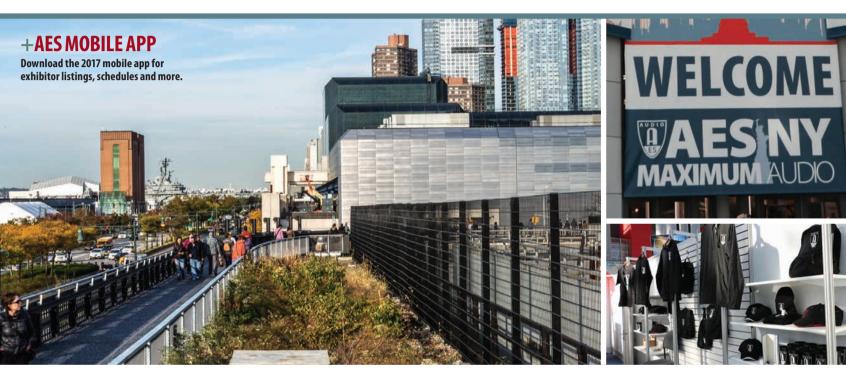


SERVING THE 143RD AES CONVENTION • OCTOBER 18-21, 2017 JACOB K. JAVITS CONVENTION CENTER, NEW YORK, NY



Alex Case Lauds AES For 'Innovating Aggressively'

By Strother Bullins, As outgoing AES President Alex Case explains it, the Society's past year has been one of hard work, innovative growth and new excitement. Collaborative AES efforts have materialized in such *Alex Case on page 38*

Achieving Maximum AES

By Clive Young

It's been two years since the annual AES Convention was held in New York City, so audio pros have been waiting patiently to spend four days getting their fill of everything to do with pro sound. This year's theme, "Maximum Audio," is apt, as this week finds the Jacob Javits Convention Center packed to the max with gear, workshops, panels, papers, lectures, tech tours and far more.

One of the top draws every year is the Opening Ceremonies. Taking place in Room 1E15/16 at 12:30 PM, the event honors AES members who have made outstanding contributions to the AES in research, scholarship and publications. This year's ceremonies will be capped with a keynote by Professor Edgar Choueiri of *Max AES on page 38*

The Road Ahead For IP Networking

By Steve Harvey

There are few areas of the pro audio world now untouched by IP networking, and the program and exhibits at this year's Convention reflect that. Meanwhile, behind the scenes, standards committees are working hard to ensure that products from diverse *IP Networking on page 35*

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+NEW FOCUSRITE PRO DIVISION Page 10

+SAFEGUARDING AUDIO HERITAGE Page 18

+THE SPECTRUM CRUNCH COMETH Page 32

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Clive's Live Sound Picks

By Clive Young

The AES Convention sometimes gets a bad rap as a "recording show," but nothing could be farther from the truth. You can't swing a microphone Roger Daltrey-style around here without (A) hitting something dealing with live sound, and (B) getting thrown out. Herewith top picks for live sound pros to check out today:

AUDIO ENGINEERING WITH HEARING LOSS—A PRACTICAL SYMPOSIUM

Get to Room 1E10 at 9 a.m. sharp to catch all of this panel of pros discussing hearing loss, focusing on practical ways to keep working in audio engineering despite damaged hearing or tinnitus.

DIVERSITY TOWN HALL

Taking place 9:30 a.m. in Room 1E15/16, this event will introduce the recently formed AES Diversity and Inclusion Committee, which aims to develop a membership of the AES that will best reflect the demographics of working audio professionals. Among the experts on-hand will be Karrie Keyes, executive director of SoundGirls.org and longtime monitor engineer for Pearl Jam.

RF AND TV SPECTRUM—THE POST AUCTION UPDATE

RF pros have endured RF woes in recent years, and the recent 600 MHz spectrum auction didn't make life any easier. This panel of experts will spell it all out in terms of spectrum matters, FCC regulations and how things may be changing in the near future.

DEMO ROOMS

The exhibit floor is exciting, but if you want to really dig deep into a piece of gear or hear that PA full-throttle, you need to head to the demo rooms. Most manufacturers' demos start on the hour or half-hour, so make sure to check them out.

DAY 1 EDITION | THE AES DAILY A-T Ships New AT5047 Cardioid Condenser Mic

BOOTH 422 Audio-Technica is now shipping its new AT5047 Cardioid Condenser Microphone. The most recent addition to A-T's acclaimed 50 Series (which also includes the AT5040 vocal microphone and AT5045 instrument mic), the AT5047 is a premier studio microphone that features the same capsule as the AT5040 but with a transformercoupled output and optimized electronics. It is equally at home capturing instruments and vocals. Boasting an exceptionally wide dynamic range-the widest among all Audio-Technica microphones-the AT5047 captures the full, expressive charac-



Audio-Technica's AT5047 Cardioid Condenser Microphone

coupled output, the microphone maintains a constant load output impedance, even when capturing sources at extreme SPL, resulting in a stable relationship between the mic and a mic preamp or console input.

The AT5047 features four rectangular two-micron-thick diaphragms, which function together to provide a combined surface area twice that of a standard oneinch circular diaphragm. Discrete components have been carefully selected and optimized for maximum performance and compat-

ter of a sound source, no matter how loud or how soft. And since it is equipped with a transformer-

ibility with a wide array of microphone preamps and console inputs.

Yamaha Unveils MMP1 Studio Monitor Management System

BOOTH 624 Yamaha Corporation of America, Professional Audio division, is launching the MMP1 Studio Monitor Management System. With advanced audio routing capabilities and DSP features that are ideally suited to configure and manage monitor environments from stereo up to complex immersive audio configurations, the MMP1 will play a major role in music and post-production studios around the globe.

The heart of the MMP1 is a 40x36 Monitor Matrix to monitor source mixing that supports formats from Stereo to Immersive audio, including Dolby Atmos, Auro3D and NHK 22.2. Also, eight cue outputs and two talkback systems between the control room and booth allow easy communication between multiple artists and directors. Additional features such as cough mute, cough mute override and studio speaker auto-mute are also provided enabling microphones to be muted from external controllers via GPI and GPO, with current status monitoring available via the MMP1 Editor software or iPad App.

The Yamaha MMP1 is scheduled for release in November 2017.



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THE AES DAILY | DAY 1 EDITION ShowNews Jones to Deliver Heyser Lecture

Award-winning recording engineer and producer Leslie Ann Jones of Skywalker Sound is delivering the Heyser Memorial Lecture at the AES New York Convention. The Heyser Memorial lecture will take place on the opening evening of the convention, October 18, from 6-7:30 p.m. Jones will also be featured during the 143rd International AES Convention in the special event presentation "Bearing Witness: The Music of *Star Wars*—Archiving Art and Technology," on day two. The Heyser Lecture is part of the Special Events schedule, open to all convention attendees.

"Almost any superlatives applied to Jones and her decades of work would be understatement," says AES Technical Council Chair Francis Rumsey. "Her lecture, fittingly titled 'Paying Attention,' promises to take attendees on a fascinating, educational and inspirational retrospective of the sessions leading to her vast discography and filmography, including those moments when focusing on the right detail has both sustained and enriched her storied career."

Leslie Ann Jones has been a recording and mixing engineer for more than 35 years. She has received four GRAMMY Awards and has been nominated multiple times (in categories including Best Engineered Recording, Non-Classical; and Best Surround Sound Album) and is a popular presenter, panelist and mentor at AES conventions and events. Additionally, she is a past Chair of The Recording Academy's Board of Trustees. She serves on the Advisory Boards of Institute for Musical Arts, Ex'pression College for Digital Arts, G.A.N.G. (Game Audio Network Guild) and is an Artistic Advisor to the new Technology and Applied Composition degree program at the San Francisco Conservatory of Music.

Strother's Picks: Diversity & History

By Strother Bullins

As the Audio Engineering Society continues to broaden, deepen and diversify, the program for its 143rd Convention is more exciting than ever. First off, it's solid proof of our tribe's growing circle. And secondly, it seems to underscore the Society's admirable ability to prepare for the surprises of the future by better understanding the technological twists and turns of our past.

Today, October 18, at 9:30 a.m., the Convention kicks off with SE01, a Diversity Town Hall introducing the recently formed AES Diversity and Inclusion Committee, and I'll be there. As designed by the AES, it's an opportunity to "give AES members a chance to have a meaningful discussion about the committee's purpose," explains special event documentation. This Convention-launching moment aims to acknowledge a membership that "will best reflect the demographics of working audio professionals" as well as "to increase AES membership and broader participation in the audio industry by helping the Society become more diverse and inclusive." AES-provided materials note that these efforts "will include women and other underrepresented groups, as well as students and young audio professionals working in newer music genres and/or audio fields."

Next, at 2 p.m., I plan to check out an intriguing look at, arguably, music production's most famous disruptive technology, MIDI, in Tutorial and Workshop TW03, "Disruption: MIDI—Machine Learning, Looking Back and Looking Ahead." The event promises to look back at MIDI's history in order to better understand what is happening now in the fields of AI, machine learning and deep learning, and how it promises to affect audio production in the future.

At 3:45 p.m., I'll continue my audio production history fix with an Archiving and Restoration event at "Soundstream: The First Commercial Digital Audio Recording System," hosted by Paul R. Blakemore of Concord Music Group. Wielding an original Soundstream machine and original Soundstream master tape from approximately 1980, Blakemore will present a comprehensive history on the Soundstream digital tape recording system, focusing on its operating principles and particular projects recorded with the system.



Leslie Ann Jones

Audio History Library & Museum Showcases Vintage Gear

BOOTH 650 As AES New York 2017 opens its doors, the Audio History Library & Museum's Lou Manno invites all attendees to visit Booth 650.

This year, the AHL&M will display the world's first amplifier (mechanical) by Western Electric (circa. 1900), the world's first earplugs, the world's first straight-line tracking tonearm, tin-foil from the world's first recording machine by Édouard-Léon Scott de Martinville of Paris (created 17 years before Thomas Edison) and much more.

The AHL&M features product literature for over 2,000 audio companies along with vintage gear, and other historic audio artifacts.

"We are currently searching for a permanent home in the Heart of New York City for the Audio History Library and Museum and we hope AES attendees will help us with that search," says Manno. "The library's vision and purpose is to re-introduce our multifaceted audio industry to the public's consciousness and a permanent home will enable everyone to enjoy our collections and benefit from a better understanding of our unique and fascinating history."







50 Series

Purity Transformed AT5047 Premier Studio Condenser Microphone

Building on the AT5040's breathtaking purity of sound, the new AT5047 combines the four-part rectangular element of its predecessor with a transformer-coupled output to create a mic with exceptionally wide dynamic range and remarkable versatility. This is purity transformed. **audio-technica.com**

audio-technica

6 | THE AES DAILY | DAY 1 EDITION Shure Introduces New Bluetooth Earphones

BOOTH 514 Shure is introducing new Wireless Earphone solutions, adding to its popular SE Sound Isolating Earphone line. The Bluetooth line features Wireless SE112 and SE215 Models, and a discrete Bluetooth Accessory Cable developed for owners of current Shure SE Earphones looking to go wireless. Designed for music and audio enthusiasts, the new SE Wireless solutions are ideal for customers who want to upgrade to seamless Bluetooth connectivity among phones, laptops and other mobile devices.

Building on Shure's line of SE Sound Isolating Earphones, the Wireless SE112 and SE215 models feature Shure's signature detailed sound and an ergonomic, Sound Isolating design. The new earphones feature a fit kit with a variety of sleeves that blocks up to 37dB of outside noise for immersive listening anywhere. Providing up to eight hours of battery life and 30 feet of range, users will experience untethered freedom to enjoy music during a commute, at work or while exercising.



Shure's SE112 Bluetooth earphones

In addition, customers who already own Shure detachable earphones can now enjoy the freedom of wireless with the Bluetooth Accessory Cable.



GENELEC, BOOTH 322 Genelec is showing the Ultimate Point Source monitoring with "The Ones"--this series includes the 8351, 8341 and 8331 three-way Smart Active Monitors, the world's smallest three-way coaxial monitors. From left, Genelec Inc. Territory Managers John Whitcore and Paul Stewart are the ones bedazzled by The Ones.

Steve's Broadcast/ Streaming Picks

By Steve Harvey

The 143rd AES Convention kicks off day one with panels covering the past, present and future. The following are among the highlights but barely scratch the surface of today's busy program; check the schedule for the complete line-up.

Multiple Grammy Award-winning recording engineer, mixer and producer Leslie Ann Jones, director of music recording and scoring at Skywalker Sound, will present the **Heyser Memorial Lecture** (Rm 1E15/16, 6 p.m.). "[A] retrospective on how my life and career have been sustained and enriched by paying attention," says Jones.

Jones returns for "Bearing Witness: The Music of Star Wars—Archiving Art and Technology" (Rm 1E15/16, Thursday at 9:30 a.m.) alongside Skywalker Sound colleague Dann Michael Thompson to discuss the format choice, transfer process, database creation and editing process of this 40-year-old classic.

Following the FCC's Incentive Auction, RF gear operators face an environment that is constantly changing as the new 600 MHz band licensees fire up their services nationwide. RF experts will report on the new FCC regulations and wireless spectrum changes during **"Wireless Update 2018"** (Stage 1, 1 p.m.), a Broadcast Audio Expo Session, and "RF and TV Spectrum—The Post Auction Update" (Rm 1E09, 3:45 p.m.), on the Sound Reinforcement Session track.

On the Audio for Cinema Track, "Future of Audio for Cinema" (Rm 1E10, 3:45 p.m.), representatives from Warner Bros Studio Facilities, Dolby Labs, Harbor Picture Company and Sony Pictures Entertainment will dig into the evolving technologies and unresolved challenges still to be addressed in motion picture sound.

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Waves is showing two new tools and a combo for audio engineers mixing 360-degree and VR projects: the Waves **B360** Ambisonics **Encoder and Waves** Nx Ambisonics, a new component of the Waves Nx Virtual Mix Room over Headphones plug-in. At the Waves booth yesterday, Luke Smith, Waves North American Sales Manager, brushed up on the various and sundry wonders of the new products.

WAVES, BOOTH 640

High-Quality Mics Key Sennheiser, Neumann Exhibit

BOOTH 724 Sennheiser and Neumann (also in Demo Room 1E04) are showcasing their comprehensive suite of high-quality microphones and monitors for both professional and home studios. Highlights on display from Neumann include the U 87 Rhodium Edition microphone and the KH 80 DSP monitor loudspeaker in a new white version. For Sennheiser, the focus will be on its groundbreaking AMBEO 3D audio recording technologies, presenting the AMBEO VR microphone for producing 3D VR/AR audio and the renowned MKH 800 TWIN recording microphone for loudspeaker-reproduced 3D audio.

The U 87 Rhodium Edition was created to honor the 50th anniversary of the classic microphone's release. Limited to only 500 units worldwide, this premium microphone is plated with rhodium, a material rarer than gold and more reflective than any other metal. Each of the meticulously crafted microphones is individually numbered with a certificate of authenticity hand-signed by Wolfgang Fraissinet, President, Neumann. Berlin.

Sennheiser is hosting demonstrations of its AMBEO 3D immersive audio technology in Demo Room 1E04. The sessions will include a walk-through of AMBEO 3D audio for loudspeaker playback and the AMBEO VR microphone. Special guests such as producer and surround sound expert Tom Ammermann and sound designer and psychoacoustician Lasse Nipkow will join attendees to relate their experiences with the technology.

ShowNews Today's Technical Tours

10 a.m.-12:30 p.m. (Off-Site) TT01: Rubin Museum of Art

"Le Corps Sonore" (Sound Body), an immersive piece composed for the museum's spiral staircase, is the centerpiece of "The World of Sound" exhibit. Ambient drone sounds inspired by Buddhist philosophy are tuned to the building, and will ascend and descend as visitors move about the staircase. Our tour begins before the museum opens to the public, and will be led by technicians and sound artists responsible for the exhibit. This tour is made possible in part through the generosity of Harman, Inc.

2 p.m.-4:30 p.m. (Off-Site) TT02: Power Station at Berklee NYC

Sesigned and built by Tony Bongiovi in the late 1970s, Power Station Studios (which became Avatar Studios in 1996) attained legendary status over forty years as a home for countless important recording sessions and a center of New York City's music industry. Now acquired by Berklee College of Music and re-christened Power Station at BerkleeNYC, significant equipment upgrades and building renovations are planned. This is a rare opportunity to visit during the fascinating transitional period.

WAM Stages Music Production Panels Here

BOOTH 860 Women's Audio Mission (WAM), a nonprofit dedicated to the advancement of women in music production and the recording arts, is presenting two music production panels

featuring award-winning engineers and producers at AES New York 2017, The company's presence at the convention is the outcome of a successful Indiegogo campaign to raise funds for the AES appearance.

The first panel, "Modern Classical Music Production" on October 19 (4:45 p.m.-6 p.m., 1E06-PMC Room), will feature moderator Terri Winston of Women's Audio Mission



(Kronos Quartet, Angélique Kidjo) and GRAMMY Awardwinning/nominated engineers and producers Susan DelGiorno (London Symphony Orchestra, East Coast Chamber Orches-

tra), David Bowles (Philharmonia Baroque, Chanticleer), John Newton (Boston Symphony Orchestra, Kansas City Chorale). WAM also is presenting the "Evolution of Album Production" on October 21 (1:30 p.m.-3 p.m., 1E07 [5.1]), moderated by Winston with top producers/engineers Ann Mincieli (Alicia Keys), Kim Rosen (Bonnie Raitt) and Angie Teo (Madonna).



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10 THE AES DAILY | DAY 1 EDITION Neutrik Shows New etherCON Feedthrough Coupler

B00TH 529 Accommodating its etherCON Cat 5 and etherCON Cat 6A cable carriers as well as standard RJ45 plugs, Neutrik's new etherCON Cat 6A feedthrough coupler (model NE8FFX6-W) features full 10-Gbit bandwidth along with IP65 ingress protection when mated to cables equipped with Neutrik's NE8MX6 family of etherCON Cat 6A cable connectors. A unique barrel design distinguishes NE8FFX6-W from its etherCON Cat 5 cousin, the rectangular NE8FF.

This robust adapter offers the proven security of Neutrik's million-fold proven robust latch lock system-ensuring trouble-free signal transmission for the most demanding applications. With its unique small form factor, Neutrik's etherCON Cat 6A feedthrough coupler is a problem solver that will be welcomed by

AV users who need durable,

high-performance solutions to

extend their existing category

cabling.

Neutrik's etherCON CAT6A Feedthrough Coupler

Focusrite Forms Focusrite Pro Division

BOOTH 366 Focusrite is launching its new Focusrite Pro division, formed to serve the specific needs of audio professionals. Focusrite Pro is dedicated to removing creative and technical barriers by improving the workflows of audio professionals with scalable audio solutions



that meet both their current and future requirements.

- The Focusrite Pro division currently oversees three product ranges:
- Red multi-format audio interfaces;
- RedNet modular audio-over-IP solutions; and
- ISA microphone preamplifiers and analog signal processors.

The creation of Focusrite Pro as a brand builds on Focusrite's longstanding tradition of best-in-breed solutions for audio production. Focusrite currently maintains four brands: Focusrite, Focusrite Pro, Novation and Ampify.

The Focusrite Pro division is led by Richard Nevens, VP Global Sales. "Focusrite Pro seeks to engage with professional audio clients, both pre- and post-sale, as they transition their workflows and facilities to an audio-over-IP infrastructure.," says Nevens.



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Booth 860

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RTW Spotlights Processing, Monitoring Products

BOOTH 504G Once again exhibiting at the Avid Partner Pavilion, RTW is previewing the latest version of its Continuous Loudness Control (CLC) software, which enables users to operate live or batch mode loudness processing with up to 24 channels. All surround formats defined in the ITU 1770-4 standard are supported. The Institut für Rundfunktechnik, GmbH (IRT) (Institute for Broadcast Technology, Ltd.), partnered with RTW to further improve its CLC algorithm for even better, faster processing. This updated version of the CLC will be available for customers to download in the coming months. RTW also is showcasing PD-Dante at the show. RTW recently announced its partnership with Nixer Pro Audio to distribute PD-Dante, a handheld monitoring and diagnostic system that allows users to listen directly into Dante Streams located on an (Ether-) Network. With 64 possible Dante channels, users can select from an existing mix or create a user definable mix of these channels via its capacitive touchscreen, and listen to them via PD-Dante's on-board loudspeakers and headphone connector. The company will distribute this product worldwide starting December 2017.

P&E Wing Panel Addresses High-Resolution Production

AES SPONSOR The Recording Academy Producers & Engineers Wing is presenting a group of experts at AES New York 2017 as part of the convention's Recording & Production track. Titled "High Resolution Record Production and Why It Matters," this panel takes place Thursday, October 19, from 3 p.m.-4:15 p.m. (Room 1E14) and will address current guidelines and production considerations when producing, recording, mixing, and mastering in High-Resolution audio.

Notes Maureen Droney, Recording Academy Managing Director, Producers & Engineers Wing: "The P&E Wing's 'Recommendations for Hi-Resolution Music Production' address two goals: Our need to promote an environment where the best possible audio quality is consistently delivered to consumers, and the drive to assist record labels, online distributors, and aggregators with their master delivery requirements. We have met these goals on both counts with a document that helps pave the way to a consistent production workflow that brings us into the future."

Moderator Michael Romanowski, Coast Mastering—Berkeley, CA; Panelists Chuck Ainlay, METAlliance—Nashville, Tennessee; Marc Finer, Digital Entertainment Group— Los Angeles, CA; Leslie Ann Jones, Recording Engineer and Producer, Director of Music Recording and Scoring, Skywalker Sound— San Rafael, CA; and Bob Ludwig, Gateway Mastering Studios, Inc.—Portland, ME.

ShowNews Today's Broadcast & Streaming Events

9 a.m.-10:30 a.m. (1E08)

B01: Designing and Constructing a Radio Performance Space

Moderator: David Prentice, Dale Pro Audio—New York, NY

10:45 a.m.-12:15 p.m. (1E08) **B02: Audio Cable Problem Solving**

Chair: Steve Lampen, Belden—San Francisco, CA

This panel discussion on common cablerelated problems and solutions will feature prominent designers, installers and endusers in the audio arena in sound reinforcement, recording, film sound and broadcast.

2 p.m.-3:30 p.m. (1E08) B03: Deconstructing Binaural MacBeth

Producer/Moderator: Sue Zizza

This session will discuss the streaming aspects of a special "reading" of Act IV, Scene 1 of Shakespeare's MacBeth staged at the 2017 HEAR Now Festival. The performance featured a Soundman dummy "head" with 2 DPA mono omni-directional capsules. as well as discuss and demonstrate working with the various technologies to put the audience in the middle of the action of this famous moment in Shakespeare's play.

4 p.m.-5:45 p.m. (1E08)

B04: Evolving Best Practices for Studio Construction and Remodeling

Moderator: Kirk Harnack, Telos Alliance— Nashville, TN; South Seas Broadcasting Corp.—Pago Pago, American Samoa

7:30 p.m.-9 p.m. (Off-Site 2)

B05: The Broadcast Facility of One World Trade Center

Moderator: John Lyons, Durst Broadcasting LLC—New York, NY

A short panel discussion and tour of the New Preeminent Broadcast Facility in New York City. A tour of the broadcasting facilities and communications spaces follows the panel discussion.



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14 THE AES DAILY | DAY 1 EDITION Genelec Intros 'The Ones' Compact Coaxial Monitors

BOOTH 322 Genelec is offering what it calls Ultimate Point Source monitoring with "The Ones": in this series, the award-winning 8351 three-way Smart Active Monitor is joined by the new 8341 and 8331 three-way coaxial monitors to create a complete compact coaxial range that redefines near-field monitoring. Recently unveiled to a VIP audience at London's Metropolis Studios, the 8341 and 8331 defy expectations; housed in enclosures no larger than a traditional two-way Genelec 8040 or 8030, they wipe away the previous constraints of coaxial point source setups.



Genelec 8331, 8341 and 8351 three-way Smart

Active Monitors, known collectively as 'The Ones.'

Small but mighty, The Ones are also powerful. The short-term maximum output capacities

for each of the models is 110dB SPL for the 8341 (at 1m), and 104 dB SPL for the 8331 (at 1m), with accuracy better than ± 1.5 dB, and respective frequency responses starting at 45 Hz and 38 Hz (-6 dB) and extending beyond 40 kHz both for the analog and digital inputs.

The coaxial design allows for ultra-near-field listening, creating a dramatic improvement in the direct sound-to-reverberant sound ratio and further reducing the room's influence while monitoring.

Sommer Cable Shows Cable Potpourri

BOOTH 533 Sommer Cable is exhibiting a variety of new products at AES New York 2017. Of special note are the touring cables that Sommer has built for Rat Sound, designed by Dave Rat himself and built in Germany to his specs. "After in-depth research of numerous cable manufacturers, we selected Sommer as the manufacturer of our SuperCAT Lite and SuperCAT Sound cables," says Rat. "Sommer's diverse product line, quality manufacturing and responsive team made them the perfect partner."

Also on display will be Sommer's cable specially designed for guitarists in the studio and on the road. The new SC Spirit LLX features extremely low capacitance and optimum flexibility. "This is truly the best guitar cable I've ever used," says top jazz guitarist Nobuki Takamen.

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Millennia's HV-3R microphone preamp connected to the Wi-Fi access point with a Galaxy Tab S controlling it

Millennia Demos AELogic RC Software

BOOTH 532 Millennia's AELogic Remote Control Software is being demonstrated over Wi-Fi using a high-resolution Android tablet client with Microsoft Remote Desktop.

"Our clients have been asking for wireless tablet control so we devised an integrated solution," says Millennia's Director of Engineering Stephan Buck. "Microsoft offers a free crossplatform client app that will run on Android, iOS, Windows and Mac OS. AELogic software running on a Windows PC host is controlled over the LAN via wired or wireless clients."

HEAR TECHNOLOGIES, BOOTH 845 Hear Technologies takes the time-tested original Hear Back to the next level of audio excellence with improved audio quality,



system performance and overall ease of use in the new Hear Back OCTO. The new Hear **Back OCTO has eight** mono channels with up to four stereo pairs that'll give a musician the mix they need. The OCTO is easier to use and more compact. It adds capacitive touch link buttons that won't stick and provides smooth level areas for the labeling for each channel. The Hear Back OCTO adopts the look and feel of the 16-channel Hear Back PRO system. Hear's engineers incorporated

the customers requested elements to enrich the overall system design and sound.

Tiny Box, Huge Sound.

This is the Grace Design m900 headphone amplifier, DAC and preamp. Its incredible sonic detail combines with a rich musical character that makes working on music easier and listening to music more fun.

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L-Acoustics Exhibits New Syva Segment Source

AES SPONSOR Syva is a new-format, highpower speaker system combining the benefits of L-Acoustics' heritage line source technology with a plug-andplay approach. Featuring six mediumfrequency and three high-frequency speakers in a sleek J-shaped progressive curvature format, Syva's patentpending transducer arrangement, called "segment source," produces an H/V 140 degrees x 26 degrees (+5/-21 degrees) directivity pattern that is optimized for exceptional surface coverage and 115 feet (35m) of throw.



L-Acoustics'

Svva speaker

Syva's modern design is ideal for projects that demand elegance and visual discretion. The system is equally

at home on everything from corporate events and fashion/trade shows to amphitheaters, houses of worship and performing arts centers to more intimate settings, such as home cinemas or lounge bars.

Syva can be accompanied by the Syva Low high-power subwoofer or Syva Sub infra extension to achieve a 142dB max SPL. Its companion Syva Low enclosure features two K2-grade 12-inch drivers designed to provide LF contour and extended bandwidth down to 40 Hz. Similarly, Syva Sub features one KS28-grade 12-inch driver to further extend the bandwidth of the system in the infrasound domain down to 27 Hz.

Sony Electronics Spotlights Expanded Pro Audio Line

B00TH 848 Sony Electronics' Pro Audio Division is expanding its pro audio line at AES 2017 with a preview of next generation DWX Digital Wireless and new Hi-Resolution studio microphones capable of extended frequency response to 50 kHz.

Suited for theater or other live applications, Sony's third- generation DWX series delivers ultra-low audio latency of 1.2ms with extended bandwidth and high-density multi-channel operation. A high dynamic range RF circuit and four diversity antenna configuration ensures reliable operation, and the system supports Dante, a digital audio over IP networking technology. The new DWX components include the smaller and lightweight DWT-B03R digital wireless bodypack transmitter, the DWR-R03D digital wireless rackmount receiver, the BC-DWX1 battery charger and the ECM-77LM miniature, omnidirectional electret condenser microphone.

Sony is also showing prototypes of three new Hi-Res condenser microphones for professional studio and home recording applications. These new models build on Sony's legendary studio microphone heritage and continue its recent development of Hi-Res audio products. The side address mic is optimized for vocal use, while the two end address models (one cardioid and one omnidirectional) are ideal for instruments. With a body structure that prevents acoustic vibration, a high frequency range with 50k frequency response and high sensitivity, the new microphones offer sound quality to professional musicians, studios and recording engineers, among others.

ShowNews Today's Product Development Track Events

10:45 a.m.-12:15 p.m. (Rm 1E10) PD01: Headphones, Headsets & Earphones: Electroacoustic Design & Verification

Presenter: Christopher Struck, CJS Labs—San Francisco, CA; Acoustical Society of America

This tutorial reviews basic the electroacoustic concepts of gain, sensitivity, sound field correction, linear and nonlinear response, and test signals for ear-worn devices. The insertion



gain concept is explained and free and diffuse field target responses are shown. Equivalent volume and acoustic impedance are defined. Ear simulators and test manikins appropriate for circum-aural, supra-aural, intra-aural and insert earphones are presented. The salient portions of the ANSI/ASA S3.7 and IEC 60268-4 standards are reviewed. Examples of frequency response, insertion gain, leftright tracking, distortion, and impedance are shown. Issues with interfacing to digital devices over USB or Bluetooth are discussed. Evaluation of active and passive noise canceling devices is also presented.

2 p.m-3:30 p.m. (Rm 1E13)

PD02: Parallel Development: Speed Time to Market

Presenter: Scott Leslie, PD Squared-Irvine, CA

Time to Market may be the most important feature in a product today. Product lifecycles and windows of opportunity are shrinking. Most product companies miss their time to market



needs because they don't make major changes to their development strategy. In this Product Development session the presenter will lead a discussion on parallel development and how to leverage best practices, inside and outside resources, build vs buy, and development technologies to enable a true parallel development process.

DAY 1 EDITION | THE AES DAILY 17 Hafler Issues New Two-Channel Amplifier

BOOTH 239 A next generation two-channel amplifier designed for both studio recording and audiophile listening, Hafler's new P3100 follows David Hafler's philosophy of offering



Hafler's P3100 two-channel amplifier

the very highest quality at an affordable price point. It produces 150 watts per channel into eight ohms, 200 watts per channel into 4 ohms and may be bridged mono to produce 400 watts and with extensive heat sinks on both sides, does not require noisy fan cooling. It employs Hafler's trans-nova lateral MOSFET topology that reduces the length of the signal path while providing exceptional stability.

The power switch is equipped with an "soft start" circuit that prevents sending potentially destructive turn-on and turn-off transients to the speakers. A thermal sensing network monitors the heatsink temperature and shuts down the amplifier to protect from excessive operating heat. The need for internal fuses has been replaced with a sensing circuit that monitors the output and shuts down operation when it detects a short in the output load. The speaker connections are No Touch binding posts.

Lectrosonics Launches New Wideband Transmitters

BOOTH 927 Lectrosonics is introducing two new transmitters as the latest generation in the award-winning Digital Hybrid Wireless SM Series product line: the "wide band" SMWB (single AA battery) and SMDWB (dual AA battery). The two new transmitters have a similar look and feel to previous SM Series units, but with several innovative new features, including the ability to either act as a transmitter or as a body-worn recorder, as well as wideband tuning.

As with current Lectrosonics transmitters, the SMWB and SMDWB units tune across three standard frequency blocks and come in several frequency ranges: A1 (470–537 MHz) and B1 (537–614 MHz) for the North American and export markets, and B2 (563–640 MHz) and C1 (614–691 MHz) for certain export markets. RF power for these models is selectable at 100, 50, or 25 mW (North American version) and 50 or 25 mW (certain export markets). The SMWB and SMDWB feature the standard TA5 connector with servo-bias mic input. This input is also found on all previous SM Series units and all current TA5 beltpack units like the LT and LMb. Any lavaliere microphones wired for these other Lectrosonics transmitters will also work on these new models.

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Safeguarding Audio Heritage in Archiving and Restoration Track

The 143rd International Audio Engineering Society Convention's Archiving and Restoration Track will feature its most varied events schedule ever, including in-depth looks at archiving the music of *Star Wars* and the remarkably prolific recordings of the Grateful Dead, media preservation techniques for the 21st century and much more.

"Our recorded music heritage is an invaluable part of our history, and today's audio archivists are using the very latest resources to ensure that our rich sonic past will be available to future generations," says Rebecca Feynberg, AES New York 2017 Archiving and Restoration Track chair. More than a dozen archiving and restoration-related seminars will take place at the upcoming Convention.

Seminars include:

■ "Bearing Witness: The Music of *Star Wars*—Archiving Art and Technology" seminar, Leslie Ann Jones (Director of Music and Scoring, Skywalker Sound) and Dann Thompson (Skywalker Sound recording engineer) will discuss archiving, transfering and preserving all of the music of *Star Wars*—especially when they realized that if they didn't, a 40-year history of some of the world's most beloved film music could be lost forever.

• The Music Never Stopped: The Future of the Grateful Dead Experience in the Information Age" will provide a fascinating look at the latest in audio archiving for the Dead and other bands.

■ "Restoration Audio: Preservation of Your Assets Today for Tomorrow," a panel led by Bob Koszella of Iron Mountain Entertainment Services Digital Studios (which has preserved over 28 million assets for its customers) will examine how advancements in audio technology and major changes in how the entertainment industry creates and monetizes content have challenged engineers to migrate, mix, master, store and distribute content securely.

• "The Edison Kinetophone" will offer a rare look at Edison's first attempt at synchronizing picture with sound, with a presentation covering the only eight Kinetophone motion



Rebecca Feynberg, Archiving and Restoration Track chair

pictures known to have survived. "A Pictorial History of CBS Records' Legendary 30th St Studio" will feature Dan Mortensen's efforts to recreate the life of the fabled studio, which hosted a who's-who of recording artists from 1948 to 1982. In addition, GRAMMY-winning engineer Paul Blakemore will offer a workshop on the history of Soundstream digital tape recording, and "The Roots of Stereophony" will trace the developments that led from two-channel telephony in the late 1800s to the key innovations from Bell Labs, EMI, Magnetophon and others that led to the beginnings of stereo recording.

Additional information about these and other AES Archiving and Restoration Track events is available at http://www.aes.org/ events/143/archiving.

DiGiCo Launches 'Stadius' Mic Preamp

BOOTH 631 Twenty years ago, converters changed from 16- or 18-bit to a new, improved resolution of 24-bit. This additional eight bits of converter resolution was instantly audible and created a demand for 24-bit quality.

At AES 2017, DiGiCo is showing and, more importantly, allowing attendees the opportunity to hear the newly designed 32-bit "John Stadius" Mic Preamp. Stadius and his team have been designing preamps for over 40 years. Now, this new improvement in converter technology has allowed them to develop a preamp with audio qualities that they have long aspired to achieve.

The new SD Mic Preamp Card includes a fully differential audio path from input to converter, twin 32-bit ADC conversion per channel, and a lightning-quick conversion time of 73uS. Providing dynamic



DiGiCo's 'Stadius' mic preamp

punch and increased audio depth, the card features a dynamic range of 123dBA and an incredibly low noise of 128dB EIN.

Hal Leonard Presents 'Pensado's Place' Live at AES

BOOTH 448 This Friday, October 20, at 10:15 a.m., Hal Leonard is presenting a live episode of Pensado's Place featuring the inimitable Greg Wells in Room 1E15/16.

Join Dave Pensado and Herb Trawick for a special live version of their globally popular web TV series with special guest Greg Wells. Producer,



songwriter, musician and mixer extraordinaire, Wells has produced such luminaries as Keith Urban, Katy Perry, Adele and One Republic and was recently on the cover of Modern Drummer. A staunch educational advocate, Wells is currently working on his first endeavor for the Pensado's Strive curriculum series, a Hal Leonard/Penwick media collaboration featuring relevant, best-in-class authors who are enormously committed to education and giving back. The product line includes A/V tutorial courses, print and ebooks, Power Learning Digital Print versions of these books, and in-person workshop events.

DAY 1 EDITION | THE AES DAILY | 19 Waves Celebrates Quarter-Century Anniversary

BOOTH 640 Waves Audio is now celebrating its 25th anniversary, an occasion that also marks the advent of the digital plug-in itself.

To mark this occasion, Waves is now shipping revamped and reskinned versions of three of its classic plug-ins: the Q10 Equalizer, the AudioTrack channel strip plugin and the L1 Ultramaximizer level maximizer/peak limiter. These revamped 25th Anniversary editions include new plug-in features, as well as a choice between two graphic user interfaces—the classic "Legacy" interface, and the new "Modern" interface created especially for the 25th Anniversary celebrations.

Twenty-five years ago, Waves introduced

Calrec Spotlights Brio, Summa Boards

BOOTH 631 Calrec Audio is spotlighting its new Brio and Summa consoles at AES 2017.

The smallest in Calrec's Bluefin2 family, Brio features a control surface unlike any other. At only 892 mm wide, the dual-layer, 36-fader surface provides more faders in a given footprint than any other audio broadcast console.

Based on Calrec's 20 years of digital development, Brio's uncluttered, compact, and configurable surface gives instant access to a large number of audio paths while an intuitive 15.6inch HD touchscreen UI provides quick access to more in-depth control.

Calrec's elegant Summa console is designed for broadcast professionals who need to produce creative and engrossing broadcast audio easily, but may not require as many resources as Calrec's larger consoles. Control is via a 17-inch multitouch screen inspired by familiar tablet technology.



Calrec's Brio console

the world's first audio plug-in, the Q10 Paragraphic Equalizer. With its introduction, Waves not only transformed the way we work in the recording studio, it also created an entirely new industry sector: softwarebased audio signal processing. Waves tools are now being used to improve sound quality in vir-



In honor of its 25th Anniversary, Waves is now shipping revamped and reskinned versions of three of its classic plugins, the Q10, AudioTrack and the L1.

tually every sector of the audio market, hence Waves' motto, "Where there's sound—there's Waves." For its accomplishments, Waves received a Technical GRAMMY Award in 2011.



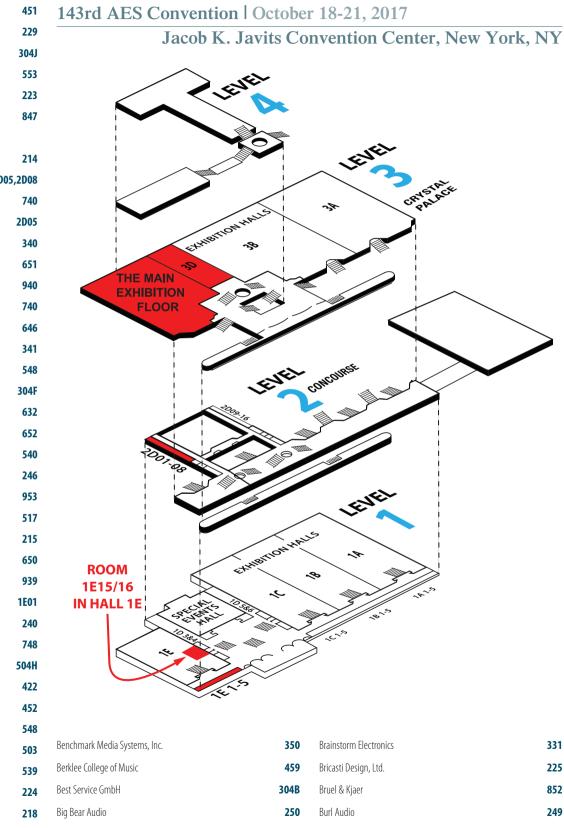
More than just connectors. We put our long time knowhow and our whole passion into our innovative products and unique solutions. No matter whether a rock band or a lighting designer, an industrial application or a broadcast studio – Neutrik offers high quality and reliable solutions for every application.

For more information visit AES booth 529 | NAB NY booth N271



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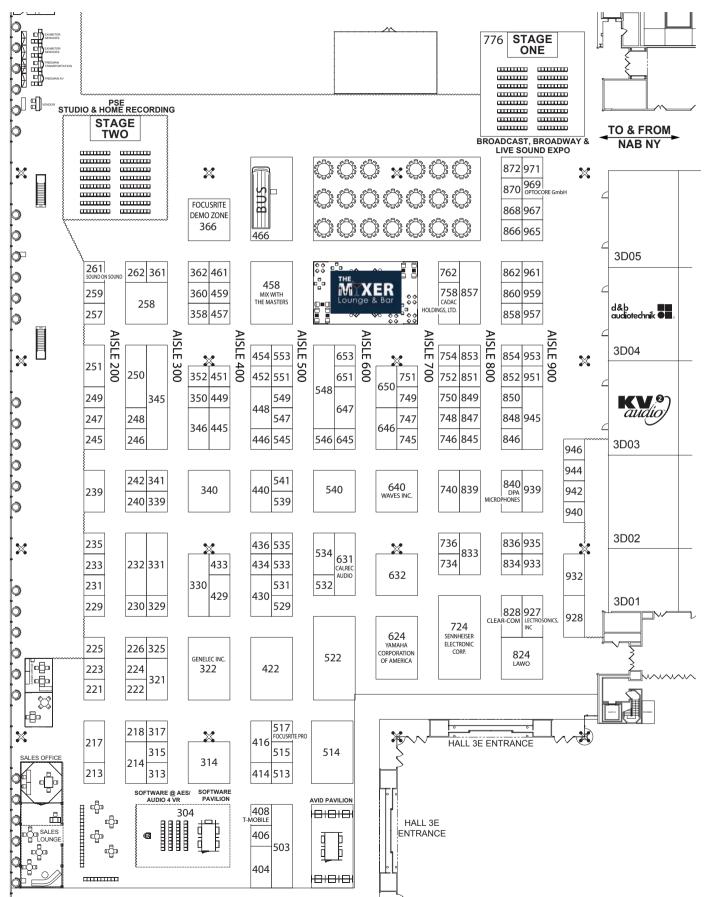
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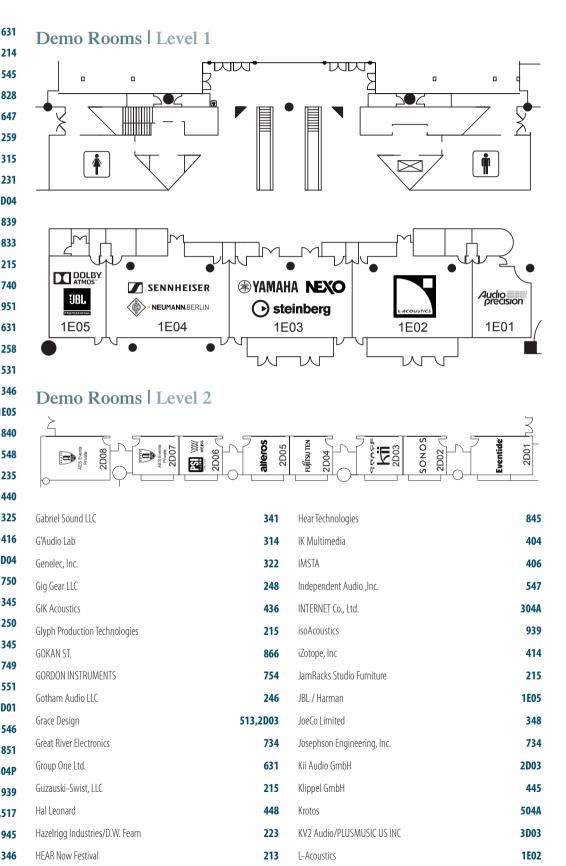
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24 THE AES DAILY | DAY 1 EDITION Focusrite Unveils New RedNet X2P Interface

BOOTH 366/517 Focusrite is unveling the RedNet X2P 2x2 Dante audio interface. Compact and robust, the RedNet X2P, featuring two Red Evolution mic pre's, stereo line outs and a stereo headphone amplifier, allows quick I/O and monitoring expansion of Focusrite RedNet or other



Focusrite's RedNet X2P 2x2 Dante audio interface.

Dante audio-over-IP systems. Power, audio and remote control are supplied using a single Ethernet cable. A local input mixer allows "more me" monitoring control, while a control lockout ensures settings remain unchanged when used remotely.

The two digitally-controlled Red Evolution mic pre's provide plenty of ultra-clean gain along with stereo linking, individually selectable phantom power, a highpass filter and phase reverse. Additionally, they include Air mode, emulating the sound of Focusrite's classic transformerbased mic preamps. The Red-Net X2P provides high-performance audio conversion with over 118dB dynamic range.

These converters have been expertly selected and calibrated to provide the best balance of sound quality, dynamic range and conversion latency.

RedNet X2P features a crossfader to enable level control of the local inputs versus network inputs assigned to feed either the line outputs or the headphone outputs.

IsoAcoustics ISO-PUCK Makes AES Debut

BOOTH 939 IsoAcoustics's ISO-Puck is making its first AES showing of the ISO-PUCK at this year's New York convention. The ISO-PUCK, the company's new low-profile, highly flexible and scalable round acoustic isolator is ideal for discreet use under pro audio speakers and subwoofers, musical instrument amplifiers, DJ mixers and turntables as well as a wide variety of stage applications (supporting cabinets, stage monitor wedges, mic stands, etc.)

Delivering the same clarity and openness that IsoAcoustics has become known for, the ISO-PUCK's extremely low profile makes it the most discreet solution to isolate speakers, amplifiers and other products where vibrations can affect best performance. With a height of only 1.18 inches (28 mm) and just 2.4 inches (60 mm) in diameter, the ISO-PUCK's round shape makes it flexible enough



to be ideally positioned on any surface, especially on the narrow spaces atop a meter bridge.

The highly scalable ISO-PUCKs are designed to be used in multiples to match the weight of each speaker, amplifier or other product. With a weight bearing capability of 20 pounds (9 kg.) for each puck, three or more of them can be combined to support the weight of the particular product requiring isolation.

A-T Expands **M-Series** Headphones line

BOOTH 422 Audio-Technica is unveiling the ATH-M50xRD Professional Monitor Headphones, a limited-edition red-andgold version of A-T's popular ATH-M50x and part of A-T's M-Series line of headphones.

From the 45 mm large-aperture drivers to its sound-isolating earcups and robust construcAudio-Technica's ATH-M50xRD Professional Monitor Headphones

tion, the ATH-M50xRD provides an unmatched experience for the most critical audio applications, including recording, live sound, broadcast, DJ and personal listening. The headphones incorporate technology drawn from Audio-Technica's long history in the field of high-performance professional audio, providing exceptional power handling, very high SPL capability, and natural, accurate sound with impactful bass and

high-frequency extension. **Jensen Rolls Out New ISO-MAX Products**

BOOTH 239 Sending line level audio over CAT-5/CAT-6 ethernet cables is a common and widely used practice in the AV industry today. Up until now, systems installers have been using products based upon low-cost and low-performing baluns, or inexpensive audio transformers. Baluns offer no high frequency isolation, and miniature, low cost audio

transformers can seriously degrade the signal quality. Jensen Transformers solved this prob-



Jensen Transformers' Model PI-RJ2X transmitter (left) and companion receiver

lem with a transmitter/receiver combination that maintains true high-performance signal quality throughout the conversion process.

There are now two versions available in Jensen's award winning ISO-MAX product line: the new PI-RJ2X for balanced XLR connections and the CI-RJ2R for unbalanced RCA connections. The Jensen audio transformers inside each version provide complete galvanic isolation and immunity from hum, buzz and noise caused by ground

loops, while maintaining the highest audio quality demanded by the installer's customer.

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Hal Leonard Sets METAlliance Panel Discussion

BOOTH 448 This Thursday, October 19, at 9:30 a.m., Hal Leonard is presenting "Yesterday, Today and Tomorrow: Where We've Been, Where We Are,



and Where We're Going," a live panel discussion featuring six founding members of the METAlliance, in Room 1E14.

Established in 2005 by globally recognized, award-winning audio engineers and producers Chuck Ainlay, Ed Cherney, Frank Filipetti, George Massenburg, Elliot Scheiner, Al Schmitt and the late Phil Ramone, the METAlliance is a collaborative community that fosters relationships between producers, engineers, and manufacturers in order to ensure the highest standards of audio production. This group has now turned its attention to providing education and inspiration to music creators while promoting excellence in engineering and production.

Accordingly, in conjunction with Hal Leonard, the METAlliance has begun publishing the collective knowledge amassed by these A-list producers and engineers under the METAlliance Academy brand. The product line includes A/V tutorial courses, print and ebooks, Power Learning Digital Print versions of these books, and in-person workshop events.

Waves Adds Dugan Automixing to eMotion LV1

BOOTH 833 Waves now offers the industry-standard Dugan Speech System as part of the eMotion LV1 live mixing console. Developed by Waves in conjunction with Dan Dugan, the new automixing feature incorporates Dugan's proprietary voice-activated process and automatically controls the gains of multiple microphones in real time while reducing feedback, studio noise and comb filtering from adjacent microphones.

The Dugan algorithm maintains a consistent system gain, even when

multiple speakers are talking simultaneously, and provides perfectly matched crossfades without any compression or noise gating artifacts. Automixing is integrated into the input channel strips of the LV1, so no patching is required.



Screen shot of Dan Dugan's Speech System as part of the Waves eMotion LV1 live console



Learn more about TELEFUNKEN Diamond Series Microphones at t-funk.com/diamond

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LAWO, BOOTH 824 Attracting 1.5 million people to its first event in 1985, Rock in Rio ranks comfortably among the largest music festivals in the world. Having begun in Rio de Janeiro, Brazil, it has since visited Lisbon, Madrid and Las Vegas. Its growing live audience is supplemented by TV broadcasts on Globosat—this year, supported by the first use of a Lawo mc296 Grand Production Console at a large-scale music festival. With an audience of 45 million viewers in 15 million households across Brazil, Globosat is the largest pay TV operator in Latin America, and the market leader in Brazil. Its use of the mc296 console was part of a rental package of equipment, support and training provided by Lawo for the event. The first mc296 sale had been made prior to Rock in Rio, with two consoles having been purchased by Viacom Media Networks (U.S.). Shown here at the Lawo mc296 Grand Production Console during Rock in Rio is Gabriel Thomazini, coordinator of audio at Globosat.



Yamaha Boosts RIVAGE PM10 Versatility

BOOTH 624 Now celebrating its 30th anniversary of digital mixer technology, Yamaha has developed new components and V1.5 firmware update that will further enhance the versatility and performance of the RIVAGE PM10 Digital Mixing System.

The new CS-R10-S control surface is approximately two-thirds the size of the existing CS-R10, and offers the same outstanding operability for applications where space is limited. A Dual Console function (to be supported in a future update) will allow two CS-R10 and/or CS-R10-S control surfaces to be connected to a single DSP-R10 DSP engine so that separate CS-R10-S control surfaces can be used at both FOH and monitor mix positions.

The HY256-TL-SMF is a TWINLANe card that supports singlemode optical fiber. The Yamaha TWINLANe audio network with up to a 400-channel capacity had previously only supported multi-mode fiber connections. The new HY256-TL-SMF expands system connection flex-



Yamaha's CS-R10-S control surface is approximately two-thirds the size of the existing CS-R10

ibility by additionally supporting single-mode fiber connections.

Yamaha RIVAGE PM10 firmware update V1.5 includes an Eventide "H3000 Live"

Ultra-Harmonizer plugin and Dan Dugan Sound Design automatic mixer plug-in.

Neutrik USA Spotlights Asymetrical Push Tabs

BOOTH 529 During AES 2017, Neutrik USA is showing its new Asymmetrical Push Tabs. Designed for use in space-sensitive applications such as the use of plug-in modules or



Neutrik USA's Asymmetrical Push Tabs

small portable devices, the new Asymmetrical Push Tabs are positioned to the right (1 o'clock) of the connector as opposed to the conventional 12 Noon location—facilitating a space saving of approximately 20% in a vertical stacking configuration.

Neutrik's new Asymmetric Push Tab is initially being introduced as an option for the following parts: NC3FAAH1-DA, NC3FAAV1-DA, NC3FAH1-DA, NC3FAH2-DA, NC3FAV1-DA, NC3FAV2-DA, NC5FAH-DA, NC5FAV-DA, NC3FBH1-DA, NC3FBH2-DA, NC3FBV1-DA, NC3FBV2-DA, NCJ6FA-H-DA, and NCJ6FA-V-DA. The -DA suffix indicates disassembled (i.e. latch packed separately), asymmetrical. This listing reflects most possible combinations. Based on customer requests and quantity commitments, the company can—in the future—release additional special versions with asymmetric push tabs within the etherCON Cat 5 A series, combo I series and XLR DLX series.

Genelec Enhances GLM 3 Software Application

BOOTH 322 Genelec is featuring GLM 3, the latest iteration of its Genelec Loudspeaker Management (GLM) software. Having revolutionized active monitoring more than a decade ago with the development of GLM, Genelec's continuous research has led to the introduction of GLM 3, incorporating beta Cloud services and Reference Level listening features. For the first time, users of Genelec Smart Active Monitoring systems will be able to access GLM Cloud services anywhere and anytime, providing a secure backup and instant access to the very latest software updates.

Since its introduction, the GLM software application has helped audio professionals



Genelec's GLM 3 interface

on both Mac and PC to configure and automatically calibrate their Genelec Smart Active Monitoring systems, delivering fully optimized performance for their acoustic environment. GLM 3 will provide each registered user with both local and beta Cloud options, with the ability to switch between the two.

The new Reference Level feature allows users to calibrate listening levels in accordance with ATSC A/85 and EBU R128 loudness standards, which combines the in-situ frequency response compensation and system alignment with the listening level calibrated to a loudness reference. GLM 3 now provides this crucial feature, without the need for a high-quality external monitor controller or other measurement tools.

GLM 3 will be available to all GLM users as a free download from www.genelec.com.

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Earthworks Ships DM20 Drum Microphone & Kits

BOOTH 416 Earthworks is now shipping its newest microphones for drum miking, including the DM20 DrumMic for close miking toms and snare, as well as several prepacks.

The DM20 DrumMic is a precision engineered cardioid condenser microphone designed for miking toms and snare in live performance and recording environments.

Key features of the DM20 include a cardioid polar pattern, 150dB SPL rating and flat 50Hz-20kHz frequency response.

Machined out of stainless steel, the DM20 is capable of withstanding a stray stick hit. A right-angle microphone head allows the user to position the microphone precisely, while the stiff yet flexible gooseneck will stay put.

Each DM20 ships with an RM1 RimMount for mounting the microphone directly on the rim of a snare or toms, eliminating the need for mic stands.

Also new are the revamped CMK4 and CMK5 CloseMic Kits, which package DM20 microphones with RM1 Rim-Mounts, windscreens and a rugged carrying case.

The DK7 DrumKit is a seven-microphone kit comprised of four DM20 microphones for toms and snare, two SR25 microphones for overheads, one low sensitivity SR20LS for bass drum and accessories.



Alteros Gears Up For Eventful AES

DEMO ROOM 2D05 Alteros, an Audio-Technica company, has been gearing up for an eventful AES Convention, with new products and corporate developments shaping the ways in which this new technology leader will serve the industry. Alteros develops products that capitalize on Audio-Technica's years of extensive ultrawideband (UWB) and RF technology research, and innovative digital solutions to solve the most demanding technical problems.

At Demo Room 2D05, located at the level 2 meeting rooms, Jackie Green, Alteros President and CTO; Brian Fair, Executive Vice President Digital Engineering, and Bob Green, Executive Vice President, Product Engineering, will be on-hand to meet attendees to help illuminate the current and future state of the broadcast industry, solutions offered by Alteros and long-term goals of the company. The booth will also be exhibiting the Alteros GTX Series Ultra-Wideband (UWB) Wireless Microphone System, a professional broadcast solution delivering the highest quality, low-latency, un-companded audio—a fully digital 6.5 GHz system that is completely immune to regulatory changes/auctions, spectrum loss and spectrum crowding. Developed and tested in conjunction with major broadcasters and professionals, GTX needs no frequency coordination, STA or database registration.

P&E Wing Teams Up on 'Mixer Lounge' at AES

AES SPONSOR At AES 2017, exhibitors and attendees will enjoy a new addition: "The Mixer" lounge and bar, sponsored by the Recording Academy Producers & Engineers Wing, Iron Mountain Entertainment Services, Sennheiser and Neumann.

The Mixer Lounge, a four-sided bar situated in the center rear of the hall, is adjacent to the AES Mix with the Masters Workshop and between the Project Studio Expo Theater and the Live Sound Expo Theater. It is the ideal location to meet with friends and colleagues, network with new contacts, and get one-on-one time with the pros and technology leaders from the convention's many sessions and workshops.

The Mixer will be selling coffee and snacks all day, with a selection of alcohol available in the afternoon until 6 p.m. Information and promotional films will also be screened in the lounge throughout the three days the convention exhibits.

Dynaudio Pro Launches New Subwoofer Models

BOOTH 440 At AES New York 2017 Dynaudio Pro is launching the 9S and the 18S subwoofers, its first new subs optimized for studio monitors in 10 years. Long-throw 9.5-inch woofers that are designed to be equally efficient for stereo and surround, handling the frequency range from 18 Hz to 175 Hz, are at the heart of these new subs. The 9S features one woofer and the 18S has two in a pushpush opposing design with a woofer on each side.

Powered by a high-end 300-watt Class D amplifier, the 9S long-throw driver delivers

low-end extension and SPL performance that outperform the BM 9S II that it replaces, while preserving detail and precision. The 18S is powered by a 500-watt amplifier and also comes with a powerful DSP engine and built-in presets for Dynaudio Pro studio monitors, as well as time-alignment functionality and a



Dynaudio Pro's 9S subwoofer

three-band EQ. The new subwoofers come with double front baffles, adjustable low-pass filters (50 Hz-150 Hz) and SAT output with defeatable high-pass filter, signal-sensing, auto-power circuit and the ability to daisy chain more units, having the first instance control the overall volume for all of the subs.

28 THE AES DAILY | DAY 1 EDITION Waves Intros Torque Drum Tone Shifter

BOOTH 640 Waves Audio is introducing the new Waves Torque Drum Tone Shifter plug-in. The key to a great-sounding mix is rooted in the tonal balance of the drums, yet mixers don't always get tasked with mixing tracks that were perfectly tuned or recorded. Waves Torque can enhance and re-pitch the tone of snares, toms, kicks or an entire kit, all with natural-sounding results that no traditional pitch shifter will allow. The Waves Torque plug-in is a



The GUI for Waves' new Torque Drum Tone Shifter plug-in

precision drum tone shifter that will help users salvage mistuned drums, pitch them to a specific key and adjust their tone—without retriggering or replacing, without the sonic artifacts introduced by traditional pitch shifters, and without losing body, timbre, resonance or attack. Driven by Waves' Organic ReSynthesis technology, Torque detects and analyzes the drums' formant, amplitude and carrier information, reassembles it, and allows users to manipulate the tonal and pitch characteristics, all while preserving the natural attack, resonance and duration of the original sound. With intuitive controls and zero latency, Torque is ideal for the studio as well as for live shows, where FOH engineers can now have the luxury of re-pitching problematic drum tone mid-show or even mid-song.

Cloud Ships Cloudlifter Zi DI/Mic Activator

BOOTH 647 Cloud Microphones is now shipping the new Cloudlifter Zi Vari-Z Instrument DI and Mic Activator, bringing the popular Cloudlifter technology to guitar players, bass players, keyboard players and more. Attendees visiting Booth 647 can pick up a free Cloud t-shirt and enter for a chance to win a Cloudlifter.

The CL-Zi's variable impedance "Z" knob and high-pass filter work in tandem to create massive tone shaping through the manipulation of impedance loading. This is a great way to customize

your tone before the gain stage of your signal path just turn the "Z" knob until it sounds right.

The CL-Zi has a threeposition gain switch allowing for minimum gain, more gain, or the maximum gain available (up to approx.

+25dB for microphones or 12dB for instruments), This allows access to clean gain and a lower



Cloud Microphones' Cloudlifter Zi Vari-Z Instrument DI and Mic Activator

noise floor for virtually any studio or stage application.

As with all Cloudlifters, the Zi can be used with dynamic microphones to increase gain before feedback on stage or ribbon microphones to boost signal quality in the studio.

Primacoustic Spotlights Element Panels

BOOTH 239 Primacoustic Element panels are a range of acoustic absorbers designed to give users more aesthetic options in their rooms. The hexagonal shape and beveled edges allow the panels to be installed in unique patterns and clusters. Now primary reflections and



Primacoustic's Element panel

flutter echo can be controlled with an acoustic treatment layout that is personalized to your space.

The 16-inch (406 mm) Element panels are 1.5 inches (3.8 cm) thick, and are constructed from sixpound high-density glass wool for optimal broadband absorption. The Element panels are available in black, grey or beige Broadway acoustic fabric, or in Primacoustic's proprietary Paintables white finish, which can be painted to suit.

DiGiCo Issues S-Series iPad App For Console Control

BOOTH 631 The new DiGiCo S App is the ideal way to control a DiGiCo S-Series console straight from an Apple iPad. Designed to be compatible with DiGiCo's S21 and S31, it allows remote, wireless control of any DiGiCo S-Series mixing console wherever users are. The DiGiCo S App permanently displays an overview of the console layout, so one can select any available console bank and have the same user-friendly operation he or she is already familiar with, without being tied to the console.

With the new app, users can have comprehensive control over Channel Setup (+48V, polarity, analog gain, digital trim,

channel delay, insert points on/off, meters), Mix (channel label, pan, mute, solo, fader level, meters), EQ (four-band EQ plus HPF/LPF), Dynamics (all dynamics parameters for all console dynamics modes), Auxes (auxiliary send levels, on/off, auxiliary pans) and Buss Routing (assignment of channels to busses). Control is additionally extended to Snapshots (insert new, recall, update, delete), Matrix (sends, on/off, matrix input labels), Graphic EQ (32 faders and on/off for each unit, flatten all bands) and Save Session.

PRO | MON | 3, MOM Lead DAD Showcase

BOOTH 331 (with plus24) DAD (Digital Audio Denmark, distributed in the U.S. by plus24) is introducing MOM (Monitor Operating Module) and PRO | MON | 3. The PRO | MON | 3 monitor controller software for DAD's AX32 and DX32R is arguably the most flexible monitor controller available, offering a modular interface structure with analog, AES, MADI, Dante/AES67 and SDI embedding/de-embedding, plus support for audio formats from mono to full 64-channel Dolby ATMOS.

Until now, PRO | MON monitor control has mainly been used with EUCON-enabled control surfaces such as Avid's S6, but with the new MOM it can now also act as a standalone monitor controller. MOM is a remote control for PRO | MON | 3, offering a wide range of standard controls, including DIM, CUT, REF Level, Talkback and of course output and source selections.

A unique feature: several MOMs can be linked on the same system, each configured for different user roles.

Today's 'Masters of Audio' Seminars

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DEMO ROOM 1E06 PMC's "Masters of Audio" seminars, in exclusive partnership with the AES, give attendees the opportunity to hear immersive sound presentations from some of the pro audio industry's most prominent engineers and producers.Demo Room 1E06 will have a full 9.1 monitor setup based on the company's IB2-XBD-A monitor system supplemented with IB1S-AIII for the surround channels and reference twotwo.6 models for the height channels. The Award-winning MB3S-XBD-A monitors, launched earlier this year at NAMM, will also be on display.

WEDNESDAY, OCTOBER 18

11a.m.-12 p.m. Mastering; "Making your mixes shine" by mastering engineer Piper Payne

2-3 p.m.2:00 p.m. SA04 "Spatial Audio for Multitrack Recordings" by Albert Leusink

4-5 p.m. EC02 "Recording Critiques: moderated by Ian Corbett



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Crane Song Unveils HEDD Quantum Converter

BOOTH 231 AES 2017 marks the first showing of Crane Song's new HEDD Quantum, the next generation of its legendary HEDD analog to digital/digital to analog converter, utilizing the same sub pico second jitter clock found in the Avocet IIA DAC. The result is outstanding imaging, an open 3D sound, and extremely detailed transit response. The clocking is applied to both the DA and AD converters. Additionally, the new HEDD Quantum features six word clock outputs allowing it to function as the master clock for all of your digital gear and a digital converter simultaneously.

Crane Song has added Optical inputs and

outputs in the new design. In addition to the new AD, DA, Clocking, I/O and WC outputs, HEDD Quantum maintains Dave Hill's renowned DSP emulation of Triode and Pentode tubes as well as the tape emulation of the origi-

nal HEDD designs. The operational modes allow the DA and the AD to be used simultaneously, at different sample rates. In the DIGI setting the unit will accept digital input from one of three sources, and output on all three digital outputs and the analog output at the same time. In the ANA mode



Crane Song's HEDD Quantum A/D-D/A converter

the input is analog and it outputs to all three digital outputs and the analog output at the same time.

Dither, which is analog generated, is selectable for either 16 or 20 bit. The AD, DA and ASRC use high-end AKM 32 parts, coupled with proprietary analog filtering and clocking.

API Shows Wire Road AXS Console

B00TH 540 At AES New York 2017, API is displaying a 32 channel Legacy AXS console that is bound for Wire Road Studios in Houston, TX, immediately following the show. Wire Road purchased the console in May to serve as the centerpiece of their Studio A space.

"We have been considering a large format console for Studio A for some time," says Wire Road President/Chief Engineer James Kelley. "The flexibility of the new Legacy AXS coupled with API's history drove our decision. We believe the AXS will allow us to take another step in building national recognition for Wire Road Studios."



API's Legacy AXS console is bound for Wire Road Studios in Houston when AES concludes Wire Road, designed by the renowned Russ Berger Design Group, opened in 2011 and, since then, has a track record of impressive achievements, including two Platinum records, one Gold record and one Billboard Gold Record. Other recognitions include the recording of a Grammy award-winning song (Best Performance/ Song), as well as receiving multiple Gold and Silver "Addy" awards for its audio production work.

TELEFUNKEN: A Comprehensive Display

BOOTH 232 TELEFUNKEN Elektroakustik returns to AES with its entire product line on display, including the Diamond, R-F-T, FET and Dynamic Series of Microphones, Direct Boxes, Vacuum Tubes and Accessories.



Elektroakustik

PMC Unveils result6 Nearfield Reference Monitor

BOOTH 330 PMC is unveiling result6, a brand new compact nearfield reference monitor, at AES New York 2017.

PMC's new twoway active result6 loudspeaker delivers on every level as it combines all the attributes for which the company's pro refer-



PMC's result6 nearfield reference monitor in action

ence monitors are internationally renowned. These include high resolution and detail, accurate and extended bass, consistent tonal balance on all levels and wide dispersion and sweet spot, all distilled into an affordable nearfield reference with the emphasis on elegant simplicity.

Both drivers are new in this two-way design and feature a 27 mm soft-dome tweeter with dispersion grille and a mid/bass unit composed of a doped natural fibre, both custom-designed for the result6. The new LF driver was developed using a groundbreaking laser-based measurement system to maximize the benefit of the result6's redesigned Advanced Transmission Line—the proprietary bass-loading system at the heart of all PMC products—and ensure perfect integration between the driver and the line.

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32 THE AES DAILY | DAY 1 EDITION IndustryAnalysis The Spectrum Crunch Cometh



By Steve Harvey

Wireless audio equipment users will soon be facing a serious spectrum crunch. Having been moved out of the 700 MHz band during the 2010 DTV transition and now being required to vacate the 600 MHz band, wireless mic users can expect the 500 MHz band to be at least 20 percent more crowded, according to estimates.

In the Federal Communications Commission's Incentive Auction, which ended on April 13, 2017, major telecom companies including T-Mobile, Dish, Comcast and AT&T acquired licenses for much of the 600 MHz band. The initial auction rules suggested that wireless mic users might have up to three years to move out of the spectrum, but in some regions of the country they are already having to make way for the new 600 MHz services.

T-Mobile, which acquired the most spectrum in the 600 MHz service band (617-652 MHz and 663-698 MHz), has promised to fire up at least 10 MHz covering 1.2 million square miles by the end of 2017. Sites in Cheyenne, WY, and near Portland, Maine, have already been lit up, and additional 600 MHz network sites are scheduled for Northwest Oregon, West Texas, Southwest Kansas, the Oklahoma panhandle, Western



North Dakota, Coastal North Carolina, Central Pennsylvania, Central Virginia and Eastern Washington before year's end.

An August 14, 2017, letter to wireless mic manufacturers and other relevant parties from Mark Bishop, T-Mobile's senior manager—spectrum management, requested that "all use of spectrum in the indicated channel blocks cease prior to November 1, 2017." The accompanying list of counties includes portions of major population centers such as Chicago, Phoenix, Dallas, Austin, San Francisco, Denver and Oklahoma City.

T-Mobile has partnered with PBS and its nationwide network to cover the costs for local public TV low-power facilities that must relocate in the spectrum repack and has also committed to providing financial assistance to any local TV stations that can move ahead of the FCC's three-year schedule. "We wish to minimize the interference with the wireless base stations and handsets that will operate in the new band and we want to avoid disruptions to any operations currently in use," stated Bishop.

The upshot? If you operate wireless microphone, in-ear monitor or comms systems, you need to familiarize yourself with the current FCC rules. You also need to remain vigilant regarding both progress of the planned three-year post-auction TV station repack in your market and the status of new 600 MHz band services, because you may have to vacate the spectrum sooner than expected.

Everyone should plan to vacate the 600 MHz band as soon as possible in any case and move to alternate available frequencies. The FCC has set a sunset date that prohibits "the manufacture, import, sale, lease, offer for sale or lease, or shipment of wireless microphones or similar devices intended for use in the United States that operate on the 600 MHz service band frequencies...after October 13, 2018."

Manufacturers including Audio-Technica, Sennheiser and Shure are offering rebate programs that allow users to trade-in 600 MHz equipment; terms and conditions vary from brand to brand. Alternatively, users of existing equipment operating in the spectrum from 470 MHz to 698 MHz may have it modified and recertified to comply with the FCC's new technical operating rules. Happily, the FCC listened to mic manufacturers and advocacy groups, including the SVG's DTV Audio Group, and also opened access to some additional spectrum, including portions of the 169-172 MHz band, the 900 MHz band, the 1435-1525 MHz band and the seven GHz band.

The bottom line is, now and going forward, you will need to mix and match spectrum, technologies and systems appropriately to your sources. Make equipment choices based on needs, not convenience. The gear you use indoors may be different to that used outdoors. Use wires wherever possible. Assign multiple comms belt packs to a single frequency.

Above all, if you meet the FCC's criteria, get a license. If you do not have a license you will not be able to register in the databases for protection against white space devices and other equipment operating on your frequencies.

The bad news is, this is not the end of the spectrum reshuffle. Microsoft is pushing the FCC for dedicated UHF frequencies to deliver its planned wireless services to rural America and the MOBILE NOW Act currently before Congress requires at least 255 MHz of federal and non-federal spectrum below six GHz be made available for mobile and fixed wireless broadband use by December 31, 2020.

Booth Number 258

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Brooklyn Steel features L-Acoustics K2 and Kara line arrays

L-Acoustics Proves Mettle at Brooklyn Steel

AES SPONSOR Leading New York City-based national concert promoter The Bowery Presents (TBP) recently opened its latest live music venue, Brooklyn Steel, a new 1,800-capacity general admission space in East Williamsburg, New York, that is outfitted with L-Acoustics K2 and Kara line arrays, plus delays and stage monitors. A gantry crane retained from the former steel fabrication business enables the flown arrays to be repositioned, along with the movable 50,000-pound steel and concrete stage, to scale the audience area

Prism Sound Sets Mic to Monitor Seminar Tour

BOOTH 535 Prism Sound's Montreal Mic to Monitor event, featuring guest speaker John-Angus MacDonald, lead guitarist of Canadian band The Trews. The tour concludes in New York on October 20 at the City College of New York, completing a series of five seminars in the U.S. and Canada that began in Philadelphia and bookend AES New York 2017, at which Prism Sound will be exhibiting (Booth 535).

The speaker for the New York seminars is Oscar and Grammy Award-winning producer/ engineer (and owner of Defy Recordings) Robert L Smith, who has worked with the likes of Aerosmith, Bon Jovi, U2, David Bowie, the Bee Gees, Michael Bublé and Lady Gaga. Smith also spoke at the October 16 Philadelphia seminar.

For the Boston Mic to Monitor event, at Future Studios on October 23, the guest speaker will be top mastering engineer and President of M-Works, Jonathan Wyner. During a career spanning nearly 30 years, Wyner has mastered more than 6000 CDs covering every musical genre and all kinds of artists including James Taylor, Kiri Te Kanawa, David Bowie, Aimee Mann, Tiny Tim and Rahsaan Roland Kirk.

Prism Sound also is hosting a Mic to Monitor seminar at Lyndon State University, Lyndonville, on October 24, featuring guest speaker Vanessa Parr, a Los Angeles-based recording engineer and Berklee College of Music graduate. Parr's career highlights include working with a variety of prestigious and Grammy award-winning artists and extensive work on many film and television scores.

For its U.S. and Canadian Autumn dates, Prism Sound is working with partners such as SADIE, GIK Acoustics, RØDE Microphones and Genelec, all of which will give presentations on recording techniques, audio hardware design and how to get the best from your studio. Everyone attending these free seminars will be automatically entered into a drawing, featuring \$6,500 worth of prizes donated by the participating manufacturers.

To register for the Mic to Monitor events, follow these links:

■ New York: https://m2m2017-newyork. eventbrite.co.uk

Boston: https://m2m2017-boston.eventbrite.co.uk

Lyndonville: https://m2m2017-lyndonville.eventbrite.co.uk

■ Montreal: https://m2m2017-montreal. eventbrite.co.uk

WSDG's Storyk To Chair Friday Project Studio Panel



KEXP Seattle Control Room view into Live Performance space designed by WSDG

BOOTH 433 WSDG Walters-Storyk Design Group founding partner John Storyk is chairing a Friday, October 20 panel discussion from 10:15 a.m. to noon on Stage 2 in the Main Exhibition Hall, at Project Studio Expo. Storyk's topic is New Frontiers In Project Studios to be discussed with a panel featuring award-winning producer/ engineer Eddie Kramer (Jimi Hendrix, Led Zeppelin, Beatles), David Rosenthal (musical director for Billy Joel, Bruce Springsteen, Elton John, etc.) and Tony Award-winning sound designer Peter Hylenski. This panel will discuss how creative new cost-effective and sonically brilliant formats are shifting thinking about studio size, ergonomics, acoustic requirements and architecture.

SANKEN MICROPHONES/PLUS24, BOOTH 331 Every day of AES New York 2017, at 3 p.m. top engineers, including Bruce Botnick, Frank Filipetti and George Massenburg, are visiting the Sanken booth to meet attendees and speak about the Sanken Chromatic series of microphones. Designed for studio recording engineers, producers, musicians and sound designers who demand the highest level of transparent, accurate and natural sounding recordings, the Sanken Chromatic Series of mics can handle anything from the roughest sounds of a metalcore band to the supernatural realm of symphonic recording. The Sanken Chromatic line is comprised of seven professional models including the CU-44X MK II shown here.



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IP Networking | continued from page 1

brands interconnect over IP as easily as they did over analog cables in the past.

Someone once joked that the nice thing about standards is that there are so many of them. Happily, the AES67 interoperability standard, published in 2013, has brought harmony to the leading proprietary IP-based networks currently on the market.

Such has been the success of AES67 that SMPTE's ST 2110 suite of standards for realtime media transport over IP references the standard where relevant. "This was the most significant interoperability event of its kind in the world to date," stated Terry Holden, vice chairman of the Media Networking Alliance (MNA), when SMPTE recently approved those parts of ST 2110 in which AES67 defines the suite's audio elements.

This year's Networked Audio track at the convention offers multiple presentations and panels on the practical aspects of implementing and operating AES67 networks and features representatives from QSC, Yamaha, The Telos Alliance, Bosch and ALC NetworX, in collaboration with the MNA. There will also be presentations on AES70, which has standardized the control protocol for AES67.

The program also touches on some of the

related philosophical and business issues relevant to many implementations of IP-based networks. For instance, does AV or IT own the network, and how do expectations differ between those departments? And is AES67 truly suited to every pro audio application? Arcade Fire, to offer just one contrary example, is currently touring with a PA system fully networked through AVB and AVnu-certified products.

And, of course, for those looking for practical solutions to their networking needs, the exhibit floor is crammed with networked pro audio products. Dive in and take a look; and while you're there, be sure to network with your friends.

Classifieds

Acoustical Products



AES Booth #553



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36 THE AES DAILY | DAY 1 EDITION Direct Sound: Makes Waves at AES

BOOTH 258 Immediately after the successful release of the Mach II Studio Plus+, EX29 Plus and EX25 Plus Extreme Isolation headphones that were featured at all of the Summer NAMM TEC sessions, Direct Sound is making waves again. In cooperation with Waves Audio, Direct Sound is exhibiting the new NX headphone featuring Waves NX augmented reality technology.

"People said it was impossible, but we thought otherwise," says Direct Sound Director of Business Development Jay Leopardi. NX is the first and only headphone with the Waves NX technology seamlessly integrated into an isolation headphone, each and every one meticulously handcrafted in Allentown, PA.



AUDIO-TECHNICA, BOOTH 422 Audio-

Technica is featuring its AT5047 Cardioid **Condenser Microphone** at AES New York 2017. The most recent addition to A-T's acclaimed 50 Series (which also includes the AT5040 vocal microphone and AT5045 instrument mic), the AT5047 is a premier studio microphone that is equally at home capturing instruments and vocals. During setup on the exhbit floor yesterday, Audio-Technica's Steve Savanyu offered an erudite appraisal of the AT5047's many virtues.

Earthworks Launches New Studio Vocal Mic

BOOTH 416 Earthworks is launching its flagship studio vocal microphone, the SV33, at AES New York 2017. The SV33 front address cardioid condenser microphone offers high resolution performance, providing impressive realism and purity of sound for male and female vocals.

Featuring hand-tuned circuitry paired with a 14mm capsule, the SV33 delivers superior audio performance with the warmth of a large diaphragm capsule coupled with the stunning detail that Earthworks is known for.

Incorporating Earthworks'

patented polar technology, the SV33 delivers a cardioid polar pattern that is consistent up to 80 degrees off-axis. This allows the singer to move freely in front of the microphone without sacrificing timbre or level. This microphone also has very low handling noise and a built-in windscreen to prevent plosives.

The SV33 Studio Vocal Microphone will be available in December 2017.

ShowNews The Engineer/ Artist Strategy Session Tomorrow

Moderated by Author/Photographer Mr. Bonzai 11:30 a.m.-12:30 p.m. (Room 1E13)

Grammy Award-winning recording engineer Al Schmitt and top jazz singer/songwriter Kat Edmonson will join moderator Mr. Bonzai for an exploration of the intense relationship between engineer and recording artist. Schmitt, a co-founder of The METAlliance, has won over 20 Grammy Awards for his work with Henry Mancini, Steely Dan, George Benson, Toto, Natalie Cole, Quincy Jones, and others. The genre-defying Kat Edmonson recently performed in Woody Allen's 2016 film set in the 1930s, *Café Society*. Her most recent record debuted at #1 on the Billboard Heatseekers Albums Chart, #1



Al Schmitt, Kat Edmonson, Mr. Bonzai

on Contemporary Jazz Chart and #2 on the Total Jazz Chart.

Edmonson will explain her songwriting process and how she works up material before joining Schmitt in the studio. Together they will explore the connection between the art and science of capturing a performance at its peak, and offer personal anecdotes about the chemistry in the studio, including mic choices and vocal techniques, live room acoustics and overdubs, all leading up to the grand finale of the mix.



Earthworks' SV33 studio vocal

microphone

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Max AES | continued from page 1

Princeton University, addressing major questions regarding the future of spatial audio and perception in his talk, "Fooled By Audio."

This year's convention has learning opportunities for everyone; if it's something you're interested in, odds are it's being talked about today. Ready to dive into immersive audio? Catch the 3D Audio Tools for Immersive Audio panel at 10:45 a.m. in 1E07. You're an archivist? The 2 p.m. presentation in the same room discusses the restoration of the eight surviving sound films created in 1913 on Thomas Edison's short-lived Kinetophone is a can't miss event. If you're a student, bring your work to the Student Recording Critiques in 1E06 at 4 p.m. to get feedback from industry pros. Love theater? Well, Thursday will find the Broadway Sound Expo taking over stage 1 on the show floor, but in the meantime, check out part of the Broadcast/Media Streaming track, with Deconstructing Binaural Macbeth at 2 p.m. in 1E08, demonstrating an approach to streaming content captured by a binaural microphone head. Need some air? Get in on the Technical Tour excursion to the Rubin Museum at 10 a.m.

No one goes to an AES Convention without walking the exhibition floor to see the latest and greatest offerings from the people who make the gear you use every day. Whether you're scoping out your next big purchase or have questions that only the folks who made your gear can answer, checking out the show floor is always a must.

After all that, your day won't be done until you sit in on this year's Heyser Lecture at 6 p.m. in 1E15/16, presented by Grammywinning producer/engineer Leslie Ann Jones, director of music recording and scoring, Skywalker Sound. Her talk, 'Paying Attention,' will recount the sessions that led to her sizable discography and filmography. As Jones herself noted, "No graphs, no charts, no Powerpoint, okay maybe a few photos, but mostly a retrospective on how my life and career have been sustained and enriched by paying attention."

Alex Case | continued from page 1

things as increased valuable rich content online to the benefit of members as well as effective outreach to partners also concerned about audio quality for the future. As a matter of fact, the 143rd AES Convention—co-located with the independent NAB Show New York

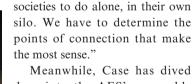
2017—is a clear result of the latter. "The AES is innovating aggressively," notes Case. "We know that audio rarely happens in isolation anymore. It is consumed and enjoyed with other media. That is part of why we are co-locating with NAB for this convention. We want to be more closely connected with broadcast, and broadcast is all media. [But] we won't dance with everyone who calls. We think NAMM's format and focus]," offers Case. "We want to work more closely with many of the 100,000 people there, those more focused on the musical instrument side of things. We are very deliberately not trying to work in isolation, but to work with other very clever people in allied fields. So I think we're all looking at each other, thinking about the most exciting way forward. It's not for a bunch of different



Alex Case

very carefully about who our partners in quality will be. For example, broadcast's aspirations for video quality is very well aligned with ours for audio quality. We're exploring those natural partnerships going forward."

The 143rd AES Convention preludes another collaboration: the approaching AES @ NAMM in January 2018. "And that will be a completely complimentary set of activities [to



deep into the AES's venerable treasure trove of audio technology and research content, working hard to make it available for the Society's membership. "It's been a major focus of mine," explains Case, as he details AES's

continuously growing E-Library, effectively the world's most comprehensive collection of audio information and reported research, as it is home to every paper ever published at the AES Convention, Conference, or in the pages of the Journal, all online, at the fingertips of the audio curious.

"We have a luxury of content," tells Case. "We're swimming in this amazing content, cap-



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tured over the years by some of the greatest thinkers in our field. [These items] have basically sat on the shelf as potential assets, and it's only in the past few years that we have begun to go through them and edit them. So far it's been done through committees that have volunteered to do that, but I anticipate it's going to be a full-time job for AES. Just as we have people dedicated to getting the Journal out ten times a year, we will also find ways to get curated, higher-quality material [online] regarding audio and audio-related fields."

"We've been recording events that happened at the [recent] Live Sound Expo, and events like what will happen here, in New York," Case continues. "But all these things happening during my tenure have actually been years in the making. It's been a major effort and the workflow is still evolving."

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See Yamaha and Steinberg in booth 624 to check out the latest Yamaha, NEXO and Steinberg products.

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Schedule

Wednesday 10/18

Yamaha — 10:00 AM, 12:00 PM, 2:00 PM, 4:00 PM NEXO — 10:30 AM, 12:30 PM, 2:30 PM, 4:30 PM

Thursday 10/19

Yamaha — 11:00 AM, 1:00 PM, 3:00 PM, 5:00 PM NEXO — 11:30 AM, 1:30 PM, 3:30 PM, 5:30 PM

Friday 10/20

Yamaha — 10:00 AM, 12:00 PM, 2:00 PM, 4:00 PM NEXO — 10:30 AM, 12:30 PM, 2:30 PM, 4:30 PM



