

LIVE SOUND

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



INSIDE

RISING TO THE CHALLENGE

Wireless coordination tames a tough RF environment at Lollapalooza in Chicago.

DETAILING A PROCESS FOR “PA OF THE DAY” SYSTEM TUNING

ADVENTURES WHILE RUNNING A SOUND COMPANY IN THE ‘90S

REAL WORLD GEAR: COLUMN LOUDSPEAKER PRINCIPLES & RECENT MODELS



color touch display, which allows for direct mix control, audio setup, routing, and metering. "It will take some time and training before all of the musicians are ready to do their own mixes onstage, so I'm doing the mixes in the KLANG processor now," he explains. "But they are all already totally into the immersive-audio aspect of the KLANG:konductor, which is connected to the console via MADI. They love it. Once they've experienced immersive sound, stereo is no longer enough. They have this space around them that gives them a tremendous amount of creative freedom. They tell me it's like they're not using in-ear monitors at all, but just hearing the music in the space around them."

Avra Estiatorio, New York City

This upscale restaurant recently opened a new multi-level venue offering indoor and outdoor dining for up to 500 that's located in the Time-Life Building across the street from Radio City Music Hall in Manhattan and outfitted with a sound system implemented by Anthem SSL Productions (Mt. Vernon, NY) that utilizes 1 SOUND loudspeakers and subwoofers. The goal of the sound design was equal coverage throughout the various spaces and intelligible background music for ambience. Cannon C6 coaxial loudspeakers deliver distributed audio throughout the restaurant, suspended with the company's companion C-Clamps and L-Brackets for adjustable positioning.

For areas requiring wider coverage, Tower LCC44 column loudspeakers deliver 120-degree horizontal dispersion. They also incorporate a rear-cancellation design that helps reduce reflections from the wall and glass behind it, enhancing sonic intelligibility. Low frequencies are also reinforced with a distributed approach utilizing SUB310 and FSUB45 subwoofers. Measuring 11.5 and 7.4 inches tall, respectively, they're concealed under banquettes throughout the restaurant.

Designed by The Rockwell Group to have a "chic Mediterranean courtyard" aesthetic with white backdrops and the use of water and greenery, all the loudspeakers were provided in white to blend into the interior.

Little Caesar European Tour

The hard rock band is currently in pre-production for an extensive European tour starting in early September, with the band's founder and frontman Ron Young as well as bassist Pharoah Barrett and drummer Tom Morris standardizing their personal monitors with ASI Audio x Sensaphonics 3DME Gen2 active ambient monitoring systems.

Young has been traveling with his own wireless in-ear system since the components first became commercially available decades ago, and he began his relationship with ASI Audio parent company Sensaphonics more than a decade ago. The 3DME system is designed to enable users also blend stage ambience with their personalized IEM mix while offering DSP control via the 3DME BT app that runs on any current Bluetooth-enabled



Suspended 1 SOUND Cannon C6 loudspeakers in white deliver coverage at the new Avra Estiatorio location in Manhattan.



Little Caesar is prepping for an extensive tour of Europe beginning in September where three band members will be equipped with ASI Audio 3DME Gen2 monitoring systems.

iOS or Android device. At the urging of Young, Barrett started using the ASI 3DME system.

"Ron turned me on to the 3DME system and I loved the fact that I could dial in my own mix including adding ambience. I just run vocals through it – his vocal and mine," Barrett says. "My vocals are slightly louder than his. And with the 3DME setup, I can add the ambience wherever I want it. For a smaller room, obviously, I wouldn't need quite as much ambient sound because it'll just be too much. But the ability to adjust the ambience really works great on large stages where I'll actually turn them up a little bit. With other systems I've tried, if I couldn't hear the ambient sounds on stage, I would basically pop out one of my in-ears, which honestly was not great, but it did the job.

"But now with the 3DME, it's totally cool. I have the ambience all around me whenever I want it. So, it's easier to deal with, and I don't have my left in-ear flopping around over my shoulder the whole show." **LSI**

1 SOUND Towers Series | 1-sound.com



The Towers Series LCC44 compact cardioid line array (column) loudspeaker from 1 SOUND utilizes proprietary Clarity Technology in design mating the coverage pattern of four 1.5-inch coaxially mounted compression drivers to the coverage of four mounted 4-inch mid/bass drivers.

The LCC44 also incorporates three rear-facing 4-inch drivers to achieve two goals. At low frequencies, they combine with the front-facing drivers to achieve extended low-frequency response stated as down to 105 Hz. At higher frequencies, the rear-facing drivers are fed a processed signal that provides cancellation of the low-mid frequencies that "wrap around" the enclosure, reducing unwanted sound emitted from the rear of the enclosure by a stated 20 dB. All drivers are proprietary designs.

An internal steel subframe fosters a robust cabinet, enabling hanging up to 12 LCC44s. The rigging hardware enables pole mount or flying applications with selectable angles of -3, 0 and +3 degrees while a new bracket design allows for single-person installations. No software is required.

TECHNOLOGY FOCUS: The LCC44 is in stock in white and black, with custom colors and fabrics available for special order. Available accessories include rigging system, fly bars (long & short), wall bracket, and stand mounts.

OF NOTE: Finland birch plywood (with phenolic glue), clear matte salt resistant coating and 316 stainless steel hardware are intended to ensure that the loudspeaker can operate in harsh outdoor environments.

KEY SPECIFICATIONS:

Design: Cardioid line array with Clarity Technology high frequency

Drivers, LF: 3 x rear-facing 4-in drivers

Drivers, MF: 4 x 4-in mid/bass drivers

Drivers, HF: 4 x 1.5-in coaxially mounted compression drivers

Frequency Range: 100 Hz – 18 kHz

Dispersion: 120 degrees horizontal, 5 degrees top and bottom

Power: 800 watts (front) + 400 watts (rear) continuous, 400 watts + 200 watts (AES)

Weight: 22 pounds

Size (h x w x d): 17.7 x 6.3 x 9.5 in

Mounting: Proprietary rigging elements and fly bars for 0, +3 and -3 degrees, plus 14 M6 points



Biamp

Desono ENT-FR
biamp.com

Type: Column (3-way)

Drivers, LF: 6 x 3.5-in cone drivers

Drivers, MF: 18 x 2.35-in drivers

Drivers, HF: 42 x 1-in (planar-coupled Compact Ribbon Emulators)

Frequency Range: 200 Hz – 20 kHz

Dispersion: 120 degrees horizontal, 12 degrees or 6 degrees vertical (user selectable)

Power: 600/1,500 watts (RMS/program)

Weight: 40 pounds

Size (h x w x d): 44.5 x 5.5 x 7.4 in

Mounting: Integrated T-Bar mounting bracket; optional pan-tilt bracket, fly kit

Companion: ENTASYS-FR LF column



Alcons Audio QR24 alconsaudio.com

Type: Ribbon column

Drivers, LF: 4 x 6.5-inch cone drivers

Drivers, HF: 2 x 12-inch ribbons

Frequency Range: 74 Hz – 20 kHz

Dispersion: Choice of 80 or 110 degrees horizontal, vertical is array length dependant

Power: Alcons Sentinel3 controller-amplifier recommended

Weight: 48 pounds

Size (h x w x d): 26 x 9.8 x 13.3 inches

Mounting: Fork/swivel bracket, stand-mount and flying hardware

Companion: QM24 LMF extension, QB363 LF extension



Yamaha VXL Series usa.yamaha.com

Model: VXL1-16

Type: Column array

Components, Full-Range: 16 x 1.5-in drivers

Frequency Range: 73 Hz – 20 kHz

Dispersion: 170 degrees horizontal, 30/20 degrees vertical (adjustable)

Power: 80 watts at 12 ohms

Weight: 8.8 pounds

Size (h x w x d): 33.3 x 2.1 x 4.1 in

Mounting: Wall-mount brackets provided, several other options available, including 2-axis adjustment

