

proSOUND

NEW

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AUDIO ON VIEW IN VEGAS: The NAB Show—the electronic media convention covering filmed entertainment and the development, management and delivery of content across all mediums—was held in Las Vegas April 7-10. The four-day convocation attracted more than 93,000 audio, video, and film content professionals from 156 countries, all on-hand to check out 1,600-plus exhibitors. Look for our coverage of NAB's audio offerings in our May issue!

Leaving Home But Staying Private

BY STEVE HARVEY

The report by Stiernberg Consulting on the state of the North American pro audio business (which formed a foundation for extensive coverage in last month's issue) predicts that the music recording market segment will increase by more than 4 percent in terms

of locations and revenue over the next five years. According to industry observers, the studio business certainly appears to be holding its own, if not bouncing back a little after the recent economic downturn, with private facilities largely leading the way.

In the late 1980s, more than 50 commercial facilities in Los

(continued on page 14)

Ready For The Red Shift

22

For years, Chris Lord-Alge funneled Pro Tools sessions through a 48-track DASH tape machine into his SSL E/G+ console, but now he's transitioned to Focusrite RedNet converters.



PL&S Proves A Product Parade

BY FRANK WELLS

FRANKFURT, GERMANY—The largest industry trade show for live sound, recording and

musical instruments, Musikmesse and ProLight & Sound was held in March 12-15 in Frankfurt, featuring the familiar pattern of new prod-

ucts and business announcements (see more coverage of the event on page 8).

In an industry where companies are proud to note 10 and 20 consecutive years of business, two brands continued a year of celebration in Frankfurt for a remarkable 90 years of operation, each. Noting milestones like the first dynamic headphones and the first studio-grade dynamic microphone, beyerdynamic is celebrating its 90th anniversary as a company (see a timeline at www.

generationaudio.com).

Loudspeaker maker Celestion is also turning 90. Having begun making loudspeakers for the radio market in 1924, Celestion soon patented a moving coil loudspeaker employing a permanent magnet. Celestion can claim numerous milestones in loudspeaker design and manufacture, including the famous Celestion Blue 12-inch guitar cabinet loudspeaker. Its latest innovation, the FTX line of coaxial loud-

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One Gig, 140 Drum Mics

38

It was a NAMM show event with 12 drum sets, 140 drum mics, 165 inputs and some of the best drummers in the world. FOH engineer Scott Rodgers (left) and his crew didn't miss a beat.



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Anya Tries Out In Nashville

BY FRANK WELLS

NASHVILLE, TN—As part of an ongoing introductory tour of world markets, the EAW team brought their latest large format loudspeaker system, Anya, to the Fellowship at Two Rivers in March for two days of hands-on demonstrations, including sonic auditions, background on theory, setup and control walk-throughs and offering the opportunity to mix on the system.

The stereo demo system was comprised of two hangs of seven Anya cabinets. Not that the system needed the help with reproduction of high fidelity, full-range playback, but a sub-stack was available for an extra

helping of low end. The balconied, theater-styled main sanctuary at Two Rivers provided a realistic medium-sized venue for the demos.

Anya was kept under wraps for most of a seven-year development process. EAW training manager, Bernie Broderick, who gave the guided tours of the system, called Anya unique, a system that provides a “completely different tool set” for live sound reproduction. Beginning with a historical perspective, Broderick said that while traditional line arrays solve many issues with inter-box interference, when a curved array pair is combined with side and rear hangs, system interaction issues are raised once again—two hangs can not be placed in close enough proximity to act as a single point source.

The straight column hang allowed by Anya’s use of DSP to shape vertical steering, provides “the best of both worlds,” says Broderick, horizontally coupling as a line source and vertically coupling as a line array. Before deployment of an Anya array, a system engineer does not need to pre-calculate the vertical coverage needed. A venue’s shape can be calculated from microphone measurements at the boundaries, and the phase and level parameters calculated to provide the digitally controlled steering for optimum vertical dis-



Rat Sound principals Dave Rat and Jon Monson contributed throughout the research and development process for EAW’s Anya and soft-launched the system at last year’s Coachella festival. Rat (left) was on-hand for the Nashville demos of Anya (pushing the system to 122 dBA SPL at one point), along with FOH engineer Jason Decter (Blink 182), an early Anya adopter, and EAW president Jeff Rocha (right).

person with a goal of even coverage throughout a defined space. Though a vertical column, an array can still do a near 90-degree down throw.

Each trapezoidal Anya cabinet is fitted with 14 high frequency drivers, sharing a common manifold and spaced 1-inch center to center—the tight spacing being critical to the manipulation of pattern control through level and phase. A half-dozen 5-inch midrange drivers are fitted, three per side, along with two 15-inch low frequency drivers. Randomized perforations in the surface that serves at the HF wave guide allow the mid-frequencies to exit the cabinet, while appearing to the HF as at least 80 percent solid—as an extended wave guide. The low frequency driver placement is too close for normal

summing, but Broderick explains that “there’s no direct radiator image.” The LF is forced through slots on the cabinet ends, making for optimal acoustic spacing. I/O includes Dual etherCON connections for Dante and other network support, XLR audio and USB for test and software upgrades. Each cabinet house 22 transducers, 22 channels of Powersoft amplification and 22 DSP channels.

Jeff Rocha, EAW President, describes the end result as “non-pixelated audio.” He concludes: “For us, it’s all about enabling the connection between artist and audience. It’s about the experience,” and that the reaction by audiences makes “all the years of Anya development worthwhile.”

EAW
eaw.com

briefs

Danley Gets In The Groove

MIAMI, FL—Pure Groove Systems (puregroovesystems.com) has partnered with Danley Sound Labs (danleysoundlabs.com) to create a new series of sound systems targeted towards the nightlife and music industries. Having produced EDM events for 25 years, Pure Groove Systems will install Danley’s audio technology into nightclub, concert and festival venues.

Lawo Gets New N.A. HQ

TORONTO, CANADA—Lawo North America (lawo.com) has moved its head offices to a new facility in Toronto to address reportedly increasing demand for the company’s product range. The facility will also house sales and support operations for LSB’s Virtual Studio Manager. The new address is 2041 McCowan Road Unit 1, Toronto, Ontario M1S 3Y, Canada. Tel +1 (416) 292-0078.

Sennheiser Launches Hall, Label in China

SHANGHAI, CHINA—The Shanghai Concert Hall was renamed Sennheiser Shanghai Concert Hall on March 10, which also coincided with the pro audio company (sennheiser-usa.com) founding of a new record label, Sennheiser Media. Chinese musical prodigy, A-Bu, was the label’s first signing and Sennheiser additionally launched A Bu’s first album at the event.



D&M CEO Talks Calrec, Pro Audio Future

BY JOSEPH PALENCHAR, TWICE

NEW YORK, NY—D&M Holdings sold off its UK-based Calrec pro audio business as part of its effort to “put more of our resources and organizational focus on building our core consumer business,” according to D&M Holdings CEO Jim Caudill.

The company, which does business as D+M Group, sold its Allen & Heath pro-audio business last June. Both Allen & Heath and Calrec were sold to London-based Electra Private Equity—Calrec for 14 million pounds (\$23.1 million at the current conversion rate), and Allen & Heath for 43 million pounds in equity and debt.

D&M is also evaluating its options for its automotive OEM business, which mainly builds car speakers for most large automakers but also builds car amplifiers for automakers. “We are evaluating our options,” he said, calling the automotive OEM business “non-core to the consumer platform.” D&M’s focus “will be on consum-

er” through its Denon, Marantz and Boston Acoustics consumer audio brands, he said.

The changes are taking place because, when a new management team took over two years ago, it found a portfolio of multiple businesses without much synergy in technology, brands or distribution, Caudill explained “All were good businesses in their own right, but with little synergy.”

The Denon- and Marantz-branded pro-audio businesses, which are “relatively small,” have also been identified as non-core, and D&M will look at its strategic options for those businesses, he said. Selling them, however, would be more complicated than selling the Calrec and Allen & Heath brands because they share brand names with their consumer counterparts, he noted. The sales, marketing and engineering organizations for the Denon and Marantz pro brands are mostly independent of their consumer-brand counterparts,

but share some back-office functions, Caudill noted.

Privately held D&M has no plans to sell its OEM consumer-platform business, which is a lot smaller than its automotive OEM business, Caudill said. It business manufactures soundbars, streaming-media players and speaker docks for other CE brands, he said. D&M plans no more rationalizations in its consumer business, he said, although the company “is constantly looking at it.”

Calrec’s first move after the sale was rebranding its Callisto audio console with a new name: Summa. Henry Goodman, Calrec’s head of sales and marketing, explained in a statement, “We took the decision to change the name because Callisto was recently registered by another pro audio company! We missed the registration, and we have consequently been asked to change it, which of course we have agreed to do.”

Calrec Audio Ltd.
calrec.com



SOUNDRECORDING

Gone West With Gear In Tow 24
After years of developing the Vault Mastering Studio's reputation in New York City, Nathan James moved the facility to Phoenix, AZ where he now works with clients around the world and close to home.

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Clear-Com installed intercom systems in three venues at the recent Winter Games for broadcast and production use; now the systems remain in Sochi, Russia for use at future events.

Microsoft Digs Deep Into Dante 33
Microsoft has installed a Dante network on its campus to interconnect its broadcast/post studios and intercoms, and to broadcast audio to its retail stores.

SOUNDTECHNOLOGY

Sound Innovations: The Next Step In Console DSP Architecture 35
Earlier this year, Studer introduced the Vista X digital console, featuring expanded capabilities made possible by the new Infinity DSP core, which uses standard general computing CPU-based processors to provide more than 800 audio channels—the first time this number of audio channels can be processed in a single CPU-based board.

SOUNDREINFORCEMENT

Minneapolis Proposes Venues Provide Ear Plugs 38
Minneapolis City Council member Jacob Frey is sponsoring an ordinance that would require all venues with a liquor license to provide free ear-plugs to patrons—and if the ordinance passes later this month, its backers have dreams of scaling it nationally.

Live Sound Showcase: Enrique Iglesias 40
Teasing his new album prior to its release, the second-generation crooner ran through a four-date mini-tour this winter, finishing up with a sold-out show at New York City's Madison Square Garden, supported by Sound Image.

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The Evolution Of Information Flow

The combined Musikmesse/ProLight + Sound trade show, held annually in Frankfurt, Germany, is the biggest such event in the industry. Messe Frankfurt cited the combined attendance of the co-located and concurrent events as 107,629, with 142 countries represented. The exhibitor count was 2,242 overall, with 57 countries of origin. Musikmesse is somewhat akin to NAMM in the USA, covering musical instruments and accessories along with recording and DJ gear. ProLight + Sound (867 of the exhibitor count), includes the gigging musician and smaller venue live-sound components of NAMM, but extends into lighting, rigging and sound reinforcement up to the major touring and festival level. Though the MI and recording halls have a major onslaught of visitors on the public day and a half, the pro-audio companies in attendance on both sides of the event—in particular the US companies—attend far less for end-user interaction and more to meet with distributors and dealers.

Though retaining core activities, the nature of industry conventions (themed gatherings where the goal is to share information covering new research, reinforcement of fundamentals and basic to advanced applications) and the frequently concurrent and co-located tradeshows (the exhibition of market specific hardware

and services) has changed substantially over the three decades that I've attended them.

At the core of those changes are the effects the Internet has had on our information gathering and research. As she researched travel plans recently, my wife wondered aloud how we'd found a hotel we stayed at when traveling to an unfamiliar city twenty-something years ago. Neither of us could remember, and even the exercise of pondering out how to conduct such a search effectively, sans Internet, was like approaching an unfamiliar puzzle type for the first time. Though the events can be huge, the vast majority of participants in any given industry are not in attendance at conventions and exhibitions. In the not-so-distant past, the trade press filled an exclusive service. If you couldn't be at the appropriate show, the fastest source of widely available information, pre-Internet, was the monthly mags like this one. The Internet is now awash in searchable information, though the trade press provides a needed filter and pre-search.

As for gear news, in my early career in the trade press, we provided the first announcements of a product's release. It wasn't uncommon to print a six-plus page review on a piece of gear, as—aside from the shared hands-on experience of a fellow professional—such a review was the first

chance to get a knob-and-button tour and to learn the signal flow capabilities of a device. Now, of course, you can download a brochure, a manual and watch a video demo typically concurrent with a product launch. You still rely on the trade press for an alert to the news, context and evaluation, of course, but the Internet has changed the game.

The commoditization of audio hardware and software has also changed the game. We're building our studios largely around a widely available computer specification, with software available from the MI retail chain, or direct Internet sales. With some notable exceptions, the trappings around that core are also available from retail channels. That's in opposition to the necessity of a \$250,000 to \$1,000,000 audio console and a five- to six-figure tape machine being the bare-bones starting point. Even in live sound, where the need to fill arenas requires substantial quantities of sophisticated gear (though substantially less than in years past), the lower and middle tiers of production have given way to products often available at retail.

Conventions and trade events offer an opportunity to build relationships and learn interactively that is not at all devalued in my mind by the changes in the business environment, but the business aspects are certainly evolving.

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Harris Broadcast Splits

NEW YORK, NY—Before a crowd of industry insiders, customers and media assembled inside Madison Square Garden, Harris Broadcast CEO Charlie Vogt announced the company has split into two separate entities, with its TV and radio transmission division becoming GatesAir, and its media software and networking in-

novation unit turning into Imagine Communications.

Imagine Communications will be headquartered in Dallas, with Centers of Excellence in Denver, Toronto, Los Angeles, Tel Aviv and Beijing. The company's five decades of work in media software and networking has led to more than 3,000 customers



Harris CEO Charlie Vogt announced the creation of Imagine Communications and GatesAir from the floor of Madison Square Garden.

spanning 185 countries, with more than three million products deployed that support over half of the world's video channels, along with a portfolio of patents.

GatesAir will be headquartered in Cincinnati, OH, with its manufacturing, supply chain and fulfillment center in Quincy, IL. GatesAir has been working in over-the-air TV and radio transmission for nearly 100 years. The name change honors Parker Gates, who founded Gates Radio Co. in 1922 in Quincy.

"With vibrant new identities and focus, Imagine Communications and GatesAir are well-positioned to serve our industry and customers," said Charlie Vogt, CEO of Imagine Communications and GatesAir. "Our vision, product direction and strategy further align Imagine Communications and GatesAir with today's transformational trends, the networks of the future and our customers and partners.

Imagine Communications
imaginecommunications.com

GatesAir
gatesair.com

TC Up For UAD Plug-Ins

NEW YORK, NY—TC Electronic has become a direct developer for Universal Audio's UAD Powered Plug-Ins platform. The partnership will bring TC Electronic's tools for music production to users of Universal Audio's UAD-2 DSP Accelerators and Apollo audio interfaces. Based in Denmark, TC Electronic is part of the TC Group, which includes Tannoy, TC-Helicon and Lab.gruppen among others.

Thomas Valter, vice president of Business Management, Broadcast & Production at TC Electronic. "We're impressed with Universal Audio's commitment to the quality of the software available for UAD-2 and Apollo, and looking forward to be a unique addition to their plug-in offerings.... We are very excited to be able to offer genuine TC Electronic processing to users of the UAD platform."

The companies have agreed on a partnership, but release dates, prices other product-specific details are to be announced at a later time.

Universal Audio
uaudio.com

TC Electronic
tcelectronic.com

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Yamaha Corp. Acquires Revolabs

SUDBURY, MA—Yamaha Corporation will acquire the audio solutions company Revolabs, as part of its growing effort to develop, manufacture and sell voice communication devices.

“With the market for conference room equipment expected to expand worldwide, I am extremely happy to welcome Revolabs, a company that

has earned a high level of trust from customers and grown rapidly in this market, as a member of the Yamaha Group,” said Mr. Takuya Nakata, president of Yamaha Corporation.

Revolabs will continue to operate as a wholly-owned subsidiary of Yamaha Corporation and execute on its existing roadmap with the current

management team. The transaction is expected to be completed by the end of March 2014 after receipt of regulatory approvals.

“Revolabs’ ethos of creating products that provide value for customers with strong technical capabilities as a base meshes well with the Yamaha Group’s corporate philosophy.

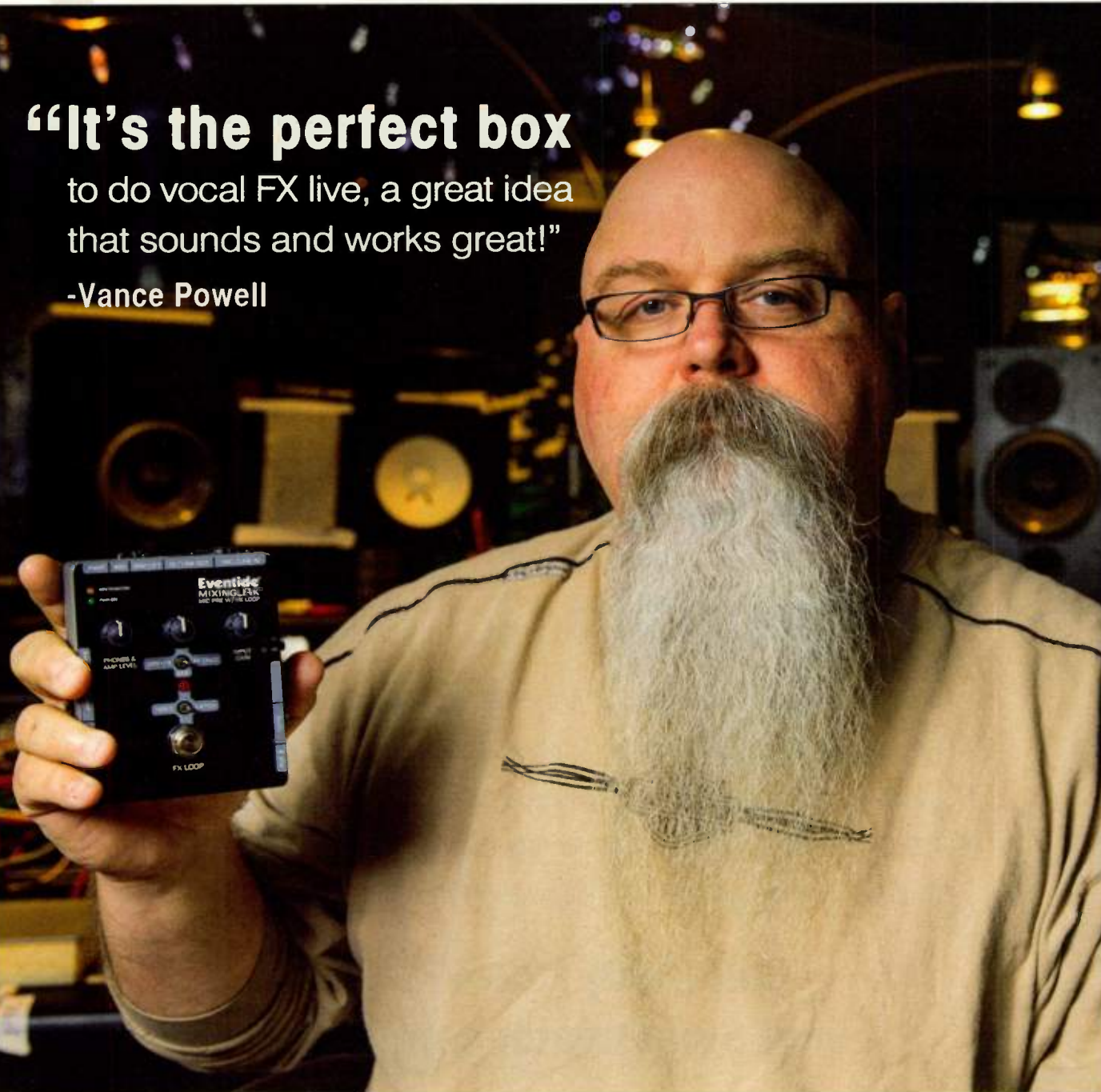
By combining Revolabs’ wireless microphone systems and wireless conference phones with Yamaha’s voice communication devices and professional audio equipment, we expect to be able to create even more appealing solutions for our customers. In the future, we aim to accelerate our progress in expanding sales in the electronics business domain, one of the goals announced in the Yamaha Management Plan 2016, our medium-term management plan, by combining the technology and know-how of both companies.”

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Sweetwater Protects Content

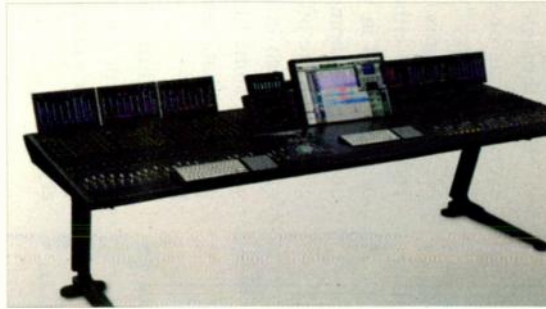
FT. WAYNE, IN—MI and pro audio retailer Sweetwater Sound has taken action against piracy of its proprietary web content, citing copyright infringement by Chicago Music Exchange.

Sweetwater informed Chicago Music Exchange of copyright infringement and the misuse of its proprietary web content. In return, Sweetwater has received a letter of apology from Chicago Music Exchange president David Kalt. The document reportedly includes assurances that all misused content has been removed from its website and that no Sweetwater content will be misappropriated in the future.

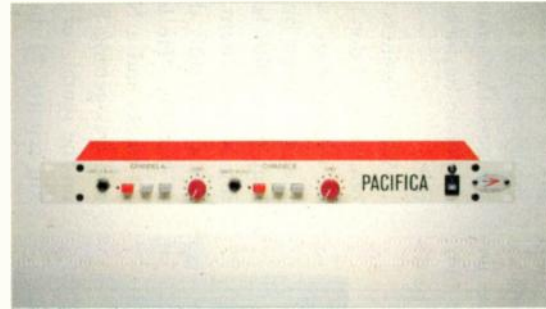
Sweetwater founder and president Chuck Surack said, “We regret having to take action, but we believe that the integrity of the MI business is at stake. We are acting not only on our own behalf, but in the interest of all online retailers who invest in the creation of unique content. For years, many companies have been copying the innovative, pioneering stuff we’ve created on the web. While ‘imitation is the sincerest form of flattery,’ lifting and copying our content verbatim is entirely different. Like any creative artist would, we need to protect our work and the extraordinary efforts of our employees.”

Sweetwater Sound
sweetwater.com

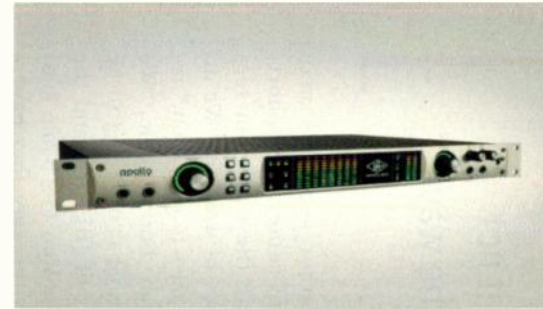
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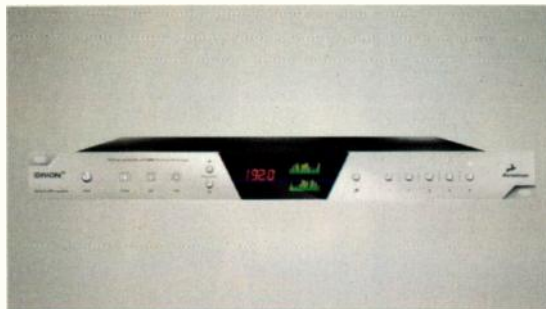
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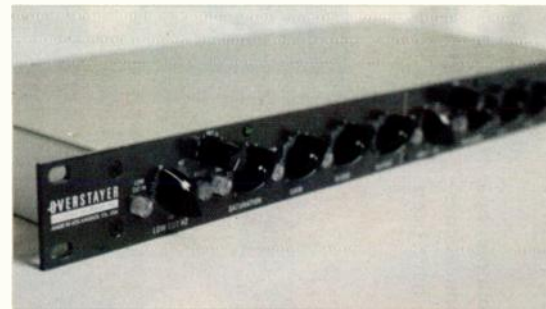
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Private Facilities

(continued from page 1)

Angeles formed an alliance to fight the rising tide of home-based, professional-quality studios operating without proper zoning. Then, in 1991, Alesis unveiled its ADAT digital tape machine, featuring 8-track recording for under \$4,000, engendering a growth spurt in private project studios. By the time Digidesign's Pro Tools had matured sufficiently to replace tape machines (Pro Tools also launched in 1991, but cost \$6,000 for only four tracks), some of those commercial studios were starting to go out of business.

If there is a trend currently, says Ellis Sorkin, whose Calabasas, CA-based Studio Referral Services (SRS) has been finding studio time and space for music recording clients since 1980, it's the relocation of home facilities to small commercial properties. "It's just like having an office; it just feels better to go to someplace sometimes," he explains.

"The other part is the kids, the dog, the wife. It just seems very semi-pro, if you're a pro, to have a big artist or producer walking into your house." That trend has been significant for some time, he says. "At one point, we had 27 leases going on in town. It's down from that to probably 18, 19 now. But that's something that didn't even exist 10, 15 years ago."

A number of commercial studios

have rented out rooms to producers and engineers, often on a long-term basis, observed Tim Finnegan at Dale Pro Audio in New York. For example, "Michael Brauer has a room at Electric Lady," he says. Such an arrangement provides the tenant with a studio infrastructure, including access to a live room, while helping the facility pay its bills.

The trend is hardly new: Robbie Robertson has had space at The Village in West Los Angeles for decades. Engineer/producers such as Ed Cher-

going that route for about 10 years," says Ehrenberg. As he notes, numerous large L.A. facilities have closed or changed owners during that period, including Cello, Cherokee, Encore and Front Page. Producer Josh Abraham took over the former Soundcastle studios in 2004, and songwriter Linda Perry acquired Royaltone in 2005.

The shift to private facilities has been great for Vintage King, says Ehrenberg. Instead of supplying several dozen commercial studios, "We've

ing okay, and Dallas, so-so; they don't have too many facilities. New York's probably okay, but I don't think they're booming."

In fact, several notable studios have closed over the past decade in New York, including Hit Factory, Sony Music Studios and Stratosphere Sound. Still, a few venerable multi-room studios remain in business, including Avatar, Electric Lady and MSR (formerly Right Track), while boutique facilities such as Jungle City and Germano Studios have opened.

The studio business appears to be holding its own, if not bouncing back, with private facilities largely leading the way.

ney and John Alagia are based there, too.

But for the well-heeled, it may even make sense to take over an entire facility. The BBC recently aired a feature on will.i.am's new L.A. complex, the former Laser Pacific post shop, which features a trio of Steven Slate Raven consoles in the main control room. "They have songwriting suites, tracking room, mix room, mastering, green screen for video, web marketing, all under one roof," reports Vintage King L.A.'s Jeffrey Ehrenberg.

"That's an extreme example, but a lot of big artists or producer/engineers that we work with have been

now got thousands of people trying to do commercial-level rooms, and needing our services."

But while the market is strong in the L.A. region, says Sorkin, who does business nationwide, it's something of an exception. "I would say that Nashville's probably doing pretty well. I have a feeling Atlanta may have contracted a little bit. San Francisco is still in the doldrums, as it's been for a long time. Seattle is probably middle-of-the-road.

"A lot of cities just don't have many studios—Detroit, for instance. Chicago has more facilities than Detroit, but they probably have more business, too. Austin seems to be do-

Other market segments may be making up some of the shortfall, including the education sector and houses of worship. "We do have a lot of sales to education," reports Finnegan. For example, "We just had a school that's going to be buying a pair of JBL M2s and the LSR308s, based on that same kind of technology, because they have a course that teaches their students how to listen."

The house of worship sector is pretty strong, says Finnegan, "although we don't see the mega-church business; that's not our backyard. But corporate business is not like it used to be."

While business overall may be rebounding, "I don't believe it will ever be what it was," says Sorkin, noting that the mega budgets of yore are long gone. SRS leases space belonging to one client with whom Sorkin was recently discussing the state of budgets. "He leased a client two 24-tracks and a Neve rack in 1997, and was getting \$10,000 per month on the rental, for five months," Sorkin reports. "I don't believe that is coming back, with a few exceptions. There are definitely artists that still spend significant money, most of them in the urban world."

"Even through 'this economy' that everyone has been griping about," says Ehrenberg, "vintage Neumann, Neve, Teletronix 2A and 3As, dbx 160s, have all either held their value or appreciated in value. You buy the best audio equipment ever made, you get a tax write-off for your business for making an investment, and then you have something that appreciates in value—that's almost unheard of in business.

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Sound Sets The Stage At Sochi For Olympic Games

SOCHI, RUSSIA—Making it to the Olympics means years of preparation, dedication to craft and singular determination to do one's best. That's spirit embodied by the athletes at the center of attention, but it is just as applicable for the teams of dedicated audio professionals behind the scenes, riding herd over acres of technology, as they bring the Games to the audiences of cheering fans onsite and around the world, watching in more than 200 countries.

Sports fans who made the journey to Sochi found themselves shuttling between a variety of world-class venues erected for the games, all of which were outfitted with top-shelf audio systems designed to ensure even coverage during events while obeying the mandated top sound levels of 85-87 dB.

Five of those venues were outfitted with Renkus-Heinz systems designed and installed by Avallon, Ltd of Moscow, including the Arena Isberg, which housed the figure skating and short track competitions. The audience seating was covered by eight hangs of Renkus-Heinz CEM61 and CEM62 high power CoEntrant mid-high modules, with eight CE-3TLO subs covering low frequency reinforcement. The systems were hung around a central Media-LCD display, and 10 CT7M TRAP boxes provided music to the skaters on the ice. Power and signal processing for the systems was handled by Dynacord DSA-series multichannel amplifiers and P 64 matrix processors. Audio signal was fed via fiber from a Stagetec Auratus On Air 24 digital console.

As for the other four venues, including Fisht Stadium, home of the opening and closing ceremonies, Avallon installed six Iconyx IC7-II mechanically steered array systems in Fisht's VIP lobby, as well as a pair of PNX-82 two-way Complex Conic loudspeakers in the Press Center. Meanwhile, the training centers for hockey and figure skating were both outfitted with multiple TRX151 two-way systems.

Eagle-eyed audio pros watching at home could spot more than just loudspeakers inside the Arena Isberg, however. For instance, Audio-Technica AT871r boundary mics could be seen on the rail above the ice dancing rink, and in truth, the company's microphones were pretty easy to spot in a number of Olympic events, both indoors and outside. Take the Olympic Skeleton track—the winter sliding sport sees athletes sled down a frozen track head-first at speeds of more than 80 mph. Despite the fast camera moves to follow the sleds, it was possible to spot an Audio-Technica BP4073



Training centers for hockey and figure skating were outfitted with multiple Renkus-Heinz TRX151 two-way systems.

short shotgun on a Bogen Magic Arm pointing down the track, and another one right by the finish line. Other events where AT mics could be spotted included curling, which saw the athletes sporting AEW T1000 body packs to get the mics close to the action; downhill skiing (particularly the Super G); speed skating; and bobsled.

Some of the most crucial pro audio gear was never heard by those attending the events, however; instead, it helped broadcasters bring the games to the world. For instance, Riedel Communications' MediorNet fiber-based network supported the transport of HD video and audio signals, data and Riedel Artist intercom signals. MediorNet systems were deployed in double-redundant rings to serve as a fiber backbone for audio and HD video, data and intercom signal transport within Fisht Stadium and several other venues linked to the International Broadcast Center. A total of 18 Riedel Artist digital matrix intercom mainframes and an array of headsets and backpacks supported communications at competition sites.

Within Fisht Stadium itself, the MediorNet infrastructure, including multiple interfaces and repeater sites, supported wired and wireless Ethernet distribution to enable both a local Wi-Fi network and facilitate programming, coordination and execution of program elements during the ceremonies, such as lighting effects and the movement of scenic and flying objects. Supplied and coordinated by Riedel, the installation featured 90 discreet radio channels and included more than 1,300 radios and 1,000 headsets.

Avallon, which handled the in-

stallation inside Fisht Stadium, also installed Merging Technologies Horus units to handle additional input signals and routing between the different systems. Horus was connected to the Stagetec Nexus via MADI and the audio was controlled by the Stagetec Auratus On Air 24 console, located high up in the stadium to give the operators a clear view of the arena.

The full design and direction of audio systems and services to tackle audio for the opening and closing ceremonies inside Fisht Stadium was managed by Auditoria Pty. Ltd. from Sydney, Australia. Among the equipment it chose were two identical turnkey Fairlight editing and playback systems, each consisting of two XSTREAM desktop controllers, two workstation PCs, two SX-20 I/O units and XE-6 Faders. Auditoria director Scott Willsallen explained the system's various uses, noting, "Whilst our primary usage of the Fairlight system is for dual-redundant A/B playback, our workflow also includes creating QuickTime movies for technical programmers and choreographers. The Fairlight platform gives us the buss count and flexibility to deliver stems for FOH and monitors, broadcast mixes, sound design content stems and backup vocal stems as well as the Quicktime movies, all within one session with complete A/B-roll capability and fully backed up on a second system."

In the U.S., the Olympics were



Fairlight's twin playback and editing systems inside the audio booth at Fisht Stadium during the 2014 Winter Olympics in Sochi, Russia.

broadcast on NBC and its various cable networks. NBCSN had three Merging Technologies Ovations and another three Horus on hand, connected to Calrec Artemis consoles via AES/EBU. NBC's primetime coverage theme music was cued on Ovation with a live voice-over channel and "bumpers" in and out of the commercial breaks. Any stings or highlight music cues were also pre-configured in Ovation and fired from the keypad when needed.

As for those consoles, Calrec provided five Artemis desks, as NBC Olympics purchased two 64-fader Artemis Shine consoles and augmented its arsenal by renting a further 40-fader and two 24-fader Artemis Beam consoles from Calrec. Additionally, Calrec supplied numerous stageboxes in digital, analog, and MADI formats to fulfill the I/O requirements, and provided on-site engineering support prior to and during the Games, as it has for NBC for every Olympics going back nearly 20 years to the Atlanta Olympics in 1996.

NBC Olympics also installed multiple CEDAR DNS 8 Live dialogue noise suppressors in its systems on-site. Inserted on busses and set in continuous learn mode, the units reportedly removed noise, reduced echo and allowed engineers to get more gain before feedback.



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April Foolin' Around

If you think the manufacturers behind your favorite audio gear are creative when it comes to inventing new equipment, you should take a look at our email box every year on April First. That's when they unveil products that are simply unbelievable. here's a few we featured April 1 on prosoundnetwork.com:

- Lectrosonics introduced user-assembled kits as a cost-saving alternative to its pre-assembled SRb Series dual-channel receivers, allowing users to enjoy the exciting challenge of sorting, correctly identifying, placing and soldering all the tiny parts—over 1,100 in all!

- Sensaphonics revealed its latest creation: the 3D 20/20, the world's first Active Ambient Optical Protection System, designed to control the harmful rays from concert lighting systems.



- Eventide debuted a real, free plug-in called Angry that analyzes the emotional content of angry music by measuring, in real time, the tempo, spectral components, dynamics and musical key.

- The Sound Guy, Inc. unveiled Dereverberationizer, a software application intended for removing excess reverb from musical performances, which it claimed has enabled scientists to listen to the sound of the Big Bang at the dawn of time.

For extended rundowns on these and other April Fools products, visit prosoundnetwork.com/apr2014.



sweet tweet links

Pro Sound News shares links to interesting audio articles every month via @prosoundnews on Twitter; here's just a sampling. Get the links at prosoundnetwork.com/apr2014

▶ How to annoy a HOW Sound Engineer.

▶ What to do with that old Cold War fallout shelter? Make it a studio, like Top Secret Sounds did.

▶ Interesting rundown on the history of New Orleans recording studios.

▶ Small studios become key part of Santa Monica, CA afterschool teen centers to help get kids off the streets.

▶ John Lennon memo about Harry Nilsson & Keith Moon using a studio console as a toilet up for auction, might get £6K.



BLOGGINGS

MOOG'S MONTH WITH ROUGH TRADE

As a precursor to its annual MoogFest in Asheville, NC, the innovative synthesizer company Moog held a residency at the Rough Trade NYC record store in the Brooklyn neighborhood of Williamsburg during the month of March, welcoming anyone to come in and experiment with one of the largest collections of Moog equipment in one location.



LADY GAGA RECALLS NYC'S ROSELAND

Lady Gaga graced the stage as SXSW's 2014 Keynote Speaker, imploring artists to not sell out to the conformity of today's music industry, touching on her personal rise to stardom, when she used to play gigs in New York City's small venues, and discussing New York's Roseland Ballroom, which closes its doors this month after 92 years with a string of eight shows by Gaga herself. Read some of her observations and statements in the Keynote at prosoundnetwork.com/apr2014.



See these blog posts and more at prosoundnetwork.com/apr2014



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Frank Filipetti, Grammy Award Winning Producer

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Vance Powell, Grammy Award Winning Chief Engineer, Blackbird Studios



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Think Different

With the rash of major studio closings in recent years, few studios are left that have been around for more than four decades—but those that are still here have some great stories. This video profile of San Francisco's Different Fur Studios highlights that with anecdotes from a facility that's recorded everyone from Van Morrison to Stevie Wonder to the latest EDM acts. Catch the clip at prosoundnetwork.com/apr2014.

SPECIAL REPORT

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THE PRO AUDIO INDUSTRY has changed radically over the past 10 years, with more choices, higher quality and better value than ever before, while the audience's audio media usage is at all-time highs. Then why all the concern over the future of pro audio? There is a widespread belief that end-users care more about convenience and cost than they do about audio quality.

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- Will the commoditization of professional audio tools affect the live sound community as well?
- Why will local and regional audio vendors become increasingly crucial to the industry?

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≡ Martin Audio Adds MLA Facility

BUCKINGHAMSHIRE, UK—Martin Audio recently opened a new MLA facility, expanding operations for the company's production and assembly, quality control, testing and warehousing.

"The runaway success that MLA has become meant we needed additional production and warehousing space in order to meet the growing

demand," commented Jason Robinson, quality manager for Martin Audio. "We also took the opportunity to instill new principles in both the creation of the layout and the day-to-day running of the facilities. 5S will help guarantee that we not only keep up with demand, but that it is achieved in an efficient manner with

the quality our customers expect and this leading system demands."

Alongside the production elements, the new facilities will also house Martin Audio's training sessions for both MLA and OmniLine. Andy Davies, lead applications engineer, said, "This new space will provide the perfect vehicle for premier



Martin Audio recently opened an MLA facility for its expanding operations.

training, while enabling us to show people how the product they are being trained on is made."

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AT Mics Up SXSWM

AUSTIN, TX—SXSWM, the dedicated online radio station for the South by Southwest Music Festival, used a number of microphones and headphones from Audio-Technica during its broadcasts this year.

This year's festival, held March 7-16, encompassed film, media, technology and music, with over 1,700 showcasing artists playing live. The channel is now live at sxswfm.com and features artists that have showcased during the SXSWM's 27-year history and all other aspects of the festival.

The station's DJs and content creators used the AT2020USB+ cardioid condenser USB microphones, ATH-M50 professional studio monitor headphones and AT8035 shotgun mics.

"We've had a great experience with the Audio Technica gear we've been using here at SXSWM," Connor said. "The ATH-M50 headphones are dependable, accurate and comfortable over the course of a long day of listening to SXSWM artists and producing our station elements. The AT8035 is not only a great shotgun mic in the field for interviews, but it has also become our go-to mic in our confined voiceover space."

Audio-Technica
audio-technica.com

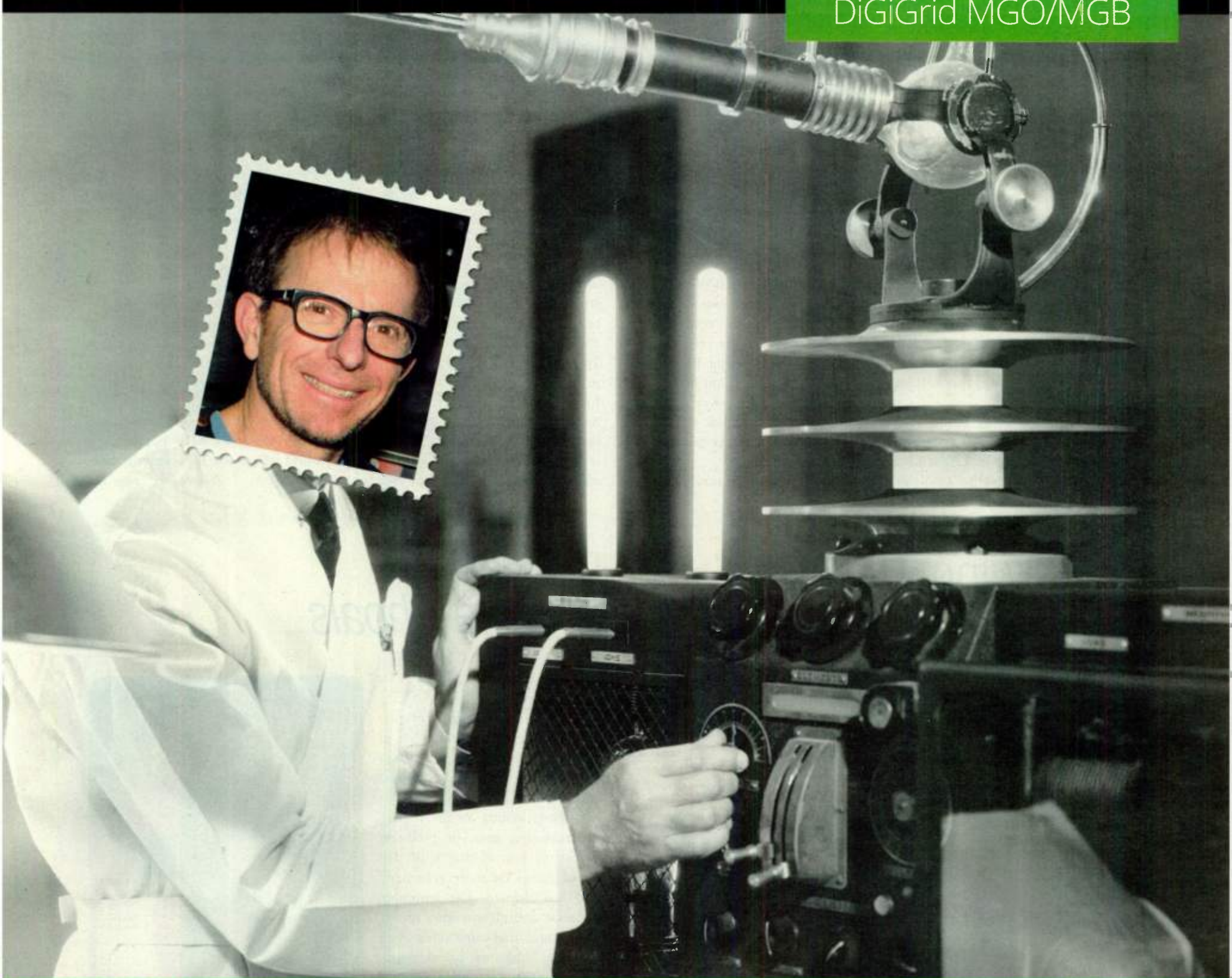
SXSWM
sxsw.com



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Dave Bracey (FOH PINK & CHER)

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DiGiGridMGB 128ch Coaxial MADi-to-SoundGrid Interface

Red Shift

BY STEVE HARVEY

RESEDA, CA—With tape stocks running low, Chris Lord-Alge, well known for employing a workflow at his Mix LA facility that funnels the Pro Tools session through a 48-track DASH tape machine and into his SSL E/G+ console, has started to transition from Sony to Focusrite RedNet converters. But while the new RedNet system undoubtedly offers some workflow efficiencies, the change wouldn't even be taking place were it not for the similarity in sound of the Focusrite and Sony electronics.

For years, Lord-Alge has had his assistants comp the session tracks, which can number 100, even as many as 200, onto his Sony PCM-3348 digital tape machine ready for mixing down through the SSL. In fact, he has two machines at Mix LA—one purchased used in 1989 for \$109,000 and a second that he picked up a few years ago for just \$1,500. But as he comments in a video recently produced by Focusrite on his new RedNet system, “No matter how much tape I’ve got piled up, this format’s got to die.”

It should probably come as no surprise that there are two Sony DASH machines at Mix LA, as Lord-Alge admits to pursuing a “Noah’s



Chris Lord-Alge pauses in his newly Focusrite RedNet-laden mix space.

Ark” philosophy—two of everything (or three, or, in the case of his Urei 1176 “blue stripe” compressors, four). But it was his reliance on a single unit, a Focusrite Red 3 dual-channel compressor that he has used on “10,000 mixes” over the years, which led him to check out RedNet as he began to make preparations for a tapeless future.

When Phil Wagner, president

of Focusrite U.S., set up a demonstration of a 48-track RedNet system—two 32-channel RedNet 5 Pro Tools|HD bridges plus three 16-channel RedNet 2 converters—at Mix LA, Lord-Alge knew he had found the replacement for his trusty Sony machine. “When they put the RedNet rig up, I said, ‘Did you patch it or not?’ It sounded like what I like, what I’m used to and what works for

me,” says Lord-Alge.

“I want the sound of my old D-to-A, which is a bit more analog, in some ways a bit more lo-fi. It’s got a bit more glue in there,” he elaborates.

With a few exceptions, of course, the music production process now typically revolves around the digital audio workstation. “The point is, it’s a world where you’ll be strictly driv-

(continued on page 32)



Reviewing The New

Beyond the realm of audio gear, the editors at Pro Sound News are constantly exploring the latest books, shows and exhibits highlighting the music world, and the innovators behind some of the industry’s greatest moments. Following are reviews of two books and one film we recently examined.

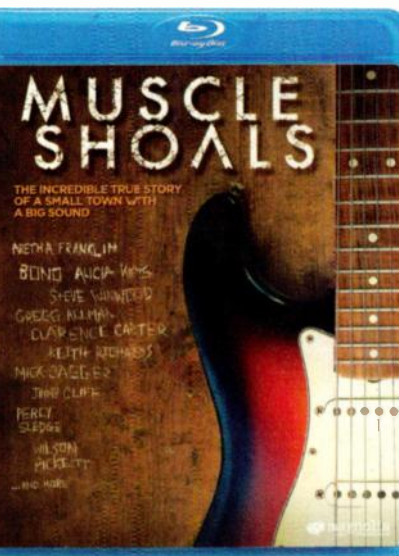
DVD REVIEW:

Muscle Shoals

BY CLIVE YOUNG

Of the recent spate of documentaries about life in the studio, *Muscle Shoals* (Magnolia Pictures, 111 Minutes) stands out for what it is not. It is not about analog versus digital, or fetishizing gear, or producer theory or any of that stuff. It’s about things far more ephemeral and less defined, like ambition, joy, pain and all the other messy, human stuff that came along when a sleepy Alabama town, population 8,000, became a musical prism that focused R&B music into a colorful, blinding light.

Dozens of artists weigh in throughout, sharing their insights and experiences recording in the town, like Aretha Franklin, Bono, Alicia Keys, Steve Winwood, Gregg Allman, Clarence Carter, Keith Richards, Mick Jagger, Jimmy Cliff, Percy Sledge, Wilson Pickett, and others.



Despite the big names, if there’s a central focus, it’s Rick Hall, the soulful, gruff founder of FAME Recording Studio. As *Muscle Shoals* unfolds and he turns a former candy and tobacco warehouse into a veritable

(continued on page 31)



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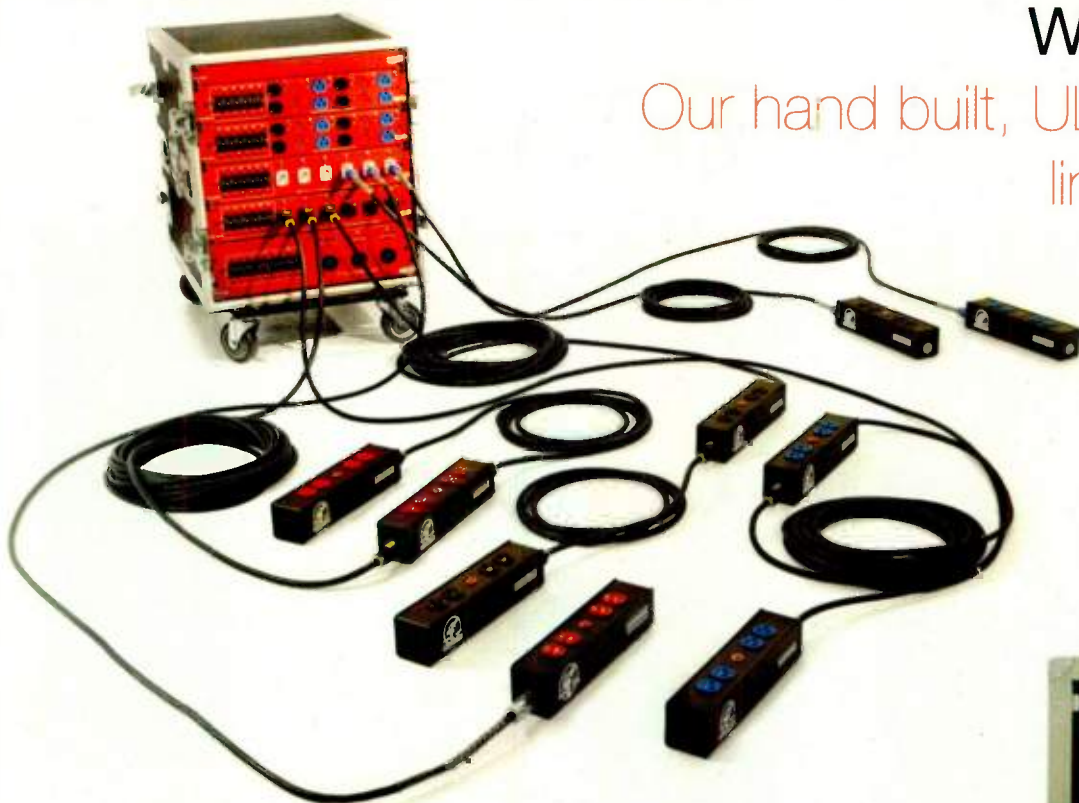
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Gone West With Gear In Tow

BY STROTHER BULLINS, EDITOR OF PRO AUDIO REVIEW

The Vault Mastering Studio now thrives in the Southwest, owner and engineer Nathan James' reclaimed hometown. After years of honing his skills at world-class facilities alongside New York City's mastering legends, James successfully planned a return to Phoenix, AZ to balance potential local business with the clientele he had successfully gleaned from around the world.

His growth as an audio pro has been a steady climb. After a stint at Arizona State University, James transferred to the Cleveland Institute of Music, a small conservatory of high-level classical musicians. The institute also offered a recording program and it wasn't long before he was hooked, gaining a Bachelor of Science in Audio Engineering alongside editing work at Telarc and a springboard summer job as a recording engineer at the Tanglewood Music Festival in Lenox, Massachusetts before heading to the Big Apple. "I was brought on to be the mastering assistant to Scott Hull at Classic Sound," James recalled. "Following my last exam, I literally hopped in a U-Haul and started work in New York two days later."

It was with Hull that James honed his skills, hopping around town a bit with his mentor, learning how to utilize a wide range of gear and environments in the process. "I worked with Scott for five years," said James. "He and I went over to the Hit Factory, then to a boutique studio called Jigsaw Sound where I started my own business; Scott and I parted ways, yet only temporarily. After a year or two, rent became way out of control and I moved my mastering studio to Midtown. Then I moved to Masterdisk, working again with Scott, this time as a colleague for my last three to four years in New York. It was a crazy, bouncing-around path that I took, but it worked."

By late 2011, James had returned to Phoenix with his growing family and the goal of bringing his world-class mastering talents to the city. Knowing he needed an acousti-



"First and foremost, the most important piece of gear in the room is the room itself," says James of his WSDG-designed mastering facility.

cian to build his work environment, James contacted John Storyk and Walter-Storyk Design Group's product manager Matthew Ballos for a consult.

"First and foremost, the most important piece of gear in the room is the room itself," said James. "It is the lens through which everything passes. In my experience—having been in really good-sounding rooms in New York and poor-sounding rooms, too—having a well-designed workspace is the difference between knowing what you're doing and guessing. It's the difference between a project with several recalls and no recalls. So it was the big link in the chain that had to be built when I moved here. I'd already had the good fortune to work out of a room that John and his colleagues built, Classic Sound. That space stuck with me—how it felt to work there, the look on people's faces when they walked into the room, everything."

Built into a tri-level Phoenix residential home, James' 300-square-foot studio is located on the bottom floor with an eight-foot ceiling and a large window providing natural light. Ballos and Storyk determined that it wasn't necessary to "float" the room, yet employed a 2 mm-thick rubberized matting beneath hardwoods to reduce sound transmission, along with ceiling and wall isolation products and techniques. "During design, we envisioned a front wall treatment comprised of three overlapping curved, stretch fabric-wrapped, absorptive panels," recalled Ballos. "We developed a correspond-

ing ceiling cloud and rear-wall panel which complimented the aesthetics and completed the room tuning requirements."

To treat the window, WSDG crafted a 6-foot wide, absorptive acoustic treatment built with Clear-sorber Deamp perforated transparent panels. The treatment is hinged to open the window, providing James and his clients with a breeze when desired. "An aspect of a well-treated room is that it becomes a 'feature' in a professional level, high-performing studio," said James. "It allows clients to learn how important acoustics are, and—especially for new clients—that it's a serious place. And if that is taken care of properly, they can assume that a lot of other things are taken care of properly, too. I was really happy to work with WSDG; I really have nothing but great things to say about that whole experience."

Complimenting its design, the Vault features gear generally only seen in the highest-level of mastering facilities: a pair of the seven-driver, "world's most accurate loudspeaker" Duntech Sovereign 2001 monitors with Cello amplification; a custom Dangerous mastering console; A/D and D/A converters by Benchmark (DAC-1), Forssell (MDAC-2), Lavry (AD122 96MKIII and 3000S), and

Prism (AD-2); a custom MAGIX Sequoia DAW with Pyramix Virtual Studio Audio Restoration Tools; and analog processing by Avalon, Crane Song, Manley Labs, Pendulum, Son-tec and Weiss. "I migrated my entire mastering setup from New York, from the custom DM console to the Duntech Sovereign Cello amp monitoring combination that I've relied on for well over a decade. I brought all my trusted processing tools as well. Everything I need to get the most out of every recording is available at my fingertips," said James.

Leaving New York City for what could be best deemed a secondary market requires a business balance of international and local clients, explained James. "Having a local base is incredibly important for me; and, being back in the Phoenix area, it's a priority. I believe that supporting the local music community, and helping it thrive, is important to any mastering business. I don't think you can have a successful mastering business without having a solid local base. Where I started, in New York, the density of musicians is a lot greater there; the other side of that coin is there is a lot more competition in those areas. In mastering, we don't lean on the need to have musicians present as much as you would hav-

STUDIO: THE VAULT MASTERING STUDIO

OWNER: NATHAN JAMES LOCATION: PHOENIX, AZ



There's more ▶ Catch Sister Sparrow & The Dirty Birds' "The Long Way" video, mastered at The Vault in Phoenix, at prosoundnetwork.com/apr2014.

ing a small recording studio. Obviously, technology has allowed me to develop pockets of clients around the world; there's certainly much more range that I have because of that—but others have that same kind of range, too. It comes down to being able to provide a really good experience for your clients so they work with you...and want to work with you again. Technology is important, but it's just a part of the bigger picture in having a successful business."

As the role of the modern mastering engineer has evolved far beyond the boundaries of yesteryear, James champions his background in classical music as training: "It was really helpful while learning to listen," he said.

But today, some of the biggest challenges in the business of mastering involve organization and archiving—not necessarily audio-related issues. "The physical aspect of the business has changed dramatically," James continued. "When I started in New York, we were still using [Sony PCM-1630] U-matic tapes as masters, shipping multiple copies to multiple countries. Juxtapose to today, there is very little physical media between mastering engineers and clients; the vast majority of it is uploads and downloads. It takes juggling to get the system right, so the organization and archival systems—especially for recalls and 'Best Of' releases—are very important. It's gotten a lot cheaper to make those archives, too; that's good, because I can recall a session from five years ago in 30 seconds; it used to take about two hours to load an archive back from an Exabyte drive, for example."

These days, James is becoming involved in projects much earlier in the production process, too. "It's really not uncommon for my clients to send a mix—or two or three—with a message, 'Yeah, I'm 98 percent sure that this is done,'" he recalled. "That's helpful on two fronts: It allows me to become familiar with the music, identify any potential problems in the mix, and give the engineer the opportunity, if local, to hear what the mix sounds like in a proper environment. Secondly, it staves off those potential problems, where I find myself making compromises when I can't go back into the mix."

At the Vault, pre-final mix involvement happens more often than not. "That's one of the most important aspects of having a mastering engineer on board—the third-party perspective," James continued. "That's happening a lot more than even two years ago. Certainly though, there were instances in New York where people brought in their workstations. I know some peo-

ple may think that opens up a can of worms, but I've always enjoyed having it available; it always meant we'd get a better product if something needed to be changed at the mix level that causes compromises in other areas."

James is adamantly encouraged about the increasing demand for higher-resolution audio within the marketplace, bolstered by Apple's "Mastered for iTunes" initiative as well as HD Track and Pono's un-

compressed, audiophile-level recording products currently being introduced to the market. "Because I come from an audiophile background, I'm going to support anything that allows people to hear music closer to what was being heard in the studio," he said. "There's always going to be that segment of the population more concerned about having their entire music collection on their phone than having higher-

quality audio overall, so part of my job is to ensure that the listener is receiving a listening experience as close to what the artist intended as possible. That said, I'm increasingly delivering high-resolution formats to distribution companies and back to labels upon request. We all welcome anything that gives the listener a little bit more resolution."

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Be Prepared

On his Continuing Adventures in Software, Rich Tozzoli shows how he packs his kit, ensuring he's prepared to grasp success from the jaws of a failure.



Got spares: If a cable fails, will your session or gig also fail?

The other night, I was playing a show out on tour and went to take a solo, stepping on my Tube Screamer pedal. It lit up red and gave me the gain and grit I needed. However, when I went to take it off, it wouldn't release. I cut the volume on my tele, finished the rest of the tune and pretended everything was fine. After the song, I tried a few more times to release it and sure enough, it stayed lit. So I quickly pulled its power from the pedalboard supply and plugged it back in. But now, it wouldn't even turn back on. Plan B went into effect, as I had the small pedal for the amp's distortion on the side of my pedalboard—just in case. Thanks to that preparation, I got through the rest of the show with no problem. Once again, redundancy saved me, as it has countless times. The rule of the road—and the studio—is not if things will stop working, but when, so be prepared in advance.

In our line of work, it's important to have multiple backups and/or workarounds for just about everything we do. I know I've mentioned this before, but first and foremost is our data. That means being diligent about backing up your files. Most of us still work on either external Firewire/Thunderbolt drives or

internal SATA drives of some type. A quick glance of the Apple website shows a wide variety of drives for backing things up, from a LaCie 3 TB USB 3.0 drive for \$159 to a 64 TB Promise VTrak x30 Series Raid system for \$29,999. The point is, get that data off your main hard drive onto at least two other drives for it to be safe. You can even use any of the popular cloud backup systems, but just do it, or you may regret it.

In my studio, I have two backup production systems to my main Pro Tools HDX rig—an Apollo Quad with an iMac and a UA Apollo Twin with a PowerMac. Both backup systems, which also serve as 'B' and mobile rigs, are outfitted with Avid's Pro Tools 10 and 11, and are very capable of getting me through a session should my HDX rig give me problems. Before I had the Apollos, I used

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Delving Into Digital Distribution

BY CRAIG ANDERTON

While most of us have been paying attention to new features within the software we use, another—and very different—revolution is taking place in the background: digital software distribution. But this isn't just about getting software into your hands, as it's sometimes designed to discourage piracy or provide additional services for end users.

When done poorly, digital distribution can make you want to scream. For example, I recently called up a plug-in whose error message claimed it was no longer

plug-in wanted to see the old one. You can't argue with a plug-in, and I only found a solution (turn off compatibility mode altogether) in an obscure forum post. If I'd been dealing with a client, that would have been rather embarrassing.

But for a far more positive example, consider Native Instruments' Service Center software. While initially dissd due to questionable stability and server issues that sometimes prevented authorizing software you'd bought, NI kept improving the concept and execution. Now it's not only stable and manages your authorizations,

“There's no universally adopted download manager solution yet, and frankly, some work better than others.”

Craig Anderton

authorized—even though I knew it was. After a lengthy and frustrating search, I found that installing an update to a host program with Windows' compatibility mode active caused the computer to generate a new computer ID, and the

but also keeps track of serial numbers and your installed software's versions. When you open the Service Center, you can find out if program or content updates are available, change authorizations if you change computers, and re-install programs if the unthinkable happens and your hard drive crashes. All of this is done without dongles or other inconveniences to legitimate users.

While few companies take online software management to the degree NI does, many provide a user area that stores information on your purchases, serial numbers, authorization codes, and the like. Maintaining the information online prevents that sinking feeling when you need to re-install some software, and can't find the little slip of paper with the serial number.

Another aspect of digital downloads involves increasingly large file sizes, particularly sample libraries that may hit dozens of gigabytes. Unless you have fast internet pipes, sometimes web connections aren't up to the task—and one dropped bit is all it takes to corrupt a file. As a result, download managers that allow downloading large files at your convenience are becoming more common; you can

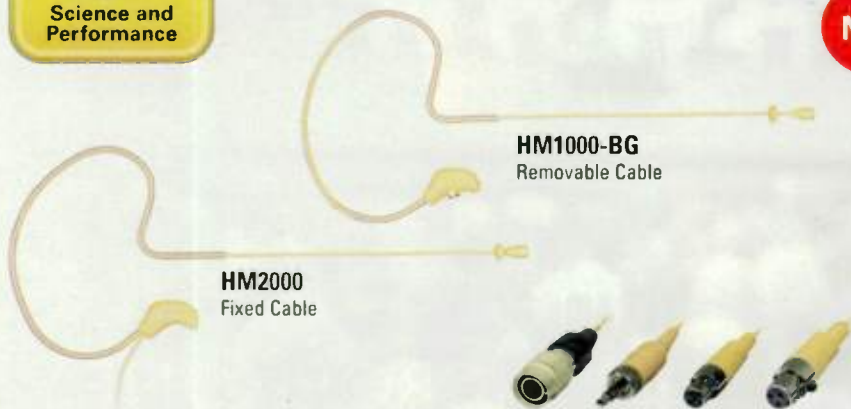
(continued on page 57)



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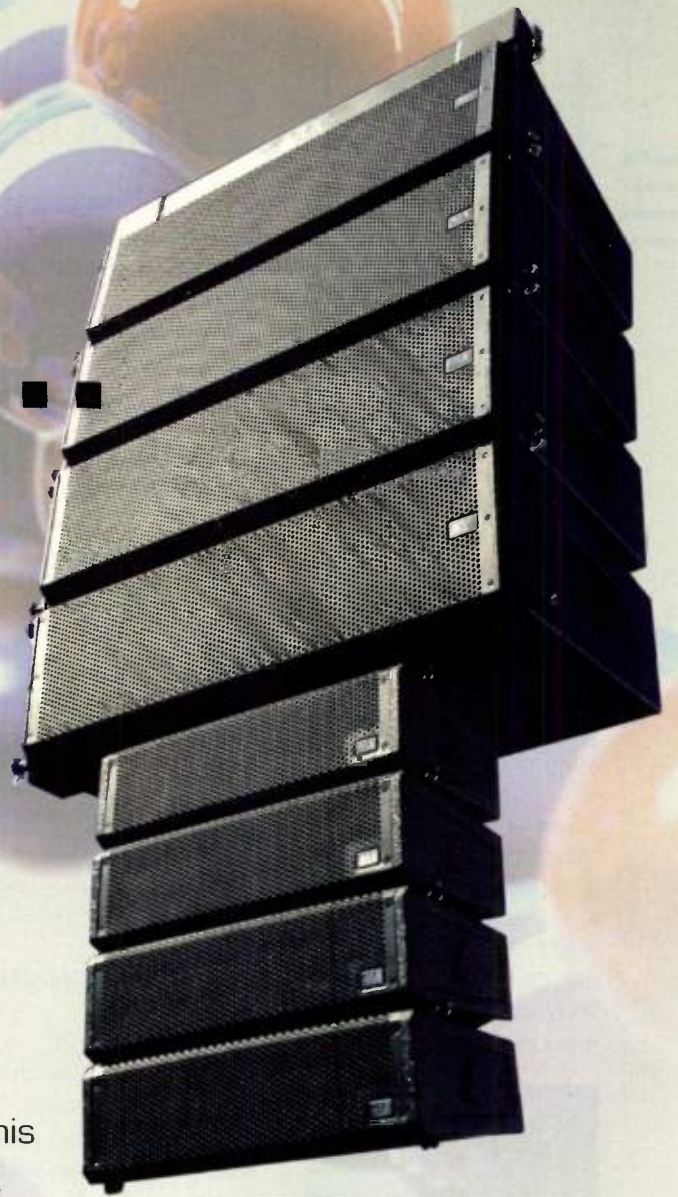
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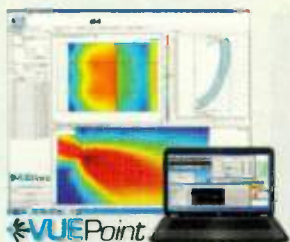
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acoustic element



Compact two-way
al-4 acoustic element



V Series Systems Engine
rack-mount amplifier/DSP



VUEPoint beam forming
FIR array steering



SystemVUE network and control
software (Window & OS X)

alClass
multi-element line array system

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ARTIST: FLINTFACE
ALBUM: HOPE
LABEL: TELL THE REST RECORDS
PERSONNEL:
Produced by: Ross Hogarth
Engineered by: Ross Hogarth
Assistant Engineer: Alec Henniger
Studios: The Boogie Motel (Los Angeles, CA); Soundmine (Strasburgh, PA)
Mastered by: Gavin Lurssen (Lurssen Mastering)
EQUIPMENT NOTES: Avid Pro Tools; Royer Labs mic; Chandler LTD; Pulse Techniques; ATC studio monitors

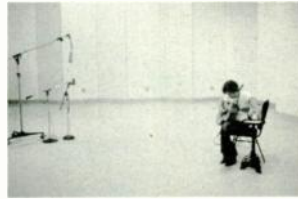


ARTIST: MUSHROOMHEAD
ALBUM: THE RIGHTEOUS & THE BUTTERFLY
LABEL: MEGAFORCE
PERSONNEL:
Produced by: Steve "Skinny" Felton
Engineered by: Tommy Church, Ryan Farrell
Assistant Engineer: Pat Lewis
Studios: Filthy Hands Studio (Cleveland, Ohio)
Mastered by: Roger Lian
EQUIPMENT NOTES: Neve V console; Avid Pro Tools 6.7; Yamaha NS-10 studio monitors



ARTIST: EAST INDIA YOUTH
ALBUM: TOTAL STRIFE FOREVER
LABEL: STOELN RECORDINGS/ CO-OP
PERSONNEL:
Produced by: William Doyle
Engineered by: William Doyle
Studios: Home Studios in Ruislip, London and Chandler's Ford, Hampshire

Mastered by: Alex Balzama (Swift Mastering)
EQUIPMENT NOTES: Cubase SX3, Cubase 5; Logic 8; Edirol PCR-500 MIDI controller; Soundhack Delay Trio, Freesound Bundle, Arturia Minimoog V, Native Instruments Guitar Rig, A1 Synth plugins; Behringer MS 20, Genelec 8040A studio monitors



ARTIST: WILLIE WATSON
ALBUM: FOLK SINGER VOL. 1
LABEL: ACONY RECORDS
PERSONNEL:
Produced by: David Rawlings, Gillian Welch
Engineered by: David Rawlings, Matt Andrews
Assistant Engineer: Shani Gandhi
Studios: Woodland Sound Studios (Nashville, TN)
Mastered by: Stephen Marcussen (Marcussen Mastering, Los Angeles, CA)
EQUIPMENT NOTES: Custom Woodland Studios Altec console; Studer A800 MKIII 16 track recorder; ART 102 recorder; Neumann U47, Sony C37A, RCA BK5B mics; Yamaha NS-10, Altec 604E studio monitors



ARTIST: HAWKER M. JAMES
TRACK: 'MANIFEST DESTINY'
ALBUM: PHASES
LABEL: ARDENT MUSIC
PERSONNEL:
Produced by: Hawker M. James
Engineered by: Jason Milton
Assistant Engineer: Hawker M. James
Studios: Young Lion of the West Recording Company (Rochester, NY)
Mastered by: Kevin Nix (L. Nix Mastering, Memphis, TN)
EQUIPMENT NOTES:

Tascam 388 console; ART Tubefire 8 mic pre; John Nau Engineering Jukebox Amplifier; Yamaha NS-500 studio monitors



ARTIST: THE FAINT
ALBUM: DOOM ABUSE
LABEL: SQE
PERSONNEL:
Produced by: Mike Mogis, The Faint
Engineered by: The Faint
Studios: Enamel (Omaha, NE); ARC (Omaha, NE)
Mastered by: Ted Jensen
EQUIPMENT NOTES: Toft Audio Trident 24 console; Avid Pro Tools HD; Shure SM7 mic; Tannoy System 15 DMT II studio monitors



ARTIST: HORSE THIEF
ALBUM: FEAR IN BLISS
LABEL: BELLA UNION
PERSONNEL:
Produced by: Thom Monahan, Horse Thief
Engineered by: Thom Monahan
Assistant Engineer: Geoff Neal, Nico Essig
Studios: Sunset Sound (Los Angeles, CA); Grama Studios (Los Angeles, CA)
EQUIPMENT NOTES: Neve 8088 console; Adam P22A studio monitors



ARTIST: GRAND ANALOG
ALBUM: MODERN THUNDER
LABEL: FEEL UP RECORDS
PERSONNEL:
Produced by: Well Said, Odario, Catalist and Grand Analog
Engineered by: Alistair Johnson, Timothy Abraham, Brian Bernard, Roger Swan, Cam Loeppy
Assistant Engineer: Greg Enns, Malin Johnson,

Rachel Ashmore
Studios: The Hive (Toronto, Canada); The Lionhead Lab (Toronto, Canada); Prairie Recording (Winnipeg, Canada); Hipposonic Studios (Vancouver, Canada)
Mastered by: Joao Carvalho (Joao Carvalho Mastering)
EQUIPMENT NOTES: Lynx Aurora 16 AD/DA converter; Studer A80 MK III 16 Track recorder; Avid Pro Tools 9 HD; Adam A7, Yamaha NS-10, Focal Solo 6be studio monitors



ARTIST: SYMBOLS OF THE WEST
ALBUM: REMIXED
LABEL: ROCK SHOCK IT! RECORDS
PERSONNEL:
Produced by: Chris Wonzer, Nat Kendall
Engineered by: Chris Wonzer
Studios: Hyde Street Studios (San Francisco, CA); Magnolia Records (Novato, CA)
Mastered by: TJ Lipple
EQUIPMENT NOTES: Avid Pro Tools HD



ARTIST: ACTIVATOR
ALBUM: ACTIVATOR
LABEL: SELF-RELEASED
PERSONNEL:
Produced by: Matt Snedecor and Activator
Engineered by: Matt Snedecor
Studios: Hella Shweet Studios (Ringwood, NJ); Night Owl Studios (New York, NY)
Mastered by: Alan Douches (WWSM, New Windsor, NY)
EQUIPMENT NOTES: Amek Big 44, Yamaha 01v consoles; Avid Pro Tools HD10; Aphex 107 Mic Pres, dbx 160a compressor; Avantone Mix Cubes, Yamaha NS-10, KRK Rockit RP5 studio monitors

notes

Ocean Way Hosts Elton Tribute

HOLLYWOOD, CA—Fall Out Boy dropped in at Ocean Way Recording Studios (oceanwayrecording.com) to record "Saturday Night's Alright for Fighting," their contribution to the Elton John 40th anniversary tribute album, *Goodbye Yellow Brick Road*, with engineer Nathaniel Kunkel and producer Peter Asher, who both joined in on chorus vocals.

Alchemy Transformed by ATC

LONDON, UK—Matt Colton, who recently earned the Mastering Engineer of the Year title from the Music Producers Guild and whose credits include Coldplay, James Blake, Gary Numan and Metronomy, has installed a pair of ATC (transaudio-group.com) SCM150ASL PRO three-way active loudspeakers in his critical listening room at the new Alchemy Mastering in West London.

You Me & Apollo at Ardent

MEMPHIS, TN—Inspired by the results of a single project at Ardent Studios (ardentstudios.com), popular Colorado band You Me & Apollo returned to the Memphis facility to record their new full-length album, working on both projects with producer/engineer Jeff Powell, who started out at Ardent 25 years ago answering phones.

Audio Network U.S. Expands

NEW YORK, NY—Music company Audio Network (us.audionetwork.com) has promoted Ian Ginsberg to the role of vice president, sales. Audio Network US, also appointing Moira McCarthy, manager, music licensing; Tristan Efremenko, manager, music licensing; and Michael Matosic joins the New York team as U.S. copyright manager.

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- | | | | | | | |
|-------------------|----------------------|-----------------|-------------------|----------------------|-------------------|---------------------|
| AC/DC | Chicago | Eric Johnson | Jewel | Letterman Show | Paul Simon | Soundgarden |
| Adele | Chick Corea | Erykah Badu | Jimmy Buffett | Lenny Kravitz | Peter Gabriel | Spice Girls |
| Adrian Belew | Chayanne | Evanescence | Joe Jackson | Leo Kottke | Pink Floyd | Steely Dan |
| Aerosmith | Chris Cornell | Extreme | Joe Nichols | Leonard Cohen | Placebo | Steve Earle |
| Alice Cooper | The Chieftains | Faith Hill | Joe Satriani | Linkin Park | The Police | Steve Lukather |
| Alicia Keys | Chuck Leavell | The Flecktones | Joe Walsh | Los Lobos | Porcupine Tree | Steve Miller |
| Alison Krauss | Chuck Rainey | Fleetwood Mac | Joey DeFrancesco | Lou Reed | Prince | Steve Morse |
| Alter Bridge | Cyndi Lauper | Flogging Molly | John Frusciante | Lucinda Williams | The Prodigy | Steve Stevens |
| America | Cirque Du Soleil | Foo Fighters | John Hiatt | Macy Gray | Queensrÿche | Steve Vai |
| American Idol | Clint Black | Foreigner | John Jorgensen | Manhattan Transfer | Radiohead | Steve Winwood |
| Anberlin | Coldplay | Frank Gambale | John Mayer | Manowar | Randy Bachman | The Stills |
| Ani DiFranco | Colin James | Franz Ferdinand | John Patitucci | Marcus Miller | Randy Travis | Sting |
| Animal Collective | The Corrs | Garbage | John Petrucci | Mariah Carey | Rascal Flatts | Stone Temple Pilots |
| Annihilator | Creed | Gavin DeGraw | John Rzeznik | Marillion | Ravi Shankar | Styx |
| Antoine Dufour | Crosby, Stills, Nash | Genesis | Johnny A | Marilyn Manson | Razorlight | Sum 41 |
| Audioslave | Crowded House | Gino Vanelli | Johnny Hallyday | Mark Egan | R H Chili Peppers | System of a Down |
| Avenged Sevenfold | Damien Rice | Godsmack | Joni Mitchell | Mark Knopfler | Rick Wakeman | Taylor Swift |
| Avril Lavigne | Dandy Warhols | Gomez | Josh Groban | Mark Tremonti | Rickie Lee Jones | Ted Nugent |
| Backstreet Boys | Daniel Lanois | Goo Goo Dolls | Josh Turner | Maroon 5 | Ricky Skaggs | Three Doors Down |
| The Band | Daryl Stuermer | Good Charlotte | Journey | Marty Stuart | Rihanna | Timbaland |
| Barbra Streisand | Dave LaRue | Gov't Mule | Juanes | Matchbox 20 | Ringo Starr | Tom Waits |
| Bare Naked Ladies | Dave Matthews | Grand Ole Opry | Justin Bieber | Meatloaf | Robert Randolph | Tommy Emmanuel |
| Barry Manilow | Davy Knowles | Great Big Sea | Justin Timberlake | Megadeth | Rod Stewart | Tommy Lee |
| Beach Boys | The Decemberists | Gregg Allman | Kaiser Chiefs | Melissa Etheridge | Roger Waters | Tony Levin |
| Beastie Boys | Def Leppard | The Guess Who | Kanye West | Metallica | Rolling Stones | Toots & The Maytals |
| Beck | Derek Trucks | Guns & Roses | Kasabian | Michael Bubl  | Rush | Tragically Hip |
| Bela Fleck | Destiny's Child | Gwen Stefani | kd Lang | M tley Cr e | Ryan Adams | Travis Tritt |
| Ben Harper | Devin Townsend | Hall & Oates | Keb' Mo' | Mot rhead | Sam Roberts | U2 |
| Bette Midler | Diana Krall | Herbie Hancock | Keith Urban | Mumford & Sons | Sammy Hagar | Usher |
| Billy Idol | Dimmu Borgir | Him | Kellie Pickler | Muse | Santana | Van Halen |
| Billy Joel | Disney | Hoobastank | Kenny Chesney | My Morning | Sarah McLachlan | Vanessa Williams |
| Billy Ray Cyrus | Dixie Chicks | Hot Hot Heat | Kenny Loggins | Jacket | Seal | Victor Wooten |
| Billy Sheehan | Dolly Parton | House of Blues | Kerry King | Nathan East | Sevendust | Vince Gill |
| Bjork | Donna Summer | Hunter Hayes | The Killers | The National | Shakira | Weezer |
| The Black Crowes | Donny Osmond | INXS | Kings of Leon | Neil Young | Shania Twain | White Stripes |
| Black Eyed Peas | Doobie Brothers | Iron Maiden | Kirk Hammett | Nelly Furtado | Sheryl Crow | The Who |
| The Black Keys | The Doves | James Taylor | Kitaro | The Neville Brothers | Shinedown | Will Lee |
| Blue Man Group | Dream Theater | Jamie Cullum | Klaxons | Nickelback | Sigur R s | Will I Am |
| Bob Dylan | Duke Robillard | Jamiroquai | Korn | Nine Inch Nails | Skunk Anansie | Wyclef Jean |
| Bon Jovi | Duran Duran | Janet Jackson | KT Tunstall | Oak Ridge Boys | Slayer | Xavier Rudd |
| Bonnie Raitt | Dwight Yoakam | Jars of Clay | Lady Antebellum | The Offspring | Slipknot | Yellowjackets |
| Bootsy Collins | The Eagles | Jay Leno Show | Lady Gaga | One Direction | Snow Patrol | Zac Brown |
| Boston Pops | Econoline Crush | Jeff Beck | Lamb of God | Pat Metheny | Sonic Youth | |
| Brad Paisley | Edgar Winter | Jennifer Lopez | LeAnn Rimes | Paul McCartney | | |
| Bruce Hornsby | Elton John | Jerry Douglas | Lee Ann Womack | | | |
| Bruce Springsteen | Eminem | Jet | | | | |
| Bruno Marz | Emmylou Harris | Jethro Tull | | | | |
| Bryan Adams | Enrique Iglesias | | | | | |
| Buddy Guy | Eric Clapton | | | | | |
| Butch Walker | | | | | | |
| Cannibal Corpse | | | | | | |
| Carly Rae Jepsen | | | | | | |
| Casting Crowns | | | | | | |
| CeCe Winans | | | | | | |
| Celine Dion | | | | | | |
| Cheap Trick | | | | | | |

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BOOK REVIEW:

Down The Rhodes—The Fender Rhodes Story

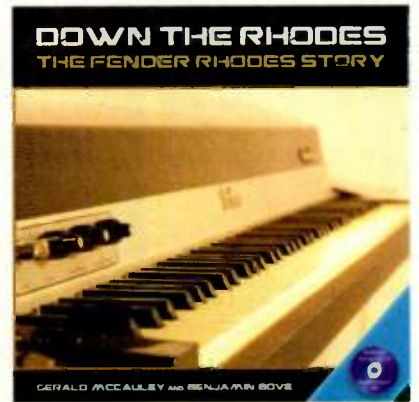
BY KELLEIGH WELCH

In 1942, while training with the Air Force, Harold Burroughs Rhodes created a laptop keyboard from scrap plane materials he found around the airfield. His intention for this key-

board, now known as the Army Air Corps Piano or Xylette, was to create a smaller, more portable piano to use while teaching injured soldiers during WWII to play as a form of musical therapy, but the invention would carry on to become one of the

most revolutionary instruments in the music industry. Now that story has been captured in the sumptuous Book and Blu-ray set, *Down The Rhodes: The Fender Rhodes Story*.

Authors Gerald McCauley and Benjamin Bove chronicled the



Rhodes keyboard, and how it influenced countless artists in the music industry through this oversized hard-cover book and accompanying 2013 documentary. Published by Hal Leonard Books, the book features intimate interviews with dozens of music's notables on their experiences with the instrument, and takes a look at how the Fender Rhodes played a role in creating music from the 1960s on.

Between 1946 and 1965, Rhodes would continue to improve on this piano, eventually creating the well-known 32-note Fender Rhodes Keyboard Bass, which has been used many of music's most memorable artists, including Miles Davis, Quincy Jones and Herbie Hancock.

In the section titled 'In The Making,' engineer Steve Woodyard discusses his involvement in the development of future generations of the keyboard. "One benefit I got from all those years was that, because I worked with so many of our sponsored artists, I developed a sense of touch that was very articulate. I also had to develop an ear to hear and feel all the nuances per note—not just a group of notes, but all the way per note...I didn't realize until later, but that's what allowed me to develop the Mark V...and the Mark IV," Woodyard said in his interview for the book.

The bulk of the book is a testament to the Fender Rhodes' impact on music, complete with color photos. "When you're talking about the Rhodes piano, you cannot forget Herbie Hancock and "Chameleon" (of the funk-jazz fusion classic from the 1973 album, *Headhunters*.) The sound of the Rhodes on that track is what a lot of people strive for in their Rhodes piano sound. It set the standard for a lot of people today," said Bove.

Down The Rhodes: The Fender Rhodes Story is a great collector's item for the keyboardist, musician or music collector. A special limited edition of the book comes in a leather case.

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BOOK REVIEW:

Social Media Promotion for Musicians

BY CLIVE YOUNG

Don't let the title fool you. *Social Media Promotion for Musicians* is for anyone in the music biz who's an entrepreneur—which is to say, it's for *everyone* in the music biz. This how-to manual is just as relevant for producers, engineers, studios, regional sound companies, gear houses and others enterprising audio pros as it is for bands that want to push their next gig.

In the space of 300 pages, Owsinski digs deep into social media (Facebook, YouTube, Twitter, Google+ and Pinterest), blogging (WordPress, Tumblr, Blogger and Typepad), your own website, newsletters and more, breaking down their pros and cons, explaining how to get started, and more importantly, showing how to max out your presence on each platform without becoming that irritating guy who gets de-friended by even his mom.

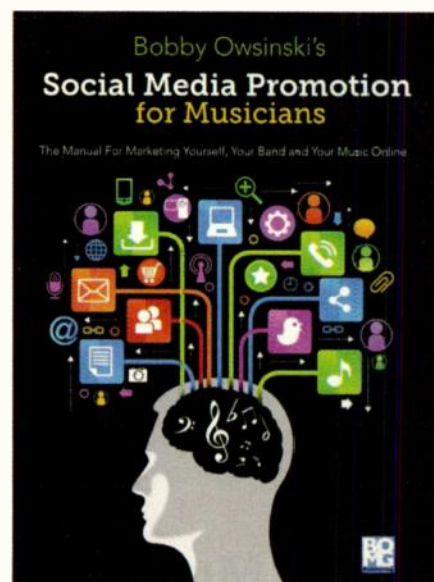
While there's plenty of books

about how to use Twitter, for example, the benefit here is that you get a comprehensive look at many platforms in one place instead of having to dig through five or six books. More importantly, Owsinski shows how to use the different platforms to achieve different goals and how the platforms interconnect with each other to create your overall online presence. A key point, too, is that it's all explained from a music entrepreneur's viewpoint, which makes examples in the book far more relatable and adaptable to your circumstances than the often starchy case studies provided in social media books aimed at Fortune 500 company wannabes.

While Owsinski talks the talk, he also walks the walk when it comes to these topics, particularly blogging—his Big Picture production blog gets more than 120,000 views a month, while his Music 3.0 blog rolls at around half that. The benefit of that experience is that he not only shares nuts-and-bolts advice on how to get

started in social media, but also what to do once you're on your way. The tips on how to create entertaining posts and make them support your goals without drowning people in hype are particularly useful.

Just as important is his advice on how to save time while doing all this. Anyone who's blogged or jumped back and forth from Facebook to Twitter to a website in order to get his message out knows how time-consuming the process can be—not only is it fatiguing, but it wastes your creative energy as well, because you're stuck doing mundane, routine tasks. Owsinski has plenty to say on that score, too, with suggestions on how to reduce the typical operations behind maintaining a social media presence. If there's any gripe to be had with the comprehensive book, it would be that coverage of newsletters via email list service providers (outfits like Mailchimp.com) is rather skimpy compared to



the in-depth coverage of everything else here, but to be fair, far more people need insight on improving their Facebook presences than on maintaining mailing lists.

When it comes to the internet, no matter how strong the signal of your message is, it's up against a lot of noise; available as both a Kindle ebook and a put-it-on-your-shelf tome, *Social Media Promotion for Musicians* is a smart choice for music entrepreneurs looking to improve their social media S/N ratio.

Muscle Shoals

(continued from page 22)

hit factory, however, it becomes clear that the story is an ensemble piece, with a wide-ranging cast of music legends and session musicians that together created a body of work greater than the sum of its parts.

While Hall's personal life was plagued by horrendous, tragic accidents, he became increasingly driven to achieve greater success for his studio, a place where he had control away from the capricious world outside. Over the course of the 1960s and '70s, he put together three teams of world-class session musicians, among them the FAME Gang and the Swampers, all of whom played on some of the biggest tracks of the day—classic singles from the likes of Franklin, Sledge and Arthur Alexander.

Despite the racial tensions in Alabama during the Civil Rights movement, FAME was a comparative oasis where white and black musicians worked together to lay down down innumerable funky sides. "A lot of people couldn't believe that my whole band was white guys that played behind me," says Sledge with a laugh.

There was still plenty of drama to go around, however. A new session trumpet player's too-friendly rep-

artee with Aretha Franklin blew up into a drunken brawl between Hall and Franklin's then-husband on a fourth-floor balcony. That, in turn, caused legendary Atlantic Records producer Jerry Wexler to end the run of hits he'd recorded at the facility. Both men recount the story and Hall

more artists to the area, like Bob Seger and Traffic. At its mid-Seventies highpoint, the facility was tackling 50 albums a year, with artists flying in from all over the world.

Take the Rolling Stones: They were in Muscle Shoals for only two days in the early 1970s, but as Jagger

Despite the racial tensions in Alabama during the Civil Rights movement, FAME was a comparative oasis where white and black musicians worked together to lay down innumerable funky sides.

coldly concludes, "Wexler came to me and said 'I will never set foot in this studio again as long as I live. I will bury you!' I said, 'You can't bury me,' and he said 'Why can't I?' 'Because you're too old—I'll be around after you're gone.'"

While Hall recovered, recording for Chess and later on, Capitol Records, Wexler's hand was felt again when the Swampers—named-checked in Lynyrd Skynyrd's "Sweet Home Alabama"—broke away to found their own facility, Muscle Shoals Sound Studios. Initially bankrolled by Wexler, the new studio across the tiny town attracted even

and Richards recall—and as shown through a surprising amount of film shot during their brief stay—it was a prosperous visit, with the band knocking out multiple tracks, including future classics "Wild Horses" and "Brown Sugar."

"I thought it was one of the easiest and rockiest sessions that we'd ever done," says Richards with a cackle. "I don't think we've been quite so prolific ever. I mean, we cut three or four tracks in two days and that for the Stones is going somewhere. We left on a high with 'Brown Sugar;' we knew we had one of the best things we'd ever done. I always

wanted to go back there and cut more, you know, then s--- happened, so we ended up in France in a basement, doing *Exile On Main Street* there, but otherwise *Exile* would've probably been cut in Muscle Shoals. Politically it wasn't possible, because I wasn't allowed in the country at the time!"

Throughout, stars expound on the vibe of the area, and the beautifully shot scenery often takes viewers out of the studios, allowing the countryside and the town itself to become a character, too. The film glosses over what happened in more recent times—Muscle Shoals Sound Studios eventually closed, its building only recently purchased by the local historical society in an effort ironically spearheaded by Hall's son—but things end on a positive note as the Swampers return to FAME to play behind Alica Keys, with Hall once again manning the console.

While *Muscle Shoals* is a sprawling and enjoyable film on its own, the DVD and Blu-ray come with numerous extras, including a commentary by director Greg Camalier, and another with Hall and the Swampers, plus a truckload of cut scenes and interviews that bring additional insight into the incredible tale of a small town in the middle of nowhere that created some of the best music of an era.

Red Shift

(continued from page 22)

ing a hard drive. Our lives are based around the D-to-A.”

But in the past, there were tape machine options—Ampex, MCI, Otari, Studer and others—that each offered a signature sound. Now, with Pro Tools the de facto standard DAW,

almost everybody relies on DigiDesign converters.

“There is a Pied Piper mentality, with everyone using the 192s,” he says, yet there are alternatives.

“I’ll be able to continue with what I like, transitioning from format to format. That was a big concern to me. There’s a sense of relief knowing that where I was and where I’m going, I’m comfortable with.”

Chris Lord-Alge

“You’ve got options for your D-to-A: blonde, brunette, redhead, whatever. I picked the red one. People have a choice, and Focusrite makes the choice easy.”

RedNet is the logical next step after Sony, he continues. “With RedNet, I’m not getting hype, I’m not getting a bump or a cheat; I don’t want that. I like the 3348 D-to-As because they’re hard hitting. That’s my personal taste. The RedNet has a harder impact, like I’m used to.”

The new Focusrite rig has been set up in parallel to the Sony machine so that mix sessions can be mirrored on the two systems, enabling easy comparison simply by switching over a few cables. The first mixes to benefit from the RedNet converters are on Bruce Springsteen’s *High Hopes* album, which went to the top of the charts around the world soon after its release on January 14, 2014. The album is a compilation of tracks written for various projects over the past 15 years but never finished, plus some covers of songs by others as well as by Springsteen.

“Since the record was done in a few steps, the last round of tweaks that I did with Bruce, three or four songs, we had the rig up. So when it came time to print, we went Red, baby!” says Lord-Alge. Those tracks include “The Ghost of Tom Joad,” “American Skin (41 Shots)” and the album’s title track. “It shows that our transition is working,” he says.

About half of his 5.1 mixes for the new Pink DVD, *The Truth About Love Tour—Live in Melbourne*, also utilized the RedNet units, Lord-Alge reports. Coming up, he will be mixing projects by Grizfolk, Adelitas Way, Gloriana, O.A.R. and Rise Against.

For all the talk of technology, he says, “A great mix starts in your ears, not in the gear. The gear is the conduit to make the great mix, obviously. But all the stuff I get the really big kudos for, it was just about the mood I was in and how I felt about bringing that sucker home.”

That philosophy stands, even with the migration to a new tapeless workflow. “I’ll be able to continue with what I like, transitioning from format to format. That was a big concern to me. There’s a sense of relief knowing that where I was and where I’m going, I’m comfortable with. It’s not a compromise.”

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THERE'S MORE ▶ See Focusrite's video from Mix LA
<http://youtu.be/zq7ZB68X5NY>

Comms Systems Part Of Permanent Sochi Install

BY STEVE HARVEY

SOCHI, RUSSIA—Clear-Com supplied broadcast and event production communications systems to three of the Olympic sports facilities in Sochi,

Russia last year in preparation for the 2014 Winter Games. In a break with past practices, the systems were permanently installed at the venues, two indoors and one outdoors, where they will remain in use for future sports and entertainment events.

Intercom technologies specialist Clear-Com may have started back in the late 1960s, but it's only recently, following the acquisition of the company by HME, that it has become actively involved with high-profile events, according to Larry Estrin, director of the company's recently-established Global Rental Group. Clear-Com is not going into the rental business, but rather has positioned itself to lead a strategic alliance of rental service providers worldwide.

Estrin can certainly be described as a veteran of the communications

industry: "I've been associated with HME in one way or another since about a year after they started, which is also about 40 years." Under his Best Audio moniker, Estrin has handled the Presidential debates, the Academy Award ceremonies and the Super Bowl since 1988. "And I've been involved in 14 or 15 Olympics," he says.

But whereas the communications gear was typically rented at previous Summer and Winter Games, Clear-Com took a different approach for Sochi. "The decision was made by our sales group to try and sell systems as opposed to just renting," he recounts. "We were very successful in getting major permanent installations in three new facilities in Sochi."

Those venues will become what the organizers like to call "legacy," says Estrin. "They'll be there after

everybody has gone, and we'll always be there."

Clear-Com's distributor in Russia, Oltbert Ltd., was successful in getting these systems sold and installed months in advance of the Games. "They've been operating for at least six months, so they're not new when people arrive, unlike rental systems," he says.

At the Bolshoy Ice Dome, an indoor sports arena seating 12,000 that, post-Olympics, will become an entertainment and concert center, seven wired V-Series keypanels, used during the Games by the judges as well as the broadcast video and audio production staff, access an Eclipse HX-PiCo digital matrix system. The system also interfaces via 4-wire with a 10-user Tempest2400 Base Station wireless system.

(continued on page 34)

briefs

Kubelka Calls on Countryman

LOS ANGELES, CA—LA-based production sound mixer Johnny Kubelka, owner of JNO Sound, uses his B3 and B6 omnidirectional lavalier microphones from Menlo Park, CA-based Countryman Associates (countryman.com) when working on *The Horseman's Apprentice* on RFD TV, which follows the training of horse whisperer and show host Pat Parelli.

Lectrosonics Goes on Location

PRAGUE, CZECH REPUBLIC—Radim Hladik, a location sound engineer, sound editor, mixer and sound designer based in Prague, used Lectrosonics (lectrosonics.com) technology on *The Don Juans*, a new feature film loosely based on the opera *Don Giovanni*, including six Lectrosonics SMQV beltpack transmitters and a pair of HM plug-on transmitters plus Octopack portable multicoupler.

Calrec Reports Record Sale

HEBDEN BRIDGE, UK—In Calrec Audio's (calrec.com) biggest single sale ever, the company has sold 14 audio consoles to South Korean broadcaster MBC, which purchased a variety of consoles ranging from a 64-fader Apollo to a 24-fader Artemis Light as part of its move to a new, purpose-built facility, to be used for TV, radio and outside broadcast productions for stations throughout the network.

Todd-Soundelux Adds Sephton

HOLLYWOOD, CA—Supervising sound editor and sound designer Rob Sephton, whose credits include *Remember the Titans*, *Spirited Away*, *The Smurfs*, *Pearl Harbor* and *Armageddon*, most recently working on *The Smurfs 2* for director Raja Gosnell, has joined Todd-Soundelux (toddsoundelux.com) from Sony Pictures, having also spent 15 years at Walt Disney Studios.

|||||

Microsoft Digs Deep Into Dante

BY STEVE HARVEY

REDMOND, WA—Microsoft Production Studios, a full-service digital media production facility located on the company's 500-acre campus 15 miles east of Seattle in Redmond, WA, is in the midst of upgrading to a comprehensive Audinate Dante network. The network ties together the audio production and post-production audio suites and intercom systems at the complex and across the campus.

The 65,000-square-foot HD and 4K video production studio facility, one of the largest technical production facilities in the Pacific Northwest, encompasses three sound stages plus an insert stage, together with three audio rooms, multiple edit suites and support amenities. The stages have been used for everything from broadcast television contribution to music mixes, including MSNBC's twice-daily political talk show, *Connected: Coast to Coast*, now defunct, and live MSN Music productions featuring the likes of Janet Jackson and Alanis Morissette. These days, "We're supposed to be anything and everything to anybody," laughs John L. Ball, systems engineer at the complex.

The Dante network implementation began when the studios entered into handling sound design and mixing for the user experience at Microsoft retail stores worldwide, Ball reports. The new Dante network also enables the Microsoft Production



John L. Ball, systems engineer at Microsoft Production Studios, which is in the midst of upgrading to a comprehensive Audinate Dante network.

Studios to broadcast live shows featuring company CEO Satya Nadella, for instance, he says. "Maybe he wants to talk about a specific project—maybe a new release or some new Xbox video game. That can be a live feed into the stores."

Justin Friesen, a system designer at Lift AV, the design and integration firm in Renton, WA with which Ball consulted on the project, first brought Dante to his attention. "He recommended Dante; that was the first I'd heard about it; they were one of the early adopters," Ball recounts.

Already heavily invested in RTS intercom systems, Microsoft Production Studios was able to upgrade its equipment with the release of the manufacturer's OMI Matrix Cards

and two-channel OKI Omneo Keypanel Interface card, which enabled Dante integration with the KP-32 keypanels. The RTS Dante network supports back-end communications between all of the stages, production controls and audio rooms, with the floor director, floor manager and A2s on belt packs, he says.

"We initially started out with a small island of Dante to do the mixing for the retail stores. Then Omneo came out, so I thought we should integrate that," Ball explains. "One of the nice features that two-channel Dante in each of the intercom panels gives us is that we can set up panels in various places—here in the production control or out on remotes—

(continued on page 34)



Sochi Comms

(continued from page 33)

An Eclipse HX-Omega digital matrix system is at the heart of the set-up at the Sanki Sliding Center, which hosted bobsleigh, luge and skeleton events during the Olympics. That system is wired using Cat5 to 11 keypanels, with an additional seven desktop panels connected over IP via IVC-32 cards. A FreeSpeak Integra system enabled 16 wireless belt-pack connections on the bobsled route during competition.

Outdoors, the RusSki Gorki Jumping Center employed another Eclipse HX-Median digital matrix system, with eight V-Series keypanels at this location. The system interfaced with a wired analog system of 32 PL belt-packs at the start, finish and medal ceremony positions.

In mission-critical situations, it's often advisable to rely on wired rather than wireless intercoms, according to Estrin. "I have friends who worked on the opening ceremonies [in Sochi] and they ended up using two-way radios. They could not use a wireless stage manager system."

That problem of limited wireless

spectrum is not peculiar to Russia, of course. "It's a problem, and not just for intercoms. But intercoms eat up more RF spectrum than wireless microphones, because there are more users. On a typical show now, it's not unusual to see 40 to 50 wireless belt-packs—but they're critical to run a show, especially when you get into events like the Olympics. If we can avoid wireless and go with wired, today, it's always better."

As intercom systems have integrated IP technology, he continues, "We're at the point now where miles are no longer the limitation. The goal for Clear-Com—and we're coming pretty close to it—is to be able to take a panel and plug it in in New York, another one in L.A. and one in Sochi, and they all find themselves on the internet and we all talk."

It's inevitable that broadcast production is moving in that direction, he adds. "I've had conversations with a major American broadcaster who's talking about doing a show that is directed from New York with only cameras and some technicians in L.A. That's where it's going, and we're building products to support that type of production."

Clear-Com
clearcom.com

Microsoft

(continued from page 33)

that allow program to be fed on that second channel.

"The first channel is all the back-end intercom connectivity. The second channel coming into that intercom via Dante can be a program speaker out of the XLR of the KP32. Plus, there's an audio in, if you're using that second channel, to get onto the Dante network as well. So we could very easily take a keypanel out to a remote, have an IFB and a microphone plugged directly into the panel, and have back-end communications, all just with a Dante network," Ball elaborates.

Ball is testing Focusrite's Red-Net 6 MADI Bridge as an interface to introduce a Miranda AV router's MADI inputs and outputs onto the Dante network. Currently, the 64 audio channels can be broken out, fed to embedders and inserted into the video stream, or vice versa. Going via the Focusrite box, he says, "We could get that audio on to our Dante network,

down into our audio rooms and our intercom, and now we have the potential to maybe start feeding via IP live streams into the retail stores, if that's a route that Microsoft wants to go."

With the retail stores production and intercoms now Dante-enabled, the facility is starting on the audio upgrade. At the moment, two rooms feature Avid D-Control Icons while the third sports a D-Command, with each room also housing 10 Avid 192 interfaces to the respective Pro Tools systems. Ball and the staff are currently contemplating their options for integration of Dante in those control rooms.

Ultimately, the network will allow "MADI going to Dante, Pro Tools going to Dante, intercom going to Dante, retail stores production going to Dante," says Ball. "Then it's just mix and match—however we want to set it up for that particular session."

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innovations: the manufacturer's view

The Next Step In Console DSP Architecture

STUDER'S INFINITY DSP CORE

BY ANDREW HILLS

Earlier this year, Studer introduced the Vista X digital console, featuring expanded capabilities made possible by the new Infinity DSP core, which uses standard general computing CPU-based processors to provide more than 800 audio channels. This marks the first time this number of audio channels can be processed in a single CPU-based board. The advantage of this are multiple: CPU processing provides a scalable system, faster development of new signal processing designs, massive channel counts, full system redundancy without a single point of failure and the possibility of running third-party algorithms.

A clear window into Studer's development of Infinity requires a look at the history of audio processing technology. Digital mixers truly came of age when the SHARC chip became available around 1994, offering mixer designers off-the-shelf silicon which runs well in clusters, (audio processing is a highly parallel task; you have to process many channels at the same time) has long word lengths and with suitable software development tools available to create audio processing functions. In the mid '90s, up to 100 or more of the first-generation SHARC chips were used to create a large-scale mixing desk, the DSP took nine units of rack space and consumed some 500 watts. Over the next 15 years, successive versions of these chips became more powerful, going from some 120 Mflops to 2,700 Mflops. (Mflops = Million Floating Point operations per Second, which is a common way of defining processing power). Studer's latest use of SHARC chips in the Vista 1 uses only eight of the current generation of SHARC chips to mix nearly the same number of channels and consume only 25 watts. There has been about a 22-fold increase in the processing power of these SHARC chips over the last 15 years or so.

In addition, Field Programmable Gate Arrays (FPGAs) have become widely used in the professional audio industry and have also become larger over the years. They are basically a huge uncommitted "sea of gates" that may be linked together to form multi-

pliers, registers, adders and so forth. However, programming them to process audio is more complex. For example, changing a multiplier used to calculate an FIR filter (a common task in audio processing) into a routine to calculate FFTs (such as metering display) is hard to do and prone to errors. The lack of suitable development tools to build the FPGA code in the field also makes it impossible for customers to construct their own DSP configurations. Due to this lack of flexibility, Studer does not see FPGAs as suitable for large-scale audio signal processing for the future.

Standard CPU chips, the x86 types as used in huge numbers for general computing, are very suitable for non-real-time signal processing. They are easy to program, many development tools are available and the shipping volumes are huge, so much effort goes into designing the chips and the PCBs used to support them.

Importantly, processing power of x86 chips has increased some 5,000-fold in the same 15 years that SHARC chips have increased in pow-

"A clear window into Studer's development of Infinity requires a look at the history of audio processing technology."

Andrew Hills, Studer

er some 22-fold. This doubling of power every 24 months is known as "Moore's Law." The vision is to take advantage of this effect in Studer's new generation DSP engine. Modern CPUs use multiple hardware "cores" to obtain the huge processing power offered today (clock speeds have reached a plateau due to physical constraints). Currently, high-end CPUs have eight to 10 cores, each of which may be set to run two threads, thus doubling the processing power. This "multi-core" technology is very suitable for large-scale audio processing due to the parallel requirements of audio mixing engines.

Studer Vista X console, employing the Infinity DSP core.



However, there is a killer problem: x86 CPUs are designed as general-purpose processors and occasionally they stop to do some housekeeping such as RAM refreshing or temperature sensing. This is not a problem for most computing—a momentary "pause" whilst saving a file is of no consequence, but a single missed audio sample results in an unacceptable click.

To avoid this problem, normal x86-based audio signal processing adds audio buffering or delay so that CPU interrupts do not affect the flow of audio. For real-time "live" audio, this delay or latency is not acceptable. The buffering also reduces the efficiency and thus reduces the channel count. Studer has found a clever way of isolating several of the CPU cores and stopping these cores from being interrupted. One core is left to run the desk communications and housekeeping while the rest of the cores concentrate on audio DSP for the highest channel count without the need for buffering and the consequential audio latency.

High-end server boards are now available for the Intel E5 series processors, which comprise the basis of the Infinity core. Two E5 processors may be fitted; each processor has 10 physical cores. Each physical core can run two threads or virtual cores. Studer has achieved some 25 fully equipped (high-quality EQ, Dynamics, Insert, Pan and fader) audio channels of processing on each virtual core, thus offering some 50 channels (mono equivalent) per hardware core; a dual processor board can thus process well over 800 channels, even allowing one core for control

and housekeeping. This scalability offers both expansion of channel counts as processors with more cores become available (72 core processor chips are on the horizon) and the possibility of modest channel counts on basic hardware for smaller mixers.

The final part of this new concept is the need to provide a suitable audio interface system to connect the huge number of audio channels into and out of this new core. Studer has designed a new high-capacity digital audio interface called A-Link. This fiber-based audio interface uses a 3 Gbit/s data rate to offer 1,536 audio channels per connection. A new PCI express card has been designed to fit into the COTS server board discussed above. This card is fitted with 12 A-Link interfaces capable of over 10,000 inputs and 10,000 outputs offering the huge I/O interface counts required of this new processing engine.

We believe this new Infinity DSP engine will prove to be a significant milestone in the development of digital audio consoles and become a standard in the years to come.

Andrew Hills serves as Product Director for Studer.

Studer
usa.studer.ch

Frankfurt

(continued from page 1)

Nexo unveiled its Geo M6 compact loudspeaker series.



speakers, was introduced in Frankfurt this year.

On the live sound console front, Yamaha Commercial Audio Systems launched its QL series, aimed at mid-level tour sound, house of worship installs and corporate A/V, among other applications. The QL series features VCM (Virtual Circuit Modeling of analog processing) technology and includes Portico 5033/5043 EQ/Compressor algorithms developed in cooperation with Rupert Neve Designs along with built-in Dan Dugan Sound Design auto mixing.

Configuration files for Yamaha's CL series are also compatible with the new QL Series. Initial offerings—the QL1 and QL5—offer 18 or 24 faders, 16 or 32 built-in analog inputs, 32- or 64-channel mixing capability with 8 stereo inputs each, with mixes feeding 24 total outputs with onboard effects processing. Dante networking compatibility is built in and a Dante Virtual Soundcard license is included, along with slots of MY I/O cards.

Also from the YCAS camp was the debut of the Nexo Geo M6 compact loudspeaker series. The M6 initial offerings are the M620 arrayable cabinet (with a 6.5-inch LF driver and 1-inch throat HF driver) and the M6B bass/

midrange extension cabinet (equipped with a 6.5-inch long excursion driver), both cabinets sharing the same footprint. Up to three Geo M620s can be used in curved arrays and up to 12 in line arrays. The Geo M6B cabinets can be deployed inside M620 arrays. A variety of mounting accommodates fixed install and portable applications, ranging from theater to distributed PA in public spaces to houses of worship.

A collaboration from DiGiCo and Optocore allows Optocore interface devices to work with optically equipped DiGiCo consoles. To achieve this, DiGiCo has implemented a new version of Optocore for all its optically enabled DiGiCo consoles. Providing connectivity to X6R, DD2FR and DD4MR units, the new



SSL introduced three additions to its Duende Native range of plug-ins.

els are the X8 and X4, with eight and four channels, respectively, at up to 5200 W per channel at 2 ohms.

On the business front, Vue Audiotechnik announced the creation of a European branch, to be run in Berlin by managing director Holger de Buhr. Service and support will be provided across Europe, along with sales support resources and distribution in Germany, Austria and Switzerland. On the hardware side, Vue introduced its hs-20 subwoofer with the company's proprietary Active Compliance Management (ACM). The hs-20 features two 10-inch, long-throw woofers, entering the Vue family as the little brother to the hs-25 and hs-28 units. The hs-20 includes dual 500 W (long term, 800 W peak) amplifiers and digital control.

Also on the console front, Midas announced the Pro X console, expected to ship by year's end. As the top end of the Pro series, the Pro will accommodate 169 inputs and 99 mix channels, all controlled from a control surface measuring less than 60 inches. AES50 connectivity allows up to 288 network inputs and 294 outputs, with compatibility available for third-party audio networks such as Dante and CobraNet. The Neutron Audio System Engine at the heart of the Pro X uses an FPGA and MIMD (Multiple Instruction, Multiple Data) architecture, reportedly yielding over 100 gigaflops of processing power. The MAP price for the Pro X is slated at \$41,999.

Solid State Logic introduced its V2 software for the SSL Live console. The 25-plus user and SSL R&D driven enhancements include Offline Setup, new effects, processing capability added to matrix outputs, and additional control surface functionality.

The Duende Native range of SSL plug-ins has three new additions, also announced in Frankfurt. X-Saturator and X-ValveComp provide analog saturation and

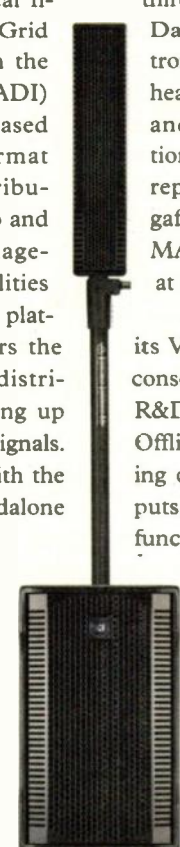


Dynaudio Professional revealed its BM6 mkIII near-field monitors, which come with IsoAcoustics isolation stands.

format will allow Optocore devices to live on DiGiCo's optical loop. The arrangement between the companies makes DiGiCo the only console maker with native Optocore compatibility.

ClearCom has announced support for AES10/MADI optical fiber operation within its ProGrid system. ProGrid is based on the open AES3 and AES10 (MADI) standards, providing fiber-based transport, routing and format conversion as well as distribution of audio, intercom, video and control data with full management and diagnostic capabilities over the Optocore and SANE platforms. Clear-Com also offers the BroaMan MUX-22 video distribution device, accommodating up to eight 3G/HD-SDI video signals. The MUX-22 can operate with the ProGrid systems or as a standalone solution.

Powersoft introduced its new X Series in Frankfurt. The X Series integrates amplification, universal power supplies, channel routing and DSP. AES3, redundant Dante digital stream and analog I/O are natively supported. The initial two mod-



RCF launched a portable line of sub and pole-mounted satellite loudspeakers dubbed EVOX.

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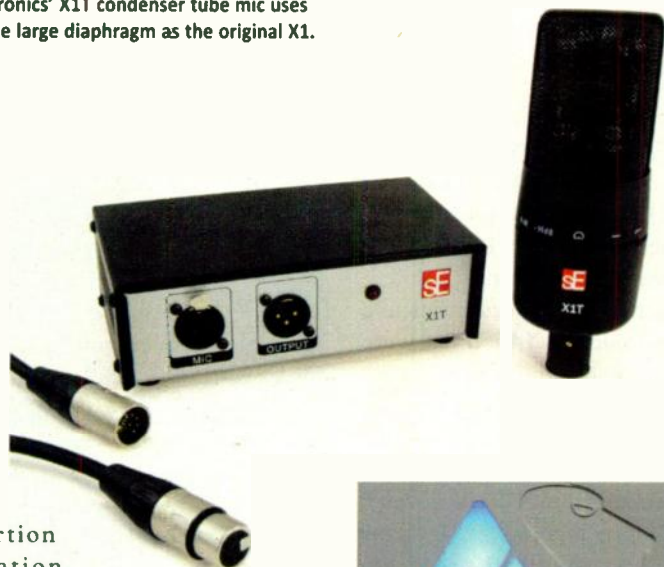
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sE Electronics' X1T condenser tube mic uses the same large diaphragm as the original X1.



distortion emulation, while the X-Phase plug offers frequency-specific phase correction. Finally, SSL announced iPad and iPhone control of its Sigma analog summing unit.

Tascam has introduced the UH-7000 USB 4x4 channel audio interface and mic preamp. The UH-7000 is spec'd with a low noise floor, high signal-to-noise ratio and a 0.0009% THD rating. A/D conversion is capable of up to 192 kHz/24-bit resolution. I/O includes two balanced inputs on XLR with phantom power, two balanced inputs on 1/4-inch TRS jacks, two balanced XLR outputs and an AES3 digital output.

Australia-based SM Pro, maker of interface, control and processing devices, introduced the uMiX digital mixer series. These Wi-Fi (via built-in routers) remote-controllable devices will be built in four models, ranging from 8 to 24 channels.

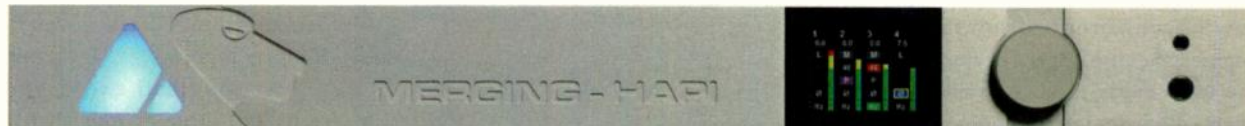


L-Acoustics announced its K2 line source loudspeaker system.

All channels feature parametric EQ and dynamics processing, with built-in digital effects, all operating at 56 bit, double precision. The two larger models incorporate Waves Audio's MaxxBass and MaxxVolume processing on the master outputs.

Audient has revisited its ASP008 microphone preamplifier with the introduction of the ASP880. The eight-channel device features eight of Audient's console mic pres, two JFET DI instrument inputs, variable impedance and variable high pass filters, all housed in a 1U rack mount unit. Each channel has a balanced insert with direct access to the converter, so the ASP880 can be used as an 8-channel mic pre and a standalone converter.

New from perennial loudspeaker



Merging Technologies debuted Hapi, the son of its multifaceted Horus audio interface.

component maker Eighteen Sound is the 18iD extended low-frequency neodymium transducer. The 18iD is designed to be mated with modern, high-power, Class D and similar amplifiers, each 18-inch device handling 2600 W (10,000 W peak). The transducer voice coil measures 5.3 inches, with "inside-outside ISC (Interleaved Sandwich Voice coil)"—a low-density material air diffractor placed into the heatsink, acting as a cooling system, reportedly increasing the power handling capability and lowering power compression.

Dynaudio Professional has upgraded its BM series of monitors with BM6 mkIII near-field monitors and BMS II subwoofers, providing improvements in various models and updated drivers (for extended

frequency response and output capability), mounting options for a variety of installations, revoicing and updated wave guides. Additionally and uniquely, the BM mkIII monitors now come packaged with isolation stands from IsoAcoustics.

sE Electronics has expanded its X1 series of microphones with two new models. The X1T condenser tube mic uses the same large diaphragm as the original X1, paired with a tube preamplifier stage. Vocals and acoustic guitars are among the recommended applications. The X1D is a solid-state preamp condenser voiced for drums and percussion. It features a titanium capsule to accommodate high SPLs and is also said to be more responsive to rapid transients.

Italian loudspeaker manufacturer

RCF has been very busy with the launch of the five-model VMAX club system (with two dedicated subwoofers). RCF also did a retake on the ART 7 portable PA with the launch of the new series flagship ART 745A. With a hefty 4-inch voice coil on the 15-inch woofer and a 2-inch neodymium HF drive, the ART 745A is said to deliver output levels atypical in its class.

RCF has gone one step smaller in its Ayra nearfield monitor range with the ultra-compact Ayra Four. On the

capability of Horus is not required.

L-Acoustics announced its K2 line source loudspeaker system as a replacement for the venerable V-Dosc system. K2 is said to offer the performance of the larger K1 system with PanFlex horizontal coverage steering and Wavefront Sculpture Technology for vertical coverage optimization. The full system includes the LA4X/LA8 amplified controllers and the SB28 and K1-SB subwoofers for low-frequency extension. The K2 system is a 3-way, quad-amplified design.

other end of the spectrum, the company reports that it has extended the performance of its TT (Theatre and Touring) line while reducing weight and price. Further, RCF launched the portable line of sub and pole-mounted satellite loudspeakers dubbed EVOX. Finally, in a complete departure, RCF introduced the L-PAD range of audio mixers in Frankfurt. Nine mixer models comprise the initial offerings in the line.

Merging Technologies has gotten Hapi, with the introduction of the son of its multifaceted Horus audio interface. Employing the same RAVENNA/AES67 network connectivity as Horus, Hapi provides the AD/DA interface option cards in a smaller footprint with a reduced channel count for use where the full

Console maker CADAC introduced new marketing and design team members, migrants from the Midas team that last worked on the Pro X project. Introduced was a new development: the SAM-4-CDC system, a migration to the CDC eight digital production system of the SAM "benchmark theater automation system" developed over nearly 15 years for the company's analog console line.

DPA used the show to reveal its d:screet 4060 Omnidirectional Miniature Microphone, which sports a reinforced cable relief for its usual edition, but a heavy-duty version has also been created, featuring a stainless steel housing, heavy-duty cable relief and a thicker 2.2 mm cable. Both models are intended for the rigors of live touring.

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One Gig, 140 Drum Microphones

BY STEVE HARVEY

ANAHEIM, CA—Japanese drum manufacturer Tama celebrated its 40th anniversary during the NAMM Show in January with an evening of live music at the Hilton Hotel in Anaheim. The four-hour show featured a dozen former and current Tama endorsees—some performing solo, some with bands—with front of house engineer Scott Rodgers having the unenviable task of wrangling 140 drum microphones.

“When they first told me about this, I thought, that’s too many tequilas, a bar napkin and a Sharpie talking!” laughs Rodgers. Since Shure was one of the underwriters of the events in the room, the first challenge was finding sufficient quantities of the right brand of microphone, he says.

Most rental houses already had their mic inventories set aside for the start of the 2014 touring season, says Rodgers, who also works events at Summer NAMM. “We got some through Shure and we got some

from vendors. Freeman Audio Visual robbed everything from all their branches. But they were all Shure microphones.”

The main stage was reserved for the ensemble performances, which included Billy Cobham and Lenny



FOH engineer Scott Rodgers (left), monitor engineer Max Gross (center) and stage crewmember Gabe Johnson kept sound on a show with 12 drum sets, 140 drum mics and 165 inputs going all night.

White with their respective bands; Simon Phillips with Protocol II; Charlie Benante with the rest of Anthrax (minus lead vocalist Joey Belladonna—the performances were all instrumental); Mike Portnoy and George “Spanky” McCurdy, each with accompanying

musicians; and Matthew Garstka with his band, Animals As Leaders. On risers out in the crowd, Ronald Bruner Jr., John Blackwell, Rayford Griffin, Blake Richardson and Billy Rymer each played five-minute solos.

As if setting up 12 drum sets and positioning 140 mics were not challenging enough, “We could not get into that room until 10 a.m., so we started building risers and building drums from 10 till seven,” Rodgers reports.

“We only had two drum techs and three or four stagehands to help move stuff around, plus my guys and the drummers.” In the case of Simon Phillips, he says, “Nobody touches his drums. He set up his own drums and his own mics; there was no drum tech.”

Phillips is also particular about his sound: “He’s a courteous guy. He came to front of house and introduced himself. He said, ‘Can you do me a favor? Please don’t put any gates or compressors on me.’ I said, ‘I don’t; I never do. If you know how to tune your drums,

(continued on page 52)

Mpls Proposes Venues Provide Ear Plugs

BY CLIVE YOUNG

MINNEAPOLIS, MN—The Minneapolis music scene may be best known for giving the world Prince, The Replacements and Semisonic, but it may soon become the incubator for something far bigger. City Council member Jacob Frey is sponsoring an ordinance that would require all venues with a liquor license to provide free earplugs to patrons—and if the ordinance passes later this month, its backers have dreams of scaling it nationally and potentially around the world.

If enacted, the ordinance would affect roughly 200 bars, restaurants and sports and music venues in the city, all of which would be required to provide single-use earplugs with a Noise Reduction Rating of at least 30 dB. It was the subject of a public hearing on April 1 and is next scheduled for a vote before the City Council on April 29.

In an effort to encourage compliance, venues would not have to bear the cost of providing earplugs. Instead, the ordinance has gained the support of 3M, which manufactures occupational hearing protection, and hearing



Minneapolis City Council member Jacob Frey has proposed an ordinance that would require restaurants, bars and venues to provide free earplugs to the public.

aid manufacturer Miracle Ear, both of which are headquartered in the region. Together, the companies have signed on to provide earplugs free to every venue under the ordinance.

As currently drafted, the proposal notes that the requirement will not apply unless the city “has identified a source or supplier of such hearing protection devices that is capable of providing sufficient devices free of charge to all such establishments. The license official may develop reason-

able rules regarding required signage or notification to patrons regarding the devices and their availability.”

The ordinance was the brainstorm of a local fashion label. “We were contacted by a company called Locally Grown, Globally Known and they had some ordinance language that they wanted us to take a look at,” said Heidi Ritchie, an aide for Frey. Locally Grown’s owner, Brian Felsen, first explored the idea with the former mayor and City Council eight

briefs

Firehouse Fired Up For SSL

RED HOOK, NY—Solid State Logic (solidstatelogic.com) has named Red Hook, NY-based Firehouse Productions as another U.S. dealer of its new Live console. A 2014 TEC Award winner for its support of Peter Gabriel’s Back to Front tour, Firehouse provides SR and sound systems for live production and high-profile TV performances.

d&b Installed At Wheaton

WHEATON, IL—Wheaton College recently upgraded the sound system for its 2,400-seat auditorium in the school’s Edman Chapel to a d&b audiotechnik (dbaudio.com) Q-Series system with 27A-Sub cardioid subs, and E8s, 8Ss and 12S-Ds for fills and delays.

Out To Impress At Empress

VALLEJO, CA—Tectonic Audio Labs’ (tectonicaudiolabs.com) large-format flat-panel loudspeakers were recently installed at the Empress Theatre in Vallejo, CA as part of the theater’s renovation, which required a speaker system that wasn’t visually intrusive.

Adamson Added On Green Campus

AKRON, OH—Akron-based The Chapel recently renovated the sanctuary on its Green Campus in Green, OH, updating to an Adamson (adamson-systems.com) sound reinforcement system with SpekTrix enclosures and subs, T21 subs and Point Concentric PC12 speakers.

Chandler Added On Green Day

SYDNEY, AUSTRALIA—As part of its Australian tour, Green Day made a stop at the annual Soundwave Festival in Brisbane, bringing along LTD-2 compressors from Chandler Limited (chandlerlimited.com). FOH man Kevin Lemoine used them on guitars, piano, sax and all backing vocals.

months ago. “[Felsen] approached us basically right away when Jacob took office in January, but he had been speaking with some other council members as well,” said Ritchie.

“It’s more of an inspirational ordinance than a regulatory one,” said Felsen. “There’s been some items brought up from different establishments and the public, because they

(continued on page 52)

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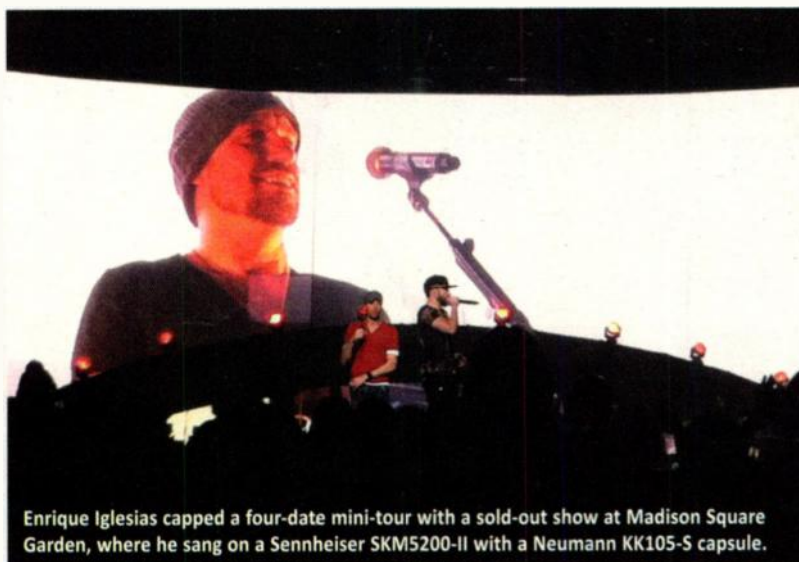
Iglesias Still Makes Fans Freak

BY KELLEIGH WELCH

NEW YORK, NY—Fifteen years after Grammy Award-winning, Latin singer-songwriter Enrique Iglesias made the crossover to English pop music in 1999 with his hit “Bailamos,” he is still selling out arenas to his loyal fans, who recently filled Madison Square Garden on February 15 for his show. Riding high on the success of his Pitbull collaboration, “I’m A Freak,” and teasing the March 14 release of his new studio album, *Sex & Love*, Iglesias launched a four-city mini tour back in early 2014, making stops in Puerto Rico, Miami, Mexico, and New York City, where he performed hits off the album including the *Billboard* Hot Latin Song Chart topper, “El Perdedor.”

Prior to the stop at Madison Square Garden, the tour performed in Puerto Rico the previous evening, causing crews to scramble to fly to New York City and set up the stage. For the New York show, Escondido, CA-based Sound Image provided the sound system, bringing in an L-Acoustics K1 rig put to good use by FOH engineer Doug Kimball, who manned an Avid Venue Profile with Waves plug-ins.

“I keep coming back to the Profile, mainly because it still sounds so good. I can get everything on one screen in front of me. I don’t like taking my eyes off Enrique, as he runs everywhere and likes to run out in front of



Enrique Iglesias capped a four-date mini-tour with a sold-out show at Madison Square Garden, where he sang on a Sennheiser SKM5200-II with a Neumann KK105-S capsule.

the PA all night,” Kimball explained.

While he mixes, Kimball said his main goal is to make sure he’s balancing the live band mix with tracks played back from Avid’s Pro Tools. “With so much information coming to me, the mix can get blurred real quickly. I try to keep the mix sounding as live as possible, even though the new material is very Pro Tools heavy.”

Kimball, a classic rock mixer by choice, said he usually prefers to work with the more traditional songs Iglesias performs. “But the newer tracks with featured singers are fun too. ‘Freak’ with Pitbull stands out.”

On monitors was engineer Eddie “El Brujo” Caipo, who joined Iglesias’ sound team a year-and-a-half earlier. He mixes on an Avid Venue Profile console, feeding Iglesias’ personal mix to the artist’s Ultimate Ears UE7 in-ear monitors.

“I always choose this console because of the sound, flexibility, plug-ins and their amazing customer support, regardless of what country I’m in,” Caipo explained. “The other benefit of this console is the fact that I can deliver the same sound quality and production value that my artists are used to in the studio, only live.” While

(continued on page 42)

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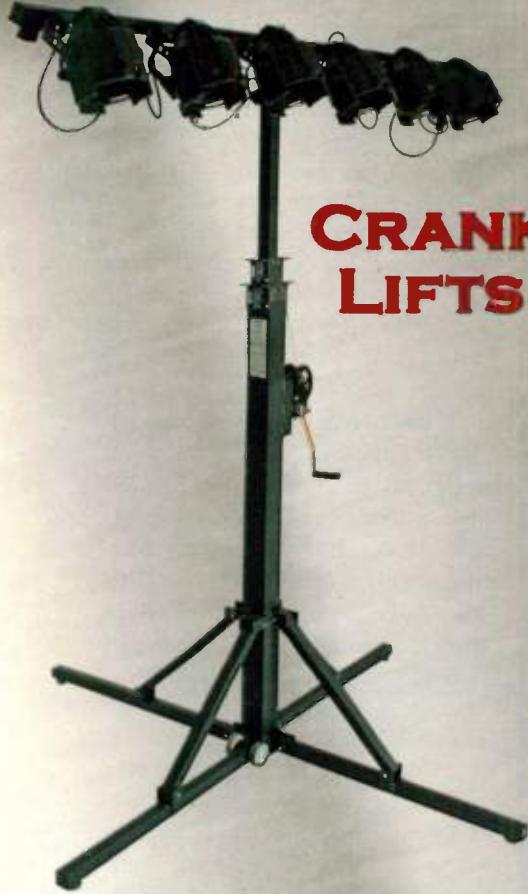


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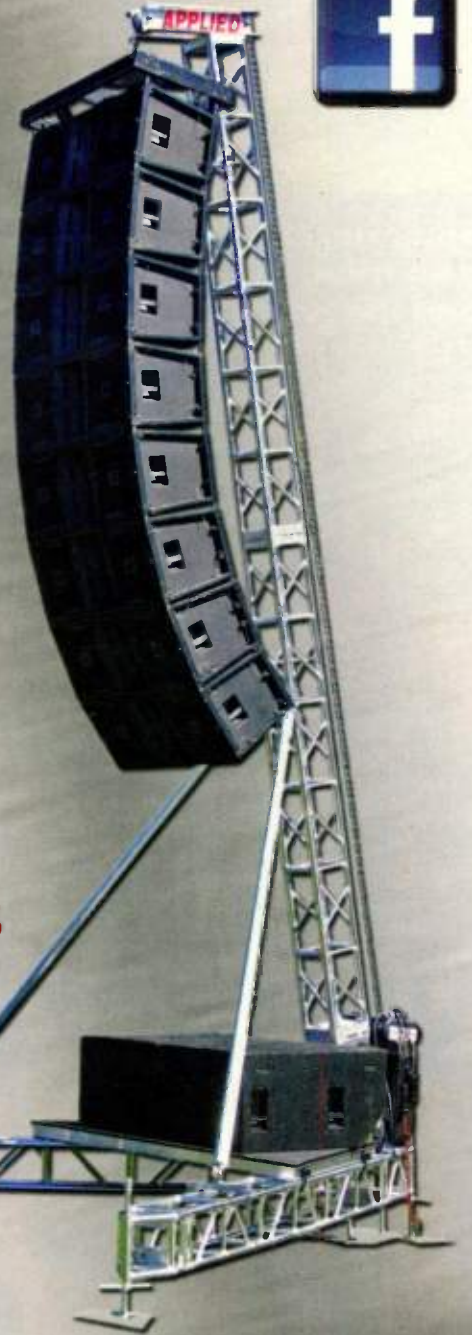
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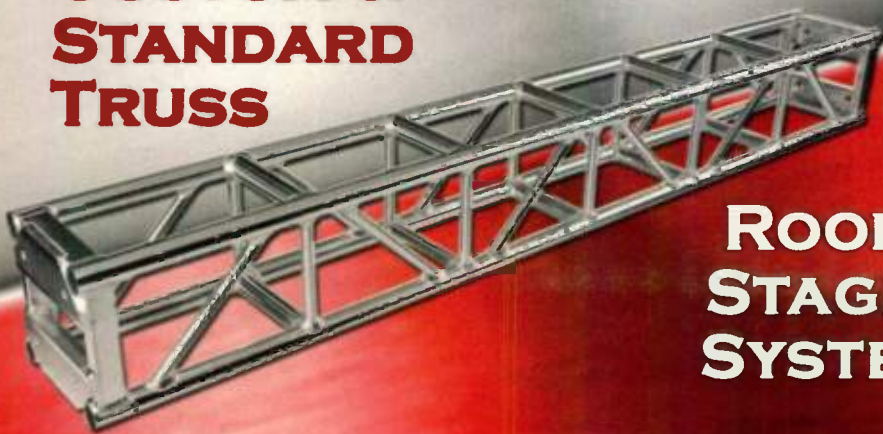
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Enrique Iglesias

(continued from page 40)

mixing, Caipo said his main goal is to keep Iglesias happy during the show. "He is very specific on what he needs, and knows what he wants to hear."

When the house system is blasting the full mix, Caipo said his job is to cater to a more specific mix that

allows Iglesias to keep pitch and stay on time during each song. "His mix is more of a utility mix that allows him to listen to musical cues instead of a polished, record balanced mix," Caipo explained.

During the show, Caipo and Iglesias mainly communicate through talkback mics, and Iglesias is sure to let Caipo know if something is going wrong. This was also the main communication method between Igle-



(Left to Right) Doug Kimball, FOH engineer, and Eddie "El Brujo" Caipo, monitor engineer, both mixed the tour on Avid Venue Profile consoles.

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ias, Caipo and the band, in the case of last-minute changes. "The band members are great, and don't overuse the mics during the show unless something went really wrong and they need to communicate with one of the backline techs or myself," Caipo said.

Caipo and Enrique both used Ultimate Ears UE7s during the show, combined with a Sennheiser SR2050 IEM system. For the band, a Shure PSM 1000 IEM system was used, along with a combination of Ultimate Ears UE7s and UE11s. "Even though there are many newer models and newer technology, I find that the UE7s sound great, and are perfect for our application," Caipo said.

However, RF control was also a major concern for the show, especially since the show had large LED video walls that affected some of the frequencies. "The LED screens interfere with the frequencies a lot, but we're able to deal with it and keep organized," Caipo said.

On stage, a minimal number of wedges were used to keep the stage quiet. "We have a pair of wedges on stage that only play Enrique's voice in it, and they're only used during the acoustic portion of the show when he brings an audience member on stage. This allows them to hear Enrique when he speaks to them."

The drums have plexiglass surrounding the drum riser, which reduces bleed from the cymbals into Iglesias' mic, a Sennheiser SKM5200-II with a Neumann KK105-S capsule.

By 6 p.m. before the show, crews were scrambling to finish setting up, after starting load-in at 1 a.m., and the audio team was busy finalizing soundcheck. "Enrique is deeply involved with the soundcheck," Caipo said. "He wants to make sure everything goes right. He's always very positive when asking for something and he's great to work with."

The show itself was one catered to the fans—the lineup started strong with his latest pop single "I'm

(continued on page 44)



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Enrique Iglesias

(continued from page 42)

A Freak,” causing the audience to jump to its feet, followed by some of the most popular hits from his career. And because of the energy of an Iglesias show, Caipo said at times it can be difficult to mix for Iglesias’ in-ears because the crowd is so loud.

“His mix is more of a utility mix that allows him to listen to musical cues instead of a polished, record balanced mix.”

Eddie Caipo

“His new stuff is over the top, in your face, and then he goes into more traditional songs,” Caipo explained about the set list. “It’s a pretty intense evening.”

Caipo said out of the set list, he does have a few songs that he enjoys mixing. “I like ‘Bailamos,’ but ‘Hero’ is pretty cool to mix, too. It’s challenge though, because he is on the C

Stage behind the FOH for the performance, so there is a lot of bleed,” he explained. “People love that part of the show though, of course.”

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VITALstats

Enrique Iglesias

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Doug Kimball

Monitor Engineer:

Eddie “El Brujo” Caipo

Production Manager:

Andres Restrepo

Musical Director/

Producer:

Carlos Paucar

Monitor Tech:

Chris Houston

Stage Manager:

Jorge Guadalupe

Backline Techs:

Brett Grau

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Avid Venue Profile

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Yorkville Sound's Paraline Series PSA1 active full range loudspeaker system delivers the clarity, scalability and precision of a complex line array system in a compact, user friendly format. Integrated DSP and efficient controls allow 'plug and play' simplicity in a scalable vertical array – no additional external signal processing or on site programming required.

The heart of the PSA1 design is the high frequency Para-Line lens. This innovative technology transforms a point source into a uni-phase plane wave, allowing multiple high frequency drivers to sum coherently in the vertical plane without self-interference.

Ideal for mobile PA applications where complex trussing or roof rigging isn't practical, Yorkville PSA1 cabinets mount quickly and securely on a typical high quality speaker stand. Up to two cabinets per stand can be arrayed when required. When rigging is available, innovative optional external bolt-on flyware allows up to four PSA1 cabinets to be configured easily in a 60°(v) x 110° (h) array for touring system or permanent install.

Rugged injection molded ABS cabinet design, Class-D amplification, and Neodymium woofers minimize overall cabinet weight, ensures system transport and set-up can easily be handled by a single operator. Highly efficient amplifier design means each PSA1 draws less than 3 amps in typical operation allowing up to four cabinets to operate safely on a standard 15 amp service.

PARALINE



www.yorkville.com

Distributed In North America by Yorkville Sound

MADE IN CANADA



Vue Falls Into Spring Hill

SPRING HILL, FL—Spring Hill Baptist Church recently underwent a major audio system upgrade at its Spring Hill Florida sanctuary, working with Atlantic Pro Audio.

“This church took their install very seriously, and was absolutely determined to explore multiple options before making a final call,” recalled Atlan-

tic Pro Audio’s Bobbie Bennett. “They sent a total of six people to a demo at our Altamonte Springs location, which is a two-hour drive. After listening to multiple systems, their selection of the Vue al-4 was unanimous.”

Pattern control was an important factor for the Spring Hill’s traditionally vocal heavy services. The church’s narrow space, rear balcony, and reflective surfaces demanded tightly defined coverage. “The al-4’s coverage is so well-defined that we were able to do a very discreet center hang consisting of eight boxes,” explained Beyrooti. “The installation and setup went very smoothly. We used nothing more than splay angles to achieve coverage from left to right, front to back, as well as the balcony.”

A Vue Audiotechnik V4 Systems Engine provides power and process-



Spring Hill Baptist Church recently had a Vue Audiotechnik al-4 line array system installed.

ing for the al-4 line array, while a pair of VUE-18a powered subwoofers deliver additional low frequency extension. An external delay processor ensures time alignment between the subs and array. The church’s exist-

ing Allen & Heath GL3800 analog console rounds out the design and retains a sense of continuity for the mostly volunteer sound crew.

Vue Audiotechnik
vueaudio.com

Upgrades Find Oakland Church Reborn

OAKLAND, CA—Oakland’s New Birth Church is housed in a mid-19th century Catholic Cathedral, which means the 500-seat sanctuary was a difficult acoustical environment when it came to modern audio expectations. Concord, CA-based Premier Media Integration, Inc., recently designed and upgraded audio, video, and lighting systems and acoustical treatment for the space.

Graham Cooper, president of PMI, contacted Rocky Giannetta, Principal of Layer 8 Inc., to assess the room’s acoustics and assist with systems design. While acoustical treatment reduced reverb to around 1.6 seconds, the environment was still challenging enough to demand an au-



A half-dozen Renkus-Heinz VARIA VAX101 cabinets hang per side inside Oakland’s New Birth Church.

dio system that could keep reflections to a minimum.

Giannetta specified a new VARIA line array system from Renkus-Heinz. “We knew that despite our best ef-

orts, the room was not going to be acoustically ideal, and we needed to maximize control of the energy,” he explains. The system is comprised of six VARIA VAX101 cabinets per side, with three 7-degree boxes on top and three 15-degree boxes underneath. “With the VARIA’S variable pattern control, we were able to configure coverage from 60 degrees on top to 120 degrees on the bottom,” says Giannetta. Two VAX115S subwoofers per side, along with four DRS18-2 subs on the floor, provide low end reinforcement. The system is powered by Lab Gruppen amplification.

Renkus-Heinz
renkus-heinz.com

Bismarck Brings On Bose

BISMARCK, ND—Legacy United Methodist Church added a new worship space in fall 2013. Tackling the audio install for the new facility was Bismarck-based A/V firm Dakota Sound Systems, Inc., which installed a system with Bose Professional Systems RoomMatch loudspeakers.

Jay Griffin, vice president and co-owner of Dakota Sound Systems, remarked, “This was the perfect opportunity to install our first RoomMatch system. We put together a model of the system for the decision-makers at the church, and it was clear that

this would be the right fit for the space and the church’s worship needs.”

The final system sports a middle array of RoomMatch RM12040 and RM9020 modules (one unit each), with two RM9060 modules, one on either side of the center array. Processing is handled by a Bose ControlSpace ESP-00 Series II engineered sound processor, and a Bose PowerMatch PM8500 power amplifier handles amplification for the system (an additional PM4250 amplifier powers a sepa-



Legacy United Methodist Church recently had Bose Professional Systems RoomMatch components installed.

rate system in the church’s fellowship area).
Bose Professional Systems Division
pro.bose.com



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in a forest make
a sound?



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ACT / STATISTICS	CREW	EQUIPMENT
1 JUSTIN TIMBERLAKE SOLOTECH	Andy Meyer (he); Dan Horton (me); Colin St-Jacques (cc); Etienne Lapré (se); Francois Hallé (ae), Alexandre Bibeau, Eric Marchand, Matt Holden (tech)	HC: DiGiCo SD7; MC: DiGiCo SD7; HS: L-Acoustic K1, Kara, SB28, V-Dosc, SB18, K1-SB, 108XT; IEM: Shure PSM 1000; HA: L-Acoustics LA8; HARDWIRED MICS: Shure SM57; Audio-Technica AE5400, ATM25; Rode; WIRELESS MICS: Shure Axient; Audio-Technica 5000 series, AEW-T6100; FOH EQUIPMENT: Waves; Bricasti M7; MONITOR EQUIPMENT: Bricasti M7; Eventide Eclipse
2 GEORGE STRAIT ONSTAGE SYSTEMS	George Olson (he/cc/se); Josh Kaylor (me); Paul Rogers (pm); Ernie Gonzales, Jason Chamlee (st)	HC: Avid Venue Profile; MC: Avid Venue Profile; HS: L-Acoustics V-Dosc, dV-Dosc, SB-28, Kudo; MS: Clair 12AM; IEM: Sennheiser G2, Shure PSM 1000; HA: L-Acoustics LA8; HARDWIRED MICS: Shure KSM9; Audix; Sennheiser; Beyerdynamic; Radial J48, JDI; Royer Labs; AKG; WIRELESS MICS: Shure UHF-R; FOH EQUIPMENT: Lake LM-44; Controller 6.1 with Rational Acoustics SMAART 7 bridge; L-Acoustics network manager; Black Lion Audio Micro Clock; Plug-Ins: Plugin Alliance Maag EQ; Transient Designer/SPL; Waves Mercury; McDSP; Rane/Serrato; Crane Song Phoenix; MONITOR EQUIPMENT: Black Lion Audio Micro Clock
3 JASON ALDEAN SPECTRUM SOUND	Chris Stephens (he); Evan Richner (me); Joseph Lloyd (pm); Jeremy Seawell (se); Ryan Stotts (mtech); Bob Campbell (tech)	HC: Avid Venue; Midas 431 preamps; MC: Avid Venue; Midas 431 preamps; 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
4 BILLY JOEL CLAIR	Brian Ruggles (he); Josh Weibel (me); Rich Schoenadel (cc/se); Lan Turner (m tech); Tom Ford, Jon Yochem (tech)	HC: DiGiCo SD5; MC: Avid Venue Profile; HS: Clair i-5, i-5b, i-3, P-2, BT-218, R-4 Series III; MS: Clair CM-22, SRM, ML-18; IEM: Sennheiser 2050; HA: Lab.gruppen; MA: Lab.gruppen; HARDWIRED MICS: Shure Beta 52, SM91, Beta 91, SM57, SM98, KSM32, SM58, KSM 137; AKG C414; Sennheiser MD-421; Audio-Technica AT4050, AT4054; WIRELESS MICS: Shure UR Series; FOH EQUIPMENT: SSL bundle; MONITOR EQUIPMENT: Lake LM44; Summit DCL-200; TC Electronic D-Two; Eventide Eclipse; Lexicon PCM-70; Tascam SS-CDR200
5 LADY ANTEBELLUM SOUND IMAGE	Brent Blanden (he); Pete Bowman (me); Jim F. Miller (cc/se); David Shatto (ae); Alex Moore (tech)	HC: Avid Venue Profile; MC: Soundcraft Vi6; HS: L-Acoustics K1, Kara, Kudo; MS: QSC drum sub; Sound Image 1x18" drum sub; IEM: Ultimate Ears; HA: L-Acoustics LA8; MA: Crown Audio I-Tech 12000 HD; HARDWIRED MICS: Sennheiser; Shure; AKG; WIRELESS MICS: Sennheiser 9000 digital wireless system; FOH EQUIPMENT: Waves V8, V9; MONITOR EQUIPMENT: On-board dynamics and EQ
6 IMAGINE DRAGONS SOUND IMAGE	Scott Eisenberg (he); Jared Swetnam (me); Andrew Dowling (cc/se); Ted Bible, Ashley Corr (tech)	HC: Avid Venue Profile; MC: Avid Venue Profile; HS: (48) Adamson E15, (12) E12, (16) Spektrix, (2) Spektrix W, (30) E218; IEM: Shure PSM 1000; HA: Crown Audio I-Tech 12000 HD; HARDWIRED MICS: Shure KSM9, Beta98, Beta 91, Beta52, SM57; WIRELESS MICS: Shure UHF-R KSM9HS; FOH EQUIPMENT/PLUG-INS: Waves; Metric Halo ULN-8, Spectrafoo; MONITOR EQUIPMENT/PLUG-INS: Onboard plug-ins
7 KINGS OF LEON EIGHTH DAY SOUND	Mark Brnich (he); Brent Rawlings (be); Saul Skoutarides (me); Eoin Collins (ae); Chris Bellamy; Chris Delucian; Ben Smith; Andy Dudash (tech)	HC: Midas XL8; MC: Midas XL8; HS: d&b Audiotechnik J8, J12, J Sub, B2, V8, V12; MS: d&b Audiotechnik M2; HA: d&b Audiotechnik D80; MA: d&b Audiotechnik D12; FOH EQUIPMENT: Crane Song; MONITOR EQUIPMENT: Crane Song
8 MICHAEL JACKSON THE IMMORTAL WORLD TOUR SOLOTECH	Martin Paré (he/cc); Renato Petruzzello (me); Sylvain Lemay (se); Greg Rule (programmer); Marc Depratto (wireless and coms); Alexandre Ginchereau, Hilario Gonzalez (PA tech)	HC: DiGiCo SD7; MC: DiGiCo SD7, SD Rack; HS: Meyer Sound LEO, Mica, UPJ-1P, UPA-2P, UPQ-1P, 700-HP, DF-4P; L-Acoustics SB-28; MS: Meyer Sound MSL-4; IEM: JH Audio JH-16, Sennheiser SR-2050XP IEM; HA: L-Acoustics LA-8; HARDWIRED MICS: AKG C 414; Neumann KM-184; Shure SM57, Beta 98, Beta 91; Sennheiser e-902, 935; WIRELESS MICS: Sennheiser SKM-5200, HSP-4; Shure Beta 98; DPA 4060, 4062, 4099; FOH EQUIPMENT: Waves Sound Grid; TC Electronic System 6000 MKII, 2290, D-Two; AMS RMX16; dbx 120A; Avalon 737-VP; Yamaha SPX990; Eventide H3000SE; Rosendahl Studiotechnik Nanosync HD; MONITOR EQUIPMENT: Waves Sound Grid; TC Electronic System 6000 MKII; Rosendahl Studiotechnik Nanosync HD
9 ENRIQUE IGLESIAS SOUND IMAGE	Doug Kimball (be); Eddie "El Brujo" Caipo (me); Andres Restrepo (pm); Carlos Paucar (md); Chris Houston (mtech); Jorge Guadalupe (sm); Brett Grau, Trent Lopez (techs)	HC: Avid Venue Profile; MC: Avid Venue Profile; HS: L-Acoustics K1; MS: Sennheiser SR 2050, Shure PSM 1000; IEM: Ultimate Ears UE7, UE11; HARDWIRED MICS: Neumann KK105-S; WIRELESS MICS: Sennheiser SKM5200-II; FOH EQUIPMENT/PLUG-INS: Manley ELOP; Waves 9 SSL Comp, C6; Fairchild 660; Crane Song Phoenix; MONITOR EQUIPMENT/PLUG-INS: Waves SSL Buss Compressor, C6; Avid Smack!; Fairchild; Revibe
10 MARC ANTHONY 3G PRODUCTIONS	Jose Rivera (he/be); Eric "Pyle" Ramey (me); Will Taylor (cc/se); Joe "Big Joe" Ramos (m tech); Jon Daly (ae); Kevin Fuller, Robert "Boy" Valdez, Jimmy Ibanez (techs)	HC: DiGiCo SD7; MC: DiGiCo SD10; HS: (128) d&b audiotechnik J8/J12, (16) J-Sub Subwoofers, 8 J-Infra Sub, (10) Q10; MS: (16) d&b audiotechnik M2, (4) M4, (32) Q1, (2) B2; IEM: Shure PSM 900; Sennheiser G2; HA: d&b audiotechnik D80s, D12; MA: d&b audiotechnik D80s; HARDWIRED MICS: Shure; Sennheiser; Audix; WIRELESS MICS: Shure Axient; Sennheiser 5200

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. IEM: in-ear monitors. 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.

Coming this May

SPORTS VENUE SOUND

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THE EDITORS OF
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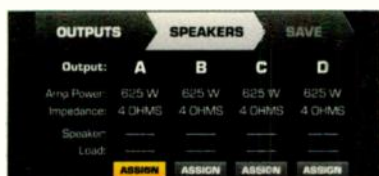
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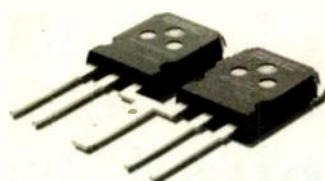
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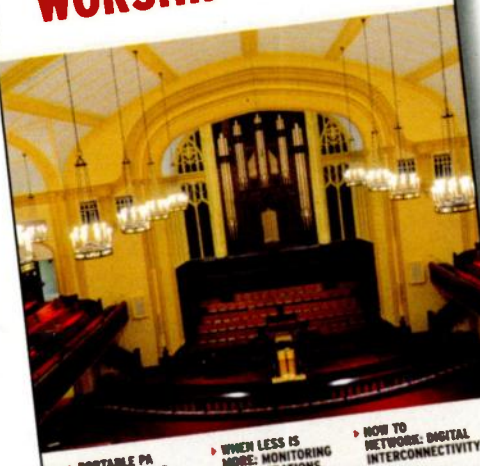
QSC
qsc.com

ACT	SOUND CO	VENUE	CREW	EQUIPMENT
2 Chainz	IRONMAN SOUND INDUSTRIES Brentwood, MO	CHAIFETZ ARENA St. Louis, MO	Rusy Shaw (he), Ian Goodman (me), Nick Barnes (se), Kevin Hayden (tech)	HC: Yamaha CL5; MC: Yamaha PM5D; HS: Martin Audio W8LC, WSX; MS: Martin Audio LE 1500, WS218X; HA: Lab.gruppen PLM 10000Q, 20000Q; MA: Crown
8th Day	TECH WORKS Las Vegas, NV	POINT HOTEL AND CASINO Las Vegas, NV	Craig Leerman (he, se), Tom Bourke (me)	HC: Soundcraft Si3; MC: Soundcraft Si3; HS: Renkus-Heinz IC Live; MS: Danley Sound Labs SM-LPM, Ramsdell Pro Audio 10-CXFM custom; MA: QSC RMX
Bela Fleck & Abigail Washburn	RMB AUDIO Raleigh, NC	UNC MEMORIAL HALL Chapel Hill, NC	Richard Battaglia (be), Matt Johnson (me), Roger Dennis (se), Cooper Cannady (tech), Robert Weddings (tech)	HC: Avid Venue Profile; MC: Avid Venue SC48; HS: Martin Audio W8LM, W8LMD, WS218X; MS: Martin Audio LE1200; HA: Lab.gruppen; MA: Lab.gruppen
The Bellamy Brothers	Q SYSTEMS SOUND & LIGHT Hobbs, NM	THE ACE ARENA Andrews, TX	Norwood Woods (be), Don Williams (se), John Pennell (me), J.C. Yberra (tech)	HC: Midas Pro2; MC: Midas Pro1; HS: dB Technologies DVA T12, DVA T4, DVA S30N; MS: dB Technologies DVA DM15, DM12
Burns & Poe	PEAR BROTHERS SOUND & LIGHTING Carleton, MI	MONTCALM COLLEGE Sydney, MI	Carl Vloch (he), Bill Vloch (me), George Favazza (tech)	HC: Soundcraft; MC: Soundcraft; HS: Bag End Gem Series; MS: Bag End, Shure IEM; HA: QSC; MA: QSC
Crystal Bowersox	SKYLANDS PROFESSIONAL AUDIO LLC Blairtown, NJ	HISTORIC BLAIRSTOWN THEATRE Blairtown, NJ	Mark Clifford (he), Doug Lemke (be), Marc McCarthy (se)	HC: Allen & Heath T112, IDR48, MixPad, iLive Editor v 1.9; MC: Allen & Heath MixPad; HS: OAP V3000, PX-1090, SM-281; MS: EAW LA212; HA: QSC Powerlight; MA: QSC PLX3602
Eddie Money	UNDERGROUND SOUND North Haven, CT	THE RIDGEFIELD PLAYHOUSE Ridgefield, CT	Jeff Weirick (be), Chris DeVecchio (he, se), Blake Joblin (me)	HC: Avid Venue Profile; MC: Avid Venue SC48; HS: d&b audiotechnik C7, C4, B2, E8, Q10; MS: d&b audiotechnik Max12, Max15; HA: d&b audiotechnik D12, D6; MA: d&b audiotechnik D12
Johnny & Edgar Winter	BOULEVARD PRO Ridgefield Park, NJ	TARRYTOWN MUSIC HALL Tarrytown, NY	Tom Oshea (he), David Lopez (bhe), Ralph Grasso (me), Anthony Cioffi (se)	HC: Yamaha CL5; MC: Yamaha CL5; HS: Meyer M2D, P700, M1D; MS: L-Acoustics 112P, SB15P, Arcs, SB18; HA: Meyer; MA: L-Acoustics LA8
Jorge Ferreira	ACIR PROFESSIONAL Mays Landing, NJ	RADISSON HOTEL Mays Landing, NJ	J. Daniel Maggio (he), Mike Neugent (me)	HC: Yamaha M7CL; MC: Yamaha LS9-32; HS: Meyer UPA, ACIR Custom Subs; MS: Sennheiser G2, ACIR Custom wedges; HA: Yamaha P700
Kenny Loggins	THIRD EAR SOUND COMAPNY Hayward, CA	WENTE WINERY Livermore, CA	Brian Chamberlin (se), Daniel Schieman (me)	HC: Avid Venue SC48; MC: Yamaha PM5D; HS: JBL VerTec VT4888, SRX728S, VT4886; MS: JBL SRX712M; HA: QSC PL6.0; MA: QSC PL236
Rock Allegiance Tour	LOGIC SYSTEMS St. Louis, MO	US CELLULAR COLISEUM Cincinnati, OH	Ziggy Stull (he), Mads Mikkelsen (be), Michael McCuddy (me)	HC: DiGiCo SD8; MC: Yamaha PM5D; HS: Nexo Geo T; MS: Logic LS152; HA: Camco Vortex 6; MA: QSC PL236A
Shawn Colvin with Emmylou Harris, James Taylor	SEMIPRO AUDIO Bozeman, MT	YELLOWSTONE CLUB Big Sky, MT	Jeremiah Slovarp (he), Mike Tarrant (me), Rich Robiscoe (se)	HC: Behringer X32, iPad remote; HS: Meyer Sound UPA-1P, UPJ-1P, UPM-1P, Mackie 1501; MS: Meyer Sound UM-1P
Ultra Miami	OFF THE WALL SOUND CO INC Miami, FL	WYNWOOD, MIAMI	Daniel Munoz (he), Joe Williams (me), Mike Mastay (ae)	HC: Yamaha PM5D RH; MC: Yamaha PM5D RH; HS: JBL VerTec VT4889, VT4880; MS: Clair Brothers 12AM, Sennheiser G3; HA: Crown HD 9000, I-Tech 3500 HD; MA: Crown I-Tech 3500 HD
WCPAAA Mystery Dinner Fundraiser	ULTRA SOUND Winfield, KS	BADEN SQUIRE CENTER Winfield, KS	Harry Derr (he, se), Shirley Allison (me, tech)	HS: Peavey, Shure
Zoe Lewis	DYNASOUR SOUND AND LIGHT Hastings, NE	BACK ALLEY BAKERY Hastings, NE	Doc Ivo (he), Don Robertson (se), Neil Brunkhorst (tech)	HC: Dynamics 824; HS: IVO Fuzzbox; MS: IVO LR 12H; HA: IVO Quadralux

LEGEND: (he) house engineer. (be) band's house engineer. (me) monitor engineer. (bme) band's monitor engineer. (se) systems engineer. (ae) asst. engineer. (tech) technician. HC: house console. MC: monitor console. HS: house speakers. MS: monitor speakers. HA: house amplifiers. MA: monitor amplifiers.

To be included in Soundcheck, fax, mail or email a current, typed list of acts, venues, personnel and equipment each following the above format. E-mail is strongly preferred. E-mail to kwelch@nbmedia.com, fax: (212) 378-0470, or send to: Soundcheck, Pro Sound News, 28 E 28th Street, 12th Floor, New York, NY 10016.

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THE EDITORS OF
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140 Drum Mics

(continued from page 38)

why do I need a gate or compressor?" He said, "Exactly!" All those guys knew how to tune their drums," says Rodgers.

Rodgers was mixing a total of 165 inputs: "We had two Yamaha CL5s at front of house and a CL5 at monitors, and the original prototype LS9. We just had 20 stereo sends from video on the LS9. I left it there so I didn't have to mess with it."

Having drummers out in the house was challenging, of course. "Max Gross, my monitor guy, had the world on his shoulders. He had both in-ears and wedges on the stage. But those five guys at front of house were in front of the PA, with 12 mics each. We were not going to allow them to use wedges, so they were all on in-ears—that helped tremendous-

ly. Otherwise, we would have had so many timing issues."

He adds, "I had the same five guys, of course. I had to delay each mic to the PA."

Yamaha not only supplied the consoles but also the Nexo PA rig, which is installed in the Pacific Ballroom—a space measuring over 28,000 square feet that is capable of accommodating 3,000 people—for NAMM week. "It's as flat as can be. We don't even have an EQ patched. That's how good that system is," says Rodgers.

On the weekend before NAMM week, GeerFab Acoustics and Freeman installed 200 custom GeerFab MultiZorber panels temporarily on rigging points throughout the venue, suspended a foot off the wall around the entire upper perimeter of the room. The panels concealed the room's concave surfaces while adding acoustic dispersion across the entire frequency range and acting as a gigantic, continuous bass trap. "It



The ceiling of the Pacific Ballroom in the Anaheim Hilton was covered by a temporary installation of 200 custom GeerFab Acoustics MultiZorber panels.

tightened up the entire room," said Rodgers.

Yamaha, Shure and Freeman Audio Visual were a pleasure to work with, reports Rodgers, and there was tremendous camaraderie between the performers, with no egos on display. "And all the Tama people came from Japan. They were just the nicest people in the world.

"The night was magical. Joe Lamond, the CEO of NAMM, is a drummer. He's always upbeat, but I've never seen him grin more. He was like a kid at Christmas."

In fact, there was only one thing missing: "Sadly, there was not one drummer joke the entire day! And I had hundreds of them ready."

Freeman Audio Visual
freemanav-ca.com

Shure
shure.com

Yamaha Commercial Audio
yamahacommercialaudiosystems.com

GeerFab Acoustics
geerfab.com

Minneapolis

(continued from page 38)

didn't fully understand what the ordinance was and how it works. The city's not going to go into clubs and shut the place down if people aren't wearing them; it's simply that hearing protection has to be there to take for free if you need it. It's compliance that the venues have to have the dispensers and hearing protection available at all

times. If club owners don't have inventory up or accessible to the public, there can be some warnings, so it is an ordinance that they will have to follow, but only to the extent of having the dispensers fully stocked."

Felsen says the proposal has generally been well-received: "The city has really embraced it—some of the council members are affected by noise-induced hearing loss through their own reasons, so they got it when I first brought it up to them, and it has become a bigger initiative as it's

progressed and gained momentum."

Similarly, at Frey's office, Ritchie noted that enthusiasm for the ordinance is building among the city's live venues. "We've gotten quite a bit of people who've said, 'Thank you, it's a great idea,'" she said. "A lot of them are in the music industry or suffer from noise-induced hearing loss, so the businesses have been fine with it thus far."

Key to that acquiescence, of course, is that venues won't have to pay for the hearing protection, due

to the corporations recruited as partners. "[3M and Miracle Ear] agreed to join forces with me and help us with supplying some of the products," said Felsen, who damaged his own hearing as a teen involved in competition car audio and has since become an advocate for preventing noise-induced hearing loss. "When we joined forces, it made the statement that they want to be known as world-leaders in hearing conservation. Alone, we can only do so much, but together, we're going to change the world. It starts here at home and we're working with some exciting companies to scale this to a national and international level."

"Hearing loss is attributed to a lot of health issues outside of not being able to hear that are very significant, especially when they're left untreated," he added. "We hope to scale this ordinance on a national level once it goes through here in Minneapolis, because it's a way for us to not only get hearing protection into people's hands, but also start the conversation about how it is a health issue that most people aren't really aware of."

Felsen's ultimate goal is to change how hearing protection is perceived among today's youth: "We really want to make hearing protection cool and fashionable," he mused. "It's like sunglasses—if you take away the brands, styles and colors, it's a tool to protect your eyes from UV rays of the sun. Sunglasses are a vanity item—and right now, earplugs are not a vanity item. Hopefully the people who go to the facilities that have these dispensers will not only take the hearing protection, but will also encourage other people they know to take it as well."

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Graham Kirk

The Audio Engineering Society has appointed industry executive **Graham Kirk** to international sales manager, underscoring the AES's bolstered business development campaign that began with the 135th AES Convention in New York last fall, resulting in record attendance. In his new position, Kirk will spearhead sales for AES exhibition partners and sponsors, as well as work closely with AES executive director Bob Moses and Steve Green, AES business development manager.

Kirk has previously managed sales and marketing efforts for Audio Media magazine and as the European sales director for the NewBay Media Group.

"We are very excited to have Graham on board as we continue to gain momentum for our two International Conventions coming up this year, in both Berlin and L.A.," said Moses. "We have worked hard to provide new opportunities for both the attendees and exhibitors at our upcoming events and we feel that Graham has an excellent background and skill set to help maximize these efforts and to help the AES grow as the number-one professional and educational resource for the industry."



Paul Marini

CADAC has appointed US industry veteran **Paul Marini** to general manager of CADAC USA. This appointment coincides with the establishment of a CADAC US office, where the company intends to develop closer customer relationships and enable quicker product development.

Morini joins CADAC from Music Group, where he was customer service manager for Midas and Klark Teknik for the US and Canada. In his new role, he will help establish the company's office and sales representative network for the US and Canada, mirroring the recently announced initiative in the UK and Eire. Based in New York, Morini will be close to CADAC's traditional Broadway customer base.

Solid State Logic has appointed **Dr. Enrique Perez Gonzalez** to chief technology officer for SSL's Board of Directors, effective April 1. Dr.



Dr. Enrique Perez Gonzalez

Perez joined SSL in 2011, spearheading the development of the Tempest processing platform and SSL's new Live console. His most recent position with the company was Head of R&D before he was promoted to the Board of Directors. An electronics and communications graduate from ITSEM, Mexico, which included a year at Australia's Royal Melbourne Institute of Technology, Dr. Perez is an alumnus of the University of York (UK), and holds a doctorate in electronic engineering from the Queen Mary University of London.

"Enrique is one of those rare individuals who has deep technical ability, first-hand experience of our markets and the skills to manage product research and development effectively," said SSL's CEO, Antony David. "Even more importantly, he has the vision to build upon our technical heritage and the resources to take us forward."



Spyros Lazaris

Audio Precision recently named **Spyros Lazaris** vice president of Sales and Marketing, where he will work directly with the company's Sales Partners and Marketing teams. Most recently, Lazaris held the role of Americas director of Marketing and Sales for Tektronix. In addition to 17 years with Tektronix, Spyros holds both MSEE and MBA degrees.



Matt Thornton

Portable loudspeaker manufacturing company Dawn Pro Audio has appointed **Matt Thornton** to director of Sales and Marketing, a new position in the company. He joins Dawn with more than 15 years of experience in pro audio sales, including national sales management roles for Samson Technologies and Numark. Thornton will be involved in rebuilding a distribution network and setting up reseller channels for the company, with the aim to re-establish the company in markets where it has historically done well, and pave the way for new products currently in the pipeline



MICK WHELAN

Adamson Systems Engineering

Q: What is your new position, and what does it entail?

A: As director of U.S. Operations, I'll be responsible for all things Adamson inside the USA.

Q: How has your background prepared you for your new role?

A: Having spent a huge amount of my career pushing faders and designing large-scale loudspeaker systems, I believe I'm in a great place to show potential users how the attributes of an Adamson Systems solution can work for its operator, no matter whether it's in a touring situation or permanent installation.

Q: What new marketing initiatives are we likely to see from the company?

A: Visibility.

Q: What are your short- and long-term goals?

A: My initial project will be to contact each U.S.-based supporter, discover how we measure up as a supplier and then share our future Adamson plan. Adamson Systems has a great opportunity with its new Energia family of products. I need to make sure that we communicate appropriately with those that would benefit from using this equipment. Long-term, the mission is straightforward: Be rider friendly.

Q: What is the greatest challenge that you face?

A: One, the planet is filled with good loudspeaker options, and so in many cases, the safe choice is to go with the popular choice; and Two, being heard through the noise and actually getting new 'ears' to invest some time, listening, playing and working with the Adamson product line.



Robin Dibble

Martin Audio has recruited **Robin Dibble** to the new position of Applications Engineer. Dibble was most recently Head of Audio Engineering at RaceTech in London, and previously Project Engineer at Glantre Engineering in Reading. He is also a member of the Audio Engineering Society and an accredited technician in the Institute of Acoustics.



Paul Waadevig

Biamp Systems has named **Paul Waadevig** its new Unified Communications product manager. Waadevig has 10 years of experience in the industry, coming to Biamp from Frost & Sullivan, where he served as director of Information and Communication Technology Best Practices. In previous roles, including manager of

Telecommunication Services, global program director of Conferencing and Collaboration, and senior consultant of Unified Communications, he provided strategic planning, consulting, and analysis to companies such as Microsoft, Cisco and Polycom.



Jeff Barnes

Record Plant Recording Studios has named **Jeff Barnes** to the position of studio manager, where he will manage the day-to-day studio operations including studio bookings, scheduling of engineers, overseeing of technical operations/equipment, and project budgets, while interfacing with producers, recording artists and artist managers. Barnes began his career studying film scoring at USC in 2003. He then attended the Los Angeles Recording School, graduating in April 2008. He started at the Record Plant Recording Studios in May of 2008 as a "runner," rising over the years within the organization.

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From Elvis Onward

CHARLES KITCH, CEO, SOUND PRODUCTIONS

BY KELLEIGH WELCH

Since 1973, the professional audio sales and rental company Sound Productions has provided top artists with custom-designed sound systems, backline, musical instruments and more. And after 40 years in the business, the company still stands as one of the industry's noted providers, offering its customers products and production services to support tours of all sizes.

At the helm of Sound Productions since its start is CEO Charles Kitch, who in 1973 co-founded the company after accommodating a quick order from Elvis Presley's then-tour manager, Charlie Stone. At the time, Kitch was an established sales representative with Larry Morgan of Arnold & Morgan Music in Garland, TX, where he sold musical instruments, recording and pro audio products at discount pricing.

"I sold a lot of Texas guitar players their first guitars," Kitch explained. "I also sold Altec, Bogen, University Sound and Shure sound systems to churches, bands and nightclubs. My clientele included Freddie King, Hank Thompson, Ike Turner, Don Henley and a very young Stevie Ray Vaughan."

Kitch connected with Presley's tour when Stone called the store looking for backline rental for a show in Dallas. When the store owner refused to rent equipment, Kitch put together the required gear for Stone, including his personal Fender Twin amp, and equipment borrowed from another employee who also owned a four-track recording studio called Sound Productions.

"We soon became partners," Kitch explained, saying that with the gear the two had collected, they were able to accommodate Elvis' tour for another 10 performances. "The promoter, Concerts West, called back a few months later wanting backline for Three Dog Night and Chicago tours. I quit the music store and within a couple of years, was fortunate to be providing backline and tech support for Elton John, Queen, Rod Stewart, Billy Joel, David Bowie, The Rolling Stones and many others."

Working with such prominent and popular bands of the time, Kitch said it taught him about the importance of providing the best equipment and personnel possible for these tours.

Today, the company continues to provide its services while staying informed on the latest trends and newest gear introduced in the industry.

"Our sales staff is well-read technically, and we also do a lot of in-house product training. Management attends the pro audio trade shows relevant to our sector, and of course, we have great factory reps and regional guys that help us keep up with the latest products and technology," said Kitch.

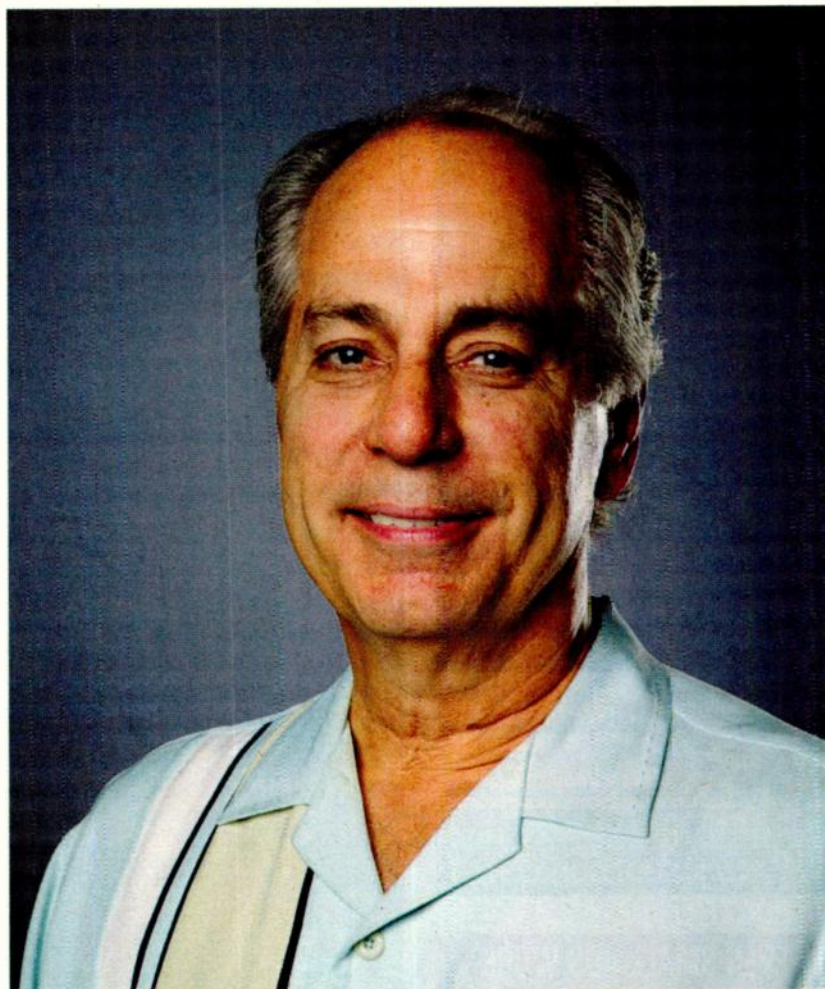
The company's logo boasts a keyboard, referencing its specialty with Hammond B3s and Leslie keyboards, along with Steinway grand pianos with customized Helpinstill pickups and monitor systems.

"We also built custom keyboard and bass rigs for our clients," Kitch said. "We became the backline provider for a lot of tours serviced by Showco. By 1980, we had expanded into sound, lighting and video rental, and had a rehearsal room."

One of Sound Productions' largest services is custom sound system designs, using products from pro audio loudspeaker manufacturers including Adamson, EAW, Electro-Voice, JBL.

"Building custom systems for bands required us to open up with vendors like JBL, Crown, Soundcraft, UREI and others," said Kitch. From there, Kitch said the company's clients wanted to buy many of the products they were renting, leading Sound Productions into sales and repairs.

In 1984, Sound Productions worked with the Dallas-based Tammel Crow Company to install hotel disco audio systems, but by 1988, decided it would be best to stick to sales and distribution to avoid competing with the company's contractor customers. Nonetheless, the experience helped provide Sound Productions with real-world knowledge of the industry and an informed ability to cater to clients' specific needs.



Charles Kitch, Sound Productions

"Providing quality products and production services, on time, within budget to picky entertainers and artist management companies has helped develop a values system that our clients appreciate," said Kitch. "The biggest challenge lately is the erosion of the middle market and the proliferation of the low price point segments. Touring is no longer the major driver. Price point is everything as the products become commoditized and the barriers to entrance in the business diminish."

A team of 22 full-time employees help run the sales, shipping and production of Sound Productions. Kitch's role is mainly focused on marketing, consignment sales and used equipment brokering.

While the company doesn't develop new products, Kitch said he keeps up with the industry's latest innovations and serves as a marketing consultant for manufacturers and to help keep up with competition.

"We have the reputation of stocking more high-end mixing consoles than our competitors. We are also known for our expertise and product knowledge, as our sales staff all have experience as mixing engineers," Kitch said. Asked what consoles he'd seen in recent times that was innovative, Kitch said, "The game changer in consoles has been the Behringer X32—talk about a disruptive price point that has everyone wondering where the digital console business is headed. It's a great little mixer and I

think everyone should have one. Or two."

Sound Productions has also branched out from just catering to tours, and now provides equipment for churches, sound contractors, DJs and more.

For future endeavors, Kitch said the company is improving itself based on customer suggestion, adding a training center and product demo room to its distribution center near the Dallas/Fort Worth airport. The opening of the space will coincide with the company's official celebration of its 40th anniversary, bringing in numerous events including product demos, training sessions, and a sound mixing seminar featuring Buford Jones (legendary FOH engineer for Pink Floyd, Eric Clapton, George Harrison and others) and Meyer Sound.

The company's website will also soon add a 'Shopping Cart,' making customer services even easier.

"We have a culture of professionalism that is customer centric and we believe in the well-being of all of our stakeholders, including employees, reps, vendors and support personnel," Kitch said. "I am most proud of the fact that Sound Productions has become a recognized brand, known for great customer service and support. I am also very proud of all my team members who have helped build this company," Kitch said.

Sound Productions
Soundpro.com

Anderton

(continued from page 26)

pause the download, and return to it later. The only snag is that there's no universally adopted download manager solution yet, and frankly, some work better than others.

So, some companies segment large files into smaller, more bite-size chunks. You download these individually, then they're assembled back into their original size. Again this isn't always a foolproof process, but it's better than trying to download a huge file.

Then there's the mother of all download software controversies—the subscription model, where you rent software instead of buy it. For enterprise situations, this can work very well because all machines in the organization are in sync with the most recent software version. However, with many subscription models, if you don't keep subscribing, the software stops functioning—so you can't open older files you created with software you paid to be able to use. One possible solution is to let DAWs open in read-only mode with only export enabled, or

let plug-ins open without editing options. That way you can't work with the projects, but you can at least return to how they were when the subscription ran out.

Digital delivery is still in its infancy, so we can expect additional twists. For example, Guitar Center offers digital downloads as part of its product mix. We can also expect an expansion of the in-app purchase concept, like what IK Multimedia does with AmpliTube Custom Shop, where you can add different amps and effects as desired. I could easily picture a DAW that ships with a minimal set of plug-ins, and you buy additional ones as you need them. Eventually, even DAWs could become modular.

However, depending on the net is not without issues. The amount of hacking with even "secure" bank and government sites is scary, as are the many recent heists of credit card data from major retailers. Still, the Internet isn't going to go away—and increasingly, we'll be buying our software without discs, packaging or shipping costs.

Author/musician Craig Anderton has given seminars on technology and the arts in 38 states, 10 countries, and in three languages.

Tozzoli

(continued from page 26)

MBoxes, which saved my bacon a few times when I had HD issues. Also, I have ZDT (Zero Downtime) coverage on my iLoks, so that I can get through a session if something goes wrong with my authorizations.

Aside of hardware, I have multiple backups for my monitors. Since I use NHT M00s and an NHT sub, I've purchased two sets of extra speakers and an additional subwoofer—since they don't make them anymore. Also, I have a full set of Adam AX5s and a sub in my storage closet, which can get me through any session. There have been times where my subwoofer blew, and I had to go to the backups. I also make sure to have backups to the cabling that gets me in and out of any speaker, from TRS to XLR to unbalanced mini plugs. I bought good plastic storage containers at The Container Store and have all my cables stored for easy retrieval.

Another lesson to learn about redundancy is to buy the good stuff to begin with. I still have cables from Mogami, Zaolla and Monster that

I've used for over 10. Just this week, on the same set of live shows I mentioned above, we had several XLR mic cables go bad—and they weren't the good stuff. My rule is that I'd rather buy something once and pay more for it upfront, knowing it will last far longer than cheap stuff.

Getting back to being on the road, that's where redundancy really is critical. One time during a show in Moscow, the stage crew plugged our gear into the wrong power source, and sure enough—BAM!—a rack of gear blew up in a shower of sparks and smoke. Mind you, we had arrived to the show, inside the Kremlin, on no sleep. So aside of language barriers, jet lag, no sleep and blown gear, we cobbled together enough with the backup gear to get the show done.

So the point I'm getting at here is that redundancy for our critical pieces of gear pays dividends. Take the time to think through your system and make sure you have backups to the big things (data) and the little things (like Thunderbolt cables). Yes, it will cost you a bit more up front, and you may question why you have extras, but when that proverbial pedal stops working, you won't miss a beat.

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Hear and Now

BY JACQUES SONYIEUX

On his new record *Hereafter*, New Yorker Sean Sullivan serves up an intense stew of eclectic tunes, tinged with just the right ingredients of jazz, blues, soul and Americana. *Hereafter* makes for an extremely active listening experience. Sullivan's vocal delivery is passionate and soulful whether he is singing a soft, jazzy ballad or more bluesy, rocking tune. It seems fitting that *Hereafter* was recorded and mixed at New York's equally eclectic Sear Sound, with all of its vintage instruments and its custom Neve 8038 console. *Pro Sound News* spoke with Sullivan about staying in the "here and the now" during recording.

ON ECLECTIC SONG CHOICES:

I like to call the project "dangerously eclectic." There is a sense of danger when you love a lot of different styles of music. And I think on this project, the basic threads that unite it all are the blues, soul and spirit, as well as the careful arranging, instrumentation and contouring of things. Somehow it plays good from beginning to end and I'm happy about that.

As far the material is concerned, we did eight originals and four covers. The originals are a mix of some jazz pop, blues, Americana, soul and some more edgy rock stuff. Fortunately, the musicians were able to play all of these things very well, having been versed in each of these genres. As for covers, I have always loved Bob Marley and I particularly

love the song "Waiting In Vain"—it's got such a beautiful melody and a very heartfelt lyric about unrequited love. For that and the Stevie Wonder song, "Until You Come Back to Me," Matt [Pierson, producer] and Kevin [Hays, piano], we just hashed things around and came up with the notion of doing them slow, in a ballad feel. It's a bit more meditative and emotional than doing an upbeat version, and I think it works.

ON A SENSE OF DISCOVERY:

Everything was done rather quickly on this project because we wanted to capture a sense of discovery in the material. We didn't over-rehearse and did just enough to keep that freshness alive. Sear Sound is the oldest recording studio in New York City and is



Sean Sullivan recorded his latest album in two whirlwind days at Sear Sound in New York City.

almost a museum, with a huge collection of vintage audio gear. Matt does a lot of work over there and it really was a privilege for us to work in Studio A. The band was booked for two days and we cut six songs in one day and six songs in the next.

We had a core group of Kevin Hays on piano, Tony Scherr on bass and Kenny Wollesen on drums. During the two days of sessions, we brought in several different instrumentalists: Seamus Blake came in to do some horn tours and Steve Cardenas did some guitar work. Tony is also fantastic at doing this inventive slide guitar work, so he put some of that in, which was fun. After the core was completed, we brought in Ray Angry, to do some B3 chores on a couple of songs. We put the percussion on and Andy Snitzer came in for some sax parts.

ON MIC TECHNIQUE:

We laid down some scratch vocals and then I came into do some overdubs. In some cases, we kept the scratch vocal and in others, we used the overdubbed ones. I've always been a big fan of the old tube condenser microphones, particularly the Neumann U 47, a classic mic that imparts a nice, warm sound. When I am singing ballads and softer stuff, I tend to move in a little closer on the mic to get that breathy quality. For other tunes, like "A Man's Woman" and "God is in the Blues," I tend to back off the mic and belt them out. I have a really big horn if I want so I am very careful to use proper mic technique.

ON TIME CONSTRAINTS:

I am a bit of a perfectionist. In some instances, having such a short time frame to record helped us get a better live energy and feel, but in other cases, I feel like some of the ballads and other things could have been realized a little bit better. But there is always some of that when you are working at this high level in New

York City with one of the best studios and musicians in the world.

ON COMMUNICATING IN MUSIC:

I like to make beautiful sounds but I don't like them to be played in the background. I think that music should tell a story, be engaging and merit repeated listening. If I am not pushing myself to be real and in the moment, then the music is not going to have life and communicate to other human beings. And communication is really the key thing in music.

ON FINISHING TOUCHES:

We did the mixing in just two days, consuming an hour and change for each track. We just railed through it. Matt and Kevin Harper [engineer] did some editing to it, then the very next week, we ended up at Battery Mastering Studios with Mark Wilder, who is an amazing mastering engineer. He put his stamp on it, and that was that. When I listen to it now, there is a part of me as the perfectionist that only hears the mistakes, but that was really only during the first month or so. Now I have made peace with it. It's about getting in there, getting it done and getting a record out. Life is short. You are hearing that immediacy in this record, and I think that's what brings the intensity that makes a project worthwhile.

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.



THERE'S MORE ▶ Catch Sean Sullivan's EPK for *Hereafter* at prosoundnetwork.com/apr2014.

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coverage loudspeaker

UPA-1P

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coverage loudspeaker

UPQ-1P

wide coverage
loudspeaker

UPJ-1P

compact VariO
loudspeaker

UPJUNIOR

ultracompact VariO
loudspeaker

Flexible, versatile and built to last, the UltraSeries self-powered loudspeakers are the workhorses of rental companies and installations worldwide. We've built them to survive season after season of extreme weather, being dropped, picked up, and trucked to performance after performance...and still perform beautifully. *The UltraSeries loudspeakers are made by hand in Berkeley, California, USA.*



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