the Meyer Sound SIM System, whose development began in the early 1980s and continues today. The company was founded back in 1977 on the measurement of loudspeaker performance, and some things never change: this year found Meyer Sound unveiling a new sound system measurement, M-Noise, a mathematically derived test signal (i.e., not pink noise) that

effectively emulates the dynamic characteristics of music and reportedly enables a far more accurate measurement of a loudspeaker system's linear peak SPL in any application requiring reproduction of musical content. File format is 96 kHz WAV with a size of 10.2 MB. Playing time is 53 seconds but playback can be looped indefinitely. M-Noise can be used to determine the linear peak SPL of any loudspeaker system, regardless of manufacturer, size or design.



### SENNHEISER XS WIRELESS DIGITAL SERIES

Sennheiser unveiled the entry-level XS Wireless Digital series, which is aimed at musicians and videographers. The systems work on 2.4 GHz for worldwide, license-free operation. XSW-D employs digital transmission in the 2.4 GHz range and uses the aptX Live codec. The receivers have antenna diversity; the transmitters work redundantly, transmitting all data packages twice to ensure reliable transmission. In case of interference, the transmitter and receiver will hop to a free frequency. The audio latency remains below 4 ms. Up to five systems can be used simultaneously and they have a range of up to 75 meters (250 feet). The transmitter and receiver units can be recharged via USB using the included charging cable and will work for up to five hours on a single charge.

Products in the line include a Vocal Set with an XS 1 dynamic cardioid microphone; a Lavalier Set with an ME 2-II clip-on microphone; and an Instrument Base Set for instruments with a 6.3 mm (1/4-inch) output. Also available is an XLR Base Set for use with existing dynamic microphones, and a Presentation Base Set for use with existing clip-on microphones with a 3.5 mm (1/8-inch) mini-jack connector. This summer, a Pedalboard Set for guitar and bass players will be added to the lineup. All transmitters and receivers are also available separately.

### SSL L550 AND L350 LIVE CONSOLES

Solid State Logic has released the SSL Live L350 and L550 consoles, with the latter becoming the flagship of its console range. The L350 and L550 replace the L300 and L500 Plus in the current SSL Live console range and are showfile-compatible with all other SSL Live consoles. The L550 features 288 processing paths, 36 matrix outputs and 48 VCAs, assignable to any of the 36 + 2 faders on the control surface. Meanwhile, the L350 features a total of 216 processing paths, 36 matrix outputs and 36 VCAs in a 24 + 2 fader frame.

Both consoles can be augmented with USB Remote Fader Tiles or be connected to remotely from another console, a laptop running SOLSA remote control software or tablet running the TaCo control app for a flexible, expandable work surface. All existing SSL MADI and Net I/O Dante stageboxes can be deployed with them, and upgrade kits are also available to existing L300 and L500 Plus owners who want to upgrade their consoles.



### YAMAHA/NEXO GEO M12 AND MSUB18

NEXO has expanded on its Geo M10 with the flagship Geo M12 and accompanying MSub18, out now. The M12 shares the same aesthetic and sonic signatures as the Geo M10, but features more low end, the removal of the panel in the back that covered the 2-way active/passive switch, and more angle splay options than the M10. Weighing in at 34 kg, the M12 line array module employs a 12-inch neodymium LF driver paired with 1.4-inch titanium diaphragm HF. Integral rigging hardware with no loose parts aids the configuration of ground stacks and line arrays of various scales. The M12 is also offered with two vertical dispersions: the 10° GEO M1210 and the 20° GEO M1220. Horizontal directivity can be changed quickly from 80° to 120°.

Accompanying the M12 is a dedicated sub-bass cabinet, the MSub18. Employing a single 18-inch-diameter voice coil neodymium driver in a high-efficiency bandpass cabinet design with a quadratic-shaped profiled port, the dedicated MSub18 is the same width as the GEO M12 and can be deployed in arrays and groundstacks in omni or cardioid mode.





## Tackling the GRAMMYs' Live Sound

BY STEVE HARVEY

LOS ANGELES, CA—The house sound system for the annual GRAMMY Awards broadcast tends to change incrementally every year as manufacturers release new and improved products and system engineers introduce their own enhancements. For the 2019 edition, as the telecast returned to its longtime home at the Staples Center in downtown Los Angeles after a rare visit to Madison Square Garden in New York in 2018, sound provider ATK Audiotek rolled out new speakers from JBL and further strengthened the system's failure provisions.

"The equipment sometimes changes—things get lighter, more efficient and easier to fly," acknowledged Jeff Peterson, system engineer for Audiotek, during the event's six-day setup period at the arena. Above all, though, while there were 21,000 audience members in the house, the primary focus was always to ensure the best possible experience for television viewers. "The approach is to keep the room from affecting the



The front of house team for the GRAMMYs, clockwise, from top: Rick Bramlette, Mikael Stewart, Ron Reaves, Leslie Ann Jones, Andrew "Fletch" Fletcher and Jeff Peterson.

broadcast as much as possible."

For one thing, that meant maintaining a manageable SPL so that the broadcast music and production mixers weren't constantly fighting the room. No doubt that goal made the experience more enjoyable for the industry executives and fans who at-

tended the evening broadcast.

"Everybody down here in front of me does this for a living," said house music mixer Ron Reaves, who, like pretty much everybody on the audio crew, has worked on the GRAMMY Awards show for years, plus many

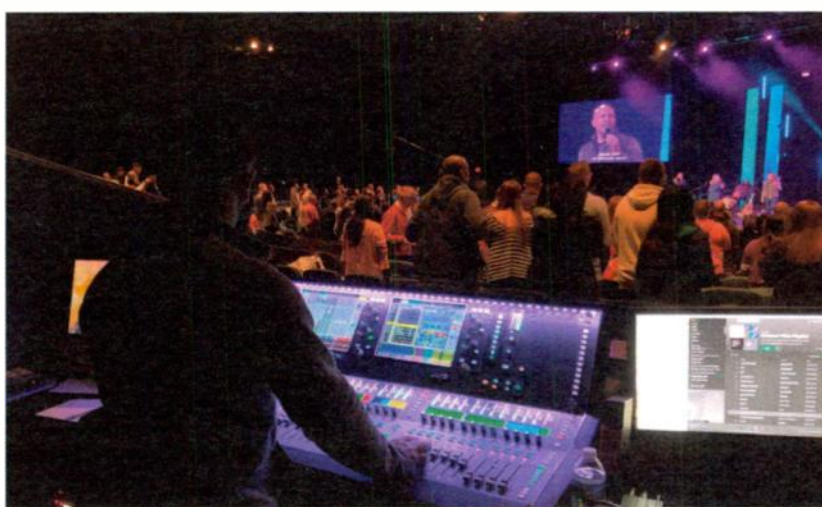
(continued on page 42)

## Wave Church Rolls with Audio Upgrade

VIRGINIA BEACH, VA—Wave Church's Great Neck Campus in Virginia Beach recently completed a major audio upgrade engineered and implemented by Virginia Beach-based S&S Productions.

The HOW now sports a pair of Allen & Heath dLive S7000 mixing systems at front of house and on stage for monitors, plus an S5000 standing in for broadcast needs. Future-proofing the system was a key consideration, as was the need to provide the volunteer staff with gear that was intuitive to use.

"Even if you've never seen them before, Allen & Heath dLive control surfaces have an air of familiarity," S&S Productions' Cory Sprenkle said. "A world of control opens up on the touchscreens that's as simple as the smartphones we use every day. Our volunteer operators were up and running in no time with little instruction."



Wave Church's Great Neck Campus added new dLive consoles at the FOH position (seen here) and broadcast booth as part of a larger upgrade.

Scenes are widely used at the Great Neck campus by all system operators, including Sprenkle, a member of the church himself. "Every operator has a different way of doing things," he said, "and with the dLive systems, we can customize our template of controls, save it, and even import it to other shows so we can always mix in the fashion we're used to."

The various engineers monitor and control the church's Shure wireless microphone systems directly from the dLive interfaces or via a laptop computer using Allen & Heath dLive Director software. Networking

capabilities were expanded with the use of Waves, Dante and AES I/O cards, the latter of which were used to carry digital input to the system amplifiers. As a safeguarding measure, each of the new dLive mixing systems is equipped with dual redundant, hot-swappable power supplies.

Further complementing the upgrade was an Allen & Heath DM64 stagebox and several DX32 and DX168 expanders. "We can use 128 inputs simultaneously," Sprenkle noted, "with far more than that available throughout the building."

Allen & Heath  
www.allen-heath.com

## briefs

## Clair Bros. Goes to China

SHANTOU CITY, CHINA—Shantou University recently upgraded audio in its 52,000-square-meter stadium complex, Shantou University Sports Park. DMT, a Clair Brothers (www.clairbrothers.com) distributor, designed and provided an extensive mobile system based around 32 Clair Brothers C12 full-frequency line arrays, 16 C8 full-frequency line arrays, 16 IS218 low-frequency line arrays and eight Clair Brothers 1AM stage monitors, accompanied by SSL L500 and L300 consoles, Clair Brothers/Lab.gruppen PLM amplifiers, Sennheiser wireless systems and DPA microphones, along with pairs of 8CX coaxial speakers installed in each of the eight VIP rooms around the facility.

## DAS Cooks Up Sound

NASHVILLE, TN—High Wire Productions recently designed and installed sound systems for FGL House, Jason Aldean's Kitchen, and Luke's 32 Bridge based around combinations of DAS Audio (www.dasaudio.com) Event and Vantec series loudspeakers. At Luke's 32 Bridge, the setup includes four Event 208A loudspeakers, Vantec 12A and 15A enclosures, plus 10 Vantec 218A subwoofers.

## Vienna Means Something to Alcons

VIENNA, AUSTRIA—The Vienna Metropol Theater's main stage is open on three sides, but it has a fairly low ceiling. A recent audio upgrade saw the theater opt for eight Alcons Audio (www.alconsaudio.com) RR12s and four BF302 mkII subwoofers to cover the crowd, controlled by two Sentinel10 amplified loudspeaker controllers.

## Yorkville Goes Hard Corps

MT. HOLLY, NJ—For the 2018 season, the Jersey Surf World Class Drum Corps once again teamed up with Yorkville Sound (www.yorkville.com) to provide sound reinforcement for the Drum Corps International Tour. Yorkville Sound's Paraline compact array system brought the corps' sound to audiences throughout the journey.



# Yamaha Makes Inroads at The Ark

CONROE, TX—The Ark Church in Conroe, TX, probably can't hold two of everything, but it might get close. Able to seat 2,600 people at a time—a necessity given its 10,000-member congregation—the house of worship's nine musicians and vocalists provide extensive contemporary devotional music at weekly and Night of Worship services.

To ensure that everyone can hear every note, Sound Productions (Irving, TX) recently installed a Yamaha Rivage PM7 console as part of a larger production update that included new wireless mics and IEMs, as well as lighting control and fixtures.

Chris Allgood, technical director at the Ark Church, noted, "As we are in the beginning stages of a 50,000-square-foot youth and kids' addition to our existing building, we were also looking to take one platform across five auditoriums. It makes training for volunteers less of a headache. We looked at every brand and model available and settled on the Yamaha Rivage PM7."

Yamaha systems application specialist Kevin Kimmel trained the qualified professional media staff. Caleb Hendrick is the Ark Church's audio director; he supervises the volunteers who work all auditoriums and venues outside of the main auditorium.

The Ark Church will be adding Yamaha CL desks with Rio units in its new auditoriums, and the decision to standardize on Yamaha desks in general was partially informed by positive experiences with two desks the Ark already owns: a pair of LS9-32 consoles.

Allgood noted that the previous LS desks "have been solid, and with that history, along with the reliability of the Yamaha brand, it made the PM7 stand out. I was looking for a solid desk with an I/O count that could provide for future growth. The TWINLANE networking along with Dante capability gives us a lot of future growth potential. The sonic quality of the desk is incredible. We had to completely retune our entire room to really take advantage of the warmth."

The Ark Church  
[www.thearkchurch.com](http://www.thearkchurch.com)

Sound Productions  
[www.soundpro.com](http://www.soundpro.com)

Yamaha  
[www.yamahaproaudio.com](http://www.yamahaproaudio.com)

A Yamaha Rivage PM7 console was installed inside the Ark Church by Sound Productions of Irving, TX.



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Hall 8.0 Booth C76

## S-SERIES EXPANSION

Introducing the S7, S7p and S10p

The Public unveiling of the latest additions to the S-Series family of products will take place at this year's Pro Light and Sound in Frankfurt, Germany. Be amongst the first to see the new S7, S7p and S10p products on the Adamson booth.

Visit: Hall 8 Booth C76 to see Adamson's expanding S-Series offering  
It's all online at [www.adamsonsystems.com](http://www.adamsonsystems.com)



## Inside Panic! at the Disco's Calm Tour

BY CLIVE YOUNG

BROOKLYN, NY—Playing the second North American leg of its nearly yearlong *Pray for the Wicked* tour, Panic! at the Disco has been performing to sold-out crowds, making it a hot tour despite some cold climates. “Our second show was in Laval, Quebec, and it was -1° outside,” laughed longtime FOH engineer Spencer Jones, looking around Brooklyn’s Barclays Center, the journey’s fifth stop. “This is nice—it’s the warmest it’s been so far.” It was 25 degrees out.

While Jones has worked with the group in various roles since 2011, the current production finds him bringing the band’s heavily electronic pop sound to life using a system from Eighth Day Sound (Highland Heights, OH), with the FOH position centered around a DiGiCo SD5 console. Despite the effect-heavy vibe, Jones uses only a handful of plug-ins, opting instead of rely mostly on outboard gear.

“I like being able to touch my faders and mix while I’m adjusting certain things,” he said. “Ultimately, it doesn’t add a lot of cost in the grand scheme of things, and it makes me more comfortable. I try to keep it as simple as possible to where the plug-ins that I do have on there still, I’m not looking at them as often. “I find feeling real knobs has a certain aesthetic to it, plus I learned on analog, so it was ingrained in me. Also, it just sounds better and plug-ins can fail; these units are a little more solid. I’ve come to have a standard package for any band I mix, certain elements that I like to have as outboard gear.”

Key to that outboard package, then, are certain items for singer Brendon Urie’s vocal, like an XTA GQ 600 graphic EQ and an Empirical Labs EL8 Distressor, along with a Bricasti M7. “I use that as my main vocal reverb. There’s plugs that will emulate it, but I feel like this one still sounds better; it has a very warm tone,” said Jones. Also in the



Panic! at the Disco main man Brendon Urie belts throughout the night via a custom gold-plated Shure KSM8 wireless mic.



The production is one of the first high-profile tours to use d&b audiotechnik’s new flagship GSL system.

rack sits a TC Electronic 2290 that he uses on a handful of songs nightly, more Distressors for backup vocals (“They add a punch that can cut through a mix”), a TC Helicon VoiceWorks he uses for one song’s underwater sound effect, and a pair of Eventide Eclipses, for which he noted, “I use one as a doubler, and then I have another that I mess around with for different types of vocal effects.”

A DiGiCo SD10 console sits at FOH for opening acts, but Jones keeps it ready to go during his portion of the night as a backup just in case; that caution paid off ear-

lier on the tour when the SD5 went down mid-show. “It happens to the best of tours. Equipment can fail, because they’re computers and we’re working them pretty hard,” said Jones. “We finished the last four songs on the 10 and didn’t go over our curfew. It’s pretty important in my opinion to have a backup next to you—not in the truck but set up with your file so you only have to switch outputs and a few cables.”

Jones’ mixes have been heard nightly through a brand-new d&b audiotechnik GSL line array system. Stage left and right each have

main hangs of 18 GSL boxes a side, along with six GSL subs flown and a dozen more on the ground. Side hangs are composed of 16 J8s and two J12s per side and then eight V8s a side tag the crowd nearly behind the stage in 240° sold arenas.

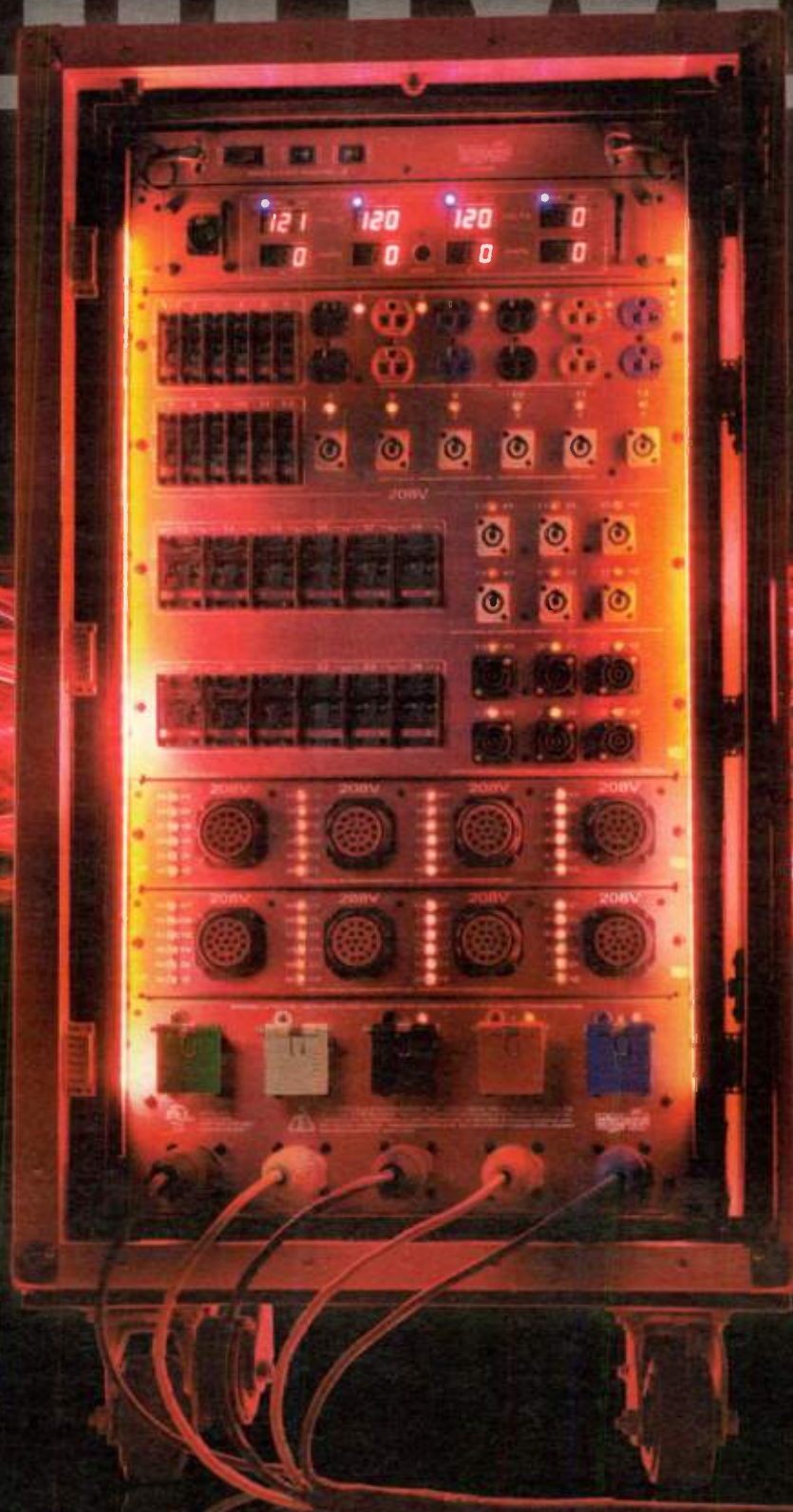
“It’s been great,” said Jones of the new GSL rig. “Plenty of power, plenty of clarity—it really punches through. They’re very balanced and I have no complaints. The subs bump. They have really great response all the way down to 20 Hz. There’s nothing you can’t hear on those things, and there’s tons of headroom where I never feel like I’m pushing it—which is nice, especially with a loud crowd.”

While the production is ornate, the wireless demands are low, with the 10 musicians on stage—Urie, bass, guitar, drums (who all sing), along with a three-piece horn section and a string trio—each sporting Ultimate Ears earpieces on Shure IEMs. In terms of wireless mics, the story is Shure-oriented, too, as the group is endorsed by the Chicago manufacturer. As a result, Urie is heard via a custom gold-plated KSM8 Dualdyne wireless, while backing vocals are captured through wired KSM8s and drum vocals get a Beta 56 due to the tighter pattern. The horns sport wireless Beta 98s and the drums are ensnared by a 91 and SM7 on the kick, Beta 57 on the tom, Beta 98A on the snare

(continued on page 40)




# whirlwind



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## Panic! at the Disco

(continued from page 38)

top, 57 on the bottom, Beta 181As on the hat and ride, KSM32s on the overheads and a VP88 above the kit to add a little compressed room sound to the drums.

With the exception of a Kemper rig on guitar and a SM7B used for

the bass mic, virtually everything else is straight XLRs into Radial DIs, including the digital pianos, one of which dangles overhead as Urie travels the length of the arena while serenading the audience with a medley of Bonnie Raitt's "I

Can't Make You Love Me" and his own "Dying in L.A." An impressive moment of stagecraft, the airborne journey is only one of a number of gags throughout the show that keep the audio crew on its toes. "We have a great crew from Eighth Day Sound," said Jones. "They handle the routing of where the cables are going because there are multiple elevators and a few surprises pop up,



Engineer Spencer Jones pauses with his DiGiCo SD5 at the FOH position inside Brooklyn's Barclays Center.

so they have to manage cabling to make sure it doesn't get pinched."

Surprising the fans is something the band has been doing on a regular basis, touring almost annually and releasing three albums since 2013, which in turn has kept Jones busy, too. "It's been nice seeing the growth," he said. "We were doing 1,000- to 1,500-capacity rooms for a while, and over the last three albums, it went up to where we're only doing arenas in the States, and even internationally only doing arenas. It's been a lot of fun to see the growth, but also to mix in different environments."

If the environment outside Barclays Center put a chill in the fans' bones, it didn't show as they belted along with Urie through nearly every song. "I average 100 to 101 dB over the course of the night," said Jones, "but there's times when I've seen the crowd sing along at over 100 dB; you'll feel the kick and his vocal, and the crowd's drowning out everything else. That's actually a cool moment because I can complement it. It's fun to know they're having a good time and I don't need to fight that. It's not a competition—if they want to be loud, cool."

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## GRAMMYS

(continued from page 36)

similar events in between. “Most of these people don’t want to be bludgeoned. They want to hear a nice musical mix and they want to hear the song that’s nominated and be able to understand the vocal.”

Reaves added, “This show doesn’t run as loud as some shows. We run between 95 dB and maybe 104 dB,” although there have been exceptions, including a performance by Metallica, and at the 2015 GRAMMY telecast, he said, “AC/DC was 116 dB for six minutes.”

Peterson tailors the house P.A. appropriately for power and coverage, and this year, that meant deploying some recent additions to JBL’s VTX A Series line. “The mains and main delay clusters are A12 boxes, a double-12 line array,” he said. “On the bottom of all four main clusters, we’re using the new A12W, a wide pattern of the A12 line. It’s 120 degrees wide, so we don’t have a hole in the center of the room.” Peterson deployed eight A12Ws in all.

“We have to fly our P.A. fairly wide for sightlines, so the 90-degree cutoff often gives us a bit of a dip in the center. Now, with the extra overlap, it’s better coverage. It also covers better on the sides, where the main left and right overlaps with the outfills.”

Front fills ensure that sound and visuals match for those close to the stage: “You don’t want to hear a concert coming from 40 feet overhead,” said Peterson.

“For the sides and the high parts of the arena, we have small delay clusters for the 300 level, which are VerTec 4886s; there are 36 of those up there,” he continued. “And in the back of the room, I have four delay

clusters with VTX A12s, same as the mains.”

For the first time, show producers added a seating section on either side of the stage. “We’re covering those with JBL’s new A8, a small cluster of four, covering about 18 feet of audience” on each side, he said.

For low end, “we have 16 elements of S28 in the air. We don’t hang enough subs to do a hip-hop concert, because we’re not aiming for 115 dB. There are also weight and power requirements.”

Peterson put eight of JBL’s new B18 subs on the floor. “It’s a companion for the A8, a single-18 high-efficiency sub. They’re under the lip of the stage.”

A total of 19 Crown Audio I-Tech 4x3500HD amps powered the line arrays, with six I-Tech 12000HDs driving the subs. “It’s all controlled through Performance Manager software and processed in the amplifiers,” said Peterson, who has used Optocore’s network system for P.A. drive for more than a decade, this year using six DD32R-FX and a pair of DD4MR-FX units.

The house sound team used four DiGiCo consoles for this year’s telecast. “There are eight SD-Racks for inputs, and another four that the monitor guys are using for outputs, on two independent fiber rings,” said Peterson. Each SD-Rack handled 56 inputs.

Mikael Stewart, who has long mixed the production elements—videotape package playback, announcer mics and similar sources—used an SD5. Reaves, sitting to his right,



Michael Abbott has been head of audio for the GRAMMY Awards for several decades.

mixed the performances on an SD7.

“I have 168 open faders, plus eight stereo effects returns and some miscellaneous channels,” Reaves said, adding, “I’ve never had to use the 168 faders, although we do on the Tony Awards. We max this thing out.”

A fifth DiGiCo desk, a compact S21, was also at FOH in case of a failure in Stewart’s console. “That console lands a full production mix from the truck, without audience mics, and a music mix from Ron. If Stewart’s console crashes, I can switch the system drive inputs over to that backup console,” said Peterson. Previously, those lines were routed to Reaves’ desk; the new workflow enabled the three engineers working with the two FOH mixers to better address a failure.

“We’re sending mix-minuses from

front-of-house back to the [broadcast] truck as well” to cover all contingencies, added Michael Abbott, head of audio for the show for several decades. “That’s being done on a Lance Design Cobranet platform; that’s new.”

Abbott reported that there were 300 to 350 wired and RF microphones in all, including those for the announcers and crowd mics, together with 30 or so line-level inputs in the GRAMMY live production. This year, he said, “We’re using the Sennheiser Digital 6000 and Shure Axient Digital systems, and we’ve got the new Audio-Technica 5000 series as well.”

All the wired and RF stage mics plus 14 channels of Avid Pro Tools playback—there were two playback rigs and operators backstage supplying musical elements plus clicks and counts and, in some cases, show automation timecode—went through the backstage split

world to the show’s longtime monitor engineers. Tom Pesa and Mike Parker worked side by side behind the set on a pair of SD7 desks. For failure mitigation, said Pesa, who handled the A stage, “Parker and I can pick off each other’s stage inputs, so everything is available.”

Audiotek supplied 24 channels of Shure PSM 1000 in-ear transmitters and more than 100 belt packs. While most artists have long since transitioned to in-ears, older artists still often rely on wedges, reported Pesa. For that purpose, this year Audiotek also brought along 48 of its small LM3 and 18 of its new large LM6 proprietary stage monitors, he said, plus 16 large M5 wedges.

GRAMMY Awards  
www.grammy.com



All the wired and RF stage mics plus 14 channels of Avid Pro Tools playback went through the backstage split world to the show’s monitor engineers.



Tom Pesa, seen here with his DiGiCO SD7 console, is one of the GRAMMY Awards’ two longtime monitor engineers.

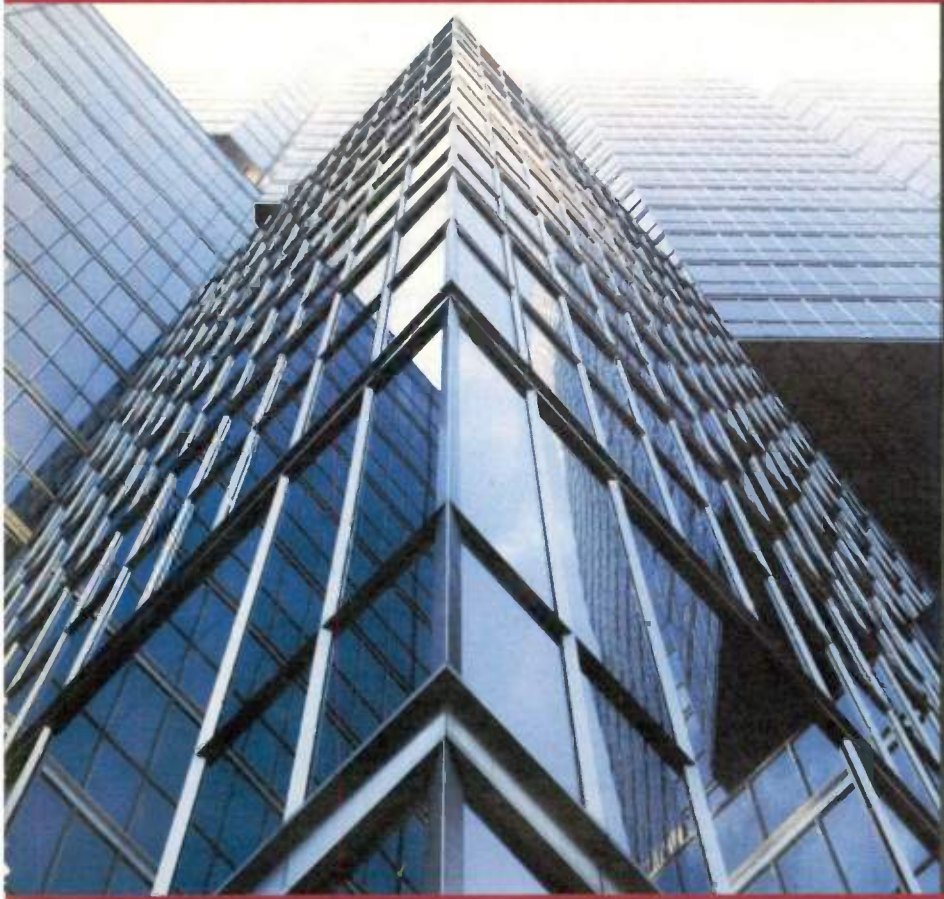


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# centerSTAGE TOP 10 TOURS OF THE MONTH

ACT / STATISTICS	CREW	EQUIPMENT
<b>1 ERIC CHURCH   CLAIR GLOBAL</b>	Billy Moore (be); Marc Earp (pm/me—artist); Ben Rigby (me—band); Jared Lawrie (cc); Nathan Lowe (m tech); Dustin Anderson, Melissa Terrazas (techs)	HC: (2) Midas Heritage XL4; MC: (2) Avid Venue Profile; HS: Clair CO-12, CO-10, CO-8, CP-218; IEM: Sennheiser G3; HA: Lab.gruppen PLM 20000Q; WIRELESS MICS: Shure UR with Telefunken M80 Capsule; FOH EQUIPMENT: TC Electronic D-Two; Bricasti M7; Yamaha SPX 990; Tube-Tech CL 2A; Drawmer DS404, 1968, DL241, DS201, DS501, DL441; Empirical Labs EL-8 Distressor, Fatso; Manley ELOP; API 527, 2500; dbx 560A, 520, 903; Neve 543; MONITOR EQUIPMENT: Waves Live Bundle; OTHER: Radial JX44, SGI44, JR5, J48
<b>2 PHISH   CLAIR GLOBAL</b>	Garry Brown (be); Mark “Bruno” Bradley (me); Thomas Huntington (se); Chris Holland (m tech); Don Baker, Scott Diamond, Tim Banas, Ben Scanlon (techs)	HC: Yamaha Rivage PM10; MC: Yamaha PM5D, DSP5D; HS: Clair Cohesion CO-12, CP-218, CO-10; MS: Clair 12am, MD-18; HA: Clair StakRak with Lab.gruppen PLM 20000Q; MA: Clair Lab.gruppen 8-mix monitor racks; OTHER: Radial J48, JDI
<b>3 BRUNO MARS   CLAIR GLOBAL</b>	Chris Rabold (be); Ramon Morales (me); Chris Sullivan (cc/se); Scotty Megrath (ae); Paul Tobey (cc/rf tech); Jacob Caples, Matt Gallagher (techs)	HC: DiGiCo SD7 with SD Racks; MC: DiGiCo SD7 with SD Racks; HS: Clair Cohesion CO-12, CP-218; MS: Clair CO-8, CM-22, CP-118; IEM: Shure PSM 1000; HA: Lab.gruppen; MA: Lab.gruppen; HARDWIRED MICS: Shure SM 81, 91a, 52a, Beta 181, SM 58, 57; AKG C-414, 45; Sennheiser MKH 451EB, MD 421, MD 409; Beyer M 88 TG; Audio-Technica; Telefunken M80, M60, TK62 capsule; Radial J48, SW8, EXCT-SA, X-Amp Reamp, SGI, J+4, SW8; Countryman DI; WIRELESS MICS: Sennheiser 9000 with 9235 handhelds; FOH EQUIPMENT: Waves Mercury Bundle, SSL Bundle, Abbey Road Bundle; Bricasti M7; Empirical Labs EL-8 Distressor; Midas XL42; Chandler TG1; TC Electronic 2290; MONITOR EQUIPMENT: Waves SSL 4000, API Bundles
<b>4 ANDREA BOCELLI   PRG</b>	Andrea Taglia (he/me/se); Francesco La Camera (orch e); Alan Henig (cc); Gabriele Turra (ae); Andre Roy, Tomasz Gajewski, Armando Montalvo, Justin Willmon, Tyler Austin, Alex Rotelli (tech)	HC: Midas Heritage 4000, XL-4; HS: L-Acoustics (88) K2, (4) K1-SB, (14) KS28, (36) Kara, (8) 12XT, (12) MTD108A; MS: (10) Meyer Sound UM-1P; IEM: Shure PSM 1000; HA: L-Acoustics LA12X; HARDWIRED MICS: 3 Schoeps CMC 6/MK 21, CMC 6/MK 4; Shure KSM32, SM57, VP88; AKG C414; DPA 4061; Schertler DYN-B; Electro-Voice RE20; various DIs; WIRELESS MICS: Shure UR2/KSM9, UR1 with DPA 4061; FOH EQUIPMENT: Meyer Sound Galileo; L-Acoustics LA Network; Lexicon 960L; TC Electronic 6000; dbx 162SL, 160A; Drawmer DL241; Tascam SS-CDR200 (SD recorder); Tascam SS-CDR200 (SD player); MONITOR EQUIPMENT: XTA DP448
<b>5 TRAVIS SCOTT   CLAIR GLOBAL</b>	Ken “Pooch” Van Durten (be); Justin Hoffmann (me); Tim Shaner (cc); Kory Lutes (m tech); Jordan Turner (rf); Tim Joyce, Jesse Cole (tech); Ian Kinersley (pm)	HC: DiGiCo SD12; MC: DiGiCo SD12; HS: Clair Cohesion CO-12, CO-10, CP-218; MS: Clair CM-22, CP-218; IEM: Shure PSM 1000; HA: Lab.gruppen PLM 20000Q; MA: Lab.gruppen PLM 20000Q; WIRELESS MICS: Sennheiser Digital 6000; FOH EQUIPMENT: Waves SSL4000, C6; MONITOR EQUIPMENT: Waves SSL4000, C6
<b>6 THE DAVE MATTHEWS BAND   ULTRASOUND</b>	Jeff Thomas (be); Tom Lyon (be); Ian Kuhn (me); Lonnie Quinn (ame); Joe Lawlor (re); Michal Kacunel (s tech); Greg Botimer (m tech); Ethan Chase (tech)	HC: Avid Venue Profile (96 Ch.); MC: Avid Venue S6L (32 Ch.); HS: Meyer Sound Leo, Lyon, LFC-1100, HP-700, CQ-2, Leopard; MS: Meyer Sound MJF-212A, LFC900; MA: Lab.gruppen fp-2400 for Clark TST; IEM: Sensaphonics 3D, 2X; Shure PSM 1000; MICS: Neumann; Sennheiser; AKG; Shure; B&K; DPA; Crown; Electro-Voice; Audio-Technica; Earthworks; Radial JDI, JD7, Duplex; FOH EQUIPMENT: Meyer Sound Galileo, Calisto; Metric Halo Mobile i/o 2882; Avid Pro Tools 12.6, Apple Mac Pro; Rational Acoustics Smaart 8; Lectrosonics TM4000; MONITOR EQUIPMENT: Apple Mac Pro; Avid Pro Tools 12.6; PWS GX-8
<b>7 TRANS-SIBERIAN ORCHESTRA   CLAIR GLOBAL</b>	Dave Whitman, Michihiro Tanikawa (he); Scott Fraser, Earl McCoy (me); Jim Ragus, Ben Rothstein (cc/se); Kory Lutes, Ken McDowell (mse); Bobby Taylor, Clayton Johnson, Mike Gamble, Rachel Stuemke (techs); Jeff Boguski, James Pettinato (pm)	HC: DiGiCo SD7 Quantum; MC: DiGiCo SD7 Quantum; HS: Clair Cohesion CO-12, CO-10, CP-218; MS: Clair CM-22; IEM: Sennheiser 2000; HA: Lab.gruppen; MA: Lab.gruppen; HARDWIRED MICS: Shure; Sennheiser; Radial; WIRELESS MICS: Shure Axient
<b>8 MAROON 5   SOUND IMAGE</b>	Vince Casamatta (be); Bill Chrysler (bme); Marcus Douglas (cc); Matthew McQuaid (se); Wayne Teaster, Nathan Payne (techs)	HC: DiGiCo SD5; MC: Avid S6L 32; HS: (32) L-Acoustics K1, (34) K2, (16) K1SB (18) SB28, (18) KARA; MS: Sound Image MA 1x12; IEM: Shure PSM 1000; JH Audio Roxanne ear pieces; HA: Lab.gruppen; MA: Crown I-Tech 12000HD; HARDWIRED MICS: Shure; AKG; Audio-Technica; Neumann; Sennheiser; Radial JDI, J48; WIRELESS MICS: Shure Axient; FOH EQUIPMENT: Tube-Tech CL 2A; Rupert Neve 5045; Bricasti M7, Apogee Big Ben Master Clock, Waves plug-ins; MONITOR EQUIPMENT: Waves plug-ins
<b>9 BILLY JOEL   CLAIR GLOBAL</b>	Brian Ruggles (he); Josh Weibel (me); Rich Schoenadel (cc/se); Jay Yochem (m tech); Tom Ford, Bryan Darling (tech)	HC: DiGiCo SD5; MC: DiGiCo SD10; HS: Clair Cohesion CO-12, i-3, P-2, R4, CP-218; MS: Clair CM-22, SRM, ML-18; IEM: Sennheiser 2050; HA: Clair StakRak (Lab.gruppen); MA: Lab.gruppen; HARDWIRED MICS: Shure; AKG; Sennheiser; Audio-Technica; Radial J48, JDI, SW8, Firefly; WIRELESS MICS: Shure UR Series; FOH EQUIPMENT: Waves
<b>10 FLORIDA-GEORGIA LINE   CLAIR GLOBAL</b>	Jared Blumenburg (be); Juan Gomez-Marin (me); John Howell (m tech)	HC: DiGiCo SD10; MC: DiGiCo SD5. HS: d&b audiotechnik J Series, V8, Q7, J-Infra Sub, JSub; IEM: Shure PSM 1000; Clair Fractal antennas; HA: Lab.gruppen PLM 20000; MA: Crown; HARDWIRED MICS: Shure; Sennheiser; WIRELESS MICS: Audio-Technica 5000 wireless with 6100 capsules; FOH EQUIPMENT: Waves; OTHER: Radial Firefly, SGI, PZDI, PZ Pre, ProRMP, Stagebug SB15

**LEGEND:** (he) house engineer. (ahe) ass't house engineer. (be) band's house engineer. (me) monitor engineer. (ame) ass't monitoring engineer. (bme) band's monitor engineer. (se) systems engineer. (ae) ass't engineer. (tech) technician. (cc) crew chief. HC: house console. MC: monitor console. HS: house speakers. PMS: personal monitor systems. MS: monitor speakers. HA: house amplifiers. MA: monitor amplifiers.

Top 10 grossing tours according to *Billboard*. Some tours did not report grosses for all shows; rankings may be affected as a result. Equipment and crew information are provided by the respective sound reinforcement companies.





**Roland Rice**

Harman Professional Solutions has named **Roland Rice** to the role of vice president and general manager, North America Sales. Rice has more than 30 years of experience and has held senior leadership roles at Altec Lansing, Diamond Multimedia and Avid, where he restructured divisions and developed new logistics and sales channels. Most recently, as vice president of sales at Plantronics, he was responsible for \$540 million in annual revenue and established the company as the marketshare leader in mobile and enterprise headset sales.



**Dr. Paul Tapper**

Nugen Audio has named **Dr. Paul Tapper** to the role of chief executive officer. Tapper developed many of the original algorithms in use by Nugen Audio products today, including the loudness metering and correction, DynApt, upmixing and True Peak limiting. Nugen Audio was co-founded in 2004 by Tapper and Jon Schorah. Tapper also worked as a lead programmer at Runecraft until 2003 and as a lead programmer for Team 17 Digital from 2003 to 2010.



**Rachel Archibald**

Clear-Com has appointed **Rachel Archibald** as its new director of marketing. A veteran of the pro audio industry, Archibald spent 17 years at Meyer Sound in increasingly senior marketing roles, culminating in 12 years as director of marketing. She led global marketing and communications programs that contributed to the company's growth, providing support for sales and organizational goals. Archibald also was instrumental in the development of the thought leadership conference TIDE for AVIXA, the producer of InfoComm.

Universal Audio has brought on **Allan Timms** as its vice president of engineering, a role in which he will define and deliver critical architectures for current and future UA products. As the head of software engineering at Logitech, Timms was responsible for all embedded, mobile, desktop and cloud software stack teams, as



**Allan Timms**

well as the overall software strategy. Prior to Logitech, Timms spent more than 10 years in various engineering leadership roles at Qualcomm, culminating as director of engineering, Smart Gateway Products.



**Rob Mailman**

Sound Image has appointed **Rob Mailman** as senior vice president. Mailman joined the company in April 1986 and has tackled front of house for Brian Wilson, Crosby Stills & Nash, Lindsey Buckingham and others, but most notably spent 16 years mixing Carlos Santana. Mailman was also general manager of production at Sound Image when he was not on tour. Mailman has handed Santana mixing duties over to Kevin Madigan.



**Kathy-Anne "KAM" McManus**

Avid has appointed **Kathy-Anne "KAM" McManus** as senior vice president of global customer solutions and services. She returns to Avid, where her previous roles included vice president of worldwide professional services and director of services for Asia-Pacific. McManus has held senior leadership roles in the services and support organizations at Adobe, Amdocs and Ericsson, and telecommunications operator Telstra. She entered the media industry as an editor and producer for Australian broadcast television networks Seven and Nine.



**Doug Taylor**

Listen Technologies has promoted **Doug Taylor** to the role of chief product officer, a new position, where he will continue to lead product management and product marketing while establishing product vision and strategy, and partnering with engineering, marketing, sales and company leadership. Previously, Taylor served as executive vice president of product management and business development at Listen Technologies. He

has also held senior positions in sales, marketing and product management at GE Healthcare and Eaton.



**Daniel Bennett**

The professional audio division of Yamaha Corporation of America has appointed **Daniel Bennett** to the position of district manager for NEXO loudspeaker systems in the United States and Canada. Bennett was most recently in a management role with AVMS, a Yamaha Commercial Audio dealer in the Seattle area, and his background includes experience in live production, corporate AV, systems integration and audio engineering.



**Vince Marcantonio**

Solotech has appointed **Vince Marcantonio** to the position of senior business developer for Solotech's Ottawa office. In the role, under the direction of sales director Robert Aubry, Marcantonio will develop business opportunities in Canada's capital region. With more than 20 years of experience in the audiovisual sector, including for large-scale systems integrators such as Sony Canada, where he began his career, and the Canadian government, Marcantonio is seasoned in business development.



**John Mills**

Eastern Acoustic Works has appointed **John Mills** to the role of senior applications engineer. A 25-year industry veteran, Mills most recently served as vice president of Nashville's Morris Light & Sound, where he worked for the last eight years. Mills has commissioned and tuned more than 100 houses of worship and other installations; has mixed FOH for acts such as Chris Tomlin, Lincoln Brewster, Shane and Shane, and Paul Baloche; and served as systems engineer for country music superstar Kenny Chesney.

L-Acoustics has hired new members for its product management and application touring teams. New hires **Marcus Ross** and **Vic Wagner** join United States and Canada application, touring, and **Scott Sugden** assumes a product management role.



**Scott Sugden**

Sugden joined L-Acoustics in 2010 as head of U.S. touring support; in his new role, he will be part of the product development process, liaising with key stakeholders across geographies and company functions to help L-Acoustics identify, capitalize on and communicate new product opportunities.



**Marcus Ross**

Ross has assumed the role of head of application, touring, U.S. and Canada, reporting to Florent Bernard, director of application, touring. Based in L-Acoustics' North America headquarters, Ross will lead application support for all rental production projects in the United States and Canada, interfacing with key clients and accounts on an ongoing basis, in conjunction with his business counterparts. Ross will also assist on major projects and events, including sound design and on-site support.



**Vic Wagner**

Wagner, application engineer, touring, joins L-Acoustics as an experienced system engineer and certified K System engineer, having deployed systems for Sound Image over the past decade for tours by Maroon 5, Santana, Sia, Tom Petty and The Heartbreakers, Zac Brown Band, Linkin Park, Kid Rock and others. Wagner will lead training and education efforts in North America from the L-Acoustics headquarters in Los Angeles.

DPA Microphones has appointed **Thomas Frederiksen** as its vice president of sales for the APAC region. A fluent Japanese speaker and formerly managing director of Shure Japan, Frederiksen has held senior sales and management positions for a range of high-profile companies, including a four-year tenure at Brüel & Kjær, the company that was the forerunner of DPA Microphones. Frederiksen began his new role on Jan. 1 and is supported by DPA's existing Hong Kong-based sales staff.



**Thomas Frederiksen**

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# Recognizing the Past, Celebrating the Future

SIAMAK NAGHIAN, MANAGING DIRECTOR, GENELEC

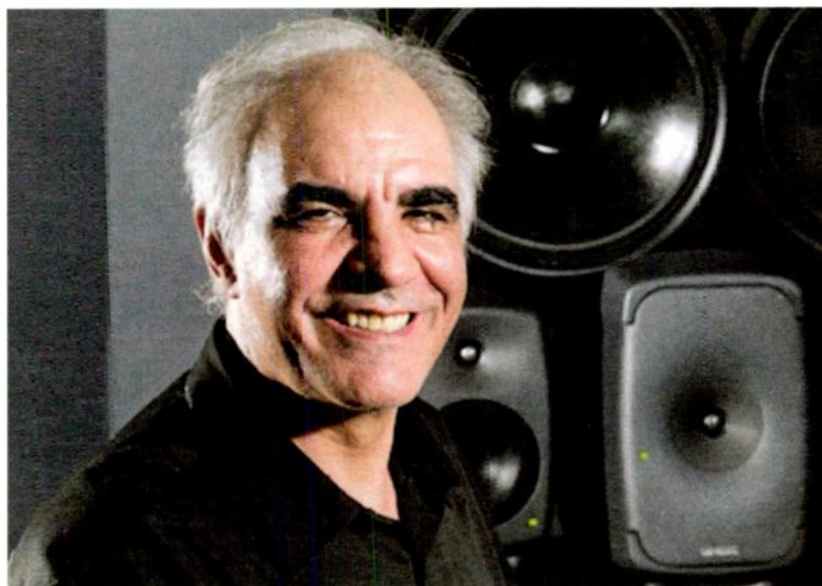
Finnish studio monitor manufacturer Genelec has been helping audio professionals achieve the mixes they envision for decades. The company spent much of 2018 celebrating its 40th anniversary.

Founded by the late Ilpo Martikainen in 1978, Genelec, based in Iisalmi, Finland, remains family-owned and family-operated to this day, even as it has grown to more than 150 employees. With both Genelec's history and future in mind, managing director Siamak Naghian shared a look back and then discussed what's next for the company.

**It's been a big year for Genelec, with its 40th anniversary celebrations in 2018. What have been some of the highlights from the past 12 months?**

**Siamak Naghian:** The most important highlights are naturally related to the recognitions and attention we have received from people in the audio community—both related to the company anniversary, its history and heritage, and also to new products. Our anniversary event was a great milestone, and having our friends all around the world celebrating our joint success was a very rewarding moment. We have been working with most of those people for decades. They have contributed to the company's success, and naturally it was great to celebrate such a milestone with the wider Genelec family.

It was also a touching moment when we gave Genelec medals to our personnel who have been working for the company more than 10 years. More than 50 percent of our personnel have been with us over 10 years and some even more than 30 years. This is a great indicator of our company culture. It shows the deep commitment people have to Genelec and to our mission: achieving the most



Siamak Naghian

truthful sound.

Beyond that, and in terms of innovations, the success of The Ones monitors has been an excellent highlight. It is encouraging to see how well users and the audio community in general have responded to these radical breakthroughs.

**Forty years is a major milestone for any company to reach. What has been the key to Genelec's longevity?**

The company values, philosophy, professional heritage and mission are definitely the foundation for such an amazing history. For over four decades, [Genelec has been] a pioneer, continuously bringing innovations to the monitoring market at a time when technology, society and the wider business environment has been developing extremely fast. This would not have been possible without a deep dedication and determination to constantly push the boundaries forward. This has required commitment and determination to long-term research and development, as well as the building of close relationships with our network of users, suppliers, distributors and other partners. Building trust in all directions about

what the company does, and providing real value to the community has been key to the company's longevity.

**The company is still very much a family business. How crucial has this unified vision been to the company's success over the past four decades?**

Dedicated and present ownership is a unique way of motivating others to get committed to the company's mission and vision. Such a model has helped the company to fully concentrate on its shared vision, invest in long-term development, and enhance its commitment to lasting relationships. It is a very different thing to exercise decades of business experience, as opposed to going for quick wins. When it works, a family business is mostly about long-term commitment. This creates trust both in the organization and within the network and chain in which the company operates. This is crucial for creating a unified vision and striving together for excellence and making such vision a reality through persistent work.

**Talk us through some of Genelec's key 2018 product launches.**

While The Ones have been establish-

ing themselves within the audio community, we have also been actively contributing to immersive audio development and education. Launching the S360 and 8382 reflected our vision and belief in immersive audio and the unique experience it brings to users. The new version of the Genelec Loudspeaker Manager (GLM) along with Cloud Services, as well as expanding our Smart Active Monitors (SAM) range, shows very clearly the evolutionary path of monitoring technology and the ways in which it can be applied in the not-too-distant future.

**What do you consider to be the biggest opportunities for Genelec as we prepare to enter 2019?**

We see immersive audio, IP and digital technology and their applications as key areas. This has been evident in the products and solutions we have been initiating in recent years. There are significant transformations going on in the working process in audio production, distribution and consumption. For over two decades we have been conducting research and development in digital technology, and we are moving in a fascinating direction, which is now becoming a reality. We expect that [2019] will be a natural continuation in this direction.

**And the biggest challenges?**

New opportunities and challenges go hand in hand. The ongoing transformation of our industry and business environment provides significant challenges, too. However, currently, and in 2019, the most serious challenges come from the global economy, or actions against it, social changes, and the uncertain economic-political climate. Such changes are already causing harmful uncertainties globally. Our industry is not an exception in this respect.

Genelec

[www.genelec.com](http://www.genelec.com)

## Harry Hirsch, Recording Entrepreneur, Dead at 89

NEW YORK, NY—An engineer, musician, professor, studio owner and designer, as well as a serial entrepreneur and key figure in the Audio Engineering Society, Harry Hirsch died Feb. 14. He was 89.

Born on Sept. 14, 1929, Hirsch first made his mark behind the glass as a recording and mastering engineer.

As founder and past president of MediaSound and Soundmixers, and as a co-designer of GRP Records and SoundTrack/NY studios, he hosted sessions for world-famous artists.

Hirsch also served as a CD reissue producer for 10 Duke Ellington albums and collaborated with Mercer Ellington on 10 more. In 1994 he founded Digi-Rom, a New York-

based replication firm and vinyl mastering house, which he sold in 2004.

In 1981, he became dean of the Audio Arts Program for New York's Center for the Media Arts and also was named an adjunct professor at NYU, where he lectured for the Music Technology Program.

In 2005, Hirsch co-chaired the Historical Committee for the AES

Convention, held in New York that year. He went on to serve as AES Convention Historical Committee chair in 2007 and 2009. In 2011, Hirsch was presented with the AES Fellowship Award and also served two terms as first vice president of the New York Chapter of the National Academy of Recording Arts & Sciences.



# Scaling Your Business Without Sacrificing Quality

A few years ago, while I was traveling to the United States from Canada, the border officer asked what I did for a living. I told him that I manufactured electronic products in Canada. He said, “No, you don’t. No one builds electronics in Canada.”

Although that’s somewhat true, not only were we able to pull off such an impossible feat, we managed to do it competitively. Radial Engineering twice made it to *Profit* magazine’s Top 100 fastest growing companies in Canada, and in 2016 we won the British Columbia Export Award. We built our first DI box in 1996, and over the years, we grew production to the point where we shipped about 100,000 electronics products a year. In my view, we achieved this by delivering exceptional quality day in, day out.

Growing steadily without sacrificing quality is not easy and there are certainly plenty of challenges along the way. The old adage “People are your biggest asset” is almost right. More to the point, you need good people to grow your firm. Good people love challenges, prefer to be in control of their departments, and love to prove that they are able to deliver. Good people will “pull the chain to stop the conveyer belt” when something is not quite right instead of simply allowing it to go through the process. Good people will also root out employees who have a bad attitude or are not carrying their weight. You can train a person with a great attitude, but you cannot turn a miserable soul into a good employee. Good employees have pride in what they

do and are able to deliver the quality that makes your products or services stand out. In a labor market where unemployment is low, finding good people is all the more difficult. Even though it is frustrating, you are much better off to wait until you find the right person instead of simply hiring a warm body. This, in fact, is the Aha Moment.

During Radial management meetings, I would sometimes announce, “Radial is a sales and marketing company.” Other times I would say, “We are a manufacturer,” and still other times I’d proclaim that we were a logistics company. The truth is, we were all of those. Without sales and marketing, you have no income and cannot produce, pay bills or hire staff. To put it in sports terms, we labeled sales and marketing as our offense, while administration, manufacturing and shipping were our defense.

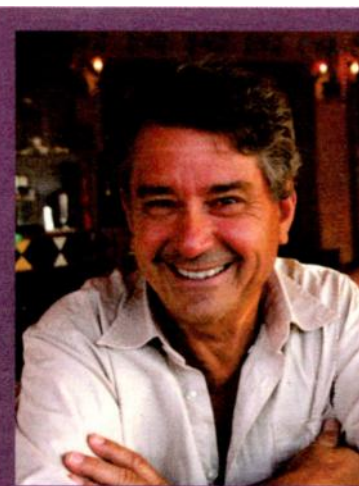
But more often than not, I would proclaim that we were a logistics company. Toyota changed the way most companies produce by instituting just-in-time (JIT) manufacturing. Toyota and Ford do not manufacture windshields, car seats or brake pads; they buy them from specialty manufacturers. Big companies use sophisticated MRP (Materials Requirements Planning) software to schedule and order parts so that they arrive only when needed and do not waste space on factory floors.

Similarly, we planned production using a spreadsheet and relied on our purchasing department and inventory management software to ensure supplies arrived on time. We used various

sub-assembly houses and manufacturers that were much more efficient at stuffing circuit boards, worked with metal shops that had robotics, purchased transformers from qualified manufacturers, brought in all of the parts and did final assembly in-house. Our purchasing department was Radial’s central nervous system, and Susan Smith, who ran the department, was an absolute star.

The beauty of JIT manufacturing is that it enabled us to scale production as needed. Specialty subcontractors allowed us to increase or decrease production levels without having to deal with hiring, training or laying off staff based on demand. By employing multiple suppliers (second sourcing), we could increase production at one facility if the other was unable to deliver. This ensured stable pricing, as everyone knew there was another player in the game. With careful due diligence, we scrutinized subcontractors by having them produce samples and clearly defined our expectations. They knew that if a product was not 100 percent, it would be returned.

Although most of our production was done in Canada, we also purchased product offshore. Primacoustic panels, for instance, came from China, as the cost to individually wrap each panel was simply too high in Canada to fit our mass production model. It took working through three different factories and multiple trips to visit the factories in China before we found one that could deliver a consistently high quality product on time. Over the years, we figured out how to work with



BY PETER JANIS

Peter Janis, former CEO of Radial Engineering, is a 40-year veteran of the music industry. Exit Plan ([www.exit-plan.ca](http://www.exit-plan.ca)), his consulting firm, assists business owners on building their companies and preparing them for eventual sale

offshore companies so that they would deliver quality without our having to station one of our staff at the factory. Doing business offshore requires building relationships and, once again, finding good people with whom to do business.

Finding the right people who can power scaling and quality ultimately creates expectations and momentum that will last even in the wake of turnover. Mike Hill, our general manager, would often say, “When my job is done, I am no longer needed.” And he proved it. When I sold the company, he decided to retire, and today the Radial team continues to motor full-steam ahead.

## Dynaudio Captured the Unheard at NAMM

ANAHEIM, CA—Danish studio monitor loudspeaker specialist Dynaudio recently provided unsigned artists a platform to a wider audience with its Dynaudio Unheard Touring Studio, which was located outside the Anaheim Convention Center for the 2019 NAMM Show.

Created in specially constructed shipping containers—half glass, with a full PA system out front—the Dynaudio Unheard Studio was used to provide a studio recording session combined with a live concert and a near-real time broadcast. As the artists were recorded, a separate multi-



Decked in tech from a variety of pro-audio brands, Dynaudio’s pop-up studio recorded a dozen acts during NAMM.

channel audio feed was sent to a front-of-house PA system, with an additional feed sent to a video-editing team. The artists also had their

own headphone monitor mix.

DPA provided a range of microphones for the project, including three d:facto 4018V vocal mics, two d:dicate 2011C and 4011C recording mics, five d:vote 4099 instrument mics, two d:screet 4060 miniature mics, and one d:sign 4098 podium mic for talkback from the mixing room.

The mixing and audio routing backbone was provided by Waves Audio, based around a Waves LV1 Live Mixer, and Digital Audio Denmark, while Klang Technologies tackled the headphone-based monitoring set-up. Most of the backline, as well

as the PA system, was courtesy of Yorkville. Elsewhere inside the studio, Zaor provided a studio table and mixing room speaker stands.

Ultimately, the studio recorded 12 unsigned bands over the course of the show.

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# Milan

(continued from page 1)

Avnu-certified products are being adopted across various markets, including automotive, consumer and industrial, in addition to pro AV. “That’s a pretty big umbrella,” says Derk Hagedorn, Avid’s senior marketing manager for the company’s live sound systems and music notation. “It calls on a lot of functionality that is not important to audio. And there are things we want that are very important for pro audio but may not be of any interest to the car manufacturers. So Milan grew out of this subgroup of audio developers that were using AVB.”

Audio networking is nothing new in touring concert sound, but AVB/TSN has been quietly chalking up some major successes on the road over the past two years or so. In 2017, country superstar Dierks Bentley’s What the Hell World Tour trekked across North America with a Meyer Sound LEO family reinforcement system said to be the first on the road to be digitally interconnected by a Galileo Galaxy networked platform using AVB/TSN. Metallica’s World-Wired Summer Tour in 2017 boasted what was at that time the most extensive implementation of Meyer Sound’s Galileo Galaxy networked platform: 14 Galaxy frames and 10 Extreme Networks switches.

The North American leg of Arcade Fire’s Infinite Content Tour at the tail end of 2017 represented L-Acoustics’ first official tour using an AVB/TSN system, which incorporated 92 AVB-capable LA12X amplified controllers networked with a pair of redundant Meyer Sound Galaxy units using Extreme Networks switches. In October 2018, Meyer Sound announced that AVB networks were used to interconnect more than a dozen Galaxy platforms for a major European rock festival—Roskilde, in Denmark—for the first time, using Luminex switches.

Pushing the Milan specification forward, group members have been rolling out compliant products since the 2018 InfoComm launch. Indeed, at that show, L-Acoustics introduced one of the first: the multifunctional P1 AVB processor, audio matrix, bridge and measurement platform. L-Acoustics’ Avnu-certified LA4X and LA12X amplified controllers are also Milan-compliant, according to an October 2018 statement from the company.

At the 2019 NAMM Show, Avnu Alliance officially welcomed Adamson Systems Engineering into its pro AV segment. On the show’s opening day, the Canadian speaker manufac-



L-Acoustics’ P1 AVB processor, audio matrix, bridge and measurement platform was among the first Milan-ready products.

turer introduced its first compliant product, the CS7p, a dipole two-way, full-range design that Adamson states is the world’s first network-redundant, Milan-ready loudspeaker.

According to Morten Lave, network architect for Adamson, “With the CS7p and other upcoming CS-Series offerings, Adamson has taken steps to ensure compliance with Milan, but we have also included a fully redundant, daisy-chainable networking topology to ensure that the signal chain is the most manageable and secure in any networked audio loudspeaker product available on the market today.”

In an online video from Adamson explaining the company’s support for



Introduced at NAMM, Adamson’s CS7p is reportedly the first network-redundant, Milan-ready loudspeaker.

Milan, Lave says, “In order to also interoperate with third-party devices, a protocol like AVB is not enough. We need to have an interoperability specification, a standard. Milan is such a specification.”

AVB/TSN networks require certified switches to operate, and there are numerous available from companies including Cisco, Control4 and Extreme Networks. On opening day of the 2019 ISE show, Luminex Network Intelligence announced that its GigaCore Ethernet switches are now Avnu-certified to support the Milan protocol, in addition to Dante and AES67. On its booth at the show, Luminex presented an interoperability demonstration of new Milan-enabled devices.

Milan supporters including Adamson, d&b audiotechnik, L-Acoustics and Meyer Sound all showcased their

respective Milan-ready products at ISE. In addition, L-Acoustics promoted the open source, free-to-use library it has published, available on GitHub, that offers a set of tools for controlling AVB and Milan devices using the AVDECC protocol (AVB Discovery, Enumeration, Connection management and Control; IEEE1722.1-2013) and to meet Avnu Milan specifications. The library is compatible with the recently published Milan Discovery, Connection & Control Specification for Listeners & Talkers, which delivers a defined profile for devices with a small subset of the standard. It is intended to remove all ambiguities from this subset to achieve interoperability at the control layer.

Also at ISE, d&b launched its DS20 audio network bridge, an interface between Milan networks and AES3 digital audio signals that offers distribution of Ethernet control data. The 1RU box, for touring and installation, incorporates a five-port AVB switch and sends metadata, including Milan channel labels and cabling information, via the AES3 channel stream to d&b’s four-channel amplifiers.

Avid implemented AVB in its current generation of live sound desks, beginning with the Venue | S3L, to connect all the system components, such as the surface, processing engine, stageboxes and peripherals, says Hagedorn. Avid incorporates its own AVB switches into the equipment, he adds.

Because it’s an open standard, “If we want to do a down-market product, we have the flexibility to not have a big licensing fee or proprietary chipset to implement,” he notes. Pro Tools also ties into the system using AVB, he says, and since the protocol is supported as standard in a Mac, a single Ethernet cable enables 128 channels of recording at 96 kHz for archiving or virtual soundchecks.

AVB and Milan proponents are quick to point out its ease of use and plug-and-play functionality. Appearing in Adamson’s online video with Lave, the manufacturer’s director of R&D, Benoit Cabot, comments, “Milan ensures that you don’t need to be a network specialist to set up a concert. ... What’s important is that it’s simple.”

He adds, “It’s going to work because all the leading manufacturers in AV are making Milan together.”

Milan  
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## Inclusion Initiative

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working in the top leadership positions.”

With this in mind, the Inclusion Initiative asks parties involved in the selection and hiring of producers and engineers to pledge they will only make such decisions after considering at least two female candidates among their pool of potential hires. More than 200 producers, labels, agencies, management companies and other entities signed on before the initiative was announced, including high-profile artists such as Justin Bieber, Cardi B, Common, Andra Day, Ariana Grande, Lady Gaga, John Legend, Nicki Minaj, Katy Perry, Pink, Post Malone, Carrie Underwood and Keith Urban. Since then, the number of signatories has risen to more than 400.

The 16-member Task Force on Diversity and Inclusion—chaired by Tina Tchen, partner at the law firm Buckley Sandler and previously an assistant to President Barack Obama, executive director of the White House Council on Women and Girls, and chief of staff to former first lady Michelle Obama—was created last May in the wake of multiple controversies that roiled the Recording Academy. At the time, the organization

was under fire for its 2018 Grammy Awards telecast, which was largely devoid of female performers or award winners. Compounding the issue, Neil Portnow, CEO of the Recording Academy, suggested backstage that the absence ultimately meant women needed to “step up”—a comment that he later conceded was a “poor choice of words.”

The Annenberg report, co-written by task force member Dr. Stacy L. Smith with Marc Choueiti and Dr. Katherine Pieper, provides considerable statistical research to back the Recording Academy’s initiative. *Inclusion in the Recording Studio? Gender and Race/Ethnicity of Artists, Songwriters & Producers Across 600 Popular Songs from 2012-2017* explores inclusion issues for artists, songwriters and producers of popular music, and shows how Grammy Award nominations overall reflect those problems. Based on data drawn from *Billboard’s* year-end Hot 100 Songs charts for the six years in question, the research found inequalities in all areas; particularly striking were the numbers when it came to women in music production.

The report found that the ratio of male to female producers across 300 popular songs, culled from the years 2012, 2015 and 2017, was 49 to 1. The report further estimated that only 2 percent of producers were women, and that only two out of 651 producers were women from “an underrepresented racial/ethnic group.”

For data development, the report team used guidelines from the Recording Academy, opting to include only producer, co-producer or vocal producer credits in its analysis. Individuals who received more than one producing credit on a single song were allotted only one credit per song.

The report noted, “Across these 300 songs and 651 producers, a full 98 percent were male and only 2 percent were female. The gender ratio of male producers to female producers is 49.1 to 1! No difference was observed over time. Of the 300 songs, a full 95.7 percent, or 287, did not feature a single female producer.”

“Of the female producers, only two were underrepresented (i.e., Beyoncé, Ester Dean). In terms of song credits, nine were delineated as producers, one was a co-producer and three were vocal producers. Six of the 13 female producers were also singer-songwriters, reducing the total number of producer-only credits to seven out of 300 songs.” The report also noted that no women were nominated for a Producer of the Year Grammy during the six years examined.

In the wake of the study, the task force’s Producer & Engineer Inclusion Initiative is seen as a first step toward rectifying the situation. In addition to the pledge, it asks producers to take possible gender diversity challenges into account when considering up-and-coming protégés for mentor-

ing. Guidance helps build careers in most fields, but the report advises it may be more crucial for women entering the recording industry, suggesting that “in more technical roles (e.g., producing, mixing, engineering), obstacles may exist for females related to pursuing math, science or other STEM fields.” In line with looking to mentors and other forms of education to help bridge that gap, the report also suggests that future music industry inclusion research should track educational programs that train young musicians, executives and engineers, and additionally the pool of talent that emerges from those schools.

In a statement, task force chair Tchen noted, “The music industry is at a crossroads and progress won’t happen on its own. There is no magic bullet to shift a status quo that has existed for centuries, but we see this initiative as an important step. We know that change requires real commitment to intentional hiring and to providing young women with consistent training and mentorship. We aren’t here to tell anyone who to hire, but we have seen repeatedly that the simple act of making sure diverse candidates are always seen and considered makes it more likely that women will get the opportunities they previously have been denied. It’s one step everyone can take that could go a long way to catalyzing important change that is overdue in this industry.”

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# Forster's Inferno

BY JACQUES SONYIEUX

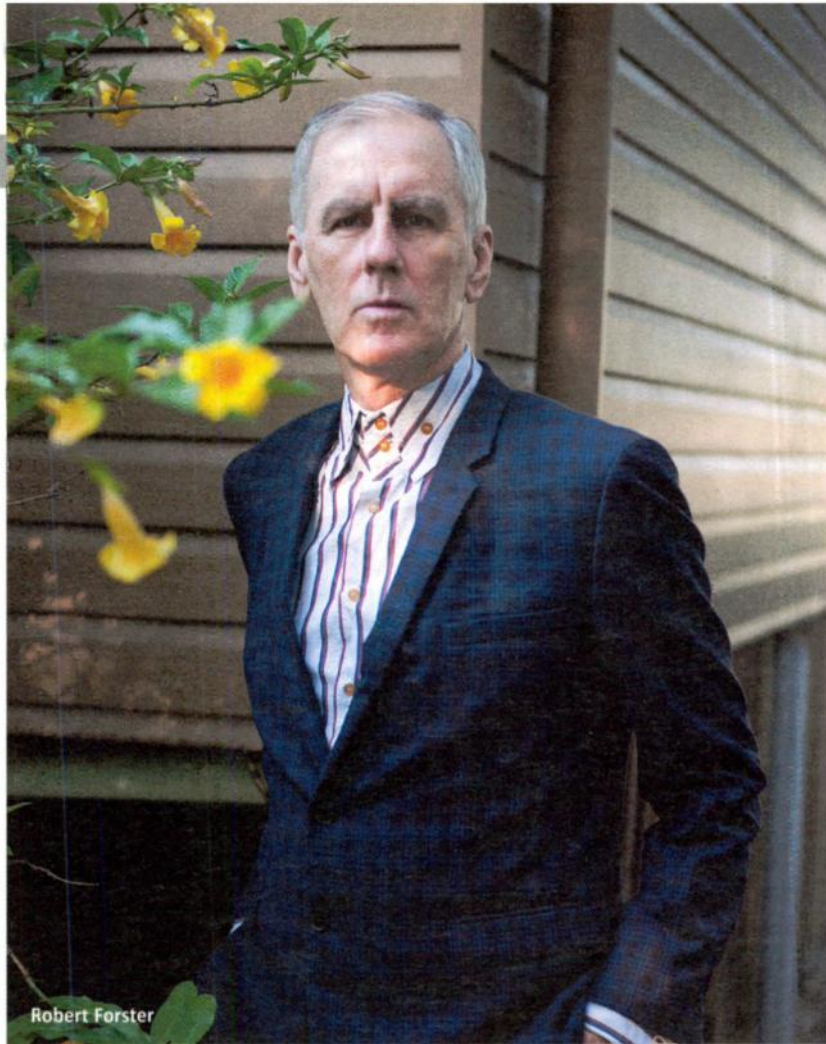
Robert Forster co-founded the Go-Betweens in Brisbane, Australia, back in 1977. Teaming up with songwriting partner and bandmate Grant McLennan, the duo forged ahead for the better part of three decades, creating an impressive body of work and being dubbed the “Lennon-McCartney of indie” because of the sheer brilliance of their words and music. Alas, the band’s career was cut short by McLennan’s untimely death in 2006, but Robert Forster continues to create stellar material as a solo artist. His latest work, *Inferno*, is no exception. *Pro Sound News* had a cross-continental conversation with Forster from his home in balmy Australia.

## ON WRITING NEW MATERIAL

As a songwriter, I write songs over time. It’s not like I’m the type of writer who goes, “Oh, I’ve got an album coming out and I’m going to write 15 songs in the next two months.” I hear people say that all the time and it astonishes me because I couldn’t do it. And also, why leave writing songs for an album to the last two months? I don’t understand that either. I am trying to write songs all the time, and I only write about one, two or three that I like every year. So it takes me years to create material for a record, and to try to put a mood into that is quite hard. I think the mood itself comes more from the studio, more from who I’m working with and the circumstances of what is happening in the studio.

## ON MINIMALIST PRODUCTION

The minimalist approach is just an aesthetic I love. It’s like 1950s rock ‘n’ roll, like The Beatles of Hamburg or The Beatles of “Love Me Do.” And it goes through The Velvet and a lot of other stuff. I don’t like layers and layers of candy floss, orchestras coming in, 15 guitars and eight keyboard parts—that’s just not me. I do like instrumentation, but it’s really got to serve a purpose. I like a band like The Doors, where I can just hear the four of them in a room, right until the end. If things are really well recorded and you can hear the magic of three, four or five instruments, that has always appealed to me. If you’ve got drums, bass, piano, guitars and vocals really well recorded, it is going to work. The base of this album is a band playing in



a room, and there is this nice combination of material that was beautifully recorded—but it is not this sort of slick, mechanical thing where you’ve been in the studio for four months and it’s been Pro Tooled to death.

## ON SEQUENCING

This was probably one of the hardest records for me to sequence. “Crazy Jane on the Day of Judgement” was pretty much always going to be the first track because I wanted the record to come in on a two-chord groove. I wanted to alert people that this was the mood, and it just sort of came in. Sometimes you choose to come in with something sort of eerie, or big and powerful. “Crazy Jane” had this hypnotic, beautiful two-chord thing that just eased in after a while. For the last song, there were many possibilities. It was really only toward the end that I decided on “One Bird in the Sky,” which starts with this lone acoustic guitar that comes in to let people know that it is the last song. Sequencing a record properly—especially if you are doing nine songs—is really important. I never want to do a record over 40 minutes, but now people are doing 15- and 18-song albums. I couldn’t imagine sequencing something that long and holding someone’s attention over 15 songs. When you’ve only got nine or ten songs, everything is vital.

## ON RECORDING “CATTLE AND CANE”

Recording “Cattle and Cane” back in 1982 was probably the first time we worked with a really good producer in the studio who really just took the band from one place, and we ended up in another. Grant [McLennan] played that tune for me on

acoustic guitar—he had written the whole song. He was playing it over and over again and we were talking about it, working up bits and pieces. He didn’t even have a lyric; he only had a riff. Then Lindy [Morrison] comes in playing drums and we work out something in the practice room. Then it went into the studio, where it makes this massive leap and you just suddenly go, “Wow, that’s a classic record.” Somehow it is bigger than anything you could have imagined. That was the first time we had the experience that a song became a lot bigger and more magical than anything we had before we went into the studio.

## ON UNFINISHED BUSINESS

I think there was unfinished business with the Go-Betweens. Grant and I and the band were working toward a great tenth album and I think we would have continued to make really good, vital music. On the other side of that, we made nine albums, which is a good amount of music. There is an album of early singles as well, so there’s really ten albums. I think that’s the body of work. You look at Joy Division—they made two albums—and say, that is definitely unfinished business. You look at Love, that’s unfinished business, too. And bands that make one great album and break up, you think, “Oh God, what could have been?” But that’s not our story. The circumstances in which the band stopped with Grant dying is absolutely horrible. But the fact that we made a good amount of music, I’m satisfied with that.

Jacques Sonyieux is a devout explorer of recording studios and the artists who occasionally inhabit them. Please send any tips or feedback to Jacques at [jacquesso-nyieux@gmail.com](mailto:jacquesso-nyieux@gmail.com).

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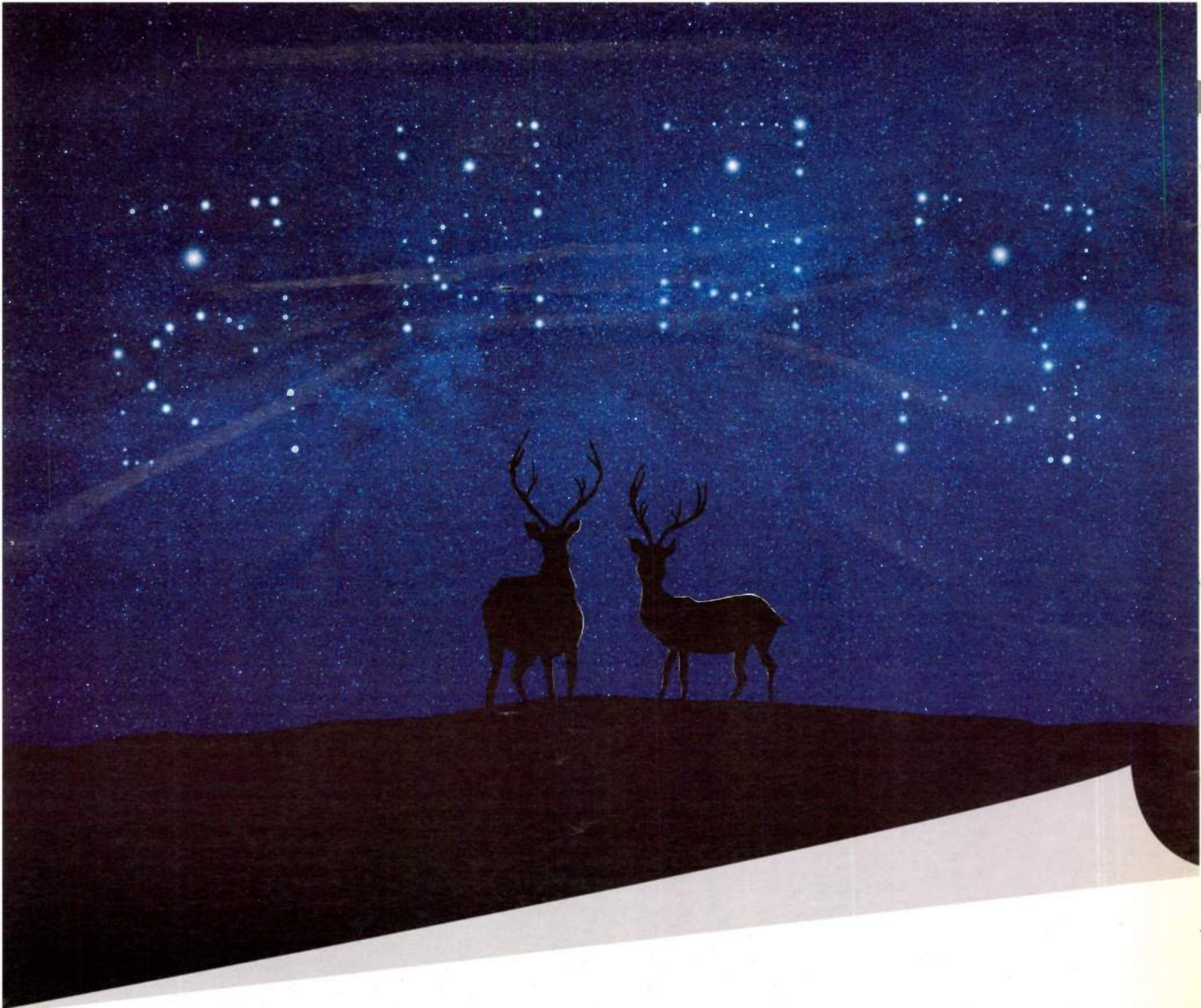
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## GENELEC®



# LEA Professional Debuts at NAMM

BY CLIVE YOUNG

ANAHEIM, CA—Pro audio startups appear all the time, but rarely with the pedigree of amplifier company LEA Professional. Based in South Bend, IN, LEA may be brand new, but it takes much of its inspiration—and leadership—from nearby Elkhart, where amplifier manufacturer Crown Audio was founded and based for 70 years until being moved to Dallas and Los Angeles as part of a massive consolidation of its parent company, Harman Professional, in 2017.

With the opportunity to start fresh, LEA executives formally announced the company at the NAMM Show in Anaheim, CA, in January. Founder and CEO Blake Augsburger—formerly executive vice president of Harman Professional—outlined

the fledgling company and its ambitious plans to roll out a series of products over the next 18 months, starting at InfoComm 2019 in June.

“Starting from a blank slate affords LEA a unique opportunity to address the middle of the market with a fresh, uncompromising approach to design, user experience, system performance and networking,” said Augsburger. “This enables a radically improved end user experience in a host of verticals, from education to corporate, worship, retail and entertainment.” As Augsburger sees it, that means there’s “an opportunity ... to provide channel partners and integrators with high-performing, cloud-configurable and yet affordable and easy-to-use pro audio technology that just rocks.”

That effort will start with the Connect Series, which the company has envisioned as a line of IoT-enabled pro-grade amplifiers. The first iterations, debuting at InfoComm, will be two- and four-channel models intended for small- to medium-scale installations. Next, models aimed at medium to large installations will be unveiled at NAMM 2020. “As we move into 2020, we will start looking at new markets such as portable P.A. and live sound,” said Augsburger, al-



The LEA Professional team, with Blake Augsburger at center left.

luding to plans for InfoComm 2020.

LEA’s customer-facing leadership team includes a number of former Harman Pro veterans, with Scott Robbins as vice president, sales and marketing; Jeremy Bules as vice president, engineering and operations; and Brian Pickowitz, senior director, sales and marketing. They are joined by some executives new to the pro audio industry, including Matt McClain, vice president, finance and administration.

“We are very passionate about the product and the overall market, and we really want to make a lasting difference,” said Augsburger. “The business is extremely well capitalized for investing in the future, both organi-

cally through products and marketing, and inorganically through acquisition. We have built an efficient business model with zero legacy baggage that is structured for growth.”

Every startup wants to get moving as soon as possible, and Augsburger and company are no different, sensing an opportunity is at hand. “I believe time is of the essence,” he said. “Innovation has slowed; independent, agile thinking is missing. Unfortunately, commoditization is at play. With these shifts occurring, LEA offers a fresh, independent but highly informed vision.”

LEA Professional  
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## briefs

### QSC, Audinate Join Forces

COSTA MESA, CA—QSC (www.qsc.com) and Audinate (www.audinate.com) have entered into an agreement to develop cross-platform technology that will aid integrations between QSC solutions and Audinate-licensed products. The first co-developed solutions are expected to debut later this year. Besides QSC’s long history of hardware in the amplifier, loudspeaker and console domains, it is also the developer of the Q-SYS software-based audio, video and control platform. Audinate is the creator of the widely used Dante AV over IP networking solution.

### Adam Hall Group, Xilica Team Up

NEW YORK, NY—Adam Hall Group (www.adamhall.com) and DSP developer Xilica (www.xilica.com) have partnered to develop LD Systems and DSP Install Solutions. As a part of the effort, Adam Hall Group is expanding the installation portfolio within its LD Systems brand in order to provide AV planners, integrators, installation service providers and end users with a range of integrative and audio solutions in the area of fixed installations. Additionally, the partnership will expand on the functionality and the Universal Control approach of Xilica’s Designer Software as the central control platform for Adam Hall’s installation projects.

## NAMM by the Numbers

ANAHEIM, CA—The 2019 NAMM Show certainly *felt* like one of the biggest, as countless pro audio manufacturers debuted their latest products for the year to come. Now the stats are in, and it turns out that a jaw-dropping 115,301 registered industry professionals attended this year, visiting more than 2,000 exhibiting member companies that represented 7,000 brands, which included a targeted year-over-year increase of 14 percent in international participants.

In recent years, NAMM has gone out of its way to court live sound professionals, such as with its expansion into the ACC North building in 2018, which holds most of the pro audio exhibitors. The show has also expanded its educational program to reflect its engagement with pro audio, adding elements such as AES@NAMM, its collaboration with the Audio Engineering Society. The result was that numerous pro audio exhibitors came away from the show with positive experiences.

This year, Yamaha shifted its usual massive presence at the Marriott, showing its pro audio wares

in the ACC North building instead. “NAMM 2019 was a landmark show for Yamaha. You could say it was a year of growth for us. After witnessing the excitement and energy in the audio-focused North Hall last year, we added a new booth this year dedicated to our Yamaha and NEXO Commercial Audio solutions,” offered Tom Sumner, Yamaha Corporation of America.

David Claringbold of d&b audiotechnik remarked that the convention provided a convenient platform for his company’s major product launch. “We launched the KSL System, the new addition to the SL Series, our top range concert line array series. This was d&b audiotechnik’s most significant product release outside of Germany in the company’s history. We chose the NAMM Show for a launch of this stature because the timing and location of NAMM is so well suited to our global market.”

Part of the convention’s draw for many pros were the 400-plus educational sessions, including “The Future of Music” with *Pro Sound News* columnist Craig Anderton, and a



The center of the selfie universe at NAMM was the new “hashtag” sculpture.

who’s who of presenters, including Alan Parsons, Al Schmitt, Michael Beinhorn, Ed Cherney, George Massenburg, Eddie Kramer, Jack Douglas, Ross Hogarth and Frank Filipetti.

AES@NAMM Pro Sound Symposium: Live & Studio returned for its second year. With over 200 dynamic sessions available, attendees were able to follow studio production and live sound reinforcement signal paths from mic to mixer and DAW, through hardware and software DSP and control, and on through digital networks to amps and speakers.

The 2020 NAMM Show will return to Anaheim, CA, Jan. 16-19. National Association of Music Merchants  
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## SOUNDRECORDING

### Could Boston's Zippah Be Any Hippah? 18

Founded 30 years ago, Zippah was purchased in 2003 by the studio's biggest client, Brian Charles. Today it remains a fixture on the vibrant Boston music scene, hosting recording and songwriting workshops and developing plug-ins with Rare Signals.

### A New Day for Dave's Room. . . . . 20

When David Bianco passed away last year, the future looked dim for his popular L.A. studio, Dave's Room, which has hosted sessions by everyone from Bob Dylan to TSOL. Now Paul Fig (Deftones, Coheed & Cambria, Ghost) and David Spreng have stepped in to bring a new day to the facility.

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### Spidey Flick Versed in Audio . . . . . 25

The Golden Globe-winning, Oscar- and Golden Reel-nominated audio team behind Sony's recent hit animated feature *Spider-Man: Into the Spider-Verse* discusses its work.

### Duo Divulges Podcasting Basics . . . . 25

Chris Bates and Tyler Marolf of TeacherZone.com and Los Rios Rock School offer advice about hosting a podcast for your own business and share best practices on topics including required gear, distribution, and ideas for successful content.

## SOUNDTECHNOLOGY

### Sound Innovations: Powersoft T Series . 28

Klas Dalbjörn, product manager at Powersoft, takes us behind the scenes of the creation of the company's new T Series, weighing not only how to capitalize on 40 years of advancements in amplifiers, but also how to make the end result suitably future-proof.

### The METAlliance Report: Where We Are 30

Legendary producer/engineer and METAlliance member Ed Cherney (Iggy Pop, Bonnie Raitt, Eric Clapton, Rolling Stones, Bob Dylan) explores the struggle to bring album credits back into the limelight in the age of streaming—and how that effort may be starting to pay off.

### NAMM 2019 Product Hits—

### Editors' Choice . . . . . 32, 33, 34, 35

The annual NAMM Show has become a key launch pad for pro audio gear, and this massive roundup, looking at dozens of top products announced at the convention, underlines that fact. Get a first look at some of the equipment you'll be hearing a lot about in the months to come.

## SOUNDREINFORCEMENT

### Tackling the GRAMMYs' Live Sound 36

There may be millions watching at home, but for the live sound audio team at the annual GRAMMY Awards, creating the perfect house mix for the discerning audience of 21,000 music industry professionals inside the Staples Center turns up the pressure even higher.

### Live Sound Showcase: Panic! at the Disco. . . . . 38

Fueled by a hit album and the omnipresent single "High Hopes," Panic! at the Disco takes a victory lap around North America's arenas with an Eighth Day Sound-supplied system combining the best of digital and analog worlds, not to mention a brand-new d&b audiotechnik PA.

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## SPECIAL REPORT

### NAMM 2019 Wrap-Up 5, 15, 21, 25, 32, 47

Pro audio has always had a presence at the annual NAMM Show in Anaheim, CA, but the convention's importance has exploded in recent years as it has increasingly catered to the industry with extensive educational offerings and a two-story hall to call home.

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Craig Anderton serves up insights on the latest DAW updates.

### viewfromthetop. . . . . 46

Siamak Naghian, managing director of Genelec, looks back at the company's 40 years of creating some of the world's best-known studio monitors, and shares what lies ahead for the Finnish manufacturer.

### theahamoment . . . . . 47

Peter Janis explores the challenge of scaling your pro audio business without sacrificing quality.

### music,etc. . . . . 50

Jacques Sonyeux talks with former Go-Between Robert Forster about minimalist production, sequencing an album and his band's unfinished business.







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## Connecting the Dots with Credits

I was 11 years old and it was a humid summer morning. As cicadas chattered in the distance, I stood sweltering outside the town record store, taking forever to work up the nerve to go inside even though it was full of high school kids. A giant poster advertising Led Zeppelin's *In Through the Out Door* was taped to the window and I stared at it until I forced myself to go in and ask if they had the record I wanted. The teen behind the counter rolled his eyes, pulled a copy off the shelf behind him and said, "65 cents." I plunked down every coin I had, grabbed it and ran. I was now the proud owner of my first record: "Funkytown" by Lipps Inc.

It's safe to say I've bought a lot of records since then, and usually better ones, too. To this day, vinyl's still my preferred format, not because it sounds better (it doesn't) but simply because I like the rituals around it, from digging in used record shops to the satisfying 'ptunk' sound as the needle finds the groove, to poring over liner notes, playing the endless game of musical connect-the-dots as certain producers, engineers and musicians turn up time and time again across albums and genres. Legendary producer/engineer Ed Cherney of the METAlliance writes on page 30 about how crucial the presentation of credits is for building a long, healthy career in production, but for me growing up, reading liner notes was just part of

falling in love with music.

In the mid-2000s, when I found out I was going to be a dad, one of my first thoughts was that I hoped I could instill a similar deep love of music in my child. Someday when I had to cover concerts for PSN, I'd be able to take Kid TBD to some great shows once he/she became a teenager, and wouldn't that be cool? That's planning pretty far ahead, but that's what editors (and nervous dads-to-be) do and I'm a patient person.

For me growing up, reading liner notes was just part of falling in love with music.

Years later, my daughter is now a teenager, and her hobby is not music. It's Netflix. All of it. Especially the stuff she thinks we don't know she's been watching. Brilliant, beautiful and funny as heck, my perfect child's one imperfection is that her interest in music is essentially nil. Every so often, I'll mention I'm going to cover some top-grossing tour and that she's welcome to be my plus 1—and she'll say, "Do I have to?" It's not her thing.

Recently, I said over dinner that I was going to cover Panic! at the Dis-

co (see page 38). The kid's response: "You're taking me, right?" It turned out we had a fan in the house; who knew? We went, I got a good story, she had a great time and we bonded over sharing a fun show. Then the other day, I spotted the band's latest LP in a store and picked it up on a whim. While my daughter bought it on iTunes ages ago, she was fascinated when I brought an actual physical copy home. Keep in mind, she's patiently waited for Dad in a million record shops over the years, so she's no stranger to the format, but this was different because it was music she cared about.

"Dad, it has lyrics!" she exclaimed, pulling out the inner sleeve. "Wow, look at all the people who worked on it," she added. She sat there and read it all, examining the minutia, and it was a revelation for both of us. She suddenly got why Dad likes having physical manifestations of his music around, and I got to see what a huge part of the music enjoyment experience her generation has missed out on by not having an object that you hold in your hands and discover while you listen. In his METAlliance column, Ed Cherney explains how credits are on the verge of making a surprise comeback in the streaming era. Let's hope so; with any luck, maybe my kid and all the future recording pros of Gen Z will get to read liner notes again and start connecting the dots themselves.

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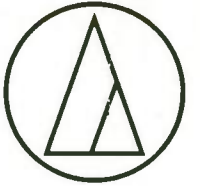
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# Avid's Rosica Reviews Year One

BY CLIVE YOUNG

ANAHEIM, CA—"We've been reshaping the company significantly since that day," says Jeff Rosica, looking back at his ascent to the role of Avid CEO a year ago. With the abrupt termination of the company's former leader Louis Hernandez Jr. in late February 2018, Rosica took on the mantle, drawing on a range of experience honed by three decades in the industry. Rosica joined Avid in 2013 as a senior vice president of worldwide field operations and worked his way up to president in 2016, so when he accepted the top spot last year, he notes, "I knew the company and the team really well. I have a different style, and an approach that's much different than the previous individual, but I think it was pretty easy for me to jump in."

What followed was a year of internal change within Avid as Rosica and the company closed the door on a five-year span that saw Avid undergo radical and often painful restructuring and layoffs as it closed, consolidated and moved offices and divisions around the globe. "I think we're in a different era now—I mean, the transformation's complete," Rosica says.

While the restructuring was already done, Rosica aimed to quickly implement a new vision for Avid's future. "It's not that the company was on the wrong path," he notes. "As I told the employees, we're definitely in the right boat—we're lucky to be a part of Avid—but this boat can be pointed to warmer waters and sunnier beaches. It was really just pointing the bow of the ship in the right way for the organization."

That goal, too, required some alterations, this time at the executive level. "We spent a lot of time initially on the leadership, on the organization, on the

culture, and then turned quickly to the business planning and strategy," he says. Almost all of Avid's executive team is brand new or has been promoted from within, and most of that change happened during Rosica's first 100 days. "We've got a new CFO, a new head of products and technology, a new CTO, new CMO, new head of services and support and new head of HR. It really was to make sure that the right team was in place."

With that taken care of, he says, it was time to change the ship's course. Noting that in the past the company adhered to five-year plans with distinct beginning-middle-end frameworks, Avid will now operate under rolling three-year plans that will be updated annually, along with R&D efforts that often look as far out as seven years.

"With the vibrant communities we are a part of—music, sound, media, film, TV and everything else—you'd better be constantly reinventing," says Rosica. "We're basically in media technology, and ... that allows us to take our technology and operate in all these areas, but we're not trying to build one product to fit all markets; rather, we're trying to have technology strategies and platform strategy. When we're building a software platform and putting together a hardware platform, we're looking across all segments to see how that technology can be utilized or leveraged in more than one market. That allows us to create more power in the products that we produce, [and] do so at good price points, because we're able to leverage some of the core technologies to feed different markets."

One of those key strategies has been to find ways to connect customers. "As a company, collaboration is the core of everything we build," says

Rosica. "We always look at how we're going to allow people to collaborate more easily, more efficiently, more powerfully." That mindset resulted in the Avid Link app, which debuted at NAMM, replacing the old Avid Application Manager app. While the free app allows users to upgrade products, check licenses and the rest, it also helps them find other people with whom to collaborate and connect. As Rosica sees it, "The business side of it for us is that if we can get people to connect and collaborate, then Avid tools are probably going to be part of what they're going to want to do, so then all of our partners and ecosystems benefit there. But it really is about how we help people connect and collaborate. You don't have to be an Avid customer; you can just be anybody who wants to be part of the community here."

The building of community continues to be a priority for Avid, but that effort is in transition, too. Avid Connect, the annual multiday Avid Customer Association event held in Las Vegas just before the NAB Show, has been renamed Connect 2019 to better reflect the dozens of partners and sponsors that take part in the event. Similarly, Avid is stepping back from tackling most of Connect's content development, bringing in a third-party organization to handle those chores. "There needs to be a partnership between Avid and the community, not just Avid on top of the community," says Rosica. "We need to pull away from that, and that's one of the changes we made during my leadership."

While Connect and trade shows such as the NAB Show, AES and NAMM often provide high-profile launch pads for new Avid products, they might not dictate Avid's sched-



Avid CEO Jeff Rosica

ule much longer. "I think that one of the criticisms I had of the company in the past is that we had a tendency to talk too soon and tell a big story way in advance," Rosica notes. "People got very frustrated that they had to wait so long for a product, so I think now we're not going to be beholden to the trade show circuit. When the product is ready, we'll announce it—and in today's day and age, you don't have to be on the show floor to announce your product."

What are some of those products going to be? Understandably, Rosica's not saying, but he does note that some of Avid's current three-year plan will see the company go after "an opportunity in the audio, professional audio and music space, including live sound" that was previously being overlooked, later adding that "what you're going to see from the company is a bit of a doubling down in the space. Over the course of 2019 and even 2020, when you look at the product releases and some of the new things coming, I think everyone's going to be pleasantly surprised."

Avid  
www.avid.com

## Sennheiser Revamps Pro Audio Management

WEDEMARK, GERMANY—John Falcone, longtime senior vice president, Global Sales – Pro Audio Solutions at Sennheiser, will retire in October, and with that change the company has announced it will revamp leadership within its Pro Audio Solutions Channel. Mark Posgay has been appointed to succeed Falcone, and in turn, Posgay has announced his leadership team, promoting Christophe van den Berghe and Simon Holley to the positions of vice president, sales and marketing, Pro Audio Solutions for EMEA and Americas/ANZ, respectively. Vince Tan has been named vice president,

sales, APAC – Pro Audio Solutions.

Posgay, who has held his new role since Jan. 1, reports directly to Peter Claussen, COO of Sennheiser electronic GmbH & Co. KG. With Sennheiser for five years, Posgay has more than 20 years' background in sales and the industry. He will collaborate closely with Falcone until his retirement in October to ensure a smooth transition. Across more than two decades at Sennheiser, Falcone's career highlights have included serving as CEO of wholly owned Sennheiser subsidiary



John Falcone (left) and Mark Posgay

Sennheiser Electronic Corporation, heading up sales for the audio specialist's Americas operations, and

the serving in the senior role at Pro Audio Solutions.

Holley has been with Sennheiser since 2014 as director, sales, Pro Audio Solutions, for the UK and Ireland, drawing on 18 years of sales management experience. Meanwhile, van den Berghe is a Sennheiser veteran of 19 years who has held numerous previous roles at the company. Tan began his career with Sennheiser in 1999 and has progressed forward in numerous

positions.  
Sennheiser  
www.sennheiser.com



# Wallaskovits Steps Up as AES President

NEW YORK, NY—Nadja Wallaskovits assumed the office of AES president on Jan. 1, 2019.

"Having worked with Nadja for many years as part of the AES team, we look forward to having her serve in the role of president, as the society continues our mission to promote science and education in the field of audio engineering," states AES past-president David Scheirman. "Nadja's knowledge of audio engineering technologies and experience within the AES will be a valuable asset in the coming year."

Wallaskovits' 25-plus-year involvement with the Audio Engineering Society has included serving as vice chair of the Austrian section, working on the Technical Committee on Archiving Restoration and Digital Libraries, and working in Standards on the SC-07 Subcommittee on Metadata for Audio. She served as convention co-chair and received AES Board of Governors Awards for her work on both the 142nd (Berlin) and 144th (Milan) AES International Conventions. For the past year, Wallaskovits has served on the Executive Committee of the AES Board of Governors' Executive Committee as president-elect.

Wallaskovits studied ethnomusicology at the University of Vienna before joining the Austrian Academy of Sciences in 2005. She currently holds the position of chief audio engineer at the academy's Phonogrammarchiv. She recently took over the management of a Public Private Partnership collaboration between the Phonogrammarchiv and NOA that is dedicated to the restoration of acetate media. Wallaskovits also holds the

position of vice chair of the Technical Committee of the International Association of Sound Archives (IASA) and is a member of the Training and Education Committee of IASA.

Additional AES committee experi-



Nadja Wallaskovits

ence includes the Board of Governors and its Executive Committee, Awards, Conference Policy, Convention Policy, Education, Finance, Laws & Resolutions, Membership, Nominations, Regions & Sections, Diversity & Inclusion, Associate Technical Editors, and the organizing committee for the AES 145th International Convention in New York City.

AES

[www.aes.org](http://www.aes.org)

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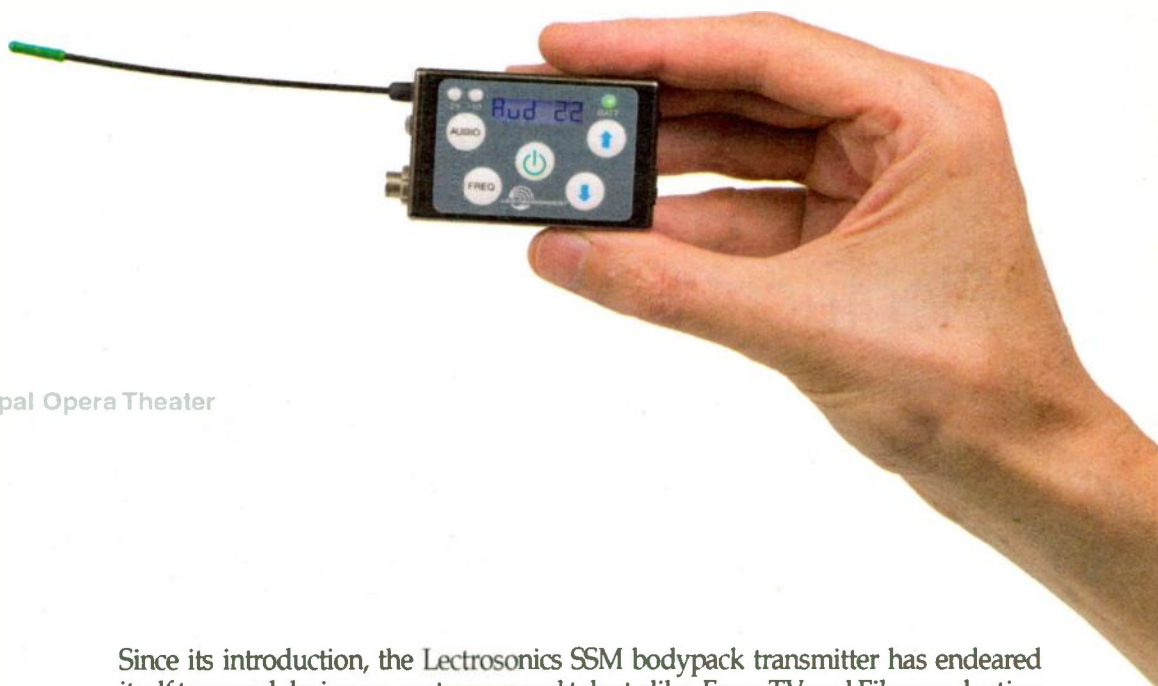
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## ADAM, Sonarworks Partner

ANAHEIM, CA—Sonarworks, developer of Reference studio calibration software, and ADAM Audio, manufacturer of monitoring products, announced a partnership, with the two brands combining their resources to create new monitoring solutions due out in the first half of this year.



Made in the USA by a Bunch of Fanatics.

WRH



# Production GRAMMY Awards Announced

BY STEVE HARVEY

LOS ANGELES, CA—The Recording Academy presented the 61st Annual GRAMMY Awards recognizing production, engineering, mixing, remixing and mastering live on CBS from the Staples Center in downtown Los Angeles on Feb. 10.

It was a historic year, with the awards' winners reflecting the increasingly diverse artists and genres driving the music business. Cardi B made history as the first solo woman to win Best Rap Album, while the single "This Is America" by Childish Gambino (a no-show at the ceremony) took both Song of the Year and Record of the Year, marking the first time a rap track won both categories.

For the first time, there were eight nominees in each of the General Field categories: Record of the Year, Album of the Year, Song of the Year and Best New Artist. This year's nominees were reportedly selected from more than 21,000 submissions across 84 categories.

The Best Immersive Audio Album category had an unusual story to it: this year's win went to Alan

Parsons, Dave Donnelly and P.J. Olsson for their work on *Eye in the Sky—35th Anniversary Edition*. That meant that Oslo-based producer Morten Lindberg, nominated in the category for both *Sommerro: Ujamaa & The Iceberg* and *Folketoner*, continued his record losing streak of 26 nominations and zero wins since his first GRAMMY nomination in 2004.

This year's production winners are:

## RECORD OF THE YEAR

"This Is America"

Childish Gambino

Donald Glover & Ludwig Göransson, producers; Derek "MixedByAli" Ali & Riley Mackin, engineers/mixers; Mike Bozzi, mastering engineer

## ALBUM OF THE YEAR

*Golden Hour*

Kacey Musgraves

Ian Fitchuk, Kacey Musgraves & Daniel Tashian, producers; Craig Alvin & Shawn Everett, engineers/mixers; Ian Fitchuk, Kacey Musgraves & Daniel Tashian, songwriters; Greg Calbi & Steve Fallone, mastering engineers

## BEST DANCE RECORDING

*Electricity*

Silk City & Dua Lipa Featuring Diplo & Mark Ronson; Silk City, producers; Josh Gudwin, mixer

## BEST HISTORICAL ALBUM

*Voices of Mississippi: Artists and Musicians Documented by William Ferris*

William Ferris, April Ledbetter & Steven Lance Ledbetter, compilation producers; Michael Graves, mastering engineer (Various Artists)

## BEST ENGINEERED ALBUM, NON-CLASSICAL

*Colors*

Julian Burg, Serban Ghenea, David "Elevator" Greenbaum, John Hanes, Beck Hansen, Greg Kurstin, Florian Lagatta, Cole M.G.N., Alex Pasco, Jesse Shatkin, Darrell Thorp & Cassidy Turbin, engineers; Chris Bellman, Tom Coyne, Emily Lazar & Randy Merrill, mastering engineers (Beck)

## PRODUCER OF THE YEAR, NON-CLASSICAL

Pharrell Williams

## BEST REMIXED RECORDING

"Walking Away" (Mura Masa Remix)

Alex Crossan, remixer (Haim)

## BEST IMMERSIVE AUDIO ALBUM

*Eye in the Sky—35th Anniversary Edition*

Alan Parsons, surround mix engineer; Dave Donnelly, P.J. Olsson & Alan Parsons, surround mastering engineers; Alan Parsons, surround producer (The Alan Parsons Project)

## BEST ENGINEERED ALBUM, CLASSICAL

*Shostakovich: Symphonies Nos. 4 & 11*  
Shawn Murphy & Nick Squire, engineers; Tim Martyn, mastering engineer (Andris Nelsons & Boston Symphony Orchestra)

## PRODUCER OF THE YEAR, CLASSICAL

Blanton Alspaugh

## BEST OPERA RECORDING

*Bates: The (R)evolution of Steve Jobs*

Michael Christie, conductor; Sasha Cooke, Jessica E. Jones, Edward Parks, Garrett Sorenson & Wei Wu; Elizabeth Ostrow, producer (The Santa Fe Opera Orchestra)

Recording Academy GRAMMY Awards  
[www.grammy.com](http://www.grammy.com)

# Electrical Fire Scorches Toast & Jam Studio

BY CLIVE YOUNG

BUFORD, GA—Toast & Jam Studio in the metro Atlanta town of Buford caught fire on Feb. 4. Electrical problems set ablaze the 120-year-old building that is home to the studio and its side business, a coworking space. While no one was hurt, the midday fire and the building's sprinkler system caused water, smoke and fire damage to audio equipment, instruments and a one-of-a-kind Wheatstone recording console originally built for NASA.

Co-owned by partners Dominick Maduri, Noah Wright and Matt Wood, Toast & Jam is a full-service studio that moved into the space in March 2017. On a GoFundMe page started by Maduri after the fire, he stated that the electrical fire was "inadvertently caused by a power surge that happened as a result of switching electricity providers." The resulting blaze, which began in a crawlspace, scorched two separate areas of the first floor and required nine



A fire at Toast & Jam Studio damaged a piano, rack gear and a console custom-built for NASA.

fire trucks to put out. Firefighters extinguished the flames before they reached the second floor.

The coworking space, Toast & Jam Community, is expected to reopen in the coming days, although it may take as long as six weeks to get the studio up and running again. While

the studio's computer and hard drives were unaffected and most of its guitars survived, damaged contents of the live room included a piano, vintage drum kit, multiple acoustic and electric guitars, and several boutique pedals. Pro audio-wise, all of the live room's interfaces, preamps, microphones, head-

phones, IEMs and cables were destroyed.

Pegging the overall cost at "hundreds of thousands of dollars" and concerned that insurance won't be enough to revive the facility, Maduri started the GoFundMe page to help cover the cost of repairs, legal fees, and replacing equipment and instruments. Wright told the *Atlanta Journal-Constitution* that recording facilities in the region had reached out to offer their studios so that the Toast & Jam team could finish recording projects by regional bands Stay Here and Macon's Hind-sight.

The studio has recorded acts such as *Sleeping Policeman*, *World's Greatest Dad*, JT Woodruff and Noah Gunder-sen. In addition to audio recording, the facility offers live video session recording services.

Toast & Jam Studio  
[www.toastandjamstudio.com](http://www.toastandjamstudio.com)

Toast & Jam Community  
[www.toastandjamcommunity.com](http://www.toastandjamcommunity.com)



# Top Pros, Gear Nab Honors at NAMM TEC Awards

ANAHEIM, CA—Held during this year's NAMM Show, the 34th annual NAMM TEC Awards highlighted top professionals, projects and audio gear across 23 technical and eight creative excellence categories.

Among the recognitions, Leslie Ann Jones, Skywalker Sound's engineer, producer and director of music and scoring, was inducted into the NAMM TEC Hall of Fame. Jones was introduced by jazz great Herbie Hancock for the Hall of Fame honor, which recognizes pioneers of audio technology, as well as accomplished producers and audio technicians. Rose Mann Cherney, Skunk Baxter, Hal Blaine, Jack Douglas, Nathan East and Geoff Emerick have been honored in recent years.

## TECHNICAL ACHIEVEMENT

- **Amplification Hardware/Studio & Sound Reinforcement:** Grace Design – m908 Surround Monitor Controller
- **Audio Apps & Hardware/Peripherals for Smartphones & Tablets:** Yamaha – CL/QL Stage-Mix v.7
- **Audio Education Technology:** Produce Like a Pro – Produce Like a Pro
- **Computer Audio Hardware:** Universal Audio – Arrow
- **DJ Production Technology (Hardware/Software):** Pioneer DJ – DDJ-1000 Controller



Leslie Ann Jones and Herbie Hancock at the NAMM TEC Awards

- **Headphone/Earpiece Technology:** Audio-Technica – ATH-M60x
- **Large Format Console Technology:** Solid State Logic – SSL Live L100
- **Microphone Preamplifiers:** Rupert Neve Designs – RMP-D8
- **Microphones – Recording:** Neumann – U 67
- **Microphones – Sound Reinforcement:** Sennheiser – HSP Essential Omni
- **Musical Instrument Amplification & Effects:** Universal Audio – OX Amp Top Box
- **Musical Instrument Hardware:** Dave Smith Instruments – Sequential Prophet X

- **Musical Instrument Software:** EastWest Sounds – Hollywood Choirs
- **Production Essentials:** PreSonus – FaderPort 16
- **Signal Processing Hardware:** Eventide – H9000
- **Signal Processing Hardware (500 Series Modules):** API – 529 Stereo Compressor
- **Signal Processing Software (Dynamics/EQ/Utilities):** iZotope – Ozone 8 Mastering Suite
- **Signal Processing Software (Effects):** Soundtoys – Little Plate Plug-In
- **Small Format Console Technology:** Allen & Heath – SQ Series Mixers

- **Sound Reinforcement Loudspeakers:** JBL – VTX A12W
- **Studio Monitors:** JBL – 3 Series MkII
- **Wireless Technology:** Sennheiser – evolution wireless G4
- **Workstation Technology/Recording Devices:** Avid – Pro Tools Ultimate

## CREATIVE ACHIEVEMENT

- **Film Sound Production:** *Black Panther* (Marvel Studios/Walt Disney Studios Motion Pictures)
- **Interactive Entertainment Sound Production:** *Star Wars Battlefront II* (DICE/Electronic Arts)
- **Record Production/Album:** *Colors*, Beck (Capitol)
- **Record Production/Single or Track:** “This Is America,” Childish Gambino (mcDJ/RCA)
- **Remote Production/Recording or Broadcasting:** 60th Annual GRAMMY Awards (CBS Television Network)
- **Studio Design Project:** Sound on Sound Studios, Montclair, NJ (David Amlen)
- **Television Sound Production:** *Game of Thrones* (HBO/Warner Bros. Television)
- **Tour Event Sound Production:** Man of the Woods Tour, Justin Timberlake (Clair Global)

NAMM TEC Awards  
www.tecawards.org

# Spotify Boosts Podcast Business with Acquisitions

BY STEVE HARVEY

NEW YORK, NY—Spotify moved a step closer to its stated goal of becoming the world's number one audio platform on Feb. 8 when CEO Daniel Ek announced the company's acquisitions of Gimlet Media, one of the podcast industry's largest production houses, and Anchor, a startup developer of podcast creation, distribution, marketing and monetization tools.

“In just shy of two years, we have become the second-biggest podcasting platform,” wrote Ek in a post on Medium. “Our podcast users spend almost twice the time on the platform, and spend even more time listening to music.” With Apple, the world's largest podcast platform, no doubt firmly in his sights, Ek has stated that he intends to spend \$500 million this year on acquisitions.

Ek expects Spotify's podcast content to attract new listen-

ers—especially new subscribers, of course—who are less interested in the platform's music programming. Looking to traditional media, he wrote, “Based on radio industry data, we believe it is a safe assumption that, over time, more than 20 percent of all Spotify listening will be non-music content.”

Gimlet Media founders Matt Lieber and Alex Blumberg have positioned their company as “the HBO of media.” Driven by the success of productions such as *StartUp*, *Reply All* and *Homecoming*, as well as *Mogul* and *Crimewave*, which are produced exclusively for Spotify, Gimlet has grown significantly over the past couple of years. The company recently moved into a new Brooklyn location, where the company built out 12 podcast studios and a music recording studio designed by WSDG Walters-Storyk Design Group.

Spotify reportedly paid approximately \$230 million for Gimlet Me-

dia, which is around three times the company's own valuation—an indication, perhaps, of the advertising dollars the streaming platform hopes to attract away from terrestrial radio. Podcast advertising revenue is skyrocketing; it is projected to grow at a nearly 30 percent annual rate through 2022, according to PwC's *Global Entertainment & Media Outlook 2018-2022*, published in October 2018.

The PwC report projected that podcast advertising revenue would reach \$650 million by the end of 2018. Spotify made nearly \$200 million in total advertising in the fourth quarter of 2018, according to its latest revenue report. Podcast revenues could reach \$1.6 billion by 2022, although that figure would still be dwarfed by radio revenues, which are expected to be in excess of \$46 billion, the report noted.

Ek also hopes to pull people

away from their video screens. In his Medium post, he noted that video is a trillion-dollar market, yet music and radio is valued at just \$100 billion. “Are our eyes really worth 10 times more than our ears?” he asked. “People still spend over two hours a day listening to radio—and we want to bring that radio listening to Spotify, where we can deepen engagement and create value in new ways. With the world focused on trying to reduce screen time, it opens up a massive audio opportunity.”

According to 2018 year-end reports from Edison Research and Nielsen, 73 million people in the United States listen to podcasts at least every month and 50 percent of all U.S. households are podcast fans. There are now more than 630,000 podcasts available and well in excess of 1.8 million episodes.

Spotify  
www.spotify.com





## BAFTAs Honor Sound and Music

BY STEVE HARVEY

LONDON, UK—In a televised ceremony from London's Royal Albert Hall on Feb. 10, *Bohemian Rhapsody* and *A Star Is Born* took top honors at the 2019 British Academy of Film and Television Arts BAFTA Film Awards in the sound and music categories, respectively.

In the Sound category, *Bohemian Rhapsody* triumphed over competition from *First Man*, *Mission: Impossible – Fallout*, *A Star Is Born* and *A Quiet Place*. The award recognized John Casali (re-recording mixer), Tim Cavagin (re-recording mixer), Nina Hartstone (supervising dialogue and ADR editor), Paul Massey (re-recording mixer) and John Warhurst (supervising music and sound editor) for their work on the biopic of British rock band Queen.

Rami Malek won the BAFTA for Leading Actor for his portrayal of Queen front man Freddie Mercury in *Bohemian Rhapsody*.

In the Original Music category, Bradley Cooper, Lady Gaga and Lukas Nelson won for *A Star Is Born*. The film, Bradley Cooper's directorial debut, beat out *BlacKkKlansman*, *If Beale Street Could Talk*, *Isle of Dogs* and *Mary Poppins Returns*.

In a tweet from Los Angeles, Lady Gaga wrote, "I can't believe we just won Best Original Music @BAFTAs. I wish so much I was there but am at the Grammys to show them our love as well. We made a film about music. This means the world to me. Thank u to all our fans we love u so much, we wouldn't be here without u #BAFTAs."

The favorite going into the BAFTA ceremony, *The Favourite*, turned seven of its 12 nominations into wins, including Olivia Coleman for Leading Actress and Rachel Weisz for Supporting Actress. *Roma* came away with four major BAFTAs: Best Film, Film Not in the English Language, Director (for Alfonso Cuarón) and Cinematography.

BAFTA

<https://awards.bafta.org>

## Beechpark for Sale, Marking 25 Years

COUNTY DUBLIN, IRELAND—Beechpark Studio in Ireland is up for sale. Daire Winston, its founder and owner, has announced he will celebrate its 25th anniversary with an open house during the AES Convention in Dublin in March.

"I'm not getting any younger and so I am looking for someone to come in, take over and take Beechpark through the next 25 years of its life," said Winston in his announcement. "This is a thriving business and whoever comes into it will be earning from day one—and that's a rare thing in our business. Leaving here is a little bittersweet, but I am sure that whoever comes in will love it as much as we do. In fact, I'll probably be one of the new owner's first customers."

Winston started out as the tea boy at Lombard Studios in Dublin in 1981, cutting his teeth on the facility's Helios desk, soon rising to assistant, then first engineer. "I moved on to become the first house engineer in the Dave Hawkins-designed Westland Studios in 1985. After falling in love with country music, I got on a plane with just few dollars in my pocket



and went to Nashville."

In 1993 he bought a house on a one-acre site in County Dublin with wife-to-be Heidi, and he opened Beechpark with just one room. It has since grown into a residential facility, designed by Roger D'Arcy of Recording Architecture.

"It's our clients who have made Beechpark so very special," said Winston. "Everyone from Clannad to Daniel O'Donnell has recorded here. Other artists and producers include The Script and Celtic Woman and a

whole host of Irish and international artists and producers."

On March 22, during AES Dublin, Winston is planning to take people from the convention center to Beechpark to experience the facility, which includes a large production studio that is regularly used by bands for tour rehearsals, and was recently occupied by The Lemonheads, who just kicked off their European tour in the UK.

Beechpark

[www.beechpark.com](http://www.beechpark.com)

## Bose Hits the Floor at the Otto Bar

MEXICO CITY, MEXICO—Reinventing the 1970s disco vibe with a modern twist, the 200-capacity Otto Bar is a high-end nightspot in Mexico City that recently updated its audio system with a variety of Bose Professional systems, including F1 Model 812 Flexible Array loudspeakers, F1 subwoofers and the S1 Pro P.A., a model that is more typically used for solo performers than a thumping club.

"We needed a sound system that could deliver great fidelity, nice pressure levels and solid bass—something that could make you feel the music," said Victor Mondragon, partner and

booker at Otto Bar. "You can feel the [Bose F1] vibrate, but even on higher volume levels you can talk and listen to other people effortlessly."

F1 Model 812 loudspeakers are suspended from the walls close to the ceiling, and musicians or sound engineers can change the coverage pattern and direct it toward the audience, if needed, or point it upward and let the sound waves bounce off and spread evenly across the room. This setup is complemented by four F1 subwoofers placed at audience level to deliver thump as needed.

The DJ booth, meanwhile, uses a

number of S1 Pro speakers as monitors, allowing DJs to work without having to completely isolate themselves from the crowd's cheers with a pair of headphones.

With more than a year under its belt at the current location, Otto Bar is looking to explore new opportunities/destinations and plans to establish pop-up activations (with audio delivered by Bose portable systems) inside festivals or celebrations in tourist-heavy places like Tulum, Playa del Carmen or Riviera Maya.

Bose

<http://pro.bose.com>



Bose S1 Pro system in use at Otto Bar in Mexico City.



# Budapest Theater Bulks Up Audio Systems

BUDAPEST, HUNGARY—Madách Theater is a busy venue—the 800-seat facility holds 350 performances a year for roughly 500,000 visitors. Currently presenting Andrew Lloyd Webber's *School of Rock*, the theater is making the most of its recent audio upgrade, which included a number of Allen & Heath dLive mixing systems.

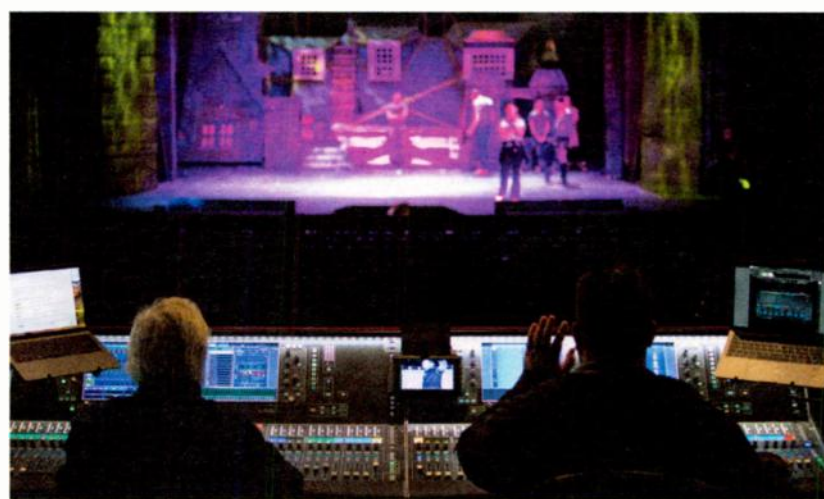
Supplied by Audmax, Allen & Heath's Hungarian distributor, the installation features three dLive surfaces, three MixRacks, eight Expanders and several ME Personal Mixing Systems, which allow for the independent mixing of vocals, orchestra and IEM/stage monitors.

"The requirements of this installation were quite complex," said Krisztian Varga, system designer and managing director at Audmax. "Madách needed a system that allowed for four independent mixing systems, which could also work together. This meant

we needed something with a very high level of flexibility, a large number of channels and a common 'language' for interconnections."

FOH comprises two dLive S7000 desks: one controlling sound for the orchestra and the other handling vocals and additional musical performers. Each surface is connected to a DX32 Expander located at FOH and a Waves SoundGrid system for additional processing. The S7000 surface used for the orchestra is connected to a DM32 MixRack located in the orchestra pit, which is in turn connected to an ME-U system powering 12 ME-1 personal mixers used by the musicians. The DM32 is paired with a DX32 for additional I/O and a DX Hub card, which is fed to a central DX and ME patch system.

In the wireless/amp room, a DM64, connected to the second FOH Surface, is utilized for wire-



Dual Allen & Heath dLive S7000 desks can be found at the FOH position inside Budapest's Madách Theater.

less microphones used by onstage performers. A connected DX32 Expander is positioned in the orchestra pit for additional I/O. A second DM32, also located in the wireless/amp room, is connected to a dLive S5000 that performs monitor mixing duties at the side of the stage, handling mixes for IEMs, the orchestra, choir and additional band members.

All three MixRacks are equipped with two gigaACE cards and one DX Link card; gigaACE is used for splits between all FOH and monitor systems, while the DX Link cards are fed to a centralized patch panel,

which is then fed to additional panels placed on stage and in the orchestra pit, allowing for further I/O and personal monitoring when required.

Two DX32 and two DX168 Expanders, accessible through the patch panel, are placed on stage with a second ME-U system and are used for more I/O or extra musicians on stage. An additional dLive setup, purchased for touring, includes an S5000 surface, DM32 MixRack, an ME-U and ME-1 and two DX168 and DX32 Expanders.

Allen & Heath  
www.allen-heath.com

## Chick Hooks McD Fans with Lectrosonics

KUALA LUMPUR, MALAYSIA—Production sound mixer Lawrence Chick made use of his collection of Lectrosonics Digital Hybrid Wireless products while on set for a 30-second spot for McDonald's Malaysia that created such demand that the company ran out of chicken at its restaurants—twice.

The spot was intended to be a purely sound-driven commercial with no dialogue or music. "Hearing the sound of people eating fried chicken was the 'hook,'" said Chick. "It was an exciting challenge because they wanted me to

Amway, BP and Citibank; and commercials for ESPN, Toyota and Visa.

Chick, who had a boom operator and a sound assistant on his team for this project, employed his SMQV UHF belt-pack transmitter, HMA UHF plug-on transmitter and ALP650 sharkfin antennas on the three-day shoot. "I used the SMQV on the talent and had my boom operator use an HMA wireless plug-on transmitter on his mic, which enabled us to move quickly around multiple sets. With the Lectrosonics ALP650 sharkfin antennas, I was able to stay outside some of the smaller rooms they used to film."

The primary release of the commercial in theaters created an additional challenge for him. "The sound of someone eating is not as loud as talking. If the signal recorded low with a lot of noise in the background, post would need to turn it up, equally increasing the background noise. It would have been very noticeable in the movie theaters," he explained.

"Also, if post sonically cut out a lot of the background noise in the mix, the recordings could have ended up too thin and lost their punch. It was an honor to be brought in at the early stages, where I could contribute my technical advice."

Lectrosonics  
www.lectrosonics.com

capture the actual sound of people eating fried chicken and not a studio sound effect."

Chick has traveled the world recording sound in England, the Middle East, Asia and Australia. His career portfolio includes work on the UFA Cinema feature film *Jungle Child* and the Michael Mann feature *Blackhat*; corporate work for



## Vervent Audio Group Makes U.S. Inroads

NEW YORK, NY—Vervent Audio Group, parent company to Focal and Naim, is aiming to establish a broader presence in North America. To that end, Vervent has acquired Audio Plus Services and Plurison, distributors of high-end audio equipment in the United States and Canada.

With the acquisition, Vervent Audio Group is building two North American subsidiaries: Focal Naim America and Focal Naim Canada. In addition to raising its profile in North America, Vervent's aim is to work more closely with its retailers.

By creating its own distribution entity, the group strives to turn the North American territory into the market leader for Focal, which turns 40 this year, and Naim, which just turned 45. Daniel Jacques, founder of Audio Plus Services and Plurison, will lead both Focal Naim America and Focal Naim Canada as president, with the goal of deploying an offering focused on customer experience and high-quality service.

**FOCAL NAIM**  
A M E R I C A

Vervent Audio Group was created in 2014 as the holding company for Focal and Naim Audio. Focal, a French manufacturer of audiophile loudspeakers, produces professional monitors, car audio systems, integration products and headphones. UK-based Naim Audio manufactures two-channel hi-fi components, complete streaming systems for the home, amplifiers and music servers.

Key markets for Vervent Audio Group in Europe are France, the UK and Germany. Vervent Audio Group generated almost €100 million in business in 2018, two-thirds of which was outside of the two countries of origin, France and the UK. At present, Vervent has more than 430 employees in Europe.

Focal Naim America  
www.audioplusservices.com



# No Rush for Recording Rustin Man

BY STEVE HARVEY

ESSEX, UK—Rustin Man, otherwise known as Paul Webb, Talk Talk's founding bass player, is a man out of time. That's not to suggest that his number is up, but rather that his new album, *Drift Code*, 16 years in the making, inspired by music of the 1940s and with intentional tempo fluctuations, stands apart from much of today's beat-mapped, pitch-corrected fare.

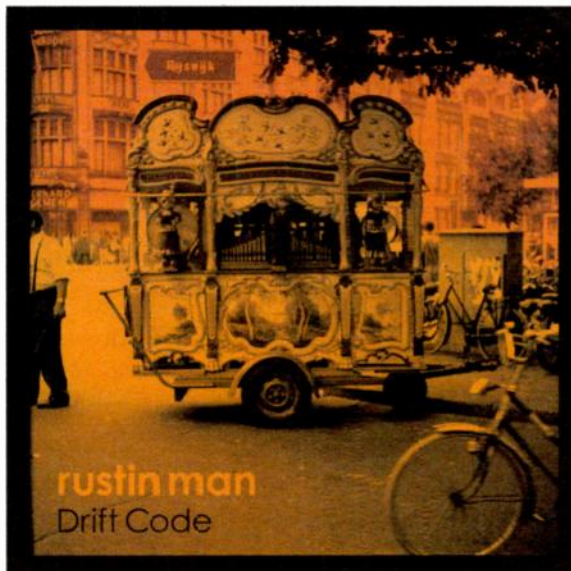
*Drift Code*, released Feb. 1 on Domino, is the second album to bear the Rustin Man name. The first, *Out of Season*, released in 2002, was a collaboration with Portishead's Beth Gibbons. Webb has been busy in the years since, raising a family in a converted barn in the county of Essex, northeast of London, and learning engineering. "With Talk Talk, I didn't really pick much [engineering] up; I was just concerned about bass playing," he says.

During the 1990s, Webb and Lee Harris, Talk Talk's drummer, had a band project, .O.rang, that recorded a couple of albums with a variety of guests. But while Harris was coming to grips with digital audio technology, says Webb, "I was learning more about performance at that time."

Then he collaborated with Gibbons. "She had a Trident desk and she knew her way around a compressor," he says. After .O.rang, the return to analog was inspiring. "I thought, I've really missed this. By the time I'd finished, I wanted to learn engineering and recording, the old-school side. That's when I started buying microphones and preamps and experimenting with them, learning on the job."

As *Drift Code* started to come together, he says, "The first thing I did was write the songs, the melodies and the structures, and the core arrangements. Then I sat down to record the songs on an acoustic guitar, just the fundamental arrangements."

Inspiration for the album came from 1940s music by the likes of the Mills Brothers and Cab Calloway. "It was a very innocent age, lyrically, even though it probably wasn't innocent at all. Also, coming off tour with Beth and having played a lot of loud guitar, I imagined what it would have sounded like if you went into a session with a guitar and a lot of effects in the 1940s and joined in."



The tempo of any given song could vary according to Webb's vocal delivery. "I wanted that in the performance," he says. He then applied a MIDI template, locking in any tempo variations. "That was when I got Lee involved and we put the drums to those MIDI files."

The barn is both recording studio and home. "I made these huge mic cables so that we could record anywhere. But to live in a house that's like a recording studio would have been too much, so we put statues and ornaments all around and disguised

it. That created an other-worldly atmosphere," he says.

Indeed, atmosphere and environment are central to Webb's creativity. "Making records is a lot of decision making. When you're not sure, just play and walk around the house; it's almost like playing into the atmosphere. When we put the drums down, we went into every room in the barn to hear what the sound was like and ended up in the attic, where one of my daughters sleeps. It has a good 'triangular' sound; we did most of the drums there."

Webb's recording setup is simple—it's essentially Pro Tools and six channels of mics and preamps, plus an SSL X-Desk. "I bought a collection of microphones, like the Soundelux ELUX 251 and the 47C. Those were the drum sounds," he says. "An old Neve 1073 was my main preamp. The other preamps were a Chandler TG2 and a Great River."

Webb, a multi-instrumentalist, began building the arrangements. "I'd already gotten into the habit of re-

(continued on page 24)

## Could Boston's Zippah Be Any Hippah?

BY STEVE HARVEY

BOSTON, MA—Zippah Recording Studios in Boston, helmed by producer, engineer, mixer and musician Brian Charles since 2003, is celebrating its 30th anniversary this year. The facility is crammed floor to ceiling with a collection of gear that enables Charles and his young staff to create recordings that compete with any album in their clients' collections.

Indeed, Charles is quite the student of recording technique, voraciously reading magazines and scouring the internet to unlock the secrets behind releases of all eras. "I'm always quoting things from articles or buying gear based on something I want to get the sound for," he says.

"There are some artists I work with who like to do the '60s retro thing, and I have a lot of those types of compressors and pre's and microphones. From the drum kit and the instruments through the signal path, I'll employ those recording techniques and get really authentic sounding '60s recordings. I would



At Boston's Zippah Recording Studios, owner Bryan Charles (right) and engineer Annie Hoffman oversee a Neotek Elite console.

do those all day long, every day for the rest of my life because they're so fun."

Charles is the guitarist in the band the Sheila Devine. About five years ago the band's singer, Aaron Perrino, suggested channeling his inner nerd into a project that became the Tuesday Night Recording Club. "He said, 'We should do

something where we pick a seminal album and you research those recording techniques. I'll write a song, we'll invite some friends down and see what comes out in one evening.' The first one we did was Joy Division; I'm triggering snare sounds with SPX90s, stuff like that. It was really fun."

Zippah was founded by Robert

Fisher and Pete Weiss in a small section of a large, freestanding garage; it later grew to occupy more floor area. When Charles began taking projects there, it was a big open space with a small control room that is now an iso room. Over the decades, clients have included Gigolo Aunts, The Figgs, The Faint and Tanya Donnelly, among many, many others.

"They were charging me \$15 an hour as a freelance engineer," recalls Charles, who was working at one of the area's major facilities, Newbury Sound, as an assistant. "That was the first time I thought maybe I could do this on my own and not have a boss. I started bringing everybody here, to the point where nobody else could get into the studio. They said, 'Would you like to become a partner with us?'"

Each threw in \$10,000—all that Charles possessed and more, he says—and they built out the place to its current layout. Fisher and Weiss eventually chose to cash out and leave Charles in charge.

(continued on page 24)



# GENESYS BLACK



## Total Integration

The Neve Genesys Black is a digitally controlled analogue recording console with total integration with the studio environment and the DAW of your choice

- Legendary Neve 1073<sup>®</sup> mic preamps
- Choice of Neve 88R 4-band EQ or Neve 1084 Classic EQ
- Mastering grade A/D/D/A conversion
- Digital control with instant reset and Total Recall<sup>®</sup>
- Enormous scalability and monitoring power



 **Neve**

[www.ams-neve.com](http://www.ams-neve.com)



## Fig, Spreng Bring a New Day to Dave's Room

BY STEVE HARVEY

NORTH HOLLYWOOD, CA—Anyone who watched this year's In Memoriam segment on the GRAMMY Awards telecast surely noticed the inclusion of revered producer, engineer and mixer David Bianco, who passed away in June at the age of 64. Bianco had a long list of credits including Bob Dylan, Mick Jagger, AC/DC and Tom Petty, with whom he won a GRAMMY for the 1996 *Wildflowers* album. Bianco owned Dave's Room in L.A.'s San Fernando Valley, not far from the Bob Hope Airport in Burbank.

In the wake of Bianco's passing, his sons reached out to some of his friends and associates to see if they could find a way to keep the studio running. Paul Figueroa, known to many as Fig, and David Spreng, who first met Bianco on a Dylan session, stepped up. Late last year, they reopened Dave's Room for business.

The one-room facility started life in the 1970s as a recording studio purpose-built by producer and engineer Freddie Piro, who named it Mama Jo's after his mother. Piro worked extensively with the band Ambrosia, whose first album was engineered by Alan Parsons. (Piro produced their second release.) Piro also played on the first Alan Parsons Project album, some of which was recorded at Mama Jo's. The studio fell into disrepair and was saved by producer/engineers David Bianco and Michael Belfer in 2006.

Fig first met Bianco at Sound City Studios. His band, signed to Virgin, had recorded its second album there but Fig quit, joined Sound City as a runner and was soon an assistant engineer, working with numerous clients, including Bianco, with whom he developed an enduring working relationship.

One day, Bianco called, Fig recalls. "He said, 'I've found this spot, do you want to come check it out?' It was the old Mama Jo's."

The facility was—and still is—set

up for musicians to all record simultaneously. "There's a piano booth, a vocal booth, a hallway you can tuck a bass amp in, and you can get an extra amp in the lounge," says Fig.

"If I wasn't busy on something, Dave would drag me in on a session. I got to work with him on a Blues Traveler record. The band would jam something out, John Popper would come in, listen to it, drive around with a rough mix, come back at 8:30 and throw vocals and a lot of harmonica on it. A couple of overdubs and it was ready to mix. It was a great space for a band to spread out and do their thing in private."

Bianco's death came as a shock. "We were great friends," says Fig, who was in the process of getting married when he got the news in

June. They had been together at Fig's small bachelor party just days earlier. "On the Wednesday, I got a phone call; he had suffered a massive stroke. And I got married that next Saturday."

Taking ownership of Dave's Room proved challenging. "I'm a producer and a mixer, so jumping through all the administrative hoops was a whole other thing—and being booked at the same time. Finally, on September 1, everything was nailed down and we took over the lease," Fig reports.

Fig and Spreng set about getting the place ready for business again. While cleaning, he says, "I picked up the doormat. 'Mama Jo's 1974' was carved into the concrete. I've been coming here since 2006 and I

had never seen that."

Both engineers have moved substantial portions of their respective collections of equipment and instruments into the studio. "Dave Spreng brought in vintage tube stuff like Altec's and some really cool mics. Not only is he a great drummer and a great engineer, producer and mixer, but he collects amazing drums, too, and he brought in vintage Ludwig and Gretsch drumkits."

Years earlier, Fig had moved the piano from his parents' old jazz club, Donte's, into Dave's Place. "Precision Piano stripped it down to the soundboard, rebuilt the whole thing and it's a monster. Bianco had Ian McLagan from Small Faces in to do a record and he fell in love with it. It's still in there."

Fig continues, "I had some 1176s, a handful of dbx 160Xs and a couple of Distressors. I brought my Shadow Hills and Aurora stuff. I found a [Yamaha] PM1000, all Class A with the mods and direct outs, and transformer ins and outs, and I brought that in. We reorganized the patch bays, got the racks all loaded. Now we've got 66 mic pre's, 29 compressors, some API 550s, Pultecs, GML."

The gear list closely follows Bianco's central philosophy: "He was such a fan of the front end. And his thing was to keep it simple—just compress it a little and get it to tape."

There's no longer a tape machine but, Fig says, "We've got Pro Tools

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The control room at Dave's Room



David Bianco and Paul Fig





# The Latest DAW Updates Serve Up Compatibility, Parity, Completeness

BY CRAIG ANDERTON

This year's NAMM show set records, and I don't mean vinyl. There were more people, more manufacturers, a more professional crowd, and, with the North Hall in its second year, more space for exhibitors. The arc of progress continues, but the reality is that DAW technology is pretty mature, so it's instructive to see what companies are emphasizing in their recent releases.

## COMPATIBILITY

Most pro DAWs, and many video editors, support the AAF (Advanced Authoring Format) project transfer protocol as an alternative to the aging OMF standard; now PreSonus Studio One 4 and Steinberg Cubase 10 have added AAF support. Probably AAF's biggest advantage compared to OMF is preserving cuts and some other audio/video edits across platforms. While AAF won't transfer plug-in data or parameters unique to a program, it will preserve level, panning and automation data. With more engineers needing to be fluent in more than one DAW, the importance of AAF-based transfers continues to grow.

The process of exporting "stems" has become more sophisticated in today's DAWs. You can often export tracks from time 00:00, with or without processing/automation. For example, if you prefer a particular DAW for songwriting but another for processing and mixing, stem exports make this easy if AAF isn't an

option. Furthermore, some DAWs embrace musicXML for sharing notation data—a great workaround for DAWs that lack robust scoring capabilities. XML can also facilitate transferring projects between audio and video programs (e.g., doing audio in Apple Logic Pro X for Final Cut Pro X).

Compatibility also involves MIDI, and many of the enhancements in MIDI 2.0 (announced at NAMM, and the subject of a future column) are about compatibility and inter-gear communication—including the ability to recognize profiles of specific instrument types. Already, many DAWs can work with MIDI's new MPE (MIDI Polyphonic Expression) protocol,

but now Cubase 10 provides an optimized, MPE-friendly workflow to accommodate MPE controllers such as ROLI's keyboards, the LinnStrument, and Keith McMillan's K-Board Pro4.

## PARITY

As soon as one DAW adds a new feature, owners of other DAWs want it too. Take Ableton Live's groundbreaking clip-launching paradigm, which Cakewalk, Mixcraft and now Digital Performer 10 have adopted. This broad embrace of features validates what many considered a "niche" approach as being appli-

cable to more than just live performance and dance music.

Consider Cakewalk's Mix Recall function, which builds on the mix recall feature in old-school digital mixers. Cubase 10 has added similar functionality, while Studio One added VCA faders that originally appeared in Cubase, as well as the FX Chains that first appeared in Cakewalk. Often, companies up the ante when incorporating a competitor's feature. For example, Studio One lagged behind Cubase in implementing a Chord Track, but when it did, it added the ability to work with audio, not just MIDI.

Of course, Windows users in particular are clamoring for VST3 compatibility. Not everyone is on board

yet (e.g., Ableton and Native Instruments), but as more companies de-emphasize VST2, VST3 support will become essential.

Regarding Pro Tools' track count limitations in the face of unlimited tracks supported by other DAWs (although your computer hardware gets to define what "unlimited" really means), Avid's answer at NAMM 2019 is optional-at-extra-cost Voice Packs, each of which raises the number of simultaneous audio tracks in blocks of 128 voices. (However, note that the latest update of Avid's standalone Pro Tools Ultimate software increases the current maxi-

mum of 256 voices to 384 voices, without Voice Packs.)

The race for better time-stretching continues apace. Digital Performer recently converted to zynaptiq's ZTX PRO technology, while Cakewalk added zplane's algorithms to its existing iZotope algorithms.

## COMPLETENESS

This trend began when DAWs bundled plug-ins to provide extra value. For example, Steinberg created VariAudio for pitch correction functions, and now includes an Audio Alignment program similar to Synchro Arts' VocAlign. Digital Performer's collection of amp sims and guitar effects basically obviates the need for third-party equivalents. Most DAWs also include sample playback instruments and sample libraries. Finally, Magix Samplitude Pro X4 Suite includes mastering-oriented plug-ins, an audio cleaning and restoration suite and, for audio editing, a complete version of Sound Forge Pro.

The trend is going in two directions: Companies are bulking up their programs to keep existing users in the fold, while users are becoming more prone to using multiple programs. Will these trends lead to a shakeout in a competitive industry, or increase the health of all DAW companies? I'm hoping for the latter.

Craig Anderton's new book series, *The Musician's Guide to Home Recording*, is now available from Hal Leonard in softcover, and Reverb.com as a series of ebooks. Please visit [craiganderton.com](http://craiganderton.com) for more news.

As soon as one DAW adds a new feature, owners of other DAWs want it too.

## Dave's Room

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summed through an Audient Sumo, so there are 16 channels of analog summing to two channels. There's no console to maintain. There's a C24 [control surface] but there's all this Class A stuff. So we can move fast—if we had time to sit and wait for the tape to rewind, it would be great, but there's no time."

A session with Paul Stanley and his band after the reopening certainly achieved a lot in a short time. "They tracked everything live: two keyboard players, a percussionist, drummer, guitar, bass and singing. Every cable was out, every single XLR in



the building was filled," he reports. "They worked quickly. They were in for a few days and they got all their

tracks together."

Billy Corgan was also in for a while recently. Tool booked time in

the studio in the lead up to recording their recently announced new record. In recent years, Bianco had Exene Cervenka in, and Billy Gibbons visited with Austin Hanks. Steve Earle worked there, as well as Dave Vanian from The Damned. Lucinda Williams loves the place, reports Fig, whose work there includes three months of engineering with Alice in Chains during the making of *The Devil Put Dinosaurs Here*, produced by Nick Raskulinecz, another Sound City alum.

But for all the recent changes, Fig and Spreng have stayed focused on retaining what Bianco really wanted for the studio: "Dave wanted the place to be a comfortable place to create."

Dave's Room  
[www.davesroom.net](http://www.davesroom.net)





**ARTIST:** JASON RINGENBERG  
**ALBUM:** STAND TALL  
**LABEL:** COURAGEOUS CHICKEN ENTERTAINMENT  
**PERSONNEL:**  
**Produced by:** Mike Lescelius, Jason Ringenberg  
**Engineered by:** Mike Lescelius  
**Studio:** Misunderstudio (Murphysboro, IL)  
**Mastered by:** Alex McCollough at True East Mastering  
**EQUIPMENT NOTES:** KRK V88 monitors, Lipinski 707 monitors, Avid Pro Tools 12.7



**ARTIST:** YOUNG HUNTING  
**ALBUM:** TRUE BELIEVERS  
**LABEL:** GOLD ROBOT RECORD  
**PERSONNEL:**  
**Produced by:** Hari Rex, Ilya Mxx  
**Engineered by:** Miles Senzaki  
**Studio:** Grandma's Dojo (Los Angeles, CA)  
**Mastered by:** Timothy Stollenwerk at Stereophonic  
**EQUIPMENT NOTES:** ADAM Audio A7 monitors, Avid Pro Tools, Reaper, Apple Logic Pro



**ARTIST:** OCEANWIRES  
**ALBUM:** THERE NEVER WAS A WAS  
**LABEL:** SELF-RELEASED  
**PERSONNEL:**

**Produced by:** Steve Fisk, Matt Bayles  
**Engineered by:** Steve Fisk, Matt Bayles  
**Mix Engineer:** Matt Bayles  
**Studios:** Red Room and Soundhouse (both Seattle, WA)  
**Mastered by:** Ed Brooks at Resonant Mastering (Seattle, WA)  
**EQUIPMENT NOTES:** Trident Audio 80B console; Dynaudio BM15A, Yamaha NS-10, NHT M00, Genelec 1030A, Yamaha NS-10m, Tannoy DMT215, JBL 4412 monitors; Avid Pro Tools



**ARTIST:** ASTRALINGUA  
**ALBUM:** SAFE PASSAGE  
**LABEL:** MIDNIGHT LAMP  
**PERSONNEL:**  
**Produced by:** Joseph A. Thompson  
**Engineered by:** Joseph A. Thompson  
**Studios:** Recorded in small cabins around the United States  
**Mastered by:** Joseph A. Thompson  
**EQUIPMENT NOTES:** Digidesign Command 8, Yamaha NS-10, Avid Pro Tools 10



**ARTIST:** SET IT OFF  
**ALBUM:** MIDNIGHT  
**LABEL:** FEARLESS RECORDS  
**PERSONNEL:**  
**Produced by:** Mike Green, Brandon Paddock  
**Engineered by:** Mike Green  
**Mix Engineer:** Brandon Paddock  
**Studio:** Home studio (Hollywood, CA)  
**Mastered by:** Brandon Paddock  
**EQUIPMENT NOTES:** Universal Audio Apollo,

Barefoot MM35, Avid ProTools



**ARTIST:** PILOTCAN  
**ALBUM:** BATS FLY OUT FROM UNDER THE BRIDGE  
**LABEL:** EVOL RECORDS  
**PERSONNEL:**  
**Produced by:** Paul Savage  
**Engineered by:** Paul Savage  
**Studio:** Chemos 19 (Lanarkshire, Scotland)  
**Mastered by:** Kenny MacLeod  
**EQUIPMENT NOTES:** SSL AWS 948 console, Quedsted V2108 (updated VS2108) monitors, Yamaha NS-10, Avid Digidesign Pro Tools HD2 Accel



**ARTIST:** THE NATIONAL LIGHTS  
**ALBUM:** WHOM THE SEA WILL KEEP  
**LABEL:** BLOODSHAKE RECORDS  
**PERSONNEL:**  
**Produced by:** Chris Kiehne  
**Engineered by:** Chris Kiehne  
**Studios:** Home studios  
**Mastered by:** Chris Kiehne  
**EQUIPMENT NOTES:** Steinberg UR22, M-Audio BX5a monitors, Avid Pro Tools



**ARTIST:** MOVING PANORAMAS  
**ALBUM:** IN TWO  
**LABEL:** MODERN OUTSIDER  
**PERSONNEL:**  
**Produced by:** Leslie Sisson, Louie Lino  
**Engineered by:** Louie Lino

**Mix Engineer:** Danny Reisch  
**Studios:** Resonate (Austin, TX), Good Danny's (Lockhart, TX)  
**Mastered by:** Erik Wofford at Cacophony Recorders (Austin, TX)  
**EQUIPMENT NOTES:** Avid Control 24; Event 20/20 bas, Yamaha NS-10, ADAM Audio S3V, Barefoot Sound MM27 monitors; Avid Pro Tools HD, HDX



**ARTIST:** TREY WRIGHT  
**ALBUM:** BEGIN AGAIN  
**LABEL:** SELF-RELEASED  
**PERSONNEL:**  
**Produced by:** Marlon Patton  
**Engineered by:** Marlon Patton  
**Studio:** Oak Avenue Recording  
**EQUIPMENT NOTES:** APS Klassik and Yamaha NS-10 monitors, Avid Pro Tools



**ARTIST:** BRAVO DELTA  
**ALBUM:** UNBREAKABLE  
**LABEL:** SELF-RELEASED  
**PERSONNEL:**  
**Produced by:** Bravo Delta (Brandon Davis, Andy Ingraham, Brian Scott, Roman)  
**Engineered by:** Roman  
**Studio:** Snakejam Studios (Las Vegas, NV)  
**Mastered by:** Andrew Capp at Funky Jelly Studios (Las Vegas, NV)  
**EQUIPMENT NOTES:** Allen & Heath console, UA 610 preamps, Yamaha NS-10 and ADAM Audio A7X monitors, Avid Pro Tools, Steinberg Cubase

## notes

### Berlin Phil Digitizes with Stage Tec

BERLIN, GERMANY—Berliner Philharmoniker Recordings employed Stage Tec's (www.stageotec.com) Nexus XMIC+ A/D converter to digitize archived recordings of 21 works by Beethoven, Brahms, Mozart, Bruckner, Schubert and others for a 22-CD/SACD edition of recordings made between 1939 and 1945.

### Grundman Masters NAACP Anthem

HOLLYWOOD, CA—At Bernie Grundman Mastering (www.bgmastering.com), engineer Paul Grundman mastered a new version of the classic NAACP official song "Lift Every Voice and Sing" by Bay Area musician and dancer collective SambaFunk! to coincide with Black History Month in February.

### Set It Off Is on Mic

LOS ANGELES, CA—After Cody Carson, lead singer with L.A.-based hard rockers Set It Off, gave Telefunken's (www.telefunken-elektroakustik.com) ELA M 251E classic large-diaphragm tube microphone a workout on the band's new album, *Midnight*, producers Mike Green and Brandon Paddock now use it for all his vocals.

### Jonas Blue Builds Around SSL

OXFORD, UK—London-born DJ, songwriter, record producer and remixer Guy Robin, aka Jonas Blue, whose 2016 debut single "Fast Car" was a global best-seller, has a new three-room home-based facility built with Justin Spier at Studio Creations centered around an SSL (www.solidstatelogs.com) AWS 948 Delta console.



# Historic Studio's Revitalization Scrapped

BY CLIVE YOUNG

NEW YORK, NY—Last year, *Pro Sound News* reported that a former recording facility built in the early 1900s was set to become the centerpiece of a planned artistic/commercial revitalization project in Camden, NJ. Now the *Philadelphia Inquirer* reports that plans to reinvent the eight-story Victor Talking Machine Company building have been scrapped in the wake of its sale to EMR Eastern, a recycling business.

Founded in 1901, the Victor Talking Machine Company grew over the years to fill two dozen buildings across 10 city blocks as it manufactured record players, accessories and a whopping 800,000 records a day. Few signs of that empire exist today, however, and Victor's main eight-story

office building near the city's waterfront sat barely used by its former owner, the Camden City School District, for much of the 2000s.

Real estate investment firm Millennial Partners purchased the building in March 2018, aiming to create a renovated, modern-day office space that would evoke its musical past. Plans called for the eighth-floor recording studio—where the likes of Enrico Caruso, Nat King Cole, Louis Armstrong, Duke Ellington and Billie Holiday reportedly cut sides—to be redeveloped and joined by a video production facility. Other possibilities included a roof-based restaurant offering views of Philadelphia across the river, first-floor shops, a performance space and more, with Millennial Partners using



Plans to reinvent Camden, NJ's Victor Talking Machine Company building have been scrapped.

the site's musical heritage to attract business tenants and create a sense of community going forward.

While the developer gutted most of the 90,000-square-foot building's interior, it opted to sell it for a reported \$13.5 million instead of developing it, after owning the building for less than a year. EMR Eastern expects to bring 120 employees to the building after it completes an estimated \$33 million in renovations.

EMR Eastern president Joseph Balzano Jr. told the *Inquirer* that the lobby and top two floors—where the recording studios were—will be preserved. That falls in line with the requests of Camden's Historic Preservation Committee, which approved the deal with the caveat that EMR preserve the building's musical history. The edifice will be part of a larger EMR Eastern campus in the area, for which the company will get \$253 million in tax incentives.

# Pros Promote Hi-Res Audio

ARLINGTON, VA—The Consumer Technology Association (CTA) has produced a series of eight documentary-style video vignettes featuring artists, engineers and producers to promote High-Resolution Audio (Hi-Res Audio, or HRA) as an emerging audio technology platform.

Each video tells a story of recording music tracks with painstaking precision and the desire for music fans to hear these tracks in Hi-Res Audio. The format is available on many streaming services, and many hardware units are capable of playing Hi-Res Audio.

One of the highlights of the video series is a tribute to Geoff Emerick, the studio engineer behind legendary Beatles albums including *Revolver*, *Sgt. Pepper's Lonely Hearts Club Band* and *Abbey Road*. Within the extended cut version of his interview, which happened to be his very last, Emerick shares his memories about recording with John, Paul, George and Ringo and the revolutionary techniques he used back in the 1960s.

"Hi-Res Audio gives music lovers the opportunity to experience their favorite artists and songs like never before—providing greater sound quality and clarity that typically get lost," said Gary Yacoubian of Specialty Technologies/SVS and vice chair of CTA's Audio Division Board. "We want consumers to embrace the ability to listen to recordings as they were intended."

In addition to Emerick, the music artists and producers featured in the series include noted producer/engineer Bruce Botnick, best known for his work with The Doors; drummer Kenny Aronoff, who has played more than 60 Grammy-nominated or awarded recordings representing over 300 million in sales; three-time

Grammy-nominated producer and DJ Paul Oakenfold; Skylar Grey, singer, songwriter and record producer; indie pop band AJR; Elise LeGrow, Canadian recording artist and songwriter; and rock act Family of the Year.

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The late legendary engineer Geoff Emerick gave his last interview for the CTA's new video series.

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## Rustin Man

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cording six microphones, so each instrument I added, I used six mics. I tried various mics in different locations and I made a library of those recordings.”

He would also record multiple takes, he says, to give himself additional options later in the process. “There might be a bass fill later on that I might need room for, so I would record a few versions, one with the acoustic guitar playing through, one where I played less.” Alternatively, if a guitar part intruded on the bass, he says, he could select a room mic track instead.

Webb brought in local musicians to add violin and cello, and a teacher at the school one of his daughters attends added trumpet, flugelhorn and euphonium. Webb’s school friend, Mark Cotgrove, better known as Latin percussionist Snowboy, brought his clavichord to the barn and contributed some keyboard parts.

About halfway through the proj-



Paul Webb, aka Rustin Man

ect, Webb says, “I took on a few production jobs with a few bands,” including UK singer-songwriter James Yorkston, Belgian duo Dez Mona and Swedish band The Tiny. “They were all acts who had their own personalities and knew what they wanted to do, so I could go in and explore production ideas with them. It was worth doing. It gave me more confidence when I came back to my own stuff to

carry on what I was doing.”

Webb’s learn-as-you-go engineering process further benefitted from his friendship with Phill Brown. The legendary recording engineer, whose credits include sessions with Jimi Hendrix, the Rolling Stones and Led Zeppelin, and who worked on two Talk Talk albums, offered Webb some pointers. “He taught me things like, don’t add top to stuff. And don’t add

EQ, just take it away, for a more natural sound.”

Once Webb finished tracking, he invited Brown to take a listen: “He said it felt like it was 85 percent mixed.”

Webb set about completing the album, aided by his latest discovery, Universal Audio plug-ins. “They really helped me with mixing. The equalizers and the compressors sounded very real to me. I kept it simple. I stayed on the Neve 1081 EQ, and I put the Studer A800 on everything; I like the tape saturation you can get from that.”

He laughs, “And you could use 15 Fairchilds if you wanted, which was a complete luxury. Someone told me you shouldn’t use a valve compressor with a valve mic, but back in the 1940s that’s all they had, and it sounded alright to me.”

Webb is now exploring the possibility of playing some live shows. “It’s weird being a 57-year-old and becoming a singer for the first time—it’s quite daunting. But we’ll see if we can get a few gigs sorted out.”

Rustin Man

[www.rustinman.com](http://www.rustinman.com)

## Zippah

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“We used to have a ’70s Neve desk. When Pete moved to Vermont [to open Verdant Studios], we had to horse-trade a bunch of gear so he could take the console there. At that point I put a Neotek Elite in; I was a big fan of Steve Albini and that era of music was dear to me.”

The Studer A80 Mk IV in the corner continues to see action. “The funny thing is, it’s getting more use. I try to make it affordable for people; I order tape by the box and charge a rental fee for the reel, then recycle it. I’ve done more records on that machine in the past three years than I did in the previous ten,” Charles reports.

The studio’s plate reverb has been memorialized in a plug-in, released late last year by Rare Signals, a company founded by Charles and digital music agency Icon Interactive. Named the Transatlantic Plate Reverb, it offers his U.S.-made example and a German-made classic, the EMT.

“As I started to mix more in-the-box, I was missing the sound of the real plate at the studio,” he explains. “Every time I had to recall a mix, I had to get out my recall sheet and try to match the decay time. Most of the time the plate is on the lead vocal, so if you don’t get it right, the recall

doesn’t sound right. It was frustrating.”

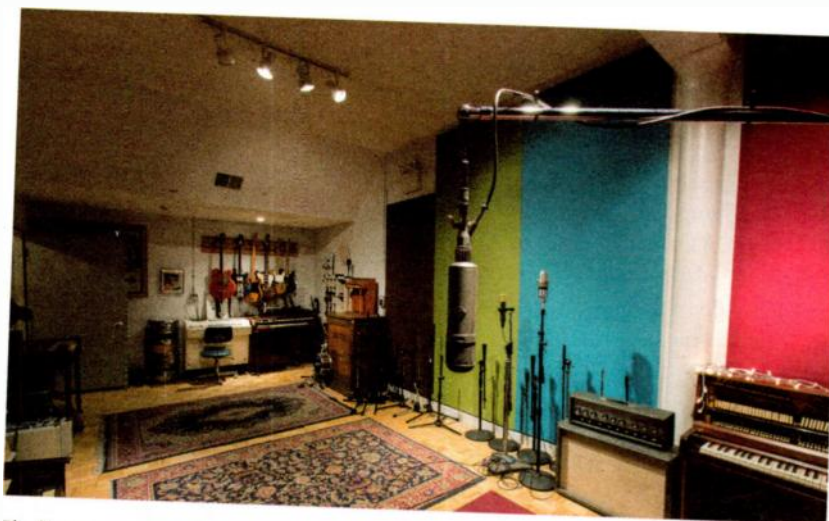
He took a deep dive into impulse responses. “As a hobby, I started making impulses of everything I could, trying different methods and reading AES white papers, trying to understand convolution, multithreading and deconvolution.”

There are limitations to most reverb plug-ins that result in an inauthentic sound and performance, he says. One is that the out-of-the-box pieces of IR deconvolution code available tend to correct the very anomalies—phase shift, differing levels between the left and right transducers—that give a plate its distinctive character. “That was keeping me from making impulses that sounded like the real thing,” he says.

“I made a series of impulses. If they were out of phase, they were supposed to be. If the left side got hit first, it was supposed to be like that. Because that’s how it is in the real world.”

The other problem was that most plate ’verb plugs impose a fade algorithm to change the decay time. But that’s not how a plate works, he says. The solution was to offer a different impulse at each available decay time, selectable by the user.

“Then the challenge was to get 24 independent impulses to load one at a time as you flipped through the decay times. But the result is that it sounds just like the plate.”



The live room at Zippah hosts the ongoing Tuesday Night Recording Club project, creating new songs in various genres using era-appropriate recording techniques.

His friend David Lyons, owner of pro audio equipment outlet Sonic Circus in Vermont, had acquired a load of gear from Bearsville Studios in Woodstock, including the EMT plate reverb. “I knew it was a magic plate; it’s on Jeff Buckley’s *Grace* album and those Todd Rundgren records. He was kind enough to give me unlimited access. So that is our European setting. The U.S. setting is the plate I’ve had here for years that was made in 1971 in Nashville.”

The Recording Academy’s Diversity and Inclusion Task Force recently announced an initiative that aims to expand opportunities for female music producers and engineers. Charles was way ahead of the curve, employing two, Annie Hoffman and Miranda Serra, the former for almost a decade.

“I’m glad that we found talented people, and it’s a bonus that they happen to be women. It wasn’t a conscious plan,” he says.

“Annie came in about nine years ago as an intern. She was a Berklee School graduate and is an incredible bassist and an amazing engineer. The first session she was put on, the client I was producing was blown away by how efficient the session was and how great we all worked together. She went from intern to being paid within a week.” Needless to say, Hoffman’s band, Weakened Friends, also records at Zippah.

Zippah Recording Studios  
[www.zippah.com](http://www.zippah.com)

Rare Signals  
[www.raresignals.com](http://www.raresignals.com)



## briefs

### SCETV Builds Trucks with Brio

COLUMBIA, SC—Following the installation of a Calrec (www.calrec.com) Brio12 console in its small uplink truck, South Carolina Educational Television's new 45-foot production truck is being outfitted by Diversified with a Brio36 interfaced via MAD1 with a Grass Valley TDM router.

### RAI Adds Six Stage Tec Desks

ROME, ITALY—Italian public broadcaster Radiotelevisione Italiana (RAI) has taken delivery of six Stage Tec (www.stage-tec.com) Aurus platinum mixing consoles, two equipped with 48 faders and four with 40 faders, and each including a Nexus router equipped with five RMDQ audio DSP modules and a Nexus Base Device.

### Vienna Studio Bets on Lawo

VIENNA, AUSTRIA—Sound engineer Georg Burdick, founder of the tonzauber (magic sound) classical music studio in the Vienna Concert Hall, has opened a studio at the Casino Baumgarten outfitted with a Lawo (www.lawo.com) mc²36 mixing console with 24 faders and a Lawo Compact I/O unit.

### Found Objects Bows Sundance Trifecta

NEW YORK, NY—Music production studio Found Objects (www.foproductions.com) celebrated its fourth consecutive year at the Sundance Film Festival with three projects that highlight the company's music capabilities, including a film, Rhys Ernst's *Adam*, that features an original score by Jay Wadley, co-founder of Found Objects with Trevor Gureckis.

### SSL Enters the Eye of the Hurricane

FT. MEYERS, FL—Waterman Broadcasting, owner of Fort Myers, FL-licensed NBC affiliate WBBH-TV and operator of Montclair Communications-owned ABC-affiliated WZVN-TV, has installed two identical Solid State Logic (www.solidstatelogic.com) System T audio production consoles in its twin control rooms alongside a Tempest Control Rack for backup and disaster recovery.

## Spidey Flick Versed in Sound

BY STEVE HARVEY

CULVER CITY, CA—Columbia Pictures and Sony Pictures Animation's *Spider-Man: Into the Spider-Verse*, the first full-length animated feature in the franchise, is enjoying the 2019 awards season. Having already crashed through the \$350 million mark in global box office since its release in mid-December, it has been picking up honors left and right: a Golden Globe, BAFTA and Annie Award for Best Animated Feature, as well as an Academy Award nomination in that category. It's also been recognized with six additional Annies, numerous craft awards, and, on the audio side, two MPSE Golden Reel Awards and a Cinema Audio Society Award.

At the end of January, Sony Pictures Studios hosted a panel discussion featuring some of the sound team's key members in the Kim Novak Theater—where *Into the Spider-Verse* was mixed natively in Dolby Atmos—that revealed some of the secrets of the film's success. The Los Angeles Section of the Audio Engineering Society and the Hollywood



Section of the Society of Motion Picture and Television Engineers jointly presented the event.

While *Spider-Verse* was very much a collaborative effort, with three directors—Bob Persichetti, Peter Ramsey and Rodney Rothman—and a host of producers at the helm, the project was essentially the vision of producers Christopher Miller and Phil Lord, the latter co-writing the screenplay with Rothman.

"The look is unique, a comic book come to life. They wanted the sound to match," said re-recording mixer Michael Semanick, CAS, who mixed dialogue and music on the stage's Harrison MPC4D X-Range digital console. "We didn't want to assault

the audience; we wanted to invite them in to have an enjoyable time. We worked hard to maintain the dynamics, with almost a childlike mix."

Many of the panelists had worked previously with Lord and Miller, whose credits include *The Lego Movie* and *22 Jump Street*. This was the first project re-recording mixer Tony Lamberti, CAS, had worked on with the two filmmakers, but he quickly picked up on their style, he said. "Phil and Chris are very rhythmic-oriented guys. The comic timing and beats are super important to them."

Lamberti, who mixed sound effects on an Avid S6 console, had previously mixed 2017's live action

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## Duo Divulges Podcasting Basics

BY STEVE HARVEY

ANAHEIM, CA—Many point to *Serial*, an investigative podcast series launched in late 2014, as the moment that the downloadable file format, which had originated a decade before, came into its own. Today, 50 percent of U.S. households listen to podcasts, according to researchers, but the content has broadened far beyond dramas and documentaries. At the 2019 NAMM Show, one NAMM U session walked attending music business professionals through the process of setting up a podcast and touted the medium's potential for engaging with current and prospective customers.

Chris Bates and Tyler Marolf—of TeacherZone.com, a software platform for performing arts schools, and Los Rios Rock School, both based in San Juan Capistrano, CA—started podcasting two years ago. They now have more than 20 episodes of *The Teacher Zone with Chris and Tyler* under their belts, plus another six for their school podcast. On stage at the NAMM Idea Center in the main lobby of the Anaheim Convention Center, which was outfitted with official headphone provider Mackie's new



Tyler Marolf and Chris Bates discussed podcasting in the NAMM Idea Center.

MC-250 studio headphones, the pair offered recommendations and best practices based on their experiences.

"One of the most important things [about podcasting] is that it gives us all a voice," said Bates. "Years ago, with our businesses, we got to know everybody who walked in." Today, however, "We have listeners all over the world. We can create friends and a global community."

As a business, "You're bringing people into your house. They know more about you and it creates trust,"

he said.

"The big thing about a podcast is that you're trying to build a following or a fan base. It's a good idea to create a brand. Call it whatever you want, or align it with your brand," Bates suggested.

For audio novices, recording a podcast need not be that complicated. "If you're a single host, you can get a simple \$99 USB mic, go straight into your computer or laptop, and that's all you need," said

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