



AES @NAMM®

PRO SOUND SYMPOSIUM: LIVE & STUDIO

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EVENT REPORT



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SENNHEISER **BEAW** **ADAMSON**
DiGiGrid **APOGEE** **BOSE** **WAVES**
DAD **dBTechnologies** **QSC**
LECTROSONICS **FOCAL** **YAMAHA** **CA**
Meyer Sound **Eventide** **GENELEC**
ALLEN & HEATH **alteros** **ULTIMATE EARS**

The Audio Engineering Society's inaugural AES@NAMM Pro Sound Symposium: Live & Studio was held in January as part of an expanding portfolio of events complementing AES's two annual international conventions and its slate of international conferences. The symposium was developed to deliver a unique education and training program targeted at professionals working in live sound, recording and audio for the performing arts, as well as student and aspiring professionals. The symposium grew out of recommendations made to the Society's Board of Governors by the AES President's Strategic Planning Team, established in 2016 by then President Alex Case. Held in the NAMM Education Campus located in 20 rooms on the fourth floor of the Anaheim Hilton Hotel, across from the Anaheim Convention Center's Grand Plaza and adjacent to a brand-new exhibit space showcasing a wide range of pro-audio brands, the four-day AES@NAMM symposium was fee-based, with limited seating secured through advance registration.

Attendees could purchase either half-day or whole-day access to a series of Training Academies and related sessions on line-array loudspeaker system technology, live-sound mixing consoles, entertainment wireless systems and studio environments, in addition to tutorials on system measurement and optimization, plus a selection of technical papers in related fields. A discounted NAMM Show badge, providing full access to all onsite exhibits and other activities, was made available for AES@NAMM event attendees.

"The Audio Engineering Society leveraged up-to-date expert knowledge from both its members and supportive pro-audio equipment manufacturers. This symposium threw a creative spotlight on the application of audio science and technology to sound-system operations, along with studio workflow practices," stated AES President David Scheirman. "The NAMM Show is one of the biggest networking opportunities in our industry," considered AES@NAMM Executive Chair Michael MacDonald. "This new symposium format has been designed to help AES members and non-members alike expand their 'human network.' Our program was formatted to merge in-person networking opportunities with hands-on training and expert tutorials."

The four-day program featured training sessions conducted by manufacturers of Live Sound Consoles and Studio Recording Technologies, in addition to half-day Line Array Loudspeaker System classes that were augmented by hands-on training on the hotel's outdoor, rooftop Lanai Deck. Entertainment Wireless and In-Ear Monitoring workshops

offered classroom training of hardware- and software-based products, while the Studio & Recording Technology Session series covered a variety of technical topics, and the Audio Science & Technology Session series included System Measurement and Optimization. Symposium sessions ran from 9:00 am to 5:00 pm from Thursday, January 25 through Sunday, January 28, with the last day ending at 4:00 pm. The Studio and Live Sound Console Academy courses of manufacturer-based training took place in six rooms, with Line Array Loudspeaker System Academy and System Measurement & Optimization classroom sessions being held in a bank of six classrooms. AES Papers and Workshops, as well as special Spanish- and Mandarin-language daily sessions, were accommodated in a separate room.

The organizing committee comprised a number of key individuals from various segments of the pro-audio community. Michael MacDonald served as Executive Chair, with AES President David Scheirman as Strategic Planning Team Liaison, AES Treasurer-Elect Richard Wollrich as Business Manager, and AES Secretary Valerie Tyler as Project Communications Manager. Working behind the scenes during the nine-month planning phase, Mel Lambert was Marketing & Promotions Manager, Graham Kirk was Symposium Supporter Sales Manager, Mary Ann Enginco was Guest Services Manager, Greg Kadorian was Facilities Manager, while Keith Elliott served as Technical Support Assistant & Event Hosts Coordinator. In terms of the symposium programming, Mark Frink was Program Director & Content Manager, Live Sound, Bobby Owsinski was Content Manager, Studio & Recording Technology, and John Murray from Optimum System Solutions was Content Manager, Audio Science & Technology, with AES VP of Eastern Region USA/Canada and Chair of AES Regions & Sections Anthony Schultz serving as manager of The Studios Academy. Finally, but by no means least, AES Guangzhou Section Chair Bing Lin served as Content Manager of the various Chinese language sessions, while Juan de Dios Martin of the AES Los Angeles Section was Content Manager of the Spanish-language sessions.

As AES@NAMM Program Director Mark Frink told the JAES: "Our educational program was carefully developed to anticipate the learning expectations of working professionals that wanted to bring themselves up to speed with what's happening in these critical technology areas. Participants learned about how to use high-tech systems in their day-to-day activities. Everybody needs a refresher course from time to time; AES@NAMM offered no-nonsense tuition on a range of key topics."

The four-day symposium comprised:

- Main Stage: Live, hosted by Robert Scovill, with sessions from Dave Rat, Patrick Baltzell, Kenneth “Pooch” Van Druten and Dave Shadoan.

- Main Stage: Studio, hosted by Bobby Owsinski, which offered diverse sessions targeted at the studio and post-production communities presented by Andrew Scheps, Sylvia Massy, Jack Joseph Puig, Richard Chycki, Scott Gershin and others, on such topics as Outside The Box Recording, which discussed unique methods for music recording; The State Of The Art of Do-It-Yourself, which provided an overview of today’s DIY gear marketplace; and Sound Design for Tent-pole Films, which considered techniques used in blockbuster motion pictures.

- The Studio Academy, which focused on using key components within a recording or production studio to achieve professional results, including digital audio workstations, microphones and monitor loudspeakers, with Apogee, DigiGrid, Digital Audio Denmark, Eventide, Focal, Genelec, Meyer Sound Laboratories and Waves/Soundgrid as symposium supporters.

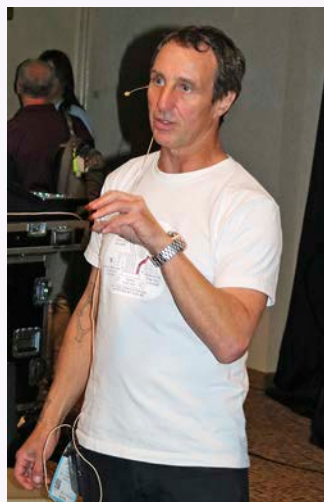
- Line Array Loudspeaker Academy, which focused on key operational features and deployment of contemporary line-source arrays, with Adamson, Bose Professional, dB Technologies and EAW as symposium supporters.

- Live Mixing Console Academy, which comprised hands-on sessions about control-surface orientation, including an exploration of each console’s features and use of Allen & Heath dLive, QSC Touch-Mix, and Yamaha CL Series digital systems, with each of the three console manufacturers serving as symposium supporters.

- Entertainment Wireless Academy, which explored how to set up and use RF systems within a shrinking UHF spectrum environment, with Alteros/Audio-Technica, Lectrosonics, Sennheiser and Ultimate Ears serving as symposium supporters.

- In-Ear Monitoring Academy, which covered the installation and operation of in-ear monitoring systems, including the importance of hearing conservation.

- Sound System Measurement & Optimization workshops, whose sessions considered current techniques for testing and fully optimizing sound reinforcement and production studio system performance.



Rat Sound founder Dave Rat takes a question during the Q&A segment of his Main Stage: Live session entitled “Often-Overlooked Aspects of Mixing Big Rock Shows.”

Top right: Mike Bangs, Allen & Heath’s live sound/touring manager, leading a session in the Live Mixing Console Academy’s hands-on training room. Top center: Mark Frink oversaw several sessions during the Symposium’s In-Ear Monitor Academy. Bottom center: Miles Rogers, Meyer Sound’s cinema/studio development manager, discussed the importance of unbiased, unflattering loudspeaker monitoring during a Studio Academy session. Bottom: For the Line Array Academy, ground-support towers were temporarily installed on the rooftop plaza Lanai Deck of the Anaheim Hilton Hotel to support the Line Array Loudspeaker System Academy. Shown here are line array and subwoofer systems from Eastern Acoustics Works, left, and Bose Professional, right. (Bottom image courtesy of NAMM)

Standout sessions included an overview of “Audio Interfaces and Devices” by Brad Deleva from Apogee, during which attendees learned about the new Symphony I/O MkII SoundGrid and the Dual-Path FX Rack; “Professional Monitoring Loudspeakers” by Nicolas Debard from Focal Professional, which centered on the firm’s most recent Shape Series of studio monitors; “Wireless Spectrum Update 2018,” with representatives from Sennheiser, Lectrosonics, Audio Technology/Alteros, PWS & RAD, including Eric Reese, Ike Zimbel, Karl Winkler, Jackie Green and Joe Ciaudelli, discussing the loss of 600 MHz spectrum and changes that affect all UHF wireless in core TV frequency bands; and “Ears Are Stereo, But Nature Is Not!” and other audio observations by Dave Rat from Rat Sound, focusing on the fact that although humans live in a three-dimensional landscape of sound radiated from all directions, we still attempt to recreate sounds using two primary sources and some surround speakers.

A companion Social Events Program included Live Sound, Lessons Learned, a press Invitational that remembered and honored audio educator Albert Leccese of Audio Analysts, together with an AES@NAMM Student Mixer coordinated by Ian Corbett, recording professor at Kansas City Community College, and a Diversity & Inclusion Cocktail Mixer reception that was hosted by the Society’s VP Western Region USA/Canada, Leslie Gaston-Bird, and organized by the Society’s new AES Diversity and Inclusion Committee. Actively promoted through such organizations as the Women’s Audio Mission, the Cocktail Mixer brought together a wide cross section of AES members and interested first-timers for fellowship and socializing.

The Main Stage: Live sessions focused on live sound-system mixing and concert system engineering, with input from top-tier rental sound company owners and leading FOH mixers. The program included individual presentations and tutorials on live digital mixing console automation, virtual sound checks, low-frequency management in live concert venues, world-tour logistics and more, plus daily panels on a range of live-sound topics. Speakers that joined veteran FOH host Robert Scovill included Rat Sound founder Dave Rat, Sound Image president Dave Shadoan, ATK/AudioteK president Michael MacDonald, and several surprise guests; Pat Baltzell of Baltzell Audio Design discussed mixing live entertainment segments for the Super Bowl halftime shows.

Hosted by producer/engineer/author Bobby Owsinski, Main



Studio presenter Richard Gibbs addressing “Alternative Studio Design,” including an overview of the thought process, and challenges, behind constructing a studio outside the norm. Gibbs’ Woodshed Recording in Malibu features an innovative and unique design, and currently serves a host of top-tier recording acts. (Courtesy of NAMM)

Stage: Studio presentations occurred hourly during all four days of the symposium, with session topics ranging from Outside-the-Box Recording Techniques and Virtual Microphones to Alternative Studio Design and DIY Projects. Other sessions focused on business, social media and creativity topics. “My overarching concept while developing the Main Stage: Studio program was to only select presenters that have the social authority to attract an audience of symposium attendees,” Owsinski states. “In other words, I first chose the presenters, and then built the sessions around them. Audiences varied from high-end professionals to students, sometimes both in the same session; quantity varied by day and topic, with positive comments from attendees.”

The Sound System Measurement & Optimization Workshop, hosted by John Murray, included sessions on AFMG’s SysTune, Rational Acoustics’ Smaart and Studio Six Digital’s Audio Tools. AES Standards Chair Bruce Olson addressed Delay Fill Alignment, Charlie Hughes considered Subwoofer Arrays, James Anderson described Multi-Mic Measurement (M3), Chris Tsanjouries looked at Live Event SPL Monitoring, while Andrew Smith offered guidance on selecting the correct frequency analysis tools for RTA, FFT and Impulse Responses.

“Our sessions highlighted three of the four most popular measurement platforms,” Murray stressed, “with all the selected presenters having some level of association with those platforms. But presentations were not limited to ‘how-to’ sessions. Topics included live-event SPL monitoring, system optimization in under an hour, low-frequency room acoustics, how to avoid system set-up noise issues, subwoofer alignment and pattern control, and more.” He noted that the majority of sessions had good attendance of between 20 and 40 people with very positive feedback, and there was no shortage of sophisticated users in attendance.

The Technical Papers Sessions of peer-reviewed papers that are standard fare for such AES gatherings were book-ended by Chinese-language sessions on selected pro-audio topics curated and presented by Bing Lin, who chairs the AES Guangzhou Professional Section, together with Xiaowei Fan, lecturer on acoustics at Communication University of China, Nanjing College. Spanish-language sessions on studio recording workflow processes were presented and curated by Juan de Dios Martin, an experienced producer/engineer and Avid Pro Tools practitioner.

A key paper entitled “Short-Term Peak Power/SPL Testing Using



One of three evening social events during AES@NAMM, the Diversity & Inclusion Cocktail Mixer brought a wide range of AES members and interested first-timers together for fellowship and socializing. Hosted by the Society’s VP Western Region USA/Canada, Leslie Gaston-Bird (right), the event was actively promoted through other organizations like the Women’s Audio Mission.



Attendees in both the Main Stage: Live And Main Stage: Studio rooms had an opportunity to select from nearly 50 different expert-speaker topical presentations and panel sessions during the four-day AES@NAMM Symposium. (Courtesy of NAMM)

Octave-Bandwidth Tone Bursts,” by AES Gold Medal winner D. B. (Don) Keele, Jr., discussed the author’s latest test technique for evaluating the short-term peak output of amplifiers and loudspeakers. This task is accomplished by playing a sequence of 11 one-minute tone-burst wave files to provide a test signal that covers the entire audible range. Keele illustrated the use of the bursts in live demonstrations by driving a small loudspeaker and powered subwoofer.

“We were pleased to be a part of the inaugural AES@NAMM programming at The NAMM Show 2018,” stated Marc Weber, director of product and brand management with Adamson Systems Engineering. “NAMM’s effort to boost the live-performance audio presence at this year’s show was very encouraging. Our participation in the Line Array Loudspeaker Academy complemented our dedicated focus on training and education for our users.”

“Bose Professional shared configuration and set-up details of our ShowMatch System Solutions during the AES@NAMM Symposium,” added Jeff Lange, the company’s global loudspeaker trainer. “We provided hands-on training for our compact line array assembly with DeltaQ technology, along with details of our collaboration with Powersoft’s DSP and amplification platform, and an explanation of our line array calculation software using AFMG’s EASE Focus.”



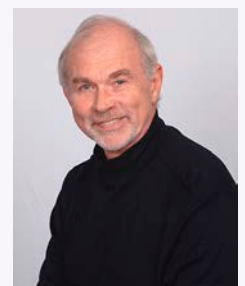
As a complementary activity to AES@NAMM, VP Western Region USA/Canada Leslie Gaston-Bird and Executive Director Bob Moses hosted a membership-drive booth onsite with assistance from the AES Los Angeles Section. Shown here (left-to-right): AES LA Section’s Greg Riggs, Brian Seagrave and Bob Lee. (Courtesy of NAMM)



The Live Mixing Console Academy included instructors and digital mixers from three different suppliers - Allen & Heath, QSC and Yamaha. Here, Yamaha Commercial Audio Instructor Chip Allen (left) provides personal training for an AES@NAMM attendee using a CL series digital mixer. (Courtesy of NAMM)

The onsite Event Staff volunteers came from a number of West Coast colleges and high schools. Faculty advisers included Stephen O’Hara from Citrus College in Pasadena, CA; Evan Peebles from Cogswell Polytechnical College in San Jose, CA; David M. Kohr from The Conservatory of Recording Arts & Sciences in Arizona; Dana Jae Labrecque from City College of San Francisco; Jay Henry from Southwestern College in Chula Vista, CA; Roy Finch from Chapman University in Orange, CA; Chris Long from Huntington High School; and Jeffrey Izzo from CSUN Northridge.

Additionally, a complementary activity at the 2018 NAMM Show was the AES Membership Drive Booth, organized by VP Western Region USA/Canada Leslie Gaston-Bird, and AES Executive Director Bob Moses. This NAMM Exhibitors’ booth in the Anaheim Convention Center was staffed by volunteers from the Los Angeles Professional Section, and served to help inform showgoers about the benefits and value of membership in the Society, while also helping guide onsite attendees to the AES@NAMM Symposium. It was also the site of a pilot project for live-streaming of onsite content for the new AES Live! Project.



AES President, David Scheirman

“With the professional audio industry growing and changing rapidly, it makes sense for our Society’s in-person gatherings to evolve as well,” concludes AES president David Scheirman. “Considering the technological advances resulting in new tools for use by audio professionals, nothing can replace direct, in-person exposure. AES@NAMM was designed to provide an audio knowledge sampler and hands-on training for the entire signal path, from microphone to speaker. We’re grateful to see the enthusiastic response and support from the audio equipment manufacturing industry for our inaugural event.”

Business Manager Richard Wollrich confirmed that the AES@NAMM Symposium was financially successful. Over 2,700 individuals participated in the event, with many attendees purchasing access passes to attend for one, two or three separate days. Complimentary access was provided for industry media professionals. Pre-planning is under way for a Board of Governors review and approval for next year’s event, which would be held concurrently with the 2019 NAMM Show in Anaheim.