

# pro sound

new

Volume 42 No. 1

www.prosoundnetwork.com

January 2020



SCOTT LEGATO/CONTRIBUTOR/GETTY IMAGES

**RISE IN FALL**—Godsmack spent the fall hitting arenas in support of its *When Legends Rise* album, with audio support from UltraSound, which provided a sizable Meyer Sound Leo Family system and Telefunken-capped Shure Axient mics for Sully Erna (pictured) to belt through nightly. For more, see page 38.

## Gear of the Year 2019

BY STEVE HARVEY

As we look back at the past year and forward to the Winter NAMM Show, rather than compile a list of 2019's most notable product introductions, *Pro Sound News* contacted recording engineers and producers to see what caught their eye or made the most impact on their workflows—new products or old, software or hardware—in 2019.

"First off," says Joe Barresi, known for his work with guitar-centric bands at the heavier end of the rock spectrum, "I'm stoked that Phil Wagner is back at SSL," as senior vice president, North America. "He's a super-nice dude."

On the hardware side, two of SSL's products were on Barresi's radar this year. "They have this new analog console, Origin. I haven't tried it, but it's very interesting to

(continued on page 49)

## Audio Keeps Up as Esports Explodes

The second Esports Production Summit in Los Angeles presented a broad agenda that offered insights about the role of audio in esports broadcasting.



## Concert Industry Continues Growth in 2020

BY CLIVE YOUNG

While year-end tallies of 2019's top-grossing tours weren't yet available at press

time, there's little question that the last 12 months will be remembered as one of the biggest years ever for the concert industry. A raft of

economic research supports that assessment as well, projecting that the industry will continue to grow at a substantial pace in the coming years. That upward growth trend bodes well for production vendors of all stripes, including sound reinforcement providers, whether they deliver sound for club concerts, stadium extravaganzas or venues somewhere in between.

While individual market estimates vary, financial research sources as a whole

point to continued strong consumer interest in concerts and live music experiences in the years to come.

In 2018, PricewaterhouseCoopers' *Global Entertainment and Media Outlook 2018-2022* report calculated that the live concert industry's total revenue will hit \$31 billion by 2022, with \$24 billion of that coming from ticket sales. In 2019, market research firm IBIS-World's *Concert & Event Promotion in the U.S.* report

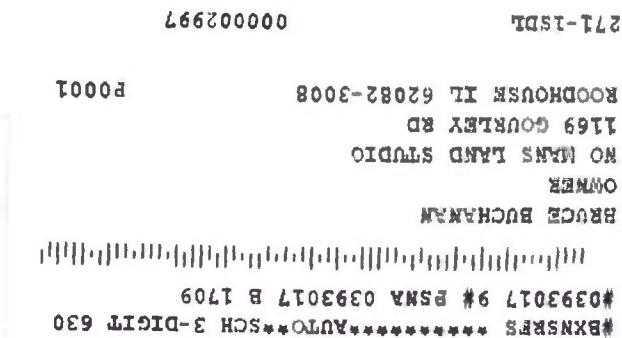
(continued on page 48)

## Audiotonix Acquired by Ardian

In December, French private equity firm Ardian quietly purchased a majority stake in Audiotonix, the UK-based parent company of Solid State Logic, Calrec, DiGiCo, Allen & Heath, KLANG:technologies and DiGiGrid.

ARDIAN .astorg  
Audiotonix

Solid State Logic DiGiCo ALLEN & HEATH CALREC KLANG DiGiGrid



# EQUIPPED BY FULL COMPASS

The Premier Supplier of Professional Audio, Video and Lighting Equipment

I'm equipped. Are you?

At Full Compass, being **Equipped** means getting the very best gear at the very best prices.

We Offer One-stop Shopping Complete with

- ✓ A Huge Selection
- ✓ Hot Gear
- ✓ Low Price Guarantee
- ✓ Flexible Financing
- ✓ Free Shipping
- ✓ Expert, Friendly Service
- ✓ End-to-end Support
- ✓ Free Repair Program

800-356-5844 • fullcompass.com





# Power Couple



The ULTRA-X40 and its companion subwoofer the 750-LFC give you a compact and highly portable system with precise and powerful performance. With 11 integrated rigging points, an abundance of mounting accessories, and simplified 90-degree horn rotation, the ULTRA-X40 is also highly configurable for a wide variety of applications.

**So, put two and two together and add pairs of ULTRA-X40 and 750-LFC to your inventory.**

**ULTRA-X40**  
A BOLD REVOLUTION OF AN INDUSTRY STANDARD

[meyersound.com/ultra-x](http://meyersound.com/ultra-x)



DIGITAL MIXING SYSTEM

# RIVAGE

PM SERIES

RIVAGE PM7

CS-R10-S Compact Control  
Surface for RIVAGE PM10

RIVAGE PM10

## Reliability, Intuitive Workflow, Natural Sound

The RIVAGE PM series offers sound engineers unprecedented reliability, easy-to-use workflow and natural sound characteristics for outstanding, natural sound reproduction. Available in three different control surface configurations for an even broader range of applications.



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



GLM

THE ONES

## Point Source Excellence - From Nearfield to Main Monitoring

Genelec, The Ones monitors are revered every day in thousands of studios around the globe for their perceptual qualities, technical brilliance and spectacular design.



Get the Genelec Point Source Immersive Experience.  
NAMM - Booth 18601 ACC North Hall



Now introducing the new members to The Ones Family, 8351B and 8361, and the Adaptive Woofer System, W371: Unparalleled room-tailoring continued to the lowest octaves, for the most critical listeners and applications. You don't know how great your room can sound before hearing it with natural direct sound, controlled reflections and pure neutral low frequency response.



**GENELEC®**

THE ONES. / THE WORLD'S FINEST ULTRA-NEARFIELD - MIDFIELD MONITORS

[WWW.GENELEC.COM/THEONES](http://WWW.GENELEC.COM/THEONES)

Genelec Inc. 7 Tech Circle, Natick, MA 01760 (t) 508-652-0900 (email) [genelec.usa@genelec.com](mailto:genelec.usa@genelec.com)

WRH



briefs

Galaxy Audio Acquires Ansr

WICHITA, KS—Aiming to expand into the wireless fitness audio marketplace, pro audio and live sound manufacturer Galaxy Audio ([www.galaxyaudio.com](http://www.galaxyaudio.com)) has acquired Ansr Audio and its subsidiary, Special Projects Audio. Special Projects Audio manufactures a variety of waterproof wireless headset microphone systems including the EVO true wireless headset mic. Meanwhile, Ansr Audio, Special Projects Audio's parent electronics manufacturing company, produces professional wireless systems, head-worn wireless microphones, lapel wireless microphones and podium/conference microphones.

Dolby, WMG Partner on Atmos Music

SAN FRANCISCO/LOS ANGELES, CA—Dolby Laboratories ([www.dolby.com](http://www.dolby.com)) and Warner Music Group ([www.wmg.com](http://www.wmg.com)) have entered into a partnership to provide artists with an immersive platform for their music. Dolby is working closely with artists, record labels, streaming services and consumer electronics manufacturers to make Dolby Atmos Music experiences accessible. WMG record labels include Asylum, Atlantic, Big Beat, Canvasback, East West, Elektra, Erato, FFRF, Fueled by Ramen, Nonesuch, Parlophone, Reprise, Rhino, Roadrunner, Sire, Spinnin', Warner Records, Warner Classics and Warner Music Nashville. The group is also home to music publisher Warner Chappell Music, which boasts a catalog of more than 1.4 million copyrights worldwide.

ESA Draws Pros to Summit

LITITZ, PA—Nearly 400 industry pros from across the live event industry attended 2019 Event Safety Summit in Lititz, PA, Nov. 20–22. Produced by the Event Safety Alliance ([www.eventsafetyalliance.org](http://www.eventsafetyalliance.org)) and presenting sponsor Take1 Insurance, the event included nearly 30 presentations and workshops, with offerings ranging from "How to Improve Safety Compliance" and "Rigging Hardware Inspection & Safety Use" to "Event Security for Nervous Times" and "Building the Foundation of Situational Awareness," which was presented by Dave Lester of Clair Global.

Producers Impersonated by Hackers

BY STEVE HARVEY

NEW YORK, NY—The record industry has a long history with music piracy, but a 27-year-old man arrested on Nov. 25 in Austin, TX, put a new spin on it, according to the indictment against him and his co-conspirators.

"Christian Erazo and his co-conspirators allegedly hacked the accounts of music producers and management companies in order to steal over 50 gigabytes of content—including some music that had yet to be publicly released—and leaked it on the internet," said Geoffrey S. Berman, the U.S. attorney for the Southern District of New York, in a statement following the arrest. "Not only did this scheme cause the companies, producers, and artists financial harm, Erazo deprived the artists of the ability to release their own exclusive content at their discretion."

The 27-page indictment against Erazo accuses him and three unnamed co-conspirators of hacking the social media account of a Los Angeles-based recording artist and music producer. They then allegedly impersonated the producer and solicited artists via private messages to send unreleased music to a fake email address they set up.

The alleged victims, none of

whom were named, included the producer's manager and the New York City-based management company for which the manager worked, which represents "over 20 influential recording artists and producers around the world." Additional alleged victims listed in the indictment include a Beverly Hills-based management company that represents more than 40 recording artists worldwide, a co-founder of that company, a Canada-based music producer and two L.A.-based music producers represented by the New York management firm, and "an American musician."

Erazo is accused of hacking the cloud storage accounts belonging to the two management companies and the L.A. artist/producer, and stealing music that had not yet been publicly released from more than 20 recording artists. The accused and his co-conspirators are alleged to have accessed the New York management company's cloud account at least 2,300 times. Forensic analysis of Erazo's computer revealed at least 850 music files, many previously unreleased, some of which he and his co-conspirators allegedly leaked onto public online forums.

The indictment alleges that the L.A. artist/producer and other collaborators suffered substantial financial and reputational harm. The group

had reportedly been working on an album for about a year and were forced to scrap it after the theft and leak of their tracks. The group's previous album grossed roughly \$2 million in sales, according to the indictment.

The scheme appears to have begun unraveling in early January 2017, when Erazo and a co-conspirator decided to blame their activities on an unnamed individual. They contacted the L.A. artist/producer's manager claiming that the individual had unauthorized access to the New York management company's storage account. They later spoke with an undercover federal law officer posing as a company security official and claimed that the individual was selling unreleased music at \$300 per track. "[T]his is the perfect cover-up," Erazo wrote in an online message to his co-conspirator.

Erazo admitted to the crimes, which took place between late 2016 and April 2017, during which time he was a California resident, to law enforcement officials. He is charged with conspiracy to commit wire fraud, which carries a maximum sentence of 20 years, conspiracy to commit computer intrusion and aggravated identity theft.

Indictment  
<https://bit.ly/2Eb84IG>

Pulitzer Prizes Add Audio Category

BY STEVE HARVEY

NEW YORK, NY—The Pulitzer Prize Board announced a new journalism prize category in audio reporting for the 2020 prize cycle. The prize will be awarded "for a distinguished example of audio journalism that serves the public interest, characterized by revelatory reporting and illuminating storytelling."

The board is inviting submissions from producers of radio programs and podcasts that exemplify the excellence the Pulitzer Prizes have honored for more than a century. Competitive entries will reflect the work the prizes have championed traditionally, from investigative reporting that exposes wrongdoing to dynamic features, and news coverage of major issues or events.

News organizations currently eligible to compete for the Pulitzer Prize—"U.S. newspapers, magazines, wire services and online news sites that publish regularly"—will be per-



The Pulitzer Prize organization has launched an experimental category to honor audio reporting in journalism.

mitted to enter audio stories in this new category, as will independent American producers and U.S. radio broadcast outlets. Non-U.S. outlets are ineligible. Eligibility rules for the other 14 journalism categories will remain the same.

According to the Pulitzer Board, "All entries must adhere to the highest journalistic principles, including a commitment to honesty with both audiences and subjects. Rigorous and transparent sourcing will be an important factor in the judging. Entered work must have been aired during the 2019 calendar year." FAQs with

further details regarding the entry process are available at the Pulitzer website.

The contest for the Pulitzer Prize Audio Reporting category and all other journalism categories will open Dec. 16. The deadline for all submissions is Jan. 24, 2020, at 5 p.m. Eastern. Audio entries must be submitted without pre-roll advertising.

Also beginning this year, applicants in relevant journalism categories may submit work for prize consideration via weblink, or by uploading PDFs as they have in the past.

The Pulitzer Prizes were established by Joseph Pulitzer, a Hungarian-American journalist and newspaper publisher, who left money to Columbia University upon his death in 1911. A portion of his bequest was used to found the School of Journalism in 1912 and to establish the Pulitzer Prizes, which were first awarded in 1917.

Pulitzer Prize  
[www.pulitzer.org](http://www.pulitzer.org)





[18]



[25]



[38]

## SOUNDRECORDING

**Moxy Brothers Team for Production . . . 18**  
Adrian Young, drummer of No Doubt, and Todd Forman, former sax player of Sublime, have partnered to launch record production team Moxy Brothers, offering everything from songwriting and performance to engineering, mixing and mastering.

**Studio Showcase: Tweed Recording . . . 20**  
Engineer and educator Andrew Ratcliffe has relocated Tweed Recording from Oxford, MS, to Athens, GA. In the process, he's established an audio engineering school and a new studio based around the first Sound Techniques desk to be produced in 40 years.

## SOUNDPOST/BROADCAST

**Waterman Sound Goes with the Flow 25**  
Newly established Toluca Lake, CA, audio post-production facility Waterman Sound offers the technologies, amenities and industry neighbors to draw productions interested in one-stop shopping.

**Audio Production Keeps Up as Esports Explodes . . . . . 25**  
The second Esports Production Summit in Los Angeles presented a broad agenda that offered insights about the role of audio in esports broadcasting.

## SOUNDTECHNOLOGY

**Sound Innovations: WSDG . . . . . 28**  
On the 50th anniversary of architect John Storyk's first studio commission, he reminisces about designing Electric Lady and reveals future plans for Walters-Storyk Design Group as he looks forward to not retiring.

**Audio Op-Ed: We Need to Talk About Money. . . . . 30**  
Getting a great engineering gig can be hard, but sometimes getting paid at the end can be even harder. Grammy Award-winning engineer/producer Dom Morley shares his time-tested methods for getting what you deserve.

**Pro Audio Review in PSN . . . . 31, 32, 33**  
Avid Pro Tools, Goodhertz Trem Control; Universal Audio Avalon 737 Tube Channel Strip; Universal Audio Sonnox Oxford SuprEsser DS; Universal Audio OX Amp Top Box v1.2; Sound City SC 20 Combo; Wireworld Pro Audio Polaris Instrument Cable; Vienna Symphonic Big Bang Orchestra and Smart Orchestra Expansion Pack; Mesa Boogie Mini Rectifier 25

## SOUNDPRODUCTS

**Studio Products . . . . . 34**  
**SR Products . . . . . 35**

## SOUNDREINFORCEMENT

**Audiotonix Acquired by Ardian . . . . . 36**  
In December, French private equity firm Ardian quietly purchased a majority stake in Audiotonix, the UK-based parent company of Solid State Logic, Calrec, DiGiCo, Allen & Heath, KLANG:technologies and DiGiGrid.

**Live Sound Showcase: Godsmack . . . 38**  
The Boston rockers have been on the road for over a year in support of their latest, tearing up arenas and sheds along the way. We catch up with the crew and find out how they keep the tour ticking like clockwork.

## DEPARTMENTS

Sound Business	5
Sound People	46
Advertiser Index	48
Classifieds	49

## CHARTS

Tracks	22
Centerstage will return next month.	

## SPECIAL REPORT

**Gear of the Year . . . . . 1**  
Top audio pros look back at 2019 and share what new equipment caught their eye, what was added to their audio arsenal, what old standbys took their projects to the next level and more.

## COLUMNS

**softwaretech . . . . . 21**  
Craig Anderton explores how amp sims, once frowned upon, have gone pro.

**viewfromthetop. . . . . 44**  
Lance Podell, senior vice president/general manager of Iron Mountain Entertainment Services, shares how the storage and information management giant is making assets more secure yet more accessible than ever before

**theahamoment . . . . . 47**  
Former Radial CEO Peter Janis says, make a new year's resolution to bring discipline to your business practices.

**music,etc. . . . . 50**  
Gloria Gaynor's gospel album *Testimony* is up for two Grammy Awards, taking the career of the disco legend ("I Will Survive") in a whole new direction. Gaynor and engineer F. Reid Shippen dish on recording the live-to-analog album.



## follow us ONLINE

 **subscriptions:**  
[www.mypsnmag.com](http://www.mypsnmag.com)

 **facebook:**  
[www.facebook.com/ProSoundNews/](http://www.facebook.com/ProSoundNews/)



 **online:**  
[www.prosoundnews.com](http://www.prosoundnews.com)

 **twitter:**  
[www.twitter.com/ProSoundNews](http://www.twitter.com/ProSoundNews)



# THE NEXT STAGE IN SOUND.

A single word can affect the entire story. Capture each and every word without fail with the natural response and robust range of a TwinPlex™ dual-diaphragm lavalier.

[shure.com/twinplex](https://www.shure.com/twinplex)

©2019 Shure Incorporated. See [shure.com/trademarks](https://www.shure.com/trademarks).

**SHURE**









**BOSE**

PROFESSIONAL

# MORE LOUDSPEAKERS

# MORE AMPLIFIERS

# MORE PROCESSORS



## FOR BETTER SOUND IN MORE SPACES

With the Installed Sound Expansion, we've expanded our range of loudspeakers, processors, amplifiers, and controllers. Our established products remain and we've added new product families into the mix. Now system designers and installers can deliver better sound systems in more spaces than ever.

To learn more about our new **DesignMax** loudspeakers, **PowerSpace** amplifiers, and **Bose CSP** processors, contact your local Bose dealer or visit [PRO.BOSE.COM/installedSoundExpansion](http://PRO.BOSE.COM/installedSoundExpansion)



# TECnology Hall of Fame Names 2020 Inductees

ANAHEIM, CA—The NAMM TECnology Hall of Fame has revealed this year's inductees, which were voted on by a panel of audio experts, including authors, educators, engineers and other professionals. The awards program honors audio products and innovations that have made a significant contribution to the advancement of audio technology and production.

Joining the 160 previous honorees in the TECnology Hall of Fame, the seven inductees for 2020 are: Multichannel Film Sound for *Fantasia* (Walt Disney Productions, 1940); UREI Cooper Time Cube (Duane Cooper/Bill Putnam, 1971); Roland TR-808 Drum Machine (Roland, 1980); Scholz Research & Development Rockman (Tom Scholz, 1982); Neutrik Combo XLR-1/4-inch connector (Neutrik, 1992); 2002 Crane Song Phoenix Plug-in (Dave Hill, 2002); and QSC K-Series Speakers (QSC, 2010).

"Every one of these innovations



made a major contribution to how sound is created and reproduced—even years after their debut," says TECnology Hall of Fame director George Petersen. "In fact, all of these technologies are still in use every day."

Petersen continues, "The collaboration of Walt Disney Productions with Bell Labs and RCA to create the 4-channel 'Fantasound' playback process used in 1940 for the production of *Fantasia* set the course for

later breakthroughs in cinema sound, including Dolby Stereo's *Star Wars*, recorded 35 years later. As another example, Roland's TR-808 programmable drum machine became part of the foundation of music movements in hip-hop, rap and electronica. And although made in 1980—almost 40 years ago—the once \$1,200 TR-808 remains a highly-prized studio tool today, with working units valued in the \$4,000 range."

The TECnology Hall of Fame also celebrates the work of individual inventors, such as Boston band founder Tom Scholz's 1980 Rockman guitar processor. His development of this studio in a box, barely larger than a cigarette pack, was inspired by the need to create consistent, high-quality electric guitar tones for use on stage or in a recording studio; the Rockman sound found its way onto countless hit records, not only for Boston, but other artists as well.

The newest group of TECnolo-

gy Hall of Fame members will be inducted Jan. 18 at 4 p.m. in the NAMM Member Center in the Anaheim Convention Center.

NAMM  
www.namm.org

## CMA Gets A-T for Christmas

NASHVILLE, TN—Taped in September and broadcast on ABC in December, the Country Music Association's *CMA Country Christmas 2019* relied on a variety of Audio-Technica mics. Christian pop crossover act For King & Country and gospel legend CeCe Winans both used Audio-Technica's third-generation 5000 Series frequency-agile true-diversity UHF wireless systems, with ATW-C5400 microphone capsules for vocals. The show also deployed wired A-T microphones, including several AT4050 large-diaphragm condenser microphones for the choir.

Jason Glass, owner of Clean Wireless Audio, the wireless RF coordinator for the broadcast, managed the wireless systems, and Tom Davis served as audio producer. Hosted by Trisha Yearwood, the two-hour event featured nearly two dozen performances from country artists both new and established, as well as fans of the genre. Other artists on the telecast included Kristin Chenoweth, Chris Janson, Lady Antebellum, Rascal Flatts and Chris Young.

Audio-Technica  
www.audio-technica.com



CeCe Winans performed at the Country Music Association's *CMA Country Christmas* broadcast event using Audio-Technica's 5000 Series UHF wireless system.

## Spotify Wraps Up Most-Streamed List

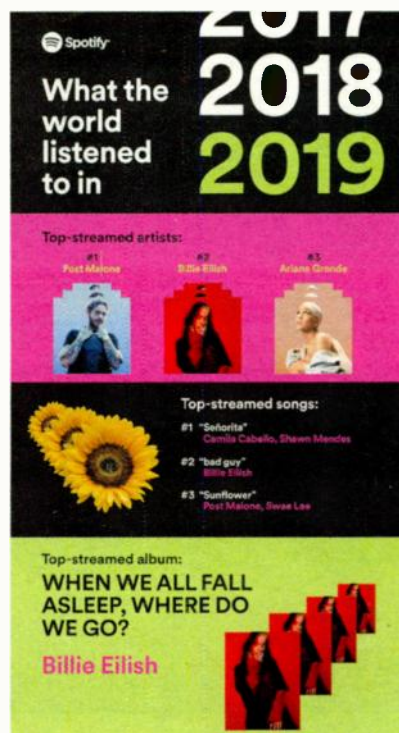
BY STEVE HARVEY

NEW YORK, NY—Wrapped 2019, Spotify's list of the most-streamed artists and songs of the year, offers an insight into the world's musical tastes, with Post Malone, Billie Eilish and Ariana Grande topping the most-streamed artist category.

Post Malone was the top streaming artist globally in 2019, with more than 6.5 billion streams. This year marks his debut atop Spotify's Wrapped list, a position achieved barely three months after the release of his *Hollywood's Bleeding* album—which, incidentally, is the second most-streamed album worldwide this year. His contribution to the *Spiderman: Into the Spiderverse* film, "Sunflower," a collaboration with Swae Lee, was the third most-streamed song of 2019.

Billie Eilish, a six-time Grammy nominee this year, sped past six billion streams to pick up second place. *When We All Fall Asleep, Where Do We Go?* was the most-streamed album of the year, making her the first female artist to top that category on the Wrapped list, according to Spotify. The single "Bad Guy" was the second most-streamed song of the year.

Ariana Grande's *thank u, next* was the third most-streamed album, while the song "7 rings" from that album was the fourth most-streamed track. Grande has had a strong top 10



showing for two consecutive years on Spotify's Wrapped list.

Grande also took the top spot on the most-streamed female artists of the decade global list, beating out Rihanna, Taylor Swift, Sia and Beyoncé. As for the global most-streamed male artists of the decade ranking, Drake took the crown, followed by Ed Sheeran, Post Malone, Eminem, and The Weeknd at number five.

Worldwide, the most-streamed tracks of the decade were "Shape of

You" by Ed Sheeran; "One Dance" by Drake, Kyla and WizKid; "rockstar (feat. 21 Savage)" by 21 Savage and Post Malone; "Closer" by Halsey and The Chainsmokers; and Ed Sheeran's "Thinking out Loud."

The number-one most-streamed track for 2019 was "Señorita" by Shawn Mendes and Camilla Cabello, with more than one billion streams, followed by the aforementioned tracks by Eilish, Post Malone and Grande. Completing the top five was Lil Nas X and Billy Ray Cyrus with "Old Town Road—Remix."

As for podcasts, comedy was the most-streamed category. *The Joe Budden Podcast with Rory & Mal* topped both the most-streamed and most-streamed Spotify original podcast categories worldwide. Two of the most-streamed overall and three of the most-streamed Spotify original podcasts were German language: *Gemischtes Hack*, *Fest & Flauschig* and *Herrengedeck—Der Podcast*.

This has been a big year for podcasts, according to Spotify, which reports that it has grown its podcast audience by 50 percent and now has more than 500,000 podcast titles available. The company also says that there has been a 39 percent increase in podcast hours consumed by listeners quarter over quarter.

Spotify  
www.spotify.com



# Sound Professionals Trust **Sweetwater**

Only **Sweetwater** has the greatest brands and legendary support for pros like you. Don't just take it from us — read what other pros have to say about **Sweetwater**.

"Sweetwater's support system is unrivaled. There isn't another company out there with the expertise and professionalism displayed by their highly competent specialists. The experienced professionals at Sweetwater will always guide you in the right direction while considering your needs and budget."

— Andy Meyer — FoH — Justin Timberlake, Madonna, Guns N' Roses, Janet Jackson, Shinedown

"You'd have to be living in a cave to not know about Sweetwater's legendary monstrous selection of gear. And Sweetwater's well-knowledged staff and wealth of web information make both equipment purchasing and support great experiences."

— Richard Chycki — Engineer — Rush, Aerosmith, Dream Theater, Mick Jagger, Alice Cooper, Seal, Skillet



**Rupert Neve Designs**  
RMP-D8 Dante Remote  
Control Microphone Preamp



**Avid**  
VENUE S6L System with S6L-24C Control Surface  
and E6L-144 Engine



**JBL**  
VRX932LAP 1,750-watt, 12" Powered  
Line-array Speaker



**QSC**  
KLA12 1,000-watt, 12" Powered  
Line-array Speaker



**Soundcraft**  
Vi3000 Digital Mixer



Discover the **Sweetwater Difference** for yourself. Call or visit online.



**Best Prices**  
thanks to our huge  
buying power



**Free 2-year Warranty**  
and factory-trained  
technicians to solve any issue



**Fast, Free Shipping**  
from our centrally located  
warehouse in Fort Wayne, IN



**Free Technical Support**  
from trained professionals  
on every product we sell



**Expert Advice and Installation**  
in studios and live venues—  
we can help your next project

(800) 222-4700  
Sweetwater.com

# Sweetwater

Music Instruments & Pro Audio



## Music's Unluckiest Night

BY CLIVE YOUNG

LOS ANGELES, CA—The Grammy Awards broadcast is an institution that earns its nickname of “music’s biggest night” every year as it serves up over-the-top production numbers, stellar celebrities and adrenaline-fueled thank-you speeches that resemble a verbal sack race. When the 62nd Grammy Awards take place on the evening of Jan. 26 at the Staples Center in Los Angeles, however, one of the most dramatic stories of the awards will have already unfolded earlier in the day.

While a handful of high-profile awards like Album of the Year are presented during the televised evening ceremony, the vast majority of Grammy Awards—approximately 70 to 75—will be presented mid-day at the Grammy Awards Premiere Ceremony, which takes place at the Microsoft Theater across the street. Among those vying for a prize will be Norwegian classical music producer/engineer Morten Lindberg, who is nominated in two categories: Producer of the Year/Classical and Best Immersive Audio Album, the latter for his work as producer, en-

gineer and mastering engineer on Anita Brevik, Trondheimsolistene & Nidarosdomens Jentekor’s *Lux* album.

While everyone nominated for an award wants to win, it’s likely that no one will be more interested in the day’s results than Lindberg who, with a lifetime total of 28 nominations and 0 wins, has the longest streak of unsuccessful nominations in Grammy history.

Lindberg landed his first nomination in 2007 for Best Surround Sound Album, a nod acknowledging his efforts on Ensemble 96’s *Immortal Nystedt*. Since then, he’s become a mainstay of the category (now called Best Immersive Audio Album) and has been nominated in it every year except 2008, accumulating 18 nominations to date. Strikingly, in 2016, he had three of the five nominations in the category, but lost to the immersive edition of Roger Waters’ *Amused to Death*.

Having the unluckiest streak in Grammy history does have an upside, however, as it has become something of a calling card; for better or worse, he’s the champ at not being the champ. Lindberg’s closest



Morten Lindberg at the Grammys in 2017.

FRAZER HARRISON/STAFF/GETTY IMAGES

rivals are rap legend Snoop Dogg and R&B mainstay Brian McKnight, each having 17 nominations and no wins. If nothing else, Lindberg has become a good sport about the situation, telling the *Los Angeles Times* last spring, “Getting an award now would actually ruin my record—my track record would be completely blown away.”

Will 2020 finally be Lindberg’s year? To find out, watch the Premiere Ceremony, which will be streamed live at 3:30 p.m. EST, Jan. 26, on the awards’ website. For a complete list of all production category nominees, visit <https://bit.ly/2rKtJfos>.

Grammy Awards  
[www.grammy.com](http://www.grammy.com)

## Yamaha Readies NAMM Grand Plaza Stage

ANAHEIM, CA—In what has become a NAMM Show tradition, Yamaha will host three concert events on the NAMM Yamaha Grand Plaza Stage in January. With separate concerts by Sarah McLachlan (Jan. 16), Tower of Power (Jan. 18) and the multi-artist Yamaha All-Star Concert on the Grand 2020 (Jan. 17), the series of shows serves as a demonstration of Yamaha and Nexo pro audio equipment.

Nexo loudspeaker systems will present “a 360-degree audio experience” at the NAMM Yamaha Grand Plaza Stage using the modular STM system. The main system will consist of multiple side-by-side M46 main and B112 bass modules flown with the M28 as downfills, while Nexo RS18 subwoofers will line the front of the stage.

Additionally, the M28 will be deployed as delays behind the front-of-house (FOH) tent, with Nexo Geo M12 and MSub18 subs also placed behind the stage. On stage, musicians who use stage monitors will be hearing themselves via the Nexo P12, the company’s newest point source speaker.

All Nexo speakers will be powered by Nexo’s new NxAmp4x4 mk2 amplifier, the most powerful amplifier in



Yamaha will present three concerts at the 2020 Winter NAMM Show. Pictured is a concert from NAMM 2019.

the NxAmp range, delivering 4,500 watts per channel and 96k processing.

Sending signals to the speakers and the on-stage performers will be Yamaha Rivage PM10 digital mixing consoles

at the FOH and monitor positions. The stage itself will be situated outdoors on the Anaheim Convention Center Grand Plaza, between the Anaheim Marriott and Hilton Anaheim hotels.

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

Nexo  
[www.nexo-sa.com](http://www.nexo-sa.com)



# DESIGNATED DRIVER

## Leading Pro Audio brands choose Celestion

Innovation, performance and reliability make Celestion the drivers of choice for a growing number of professional audio manufacturers. Visit our website or contact us now to find out more about our comprehensive range.



[celestion.com](http://celestion.com)

**CELESTION**



## Shure Opens Experience Center in London

LONDON, UK—A new Shure Experience Center and office has opened in London, bolstering the company's growing presence in the UK and EMEA. The space is designed for product demonstrations with corporate, government and education customers looking for audio solutions for their respective facilities.

The Rose Shure Experience Center is named after Rose Shure, who founded the company with her husband, Sydney Shure, in 1925. Rose was involved with the company from 1949 until her passing in 2016.

Shure executives, including CEO Christine Schyvinck, participated in the VIP opening of the facility. Schyvinck commented, "I think Rose would be honored by having such an

amazing complex named after her, especially given the short amount of time it has taken to complete such an ambitious project." The facility was designed and built in four months; AV solutions provider proAV was tasked with integrating the systems.

The Rose Shure Experience Center contains three meeting rooms and a training space with voice-lift camera tracking functionalities. "We had a very clear vision as to how we wanted the space to function as an experience center," said Andrew Francis, senior applications engineer, Shure. "The completion of the project is a great success that will allow us to move forward and



Shure CEO Christine Schyvinck participated in the VIP opening of the company's London Experience Center.

continue to build on the systems in place as our technology advances."

Shure's audio products are highlighted throughout the venue, most significantly its Microflex Advance

ceiling array microphones and IntelliMix P300 audio conferencing processor.

"The Rose Shure Customer Experience Center is the culmination of many, many months of work by Shure employees from all areas of the business," said James Hill, UK director of integrated systems sales, Shure. "We look forward to welcoming all of our existing and new customers to the Rose Center, and learning their AV needs and requirements in the best possible environment."

Shure  
www.shure.com

## Reality TV Concert Rolls in Germany

BERLIN, GERMANY—Berlin's Waldbühne amphitheater, one of Germany's biggest open-air stages, recently hosted the sixth season finale concert of the hit reality show *Sing meinen Song—Das Tauschkonzert*. All the artists involved reunited for one final live show, which was mixed by Daniel Lauer (FOH) and Sascha Kohl (monitors) on Allen & Heath dLive consoles.



The season finale concert for German reality TV show *Sing meinen Song* was mixed on Allen & Heath dLive consoles.

"The main challenge of the show was the limited time available for preparation," said Lauer. "Because of its size and special acoustics, the Waldbühne is quite a demanding location for a sound engineer. We had just one day of studio rehearsal for 25 songs, so we had to be able to adapt very quickly to any changes at soundcheck. The variety of songs and artists also presented us with a full spec-

trum of sound and dynamics to cope with. Mixing the show was a huge challenge for us, but of course that was also what made it interesting. The two dLive systems were an enormous help in dealing with those issues."

Allen & Heath dLive S7000 surfaces, each paired with their own DM64 MixRack, were used for the show and fitted with Dante and superMADI cards. An IP8 remote controller at FOH provided an additional eight faders, while more than 100 sources were connected to the monitor DM64 and attached DX168 expanders, with the digital split between the FOH and MON systems handled via the superMADI cards at 96 kHz.

Sixty-four busses were required in the monitor console to feed the in-ear monitors of all the musicians, artists and crew. Kohl noted, "At monitors, the main focus is always to keep the artists comfortable and happy."

"At this concert, we really needed flexible access to all parameters and a very fast workflow," said Lauer. "From the integration of external controllers, the AMM to handle dynamic changes between the songs, to fast changes during the show with relative scene updates and the easy system integration in a shared control network, dLive always had a solution."

Allen & Heath  
www.allen-heath.com

## Cathedral Installs 100+ d&b Speakers

YORK, UK—Northern England's York Minster, a cathedral built in the seventh century, recently installed more than 100 d&b audio-technik xC-Series cardioid column loudspeakers. The project represents the largest single installation of the series to date. The aim was to retain the space's reverberance while allowing for intelligible speech.

d&b partner Wigwam was commissioned to create a solution for York Minster that would tackle the spoken word without distraction, and reinforce live music for a variety of events. Wigwam installation manager Phil Goldsworthy opted for the 2-way passive column loudspeakers from the d&b xC-Series. Working closely with York Minster representatives, he ultimately spec'ed d&b 24C cardioid column loudspeakers, along with their 24C-E extension companions, on each column. The 24C-Es provide an additional octave of vertical pattern control down to 190 Hz.

Additional d&b xC-Series units in the form of smaller 16C loudspeakers were added around the altar and in the choir. All 108 loudspeakers are powered and individually processed by 10D amplifiers, with control via R1 and Q-SYS integration.

"The 24C features mechanically steerable high-frequency drivers, which can be adjusted to direct the audio to where it's needed," said



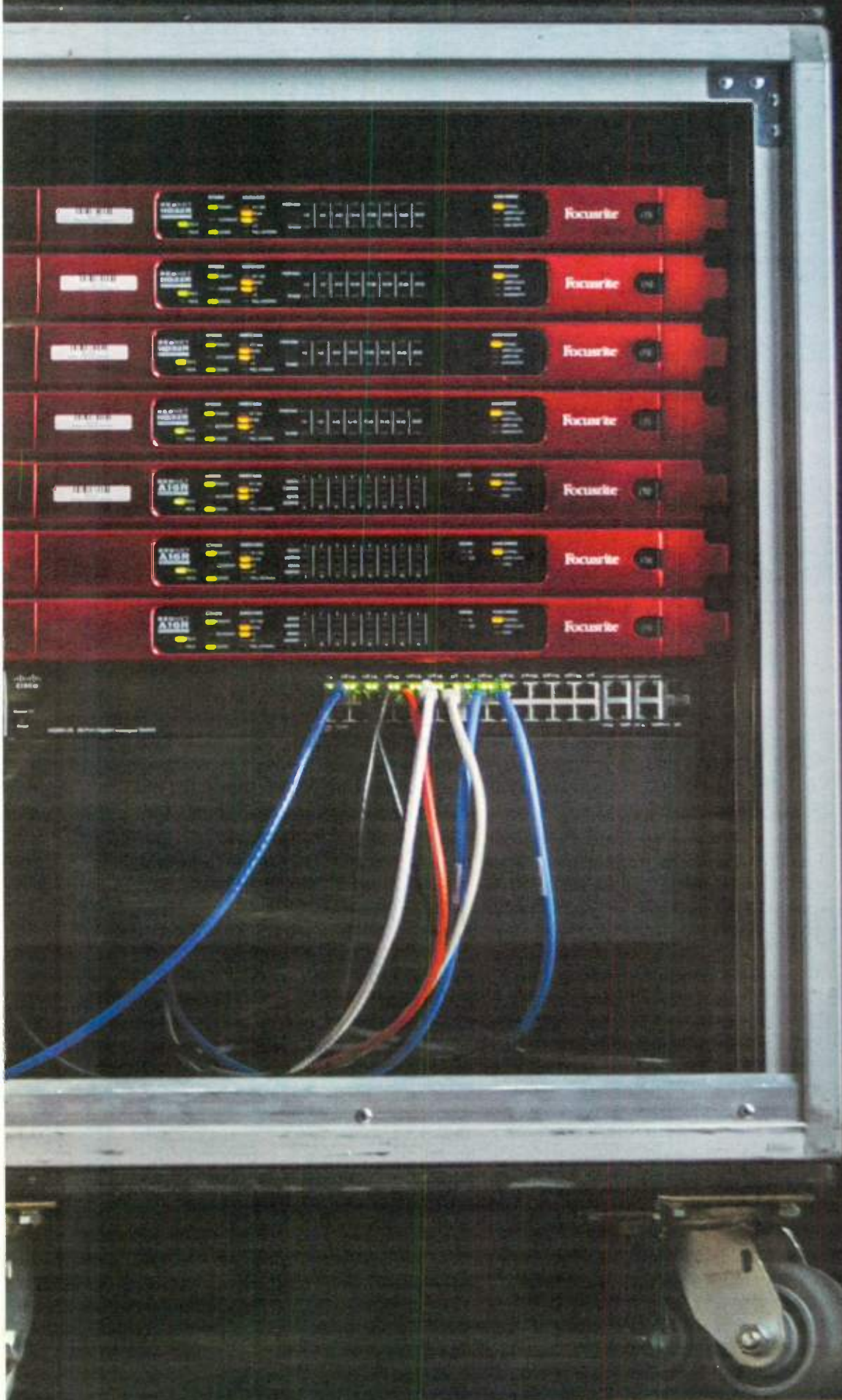
d&b partner Wigwam was commissioned to create a solution for York Minster that would tackle the spoken word without distraction, and reinforce live music for a variety of events.

Goldsworthy. "This allows you to mount the units completely vertically, tight up against the pillar and quite high up, yet still achieve an even audio coverage to the congregation below.

"The units are narrow enough to fit within the grooves of the masonry, helping to reduce the visual impact of the installation, which is vital in a listed building of this type. We further reduced the impact by color-matching the speaker to the pillar. The sound quality is second to none in a building of this type, and the installation is incredibly sympathetic to the minster's architecture. The system provides huge flexibility for a wide range of uses and is simple to operate."

d&b audiotechnik  
www.dbaudio.com





# THE MOST RELIABLE SOLUTION IS ALSO THE BEST SOUNDING

Audio professionals trust RedNet as their audio-over-IP solution for post-production, broadcast, front of house, educational facilities, and houses of worship. These solutions have been developed to meet the needs of the most demanding professional applications through a relentless focus on audio quality, reliability, and ease of use.

To add peace of mind when it counts, many RedNet units offer redundant network connections and power supplies giving you instant, uninterrupted, and glitch-free failover.

Contact us if you would like more information on how our audio solutions could improve the quality and efficiency of your audio workflow, or to request a demonstration.

[pro.focusrite.com/contact-us](http://pro.focusrite.com/contact-us)

Focusrite PRO



## China's Spectacular Chapel of Sound

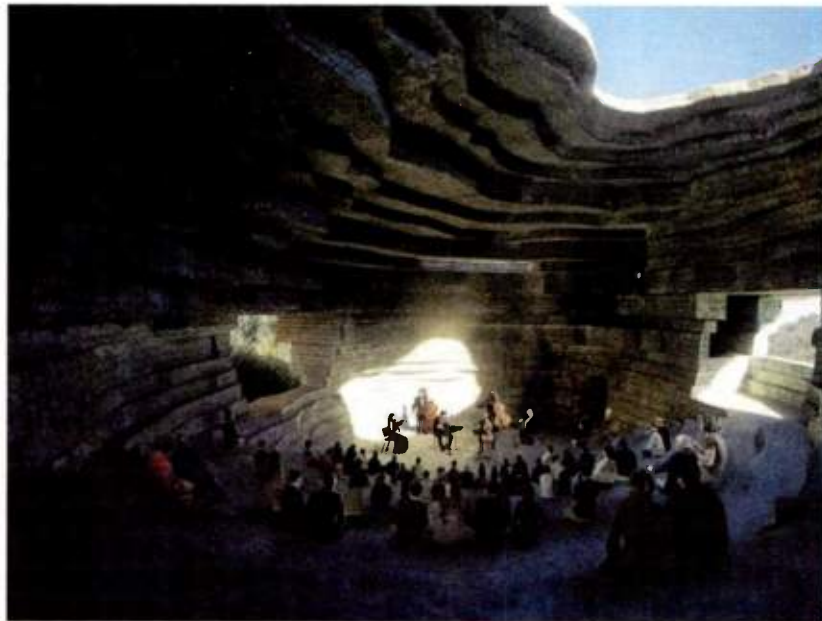
BEIJING, CHINA—Last month, Beijing-based Open Architecture poured the concrete for the roof of its Chapel of Sound. The boulder-shaped concert hall sits in a rocky valley at the foot of Jinshanling Great Wall on Beijing's northern border. Inside the rocky outcropping is a semi-outdoor amphitheater, an outdoor stage, viewing platforms and supporting spaces.

The last pour of structural concrete for the flat roof took about 24 hours, with workers finishing the surfaces with hand tools as they pushed to complete their work before the Beijing winter settled in. The building is slated to open in the summer of 2020.

The 790-square-meter semi-outdoor concert hall is constructed of concrete mixed with an aggregate of crushed local rocks, shaped acoustically for music performances. Openings in the roof and walls pull in the sky and surrounding landscape as well as the sounds of nature; light and rain, bird song and the chirp of insects gently fill the chapel.

The interior shape was inspired by the contours of shells, wooden instruments and the human ear. Through digital optimization, the acoustic properties were reportedly tweaked to produce the best possible sound quality. The openings of the building are placed strategically to avoid unwanted reverberations while simultaneously allowing in natural sounds and views.

The Chapel of Sound was recently



The Chapel of Sound is a boulder-shaped concert hall in a rocky valley at the foot of Jinshanling Great Wall on Beijing's northern border.

recognized in the 66th annual Progressive Architecture Awards, a program that celebrates innovative, ongoing works that promote new ways of thinking about architecture. The Chapel of Sound not only reimagines the typology of a concert venue, but asks us to reimagine the definition of a concert itself.

According to a statement by the architecture firm, "The layered form of the building takes inspiration from the sedimentary rock formations of the surrounding mountains, while asserting the human hands involved in its construction and avoiding mere mimicry of natural rock." The com-

pany is led by architects Li Hu and Huang Wenjing, who founded it in New York City, later establishing a Beijing office in 2008.

"When there is no scheduled concert, no choir or instruments playing, the hall still remains a destination, one at which to quietly listen to the sound of birds singing, insects chirping, gentle breezes rustling through nearby trees, or raindrops on the floor," the statement continued. "Inside this mysterious space, nature orchestrates an ever-changing symphony. It is a chapel of sound."

Open Architecture  
www.openarch.com

## OBX VIDEE Van Runs with Riedel

ITALY—Videe recently debuted its OBX VIDEE 4K HDR OB van, which is outfitted with Riedel's Artist-1024 digital matrix intercom system and Bolero wireless intercom system. OBX VIDEE is a triple-expanding mobile production unit that can support up to 30 cameras and was designed to provide host broadcasting services for live sporting, music, cultural and entertainment events worldwide.

Engineered by Videe and systems integrator Chromaline, the OB van features Artist and Bolero systems, along with 36 RSP-2318 SmartPanels. Based on client requirements, the van can be configured with dual control rooms or as one large, 75-square-meter (more than 800 square feet) production area that can accommodate up to 36 team members.

"The Riedel name is synonymous with reliability, efficiency, versatility and usability in the intercom domain, and the company is a longtime Videe partner," said Bruno Mercuri, Videe president and founder.

"We choose and rely on Riedel because of the company's innovative approach and its constant commitment to developing the best technologies for broadcast requirements. That's what Videe expects from its providers because that's what Videe is expected to provide to its own clients."

Riedel  
www.riedel.net

## PMC Picked for Pinewood Scoring Studio



Youki Yamamoto

IVER, UK—For 15 years, musician, composer and orchestrator Youki Yamamoto has created his own music, as well as compositions for films and computer games, in his recording studio at Pinewood Studios in England. Yamamoto's studio is located in a converted theater at Pinewood and equipped with a vintage Neve 5315 console, Apple Logic Pro, Avid Pro Tools and Prism Sound ADA-8XR conversion, as well as a pair of recently purchased PMC monitors.

He has worked on numerous scores over the years as an orchestrator and programmer for films including *Never Let Me Go*, *Belle*, *One Day*, *Paddington 2* and the Turkish film *Meryem*, for which he won the Antalya Golden Orange Film Festival Award for Best Music. He is currently working on music for several computer games, including the *Final Fantasy* series.

Yamamoto initially tried PMC IB2 XBD-A monitors with Class-D amplification, but eventually chose a passive MB2 system with a separate Class-A Bryston amp. "It's a matter of personal taste," he explained.

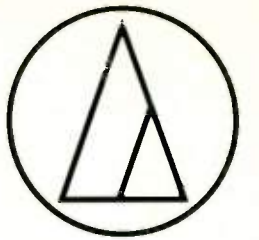
"The IB2 system was great and probably 'greener' because it uses less electricity, and it was perfect when I recorded vocals, but I simply thought I might prefer the sound of the passive MB2 with volt driver system in my room because it was more comfortable around the 200–2,500 Hz area, and especially for orchestral work. I thought this could be the most versatile speaker for any kind of music. I get all the lovely clarity and detail that PMC monitors deliver, but I don't get tired listening all day. The sound is so beautiful that I find it hard to leave the studio—I just want to stay in there and keep working. It is al-

most like being with your first-ever girlfriend."

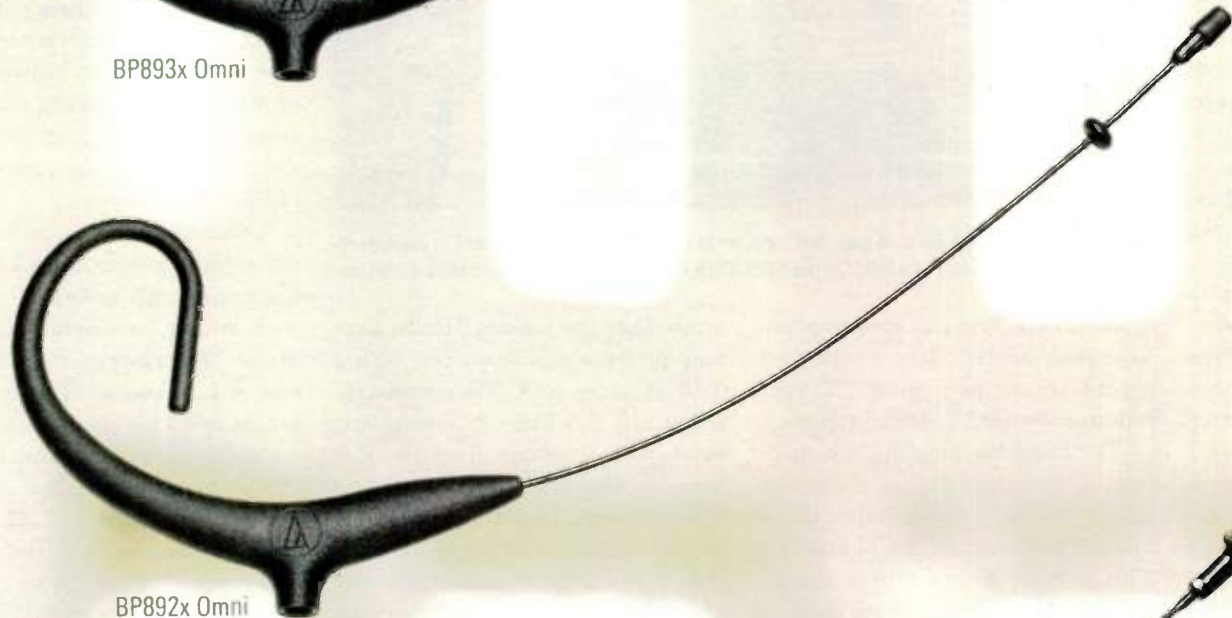
Before he bought his PMC monitors, he said, "I was looking for something that would motivate me to work on my own music again, as well as the projects I do for my clients. In that respect, they have been a huge success because as soon as I heard them, I knew I'd found what I was looking for."

PMC  
www.pmc-speakers.com

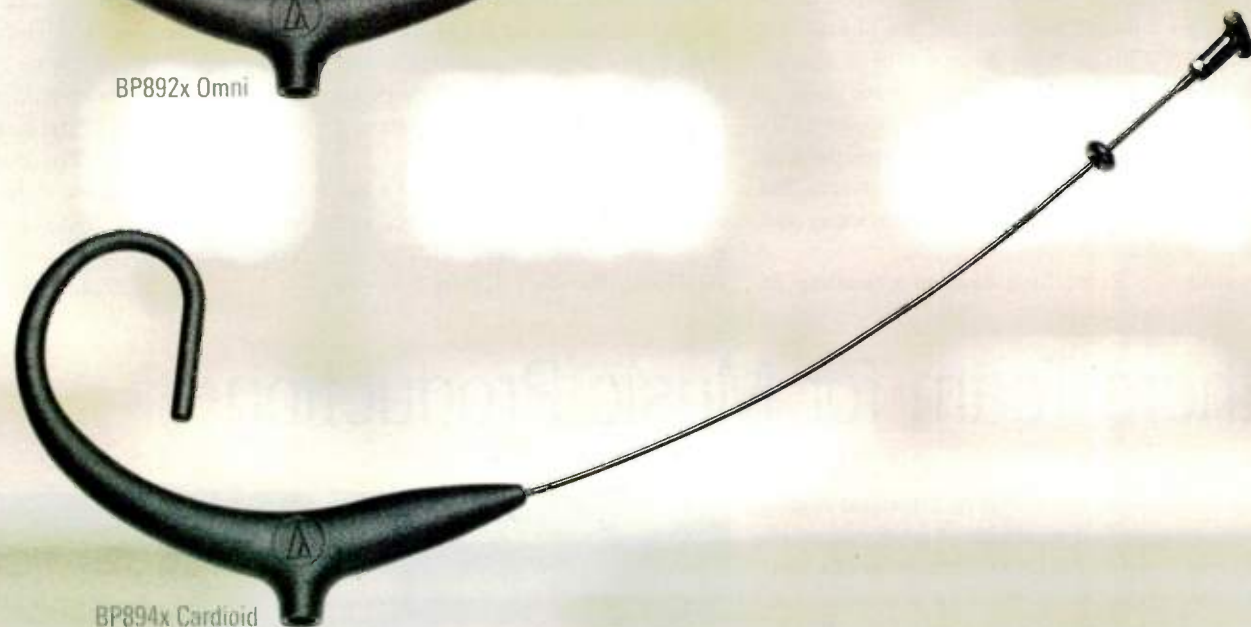




BP893x Omni



BP892x Omni



BP894x Cardioid

All models also  
available in beige



Multiple Termination Options



## Message Delivered

### MicroSet® Subminiature Headworn Microphones

The innovative Audio-Technica MicroSet headworn microphones have been redesigned to provide even greater performance and versatility. The three new models – BP892x, BP893x, and BP894x – operate with a detachable, field-replaceable cable that is available in multiple terminations for use in a wired configuration or with wireless systems from Audio-Technica and other manufacturers. The lightweight, ergonomic design hooks the headset behind and below the ear for a secure, inconspicuous fit that ideally positions the mic for clear, natural vocal reproduction. So no one misses your message. [audio-technica.com](http://audio-technica.com)

**audio-technica**



# L.A.'s Sure Sure Brings It All Back Home

BY STEVE HARVEY

LOS ANGELES, CA—Picture The Beatles' communal house in *Help!* transported into the 21st century, relocated to the east side of Los Angeles and outfitted to record music at a moment's notice and you'll have some idea of Sure Sure's headquarters. The four-piece—the origin of the name is shrouded in mystery—have shared a house since forming five years ago, writing, recording, engineering, producing and mixing all their independently released songs and streaming live performances from their living room.

That said, Sure Sure has also recorded in the attic, reports Mike Coleman, the band's producer, main mixer, bass player and vocalist, but that involves running up and down three flights of stairs. Conveniently, the first floor is one large, wood-floored, open-plan space where everyone can set up; indeed, it dwarfs some commercial tracking rooms. A set of ceiling-high gobos allows the room to be partitioned into a smaller space, while the rugs and furniture serve as acoustic treatment.

"I've learned that as long as you're getting accurate sounds, you can record anywhere. Electric guitars sound



Members of electropop act Sure Sure live together in one house, making sessions in their home studio easy to schedule. From left: Charlie Glick, Chris Beachy, Kevin Farzad and Mike Coleman.

great in here, and the upright piano [donated by Grammy-nominated recording engineer Joseph Lorge] sounds awesome," Coleman reports.

The band has long made a practice of recording in the houses in which they all live—mostly due to budget restrictions, he continues. This is Sure Sure's fourth shared house; they've lived in it for about a year. "Every house has its own character. I've fallen in love with the way this space sounds. It's so warm, for whatever reason, and mid-rangey and big."

Something akin to a mashup of

Steely Dan and Talking Heads, Sure Sure produce catchy art-pop with a dash of yacht rock. They came together in L.A.'s Echo Park neighborhood, with Coleman from the Bay Area, vocalist and keyboardist Chris Beachy from Baltimore, and guitarist and vocalist Charlie Glick from Delaware. (Beachy and Glick met while attending Stanford University.) Drummer and vocalist Kevin Farzad is the only native Angeleno.

The band recently came off a nationwide tour with Half Alive, and in the past have gigged with Young the Giant, Rainbow Kitten Surprise

and Hippo Campus; in March, they'll head out for a month with COIN. During their present hiatus, they plan to write and record their second album. They also have two EPs out—the latest, *What's It Like?*, featuring eight tracks.

Following the input snake up the stairs leads to Coleman's bedroom, which doubles as the control room. The space is comprehensively treated with acoustic panels, including a cloud, with all the gear housed in a three-bay console that supports a pair of Focal SM9 monitors.

Coleman has been collecting audio equipment for much of his life, beginning with several Shure mics with which he learned to record drums. "I buy everything used. Craigslist in Los Angeles is nuts; you can get the best gear," he says.

"As far as recording mics, I'll buy one or two a year." One recent acquisition was an AEA N22. "It's an active ribbon, really bright and very mid-rangey, in the 1k to 3k range, that is really punchy with drums—especially with a Distressor or ELI compressor on it." The band's mic collection covers a lot of bases, with various models of AKG, E-V, Shure, Telefunken and other brands.

(continued on page 24)

## Moxy Brothers Team for Music Production

BY STEVE HARVEY

LONG BEACH, CA—Adrian Young, drummer with No Doubt, and Todd Forman, former sax player with Sublime, have partnered to launch record production team Moxy Brothers. The pair, veterans of the Southern California ska, pop and punk scene, are offering full-service music production, from songwriting and performance through engineering, mixing and mastering.

Moxy Brothers, launched at the beginning of 2019, already have four records to their credit. "We just want to work with more and more artists, and to start working with record labels as a go-to production team," says Young.

Forman adds, "As we got going with our production team, we were working with a lot of local talent—which was great, but how do we expand the universe of talent?"

In November, to bring their venture to wider notice and attract new talent, the pair launched a competi-

tion, sponsored by Universal Audio, to find an unsigned artist and deliver a fully produced version of a winning song. The plan is to handle all pre-production at their Long Beach-based Ruby Red Room studio, then travel to the artist's home with their mobile Universal Audio systems, at their own expense. The winner will also receive a UA Apollo X4 audio interface. (The winner, announced just before press time, is Rozetta Marie, a Panamanian-American from Brooklyn, NY.)

Depending on the winner's wishes, they expect to lay down Young's drum tracks at Ruby Red before they leave. "After we come back from recording the artist, we can also overdub horns or more guitars or what have you," says Forman, a multi-instrumentalist.

The idea came about after they learned that the band Vampire Weekend had worked on an album in a variety of locations using a mobile UA setup, according to Young. "Since we're already big fans and already use Universal Audio com-



Todd Forman (left), former sax player with Sublime, and Adrian Young (right), drummer with No Doubt, have partnered to launch record production team Moxy Brothers.

ponents, we thought we could do something like that, but turn it into a competition."

He elaborates, "We're going to have matching backpacks of Universal Audio gear," which will include an X4 with a UAD-2 Satellite Octo

for extra processing power. They plan to carry eight microphones, including a vintage Neumann U 87 and U 77, Shure SM7, a pair of AKG 414s, a Shure Beta 52 and a

(continued on page 24)





# BLADE

The Ultimate Audiophile Experience

BLADE is an attitude. It's about exploring the art of the possible, without preconceptions, pushing the boundaries of Hi-Fi sound, in a form that fulfills the wildest imagination. The world's first single apparent source loudspeaker — designed, engineered, and hand-built in the UK.

KEF.COM

**KEF**

OBSESSED WITH HIGH RESOLUTION



## Tweed Recording Academy Arrives in Athens, GA

BY STEVE HARVEY

ATHENS, GA—“We’re going to teach you everything you need to know about engineering and about sound. We’re also going to teach you life lessons,” says Andrew Ratcliffe of his newly opened Tweed Recording Audio Production Academy.

Ratcliffe, recording instructor and CEO, may not have trained as an educator, but he knows whereof he speaks. For 22 years, he ran a studio, Tweed Recording, in northern Mississippi, working with the likes of Jars of Clay, Blue Mountain, The Damnells and Cedric Burnside. But, he says, “To use someone else’s phrase, I had a major-league studio in a minor-league building.”

Initially Ratcliffe wanted to build the mega-studio that he’d been designing in his head for years in Athens, where he, his wife and two young daughters had relocated. “I went, uh oh, this is going to cost some money. What are some ways I could help offset that?”

Having trained at the university of life, working alongside engineers and producers such as Ken Scott and Danny Jones, the answer soon presented itself: Bring together other industry veterans and build a recording academy. “We decided to put together a curriculum to teach young people what we know about the industry, whether that’s intellectual property or recording studios, vintage gear or just how to be a good person,” says Ratcliffe.

Speaking from long experience, psychology is a big part of the gig, he adds. “The battle is herding feral cats that hate each other in a live room.”

The staff at Tweed, which occupies the historic former Lamar Lewis Shoe Company in downtown Athens, also represent a deep bench of experience. Faculty includes legendary tour engineer Buford Jones (Pink Floyd, David Bowie) as adjunct live sound instructor; Timothy Hall, recording and live sound instructor and faculty leader; Nate Nelson, recording instructor; and



Tweed Recording’s control room sports the first Sound Techniques ZR desk produced.

Joe Bleakley, live sound instructor. John Snyder, with five Grammys and 32 nominations to his name, is business of music instructor and president. Athens native David S. Dwyer, from the world of business start-ups and finance, is chief operating officer.

“It’s a 17-week, 580-contact-hour semester—two and a half college semesters in one,” explains Ratcliffe. “The folks across the street at UGA [University of Georgia] said, ‘You can’t do that!’ I said, ‘You’ve never worked in a studio, my friend.’ If you’re not prepared for a 15- or 18-hour day, you’re not going to make it.”

Ratcliffe has long been a Trident console fan, and had a Trident A Range desk, since sold, at his former location. The night he loaded that desk into the studio, he remembered, some kids broke in and stole a random assortment of things, throwing them into a convenient box. Unfortunately, the box contained four of the desk’s monitor modules. Searching for replacements, which are rare as hen’s teeth, he spoke with Danny White, a former A Range owner. “He asked, ‘Are you familiar with Sound Techniques?’ I’d been in the industry for 20 years and had no clue about the company and the history.”

Sound Techniques was a London studio, built in the mid-’60s by

Geoff Frost and John Wood, that manufactured mixing desks for their own rooms and other facilities, including Trident. The desk would later inspire Malcolm Toft and Barry Porter to design and build the Trident A Range.

White explains, “Pretty much every record they did at Trident that everybody thought was mixed on an A Range was actually mixed on a Sound Techniques,” since the console sat in the upstairs remix room until 1977. That includes projects by The Beatles, David Bowie, Elton John and others.

In 2015, White partnered with longtime rhythm section partner PH Naffar (bass and drums, respectively) and bought the company from Frost. With veteran UK audio electronics designers Graham Milnes and Gareth Connor also on board, they have started producing Sound Techniques consoles for the first time since the 1970s.

Ratcliffe, now also a partner in the company, ordered the first production Sound Techniques ZR desk for Tweed. The console, configured with 48 input channels, was displayed at the 2018 NAMM Show. Prior to installation, Ratcliffe had the console reduced to 32 inputs after plans changed and space became an issue. He also ordered seven 8x2 ZR sidecars for the teaching spaces.

Ratcliffe sees Tweed potentially extending a music legacy in Athens that stretches from R.E.M. and The B-52s through the artists of the Elephant 6 collective, such as Neutral Milk Hotel. “It has the promise to help reinvigorate Athens, which is already on the map, but it’s teaching young people the history of recording in the South.”

On that theme, Tweed recently announced that it will hold its first-ever Saturday Session for high school students at the beginning of January. The idea is to introduce students to the recording studio and make them aware of the career opportunities in audio engineering and music production.

Ratcliffe had originally planned to install a 48-input ZR at Pinewood Atlanta Studios, but has now moved his concept closer to home. “We’re going to open a 16,000-square-foot facility two miles from here,” he reveals. “It’ll be for sound for cinematic arts—ADR, Foley, scoring—as well as a commercial studio that also doubles as a greenscreen and a chamber orchestra soundstage.”

Meanwhile, Tweed has opened a 106-seat performance hall with a 264-square-foot stage in its building. Outfitted with Danley Sound Labs speakers and d&b audiotechnik monitors, the space is intended for stripped-down performances by artists passing through town to play just around the corner at the Georgia Theater or 40 Watt Club.

“You can come in, put down your phone, shut up and listen to some music, and enjoy talking to people. We want to do that at 5:30 to 7:30 in the evening,” he says, before bands play their big show elsewhere.

Ratcliffe would also like to host events for the local community. For instance, he says, there is a local resource center offering support for the well-being of the music community. The owner’s son, Nuçi Phillips, a musician, killed himself in 1996 while studying at UGA after losing his battle with depression. “We’re partnering with them to bring in people and talk about wellness,” he says.

“We’re about community, about helping people,” he says of Tweed and its faculty. “We’ve lost friends, kids and loved ones. We didn’t know how to talk about that 20 years ago. But it’s okay to sit down and say, can I talk to you about this?”

Tweed Recording  
www.tweedrecording.com

“It’s a 17-week, 580-contact-hour semester—two and a half college semesters in one. The folks across the street at UGA [University of Georgia] said, ‘You can’t do that!’ I said, ‘You’ve never worked in a studio, my friend.’ If you’re not prepared for a 15- or 18-hour day, you’re not going to make it.”

Andrew Ratcliffe



# Amp Sims Go Pro



BY CRAIG ANDERTON

When amp sims appeared a couple decades ago, opinions were divided. While the convenience of a plug-in or hardware box that could emulate the sound of various amps and effects was appealing, the sound quality was often problematic. Although you could pre- and post-process the sims for better tone, and those listening to a complete mix often couldn't tell the difference between a recorded sim and a physical amp, for many players, the "feel" wasn't the same.

But times have changed. There are several reasons why amplifier emulation is winning over the normally conservative world of pro guitar players, both in the studio and for live performance.

**More powerful processors and more complex algorithms:** Modeling amp distortion is challenging, and the algorithms needed to provide sufficient detail require today's fast processors. The increase in sound quality has been incremental, but when you compare older amp sim programs to newer ones, the difference is obvious. For example, Waves GTR amp models were some of the earliest sims, and they were well-received at the time, but the company's latest PRS "Supermodels" are audibly better and respond more like playing a physical amp. You'll hear similar improvements with earlier and later models from IK Multimedia, Overloud and others.

**Oversampling and higher sample rates:** Amp sims can generate harmonics above 44.1 and 48 kHz, so running projects at 96 kHz and higher helps reduce aliasing. Most amp sims include oversampling options to "fake" higher clock rates, at the expense of somewhat higher CPU consumption.

**Profiling:** The Kemper Profiling Amp started a revolution that is ongoing, and was the breakthrough many professionals were waiting for. The reality of tube amps is that they aren't perfect: tubes age, matched tubes become unmatched, bias requires adjusting, and amps need to be miked properly—which is not always easy on stage. Kemper decided not to emulate amps through conventional means, but instead devised a way to capture their salient characteristics by send-

ing test signals through an existing amp. Capturing and analyzing these test signals allows the creation of a "profile" of how the amp responds to different input signals and control settings.

At first, some thought this approach was limited compared to

software that could emulate dozens of amps; however, as more users developed amp profiles (both for sale and for free), a Kemper could reproduce the sound of any amp that had been profiled properly. Producer Michael Wagener, known for his Platinum album-level work with metal bands like Dokken, Metallica, Alice Cooper, Megadeth, Mötley Crüe, Poison and others, is a tone

fanatic—but after profiling his amps, he sold most of them because the Kemper's sound was equally good, and more consistent.

Profiling is now part of amp sims, too. Positive Grid's Amp Match feature does profiling, as does the upcoming Amp Cloner from AMR (formerly part of Peavey). I've even used this technique to profile amp

*(continued on page 23)*



## E-Vocal® Series



Dante  
SPOKEN HERE

DDM READY

The E-Vocal® series is a family product of AoIP which provides various functionalities to professional audio applications. It is specifically designed and complied with Dante which is known as the combination of software, hardware and network protocol that delivers uncompressed, multi-channel, low-latency digital audio over a standard Ethernet network. The features of E-Vocal® series are shown below :

### E-Vocal® Duo



- Plug and Play
- Two input or output channels
- Network all audio gears
- Power via PoE or DC5V
- AES67 Compliant
- Adjustable Lip-Sync delay (ARS-0002-A01)

### E-Vocal® Duo+



- Two input and output channels
- Mic PreAmp and Phantom Power
- Mic PreAmp gain control
- Adjustable Lip Sync delay output
- Web browser based remote control
- RJ45 Copper / Fiber interface
- AES67 compliant

### E-Vocal® Myriad



- 16/32 analog channels input & output
- 2 LAN etherCON connectors for redundancy
- 96 kHz, 24 bit resolution
- Display operation status, current sample rate
- 25-pin D-sub connectors
- Dual AC input and dual PoE power sources for redundancy
- Built-in web-based controller

### E-Vocal® Stage



- 16 analog channels input / output
- Robust and portable Stage box
- Placed horizontally or vertically
- 2 LAN etherCON connectors for redundancy
- 96 kHz, 24 bit resolution
- Dual AC input and dual PoE power sources for redundancy
- Built-in web-based controller



Arista Corporation  
40675 Encyclopedia Circle  
Fremont, CA 94538  
TEL: 510-226-1800  
sales@aristaproav.com  
www.aristaproav.com



E-Vocal®  
Dante  
SPOKEN HERE  
DDM READY





**ARTIST:** THE CAROLYN SILLS COMBO  
**ALBUM:** RETURN TO EL PASO  
**LABEL:** SELF-RELEASED  
**PERSONNEL**  
**Produced by:** Sylvia Massy, Carolyn Sills, Gerard Egan  
**Engineered by:** Sylvia Massy  
**Studio:** Pink Satellite Studio (Joshua Tree, CA)  
**Mastered by:** Steve Turnidge at Ars Divina  
**EQUIPMENT NOTES:** Avid S6, Yamaha NS10, Avid Pro Tools



**ARTIST:** SEFI ZISLING  
**ALBUM:** EXPANSE  
**LABEL:** TRU THOUGHTS  
**PERSONNEL**  
**Produced by:** Sefi Zisling  
**Engineered by:** Asaf Shay  
**Studios:** Hateiva Studios, Halal Studio (both Tel Aviv, Israel)  
**Mastered by:** Stardelta  
**EQUIPMENT NOTES:** Midas Venice F32 console, Genelec 8020 and ATC SCM25A monitors, Avid Pro Tools



**ARTIST:** MILKY CHANCE  
**ALBUM:** MIND THE MOON  
**LABEL:** BMG  
**PERSONNEL**  
**Produced by:** Milky Chance, Tobias Kuhn  
**Engineered by:** Jonas Holle, Tobias Kuhn, Richard Stolz  
**Mix Engineer:** Rob Kinelski  
**Studios:** Oceansound (Allesund, Norway), Mushroom Studio (Italy), Muggelig Studios (Kassel, Germany), Woodstock Studios (Melbourne, Australia)  
**Mastered by:** HP Mastering (Germany)

**EQUIPMENT NOTES:** Rupert Neve Designs 5088 Shelford Limited Edition, Neve V-Series 36 console, ATC and Yamaha NS-10 monitors, Apple Logic Pro



**ARTIST:** MADAME GANDHI  
**ALBUM:** VISIONS  
**LABEL:** SELF-RELEASED  
**PERSONNEL**  
**Produced by:** Madame Gandhi, Anthony Saffery, Caleb Stone, Dave Lewis, Ruxell, Zach Witness, Black Noi\$e  
**Engineered by:** Sarah Ma, Jasmine Chen, Charlie Moon, Danielle "Daiza" Thwaites, Michael Starita, John Zott, James Musshorn  
**Mix Engineer:** Neil Comber  
**Studios:** Red Bull Studios, Village Studios, Assemble Sound, Pulse Recordings  
**Mastered by:** Piper Payne, Infrasonic Sound, Cue Division Studios, The Pool Studios, ArtHouse Lofts, The Curtain Hotel, Berklee College of Music, The Gantry Studios  
**EQUIPMENT NOTES:** SSL hybrid console, KRK 9000b monitors, Avid Pro Tools



**ARTIST:** JENNIFER TRUESDALE  
**ALBUM:** THROUGH THE CIRCLE  
**LABEL:** RUBY SHOES MUSIC  
**PERSONNEL**  
**Produced by:** Jennifer Truesdale, David Minehan  
**Engineered by:** David Minehan  
**Studio:** Woolly Mammoth Sound (Waltham, MA)  
**Mastered by:** Dana White at Specialized Mastering  
**EQUIPMENT NOTES:** Ampex 102 1/2-inch tape mastering deck, Neotek Elite 34-channel console, Amphion Two18 monitors, Avid Pro Tools HDX Ultimate 2018



**ARTIST:** LOCOBEACH  
**ALBUM:** PSYCHEDELIC DISCO CUMBIA  
**LABEL:** DORSAL FIN/PEACE & RHYTHM  
**PERSONNEL**  
**Produced by:** José Luis Pardo  
**Engineered by:** José Luis Pardo  
**Studio:** Cutupra Studios (New York, NY)  
**Mastered by:** José Blanco at Blanco Mastering  
**EQUIPMENT NOTES:** Event XL Toroid monitors, Avid Pro Tools HD



**ARTIST:** JOHN DENNIS  
**ALBUM:** MORTAL FLAMES  
**LABEL:** RAINFEATHER RECORDS  
**PERSONNEL**  
**Produced by:** Bryan Clark  
**Engineered by:** Bryan Clark, Jason Mott, Chris Brush, Mark Lange  
**Mix Engineer:** Bryan Clark  
**Studios:** Blackbird Studio, PlethoraTone Studio, Rainfeather Studio (all Nashville, TN)  
**Mastered by:** Frank Gagliardi at Fuselage Mastering  
**EQUIPMENT NOTES:** Neve 8078 and Kearney Barton Langevin consoles; ATC SCM300ASL, Dynaudio BM15A, Neumann KH 120 monitors; Avid Pro Tools



**ARTIST:** HAWKTAIL  
**ALBUM:** FORMATIONS  
**LABEL:** PADIDDLE RECORDS  
**PERSONNEL**  
**Produced by:** Hawktail, Chris "Critter" Eldridge  
**Engineered by:** Dave Sinko  
**Mix Engineer:** Jacquire King  
**Studio:** Southern Ground (Nashville, TN)

**Mastered by:** Pete Lyman at Infrasonic Sound  
**EQUIPMENT NOTES:** API Legacy Plus 48 channel with 500 series bucket, Atomic Reactor monitors, Avid Pro Tools



**ARTIST:** THE JAY VONS  
**ALBUM:** THE WORD  
**LABEL:** LA CASTANYA  
**PERSONNEL**  
**Produced by:** The Jay Vons, Wayne Gordon, Thomas Brenneck  
**Engineered by:** Wayne Gordon, Larry Gordon, Thomas Brenneck  
**Mix Engineers:** Wayne Gordon, Thomas Brenneck, Simon Guzman, Dave Amels, Benny Trokan  
**Studios:** Daptone House of Soul and Dunham Sound Studios (both Brooklyn, NY), Diamond Mine Recording (Long Island City, NY)  
**Mastered by:** JJ Golden at Golden Mastering (Ventura, CA)  
**EQUIPMENT NOTES:** Trident Series 65 console, JBL 4425 monitors, Ampex 440 1-inch 8-track



**ARTIST:** DANTE MAZZETTI  
**ALBUM:** HOTEL VOL. 2  
**LABEL:** SELF-RELEASED  
**PERSONNEL**  
**Produced by:** Adam Sussman, Dante Mazzetti  
**Engineered by:** Adam Sussman, Dante Mazzetti  
**Mix Engineer:** Adam Sussman, Dante Mazzetti.  
**"Ugly" engineered by:** Daniel Alba  
**Studios:** Mercy Sound Recording Studios, home studio (both New York, NY)  
**Mastered by:** Oscar Zambrano at Zampol Productions (New York, NY), Dante Mazzetti  
**EQUIPMENT NOTES:** vintage Neve 1073 mic pre, Legacy Focus SE and Yamaha NS-10 monitors

## Bates Builds ATC Collection

LAS VEGAS, NV—Longtime ATC ([www.transaudiogroup.com](http://www.transaudiogroup.com)) user Tyler Bates, who works across the film, TV, videogame and record industries, and is currently scoring a new Cirque du Soleil show, recently purchased a second pair of ATC SCM20ASL monitors to match the sound of his other rooms, where he has ATC SCM100ASL and SCM150ASL monitors.

## Narwhal Nets 5088

CHICAGO, IL—Narwhal Studios, a collaboration between producers Brian Deck and Jim Gifford in Chicago's Wicker Park neighborhood, is now home to a 16-channel Rupert Neve Designs ([www.rupertneve.com](http://www.rupertneve.com)) 5088 console with Shelford 5052 mic preamp/inductor EQs, which sits beside the studio's vintage SSL 4040 G+.

## Studio Matched with Ocean Way, MDG

MIAMI, FL—Noisematch Studios, designed by the Malvicino Design Group ([www.malvicinodg.com](http://www.malvicinodg.com)) and built from the ground up in Miami, features an SSL Duality SE 48 console and an Ocean Way Audio ([www.oceanwayaudio.com](http://www.oceanwayaudio.com)) HR2 3-way monitoring system. The facility is a 2020 nominee for a TEC Award in the Studio Design Project category.

## WSDG, TC Zhou Build in Beijing

BEIJING, CHINA—Multi-talented studio engineer TC Zhou collaborated with director of design Renato Cipriano, art director Silvia Molho and project manager Alan Machado from acoustic consulting and AV integration firm WSDG ([www.wsdg.com](http://www.wsdg.com)) to design his latest multiroom facility in Beijing.



## Software Tech

(continued from page 21)

sims proprietary to specific DAWs that I wanted to use in other DAWs. The first time I tried this, I thought I'd copied the original audio file by mistake—but there was no mistake. The sound was essentially identical.

The rise of impulse responses: The art of capturing impulses for convolution-based processing is becoming more refined, and amp sim speaker cabinets are among the beneficiaries. What's more, newer sims often allow loading custom impulse responses. For example, if you really like a particular impulse of a Celestion speaker

in a closed-back cabinet, you can use it in more than just one particular amp sim.

A change in attitude: Finally, more people accept that amp sims don't exist solely to replace physical amps, but to provide options that would be difficult to implement with hardware. Furthermore, there's an understanding that the virtual and physical worlds can complement each other. Some use only the effects in amp

sims along with physical amps, while others use analog effects with virtual amps and cabinets. Techniques like multiband processing, stacking multiple cabinets and the like are daunting in the physical world, but take only a few mouse clicks in a virtual one. Couple that with ever-improving sound quality and it's not surprising that amp sims have turned the corner for professional use.

There's a great quote from Jason

Burns: "If I traveled back to 1973 and stole all of Jimmy Page's gear, but left him with an AxeFX II, *Led Zeppelin III* would still be *Led Zeppelin III*." Amen. The art will always be more important than the tools, but it's even better when tools advance the state of the art.

Craig Anderton's free educational website, [www.craiganderton.org](http://www.craiganderton.org), is now online as a companion to the [craiganderton.com](http://craiganderton.com) digital storefront.

## MwM Attracts API

PAWTUCKET, RI—Recording studio Machines with Magnets commissioned a 24-channel API 2448 console for the facility's main recording room. Created as a mixed-use facility—recording studio, art gallery and live venue—Machines with Magnets was founded in 2001 in East Providence, RI, by Keith Souza, who was joined by Seth Manchester in 2005.

Based today in Pawtucket, the current iteration of the studio is centered around a 24-channel API DSM console. "For the past 15 years we had an API DSM system, which became the cornerstone of the sound of the records we make here at Machines with Magnets," said Manchester. "When the API 2448 console was first announced, Keith and I knew we had to figure out how to get one. It was exactly what we had been wanting from API for years. The inline topology, direct outs, bus and auxiliary options have opened up a world of flexibility that instantly made sessions significantly more efficient and productive."

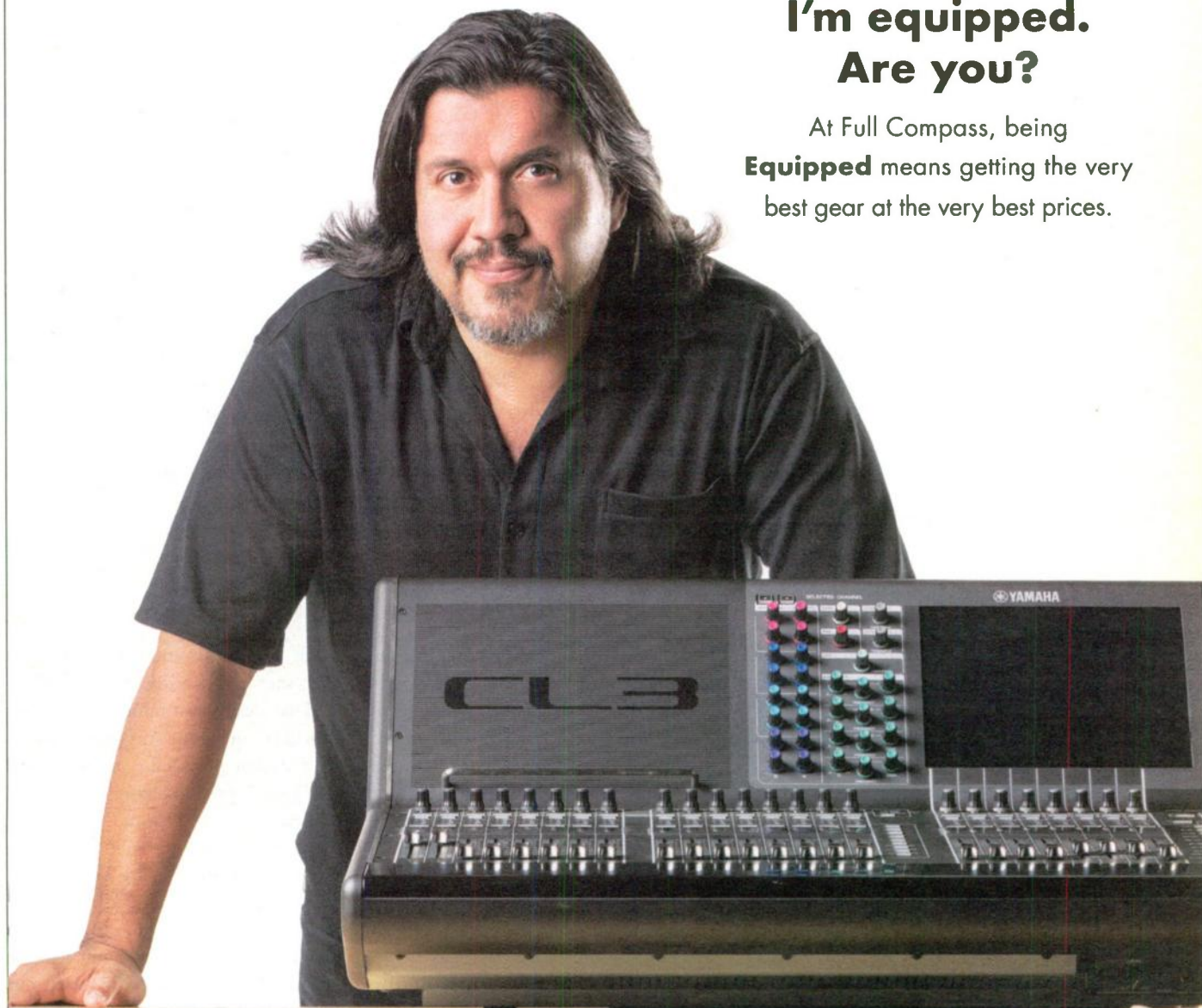
Automated Processes Inc.  
[www.apiaudio.com](http://www.apiaudio.com)



Machines with Magnets' API 2448 console

# EQUIPPED BY FULL COMPASS

The Premier Supplier of Professional Audio, Video and Lighting Equipment



**I'm equipped.  
Are you?**

At Full Compass, being **Equipped** means getting the very best gear at the very best prices.

**We Offer One-stop Shopping Complete with**

- ✓ A Huge Selection
- ✓ Hot Gear
- ✓ Low Price Guarantee
- ✓ Flexible Financing
- ✓ Free Shipping
- ✓ Expert, Friendly Service
- ✓ End-to-end Support
- ✓ Free Repair Program

**800-356-5844**  
**fullcompass.com**





## Sure Sure

(continued from page 18)

“A lot of the drum miking has come through trial and error,” says Coleman. He likes to experiment, using self-imposed restrictions. For instance, “What does it sound like if you mic a drum set with all [Shure] Beta 52s?”

Currently, the band have just 13 simultaneous mic inputs available. That’s enough, says Coleman, but he would be happy to have a few more. His mic preamp collection includes an A-Designs Pacifica and various 500-series modules from the likes of API, CAPI, Chandler, Great River and Neve. “I’d like to have more channels when we’re shooting live stuff,” he says, especially on the drums. “I love the Pacifica. I would

get another one of those.”

For dynamics control, there is a Manley Variable Mu and a pair of Warm Audio WA76 limiters, as well as the Empirical Labs compressors. Additional coloration can be dialed in using UBK Kush Electra and Manley Pultec equalizers. “And I have an ELI DerrEsser that I use a lot. It’s super good,” he says.

Another favorite piece is the Elysia Envelope, a frequency-based transient designer. Drums are the solid center of any Sure Sure confection, and the Envelope enables Coleman to get the sounds he needs. “It allows us to record really tight drums. There will be one overhead or a front mic and—we learned this trick from a friend—you can use a ‘snare under’ and get kick, too.” Using the Envelope, he says, “You then take all of the sustain out of it. It

sounds so tight.”

Using that method, he continues, “It gives the kit an interesting stereo image because the hi-hat will be a dynamic mic, panned, but there’s this room reverb on it. You gate the snare. And I love using sub-kicks—I’m in a sub-kick phase now.”

An Eventide H3000 also gets frequent use. “I love overloading its converters. Pitching drums down, then blowing them up is just the best. It sounds amazing.”

Given the drum experimentation, he comments, “What I love about working with Kevin is that he gives me the space to experiment and get crazy sounds. Every day, working with these guys, I feel so lucky, for their musicianship and their abilities.”

Adding to the communal feel, everyone pitches in during production. “What’s nice about our workflow is

that everybody is really good at editing and is super competent in Logic,” says Coleman. “Everybody can be working all the time and can tag in and out. We can work fast.”

Sure Sure  
www.suresuremusic.com

## PreSonus Partners on Multitracks

BATON ROUGE, LA—PreSonus has teamed with Mix the Music, an online store offering downloadable stems from officially licensed major-label multitrack recordings provided by Universal Music Group, Fox Film Music, Electronic Arts and others, with artists ranging from Ariana Grande and Shawn Mendes to Anthrax and Korn.



PreSonus' Studio One 4

The service, which is intended for entertainment and educational purposes, allows users to download, listen to and remix songs using multitracks created from the original recordings by major artists and film/game composers. The download agreements do not permit users to export their mixes or individual tracks of Mix the Music songs to a new file.

The files, in PreSonus' new multitrack format, can be opened, played and edited using any edition of PreSonus' Studio One 4 (version 4.5.4 or later) recording and production software, including Studio One Professional, Artist and Prime. Studio One is the only software that supports the new multitrack format.

Mix the Music offers a variety of multitrack music, including contemporary and classic hits, film scores and video game scores.

Mix the Music  
www.mixthemusic.com

PreSonus  
www.presonus.com

## Moxy

(continued from page 18)

Sennheiser MD421.

Situated in the basement of Young's house, Ruby Red was originally a rehearsal space. “At the end of last year, I integrated the recording studio to be a part of that, so it’s technically both,” says Young. “I would argue that it might be the smallest recording space where you can record an entire record, including drums, with 12 mics on them.”

Young, who switched from Logic

ects. His gear includes a number of vintage pieces: a pair of Neve 1073s, a UA 1176 and Lavry converters, with Pro Tools and an old Digidesign 003 interface. “I’m adding the Universal Audio X4,” he reports.

Once the winning song is finished, says Young, “Assuming the artist wants us to stream it, that would be the beginning, but we’ll also share it with industry folks we’re friends with, just like we do with all of our projects that are currently unsigned.”

The pair will travel with Young's brother, Alex, a marketing and social media expert. “We’ll see what we can do to enhance our experience

wanted to play music that my kids could listen to, other than Sublime.” That band's 1991 debut single, on which he played, was entitled “Date Rape,” he points out.

The five-piece Jelly of the Month Club performs at venues such as Knott's Berry Farm and the Fairmont Princess Hotel in Scottsdale, AZ. With the school music programs from which Sublime, No Doubt and their contemporaries befitted now almost extinct, Forman says, “We want to ‘vaccinate’ children so that when they become teenagers and hit the pop world the way it is now, they can understand what music with a real

“We want our productions to be a bridge between that homespun, do-it-yourself attitude, but delivered with more excellence, to the level it should be at.”

Todd Foreman

to Pro Tools a while back, was initially concerned about the results he could get in the room, which he describes as “small but very dead. I thought, I’m kind of limited in the space—I can’t get any kind of a room sound. Once I dug deeper into Universal Audio’s plug-ins, like the Ocean Way and Capitol Chambers plug-ins, I found I could make those drums sound as big as I want. And it’s so easy to do aux channels now, so you’re recording dry, but you also have the wet version.”

“Adrian has done a great job working out what mics work best where in that room for his drums, and what drums work best,” Foreman says.

Foreman built a home studio about 10 years ago that includes a vocal booth they can use for their proj-

when we visit the winner,” says Forman. Arriving a day or two in advance, they can check out the local music scene and interview the artist, he says. “We can see what influences he or she has had in their life, and what the inspiration was behind the song so we can get a deeper understanding of where that person is coming from. That will inform the making of the song. Having Alex along to film it would be a neat process.”

In 2010, Forman came off the road with Sublime with Rome, a group that had revived Sublime's songs after the death of the band's founder and frontman, Bradley Nowell, in 1996. He's since put together a family-friendly band, Jelly of the Month Club. “I have a master's degree in medical education and am a family physician,” says Forman. “I

guitar, real horns and real production is, so they can hear the difference.”

That desire also informs the Moxy Brothers' mission. Anyone can create a decent production at home and distribute it on one platform or another, says Forman. “At the same time, you’re not getting the investment into really professional quality we were getting in the '70s, '80s and '90s in terms of engineering, production, sounds, rooms and time. We just don't see that quality on a broad scale. We want our productions to be a bridge between that homespun, do-it-yourself attitude, but delivered with more excellence, to the level it should be at.”

Moxy Brothers  
www.moxybrothers.com

Universal Audio  
www.uaudio.com



briefs

### Calrec Adopted for Esports

HELDEN BRIDGE, UK—Calrec Audio ([www.calrec.com](http://www.calrec.com)) reports that esports organizations are turning to its traditional broadcast solutions to handle complex tournaments. Calrec clients include EA Sports, Full Sail University, OGN and Riot Games, which has implemented the RP1 remote broadcast mixing system and Artemis mixing consoles.

### Man Made Makes Change

NEW YORK, NY—Manhattan-based sound design, sonic branding and music creation facility Man Made Music has upgraded to a PMC ([www.pmc-speakers.com](http://www.pmc-speakers.com)) IB2S XBD-A active system for both stereo and 5.1 monitoring in its Studio A control room, in addition to PMC Wafer2 passive speakers for left and right rear surround positions.

### Finishing Move Nabs SSL

OAKLAND, CA—Production duo Finishing Move, which comprises principal composers Brian Trifon and Brian Lee White, creates music and sound design for games, television, film and ad campaigns. They have been using an all-analog SSL ([www.solidstatelogs.com](http://www.solidstatelogs.com)) Fusion stereo on-board processor for their game score work.

### Sound Lounge Adds Services

NEW YORK, NY—New York post house Sound Lounge ([www.soundlounge.com](http://www.soundlounge.com)) has launched a package of sound production and post-production services for podcasts, offering studio recording, remote recording, sound editing, and sound design and mixing. The company can also assist with music licensing, voiceover casting and other production requirements.

### Wee Works with Nugen

LOS ANGELES, CA—Producer and mixer Alvin Wee, who cut his teeth working with composers and record producers in Los Angeles on film projects such as *Kung Fu Panda*, *The Kingsman* and *Eddie the Eagle*, has been using a Nugen Audio ([www.nugenaudio.com](http://www.nugenaudio.com)) Producer bundle and Halo Upmix for mixing and mastering.

## Waterman Sound Goes with the Flow

BY STEVE HARVEY

TOLUCA LAKE, CA—Supervising sound editor and re-recording mixer Joe Schultz recently opened audio post-production facility Waterman Sound in Toluca Lake, partnering with James Longieretta, owner of post-production solutions provider Vortechs. The boutique sound shop offers a mix stage, ADR stage and an edit and utility bay, plus a lounge and other client amenities.

The San Fernando Valley neighborhood once home to Bing Crosby, Bob Hope, Frank Sinatra and numerous Hollywood actors retains a small-town feel despite being just minutes from the Warner Bros., Universal and Disney studio lots. Waterman Sound occupies 3,000 square feet on the first floor below Vortechs' new 40-bay picture editing facility, sharing the building's celebrity-friendly on-premises parking lot—with complimentary car wash—and private entrance. Vortechs, headquartered in Echo Park, also recently leased a space across the street, building out 10 more picture edit rooms. With a third partner, picture finishing house The Foundation, just a short walk



James Longieretta (left), owner of post-production solutions provider Vortechs, and supervising sound editor/re-recording mixer Joe Schultz (center) recently partnered to found Waterman Sound, bringing on Marilyn Morris to head the ADR department.

away, clients have everything they need in the immediate neighborhood.

One-stop shopping is part of the concept, says Schultz: "We've done a couple of shows where clients have been upstairs, then mixed down here." For instance, the titular hosts of *Rhett & Link's Buddy System*, a YouTube Premium original series, worked with Schultz, who supervised,

handled sound editorial, ADR and dialogue editing chores, and mixed the audio while the show was being cut upstairs.

Originally from the Midwest, where he started as a musician and luthier, Schultz arrived in Los Angeles in 2001, initially working with Sound Dogs. He has had a long association

(continued on page 26)



Speaking at the Esports Production Summit were (l-r): Matt Donovan, broadcast and technology manager, Riot Games; Simon Eicher, executive producer and director, broadcast, esports services, ESL Gaming; Andrew Lane, director of broadcast, Faceit; Mitch Rosenthal, director, esports production operations, Twitch; Scott Smith, co-founder/managing director, Do Not Peek Entertainment; Andrew Wagnitz, director of broadcast and technology, Next Generation Esports; and Jason Dachman, chief editor, SVG.

## Audio Production Keeps Up as Esports Explodes

BY STEVE HARVEY

UNIVERSAL CITY, CA—Industry analysts predict there will be 84 million esports viewers in the United States by 2021, compared to just 79 million MLB viewers and 63 million NBA viewers. As the juggernaut that is esports continues to gain momentum,

Sports Video Group hosted its second annual Esports Production Summit in Los Angeles, presenting a broad agenda that offered insights about the role of audio in esports broadcasting.

Since esports championships, tournaments and games are hosted around the world, broadcast productions have quickly come to rely

on REMI (REMIte Integration), or at-home workflows, for much the same reasons as traditional sports broadcasts. Not only does the REMI model reduce costs such as hotels and flights for a production that typically requires anywhere from 50 to 80 people, it also enables producers, directors, camera operators, audio engineers and others to sleep in their own beds every night.

"I got tired of being on the road," said Scott Smith, co-founder/managing director of Do Not Peek Entertainment, speaking on a panel offering attendees a look behind the scenes of today's esports productions. Smith started the company with Jason Baker, a fellow traveler in the gaming industry since the turn of the millennium. "We did REMI before it was called REMI. We've been pioneers in this space since before it was called esports," said Smith.

"Riot leans pretty hard on the REMI workflow model," said Matt Donovan, Riot Games' broadcast and technology manager. Riot's *League of Legends* World Championships, held in three European cities in late 2019, reportedly attracted more than 30 million viewers over 30 days. According to data from industry analyst Esports Charts, the tournament set a record, with four million viewers at its peak.

(continued on page 26)



## Waterman Sound

(continued from page 25)

with Walt Disney Pictures/ABC Television and, like many in the sound for TV and film business, has worked all over town. But it was a friend, Craig Henighan, who recently completed *Terminator: Dark Fate*, who most influenced Waterman Sound's design.

"He built a stage at his house," says Schultz, "and I asked who he was using for gear and acoustics. He put me in touch with [executive vice president Hamid] 'Gadget' Hopkins at Westlake Pro and Jerry Steckling," founder of JSX Acoustics, who supplied a couple of his subwoofers for the stage and has been consulting on sound isolation between the upstairs and downstairs facilities as well as the mix stage acoustics.

Schultz—a three-time Emmy nominee for his work on *Lost*, for which he worked on every season but the first—has long been a devotee of in-the-box workflows. Having experienced some of the limitations of standalone digital mixing desks in the past, he's happy to now be working on a dual-operator Avid S6 console and multiple Pro Tools HDX systems on Waterman Sound's 500-plus-square-foot mix stage. "It's much more of a hybridized workflow than when I started," he says.

The stage is set up for 7.1 work, with JBL's 708 speakers on the walls and M3 monitors behind the screen, in addition to Steckling's subs. But, as



ADR department head Marilyn Morris' background includes a two-year stint at Lucasfilm's Skywalker Sound.

Schultz reports, the room is about to get slightly larger with an upgrade to Dolby Atmos for Home certification.

"I have my DARDT numbers done, so I'm ready to do the demo," he says, referring to the Dolby audio room design tool that specifies speaker selection and placement for an Atmos stage. The rear wall, separating the stage from a producer's room, will be moved back, making space for another row of seats, he says, and he will add a half-dozen JBL 705 overhead speakers, plus two more 708s, for a 9.1.6 configuration. That will not only enable him to work on Dolby Atmos shows, but by offering more accurate translation to larger stages, it will also allow other mixers to pre-dub projects in the room if they wish, he says.

Schultz has hired Marilyn Morris,

who until recently was working as a dubbing mixer for foreign television series and features at Dubbing Brothers in Burbank, to head the ADR department. From the Bay Area, Morris worked as an ADR mixer and associate chief engineer at Hollywood's Bell Sound for six years before a two-year stint at Skywalker Sound.

"I was doing mostly mix technician work, supporting six DFC consoles," she says of her time at the Lucasfilm facility. "I got to do some editorial work on *Captain Marvel*, and sound effects recording, spotting ADR and doing conforms, but I missed Los Angeles and ADR mixing, which is what brought me back."

Waterman Sound's ADR stage accommodates up to eight actors. "The room sounds great. It's an amalgamation of some of the rooms that I've

liked in town," says Schultz. "It's a perfect TV-sized stage." The associated edit room is outfitted with JBL monitors, a Pro Tools HDX rig and an Avid S3 work surface, as is the edit bay positioned between that room and the mix stage.

After being hired, Morris immediately went to work recording ADR for the series *Castle Rock* for Warner Bros., and NBC's *The Good Place*. Waterman Sound's list of ADR credits also includes ABC Studios' *Blackish* and Fox's *What We Do in the Shadows* on the TV side, plus feature films including *Charlie's Angels* and *Jojo Rabbit*. The facility has also provided mixing services for Showtime's *The Loudest Voice*, Facebook's *Queen America*, and the ABC TV series *Once Upon a Time*, along with its spinoffs, that Schultz has worked on since 2012.

Connectivity between the upstairs and downstairs facilities, plus a link across the street, further expands the dub stage's potential. "*Charlie's Angels* was upstairs and came down to use the room for some screenings, and *Jojo Rabbit* finished here," says Longgeretta. Vortechs has contracted with a company to do dark fiber between the building and the facility across the street, he says, "so they can be connected to our [Avid] Nexis [storage platform] and down here."

"We have a Media Composer machine that we can tie into their Nexis. *Charlie's Angels* was thrilled because they were able to cut past the 11th hour," says Schultz.

**Waterman Sound**  
www.watermansound.com

## Esports Audio

(continued from page 25)

The tournament included 20 broadcast days, whose production was handled from Riot's Southern California facility. "We've integrated with the Calrec RP1 and utilized remote IFB control from our EU facility," he said. The RP1 remote production engine acts as an extension of the at-home audio mixing console while also managing local IFBs and remote monitor mixes.

During the competition, "We had upwards of 40 transmission feeds all coming back to different studios around the world," said Donovan. The signal flow was typical of past tournaments. "We transport those to our flagship studio in Santa Monica and make a world clean feed that is distributed to the rest of the regions," enabling staff in each of Riot's 14 broadcast regions to localize the program with their own language, graphics and productions.

Next Generation Esports, a white-label production company based in Burbank, CA, helped produce the *Fortnite* World Cup in New York in 2019. The company has two studios, one of which has been built out with six new soundstages "to help partner with publishers and vendors that want to produce content," said Andrew Wagnitz, director of broadcast and technology. "And we've partnered with third-party vendors—Game Creek, Bexel, NEP—trying to help publishers get things they wouldn't normally be able to achieve."

Panel moderator Jason Dachman, SVG's chief editor, noted that the biggest difference between broadcast production for traditional sports and esports is that in esports, there is no separation between venue and broadcast production, which share a control room. "When you're casting in a remote model, that complicates the workflows," said Donovan, "especially on the audio side, just adding technology." It's a challenge to keep track of local and remote feeds and cues, he said.

That lack of separation has increasingly become a challenge to the integrity of esports competitions as big money flows into the business. Esports games can attract tens of thousands of spectators who expect to follow the play with the help of in-venue commentary and multiple screens. But what if an in-house caster describes some action currently taking place out of sight of a player to fans and the player overhears, or can see events unfolding on one of the displays? How do you prevent cheating with so much money on the line?

To take one example, *Fortnite* finals winners shared a prize pool of \$30 million, and one 16 year old took home \$3 million. "When you have a prize pool of multi-millions of dollars, there's a security aspect," said Wagnitz.

"As money and fame go up, you have to be careful of these things," said Smith. To prevent players from hearing what is going on elsewhere in the game while still delivering the expected experience to fans in the venue, "you isolate the players' headsets," he said. "They usually wear ear-

buds and a headset with white noise. Or, at the big events, they put them in a soundproof booth."

That said, players might still be able to turn and see the action on the screens. "All those things are an extra worry when you're building the stage and planning the audio," Smith said.

ESL Gaming's Simon Eicher, executive producer and director, broadcast, esports services, spoke about opening esports to an even wider audience. "We recently announced, with Intel, the Intel World Open, leading into the Tokyo 2020 Games, tying into OBS [Olympic Broadcast Services, the permanent host broadcaster] and working with the IOC [International Olympic Committee]." It was a thrill to walk around the IBC [International Broadcast Centre], he said: "All the broadcasters getting ready for the Olympic Games were watching our feeds."

Intel and ESL previously hosted IEM Pyeongchang around the time of the 2018 Winter Olympic Games in South Korea. Esports has been

(continued on page 27)



# Godfather at Goldcrest

NEW YORK, NY—For the Epix crime drama *Godfather of Harlem*, the sound team at Goldcrest Post, led by supervising sound editor/re-recording mixer Jacob Ribicoff and re-recording mixer Bob Chefalas, was tasked with bringing city streets and other environments depicted in the show to life.

*Godfather of Harlem* is based on the story of real-life crime boss Ellsworth “Bumpy” Johnson (played by Whitaker).

“It was very important to Chris Brancato that we get 1963 Harlem right,” says Ribicoff. “During initial spotting sessions, we talked about the various neighborhoods portrayed in the show and how to give each one the proper feel.”

The sound team combed through old news footage and other archival material to get a sense for the sounds of real-world city streets, apartment buildings, shops, nightclubs and traffic. Their goal was to replicate those sonic spaces as accurately as possible to draw viewers into Bumpy’s world. “If we were on 125th Street in Harlem, the traffic you’d hear would mostly come from

older cars,” Ribicoff notes. “You’d also hear people talking and laughing, and their voices needed to be natural and ethnically correct. When we moved to a wealthier neighborhood, you might hear more trees and birds.”

Goldcrest Post  
www.goldcrestpostny.com



*Godfather of Harlem*, starring and executive produced by Forest Whitaker (right), gets audio post-production at Goldcrest Post.

## Esports Audio

(continued from page 26)

lobbying for inclusion in the Olympic Games for some time. The Tokyo tie-in will likely help increase awareness of esports among traditional sports fans.

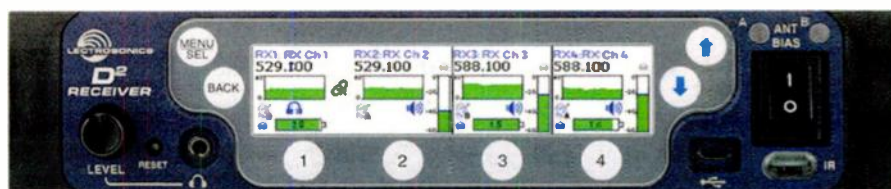
As esports’ popularity grows, developers have started to establish dedicated venues, either as conversions or ground-up constructions. A separate panel focused on what is expected to be an explosion in the number of venues over the next few years.

“With *Overwatch* heading into its third year, this is the first time that matches will be played in home markets around the world,” said Kristin Connelly, *Overwatch* League, senior director, marketing. “All 20 teams will be playing at arenas, stadiums and concert halls that aren’t their own—yet.”

But in Philadelphia, ground was recently broken on what will be a purpose-built 3,500-seat esports venue for the *Overwatch* League’s Fusion team, due for completion in 2021. A \$50 million joint venture between Comcast Spectacor and the Cordish Companies, Fusion Arena is in the heart of the city’s sports complex. “We’re looking forward to that trend continuing,” said Connelly.

# Let there be light *weight.*

Visit us at  
**The NAMM Show**  
January 16/19 2020 California  
Booth 17213



### DSQD Receiver

### SSM Transmitter

4 Ch. per half rack = 8 ch. in 1RU



2.3 Oz (65 g) with LiOn battery

Digital and Digital Hybrid



Digital Hybrid Wireless

Quick, intuitive interface



Sets up in seconds with IR sync

All metal construction



All metal construction

Analog and Dante® outputs



Compatible with analog receivers

Surprisingly Competitive



Surprisingly Competitive

Check out the latest Lectrosonics wireless systems  
and raise *your* wireless standards.



<< Scan here to learn more

www.lectrosonics.com or 1-800-821-1121

In Canada, call 877-753-2876

In Europe, call +33 (0) 78558-3735



## A Half-Century of Innovations: John Storyk Looks Back at 50 Years of Studio Design

BY STEVE HARVEY

After visiting Cerebrum, a New York City club that opened in 1968 and offered what was described as an “innovative immersive experience,” Jimi Hendrix decided to build his own club and sought out the designer. The project soon turned into a recording studio, Electric Lady, and the designer, John Storyk, a recent architecture school graduate, found himself propelled on a career path that would see him and his firm go on to design nearly 4,000 audio/video production, performance, education, house of worship and residential facilities worldwide.

Storyk and the partners and employees at WSDG – Walters-Storyk Design Group have spent the past year celebrating 50 years in business. “I have my first drawing, dated February 1969,” says Storyk of the Electric Lady Studio project, which took 15 months to complete.

Over the past five decades, WSDG’s projects have included New York’s Jazz at Lincoln Center; private production spaces for Jay-Z, Bruce Springsteen and Alicia Keys; commercial studios such as Jungle City in New York and The Church Studio in London; and broadcast facilities for CBS, WNET and Food Network.

The company has grown from a home-based business to a global network of offices in New York, Miami, Switzerland, Germany and Brazil, with representation in Spain, Argentina, Qatar, China, Mexico, India and the United States. And now, with a half-century in business behind him, Storyk, who turns 74 in May, has implemented a succession plan that will allow WSDG to continue for another 50 years.

Just don’t call it a retirement.

“I’m just involved in the 30,000-foot view,” he says. “I still work 50, 60 hours a week. I’m the lead designer on about 25 percent of the projects. I still review every design. I teach and I write. We have a research group that I’m very involved in on some issues you’ll hear more about in about six months. We’re releasing some pretty interesting analysis software.”

Storyk stresses, “I’m not even interested in retiring. I worked all these years to get pretty good at something,



John Storyk, then and now.

so what would be the point? The ‘R word’ does not work with me.”

The company today is a far cry from its beginnings, when Storyk was an aspiring music star making a living with carpentry work and a brief stint in an architect’s office. “If you were to describe to that 22 year old—a sax and piano player, an architect out of Princeton, living in Greenwich Village in the summer of ‘68—the life he would have over the next 50 years, and that [his legacy] would continue after he is no longer here, I would have said you were crazy,” Storyk says.

With Electric Lady barely underway, he was introduced to legendary artist manager and entrepreneur Albert Grossman through a mutual friend, a roadie with The Band. “The anthem is, make your first project famous,” laughs Storyk. He began designing Bearsville Studios in upstate New York for Grossman, accompanying him to the Woodstock festival in August 1969.

Through his wife at the time, Storyk also met two people planning the first recording facility in SoHo, Blue Rock Studios. “So before I finished Electric Lady, I had two more studios to do,” he says.

While building Electric Lady, he reveals, “Jimi came around one day and said, ‘I don’t like the doors or the square windows. Can we have round ones?’ These expensive acoustic doors and windows came out and—I can now tell this, 50 years later—went to Blue Rock.”

For a few years, Storyk lived with

his first wife in Colorado, where they had a child, but they separated in 1973 and Storyk returned to New York City. “I was doing a lot of work for Albert, and not only did he give me a room at his 55th Street office, but he let me live in one of his houses in Woodstock. Albert was essentially a mentor and a friend.”

Grossman died in January 1986: “It was a crushing blow.” But a new chapter was beginning. A couple of months earlier, Storyk had met Beth Walters, an interior designer, set builder and installation carpenter. “She arrived with a six-month-old baby; we raised him and had another a few years later. By that spring, we formed Walters-Storyk Design Group.”

After a stint with homes and offices in New York City and upstate, they ultimately consolidated, constructing a 5,000-square-foot building in New Paltz, NY, that is still their office today. Clients didn’t care where they were; they just needed a phone number.

All the while, the firm was growing. Interns would come and go, but many stayed and are still with the company. Some interns returned to their respective countries and set up offices. “Those representation offices became real offices, and all of a sudden we had gone from four or five people in Union Square to 60 people in five offices over about 15 years,” he says.

With his 70th birthday on the horizon, Storyk started making plans for key WSDG team members to assume more control. “I still own half, but I don’t control it; we have a board. I’m

not the COO anymore,” he says, noting that he never enjoyed that part of the job.

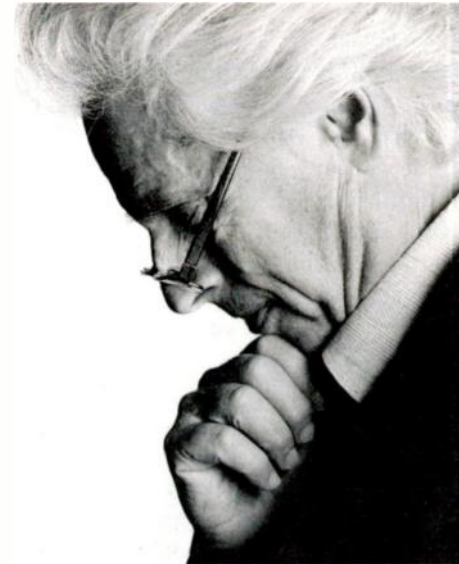
Sergio Molho, who joined in 1994 as founding partner of the Latin America office in Argentina, is now partner/director of business development and based in WSDG’s Miami office, with partner/art director Silvia Molho. Dirk Noy, who signed on as a WSDG intern in 1997, now heads the European office as partner/director of applied science and engineering, in Basel, Switzerland. Renato Cipriano, Brazil-based partner/director of design, has been with WSDG since 2000. Joshua Morris, who joined in 2005, is now partner/COO, and Nancy Flannery is partner/CFO.

“They were able to buy into the company at a very reasonable price. I lent them the money to buy into it. They paid me back and now they’re my partners,” says Storyk. “We’re blessed with an amazing staff.”

Additional leadership roles were awarded to key senior management personnel, including longtime project managers Romina Larregina, now director of production, Gabriel Hauser, now director of acoustics, and Matthew Ballos, who is now director of architectural technology.

As the celebration year draws to an end, don’t call this a 50th anniversary. “WSDG is going to last after me. We’ve got a lot of people who want to keep it going. We’re calling it the First 50 Years.”

WSDG – Walters-Storyk Design Group  
www.wsdg.com






# whirlwind

**THE POSSIBILITIES ARE ENDLESS  
INTRODUCING COLOURBOND™ PRINTING.  
—— ONLY FROM WHIRLWIND ——**



VISIT US AT  
**NAMM**  
BOOTH #  
**16116**



1-800-733-9473  [whirlwindusa.com](http://whirlwindusa.com)

Made in USA 



## We Need to Talk About Money

We need to talk about money. OK, perhaps not dollars and pounds, but I think we do need to talk more about how we make it.

Let's face it, most of us reading this article enjoy a good chat about gear. I'm a freelance producer and engineer, so, admittedly, I spend most of my time hunkered down in my studio on my own, but when I do get a chance to get out and chat with colleagues and contemporaries, it's not long before the conversation turns to gear we love or hate: the latest compressor plug-in that looks suspiciously like an 1176 ("But is it as good as a real one?"), or a new DAW bug that's giving us all headaches, or old war stories about lining up 24-track tape machines (just to give you an idea of how old I am!). While this is all good fun, the more constructive conversations we could be having are about how we earn our money, not how we're planning on spending it.

Freelancers are all entrepreneurs—whether we like it or not—so let's embrace that and not be afraid of more business-focused dialogue. We can also be more honest about downtime (we all get it) and what constructive activities can be used to fill that time.

I'm going to get the ball rolling by discussing some approaches I have found useful in negotiating over more than a decade of freelancing.

This is all the same process for me. I don't have a manager (that's another conversation), so I have to keep my involvement in administration light and efficient. If I'm talking to a client about booking in some work and we get to discussing dates, I say that I need 50

percent of the project cost to book any dates in. If they don't pay the fee, then there's a risk that the dates they want will go to someone else—someone who paid the deposit. This fee is non-refundable, as I'll be turning down other clients and other work on the days that have been booked. I stress to them that this is the only way I can keep all the balls I'm juggling in the air, and I just don't have the capacity to deal with multiple holds. I've not yet found a client who had a problem with this approach. I suspect that if I did, then that person wasn't really serious about booking time; otherwise, the fact they pay 50 percent up front wouldn't be an issue.

I ask for the final 50 percent once the final mixes are done, just before delivery to mastering. I know this is sometimes a hard thing to control, but here's what I do, and it works for me.

For a long time, I've mixed into a small amount of limiting. It's the last thing on my mix bus chain, and I put it on when I start automating faders. This means the dynamics of my mixes are mostly retained through mastering and there tend to be no big surprises at that stage. I make sure that clients know that the mixes I send through for approval have this limiting on and so are not suitable to send to mastering. Once the final mix is approved, I print one without the limiter, and that's what the mastering engineer receives. After a while, I realized that this process has a useful business angle, too. I now only send through the unlimited version when I have the final 50 percent fee in my account. So

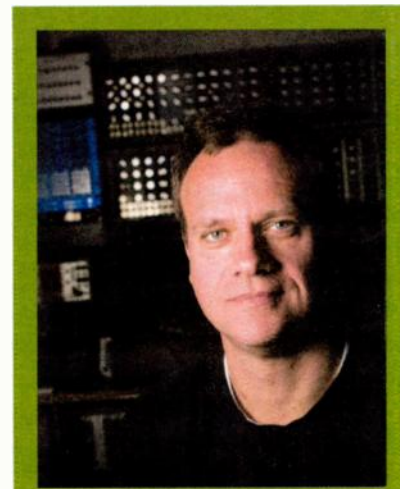
the client receives full-quality WAVs to approve throughout the mixing process, but if anyone wants to pull a fast one and disappear before paying the final 50 percent, then they know they don't have the right files. Again, I don't have a manager, so I make it clear that I don't have the capacity to negotiate around this. It's a simple rule I have, and it's really not asking too much.

### MAKING THE BEST USE OF DOWNTIME

Although I've been fairly fortunate with steady streams of work, I have occasional periods of downtime, like everyone else. They can be as challenging mentally as they are financially, so it's important to fill them with meaningful endeavors.

What you choose to do really comes down to your skill set, studio availability and interests. I fill downtime by making sample packs. I have a wall of modular synths (it's not an addiction, I can stop any time I want...) and some nice recording kit in my studio, so it's easy for me to get some great synth sounds and package them up in a way that people want to buy.

I'm also involved in education, with lots of guest lecturing around the country and abroad, as well as a part-time gig tutoring the master's course in music production at a leading UK conservatoire. On top of that, I run a website at [www.themixconsultancy.com](http://www.themixconsultancy.com) that offers in-depth mixing advice tailored precisely to a client's needs. (Not sure about a mix you've done? Send it in and I give discrete advice on improvements that you can make before you send it on to a cli-



BY DOM MORLEY

Dom Morley is a Grammy Award-winning engineer and producer. Over a 20-year career, he has worked with many artists, including Adele, Sting and Amy Winehouse, and producers including Phil Spector, Mark Ronson and Tony Visconti. Morley can be reached at [www.themixconsultancy.com](http://www.themixconsultancy.com).

ent.)

As you can probably guess, when I do get some downtime from making records, it's very quickly filled with one or more of these activities. They not only keep me busy, but all bring in money, and I love the variety of work.

I hope these points have been of some use, but more than that, I hope it inspires a conversation next time you are chatting with some other freelancers. In the meantime, I recommend you check out a podcast called *The Six-Figure Home Studio*, which discusses all things studio business-related, and passionately avoids talking about gear. And if there are any ideas you think I'd like, please get in touch!

## Almo Pro A/V Acquires NewComm Technologies

PHILADELPHIA, PA—AV industry distributor Almo Professional A/V has acquired certain assets of NewComm Distributing, the distribution arm of manufacturing representative NewComm Technologies.

As a result, Almo Pro A/V is now sourcing all of NewComm's ClearOne inventory. Meanwhile, NewComm's customers now have access to Almo Pro A/V's distribution of 60-plus AV brands, supported by nine warehouse locations, the Sound Options dedicated audio sourcing and technical engineering group, and Almo Managed Services.

"This acquisition offers benefits



for both our existing partners and former NewComm customers," said Rob Ziv, director of business development for Almo Professional A/V. "Our existing partners now have a larger quantity of inventory to access in different locations throughout the nation. At the same time, former NewComm customers can now take advantage of all Almo Pro A/V has to offer to increase profits

and margin, such as products from the top AV brands, and business-expanding services like content creation for digital signage, sourcing labor, control systems, ClearOne DSP mixer programming, and bandwidth service."

Alex Schouten, sales and dealer communication for NewComm Distributing, added, "When we made the business decision to exit distribution, we wanted to make sure our customers would be taken care of by a reliable, well-stocked and technically-astute distributor. Almo Pro A/V has a proven, secure path for these resellers and integrators, with

the benefit of ongoing opportunities for growth and profitability in the future."

Now Almo Pro A/V carries ClearOne's complete line of audio conferencing, visual collaboration, and AV networking products, including DSP mixers, microphones, speakerphones, conference phones, video collaboration platforms, BYOD collaboration solutions, professional cameras, network media streaming equipment, sound reinforcement solutions and audio distribution products.

Almo Professional A/V  
[www.almoproav.com](http://www.almoproav.com)



AVID PRO TOOLS ULTIMATE ■ GOODHERTZ TREM CONTROL ■ UNIVERSAL AUDIO AVALON 737 TUBE CHANNEL STRIP ■ UNIVERSAL AUDIO SONNOX OXFORD SUPPRESSER DS ■ UNIVERSAL AUDIO OX AMP TOP BOX V1.2 ■ SOUND CITY SC 20 COMBO ■ WIREWORLD PRO AUDIO POLARIS INSTRUMENT CABLE ■ VIENNA SYMPHONIC BIG BANG ORCHESTRA AND SMART ORCHESTRA EXPANSION PACK ■ MESA BOOGIE MINI RECTIFIER 25

There is nothing like a NAMM show. Freshly warmed from the California sun and buzzing with energy and excitement, a walk around the massive floor always brings about new adventures in gear land. Here are a few NAMM-centric things you might want to check out if you're at the show, as well as a few useful pieces that have recently made it into my studio workflow.

#### AVID PRO TOOLS ULTIMATE

Undeniably, without Pro Tools, I could not do what I do on a daily basis. Throughout the years, it has allowed me to compose thousands of TV cues, mix countless records and 5.1 projects, and score and sound design many videos to picture.

Ever evolving, Pro Tools is now available in three flavors: Pro Tools First, Pro Tools, and Pro Tools Ultimate. The "free" version is called Pro Tools First. While you can still use First for free, you can also pay \$4.99 a month to add options including Track Freeze, the ability to save an unlimited number of projects, additional Cloud storage beyond the provided 1 GB and more.

Meanwhile, Pro Tools (Standard) is \$599 with a one-year upgrade plan and includes 5 GB of included sounds; 60 effect plug-ins and virtual instruments; a max of 128 audio tracks/32 inputs; 128 Aux tracks; 12 months of software upgrades and more. It can also be had for \$29.99 a month.

At the top of the food chain is Pro Tools Ultimate, previously known as Pro Tools HD. This is the one I use. It allows/includes up to 192 inputs; 1,024 MIDI tracks; 512 instrument tracks; 64 video tracks; 7.1 surround; Atmos and Ambisonics mixing; 115 included AAX plug-ins; and more than 5 GB of sounds and unlimited busses, all at up to 32-bit 192 kHz. Pro Tools Ultimate is \$2,499, or \$99.99 a month for the rental.

With regard to video, Pro Tools and Pro Tools Ultimate now include 4K/UHD support, and MP4 video works much better thanks to an updated codec. Ultimate's multichannel capabilities now include Dolby Audio Bridge functionality. (You can set the Playback



Avid Pro Tools Ultimate

Engine to the Dolby Audio Bridge.)

Like most other things in Pro Tools, there are several ways to complete a task, and everyone tends to have a unique workflow. For example, Richard Chycki (Rush, Dream Theater, Aerosmith) uses Ultimate in tandem with the Dolby Production Suite to work on his multichannel Atmos mixes. He rarely has need for a hardware renderer (the RMU), as he renders ADM WAV files via the software Dolby Atmos Renderer, which also provides real-time rendering of the Atmos mix for monitoring.

Aside from the standard mixing/editing and multichannel capabilities, one of my favorite aspects included in Ultimate (and Pro Tools) is the Avid Complete Plug-In Bundle. As a composer, these can push your rig to a whole new level because they include Dynamic and EQ, Effects, filters, emulators, reverb and delay, stompbox effects and virtual instruments. I've used Air Expand 2 to fatten up brass sections and layer timpani and strings. I've put Black Sprig (blackface-era Fender Spring Reverb) and Eleven MK II (which has 33 different amps) on a clean guitar and added subtle touch of DC Distortion (kind of like a Tube Screamer). I put Air Fuzz-Wah on a clavinet part and crushed it with a bit of Smack compression. These are not just "throw in" plug-ins—they are immensely useful and spur on sonic creativity.

There are a few extra small but important details that I've noticed when working with Ultimate. I like that it lets me name tracks faster with

the "Name" field in the New Track dialog (that saves a lot of time!), as well as the ability to create or delete tracks during playback. Since I work quite fast, my favorite is the ability to add plug-ins while the track is playing. (Thank you, Avid!) You can also highlight a clip and use the Avid plug-ins to apply dynamics, EQ and so on to that clip. This is very useful because it's applied in real time and can be tweaked like a plug-in.

As an in-the-box mixer since the earliest days of Pro Tools, I can definitely say that Ultimate is a refined piece of professional software. It can cover virtually every piece of ground in the world of mixing, editing, composing and multichannel production, and do it with an all-in-one solution.

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

#### GOODHERTZ TREM CONTROL

As a guitar player, I love tremolo. As the owner of a vintage Magnatone



BY RICH TOZZOLI

Rich Tozzoli is an award-winning, Grammy-nominated producer, engineer and composer for programming such as FOX NFL, Pawn Stars, Duck Dynasty and Oprah & Deepak Chopra. [www.richtozzoli.com](http://www.richtozzoli.com)

M10A with real vibrato and a Fender Princeton Reverb with tremolo, I find the vibe of a shimmering sound to be intoxicating. When I got my hands on the Goodhertz Trem Control, I was excited to see what it could do compared to the real thing. Well, it not only delivered on the goods but exceeded them. Labeled as "classic tremolo for the 21st century," Trem Control features both Primary and Advanced controls, allowing for a huge variety of shaking.

Tempo can be set either manually, tapped or synced to BPM, and for Shape, you can adjust Depth, Wave, Bias and Symmetry, which controls the symmetry of the modulations' rise and fall. Tube Color can go from 0 to 200 percent, and there are a number of Trem types, including Harmonic, Bass, Air and even Mid/Side, which modulates the mid and side out-of-phase when used in stereo. Some of the Advanced Controls include Phase Offset, Stereo Phase, Swing, Volume Comp for constant RMS level (regardless of tremolo Depth), Tube Noise Gain, and even an HQ mode where quality is prioritized over CPU use.

The best place to start is with the presets. Even the Historical presets in

(continued on page 32)



Goodhertz Trem Control



## Tozzoli

(continued from page 31)

clude record references, such as Pops Staples as heard on “Uncloudy Day” (1961), Led Zeppelin’s “No Quarter” (1973), Pink Floyd’s “Money” (1973), Lionel Hampton and the Just Jazz All Stars on “Stardust” (1956), as well as Leo, Leslie-esque, Reverse Pulses, Broken Digital and 16th Harmonics.

I’ve used it not only on guitar but on keyboards, cymbal FX, strings and even drum and percussion loops. It’s a remarkably flexible, creative tool. If tremolo is your thing, it should be in your computer.

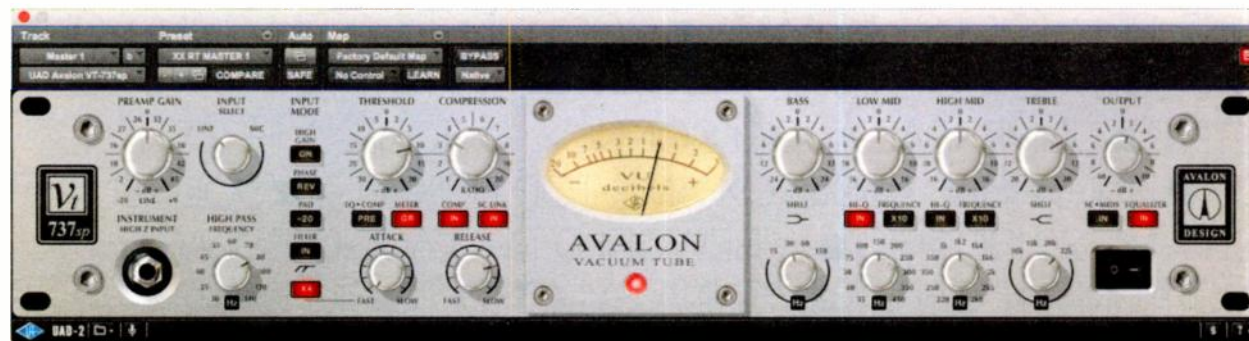
[www.goodhertz.com](http://www.goodhertz.com)

### UNIVERSAL AUDIO AVALON 737 TUBE CHANNEL STRIP

UAD Software v9.11 features several new plug-in releases, including the Avalon VT-737 Tube Channel Strip. The UA team went in the lab with a “golden hardware unit” and captured the essence of its transformers, filters, class-A tube amp section, high voltage discrete four-band EQ and LED-style optical compressor. It’s interesting to use the software unit in the comfort of your own studio, versus using the hardware unit at a commercial facility. When you’re in someone else’s space, you tend to quickly dial in the sound you need instead of really learning the unit on your time and your speakers—from the sweet spot. By digging further, I’ve come to realize that it’s even more powerful than I thought.

The first adjective I’d use is “butter,” because it sounds like you’re drenching your tracks in the stuff. The EQ is soft and polished yet musical, and the compression borders on invisible (but noticeable when removed). On drum loops, it adds thickness without mud, and the optical compression locks down stray bass notes with ease.

What makes it so flexible is that each function of the 737 can be used separately or combined into a chan-



Universal Audio Avalon 737 Tube Channel Strip

nel strip. Just a note about the EQ: the Treble control is a passive shelving-type filter, switchable at 10 kHz, 15 kHz, 20 kHz and 32 kHz +/-20 dB. In addition, the Bass is a passive shelf filter with centered bands at 15 Hz, 30 Hz, 60 Hz and 150 Hz +/-24 dB. Between those two sit the Low and High Mid bands, and just turning the knobs brings creamy joy (and I don’t say that lightly).

Grammy Award-winning engineer Peter Moshay (*Live From Daryl’s House*, Hall & Oates, B.B. King) told me, “Having owned an Avalon 737 hardware unit since the first batch was shipped, I know it inside and out. I was floored by how UA got all the nuances of the pre, compression and EQ so perfectly. The EQ is so detailed and powerful, and even using the 32k to open up the ‘Air’ on a vocal can be done just like I do on my original unit.” To continue what we both agree on, he notes “It’s stunning.”

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

### UNIVERSAL AUDIO SONNOX OXFORD SUPRESSER DS

Another part of the Universal Audio v9.11 update is the Sonnox Oxford SuprEsser DS, which is labeled as having “transparent, precise linear-phase de-essing with near zero-latency when tracking in real time.” While I have found that to be true (especially on harsh cymbals), I wanted to share a slightly different way I use the SuprEsser. What you might not know about this plug-in is that it’s a great bass enhancement tool, which I apply to strings, acoustic guitars and even

mandolins and banjos.

Using the FFT spectral display, the floating threshold control, Inside Listen mode and Make Up gain, you can selectively boost the bottom of any track in a way that’s different than a typical EQ. For example, to add some extra bottom to a thin guitar, first solo the Inside button, which allows you to hear only what’s inside the two bands. Slide the bands while viewing the FFT display and the actual frequency displays in yellow and boost Make-Up Gain (up to +24 dB). Then put the Listen mode back to Mix and adjust the Threshold, Make Up Gain, Wet/Dry amount and Trim if you are clipping. It’s that easy to get a selectable amount of low end boost on a track.

With just a few careful adjustments, it’s helped turn a viola into a high cello, brought “beef” to a banjo, and transformed thin orchestra and taiko drum samples into something much bigger. In the more traditional sense, I also use it quite a bit to take the sizzle out of compressed drums without losing the clarity. The SuprEsser is definitely a useful sonic tool with a few extra tricks up its sleeve.

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

### UNIVERSAL AUDIO OX AMP TOP BOX V1.2

I’ve had my OX reactive load box for quite some time now, and it has become my go-to for getting real amp tones in my production studio without a cabinet, so when I saw that UA released an update, I was ready to rock. It includes a new collection of 4x12 cabinets with modern and vintage 30-watt British speakers, new combo cabinets with high-headroom extended-range speakers, and 27 new RIG presets and footswitch controls. The cabinets include a 4x12 birch Marshall with Celestion 30-watt “Greenbacks” (my favorite), a 4x12 Mesa Boogie extra deep cabinet with Celestion Vintage 30s, a late ’60s Fender Twin Reverb with vintage JBL D-120Fs, and a Marshall 4x12 1960TV cabinet with Celestion Vintage 30s. I do hope to have iPhone support for this unit someday, but overall, I say keep them coming, UA. We can never have enough options from OX.

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

### SOUND CITY SC 20 COMBO

The SC20 from Sound City Amplification is a tube combo amp for both studio and stage use. Weighing in at a manageable but sturdy 35 pounds, this 20-watt amp features a matched pair of Mullard 6V6 power tubes, a 12AX7 Tung-Sol, two 12AX7A Ruby Selected and two 12AT7 Ruby Selected preamp tubes, and a special design 12-inch, 50-watt, 8-ohm Sound City Power speaker.

On the top control panel you’ve got Input, Normal and Brilliant Volume, Treble, Middle, Bass and Reverb, which is a tube-driven Accutronics three-spring reverb. The lineage of this amp is actually quite interesting. “Sound City started as a music store in London that was owned by Ivor Arbiter, of Dallas Arbiter fuzz face fame,” said owner Neil Ostberg. “The original Sound City amps were designed and built by Dave Reeves, who later went on to start Hiwatt. Townshend, Entwistle and Jimi Hendrix used the original Sound City 100 amps, so these new amps are an evolution of those developed by myself and Steve Fryette. They are hand-built in L.A., including the cabinetry; even the serial number is hand-stamped into the plate. The speaker is made by Eminence and is a custom design we developed with them.”

Note that the Brilliant and Normal Volume knobs can be blended together to create a variety of tones and voicings. You could even turn one off and just use the other. As Ostberg noted, “The Brilliant volume control is not bright; it actually pushes the mids. It’s the normal volume control that pushes the bottom end and sparkle on the top.”

He added, “If you have a single-coil guitar like a Strat, you want to favor more of the Brilliant channel because it fills in the thick mids, whereas when you have a humbucker guitar like a Les Paul, you want to push more of the normal volume control so you get more top because of the mid-range content inherent in humbuckers.” Interestingly, there is no standby switch, and they note that you can leave it on or turn it off in between sets or sessions.

Putting it through its paces both on a live show and up at Clubhouse Studios in Rhinebeck, NY, on a TV



Universal Audio OX Amp Top Box v1.2





Vienna Symphonic Big Bang Orchestra and Smart Orchestra Expansion Pack

scoring session, it delivered on its promise of versatile, thick tone. This amp has a super tight low end and a wide open, dynamic sound. Since it features a solid-state rectifier, when you push it hard into saturation, it still remains tight and “clean.” I did use my Les Paul Custom with it, so favoring the normal volume, I got what I like to call a classic rock tone like an enhanced Fender. I also noticed that it takes pedals quite well; I drove it hard with a number of distortion pedals, including a classic Ibanez Tube Screamer, Creation Audio Labs Holy Fire and my J Rockett Audio Designs Rockaway Archer overdrive/EQ. It gives the amp a whole new attitude, and the reverb never swims, even when you turn it up. If you’re looking to try a solid, hand-assembled, tone-shaping tube amp, check out the Sound City SC 20 Combo.

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

#### WIREWORLD PRO AUDIO POLARIS INSTRUMENT CABLE

There’s no question I have a lot of 1/4-inch instrument cables in my studio. Between the pedalboards, amps, effects and various DI boxes, I must have well over 30 of various lengths—but the main cable I plug in when tracking critical parts in my studio is my 10-foot piece of Polaris instrument cable from Wireworld Pro Audio.

Am I going to tell you it’s because I hear a difference in sound? The an-

Sound City SC 20 Combo



Wireworld Pro Audio Polaris instrument cable

swer is no, because all of my cables are good cables. They’re the lifelines between me and my tone. However, I will tell you that the Polaris gives me the most confidence that I’m getting everything I can out of a piece of wire.

The foundation is a patented design Wireworld calls DNA Helix, which they note uses the electromagnetic field to move the signal efficiently. Instead of the twisted strands that make up most cables, this design here is parallel. They also designed it to get the best sound in one direction, and the cables are marked accordingly with an arrow. The conductor material is oxygen-free copper. The connectors were also custom-designed; the center pin and ground path are single pieces of metal, which allows even a bit of bending before breaking, should you step on it or the like. The cable features a DuPont Kevlar fiber core and a thick layer of silver in the connection. In a world of black cables, I do like the fact that this is blue, which makes it easy to find in a crowd. Cable is one of those things you shouldn’t take for granted, and it’s worth it to invest into your tone with a quality piece like those from Wireworld.

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



Mesa Boogie Mini Rectifier 25

#### VIENNA SYMPHONIC BIG BANG ORCHESTRA AND SMART ORCHESTRA EXPANSION PACK

Big Bang Orchestra is a free release from the Vienna Symphonic Library team using samples from its Synchron Stage Orchestra playing “tutti” (all together) on Stage A of Synchron Stage Vienna in Austria. According to the Vienna team, the free release is a way to “thank the worldwide community of music creators.” The Big Bang Orchestra is powered by the included Synchron Player and also features the integrated FX plug-ins and routing options. Articulation in this collection include *marcato*, *swell*, *sustains*, *runs* and *staccato*s. However, it is important to know that you do need a Vienna Key to run Big Bang, or another USB eLicenser, such as Steinberg or Arturia. The Vienna Key can run all Vienna Symphonic Library products and is available for \$29, so that should not stop anyone from checking out these useful sounds.

Aside from the Vienna Instruments Series, another product I rely on for high-quality orchestral sounds is the 140-piece Smart Orchestra. An easy-to-use, inexpensive library for composers needing strings, brass, woodwinds, percussion and some creative twists on them, it runs within the Synchron Player. The new Smart Orchestra Expansion Pack can be had for under \$100 and includes new solo instruments and string ensembles such as *timpani* (with eight velocity layers), *harp*, *bassoon*, *bass clarinet*, *celesta*, *piccolo* and *English horn*.

[www.vsl.co.at/en](http://www.vsl.co.at/en)

#### MESA BOOGIE MINI RECTIFIER 25

Savage. That’s all I need to say. As a longtime “Boogie man” with a MK IV head I’ve had since the ’90s, I know what these things can do. Still, to get this kind of attitude with some-

thing that literally fits on my desktop and can be lifted with a few fingers? That’s a whole new thing.

The Mini Rectifier 25 features two independent channels, four style modes (Clean, Pushed, Vintage, Modern) and 25- or 10-watt assignable power. The front panel delivers a 1/4-inch input and 1/4-inch jack for the included foot switch, toggle switches for the aforementioned Style modes, Gain, Treble, Mid, Bass, Presence, Master and 25W/10W toggles for each channel, as well as a master foot switch control, power and standby. The rear features 1/4-inch FX loop Send and Return, and 1/4-inch 8-ohm or 4-ohm speaker outputs. The top unscrews quickly for easy access to the tubes if you want to get in there.

While I did run this thing through a classic Boogie 4x12 cabinet (it peeled the paint), in my studio, I run it through my Universal Audio OX, which allows me to hook it up directly to Pro Tools and work at respectable levels. What I like about having it next to me on the desktop is that I gain the ability to tweak it per track. Toggling through the various modes and power settings allows you to realize how flexible it is. To me, it’s like having a plug-in hardware amp on my desktop, except that it’s not—it’s living, breathing tubes. Speaking of tubes, it runs five 12AX7s and two EL 84s. To me, the power lies in the ability to not only shred with Channel 2, but to play clean or just slightly dirty on Channel 1. However, Channel 1, when pushed, can also rock, just not in the way Channel 2 can, which is that classic ‘Recto’ sound.

Overall, it’s an accurate mini version of the regular Rectifier (I’ve used a number of them), and it uses the same materials and components as all the Mesas. Don’t think of this as something small just for the studio—you could definitely take this full-featured beast on the road and rock with it—but for my use, the sonic flexibility and attitude that it gives me on a desktop level is undeniable.

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



## Royer Labs Custom Shop EMT 140

Royer Labs Custom Shop, a new division of Royer, has been created to release products designed by Rick Perrotta and/or David Royer that fall outside of Royer's regular pro audio offerings. The first product from the custom shop is an EMT 140 replacement magnet assembly for the legendary plate reverb. With the original EMT 140s getting on in age, the new product is designed to replace missing or weak magnet assemblies. The Royer 140-NM is manufactured using six neodymium magnets arranged in a "turret" fashion, which results greater flux density for enhanced performance of an EMT plate, as well as lower distortion and a more responsive drive coil, according to president Rick Perrotta. Designed by Perrotta in partnership with Advanced Theoretical Concepts, the Royer 140-NM package includes an acrylic centering disc, mounting hardware and a set of instructions, along with suggested tips to help audio engineers get the most from an EMT 140.



## DPA 4560 CORE Binaural Headset

The DPA 4560 CORE binaural headset captures immersive audio via worn mics on each ear. The new microphone arrangement is designed for YouTubers, sound designers, podcasters, vloggers and other content creators looking to capture immersive and POV audio. The binaural headset allows users to capture, in real time, exactly what each ear is hearing so that those listening on headphones can experience the full immersive sound. Beyond recording applications, the headset can be used for tasks such as sound system documentation, soundscape analysis, sound quality assessment, and sound for theatrical productions or gaming. At the heart of the DPA 4560 CORE binaural headset is a pair of 4060 CORE miniature microphones mounted on two ear hooks, sitting just outside the user's ear canal, that make it possible to directly capture (1:1) the sound heard by the person making the recording.



## United Studio Technologies UT FET47 Microphone

The UT FET47 microphone will be the first product released by newly founded pro audio manufacturer United Studio Technologies. The new mic is targeted at both professional and project-level recording, as well as the broadcast and voiceover market. Featuring a large, custom-wound, "striped core" (multi-alloy) output transformer designed by Cinemag to reproduce the harmonic signature of its original German counterpart, the UT FET47 microphone incorporates a Heiserman HZ-series "K47" German-style capsule that's the result of a joint effort between Heiserman and United Studio Technologies. This design features dual-milled backplates that are matched and then physically joined to ensure consistent performance between sides and capsules. Circuitry involved in the UT FET47 microphone is fully discrete, using NOS military-spec polystyrene capacitors and tested, original NOS Fairchild FETs. No electrolytic capacitors are used in the microphone, and the mic sports an "all-dry" topology. The UT FET47 will be available worldwide from RAD Distribution.



## Adam Hall Group Palmer Monicon XL

The Adam Hall Group has unveiled the Palmer Monicon XL studio monitor controller. As the flagship of the Monicon series, this controller is one of the first Palmer products to take on the revamped appearance of the brand. It is designed for use in both professional studio environments and home studios. The controller features a correlation meter that displays the phase difference between the left and right stereo channels to reveal mono compatibil-

## firstlook

### Celestion G10 Vintage IR Collection

The Celestion G10 Vintage collection adds another speaker to the company's growing selection of impulse responses. The next iteration of the Vintage 10, the G10 Vintage is a 10-inch speaker is intended to provide original "British rock attitude with powerful and rich tone," according to a company statement. Using powerful ceramic magnets and the same voice coil design as the Vintage 30, the G10 packs a punch with its 60W power handling. With the fast response of a 10-inch but with the strong and creamy vocal tones of a 12-inch, the G10 is a solid choice to add depth to hollow-sounding amps, or for players who want to get humbucker-type girth from single-coil guitars. Celestion suggests its use in singles to add warm tones to small valve combos, or in a 4x10 cabinet for a more aggressive, heavier rock sound.



ity errors in a mix. Due to an entirely analog audio circuit, there is no latency when monitoring, as the coaxial S/PDIF signals are converted directly in the input. The mono-summed output is frequency-neutral. Not only is it suitable for connecting to a subwoofer, but it may also be connected to a separate mono speaker to verify the mix in mono, both acoustically and visually with the correlation meter.



## iZotope Dialogue Match

Dialogue Match is a tool that can learn and match the sonic character of dialogue recordings to ensure consistency across multiple environments. Intended for audio post-production, Dialogue Match combines machine learning from iZotope with reverb technology from Exponential Audio's product line, which iZotope acquired in April 2019. With the Dialogue Match Pro Tools AudioSuite plug-in, users can analyze audio to extract a sonic profile, then apply the profile to any other dialogue track for environmental consistency in scene recordings, allowing them to complete the process of matching production dialogue to ADR more quickly. Tonal characteristics can be matched between a boom and a lavalier microphone, localized audio can automatically be matched to the original language, and global snapshots and reference profiles can be saved or loaded.



## Centrance MixerFace R4B Stereo Recorder

The MixerFace R4B model retains all the features of its parent MixerFace R4R, a mobile recording interface for smartphones, tablets and computers, but adds a pair of precision-matched XY stereo recording microphones, turning the unit into a standalone professional-grade field recorder. As well as the addition of the PivotMics PM1 XY stereo microphone pair, the R4B edition includes a built-in 24-bit/48 kHz stereo microSD card recorder. The device is able to simultaneously record to SD card and to a digital device, such as a smartphone, tablet or laptop. While users may choose to use the included PivotMics PM1, MixerFace R4B offers two built-in mic preamps with 48V phantom power that will accept other microphone options. The unit sports Neutrik Combo input jacks with a Hi-Z feature that allows users to plug in instruments, turning the unit into a music practice tool, idea pad or on-the-gig mixer.

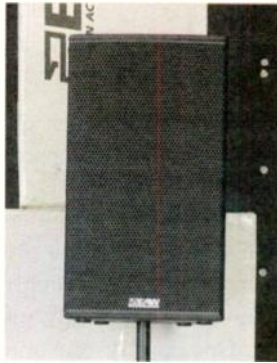






## EAW RS Series

The new family of RS Series 2-way self-powered loudspeakers delivers EAW signature performance in a portable and lightweight package. This new series from EAW kicks off with four loudspeakers and two low-frequency enclosures. Designed around the latest breed of touring-grade HF and LF transducers, the RS Series also offers intelligent EAW Core Technology, with the goal of producing studio-quality sound. The loudspeakers benefit from EAW Focussing, advanced digital signal processing that perfects the impulse response of a loudspeaker in the time domain. Pattern control of the loudspeakers is aided by a large-format, constant-directivity HF horn derived from EAW's MK Series. The RS subwoofers offer 1,500 or 2,500 watts of Class-D Power Factor Corrected amplification. EAW Core Technology, in the form of DynO, makes sure all that power is accurately directed.



## Waves MyMon App

Waves Audio has launched the Waves MyMon app, a personal monitor mixing app that provides musicians on stage direct control of their monitor mixes. The app works in conjunction with the Waves eMotion LV1 Live Mixer. With the Waves MyMon app, users can adjust input channel levels, mute, pan, apply post-mix EQ, and link channels to custom single-fader groups, giving them real-time customizable control of their own mix.



The MyMon interface is intended to be intuitive enough that a musician can build their own mix, freeing up live sound engineers to focus their attention elsewhere. Up to 16 devices using the Waves MyMon app can be connected simultaneously to the eMotion LV1 Live Mixer. The app works in landscape and portrait screen modes and provides simple swipe navigation. Any combination of channels can be assigned to four Link masters, each with volume and mute toggles.

## Rational Acoustics Smart v8.4

Smaart is computer-based dual-channel FFT platform that's used by audio engineers to view the frequency content of signals or measure the response of electrical and electroacoustic systems, enabling them to better make informed decisions about the deployment and operation of those systems. Building up Smaart 8's SPL monitoring capability, the v8.4 update turns the tool into a full-featured SPL monitoring solution, in addition to its use for Real-Time Frequency and Impulse Response Mode measurement. New features include SPL data logging and interface improvements, a new web browser interface for remotely viewing inputs that are actively logging SPL, 64-bit support for macOS Catalina, new hotkeys for averaging dialogues, and performance enhancements.



## Eventide Audio MangledVerb

Eventide's MangledVerb for iOS is available as an AUv3 plug-in and standalone app. Combining extensive reverb and distortion, the effect is intended for use by iPhone/iPad-based music-makers to create a variety of moods, ambiances and chaotic soundscapes. MangledVerb starts with a variable pre-delay, which feeds a stereo reverb into a complex distortion effect. The Ribbon control lets users program two settings, for any combination of the controls, and transition between them. A programmable hot switch allows users to jump to an alternate setting at the push of a button, aiming to re-create the experience of tweaking a piece of hardware. Other controls available include Size and Softclip, which help create soundscapes, and Wobble, which creates spookiness. The software includes flexible mono/stereo I/O configurations, as well as TAP tempo control. A mix lock control can be used to scroll through the factory presets while keeping the wet-dry mix constant.



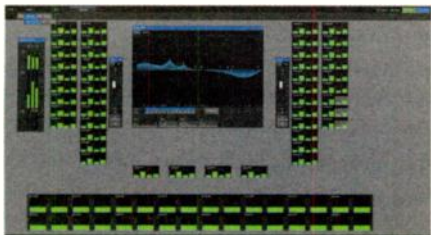
## BishopSound Delta Line Array

Boutique P.A. manufacturer BishopSound has launched a dual 8-inch passive line array speaker system, the Delta Line Array. Designed and tuned in the UK, the BishopSound Delta Line Array BLA208 consists of four dual 8-inch boxes housed in a purpose-built flight case. Each of the four boxes contains a pair of 8-inch BishopSound Neo Drivers with 2.5-inch voice coils and two HF units with titanium diaphragms. British-made Kevlar speaker cones are used throughout. Each box is said to provide 600W RMS and operate at 65-20 kHz. Each plywood box weighs 18 Kg.



## Dynacord Sonicue 1.1

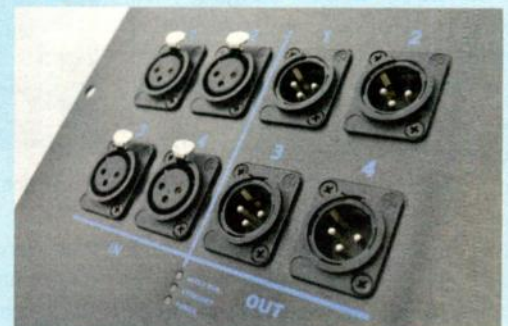
The v1.1 update to the Sonicue sound system software makes it more suitable for smaller systems and day-to-day applications. The new version adds support for Dynacord L and C series amplifiers, and updates its Electro-Voice loudspeaker settings library to include almost all current commercial, portable, install and concert sound models. Engineered to provide sound reinforcement for live music (L series) and permanent installation (C series), both series power amplifiers from Dynacord offer onboard DSP, advanced FIR-Drive and pro-level audio performance. The firmware upgrade expands the L and C series DSP structure to give users the same level of input or user processing as found in Dynacord's tour-grade IPX and TGX amplifiers, with which L and C series models may now be combined. The expanded loudspeaker database allows users to use Sonicue software for a larger range of applications. The software now features presets for almost all loudspeaker models from Electro-Voice, including the ZLX, ELX200, EKX and ETX portable series, and the EVID commercial family.



## firstlook

### Symetrix xIO Stage 4x4 Dante Stage Box

The xIO Stage 4x4 Dante stage box is intended for professionals installing audio systems in stage environments such as those in performing arts theaters, school gymnasium/auditoriums, houses of worship, courtrooms and conference rooms. This audio over



IP solution installs in any NEMA 8"x8"x4" electrical enclosure. It provides four analog microphone/line inputs and four line-level outputs, converting the signals to and from Dante for transfer over standard Cat 5/6 cable from a stage or other source location to a Symetrix Radius NX, Prism or Edge DSP. The xIO Stage 4x4 employs 24-bit 48 kHz AD/DA converters, Neutrik XLR connectors, and cable management tie-points, and allows reconfiguration of input sources. The xIO Stage 4x4 is powered by a PoE injector or PoE network switch. Once signals are on the Dante network, they can be routed by a Symetrix DSP, without degradation, into multiple zones.

There's more information on all the products featured at [prosoundnetwork.com/jan2020](http://prosoundnetwork.com/jan2020).





## Audiotonix Acquired by Ardian

BY CLIVE YOUNG

CHESSINGTON, UK— In mid-December, Paris-based private investment group Ardian has agreed to purchase a majority share of Audiotonix, parent company of the Solid State Logic, Calrec, DiGiCo and Allen & Heath console brands, as well as immersive IEM tech developer KLANG:technologies and audio interfaces manufacturer DiGiGrid.

Expected to close in the first quarter of 2020, the deal is said to place a \$1 billion-plus enterprise value on Audiotonix, according to *Financial Times*. While financial details of the arrangement were not released, the majority stake is being purchased from Paris-based private investment group Astorg, which itself purchased Audiotonix—then consisting of DiGiCo, Calrec and Allen & Heath—in February 2017 for approximately

\$254 million. Since then, Audiotonix acquired Solid State Logic in December 2017, and DiGiCo acquired KLANG in December 2018.

Astorg will keep a minority stake in Audiotonix, but had been planning to sell the company at auction



Private equity group Ardian has acquired a majority stake in Audiotonix.

in early 2020, according to the *Financial Times*' sources. Reportedly a half-dozen private equity funds were interested before Ardian stepped in to purchase the majority stake. Audiotonix management, as well as Astorg, will re-invest as part of the transaction. Audiotonix employs roughly 550 people and distributes its products

via a global network of more than 200 distributors and partners in more than 90 countries.

The Audiotonix purchase isn't Ardian's first foray into pro-audio waters. Among the roughly 150 companies it is currently invested in is loudspeaker system manufacturer d&b audiotechnik, acquired in February 2016 from investment companies Odewald & Compagnie and COBEPA, which had acquired d&b in 2011.

"This is an outstanding opportunity to partner with Ardian to enable further growth, and it represents a significant step in the future development of Audiotonix," said James Gordon, Audiotonix CEO. "We have built an incredible infrastructure within the group in the past five years, which has clearly benefited all our brands with manufacturing know-how, devel-

(continued on page 42)

## briefs

## A&amp;H Dove Dives into dLive

DENVER, CO—Denver night spot Soiled Dove Underground recently updated its sound with an Allen & Heath ([www.allen-heath.com](http://www.allen-heath.com)) dLive console in the form of a C3500 surface and a CDM48 MixRack, marking the first time the venue has had a digital console.

## Work Pro Goes to Hong Kong

HONG KONG, CHINA—Work Pro Audio ([www.equipson.es](http://www.equipson.es)) may be a brand manufactured by Equipson in Spain, but one of its SL210A line array systems is now used daily by Freelancer Production Company, a theater and event production business that specializes in audio equipment rental to theaters in Hong Kong and touring artists in mainland China. The SL210A line array was specified by system designer Camus Chan, director of Equipson's Hong Kong distributor All Solution Ltd.

## Ballroom Revived with Electro-Voice

ARNOLDS PARK, IA—Built in the 1920s and shuttered in 1988, the Roof Garden Ballroom reopened this past summer with a concert by Tommy James and the Shondells. The venue's new house system includes Electro-Voice ([www.electrovoice.com](http://www.electrovoice.com)) X-Line Advance X2 line array loudspeakers powered by Dynacord IPX series DSP amplifiers.

## Khalid Runs Free with DPA

LOS ANGELES, CA—R&B sensation Khalid has been touring the globe on his Free Spirit World Tour. Along for the ride is production manager and FOH engineer CJ Blair, overseeing gear from Clair Global that includes a DPA Microphones ([www.dpamicrophones.com](http://www.dpamicrophones.com)) d:facto 4018VL Vocal Mic, used on the singer himself. Blair has used the DPA d:factos for the entirety of the Free Spirit tour. "When Landon [Storey, Khalid's monitor engineer] and I started using the d:facto 4018VL, we finally began to breathe easier," he says.

## Truth Hurts, but the Road Doesn't for Lizzo

MINNEAPOLIS, MN—If Lizzo needed something more exciting this year, she got it with the success of "Truth Hurts," which topped the *Billboard* Hot 100 for seven weeks and amassed more than 110 million views on YouTube. That success was supported by more than 90 live shows in six months. Lizzo toured internationally with Clair Global-supplied DiGiCo SD12 96 desks, which were overseen by FOH engineer Brandon Blackwell and monitor engineer Loreen Bohannon.

Blackwell started working with Lizzo in late May, and specified a DiGiCo SD12 96 for FOH. "I have been on an SD12 the entire year with my other clients, but I was super-excited for the new update to 96 inputs and 48 busses," he said. "With the extra I/O, I was able to add some extra key FX sends and returns, and also more parallel groups to my mix.

"As usual, I have paired my DiGiCo console with a Waves SoundGrid setup. While Waves is taking care of processing my vocals, subgroups and EFX, most of the heavy lifting of processing the playback tracks is taken care of onboard the console. For each playback channel, I am using the dynamic EQ and multiband compressors to shape my mix. Snapshots are a big part of my mixing, so I really enjoy having all of these settings change when I hit 'next.'"

Blackwell is a big believer in cutting out the traditional analog splitter, so both consoles and the stage



Loreen Bohannon mixes monitors for Lizzo on Clair Global's DiGiCo SD12 96 desk.

rack were on a fiber loop, and all of the inputs went directly into the SD-Rack, which had six 32-bit Mic Pre-Amp cards and one AES/EBU input card, taking advantage of features that are unlocked when using an Optocore loop. Bohannon had control over the gains, and Blackwell used the digital trim with gain tracking engaged.

"We use the Con Send and Receive feature to move key audio sources between the desks," Blackwell said, "and since the crowds can get up to 115 dBA at FOH, we rely on the chat feature a lot. It has to be one of my favorite management features of the DiGiCo platform."

Bohannon, who'd previously used

DiGiCo desks to handle monitors for Michael Bolton, among other artists, began with Lizzo in April ahead of the artist's Coachella appearance, using a compact SD11. "DiGiCo was absolutely crucial to my success on that tour, always available for me when I ran into a tech issue," she recalls. "The SD12 was already my favorite console from my Bolton days, and I was more than excited to add this to our gear and get the new software update to 96 input channels."

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

DiGiCo  
[www.DiGiCo.biz](http://www.DiGiCo.biz)

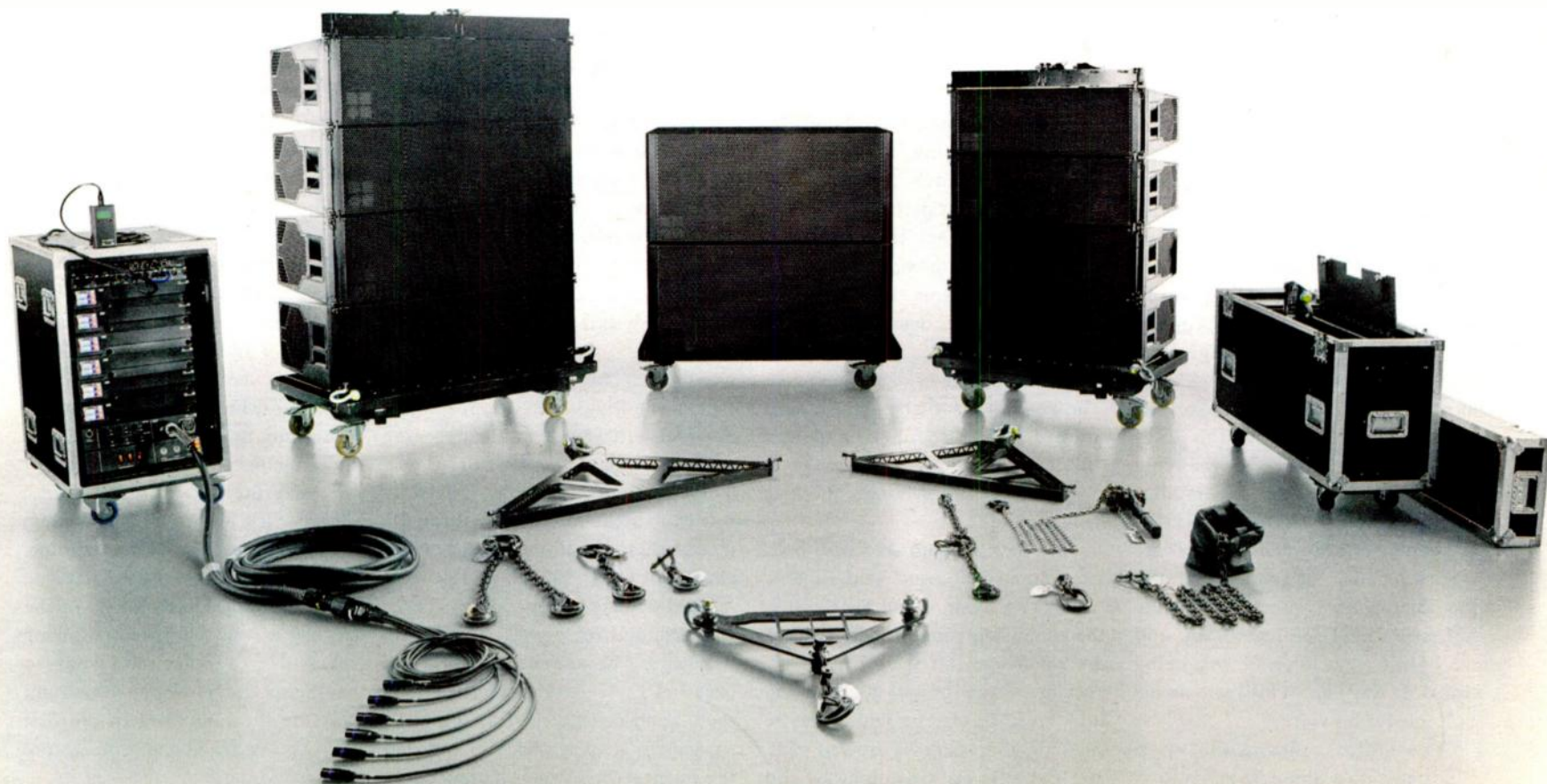


# Sound doesn't optimize.

Sound systems do. The SL-Series equips users with more of the industry's most valuable commodity: time. Designed for maximum speed and efficiency from planning through transport to rigging, the SL-Series includes hardware and software for every eventuality. Minimal stress for optimal performances.

Read what users say at [sl-series.com](http://sl-series.com)

Visit us at the NAMM Show, Jan 16 - 19th  
Booth #18107 and demo room #18816



More art. Less noise.

d&b  
audiotechnik 



Godsmack Tour Serves Up *Legends Live*

BY CLIVE YOUNG

A mainstay of metal since the mid-'90s, Godsmack spent most of 2019 on the road supporting its seventh studio album, 2018's *When Legends Rise*, playing arenas, theaters, festivals and everything in between. Over the 18-month album cycle, the band took multiple jaunts around the world, playing U.S. dates with audio provided by Ultra Sound, and Europe with sound by Victory.

While engineer Scott Tkachuk started the journey in 2018, manning the FOH desk, he stepped away from the tour for part of 2019, returning to the fold for Godsmack's fall U.S. arena run with Halestorm. The intervening 2019 legs saw the tour's systems engineer/FOH tech Erik Rogers step in as FOH engineer.

No slouch behind the desk, having mixed the likes of Dustin Lynch, Ed Kowalczyk and others, Rogers ruled over 96 inputs on a Midas Pro X console each night, capturing the sound of a band that brings unpredictability to its shows: "There's three downstage vocal positions, plus there's one backup," said Rogers. "When the stage goes dark, I have no idea where the singer is gonna go, and he doesn't know where he's gonna go until he's on it! That's an interesting challenge."

Those vocal mics were Shure Axient wirelesses with Telefunken M80 capsules—an arrangement that won an unexpected road test along the way. "In Europe, we had a backup microphone with the capsule of another brand. That was cool because I wanted an opportunity to A/B it, and we did—by accident at soundcheck. Somehow the spare was swapped in at soundcheck and the difference was pretty stark; quite honestly, the Telefunken won, and we didn't even know it was being tested. It was like, 'This really is the best mic for his voice.'"

The guitars, meanwhile, were captured with a Shure SM57, a Royer R10 ribbon and a Radial JDI DI box each. The ribbons gave Rogers pause initially: "I inherited this show, and of course, if you didn't put it together, you make it your



Erik Rogers stepped in to mix FOH for Godsmack throughout most of 2019, looking after 96 channels on a Midas Pro X desk nightly.

own. I was hesitant to put a ribbon on these guitars because it's already dark, heavy music, and a ribbon's already a dark, heavy microphone. I was talked into trying the R10, which is an 'equal in quality but half the cost' version of the famous R101 that you're afraid to take out of its briefcase in case you breathe on it wrong. I put the R10 on guitars in rehearsals, tried it out and was pleased to admit that my initial thoughts about using ribbons on guitars were wrong, because honestly those channels are flat in my console. It sounds perfect!"

On a Godsmack tour, however, there's one miking challenge to rule them all: the drums. The show featured two sizable drum kits requiring extensive miking; plus, every drum had a trigger keying the gate. The result was that each kit had upwards of 20 channels, and that didn't even include the percussion rig based around a bongo, djembe, cymbals and more.

"We have a drum solo with both kits and it's intense," said Rogers. "They're playing off of each other, the percussion comes in and the kits are automated to roll in front of the backline. Soon I've got guitars firing into these drum kits while they're spinning and doing all this fun stuff, and the guys are playing away, and it's a dynamic thing, not just a loud crash. There's parts of the drum solo where you could have a cell phone conversation over it. It's cool because, yes, it's a rehearsed drum solo, so

it's not like it varies, but at the same time, they're humans—and they play! You've gotta pay attention."

The audience paid attention, too, thanks to a Meyer Sound Leo Family system anchored by Lyon linear line array loudspeakers. "It all comes together with that," said Rogers. "It's loud, it's in your face, but it's aill detailed. You can hear the notes when he strums the guitar. You don't just hear the 'mud from the amplifier' type thing."

Of course, it didn't hurt that Rogers' mixing philosophy changed over the course of the tour as well: "I spent so much time in Europe this year that I got used to keeping it around 101 dB. When I was younger, I didn't care about how loud I was gonna get out there; I wanted the big, loud rock show. But honestly—and people may disagree—the rules in Europe are not unreasonable most of the time. There's a couple of places where you roll your eyes and you get through it, but there's nothing wrong with your limit being 100 dB at 180 feet from the stage. With Godsmack, I was nice and reasonable in Europe; then we got back, went out with Volbeat and I was getting right back up there—and that's when I found it's a struggle to actually pick out some of the nuance when you're fatigued by the end of the night. Now I keep the show around 101, with 103 peaks. It's not a loud, uncomfortable show. I haven't had anyone come up to me and ask for hearing protection in a

long time, and that's kind of cool."

There's value to nuance; after all, it's what the audience came to see. "One of the things important to me is, if I see an instrument being played on stage, I want to hear it," said Rogers. "It really annoys me when you see a giant drum kit and all you hear is kick, snare, hat—or when you see a band with somebody singing into a microphone and he's not there. He's singing for a reason—he's part of the song, the band wants him there, the guys are pretty talented and people paid a lot of money to hear that person. Let's listen to them."

FOH engineers can do a lot to shape a band's live sound and supercharge that connection between an act and its audience, but ultimately the energy starts with the musicians on stage—which is why Rogers' favorite song to mix is always the one where the lights go down. "The first song sets the pace for the night," he said. "It's always the same song, but it sets the tone for the evening. How will they come out? I have no idea what they talked about in the dressing room, what they're thinking or how they're feeling, and you read the energy of the whole show right away. By the first word of the first song, you've taken the temperature and away you go!"

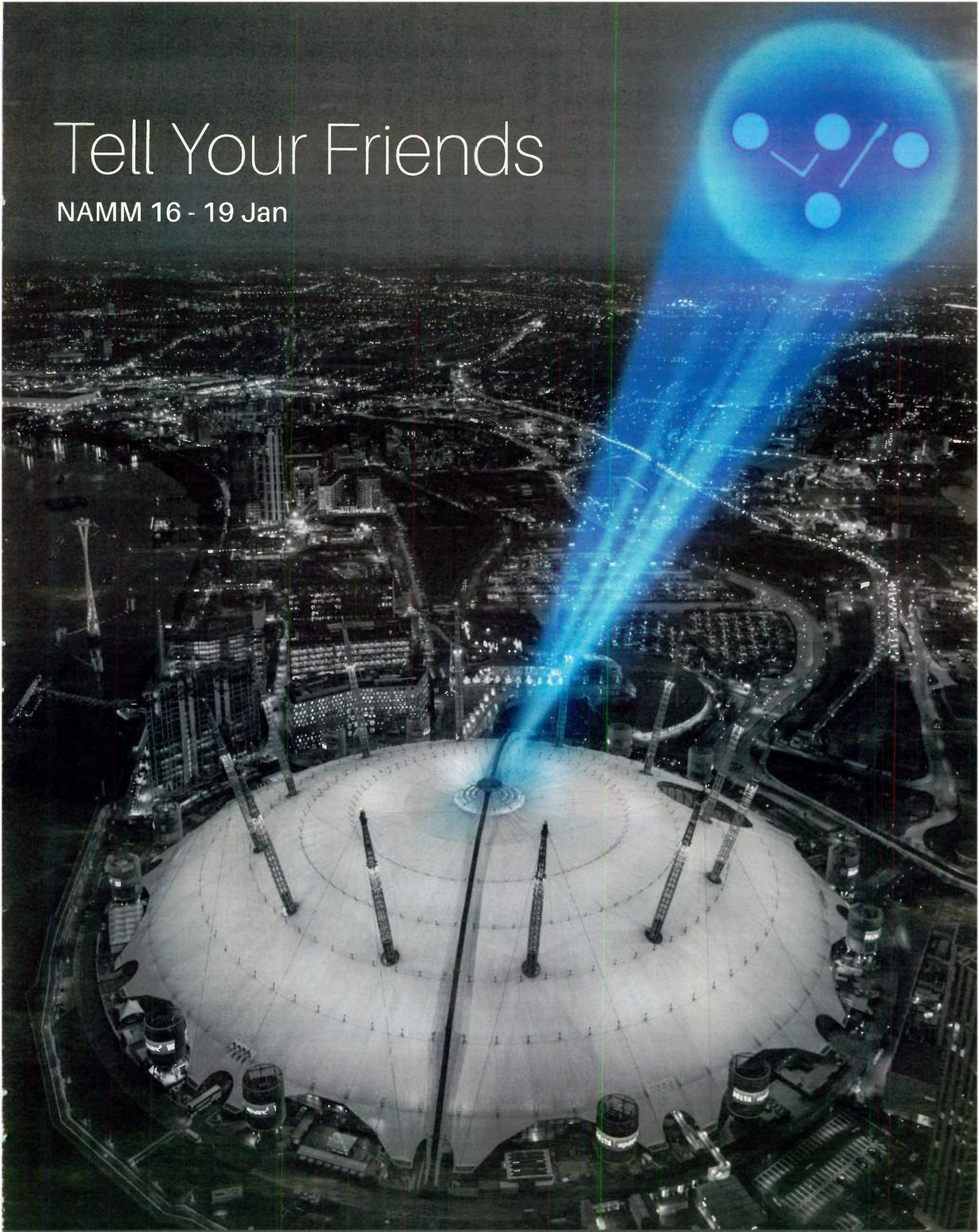
Ultra Sound  
[www.ultrasound.audio](http://www.ultrasound.audio)

Meyer Sound  
[www.meyersound.com](http://www.meyersound.com)



# Tell Your Friends

NAMM 16 - 19 Jan



OWN THE ROOM

 **DiGiCo**  
[www.DiGiCo.biz](http://www.DiGiCo.biz)





## New Zealand Church Turns to Clear-Com

AUCKLAND, NEW ZEALAND—LIFE Church in New Zealand recently outfitted its newest facility, LIFE Central Campus, with a Clear-Com FreeSpeak II communication system.

LIFE Central Campus includes an 1,800-seat auditorium, a 300-seat chapel facility and foyer spaces. Riki Willis, LIFE's production project coordinator, explained, "The new facility is set up as a typical live production environment, including a vision control room and auditorium FOH. We needed multiple channels of simultaneous communication to support the various job functions, from technical directors and video producers to lighting operators and stage management crew, so a matrix was deemed necessary. We also wanted to be able to live-link audio and video to and from our two other Auckland-based campuses."

The church selected the FreeSpeak II system after comparing it to other options. Also supporting the decision, LIFE already owned some Clear-Com LQ units and partyline equipment, so there was compatibility with existing equipment. Willis added, "I tested the competitors' latest-generation wireless system against FreeSpeak II and felt that FreeSpeak II's audio quality and noise floor were far superior."

The church's Clear-Com instal-



LIFE Church outfitted the LIFE Central Campus with a Clear-Com FreeSpeak II communication system.

lation includes an Eclipse HX-Delta matrix frame with E-IPA cards, with FreeSpeak II IP-enabled transceivers and belt packs, V-Series Iris intercom panels and LQ Series IP interfaces.

On the facility's opening weekend,

LIFE Central Campus hosted the Hillsong Young and Free band for a worship concert, and within a couple of weeks of opening, the church held a Christmas Spectacular, with three showings at full capacity. "It was

quite a way to start with a new communications system, but everything went very smoothly and has continued to do so ever since," says Willis.

Clear-Com  
www.clearcom.com

## Rebuilding the Colosseum at Caesars

LAS VEGAS, NV—The Colosseum at Caesars Palace in Las Vegas opened in 2003, playing host to Céline Dion's record-breaking series of residencies. Nearly 10 million fans and 16 years later, Dion played her final show at the venue on June 8, 2019, at which time the 4,300-seat venue went on hiatus for technical and design updates. Many aspects changed, but some stayed the same. The venue has a new Solotech-provided Meyer Sound Leo Family system anchored by LYON arrays, replacing the Meyer system that Solotech first installed there in 2003.

Solotech's Francois "Frankie" Desjardins designed the original system at the Colosseum. While not directly involved in the design this time around, as he's now the company's vice president of R&D, he was nonetheless still involved: "The first system had served the room for more than 15 years, so reliability and longevity were important factors in the selection of the new audio system. Once given the design, we worked to ensure the installed system would achieve all goals, with hopes of ex-



The Colosseum at Caesars Palace in Las Vegas reopened in September with an all-new Meyer Sound Leo system.

ceeding expectations for guests of the all-new Colosseum. We always strive to achieve the best of the best. People remember your most recent project, not the one from 15 years ago."

The Colosseum's Leo Family system is built around twin arrays of 16-each Lyon line array loudspeakers, with a center hang of 12 Leopard line array loudspeakers. Low end is supplied by 18 1100-LFC and 14

900-LFC low-frequency control elements. Completing the design are four UPQ-D1 loudspeakers, six Lina loudspeakers, and 26 UPM-1P loudspeakers for fill and delay systems. Eight Galileo Galaxy 816 processors are linked via an AVB network. The main arrays use Meyer Sound's Low-Mid Beam Control technology with the aim of providing uniform front-to-back response.

With Solotech also handling video and lighting for the update, Solotech project manager David Cerullo noted, "All the video, audio and lighting systems here can work in unison or separately, depending on how the acts want to use them. We have fiber optic connections for both audio and video, so if we need to send audio cues to video or lighting, that can happen. It's powerful and incredibly flexible, and from my perspective, it's an extremely impressive improvement."

Following the renovation, Caesars Entertainment delegated responsibility for both the AV overhaul and continuing production management to Production Specialists of Las Vegas (PSLV). One of the first acts to play the updated venue was Journey, which tore through a number of shows in October and December. The band's FOH engineer, Keith "Meaux" Windhorst, noted that the group has toured with a Meyer Leo rig in recent times, so "there was a comfort factor right out of the gate. You run up that first fader and it's immediately right in the ballpark. It sounds fantastic, it sounds familiar, and that's what I'm looking for."

Meyer Sound  
www.meyersound.com





*Sound  
Productions*  
®

Your AVL Source Since 1973

**CHAUVET**  
PROFESSIONAL

# JANUARY IS LIGHTING MONTH!

SoundPro's account managers share their product knowledge to support your needs and drive the success of your projects.



Chauvet Pro Rogue R2X Spot



QuickQ20 Lighting Control Console



CHAUVET DJ SlimPAR Pro H USB

**CALL FOR YOUR BEST PRICE 800.203.5611**



Electro-Voice



Blackmagicdesign



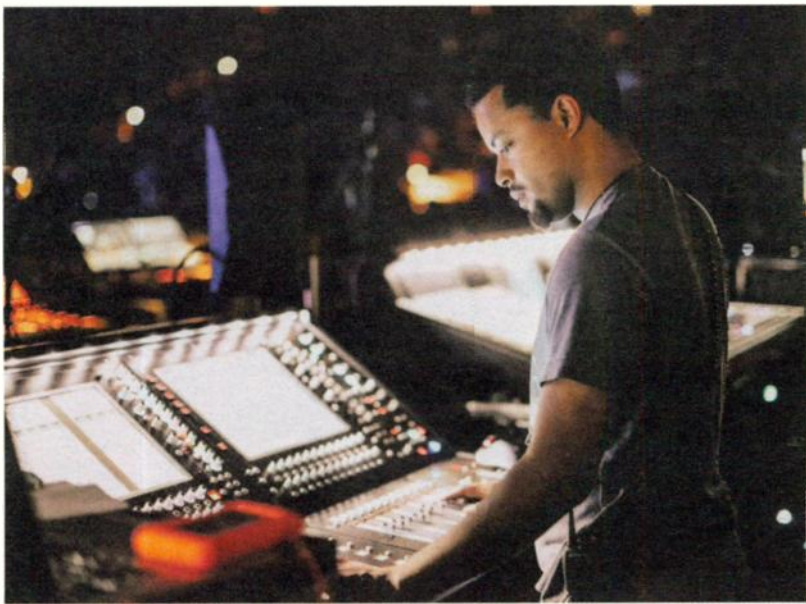
SENNHEISER

WRH



SHURE





Abel Ocasio has spent recent months mixing Arizona on tour.

## Rocking Arizona

NEW YORK, NY—Signed in 2016, the Atlantic/APG band Arizona has spent much of the last few years on the road, touring behind two albums and a string of rock/electropop singles. Mixing the band's live sound is FOH engineer Abel Ocasio, who carves the band's live sound on an endless variety of house P.A.s, including, recently, a Bose ShowMatch line array system from Bose Professional.

It's a long way from his start in audio back in Venezuela. "I remember being at church with my mom, and the time came for me to start volunteering. The audio got me hooked. I remember it was a smaller 32-channel board and just a few powered speakers, but it really got my attention. That was the start of it for me, and I learned more and more, especially when I began my audio studies at Full Sail University in Orlando, studying recording arts."

After that, he got a job working audio with Royal Caribbean cruises, managing all the audio for Broad-

way-type shows with large ensembles. He recalls, "Doing shows nearly every night for almost three years, that really helped me to sharpen my skills."

More gigs came and went, and eventually he ended up with Arizona, where his ears are put to the test across a wide range of venues and house P.A. systems, including that ShowMatch line array: "I had read about it, but I didn't know exactly what to expect. Going from venue to venue, we have to be ready for whatever system they have in place. It was shocking, honestly, as it was such a step up from some of the systems we'd used at other dates. The transient response was unreal, and the amount of air pushed by the low-frequency elements was phenomenal. It was a very clean P.A. overall, [and] we had lots of headroom in the P.A., too. It was a great system for the space, and for our group."

Bose Professional  
pro.bose.com

## Audiotonix

(continued from page 36)

oping new technologies, and growing their worldwide reach. Ardian's financial support and advice, combined with Astorg's, who are also remaining as an investor for this next phase, will help expand our brands and product portfolio even further."

For Ardian's part, Bruno Ladrière, managing director of Ardian Buyout, reaffirmed the group's confidence in Audiotonix's direction, noting, "The highly experienced management team is well placed to grow the scope and reach of the business, delivering out-

standing audio experiences to more and more people worldwide."

As a private investment firm, Ardian reportedly has assets of \$90 billion globally, manages funds for roughly 800 clients, and is majority-owned by its 550-plus employees in 15 offices across Europe (Frankfurt, Jersey, London, Luxembourg, Madrid, Milan, Paris and Zurich), the Americas (New York, San Francisco and Santiago) and Asia (Beijing, Singapore, Tokyo and Seoul).

The acquisition comes in the wake of another recent change at Audiotonix; in late November, the company appointed Simon Downing its group chairman. The founder of software services company Civica, Downing

## Jackman Knocks Out 90 Shows with Solotech

NASHVILLE, TN—Whether tearing it up as Wolverine, smarming it up as a school superintendent in the upcoming HBO movie *Bad Education*, or turning it up in song-and-dance performances on Broadway, Australian-born entertainer Hugh Jackman pretty much does it all. That includes touring the world, as he did recently on a 90-show global concert production known as "The Man. The Music. The Show." Along for the ride was audio gear provided by Solotech, which fielded an L-Acoustics K2-based system as Jackman performed Hollywood and Broadway musical numbers backed by a five-piece band and 14-member orchestra.

With SSE Audio, now a Solotech company, kicking off the worldwide trek in the UK and Europe, Solotech system engineer Alexandre Bibeau notes that the second and fourth legs of the tour visited A-market arenas across the United States, Canada and Mexico. Performances were presented via main arrays of 16 L-Acoustics K2 per side, each backed

by six flown KS28 subs and flanked by 14 more K2 as side hangs.

Additional arrays of 12 Kara enclosures each addressed the extreme left and right seating areas, ranging from 180 to 220 degrees, depending on the venue, while three smaller arrays of eight Kara—on axis with the main P.A.—handled upper level delay.

Solotech also carried a number of short-throw enclosures—including eight X8 and a dozen tiny 5XT—for extra fill applications, two additional ground-based KS28 subs for extra low-end impact, and 49 LA12X amplified controllers housed in LARAK II mobile rack units.

Bibeau used two L-Acoustics P1 processors and four Avnu-certified Extreme Networks AVB switches. "Our full system used AVB protocol with an analog backup," he said. "We were using fiber to interconnect the switches, and the whole process was simple, reliable, and a great experience."

L-Acoustics  
www.l-acoustics.com



Hugh Jackman's "The Man. The Music. The Show" toured the world with an L-Acoustics K2 line array system in tow.

guided that business through a 2004 IPO and three private equity buyouts, the last in 2017 for more than \$1 billion. On becoming Audiotonix's new chairman, Downing noted in November, "It's an exciting time to be part of the Audiotonix team. Their passion for the business combined with best-in-class engineering sits well with my own business success. There is much to learn here, but helping develop future software and hardware technologies for mission-critical environments and using these solutions to further build our brands globally will certainly play to my strengths."

Gordon lauded Downing's arrival, noting, "It has taken us a long time to find a chairman with the level of

experience in a technology business as well as private equity expertise. In Simon we have both, as well as a style that fits with the Audiotonix team perfectly."

It's been a busy fall in general for Audiotonix, as its SSL brand released the Origin analog-based studio console and named Phil Wagner as its senior vice president, U.S.; Allen & Heath introduced the Avantis live sound desk; and DiGiCo unveiled the SD7 Quantum's Spice Rack and Mustard.

Audiotonix  
www.audiotonix.com

Ardian  
www.ardian.com



BandH.com

800-875-8508

Where  
Technology  
Lives



GOV | EDU | CORP

# Christie Boxer Series 4K30 30,000-Lumen 3DLP Projector

The Boxer Series 4K30 3DLP Projector from Christie offers 4K image processing and a brightness rating of 30,000 lumens, making it suitable for use in high-impact live events. It comes with an integrated NFC (near field communication) technology for lamp information tracking. In addition, the projector comes with HDBaseT, two dual 3G HD-SDI, and one Twin DisplayPort input.

CH1440010102



Sign up or log in for the most current pricing at [BandH.com/b2b](http://BandH.com/b2b)



Canon REALIS 4K501ST Pro AV  
5000-Lumen LCoS Projector

CA4K501ST



NEC X555UNS-TMX9P 55" 3x3 LCD  
TileMatrix Digital Video Wall Solution

NEX555UNSX9P



Logitech PTZ Pro 2  
Video Conferencing Camera

LOPTZPRO2



JBL Control 24CTM - Two Way Vented  
Ceiling Speaker with 4" woofer

JBC24CTM



Shure QLXD124/85 VHF Handheld & Lavalier  
Combo Wireless Mic System

SHQL12485V5.0



JBL VRX932LAP 12" 2-Way  
Line Array Loudspeaker System

JBVRX932LAP



Atlona 4K/UHD Dual-Distance 16x16 HDMI  
to HDBaseT Matrix Switcher with PoE

ATUHDPRO3161



C2G HDMI, VGA, 3.5mm Audio & USB  
Pass Through Single Gang Wall Plate

CA39707



Apple TV (32GB, 4th Generation,  
with Updated Siri Remote)

APTV32BL



Crown Audio XLS 1002  
Stereo Power Amplifier

CRXLS1002

Call an Expert Today  
**800-875-8508**

Free Expedited  
Shipping  
on orders over \$49\*



[www.BandH.com/b2b](http://www.BandH.com/b2b)  
Where you will find information  
on over 500,000 items



Visit Our SuperStore  
420 Ninth Avenue  
New York, NY 10001



Cash in or Trade up  
**Used Equipment**  
We Buy, Sell, and Trade

\*Applies to In-Stock Items. Some restrictions may apply. See website for details. NYC DCA Electronics Store Lic. #0906712; NYC DCA Electronics & Home Appliance Service Dealer Lic. #12807905; NYC DCA Secondhand Dealer - General Lic. #0907906 © 2019 B & H Photo & Electronics Corp.



## Go Tell It, Iron Mountain

LANCE PODELL, SENIOR VICE PRESIDENT/GENERAL MANAGER, IRON MOUNTAIN ENTERTAINMENT SERVICES

BY CLIVE YOUNG

Founded in 1951, Iron Mountain has long been at the forefront—the peak, if you will—of storage and information management services. Iron Mountain comprises more than 1,450 facilities around the world totaling more than 90 million square feet serving more than 225,000 organizations, from major corporations and financial entities to noted private citizens.

Many of the assets Iron Mountain stores, preserves and in some cases restores are from the entertainment world. While much of that is media—master tapes, films, photos, video reels and the like—there’s also wardrobe, sets, personal memorabilia and far more. The one thing the items have in common is that they are valuable, whether fiscally or on a personal level.

“All content creators have emotional connections to their creations,” observed Lance Podell, the recently appointed senior vice president and general manager of Iron Mountain Entertainment Services (IMES). He would know; while his background in media and entertainment involves ad agencies, ad tech firms and online video programming, the job he held prior to joining IMES, global director of YouTube Spaces, allowed him to witness the passion that goes into modern-day digital storytelling firsthand. “We built and ran studios around the world

Podell. “As he described his day-to-day work restoring master recordings of the music that my parents shared with me—Motown, classic rock—I immediately understood the risk that some of our most beloved content may not be playable for our children, and their children. I realized that these iconic works are critical to defining generations of our collective past, understanding social context, and supporting our children’s understanding of history. It also became abundantly clear that these libraries of music, film, historical sporting moments and iconic brand media—remember ‘I’d like to buy the world a Coke,’—still have an active role in our present-day enjoyment. In fact, there is still quite a lot of life and potential revenue in these classic assets—songs such as ‘Sweet Caroline,’ which, because of thoughtful preservation strategy, enjoys more widespread airplay today than when it was released 50 years ago.”

“My vision is that soon content creators of all types will understand the urgency of properly preserving their creations.”

Lance Podell

to invest in YouTube creators—great storytellers native to the digital space and those joining the digital space from more traditional entertainment.”

While much of YouTube’s content is reactionary to a given cultural moment, IMES’ remit often regards content being retained for the long haul, helping ensure its place in the cultural conversation for, ideally, eternity. “I was hooked on the opportunity to lead IMES in the middle of a conversation with one of our accomplished audio engineers,” said

There are plenty of hurdles to be overcome in the process of making that happen, of course. Sometimes it means getting creatives to see the larger picture, he noted. “My vision is that soon content creators of all types—musicians, actors, producers, directors, brands, sport organizations, broadcasters—will understand the urgency of properly preserving their creations, and will trust IMES to serve them with continually relevant solutions to preserve both original analog and digital content,



Lance Podell

and to help unlock the value in that content so that future generations can enjoy it.”

A greater obstacle, however, is the race against time to protect and preserve media while it’s still accessible. “Iron Mountain’s services have never been more relevant to content creators, especially those with media assets on physical tape and hard drives. We are seeing significant physical deterioration across many of those formats,” he noted. “IMES is now extending its core offerings of physical media storage and digital transformation by bringing new, complementary services to the market that further unlock the value of our clients’ archives, and provide them instantaneous and permanent access to those priceless assets in the future—for sharing, distribution or personal safe-keeping.”

To that extent, IMES now has more than 200 employees throughout numerous locations. Podell himself is based in the New York area. Additionally, Iron Mountain has purpose-built facilities for media storage and digitization in Hollywood, CA, Chicago, IL, Boyers, PA, Nashville, TN, Toronto, ON, London and Paris, and the company has an eye toward expanding to other entertainment capitals around the world. “Our digital studios are staffed with audio, film, video and still image production professionals to whom our largest global

clients, including film studios and music labels, entrust their most fragile assets for preservation, digitization and digital storage,” said Podell. “Our storage operations teams are physical archive experts, with deep experience in designing custom solutions that are appropriate for the contents being stored, whether it’s physical media, musical instruments, sheet music, wardrobe, sets, awards or fine art.”

The fact that IMES handles such a variety of assets for the music, film and broadcast sectors isn’t lost on entities from outside of those markets; Podell notes that they’re seeing a growing need and demand from sports teams/organizations, ad agencies, brands and individuals looking to preserve their legacies. “The foundational elements of our services—physical storage and vaults, digitization, and digital storage and asset management—are delivered end-to-end with complete chain of custody that is routinely trusted by organizations with the most sensitive and fragile assets in the world: governments, healthcare organizations, financial institutions—and media and entertainment organizations,” noted Podell.

Of course, a major concern for any entity storing its assets—for instance, thousands of master tapes—is that yes, the items may be safe and preserved, but how much of a hassle will

(continued on page 48)

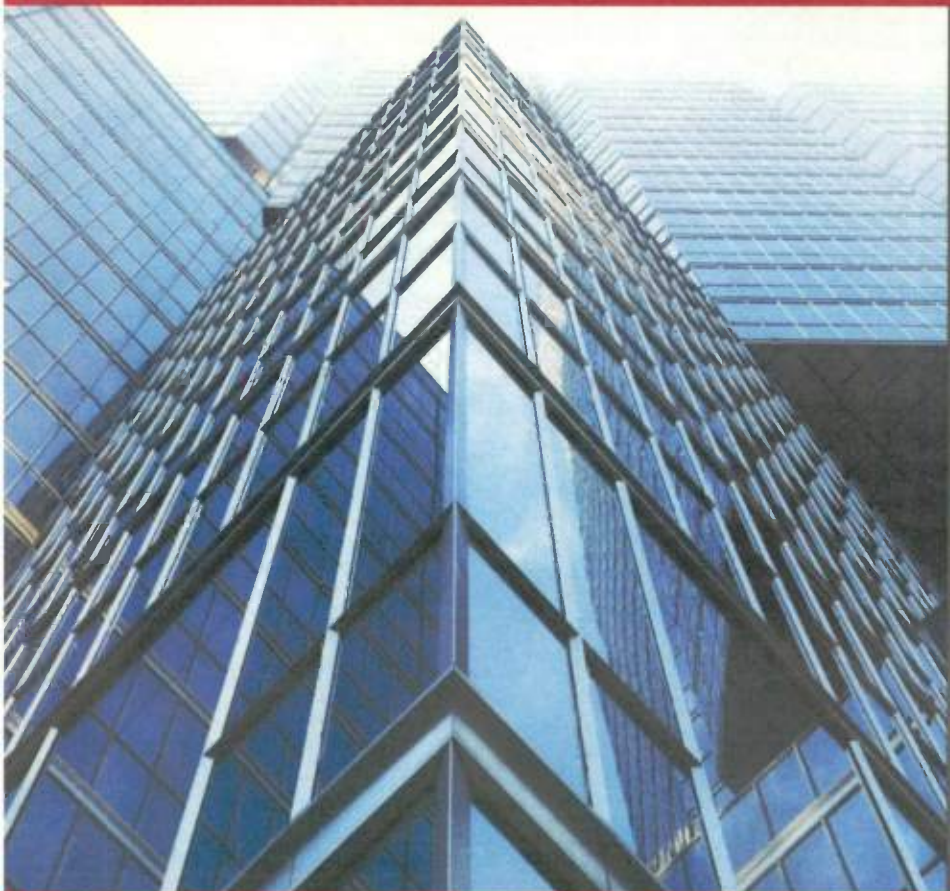


FUTURE  
B2B

CONNECTORS.  
CREATORS.  
EXPERIENCE MAKERS.

## We Are Future

Future is a global platform for specialist media with scalable, diversified brands. We connect people to their passions through the high-quality content we create, the innovative technology we pioneer and the engaging experiences we deliver.



## Our Services

Our partners look to us to make unique and valuable connections in a number of ways including creative advertising solutions, memorable live experiences, superior eCommerce technology and innovative media services. We push boundaries, seize opportunities and exceed expectations.

See how we can take your business to the next level. Learn more at [futureplc.com](http://futureplc.com)

### AV TECHNOLOGY

- AV Technology
- AV Technology Europe
- Installation Contractor
- Systems Contractor News

### MEDIA ENTERTAINMENT

- Broadcasting & Cable
- Multichannel News

### MEDIA TECHNOLOGY

- Radio World
- Radio World International
- TV Technology
- TVB Europe

### EDUCATION

- Tech & Learning

### CONSUMER TECHNOLOGY

- TWICE
- Residential Systems

### MUSIC

- Music Week

### PRO AUDIO TECHNOLOGY

- Pro Sound News
- Pro Sound News Europe
- Mix

For more information on these brands and the many others offered from FUTURE US, as well as subscription information for all of FUTURE US's print and electronic products, visit [www.futureplc.com](http://www.futureplc.com).





Tylene "Ty" Robinson

Symetrix has promoted Tylene "Ty" Robinson to international sales and operations manager. She began her career in web design and digital marketing, graduating from the University of Advancing Technology with a B.A. in digital media (summa cum laude). After working at a Seattle software company, Robinson joined Symetrix, focusing on managing order and fulfillment processes. In her new role, Robinson will direct strategic accounts and an international salesforce, as well as driving global sales enablement programs and managing critical sales KPIs.



Blair Johnson

Lectrosonics has appointed two U.S. regional representatives: **Blair Johnson** in the Northeast and **Nicholas Mariano** in the Southeast. Johnson will serve customers and develop new business in Maine, New Hampshire, Vermont, Connecticut, Rhode Island, New York, Massachusetts, New Jersey, eastern Pennsylvania,

Maryland, Virginia and Washington, D.C. Mariano will do the same in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, the Carolinas, Oklahoma, Tennessee and Texas.

Johnson's background in filmmaking and film/video production management includes live-streamed performances from the Metropolitan Museum of Art, as well as editing, sound mixing and producing in a variety of environments, from artistic to corporate and commercial. Mariano has worked in Lectrosonics' technical customer service department since September 2017. His background in audio mixing, support and repair includes time at the legendary Village Recorder in Los Angeles and a stint as special effects consultant for the TV series *Breaking Bad*.

Focusrite has added to its Focusrite Pro sales team with the appointment of **Dave Rieley** as U.S. and Canada sales manager, **Peter Tilley** as western U.S. sales manager, **Michael York** as central EMEA sales manager, and **Anthony Wilkins** as EMEA



L-R: Anthony Wilkins, Dave Rieley, Pete Tilley and Michael York

sales manager.

Rieley, who will manage business throughout the United States and Canada, is relocating to the Nashville area to better align with Focusrite's eastern U.S. and Canadian channel partners. Rieley joined Focusrite Pro a year ago as the western region sales manager and was a former sales manager at Vintage King Nashville and a recording engineer.

Tilley previously spent several years in sales at Guitar Center, handling sales and sales training. Based in Los Angeles, he has been promoted to his new role from senior tech in Focusrite's technical support department. York recently joined Focusrite from Avid in the UK and will handle the Central Europe territory, including Germany, France and Benelux. Wilkins worked previously at Aspen Media, which distributes audio and control products for broadcast, live, post-production and recording companies, and prior to that was international sales manager for Trinnor Audio, Junger Audio and RTW.



Clockwise: Ramon Guerrero, Daniel Lee, Konrad Berreth, Tony Freed

Renkus-Heinz has added several new employees. **Ramon Guerrero**, who joined Renkus-Heinz in September 1985, is now a production planner at the company, following stints working in production, engineering and sales. Guerrero will ensure flow of production at the Orange County-based manufacturing facility. **Daniel Lee**, a new mechanical engineer, has a B.S. in mechanical engineering from the University of the Pacific and a background in designing low-voltage life safety equipment systems. **Tony Freed** has joined the customer service team, having pre-

Anna Csontos  
QSC

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

**A:** I have a diverse set of responsibilities. As chief of staff, I work closely with our teams to formulate our overall corporate strategy and oversee the execution of major business initiatives such as business model transformations, customer experience and others.

As chief market officer, I lead our sales teams for our three businesses—Systems, Cinema, and Live Sound—in the Americas, and guide the global technical and support teams and our global pricing efforts. Finally, I work closely with our teams around the world on multinational expansion and coordination for our businesses.

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

**A:** Before QSC, during my time in management consulting, I served many Fortune 500s and other large enterprises in dozens of industries. I feel very fortunate to have garnered a broad business background across several geographies and various functions, which has certainly come in handy at QSC across our multinational business and with the variety of initiatives we have. In my nine years with QSC, I have had many different roles and have been involved in various parts of the company, so I have a thorough understanding of our long business legacy, strong capability foundation and future business aspirations.

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

**A:** QSC is on an amazing growth journey. In the coming years, we will continue to advance our technology leadership in each of the markets we serve. In the AV industry, we clearly see the seismic shift toward customer lifetime value, managed services, and the need to equip customers with relevant data to optimize their investments. Customers are not buying hardware or software pieces anymore; they are looking for ecosystem solutions and skilled business partners who can deliver repeatable, relevant and unique experiences—the wow moments—for them. We are very much focused on highlighting the benefits of this new business approach, cultivating a strong channel partner network, and providing the tools, technologies and support to make that a reality.

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

**A:** If you have been watching QSC lately, you know that we've introduced a number of groundbreaking technologies, so in the short term, our goal is to work with our teams and customers to proliferate these new products into the market and help deliver exceptional experiences for end users.

In the long term, we are looking to vastly expand our business by fostering the continued success in the Americas and enhancing our presence in key geographies around the world to realize new and additional business opportunities. Our goal is to strengthen our global market reach and support infrastructure with the opening of new offices, training centers and experience centers around the world.

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

**A:** QSC has experienced tremendous growth over the last several years. With this comes the need for more talent—hiring people who are excited to work in a fast-paced environment and willing to put the customer first, all within a culture that values working hard and having fun. I want to preserve this unique and special place (we've been around for over 50 years) while fully supporting the undeniable growth of our last few years. I love seeing our teams grow and challenge themselves to tackle new responsibilities while delivering some of the most innovative solutions and technologies we've ever produced. All of us at QSC have a unique opportunity to carry forward a legacy of technology innovation, transformational mindset, and a cultural foundation for talented people to collaborate, create, and thrive. The QSC journey continues!

viously worked in sales and service roles, as well as for the U.S. Army's aviation division. **Konrad Berreth** has also joined the customer service team; he previously worked in customer service and tech support at the Mesa Safe Company.

d&b audiotechnik has appointed **Alain Richer** as managing director in France. He succeeds Didier "Lulu" Lubin, who retired in September, having founded d&b France



Alain Richer

in 2000. In his new role, Richer will be responsible for all aspects of business and market development of d&b in France, as well as the day-to-day operations throughout the country. He will report to Phill Coe, (continued on page 47)



# Creating Discipline in the New Year

BY PETER JANIS

Every new year, people all over the world make resolutions. Probably the most common is the resolve to lose weight, which generally means eating smarter, drinking less booze and soft drinks, and beginning a regular exercise regimen. The key word here is “regimen”—a daily routine. Truth

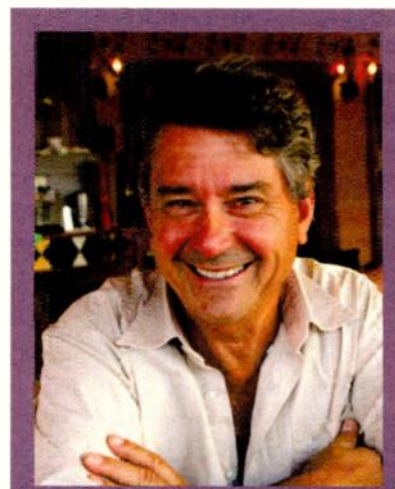
cess in October: the sales manager would translate all the numbers into units and dollars, while I, the CEO, would generate a forecast using past history plus our growth trajectory and then add in assumptions about where new business could be generated. We would compare forecasts and come to an agreement. Once the sales forecasting was completed, the

missions and a salesperson’s income, leaving everyone involved demotivated.

Another initiative that I undertook was giving the company a challenge each year to do something big and radical. In the business world, this is known as a BHOG, or a big, hairy, audacious goal. One year’s BHOG could be the launch of a new product line, the development of a new technology, moving the company to a new location, finding secondary part sources, reorganizing the warehouse or manufacturing layout to improve efficiency, expanding sales into a new market and so on. Over the years, we did just that. Or more to the point, all of those.

For instance, when we moved from a 10,000-square-foot facility to 25,000, the new building required significant renovations. Our general manager, Mike Hill, and our operations manager, Steve Hopia, took on this project with aplomb. Another year, we decided to switch the production of Primacoustic from foam to glass wool so we could boast about having a higher-performance product that would meet the stricter fire codes required for commercial sales. That may sound easy, but it took months of trial and error, which turned into years as production evolved. Another goal was expanding sales in Asia. We had already made headway into Europe and knew that the next big challenge would be to turn Radial into a household brand in key markets such as Japan, South Korea and Singapore.

We have all heard the adage, If you don’t have a target, how can you hit the bullseye? When you give your team a challenge and they are up to the task, they walk around with pride. It is not merely the pride of achieving their goal, but the pride



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.

“Sales forecasting takes a tremendous amount of time, and you have to find the discipline to do it each and every year.”

is, staying at it requires discipline, and most of us fail miserably. We hate discipline!

In business, it is imperative that you create yearly sales forecasts and monthly expense budgets as a means to measure progress. It astounds me when I speak with business owners who tell me they don’t generate a yearly budget. The most common excuse? “We have no way of predicting what will happen or what customers will buy.”

The Aha Moment: You will never create the perfect budget. But the process isn’t about that; it’s about setting goals and allowing the averages to work themselves out. If you track the purchases of every customer individually, each one will create a line. Put them all onto a single graph, and as you zoom out, you will see that together they form a thick line. This is the basis of the sales forecasting process.

Sales forecasting takes a tremendous amount of time, and you have to find the discipline to do it each and every year. Yes, discipline ... that ugly word again!

At Radial, we would start the pro-

cess in October: the sales manager would translate all the numbers into units and dollars, while I, the CEO, would generate a forecast using past history plus our growth trajectory and then add in assumptions about where new business could be generated. We would compare forecasts and come to an agreement. Once the sales forecasting was completed, the

accounting department could then work through the numbers to generate the expense budget, taking into account the cost of goods and other expenses such as salaries, rent, marketing and so on, along with any significant expenses that might come into play in the coming year. This endeavor then gave us a monthly nut to crack. The most important aspect of any business is sales revenue. You can have the coolest widgets and the best shipping department in the world, but if you have no orders to fill, the company will cease to exist. This is why the sales department plays such a key role in any company. Sales teams must be given goals and be rewarded for success. I am a big fan of rewarding salespeople with commissions on sales and bonuses when they meet their targets. We employed a system that shielded salespeople somewhat, so they could recoup losses from a bad month over the next month or two and not be penalized. This approach helped avoid finger-pointing if product deliveries were slow due to part shortages—a situation that in turn would affect com-

missions and a salesperson’s income, leaving everyone involved demotivated.

that comes from knowing that they made it happen. There is a downside to success, one that tends to blind. It comes when sales are rocking. When a company is successful and cash is flowing in, the success hides inadequacies. Then, when sales slump and money gets tight, frustration can set in and tempers can flare. All of a sudden, the hidden problems all find their way to the surface. This only further substantiates the importance of discipline and setting goals each year. Once you get started and begin to reap the benefits, you will soon begin to love that cranky old miserable word we call “discipline!”

Happy new year!

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.



## People

(continued from page 46)

territory manager, EMEA. An experienced sales and marketing executive with a background in industrial and consumer markets, Richer comes to d&b from Sennheiser, where he held the role of European marketing director.

Manley Laboratories is expanding its engineering department with the addition of **Jeffrey Bork** as senior electromechanical design engineer



Jeffrey Bork and Jesse Honig

and **Jesse Honig** as engineering project manager. Bork previously spent 20 years at Automated Processes Inc., including 13 years as API’s director of engineering, before working two years as an audio hardware design

engineer at Avalon Design. Prior to those positions, he served as chief of technical maintenance at Sunset Sound Recorders. Honig’s background includes work at Slate Digital/Slate Media Technologies, The Village and Largo, plus experience in recording and technical systems design.

Ashly Audio has appointed **Andy Lopez** as its export sales manager. The addition is a strategic hire to support the company’s long-term plan to grow the business in the international market. Lopez, who



Andy Lopez

has worked in the AV industry for more than two decades, has spent the past 17 years focused primarily on international business development. Previously, Lopez worked as director of international sales at MSE Audio. In that role, he worked directly with international dealers and representatives to support the sales goals of the company.



## Live Industry Forecast

(continued from page 1)

predicted that the concert industry's total revenue will rise 1.9 percent annually through 2024, ultimately hitting \$36.6 billion that year. And peering even deeper into the crystal ball, in December, *The Wall Street Journal* reported that the live music business currently rakes in roughly \$28 billion annually, and forecast that the indus-

## RCF Group Acquires Montarbo

BY FIONA HOPE MCDOWALL

REGGIO EMILIA, ITALY—RCF Group has completed the acquisition of Montarbo, an Italian pro audio loudspeaker manufacturer.

From an operational standpoint, the brand will be run and distributed by AEB Industriale.

The acquisition is part of RCF Group's strategy of selective M&A activity focusing on pro audio brands that can bolster the group's positioning in the field.

Arturo Vicari, CEO of RCF Group, commented on the acquisition: "We're delighted to welcome Montarbo to our group. It's a historic brand that has contributed to the evolution of the music and professional audio industry in Italy and around the world.

"For anyone who, like myself, has followed the development of this market over the years, elite brands such as Montarbo have a special significance and therefore represent a wonderful opportunity for us to increase the value of our group. RCF Group is one of the most dynamic organizations in the global professional audio industry, meaning Montarbo will be able to live up to its potential and continue to grow alongside us."

Over the course of this year, RCF has also acquired leading pro sound brands EAW and DPA Microphones, as well as celebrating its 70th anniversary.

RCF  
www.rcf.it

Montarbo  
www.montarbo.com

try will be taking in \$38 billion annually by 2030.

A number of trends have been identified by those making the predictions. It's no secret that artists have been placing more emphasis on touring and concerts to make money, as low-paying streaming continues to erode once-lucrative physical album sales. At the same time, however, paying audiences have become increasingly attracted to live music, underlining the industry adage, "You can't download an experience."

That doesn't mean technologists won't try to make that happen, of course. Supersphere, an entertainment production company that specializes in immersive and interactive live broadcast events, has streamed more than 80 events in the past two years, including a string of concerts branded *The Audiophile Series* that viewers watch using Oculus VR headsets. For music fans who prefer a crowd, Fathom Events broadcasts one-off exclusive live music events to cinemas around the country, often on days that would otherwise draw low attendance for movies. Fans turn out for these events; Fathom Events CEO Ray Nutt told *Rolling Stone* in December, "In terms of a one-time performance, an event in excess of \$750,000 in gross box office, such as the ones we've done with BTS and the *Elvis Presley '68 Comeback Special*, is a success in our books."

## View from the Top

(continued from page 44)

it be to access those items and put them to use when necessary? IMES has been taking new approaches to those perennial concerns as of late.

Podell offered, "Iron Mountain InSight is a product developed in partnership with Google that enables content owners to significantly enrich their metadata through artificial intelligence/machine learning, which in turn makes their archives searchable in ways that were previously not possible. Features such as facial recognition, image recognition, speech to text, and optical character recognition mean that, for music archives, for example, archivists can automate the reading and categorization of thousands of handwritten notes and labels on vintage tapes and boxes—and then conduct instantaneous searches for specific artists, titles or formats that previously would have taken days or weeks to complete."

Also of note, he said, is the company's Digital Content Repository (DCR), a managed digital storage

While music events like these highlight the need for cinemas to install top-shelf audio systems in their facilities, they also confirm something arena operators already know: that live music shows often perform better at the box office than the original draws the venues were built for. According to *The Wall Street Journal*, an arena may do well presenting an NBA and NHL game, but it can often attain double the net income for the night by presenting a concert. This fact has not been lost on venues; arenas that don't have to accommodate a major-league sports schedule have upwards of 40 more potential dates each year to play with when determining their concert schedules. As result, the *WSJ* notes, Irving Azoff's facility company Oak View Group may be planning to spend \$3.9 billion to build eight arenas around the country in the next three years, but only two of them will house a sports team.

While the availability of more arenas to play turns into more potential revenue down the line for national tour sound companies, regional and local audio providers won't miss out on live music's continued wave of success. IBISWorld's report notes that music fans have increasingly used the web in recent years to discover new music acts, resulting in a parallel rise in club and theater concerts over the last five years, and that ascent, too, is expected to continue.

solution specifically designed for the ingest, retrieval, and long-term preservation of digitized and born-digital media creations such as music, film and broadcasts, providing clients with working access to their digital archives, with full searchability and worldwide distribution capabilities. Further work is also underway with technology companies in the global M&E sector to develop a digital asset management platform that integrates InSight and DCR to provide an all-encompassing, searchable view of an organization's global content inventory.

IMES is in a unique position as it, like the mind itself, is designed to look backward and then recontextualize elements from the past to help create the future. For Podell, it's something of a calling: "My career has been built on serving content creators and entertainers by providing them with offline and then digital platforms and services to ensure their life's work can be enjoyed widely by global audiences. Now I am fortunate enough to play a key role in ensuring these works, costumes and other iconic memorabilia are safely secured and that media from all formats can now be archived and digitized correctly."

Iron Mountain  
www.ironmountain.com

## advertiserINDEX

### ADVERTISER PAGE

Acoustics First	8
Allen & Heath	52
Arista	21
Audiotechnica	17
B & H	43
Bose	9
Celestion	13
D&B Audiotechnik Corporation	37
DigiCo	39
Focusrite	15
Full Compass	1,23
Genelac	4
KEF America	19
Lectrosonics	27
Meyer Sound	2
Radial	51
Shure	7
Sound Productions	41
Sweetwater Music	
Instruments & Pro Audio	11
Whirlwind	29
Yamaha Commercial Audio	3

Pro Sound News (ISSN# 0164-6338) is published monthly by Future US, Inc., 11 West 42nd Street - 15th Fl, New York, NY 10036. Pro Sound News is available without charge in the USA to qualified professionals engaged in sound recording, broadcast, video recording, audio-visual, sound reinforcement and associated business. The publisher reserves the right to refuse applications and restrict free copies sent to a company or organization. For subscription information or to email customer service, please visit our online Subscribe Center at [www.MyPSNmag.com](http://www.MyPSNmag.com). Reprints available upon request, call our Reprint Coordinator at Wright's Reprints: 877-652-5295. Periodical postage paid at New York, NY and additional mailing offices. POSTMASTER: Send address changes to: Pro Sound News, P.O. Box 234, Lowell, MA 01853. Please allow 6-8 weeks for address changes to take effect. © Copyright 2020 by Future US, Inc. PRINTED IN U.S.A.



## Gear of the Year

(continued from page 1)

me: 32 inputs, inline, analog and \$50,000. How can you go wrong with that?"

SSL's Fusion, essentially an analog coloration toolkit, also looks cool, he says. "It's designed for people mixing in the box, to give them some analog flavor. You put it on your mix bus."

Looking back at 2019, Ryan Hewitt says, "This year was crazy. I worked with 35 different artists," including country stars Little Big Town and Brett Eldredge, and Harry Connick Jr. He purchased a few pieces introduced in recent times, including an UnderToneAudio UnFairchild: "That's pretty spectacular," he says.

He also got a pair of PMC IBIS monitors. "I'm still using ProAcs, but the PMCs are bigger party speakers. Clients love them. They get loud and bright and tell the truth." He adds, "Another thing I got was the Chandler TG microphone. I love that mic."

One more highlight for Hewitt was a prototype of the Nautilus EQ, the brainchild of Govinda Doyle at Australian boutique manufacturer Harris Doyle Audio. "He cornered me at the Nashville NAMM and made me try this thing—and now I won't give it back." The stereo unit has stepped, ganged controls for each function, and super-high headroom courtesy of 110V rails, says Hewitt, "and it's got this very unique, all-analog transformer saturation circuit that is pretty ridiculous. No one else has anything like it." It's not cheap, he adds, "but I think it'll be worth every penny."

"I've been bouncing around between studios a bit more in the last few years," reports Ronan Chris Murphy. His credit list, ranging from pop to rock to jazz to world music and everything in between, is topped by work with King Crimson, GWAR, Ulver, and the videogame *Mafia III*.

In addition to finally pulling the trigger on a Great River MP-500NV mic pre in 2019, Murphy reports that he recently upgraded from a prototype to a production model of A-Designs' Ventura SE channel strip, which is ideal for his peripatetic style.

"If you cart that along, you've got your bases covered for almost

Chambers plug-in. "I'm using them every day. The Al Schmitt preset is pretty much all you need," he says. Valhalla's reverb, he adds, "is great and has a tone to it very different from everything else."

Unusual emulations are welcome at Barresi's studio. Arturia has come out with some interesting offerings, he says: "They did a couple of preamps, a V72 and V76 type thing, and a Trident A Range. Preamps are interesting to me—because I have so many of them anyway but I never really think about software preamps—and putting an A Range across something and having that kind of EQ capability is pretty cool."

As for delays, he says, "They've

texture and character. It's a great tool for making things bigger or more aggressive without harshness or other negative artifacts."

He continues, "I usually cut frequencies with one of my cleaner plug-ins, then boost with the E27 for bigness and character. I feel like the E27 has a really nice texture. The fact that I can do M-S processing with it makes it even more useful. I even use it on some aggressive masters."

Murphy adds, "I use a lot of Plugin Alliance stuff and pulled the trigger on their bundle. In terms of my mastering work, Softube's Weiss MM-1 limiter is starting to creep into the number-one slot as my most-used mastering limiter—and I have quite a few."

Murphy made a software change that has had a significant impact on his workflow. "I finally took the plunge and bought Reason Studio. It can essentially work as a plug-in inside of Pro Tools," he says.

"I've been using Pro Tools since version 1.0, and as an audio recording and mixing format, I still think it's fantastic." But for doing production work, especially on more pop-oriented projects, he says, Pro Tools is not an ideal composition tool, creating bottlenecks and requiring him to jump through hoops.

He says, "Working with Pro Tools and working with Reason have reinforced my opinion of what a brilliant piece of software [Opcode] Studio Vision was, and how heartbreaking it was that Gibson killed it." Gibson Guitar Corp. acquired Opcode in 1998 and discontinued development on Studio Vision the following year.

The platform was essentially 20 years ahead of its time, he says. "It was basically where modern production was going."

"I think [A-Designs' Ventura SE is] the single most underrated piece of gear in pro audio. I'm stunned that it's not an insanely popular piece of equipment."

Ronan Chris Murphy

anything you need on the front end. With a single unit, I have one of the cleanest, most articulate instrument sources I've ever used, a really clean and full-bodied mic preamp, and a very usable EQ section," he says. "I think it's the single most underrated piece of gear in pro audio. I'm stunned that it's not an insanely popular piece of equipment."

A familiar refrain among engineers is that the industry is saturated with plug-in emulations of classic gear. "We don't need replicas of things anymore," says Hewitt. "Make something new and exciting that gives me more tools and a bigger palette."

Hewitt has added UAD's Capitol

come out with a couple that are really good—a Roland Space Echo [Tape-201] and Delay Eternity," an original design. "They've got something else coming out that I can't even talk about," he confides.

"On Black Friday, I always pick up some sales," Barresi continues. "The new Sonnox Oxford Drum Gate is pretty interesting, and Dave Pensado turned me on to something called Limitless from DMG Audio that's pretty cool—you can get your mixes loud with it and not whack them out."

For Murphy, "The most significant addition to my arsenal was the Avedis E27 plug-in by PSP Audio. It's become my most-used EQ for

## soundCLASSIFIEDS

equipment for sale



**STAY ONE STEP AHEAD**  
with Future's **FREE** Electronic Newsletters

**ALL ENTERTAINMENT TECHNOLOGY TOPICS COVERED:**

**ONE-STOP SHOPPING:** Simply visit [www.prosoundnetwork.com](http://www.prosoundnetwork.com) and click on the "Sign Up" link on the homepage. Then choose as many newsletters you need.

**FREE!** Visit [www.prosoundnetwork.com](http://www.prosoundnetwork.com)

**JOSEPHSON** C550H Omni Condenser Microphone  
for calibrated system measurements  
**Josephson Engineering**  
[www.josephson.com](http://www.josephson.com)

**ARX**  
[www.arxamerica.com](http://www.arxamerica.com)  
USB DI BOXES • SPLITTERS • SIGNAL PROCESSING

To advertise in the classified section of **PRO SOUND NEWS**  
Contact Zahra Majma at [zahra.majma@futurenet.com](mailto:zahra.majma@futurenet.com)

acoustical products

**AcousticsFirst**  
Materials • Control • Sound • Eliminate Noise  
MADE IN THE USA  
888-765-2900  
Toll-Free Number



# Not Just Surviving but Thriving and Testifying

BY STEVE HARVEY

Gloria Gaynor first came to the attention of dance music fans in 1975 with a string of chart hits at home and abroad, but it was her 1978 single, “I Will Survive,” initially released as a B-side, that brought her iconic status. Catapulting her into the mainstream, it went on to sell 14 million copies, topping the charts worldwide. The female empowerment anthem was honored with a Grammy Award for Best Disco Recording, and in 2016, it was added to the National Recording Registry for preservation by the Library of Congress.

With the early-'80s backlash against disco music in the United States, Gaynor moved on. She released a succession of R&B and pop records, and in 2013, a contemporary Christian album. In June 2019 she released a follow-up album, *Testimony*, that received two Grammy nominations: Best Roots Gospel Album and Best Gospel Performance/Song for “Talkin’ 'Bout Jesus.”

Captured live to analog tape in Nashville’s RCA Studio A by Dove Award-winning producer Christopher Stephens and engineer F. Reid Shippen, *Testimony* features Willie Weeks (bass), Drew Ramsey (guitar), Jason Webb (keyboards), Shannon Sanders (keyboards/B3) and Daru Jones (drums). Across the album, Gaynor duets with a who’s who of contemporary Christian singers, including

Jason Crabb, Yolanda Adams and MercyMe’s Bart Millard. Mike Faris sang Bob Dylan’s “Man of Peace” with Gaynor, who re-wrote “Amazing Grace” for the release; they’re the only two songs she didn’t co-write. Jason Eskridge, *American Idol* alum Melinda Doolittle and Latrese Bush, from Gaynor’s road band, provided background vocals.

The studio’s enormous tracking room enabled all the musicians, whose collective credits range from Elvis Presley and Aretha Franklin to Jonny Lang and Jack White, to play together. The result is redolent of classic soul and R&B, yet thoroughly modern in its sound, as it offers a real sense of the historic space where Dolly Parton, Charley Pride, Willie Nelson and others have recorded.

Gaynor and Shippen joined *Pro*



Engineer F. Reid Shippen captured Gloria Gaynor’s Grammy-nominated *Testimony* live to analog.

PHOTO COURTESY GLORIA GAYNOR

*Sound News* on a conference call to discuss the project.

## ON THE CHOICE OF RECORDING STUDIO

Gaynor: The purpose of doing it in RCA Studio A was for the sound there. It was wonderful being in a legendary studio where legendary artists have recorded before us. We wanted that spontaneous creativity that can only happen with live musicians working together and inspiring one another. You don’t want rehearsals for that—you can’t rehearse that.

But the singers and I had writing sessions, we had rehearsals; we were very familiar with the songs before we went into the studio, so we didn’t waste time.

The only other studio we worked in was with Yolanda. We were finished with the album, because we hadn’t been able to get Yolanda’s and my schedules to coincide. Finally, we found we were both going to be in the New York area at the same time, so Chris recorded Yolanda and me, again, remotely. I recorded at the same time as the guest vocalists in the studio in Nashville. That’s why we re-did my vocal with Yolanda, so she and I could work off one another.

Shippen: I’ve done a couple of projects there but not a ton. For a lot of the time it was on lockout. Ben Folds had it and then Dave Cobb was in there—and he works a lot. Everybody was playing in the room and having fun. It was a very lighthearted session, and everyone had a blast. I think you can hear it in the tracks. People forget [the benefit of a big room] mainly because, I guess, they don’t have the opportunity. You cut in a small, dead room, and you cut in a larger, live room, but when you get to a really big room, it kind of becomes its own isolation, because of the distances. And that’s really fun. It’s a great room. I think the only reverb I used on the album was maybe my

plate, my [EMT]140. Maybe there was a spring somewhere, but we tried to keep it as old-school as possible.

It bears mentioning that a lot of these vocals were recorded by Gloria live, in a booth, with the musicians. The three background singers were standing around just one mic, so it was pretty much everybody playing together in a room.

## ON RECORDING TO ANALOG TAPE

Shippen: I think a lot of times for me, recording on analog, there’s an immediacy to it—and that was the point: Everyone is going for what feels great. I think we got that on this record. I’m sure there’s stuff on it that’s not technically perfect, but it all feels really good.

Gaynor: It definitely does. You can almost hear your intent with analog. For me, it makes it easier, and I find it so much more real and genuine.

## ON THE OLD-SCHOOL R&B VIBE

Gaynor: We all agreed that that was the way we wanted to go, because we all come from there and we know the good elements that have been lost over time in the music of today. We all agreed to bring that back and make all of that be a part of what we were doing. It has always been my philosophy in whatever business I’m doing that if I can’t do something or don’t have time or whatever, to hire people who know what they’re doing and let them do it.

## ON RECORDING A GOSPEL ALBUM

Gaynor: This is my second gospel album, and it’s something I’ve wanted to do for many, many years. The management that I had didn’t agree—but didn’t say they didn’t agree. They were just stalling and putting it off. Now I have new management who respect me and my desires and designs for my life and career. So, finally, I get to do this.

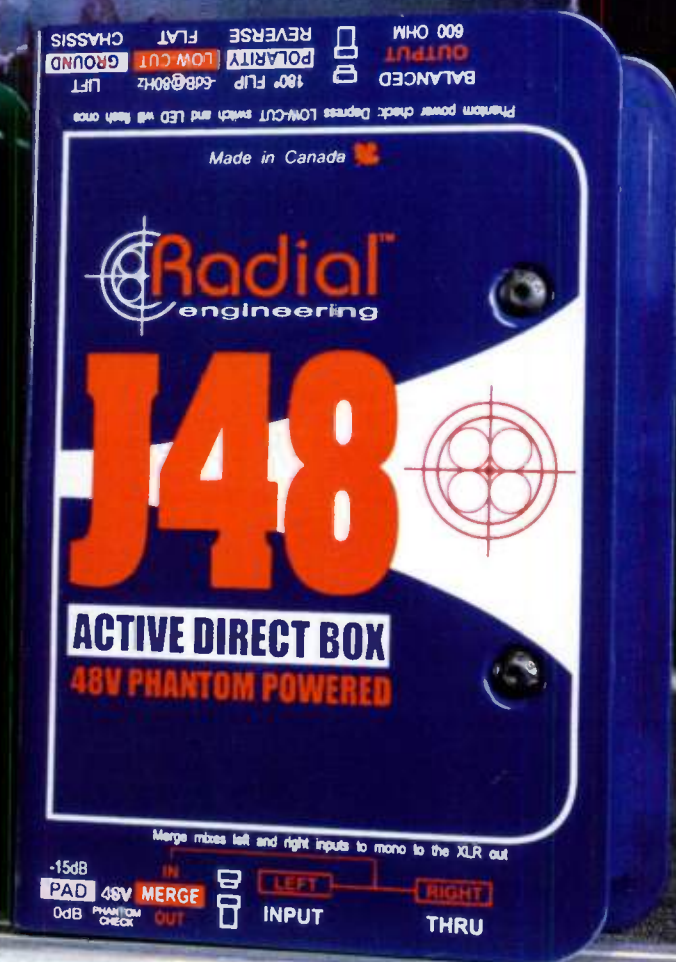
Gloria Gaynor  
www.gloriagaynor.com



# When Quality Counts Count on Radial

## Trusted on stages worldwide

The JDI and J48 direct boxes provide unmatched reliability and exceptional audio quality, making them the first choice on pro touring riders worldwide. When you need the best, trust the pros - trust Radial.



Come visit us at **NAMM 2020 Booth #14716**  
to see the new products from Radial.  
[www.radialeng.com](http://www.radialeng.com)





# PLEASE RECYCLE YOUR OLD MIXER RESPONSIBLY



Introducing Avantis, a new 64 channel mixer based on the 96kHz XCVI technology from dLive. Dual Full HD touchscreens. Huge range of I/O. dPack option for additional stadium class dLive processing. All encased in a lightweight, super strong full metal chassis.

Step up to Avantis.



avantis

**ALLEN & HEATH**