Volume 37 No. 6

www.prosoundnetwork.com

June 2015

At the 18th Annual AudioMasters, Brian

on the hole sponsored by new Live Day tourney title sponsor JBL Professional. Presenting the prize is newly named U.S. sales manager, Tour & Rental

Holloway (left) takes possession of a pair of JBL LSR305 studio reference monitors for driving "Closest To Creek"



LEGEND AND LEGEND—Stevie Wonder (at keyboard) and John Legend, each sang a Bill Withers tune during the 2015 Rock and Roll Hall of Fame Induction Ceremony in Cleveland, then the pair teamed with Withers for "Lean On Me." The legends used Audio-Technica's 5000 Series UHF Wireless System with AEW-T5400a handheld microphones/transmitters

# AMP Act To Deliver Fair Pay For Producers, Engineers

BY STROTHER BULLINS

WASHINGTON, DC-Approximately two months ago, US Congressmen Joe Crowley (D-NY) and Tom Rooney (R-FL) introduced the Allocation for Music Producers Act, or AMP

Act (H.R. 1457) on Capitol Hill. The components of the bill largely came together through careful planning by the Producers & Engineers Wing's Steering Committee of The Recording Academy. Most nota-

(continued on page 26)



# Networking Headlines In Live Touring

BY STEVE HARVEY

NEW YORK, NY-Audio-over-IP has been a boon for live sound production. Flexible, scalable and reconfigurable, using easily deployable fiber, coax or category cable, digital audio networking can significantly streamline set-up

and installation-yet some challenges remain.

KC and the Sunshine Band switched to a Dantenetworked Yamaha system in 2014, following a brainstorming session involving FOH engineer David Dean (who is also a faculty member at Full Sail in Orlando, FL), monitor engineer Chad Griswold and production manager Rick Raymond. "Chad was talking about how you could put Shure ULX-D [wireless mic] signals on the Dante network

and it sounded great. I said, what if we got rid of all our sub-snakes and put Rio racks out on each riser?" recalls

The new Dante-networked rig, featuring Yamaha CL5 FOH and monitor consoles, includes Rio 1608-D I/O boxes on the horn section and percussion risers, both linked via Cat 5 to a third Rio1608 in the drum riser rack, which also houses a Cisco SG300-20 switch. That switch is connected to (continued on page 26)

Analog

Systems, Eric Elwell.

Drive

Time

Lives The Alto Professional Live 1604 16-Channel, 4-Bus Analog Mixer, reviewed by Strother Bullins (wno calls the desk an "attractive bargain"), is included with many more products in

this month's PAR in PSN pages.



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Ri8-D

Ro8-D











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# **IIIII**soundBUSINESS

### briefs

### Harman Pro's Global Alliance

NORTHRIDGE, CA-Harman Professional has created a new Global Alliance Program (harmanproalliance.com)—a worldwide network of dealers and users—to provide tour sounc customers with access to Harman live sound products as needed around the world.

In addition to product rentals and purchases, the Global Alliance Program allows customers to promote themselves among industry peers, while also building cross-re-tal opportunities and other partnerships between companies. The Global Alliance Program website also Features access to Harman Professional's Customer Center.

### Kling & Freitag Come To The Americas

MONTREAL, CANADA—German loudspeaker system manufacturer Kling
& Freitag has founded a new North
American division based in Montreal
to distribute its pro audio offerings
in Canada, the U.S. and Mexico. Kling
& Freitag Americas (kling-freitagamericas.com) was founded by Vaino
Gennaro, formerly of Sennheiser
Canada where he was in charge
of Kling & Freitag distribution, and
Susanne Seidel who has held management roles within a number of
technology-driven corporations,
including Sennheiser and DFA.

### Hal Leonard, METAlliance Collaborate

MONTCLAIR, NJ-The Music (METAlliance.org) was founded by award-winning audio engineers and producers Chuck Ainlay, Ed Cherney, Frank Filipetti, George Masser burg, Elliot Scheiner, Al Schmitt and the late Phil Ramone. Next month, Hal Leonard (halleonardbooks..com) will amassed by these A-list producers and engineers in on-line A/V courses as well as traditional print pro-audio products. The online courses will be branded under METAlliance Academy and available at Groove3.com. Books and other digital versions of the product will be released in fourth quarter

# MUSIC Group Acquires TC Group

NEW YORK, NY—The groups have been grouped: Pro audio conglomerate MUSIC Group has acquired TC Group, the Danish parent company to Tannoy, Lab.gruppen, Lake, TC Electronic, TC Helicon, White Acoustics and TC Applied Technologies.

Given that MUSIC Group is privately owned, the final acquisition cost will likely never be known. Nonetheless last summer, when TC Group was first quietly put on the market, the Danish financial newspaper Børsen estimated the pro audio manufacturer could command a price as high as 1 billion Krone, or roughly \$171 million US. Last September, TC Group CEO Anders Fauerskov told Pro Sound News, "...We do not intend this process to go on for a prolonged time period.... We expect that a sale will complete some time in the spring."

Building on the in-roads into the touring and install markets that MU-SIC Group forged with its acquisitions of Midas, Klark Teknik and Turbosound in recent years, Tannoy, Lab.

gruppen and Lake will now be a part of that continued expansion. Meanwhile, TC Electronic and TC Helicon can conceptually be slotted in next to MUSIC Group's Bugera guitar tube amplifier brand and Behringer prosumer division.

MUSIC Group founder and CEO Uli Behringer commented, "We will invest heavily in positioning TC Group's brands at the very pinnacle of the industry, as we have done with Midas, Klark Teknik and Turbosound, where we have invested over \$100 million in highly automated and integrated manufacturing facilities, quality control systems and engineering resources, including a new Center of Engineering Excellence in Manchester, UK. TC Group will now equally have full access to MUSIC Group's extensive resources and advanced automated system platforms in such areas as product development and lifecycle management, engineering, manufacturing, supply chain and finance."

Behringer characterized TC

Group as an "ideal match because of their world-class brands, impressive intellectual property, sterling reputation and first-class team of people. I am very proud to welcome the TC Group team into our family."

TC Group's Fauerskov responded, "We are very honored that during the acquisition process, some of the largest industry players were bidding for TC Group; however we have selected MUSIC Group as they represent the perfect fit in terms of strategic direction, overall synergies and company culture. Our team is thrilled to join MUSIC Group and open a new chapter for TC Group and its prestigious brands. With the incredibly talented people and massive resources of the MUSIC Group behind us, the team is excited to enter a new era of unprecedented innovation and growth."

MUSIC Group music-group.com

TC Group tcgroup.tc

### ШШ

# 18th Annual AudioMasters Aids Audio Pros

### **BY FRANK WELLS**

NASHVILLE, TN-Records were set at the JBL Professional AudioMasters Live and Sweetwater AudioMasters, held on consecutive days at the Harpeth Hills Municipal Golf Course on the outskirts of Nashvillenot records based on player skills, but rather on sponsorships, player counts and diversity of activities. 2015 marks the 18th year for the AudioMasters, with the second day, the AudioMasters Live, added in 2008. Sweetwater has been a perennial supporter of the AudioMas-

ters, taking the title sponsorship for nearly a decade. JBL Professional joined in as AudioMasters Live title sponsor this year, with a return in 2016 already promised.

The AudioMasters is a party, a golf tournament and a fundraiser—the primary funding source for the Nashville Engineer Relief Fund (NERF), a home-grown non-profit corporation that provides assistance to Nashville-area audio professionals in times of crisis. "Nashville has such an awesome group of audio professionals and this event shows everyone's commitment towards a common goal," said Mike



DUFFERS ASSEMBLED—The field of players gather at the start of each day of play—the JBL Professional AudioMasters Live on May 14, 2015 (top) and the Sweetwater AudioMasters on May 15 (bottom).



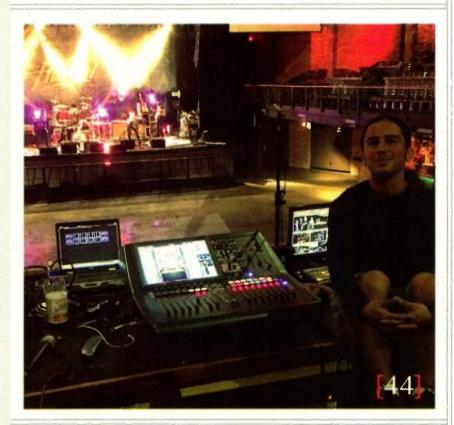
Porter, chair of the Nashville AES Section—the section gave birth to NERF and now annually produces the AudioMasters. "The list includes student volunteers, tournament sponsors, players, the crew at Harpeth Hills Golf Course and so many others that give their time to make this event happen, not once, but twice in two days. As a result of their investments of time, effort and financial support, NERF is able to provide a hand-up to individuals in need."

That list of participants and sponsors include audio manufacturers, studios, gear and supply vendors, professional organizations, live and studio engineers and publications like *Pro Sound News* and *Mix*. API, which provides culinary adventures at its sponsored hole each year (Mexican shrimp cocktails and Tortuga Margaritas this time) also donated an additional \$1,000 to NERF at the end of play. First-time sponsor Crown Seating gave away six chairs in a putting competition, and owner Steve Knight trumped the field with his team, Crown Seating, winning possession of the AudioMasters Cup for both days of play.

Nashville Engineer Relief Fund

theaudiomasters.org

# IN SOUND CONTENTS



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### SOUNDRECORDING ASCAP Offers Music-Makers

Information And Inspiration

The ASCAP "I Create Music" Expo is an annual three-day conference on the craft and business of songwriting, composing and producing.

### Putting The Funk In Boston's FunkBunker .....

Running FunkBunker Studio out of his basement and his own label, Sadawala Music Everything, Jimmy Fox recently found it necessary to upgrade from "two really good channels both in and out" to "an overall higher level of fidelity" by installing a Harrison 950mx analog console.

### SOUNDPOST/BROADCAST

RRF Makes The Most of Mentoring . 30 Providing an alternate road to a pro audio education, Recording Connection Audio Institute places students with facilities in their hometowns, where the facility owners or associated qualified professionals mentor them.

Fraunhofer Cingo Software Aimed At Portable Immersive Sound . . . . . . . 30 Fraunhofer recently revealed Cingo, a codec for delivering multichannel surround for mobile device sound reproduction via headphones, intended to virtualize channel-based surround and objectbased immersive formats.

### SOUNDTECHNOLOGY

Sound Innovations: Roland's O.R.C.H.A. Console Platform . . . . . . 34 To provide connectivity solutions across the range of digital audio networking protocols and a flexible architecture that is adaptable to a myriad of appli-

cations, Roland went back to the drawing board.

Pro Audio Review in PSN . 36, 37, 38, 39 ATC SCM50ASL Pro; Manley Force Four-Channel Microphone Preamplifier: Alto Professional Live 1604 16-Channel 4-Bus Analog Mixer

### SOUNDPRODUCTS

Studio Products					į,					40
SR Products		٠			,					41

### SOUNDREINFORCEMENT

Teragram Ballroom: Built From And For 

Angeles with the opening this month of the Teragram Ballroom in Westlake, following a \$2 million renovation of a 1913 cinema-turned-print shop.

Live Sound Showcase: Papa Roach . . 44 Papa Roach is in the middle of its latest world tour, with engineers Eddie Mapp and Mike Lowe in tow, carrying a lightweight audio system that's a heavyweight when it comes to providing both simplicity and consistency.

### **DEPARTMENTS**

Sound Business	
Classifieds	5
Sound People	5.

### CHARTS

Centerstage	50

### SPECIAL REPORT

Live Sound Networking. Networking is becoming ubiquitous in live sound, both for install and for portable/touring applications. What are the challenges

and practical implications as end users deploy systems? What clever solutions are they coming up with now that they have some experience under their belts?

### **COLUMNS**/REVIEWS

softwaretech . . . . . . . 24 Craig Anderton tracks the trends of Frankfurt Musikmesse.

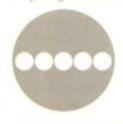
viewfromthetop. . Having had a hand in live sound since the age 14, Ken Berger, CEO of VUE Audiotechnik, is building an international pro audio manufacturing company that takes its inspiration as much from the tech world as it does pro audio.

music,etc. . . . . Jaques Sonyieux talks with Larry Campbell and Teresa Williams about recording their own album after careers backing Bob Dylan. Levon Helms, Little Feat and other legends.



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# 181 fromtheEDITOR

FRANK WELLS





FRANK WELLS, editor

CLIVE YOUNG, managing editor/web editor 212-378-0424, cyoung@nbmedia.com

818-909-9790, sharvey.prosound@gmail.com

336-703-9932, sbullins@nbmedia.com

TAVAGLIONE, RICH TOZZOLI contributors

LYNN FUSTON, reviews technical editor

TARA PRESTON, associate publisher

JANIS CROWLEY, west coast sales

212-378-0400 x517, zmajma@nbmedia.com

### art & production

NICOLE COBBAN, senior art director

associate art director

FRED VEGA, production manager 212-378-0445, fvega@nbmedia.com

### circulation

MEG ESTEVEZ, group director,

MICHELE FONVILLE, circulation coordinator

SUBSCRIPTIONS: PRO SOUND NEWS,

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(U.S.A. ONLY, 8:30 A.M. - 5 P.M. EST)

E-MAIL: newbay@computerfulfillment.com

ADAM GOLDSTEIN, executive vice president/

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danny.grubert@lakegroupmedia.com

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STEVE HARVEY, west coast editor

STROTHER BULLINS, reviews editor

CRAIG ANDERTON, JAQUES SONYIEUX, ROB

RUSS LONG, senior contributor

### advertising

917-331-8904, tpreston@nbmedia.com

415-505-1985, jcrowley@nbmedia.com

ZAHRA MAJMA, specialty sales

WALTER MAKARUCHA, JR.,

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LIST RENTAL: 914-925-2449,

New York, NY 10016 TEL: (212) 378-0400 FAX: (212) 378-0435

E-MAIL: pro@nbmedia.com



# A Postcard From Warsaw

Warsaw at first blush seems a typical European city, but the infrastructure is much vounger than even cities nearby within Poland. Warsaw suffered near universal devastation during World War II and has been rebuilt with care, retaining a charm and character that is a tribute to its past. The 136th Audio Engineering Society International Convention in Berlin in 2014 coincided with the beginning of a year-long celebration of the 25th anniversary of the fall of the Berlin Wall. This year, the 138th AES International Convention, held in War aw, also corresponded with an auspicious event-the 70th anniversary of VE day. Celebrations and remembrances were in abundance during the early May Convention. Both occasions were welcome experiences.

The official AES attendance numbers were also up from what was a strong 136th Convention in Berlin. The total registration was slated at 1,597 registrants-51 percent of those for the exhibits and free special events available with an Exhibits Plus badge. 49 percent were registered for the full technical program—an exhaustive cornucopia of papers, poster sessions, workshops, tutorials and special events. 24 percent of the total registration was made up of student and volunteer participants.

Having observed the attendee blend at European AES Conventions

the selection of Poland as a convention location did not seem to be a gamble in terms of attendance. Polish students are consistently a strong, if not the strongest, contingent among student attendees. Polish audio professionals participate in the Society at the highest levels and Poland is a stronghold of academic research in audio.

for more than a decade-and-a-half.

Poland represented a new market for many of the exhibitors at the 138th, evidenced by a stronger exhibition than at the 136th, and significantly stronger than in the several years immediately previous to the 136th. A full 30-plus exhibitors showed wares from more than 70 brands. Polish distributors rallied to fill the exhibition space to capacity, eager for the opportunity to reach the assembled attendees.

The Polish people were universally welcoming and gracious in my short experience. The currently strong dollar meant that money went a long way in the shops and restaurants. The counter to that is that US imports face a currency exchangeinduced price penalty. This can hurt solely US-based companies, but for large pro-audio companies, the issue is somewhat mitigated by their international nature. European-based manufacturers are in a generally better position, though that can vary by

country. Poland is not a rich country, but it is currently benefitting from EU investment, I'm told. While the decision to invest in

participating in the Convention did not come easy for many exhibitors, satisfaction at having made the decision was consistently evident. Several of those who opted-out of exhibiting came along to check out the event, and it was reported that regret was being expressed over not participating. Also in attendance were a number of European marketing managers for companies that did not participate. Near the Convention's end, a common query was heard from both exhibitors and attendees, the latter group including representatives of non-exhibiting manufacturers, asking, "When are you coming back?"

For a final summation of the Warsaw convention experience, and the evolution of AES conventions in Europe and the USA, I share postconvention comments from AES executive director Bob Moses: "It's not about trying to match what the larger commercial trade shows are doing in the retail sector; rather, it's about incubating innovation that fuels growth in our market, supporting a professional community that is struggling to keep up with the changes, and making sure audio quality is not forgotten in an age of disposable products."



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# **Sweetwater Readies GearFest '15**

FORT WAYNE, IN-Sweetwater has announced GearFest 15, the latest edition of the retailer's annual event, on Friday, June 12 and Saturday, June 13 at the Sweetwater campus in Fort Wayne, IN. GearFest is free and open to the public.

GearFest combines a gear expo, entertainment events, flea market, and musical demonstrations, with seminars and workshops, plus two days of deals on music instruments and pro audio gear.

Sweetwater founder and president Chuck Surack said, "GearFest has become an extraordinary, one-of-akind event in the music retail business. Where else can musicians and

music-lovers come to see, hear, enjoy not to mention buy what is usually reserved for music industry insiders at your typical trade show? We're also particularly proud to be able to produce this huge event in Fort Wayne, bringing people here from literally all across the country."

GearFest will host musicians per-



Billy Sheehan performs for an SRO crowd in Sweetwater's Performance Theatre during GearFest '14.

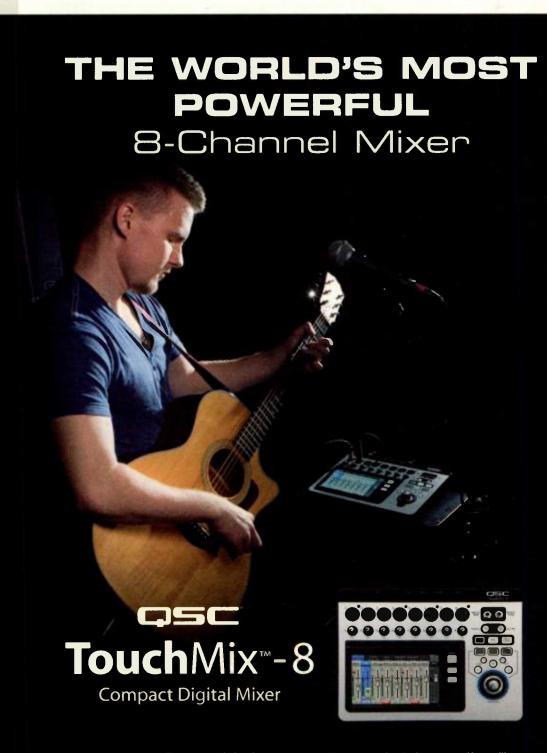
forming and in workshops continuously on five different stages. Live and studio music production professionals will present workshops and tutuorials on aspects of recording, mixing, mastering, studio design, acoustics and live sound. Presenters will include Sylvia Massey, Neal Cappellino, Craig Anderton, Terri Winston, Fab Dupont, Jason Spence, Jonathan Pines, Erin Barra, Brian Vibberts, Fab Dupont, Jason Spence, Dusty Wakeman, Mark Hornsby, Mitch Gallagher, Gavin Haverstick, Ben Lilly, Kent Morris, Michael PA. Ray Williams, Dave Brow and Mike Picotte. Featured musicians will include guitarists Jeff "Skunk" Baxter, Mike Stern, Mark Colcomb and Javier Reyes; bassists Nathan East and Glenn Hughes; drummer Shawn Pelton and keyboardist Steve Weingart. Sweetwater's Mitch Gallagher will host a panel discussion with three pioneers of synthesis and electronic instruments: Roger Linn, Tom Oberheim and Dave Smith.

One attraction will be Sweetwater's expanded and recently completed 15,000-square-foot music store. GearFest attendees will be able to visit one of the largest music instrument and audio gear stores in the Midwest, with the largest on-site inventory of any music store in the country.

Special GearFest features will include hourly giveaway drawings for free gear totaling more than \$70,000, from Gibson, Fender, Antelope, Focal, Roland, Yamaha, Moog, and others. More than 400 product lines, including all of the newest musical instruments, music technology, and audio equipment, will be on display in 19 tents and four semi-trailers. In addition, Sweetwater will offer sale pricing on many products.

GearFest '15 will also offer five Pre-GearFest AMPLIFIED Workshops, on Thursday, June 11, from 8:00 a.m. to 5:00 p.m. The workshops will include "The Craft of Songwriting," "Shaping the Sound of Worship," "Pursuing the Ultimate Guitar Sound," "The Art of Studio Mixing," and "Synth Tips and Tricks."

GearFest '15 sweetwater.com/gearfest



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# Marray Dial

# Meyer Picked for NFL Draft

CHICAGO, IL—The recent NFL Draft, held in Chicago, found teams looking to add new faces to their rosters, while the event's audio provider, VER (Video Equipment Rentals), brought along a familiar part of its own audio team—a Meyer Sound Lyon linear line array system, used to cover all 3,901 seats inside the Auditorium

Theatre

The Meyer Sound complement for the program also comprised JM-1P arrayable loudspeakers, MM-4XP loudspeakers with Intelligent-DC technology, 700-HP subwoofers and a Galileo loudspeaker management system with Galileo Callisto array processors. For the Red Car-

pet arrivals, VER provided a separate Meyer Sound system using UPQ-1P and UPJ-1P loudspeakers.

Warren Cruikshank and Wilson Tennermann of VER tackled project management and coordination for the nationwide live broadcast and deployment of the multi-

CHI-TOWN IS DRAFT TOWN

This year's NFL Draft used a Meyer Sound Lyon line array system.

multi-zoned audio system. Meyer Sound Laboratories, Inc. meyersound.com

# Recording Industry Golf Tourney Set

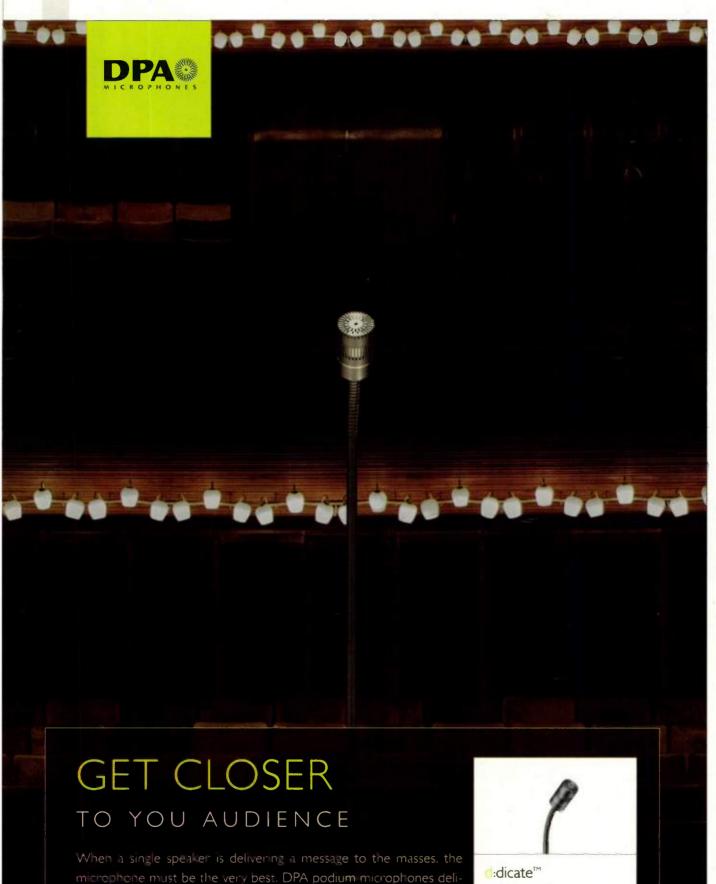
LOS ANGELES, CA—The 2015 Recording Industry Golf Tournament (RIGT) is set for Monday, June 29, 2015, at MountainGate Country Club. The event is again being organized by event productrons LLC and will support the music program at A Place Called Home, a community center and safe haven in South Central Los Angeles for youth 8-21 years old. Recording veterans Ed Cherney and Al Schmitt will return as Honorary Co-Chairs.

The day will include a \$1 million shoot-out opportunity, Hyundai and Harley Davidson hole-in-one giveaways, scotch tasting, great food, poker, a "19th hole" and more. The course, designed by golf course architect Ted Robinson, is centrally located, not far from downtown L.A. Dunn and the industry veteran Rose Mann-Cherney will be driving the "world-famous tequila cart."

The list of confirmed sponsors includes Audio-Technica, Clyne Media, Bob Hodas Acoustic Analysis, Guitar Center Professional, Hyundai, Icebox Water, JBL, NAMM, The Recording Studio Insurance Program, Sterling Audio, studioexpresso.com, Transaudiogroup, United Recording Studios and Westlake Recording Studios, with more being added by the week. Hyundai will once again be taking the winning foursome to their Hyundai National Invitational in Vegas.

Registration http://bit.ly/1Le6u4O

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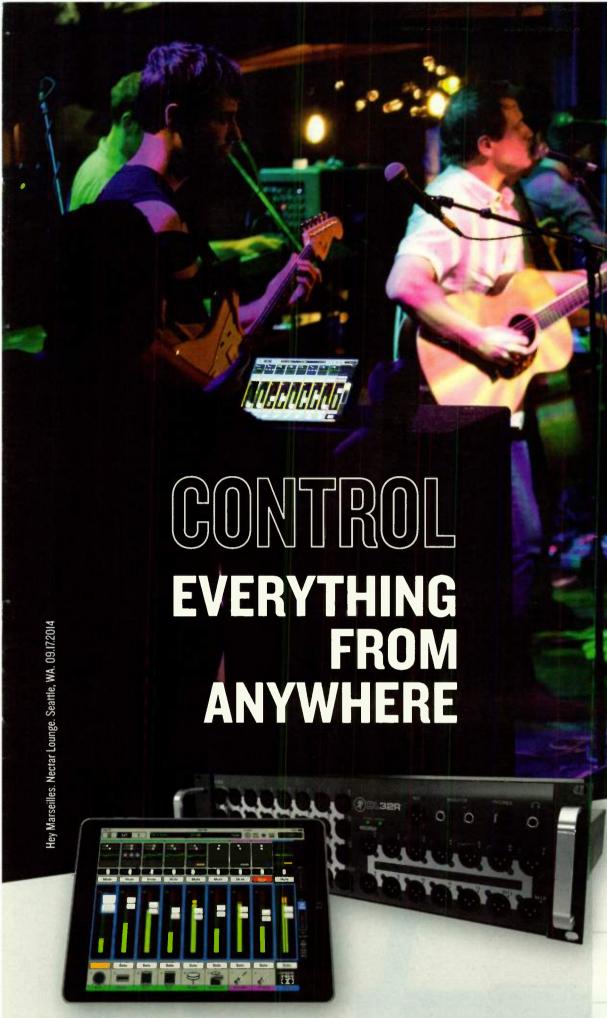
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# 16] Sound INTERNATIONALIIII

# E Keeping The Prodigy On Track

BERLIN, GERMANY-Nineties electro-rockers The Prodigy are still going strong overseas, and recently played a show inside Berlin's 12,000-capacity Velodrom, an indoor bike-racing track. Helping keep the sound upto-speed was sound provider Complete Audio Berlin, which fielded its Martin Audio MLA system. Mixing at front of house was the band's longtime sound engineer, Ion Burton.

The promoter for the Berlin show contracted Complete Audio, which brought out two main L/R hangs of 11 MLA elements, with two MLD Downfills. Side hangs consisted of two drops of eight MLA Compact. But The Prodigy are all about that

bass and the production company deployed 24 MLX enclosures—each housing two Hybrid-loaded 18-inch drivers, capable of more than 150 dB peak output at 1 m. The crew spread 18 along the stage apron; leaving gaps for other infill subs with a further three MLX

The Prodigy filled Berlin's Velodrom, an indoor bike-racing track, covering the crowd with a Martin Audio MLA System.

per side flown between the main PA and MLA Compact outfills.

Complete Audio MD, André Rauhut, noted that "Jon is quiet clear about what he wants and asked for a broadside sub-array-which in any case is what we would do in that kind of venue."

While Burton himself was mixing sound on a Midas XL3 analog desk, helping him to optimize the room acoustics using Martin Audio's Display 2 software were head system tech Nils Uhthoff assisted by Benny Franke and Martin Eckert, programming the 'hard avoid' features on surfaces with no audience to cancel unwanted reflections.

Martin Audio martin-audio.com

### **Touring With** Screen-Mixed Monitors

BRISTOL, UK-On a recent 28day UK tour with British singer songwriter, King Charles, monitor engineer Ross Rothero-Bourge mixed shows solely on a laptop and iPad connected to an Allen & Heath iLive system, comprised of an iDR-32 and iDR0 MixRacks, with an iLive-80 surface for FOH, too.

"The venues range from 200 to 2,000 capacity, so space is often a tight squeeze, but as I'm using a laptop or iPad instead of a surface, I can tuck myself away whilst being free to move close and keep eye contact with the band," said Rothero-Bourge. All members apart from the bass player were on in-ear monitors.

FOH engineer Jonathan Lewis commented, "We could have managed just with the iDR-32, but adding the iDR0 means we don't have to share PFL or scenes, and it gives us another 64 channels to cater for all the in-ear splits."

Allen & Heath allen-heath.com



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Integration: 3072 channels of audio can be provided via a MegaCOMMS router. MADI and Dante Network Bridges allow seamless third party integration.

### **CDC** six Introduction

CDC six is the latest in the digital console line up from Cadac, featuring 64 inputs and 48 configurable busses all accessed via a 23 5" 16:9 optically bonded touch screen.

The screen displays the innovative and widely acclaimed "high agility" user interface developed from the CDC eight, which provides a workflow that is fast and logical without the restrictions imposed by hardware-centric designs.

With a unique combination of an exceptional user interface, legendary Cadac mic-pre's, state-of-the art DSP and FPGA processing with incredibly low latency, the CDC six makes an exceptional proposition for those who do not want to be limited by either audio or creative compromises.

### **CDC six Features**

- > Features Cadac's unique "high agility" control surface
- > Highly acclaimed Cadac mic-preamps
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- > Waves integration
- > Multilingual user definable labelling
- > Optional MegaCOMMS Router gives up to 3072 channels in one network including multi console gain compensation



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### Recalling Recording *Born To Run*

Forty years ago, Bruce Springsteen and the E Street Band recorded some of their breakthrough Born To Run album at 914 Sound Studios in the small town of Blauvelt, NY, but ultimately only used one song on the final album: the propulsive title track. We all know what happened to Springsteen, but whatever became of 914 Sound Studios and its audio team?



Robert Brum, reporter for The Journal News, tracked down the recording facility founded in

1971 by Brooks Arthur and the late, legendary Phil Ramone. Over the years, the studio and its SSL console recorded 16-track hits for James Taylor, The Ramones, Dusty Springfield and Ashford & Simpson, among others, and won a Grammy for Janis Ian's 1975 album, Between the Lines. Eventually everyone involved with the studio moved on to other efforts—Arthur left for the West Coast to work with the likes of Neil Diamond, while Larry Alexander, assistant engineer, moved up to The Power Station studios in New York City; these days, he has his own studio at home.

And 914 Sound Studios itself? The "914" no longer applies—it came from the local area code, which changed years ago-and "Sound Studios" isn't accurate either: Today, the site where so much rock history was recorded is a

For the full blog post and video of 914 Sound Studios, visit prosoundnetwork.com/june2015.



### sweet tweet links

Pro Sound News brings you audio news every weekday on prosoundnetwork.com, Twitter (@prosoundnews) and Facebook (facebook.com/ProSoundNews)—but we also use

social media to share links to mainstream audio stories. Here's a few we recently shared; get their links at prosoundnetwork.com/ june2015.

- Family of late sound engineer sues NASA, claims building anechoic chambers for the space agency killed him.
- ▶ Preservationists rescue earliest entertainment audio—from 1890s "talking" dolls manufactured by Thomas Edison.
- ▶ Underground studios housed in Charleston, SC storage facility face



### WHAT AUDIO SHOULD FEED THE ASSISTIVE LISTENING SYSTEM?

Brian Davidson, production director at Dallas, TX-based Park Cities Baptist Church (weekly attendance of 2,500 congregants and 50-plus assistive listening users), shares his thoughts and experience as to how best



to make the most of assistive listening systems in Houses of Worship and other venues.

### PAR ADVICE: AN AFFORDABLE MIC FOR SINGER/SONGWRITERS

From time to time, PAR In PSN contributor Rob Tavaglione gets asked for advice from fellow engineers. Sure, there's questions about compressors or methodologies, but the most common is the good of "what mic should I buy?" A recent inquiry from Terry Moore of Abstract Studios in Houston, asking about affordable mic purchases for singer/songwriters, found Tavaglione



weighing the pros and cons of numerous mics; find out what he said—and what Moore ultimately bought.

> Find these blog posts at prosoundnetwork.com/june2015.

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### video vault

### Austin Signal Cuts to the Chase

It's no secret that record pressing plants are heavily backlogged these days. Aiming to help out bands and simply try something new, Texas-based Austin Signal recording studio has started offering lathe-cut vinyl servicesessentially hand-cutting records one-by-one. A cool video by studio owner Jon Neiss reveals the process by recording, mixing and literally cutting a single with indie pop act Holiday Mountain in one day. Catch the clip at prosoundnetwork.com/june2015.

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# [20] SoundRECORDINGIIII

# **=** ASCAP Offers Music-Makers Information And Inspiration

BY STEVE HARVEY

HOLLYWOOD, CA-The ASCAP "I Create Music" Expo, celebrating its tenth anniversary in Los Angeles, put nearly 200 panelists and performers in front of hordes of music business hopefuls at the end of April. The annual three-day conference on the craft and business of songwriting, composing and producing also featured exhibits and workshops by a slew of pro audio companies, including Ableton, Ilio, iZotope, Native Instruments, PMC and Prism Sound, as well as retailers Sam Ash and Vintage King Audio.

The Expo offered plenty of opportunities for attendees to learn about the music business from established artists, songwriters, composers, producers and others. But the information imparted may not always have been what the audience wanted to hear. During one of monitor loudspeaker manufacturer PMC's sessions, for example, producer and mixer Rob Chiarelli spoke from experience regarding the "unbelievably competitive" process of pitching music to a record label. "The reality of the business—and everyone will hate this-is that the louder record wins," he said. "I've never heard a quieter record win in an A&R meeting."

Earlier in the same session, pro-



Sharing knowledge at the ASCAP "I Create Music" Expo were (I-r): Maurice Patist, president of sales & marketing, PMC; speakers Michael James and Rob Chiarelli; and Vintage King sales representatives Jeffrey Ehrenberg and Chris Bolitho.

ducer and mixer Michael James offered his top production tip: Remove distractions-anything that does not support the song's key elements, which could be the vocal, a guitar figure or both—and focus on the song's emotional resonance, he advised. "Don't get hung up in the details, at least at first," said James, adding, "It's a game of inches when you get to the mixing phase."

A panel discussion, Women Behind the Music, celebrated the accomplishments of a number of artists, songwriters and label executives, but also addressed the subject of sexism. Faith Newman, who discovered and signed Nas in 1991, recalled how someone subsequently tried to take credit for the rapper's success. "This particular

person...was playing golf with the president of Sony; I don't do that. I'm not going to go to a strip club with you. There's this boys' club, and you are not a part of it," she said.

"I heard the word 'difficult' being thrown around," agreed Santigold, who has long had full control of her own career with respect to everything from costumes and choreography to her music. "People aren't used to a woman in this industry walking in and knowing what they want, and being willing to stand behind what they

Owner and composer Jez Colin and composer Erich Lee from music production company Hi-Finesse, along with Heather Kreamer, director (continued on page 28)

### notes

### Focusrite Takes M3 to the Bridge

# Michael Travels

### Toto Returns with IBL

### WAM Adds Audient

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> -Elliot Scheiner, Grammy Amard-Winning Recording & Missing Engine

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-Vance Powell
The White Stripes, Beck

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# [22] STUDIOshowcaseIIII

# Putting The Funk In Boston's FunkBunker

BY STROTHER BULLINS

BOSTON, MA Like many aspirational producer/ engineers, Jimmy Fox-a Boston-area musicianhas been recording a wide range of musical acts for years now, all out of his basement. Fox has long realized the importance of proper pro-grade

recording gear, following his favorite productions and what gear they have chosen.

"I'm a musician, a guitar player to start," explains Fox. "I've been doing albums for quite a long time. They've ranged from productions in my living room to ones with 'real' engineers, too. Over time, musicians pick up what to do to make

a recording. With the way the music industry has gone, it makes sense in the long run to have your own gear, and quality gear at that."

Running FunkBunker Studio out of his basement and his own label, Sadawala Music Everything, Fox recently found it necessary to upgrade from "two really good channels both in and out" to "an overall higher level of fidelity" by installing a Harrison 950mx analog console as his production centerpiece. "Because my musical interests are varied-I do everything from hip-hop to bluegrassbut I'm a guitar player first, [predominantly analog signal chains have always sounded better," Fox explains of his early dependence on a Burl Mothership, a 500-Series chassis with a reportedly "tape-like" AD/DA converter flavor, another pro-grade I/O investment. "I've also invested in good summing out of the box, and a couple of tube channels on inputs. And my future is Dante-based, so I'm looking forward to networking options, too. Now with the Harrison console, I'm meeting this higher level of fidelity in the middle with no compromises. The more space you allow for each sound, the better off you'll be."

Fox's Harrison 950mx is comprised of a 16-channel frame featuring eight mono channels and four stereo channels. With its four open slots, Fox's 950mx can ultimately provide 24 inputs and outputs, in any split mono/stereo channel configuration. "I can get those channels when I've grown to that point and I'm ready," explains Fox on the value of investing in an expandable, modular mixing console. "On the mono channels, that Harrison fully-sweepable EQ is there; it's the Bruce Swedien-preferred Harrison EQ he used for many years. And with the console's gain staging, there's a lot of soundshaping possibilities going on for each specific sound."

Fox considered all competing brands of analog mixers within his budget, both new and vintage. Ultimately, the Harrison 950mx won out because it offered the most value and "clout" to best serve his clients. "I think that the Harrison is an accepted first choice within all genres, and that's worldwide," offers Fox. "That's one aspect of my choosing it. It's also very flexible, and being a centerpiece of a room with so many options all

A 16-channel Harrison 950mx analog console resides in Jimmy Fox's personal production space for his label, Sadawała Music Everything.

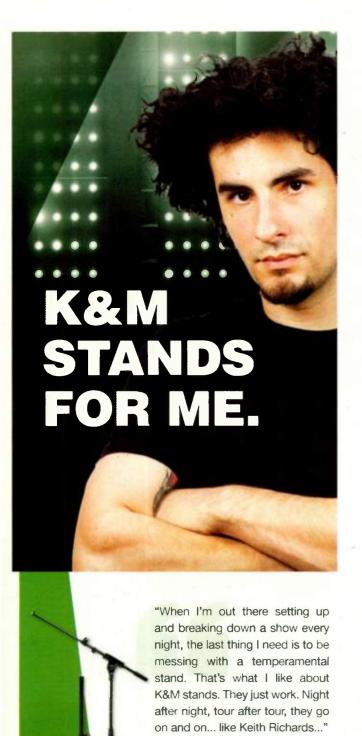
built in, it's best to get the most bang for your buck when you're making this kind of jump in investment. It's important to remember that you may not be able to hear something completely until you own it, so it's important to think about flexibility and real-deal, professional worldwide sound quality from the beginning. This is a board that would be welcomed anywhere around the world; it just so happens that it's in my basement."

Fox matched the Harrison 950mx with a monitoring system he felt would be as universally accepted, ultimately choosing English hand-built ProAc studio monitors. "They're neutral, clear and are known as being well accepted in a wide range of genres," tells Fox. He also insists that ProAc's low frequency response is, in general, more accurate than many studio monitors available today. His ProAc system has already provided significant improvements in what he delivers to mastering, too. "On my last bluegrass record-produced before the Harrison and recent upgrades like the ProAc system—my mastering engineer's first comment was, 'I added a lot more bass.' It was directly related to the basement environment where I work; you can't easily work your way around bass frequency issues [in acoustically compromised environments] without a significant investment in monitors."

Today, Fox is celebrating the overall "improved fidelity" that his 950mx-centered studio now provides. "With the console, suddenly my judgments are more accurate," he concludes. "I hear more of the nuance. Each crucial channel—like bass drum, for example—is in a channel of its own, ready for manipulation and more easily controlled. These improvements-such a big console and moni-

significant for a guy like me." **FunkBunker** Sadawala.com

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There's more > Jimmy Fox's independent label, Sadawala Music Everything's official website: http://sadawala.com.

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# SOFTWAREtechIIII

# Trending at Frankfurt Musikmesse

BY CRAIG ANDERTON

he biggest news in Frankfurt was the Messe hierarchy shakeup and subsequent schedule changes. Prolight + Sound dates have changed



to Tuesday through Friday, while Musikmesse will run from Thursday to Sunday with all Musikmesse days open to the public. The two events will more or less swap exhibit spaces.

On one level, this should

be comforting to PSN's readers: Prolight + Sound is growing. However, companies that exhibit in both shows will have to cover all six days-as well as pay the jacked-up local hotel rates. Next year's Messe will have the first major makeover in decades.

As to this year...

USB 3.0 and Thunderbolt keep moving forward. PreSonus's Studio 192 interface does USB 3.0 and incorporates Fat Channel processing, along with wireless control; Zoom got in the act with the UAC-8 (18 ins and 20 outs, including ADAT and S/PDIF I/O) and the smaller UAC-2. TASCAM's US-20x20 does 20 simultaneous ins and outs at 44.1/48 kHz, or 12 ins and outs at 176.4/192 kHz (there's also onboard DSP and word clock sync). Universal Audio updates to its Apollo audio interface line include Thunderbolt 2.0 and new preamps, while Focusrite's Clarett Thunderbolt made its European debut—and both were joined by Resident Audio's T4 bus-powered audio interface.

192 kHz is being touted as important. I guess 96 kHz is so 20th century, because part of the justification for USB 3.0 and Thunderbolt is the need to handle 192 kHz. I'll let the "Nyquist was my personal friend" folks battle it out about whether this sounds better and if so, why; but adopting 192 kHz is pretty disruptive to today's multitrack studio.

Revenge of the ADAT. Remember stand-alone digital recorders? Inexpensive solid-state storage has changed the game again. Joining JoeCo's various rack mount offerings, XI-Machines introduced a 1U, 194-track (at 48 kHz/24-bit) audio recorder called Recorder.1. It runs Nuendo Live software (there are DVI and HDMI outs for monitoring) and includes a choice of MADI or Dante interfacing; three different "RecPacks" allow various recording times up to 13 hours. Meanwhile, TASCAM's DA-6400 is being touted as a 64-track backup recorder for DAWs or live mixers. It's slated to offer several interface boards (MA-DI, Dante, DigiLink, AVB and AES/

Hardware/control surface divorces. The irreconcilable differences here seem to be cost and convenience, exacerbated by an affair with Bluetooth. From RCF to Mackie to PreSonus to...you name it, mixers and similar devices are turning into DSP-based engines adorned with I/O, while wireless connections or increasingly, Bluetooth handle control. In fact, Bluetooth was ubiquitousnot for audio, due to the latency issues, but for control from phones, tablets and the like.

Dante's internal. Dante certainly isn't new, but these days, just about everything seems to incorporate it. There's a Dante-enabled desk stand for mics, which connects di-(continued on page 28)



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### **AMP Act**

(continued from page 1)

bly, it marks the first time a bill has been designed to address the needs of studio professionals.

"This is the first time in American history that producers and engineers have been mentioned in law," says Daryl P. Friedman, the chief advocacy and industry relations officer for The Recording Academy. The Washington DC-based Friedman serves as a liaison for relevant music industry concerns to the US federal government; he's been a key mover of the act through the complexities of Washington legislation. "In some ways, it's a historic stamp of approval by Congress of their critical role in the creation process and how they deserve rights and laws just as songwriters do. Combine this with the transition to a digital marketplace and the emphasis on copyright, and Congress is starting to get a real handle on the implications to creators [of largely digitally distributed intellectual property] and the need to protect creators to keep the music coming."

There are two key components of the AMP Act, both of which involve the gracious participation of non-profit SoundExchange, the industry's sole entity that collects and distributes digital performance royalties for artists. "The first part is ensuring that an artist can direct the royalty to the producer or engineer for contract, but making sure that it is a right of the



A bevy of P&E Wing pros visit Congresswoman Nancy Pelosi (fourth from left) on Capitol Hill.

producer, with the producer getting paid directly from SoundExchange, which is putting the money directly into the pockets of studio professionals. If that weren't the case, it would be on the producer to try to collect from the artist directly after the artist has been paid-very difficult to do, not to mention uncomfortable for a lot of relationships. It's much better to have the money paid directly to producer and engineer. SoundExchange—or any other collective, for that matterwould have to pay producers directly. This is the main part of the AMP Act going forward."

The second component of the AMP Act assures some level of digital performance royalties prior to SoundExchange's existence, he said: "Anything prior to 1995—before the system was in place and where artists could direct SoundExchange to pay the producer—the producer wouldn't

get paid anything unless they went back to the artist to try to get a letter of direction. The second thing the AMP Act does is provide a mechanism for the producer to get some small piece of royalty for these older works, even if they can't get an answer from the artists themselves to authorize it. It provides a way for the producer to apply to SoundExchange to receive a portion of pre-1995 royalties. Combining these two things, you have a mechanism for producers getting paid more accurately, quickly and directly, and on top of that, you have the stamp of approval from Congress, that producers and engineers are an important part of the creation process and have their rights embedded in law.

"Thanks to the work of the Producers & Engineers Wing, Congress has been substantially educated on the role of producers and engineers," concludes Friedman. "For the last

10 years, we've tried to educate the members of Congress on the process, even bringing some high-profile producers to Washington as part of an educational day on Capitol Hill. We also had members of Congress who play instruments at a studio and had professional producers record the track. They know they're amateurs, but experiencing that studio session in progress, and hearing the resulting recording that was professionally produced, it really hit home how much of a role the producer plays in the creation process. The AMP Act is the result of all these efforts."

THERE'S MORE ▶ Get the Recording Academy's

prosoundnetwork.com/june2015.

AMP advocacy guide via

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Live Networking

(continued from page 1)

an identical switch at Griswold's position, where another Rio inputs the wireless microphone and instrument channels to the network. A 500-foot fiber snake connects to a third Cisco switch at FOH.

"The beautiful thing is, Chad can send his ear mixes to the outputs of all the riser Rio racks," says Dean. "Think of all the cabling we've saved—pretty much a full trunk of copper, stagebox and multi-pin subsnake system, not to mention the splitter box. These network-capable consoles make life just a dream."

There were some early challenges. "But the gain tracking didn't turn out to be as big a deal as I thought it was going to be," he says. "Chad sets the preamp, and does a pretty good job of getting signal-to-noise where we need it, then we both go into digital offset. At any point, I can take over the head amp and adjust it, if I need

to. So far we've had to do very little adjustment."

It's not unusual for a system to employ multiple transports. As Marc Waithe, production department audio supervisor at The Juilliard School at Lincoln Center for the Performing Arts in New York, explains, a multiplicity of protocols, and the way they are implemented, may be challenging not only in terms of interchange of data but also redundancy.

Waithe's system at the school's Peter Jay Sharp Theater includes a pair of DiGiCo SD10 consoles on an Optocore fiber loop. Signals to the Lake LM-44 processors are via AES digital, converting to analog to feed the amps and speakers. Two Focusrite RedNet 6 MADI/Dante bridges enable interconnection with Waithe's Windows 8.1 PC for redundant recording of 28 tracks at 96 kHz in Cakewalk Sonar using Audinate's Dante Virtual Soundcard (DVS) and allowing for virtual soundcheck. Twin Mac Minis are connected to the DiGiCo console using the Dante cards on the SD-Racks on either side of the stage for sound cue

triggering via Mac-based QLab show control software.

A RedNet 4 mic preamp box allows audio to feed Rational Acoustics Smaart software on a Mac Mini, and supports inputs from peripherals such as CD players. Fiber and an RME MADI-to-analog converter provide a path to the separate recording department's vintage analog consoles. "It's like a huge lab of future protocols, all working," says Waithe. "MADI, Optocore and Dante look like they're here to stay."

Optocore's fiber ring topology offers innate redundancy; the signal simply closes the loop in the opposite direction if there is a break at any point. Dante, on the other hand, utilizes separate primary and secondary paths for redundancy—but not all equipment supports dual ports. Since the Mac Mini has a single port, "I can only put them on one Dante system. But having separate switches for the stage left and right DiGiCo Dante cards allows for a certain level of redundancy," reports Waithe.

At Beltway Park Baptist Church's

new North Campus in Abilene, TX, a DiGiCo SD9 FOH console accesses a Dante network via a RedNet 6 MADI bridge. At the original South Campus, a similar RedNet system splits to an Avid Venue FOH console. Both systems can feed Pro Tools via a computer fitted with a Focusrite RedNet PCIe card, and machines equipped with Audinate's DVS. At the North Campus, the Dante network, which runs on a backbone that carries other audio transport protocols, DMX lighting command data and multiple streams of IP-based HD video, allows audio to be routed anywhere in the facility through the Red-Net mic preamps.

"Say there's a wedding reception and a band in the concourse," says creative director Jacob Moore, "I could utilize my wireless microphones from the worship center as if they were in the concourse, and route that audio through RedNet to speakers in the concourse." Various classrooms as well as a coffee shop that hosts singer-songwriter events are also on the Dante network.

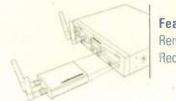


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(continued from page 20)

of music for marketing company Create Advertising, offered insights into the specialized world of music for movie trailers. "It's a struggle to get songs placed," Colin warned songwriters in the crowd.

Traditionally, a two-minute trailer

uses separate pieces of music for the beginning, middle and end. These days, said Colin, "There's a growing trend to find a single piece that gets massive and epic at the end."

Happily, Lee has become adept at composing for trailers, often using hybrid instrumentation such as virtual synths and sample libraries married with real performances. "You need quality instruments at your fingertips," said Lee. Time is always of

the essence, he added: "We have to turn things around in 24, 48 hours."

Panelists for The Music Supervisor's Mission explained the process and the particulars of their respective jobs, which included everything from big-budget to indie films as well as television. Moderator Christine Belden of the Nettwerk Music Group asked how they cope with tiny budgets. "Lots of begging," laughed Anton Monsted, who has worked

on many of Australian director Baz Luhrmann's films.

All agreed that it behooves the music supervisor to be involved as early as possible in a film's production, whenever possible. But television is another matter. Kasey Truman, who works on shows such as Scandal and Mad Men, reported that she typically has about two weeks lead-time on each episode.

Colleen Fitzpatrick of Nickelodeon commented, "Our turnaround is so fast." For the network's shows, she said, there is a run-through on Friday afternoon, rehearsal on Saturday, and the program shoots on Monday.

Rock Songwriters on the Move, moderated by mixer and producer Chris Lord-Alge, delved into the relatively recent trend for songwriters to branch out beyond their own bands and write for and with other artists. How do you know when a song you have worked on is being released on an album, asked Lord-Alge. "Up until that day [of release], you don't know," said John Feldmann of the band Goldfinger.

Sum 41's Deryk Whibley noted that he is indebted to Feldmann: "You taught me Pro Tools backstage" on the 2001 tour that their bands did together. Whibley also revealed he is unable to write on the road. Feldmann, in contrast, wrote Goldfinger's entire Hang-Ups album on the bus, with some of the 4-track recordings making it onto the final release.

American Society of Composers, Authors and Publishers ascap.org

rectly to Ethernet with an RJ-45 connector and works with XLR mics. And, of course, Dante plays well with others, as evidenced by

Yamaha's RSio64-D I/O audio

interface. Providing up to 64 ins

and 64 outs, it allows a variety of I/O formats to connect to a

Dante network. And Mackie's

DL Dante card for the iPad-con-

trolled DL32R provides 32x32 channels of network audio I/O.

control and USB 3.0/Thunder-

bolt keep growing. Will Messe's gamble for next year achieve the

same results? Check back next

Craig Anderton has given seminars on

technology and the arts in 38 states, 10 countries, and three languages as

well as mastered hundreds of tracks. Check out his latest music at youtube.

com/thecraiganderton.

So Dante, 192 kHz, wireless

Anderton (continued from page 24)

### In 1973, at Watkins Glen, live sound went just a bit digital.





### "In the beginning, audio was analog. And, almost anything was possible."

Everything but delay. And so the Digital Delay Line (DDL) was born. DDLs were simple and limited to just delay. Today, forty one years after a stack of Eventide DDLs delayed the audio feeds to the speaker towers at Watkins Glen, Eventide introduces the DDL 500. Designed to be 'as analog as possible', the DDL 500 will make your 500 series lunch box "just a bit digital."

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# soundPOST | BROADCASTIIII

# RRF Makes the Most of Mentoring

### BY STEVE HARVEY

LOS ANGELES, CA-Founded in 1983 by former radio DJ Jimi Petulla, RRF, Inc. has long offered an alternate path to the industry-specific educational institutions for anybody wishing to pursue a career in recording, radio or film. Rather than subjecting stu-

dents to loan repayments for tuition fees in the tens of thousands of dollars and the stress-for many-of relocating to another city, the Recording Connection Audio Institute (and sister organizations the Radio Connection and Film Connection) instead places them with facilities in their hometowns, where the facility owners or associated qualified professionals mentor them.

"We're not big believers in advising people to, 'leave

your job, get a U-Haul and get out here to L.A.,' where there are already very few jobs," says Brian Kraft, head of business development and COO at RRF. "It's better to stay out of debt and out of stress, and focus on what's important." The tuition fee, including all materials, a year of job placement assistance and a copy of Avid's Pro Tools, is less than \$10,000, according to the web site.

There are mentors in all 50 states and in numerous cities. "Our mentors are everyone from a guy in Iowa that

owns a small recording studio, radio station or film production company, all the way up to people like Ross Hogarth, Al Schmitt, Ryan Hewitt, Tim Palmer and others," he says.

Mentors receive compensation for taking on a student, says Petulla.



RRF Founder Jimi Petulla (left) with head of business development and COO, Brian Kraft.

on an apprentice that actually performs real work in the studio under their strict guidance as a mentor and

But before being placed, every potential student must go through a multi-stage screening process handled from RRF's headquarters near downtown Los Angeles. According to Kraft, 3,500 would-be students apply online every month from the U.S., Canada, Australia and the U.K. "They fill out a form and then they are called back by our admissions

department. These admissions agents are all audio engineers, filmmakers or broadcasters. They're vetting to find the best-those who display commitment and clear potential."

Those making it past the first hurdle are next called by the heads of admissions in the second step of screening. "They go deeper," says Kraft,

asking questions such as "What are your expectations of the business? Do you realize it's going to take 10, 15, 20 years with little or no pay before you maybe are successful?" If it turns out that there is no shaking the student's determination and it's simply in their blood, he continues, "We send them to the mentor to have an in-person, one-on-one interview at the studio."

The mentor is the ultimate gatekeeper. "If the

mentor says no, we ask why. If the mentor says yes, we enroll the student, but only if the student still really, really wants to do this. If the mentor says no because he or she is not a good fit, or for some reason there are bad vibes, we give the student a second chance with another mentor," he says.

Where appropriate, parents are encouraged to accompany the student for the interview with the mentor: "For parents, what better person

(continued on page 32)

# "They are not being paid to take on an intern; they are being paid to take

### briefs

### Sennheiser Shines at Junos

HAMILTON, ON, CANADA—Canada's Juno Awards ceremony, proadcast on CTV Television Network, featured various Sennheiser (sennheiser.com) mic products, including an SKM 2000 handheld transmitter and MMD 935 capsule for host Jacob Hoggard, SKM 5200 with an MD 5235 capsule for The Weeknd's singer, Abel Tesfa and MD 431-II dynamics for Arkells' vocals and 16-piece orchestra.

### High Noon Lightens Up with Lectro

ity TV content creator High Noon Cake Boss, HGTV's Fixer Upper and the Travel Channel's Trip Flip, is using more than 10 Lectrosonics (lectrosonics.com) SRa5P receivers, which enable two audio channels to be fed into its cameras while avoiding weighing down its operators, and also uses UCR401, UCR100, 200 and 411a

### DPA Records Blue Line in

ALLEROED, DENMARK-Production deployed for exterior scenes.

### LaRocca Leans on MU

Sparks and The Mechanic to TV shows like Orce Upon a Time and Beauty and the Beast, music recordhas used his Mastering version of the Variable MU stereo limiter cor

# Fraunhofer Cingo Software Aimed At Portable Immersive Sound

### BY STEVE HARVEY

ERLANGEN, GERMANY—At the CES Show in January 2015, research institution and codec developer. Fraunhofer IIS, rolled out its latest version of Cingo, a software solution addressing several of the challenges associated with mobile device sound reproduction. Cingo is designed to not only improve the audio quality of these devices, but it can also virtualize channel-based surround and object-based immersive formats for reproduction on headphones and built-in speakers.

Cingo now supports height channels, says Amir Iljazovic, product manager, professional encoding and mobile platform applications, at Fraunhofer IIS. "Sources can not only be placed in the horizontal plane but also elevated, which allows for more advanced loudspeaker configurations like 9.1 or 11.1, or higher. But it also allows placing of audio objects anywhere in the virtual space around the listener."

When DVD-Audio and SACD were slugging it out 15 years ago to see which would be the dominant disc-based 5.1-channel audio playback format, large-scale adoption by automakers was seen as critical to their ultimate success. With the number of mobile phones more or less equal to the number of people in the world, handheld devices now represent a more ubiquitous platform that could help drive the wider adoption

of next-generation audio formats.

One of the advantages of the new object-based immersive audio formats is the ability to faithfully reproduce content on any speaker configuration, not just the one on which it was created. With mobile devices and headphones now so commonplace, there is potentially a very large global market for the delivery of immersive content virtualized for reproduction over two channels.

Cingo has applications beyond mobile phones, too. "It's also useful with head-tracking, if you have a device like a virtual reality head-mounted display," says Iljazovic.

There is a relative paucity of immersive content available for play-(continued on page 32)

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### Recording Connection

to talk to about a career in audio, broadcasting or filmmaking than a person who's actually doing it for a living, before you spend any money supporting your child's chosen path?"

"Once they become enrolled students, we have a dedicated student services department that makes sure we deliver on our promise. We also have tutors that will take the students through any program they want, or any additional services in terms of education," he continues. Recording Connection offers tuition (in the education sense, not the payment sense) on Ableton, Logic, Native Instruments, Pro Tools, Reason and other

Each course, typically six months long, requires a minimum of two days per week apprenticing at the facility. "We encourage them to go more; that's between them and their mentor," Kraft elaborates. We tell the students that you're auditioning for a job every day you show up. Get there early, have your homework done, have a notebook with all your questions, and show this guy that you will not let him down-which is what we all want to see as employers."

"I know the value of just getting them in the door," says Petulla. "Our biggest frustration is that a lot of times you battle with the unmotivated candidate but we have a refund policy."

It's not unusual for a student to have an opportunity to work on a project several months into the course. "Therein lies the entry point to the beginning of their career," says Kraft. "We've gotten 900 people jobs in the last 21 months. Not because we're geniuses, but because we have done the hard work to match up these individuals with the right mentors and get them in the room with the guy who has work."

There may be as many as 5,000 apprentices at any one time, all across the country, says Kraft. Upon finishing their apprenticeship, the best of the best may be asked to join a higher-level program known as Masters Mentor. "We ask our mentors, find us your stars. Who are the 500 who are kick-ass? We take those guys and introduce them to Al Schmitt, Dave Pensado, Nick Raskulinecz, F. Reid Shippen, Ross Hogarth," as well as companies such as Native Instruments, Waves, Focusrite and SSL.

"We're the only school that's connecting students to the people they need to be connected to," says Kraft. "Not as interns, but as apprentices, where they are taking a structured course curriculum under the supervision of hard-working people who are all in the business."

back on mobile devices currently, although that is likely to change soon enough. "Where we might immediately make use of audio objects is within games," he suggests. "In the

game world, we've had objects for

quite a while now, particularly sounds

that are triggered during gameplay

and positioned in the virtual space

around the listener. We can have a flexible number of objects that can

be rendered or processed with Cingo

THERE'S MORE > Find a

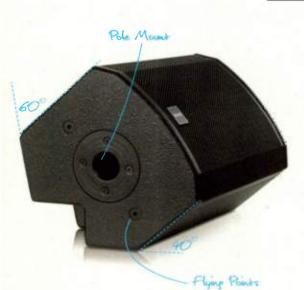
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Fraunhofer

(continued from page 30)



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monitor angle





monitor angle

### longer version of this story and listen to a Cingo sample at prosoundnetwork.com/june2015

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"The Radial J48 is one piece of kit that can be relied upon in my worldwide touring. It is not only reliable but delivers what it needs to do... and that is good audio.

~ Paul 'Pab' Boothroyd (Paul McCartney, AC/DC, Paul Simon, Faith Hill, Pink)

"With the PZ-DI, we were able to integrate multiple piezoelectric devices seamlessly and with glorious results. Radial has once again proven they are a cut above the rest.'

~ Brad Madix (Rush, Marilyn Manson, Shakira,

"Radial direct boxes make everything I put through them warm, punchy and clear. They are great DI's"

~ Chick Corea (Electrik Band, Miles Davis, Return to Forever)

"The JDX gave me all the character and distortion without the worries of bleed and feedback. I was so surprised how close it sounded to the SM57, I had to double check the patch."

~ Jim Warren (Radiohead, Arcade Fire, Nine Inch Nails)

"We struggled for years on Zombie to get clean audio from the video servers... the JPC solved it! I finally get clean CD quality and dont cringe at the nois levels. The JPC is great!' ~ Joel Lonky (Rob Zombie, Goo Goo Dolls, P. Diddy, Billy Idol)

"Radial DI's provide the flexibility I need to perfectly match any situation I come across. I specify Radial exclusively for every tour I mix.'

~ Dave Natale (Rolling Stones, Joe Cocker Lionel Richie, Fleetwood Mac)

'The Radial JDX is almost too good to be true.The artists hear the sound they are playing and I'm not fighting mic coloration any more. I just plug it in & turn

~ Jon Garber (Rascal Flatts, Brad Paisley, The Band Perry, Chely Wright)

"On Santana tour, we have Radial J48's on guitars and JDI's on keyboards. Since January this year we have traveled all over and the Radial DI's have worked great!" ~ Rob Mailman (FOH engineer - Santana)

"Once you hear the Radial DI and the others, you'll never go back. After over 300 U2 shows around the world, they have worked flawlessly.

~ Terry Lawless (Keys and programmer - U2)

# "I specify Radial exclusively for every tour I mix."

~ Dave Natale

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# [34] SoundTECHNOLOGYIII

# innovations: the manufacturer's view

# A Platform For Growth

### O.H.R.C.A.: ROLAND'S NEW CONSOLE PLATFORM

### BY DOUG SCHOUTEN

Roland's Professional A/V division recently introduced a new digital audio mixing platform called O.H.R.C.A. to address the growing wish lists of audio professionals who were requesting high-quality sound, flexible architecture and an open audio network that integrates with most audioover-Ethernet protocols. O.H.R.C.A. stands for "Open, High-Resolution, Configurable Architecture." The Roland M-5000 Live Mixing Console is our first audio product that employs this new technology, with future products in the works. The M-5000 serves users' needs in a variety of applications by delivering freely definable audio paths, a flexible user interface and workflows, expandable future-proof protocols, and multiformat I/O choices, all delivered at 96 kHz sound quality.

Sound engineers are purists, wanting to maintain an original and clean sound. Some sound engineers have said that digital consoles and digital processing take away from the warmth of the original sound. The

digital circuitry of O.H.R.C.A. was designed with sound quality in mind and a meticulous attention to processing quality while maintaining smooth fidelity with the warmth of the original sound.. The effects section also adopts our own innovative 32-bit floating-point processing optimized for computational accuracy, enhancing both dynamic range and precision while the summing circuit is 72-bit. The EQs use state-variable filters that have a proven track record in analog circuitry as well as high-precision computing power that generates zero noise, even when parameters are changed. The dynamics section uses a high-precision exponential circuit to accomplish sophisticated level control. We believe all of this investment in engineering will satisfy even the

### CONFIGURABLE ARCHITECTURE

One of the engineering goals of the O.H.R.C.A. platform was to provide users with the ability to create a console architecture that suits their mixing needs. To achieve this, a newly designed audio processor was designed and is optimized by using field programmable gate arrays (FPGAs) that make high-speed computation for the mixing section possible. The 128 I/Os can be assigned for extra auxes for monitoring, or for 5.1 and mix-minus for broadcast. Additional applications include FOH and the-

### **OPEN PLATFORM**

Today's world of live audio transport over Ethernet employs many distinct protocols. In 2005, we introduced a protocol called REAC (Roland Ethernet Audio Communication), a point-to-point, two-way, very-low-latency, high-quality digital audio transport for live-sound use and commercial applications. We saw a need to bridge the REAC protocol with other transport protocols so we developed an expansion card system that allows it to work with other popular audio transport protocols.

The Roland M-5000 offers two REAC ports and one split port builtin, plus two expansion card slots to support a range of protocols such as Dante, MADI, SDI and Waves



Roland's Doug Shouten with the O.H.R.C.A. fueled M-5000 live sound console.

SoundGrid, as well as additional REAC ports. The XI-Expansion Interface Cards also support SDI, DVI and SFP digital audio and video transport protocols. Roland is one of the first companies to support digital audio-over-video transport protocols to de-embed audio coming from SDI or DVI. When used with the M-5000 console, the XI-SDI, XI-DVI and XI-SFP expansion interface cards add direct audio I/O capabilities for video workflows.

### **FLEXIBLE WORKFLOW**

In developing the O.H.R.C.A. platform and the M-5000, Roland's R&D department spoke with numerous live sound engineers and found that the number-one request was a fast workflow. O.H.R.C.A.'s 12-inch color touch screen, 28 channel faders in four groups, multifunction knobs and buttons, "touch and turn" functions, and user-assignable section make mixing fast and accurate. The channel and user-assignment displays utilize bright, full-color organic technology for high visibility in any lighting situation. A user-assignable section consisting of four encoders and eight buttons in three banks provides quick access to key functions.

The O.H.R.C.A. platform represents a foundation for users and Roland to build upon in the future.

Doug Schouten is a pro audio sales engi-

Roland Professional A/V proav.roland.com

THERE'S MORE > A longer version prosoundnetwork.com/june2015





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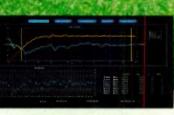
- The AMC is compatible with all speaker brands
- ▶ AMC integrates Blue Sky's Speaker Room Optimization auto-alignment system (SRO)
- 8-channel DSP- based system with balanced analog and digital I/O. Any input can be routed to any output and multiple inputs can be mixed and routed to any outputs.
- ▶ Each channel features 1/3 octave EQ, 8 bands of parametric EQ and filters, and variable delay for time alignment
- ▶ 7.1 bass management and an externally- accessible mute input.
- 8 system presets (EQ curves, etc.), mute and solo switches











AMC Control Screen

Speaker Room Measurement

Speaker Room Optimization w/EQ

### AMC: Audio Management Controller

The AMC is a Universal DSP Processing Tool that allows a user or facility to accurately measure speaker performance and autocorrect to a desired frequency response based on a selected target curve.

The Blue Sky AMC provides precise, centralized control over levels, balance, mute, selection of house curves, and various other system configuration settings.

Fitted with a big weighted "old-school" rotary control for primary adjustments as well as additional hardware controls via lighted buttons, and a large display screen, the AMC is an 8-channel DSP-based system and supports configurations of 7.1 or 7.1.4 when linked with a second AMC.

www.abluesky.com Exclusive US distribution: Group One Ltd. Tel: 631 396 0195

# The Blue Sky Speaker-Room Optimization (SRO) System

SRO integrates measurement and equalization in a seamless process within the Speaker Manager software. When used in conjunction with Blue Sky's AMC, multiple curves can be saved and instantly recalled. Unlike some competitive systems, SRO can measure and correct for room issues across the full frequency spectrum, not just the low end. SRO substantially enhances monitoring accuracy in general, and is especially useful for mixers working in real-world, "acoustically-challenged", environments.



# Gearing Up With "The Trio of Oz"

BY RICH TOZZOLI

Recently I've been working on a recording project that was just so refreshing, I wanted to write about it. Sometimes, especially after being in this crazy biz for a while, each of us can get stale. Sometimes we forget

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that music is supposed to be creative, inspiring and fun, and that recording projects can often push us into uncomfortable places where we hopefully come out better off than we were going in. And when the mutual parties involved trust each other enough, the technology involved often disappears, allowing the focus to be solely on making great music.

The project I'm referring to is the Trio Of Oz featuring Omar Hakim (Sting, Weather Report, Daft Punk), Rachel Z (Peter Gabriel, Wayne Shorter, Stanley Clarke) and newcomer to their project, bassist Jonathan Toscano, who studied with jazz great Ron Carter. Recorded at Omar



### BY RICH TOZZOLI

Rich Tozzoli is a producer, mixer, engineer and musician/composer for programming such as A&E's Duck Dy-

nasty, History Channel's Pawn Stars, Harpo Studios' 21-Day Meditation Challenge and more. and Rachel's comfortable, well-

equipped home studio, it includes both original tracks and several unusual cover tunes. It came about naturally-after enough rehearsals, they thought it was time to get some tracks laid down, which is one of the many benefits of having one's own recording setup. Omar knows his way around the

studio as well as anyone and has a 24-fader Digidesign D-Command ES console with 32 channels of Pro Tools HDX in a separate control room. His outboard rack offers a nice variety of old and new, with preamps from Focusrite, API, ADL/PreSonus, Digidesign, Mindprint, Amek/Neve, Trident and Audient. In the box, he's running Pro Tools 11 with a variety of plugins from Waves, Sonnox, McDSP and SoundToys. But his latest addition to the control room ATC SCM50ASL Pro studio monitors-are making tracking and mixing a dream for me. When he first played them for me, I just sat there with my hands up and said, "I want these!" But more on that later.

The live room is a busy place. Omar's drums are set in the back against the rear wall. The kit is welloutfitted with beyerdynamic mics: TG D70d on kick, TG d57c and TG 58c over five toms, M 201 TG on primary snare top, mC 950 on hi-hat, and TG 50d on snare bottom and secondary snare top. A pair of Milab VM-44 condensers act as overheads. There's a Neumann TLM-103 on center overhead and one several feet back in the room.

Rachel Z's setup is facing Omar's on the opposite side of the room: keyboard central, as I call it, with a Roland V-Piano, Roland A-800 Pro Controller and a Kurzweil PC3K7. She has two separate laptops-one running Ableton Live and the other with software such as Spectrasonics Omni-



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Omar Hakim and Rachel Z's gear-packed, home-based recording studio

sphere and Synthogy's Ivory. There's also a custom Purple Sparkle Moog Voyager synth with stereo outputs. All the keyboard outputs are independently fed into a PreSonus 16.0.2 StudioLive mixer and an eight-channel Behringer Ultra Pro DI, routed to various preamps for Pro Tools connectivity. We also took the MIDI Out from the Roland V-Piano so that the notes were tracked, allowing for further editing and overdubs.

Jon ran his electric 5-string bass into a Behringer BD121 V-Tone Bass Driver DI into the Focusrite ISA preamp. The acoustic bass would be tracked at a time later.

Headphone feeds, which we all know are critically important when recording live, were derived using the Behringer Powerplay 16 personal headphone mixing system. Pro Tools outputs fed the Behringer and then Audio-Technica and Sony headphones. In the headphones, I also set up a few Sonnox reverbs for snare and piano and also McDSP's Revolver for a variety of convolution sounds on drums.

The first day's setup involved not only wiring all the mics into their respective preamps, but also doing some trial and error mic tests. To be good at one's craft, always be open to new sounds and willing to try new things. We took the time to put up a variety of different mics on the toms, overheads and kick, and came away mutually agreeing the Sennheisers had the best overall sound—for all drums. All mics would be recorded clean, but the two Neumanns used on overhead center and room would be processed on a per track basis with 1176 compression and Sonnox EQ.

That brings me to the speakers. Omar had been turned on to ATCs when over in London playing with Kate Bush last year. Before I knew it, a pair of SCM50 monitors were in the control room. They make tracking and mixing a pleasure; they are open, true and easy on the ears. We used them like a production tool, making critical decisions on drum tuning, the use of different snares, reverbs and keyboard sounds by tracking test

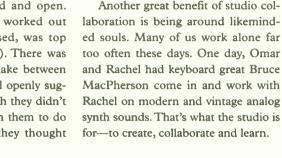
"The idea for the sessions was to first rehearse the trio to work out basic arrangement concepts and get comfortable with the new tunes,"

noted Hakim. "Production-wise, I like to do multiple takes of songs just to see how the improvisational aspect of what we do will evolve over several days of recording. The plan for Oz this time is to do our best to blend the 'jazz language' with contemporary grooves and sounds."

I mentioned above that the sessions were refreshing, and they truly were. Way too often, sessions can be long, arduous and grinding; truthfully, that is why I choose to largely compose TV music instead of recording artists these days. But these sessions have been different: fun, fluid and open. The music, which they worked out as the tracking progressed, was top notch (that always helps). There was a comfortable give-and-take between the band and me. I could openly suggest ideas to them (though they didn't need many). I could push them to do more takes even when they thought

they had it and not feel uncomfortable. Sometimes it's just good to have a fresh ear hear things.

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## Manley Force Mic Preamplifier

Not unlike its Core, Manley's four-channel Force relies on the company's usual Class A topologies, tubes and transformers for tone. Design highlights include an all-new power supply, 300 VDC rails, dual-triode 12AX7 tubes, the exact same DI utilized in the Core and Manley custom-wound transformers.

Upon powering up, the Force goes into 30 seconds of slow warm-up. The HPF, phantom power and gain range switches are relay-switched and nicely illuminated.

As a fond user of the Manley TNT mic amp, I can say that the Force has its own signature sound rather similar to my TNT's tube side, yet is actually

closer to the Core in overall tone. Its tube and transformers do not impart so much color or grit as they do smoothness, grace and euphony.

For best results, I found that using the low-gain range cranked up sounded cleaner and most desirable; if users need more than 50 dB of gain, there are internal jumpers to reach BY ROB TAVAGLIONE

Rob Tavaglione operates Charlotte's
Catalyst Recording and has been a
long-time Contributor to Pro Audio
Review. twitter.com/robtavaglione

60 dB. I ran the Force wide-open at +50 dB for some mandolin and guitar overdubs and it sounded nice.

Long story short, results were very similar with all the sources I amped via the Force: always clean, pretty and never the slightest bit veiled, slow or murky.

Compared to the Core, the DI sounds identical but the Core has an overall more plump, velvety and "cushion-y" sound that I believe to be color from the optical compressor.

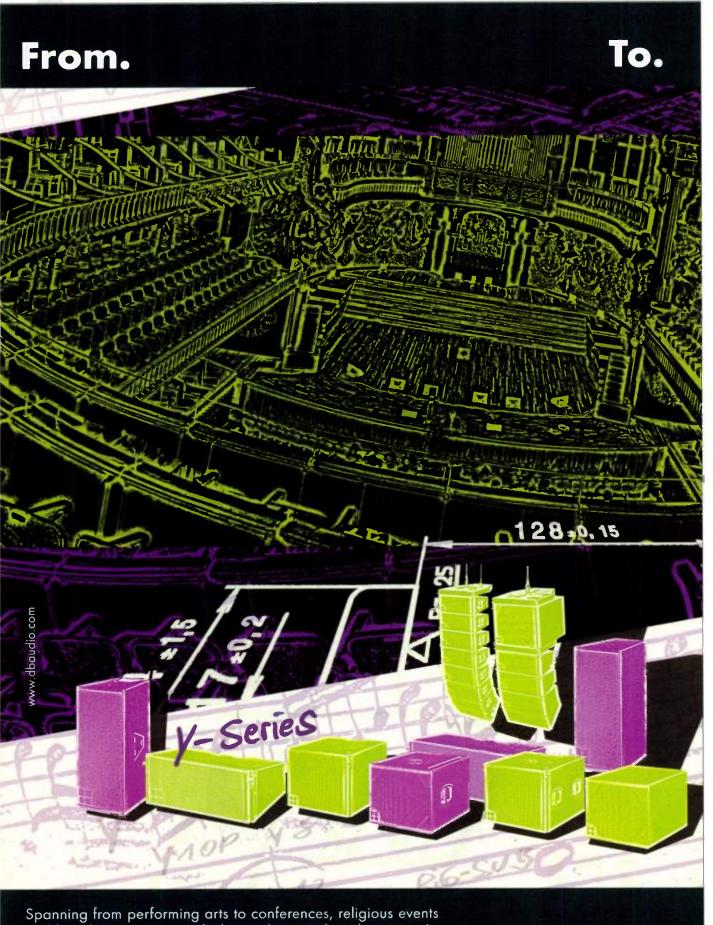
With drums—kick, snare and stereo overheads—I found that tube overdrive really wasn't a possibility, but who cares? The Force's excellent imaging, silky smooth sparkle, open dynamics



and ability to grab some low frequency kick drum decay (even from an itty-bitty 16-inch diameter kick) earned praise from both guest drummer Stacy Huggins and myself. Please check out this webclip: www.soundcloud.com/pro-audio-review-magazine.

\$2,500 does not represent a compromised Manley product, but rather the efficiencies of smart, modern production. Hand-built in California with notable local sourcing, the Force is a guilt-free purchase for the consumer with a conscience. Manley brags that this high-operating voltage design offers performance that's simply not possible in 500 Series designs. I agree. At only approximately \$625 per channel, the cost is comparable to not only 500 Series preamps but "budget gear" in general.

THERE'S MORE ▶ For a longer version of this review, visit prosoundnetwork.com/june/2015.



and live shows, a Series which can do everything because it's ready for anything: with befitting dispersion characteristics and dipole driver arrangements, innovative waveguides and rotatable

horns. From. To. In the very best sense: the d&b Y-Series.

#### Alto Professional Live 1604

The Live 1604 is a clear progression in the evolution of Alto Pro mixing products. Today's Alto Pro is building gear that can indeed sit on professional stages—e.g., its Black Series Powered Loudspeakers, which I reviewed last year with quite impressive results.

Main features include 10 XLR and TRS inputs to full channels (8 with inserts) with clean preamps (+30dB Line, +50dB Mic), plus four stereo TRS-equipped channels, two of which also have mono XLR input/mic preamps. All channels feature a 3-band EQ with fixed-Q sweepable mids and 4 Aux sends to TRS (Sends 1+2 offer pre post switching), the fourth reserved as the DFX digital effects channel send. Other features include four subgroups, six channels of "one knob" channel compression, a 9-band graphic EQ, and simple 2-channel USB I/O plus charging USB port.

For a month, I used this mixer like it was my only mixer. It covered all my live sound reinforcement needs, anywhere between singer songwriter to full band applications. I used it to record 2-track live performances. I "cheap DJ'd" requested playlists between live performance sets. I used it to record multitrack productions (via analog channel inserts) with great results, too. Paired with powered studio speakers, I monitored everything from recent iTunes-based Logic Pro X mixes to my favorite reference tracks and others that came across my desktop.

I have to comment on the 1604 Live's aesthetic and feel. Its silk-screened labeling is clear and detailed yet not flashy; the gunmetal grey work surface is classic in its look and feels rock solid to the touch; and the black/tastefully color-coded knobs and faders are small and solid. It's overall stylishly classy but not necessarily intentionally so. Considering that all the above is available for \$500 street, it's an attractive bargain.

One complaint, purely tactile: The plastic end-pieces of the console—featuring a chrome-effect "Alto" held on by three hex nuts, is sharp to the



THERE'S MORE > For a longer version of this review, visit prosoundnetwork.com/june/2015.

back of your fingers, especially working on channel 1 or at the other end of the desk; it caused me a couple of paper cut-like injuries before I grabbed some fine grit sand paper and smoothed them off just a bit. It's really the only fit/finish issue that struck me, though—not a deal-breaker for the bargain \$500 street price.

Alto is still a new name in the pro-aspirational PPA league. Perhaps that's to our benefit, as they are offering products like the Live 1604 at a better price than similarly equipped/sized analog mixers.

Alto Professional

http://www.altoproaudio.com/products/live-1604



BY STROTHER BULLINS, REVIEWS EDITOR, NEWBAY MEDIA AV/PRO AUDIO GROUP

Strother Bullins is NewBay Media's Reviews Editor, AV/Pro Audio Group, active musician, recordist and cluble vel sound reinforcement wrangler. sbullins@nbmedia.com





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#### [40] SoundPRODUCTSIIII

#### TC ELECTRONIC CLARITY X MULTI-FORMAT MONITOR CONTROLLER

TC Electronic's Clarity X is a multi-format monitor controller that works with any professional loudspeaker. It comes with a small-footprint remote control, measurement microphone and a full range of meters to assist in mixing decisions. Clarity X offers a suite of metering tools, including a loudness-based Stereo Deviation Meter that reflects how well a surround mix will translate into stereo. Other meters include a new Center Ratio meter displaying the balance between the center channel (typical dialog) and the



other channels in a surround mix, the new LM8 Loudness Radar Meter with 7.1 surround support, true-peak meter, SPL meter and a dose % (SPL exposure) meter. As default, Clarity X comes with AES inputs and outputs, but it can be expanded with MADI I/O as well.

#### SENNHEISER CLIPMIC & MKE 2 DIGITAL **CLIP-ON MICROPHONES**

Featuring Apogee preamplification and A/D converters, Sennheiser's new ClipMic digital and MKE 2 digital offerings connect directly to iOS devices via each's Lightning connector for simplified field

recording. Each allows for field-applicable metadata tags-like Keywords, Favorites and Markers-on audio files to be imported via XML files into Apple's Final Cut Pro, too. ClipMic digital is the "pro-sumer" product, while MKE 2 features Sennheiser's namesake subminiature omnidirectional lavalier capsule.

#### SONY CREATIVE SOFTWARE SPECTRALAYERS PRO 3

Targeting mastering engineers, sound designers, A/V producers and more, SpectraLayers Pro 3 is a graphics-based audio editing system where the content creator can work with audio elements "just as if they were objects in a photograph," explains Sony Creative Software, also calling the



software useful in building intricate soundscapes from varied audio sources, making it especially useful to the file-rich sound designer as well as creative musicians, music producers and more. Combined with Sound Forge Pro-of which tools are accessible without leaving the SpectraLayers Pro 3 application—Sony offers an entire platform for crafting soundtracks for most any commercial audio task.

#### **AUDIO-TECHNICA BP40 LARGE** DIAPHRAGM DYNAMIC MICROPHONE

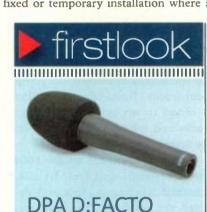
A-T's new BP40 is designed to serve in a range of audio-forbroadcast applications with potential use in various music recording and production environments; the early buzz is that it may shine on kick drum applications, too. Features include a 50 Hz to 16 kHz frequency response, notably large diaphragm with patented floating-edge construction and humbucking voice coil to prevent electromagnetic interference (EMI), hypercardioid polar pattern, switchable 100 Hz high-pass filter (6 dB/oct.), and built-in multistage windscreen. The BP40 comes with the AT8483 mounting clamp, though the AT8484 shock mount is available separately.

CALREC FIELDBOX I/O UNITS FOR **HYDRA2 NETWORK** 

Built for Calrec's Hydra2 proprietary Ao-IP networks, the new Fieldbox range of small-format I/O units features aluminum chassis in a 1U, half-rack size. Calrec envisions the Fieldbox range as in-

tended for outdoors broadcast environments where I/O must be spread over a large area-e.g., golf courses-or any fixed or temporary installation where a

small number of analog inputs and/or outputs are required, including small studios, VO booths, control rooms for monitors feeds and so on. Using two high-capacity network cables, Fieldboxes are fully redundant. Specifically, the Fieldbox (pictured) offers eight analog inputs via XLR with available +48 VDC phantom power, and the H2Hub is an accompanying



#### INTERVIEW MICROPHONE

DPA's d:facto Interview Microphone features an omnidirectional 2006V capsule with sensitivity lowered 12 dB to accommodate typical interview mic and wireless handle sensitivities. DPA suggests that this "omnidirectional pattern is preferred for handheld interview use because precision is less critical and native reductions in wind and handling noise, which is further lowered in the mic by a rubber suspension mount," which is built into DPA's difacto head unit.

"A microphone of this style has less handling noise and wind noise, which gives us a solution with much less sensitivity to accommodate outdoor use," says DPA product manager Mikkel Nymand. "We have compared the d:facto Interview to a number of competitors, and found that we achieve 20 to 30 dB less wind noise straight out of the box."



**ALLEN & HEATH GLD** 

#### **CHROME EDITION DIGITAL MIXER**

The Chrome Edition adds Automatic Mic Mixer (AMM) capabilities plus extra processing power and new channel compressor emulations to Allen & Heath's GLD Digital Mixer Series, Chrome Edition models include



the GLD-80 and GLD-112 mixers with AR84 or AR2412 AudioRacks. The AMM is configurable up to 44 mic sources, allowing user-chosen combinations of auto- and manualmix workflows. Additional AMM features include dynamic gain sharing, A&H's Number of Open Microphones (NOM) logic gate and the Best Mic Lock system for prioritizing open mics where crosstalk is present. Other edition upgrades include a new plug-in assignment architecture and a an expanded FX feature set.

#### YAMAHA TF SERIES COMPACT DIGITAL **MIXING CONSOLE**

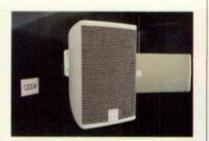
The latest small digital mixer from Yamaha, the three-model TF Series, comes in 33, 25, or 17 motor fader-based models, the TF5, TF3 (shown) and TF1, respectively. These mixers provide 32, 24, or 16 rear panel analog inputs, recallable D-PRE preamps, and a total of 48 or 40 (TF1) inputs. Live recording features include up to 34

x 34 channel recording/playback via USB 2.0 and 2

x 2 via a USB storage device. "Fast effects" features include one-knob COMP and EQ, available on both individual source inputs and outputs. Yamaha's TouchFlow operation—the "TF" in TF Series—refers to familiar Yamaha user interfaces that are now offered in a touch-panel based system.

#### MARTIN AUDIO CDD SERIES INSTALLATION LOUDSPEAKER RANGE

The new CDD Series for installed sound combines enclosures marked by their curvature and proprietary Coaxial Differential Dispersion technology. The CDD Series offers six full-range, two-way enclosures ranging from the "micro" CDD5 to the large CDD15 with accompanying subwoofers, each available in black or white as standard as well as all RAL color



variants as special order. Specifically, CDD technology creates a rectangular coverage pattern rather than standard wide horizontal coverage; Martin Audio insists that this will provide distinctly more consistent frequency response and SPL coverage throughout any CDD Series installation.

#### DIGICO S21 DIGITAL MIXER

Reportedly an 96 kHz as standard, "entry level" live mixer with features pro users would expect from DiGiCo, the 46-bus S21 features two large multi-touch screens in an aluminum-centric, road-ready chassis plus 24 mic/line inputs (amps first featured in the

192kHz SD-Rack), FPGA algorithms from the lauded SD7 as well as comprehensive effects, EQ, compression, routing, and I/O. According to DiGiCo, the goal was to give the budget-restricted end user "all the sensations they would get when standing behind the SD7."

There's more information on all the products featured at prosoundnetwork.com/june2015.



#### HARMAN JBL PROFESSIONAL VTX V25-II LINE ARRAY LOUDSPEAKER

A significant upgrade to JBL's V25 line array loudspeaker, the V25-II offers a new waveguide designed to increase long-throw performance and control and improved power matching via its



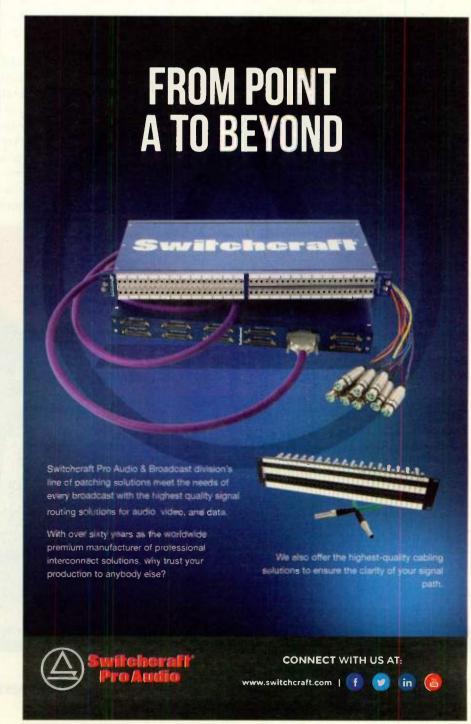
power pairing, the Crown I-Tech 4x3500HD four-channel amplifier. Current V25 owners can upgrade their existing cabinets to the new V25-II standard in 10 minutes, according to Harman; the VTX-V25-WG-UK Waveguide Upgrade Kit is available, too.

#### CADAC CDC SIX DIGITAL MIXER

The 48-bus CDC six is comprised of Cadac's new ergonomically-friendly, gesture-based UI with the performance design found in the CDC eight. Cadac also notes its 23.5-inch touchscreen enables the end user to be far less "menu-dependent" than when working on more traditional digital mixing platforms. Key features include 64 input channels, Cadac preamplifiers, 24-bit/96 kHz Delta Sigma AD/



DA converters, 20 touch-sensitive motorized faders, and comprehensive I/O plus compressor/limiter, four-band fully parametric and 31-band graphic EQs on all outputs. An integrated Waves card for its MultiRack SoundGrid server comes standard, too.



#### [42] SOUNDREINFORCEMENTIIII

#### = Teragram Ballroom: Built From Experience And Built For Experiences

BY STEVE HARVEY

LOS ANGELES, CA-Leveraging the recent rebirth of downtown L.A., Michael Swier of the Bowery Presents has opened his first West Coast venue, Teragram Ballroom, in the adjacent Westlake neighborhood. The new music club-named in honor of Swier's late wife, Margaret features a Midas analog mixing console and racks of outboard gear at front of house, a digital Midas desk at stage right, and LCR main and monitor speakers from d&b audiotechnik.

"It's the bones of this place that were the most important," says Swier (pronounced Sweer), founder and owner of New York's Mercury Lounge, Bowery Ballroom and Music Hall of Williamsburg, among others. Swier and his team have built out the structure to include a 30-foot stage with a proscenium, three large, wellappointed dressing rooms, a bar and café area and offices. Due to open June 1, Teragram's calendar already includes The Delta Spirit, Palma Violets, Nate Ruess and others.

"This was originally built as a cinema in 1913. The current landlord bought it in the late '50s and had a print shop in here," Swier continues. The refit, reportedly costing around \$2 million, was very much a collaboration, involving talent largely brought in from back east. Swier's



Getting the Teragram Ballroom ready to roll are (I-r) Jeff DelBello, system designer/installer, dB Sound Design; Ken Blecher, regional manager west, d&b audiotechnik; and Robin Danar, production manager, Teragram Ballroom.

brother, Brian, an architect, has designed several of the company's New York venues and is a partner in Teragram. Jim Falconer, who designed the sprung floor and acoustics at the Mercury Lounge, was also a big part of the design, says Swier.

On the equipment side, Jeff Del-Bello, of New Jersey-based design, installation and sales company dB Sound Design, is involved with the audio, assisted by local sound engineer Sam Coy. Another Bowery Presents alum, Luciano Savedra, lighting director at the organization's Terminal 5 location, provided the design of the Teragram's substantial lighting

rig. Production manager for the new venue is Robin Danar, who began his career as sound engineer at CBGB's during its hevday.

Swier appreciates good sound, he says. "I'm a bit old school, but for a reason—I think it's going to be just that much better sounding in here." Take the Midas analog console at FOH, for example: "Even though they make extremely good digital boards these days, I need that real warmth. There's something about that Midas. The sound quality, in everybody's opinion, is going to be that much better."

(continued on page 48)

#### briefs

#### L-Acoustics Pumps Up **Pentatonix**

ESCONDIDO, CA—A capella act Pentatonix's U.S. tour carried a L-Acoustics (I-acoustics.com) K2 system from Escondido, CA-based Sound Image (sound-image.com). Chris Aman, FOH engineer/production manager, mixed through 14 K2s per side with outfills of nine Kara, plus four Karas on frontfill and 12 SB28 subs, all powered by six LA-RAKs.

#### Rat Brings Anya To Coachella

INDIO, CA—Longtime audio supplier for the Coachella Festival, Rat Sound, had EAW (eaw.com) Anya line arrays on hand in the Gobi and Yuma tents this year. A pair of Anya arrays, made hung to the left and right of the Gobi Tent stage, while four stacked Anya arrays of five modules each immersed the dance floor in the oval-shaped

#### **HOW Turns To**

CLARENDON HILLS, IL—Christian Church of Clarendon Hills recently began using a DPA (dpamicrophones.com) discreet necklace mic, adding it to the House of Worship's inventory of DPA d:fine 66, d:fine 4066 and d:screet 4061 miniatures, where it's used for pastors, plays, talent shows, schools and more.

#### Vegas Gets VUE LAS VEGAS, NV—In mid-April, H.A.S

Productions tackled the City of Lights Jazz Rhythm & Blues Festival in Las Vegas, fielding a VUE Audiotechnik (vueaudio.com) system for the twoday event, including 32 al-8 high-output loudspeakers, 16 al-4 subcompact loudspeakers, a dozen powered hs-28 ACM subwoofers and four al-4SB flyable isobaric subwoofers.

#### FBT Hits French Quarter **Festival**

Productions recently borrowed an FBT (fbtusa.com) Promaxx 14A system from Audio Anonymous Live for ran the speakers flat and couldn't believe that, even without a sub, the sound out of those little speakers was amazing," reported Ian Bruce of Bernard Productions.

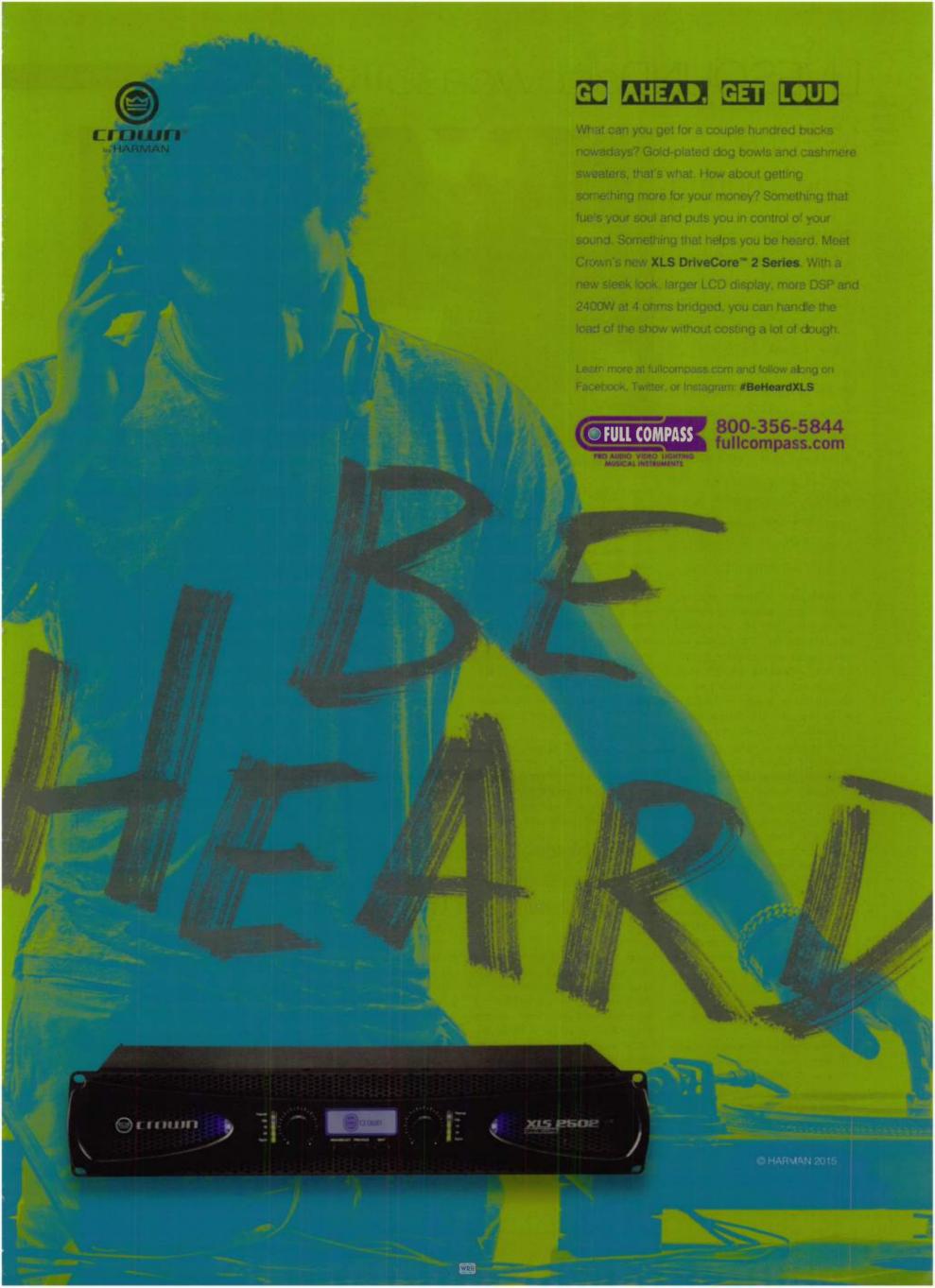


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#### [44] LIVESOUNDshowcaseIIIII

#### F.F.A.R. and Touring

#### BY CLIVE YOUNG

They say bands don't sell records in the new Millennium, but since its major label debut in 2000, Papa Roach has sold 20 million albums around the globe. A lot of that is thanks to incessant touring, much as the band is doing for its new album, F.E.A.R., released this past January. Along for the ride on the inevitable world tour are engineers Eddie Mapp at front-of-house and Mike Lowe in monitorland.

Both have a history with the band-Mapp mixed Papa Roach on tour in 2005 and returned to the fold last fall, while Lowe took over the group's monitor position in 2013. Planning for this year's lengthy run by the time you read this, they'll be in Europe, having already done two U.S. runs as well as Australia, New Zealand and England Lowe and Mapp aimed for continuity despite picking up local stacks and racks at each stop.

"Last November, we both bought our own desks," said Lowe, who has his own production company, ShotRock Productions. "Eddie and I handle all our own audio out here. so any purchases, we buy personally." The engineers went with Midas consoles, with Lowe manning a Pro1 and Mapp getting a Pro2C, though he sometimes opts to rent another Pro1 instead, because as he noted, "We found some plastic-molded cases that they fit in, so they come in at 84 lbs-which means we have to pay overweight charges, but we can get it on a plane and carry our rig everywhere.

The desks are networked together, with Lowe's acting as the Master console. A Midas DL151 24-input stagebox takes everything from the stage, sending it into Lowe's Prol; those inputs, along with that desk's own 24 inputs, are sent on further via AES50 protocol on Cat 5 cables to and from the FOH desk, giving both desks 48 channels for mixing. Fortunately, Mapp has room to



Eddie Mapp with the Midas Pro1 console in the balcony FOH position of The Paramount in Huntington, NY.

grow: "This desk can have 40 channels plus effects returns. The band is at 32 channels, but I have another five channels that return to the desk they're triggers that open the sidechain of gates on my drums."

Travelling light means that Mapp opts to stick with internal effects on the desk-which suits him just fine, thank you. "It keeps my show consistent no matter where I go. anywhere in the world; everything sounds great in there," he said, diplomatically adding, "I think sometimes people complain about internal effects when maybe the source doesn't sound good.'

Helping ensure he gets the sources he needs, Mapp supplies all his own mics for everything but vocals. "The drum kit stays bungeed down to the riser, so I just leave all my mics up and don't have to worry drummer, plays with a lot of finesse, so there's a lot of little ghost strokes and subtleties that would get missed otherwise." Two channels of Tobin Esperance's bass are on-hand, with a clean signal coming through a Rupert Neve Designs RNDI and a dirty one thanks to a Kemper modeling amp; meanwhile guitarist Jerry Horton's signal comes from a Fractal Audio Axe FX II modeling amp.

Vocals from frontman Jacoby Shaddix, Esperance and Horton are captured with Audio-Technica AE6100 wireless mics and a helical antenna from PWS, with the backing vocals additionally passing through a Rupert Neve Designs 5045 primary source enhancer. Adding to the band's RF footprint are IH Audio Roxanne ear buds on Sennheiser G3 wirelesses used by all members. "Today though, I'm using

it can. "What's fun about having worked with this band before has been coming back and taking a fresh approach to it," Mapp enthused. "I'm trying to make it as clean and coherent as possible and just portray that energy that they give. They're a super in-your-face band and Jacoby is an incredible frontman, so I want big guitars and big drums and thunderous bass, but I also want those vocals to be clear and out front. It's fun to close your eyes and be able to hear every word he's saying. I look at it as a high-def version of Papa Roach for 2015."

Midasconsoles.com

"I think sometimes people complain about consoles' internal effects when maybe the source doesn't sound good."

Eddie Mapp, FOH, Papa Roach

about miking everyday. I have Audix D6s on the kick, rack tom and both floor toms-kind of oddball, but it's the curve that I already use for EOing drums so I figure why not start there? We've also got a Shure Beta91A inside the kick drum that's mounted on a Kelly Shu Flatz [Internal drum microphone support system). Then I have sE Electronics sE5s for overheads and DPA 4099s underneath the hat and the ride cymbals. I've got a Telefunken M80SH on snare and an sE Electronics X1 D with a large titanium diaphragm, which is better for faster transients; Tony [Palermo], the

wedges for Jacoby because he has an ear infection," said Lowe. "In-ears aren't doing it for him because of pressure; he'll start a song and with the ear infection, it'll cut in half almost immediately. Part of the reason why everyone went off wedges in the first place was that everything was so loud; with in-ears, it's safer, but with an infection, the source is close and you have to find that balance so that he doesn't get hurt."

As the ear infection shows, Papa Roach believes in the old maxim that the show must go on, but the audio team is just as committed to making that show sound the best

#### **VITALstats**

#### Papa Roach

At The Paramount (Humington, NY)

FOH Engineer: Eddie Mapp

Monitor Engineer:

FOH Console: Midas Pro1

Monitor Console: Midas Pro1

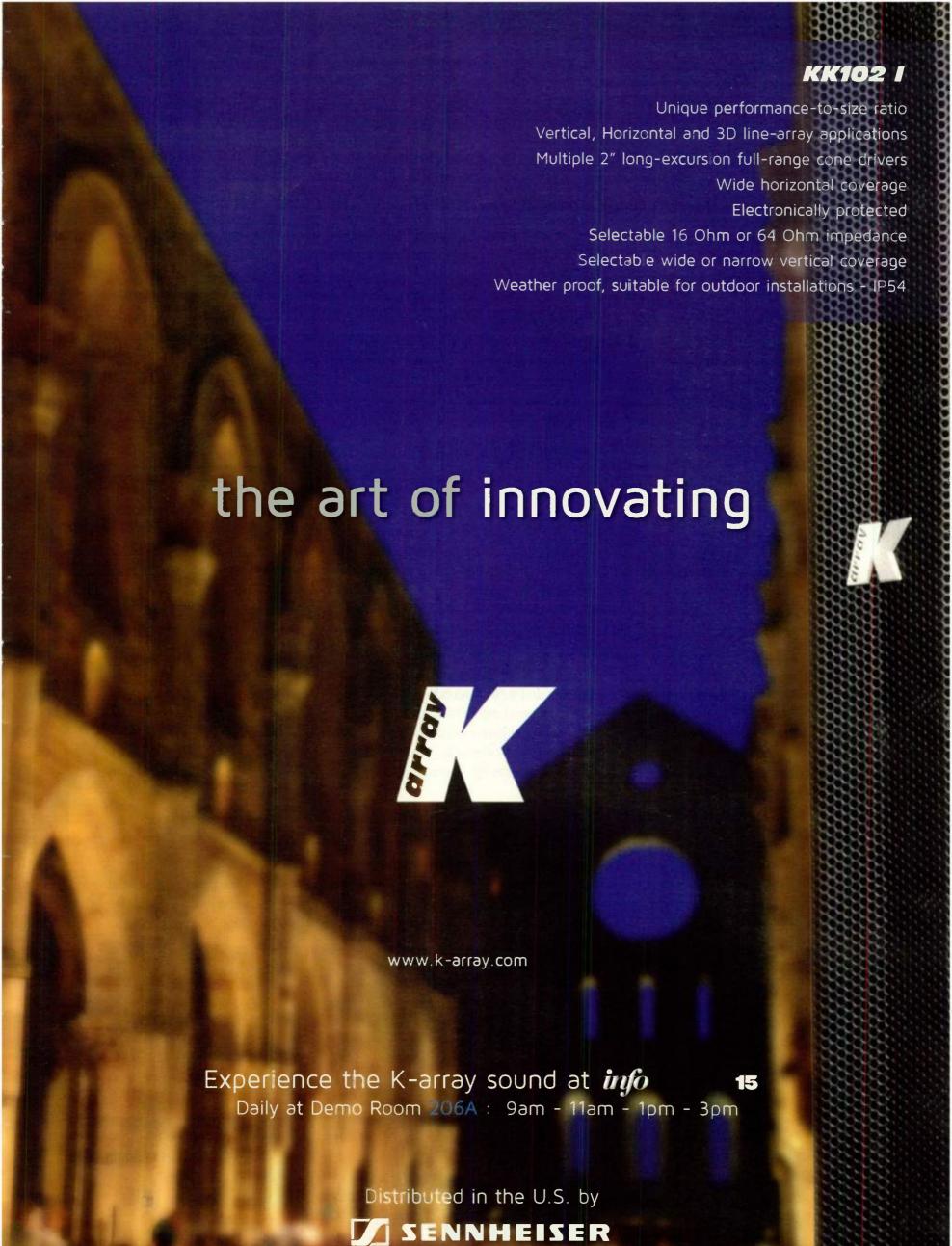
House Speakers: JBL VerTec VT4888

Personal Monitors:

JH Audio Roxanne buds: Sennheiser G3 wireless

Microphones:

Audio-Technica AE6100 wireless; Audix D6; Shure Beta91A; sE Electronics sE5, X1 D; DPA 4099; Telefunken M80SH



# An Open Letter to the Audio Production Industry

Revolutionary Wireless Development

As most audio professionals are aware, there have been major changes in the industry over the past few years, concerning wireless usage. These hail back to 2008, when the FCC announced the users of pro audio wireless in the 700 MHz band (actually 698 to 806 MHz) would have to vacate that band after June 12, 2010. Later this year, the FCC is planning another big money spectrum sell-off, this time of undisclosed portions of the 600 MHz band — perhaps not all of it, but the remainder that we as wireless users will be able to use will most certainly be a small fraction of what we had.

It's not a pretty picture for thousands of wireless system owners, and we hear these concerns from our customers every day. As the developers of the Invisible Waves™ brand of RF spectrum analyzers and innovative antenna systems, used by thousands of professional audio personnel throughout the world, I want to inform you of a new and "Revolutionary" solution to the RF congestion and "spectrum squeeze." First, I must tell you that I do not lightly throw around the word "Revolutionary" when describing a new product or technology. But as you'll read below, "Revolutionary" is a very appropriate description.

Kaltman Creations LLC secured the rights and ownership to advanced filtering technology that was previously used in military, nuclear plant and critical data communications. Over the past two years, we have been aggressively working on adapting this technology for use in the pro audio wireless UHF bands. Our new "Revolutionary" technology is called the RF-ResQ™. It will change the way you think about wireless microphone frequency assignment and spectrum. The RF-ResQ is an antenna signal processor that can rescue and salvage unusable RF spectrum, substantially reduce interference, and features additional trailblazing technologies.

Housed in a single-rackspace unit, the RF-ResQ is the world's first standalone wireless microphone filtering system employing multiple military-spec, very high-Q bandpass filters. ResQ will clean up the received RF spectrum, allow for much closer adjacent channel spacing (potentially doubling the available channel count and without interference or sacrificing power), remove the issue of intermodulation effects, and improve the reception of weaker transmissions.

RF-ResQ's onboard 8-channel antenna distribution amplifier with RF router allows its filters to adapt to various receiver and distribution configurations. This provides one filter/frequency per receiver channel, which ultimately means that your receiver only sees its assigned transmitter frequency and nothing else — no out-of-band RF interference to bog down or de-sensitize the receiver's input. Alternatively, you can select "combined signal routing" to feed integrated receiver/distribution systems, as found in some newer digital mic systems. As ResQ assigns a single, frequency-cleaned-up, bandpass filtered feed for each transmitter's frequency, its eight discrete amplifiers can maximize the individual RF signals up to 10 dB. This means that there's no need for amplified antennas. Why amplify all of the RF — including the RF noise — when the ResQ amplifies only specific frequencies as needed?

DiverseQ<sup>™</sup>, the RF-ResQ's new antenna diversity technology, processes the antenna A/B signals in its IF stage for fast, accurate and quiet antenna switching. This superior, 'best signal detection' function is performed right within the RF-ResQ.

Installed between the antennas and receivers, the RF-ResQ works with industry-standard antennas and analog and digital wireless mic systems in the 470 MHz to 928 MHz range; one model — worldwide. The ResQ can be a cost-effective alternative to traditional antenna distribution and active antennas, or used with existing systems. Frequency, gain and routing assignments are easily performed via a LAN or USB/laptop connection to the rack unit; once set, you are free to unplug and walk away.

I'm sure you will agree that this new product will have a profound impact on your frequency concerns for wireless microphone applications. For peace of mind in critical wireless applications or to squeeze into an ever increasingly overcrowded RF spectrum, the "Revolutionary" RF-ResQ is here!

Thanks for your business and support.

Mush Katur o

Mark L. Kaltman

President - Kaltman Creations LLC

See the RF-ResQ<sup>™</sup> at InfoComm, June 17-19 Visit us at Booth 1328





# New, Breakthrough Wireless Interference Technology Solves RF Congestion Issues!!!

The RF-ResQ<sup>™</sup> will rescue and salvage unusable RF spectrum and substantially reduce inteference.





#### Teragram Ballroom

(continued from page 42)

The house speakers comprise a d&b rig configured as an LCR point source system rather than arrays, explains DelBello. "Left, center and right are going to be Q7s, up top, and Q10s for the front fill. In the center we're

going to have a couple of smaller E8s for front fill, too. We're using five Vi subs for the array below the stage."

The FOH effects racks include compressors, equalizers, gates and reverbs, many in multiples, from the likes of Chandler Ltd., dbx, Empirical Labs, Eventide, Lexicon, Pendulum Audio and Summit Audio. On stage, the monitors are d&b audiotechnik M4 wedges driven by a digital Midas Pro3.

Unusually for a small club—Teragram holds around 600—the room and stage are fully acoustically treated, as much to keep the surrounding residents happy as for its benefits inside. For Swier, great sound is paramount. "It's all about the sound: The bands hearing themselves on stage, and the people watching the show and how it sounds to them."

He continues, "We built the Mercury Lounge for sound; it was the first

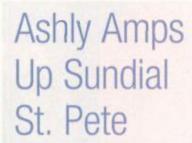
place in New York that was built specifically for that. I just wanted to make it the best sounding room for its size."

Every subsequent music venue has been a learning experience, he says. "This is the culmination of it all. With every one, you learn a little more about it." Looking around as the construction enters its final phase, he says, "You have these visions of the end result, but when they happen, and it's even better, it's kind of nice." d&b audiotechnik

dbaudio.com

Midas midasconsoles.com

dB Sound Design www.dbsounddesign.com



ST. PETERSBURG, FL.—Sundial St. Pete shopping center and its restaurant Sea Salt recently got audio upgrades, installed by Magnum Audio Group, which used Ashly Audio's NE Series and nX Series network amps.

Key were SoundTube XT850s in the promenade, CM500i speakers around umbrellas, and IW31-EZs in the walkways, all driven by a Ashly nXp 3.04 network amplifier with a built-in Protea DSP. The music source for the system is Pandora. In addition, an Ashly MX-508 eight-channel rack mixer feeds an Ashly KLR-4000 amplifier in support of live events and music video playback, the audio via Community WX-1564 speakers.

The sound system in Sea Salt also takes its input from Pandora, with an additional microphone input. A single, two-rack space Ashly ne8250.70pe provides Sea Salt with Ashly Protea DSP and eight channels of 70V amplification at 250 W each. Ashly Audio ashly.com



An Ashly-powered audio system was installed at Sundial St. Pete's



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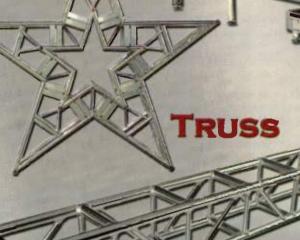


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#### CenterSTAGE TOP 10 TOURS OF THE MONTH

ACT / STATISTICS	CREW	EQUIPMENT
1 ARIANA GRANDE   VER TOUR SOUND	Toby Francis (be); Justin Hoffmann (me); Brett Stec (cc/se); Ashley Zepar (m tech); Austin Dudley, Frank Peoples, Kenny Hottenstein (techs)	HC: DiGiCo SD7; MC: DiGiCo SD7; HS: Meyer Sound Leo, Lyon, LFC 1100, Mica; MS: Meyer Sound MJF210; IEM: Sennheiser 2000 series; WIRELESS MICS: Sennheiser 5000 series; FOH EQUIPMENT: TC Electronics M5000; Neve Primary Source; Waves
2 FLEETWOOD MAC   CLAIR	David Kob (be); Ed Dracoules, David Coyle (me); Donovan Friedman (cc/se); Steve Hupkowicz, Meg Tempio, Ricky Avilia, Dave Wiseman (techs)	HC: (2) Avid Venue Profile; Yamaha PM5000; MC: Avid Venue D-Show with sidecar; DiGiCo SD10; HS: Clair 1-5D, i-5, CO-8, CP-118 subs, FF2; MS: Clair 12am, R-4III, ML-18; Avid PQ System; IEM: Shure PSM 1000, PSM 600; HA: Crown; MA: Crown; HARDWIRED MICS: AKG C414 B, C 451EB; Audio-Technica AT4054, AE6100; Shure SM 57, Beta 98, Beta 56, Beta 91a, KSM313/NE, Beta 181, KSM137; Beyer M 201 TG; Milab DC-96B, BDM-01; Sennheiser MD 421-II, MKH-416, ME 2, e 935; Audix D4; Countryman DI; Radial J48 WIRELESS MICS: Shure UR Series; FOH EQUIPMENT: Summit TLA100; Yamaha SPX2000; Lexicon 480L; Eventide Eclipse; Bricasti M7; Aphex 612; TC Electronic D-Two; Lake LM 44, LM 26; Empirical Labs EL-8; Avalon AD2044; MONITOR EQUIPMENT: Crane Song Phoenix; TC Electronic VSS3; Rational Acoustics Smaart
3 ERIC CHURCH   CLAIR	Billy Moore (be); Marc Earp (me); Jared Lawrie (se); Rachael Aull (m tech); Bryce Beauregard, Matthew Patterson (tech)	HC: (2) Midas Heritage 3000; MC: Avid Venue Profile, Venue SC48; HS: Clair i-5, i-5B, i-3, CO-8, CP-218, FF-2; IEM: Sennheiser G3; HA: Lab. gruppen PLM 20000Q; HARDWIRED MICS: Shure; Sennheiser; Royer; WIRELESS MICS: Shure; FOH EQUIPMENT: Manley VoxBox; Avalon VT-747SP, VT-737SP; Summit DCL-200; Tube Tech LCA 2B; Drawmer DS201; dbx 903; Yamaha SPX990; TC Electronic D-Two; Eventide H3500; MONITOR PLUG-INS: Waves Live Bundle; Crane Song Phoenix
4 JASON ALDEAN   SPECTRUM SOUND	Chris Stephens (he); Evan Richner (me); Joseph Lloyd (pm); Jeremy Seawell (se); Ryan Stotts (mtech); Bob Campbell (tech)	HC: SSL Live; MC: SSL Live; HS: d&b audiotechnik (64) J8, (8) J12, (16) J Sub, (24) B2, (8) Q10; IEM: Shure PSM 1000; Ultimate Ears UE-7, UE-11; HA: d&b audiotechnik D12; HARDWIRED MICS: Audio-Technica AE6100, AE2500, ATM350, ATM450, AT4050, AT4081, AE3000, AT4047/SV; Shure SM57; WIRELESS MICS: Audio-Technica Artist Elite 5000 series wireless with T6100, T1000 transmitters; FOH EQUIPMENT: Lake LM44; ATI DDA 212XLR; Waves Platinum Bundle; Crane Song Phoenix; SPL Transient Designer; Massey De:Esser, vt3; MONITOR EQUIPMENT: Massey L2007, vt3, De:Esser
5 FLORIDA-GEORGIA LINE   CLAIR	Jared Blumenburg (be); Juan Gomez-Marin (me); Phil Kriz (se); Elliott Wiley (ae); Brandon Allison (tech)	HC: Avid Venue Profile; MC: DiGiCo SD10; HS: Clair i-5B, i-3, CP-218, FF-2; IEM: Shure PSM 1000; Clair Fractal antennas; HA: Lab.gruppen PLM 20000; MA: Crown; HARDWIRED MICS: Shure; Sennheiser; Radial Firefly Tube DI; WIRELESS MICS: Shure; FOH EQUIPMENT: Waves; Antares
6 CHRIS BROWN/TREY SONGZ   EIGHTH DAY SOUND	Gordon Mack, Bryon Tate (he); Chainey Harpe, Adam Robinson (me); Krysten Dean (cc); Chris Hall (se); Dan Bluhm (rfe); Cory Osadciw, Greg Horning (techs)	HC: (2) Avid Venue Profile; MC: (2) DiGiCo SD7; HS: d&b audiotechnik J8, J12, J Sub, B2; MS: d&b audiotechnik M2; IEM: Shure; HA: d&b audiotechnik D80; MA: d&b audiotechnik D12; HARDWIRED MICS: Shure; Sennheiser; AKG; WIRELESS MICS: Shure
7 JIMMY BUFFETT   SOUND IMAGE	Rich Davis (he/be/cc); Bill Szocska (me); Chuck Smith (se); Scott Taylor (tech)	HC: Avid Venue Profile (96ch); MC: Yamaha PM5D with DSP5D (96ch); HS: (76) JBL VTX 25, (12) VTX S28, (12) VTX G28; IEM: Shure PSM 1000; HA: Crown I-T12000HD; HARDWIRED MICS: Shure; Audio-Technica; Sennheiser; AKG; WIRELESS MICS: Shure U4RD; FOH EQUIPMENT: Lexicon 960L; Eventide H3000; Waves; Crane Song
8 NEIL DIAMOND   SOUND IMAGE	Stan Miller (he/be); Bernard Becker (me); Greg "Chico" Lopez (cc); John Drane (se); Jonathan Meton (ae); Scott Lawhead, John Tompkins, Wayne "Chan" Teaster (techs)	HC: Yamaha CL5; MC: (2) Yamaha CL1; HS: (32) JBL VTX25, (24) VTX-S28, (62) VTX20, (20) VT4886; MS: (6) JBL VT4886; IEM: AKG SST 4500; HA: (96) Crown I-T12000 HD; MA: Crown I-T12000 HD; HARDWIRED MICS: AKG D5, C414, C430, C547 BL, D12 VR; WIRELESS MICS: AKG DMS700; FOH EQUIPMENT: dbx 120a
9 STEVIE WONDER   EIGHTH DAY SOUND	Danny Leake (he); James Berry, Rico Gonzales (me); Victor Arko (cc); Edgardo Vertanessian (se); Krysten Dean (ae); Chris Bellamy, Ben Smith (tech)	HC: DiGiCo SD7; MC: (2) DiGiCo SD7; HS: d&b Audiotechnik J8, J12, J Sub, B2; MS: d&b Audiotechnik M2, M4; HA: d&b Audiotechnik D80; MA: d&b Audiotechnik D12; HARDWIRED MICS: DPA; Shure; Neumann; WIRELESS MICS: Shure; FOH EQUIPMENT: Eventide, Lexicon, TC Electronic; MONITOR EQUIPMENT: TC Electronic
10 RICARDO ARJONA   PROCOLOR	Jorge Frontera (he); Luis de la Rosa (me); Roly Garbalosa (cc); Jorge Solorsano (se); Jose Mendoza, David Covarruvias (techs)	HC: DiGiCo SD9; MC: Yamaha CL5; HS: L-Acoustics K1, SB-28, Kara, dV-Dosc, Kudo; MS: L-Acoustics Arcs; IEM: Shure PSM 1000; HA: L-Acoustics LA8; MA: L-Acoustics LA8; HARDWIRED MICS: Shure; WIRELESS MICS: Shure; FOH EQUIPMENT: Waves SoundGrid

LEGEND: (he) house engineer. (ahe) ass't house engineer. (be) band's house engineer. (me) monitor engineer. (ame) ass't monitoring engineer. (bme) band's monitor engineer. (se) systems engineer. (ae) ass't engineer. (tech) technician. (cc) crew chief. HC: house console. MC: monitor console. HS: house speakers. PMS: personal monitor systems. MS: monitor speakers. HA: house amplifiers. MA: monitor amplifiers.

Top 10 grossing tours according to *Billboard*. Some tours did not report grosses for all shows; rankings may be affected as a result. Equipment and crew information are provided by the respective sound reinforcement companies.

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#### [52] SoundPEOPLE





**Doug Schouten** 

Brian Belcher

Roland's Professional A/V division has expanded its Sales Engineering team focused on live pro audio in conjunction with its launch of the M-5000 digital console. New Pro Audio-only focused positions include current sales engineer Doug Schouten and newly hired sales engineer, Brian Belcher.

Doug Schouten is a native of Indianapolis; prior to joining Roland in 2012, he was an audio engineer at the Center for the Performing Arts in Carmel, IN. Based in Los Angeles, Schouten has been actively supporting the development of markets for both audio and video products. He will now focus on Pro Audio Products in the western region of the U.S.

Nashville-based Belcher is best known for his work as an live sound and broadcast mix engineer, and production manager with a long list of touring credits including Gary Allan, Joe Nichols, Geoff Moore & the Distance and production of GodWhy. com. Belcher is also the broadcast mix engineer for Vanderbilt University sports airing on ESPN, has been the system designer for several theaters and schools, and has also been a training resource for church, broadcast and FOH engineers. Belcher will remain in Nashville and is primarily responsible for Pro Audio Products in the eastern region.

Both Schouten and Belcher will be involved in supporting customers in the touring, corporate AV, broadcast, theater and house of worship markets.



**Tim Schuette** 

Sennheiser announced the appointment of Tim Schuette to vice president, Global Sales, System Integration (SI). Schuette, an industry veteran with over 15

years of management experience at companies such as Logitech, Microsoft and Oracle, will be based in Germany and report directly to John C. Falcone, senior vice-president of Sennheiser's Systems Solutions Channel. In his new role, Schuette will oversee Sennheiser SI sales teams located in North America, Western Europe, Central Europe and Northern Europe. The announcement states in part, "this newly created position reflects the rapid industry growth and high revenue potential within the System Integration market for Sennheiser, particularly in view of the convergence of IT and A/V markets in the installed sound channel."

Adamson Systems Engineering has announced the appointment of Justin Stone to the newly created po-



**Justin Stone** 

sition of U.S. account manager. The announcement was made by James Oliver, Adamson's director of marketing and sales.

Prior to joining Adamson,

Stone was the production manager for the Romeo Entertainment Group. He also has spent time both as an audio technician and then account manager for Audio Visions.

Located in Omaha, Nebraska, Stone is responsible for establishing new accounts, servicing the existing U.S. customer base and creating new business across the United States. He works directly with Adamson's director of U.S. Operations, Mick Whelan.



**David Hetrick** 

has joined ADAM Audio as its new U.S. Head of Professional Audio Sales. Hetrick was a long time recording engineer, producer and studio owner in Chi-

David Hetrick

cago and Southern California. Prior to joining ADAM Audio, Hetrick's career has included such positions as VP Global Sales and Marketing at Event Electronics, Director of Worldwide Sales for KRK Systems and National Sales Manager for beyerdynamic.

Hetrick is establishing new sales offices in Nashville. Roger Fortier remains in his position as President of ADAM Audio USA.



Tim McCall

L-Acoustics today announced a strengthened commitment to the Latin American market, appointing Tim McCall as sales manager for the region. With five years of experi-

ence as sales manager for Europe, Africa and Oceania at L-Acoustics, and 25 years of experience in the pro audio industry to his credit, McCall will be tasked with developing the brand in this vast and growing territory.

#### soundREPS

■ Quest Marketing, RCF USA manufacturer representative for the Southeast region of the United States, was recently presented with the Arturo Vicari Award of Excellence as Rep of the Year.

The award, named on behalf of the Italian-based RCF Group CEO Arturo Vicari, is presented to the rep firm that not only achieves its sales goals, but for its professional presentation of the company's products.

Transducer manufacturer RCF was founded in 1949; Vicari took over the leadership reins of the company in 1996 and has transformed the company from being a component manufacturer via a pioneering role in the evolution of the portable speaker system to the present, where RCF's offerings include a wide array of systems integration products. RCF USA is the wholly owned distributor of both the RCF and dB Technologies brands which comprise the RCF Group.



In addition to Quest Marketing receiving the RCF Group Arturo Vicari Award of Excellence, its southern Florida sales representative Jerry Sehi (middle) captured the Mr. dB Technologies award for his individual sales and support of the dB Technologies brand. Presenting the award was Tarik Solangi, RCF USA National Sales Manager (left) and Roni Nevo, President RCF USA (right)



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#### 154] ViewfromtheTOPIII

## Taking A Global VUE

KEN BERGER, CEO, VUE AUDIOTECHNIK

#### BY FRANK WELLS

Ken Berger got his start in audio at the tender age of 14, "hanging out" and doing shop work with Philadelphia-based sound companies, including Sound Specialties and Natural Sound. "I then started the pro division of K&L Sound in Watertown, MA while in college," he recalls, "and embarked on a ride called 'EAW' at the ripe age of 21." His current passion and vocation is VUE Audiotechnik, a manufacturer of sound reproduction systems for touring, portable and installation applications. "I built the team and started VUE in 2012. Today, I am the CEO of VUE Audiotechnik."

Berger says that beginning with those early 70's experiences, he's been consistently "interested in integrating new technologies and techniques from outside the industry, and from various different segments within the pro audio industry. Historically, it was about bringing the defined

coverage from the install market to the touring world, and the output capabilities from the touring world to the large-scale installation market. Today, it is about bringing high-definition and low-distortion to all the live sound markets."

Berger says that VUE is an amal-

gam of his experiences through the years and across a number of companies. "VUE's structure is particularly interesting as I learned a lot from my days building EAW, along with working for Mackie/Ampeg/LOUD and having done consulting work for many other companies both big and small. We worked hard to make VUE's company structure look more like a tech company than a traditional pro audio company." By way of example, he offers the "truly international" operation of VUE, with teams working together on engineering and product development in Escondido CA, materials experts in Freemont, CA, systems engineers and industrial designers in Solingen, Germany, a software/firmware team in Hamm, Germany, and transducer and manufacturing engineering in Zhejiang, China, along with marketing and applications teams in the continents of North America, Europe and Asia. The internet facilitates corporate communication, he elaborates. "We all work together using lots of webbased tools including Dropbox, Skype and Wikis."

**WUE** 

VUE is "steadily growing both in the US and around the world, Berger reveals. "We continue adding Global production partners, especially in the development process, including transducers from Europe and amplifiers from both Europe and China." One of the advantages of VUE's infrastructure, he explains, is that the company deliberately embraces the knowledge and experience of its various teams and partners. This, he says, enables VUE "to offer products which may be difficult to bring to fruition at companies by-and-large bigger than VUE, whom try to do all or most of the work in-house."

Being relatively new, there is a wide range of activity in all aspects of the company's business. "The thing I love the most about VUE is we are still in the rapid growth, start-up phase, so there is so much to do in so many places, from development, to marketing and sales," says Berger. "We have a culture built upon a 'can do' attitude, whether it is an idea about an under-served product segment, or about servicing our customers in ways our competition no longer want to do."

Ken Berger, CEO, VUE Audiotechnik

The biggest markets to date for VUE are the HOW, theater and event segments of pro audio, where the leading products are VUE's small- to midsized line array systems. Regarding future growth, Berger says that VUE is "focusing on bringing unique solutions to the world of installed sound; we expect to have some unique products launching over the next year that will change the market significantly."

With its workload and rapid growth, he says that competition is "more of a nuance than a major

"We view the world as our market and we are expanding internationally."

Ken Berger, VUE Audiotechnik

focus. What is frustrating is that so many loudspeaker companies provide misleading or incomplete technical specifications. This is a constant source of discussion with our customers, as many need to be shown what the real performance of systems are, to fully appreciate some of the ways our products excel." Training and education are of particular interest to VUE-areas "where the industry still needs to grow."

For the long term, Berger emphasizes that VUE Audiotechnik will continue to build upon its global perspective: "We view the world as our market and we are expanding internationally. We are building our application and engineering support teams in Europe and now in Asia, and hope to add a Latin-American team by the end of this year."

**VUE Audiotechnik** vueaudio.com



#### New David Clark Pro Audio Headsets with Rest-On-Ear Design

New DC-Series Pro Audio Headsets now feature a 'rest-on-ear' design for maximum comfort, M-2H noise-cancelling microphone for clear, crisp transmission, and an ultra-lightweight, yet rugged alloy suspension system. Ideal for front-of-house professionals, sound engineers, video personnel, camera and event production crews. For superior sound quality, performance and reliability, DC-Series headsets are the best value in the Pro Audio industry. Order direct online at www.davidclark.com or call

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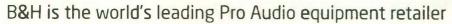
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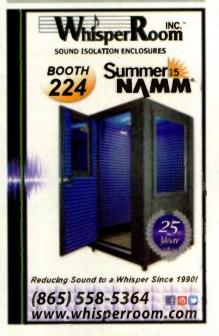
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**West Coast Sales Manager** 

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#### acoustical products









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#### MUSICetc.IIII

## E Capturing a Fragile Moment

#### BY JAQUES SONYIEUX

This month, Larry Campbell and Teresa Williams issue their self-titled debut album on Red House Records. While this is a debut album, both Larry and Teresa have done their time on the road and in the studio, touring and recording with the likes of Bob Dylan, Phil Lesh, Little Feat, Paul Simon and the inimitable Levon Helms. Their new album was recorded at Levon's Barn, located in Woodstock, NY. Pro Sound News took a time out with Larry and Lisa to talk about their latest journey in the studio

#### ON MOVIN' ON AND UP:

Larry: I left Dylan's band at the end of '04-and soon after started working with Levon. That was a really cool thing. Teresa and I had been singing together on her farm down in Tennessee with her family, and that was sort of the beginning of our collaboration. When I started working with Levon in Woodstock, Teresa ended up joining me up there, too, and things really started to gel. So we began concentrating more on songs that we could sing together and still perform in Levon's band.

I had just gotten off of being on the road for eight years with Bob, and I wanted to be with Teresa—I thought that our ability to create music together was amazing, and what a great opportunity to be able to do it with Levon and the whole band. So about this time, I started writing some songs, and we performed a few songs with the Levon band. It all happened very organically. Eventually, we realized

that we had to do a record. That is the short version of how we got here.

#### ON PLANTING SEEDS:

Teresa: All along, Larry had been touting that we were working on a record on the air since before we started working with Levon, and right after he left Dylan. But when people like Levon, or Jorma [Kaukonen], or Bromberg called, Larry would drop whatever he was doing to produce them. Who wouldn't? So we were just rolling along, like the shoemaker's children have no shoes, if you will. You think you have plenty of time to get to your own record, but it takes a lot longer than you might have imagined. But the seeds were planted and slowly growing in and around all that though. These experiences ended up really contributing to what finally came out on the record.

#### ON DIVING DEEP:

Larry: My career over the last

several years has been backing up and producing other people. Songwriting is very difficult for me, and nothing ever comes easy. So for this, I really had to dive deep out. Above all, our re-

cord was a natural avenue of expression—I never want things to sound contrived or formulaic, yet I always wanted to find the feeling in my writing. It's unexpected, because you are really spilling your guts.

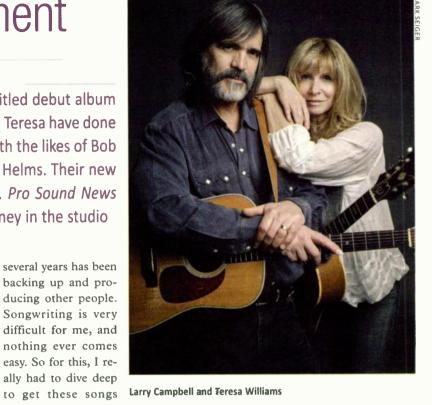
#### ON SHIFTING FROM PRODUCER:

Larry: Normally, I am the guy that is supposed to provide objectivity and be there for the artist. I realized that when you are trying to do that for yourself, it is nearly impossible. I would go from thinking, "you know, this stuff is pretty good" to "who the hell am I trying to kid here, this is nonsense." And normally, when you go through all these emotions, the producer really knows what is happening and calms the artist down. Teresa was great in that regard. For example. I could not have done my vocals without her because she provided some objectivity that I needed. There were many things I was trying to do that I shouldn't have been trying to do-and she helped through some important musical decisions.

On the technical side, Justin [Guip] was invaluable as an engineer. I would describe what I wanted the record to sound like in abstract terms, and he busted his ass to come up with templates that might represent what I was talking about, and we finally got there. He is a brilliant engineer.

#### ON SURVIVING LEVON:

Larry: The first couple of tracks we did for this record were with Levon, because while we were recording Electric Dirt, we had some downtime at the studio. At the time, I asked Levon if he would play on a couple of tunes that we were thinking about recording; this was around 2007 or

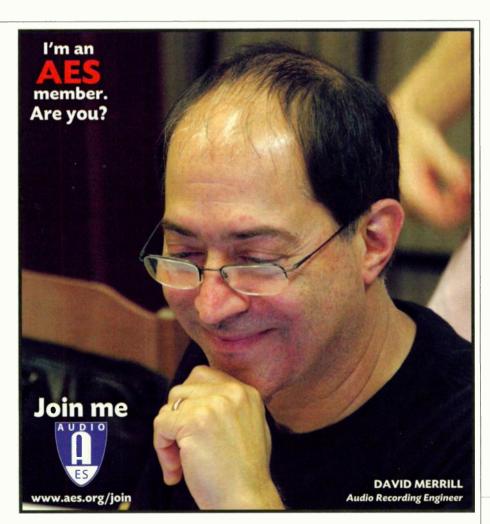


2008. One of those tracks survived, and ended up on the record with him playing drums. That was when we put a foot in the water for getting the entire project done. Soon after he died, Teresa and I realized we had to make some decisions about what we were going to do. That's when we started to focus on getting back to the record. Byron Isaacs has played bass with the Ramble Band on the three Levon records that we didhe's a great bass player. Justin, our engineer, is also a great drummer and we have a real chemistry. When we started everything up again, I asked him to do the rhythm section and everything was coming out beautifully. Finally, Teresa and I had been working with Little Feat a bunch, and Bill Payne became a great friend. We were working on project with Bill and at the time, he graciously offered to add piano to our record. What better than having Bill Payne playing piano on your record? I am really proud of everybody who contributed to this

#### ON THE 10,000-FOOT VIEW:

Larry: As I have had time to get away from this record and listen to it with objectivity. I've come to the conclusion that it is everything I wanted it to be. Our idea was to just follow the path of that reaction. If 10 people are interested in it, well great, I'm glad it moved you. If more people like it, then we will follow that path. This road is getting longer, and we're going to take as far as we can take it.

Jacques Sonyieux is a devout explorer of recording studios and the artists that occasionally inhabit them. Please send any tips or feedback to Jacques at: jacquessonyieux@gmail.com.











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