

# LIVE SOUND

I N T E R N A T I O N A L

INSIDE

## ABOVE IT ALL

Inside the building of a growing audio and production company.

CAUSE & EFFECT: UNDERSTANDING HOW SOUND BEHAVES IN ROOMS

A REAL WORLD GEAR LOOK AT SUBWOOFERS

APPLICATIONS OF MIX BUS COMPRESSION IN THE LIVE REALM



## (MUCH) BETTER THAN OK

A look at recent microphone and wireless system advances. **by Craig Leerman**



A member of the Telefunken DC6 Drum Pack at work.

**Q**uality sound reinforcement starts by choosing microphones that work well for each particular application and then placing them optimally to catch the intended targets (sources) while rejecting other sounds. For audio techs working with the same band/artist regularly, this is usually relatively easy to accomplish due to familiarity, but it can be a tougher task for freelancers as well as those of us (like me) working with regional companies that see a different act almost every show/event.

The rider (if we even get one) might provide some clues or ask for specific models, but for most dates we tend to go with



Audio-Technica ATM350a

favorite mics and placement options that have proven to work well over time. However, we should be aware of new tools that can help deliver improved results, so with that in mind, here are some recent developments in mics and wireless systems that have caught my eye over the past year or so, including a few that I've had a chance to Road Test.

The recently debuted **Audio-Technica** ATM350a is a compact instrument mic measuring just 1.5 inches long and .5 inch wide. It's designed to work with its proprietary UniMount components on just about any instrument. Mounting options include using a 5- or 9-inch gooseneck connected to a universal instrument clamp, drum clamp, woodwind strap, violin strap and a magnetic base. The cardioid design has a stated frequency response of 40 Hz – 20 kHz and an impressive SPL rating of 159 dB. And, the in-line power module includes a switchable 80 Hz high-pass filter. (See *Road Test*, January 2017 *LSI*, for more.)

New from **Point Source Audio** is the CO2-8WL, a dual omni lavalier that houses two separate mics in a single body, providing a built-in backup. The cable terminates into two ends supporting separate wireless transmitters. The paired elements are factory matched in frequency and sensitivity so that when the backup is initiated, any difference in audio performance is nearly undetectable. IP57 waterproof, it has a stated SPL of 136 dB and a frequency response of 20 Hz – 20 kHz, and is available in beige, brown or black along with hard-wired terminations for Shure, Sennheiser and Lectrosonics wireless transmitters.



Point Source Audio CO2-8WL

The **Electro-Voice** ND Series is the latest iteration from the company that was the first (almost 30 years ago) to incorporate neodymium in microphone magnet structures. The new series is comprised of four instrument and four vocal models. I covered the flagship ND96 dynamic vocal mic in a Road Test (*April 2017 LSI*), and it's outfitted with a 2-position vocal presence emphasis switch that has a flat setting and a presence booster setting that reduces certain low-mid frequency areas and emphasizes key upper-midrange areas. Stated frequency response is 140