

# proSOUND

NEW

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October 2019

## STATE OF THE INDUSTRY

### SOUND REINFORCEMENT

BY CLIVE YOUNG

There are many facets to the sound reinforcement business, but one of the most visible has always been the summer concert season, traditionally the busiest time of year for audio vendors. Last year, the hot months found the concert business around the U.S. happily skyrocketing, buoyed by hit tours, a strong economy and a historically low jobless rate, as the national average fell to 3.7 percent for the first time since 1969. With consumers feeling flush and relatively confident about the future, ticket sales were strong around the country. That, in turn, kept sound reinforcement companies at all levels busy, regardless of whether they were national providers providing full stadium and arena systems for megastars, regionals providing arrays and amps for mid-level tours passing through, or local audio shops tackling special events around town.

But that was last year. A full 12 months on ... things are about the same, if a tad underwhelming. Encouragingly, unemployment sat at 3.7 percent all summer long, but the Consumer Sen-

*(continued on page 48)*

### RECORDING

BY STEVE HARVEY

There's no business like the streaming business, as the record industry has discovered. More than 60 percent of U.S. recorded music revenues now come from paid streaming subscriptions, according to the RIAA, partially offsetting the steep downturn in physical sales since the late '90s. But while it took some time for the labels to find their footing in the 21st century, on the front lines, at recording studios in and around Philadelphia, Dallas and Washington, D.C., business is, well, the same as it ever was.

Don Zientara started Inner Ear Studio 30 years ago in his basement in Arlington, VA, just across the Potomac River

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### Little Everywhere Grows Up

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After years spent as a musician, songwriter, producer and engineer, creating Grammy-nominated work with Modest Mouse, the Murder City Devils and Cold War Kids, Dann Gallucci found the next phase of his career in podcasting.



### Olympic-Sized Sound

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The Tokyo 2020 Olympic Games is shaping up to be a record-breaking event, as host broadcaster Olympic Broadcasting Services will provide 5.1.4-format audio from all 45 venues.



**KILLER QUEEN**—In the wake of the Oscar-winning biopic *Bohemian Rhapsody*, Queen + Adam Lambert packed arenas across the U.S. this summer with a sold-out string of shows. Along for the ride was a sizable audio system from Clair Global that included DiGiCo consoles and Shure Axient Digital wireless systems. For more on the tour, see the Live Sound Showcase on page 38.

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# Propellerhead Rebrands as Reason Studios

STOCKHOLM, SWEDEN—In late August, Propellerhead Software announced a significant rebranding effort that brings with it a corporate name change and new logo. Propellerhead has become Reason Studios, referencing the name of the company's flagship music-making software.

At the same time, the company revealed a major update to Reason software. Reason 11 includes the Reason Rack Plug-In, which enables music makers using any popular digital audio workstation to plug the Reason Rack into their sessions, in addition to a number of updates to its stand-alone music making software.

"The rack of devices has always been the core of Reason. Now with Reason 11, anyone can easily add the Reason Rack Plug-In to their favorite DAW," said Mattias Häggström Gerdt, Reason product manager. "With the addition of six new devices, the Reason Rack is bigger than ever, so you can make music the way you want. Of course, we've improved Reason as a DAW, too, adding some of the most requested workflow fea-

tures like improved sequencing and editing."

The new Reason 11 devices include Quartet Chorus Ensemble, Sweeper Modulation Effect, Master Bus Compressor, Channel Dynamics, and Channel EQ.

Timothy Self, chief product officer, explained some of the thinking behind the corporate rebrand: "We're changing our name to Reason Studios to clearly express our dedication to delivering the best experience for all music makers, regardless of where they are in their creative journeys," he said. "The world really knows us for Reason. Reason Studios encapsulates our mission of building a platform for all music creators. Reason 11, with its seamless integration into other music production software, truly exempli-



## Reason Studios

Reason Studios' new logo.

ties how we want to open up to the world."

Reason 11 is expected to be available for purchase worldwide on Sept. 25. The launch version is VST 3 and the company is working to release an AU version in a free update before the end of 2019.

Propellerhead Software (Reason Studios)  
www.propellerheads.com

### briefs

## Audinate Reports Strong Growth

SURRY HILLS, AUSTRALIA—Audinate's (www.audinate.com) year-end results, released in late August, show the company's revenue, earnings and cash flow were all up. The growth is driven in part by an increase in shipments of Dante chips, cards, modules and software. The number of Dante-enabled products for sale is up 30 percent, while the number of OEMs shipping Dante-enabled products is up 22 percent to 270, according to the report.

## Audio Hive Starts Buzzing

LOS ANGELES, CA—Composer Cris Velasco and CEO and composer Jose Varon have launched The Audio Hive (www.theaudiohive.com), a globally-focused full-service audio production company specializing in music, sound design, voiceover and implementation for video games. Velasco and Varon have a combined experience of more than 300 game titles. The Audio Hive has also enlisted sound designer/audio director Rodney Gates, voice director/casting director Rob King and business development manager Koyo Sonae.

## SiriusXM Goes Hollywood

LOS ANGELES, CA—SiriusXM (www.siriusxm.com) and Pandora will officially open SiriusXM Hollywood, the company's new Hollywood studio complex, on Oct. 7 with the first broadcast from the West Coast in almost 20 years by mainstay Howard Stern. Located in the heart of the Hollywood Media District at 953 N. Sycamore Ave., SiriusXM Hollywood has been built from the ground up to reflect the company's commitment to the West Coast artist community and audience, according to a company statement. Production facilities occupy 26,000 square feet on the eighth floor of the building.



# RIAA Rolls Out Revenues Report

BY STEVE HARVEY

WASHINGTON, D.C.—According to the mid-year industry revenue report released by the Recording Industry Association of America (RIAA), the U.S. recorded music market continues to enjoy double-digit growth, driven by paid streaming subscriptions and a small bump in physical format sales.

Total music revenues grew 18 percent to \$5.4 billion at retail in the first half of 2019, fueled in large measure by the 26 percent increase in streaming revenues. Indeed, streaming has reshaped the music business, with paid subscriptions now accounting for 62 percent of overall industry revenues. Paid subscriptions contribute 77 percent of the total U.S. streaming music revenues. The category's 31 percent year-over-year growth pushed total subscription revenues to \$3.3 billion.

The RIAA's streaming category includes revenues from subscription services (such as paid versions of Spotify, TIDAL, Apple Music, Amazon and others), digital and customized radio services including those revenues distributed by SoundExchange (like Pandora, SiriusXM and other internet radio), and ad-supported on-demand streaming services (such as YouTube, Vevo and ad-supported Spotify).

As has become his tradition, Mitch Glazier, chairman and CEO of RIAA, issued a blog post to coincide with the report on Medium. "It's great

news for the music business and for the U.S. economy overall," he wrote. "Music contributes \$143 billion to the nation's GDP every year, supporting more than 157,000 music-related businesses and nearly two million jobs. A healthy music economy fuels a healthy American economy."

In the RIAA's three-page report, digital downloads and physical products are almost an afterthought.

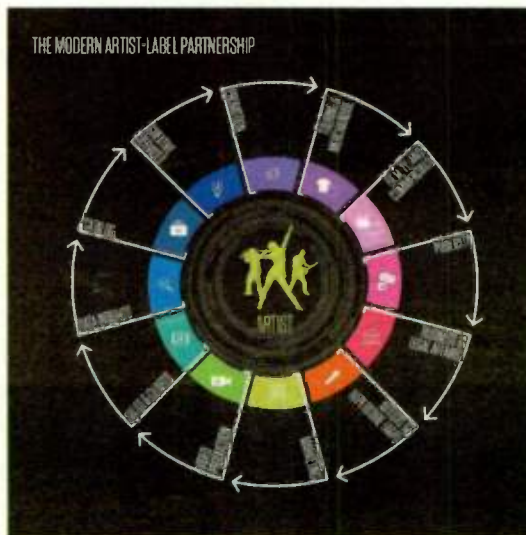
million, or 9 percent of the industry total for the period. The report notes, however, that this was due to a reduction in physical product returns. Sales of vinyl albums grew 13 percent to \$224 million—if that trajectory continues, vinyl will likely overtake CD sales before long—yet accounted for only 4 percent of total revenues.

According to Glazier, record companies are plowing more money than ever into discovering and promoting new talent: "Worldwide, labels now spend nearly \$6 billion a year to find talent, enable artists to record, cut through the noise, and be heard. Finding and developing new talent is the lifeblood of the business, with 20 percent of a major label's roster of artists signed fresh each year."

Beyond the unit sales figures and percentages, Glazier observes, "Music continues to be a key driver of internet culture, and engagement around music and artists powers much of the popularity of many social media and technology platforms. On social media, musicians are among the most-followed users worldwide."

Glazier finishes on a positive note with a comment on the passing of the Music Modernization Act, which, among other things, closed a loophole in federal copyright protections, enabling artists who recorded before 1972 to receive royalties for digital radio plays.

Recording Industry Association of America  
www.riaa.com



The continuing decline in digital sales, falling 18 percent in the first six months of 2019 to \$462 million, partially offset streaming's revenue growth. Individual track sales revenues were down 16 percent year-over-year, while digital album revenues dropped 23 percent. Overall, the category contributed just 8.6 percent to the industry's total revenues.

As it turns out, digital sales are now outstripped by sales of physical products, which grew 5 percent to \$485



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**Studio Showcase: Little Everywhere.** . . 22  
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**Chicago's Periscope Expands to L.A.** 26  
Periscope has acquired Sonic Pool's 22,000-square-foot Hollywood complex and is building out a full-service post house, with an Atmos room already working on a streaming series. General manager Ben Benedetti and co-owner Michael Nehls share the company's plans and accomplishments to date.

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LEA Professional was founded earlier this year by a team of veteran audio executives and engineers who aimed to build an installation-oriented, IoT-enabled professional amplifier with cloud-based control and monitoring. Months later, LEA's first products are rolling off the line, and vice president of marketing Brian Pickowitz recounts the journey to this point.

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**Live Sound Showcase: Queen + Adam Lambert** . . . . . 38  
Riding on the success of the *Bohemian Rhapsody* biopic, Queen has returned to the road, with Adam Lambert filling Freddie Mercury's ample shoes. We talk with the tour's audio team about how they're helping the classic rockers keep the flame alive.

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"Hire good people and give them the space to thrive." It seems obvious, but if you're the boss, it's not that easy to do. Peter Janis explores why.

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## Excitement Builds for AES

When I began working at *Pro Sound News*, one of my first assignments was to interview a few audio pros about why they were going to attend the next Audio Engineering Society Convention. They all had their reasons, but the one thing they all agreed on was that the AES show was exciting.

It still is. Every AES convention delivers new surprises, people, gear and experiences, and this year's edition, taking place Oct. 16–19 at the Jacob K. Javits Convention Center in New York City, will be no exception.

For many, the top priority is the exhibition floor, where some of the biggest companies in audio are on hand to show off their latest gear. Every year, visitors observe the time-honored tradition of going booth by booth, aisle by aisle and demo room by demo room in search of audio products that'll improve their work—and work lives! It's the opportunity to get hands-on with gear you may have only heard about, discover new solutions and meet the people behind the equipment you use each day.

There's more to see than the exhibition floor, however—as the slogan says, “If it's about audio, it's at AES.” Game audio? To paraphrase Apple, there's a track for that. Archiving and restoration? There's a track for that. Immersive audio? Acoustics and psychoacoustics? Recording? Live sound? There are tracks for those,

and a lot of other topics as well.

You can expect packed rooms at the new EDM track, which will explore “The Art & Origins of Sampling” and offer two separate workshops on mixing the beat-heavy genre: the “Mixing EDM Masterclass” led by multi-Platinum/Grammy-winning mix engineer Ariel Borujow, and “Remixing—Breaking the Illusion” featuring remix engineer Rick Snoman.

For others, the Product Development track is their must-see, serving up events like Virtual Development Day, which explores best practices and technologies for creating audio products, while additional sessions delve into automotive audio with self-explanatory titles like “Can DSP Fix a Bad Loudspeaker?”

At every event, you'll find pros sharing the insight and knowledge that can only come from those who can say, “Been there, done that ... and that ... and that....” With that in mind, the opening ceremony will feature keynote speaker, hip-hop legend and pioneering turntablist Grandmaster Flash discussing his groundbreaking work in his address, “Evolution of the Beat.” A day later, the 20th annual Heyser Lecture will find Louis D. Fielder presenting “Psychoacoustics Applied to Dynamic-Range and Nonlinear-Distortion Assessment.”

In recent times, the Sound Rein-

forcement track has been gaining an ever-higher profile, and this year's edition will continue that trajectory. Offerings like “Seven Steps to a Successful Sound System Design,” “AC Power, Grounding and Shielding” and “Your Noise Isn't My Noise: Improving Sound Exposure and Noise Pollution Management at Outdoor Events” hint at the breadth of topics and information that will be offered. In particular, if you work with wireless gear, the annual “RF Super Session,” which finds pros and manufacturers sharing their thoughts on RF spectrum, regulatory changes and best practices, is simply not to be missed.

While AES attracts audio veterans at the top of their game, those just starting out will find lots to take in as well, like the Education and Career Fair, the annual Student Recording Competition and Design Competitions, the second-annual AES MATLAB Plug-In Student Competition, and the ever-popular Student Recording Critiques, where a panel of pros shares their thoughts and advice on submitted recordings, designs and software.

All of this only scratches the surface of what's offered at the AES Convention this year; there's plenty more going on that's guaranteed to fill your brain, sharpen your skills and pack your schedule. Plus—and I have this on good authority—it's exciting.

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# Sound Professionals

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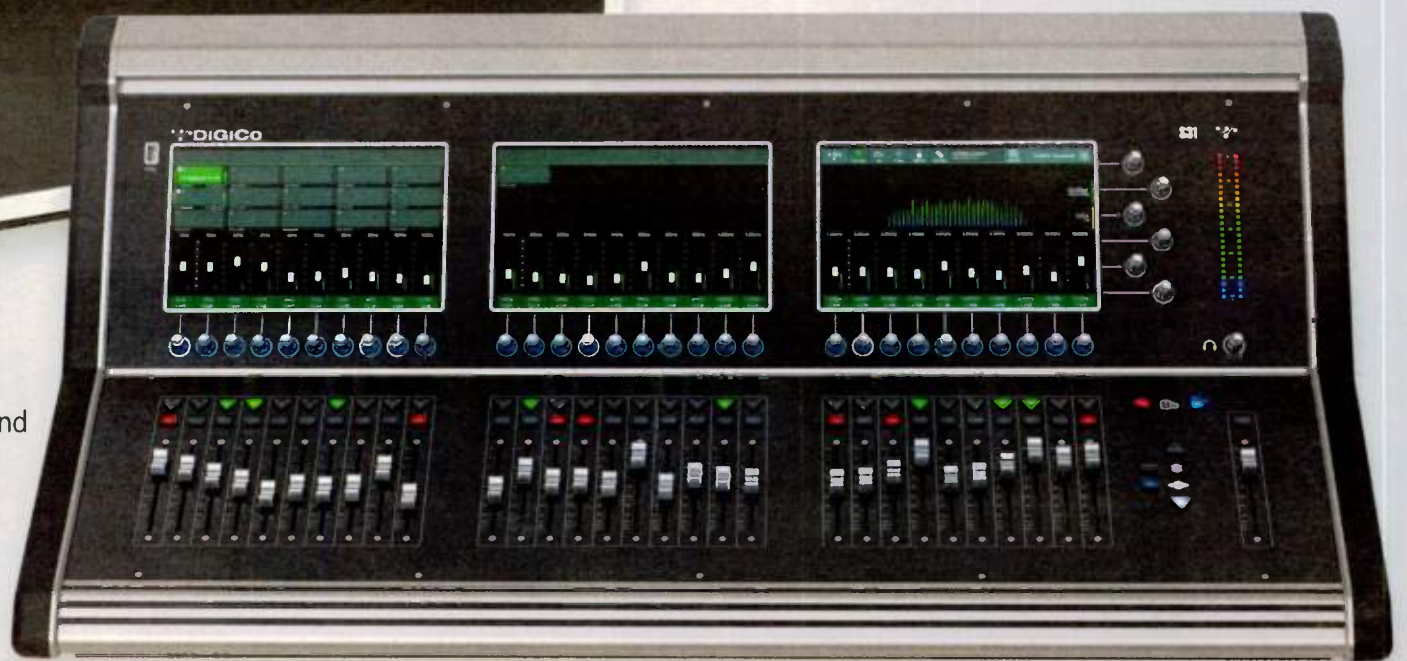
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– Andy Meyer – FoH – Justin Timberlake, Madonna, Guns N’ Roses, Janet Jackson, Shinedown



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## Warm Audio Readies New HQ

CEDAR PARK, TX—Warm Audio has announced it will move into a new world headquarters in Cedar Park, TX, next spring. Located about 25 minutes outside Austin, the facility will allow Warm Audio to accommodate growth across all departments, including warehousing, quality control, customer support, technical support, repairs, research and development, engineering, marketing, studio recording and testing.

The headquarters will encompass about 40,000 square feet of space, providing room for additional hiring across all departments. Warm Audio has experienced about 30 percent growth for the past four years in its current Liberty Hill office/warehouse, which necessitated the expansion.

The new HQ will include a 3,500-square-foot, multi-million-dol-



The Warm Audio team readies for the move to its new headquarters.

lar recording facility, Warm Studios, where local, regional and international artists will be invited to record and film. The two studios' control rooms and live rooms will be fully interconnected to allow tracking in the large

studio from Control B while mixing in Control A, and vice versa. The studios were designed by Alex Otto of OSW Audio in Tempe, AZ.

Warm Audio  
www.warmaudio.com

## WAMCon Los Angeles Event a Hit

BURBANK, CA—Following a series of conferences over the last year in Nashville, Los Angeles, New York and Boston, Women's Audio Mission (WAM) attracted a sold-out audience for WAM-Con Los Angeles: Sound for Picture on Aug. 15, 16 and 17. The event was spread out over several L.A.-area locations including Walt Disney Studios in Burbank, the Dolby Screening Room, the Ace Hotel, and YouTube Space Los Angeles.

Marking WAM's first conference focused on sound for animation, film, television and games, the event featured top industry professionals including Academy Award-winning re-recording mixer Lora Hirschberg (*Captain Marvel*, *The Lion King*), four-time Emmy Award-winning supervising sound editor/re-recording mixer Onnalee Blank (*Game of Thrones*), nine-time Emmy Award-winning re-recording mixer David Fluhr (*Moana*, *Frozen*), vice president of post-production at Disney Animation Studios Berenice Robinson, head of editorial at Disney Animation Studios Fabienne Rawley, and Kate Finan of Boom Box Post.

WAMCon featured workshops and demonstrations spanning a range of topics in sound for picture, including mixing sessions in Stage A at Disney Animation Studios and a behind-the-scenes Dolby Atmos workshop at the company's screening room in Burbank with Jurgen Scharpf (lead audio mixer, Dolby Laboratories). WAMCon also included an Epidemic Sound-sponsored dance party and plug-in bundle giveaways from iZotope.

Women's Audio Mission  
www.womensaudiomission.org



WAMCon Los Angeles was held at locations including YouTube Space L.A.

## Jimmy Johnson, Dead at 76

BY STEVE HARVEY

SHEFFIELD, AL—Guitarist, engineer and producer Jimmy Johnson, co-founder of Muscle Shoals Sound Studio, died on Sept. 5 after a long illness. He was 76.

Johnson was reportedly the first paid employee at Rick Hall's FAME Recording Studios, initially sweeping the floors and making coffee. But the musician, who played his first paying gig at age 15, soon made his mark as a session guitarist, contributing to sessions by the likes of Aretha Franklin, Etta James and Clarence Carter. Johnson and his trusty Gretsch 6120 guitar can also be heard on recordings by Wilson Pickett, Millie Jackson, Paul Simon, Bob Seger, Dr. Hook, Leon Russell, the Staple Singers, Johnnie Taylor, Z.Z. Hill, Bobby "Blue" Bland, Bob Seger, Lulu, R.B. Greaves, Luther Ingram, Rod Stewart, Willie Nelson and many others.

Johnson also displayed an early talent for engineering and production. In 1966, he engineered the first Number One record to emerge from Muscle Shoals: Percy Sledge's "When a Man Loves a Woman."

In 1969, Johnson left FAME with fellow session players Roger Hawkins, Barry Beckett and David Hood and founded Muscle Shoals Sound Studio. Officially known as the Muscle Shoals Rhythm Section but more commonly referred to as the Swampers, a name given to them by pianist Leon Russell, the in-house musicians put their distinc-



Jimmy Johnson, during a recording session at FAME Studios in 2017.

tive R&B brand on productions by artists including Paul Simon, Bob Dylan, Cher and Jimmy Cliff. The Rhythm Section was nominated for a Grammy in the production category for Paul Simon's *There Goes Rhymin' Simon*.

One of the first hits out of Muscle Shoals Sound was "Take a Letter Maria" by R.B. Greaves, which was recorded in August 1969. Four months later, Johnson engineered three days of sessions by the Rolling Stones that produced "Brown Sugar," "You Gotta Move" and "Wild Horses," which were all included on 1971's *Sticky Fingers* album. The sessions were filmed by Albert and David Maysles for their documentary film *Gimme Shelter*.

Johnson was the first person to record Lynyrd Skynyrd, in the early 1970s. Studio partner and fellow Swamper David Hood is quoted as saying, "When he first signed Lynyrd Skynyrd, nobody thought

anybody would want to hear that. But he believed in them, fought for them and never gave up on them." The Swampers were later immortalized in a verse in Lynyrd Skynyrd's 1974 hit, "Sweet Home Alabama."

The Swampers relocated the studio in 1979 (Johnson's Gretsch was stolen during the move) and sold the facility to Malaco Records in 1985. On the business side, Johnson served as president of Muscle Shoals Sound Studios and Publishing companies. He was also president of the Muscle Shoals Music Association. He was vice president of A&R for Capitol/MSS Records, chairman of the Alabama Music Hall of Fame Board, a member of the Board of Governors for the 3M Scotty Awards, a member of the Colbert County Chamber of Commerce, and president of MSS Records/Malaco.

Jimmy Johnson  
www.jimmyjohnsonmusic.com

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**CELESTION**



## Martin Audio Marks Growth

HIGH WYCOMBE, UK—A year after Martin Audio underwent a management buyout, the loudspeaker manufacturer has reported a 22 percent increase in sales in its financial year 2017–18, growing from £16.5 million to £20.1 million (\$20.2 million to \$24.6 million). The company says it expects a further 20 percent increase in 2019.

Martin Audio was backed by LDC in 2018 in a management buyout from global audio specialist Loud Audio. As part of the deal, LDC invested £12 million in the company, alongside its existing management team.

The company attributed the YoY growth largely to a series of product launches and overseas expansion. Over the same period, Martin Audio has added a number of global rental clients to its roster, including U.S.-based Soundworks, Southard Audio and Twilight Audio, which were part of efforts to consolidate the brand's footprint in North America, where it is now established as a direct distributor.

The brand has also launched 15 products over the past 12 months and extended its scalable acoustic



Dom Harter, managing director of Martin Audio

technology offering. In keeping with the rise of output, Martin Audio has invested in developing teams and processes, and enhancing its computer software and ERP systems, as well as recruiting a new finance department from scratch.

Dom Harter, managing director of Martin Audio, said, "This has been a significant year for Martin Audio, with a series of key product launches to help us continue providing incredible audio experiences to our customers. We've also laid the groundwork for future growth by enhancing key business functions and ensuring we have the best possible team in place.

"LDC has backed our plan from the beginning and has played a key role in helping us set the wheels in motion, offering us the flexibility we needed and directly supporting our recruitment efforts," Harter added. "We're now looking to build on the momentum we have created to expand our offering even further and become a major player in the market."

Martin Audio  
www.martin-audio.com

## PMC, AES Team for Scholarship

NEW YORK, NY—UK loudspeaker manufacturer PMC has joined with the Audio Engineering Society Education Foundation to establish the Sound for the Future Scholarship, an annual \$5,000 prize to be awarded to an audio engineering graduate who is also a member of the AES.

The first recipient of the PMC Sound for the Future scholarship is Dora Filipovic, a Ph.D. candidate in Digital Media Arts at the University of Surrey in the UK. Already a graduate of the University of Arts in Belgrade, Serbia, Dora has won numerous awards for her sound design work, including four for creative contribution from Radio Belgrade.

Over the past seven years, Filipovic has worked as a sound designer on more than 20 feature films, as well as many documentary and short films, including "Glances of Closed Eyes," a short documentary about blind and visually impaired people that uses sound to introduce viewers to their way of life. Besides writing, directing and producing the film, Filipovic is responsible for the sound design. "Glances of Closed Eyes" won national and international film festival awards for best film and sound design, including the award for best film at the Second International SEECs Short Film Festival in Istanbul and the City of Belgrade Award for the greatest accomplishment of youth in the field of arts.

Commenting on her PMC scholarship, Filipovic



Dora Filipovic is the first recipient of the PMC Sound for the Future scholarship.

says, "I am very honored to receive this scholarship from PMC and AES, and to be its first recipient. I will use it to cover the tuition fee for my Ph.D. studies at the University of Surrey. For my Ph.D. project, I aim to develop an alternative approach that uses the new medium of virtual reality film, immersive sound and vision, and fictitious storylines to transport audiences into the everyday life of people with different kinds of sight loss."

AES  
www.aes.org

PMC  
www.pmc-speakers.com

## Dynaudio Debuts New North American HQ

NORTHBROOK, IL—Dynaudio opened the doors to its new headquarters for North and South American operations with its annual Rep Summit in late August. Based in Northbrook, the 25,000-square-foot facility is dedicated largely to the new Dynaudio Experience Center, which will host product demonstrations and dealer and sales rep training sessions. The facility also houses a larger warehouse to support increased product demand in the region.

"As we continue to expand, we're always looking for new opportunities that we can invest in to support our customers," said Michael Manousellis, vice president, operations-Americas. "Our new North American headquarters is part of that mission. We will not only be able to facilitate continued sales growth, but also conduct highly requested training sessions and demonstrate our expanding and increasingly diversified high-end product portfolio properly because of our more flexible facility."

The Experience Center provides a space to host dealer and rep training as well as demonstrations of Dynaudio products in two-channel stereo and multi-channel home theater systems, along with those of partnering manufacturers to the company's sales reps and existing and prospective dealers, as well as end-user customers. Dynaudio's vendor partners will also be able to use the center to showcase and demonstrate their products.

The headquarters' larger, upgraded warehouse space will allow Dynaudio to keep higher inventory levels.

Dynaudio  
www.dynaudio.com



Dynaudio marked the opening of its Experience Center in Northbrook, IL, by hosting 30 reps from across North America at its annual Rep Summit in late August.



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## Big Brother Is Listening ... in Canada

CANADA—Some things in life are universal, and one of them, surprisingly enough, is the *Big Brother* reality TV franchise. There are a whopping 54 different versions of the show around the world. As it happens, *Big Brother Canada* wrapped up its seventh season in early May, with Canadian-based live production powerhouse Solotech handling audio for the live studio audience segments.

Solotech's setup featured an Allen & Heath dLive S5000 surface paired with a DM64 MixRack, fitted with superMADI and Dante networking cards. "For the past few years, we'd been using an older model console that had a larger footprint and fewer features, so this year provided a good opportunity



An Allen & Heath dLive S5000 handled audio for the live studio audience segments of the season finale of *Big Brother Canada*.

to upgrade to dLive," said Phil Horning, audio technical advisor, live productions at Solotech.

"The dLive has a very sophisticated MADI I/O option card that can interface with the fairly complex broad-

cast console and matrix system in place on the show, regardless of sampling rate, channel count or MADI format," he noted. "It also has a large-capacity 64-channel Automatic Mic Mixing [AMM] function, which has proven to be an invaluable solution. We'd previously been using two separate 16-channel AMMs linked together externally from the console."

John Lacina, a senior audio engineer at Solotech (and mix engineer for the live studio audience), added, "The Tie Line option was a welcome addition compared to the platform we had used up until this season. It allowed me to give and take broadcast MADI signals and use the console and remote rack hardware to deliver audio around the studio as needed, without using up

any console surface assets. I also really enjoyed the built-in AMM function, as well as the Ducker, Multiband Compressor and other onboard FX options."

Lacina continued, "The dLive system exceeded my expectations in every way. It's incredibly intuitive, easy to navigate and sounds wonderful. I'm looking forward to using this product again for another television broadcast this fall."

Allen & Heath  
www.allen-heath.com

## HOW Gets Soundscape Installation

CALGARY, AB—The First Assembly Church in Calgary recently updated its audio system with a d&b audiotechnik Soundscape system—not to provide worshippers with immersive audio (Soundscape's typical use) but to create a larger sweet spot for them in the church's 240-degree fan-shaped sanctuary.

Justin Wells, First Assembly's technical director, and executive pastor Shane Penney called on the services of Sapphire Sound, an audio, video and multimedia specialist headquartered in Abbotsford, BC, with a permanent office in Calgary. "They first came to us in early 2017 and requested we look at updating their sound reinforcement system," said Ben Burrell of Sapphire. "They really wanted a quality experiential dimension to audio and imagined stereo imaging for everyone. Our analysis showed that while this was entirely possible, the room dimension and physical shape would require an unusually large number of cabinets to achieve what they wanted. It would also be a remarkably complex system to manage."

Burrell continued. "We completed the assessment right about the time of the official launch of d&b's Soundscape system. The functionality of the object positioning tool within the En-Scene module of Soundscape presented a much more manageable solution to First Assembly's dilemma, and in many ways a better and more creative one."

Burrell arranged for Wells and Penney to attend InfoComm and get a d&b Soundscape demonstration.



The First Assembly Church recently updated its audio with a d&b audiotechnik Soundscape system.

Burrell received the green light two days later and Sapphire placed the order with d&b audiotechnik Canada. "Although this was to be our first Soundscape installation, and the first in a house of worship for d&b anywhere in the world, one element was in our favor. Soundscape typically requires more channels of amplification than a more conventional point source solution. But such a conventional solution to First Assembly's listening area was already complex enough that a high amplifier count was a given; in fact, using Soundscape has reduced the number of cabinets required and consequently reduced the amp count. The only cost impact was the d&b DS100 signal processing engine and the En-Scene license."

The system Sapphire installed consisted of components from d&b

Y- and E-Series loudspeaker ranges, with Bi6 and 27S-SUBs, all driven by d&b 30D and 10D installation amplifiers. Sapphire also supplied an Allen & Heath dLive-S5000 mix console with dLive stage rack, card adapter and Dante card.

Wells noted, "In terms of installation, everyone—top to bottom, the church elders, the congregation, people who choose to come from out of town (and we get a lot of them)—really enjoys it and we constantly receive compliments on the listening experience. We value excellence at First Assembly. This brings music to a place at the heart of worship. Excellence in itself will inspire others to strive for excellence in themselves and their wider community."

d&b audiotechnik  
www.dbaudio.com

## Shure Expands in Berlin

BERLIN, GERMANY—Shure has opened a new sales and marketing office in Berlin. The manufacturer's new bureau, located in the House of Music in the creative Friedrichshain-Kreuzberg district of Berlin, includes collaboration and working space for up to a dozen Shure employees.

Intended to be a creative hub for musicians, content creators, companies and organizations in the music industry, the House of Music is also home to Noisy Musicworld, a service provider for the music industry that offers support and rehearsal spaces for musicians, and BIMM, a higher education institution for music that offers full-time B.A. courses in guitar, bass, drums, vocals, songwriting, music production and music business.

"Being a member of the House of Music community has many benefits for us," said Abby Kaplan, Shure's vice president of global retail sales. "It strategically expands Shure's European business, allows for collective inspiration, and places us directly in the heart of Berlin's vibrant creative scene."

Shure's Berlin office is located at 99 Revaler Strasse.

Shure  
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Shure's new Berlin office is in the House of Music.






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## Vix in the Mix

BY STEVE HARVEY

NEW YORK, NY—A personal production setup these days can be anything from a full-blown recording studio to rival high-end commercial facilities to something as simple as a laptop, an interface and headphones. But Jenn Vix' production rig features something unusual: a dinosaur.

Vix, a multi-instrumentalist, songwriter, engineer and producer, has had a storied musical career—well, a storied life, really. “I spent my childhood going back and forth between Miami and Rhode Island. Then I moved to New York City in 1979 when I was 12 years old, so I spent my formative years in New York City. I was also homeless and on the streets for quite some time. I was a runaway,” she says.

“I’ve always known that [music] is what I wanted to do since I was about 3 years old. I made it happen.”

She first stood in front of a mixing desk in 1985, she recalls. “I hooked up with a guitar player when I was a teenager, which is how I got into recording. When I started out, we recorded everything to tape. I started

on 16-track, then moved to 24-track with a Soundcraft mixing desk” at one collaborator’s studio, she reports. “That’s where I learned to use analog gear. I’ve also recorded to ADAT with another recording partner. So I’ve worked on a lot of different formats.”

Today, her setup is based around Steinberg’s Cubase. “I’m a Cubase loyalist. It’s my favorite program,” she says. “I’ve tried Logic, Pro Tools—they’re just not my thing.”

Vix has two versions of Cubase running at the same time, including one on an HP laptop running Windows 10, with a MOTU interface. “I’m not running a Mac because I don’t have Mac money. But I hope to upgrade eventually,” she says.

As for the other instance of Cubase, “Here’s where it gets weird,” she says. “I’m kind of nostalgic and have a secondary computer that I built quite some time ago. It’s an old Intel-based computer that I built from the motherboard up. It’s still running Windows XP. I’m running a MOTU Traveler Mk 1 with FireWire into Cubase 4.”

That version of Cubase was intro-

## Jenn VIX



New York engineer Jenn Vix' latest release is an EP called 6.

duced in 2008, a lifetime ago in digital years, but there’s a reason for running a dinosaur system, she explains. “It’s not just for sentimental reasons, although I love working on something that I built myself. The main reason

I like to run it when I write songs is that I find I’m less bogged down with choices because I don’t have 20 plug-ins running at once, therefore I become more creative. The burden of  
(continued on page 24)

6



Returning after a five-year hiatus, The Futureheads includes (l-r) David “Jaff” Craig (vocals and bass guitar), Barry Hyde (vocals and guitar), Dave Hyde (drums) and Ross Millard (vocals and guitar).

## Back to The Futureheads

BY STEVE HARVEY

SUNDERLAND, UK—It’s been 15 years since The Futureheads burst onto the scene with a self-titled debut album redolent of XTC, Gang of Four, Wire and The Cardiacs, catching the attention of audiences on both sides of the Atlantic with their

cover of Kate Bush’s “Hounds of Love.” But four albums and barely 10 years later, the band drifted apart when lead singer and guitarist Barry Hyde was sidelined by chronic mental problems.

Now, fans of the post-punk redux sound of The Futureheads—the name came from a Flaming Lips

album title—are rejoicing with the release of *Powers* on Aug. 30. On the phone from the northeast of England, where the band members live, Hyde reports that the 12 new songs, recorded and self-produced at a local studio, started to come together 18 months ago.

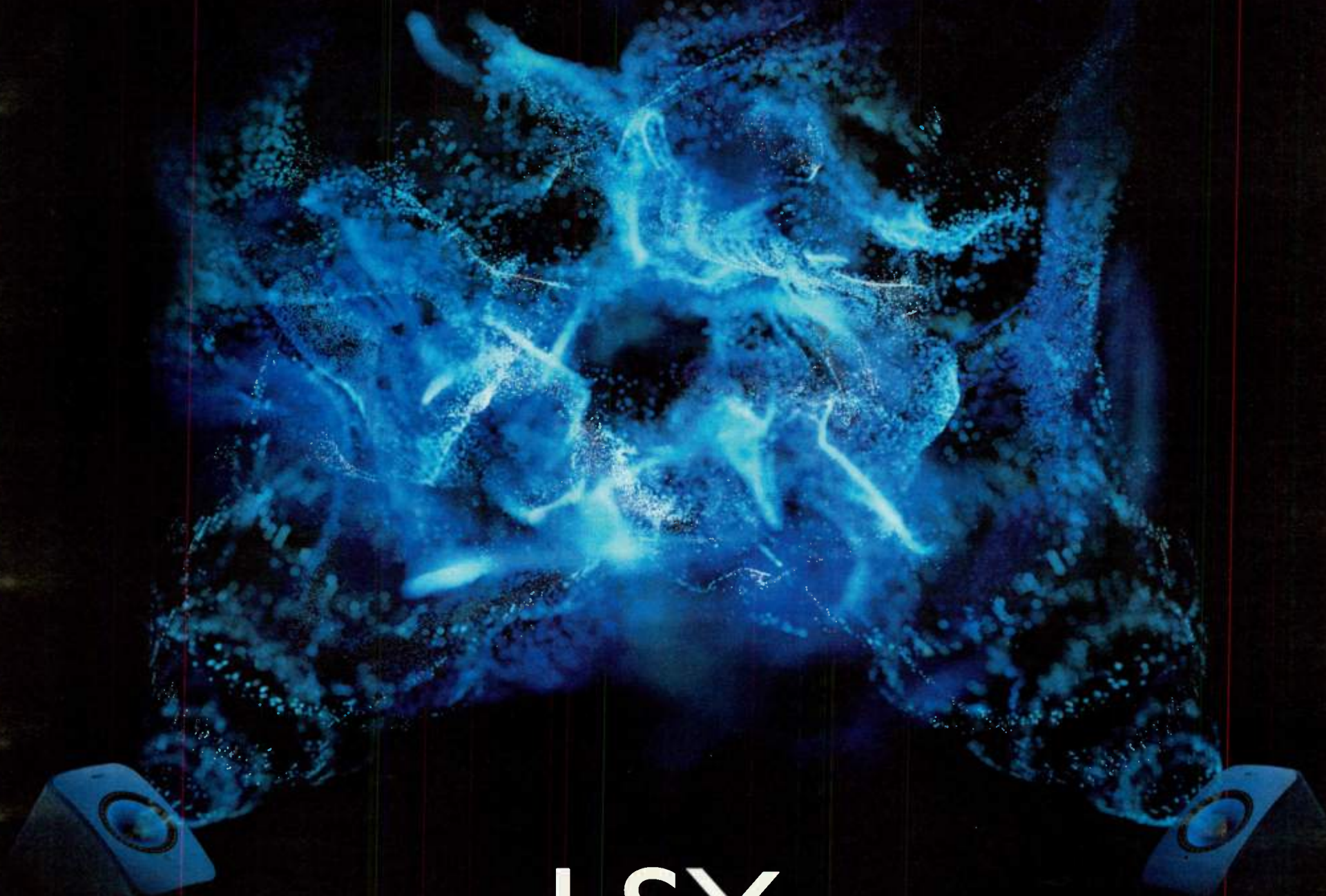
As a condition of reforming for

some shows, says Hyde, bass player David “Jaff” Craig insisted they also record a new album. “I can only presume it was because he’d forgotten how much work it is to make an album,” chuckles Hyde, who trained as a chef, became a music teacher during the hiatus and is currently finishing a master’s degree.

Other commitments meant they could meet and rehearse for only three hours a week, meanwhile working on songs individually at home. To speed things up, they decided to write and record in the studio and booked a series of full days at First Avenue Studios in nearby Newcastle upon Tyne. The facility is a home away from home for the band, who recorded numerous B-sides, a large part of their fourth album, *The Chaos*, and all of their 2012 a cappella album, *Rant*, at the facility. Hyde also recorded his solo album, *Malody*, at First Avenue. “It’s cheap and cheerful,” he says.

“I mean this in the nicest possible way, but I think engineers should be seen and not heard,” says Hyde. Studio owner Dave Curle meets the criteria: “He’s a quiet man and has this almost telepathic understanding of how we work and what we’re going to ask for next. Dave’s an expert.”

(continued on page 24)



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## THE METALLIANCE REPORT: Living the Dream (or “Still Working on that Studio Tan?”)

Elliot Scheiner remembers a time when working in a studio meant a commitment far exceeding what was reasonable: “When I first started in the business, working for Phil Ramone, I knew it was the luckiest day of my life. I was going to do whatever it took to be successful as an engineer.

“I never thought twice about the number of hours I was putting in on a weekly basis. I remember one session for a movie that lasted 70 hours. The only time I left the console was to eat and go to the bathroom. At 22 years old, I didn’t care much about anything else. I didn’t know that regimens would last another 30 years! Always going into the control room and working, without using anything to relax my body for the rest of the session, became the norm.

“At some point I realized I needed to do some kind of exercise, whether it was walking or physically doing something before I came to work. I’m sure most of the younger engineers totally understand. My son is an engineer and he tells me that he’s at a gym every morning before work. For



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

those of you who have never thought about exercise, the time is now.

“You can’t just work and eat over the course of a day. Find time to exercise when you’re working, even if it’s just to take a walk, even if it’s just in the complex—walk and relax. I can’t tell you how many engineers paid a high price for not taking care

of themselves. You don’t want to end up like that!”

Al Schmitt agrees, taking it further: “Try to reduce stress and make sure you take breaks. These are some of the reasons why I’ve been doing this forever.

“When I first came to Los Angeles, I noticed that everyone belonged to a gym, so I joined one, too. I started working out when I was off and I started doing Pilates three times a week. I was having back problems at least once a week, but once I started Pilates, that all went away. Now, no more back problems. When I have time, I do add some light treadmill.

“When mixing, I get up for about five minutes every half hour and walk

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The METAlliance—Al Schmitt, Chuck Ainlay, Ed Cherney, Elliot Scheiner, Frank Filipetti and George Massenburg, along with the late Phil Ramone—has the dual goals of mentoring through our “In Session” events, and conveying to audio professionals and semi-professionals our choices for the highest quality hardware and software by shining a light on products worthy of consideration through a certification process and product reviews in this column. Our mission is to promote the highest quality in the art and science of recording music.

and one ran into the next, seemingly endlessly. I was so eager to be working in a studio and hanging out with all the amazing musicians that it really never occurred to me that I needed to think about my health.

“At some point, though, I rediscovered my love of waterskiing, and that may have been one of the best things to happen to me. Just like engineering, I wasn’t happy being just a recreational waterskier, so I started competing, which meant I had to start looking after the substances I was putting in my body, food and otherwise. I discovered that my hearing improved as a result of the increased blood flow. After all the years of being a studio rat, I still get to do what I love, and I attribute that to staying active and eating right.”

Find time in your day to exercise, join a gym and commit to taking care of yourself. If you work out of your home, making a workout space can

### You Gotta Move

Like the old blues song says, you gotta move. A 2012 study published in *JAMA Internal Medicine* found that the more time you spend sitting every day, the greater your chances are of dying prematurely. After examining more than 222,000 people, researchers determined that adults who sit for more than 11 hours a day have a 40 percent greater risk of dying of any cause within three years. Even if you are sitting a bit less—say eight to 11 hours a day—your chances are still 15 percent higher than they are for someone who sits less than four hours a day.

If that routine sounds a little familiar, you’re not alone. According to that same study, less than half of American adults meet the physical activity recommendations of the World Health Organization of a minimum of 150 minutes of at least aerobic physical activity throughout the week. That’s not a lot of time when you consider the payback; according to the study, you’ll reduce the risk of chronic disease, including cardiovascular disease, Type 2 diabetes and certain cancers.

The correlation is pretty clear but the study spells it out anyway: “Shorter sitting times and sufficient physical activity are independently protective against all-cause mortality, not just for healthy individuals, but also for those with cardiovascular disease, diabetes, overweight, or obesity.” So do yourself a favor: step away from your music and move around. Everyone wants to create a mix to die for, but don’t do it literally!

“I was so eager to be working in a studio and hanging out with all the amazing musicians that it really never occurred to me that I needed to think about my health.”

Chuck Ainlay

the halls of the studio. I’ll take a walk and clear my head. This can be fun because you never know who you will run into. I watch my diet, don’t smoke or drink. I also try to meditate at least once a day; this is a wonderful thing if you know how to do it. It can give you and your work some perspective.”

Chuck Ainlay’s story includes some competitive motivation: “I can’t say that I’ve always been a beacon of health, especially in the beginning of my career, when the days were long

be nearly as important as the studio you’ve crafted. Develop good habits like scheduling “me time” just like you schedule anything else, and set your expectation to include a prolonged career. To do that, you need to maintain a level of energy that allows you to pursue your motivation. Think about how hard it is to get better—at anything, really—when you don’t have the energy to get off your ass. Then go do it.

METAlliance  
www.metalliance.com

# Is Inexpensive Pro Audio Software Over?



BY CRAIG ANDERTON

Before the turn of the century, keyboards were on a race to the bottom in terms of cost. Digital technology made it possible to produce very inexpensive keyboards with an interface that consisted of an LCD panel and a few buttons. Ultimately, though, that wasn't enough—keyboards started adding features and functionality (and prices rose) because that's what professionals needed. Eventually, Dave Smith Instruments had its comeback with analog-based synthesizers, the Korg Kronos appeared and Roland's Jupiter-80 staked its claim to the high end.

We've seen pro audio software prices drop drastically over the years. The Emagic Logic package that sold for \$999 is now Apple Logic for \$199. Digital Performer 3 was \$795; Digital Performer 10 is \$499, a 40 percent drop. Cubase has followed a similar curve. One could argue that a lot of the code base has already been developed, so companies could afford to reduce prices in the updated models. What's more, costs are lower because software no longer ships on physical media. Nonetheless, development is ongoing to add new features and retain compatibility with changing operating systems and increasingly powerful CPUs/GPUs. You also have to factor in the cost of new customer acquisition—not everybody pays to upgrade.

Furthermore, most of these pro audio software programs run on laptop or desktop computers, and that market is shrinking. Since a peak in 2014, shipments of desktops, laptops and tablets have all fallen, according to a forecast from market research firm Statista; desktop shipments are projected to drop by about 30 percent at the end of 2019 compared to their peak.

How do you raise prices in such a price-conscious category? We can take a cue from keyboards and from Apple. Customers were willing to pay more for keyboards that did more; and while people grouse about the price of Apple's Mac Pro, on paper, it's certainly a supremely powerful computer that, in many situations, will pay for itself long before the end of its useful life.

Another route is the one taken by Avid: change models, and change

the price in the process. Although there's been a lot of moaning about Avid's Pro Tools pricing, and no one likes spending more money, we may not have much choice if manufacturers want to stay in business. Products from companies that adopt the software-as-a-service (SaaS)

model (aka subscriptions) will have a de facto price increase because customers commit to pay on a regular basis to keep using the software. Users complained vociferously when Adobe went to an all-subscription model, and revenue dropped after it was introduced. Yet since then,

revenues have increased steadily; Adobe's strategy to ditch one-time, expensive purchases in favor of inexpensive monthly subscriptions has been very successful. About 86 percent of Adobe's revenue now comes from recurring subscriptions, and

(continued on page 25)

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## Little Everywhere Grows Up

BY STEVE HARVEY

GLENDALE, CA—“For the last 10 years of playing music, I had this question in the back of my head: What am I going to do after this?” says Dann Gallucci, a musician, songwriter, producer and engineer best known for his Grammy-nominated work with Modest Mouse, the Murder City Devils and Cold War Kids. The answer, ultimately, was podcasting.

Although Gallucci was in and out of bands and recording studios until relatively recently, he initially stepped away from making music in the mid-2000s. “My daughter was getting to an age where, when she said, ‘I don’t want you to leave,’ it was becoming more heartbreaking by the day. I’d been touring for 20 years and I was able to leave on a high note.”

After graduating with a degree in audio engineering from Arizona’s Conservatory of Recording Arts & Sciences (CRAS), he worked for a while at Phil Ek’s Avast Recording in Seattle until the 2008 recession hit. “So I went on the road and started doing live sound, which I loved,” he says. He worked as M.I.A.’s monitor engineer before moving to FOH with Cold War Kids, Miiike Snow and The xx. “I think live sound is absolutely the most important engineering I’ve ever done as far as learning and becoming a better engineer.”

When Cold War Kids lost their guitarist, they called Gallucci, who headed to San Pedro, CA, to help the band build a recording studio. He engineered, produced and mixed, with Lars Stalfors, two albums, also joining the band as guitarist and songwriter.

His transition to podcasting began when he started working on *Bullseye with Jesse Thorn*, a public radio show produced in Los Angeles and distributed by NPR. “That was my first radio producing job after music. It was full-on boot camp. I did everything on the show and got to learn a ton in a short amount of

Year Award winner.

They found a spot in the Seeley Building, a former furniture warehouse in Glendale, CA, that has been turned into a creative campus with dozens of raw spaces. “I was nervous because we were on a budget and couldn’t hire studio builders, but we had a great contractor,”

“I want everyone who comes in to have simple functionality so they don’t feel weird or have to ask eight million questions. We wanted a space that people could come into and feel comfortable and feel like it was professional.”

Dann Gallucci

time,” he says.

In 2016, he left to set up Little Everywhere, a podcast production house and recording studio, with his partner, Jane Marie, a Peabody and Emmy Award-winning journalist and a 10-year veteran of the weekly public radio show *This American Life*. “We met and fell in love. I was itching to leave, and Jane was itching to start something,” says Gallucci, who is an ASCAP Songwriter of the

he says.

Keeping noise out of the studio and control room was a new challenge for Gallucci. “I was so used to trying to keep noise from *escaping* rooms. We could drive people crazy at the Cold War Kids’ space,” he laughs.

Little Everywhere’s control room and studio are separated by a sliding glass door—another design challenge. “We were trying to figure out

how we could see into the room but not have reflections off the glass,” he says. Marie came up with the solution: a heavy drape with a transparent panel that she sewed herself. “It’s my favorite thing in here,” he says.

Having built the Cold War Kids’ studio, outfitting Little Everywhere was a breeze, but the demands of podcasting are different than recording rock ‘n’ roll. “This is the first time in my career that I didn’t want any coloration. We want transparency and the best representation of someone’s voice from the microphone.”

In common with many podcast and broadcast facilities, he chose Shure SM7B microphones, although there are other options on the market. “Typically, we don’t get sessions with more than four people, so I’ve got them going through a Cloudlifter CL-4,” which transparently boosts the signals.

To handle telephone interviews, Gallucci had to venture outside his comfort zone. “When I started getting into this stuff, I was going to a very different section of the B&H catalog,” he says, indicating the JK Audio innkeeper LTD digital hybrid used to interface the phone lines with his setup.

A Universal Audio UAD-2 Satellite interfaces everything with the Avid Pro Tools 12 HD workstation, but to provide simple signal routing, he opted for a Toft ATB08M analog mixing console, mainly for its matrix section. The desk is mounted on the wall: “It’s space-saving. Isaac [Brock] from Modest Mouse had one of these in his attic studio. It’s got talkback, a master section and the right amount of feeds for what we need. Well, way more than we need, but it’s nice to have options.”

Simplicity of operation—along with great audio quality, of course—is key in a client-facing podcasting studio where producers and engineers are constantly coming through. This year’s projects have included a podcast by *Queer Eye’s* Karamo Brown and *The Jump*, an interview series hosted by Garbage singer Shirley Manson featuring guests such as Perfume Genius, Courtney Love and Karen O.

“I want everyone who comes in to have simple functionality so they don’t feel weird or have to ask eight million questions,” says Gallucci. “We wanted a space that people could come into and feel comfortable and feel like it was professional.”

He still gets to make music occasionally. “If I’m making music for a

(continued on page 25)



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## Vix

*(continued from page 18)*

choice is a real thing.”

She adds, “If I need more power, I go over to the newer machine. I go back and forth.”

For outboard, she has a Summit Audio 2BA-221 mono tube pre. “I have a Shure SM48 microphone that I love for certain things, as well as an AKG 414 XL II, which is my go-to,” she says.

“People are listening to music on small devices and laptops with headphones,” Vix says, and much of her music is distributed digitally, “so when I mix these days, I mix primarily for headphones.” Both computers are paired with Sennheiser headphones, but she also uses Alesis M1 active monitors: “They sound great.”

Vix has the Waves Mercury bundle on both computers. “It’s absolutely phenomenal—I would be lost without it,” she says. “And I have a bunch of Steinberg plug-ins,” including Groove Agent, Steinberg’s rhythm plug-in. “But I also have an electronic drum kit, because I’m a drummer as well.”

The sound of the new wave and post-punk bands that came through New York City during the ’80s still informs Vix’ music, which on her latest release, a six-song EP entitled *6*, focuses on electro-pop. On past releases, she’s detoured into alt-rock, trip-hop, darkwave, modern new wave and electro-industrial territory.

The latest tracks benefit from programmed and live electronic drums, but one song, “Show Me the Sun,” features Dave Barbarossa, who introduced Burundi tribal beats to a wider audience while playing drums with Adam and the Ants, then Bow Wow Wow. Vix first met Barbarossa when Bow Wow Wow opened on The Police’s 1982 tour for *Ghost in the Machine*, she says. “I got to meet so many people because I lived in New York. I was hanging out in the nightclubs where they were hanging out.”

Her first band experience, a one-off, was singing with Disco Donut, which featured Adam Horovitz (Ad-Rock of the Beastie Boys) on bass. She’s since collaborated with numerous musicians with whom she’s connected since that time, including John Ashton, original guitarist for the Psychedelic Furs; Reeves Gabrels,

“I have a secondary computer that I built quite some time ago. The main reason I like to run it when I write songs is that I find I’m less bogged down with choices, therefore I become more creative.”

Jenn Vix

current guitarist with The Cure and previously with David Bowie and Tin Machine; Marco Pirroni, guitarist with Adam Ant and Sinéad O’Connor; and the late Andy Anderson, known for his work with The Cure in the early ’80s and with Steve Hillage.

Vix also shoots and edits music videos, for herself and others, and owns Vortex Music Management, managing herself and Positive Negative Man, a three-piece based in Boston, MA. “They’re a modern post-punk band. I think they’re brilliant. I don’t write with them, but I’ll get on stage and sing a couple of songs with them. I recorded their latest EP and helped them with a music video.”

A new Jenn Vix song might start with a bass, a piano or a vocal mel-

ody, she says. “It always—99.9 percent of the time—starts with a chorus hook and I build from there. I grew up listening to catchy music, like New Order, but I do like some stuff that is not considered pop, like King Crimson.”

But you won’t catch her copying and pasting sections for the sake of convenience. “I punch in if I must, but I try to track everything live all the way through.” That said, though she’s not a big fan of Auto-Tune, she’ll use it sparingly if it saves having to retake an entire track.

“I like that human verve in my recordings. I don’t want it to sound repetitive or computer-like,” she says. “I need that human element.”

Jenn Vix

[www.jennvix.band](http://www.jennvix.band)

## Futureheads

*(continued from page 18)*

On those early tracking sessions, he says, “We were just concentrating on getting vibrant drum takes down. Our drummer, my brother Dave, was recording songs he’d essentially never heard. That was challenging.”

The band have certainly recorded elsewhere, including at a farmhouse in the Yorkshire Dales. “That was us living our Bron-Yr-Aur fantasy,” he says, referring to the Welsh cottage where Led Zeppelin worked.

Their debut album was produced partly by Gang of Four’s Andy Gill and partly by Paul Epworth, now a multi-award-winning mega-producer. “We were the first band he ever worked with as a producer in the studio,” Hyde says of Epworth, who was previously a live sound engineer. “His vision very much became the blueprint of that Naughties guitar sound.”

On a more recent visit to Epworth’s The Church studio, he says, “I realized that I really should do something about my lack of recording knowledge, so I started a modest home studio. I feel like the confidence I got from picking up a few basic skills has made me a far more valuable musician.”

Hyde’s home setup includes Apple Logic and Ableton with MuseScore scoring software and EastWest’s Sym-

phonic Orchestra sample library. A Universal Audio Apollo Twin interface, Shure SM7B microphone and M-Audio BX monitors round out the rig.

“It’s efficient for what I need and serves me fine for making demos and for commission work,” which has included songwriting with murderers in a local prison and leading 500 schoolchildren in a song commemorating the anniversary of Apollo 11’s moon landing. “It was my partner,

liberate about chord progressions and scales,” he says. The track “Animus,” for example, constantly changes key.

First Avenue is outfitted with an Allen & Heath mixing desk and a collection of vintage outboard and microphones, including rare AKG D224E dual-element and D200 models, which Curle put on the drums. “Dave Curle is a drummer and has lots of drums, so we experimented,” Hyde reports. All four band members sing: “Everyone used SM7Bs.”

“There’s nothing more sensible than relaunching a band, releasing an album and finishing a master’s degree all within the same few weeks.”

Barry Hyde

Cindy, who encouraged me to take our spare room for a studio. That thought from her was instrumental to me writing my contributions to this new album,” Hyde says.

“We used a lot of guitars on this album and were not too fussy about everything being pristine and neat, making it more about the songwriting. Each piece has its unique place on the album. We tried to treat each song as a separate musical world, something we’ve always tried to do, but in this case I think we really pushed that, using different tempos, different tonal systems, being very de-

Much of the album’s sonic character comes from the guitars. “We ended up with a methodology for how we arranged the guitars. We’d start off with the basic track, then add multiple clean parts, often very quietly, to enhance certain parts within the guitar arrangements, usually with a little bit of chorus,” he says.

“Also, we added acoustic guitars almost like percussion. You get this swing. After a while, it felt like that was part of the palette we’d developed for this album. The second verse of ‘Listen, Little Man!’ is two Dreadnought guitars, one with standard and

one with Nashville tuning, so you get a 12-string image. It was nice to play with that. We did that a lot.”

Guitars went through a variety of amps, including a Fender Deluxe, a Vox AC30 and a small Roland Jazz Chorus, depending on the character required. A variety of stompboxes, including the Harmonic Perculator, a favorite of engineer and musician Steve Albini, delivered top-end boost.

“We also had a Lab Series L5, made by Gibson and Moog, a beautiful valve amp. We even used a Marshall JCM800. I wanted a gnarly rock sound on one song, ‘Headcase,’ which is very dark and fast.” No surprise regarding the choice of microphone: “SM57s all the way. You can’t beat it,” says Hyde.

As for the low end, “We used things like a Fender Rhodes piano to double some of the bass lines, blending it so you can’t hear it as a keyboard. It adds nuance.”

Hyde is obviously pleased that The Futureheads are working together again, his health issues behind him. “We’ve all grown as people and gained a lot of experience and have come back with a far more genuine artistic standpoint.” That said, he laughs, “There’s nothing more sensible than relaunching a band, releasing an album and finishing a master’s degree all within the same few weeks.”

The Futureheads

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



notes

### Duro Adopts ATC

LAS VEGAS, NV—Six-time Grammy-winning mixer Ken “Duro” Fill, whose client list includes Jay-Z, Nas, Pharrell, Erykah Badu, Will Smith, Beastie Boys and Usher, and who is also senior vice president of A&R at Republic/Universal Records, recently replaced his 20-year-old studio speakers with ATC ([www.transaudiogroup.com](http://www.transaudiogroup.com)) SCM45A three-way nearfield monitors.

### Beyond Goes Global

ERLENBACH, SWITZERLAND—Beyond Music’s ([www.beyonddmusic.org](http://www.beyonddmusic.org)) 13-song *Volume One: Same Sky* album features 23 artists from 17 countries, along with an all-star roster of musicians and engineers. It was mixed by Tim Palmer, Stephen Lipson, Chad Blake, Adam Greenspan and Maxime Le Gull under the guidance of multiple Grammy-winning producer Larry Klein.

### University Adds Genelecs

NATICK, MA—The Audio Technology program at American University in Washington, D.C., has installed two 5.1 Genelec ([www.genelecusa.com](http://www.genelecusa.com)) Smart Active Monitor systems in two control rooms, including an 8351A LCR front array, 8341A surrounds and a 7380A subwoofer in its main room, and a Genelec 8020.LSE Espresso 5.1 system in the other.

### No. 1 Album Mixed in Dolby Atmos

BERKELEY, CA—Engineer Eric “ET” Thorngren and mastering and mix engineer Michael Romanowski mixed and mastered the Kenny Wayne Shepherd Band album *The Traveler*, which debuted atop the *Billboard* Blues Albums chart, for a Dolby Atmos Blu-ray release at Romanowski’s Coast Mastering ([www.coastmastering.com](http://www.coastmastering.com)) facility on Focal, Neumann and Meyer speakers.

## Anderton

(continued from page 21)

that percentage will continue to grow as those using legacy products will have to convert to the subscription model because of factors including operating system deprecation and computer hardware upgrades.

Another option is to redo and rebrand a product line. For example, Korg’s Kronos line of high-end keyboards, while having its roots in the company’s OASYS system, was a clear departure from what had come before. Most DAWs are currently configured as a core system bundled with selected effects and instruments, some of which are quite good. But no DAW has a sampler along the lines of Native Instruments’ Kontakt, or resto-

ration tools like iZotope’s RX7. It’s possible that for pro audio, the idea of spending \$1,499 or even \$1,999 for a turnkey, rebranded production

the going price) to cover a different pricing tier under the original brand, but slow down development.

Professionals have never been more dependent on these tools—yet many of the problems we encounter are due to conflicts among software, operating system, plug-ins and drivers. We are essentially using modular systems, but with modules made by different companies. The closer we get to a turnkey solution, the better. The Apple Mac Pro/Logic model is almost there, but if at some point we could buy an integrated package under the stewardship of a single manufacturer that would contain the majority of tools we need (or better yet, an expandable, modular system), it might well be worth a higher price tag.

Craig Anderton’s new educational web site, [www.craiganderton.org](http://www.craiganderton.org), is now online as a companion to [www.craiganderton.com](http://www.craiganderton.com).

How do you raise prices in such a price-conscious category?

environment whose bundled additions consist of world-class software isn’t that far-fetched. The company could then, over time, transition that into a SaaS model that bundles in services discussed in last issue’s column, like automatic backup and diagnostics. Meanwhile, it can continue selling existing \$499 DAWs (which seems to be

## Little Everywhere

(continued from page 22)

podcast, it’s because I’m in the middle of mixing and I need some more music. It’s fun—you can almost score in real time.”

The consumer market for podcasts has grown enormously in recent years and shows no sign of slowing. Major players have started investing heavily in podcast production companies, some of which have seen their original content snapped up by film and television—*Dirty John* being a prime example. While Little Every-

where’s client-based business has kept the lights on, says Gallucci, focusing more on original content would allow the business to grow.

Indeed, he reports, “We just sold the first season of *The Dream* to Annapurna Films.” The investigative documentary podcast series about multilevel marketing, or pyramid schemes, was co-produced by Little Everywhere and Stitcher. They are now working on the second season of the flagship show.

Gallucci reports that Little Everywhere is currently considering a



Dann Gallucci

handful of show offers. “We’re trying to navigate what we have the bandwidth for,” he says. But while production space might appear limited, they are also considering expanding into another space in the complex

with larger rooms to handle music recording as well as voice recording, sound design and mixing for budget films.

“If we do expand, which we’re hoping to do,” he says, “that changes everything.”

Little Everywhere [www.littleeverywhere.com](http://www.littleeverywhere.com)



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## Immersive Audio at the Tokyo 2020 Olympics

BY STEVE HARVEY

MADRID, SPAIN—With less than 10 months remaining before the Tokyo 2020 opening ceremony, the Olympic Games is shaping up to be a record-breaking event, with Olympic Broadcasting Services (OBS), the permanent host broadcaster, set to produce an unprecedented amount of content across all delivery platforms. For the coming quadrennial sports bonanza, OBS will debut several technical firsts, offering the first-ever live coverage of the Olympic Games with ultra-high definition (UHD) and high dynamic range (HDR) imagery, together with immersive 5.1.4-format audio from every venue.

“Immersive audio has to move forward,” says Nuno Duarte, OBS senior manager, audio, on the phone from the organization’s headquarters in Madrid. Worldwide, demand is not yet that great, and the number of consumers able to experience immersive audio is still small, he acknowledges. “But someone must take a step forward, so that’s what we’re doing.”

To be very clear, audio from the competitions is not being offered to participating rights-holding broadcasters (RHBs) in any encoded immersive audio format, Duarte explains. Rather, in planning for the event, he was aware that different territories around the world have adopted different international television standards that mandate, currently, one of two audio codecs. “Audio can be delivered to distribution platforms in Dolby Atmos or MPEG-H 3D Audio,” he says. As examples, North America has adopted Dolby Atmos as part of the ATSC 3.0 broadcast standard, but in Brazil, China, South Korea and the European Broadcast Union (EBU) countries, MPEG-H 3D Audio is specified. “We need to be completely agnostic,” he says, so OBS will offer the immersive audio feed as discrete channels: five on the lower listening plane, a sub-bass and four overhead.

OBS, which produces the live television, radio and digital coverage of the Olympic and Paralympic Games, will produce immersive audio at ev-



The 2020 Olympic Games from Tokyo will be the first ever to provide broadcasters with 5.1.4-format audio from all 45 venues.

ery one of the 45 venues but will be delivering far more feeds than that to the RHBs. “For athletics, we have seven productions. For gymnastics, we have seven productions,” he explains. In total, 85 separate 5.1.4 audio feeds will be made available.

Consumers are not the only ones with limited experience with immersive audio. “We have 45 production teams for all the different sports. For 99.9 percent of them—I’m talking about the directors and producers—immersive audio is unknown to them. They’ve heard about it for cinema or Netflix series, but for most of them, it’s quite new for sports. The first step

is getting those people used to the terms and to the workflow,” says Duarte.

Indeed, immersive audio is so new in television broadcast—apart from a few premium sports competitions on a handful of platforms, such as the English Premier League of soccer, boxing title fights and NHRA drag racing—that audio crews generally have limited experience with the format, too. And while much of that experience is with Dolby Atmos, Tokyo 2020 is not the place to generate audio feeds in that specific format, says Duarte. “We can’t have 85 Dol-

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## Chicago’s Periscope Expands to L.A.

BY STEVE HARVEY

HOLLYWOOD, CA—Since Periscope Post & Audio’s first day in business, the company has taken off like a rocket, expanding from a literal hole in the wall in Chicago to a multiroom complex on the city’s Cinespace studios lot to a recently opened facility in Hollywood—all in just six years. And as with virtually every room the company has built for picture or sound, projects were waiting to get underway at the new Hollywood location almost before the paint had dried.

“We were awarded all the ADR for ABC’s *Betrayal* in 2013,” says Michael Nehs, recalling the company’s inception. Nehs, steeped in audio, and business partner Jonathan Bross, who focuses on finance, had already begun building Periscope’s first rooms at the sprawling Cinespace Chicago campus to handle dailies, color correction, picture editing and sound. But Nehs needed to start working, so he approached a friend at Chicago Studio City, where the show was being shot, who offered two adjacent offices.

“I walked in with a Sawzall, cut



Veteran re-recording mixers Ron Eng (left) and Rick Ash used Periscope Post & Audio’s new theatrical mix stage to work on an upcoming 10-episode streaming series.

a hole in the wall and put a window in,” says Nehs. “My gear was back-ordered, so I built an ADR rig out of Guitar Center.” From that hole in the wall, Periscope was off and running.

Periscope expanded at Cinespace, building out three dedicated audio rooms to handle music production, mixing, sound design, ADR, Foley—you name it. “We got the first room open and had two shows simultaneously from Fox that we were doing out of that room. It became evident that we were growing at a very fast

rate,” says Nehs. Indeed, there was so much work—including all the music and ADR for the Fox hit series *Empire*—that it took 18 months to complete the new rooms, he adds.

Nehs has long traveled back and forth between Chicago and Los Angeles, meeting with studios and show producers, many of whom suggested he open a Hollywood location. After a lengthy search he found a 22,000-square-foot former post-production facility that fit the bill. The building had seen better days, so in-

dustry veterans Ben Benedetti and Rich Ellis, newly appointed as general manager and executive sales manager, respectively, set about refurbishing, replacing and reshaping the infrastructure to handle a full slate of sound and picture post-production services, including dailies, editorial, color grading, sound editing and mixing.

Benedetti notes that Periscope Hollywood provides more than sound and picture post services. “We have over 40 production offices and cutting rooms, and are able to house a significant number of clients in the building,” he says. At least one production has already taken advantage of that space, setting up writers’ rooms and accommodating executive producers in proximity to the in-house post services, effectively creating an independent studio within the building.

Ellis notes that the offices can be flexibly combined to create a pod of, say, six or 10 rooms, according to a project’s needs. Periscope has invested heavily in security—a necessity in today’s content creation environment—and the building offers 24/7 secure access with all the necessary amenities, unlike some other four-wall workspaces in Hollywood, he says.

Periscope has reworked the building so that sound is handled down-

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## Periscope

(continued from page 26)

stairs and picture services are upstairs, with the office spaces distributed throughout both floors.

The first two of four planned mixing stages have been built and are online. Studio A, a Dolby Atmos-capable theatrical mix stage for cinema, streaming and broadcast productions, features a dual-operator Avid S6 mixing console, Avid Pro Tools Ultimate workstations with MTRX interfaces and JBL speakers. Audio Intervisual Design (AID) handled the design and construction of Stage A, which was completed in less than five weeks. Veteran re-recording mixers Rick Ash and Ron Eng, the first to join the Periscope Hollywood sound team, immediately went to work in the room on a 10-episode streaming series set to premiere this fall.

"The room is built to meet or exceed what the Hollywood community expects in a high-end dub stage," says AID principal Jim Pace. "It's a very tight sound with a lot of headroom."

"The bottom end of the room

is extremely tight and responsive," agrees Ash, a three-time Emmy-winner. "It rocks!"

The second mix stage to be completed, a dual-operator room certified for Dolby Atmos for Home, also features an S6 console and Pro Tools Ultimate. Re-recording mixers Fred Howard and Ross Davis have joined the team and are already working on two projects in that room.

AID also supported the completion of an ADR stage that can accommodate up to five people, plus a layback/QC room. Two more rooms have been earmarked as single-operator Atmos for Home mix stages, equipped with Avid S4 consoles, and are due for completion before year's end.

With multiroom, full-service complexes in Chicago and Hollywood and connectivity between them, Periscope can spread the workload when necessary. That said, with an eye on the work schedule, Nehs has started planning for the inevitable next step. "I'm already looking at another building," he says.

Periscope Post & Audio  
www.periscopepa.com

Audio Intervisual Design  
www.aidinc.com

## Olympics

(continued from page 26)

by Atmos encoders. We don't have 120 A1s trained for Dolby Atmos. Maybe after the Los Angeles Games in 2028 we can be ambitious and do that. But for now, people first need to understand the sound design, what objects are, what the workflows are." Ahead of the day when any particular audio codecs might be implemented by OBS, says Duarte, he and his team can experiment with both Dolby Atmos and MPEG-H and familiarize themselves with the platforms beginning at Tokyo 2020.

More immediately, those 120 A1s participating in the Olympic Games broadcasts need to get up to speed on immersive audio, even though the focus will be on 5.1 and stereo production, which is what most consumers will experience. "We are pushing for the A1s to come prepared," he says. "We're pushing for TV stations to provide training for their A1s."

That said, OBS will offer some training and guidance, he says. "I've been mixing in immersive for more than five years, so I have a lot of

experience. We mix a lot of sports in 5.1.4. The challenge is to make everybody, the 120 production teams, aware of it."

There are plenty of challenges, of course. For one, OBS is not able to train the A1s on mixing consoles, he says: "Because we don't have time to give them a year of training. So we need to choose simple solutions and be very pragmatic about training all these people."

Furthermore, there are still only limited tools available for immersive broadcast audio. For example, there are currently no mixing consoles that offer a complete immersive audio feature set. "There is no 3D pan, as an example. We don't have 5.1.4 meters," he says, in the quantity needed to install in the OB vans. "There is no noise reduction for 5.1.4."

At this stage in the preparations, Duarte is meeting almost daily with engineers. "I have to explain how we configure the DVS, how we configure the meters. It's complex." But the upside is that, after the closing ceremony on Aug. 9, "We're going to have more than 120 A1s who are used to the terms and have experience."

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AES 2019: Booth #828

## Doing Things the LEA Way

### LEA PROFESSIONAL CONNECT SERIES AMPLIFIERS

BY BRIAN PICKOWITZ

The idea of an IoT-enabled professional amplifier with cloud-based control and monitoring is one that many of us at LEA have been dreaming up for a while now. We always knew it wasn't going to be a simple undertaking and we really had to wait for the stars to align so we could get to work on it. That happened, however, when our founder, Blake Augsburg, started a brand new company and hired a team of unmatched industry engineers. Once LEA Professional was started, we began work on the industry's first IoT-enabled professional amplifiers and our first product line, the Connect Series.

With the Connect Series, we wanted to create a product that directly addressed the needs of system integrators and installers. Many integrators we had spoken with had voiced their frustrations about other manufacturer processes and products. We armed ourselves with that information and used it to imagine a process and a product that was built specifically for the integrator/installer. The vision was to create a virtual Swiss Army knife of professional amplifiers. It would have to address the various power points needed by installers, with the variety of features and flexibility that can't be found in any other single product.

First, we knew we wanted a product that was powerful but also flexible. Those criteria drove the need for a few critical features. Among them are Direct LoZ and HiZ (70V or 100V) selectable per channel, channel bridging and a Universal Switch Mode Power Supply with PFC.

When the topic of channel bridging came up, we decided that in order to best serve the system integrator, we would have to take this feature to the next level. That meant figuring out the best way to maintain all amplifier channels during the bridging process, so we developed our proprietary Smart Power Bridge technology. The idea of Smart Power Bridge is to allow a single channel of the amplifier to emulate the results of bridging two amplifier channels. This provides

the flexibility offered up by bridging without having to lose a valuable amplifier channel.

The next must-have criteria we identified was ensuring that installers have total control over the units and also the way they shape the audio signals. Many installers and integrators in the pro audio community use multiple devices and multiple platforms in their daily lives, so if we came out with a Windows-only application, it would alienate the people who use macOS; similarly, if we picked iOS, we would alienate all of the Android users. This led to a big question we had to solve that had great impact on the overall project timeline. We reviewed many software development options and the winner was clear. We wanted an option that would quickly and efficiently control and monitor our Connect Series on any platform our users used, and that would not require time to learn or software to download. That led us down the path of using a web browser-based user interface.

We also wanted to ensure that integrators would be able to fine-tune their amplified signals through the Web App UI to meet the specifications of any job, large or small, so we decided it was crucial to include 96 kHz Analog Devices DSP. With that, integrators would be able to simply log in to the Web App UI from their device, connect the product to the network and, just like that, start adjusting the amps' DSP settings such as input routing, up to 48 dB/Oct crossover filters, eight

parametric EQ filters, user-configurable speaker limiters, and real-time load monitoring, among many other features.

With all of that accomplished, we felt we would be a major competitor in our space.

Another way we wanted to differentiate the Connect Series from competitive products was with a variety of network connection types. The motivation behind this was, once again, to give as much flexibility to the installer/integrator as possible, so we included the ability to connect to a Wi-Fi network, the ability to turn the amp into a WAP (wireless access point), and the ability to make the traditional network connection through Cat 5 or Cat 6 cabling. With all three connection options, we felt confident that an installer could show up and control our product in virtually any job. From older buildings with no network infrastructure in place to any venue with a unique network, our product can be networked easily. It is a critical feature that we felt we needed to deliver to the integrator community.

We're proud to say that we packed all of these killer features into an ergonomic and energy-efficient 1 RU device. We spent a lot of time working with outside development partners to design and refine a unit with a sleek, industrial look that fits in a 1 RU space. Now we like to tell people that it's going to be the best looking gear you put in a closet.

But the real game-changer that

we felt would drastically improve the integrator experience was the IoT technology. Cloud storage provides a unique benefit to the installer through remote control and monitoring, as well as instant push notifications alerting them of system errors and failures. There is no other professional audio product like it. Possibly even more valuable to the installer is the opportunity this technology creates for monthly recurring revenue contracts. With the potential for 24-hour system monitoring and data collection, integrators will find real value in setting up contracts with their clients to ensure everything is always functioning as it should—and all of this will come free to the installer.

The hope is that the Connect Series truly is something that integrators will be proud to install in any project and happy to work with due to its laundry list of features that cater directly to their needs. It's been a long road getting this product to market, but at the same time, it all seemed to happen so fast. The Connect Series perfectly encompasses everything that our company stands for, and we think that once these amps make their way into install projects around the world, everyone will have an even better idea about just who LEA is and what it means to do things the LEA Way.

Brian Pickowitz is vice president of marketing for LEA Professional.

LEA Professional  
www.leaprofessional.com



LEA Professional Connect Series amplifiers

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KRK ROKIT 8 G4 MONITORS ■ VANGUARD AUDIO LABS V1S+LOLLI MIC SYSTEM ■ SE ELECTRONICS V PACK ARENA DRUM MIC PACK

## KRK ROKIT 8 G4 MONITORS

What do you do for an encore if you've already got the best-selling line of monitors in the world? Ideally, you retain all the desirable traits that got you there, but raise the stakes with improved materials and design.

KRK Systems' ROKIT G4s build on the success of the best-selling ROKIT G3s: the aramid glass composite woofers and silk-dome tweeters are now Kevlar, though still branded in KRK's trademark yellow and housed in a plastic composite cabinet so things don't look that different. Under the hood, there's new amplification, new DSP and new control (the KRK Control app) for what is really an all-new active studio monitor that somehow manages to sound quite a bit like its successful predecessors ... but just a little better.

### OUT OF THE BOX

The ROKIT G4 line includes 5-, 7-, 8- and 10-inch models. The ROKIT 8 G4 is a two-way nearfield studio monitor with a frequency response of 36 Hz – 40 kHz, max SPL of 111 dB and power output of 203W; ROKIT 10-3 G4 is a three-way midfield studio monitor with a frequency response of 26 Hz – 40 kHz, max SPL of 112 dB and power output of 300W.

Like KRK's flagship V Series monitors, the G4s (I tested the ROKIT 8 G4) use the same Kevlar material for the woofer and the tweeter because of its rigidity and excellent strength-to-weight ratio. According to KRK, using the same materials to deliver all frequencies creates a more uniform response and a natural tonal balance, resulting in less listener fatigue.

The low-resonance plastic composite cabinet has a newly-designed and larger front port, which offers greater placement flexibility than rear ports. Here, KRK used "computational fluid dynamics analysis to ensure laminar airflow for reduced port turbulence and optimized low-frequency transient response." The base of the cabinet has an open-cell iso-foam pad footer that helps decouple the monitor from its support.

Amplification is provided via new internal Class-D type amplifiers, an efficient design that has become common in modern powered monitors due to reduced heat creation and lighter weight. Inside the ROKIT 8s, 203 watts are delivered, creating a max SPL of 111 dB. The rear panel



KRK's new ROKIT 8 G4 monitors sport Kevlar woofers and tweeters.

is sparse, with only a power switch, IEC power connection, combo analog input and the screen/dial for the DSP control.

Via this single knob, you can scroll/tap through numerous settings, especially the new digital EQ. It is not infinitely variable in its settings but instead offers 25 presets to cover most needs with (boosted or cut) high and low shelves, as well as high-mid and low-mid bell curves at fixed frequencies (not sweepable or parametric). The KRK Brick Wall Limiter is always on, protecting the drivers by preventing amplifier overload. A power standby mode is offered that engages after 30 minutes of inactivity.

### IN SESSION

Even though I have never owned a KRK monitor other than the 10S subwoofer, I've often used the G3 as my standard for very affordable monitors. In my comparisons, it seemed that the G3s had the most consistent and complete bottom-end response, and often the most punch, too; you could say that the KRKs "rocked" more than their competitors in the low-price category.

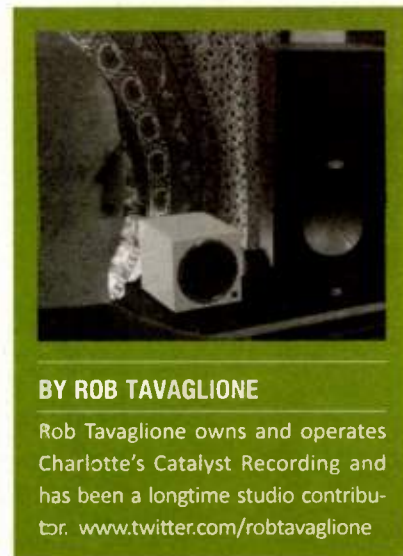
KRK seems to be continuing the trend with the G4 models, as the 8s deliver some serious bottom end for their size. No, they aren't full bandwidth down to 20 cycles, nor do they preclude the need for a sub in seri-



New amplification and DSP can be found in KRK's ROKIT 8 G4s.

ous applications, but the depth and punch they deliver is commendable. In particular, KRK is not kidding about Kevlar being light and rigid; you can hear it in rapid kick drums or tom-toms, as the transients remain distinct and the woofers seem to recover quickly enough to deliver the next blow separately from the preceding and following hit.

These are punchy speakers—punchier than most—and they're able to deliver that detail in the realms of loud and very loud before they start to compress; and finally the limiter kicks in, not so much with a bark as with blur and sag. Unfortunately, there is no visual indicator of the limiting kicking in, which would be help-



### BY ROB TAVAGLIONE

Rob Tavaglione owns and operates Charlotte's Catalyst Recording and has been a longtime studio contributor. [www.twitter.com/robtavaglione](http://www.twitter.com/robtavaglione)

ful. That said, they are loud as hell by that point. You should be able to work in smaller rooms without ever hearing the limiter. The front ports work without audible issues and are apparently well matched to the woofers/amps/cabinets, encouraging this impressive bass and dynamic response.

The overall tonal balance isn't bottom, however, as those tweeters deliver offsetting top-end—maybe even a bit much of it, really, as there is a lot of energy in the 3 kHz to 6 kHz region, making for exciting and detailed sound. Above 6 kHz, the response is notably flatter and distributed around the room quite uniformly, with a circular wave guide for the tweeter. This guide isn't very pronounced and allows equal dispersion in all directions, resulting in a rather wide sweet spot—so there are no issues with ear placement on the vertical axis, but potentially a problem for low and untreated ceilings, very reflective flooring or iso-booth glass.

Before doing any work with the 8s, I broke them in with some catalogue listening. I found them consistently deep-reaching, consistently forward with those hi-mids, and sometimes noticeably scooped in the just-under-1 kHz midrange area. This frequency range is also home to a bit of cabinet honk (a common trait with less-than-massive modern cabinetry), so a bit of a frequency dip in this area was necessary, even if it creates some inconsistencies.

I first tried EQ'ing myself and found I liked the extra boom from a +2 dB bass boost; that helped offset the abundant high-mid emphasis, but it was just a little too tubby. I tried the -2 dB bell-curve cut with the high-mids but that was a little too empty for me, so I tried the -2 dB high-shelf cut, which was a little too dull. I found myself really preferring the monitors flat, even if a little imbalanced, as they seemed the most natural, dynamic and complete that way.

KRK's Audio Tools App (tested *(continued on page 33)*)

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## VANGUARD AUDIO LABS V1S+LOLLI MIC SYSTEM

I think we can all agree that it's better to capture tracks well with specialized tools than try to "fix it in the mix." Most would contend that mics with built-in tonal options beyond just pads and high-pass filters are very useful. Many would say that affordably priced modern microphones have reached or surpassed the standards set by classic mics. Vanguard Labs' VIS+LOLLI kit seems to prove all three of these points; this is a versatile system that is nearly a complete stereo miking solution, save a single exception.

### OUT OF THE BOX

The whole kit (\$1,199 direct or via retail) is based on V1 pencil FET condensers. They have a minimalist "straight wire" path, according to Vanguard, with only four components, including a precision-biased JFET, a custom-wound transformer, and cryogenic treatment of all components—the concept being that deep-freezing produces molecular stability, a longer lifespan and more consistent matching/performance. The V1s look sharp, with Vanguard's usual pinot noir finish, nickel trimmings and attention to detail.

Each V1 comes with a VSSM shockmount, zinc-alloy construction, a powder coat finish, aerospace suspension bands and, best of all, an ABS pivot/clutch that works properly. This suspension should be the envy of other manufacturers, as it holds firmly, feels strong and is a pleasure to use.

Each V1 body can be topped with a 22 mm, 4-micron, gold-sputtered Mylar diaphragm'd capsule in one of four configurations: cardioid, hypercardioid, wide-cardioid or omnidirectional. The diaphragms are mounted extremely close to the front of their housing, encouraging accurate frequency response and reducing comb filtering.

Matched-pair stereo kits, including a stereo bar long enough for ORTF configurations, are available as above, or with additional LOLLi large-diaphragm'd heads. This 34 mm, 3-micron diaphragm and capsule is housed in an aluminum body that looks very nice in an art deco kind of way and allows switching between cardioid and omni patterns.

As tested here, the V1S includes the two-mic chassis, eight small-diaphragm caps, two LOLLi caps, a stereo bar and wooden storage case for \$1,199 direct from Vanguard, with an extended five-year warranty.

### IN SESSION

In a nutshell, the VIS+LOLLi kit performs as promised and as expected. (I reviewed Vanguard's V13 large-diaphragm multipattern tube



Vanguard Audio Labs V1S mics with LOLLi heads.



condenser mic back in December 2016.) Most importantly, the parts are machined precisely, allowing easy mounting of the capsules; I wouldn't recommend this kit otherwise. The shockmounts are superb, with a firm grip on the mics and a firmer clutch; I recommend buying these VSSMs (\$39) for your other SDC mics.

I first tested the capsules when an organ re-amping job with a Leslie speaker cabinet/amp conveniently came my way. The consistent repetition of the spinning and swirling tracks and an ORTF stereo miking technique allowed me to find small but important details. The hypercardioids provided the tightest focus and the brightest tone, but with a smaller soundstage. The omnis provided the flattest frequency response, a lack of proximity effect and more air, but less detail. The cardioids offered a largely neutral frequency response, typical side rejection and ample detail. But it was the wide cardioids that I found myself coming back to again and again, with their reasonable directionality, a significant amount of air, a tonal balance nearly as flat as the omnis, and a sense of "being there" that approximates normal hearing.

I began using the kit in some way on every session and tried many combinations. Sometimes I matched both mics as a true stereo or spaced pair; sometimes I would use mismatched caps (i.e., an omni and a cardioid) or patterns (two LOLLis: one cardioid, one omni); and sometimes I would mix a small cap and a LOLLi. Here's a condensed rundown of what I found:

**Rain stick**—Widely spaced pair, small cardioids. Plenty of excessive movement and detail just as desired; crisp but not harsh.

**Clave**—ORTF pair, small cardioids. Solid yet airy, very realistic.

**Shaker trills in an arc**—Doppler effect attempt; widely spaced cardioids. Nice detail in movement/placement without harshness.

**Acoustic guitar**—One small cardioid/one small wide, neither boomy nor crispy. Small hypercardioid as a nice neck-position option (to reject breathing/vocals), natural dynamics and a very realistic presentation.

**Acoustic guitar**—LOLLi cardioids, nicely full bodied, not bright, just slightly dark. A little bigger than life, but not as natural as the small caps.

**African drum troupe (djembes, kinkinées and dun duns)**—LOLLi omni in room center. Very full and warm, slightly dark, strong low-mids 200–250 Hz area, slightly compressed dynamics.

**Drum overheads**—Spaced pair LOLLi cardioids. Well matched, great low-mids, slightly dark, slightly compressed, really good imaging.

**Drum overheads**—Spaced pair, small wide cardioids. Flatter than LOLLis, more focused soundstage, smoother off-axis than LOLLis, more natural but less girth, not bright. Basically flat.

**Lead vocals**—LOLLi cardioid. Well balanced on baritones and altos, limited sibilance, strong low-mids, similar to TLM103 but thicker and chestier. Nice side rejection with group vocals (two LOLLis in a live three-part harmony tracking session).

**Distorted vocals**—LOLLi cardioid via stomp box vocal processor pedal with plenty of digital distortion. Smooth top and ample low-mids but a little lacking in definition.

**Backing vocals**—Small cardioid and wide cardioid, not as big as LOLLis but flatter. Nice, tight focus for doubling/stacking, good neutral balance for rap ad-libs.

**Electric guitar**—LOLLi too distorted when right up on speaker; had to pull back.

**Violin/fiddle**—Small cardioid overhead and omni in the room 4 to 5 feet out, nicely flat. Artist commented he liked them better than his usual tube mic. Good dynamics.

**Flute**—LOLLi cardioid, nice and full, overall neutral. Should've tried

small wide cardioid.

**Upright bass**—LOLLi cardioid, high position, a little ticky/clicky on the slaps, smooth lows and low-mids. Should've tried the small wide cardioid.

**Alto sax/baritone sax/flute**—LOLLi cardioid, warm, smooth tops. Reached down low for nice bass extension on baritone without any single note emphasis.

**Finger snaps**—Small, wide cardioids in spaced pair. Great transient response, almost too bright.

### THE FINAL MIX

All things considered, the VIS+LOLLi kit met all expectations, including a stereo bar that worked nicely for numerous techniques. If only the LOLLis had a figure-of-eight pattern, you could do the Mid-Side stereo technique and Blumlein, too, but at least you can do X/Y, ORTF and spaced positions. The wooden storage case neatly holds all the components, but it is large and needs a handle for convenient carrying.

I'm going to highly recommend the VIS+LOLLi kit (or the mono version at the very least) as a great way to get a full palette of mic options that are readily available and easy to implement. The overall balance of the kit leans toward fullness over brightness, which makes this kit a standout in its field right there. Nonetheless, it's the small wide cardioid caps that seal the deal. These caps are slightly airy, and flatter and smoother than cardioids; they sound great in places where you might use standard SDCs. If you've got a room worth hearing, these caps inject a tasteful amount of it into your still noticeably directional signal, with better spatial cues than omni—buy this kit just to get these wide cardioid beauties. Well, the LOLLis in omni, too, and the ...

Vanguard Audio Labs  
www.vanguardaudiolabs.com



## SE ELECTRONICS V PACK ARENA DRUM MIC KIT

There are drum mic kits and then there are sE drum mic kits. Admittedly, this is the company's top-of-the-line kit (MSRP \$1,199, \$999 street), so you'd expect quality, but from heavy-duty tom mounts to a heavy-duty flight case, this kit looks to be rock 'n' roll roadworthy, and I mean that sonically, too.

### OUT OF THE BOX

Bottoms up, it all starts with the V Kick mic—a dynamic with sE's DCM7 SB capsule housing a 1-inch diaphragm and neodymium magnets. The capsule is well suspended in a small yet sturdy body, with a strong spring/steel mesh windscreen and a particularly sturdy stand-mount swivel joint that allows “straight-in” inside-drum placement, or 90-degree “in-the-hole” placement. Two voicing switches allow four different tones and increased versatility. Switch #1 Classic or Modern offers flat mids or a dip for that modern scoop, while Switch #2 Classic or Modern offers a flat top-end or a definition-increasing boost.

For snare, there's the V7X, a super-cardioid dynamic instrument type mic (it looks like a handheld vocal mic with a tapered handle) with the similar DMC 7X capsule, a no-roll windscreen (a hex-like shape stops the mic from rolling on a flat surface) and a standard mic clip.

Three of the V Beat mics are included, all with the same DMC 7X capsule and windscreen, but housed in a short body and with a strong pivot just like the V Kick. This time, the V Clamp is supplied, with a small 2.25-inch gooseneck and rim mount attached, allowing on-drum mounting without resonance problems.

Two sE8 small-diaphragm, cardioid condenser mics are included, with in-house gold-sputtered diaphragms, two levels of switchable attenuation (0, -10, -20 dB) and two levels of high-pass filtering (flat, 80 or 160 Hz). A pair of mic clips and windscreens are provided. The capsules on these mics neatly twist off, which makes one wonder if other patterns are available.

The whole kit is housed in a nice Pelican-style molded case (approximately 18.5 x 14.5 x 7 inches) that's small enough to be portable and



sE Electronics' V Pack Arena drum mic kit comes in a roadworthy case to keep it safe on the move.

should just fit in an airline's overhead bins. Everything fits neatly inside, with a spot left vacant to hold a hi-hat mic (and clip), a third overhead, or a snare bottom mic.

### IN SESSION

I started testing with a good old rock 'n' roll tracking session and the Arena pack was a natural fit. The V Kick was very easy to get on a low-profile kickstand, then tighten down the swivel and adjust the two voicing settings (albeit with a mini screwdriver on the latter). With both voicings on Modern, the sound was definitely thick and punchy, defined but not overly bright or aggressive, with a nice click up top but without any particular frequency emphasis. It was an overall balanced tone that could work across multiple styles, unlike certain kick mics that seem to be genre-specific.

There are a lot of secondary snare miking positions (underneath, overhead, a 451 taped to another mic), but many of us start with a SM57 placed up top. With that in mind, compared to your typical 57 close in and up top, the V7X offered a good bit more bottom-end and a good bit less hi-mids, just as you might expect. I found myself missing some of that crisp 57 snap, but the V7X had a lot more punch and more hi-hat rejection, so it's a taste thing.

The V Beats on toms use the same capsule as the V7X, but I didn't

know that when I started tracking; I thought the two mics sounded alike, with the same chesty punch and polite top-end. In fact, I got a sound that was a little too thick when I mounted the mics on the tom-tom's mounting support arms—those isolating Gauger Percussion RIMS systems. I should've mounted directly on the actual drum rims, where the 2-inch goosenecks could have gotten me more elevation and a touch less proximity effect.

I tried the sE8s as overheads, in a spaced pair configuration a few feet above the cymbals, with snare roughly centered in the overall stereo picture. I didn't find a pad necessary, as my mic amps (AMS Neves) needed a typical 20 to 25 dB of gain; I also didn't use a HPF, as the bottom-end was useful (and always filter-able later), and a touch of gentle FET compression held things together. Compared to my typical favorites for the job (Roswell Delphos LDCs or Vanguard Audio Labs VIS SDCs) the sE8s were a little smoother and understated up top, similarly neutral and linear though the mids, and a little thicker through the low-mids into the bottom-end. Dynamics were open and unrestrained, while the soundstage remained stable (good matching and consistency in manufacturing makes for good imaging), wide and smooth, with off-axis sounds like good SDCs often have.

I got in a couple drum sessions that weren't as “rocking” and learned more. Needing a gentler sound, I tried the V Kick with Classic settings and found an abundance of mids, less thump and less click. Just a touch of EQ and I had a sound quite different than with the Modern settings. With some thinner snares, I found the EQ balance of the V7X to be much more likable, adding punch where it was sorely needed and where a 57 would need some help. I mounted the V Beat tom mics right on the drum rims and elevated them as far as the goosenecks could reach. I got a better sound with less proximity effect cellulite, although I still wished those goosenecks were an inch longer.

I didn't get an opportunity to try the V Pack's dynamics on other sources, though I'd imagine that guitars, horns, percussion and so on would all be in their wheelhouse. I did get to try the sE8s on some acoustic instruments, where their short signal path (no ICs or transformers) conveyed quite flat response, very little noise, natural dynamics and a lack of brittleness that accepts EQ nicely.

### THE FINAL MIX

Considering all the styles of drumming I might come across, the V Pack Arena kit delivered as well as, or extremely close to, all my drum miking favorites curated over many years. With a little EQ, I was able to achieve all the sounds I needed from this kit. OK, I'm still stuck on a 57 for snare top, but I would gladly blend in a V7X to improve on that sound. Stylistically, I think that the kit naturally leans toward a punchy, mids-heavy rock sound that would be great with really loud bands and especially great at reducing nasty off-axis cymbal bleed that some mic kits seem to accentuate.

It deserves mention that this kit has the design, build quality and portability that would excel for live sound and touring acts. Those tom mounts are stout and tough, as are all the windscreens, tightening nuts, pivots and mic clips, all in a sturdy case that's ready to hit the road.

sE Electronics  
www.seelectronics.com

## KRK

(continued from page 30)

with iOS and to be reviewed in an upcoming issue) aids in positioning and calibration; for ROKIT G4s only, it provides EQ settings recommenda-

tions. The app recommended a flat setting for me, so I think it's pretty accurate and could be much more helpful to those in need.

### THE FINAL MIX

In my studio, the ROKIT G4 8s were ample help as a second point of reference and especially for gauging

tricky bottom-end EQ adjustments, responding with detail and sensitivity. With a little practice, I do think I could work on them alone, and I think they'll be more than adequate for their intended audience: engineers getting their first or second pair of serious monitors. I can't think of any other monitors at this price point that

can deliver this much SPL, this much punch and dispersion this smooth, even if the EQ isn't the best sounding. I'd expect the G4 line to keep up with its G3 predecessors in popularity, even as the affordable nearfield market heats up with worthy competition.

KRK Systems  
www.krksys.com

## MXL Overstream Bundles

MXL Microphones' Overstream and Overstream Pro Bundles support live streaming and gaming applications. In addition to a choice of the 990 Blizzard or 990 Blaze condenser microphone, the bundles include an MXL-BCD Stand desk-mounted mic stand with integrated XLR mic cable, and an MXL-SMP 1 all-in-one pop filter and shockmount. The Overstream Pro Bundle also includes an MXL Mic Mate Pro XLR-to-USB audio interface, which is both Mac and PC compatible and features a single USB input. It offers a 1/8-inch stereo headphone jack and the ability to control gain and headphone volume. Both condenser mics sport a cardioid polar pattern to help reject noise from behind. The LEDs in the mics' grilles are intended to complement a gaming rig; the 990 Blaze glows red and the 990 Blizzard glows blue.



## Røde RødeCaster Pro v2.0

Røde Microphones has released firmware version 2.0 for the RødeCaster Pro podcasting studio, adding 25 new features in the process. With the updated firmware, users can save and load "Shows" via the RødeCaster companion app, which is essentially a snapshot of all sounds and settings. Settings can also be saved on their own. Podcast Transfer Mode allows users to transfer podcasts from their onboard microSD card to a computer directly from the RødeCaster Pro. The firmware adds several sound pad features, including a sound pad indicator on the home screen that tells users which pad is playing and how long until it finishes, easier access to the sound pad configuration screen, more onboard control, and a new "pause" playback mode. Eight banks of sounds can now be saved to a RødeCaster Pro.



## Nugen Audio VisLM Update

Nugen Audio is updating its VisLM loudness metering software with a new Flag feature that builds on the alert functionality found in previous versions of the plug-in. Flag allows users to navigate through True Peak and short-term/momentary loudness alerts, as well as manual flags for other points of interest. Included with the update is the latest maximum loudness range (LRA 18) for its Netflix preset that will benefit forward-thinking productions supplying content to the SVOD platform. The company is also rolling out navigable/visual alerts intended to simplify operation. VisLM offers a user interface design focused on standard loudness parameters, such as the newly implemented LRA 18 for Netflix productions. Using this solution, editors can view detailed historical information that enables them to hit the target. Additional loudness logging and timecode functions allow for analysis and proof of compliance.



## Celestion Ruby Impulse Response

Loudspeaker manufacturer Celestion has added the Ruby guitar speaker to its line of impulse responses. The physical Celestion Ruby is an alnico-magnet guitar speaker that's purpose-built to create vintage tones. The speaker is intended to recall an alnico vibe with a dampened attack, aiming to provide warmth, mellow highs and a smooth midrange. The Celestion Ruby guitar speaker impulse responses were recorded using three typical microphones: a Shure SM57, a Royer ribbon mic and a Sennheiser MD421. Each mic was in turn recorded in six unique positions (including a rear mic for the open-back cabinets) and labeled within the IR files as Balanced, Bright, Fat, Thin, Dark and Dark 2. In addition to the three studio mics included with this IR pack, a Neumann TLM107 room mic was also used to provide tonal options. The Celestion Ruby guitar speaker IR collection is available to download in five cabinet configurations.



## firstlook

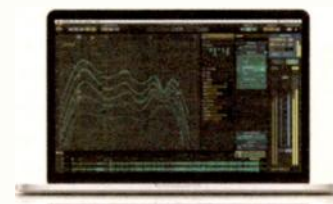
### RTW TouchMonitor Metering for Dolby Atmos

RTW has developed an immersive audio license, ISA – Immersive Sound Analyzer, for its TouchMonitor TM7 and TM9 audio meters that enables metering of several variants of the Dolby Atmos format. With the ISA license, audio engineers in broadcast and post-production will be able to monitor 5.1.2, 5.1.4, 7.1.2 or 7.1.4. In reality, two surround sound analyzers are combined, which allows engineers to monitor both the main bed (5.1 or 7.1) and the upper bed (2.0 or 4.0) in a single, easy-to-read view. Besides offering all relevant metering instruments, users will also be able to monitor various loudness measures, including Integrated, Momentary and Short-Term loudness across an entire Dolby Atmos stream.



## TC Finalizer Reissue

TC Electronic has resurrected and repackaged its dual-sided Finalizer concept as a desktop mastering app and a free online analysis service that compares an uploaded song to a representative current example from the *Billboard* Top 20 charts. The central component in the reincarnated Finalizer concept is a desktop mastering app that compiles a wide range of what the company says are "the best multi-band compression, limiter and EQ algorithms that TC Electronic has ever developed." The processing components are ported directly from the company's System 6000 platform and bundled with new features including a new way of presenting the audio that shows how individual mastering decisions affect the song in real time, as the processing is being applied. The second half of the reincarnated Finalizer mastering concept is a free online analysis service.



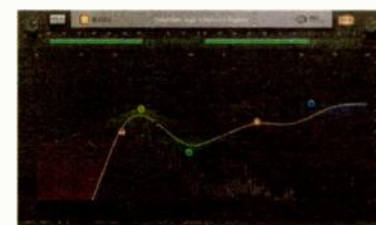
## iCON Pro Audio Platform Nano

Platform Nano is a MIDI control surface for producers, engineers and musicians who want hands-on control of their modern "in the box" digital music production with a small footprint. Weighing in at 2.8 pounds, Platform Nano adds tactile control with a single motorized fader via USB 2.0 to a DAW and production system. It offers one full-sized motorized fader, four rotary dual-function encoder knobs, backlit buttons for Mute, Solo, Automation and Transport control, and a jogwheel. It provides access to an entire mix by banking across tracks in groups of eight or one channel at a time. The unit supports MCU (Mackie Control Universal) and HUI (Human User Interface) protocols and comes with overlays for Ableton Live, Audition, Bitwig, Cubase/Nuendo, Digital Performer, FL Studio, Logic Pro X, Pro Tools, Reaper, Reason, Samplitude, Sonar and Studio One.



## SSL Native Plug-Ins v6.3

The v6.3 release of SSL's Native plug-in collection introduces a new X-EQ 2 Native studio plug-in and drops the need to use a physical iLok dongle. All SSL Native 6.3 plug-ins can now be authorized to a computer. The v6.3 update is free for existing Duende Native and SSL Native customers. X-EQ 2, which replaces the existing X-EQ plug-in, offers a new GUI, rewritten algorithms and new features. The plug-in uses SSL's proprietary "anti-cramping" DSP to provide a transparent EQ; the plug-in also allows for the creation of up to 24 EQ bands with a choice of 17 classic and modern filter shapes and EQ types. Other new features include M/S processing modes, Band Solo, and analysis tools including Phase and Step response plots. X-EQ 2 also features "significant" DSP optimization, according to SSL, aiming to keep the computer's CPU load low.



## DirectOut Prodigy.MC Adds Features

DirectOut has extended the feature set of its Prodigy.MC modular audio converter. While Prodigy.MC can be managed natively via globcon, a unified remote-control platform, or via integrated web server, a fully implemented JSON-API allows integration for third-party remote-control software, with further protocols to be added in the future for increased system integration. New features also include an LTC reader and BLDS Generator, which can be monitored and controlled using globcon and provide tools for a variety of applications. BLDS is available as (virtual) source in Matrix, and provides monitoring of connections with automatic failover switching.



## Royer AxeMount Dual Mic Mount

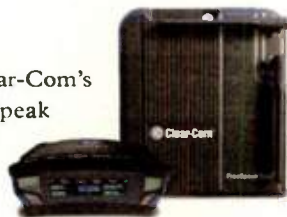
The AxeMount Dual Microphone Mount from Royer Labs aids the blending a Royer R-121 ribbon mic with a Shure 57-styled dynamic mic. A R-121 and a 57 paired up to capture an electric guitar amp is a common sight on the road and in the studio; this dual mount mic clip is intended to make their use a simpler process, positioning the mics with the setup phase-aligned and ready to go on a single mic stand. AxeMount also accommodates Royer R-122, R-122 MKII and R-122V ribbon microphones.



The AxeMount Dual Microphone Mount is available now. Co-designed with SLR of Windsor, Ontario, Canada, AxeMount is manufactured by SLR in Canada.

## Clear-Com FreeSpeak Edge

FreeSpeak Edge is the new flagship model of Clear-Com's FreeSpeak digital wireless intercom line. FreeSpeak Edge is based on an all-new 5 GHz chipset that features an exclusive radio stack development optimized for intercom. The new intercom also brings into play new audio-over-IP developments in its architecture, using AES67 connections between the transceivers and the host intercom frame. The 5 GHz



band is appropriate for large-scale communications, as it can be managed with frequency coordination for reduced interference and offers a wide range of RF channels, according to Clear-Com. Its higher frequencies means there's more bandwidth for data as well. The Clear-Com RF technology in FreeSpeak Edge uses OFDM to provide a transport layer that is "immune to most forms of interference," Clear-Com says. FreeSpeak Edge delivers 12 kHz audio with ultra-low latency and is scalable to support over 100 beltpacks and 64 transceivers. It can be combined with existing FreeSpeak II 1.9 GHz and 2.4 GHz systems, providing three bandwidths across a single unified communications system.

## Bose Portable Product Accessories

Bose Professional is shipping two new accessories for its portable products: a series of Play-Through Covers for the S1 Pro multiposition P.A. system, and a carrying case for T4S and T8S ToneMatch mixers. S1 Play-Through Covers are available in four color options: Baltic Blue, Night Orchid Red, Nue Bose Black and Nue Artic White. Each cover features a zipper for a secure fit and "acoustically transparent" stretchable fabric. Meanwhile, ToneMatch mixer owners can use the new ToneMatch Carrying Case, which can carry both T4S and T8S ToneMatch mixers. With a nylon shell and easy-carry handle, each case offers both protection when moving, packing or storing a ToneMatch mixer between gigs. Users can also carry their power supply, ToneMatch cable and additional equipment.



## DPA 2028 Vocal Mic

DPA's 2028 Vocal Microphone, intended for live performance, broadcast and pro AV applications, was created with the aim of replicating the sound of the brand's flagship handheld mic, the 4018 VL, while also addressing challenges of the live stage in a manner similar to DPA's 4018 mic. The 2028 features a fixed-position capsule, specially designed shockmount and pop filter. It uses a supercardioid polar pattern, providing a uniform off-axis response to improve gain before feedback and less mic bleed from sound sources in close proximity. Both the outer grille and the inner pop filter can be detached and rinsed.



## Lab Gruppen CA Series Amplifiers

CA Series amplifiers from Lab Gruppen are intended for use in commercial installations such as bars, restaurants, corporate environments, retail destinations and hotels, and other facilities where background music or P.A. systems are needed. The amplifiers are Energy Star-certified. CA series amplifiers sport a flexible power scheme with automatic power on/off based on the input signal, reducing consumption when a signal is not present. The amplifiers are convection-cooled, eliminating fan noise and making the system silent for sensitive environments. Models are offered in 60W, 120W and 240W, with each version available in one or two channels.



## Yamaha Sound Bar Collaboration Kit

Available in North America, the ESB-1080 Enterprise Sound Bar and Collaboration Kit bundles an AI wide-angle USB camera from Huddly with Yamaha's ESB-1080 Enterprise Sound Bar. The ESB-1080 Enterprise Sound Bar provides output for conference rooms via two built-in subwoofers, a bass-reflex port, two dome tweeters and two woofers. Its conference mode preset is specialized for installation in conference room spaces. It has various functions tailored for administration.

The Yamaha Collaboration Kit's Huddly camera provides wide-angle (150°) 1080p video, an embedded mic array, automated AI features, and the Huddly InSights analytics API. With the Genius Framing feature, the camera can automatically detect and frame participants in its field of view, eliminating the need to manually control the camera.



## firstlook

### Audio-Technica UniPoint Boundary Mics

Audio-Technica refreshed its line of UniPoint U891 boundary microphones, releasing the updated U891RCb, U891Rb and U891RWb cardioid condenser models and a new model, the U891RbO omnidirectional condenser boundary mic. The mics feature a two-state RGB LED status indicator and a touch-sensitive capacitive-type user switch that can be set to three modes. All new U891 models are equipped with an 80 Hz low-cut UniSteep filter to reduce pickup of low-frequency ambient noise and a PivotPoint rotating connector. The U891RCb (upgrading the previous model, U891RCx) features a wide-range condenser microphone with a cardioid polar pattern and offers an external contact closure switch that allows users to control a remote device—a camera, for instance—from a switch on the microphone. The U891Rb (upgrading the previous model, U891Rx) is a cardioid condenser boundary microphone with a local activation switch that can be set to three operating modes. The model is available in black (U891Rb) and white (U891RWb). The new U891RbO is designed for surface-mount applications such as sound reinforcement, professional recording, television, conferencing and more.



There's more information on all the products featured at [prosoundnetwork.com/oct2019](http://prosoundnetwork.com/oct2019).



# Vampire Weekend Goes 360 at MSG

BY LARRY JAFFEE

NEW YORK, NY—New York City is in Vampire Weekend's blood. The group was founded uptown at Columbia University in 2006, and 13 years later, the band launched its fifth album, *Father of the Bride*, with a short promo tour that included a marathon stop downtown at Webster Hall, where they played nearly every song in their catalog across three 90-minute sets in one day in May. In September, now barnstorming through the second North American leg of their world tour, the band upped the ante for—you guessed it—the New York City stop by not only headlining Madison Square Garden for the first time, but also playing the vaunted venue in-the-round to accommodate more fans.

For the sold-out show, the stage was set at one end of the arena without a backdrop, allowing the seats behind it to be sold. The bigger crowd meant the tour's audio provider, Solotech, had to field a larger L-Acoustics line array system—Paul Owen, general manager of the company's Nashville office, met the challenge easily. Owen has handled Vampire Weekend tours (as well as numerous



On hand for Vampire Weekend's New York show in-the-round were (l-r) Francis Lussier and Jeremy Walls, P.A. techs specially brought in for the 360 show; Fred Cantin, Solotech crew manager/systems engineer; Matt Andrade, monitor engineer; Neil Heal, FOH engineer; Ben Malone, FOH system engineer/audio crew chief; and Justin Stiepleman, monitor tech/P.A. tech. Not pictured: Nikki Berna, P.A. tech.

other A-list artists) for 10 years, and through it all, he's gained an understanding of the band's aural needs. "The mixes are all dialed in," he noted, so the biggest challenge that day would simply be re-tuning the room for 360 coverage from 180. "It should be pretty straightforward."

Mixing the four-member band and three additional touring musicians, Vampire Weekend's longtime FOH engineer Neil Heal has been

looking after 120 inputs on a DiGiCo SD5 desk, all running at 96k. "I decided not to use Waves on this, so I have no plug-ins!" he reported. "I figure if I want something specific, I'll get the real thing in a rack, so if I need to change any parameters, it's right at hand and I can just look over and always see what it's doing. I do have a couple of Empirical Labs EL8X Distressors and a couple of ef-

(continued on page 41)

## Outfitting Audio in Fender's In-House Venue

CORONA, CA—The Fender Factory, where the guitar manufacturer offers its standard- and limited-edition instruments, recently named a 120-capacity training room with a stage after Def Leppard guitarist Phil Collen, commemorating the multiple times the Rock & Roll Hall of Famer stopped in to visit and even perform in the room.

Fender IT support supervisor Steph Maffei explained, "This all started when Fender gave me about a day's notice to bring in my P.A. gear because Phil Collen was coming. We did it in this training room that holds about 120 and has a stage on one side. The show went well, and



Phil Collen, rocking out on stage at Fender. The event was mixed remotely on the QSC TouchMix-16 visible behind him.

it inspired me to optimize the room for concerts, name it after Phil and surprise him the next time he showed up. Our other conference rooms are named for famous guitarists, and Phil lives nearby and comes over often."

Maffei felt a QSC TouchMix-16 was a good match for the room, not-

ing, "At our office, we often find ourselves doing guerrilla-style sound because artists drop in on short notice, so the input presets are key. We start by calling up a factory preset for the type of instrument or vocal on each channel, and between those and the Room Tuning Wizard, we do almost no tweaking from there. It's easy to use for staff members who aren't trained as audio engineers, and it really doesn't take much effort to get a great sound."

The room's layout made the TouchMix's ability to be remotely controlled from an Apple iOS or Android device essential. "I mounted the TouchMix-16 on the wall behind the stage in a lockable SKB case, so it would be easy to plug in mics and instruments without running a snake," he explains. "Then I could just sit in the back where the lighting controller is and mix from an iPad."

When Collen came to play, his side project, Delta Deep, came along for the occasion. "It's a four-piece band," Maffei details, "and I took direct outs into the TouchMix from the bass player [standard DI box] and from Phil's Fender Cyber Twin modeling amp

(continued on page 40)

## briefs

### Montgomery PAC Upgrades

MONTGOMERY, AL—This year, artists like Charlie Daniels, The Temptations and REO Speedwagon have all made their way to the Montgomery Performing Arts Centre (MPAC). As it turns out, a pair of new mixing desks has also journeyed there, as the facility recently added Yamaha ([www.usa.yamaha.com](http://www.usa.yamaha.com)) Rvage PM7 and CL5 digital consoles.

### Historic HS Adds Audix

SACRAMENTO, CA—C.K. McClatchy High School, the oldest high school in Sacramento, recently renovated its 82-year-old art deco auditorium, installing an acoustic conditioning system that allows adjustments to room acoustics through manipulation of reflections and reverberations using a system of dedicated microphones, loudspeakers and digital processing. The Yamaha AFC3 system employs eight Audix ([www.audix.com](http://www.audix.com)) SCX1 mics: two matched pairs (SCX1CMP) of cardioids at the proscenium, and four SCX1 omnis (SCX1O) about 30 feet offstage.

### Lykke Li Tours Light

NEW YORK, NY—Swedish singer/songwriter Lykke Li has been on the move this year with *Per So Sad So Sexy* tour. Along for the ride is FOH sound engineer Dani Munoz, who has been using a Waves Audio ([www.waves.com](http://www.waves.com)) eMoticn LV1 Live Mixer and Waves plug-ins for the project. "I've got an Axis One compact computer, a SoundGrid Server One-C, a DiGiGrid IDX, a DiGiGrid MGB coaxial MADI-to-SoundGrid interface, a couple of outboard FX units, and a single touchscreen monitor," he reported.

### Gaga Gets Immersive

LAS VEGAS, NV—Lady Gaga has spent much of the year headlining *Enigma* and *Jazz & Piano*, two separate residencies at Park Theater at Park MGM in Las Vegas. Both events were presented using L-ISA Immersive Hyperreal Sound technology from L-Acoustics ([www.l-acoustics.com](http://www.l-acoustics.com)).

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## Rhapsodizing with Queen + Adam Lambert

BY CLIVE YOUNG WITH KATIE MAKAL

NEW YORK, NY—Queen has always packed arenas, but in the wake of the band's Oscar-winning biopic, *Bohemian Rhapsody*, it's fair to say that 2019 is one of the group's biggest years ever. On the heels of that success, guitarist Brian May and drummer Roger Taylor hit the road this summer for the latest U.S. leg of the ongoing Rhapsody Tour. Much as he has since 2012, former *American Idol* contestant Adam Lambert ably fronted the musicians on stage, roaring his way nightly through the vocal acrobatics originally made famous by Freddie Mercury. Accordingly, the group these days is officially called Queen + Adam Lambert.

Mixing the six musicians—the principals plus bass, keyboards and percussion—was FOH engineer Tom New, who joined the production in 2014 as a system engineer, eventually moving to the house desk at the end of 2015. The desk in question was a DiGiCo SD5, used to look after 88 inputs. “The SD5 has a bank of buttons called macros, which can be assigned to do anything you want,” he noted. “Rather than running snapshots as a lot of people do, I assign buttons for certain effects cues, be it a delay on Adam’s vocal, a different snare reverb or something else. I have that on a button rather than on a global snapshot, as I don’t like to do something where I can’t see what I’m doing. A button that has only two functions reduces that risk.”

While some engineers opt to use a Universal Audio UAD Realtime Rack as their software plug-in host system and others prefer Waves SoundGrid Extreme server, New gets the best of both worlds as he uses both: “Our three Realtime Racks give me 48 processing channels, and the Extreme server is doing about 12 for me. Mostly the UADs are dynamic effects and the Waves is delay effects, like reverb and things like that.”

The production had a fair number of visual delights—moving video screens, lifts beneath the band members and a 50-foot thrust leading out to a sizable B-stage, all of which took time to get together. “We did rehearsals in London for a week before we came out here,” recalled New. “Then we did 10 days of production rehearsals in Anaheim, so we had plenty of rehearsal and went into the first show ready.

“Things that affect us—like there’s a drum lift, for instance—are just a case of cable management and

being well rehearsed to know when things are happening, because stuff is being patched live. You have to be aware so that things aren’t unpatched when they’re live in the P.A.! That’s been a part of the show for quite a long time, however, so we’re all quite well used to that [aspect].”

Clair Global, the band’s longtime audio provider, fielded a sizable P.A. for the tour, centered around its legacy i-5 proprietary line arrays. The system, hung to cover 270° nightly, featured main hangs of 14 i-5D line array boxes per side, side hangs of a dozen i-5s each, and rear hangs of eight i-5s.

But then there was the B-stage, used for a stripped-back acoustic set and situated more than 50 feet out into the audience at the end of the thrust. To aid feedback rejection, the production uniquely deployed small arrays of Clair’s Cohesion CO-10 loudspeakers above the end of the B-stage, hung perpendicularly to the stage to cover the audience area on either side of the thrust. As a result, the main P.A. could be aimed to hit the crowd beyond the end of the thrust. New explained, “You’ve got acoustic guitar, three vocals and drums down there, and it could be a real nightmare if you have the P.A. pointing at it as well when the monitor system is already quite loud.”

As is often the case with classic rock bands, that loud monitor system consisted largely of wedges. May, Taylor and keyboardist Spike Edney heard themselves via 13 Clair CM22 and 20 Clair CM14 wedges, bolstered by eight CO-10s for side fills, with two grounded and two flown on each side of the stage. Meanwhile, Lambert, bassist Neil Fairclough and percussionist Tyler Warren heard themselves via both



MIKE COPPOLA/STAFF/GETTY

Adam Lambert belted into a Shure Axient Digital mic nightly.



Monitor engineer Ben Rothstein mixed each night of Queen + Adam Lambert’s sold-out U.S. tour on a DiGiCo SD5.

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## Live Sound Showcase

(continued from page 38)

Shure PSM 1000 IEM systems and wedges, though Taylor also used a single in-ear monitor for one song nightly.

Monitor mixing duties were handled on more SD5 consoles, with Niall Slevin looking after Lambert's IEM mix and Ben Rothstein covering everyone else. Opting to use only onboard effects, Rothstein aimed to keep everything as balanced and authentic as possible: "I want the drums to come back to them sounding like how the actual drums sound acoustically. I'm making sure the guitar coming out of the wedges sounds as much like the guitar coming out of the amps as possible."

Rothstein took over the monitor position in September 2018, so things were in good order by the time the summer tour rolled around. "I think now we're in a place where they are happy with those sounds—now I try to tailor the mixes to fill in the gaps, as it were," he said. "Being on wedges, they get a lot of stage sound directly from guitar amps and

the drum kit, so I make sure that the closer you are to the drum kit, the less drums there are in the wedges. Likewise, Brian has a pair of wedges in front of him when he's standing in front of his amps, and there's no guitar in the wedges whatsoever. I'm trying to keep it so that the sound on stage is consistent as you walk across it."

Queen + Adam Lambert has toured regularly in recent years, but

aware of what to do in what song. It brings the American audience up to par with the way some of the European or other international audiences are, and the audience reaction is definitely more enthusiastic here now."

That energy, in turn, creates the one musical effect you can't get out of a console or plug-in: an excited band. "I see how they react from show to show. They feed off the crowd," said New. "It definitely

"It definitely pumps them up when the crowd are going for it like they were last night here at Madison Square Garden. It makes everybody's lives easier—they enjoy it more; we enjoy it more."

Tom New

there's no question that the recent film has kicked things up a notch when it comes to playing the United States. Rothstein observed, "The U.S. audience always knows the music, but they don't necessarily know how it works with some of the audience participation. Now, with how the concerts are portrayed in the movie, everyone's

pumps them up when the crowd are going for it like they were last night here at Madison Square Garden. It makes everybody's lives easier—they enjoy it more; we enjoy it more. It's not what we do it for, but it definitely helps!"

Clair Global

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

## Fender

(continued from page 36)

[using a Radial JDX], which is one we made years ago. Drums were picked up using the Yamaha EAD 10 [which is a kick trigger and X-Y mics that feed a digital drum brain], which also went direct to the Touch-Mix. Then, four vocal mics. Nothing was bleeding into anything else. The sound in the room was like being at a stadium show, only better because things were more intimate."

The gig was shot on video and Maffei captured a multitrack recording using only the TouchMix's preamps and built-in features on a USB stick for the production. "Phil and bass player Craig Martini went back to his house and imported all the tracks into Logic Pro to do the 'final' mix. After listening to it a bunch of times, they told me, 'We can't do anything to fix this because it's already perfect.' It's such a great compliment. Given the multi-Platinum albums Phil has played on, if he says something is perfect, I believe him."

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## Vampire Weekend

(continued from page 36)

fects units that have specific capabilities that the console can't do."

The set list changes nightly, so while Heal uses snapshots to recall fader positions and effects at the start of a song, it's all mixed on the fly across the typically 32-song, two-and-a-half-hour shows. "All the songs sound so much bigger and better performed as a seven-piece," Heal said. "It really is a great show to mix since there's an element of 'the weird' involved. The albums sound crazy at times—as they do when played live."

With that in mind, Heal mixes the songs pretty closely to the album versions. "That said, there definitely is a live feel—the song arrangements can differ and they are 'jamming out' a lot and segueing songs into one another.... It's just [a matter of] knowing the music very well, and accepting that weird happens sometimes on purpose, [and when it does, to] embrace that."

Critical to the band's sound is lead vocalist/band leader Ezra Koenig, whose singing sounds like literally no one else. His mic of choice: a Sennheiser e945. "I love the e945s on vocals," commented Heal. "I think they sound great. I have a pretty quiet singer and I can get so much gain before feedback without it behaving like an additional overhead."

Monitor engineer Matt Andrade joined the tour in May, taking over that position from Chris Moon, who had been with Vampire Weekend since 2006 and is still peripherally involved with the current tour.

"I took over Chris' Avid S6L show file," Andrade explained. "Since the band was already well into the beginning of a new album tour cycle, the goal was to make the transition between Chris and me as seamless as possible, so I'm currently mixing on an Avid S6L, integrated with Waves SoundGrid. Some of my favorite Waves plug-ins include the F6 Dynamic EQ, C6 Multiband Compressor, NLS Buss and Channel, PSE Primary Source Expander and the SSL E-Channel. I also like to use the Empirical Labs Arouser plug-in."

All seven band members use Shure PSM 1000 systems with JH Audio in-ear monitors; while two opt for Roxannes, the other five, including Koenig, and all the backline and audio techs use JH16v2s. As a result, the pair of L-Acoustics X15 floor wedges for the lead vocal and guitar at downstage center stay muted unless needed in an emergency.

They aren't the only L-Acoustics boxes on the tour, however, as

a massive K2 system hangs above the stage. For typical shows, the P.A. includes main left and right arrays of 18 K2 per side, along with 12 Karas a side for side hangs. Subs include 12 KS28s on the floor, with a half-dozen Karas and four Arcs IIs used for front fill and out fill. The subs typically go in evenly spaced pairs across the floor in front of the stage with a slight delay arc on them to spread their coverage out toward the sides. Since seat-

ing was in-the-round at the New York show, the system had to be appropriately bulked up, and 112 cabinets were hung for the occasion.

Mixing the big homecoming gig in a sold-out legendary venue was a treat for Heal, who has mixed the band for the last 11 years. "It's been a great journey seeing Vampire Weekend go from small clubs to now selling out Madison Square Garden with 360 degrees and headlining festivals

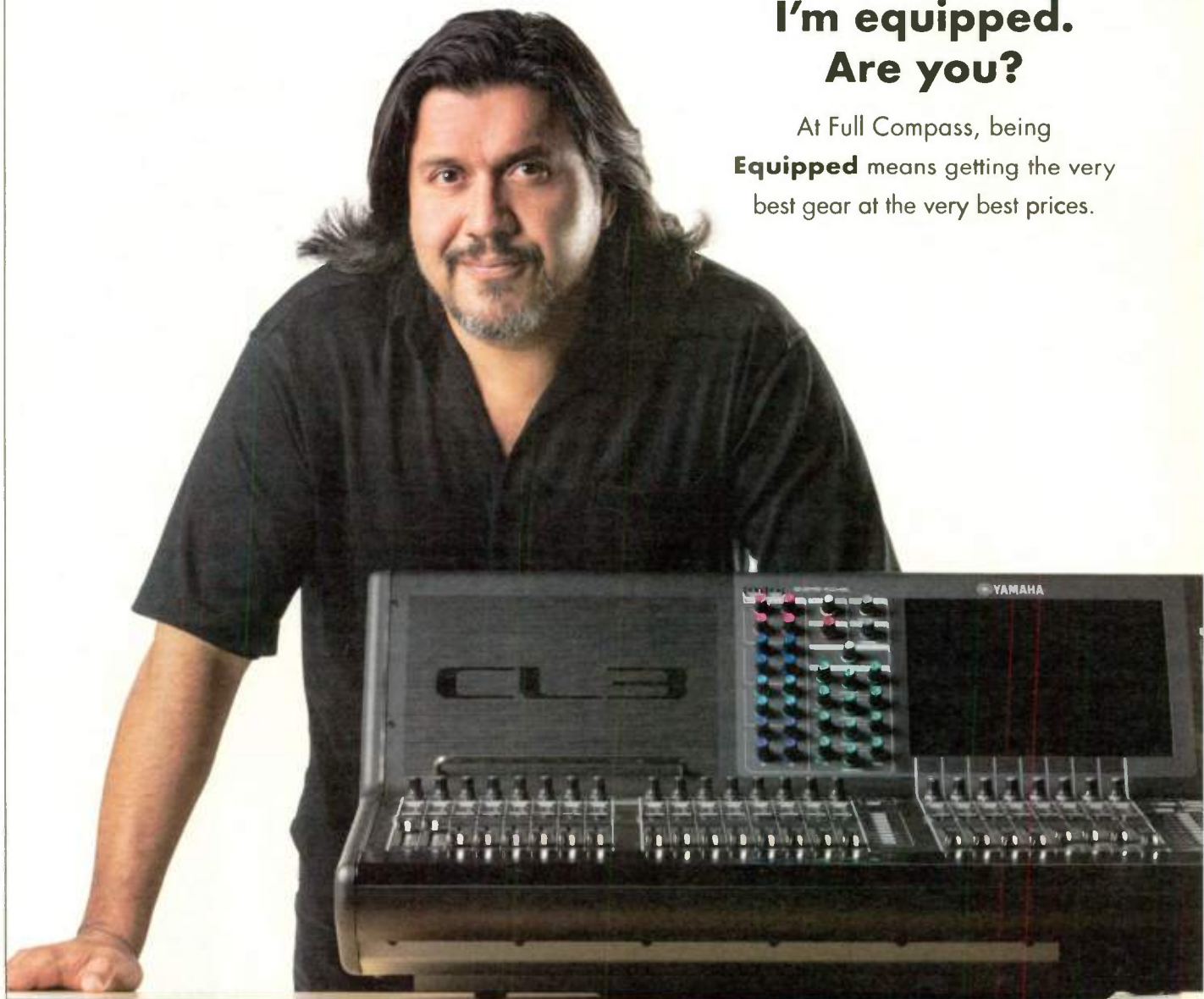
around the world," he mused. There was little time to revel in the moment, however; audio would be struck right after the show and the buses would head out for Montreal, the next date on the itinerary. Surveying the scene, he allowed, "It's been a hectic day."

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## Audio Logic Systems Takes Off to Tahoe

SAND HARBOR, NV—The annual Lake Tahoe Shakespeare Festival, held in Sand Harbor, Lake Tahoe-Nevada State Park, brings the Bard and a modern-day musical to the masses every summer, as well as weekly concerts. This year's selections included *The Taming of the Shrew* and *Million Dollar Quartet*. All of it is heard by sound systems provided by Audio Logic Systems (ALS) of Minneapolis, MN.

The resident designer for the festival is David Gotwald. He and sound supervisor Brian Chismar selected d&b for the event. "We went to John [Markiewicz, owner and CMO of Audio Logic Systems] because we were interested in an all-d&b system," recalled Gotwald. "Brian and I had specified a d&b rig for our sister venue, the Idaho Shakespeare Festival, two years ago, and we were thrilled with the response from the patrons as well as our artists, so we knew we couldn't go wrong with a d&b system for Tahoe.

"The transparency and linear response of the cabinets are a huge selling point for me as a designer. Since our venue is completely exposed to the elements, I wanted weather-resistant cabinets that could withstand the blistering sun and the constant exposure to sand dust," Gotwald added. "The fact that d&b offers this option was a plus for us. It was a pleasure designing this system with John and the result of our tuning process was



Audio Logic Systems outfitted the Lake Tahoe Shakespeare Festival with a d&b audiotechnik system this summer.

extremely successful. A constant complaint we heard before this install was about inconsistent coverage: 'Too loud up front and can't hear in the back.' With the new line arrays and the point source delay and fill cabinets, we have really solved this problem."

From a design perspective, the venue is a challenging asymmetrical space built on a sand dune peninsula. According to Markiewicz, "If you were to stand in the back seating position and line yourself up with the center of the stage, you would be sitting house left, third seat from the extreme side. The first row is three feet from the stage and the last row ends 150 feet to the rear of the dune, with 36 feet of elevation. An additional section of seats extends far to the side of the venue, adding to the asymmetrical issues of

coverage.... With many measurements, I was able to build an accurate Array-Calc file for the venue. Most difficult were the vertical heights and getting an absolute trim height estimated for the new array using the existing vertical truss towers."

The main P.A. consists of two left and right arrays of eight Y12s each. Because of the trim height limitations and the 36-foot rise in elevation, Markiewicz was unable to cover the entire depth of the seating area with this hang alone. To cover the rear seating area, he implemented a delay system from the lighting towers half-way back. "This was tricky because the seating is not symmetrical and the two towers are at different heights. To provide coverage for the first few rows and to bring the image forward

and down to the stage, we provided two Y10P loudspeakers mounted at the left and right proscenium location. The front fills are six 4S loudspeakers mounted to the stage lip, with low frequency handled by the B22-SUBs. Additionally, the four 4S downstage foldback speakers and two 8S can be implemented as monitors or effects speakers as needed. The Yamaha CL console feeds the d&b DS10 Dante bridge." To complete the audio system for the festival, ALS also supplies Audio-Technica mics and a pair of Yamaha R18-D input boxes.

While the design itself proved challenging, Markiewicz said that a significant installation difficulty was the sand. "Trenching in sand and running new conduit is difficult. Add to that working outdoors for weeks and squirrels eating everything you set down."

Bart Fasbender, sound designer on *Million Dollar Quartet*, was pleased with the results, noting, "I arrived at the venue after the system had already been installed and tuned to measurements. In walking around the house, and after consulting with John Markiewicz and David Gotwald, we made a few EQ and timing changes to taste, but generally we stayed pretty close to what the numbers and meters predicted we would need. That first session was mostly about getting the system aligned and neutral. After that was locked, I made tweaks to make the show sound how I wanted it. It was just a pleasure having that reliably blank canvas to work with. The seating area was just nuts in terms of there being no symmetry. John did an amazing job with David to cover all the idiosyncrasies of the house."

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# centerSTAGE TOP 10 TOURS OF THE MONTH

ACT / STATISTICS	CREW	EQUIPMENT
<b>1 PAUL MCCARTNEY   CLAIR GLOBAL</b>	Paul "Pab" Boothroyd (be); John "Grubby" Callis (me); Randy Weinholtz (se); Paul "Swanny" Swan (mse); Justin Robinson (RF tech); Sean Baca, Michael Conner, Andrew Kastrinelis, Chris Fulton, James Higgins, Tom Ford (techs)	<b>HC:</b> (2) Avid Venue S6L 32D; <b>MC:</b> (2) Midas Heritage 3000; Avid Venue S6L 24D; <b>HS:</b> Clair Cohesion CO-12, CP-218, P-2; <b>MS:</b> Clair SRM, ML-18, R-4 III; <b>IEM:</b> Shure PSM 600; <b>HA:</b> Lab.gruppen; <b>MA:</b> Crown; <b>MICS:</b> Shure Axient series with Beta 58A capsule, SM91, Beta 98, KSM32, Beta 58A; Radial J48, PZDI, SW4, ProD8, JR2; Audix D6, I5, D4; Telefunken M80; Rode NT3; DPA; Avalon U5; <b>FOH EQUIPMENT:</b> dbx 160SL; TC Electronic 6000; <b>PLUG-INS:</b> Sonnox Oxford EQ, Avid Pro compressor, Smack!, ReVibe II, ReVibe I, Mod Delay III; <b>MONITOR EQUIPMENT:</b> XTA GQ600b; Drawmer DS201; Yamaha SPX990
<b>2 THE ROLLING STONES   CLAIR GLOBAL</b>	Dave Natale (be); Steve Carter (me); Taylor Holden (mse); Tyson Clark (cc); Jo Ravitch, Jim Ragus (se); Thomas Huntington (rec tech); Matt Woolley, Brent Edgerton, Dave Enderle, Falko Knueppel, Jon Brook, Trystan Forbes (tech)	<b>HC:</b> Yamaha PM4000; Avid Venue Profile; <b>MC:</b> Midas XL-4000; Avid Venue Profile; <b>HS:</b> Clair i-5, i-5b, P-2; <b>MS:</b> Clair 12AM, R-4, i-5b; <b>IEM:</b> Shure PSM 1000; <b>HA:</b> Crown Macro-Tech; <b>MA:</b> Lab.gruppen; <b>WIRELESS MICS:</b> Shure UR Series; <b>FOH EQUIPMENT:</b> Aphex 612, dbx 903, AlignArray software, iO loudspeaker processors; <b>MONITOR EQUIPMENT:</b> TC Electronic 1128; dbx 160A; SPL Transient Designer 4; <b>OTHER:</b> Radial JX44, JR5, KL-8, Voco Loco
<b>3 DEAD &amp; COMPANY   ULTRASOUND</b>	Derek Featherstone (be); Lonnie Quinn, Ian Dubois (me); Ethan Chase (mse); Michal Kacunel (cc/foh se); Ross Harris (rec e); Conner Riley, Sam Brodsky (techs)	<b>HC:</b> Gamble EX56; Avid S6L (96 Ch. drums) with Pro Tools Ultimate; <b>MC:</b> Avid Venue D-Show (96 Ch.), Venue Profile (96 Ch.); <b>HS:</b> (36) Meyer Sound Leo, (22) 1100-LFC, (16) 700-HP, (36) Lyon, (8) Mica; <b>MS:</b> Meyer Sound MJF-212, MJF-210, 1100-LFC, JM1-P; <b>IEM:</b> Sensaphonics; JH Audio; Future Sonics; <b>HARDWIRED MICS:</b> Sennheiser 935, 421, 409, 904, 945; Shure KSM144, Beta91, SM57; Neumann KMS104; AKG 460; Telefunken M-80; Radial JD7, SGI, DM1; <b>FOH EQUIPMENT:</b> Analog: Summit DCL-200, TLA-100; Empirical Labs Distressor; TC Electronic M5000, D-Two; Aphex 622 gates; UltraSound DRSE Quad Panners; MOTU 838 mk3; TubeTech LCA-2B; UA 1176 LN; <b>PLUG-INS:</b> McDSP 6050 ultimate comp, AE600 EQ; <b>MONITOR EQUIPMENT:</b> Sennheiser EW300G3; Eventide Octovox plug-in
<b>4 ARIANA GRANDE   CLAIR GLOBAL</b>	Toby Francis (be); Erik Rodstol (me); Dean Mizzi (cc/se); Cory Harris (ae); James Ellison, Katy Hughes, Benjamin Scanlon, Andrew Black (tech); Jason Zito (pm)	<b>HC:</b> Yamaha Rivage PM7; RND Neve 5060 buss mixer; <b>MC:</b> DiGiCo SD7; <b>HS:</b> Clair CO-12, CO-10, CP-218 Subs; <b>MS:</b> Clair CM14; <b>IEM:</b> Sennheiser EM 2050; <b>HA:</b> Lab.gruppen; <b>MA:</b> Lab.gruppen; <b>HARDWIRED MICS:</b> Shure; Sennheiser; Radial JDI, SW8; <b>WIRELESS MICS:</b> Sennheiser 5000/5235 series; Shure Axient Digital, ULX-D; <b>FOH EQUIPMENT:</b> Tube Tech SMB 2B; Crane Song STC8; Smart Research C-2; RND Shelford Channel; API 2500; RND Portico II MBC
<b>5 JOHN MAYER   CLAIR GLOBAL</b>	Chad Franscoviak (he); Monty Carlo (me—Mayer); Rob Smuder (me—band); Jeff Hargrove (se); Jamie Nelson (mse); James Higgins, Jesse Cole, Gracie Fischely (techs)	<b>HC:</b> Avid S6L 32D; <b>MC:</b> DiGiCo SD5; Avid S6L 32D; <b>HS:</b> Clair Cohesion CO-12, CP-218; <b>MS:</b> Clair CM-22, Cohesion CP-118; <b>IEM:</b> Shure PSM 1000; <b>HA:</b> Lab.gruppen; <b>MA:</b> Lab.gruppen; <b>WIRELESS MICS:</b> Shure UR Series; <b>OTHER:</b> Radial JD7, SGI, J48, JDI, SW8, Hotshot DM1, Hotshot Abo
<b>6 HUGH JACKMAN   SOLOTECH/SSE HIRE</b>	Simon Sayer (he); Seamus Fenton (me); Alexandre Bibeau (cc/se); Ike Zimbel (rf); David Courtney (ae); Mark Cleator, Chris Courtney (techs); Phil Hornung (ats)	<b>HC:</b> DiGiCo SD7; <b>MC:</b> DiGiCo SD7; <b>HS:</b> L-Acoustics K2, Kara, X8, 5XT, KS28; <b>IEM:</b> Shure PSM 1000, Sennheiser EM6000; <b>HA:</b> L-Acoustics LA12X
<b>7 NEW KIDS ON THE BLOCK   EIGHTH DAY SOUND</b>	Kevin Elson (he); Chris Miller (me); Kyle Walsh (se); Mark Phillips (ae); Joey Armada (tech)	<b>HC:</b> DiGiCo SD12; <b>MC:</b> DiGiCo SD10; <b>HS:</b> Adamson E15; E12; E119; S10; <b>MS:</b> d&b audiotechnik; <b>IEM:</b> Sennheiser; <b>HA:</b> Lab.gruppen; <b>MA:</b> d&b audiotechnik; <b>HARDWIRED MICS:</b> Shure; Radial; <b>WIRELESS MICS:</b> Sennheiser Digital 6000; <b>FOH EQUIPMENT:</b> Universal Audio UAD Live Rack; <b>MONITOR EQUIPMENT:</b> Neve 5045
<b>8 JENNIFER LOPEZ   EIGHTH DAY SOUND</b>	Stephen Curtin (be); Chris Lee (me); Arno Voortman (se); Dustyn Lewis (ae); Andy Dudash, Howard Chan (tech)	<b>HC:</b> DiGiCo SD7; <b>MC:</b> DiGiCo SD7; <b>HS:</b> d&b audiotechnik J Series; <b>MS:</b> d&b audiotechnik M2, J8, B22; <b>IEM:</b> Shure PSM 1000; <b>HA:</b> d&b audiotechnik; <b>MA:</b> d&b audiotechnik; <b>HARDWIRED MICS:</b> Shure, Heil; AKG; <b>WIRELESS MICS:</b> Shure Axient Digital; <b>FOH EQUIPMENT:</b> Universal Audio Live; Sonic Lab Creamliner
<b>9 SHAWN MENDES   CLAIR GLOBAL</b>	Tom Wood (he); Michael Flaherty (me); Jeff Wuertch (cc/se); Adam Field (m/rf tech); Sarah Blakey, Edward Peers (PA techs)	<b>HC:</b> Avid Venue S6L; <b>MC:</b> Solid State Logic L500; <b>HS:</b> Clair Cohesion CO-12, CO-10; <b>IEM:</b> JH Audio Roxanne; Shure PSM 1000; <b>HA:</b> Lab.gruppen PLM 20000Q; <b>HARDWIRED MICS:</b> Shure Beta91A, Beta52, KSM32; Beyerdynamic M 201 TG; Neumann KM 184; Sennheiser e945; AKG C414; <b>WIRELESS MICS:</b> Sennheiser Digital 6000 with MMD 945; <b>FOH EQUIPMENT:</b> SSL Fusion; Waves SoundGrid; Waves Plug-Ins; Sonnox Plug-Ins; Avalon VT-737SP; Bricasti M7; Neumann KH 310 Monitors; <b>OTHER:</b> Radial Tonebone AC Driver, Tonebone PZ Pre, SGI, JX44, SGI44, SW8, Backtrack, Hotshot Abo
<b>10 CARRIE UNDERWOOD   CLAIR GLOBAL</b>	Tim Holder (he); Travis White (me); Dave Shatto (cc/se); Rich Burke (stage e); Jen Smola, Jeff Stearns, Thomas Birkhead (tech)	<b>HC:</b> Yamaha Rivage PM7; <b>MC:</b> Yamaha Rivage PM10; <b>HS:</b> Clair Cohesion CO-12, CO-10, CP-6, CP-218, CP-118 subs; <b>MS:</b> Clair Cohesion CM-22, CP-118 Sub; <b>IEM:</b> Shure PSM 1000; <b>HA:</b> Lab.gruppen; <b>MA:</b> Lab.gruppen; <b>HARDWIRED MICS:</b> Shure SM57, SM58, Beta 52A, SM48, Beta 91A, VP88, 520D, PGA81, Beta 98AMP, KSM137; Sennheiser MKH 416; Beyerdynamic MC 930; DPA MMC 2100, d:vote Core 4099, FA4018VL; Stager SR-2N; Earthworks KP1, DP25/C; sE Electronics V7; Radial JX44, JR5, SGI; Rupert Neve DI; <b>WIRELESS MICS:</b> Shure Axient Digital; <b>FOH EQUIPMENT:</b> Empirical Labs ELQ Lil FrEQ; API 2500; Lexicon PCM91; tc electronic M6000 mkII; Universal Audio LA-2A; Crane Song HEDD-192; Urei 1176LN; <b>MONITOR EQUIPMENT:</b> Eventide Eclipse; Bricasti M7

**LEGEND:** (he) house engineer. (ah) 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.

# Leading AES into the Future

COLLEEN HARPER, EXECUTIVE DIRECTOR,  
AUDIO ENGINEERING SOCIETY

BY CLIVE YOUNG

Running an organization like the Audio Engineering Society is no simple matter. Founded in 1948, AES has long spearheaded the advancement of professional audio, and today, the nonprofit organization has thousands of members, and more than 90 professional and 120 student sections around the world. In recent years, AES has made great strides in developing its online e-library repository of more than 17,000 technical papers and research findings, retrenching its annual convention, creating new opportunities to provide audio education at events like the Winter NAMM Show, and more. With the goal of even greater innovation, the organization named Colleen Harper as its executive director in January 2019.



Colleen Harper, executive director, Audio Engineering Society

While many previous AES executive directors have come from within the pro audio industry, Harper has spent her career, fittingly, in the world of nonprofit associations. She became a Certified Association Executive in 2012 and worked at organizations focused on finance, healthcare and engineering. “I spent most of my time in membership,” she recalls, “working directly with members and volunteers on increasing the value of their organizations, making sure both the membership and the community that the organization served felt appreciated and connected. At my most recent organization before joining AES, I started out in membership and marketing and was then promoted to chief operating officer. I also served as interim CEO for eight months.” It was that experience that Harper credits with giving her the real-world business operations and nonprofit governance experience that an association executive needs.

As an organization, AES is both lean and massive at the same time—it employs a mere six full-time staff members (five in New York and one in Nashville) and a number of long-term contractors around the world, but much of the society’s work is done by its membership. Notes Harper, “AES is a volunteer organization that couldn’t exist without the numerous members around the world who are committed to our mission and work on a daily basis to further the goals of AES.”

Insight from those members has always helped inform the society’s efforts. “With the leading minds in professional audio among its membership, AES is helping to spearhead and establish the next generation of best practices and workflows, and the refinement and implementation of

innovations defining the evolution of the audio arts and sciences across the varied landscape of professional audio specialties,” Harper points out.

That said, pro audio and AES are both evolving for reasons beyond just technology these days. “In addition to creating market-driven standards, it’s also our job now to continue expanding our role in providing value to a more diverse and inclusive community, while keeping up with trends, the global economy, and other laws and regulations that could impact the way that businesses operate,” says Harper. “AES is an amazing resource for everyone in professional audio, no matter your race, gender, ethnicity, level of education, geographic location, music genre of focus, et cetera. It is my job and my teams’ responsibility that everyone sees the value that the society brings to the industry and genuinely believes that AES is a valued resource and their professional home.”

Modern audio tools are more broadly defined and accessible than ever before, and AES is making moves to embrace both those changes and the pros who work in those areas. That’s nothing new, however; as the only professional society devoted exclusively to audio technology, the Audio Engineering Society has always been comfortable at the cutting edge of technology.

“Most of the significant audio industry technology milestones over several decades were either spearheaded by a leading member of AES or were introduced at an AES convention,” notes Harper. “From advancements in phonograph, tape recording, sound reinforcement and audio reproduction technologies to the introduction of groundbreaking technologies like the compact disc

and MP3 audio to the introduction of essential audio distribution and interface standards up through AES67 (Audio over IP), AES has led the industry forward.”

The best way to honor AES’ storied history, then, is to keep innovating—to not merely react to the changing times, but to foster that change, says Harper. “We need to continue to take advantage of the integration of different learning styles and platforms, be more inclusive and welcoming to everyone in the community, and better engage members throughout the year so the value of membership is never questioned. Our members are our greatest resource and we need to continue to capitalize on their industry leadership and make their knowledge and experience accessible to the industry at large.”

Audio pros around the world can look forward to benefitting more from their AES membership. Harper reports, “Close communication with our sections helps provide a clear view of the industry in terms of market trends and production trends that inform our understanding of the needs of our membership and our industry. However, more can certainly be done to serve the global community by having more local/grassroots events in locations all over the world on a regular basis. Such activities are an important component of our long-term strategic business plan, and in the coming months, I look forward to announcing new and exciting initiatives that will resonate with the pro audio community.”

Definitions of what constitutes “pro audio” technology have changed in recent times, and AES is moving to better reflect and incorporate those changes, too. That’s readily appar-

ent with some of the new offerings at this month’s AES Convention in New York City, Oct. 16-19. “We are listening to our membership, our exhibitors and our sponsors,” says Harper, “and welcoming with open arms those working in music genres that historically have not had a big presence at the AES conventions—or in AES in general—as well as those who make music in untraditional but more and more prevalent ways. We believe there is a big opportunity for us to be more inclusive of other genres of music. For example, for the first time this year, our New York convention will feature an Electronic Dance Music Academy in the exhibit hall.”

Other changes will be afoot at the convention, too: “Focusing on the general concept of diversity and inclusion will be impactful for an organization like AES. While there’s some perception of AES activities historically being a bit narrowly participatory, AES has a rich tradition of encouraging female participation in its governance and, over the past five years, has made tremendous strides in actively expanding its inclusiveness. The society is committed to aggressively working to further expand its outreach.”

For Harper, getting to know the Audio Engineering Society and lead it into the future has been a welcome and rewarding challenge. “AES was—and is—unlike any organization I have ever worked for. The pro audio community is a one-of-a-kind, close-knit community and I’m honored to work with the extraordinary people in our industry every day.”

Audio Engineering Society  
www.aes.com



Michael Kurcab

d&b audiotechnik has appointed **Michael Kurcab** as a business development manager in the United States and promoted **Matt Collins** to regional sales manager for the Northwest. Kurcab comes to d&b after having owned and operated Equilibrium Audio since 1999. He has worked as a sound engineer, regional director in design consulting, and global marketing manager, and has led global teams as a business development manager. He has a bachelor's degree in audio engineering and acoustics from Columbia College Chicago and is based in Las Vegas. Collins, meanwhile, based in Seattle, initially joined d&b in 2017, providing education and application support for the Northwest. He has worked closely with the sales team over the past two years.



Matt Collins

Almo Corp. has named **Gary Bennett** as its chief financial officer. Bennett will succeed Matt Elkes, who is retiring after having served as CFO at Almo Corp. for 25 years. Bennett joined Almo in January 2019 as senior vice president of finance. Previously, he led finance and accounting operations as CFO at Prometheus Global Media. Bennett has served in senior financial management positions for several other companies and is now based out of Almo's Philadelphia, PA, corporate headquarters.



Gary Bennett

LEA Professional has promoted charter team member **Brian Pickowitz** from senior director of sales and marketing to vice president of marketing. Pickowitz received a bachelor's degree in electrical engineering from Southern Illinois University and joined Crown International in 2004. In 2015, he was selected to lead Harman Professional groupwide sales for tour sound in North America and Latin America. He was promoted to



Brian Pickowitz

director of global business development, touring and performing arts for Harman Professional in 2018 and joined LEA Professional's executive team in late 2018.



Dave Cerra

Shure has promoted three associates to vice president positions. In the product development division, **Dave Cerra** has been named vice president of conferencing and **Tom Kundmann** has been named vice president of professional wireless products. In the global marketing and sales division, **Erik Vaveris** has been named vice president of global marketing.



Tom Kundmann



Erik Vaveris

Cerra joined Shure as an audio engineer in 1995. In the years since, he invented Shure's patented Audio Reference Companding (ARC) and led development of PSM 900, PSM 1000, Microflex Wireless, and Microflex Advance. Kundmann joined Shure in 2009 and has worked in the development of RF, digital and DSP subsystems from architectures to final product testing, leading numerous digital wireless initiatives at Shure, including the development of PGX-D, ULX-D, GLX-D, QLX-D and Axient Digital.

Vaveris joined Shure in 2001 and has held several positions in GMS, including product specialist, research analyst, portfolio manager for entertainment products, and wireless category manager. In 2014, he was named director of strategic planning, and he was appointed associate vice president of global marketing in 2016.



TJ Adams

QSC has promoted **TJ Adams** to vice president, systems product strategy and development. In the new role, Adams will continue to oversee strategy development and execution of product development for its systems portfolio, including the Q-SYS ecosystem. Adams joined QSC six years ago.

## 60SECONDS



## RICH ZABEL

Riedel

**Q:** What is your new position, and what does it entail?

**A:** As Riedel's vice president of sales for North America, I will be focusing on aligning our sales efforts and helping the sales staff to maximize their opportunities and close business. We have had tremendous, unprecedented growth over the last three years, and I see exciting potential going forward, with double-digit growth for the foreseeable future. Building our team with the right sales professionals remains a top priority.

**Q:** How has your background prepared you for your new role?

**A:** I have spent my entire career in the broadcast and media space, working for a variety of companies that went through significant growth, both organically and through M&A. Working with these companies, some with different ownership models, has helped me understand what really works to drive business through growth. Explosive growth like the kind Riedel is experiencing is exciting to manage. Working with companies that range from nimble and entrepreneurial to global and process-driven has armed me with the necessary experience to guide this team toward achieving the goals we have set for ourselves.

**Q:** What new marketing initiatives are we likely to see from the company?

**A:** We have enjoyed tremendous success with the Artist intercom ecosystem, and we will continue to drive Artist products while pivoting off the amazing successes that we've had with our Bolero wireless intercom system. This puts us in an ideal position to take our sales teams to the next level. One of our best-kept secrets is MediorNet, our distributed signal transport, processing and routing platform, and we expect to flood the market with messaging about that in the upcoming months. Channel strategy is the next growth opportunity in the United States. We are currently interviewing for a channel manager, with plans to introduce a world-class channel program later this year that will be a game-changer for our sales partners.

**Q:** What are your short- and long-term goals?

**A:** For the short term, we are working to expand and build cohesion within the sales team while maintaining the growth trajectory that we are currently enjoying. For the long term, we seek to expand market penetration in the verticals outside of traditional broadcast including entertainment, houses of worship, theme parks, the cruise industry, corporate deployments and others to help us meet our stretch goals.

**Q:** What is the greatest challenge you face?

**A:** Broadcasting is in the midst of a massive transformation as more and more clients head toward IP-based infrastructures. As such, there's a lot of confusion out there right now! We have the trust of many customers, but reaching clients who are unsure of the technology roadmap or what their next steps should be is a top priority. We are confident in our ability to guide our customers through the decision-making process and help them achieve their goals. Bringing in the best sales talent is an exciting and huge challenge. We want to build a professional sales force that can meet our internal expectations and become the trusted advisers their customers need during this technology transformation.

He aims to push the Q-SYS vision through further software/cloud-based innovation while expanding its platform through complementary technology and IT industry partnerships.



Jonathan "JP" Pusey

Neutrik USA has appointed **Jonathan "JP" Pusey** to the newly created position of national sales manager—music industry. He started with Neutrik USA in June and will be stationed in Long Beach, CA. Most recently, he spent 13 years at Hosa Technology, working his way up to director of sales.



Amy Hacker

Atlona has appointed **Amy Hacker** as regional sales manager for the Great Lakes region. Reporting to CEO Ilya Khayn, Hacker will focus on driving commercial AV business in Indiana, Kentucky, Michigan, Ohio, West Virginia and western Pennsylvania. Hacker joins Atlona from its parent company, Panduit; in her most recent position as commercial strategy and enablement manager, she worked closely with the Atlona team to lead sales integration efforts, strategy planning, and business development goals between the two brands.

# Good People

BY PETER JANIS

When Mike Hill applied for a job as Radial's purchaser, I realized that this guy was special, so I asked him to take on the role of general manager instead. He thought about it and replied, "I will do it under one condition: I get to hire the people." I laughed, said no problem and then asked why. He said, "Good people manage themselves. If I do my job right, you don't need me!"

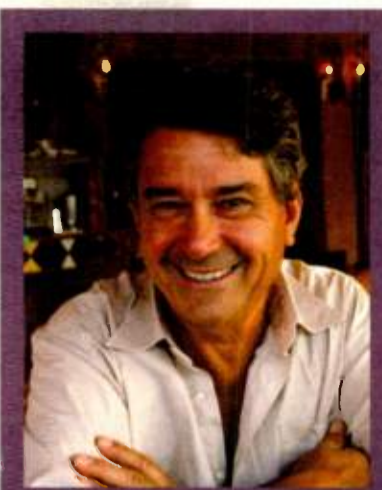
Mike was my right-hand man for 20 years and enabled me the freedom to do my job as he took care of the people. Today, the company runs well, with virtually all of the staff that were there when both Mike and I retired.

Some of the most difficult hires were when we had to find people who would work closely with me. I was essentially overseeing product development, artist relations, R&D, marketing and sales. I, like anyone in my position, wanted the person who was following in my footsteps to do exactly that. As they say, if you don't know your history, you are doomed to repeat it! I would often start by telling new hires, "You know nothing!" In other words, learn, ask a bunch of questions and then make informed decisions before you make a move. Smart people ask questions!

I recall hiring Roc Bubel, Radial's sales manager. Roc worked alongside me in the 1980s at TMI (Fender Canada); when TMI folded and Fender went direct, Roc took on the

role of Canadian sales manager. After his long stint at Fender, I asked him if he would like to work for Radial. I know he initially felt that I was micromanaging. When I look back, my biggest concern was that Roc had only worked in Canada, while Radial was worldwide; he had no global sales experience and had never dealt with international distributors. This may have been cause for his impression. Conversely, I told Roc early on that he could hire or fire anyone he wanted. He surprised me when, after his first year, he hadn't changed a single individual. I gave him total control of his department because I trusted his instincts. Instead of changing out staff, he nurtured them and built what is today a superb sales team.

Marketing is akin to a chef flavoring a dish. You can cook chicken a thousand different ways, but in the end, you are responsible for making sure it tastes good when it hits the table. When I go to a Mexican restaurant and the chef is from someplace



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 to build their companies and prepare them for eventual sale.

that's not Mexico, I get nervous. I've got firsthand experience and it has not been positive.

People are your most important asset. More to the point, good people are. Train them, and then give them the room to do their job. If people are afraid of making mistakes, they will never excel. I always invited input and suggestions and would try various ideas to see if they would result in positive outcomes. The hard part, of course, is knocking the wind out of a new staff member by telling them that we already tried that idea and it tanked. Once they have been denied,

they become reluctant to make more suggestions.

At one point, I decided to hire a consultant to help us take Radial to the next level. This guy had worked for a \$100 million firm, and at one-tenth the size, I felt we could learn from him. I initially got a lot of pushback from management as they felt he was infringing on their turf. During his term, he brought some great suggestions to the table and helped me form some ideas that eventually increased the value of the company. One suggestion was to have weekly manager meetings. When I pushed Mike Hill, our GM, to do this, he agreed, under one condition: that Peter Janis was not invited to attend. For a control freak, this is near suicide. Mike felt that if I were in attendance, I would hijack the meeting with my agendas and limit the managers' interaction. I agreed—I had to trust. Initially, because I was left out, I felt a certain degree of inner resentment, but in the end, this was the best move I could have made. The managers worked together to find solutions and they grew more confident with their positions. This proved to me, to the staff and to the new owners that Radial had a strong team that could run a company without me. This also gave me the freedom to travel around the globe and focus on the creative side of the business.

The story here is simple: Hire good people and then give them the space to thrive!

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## SOTI: Sound Reinforcement

(continued from page 1)

timent Index, reported monthly by the University of Michigan, wobbled a bit, reading 98.4 in July, only to drop to a three-year low of 89.8 in August, then rebound slightly to 92 in September—a considerable drop from the 100.1 reached a year earlier. Analyzing the changes, Richard Curtin, chief economist of the survey, noted, “While a recession is not anticipated in the year ahead, neither is a resurgence in personal consumption.”

Whether that sentiment will be reflected by a drop in concert grosses when year-end tallies come out remains to be seen, but before the summer even started, there were signs that the U.S. concert industry will likely have a stellar 2019.

Pollstar reported in July that at the mid-year point, the top 100 North American tours had grossed a combined \$1.547 billion, up a staggering 14 percent over the same period in 2018. Some of those increased earnings were due to a rise in the average price of a concert ticket, which broke the three-digit barrier for the first time, hitting \$100.64. Undeterred by that statistic, however, audiences bought 18.8 million tickets, sending concert attendance up 6.4 percent.

“It’s been a great summer, and that’s rolling right into a great fall, too,” said Jack Boessneck, executive vice president of Eighth Day Sound

(Highland Heights, OH), which provided audio for The Who, Jennifer Lopez, New Kids on the Block and other acts throughout shed season. “Everybody’s working. I can tell because I keep getting calls from other sound companies asking if we have gear available—and I don’t, because I’m calling other sound companies asking if they have gear available. We’re all busy.”

If live sound vendors can’t find gear, they can always bite the bullet and acquire more; they won’t be alone on that score. Both the mixing console and microphone markets are expected to grow considerably in the coming years, and live sound will be part of that expansion. The professional console market as a whole—not just live sound—had global revenues of \$775 million last year and is on track to reach nearly \$1 billion annually by 2023, according to AV market research firm Futuresource Consulting. “Many manufacturers are finding opportunity in targeting the installation verticals and some key hotspots in the market such as corporate and hospitality event spaces and venues,” noted analyst James Kirby.

Kirby likewise sees the microphone market getting a boost from the live marketplace: “With earnings from record sales declining each year, musicians are increasingly dependent on concerts and tours to generate income. The resulting growth in live performances is keeping the market buoyant. We’re also hearing reports from multiple regions that there’s a spike in construction and upgrade

work to theaters, which is also playing its part in driving growth. On top of this, technology advancements in miniature capsule microphones continues to add to market success in some of these verticals.”

AVIXA, the trade association for pro audiovisual and information communications industries formerly known as InfoComm, released research on the live sound marketplace in recent months, and its predictions, too, are intriguing. According to the organization, live events—defined as touring and corporate events held in temporary facilities—are expected to continue a trend of strong global growth, with revenues from live event solutions growing with a CAGR of 5.2 percent, from \$26.7 billion in 2019 to \$33.7 billion in 2024. The Americas are expected to lead the way, with nearly 36 percent of the revenues through the forecast period.

Part of that explosive expansion is due to venues themselves, whether clubs and theaters or stadiums and arenas, as many are revamping in order to get their house audio systems up to date. It’s an investment that pays off, however: AVIXA reports that in sports facilities, audio quality is the second most important factor to end users (audiences) in determining overall satisfaction. Perhaps unsurprisingly, when it comes to performances, it’s number one.

With trade organizations and manufacturers expecting continued strong performance in the U.S. sound reinforcement market, the coming years look bright for sound reinforcement.

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## SOTI: Recording

(continued from page 1)

from the nation's capital, later relocating to a bigger place. He helped put D.C. hardcore on the map, recording bands such as Minor Threat and Fugazi, and while we may not see the likes of such a music movement again, he's still busy, working with talent from the region and on the occasional corporate project.

Zientara is old school, working on a vintage Amek Angela analog desk and, frequently, an Otari MTR-90 tape machine, as well as Pro Tools. "Most of the rock bands that I record want to go to tape first for the drums and the bass; they find that it's far more powerful. Then we dump it into the computer and it keeps that power," he says.

If there is any threat to his livelihood, says Zientara, it's from people with limited recording experience spending money on gear for the home instead of booking time in a commercial studio. "Retailers are out to sell equipment, and we're left high and dry," he says. "It's a story that's been told many, many times, but it keeps repeating."

Happily, enough customers understand that a dedicated space and a recording engineer's expertise have value. "Picking out the equipment, matching this microphone to that particular voice? That takes an engineer. Over time, they realize that getting good audio has value," Zientara believes.

A 1980s UK record industry campaign claimed home taping was killing music. Could home recording pose a similar threat? "Yes, you can put up some marginal stuff on Bandcamp or wherever," says Zientara, "and it's a democratic internet and

all that, but is that really where we're going? Do we want a lot of stuff out there that's just marginal?"

Pleasantry Lane Studio in Dallas, TX, was started 20 years ago by Salim Nourallah, a recording artist, engineer and producer who has enjoyed some success working with Old 97's, Rhett Miller and The Damnells. That success, along with being voted best producer by the *Dallas Observer* for eight consecutive years, allows him to pick and choose his clients.

"I only record people that I like or whose music I'm interested in," he says, a decision based on his own early, unsatisfactory recording experiences, where the studio staff were just not engaged. "Maybe [it was] because they have to record every

says. Suffolk is now finishing up a vocal/amp booth and a drum room that would make Glyn Johns proud. "I'm a big fan of '70s drums in a fairly dead room," says Nourallah, an avowed Anglophile.

When his band signed its first indie deal in the '90s, says Nourallah, only major-label artists had their own facilities. Since then, the price of pro audio gear has fallen, democratizing the music recording business. "It's incredible that guys like me can now have a facility like this. I feel like Tom Petty. How do I have a studio like this when I didn't sell a bazillion records?"

Alex Santilli opened his John Storky-designed Spice House Sound in Philadelphia's Fishtown neighbor-

hood just need to keep at it until you find something that clicks."

A partnership with Y-Not Radio means that Santilli also gets to record and shoot video of live performances by touring bands from Australia and the UK, such as The Wombats, he says. Indeed, video and photo shoots for advertising have provided an unforeseen revenue stream. "It's strange how many people have used the studio as a filming location. I wasn't expecting that. I don't know how these people find out about us, but we're happy about it." Clients have included VH1, Discovery Channel, NFL and Coors Light.

Santilli is something of a gear whisperer, constantly improving Spice House's vintage equipment, such as the facility's Auditronics mixing desk, but clients don't appreciate everything he does. "I spent months rebuilding a tape machine and made it the most perfectly measuring machine, and then no one ever used it," he says.

He reports that between the console and the speakers, the level of distortion in the studio is almost impossible to measure. "We try to keep everything big and clean and clear sounding, so when you run it through an 1176 or a Distressor, you can [mess] it all up exactly the way you want."

The speakers he references are his own design, 10 years in the making. "We built the room around a set of speakers, and then I rebuilt the set of speakers around the room," he says. "The challenge is having super low distortion but also super high volume handling for clients who listen back at jet engine levels. I didn't realize people wanted to do that."

The current iteration generates about 700W of continuous power, he says. "If you can handle 140 dB, they'll do it—but please don't."

"It's incredible that guys like me can now have a facility like this. I feel like Tom Petty. How do I have a studio like this when I didn't sell a bazillion records?"

Salim Nourallah

single person who comes in the door, whether they like their music or not," he says. "So I don't advertise. People just find me."

About three years ago, Nourallah partnered with Sarah Henry at Palo Santo Records to reissue underappreciated catalog projects on vinyl. The label also releases music by new, mainly local artists. "Texas has so much great music and I don't feel like it's being properly represented to the rest of the country or the world," he says.

Nourallah had Dallas-based, UK-born studio designer Bob Suffolk build out the current version of his studio. "That was 12 years ago, when I had major-label money," he

hood five years ago. The studio has never advertised and was open almost before he realized it. "We had people ask us if they could come in, so the ball just started rolling. I didn't even feel like we were ready to open yet."

Business has been great, he says: "Every year has been the best year so far. We really can't complain—but we'll see what happens in two years when we open!"

Spice House attracts business from around the city and the region, such as Japanese Breakfast, Michelle Zauner's latest project, which is generating a lot of buzz. "She was in Little Big League, a band I used to do mastering work for. It shows that you

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# Jean Genie

BY JACQUES SONYIEUX

Former guitarist of the Black Belles and longtime Jack White protégé Olivia Jean anchored her musical tastes around American surf and garage rock at an early age, and some of those influences can be spotted on her sophomore solo album, *Night Owl*, released last month. Recorded primarily at Third Man Studios in Nashville, the collection sports wicked guitar work, melodious hooks and well-considered lyrics, as well as distant echoes of The Cramps, Dick Dale and the earlier work of The B-52s. *Pro Sound News* spoke with Jean about being a perfectionist in the studio and what it was like to sit in the producer's chair for the first time.

## ON HER SOPHOMORE SOLO ALBUM

I've been recording bits and pieces throughout the years, but I felt inspired this past year to get back into the studio and finish the album. I would say that I had finished about half of the songs, and then I was working on the other half as we were going in the studio. There are also a few songs on there that I wrote when I was a teenager, when I was really heavy into surf music. Those songs—"Garage Bat," "Tsunami Sue" and "Siren Call"—are the songs that I play all the instruments on.

## ON SONIC MILESTONES

Every single day that I wasn't making this album, I was thinking about making the album. This time, I was able to produce everything. I wanted

it to sound not so polished, with elements of garage and surf rock from the '60s—I hope I accomplished this. I recorded it in three different studios: Third Man Studios in Nashville, Herzog Studio in Cincinnati and Big Light Studio in Nashville. The engineers were able to jump on board really quickly and understand what I was going for.

## ON FUSS-FREE TONES

I used my Fender Twin basically on everything. I use it both live and in the studio. I also used my pedals, including the Fulltone OCD, which I had on for basically everything. It's an overdrive pedal that adds just the right amount of dirt to the songs. Also we dove really deep into plug-ins, which was kind of dangerous because once you go down that rabbit hole,



BECCA HEUP

Olivia Jean's latest album is *Night Owl*.

it's really hard to stop. Ultimately, we ended up stripping away a lot of the plug-ins and just went analog. In the end, you can accomplish a great sound with just analog equipment in a fraction of the time it takes with plug-ins, which can be like quicksand. We used all analog equipment and we fed this through the Fairchild compressor, which was great.

## ON BEING A PERFECTIONIST

Usually I am a perfectionist when it comes to doing takes. I hear the melodies in my head and I really want to nail it down exactly as I hear it; if it is not exact, I will go back and redo, redo and redo until I get it down. There is not a lot of organic songwriting that occurs when it comes to guitar riffs and stuff like that—I come in with a specific plan, so I try to nail it as close as I can. To save time so I wouldn't have to lay down all the parts myself, I brought in musicians to help me out. I would write out the parts for them and they would play the parts back for me. It's really nice to have the live sound on the record,

we could feel things out. Then I was in the Black Belles for a few years. After we stopped playing together, I continued to work with Third Man and started working on my first solo album. I'm super comfortable working at Third Man Studios. I've done not only my stuff with the Black Belles and my solo albums there, but I've also recorded on a ton of their Blue Series records—a series of 45s records that came out with different artists who were rolling through Nashville.

## ON THIRD MAN STUDIOS

The studio is cozy and filled with tons of really interesting instruments that you wouldn't think you'd ever use in a song, but then you end up using them and it sounds awesome. Jack has a lot of analog equipment and he can achieve whatever sound he's got in his head. All the engineers he works with are into vintage equipment as well. It's a very creative space and Jack is super open-minded about whatever you want to record. He likes to give input, but ultimately he wants

"[Third Man Records'] studio is cozy and filled with tons of really interesting instruments that you wouldn't think you'd ever use in a song, but then you end up using them and it sounds awesome."

Olivia Jean

and those that I recorded this way ended up sounding the best.

## ON WORKING WITH JACK WHITE

Jack [White] had gotten my demo when I was a teenager, which was basically all surf instrumental music—and Jack is a huge surf music fan. I was really lucky that he had listened to it in the first place and that he happened to really like surf music. I got a call from Third Man to fly into Nashville to lay down some songs so

the artist to just go for it, which is great. Most of this record was recorded with tape, but then we did a lot of overdubs in Pro Tools. We needed to get these tracks laid down quickly, so Pro Tools was a time-saver. I would have preferred to do everything on tape, though.

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 jacquessonnyieux@gmail.com.

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