Martin Audio Celebrates 35 Years

WATERLOO, CAN — Martin Audio recently celebrated 35 years in loudspeaker design and manufacturing at the Roadhouse club at The Piazza in London’s Covent Garden.

Not coincidentally, the Roadhouse is situated on the site of Martin Audio’s original manufacturing facility where the company, under the leadership of David Martin, began building loudspeaker systems for productions like Pink Floyd, The Who, ELP, Supertramp, Dire Straits and others. Thirty-five years later, Martin Audio is still driven by a design team constantly seeking to push the boundaries.

Originally, Martin Audio had distribution in only one or two countries. Now the company has its own operation in North America and a steadily growing business in nearly 50 markets around the world, with a wide range of loudspeakers for touring, commercial installations and more.

Commenting on this milestone in the company’s history, managing director David Bissett-Powell stated, “I knew David back in the early days and we continued a relationship right up until his untimely death. I think he’d be quite proud of how the company has progressed and the team that we’ve built over the last 15 years. Some of his early customers are still with us today, and it feels like the Martin Audio Team, our distributors and customers are all one big family.

“Every morning when I enter our facility I pass the bronze bust of David Martin in our entrance lobby and never fail to think that his initial passion is what started this whole business 35 years ago.”

2006 Parnelli Awards Held In Las Vegas

LAS VEGAS — Timeless Communications, Inc. presented the 2006 Parnelli Awards on October 20 at the Venetian Hotel and Casino in Las Vegas. Named in honor of production and tour manager Rick “Parnelli” O’Brien, the awards acknowledge the achievements of the best in the business. Topping the list of honorees were Bill Hanley, legendary sound engineer, winner of the Audio Innovator Award (pictured above left, with Dave Shadoan, president of Sound Image, who introduced Bill at the ceremony), and Jere Harris, of PRG, as winner of the Lifetime Achievement Award. The full list of winners is available now on the FOH Web site and at ParnelliAwards.com, with full coverage in print coming next month.

Production Pros Build “Musicians’ Village”

NEW ORLEANS—At Camp Hope in New Orleans, Habitat for Humanity volunteers assemble daily and then issue forth to help rebuild hopes and dreams shattered by 2005’s “Katrina” flood disaster. Teaming up with local grass roots organizations, such as the Baptist Crossroads Project, on a planned community dubbed “Musicians’ Village,” they have nearly completed 30 of a projected 75 new homes. Primarily intended for musicians who live in the New Orleans and the Lower 9th Ward area, this project was conceived by Branford Marsalis and Harry Connick, Jr. as a way to help local musicians displaced by Katrina.

Volunteers from across the country, across all spectrums of social and professional backgrounds, have come at their own expense to assist the work for periods from a few days to weeks, and even months. Among those answering the call for assistance, veteran L.A. tour manager Tom Mooney (whose wife Ann was an SVP with Ticketmaster for 22 years and ran continued on page 10
Present a radical idea, and everyone's there to question it. But if it works, suddenly it's more than a good idea. It's an industry standard. Even before Meyer Sound was founded in 1979, the idea of self-powering was in John Meyer's mind. The HD-1 studio monitors realized his concept of incorporating amplification, processing, limiting and crossovers into one cabinet. The NSL-4 brought it to sound reinforcement. At the time, there were skeptics, but now that we've been making self-powered sound reinforcement loudspeakers for more than 11 years, John Meyer's sound thinking is not in question. The real question is what will he think of next?

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The Tn Series of Amplifiers. Working hard so you don't have to.
FOH Interview
You may not believe us, but our interview with Howard Page, Mariah Carey’s FOH mixer, is more interesting than this picture.

On Broadway
The sound of snow falling? Turns out it’s actually pretty loud.

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Feedback
Hi Guys,
Just thought I’d drop you a note regarding your recent column on “idiot proofing” and color-coding system connections.

First, as for having crews patch things, my preference is to watch the crew closely during the initial load-in and stacking of the PA. You should be able to identify a couple of individuals in the crew that number one, listen to your directions and number two, follow those directions. When it comes time to wire the system, I’ll cut off most of the muscle part of the crew and keep those crew members that are willing to follow direction. And if I don’t cable it myself or see the crew cable it, I’ll double-check it.

Second, Brian makes a comment “if people can’t follow the color code, we’ve got bigger problems…” We need to bear in mind that we do occasionally work with people that are colorblind. So relying on a color coded system in place of labeling is NOT foolproof or safe. One way around this is to use a color-coding scheme that’s compatible with colorblind individuals. That said, I do like that color-coding because it allows for fast visual inspections to verify proper patching.

Also, like Brian, my preference is to use different connectors for different applications that are NOT close to being compatible. AC power is Camlok, Hubble twist lock and Edison. I tend to avoid Powercons because they’re too close to NL4s. Speaker cabling is NL8 for mains and NL4 for subs and monitors. Signal cabling is all XLR and multipin using adaptors to minimize the number of 1/8-inch, 1/4-inch and RCA connections.

Personally, I DO NOT like the idea of cabling stuffed into the back of racks for several reasons:

1 – Too many times I have seen them not properly strain relieved, so the cables end up yanking on the connectors of the rack gear. This stress can lead to damaged connectors on the rack gear.

2 – All that cabling stuffed into the rack can lay up against connectors plugged into the rack gear, providing additional stresses and potential for damage to the gear.

3 – What happens when the cable or rack gear is damaged? If you use rack panels and “standard” cables, a damaged cable can be easily replaced. Also, if a connector on a rack panel gets damaged you can bypass the panel and hardwire into the rack gear as a temporary fix.

I understand that building a system to be easy and fast-to-setup using rack panels adds to the cost. But in the end you save money by avoiding the damage that can be caused by incorrectly patched systems and the lost time chasing down mis-patched connections. You’ll also be able to setup your rig faster, which will enhance your reputation and please your clients.

Mike Borkhuis

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THE CHOICE WORLDWIDE

VERTEC® has become the most requested loudspeaker system worldwide for more than just the legendary JBL sound. Lightweight neodymium drivers, tour-proven enclosures, and flexible rigging hardware make the VERTEC product family extremely portable and quick to set up. The engineering science behind the award-winning VERTEC system is readily configured onsite to provide optimal coverage in different venue applications. And with available options including powered models using JBL DrivePack® Technology and HiQnet™ for remote control and monitoring, VERTEC represents your best choice in sound business tools. Choose the sonically accurate system most likely to be requested for tours and projects worldwide.
N
it's not the name of the next band you'll be working with or even a way of looking at the future of analog consoles. I saw that phrase on the cover of a magazine recently. It was a teaser to an interview with the publisher of Wired Magazine, and it referred to the entire idea of print publishing — from its efficiency as a way to disseminate information in a timely manner, to its effectiveness for advertisers seeking to get their stuff seen by the right audience. The phrase has stuck with me because it does a great job of describing the way I have felt but have been unable to express well for the past decade-plus.

On a non-publishing front it is a great way to describe how it remains important — even crucial — to do the basics well, but that the basics are no longer enough. Example: last night I went out to the MGM Grand Garden Arena to talk to the audio crew and catch part of the show with the Southern jam band Widespread Panic. The band and the crew had the basics down for a show like this. The band went on lots of extended, danceable instrumental excursions, and the crew knew the material and the people well enough to know where they were going and to keep the big beat ever present. Good stuff, but not enough. The band and crew together upped the ante a notch or three with cool visuals and some of the best arena sound I have heard recently — maybe ever. And this is in a room that can be tough to mix in.

That mastery of the basics coupled with an emphasis on very current news and education.

As the world has gotten more digital, consumers of information have come to expect more choices. And truth is, we have done only a so-so job of offering those choices. We have had a digital version of the print magazine available for some time now, and people really like it. But the FOH Web site is what it is. It has it's high points — the forums that we started almost two years ago are going pretty strong — and areas that need to improve, and in the next few months you will see a major redesign of the site, including the ability to search back issues, more interactive content, Web-only content, plus downloadable stuff with an emphasis on very current news and education.

Finally, you may have already received an electronic notice to update your listing in the Event Production Directory. With the issue that is being put together now, you will not only be able to update your listing online, but the whole directory will be available — and searchable online. For those of you who are working individuals and not company owners, stay with us. There is something in the works for all of you as well.

Just like you have to stay on top of current production and audio trends to be successful, we have had to look at where things are heading and what our readers need from us and make some adjustments. Like I said, we are pretty good at putting together a magazine that gives a good overview of a complex industry while both inspiring and educating our readers. Not dead. But not enough.
LONG BEACH, CA — The crew of the Nimitz-class aircraft carrier USS John C. Stennis had been working for almost two months straight without a day off, when the commanders decided to give the crew a full-scale party on July 4th. The Chuck Alvarez Band got the call, along with the Comics On Duty tour.

Steve McNeil, president of Mac West Group in Long Beach, also got the call, and his job was to provide the sound system for the show. “They told me I could bring 2000 pounds of gear. And we had to be completely self-sufficient.” McNeil packed his Sabine 2.4 GHz Smart Spectrum Wireless Systems and Gaphi-Q2 Multi-function Processors. Sabine’s SWM7000 Wireless operates in the globally accepted 2.4 GHz band.

Once the gear was packed, the band and crew settled in for the short ride to the ship. “All the gear was packed into a turbo prop COD (Carrier Onboard Delivery) plane, and we came in at 170 miles per hour,” said McNeil. Luckily, all the gear made it just fine, with the exception of one speaker cabinet that “did not stop.”

The stage was placed on the almost 5-acre deck, right in front of the main superstructure of the ship. Sabine’s 2.4 GHz Wireless Systems were used for lead vocals, the comedians and the announcers.

The USS John C. Stennis (CVN-74) is the lead ship of the Stennis Carrier Strike Group. This nuclear-powered aircraft carrier is over 1000 feet long with a beam of 134 feet, and displaces 91,300 tons. The Stennis can carry up to 90 aircraft, and her maximum speed is classified, but is well over 35 knots. Two Westinghouse reactors drive geared turbines that deliver a whopping 260,000 HP, and the ship is propelled by four screws.

Sabine Wireless receivers feature built-in signal processing, and transmitters come with rechargeable batteries. Handheld transmitters, lavalier and head-worn microphones and a variety of antennas are also available.

GALVESTON, TX — The Rock Boat will again set sail in January of 2007. For those unfamiliar with the cruise, Atlanta Sound And Lighting will produce three rounds of cruises in 2007, each requiring the crew and gear of a large-scale bus and truck tour—only they’ve traded in the road for the high seas.

One of the three established 2007 cruises will play host to more than 30 bands. Other cruises will be hosted by Lynyrd Skynyrd and the Barenaked Ladies. The cruises include bands playing from as early as noon each day until as late as four o’clock in the morning.

According to production manager Rodney Stammel, each boat comes with its own sound needs, and these needs can change from year to year, so the gear list is in a constant state of flux. One thing that remains the same from the road is the amount of work each boat tour brings.

“There’s people up at all hours,” Stammel said. In getting the gear loaded, set and patched, crews can put in as many as 20 hours a day each.

Stammel also stated that the ships rely on AC power, so the crews tie in using transformers. Also, because of the possibility of swaying on board, all gear is strapped to the deck. This, along with the use of pre-existing positions for hanging and setting gear, helps keep the gear, passengers and crew secure in the event of choppy seas.

“It’s one of those things you need to see to understand,” Stammel added.

The cruises once departed out of Louisiana, but with the onset of some powerful hurricane seasons, and with a season that runs year-round, Galveston was chosen as their new port. Five cruises will sail in 2008, more coverage from FOH on this burgeoning market will take place in early 2007.
Trinity Baptist Restores Voice

LAKE CHARLES, LA — After nearly one year of rebuilding from the devastation inflicted by Hurricane Rita, Trinity Baptist Church, located in Lake Charles, La. is communicating with its congregation in a big way, thanks to the installation of SLS loudspeakers. The 66,000-square-foot church has acquired several SLS units to replace its old sound system, which was badly damaged during the September, 2005 storm.

“The wreckage resulting from Hurricane Rita was catastrophic for Trinity Baptist Church,” said Randy Monroe, associate pastor of worship and praise, Trinity Baptist Church. “Our roof and ceiling tiles suffered a lot from the wind, salt water and rain, which subsequently took a significant toll on many of our resources, including sound speakers located within the ceiling.”

Niel Traylor, Jr., CEO of N.B. Traylor & Associates, Inc., the consulting engineers for the project, selected RLA/2s, LS68115s and LS6993 for Trinity. Traylor stated, “It was clear that the space would benefit from a system with a good footprint and minimal wall/ceiling excitation. Even though it was a departure from his original mandate, the restoration contractor cooperated in flying a side-by-side cluster comprised of eight 2-way modules and four subs, which matched up in a nice monolithic-appearing array. The left and right corners were supplemented with dual stacks off LS6993 flush mounted at ear level.”

Trinity Baptist Church was first established at its downtown location near Lake Charles 80 years ago and has since been relocated to its current site in south Lake Charles for the past six years. A hub to its community, it is home to a worship center, double gymnasium, children’s playhouse, fitness center and student ministry. It is also host to a number of concerts and gospel artist performances.

Kenyon College Works Out Its Audio

GAMBIER, OH — Kenyon College’s new Athletic Center, designed by the Gund Partnership architectural firm of Cambridge, Mass., is indeed a large space to fill. To this end, the sound system makes use of media systems that have been designed to function under a wide range of scenarios, making use of several independent, but interconnected, DSP and control systems. The various areas of the complex were designed to function as discrete systems, though any or all of them can be tied together as needed.

Audio for the indoor track area is provided by 48 Community R166-X two-way full range systems, while the tennis courts are covered by twelve Community R1-66TX loudspeakers. Audio in the natatorium, an indoor Olympic-sized swimming pool, is provided by 18 Community R1-66TX full-range loudspeakers. The Center opened its doors in March of this year. Although the official opening ceremonies were scheduled for April, the facility has been fully booked since day one.

Grand Ole Opry Upgrades

NASHVILLE, TN — Recently, the Grand Ole Opry turned to Neumann and Sennheiser microphones, thanks to the efforts of Steve Gibson, music director/manager of Creative Services.

The basic format of the Opry stage consists of the upstage area that is reserved for the band, the mid-stage line that is occupied by the piano, various guitars and their respective amplifiers and finally the downstage area that is closest to the audience. The new microphones are used at mid-stage and downstage with a Neumann BCM 104 broadcast microphone on the upright bass and a total of eight Neumann (four BCM 104s and four KMS 104s) for main vocals and instruments. One Neumann BCM 104 travels around the stage as needed. Sennheiser Evolution 609 silver microphones are used on guitar amplifiers downstage. A Sennheiser MD421 is also on the steel guitar and on guest guitar amplifiers.

The Opry’s unique sonic personality is a special blend of musicians and performers, the acoustic characteristics of the house, and the talented audio staff working behind the scenes.

The Giants Have Gone Wireless

SAN FRANCISCO—Opened in April of 2000, AT&T Park is the San Francisco Giants’ home stadium. Wireless needs at the park extend beyond the normal reach of pre-game activities, announcements made from the field and the national anthem, so a total of eight UHF-R channels are used within the park, along with a pair of active UA870WB paddle-style antennas. Transmitters across the board are handheld U82 units sporting venerable SM58 capsules.

Shure comprises a large portion of the in-house gear, including their new UHF-R, a wireless system which includes automatic frequency selection with group scan, infra-red automatic transmitter sync and a smart menu-driven system operation. With 2,400 frequencies spread across a 60 MHz bandwidth, UHF-R provides room for up to 40 preset compatible systems to be operated per band. Complementing this expanded window of operation is Shure’s Advanced Track Tuning Filtering Technology, which shifts onboard RF filtering.

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SALT LAKE CITY, UT — A group led by local event promoter United Concerts has restored the downtown Salt Lake City Union Pacific Railway Station into a new space called The Depot nightclub. The Depot topped off its hard-won restoration with a Meyer Sound system. The completed venue led United Concerts President Jim C. McNeil to proclaim that “it’s like nothing we’ve ever had in Salt Lake City.”

A 37,000 square-foot, three-story space, The Depot is centered around a 1,200-capacity, two-level concert hall. But the club also includes a 220-seat, five-star restaurant, as well as a separate VIP wing complete with private lounge and meeting areas, and has already seen business hosting corporate functions.

Its main purpose, though, is as a live music performance space, and in that respect the club has been a success, with the first few months witnessing performers as diverse as Cake, Los Lobos, Minnie Driver and Martin Sexton, the Reverend Horton Heat, Isaac Hayes and The Roots all taking the stage. The club’s central mission is to bring a wide variety of quality music to the city while giving the local nightlife and culture a much-needed shot in the arm. United’s event coordinator, Rob Pierce, contacted local pro audio dealer Webb AV, and the choice was made to install a system of MICA compact high-power curvilinear array loudspeakers, supported by 700-HP ultra-high-power subwoofers.

The system design was created by plotting the building dimensions in Meyer Sound’s MAPP Online Pro acoustical prediction program and working with the array configuration until the desired coverage was obtained. The final design called for five MICA cabinets per side and four 700-HP units beneath the stage, all driven from a Galileo loudspeaker management system.

Before installing the system, however, the United crew had to deal with the fact that the old rail station wasn’t ready for the vibration and abuse of regular concerts. Originally built in 1909, the building’s basic frame was in good shape, but the walls and floor needed reinforcement to handle large crowds. The crews worked diligently so as not to violate any of the codes governing restoration of a historic landmark, and left the exterior of the building largely unchanged. Inside, they insulated the roof and wrapped additional material around the joints to better seal them for both insulation and sonic reasons and to reduce sound reflections from them. In the acoustical foam in problem areas, applied sound treatment to the underside of the balcony level and draped both the stage and the windows.

The system passed its first real performance test when The Roots performed at the club. “I was a little worried about subwoofer capacity for that show, because they needed so much low end,” Pierce says. “They came in, looked at the setup and immediately said ‘we need more subs.’” Pierce convinced them to try the setup as it was, and immediately said ‘we need more subs.’”

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Daresbury Estate, UK — This year, a crowd of 45,000 made its way to the Creamfields festival in its new home of Daresbury Estate in the heart of the Cheshire countryside. Headlining this year were the Prodigy, and as headline act, the audio system was designed to meet the specification on their rider. This included an EAW KF760 line array system from UK rental specialists, and long-term Prodigy suppliers, ML Executives.

ML Executive’s Oz Bagnall opted for a stack of 18 SB1000 sub per side running a conventional sub/KF760 processor configuration. The ML team also added a center stack of 12 SB1000s, which were tuned to a much lower frequency band and driven from a separate matrix. “This allowed Jon to feed this extra reserve of energy into his mix at crucial moments during the set,” explained Bagnall.

Jim Griffiths, of newly formed consultants Vanguarda, whose task it was to ensure that noise levels were contained within the statutory limits, was very impressed by the professionalism of the crew. “It makes a huge difference to the efficacy of my job when I can work with a crew that truly understands the restrictions imposed by the site and is happy to work with them.”

Berlin—After a two-year break, under the banner “The Love Is Back,” Summer 2006 marked a triumphant return for the Berlin Loveparade, which featured more than 200 musical acts from across the globe, including international electronica superstars like Paul Van Dyk, Tiësto, DJ Hell and ATB. An estimated two million people crowd the streets to groove the entire venue.

In contrast to previous years, this year’s parade provided free floats with identical sound systems to the winners of an online vote, so all participants would have access to sound systems of equal quality, capabilities and safety.

Promotional firm Lopavent GmbH retained the services of local audio designer Christian Oeser to create the sound systems for the trucks. “Loveparade systems need some serious headroom,” explains Oeser, “so we wanted to go with a system that was both powerful and compact.”

Oeser’s design called for a dozen 650-P high-power subwoofers, eight MLS-4 horn-loaded long-throw loudspeakers and four CQ-1 wide coverage main loudspeakers on each of the forty trucks. Each float was also outfitted with a pair of USM-1P extended range narrow coverage main loudspeakers and four CQ-1 wide coverage main loudspeakers to help the DJ’s keep the parachute of the floats’ sound systems are linked together for a ful, homogenous sound reinforcement across all cases, and still we were able to achieve power range and even remained below them in some

The Parade’s organizers also commissioned a NEXO GEO T tangent-array sound system for the Abschlusskundgebung, integrating it into the overall sound reinforcement design. As the view from the Victory Column to both the east and the west was to be as unrestricted as possible, the structures needed for mounting the loudspeakers had to be kept very simple.

Jesko Purmann and Michael “Miiwe” Wengerter from the Kassel enterprise Ambion GmbH successfully tendered a system design using nearly 90 GEO T tangent array loudspeakers from NEXO, several supplementary NEXO Alpha and PS Series loudspeakers and NX TD-controllers, as well as 70 Vertex 6 amplifiers from Carco. This system networked three locations, the central mixing/presentation point and the two DJ stages.

Speaking after the Love Parade’s successful revival, Jesko Purmann said, “We managed to meet all the conditions regarding volume and range and even remained below them in some cases, and still we were able to achieve powerful, homogenous sound reinforcement across the entire venue.”

big nightclub, with music and acts interspersed throughout the various after-parties held in all of the dance clubs and streets. Oeser plans on using the Meyer gear at the Loveparade for years to come.

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Download Festival Hits High SPLs

LEICESTERSHIRE, UK — This year’s Download festival, held at the Donnington race track, attracted 70,000 fans for 3 days of music. For the first time, all the sound stages were supplied by companies using L-ACOUSTICS systems. SSE took care of the main stage with their V-DOSC system, SKAN the second stage, and Stage Audio Services supplied five other stages, all with L-ACOUSTICS loudspeakers and amplifiers.

Paul Nicholson, from L-ACOUSTICS UK, was involved with the main stage design and was on site along with Paul Bauman, the head of technical support, to assist SSE with the installation of the system. The site mapping was completed many weeks before the load in, and all that was required on the day were a few trim adjustments with the undulating nature of the field taken into consideration.

L-ACOUSTICS also supplied their KUDO demo rig for the main stage delays. This was the first time that the system had been used in this configuration in the UK. Nine boxes were used on each of the two delay positions, covering the last 100 meters to the back of the field.

SPL levels had to be trimmed back to comply with local noise regulations, but peak averages throughout the audience remained around the 104 dB mark from front to back, which, for an event like Download, was a comfortable level for all.

To Russia With Love

MEZHDURECHENSK, RUSSIA — Work began a few months ago in Siberia on a total re-build of the Raspadskiy Palace of Arts, which included the replacement of the entire technical set-up: audio, lighting, stage mechanism and other apparatus. The tender for the design of the systems and supply of sound and light rigs went to Sound Design, a firm from Novokuzeznetsk, Moscow’s Studitech, Outline’s distributor for several years, took part as sub-contractor for the design, supply and installation of the sound system.

The client’s brief was to provide a sound reinforcement system able to ensure the flexibility to adapt to the requirements of different types of events (concerts by pro and amateur singers and groups, choirs, conferences, meetings and much more).

The FOH system’s installation features sixteen Butterfly CDH 483 hi-packs, eight Butterfly CDL 1815 lo-packs (in a single array with the hi-packs) and four floor-stacked Victor Live subwoofers. All are controlled and powered by two DSP Genius 26, twelve T6.5 and two T4.5 digital power amplifiers, respectively.

Onstage, preference went to four HARD 212 SP and four HARD 115 SP monitors (all self-powered), while two Outline Kanguro 1215 A speakers were installed on side-fill duty. Two Micra II SP enclosures are used as FOH monitors.

The FOH desk is an Audient Aztec AZ-40, and the microphones on the installation are of various brands: Beyerdynamic, DPA, Shure, Audio Technica and Schoeps.

Alexander Klimushkin, Outline’s representative in Russia and head engineer with Moscow’s Studitech, comments, “This wasn’t my first experience with using the Butterfly system for theatres and concert halls.”

Bokov Alexey, director in charge of Sound Design of Novokuzeznetsk, comments, “We’ve used Outline systems in various installation and tours since 1994. Last summer, in collaboration with Moscow’s Studitech, we carried out another project with a Butterfly rig. It was my first experience with one of the very latest Outline products.”

Chinese Cultural Center Revs Up

DALIAN, CHINA — The Dalian Cultural Center, located in Zhongshan Square in the heart of the city, is one of the area’s more recent building projects. The center is the main venue for the 2007 Dalian Art Festival, an event organized by local government.

When bidding for this audio installation project began, many engineers flew to Dalian to compete. After several rounds of competition and review, the decision-makers at the client’s brief was to provide a sound reinforcement system able to ensure the flexibility to adapt to the requirements of different types of events (concerts by pro and amateur singers and groups, choirs, conferences, meetings and much more).

The FOH system’s installation features sixteen Butterfly CDH 483 hi-packs, eight Butterfly CDL 1815 lo-packs (in a single array with the hi-packs) and four floor-stacked Victor Live subwoofers. All are controlled and powered by two DSP Genius 26, twelve T6.5 and two T4.5 digital power amplifiers, respectively.

Onstage, preference went to four HARD 212 SP and four HARD 115 SP monitors (all self-powered), while two Outline Kanguro 1215 A speakers were installed on side-fill duty. Two Micra II SP enclosures are used as FOH monitors.

The FOH desk is an Audient Aztec AZ-40, and the microphones on the installation are of various brands: Beyerdynamic, DPA, Shure, Audio Technica and Schoeps.

Alexander Klimushkin, Outline’s representative in Russia and head engineer with Moscow’s Studitech, comments, “This wasn’t my first experience with using the Butterfly system for theatres and concert halls.”

Bokov Alexey, director in charge of Sound Design of Novokuzeznetsk, comments, “We’ve used Outline systems in various installation and tours since 1994. Last summer, in collaboration with Moscow’s Studitech, we carried out another project with a Butterfly rig. It was my first experience with one of the very latest Outline products.”
The only thing between you and a bottle flying your direction from center stage

The Rane MM 42
The worlds most powerful in-ear monitor processor, all in one rack space.

- Independent and fully adjustable multi-band compression & limiting
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Visit www.rane.com/iem.html for more information on this bitchin’ device.
On The Move

Allen & Heath has appointed a new distributor, Shidco, to exclusively manage the sales, distribution and service of Allen & Heath product lines in Iran.

Crown International announces two appointments to its senior staff with the dual promotions of Scott Potosky to vice president of engineering and Marc Kellom to vice president of marketing.

Eminence Speaker LLC recently announced the addition of Trans Continental Hardware as a preferred distributor for branded Eminence product sales in the continental USA.

Eventide has named Robert Kovarick to the position of director of operations. Eventide has recruited Christine Sapienza-Chaput to the newly created customer support manager position. Eventide also promoted Brian Haberman to office manager.

KAM Sales has been appointed to represent TOA Electronics’ Security Products Division in the sales territory of Alabama, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee.

Meyer Sound has announced that Kurt Metzler has been appointed to the newly created position of northwest regional sales manager. Will Lewis has also been appointed to the newly created position of southwest regional sales manager.

Mark Humrichouser has been hired as a new director of U.S. sales for Shure, Inc. He brings fifteen years of experience in sales, technology and the audio industry to the company.

To get listed in On The Move, in the Trenches, Showtime or Welcome to My Nightmare, send your info and pics to: pr@fohonline.com

We Who Provide Audio, Salute You

ROME—Around half a million fans streamed to the Coliseum in Rome for the Teleconcerto concert featuring Billy Joel and Bryan Adams, sponsored by Telecom Progetto Italia and the City of Rome.

The audio and lighting equipment for both concerts was supplied by Italian company MMS srl. of Solaro (Milan); Maddalena Tronchetti Provera and Vittorio Quattrone of the Four One Music company organized the event. Texim are the official Italian distributors of the Electro-Voice, Midas and Klark Teknik equipment that comprised the entire sound reinforcement system.

The event location included the street running from the Coliseum to the Imperial Forums—along which sound reinforcement was provided for one kilometer. Alessandro Galli was responsible for event production, with support from Diego Bertuzzi. Milan-based Stage System supplied the stage and the layer for the delay towers. The EASE projections for the audio system were made by the Texim Technical Department in collaboration with Giovanni Colucci and Massimo Sartirana of MMS, who made the final projections for the whole system.

The main system was comprised of 56 Electro-Voice X-Line enclosures (24 Xvls, four Xvlts and 28 Xsubs) flown from four X-Line grids. The delay systems included 112 XLC127+ speakers suspended in the layer towers, with 32 Xsubs and 12 XLC118 subs.

Final fine-tuning was performed by PA manager Massimo Sartirana and resident sound engineer Domenico Carmuccio, relying on the SMAART program.
“When the audience hears Toby Keith, that’s all they hear.”
Dirk Durham, FOH Engineer

“I knew the DriveRack® 4800 was going to be great the first time I tested it. None of us — including our monitor engineer Earl Neal, or Dave Shadoan, President of Sound Image — could spot the processed signal: the sound was beautifully transparent. I can get anywhere on the front panel with just two button pushes. Everything can be visually represented on the 4800’s color front panel display or via System Architect™ software on a laptop or wireless tablet PC.

It’s very reassuring to be able to get to anything fast and easy, as well as see the moves you’re making in real time in a number of places — which is very important when you’re surrounded by 20,000 screaming fans. I’ve been with Toby as we’ve gone from clubs to arenas...it’s been a great ride, and the ride is getting better with dbx on board. The new DriveRack 4800 is just one incredible box.”

Dirk Durham
Front of House Engineer for Toby Keith
You Can’t Get (It) There From Here...

Or Can You?

Delivered and Transport of Audio In the Spotlight at AES San Francisco

You can tell what part of the pro audio industry is healthy and what part is struggling pretty easily just by keeping your ears open to conversations around you at the Audio Engineering Society show. Over the past few years the phrase heard with increasing frequency went something like, “It was, of course, designed for the studio, but we are seeing lots of them used live.” This phrase gets me on a couple of levels. First, I am filled with gratitude that I do not own a recording studio, and second, depending on who says it, that phrase is either illustrative of the direction we are heading in the live event audio field, or it is total marketing BS. Example: Yamaha’s DM 2000 mixers were designed as production mixers for recording and perhaps some smaller broadcast operations, and they were as surprised as anyone else when nearly half of the units sold ended up in the live arena. On the other hand, a several-thousand-dollar mic that ships in a shock-mounted titanium case with a bodyguard won’t be on any stage I am working. Sorry, but I still ask, “What happens when it gets dropped?”

All that being said, where shows over the past few years have been centered on either speakers (line array) or consoles (of the digital variety) the emphasis changed a bit this time out. While there is still news on the line array front it is getting to be more about refinements than re-invention, and the big news on digital consoles this time around is that guys who don’t have $1 million inventories are going to be able to afford good ones very soon. No, this time the big emphasis was on getting the signal from the console to the amps without another D/A conversion and huge coils of heavy copper.

While EtherSound made the loudest splash with the news of its adoption by an increasing number of gear-makers, including Yamaha and Peavey/Crest, there were audio networking/digital snake products being touted by at least a half-dozen other companies. While there is still no real standard on how to do it, it is increasingly obvious that the future is running on Cat5 or fiber, and the truck pack is going to get a bit easier with the big snakes getting left back at the shop. Who am I kidding? The extra room just means they’ll add more lights to the show, and the last thing we need out there is squints with more gear.

Here are some of the highlights of AES San Francisco.

Let’s get some of that transport stuff out of the way first. Like we said before, EtherSound continues to sign up big companies for its format, but some others are coming in under the radar. Included in that group are Aviom, which announced a deal with Innovation as well as a new chip that allows console makers to provide direct A-Net connectivity from the desk. The newest kids on the block were the Aussies over at Audinate (who more than one high-profile sound guy told us to make sure we checked out), whose Dante system can run over existing networks (including the Internet) and is compatible with standard Internet Protocols. That means audio can run over the network that your computer is on and can even be encrypted (sure to be an issue as digital delivery becomes more common).

Pictured above is the team from Media Numerics. Their RockNet is a suite of products that combined can handle up to 99 devices comprising 160 audio channels that can be dropped to as many as 768 outputs. The nice part about this one is that if you understand standard Internet Protocols, you can tell what part of the pro audio industry is healthy and what part is struggling pretty easily just by keeping your ears open to conversations around you at the Audio Engineering Society show.
The company with the best appetizers, hands-down (or should we say hands-full? FOH Editor Bill Evans still has some aioli from the reception stuck in his beard), at AES was Yamaha. They set a full course for everyone. Ready for your fill?

In the pic above, Dan Craik shows off the new LS9 series of digital mixing consoles. The console comes in three flavors: 16, 32 and 64 channel sizes. The console shares the same sound quality, built-in effects, EQ and dynamics processing as that of the M7CL console, not to mention an MP3 recorder on the 32 and 64 channel models. These boards had technical editor Mark Amundson openly drooling. (Or was that the prosciutto-wrapped asparagus?) Available now, LS9 series will replace the Yamaha GA series analog console. In what has to be a first in the industry, a major manufacturer is replacing an analog model-line with a digital model-line.

Another big announcement from Yamaha was the launch of the DSP5D, a DSP-expander for the PM5D digital sound reinforcement console. The DSP5D is essentially a PM5D without a control surface, shrunk into a 10RU box. It can be controlled via a PC running Yamaha Studio Manager software, or used as an expansion to the PM5D console. If used as an expander it will extend the PM5D’s 96 mono plus 16 stereo input channels, including two additional card slots and effects and dynamics processing. A second DSP5D unit can be added to provide further expansion to 144 mono plus 24 stereo input channels. When used in conjunction with the new DCU5D Ethernet Audio Cascade Unit, the DSP5D can be set in a remote location and controlled from a PM5D up to 100 meters away via a Cat5 cable.

Yamaha also declared its intent to re-enter the professional amplifier market in a big way with the introduction of the Tn Series amps. The Tn Series amps enter the market with three available models. The Tn5 delivers 2300W (stereo at four ohms) and 5000W at four ohms bridged; the Tn4 delivers 2000W (stereo at four ohms), 4400W in four ohms bridged mode; the Tn3 delivers 1400W (stereo at 4 ohms), and 3800W at four ohms bridged. The input gain level for all models is 26dB.

Lastly, Yamaha gave some details on its recently announced partnership with EtherSound, showing their DME Satellite Series with its new EtherSound compatibility. The Yamaha DME Satellite Series includes the DME8i-ES (8 analog inputs), DME8o-ES (8 analog outputs) and DME4io-ES (4 analog inputs, 4 analog outputs). The series will be available in the second quarter of 2007. Each DSP processor is housed in a single rack space unit and is capable of producing 80 percent of the DSP power of the full-featured Yamaha DME24N DME Designer Software, which will be included with the DME Satellites and will also be distributed from the Yamaha website, allows programming, monitoring and control of all DME units: Satellite models (CobraNet and EtherSound versions), the DME24N and DME64N, plus the SP2060 speaker processor, all from one central software package.
New Gear

AES also had the usual complement of mic announcements, too.

Sony Electronics announced the expansion of the frequency availability for many of its WL-800 Series Wireless transmitter models with the introduction of two new channel blocks 30/32 and 42/44. The new channels were developed to aid end-users in configuring Sony wireless systems with increased flexibility in UHF-TV channel selection. That’s Karl Kussmaul holding the ECM-322 headset microphone, with the B22B transmitter in the background on the table.

We also got to talk to the good folks over at Audio-Technica and ask them why they don’t include a spare dual XLR adapter for their ATM250DE dual-action microphone. Turns out they had considered it, but including an extra adapter would up the price by an additional $50, and they didn’t want to push the price point any higher.

We don’t know which is more disturbing: manufacturers thinking like FOH, or FOH thinking like a manufacturer.

Lastly, DPA was showing off their SMK mic, a 5.4mm electret condenser capsule that they had mounted to the inside of a piano. With the help of a pianist for the San Francisco Opera and a little Mozart they showed off the incredible sound from this tiny package.

If you had any doubt about digital migrating to the anklebiter level, all it took was a quick stop at the Mackie booth to put those doubts aside. Mackie is shipping a couple of add-ons for its very affordable TT24 digital mixer. One is a processor card that gives you the functionality of a Lake Mesa EQ, controllable from the console and the other is — you guessed it — digital snake. Looks like it might be time to consider buying stock in companies that make good Cat’s cable.

Jan-Al cases, purveyors of custom cases, announced they will launch RackmountCity.com in the first quarter of 2007. This one-stop shop site will provide engineers and rack-mounting professionals with a complete source for specifications, reference information, and point of purchase for racks, rack cases and rack accessories, whether for the road or permanent installation. It will allow users the ability to design racks by integrating product information and electronics manufacturers specifications on a searchable database. It will include extensive guidelines and “how to’s,” glossaries and explanations meant to standardize communications about rack mount products.

Stop Answering Stupid Questions!

Let the FOH FAQ T-Shirt do the answering for you.

You may have already heard about these shirts designed by mixer-extraordinaire James Geddes that feature the answers to the Top 10 stupid questions audience members ask. Now you can order one of these beauties and all of the net proceeds will benefit the music and arts programs of the Rogue River, Ore School District (Where James’ kids go to school).

That Lampy Show

Is it just me, or is it terribly annoying that the only trade show where you can really hear concert-scale systems in their natural environment is a freaking LIGHTING show? Anyway, the shootout that isn’t really a shootout of speaker systems made it worth spending an entire day at LDL. (Yeah, they call ET Live — whatever, it’s still a lighting show.)

So what was what? Harman did a live sound demo featuring an interestingly dressed club singer. EAW showed off the greatly improved KF series line array. With new Guiness Focusing and the ability to fly the subs, it sounded like a whole new system. Unfortunately, the reflection off of the apartment building a block away made it hard to really hear from more than about 60 feet away. (And we’re sure the apartment residents were thrilled…) Stage “D” featured a turnkey club rig, and had other speaker makers singing its praises. Expensive or not, this is a very good sounding system — especially with the advantage of Robert Scovill running a Digidesign VENUE and using live Tom Petty tracks for the demo.

Across the parking lot the Meyer system sounded great — as expected — but the surrounding environment is a freaking LIGHTING show? (and “how to’s,” glossaries and explanations meant to standardize communications about rack mount products.)
Big shows require big consoles. Seven of the top ten grossing tours last year used Yamaha PM1D. Accomodating superstars around the globe with 112 input channels, 48 mix outputs and a 24 channel matrix, the PM1D is a shining star of its own. With an I/O configuration expandable to 640 inputs, 224 channels and 192 outputs, you’ll never come up short with even the most demanding artist. Add unbeatable reliability and sound quality to the mix, and it’s clear to see how PM1D steals the show every time.

When you need help, time zones shouldn’t matter. Yamaha provides coast to coast 24/7 technical support. With dedicated staff and regional service centers, assistance is around the corner. If we can’t fix it over the phone, we’ll put a part or a person on the next plane out. It’s that simple.
Showtime

**84 Lumber Classic/Clint Black & Black Eyed Peas**

**Venue**
Nemacolin Woodlands Resort, Nemacolin, PA

**Crew**
Sound Co/Provider: Brantley Sound Associates, Nashville, TN
FOH Engineer: John Robertson
Monitor Engineer: Chris Demonbreun
System Techs: Jeff Linn

**Gear**

**FOH**
Console: Yamaha PM500, Digidesign D-Show
Speakers: Martin W65 line array, Martin WSK 126
Amps: (10) Crown Macro-Techs
Processing: (3) XTA, (3) DBX 480, BSS
Mics: Shure Beta 52, 57, 58, KSM32, EV RE20
Power Distro: BSA Custom
Rigging: CM Lodestar

**MON**
Console: DiGiCo D5, Digidesign D-Show
Speakers: Meyer UM-1Ps, Future Sonic+Shure RF
Mics: Shure Beta 92, Beta 57, Beta 58, KSM44, FV 1D/2D
Amps: Crown
Processing: All FX and Dynamics on M7CL

**Coolio**

**Venue**
Vanderbilt University, Nashville, TN

**Crew**
Sound Co/Provider: Satin Sound Systems
FOH Engineer: Zach Berry, Dave Haines
Systems Engineer: John M. Durisko
System Techs: John A. Durisko, Mick Rispoli, Soren Beiler

**Gear**

**FOH**
Console: Allen & Heath GL4000
Speakers: (12) Adamson Y-10s, (12) EAW SB1000e's, (2) EAW KF300e
Amps: (8) Camco Vortex 6s, (4) Crown MacroTech's
Processing: (3) EAW MX8600's, (1) Klark Teknik DN3600, (1) BSS Opal FCS-864, (6) dbx 1660's, (1) Yamaha Rev7, (1) Lexicon PCM-70, (1) Yamaha SPX90
Mics: (4) Shure UHF Wireless w/ Shure Beta 87A Capsule
Power Distro: Custom
Rigging: Custom

**MON**
Console: Ramsa 840
Speakers: (6) EAW SM15 wedges, (2) EAW KF850c and (4) EAW SB1000's for Sidefills
Amps: (10) Crown Macro-Techs
Processing: (3) BSS FX5-310s, (1) dbx 480, (6) White 46650s
Power Distro: Custom
Rigging: Custom

**REM’s Georgia Music Hall of Fame Induction**

**Venue**
Georgia World Congress Center, Atlanta, GA

**Crew**
Sound Co/Provider: Entertainment Design Group
FOH Engineer: Ric Wallace
Monitor Engineer: Keith Reardigan
Systems Engineer: Garry Sharp
System Techs: Dave Bath

**Gear**

**FOH**
Console: Yamaha M7CL
Speakers: V-DOSC
Amps: Crown
Processing: All FX and Dynamics on M7CL

**MON**
Console: PM5000
Speakers: (14) Meyer UM-1Ps, Future Sonic+Shure RF
Mics: Shure Beta 192, Beta 97, Beta 58, KSM44, FV 1D/2D

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**The Dominican Festival**

**Venue**
Jefferson County Fair, WV

**Crew**
- **Sound Co/Provider:** Welsh Sound LLC, Kearneysville, WV
- **FOH Engineer:** James Welsh
- **Monitor Engineer:** Chris Mortin
- **Systems Engineer:** Patrick Wallace
- **Production Manager:** Dennis Barron
- **Tour Manager:** Ken, Variety Attractions Inc.
- **System Techs:** Mike Monseur, Christina Smith, Molly Collier

**Gear**
- **FOH**
  - **Console:** Soundcraft Series 2, 44 x 8
  - **Speakers:** Wharfdale SI-15 Array Hi/Mids x 8, SI-18 Subs x 8
  - **Amps:** QSC EX and MX series
  - **Processing:** dbx DriveRack 480, 2231 EQs, 1066, 166XL Comps, BSS 804 Delay Line, Samson S-gates, Alesis, Lexicon and TC Electronic effects, Tascam playback, SIA Smaartlive v5
  - **Mics:** Shure Beta 58s, SM57s, Beta 52, PGB1, AKG C451s, D112, Whirlwind and ProCo DIs, Earthworks TC30 RTA mic
  - **Power Distro:** WSLP 200 Amp single phase
  - **Rigging:** CM Loadstar 1 tons, ATY Flybars, Genie, Thomas Truss
  - **Breakout Assemblies:** Whirlwind
  - **Snake Assemblies:** Whirlwind Concert 52 2-way Splitter

- **MON**
  - **Console:** Soundcraft Monitor Two
  - **Speakers:** Wharfdale Twin 12X Coaxial wedges, Wharfdale LIX-15 Drum Fill
  - **Amps:** Wharfdale SE Series, QSC MX Series
  - **Processing:** TDM, Klark Teknik, dbx 2231, Lexicon MX200, dbx 1046, 166

**Third Day**

**Venue**
Pine Mountain Amphitheatre, Flagstaff, AZ

**Crew**
- **Sound Co/Provider:** Total Sound Productions, LLC
- **FOH Engineer:** Adrian Stone
- **Monitor Engineer:** Chris Freund
- **Systems Engineer:** Brian Dietz
- **System Techs:** Drew Baloh, Rex Jensen, Keith Jensen

**Gear**
- **FOH**
  - **Console:** Yamaha PM4000
  - **Speakers:** EAW KF850, SB850, KF300
  - **Amps:** Crown MA24x6
  - **Processing:** Klark Teknik

**The Tommy Cash Show, “Tribute to Johnny”**

**Venue**
Jefferson County Fair, WV

**Crew**
- **Sound Co/Provider:** Total Sound Productions, LLC
- **FOH Engineer:** Adrian Stone
- **Monitor Engineer:** Chris Freund
- **Systems Engineer:** Brian Dietz
- **System Techs:** Drew Baloh, Rex Jensen, Keith Jensen

**Gear**
- **FOH**
  - **Console:** Yamaha PM5D
  - **Speakers:** EAW KF850, SB850, SM500, JH560, JBL
  - **Amps:** Crown MA24x6
  - **Processing:** Klark Teknik

**Third Day**

**Venue**
Roger Williams Park, Providence, RI

**Crew**
- **Sound Co/Provider:** Max Audio
- **FOH Engineer:** William Medina
- **Monitor Engineer:** Nate Conti
- **Systems Engineer:** William Medina
- **System Techs:** Jorge Rosario

**Gear**
- **FOH**
  - **Console:** Soundcraft GB8 40
  - **Speakers:** Martin Audio W8C & W8X
  - **Amps:** Crest Audio, ProQ9001, ProQ200, ProB200
  - **Processing:** Ashly Protea 4.24, GQX3102, TC Electronic M2000, M-OneXL, O-Tree, dbx 1046, 1074.

- **MON**
  - **Console:** Allen & Heath GL2400-32
  - **Speakers:** Crest Audio 1150M & TM115
  - **Amps:** Crest Audio ProQ8002
  - **Processing:** Ashly GQX3102, dbx 2231, Lexicon M2000, dbx 1046, 166
  - **Mics:** Shure Beta
  - **Power Distro:** Max Custom’s Distro 200amp

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- Cables, connectors, or complete custom assemblies!
By Bryan Reesman

I guarantee that you’ve never seen anything like Slava’s Snowshow. It will transform your perception of clowns in the way that Cirque Du Soleil has reinvented our idea of the circus. The two-act show features a yellow clown and his green companions wandering the stage, improvising various gags and parodying many famous movie or theatre clichés, from two people lost at sea to two lovers parting at a train station. And they do so in brilliant and unconventional ways. The costumes are wild, the set pieces are surreal, and the climactic “blizzard” that engulfs the audience has to be experienced to be believed. Make sure you stay during the intermission, too, as the clowns come down from the stage to wreak havoc and play around with the audience.

Sound supervisor Keith Rubinstein mans the boards for the Snowshow, and he has worked on it since it opened at the Union Square Theatre two years ago. Rubinstein worked for the venue for four years on shows like Our Lady Of 121st Street, directed by Philip Seymour Hoffman, and More, starring Yeardley Smith, a.k.a. the voice of Lisa Simpson. But despite his solid resume, nothing could prepare Rubinstein for the unique experience that is Slava’s Snowshow.

Is this the first city that Slava’s Snowshow has been performed in, or has it been performed in other cities?

The show’s been touring for about 12 or 13 years now. They’ve been all over the world. It’s originally a Russian troupe, and now there are two companies. There is the touring company, which is the original company with Slava and his people, and then there’s the New York company, which is a mixture of some of the people from Slava’s company and new people.

Has the show changed much since it came to New York?

It changes daily, depending upon who’s onstage. The actors have the freedom to improvise a little bit. The backstage people, and definitely the front of house people, like the lighting op and myself, do have a little bit of freedom to improvise with them.

You’re called the show’s sound supervisor.

Sound supervisor is the appropriate title. I was taught by the original designer, Ras-tiam “Roma” Dubininok. He’s a genius, in my opinion.

Who came up with the music?

It’s a mixture. Some of the pieces are pretty well known. Like “O Fortuna” from Carmina Burana?

Exactly. Slava and Roma collaborated and came up with a soundtrack, but Roma also has some of his original music in there. All the atmospheric sounds, like birds or waves or anything that’s real, are all real sounds. He went out with a MiniDisc player and a microphone and recorded everything.

You were brought in to do the live mixing. Is there a lot of music timed to specific actions in the show?

Yes. The cast rotates a lot, so a different clown will play a different character. The yellow clown switches sometimes. They all have completely different timing, so I have to know who is going to move how or when.

Which means that things won’t be perfectly synched.

That’s OK because they’re clowns, and that’s all fine and good. But I’ve been doing it long enough where I can predict what somebody is going to do.

In the show you have clowns doing surreal, strange parodies of things, and a lot of it is set to music. There are other times when certain sounds need to be synched perfectly. How much of the show is comprised of things that are specifically timed?

All of it. I call everything myself. I have to watch every move.

What kind of board are you running?

An Allen and Heath GL2200 with approximately 32 inputs.

Are you running any processing or other outboard gear?

There are a couple of Behringer processors, and I have a dbx 266 compressor that I use on the microphones. That’s pretty much it in the way of processing. It’s just more of a speaker management system, and the way it’s set up is that there are a couple of different systems. There’s a stage set, which are Mackie SR450s. Those are self-powered monitors, and those are on stage behind all the stage legs. They act as monitors for the actors, and also with something like the steps, when it sounds like it’s only coming from the
“When I first saw it, I was supposed to be training, but I disconnected that first time because I was in total awe of what I was seeing.”—Keith Rubinstein

I saw that, and there is also one gag sequence involving one clown and two phones. Then at the end there’s a howl.

What kind of mics are you using?

A Sennheiser wireless lav mic. I think it’s the E series, Evolution.

So you were talking about improving before...

Yeah, everybody improvises. That’s what’s exciting about the show. It’s never exactly the same. The outline is there. There’s a lot of crowd play, so sometimes you get somebody who plays really well, and there’s a magical moment that happens that you never see again.

Of course, this means that people can go back to see it more than once and be surprised.

A lot of people do. We have some people who have seen it 10 or 20 times. It’s so different and fun, even if you see it a few times. What I think is that you miss so much the first time you see it. When I first saw it, I was supposed to be training, but I disconnected that first time because I was in total awe of what I was seeing. I think it’s different, and there’s some sort of magical attraction that people like.

What else have you worked on previous to the Snowshow?

I’ve actually worked in this theatre for four years. I’ve also done tech work for different companies. I’ve worked for the White House. They came to New York right after 9/11, and President Bush was giving a speech at the Armony. I helped them install a sound system and got a little certificate of appreciation from the White House. I’ve also done a lot of load-ins for different stuff I can’t even remember. I worked for a small performance space called PS101, which was for NBC Television, and one of the producers over there had a showcase spot in a small theatre downtown on Spring Street. I ran sound for shows there and comedy nights.

Comedy shows must be interesting to work on because you have people screaming into the mic one minute, then whispering into it the next. Oh sure. In situations like that my favorite piece of gear is a compressor, so I’ll try to use that if I can.

Do you think any of your comedy club experience helped you with Slava’s Snowshow?

Definitely not. There’s absolutely nothing that can prepare you to run Snowshow. It’s so unorthodox. Everything is run off of MiniDisc players. Roma gave me the Russian discs that he had, so I had to take his MiniDiscs and re-record them on my own and put English text in so I knew what everything was. That was kind of a challenge, to say the least.

What other challenges has the show presented to you?

Just being able to cope with the different actors’ needs, because sometimes an actor will come to me and say that they want something that might be in conflict with the original design. I’ve just learned that if somebody asks me to do something, I’ll just do it.

Do you enjoy working on Slava’s Snowshow?

Oh yeah. I wouldn’t have stayed for two years if I didn’t like it! It’s given me a lot of design experience. Now I’m starting to do something with one of the clowns in the show. We did a show last Monday that was kind of an improv thing, and he asked me to compile some music pieces and some original sound stuff. It was pretty interesting. I definitely value the experience that I’ve gotten, more than anything else.
FOH Interview

Adventures in Mixing

By Paul Overson

No matter the artist or venue, Howard Page keeps the sound true.

For those of you who do not recognize the name Howard Page, you should. His audio credits include Van Halen and Sade, as well as the design and creation of six sound consoles, including the Showco Showconsole, one of the first digital mixing desks (OK, digitally-controlled analog). In addition, Page currently serves as director of engineering for Showco, part of Clair Brothers Audio. In a career measured not in years but in decades, Page has mastered the art of the live mix, so there is little wonder why many in his native Australia refer to him as “The Legend.”

Currently Page serves as FOH audio engineer on the Mariah Carey Adventures of Mimi tour, and FOH managed to catch up with him at the MGM Grand Garden Arena in Las Vegas, a room with a challenging FOH position and a tendency for low-end build-up. Page delivered a wonderful mix, clean and defined, even in the nosebleed seats. In a city noted for its reded a wonderful mix, clean and defined, even in the nosebleed seats. In a city noted for its.

Page found time for a conversation that swayed between the techniques of live sound reinforcement, the methods of mixing and Page’s own philosophy of FOH control. Howard Page has built a career on keeping artists’ voices true, now we get a taste of how.

FOH: Tell me about the main FOH system.

Howard Page: I’m using a Clair Brothers i4 line array system, hung in a classic “J” style array. After extensive research I consider this style of array best matches the power coupling versus distance ratio of the vast majority of arena style venues being played on this tour.

There is, of course, designed into the i4 System the option of curving the array into more of a banana style array, but I have found that by hanging the “J” style array the same way for nearly all venues on this tour I have removed a huge variable from the daily setup/tuning process, and we are achieving really predictable, consistent results. The interesting thing about using the “J” style array is that it follows my old (before line arrays) golden rule for big loud shows — concentrate more components, or “power band,” to the longest throw of the venue, and as the throw distances get smaller, fewer components are required to achieve the same overall SPL.

What I ended up with is a steered sub bass array with even, solid coverage across the room, continuing above the floor area seating up into the higher arena seats. I am using multiple drive elements feeding the separated sub bass stacks, and careful alignment timing to the main hanging i4 arrays. The final ingredient is exact level balance matching of the whole steered sub bass array, relative to the main array low end. The sub bass becomes what I believe it should be, a perfect low frequency extension of the main array, with all the retained low-end definition of the original recorded material.

The low end of this show is tight and even. Why do you have the sub bass arrayed so differently than I have ever seen before?

My approach to reproducing the low frequencies for this show is a little different to most others. In my usual role as company director of engineering, I have been called upon to fix any way too many other tours where the entire low end of the system was just way out of balance compared to the mids and highs. So bad, in fact, that the low end in the large arena space had zero definition and became just an audience-numbing noise.

When, at the last minute, I became involved in mixing this tour, I was determined not to have a show where the low end had those negative qualities. To this end, I am using our Prism II sub cabinets, which I knew from being involved in the design, would give me the tightest, shortest, highest-impact response in a large space. We must always remember the space will give our low end the extra length and, if installed correctly, the depth we need. Of course depth is a relative term in some of these bad arenas — if the room won’t hold the extreme low end tight and short, but only serves to lengthen all the notes, don’t put those frequencies into that room. I designed the array of these subs to be the best compromise between achieving the best audio result, but also to satisfy some show production front edge of stage specific design criteria.

The Legend of the Low End

Page knew from being involved in the design of the Prism II sub cabinets, which I would give me the tightest, shortest, highest-impact response in a large space. We made sure to put enough subs into the mix to give our low end the extra length and, if installed correctly, the depth we needed.

How do you have the sub bass arrayed?

I designed the array of these subs to be the best compromise between achieving the best audio result, but also to satisfy some show production front edge of stage specific design criteria.

You seem to be preaching a philosophy there?

Yes. After being involved in live sound engineering for so long I am very, very sad to see the way it has all evolved in the last few years. When did the kick drum become the lead singer? Show after show, regardless of the style of music, ends up being just a solid wall of badly mixed, way too loud, over the top, low-end-heavy noise. I have tried to help and nurture so many young guys over the years to understand what mixing live shows is all about, and my often repeated sermon is to make it “sound as close as possible to the recorded material by the artist.” If some artists ever came out front at their shows and listened, I’m sure they would be horrified at how their performance is being brutal...
ized. True, lately, some artists set out to use the sound system to deliberately beat up the audience, but those shows are way beyond any help.

I’m sure that most people mixing live shows are trying to do their best, so what do you think is the real cause of these bad sounding shows?

Analyzing what the real cause of this current situation is leads to the two key problems: tuning the system with a very out-of-balance low-end level before mixing, and then a total loss of good console gain structure management after starting to mix. These two factors absolutely cause most bad live shows. Tuning a large-scale sound system with any form of out-of-balance level between the lows/mids/highs (and we are not talking about EQ here) directly applies that bad balance to every channel of the mixing console before even beginning to mix. I think of system tuning this way — say I decide to use a brand new expensive microphone on a show. When I open the fancy box, I get a frequency response plot that shows that my mic is beautifully flat. If I badly tune the system with the low-end +6dB too high in level relative to the mids and highs, then I have just added +6dB from 30Hz to 250Hz to every channel of the console, including my fancy mic. Here is the real key to live system tuning: On any of the current state-of-the-art large-scale sound systems, which have carefully designed elements with crossover systems custom tailored to the cabinets, nearly all actual system tuning can be done by balancing the relative levels between the lows/mids/highs first, and then adding the absolute minimum amount of EQ to get the system to a flat, reference starting point.

So what is the key to good console gain structure?

When mixing a large live show, it is vital to set up the console gain structure so that you have absolute command of every single element/channel forming that mix. The goal of any rehearsal or sound check before the show is to be able to start that actual show with all channel faders, VCA/DCAs and Mas ters at zero/unity with a great sounding, under control “reference mix.” This mix is the point you will constantly come back to during the show after solos, big mixing “pushes,” dynamic psycho-acoustic level shifts to create different moods or just when it all seems to be getting a little sideways! This is done at sound check by very careful use of the input channel mic pre gains on each channel to establish this core mix. A big mistake is to run the individual input channel gains of a large mix too hot — the lower the better! The PFL/cue metering on a console should be used only as a guide to prevent input overloading problems. Do not ever set up input channel mic pre gains using a PFL/cue meter — that sets an absolute level, not a musical mix relationship between channels! If the drum- mer arrives first to sound check you need to be very careful listening to and setting up input gains for just one element of the entire mix. Get a great drum sound, but be prepared to back off all of the drum channels’ mic pre gains once the full mix is up. In fact, to get really good long-term, consistent gain structure for a large tour, at first you will find yourself mixing a lot of the time on the input mic pre gains until you have the whole mix under control with all of the faders at unity. If you use this disciplined approach to using any live console, then you will end up with a totally controlled gain structure “reference mix” for any show. A show that you will never lose control of.

I’ve heard many shows where the vocals were lost from using too many effects. How do you feel about the use of processing for live shows?

Every time we attempt to mix sound in a large closed space like an arena, we get reverb for free — whether we want it or not! The key to all of this live sound stuff is definition in the mix — excessive processing will ruin definition in a heartbeat! I have a philosophy with the use of any effects and processing in general — “less is more.” You cannot get a wonderful, defined, emotional, up-front vocal sound if it’s ruined with too much processing of any sort. It is nice to have that stuff available for the rare occasions when you get to a dry room, but honestly, for most large arenas — leave it alone! The key to all of this live sound stuff is definition in the mix — excessive processing will ruin definition in a heartbeat!

Paul H. Overson is one half of the FOH Ankles biters crew, and a student himself of Page’s tech- niques. Contact Paul at poverson@fohonline.com.
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ith the proliferation of outdoor amphitheatres in recent years, the onus increasingly falls on sound designers to integrate audio systems that are capable of performing in less-than-ideal conditions. In turn, it’s up to manufacturers to provide these designers with state-of-the-art technology through the development of powerful, controllable and versatile audio components in technology, combined with the creativity of designers, have led to dramatic improvements in lawn delay systems for amphitheatres, or “sheds.”

As any audio professional will attest, the obstacles associated with designing and implementing lawn delay systems are numerous. Inherent in any amphitheatre setting is the challenge of reconciling the loudspeaker system with the outdoor environment. In outdoor conditions, a number of mitigating factors are taken into account. “In some ways, it is actually more forgiving in outdoor spaces because there are less reverberant surfaces to deal with,” said Brad Ricks, senior applications engineer at JBL Professional. “That said, in any outdoor setting, there will be environmental effects, such as air absorption. Because of this, it’s important to design and install an audio system with enough power to counteract those dynamics.”

Protection from the elements is another key issue when installing a lawn delay system. “In a lot of cases, the loudspeakers are installed in enclosures and will be removed at the end of the concert season,” Ricks said. “Particularly in areas where humidity and precipitation are common, placing the loudspeakers in protective enclosures will be a key aspect of this application.”

According to Ricks, as the majority of shed-style amphitheatres feature sloped lawn seating areas, the evolution of the line array has given sound designers a practical solution for providing even coverage across angles of varying degrees over large, open spaces. “Line arrays provide a good vertical coverage pattern that can be shaped to match the contours of the seating area,” he said. “These outdoor amphitheatres are typically very wide, so it takes quite a few arrays to cover the seating area. However, the narrow coverage pattern and superior controllability of line array systems make them ideal for these environments.”

This controllability of line arrays also plays a key role when discussing the issue of neighborhood noise ordinances. As many outdoor amphitheatres are built adjacent to large areas, the ability to control noise levels is imperative to avoid complaints from the neighbors. “Dealing with the requirements of the neighborhood is always a challenge,” Ricks added. “Care has to be taken to monitor the levels and limit the system. With line arrays, it’s easier to cut off the pattern to avoid overshooting the back of the listening area.”

Recently, Braintree, a Massachusetts-based Pro Sound Service, installed a new lawn delay system at the Tweeter Center in Mansfield, Mass., for the 2006 summer concert and event season. The Tweeter Center is a 19,900-seat outdoor venue with a covered, roofed section of about 7,500 seats, with the balance in an open setting. A wall at the back of the seating area separates the venue from the community. The previous audio system, like the open-air venue itself, was 20 years old and was fatigued “fringe fill.” The total system includes 20 VT4888 midsize line array elements, two AM6212/95s, and six VRX932LAAs. Additionally, the system includes 11 Crown I-Tech 4000 amplifiers and 10 I-Tech 8000s, with two dbx 2231 dual 31-band graphic equalizers. JBL’s VerTec Line Array Calculator software allowed the team to accurately predict not only coverage patterns, but SPL at various locations in the lawn area, along with rigging details. The new system is one of the first lawn delay systems in the market to use Harman Professional’s HQNet networking protocol and System Architect software.

“During system commissioning,” said Charles Tappa, president of Pro Sound Service, “with the system running at 95 dB SPL at the back wall, a handheld meter was taken into the neighborhood to check sound pressure levels. We made a phone call to verify that the sound system was still on because it could not even be heard in an area that was previously a problem spot in the neighborhood.”

For the Bethel Woods Center for the Arts, in Sullivan County, NY, another outdoor facility, JaffeHolden, of Norwalk, Conn. designed a series of ten weatherproof custom speaker assemblies, each housing two loudspeakers weighing over 200 lbs. each. As the Bethel Woods Center sits precisely on the site of the original Woodstock festival, the loudspeakers needed to be able to compensate for the rolling topography of the local landscape. These loudspeaker assemblies are distributed under the rear edge of the pavilion roof, some 190 feet from the proscenium, to provide full-frequency coverage to the entire 70,000 sq. foot lawn seating area. Among the speakers chosen for this project were ten EAW KF750F speakers and ten EAW KF755Ps. Beyond the 70,000 square feet inherent to the facility, the audience seats up to 12,000 people. Between these two factors, sound can be swallowed easily, necessitating an adequate mixing desk and proper amps to drive the speakers. For this, JaffeHolden selected a Yamaha DM1000 digital audio console and Crown amplifiers. Add to these the fact that Bethel Woods houses not only rock acts, but also classical and symphonic musicians. “Most pavilions can only do one thing well,” says JaffeHolden’s Mark Holden. “Either they’re designed for rock, or for symphonic music. We needed a pavilion designed for a new century.” To this end, the walls and ceiling of the Bethel stage are designed to absorb the echoes and boomy sound that can compromise a performance with amplified music. For orchestral music, a portable, tunable orchestra shell was designed to JaffeHolden specifications.

Also newly installed in 2006, Overland Park, Kansas-based DSS, Inc. has designed and supplied the UMB Bank Pavilion in St. Louis, Mo., with a new lawn delay system featuring JBL’s VerTec line arrays. Live Nation, operator of the UMB Bank Pavilion, needed to upgrade the concert experience for guests who frequent the open-air venue to enjoy the many top-tier entertainment attractions hosted there. After repairing the older, existing lawn-area sound system year after year, the decision was made to purchase a new, more capable system. Increased fidelity, improved output capabilities and acceptance by visiting tour sound professionals were design goals.

The new system, as installed by DSS, includes 24 VerTec VT4888 midsize line array loudspeakers, supplemented by nine VRX- 932LAs compact constant-curvature loudspeaker systems. The array coverage pattern and output power capabilities of the JBL speakers were a key aspect of this application, due to the venue’s large seating capacity, which totals more than 13,000.

“We’ve achieved excellent results with JBL VerTec systems in our company’s tour- and rental division, and it’s a natural fit as well for installations of this type,” advised Jeremy Dixon, of DSS. “Such installed lawn-delay systems must complement the touring sound rigs brought into outdoor amphitheatre venues during the summer season. The new installed system at UMB Pavilion is meeting both their needs and those of venue management.”

If You Build It, They Will Hear Sound Design For Lawn Delay Systems

By Richard Montrose

“We made a phone call to verify that the sound system was still on because it could not even be heard in an area that was previously a problem spot in the neighborhood.” –Charles Tappa

“Dealing with the requirements of the neighborhood is always a challenge,” Ricks added. “Care has to be taken to monitor the levels and limit the system. With line arrays, it’s easier to cut off the pattern to avoid overshooting the back of the listening area.”

The new installed system at UMB Pavilion is

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With so many choices for gear on the market today, it’s a wonder that anyone can make heads or tails of it. Cutting through the marketing hype to determine what is really needed for a good audio system can be challenging for professionals, as well as the staff and volunteers at smaller venues like churches or theaters that may not eat, sleep and breathe live sound on a daily basis. FOH sat down to talk with Steve Raslevich, president of Northern Sound & Light (NSL) to get some insight into the market. NSL often gets calls from customers who know what they want after browsing the information on the NSL web site, but still need help interpreting the marketing verbiage using the real world experience of the sales staff.

“IT’s best to invest in the higher quality mixer with the features that are really needed, instead of a lesser quality mixer that is loaded with bells and whistles, some of which you may never need or use.” - Steve Raslevich

What should people be aware of when shopping for new gear?

Steve Raslevich: With technology constantly improving and changing, there are still fundamentals that apply to live sound gear, whether the preference is analog over digital, or wood enclosures versus plastic. There are three major groupings of live sound gear that people tend to buy: consoles and outboard gear; amps and speakers; and microphones and input gear. With some online research and a few tips from a pro, it becomes easier to select and buy gear that will perform well under most conditions.

What is happening with consoles and outboard gear lately?

With each new product revision, it seems like each manufacturer is trying to come out with more features at a better price point. In the console market segment, this trend is no different. Most recently, manufacturers have been cheating on the number of mic preamps to bring down the cost to manufacture or to fit into a certain form factor. Some of the better named console manufacturers have not played this game yet with their mixers, but customers still need to do their research.

What do you mean by “cheating” on the mic preamps?

Some companies that list a mixer as having 24 channels may not mean that it has 24 mic preamps; rather, it may be 20 mic preamps and 4 line inputs. Depending on the use of the mixer, this may be okay. If the main function is simple tape playback, then the number of preamps may not even matter. Bottom line is that the customer must think about what he or she needs the mixer to do. Are there stage monitors, front fills or balcony fills that may need their own subgroup? Is there a good EQ section? How many aux inputs are provided? How many effects returns? We’ve found that our customers generally prefer about 32 channels, which is enough to accommodate a small to medium venue.

Another raging debate is the preference of analog versus digital technology. High-end digital boards run into the 40+ input range and give ultimate flexibility in exchange for a more complex setup. A major manufacturer has tried to bring digital mixing technology into the mainstream at a lower price point, but, unfortunately, it was plagued with issues when it first debuted. For new users, it may have left them with a bad taste for digital; however, the demand for digital is strong since other audio companies are going in this direction. As the component part of a digital board comes if it is for the same show every night — all you have to do is unload it and make small tweaks based on the venue.

What about the outboard gear? Where does that fit in?

Much ado has been made about outboard gear — compressors, limiters, gates, etc. with more control given at each step. In reality, outboard gear is not needed to mix audio. Yes, that is a rudimentary system. But given that there may be other places to spend those dollars, it isn’t a necessity. As with the console market segment, many outboard gear manufacturers have grabbed market share by lowering prices. Marketing hype makes it seem like they can provide more performance without cutting any corners. Recently, a new entry-level EQ caught our eye. The marketing materials state that it is balanced and, in reality, the input is balanced, but the output is not. While an unbalanced output is okay in shorter runs, it would be detrimental if used to drive long lines back to the stage from FOH. Since we pay attention to those details, we can provide our customers the insight to make a smart purchasing decision. In the end, the customer needs to have a realistic expectation of what the system can do.

What about amps and speakers? These days you could be talking about the same piece of gear, no?

There has not been any significant loudspeaker technology in years. The line array craze is over, but there are still people who are absolutely convinced they need one, regardless of the application. Recently there has been a surge in interest for powered speakers — the compelling merger of amps and speakers. As with any product, there are pros and cons to using these types of speakers.

On the pro side, it is much more convenient to send just a power harness and a line out to the speakers. Powered speakers save space around the stage wings, which is valuable real estate, especially in small to medium venues. On the con side, failures are bad enough, and get worse when the flown powered speaker fails in the middle of a performance. With the built-in electronics, it’s not exactly easy to bypass and keep going.

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Everybody needs a mid-format, mid-sized board. Well, maybe not everybody. My grandmother doesn’t need this size of a mixer, but you know what I mean. If you supply sound reinforcement for some of the millions of school, city, church, club, park, small fair and carnival shows that happen every year in this country, then you need a midsize board.

For myself, the aforementioned events make up more than half of all my shows every year. When you think about it, this niche of the market makes up the majority of events that happen in the USA on a yearly basis. There are probably a thousand times more schools, churches and parks than arenas. Now, it almost goes without saying that you do not need a large, grandiose board for these smaller events. Especially if you are working as a one-man operation.

O.K., have I made a case for the mid-size console? Good! Now let’s get on to the Mackie Onyx 24.4.

The Gear

This is an analog 24-channel (also available in a 32-channel model) 4-buss board with buckets of cool features. The only thing it has in common with the previous Mackie mixers is the name “Mackie.” In fact, they could have just put up the Onyx logo, left off Mackie and created a whole new console company.

In other words, this board is a total departure from their previous models. The most notable new features are the 4-band Perkins EQ, the new Onyx preamps and the 100mm faders. The new EQ is very musical and fun to use, and when you crank a knob, you really hear and feel the sweetness of this new circuitry. The preamps are smooth, pleasant to the ear and clean as a whistle. I own two Mackie mixers that have been real workhorses for various situations over the years. However, if I have one complaint, it would be that the preamps are brittle and harsh. That description is definitely a thing of the past with this new board.

Each of the 20 mono-channel strips starts with a -20dB pad button, a 100Hz low frequency roll-off/high pass filter button and gain knob. Also, each mono channel gets its own phantom power button with a light; this feature is so very cool and unusual in a board of this size. Next, we have the Cal Perkins 4-band EQ. Sporting a fixed high knob at 12KHz, a fixed low knob at 80Hz and sweepable low and high mids, Cal built upon the old classic Wein Bridge circuitry used in British boards of the ’60s and ’70s. Let’s just say it’s really good. We can engage the EQ via an on/off button. Six aux sends are on the board, grouped in colored pairs. The pre/post, AFL and mute buttons are over in the master section of the aux sends. The pan knob sits in back, right above the 100mm Panasonic fader, separated by a large mute button with a red LED. Next to the fader you have 4 LED signal strength lights, bus assign 1-2 button, bus assign 3-4 button and a main mix button. The channel strip is finished off with a large PFL button and a green LED.

The master section gives you a 6 x 2 matrix mixer, which opens up additional outputs for PMs and a variety of monitoring scenarios. There is an on-board assignable stereo compressor/limiter. The routing for the compressor changes depending on how you use it. On a subgroup it is pre-fader, but if you assign it the mains it routes post fader for overall system limiting. Now if we could turn it on as a system limiter without anyone knowing it was on, it would be real handy for those band engineers who seem intent on blowing your mains...! The left of the 100mm main fader sits four 100mm buss faders with signal strength lights, mute and AFL buttons. There are solo level knobs, talk back buttons, stereo returns and routing buttons. I am glossing over these features because I need to get into the live performance of this mixer. That is the real point of this review anyway.

The Gigs

I took the Onyx to a two-day church festival/carnival event. The roster included two blues bands, the typical deluge of local and school dance, acting and talent acts and our own fearless leader, Bill Evans, fronting Reverend Bill and the Soul Believers. The first group up was the school jazz band. I put a mic on the drummer’s kick, ran the bass direct and area miked the brass section. I bussed the area mics and hoped for the best. If you have done this type of miking, you know that the main challenge is getting maximum gain without feedback. This is where that Perkins EQ really shined. If you can hear the problem, you can affect it positively and very musically with this EQ. All in all, the Mackie and I made the jazz band sound great.

However, I did not have a talent filter in my rack, so the clinkers and clams sounded just as perfect as the sweet notes. Next up was the local hip-hop dance troupe. Once again, I area miked the floor to get the stomps and slaps and ran tracks for the music. It wasn’t until blues singer Marcy Levy brought up her group that I had a real chance at a mix. The EQ worked very well on the drums and bass. I got lots of punch and thump out of the kick and a nice clean crack out of the snare. I easily pebbled the fab out of the bass bottom and added a nice punchy presence. The best parts of this band were Marcy’s vocals, and the Onyx preamps allowed her voice to come through smooth as glass and crystal clear.

Reverend Bill’s nine-piece group was up next. They used 17 mono inputs and one stereo. I bussed the vocals to 1 and 2 and sent the horns to 3 and 4. I also assigned the compressor to the horns and was surprised with the results. I originally looked at the on-board compressor as more of a gimmick than a real tool, but it sounds great and is extremely simple to use. It smoothed out and contained the brass without sounding artificial. The Mackie Onyx performed equally as well the following day. This is truly a leap forward for Mackie and a great tool for any mid-size gig. The bottom line is that if you are looking for this size of a board, you just found it.
Face Audio has begun offering a line of newly designed power amplifiers, and is promising to offer the best customer service of any amplifier maker. Of the four lines of amplifiers they make, I was asked to review Face Audio's popular TS (Titanium Series) line and the flagship 1200 model. The Titanium Series are conventional power supply (transformer based) audio power amplifiers with class H amplification and two rack spaces in height.

The front panel of the 1200TS is basic, with its center power switch and two-channel attenuator controls. Flanking each control are five LEDs for Active, Signal (two levels), Clip and Fault indications. Two beefy metal handles and a top air filter inlet plate complete this amplifier. On the rear panel, the black metal panel has two screened fans on the outside with all the controls and connection in between. A standard IEC inlet and two fuse holders make up the power supply section next to pairs of Neutrik NL4 connectors and binding posts for speaker connections. For signal inputs, the 1200TS has both XLR female and TRS jacks. Completing the rear panel are three switches for chassis ground lift, stereo/parallel/bridge mode selection, and on/off limiters selection.

With its toroidal power transformer design, the Face Audio 1200TS weighs in at 49 pounds and 17 inches deep when including the rear rack ears. Popping the cover off the 1200TS was partially like a time warp, because the sturdy construction had circuit boards populated with leaded through-hole components, and not the typical surface-mount components most manufacturers use. But this construction allows for better component cooling, and once they add in the modern wind tunnel heatsinking and a beefy toroidal transformer, this amplifier lands squarely in the modern era.

Checkout Time
The Face Audio 1200TS audio power amplifier looked mild and meek on the outside, but once powered up and operating it delivered very nice performance to my ears. Operating in both sub-woofer duty and top-box speakers, the 1200TS handled the tasks nicely, providing the push of 60Hz transformer-based amplifiers with the clarity of conventional analog amplifier stages. Out on the gigs, the 1200TS slipped into various roles with ease. The only item needing adjustment is the 39dB of full up gain that needed backing off 7dB, for my 32dB system gains on my other amplifiers. I could not find any niggles to speak of, but some users will not find the 1200TS a good fit due to its weight, especially with the new switcher supply amplifiers entering the market. The Face Audio 1200TS is a professional amplifier for a wide variety of customers.

What it is: Conventional audio power amplifier.
Who it’s for: Local to regional soundcos needing basic power amplifier capability with good customer service.
Pros: Good sound, basic features, all-around player.
Cons: None.
Retail Price: $1169.58
Maybe it’s the fact that, as the owner of a mid-level company, I never get the chance to slow down long enough to get complacent, and instead find myself looking at every aspect of the rig, crew and all the other details that can make or break a gig, examining them over and over again to make sure nothing is missed. Or maybe when you travel with the same act for a while you just naturally get used to a specific way of doing things. Or maybe it’s both. Whatever. But I had a gig recently that made me think about what we think about.

The show was with a major act who normally travels with a full rig. This gig was a one-off that was not part of the scheduled tour, so they decided to make it a fly date at a venue where my company handles all of the larger shows. We were hired to do full audio and backline production. We do this for other acts at this venue and other venues, so on the surface it didn't seem like a big deal. The important part of that sentence is the part that says “on the surface.”

We put together the backline with SIR Las Vegas, and they had everything the client requested. So far, so good. The band required 16 personal monitor rigs and 12 RF mics as well. Again, no real issues there… The FOH and monitor guys both wanted digital consoles. I didn't have an issue with this, either — give 'em what they want, right? The problem was in the “why” of wanting those digital desks. I was thinking they wanted them because it was what they were used to using on the tour, but I was only partially right. Evidently, their thinking was more like, “Let's make it a real easy day. We can just put our disks in and go! No sound check!” Yeah, right.

This is not a rant about digital consoles — I own four of them. No, this is a rant about incorrect assumptions and expecting the gear to do the heavy lifting for you. Using those digital consoles on tour with the same PA, same mic package, same personal monitors and same backline makes perfect sense to me. Nothing of real relevance changes. Gain structure is basically the same. Maybe some subtle EQ changes, but basically you're good to go. You gotta love that digital console! But when you're flying in for a one-off with a different PA, different mic package and rented backline, how can you expect your disc to set up the console for you?

Back at the gig, the monitor guy is freaking because his gains are off the map for his PMs. The FOH guy is complaining that the PA doesn’t sound right — what’s wrong with it? They seem so befuddled that things are not the same as at any other tour stop. “I mean, I put my disc in so it should be fine.”

My outside voice: “Well, dude, what vocal mics are you touring with? Oh, well, remember we gave you those other mics you asked for because you said you wanted to try them?”

My inside voice: Of course they don’t sound the same and the gain is way off.

My outside voice: “What line array are you touring with? Yeah, this ain’t it. That big sound company doesn’t sell their speakers so, um, maybe you should flatten the EQ and start over?”

Maybe if we had forced them to use a trusty Midas XL-4 or a Soundcraft Series 5 and made them actually do their gig, we wouldn’t have been there all day while they figured it out. You know? “Let's make this a real easy day; just put our disc in and go.” Hmmmm…

Maybe I’m wrong, and it wouldn’t be the first time. Hell, it wouldn’t even be the first time today, but maybe the digital console doesn’t always meet the fly date rider in real life. I am going to Hell for writing this, aren't I?
PACE provides the lock and key (iLok) to protect the contents of your safe deposit box (software).

Last month we thought a lot about things in the rapidly changing world of digital audio, one of which was copy protection of audio software. Copy protection has long been a problem for companies that manufacture all sorts of software. Several years ago I had a conversation with a rep at an AES who told me that his company’s program had approximately 1,000 registered purchases but an estimated 30 times as many users with illegitimate copies of their program. That’s a lot of lost revenue due to cracked code, and it’s totally unfair to folks who are trying to stay afloat developing software. If you really like a program, and you’d like to see it continue to exist, you should buy it from the manufacturer.

In last month’s Bleeding Edge, I gave you a super-quick rundown of a device known as an iLok. Let’s take a look at the iLok in a bit more detail, because anyone who plans to own a Digidesign VENUE will need to know about this, as will anyone you working in the studio using recording software. You may also run into the iLok on the road in situations where band members are using virtual synths or samplers on stage.

Manufactured by PACE Anti-Piracy, iLok is a device that facilitates software copy protection. PACE does not produce audio software; they simply have developed a lock and key for protecting software. iLok is a small chip employing technology similar to a smart card but is generally a bit larger and solid-state USB “thumb drives” that plug directly into an open slot in your computer. It’s small enough to fit in your pocket, but not so small that you might lose it (I keep mine tethered to a baseball bat). You can purchase an iLok for around $40 at iLok.com, as well as from audio software manufacturers and computer suppliers. Either way it’s the same device, the exception being an iLok that comes packaged with software bundles—in which case the manufacturer may include a “load-ed” iLok (i.e., an iLok that includes authorizations for their software).

After you purchase iLok-compliant software and install it on your computer you typically have a week or 10 days during which you can run the software without authorization. After that period of time the app will no longer open unless you insert an iLok with the appropriate license.

There are basically two ways to obtain the license for the software. In cases where you purchased a retail package, a license card may be included with the packaging. On this “smart card” is a small chip employing technology similar to that used for GSM cell phones and credit cards. Your software will prompt you to insert the license chip into the iLok; the license will move to the iLok, and your software will immediately be authorized. The other manner in which a license is obtained is through PACE’s website (www.iLok.com), where you set up a private account with a password. This account is free of charge. When you purchase software via download, you register with the manufacturer and submit your iLok account name (which you must provide accurately to ensure that your deposit does not go into someone else’s account). The manufacturer deposits an authorization “key” into your account, and sends you an e-mail when the deposit has been made. You log into your iLok account, and transfer the key from the web account to the iLok. Honestly, it sounds way more painful than it is in practice.

Using an iLok provides several advantages. Obviously you have the ability to carry all of your software authorizations in a single device that fits in your pocket. The keys are not located on a hard drive, so in the event of a hard drive crash you don’t lose your software licenses. Your account can service more than one iLok, and licenses can be transferred between iLoks—though if you transfer a key to another user, there is an “administrative” fee of $25. Once you set up your account, you can name and identify your iLok(s), and view the licenses that they hold. When you add an authorization via license card, it’s wise to re-register the iLok so that iLok.com can track your assets via a “synchronize” function. As I mentioned last month, PACE makes it easy to keep internet software off of your audio computer, which is generally a wise idea. Finally, PACE offers a “Zero Downtime” insurance policy in case your iLok is broken, lost or stolen. At a cost of $50 per year per iLok, this service provides immediate replacement of a missing iLok—which would save your ear on a show night. 

“Stop Answering Stupid Questions!”

Let the FOH FAQ T-Shirt do the answering for you.

You may have already heard about these shirts that feature the answers to the Top 10 stupid questions audience members ask. Now you can order one of these beauties and a portion of the net proceeds will benefit the music and arts programs of the Rogue River, Ore School District.

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By Steve LaCerra
Steve LaCerra is the Tour Manager and Front of House engineer for Blue Oyster Cult. He can be reached via email at steve@fohone.com.

“I Like it with Me). PACE makes their technology available to software manufacturers who wish to protect their R&D investment, and to users who wish to use said software. In addition to developing the protection software, PACE provides drivers for users of iLok-protected software, and manufactures the physical device required to unlock a protected program. Current audio software manufacturers using iLok technology include: Antares, Bomb Factory, Crane Song, Digidesign, DUY, Eventide, GRM Tools, Line6, McDSP, Mark of the Unicorn (MOTU), Princeton Digital, Serato, Sonic Solutions, Sony, SoundToys, Steinberg, TC Works, Trillium Lane Labs, Unique Recording Software, WAVES, Mechanics and Sonitus.

“Handfuls of software-soapbox and get on with it.

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Mind Games

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Mind Games

By Mark Amundson

In previous Theory and Practice installments, I have gone over many lists of things to do while setting up for the show, but it’s a whole new game once the show starts. From the sound check, you should have your performance mix roughed in, or at least your usual fader starting locations for vocals and the various instrument inputs. And once the performance is started, all your senses are required. This means a lot more than the standard “no alcohol consumption” bromide. (Repeat after me class: “It robs you of your high-frequency hearing temporarily!”) “All senses required” means a mind emptied of all non-performance issues as the show starts. See the board, be the board. Or, if you prefer, get your Jedi on.

Jed-like, I find that my intuitions are nearly always correct. If something “sounds odd,” it is very likely something to seek out and rectify soon. It could be a muted input, a mis-set gain of something that should have been left low or a host of things that experience helps locate. The bottom line is to identify the oddity and correct it as quickly as possible. In some cases, it may require others’ assistance, or it may have to be left as is until the next set break. Good hearing is a must, and visual confirmation of normality on the console and outboard racks is very important.

Settle Down, Son

At show start, also understand that you cannot busy yourself in nailing the mix over the first few bars. Your first priority, after leveling up the mix, is to look for and hit the show cues. This may be foreign to many “house techs,” but the band’s sound engineers, and especially the band’s light console operators (lamps), are looking for natural breaks in the music where solos are performed, or a change in the song’s attitude is done. I mix regularly with rock cover bands, and it makes taking cues fun, as I know the song cues well and usually know what the set is going to do the next moment.

The other cues are effects set to the song or part of a song. When mixing by the seat of my pants, I set two reverb returns for “medium hall” and “vocal plate.” Mostly, I will note how a song starts, and if it is up-tempo, the vocal plate ‘verb is eased in. Generally, I will have it ready just as the vocal starts. Then all I need to do is add ‘verb to taste, with the room acoustics taken into account. For soft ballads, that medium hall enlarges the tune and works well with drawn out lyrics. The mental criteria is to make sure the lyrics are plainly understood, unless the original artist intentionally buried the lyrics in effects or instruments on their recording (e.g. The Hollies’ “Long Cool Woman in a Black Dress”).

One of my favorite effects cues is tagging delay repeats at the end of vocal phrases, as required. A great example of this is Tom Petty’s “Runnin’ Down A Dream,” in which some verse phrases get a couple of 500 millisecond slap repeats — this is skill in mixing with the fader pumped on the last word or two and then brought back out.

What I am saying is that mixing should include attention to cues, and it is a contact sport in league with the band. When done exceptionally well, bad ballads should put tears on the audience’s cheeks and revived-up songs should get the audience shouting and pumping their fists in the air by the song’s ending. It really pains me to see house engineers reading novels at FOH while a band is performing, or taking a meal break while a band is performing, or doing a “set and forget” mix on a band.

Background Thoughts

And with the tasks of sensing oddities and hitting the cues, you also need to continuously re-evaluate the state of the mix in the background. You should periodically ask yourself questions like, “Does the bass guitar sound right?” Are the vocals balanced and on top of the mix? Is the timbre of the electric guitars correct, or does it need a touch of equalization?”

Mentally, you should go down the channel strips and ask yourself, “Are these settings the best for this situation right now?” And the same has to be considered on the outboard processing as well. For example, the lightly-used compression on an instrument at the beginning of the show may now be hitting hard and boiling into the limiters on every note. It may not have been your problem on mix setup, but now you have to either back off on the channel strip gain or re-adjust the compressor threshold.

If you are doing small shows with yourself as the key audio person, also keep a wandering eye on what the drive and amp racks are doing. On small shows where I am tied up at FOH, I point the amp racks back at me so I can periodically see the LED metering on the power amplifiers, speaker processors and power condition- ing gear. Usually, a short glance at the familiar dancing LEDs tells me all I need to know about how hard the system is being pushed, and how stable the house power is. Often, I pick up on things like bad receptacles, slightly shorted speaker cables and how close to circuit overload I am running.

Summing Up

The broad point I want to make is that mixing is not something you can do with a beer in one hand, chatting with your bud- dies. Good shows are more than just good talent onstage, and your constant attention at monitor beach or FOH is needed to make the music performance worth the attendance to the patrons. Personally, I prefer not to be bothered while the show is in progress, and there better be a good reason for someone to distract me while at the console. And if you are a visiting soundperson behind the working sound person, keep quiet until asked. And if you’re even smarter, you’ll keep your ego in check.

E-mail Mark at mark@fohonline.com

Mind Games

It really pains me to see house engineers reading novels at FOH while a band is performing, or taking a meal break mid-performance, or just doing a set-and-forget mix on a band.
We've been on a roll lately in discussing how digital technology is changing the business models for the live sound industry. Fewer, but bigger, shows have escaped unscathed, and live recordings are no exception. The onetime "ne plus ultra" of the live LP, Frampton Comes Alive, has transitioned from milestone to artifact. In the RIAA's list of all-time top-100 albums, only one, Garth Brook's "Double Live," made the top ten, one of the few on the entire list. Steady declines in the number of conventional (I'm using that word for a reason) live recordings were countered to a degree by the explosive growth of music on DVD; from 2000 to 2004 the category grew by double and even triple digits annually. However, 2005 was a watershed year that saw the sector cool off and decline by 4%.

What happened was a convergence of technology, economics and culture. Touring artists began to travel with hard drive recording systems, literally recording each and every show of a tour without having to lug boxes of tape around. The lower costs of production for live albums compared to studio projects to record labels, were more than offset by the costs of producing concerts for DVD, costs that often far exceeded anything they spent for audio-only recordings. And the music consumer began to shift towards a download paradigm — those hundreds of songs recorded to Pro Tools every night of the tour that were aggregated for retail products, but rather were becoming commoditized one-offs used for promotions on Web sites to boost record and concert ticket sales. No one has noticed this shift more than the remote recording vendors — live sound's truckers. Like mastering engineers, they were insulated from the effects of the shift by the complexity of their specialty. But that's changed.

"It's in flux right now," says Peter Yanilos, owner of Artisan Recording, a remote truck based in Ft. Lauderdale. "People are willing to pay $180 for a ticket to a concert but aren't willing to buy a recording of it on CD." Yanilos suggests further that the culture shift towards downloads is changing the dynamic. "Bands are striving to make live shows flawless, as opposed to capturing the spirit of a live performance. Live At Leeds was so real you could smell the pot. But now a live recording has to compete with extremely polished recorded performances. A concert isn't a single; no one puts on a live concert CD to hear one song. The listener has to make an emotional investment in listening to the record." Richard "Vance" Van Horn, president of Sheffield Remote, in Baltimore, says the trend is pulling the remote recording business in opposite directions, with events seeking smaller audio trucks to do the recordings at lower cost and to make way for ever-larger video trucks, while at the same time the recording systems with them," he says. "Also, a lot of the remote recording companies have their own recording systems, literally recording each and every show of a tour without having to lug boxes of tape around. The lower costs of production for live albums compared to studio projects to record labels, were more than offset by the costs of producing concerts for DVD, costs that often far exceeded anything they spent for audio-only recordings. And the music consumer began to shift towards a download paradigm — those hundreds of songs recorded to Pro Tools every night of the tour that were aggregated for retail products, but rather were becoming commoditized one-offs used for promotions on Web sites to boost record and concert ticket sales. No one has noticed this shift more than the remote recording vendors — live sound's truckers. Like mastering engineers, they were insulated from the effects of the shift by the complexity of their specialty. But that's changed.

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“Live At Leeds was so real you could smell the pot. But now a live recording has to compete with extremely polished recorded performances.” - Peter Yanilos

The future of remote recording likely matches the paradigm of all else digital: Faster, smaller, cheaper,” says Karen Brinton, owner of Remote Recording, which this year launched Polar Express, a more petite cruiser fitted with Pro Tools and other digital gear, to complement the company’s more conventional, tape-equipped Silver Truck. “It’s about downsizing,” Brinton adds. “The space available for audio trucks is diminishing at the same time that they’re not making live CDs anymore. It’s a matter of fitting into the way things are going.”

There’s still call for larger vehicles for concert work, Brinton says, citing the “Heart of Gold” recording Remote Recording did for Neil Young this year in Nashville. “But the strategy is smaller and maybe more of it — adding more smaller trucks to cover a wider geographical range,” she says.

Doing more with less is what digital enables. Changing the workflow and the culture of the business isn’t as easily accomplished. Look for smaller trucks, more of them — both from the veterans and new start-ups — and look for them all to pursue more broadcast live music and more integration with streaming from the new heavyweights in the concert business, Live Nation and Network Live, which are taking the concert business to the Internet. Look for fewer people doing more — with less.

E-mail Dan at ddaley@fohonline.com

By Dan Daley

E-mail Dan at ddaley@fohonline.com

The Biz

REMOTE

Considers The Options

W
Eric Popp
FOH Tech
Axxis Inc.
Louisville, KY
502.299.2511
humankind23@hotmail.com
www.axiosinc.com
Services Provided:
Audio, video and lighting for a four-camera plus-jib shoot. Week-long National Assembly for Church of God of Prophecy at the Gaylord Center in Nashville.
Clients:
Quote:
"Only the paranoid survive."
Personal Info:
I love to challenge myself. In our industry you need to be paranoid and always ready to start sound check, when the GFI on the distro panel popped. [...
Hobbies:
Destroying corporate America, then finding a new gig when there’s no more work.

Scott Briese
Senior Project Manager
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414.258.6333
sbriese@clearwing.com
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Services Provided:
Sound, lighting, staging, backline and trucking.
Clients:
Office Max, Miller Brewing, Sony, Best Buy, Target, Steve Miller Band.
Quote:
"It will always be that way, unless it’s different."
Personal Info:
I started out as a lot of people do, as a musician, and I then found out that I was the only guy in the band who cared about sound. This eventually put me behind the console and also behind the wheel of a new and exciting career. It’s still exciting, but definitely not new anymore. Even though I have taken a break or two, I still come back to this crazy biz. Why you ask? Because I LOVE IT!
Hobbies:
Golfing, cooking, boating and woodworking.

Equipment:
Late in the festival season had to pull out the B-stock (Axxis owns two DiGiCo DS3s, Yamaha PM4000, 48 V-DOSC, 24 Design Acoustics SB218s, 8 ARCS, all at the Kentucky state fair). For this show we had eight on each side: EAW KF760s flown, EAW KF940s wide fill flown, EAW KF940s doing the sub, EAW KF300 and JF80s doing front fill duty. EAW MX8750 processors, Crown CT3000s powering it all. Supplied by Brantley Sound in Nashville. Soundcraft K2 out front doing vocals, wireless and video rolls, a 32 channel Soundcraft handling the band and a Soundcraft Delta 9-channel taking care of all the translation feeds, 16 dbx comps, a couple of Yamaha SPX 990s, 5 TC Electronic 1128 Graphic Eqs, 2 Klark Teknik parametrics and a Denon CD playback. Ramsa 840 at monitors, Clair Brothers modified Carver Pro amps pushing our proprietary wedges. 12 pack Shure wireless HV/Lawcoms and the standard band mic package.

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Welcome To My Nightmare

In The Trenches

We were playing a street dance, and they told us there was a generator for us to use. When we got there we found that the generator’s distro panel was 150 feet from the stage, and the generator was in an alley behind a fence and 12 feet below the street level. Oh, and the generator was being shared by us and all the street vendors. (Uh-oh.)

We got everything plugged in and checked the power meters on the FOH rack, and discovered that the generator was cranked up to 130 volts, so my guy had to walk around two buildings to get to the generator to turn its output down to a reasonable level. We continued with our setup and got ready to start sound check, when the GFI on the distro panel popped.

After checking several configurations on the distro, we finally got a stable one, and got through the sound check. In the middle of the first set, though, I lost the mids, so I sprinted back to the distortion to find that one of our breakers had popped. Mind you, as I was running around, the band was still playing (we were recording the show), and the crowd was doing its best to stay out of my way so I could do what I needed to do. Anyway, I reset the breaker and sprinted back to the FOH (being cheered by the crowd because I had fixed the sound problem), hoping that things would be ok. And they were — until the third set when it popped again, and again, and again…(Wait for it)…And again. Finally, at this point, one of the organizers came up to me and told me that a beer truck had been sharing the same circuit as the amps, and that was popping the breaker. He had just moved the beer truck to another outlet, and we went the rest of the show without another power problem, which amounted to eight more songs.

Phil “Swordfish” Clark
www.soundsiteaudio.com

If you’d like to see yourself featured in “In The Trenches,” visit www.fohonline.com/trenches to submit your information to FOH, or e-mail sbriese@clearwing.com for more information.

MORE BEER!

Uh, MORE POWER!

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We were playing a street dance, and they told us there was a generator for us to use. When we got there we found that the generator’s distro panel was 150 feet from the stage, and the generator was in an alley behind a fence and 12 feet below the street level. Oh, and the generator was being shared by us and all the street vendors. (Uh-oh.)

We got everything plugged in and checked the power meters on the FOH rack, and discovered that the generator was cranked up to 130 volts, so my guy had to walk around two buildings to get to the generator to turn its output down to a reasonable level. We continued with our setup and got ready to start sound check, when the GFI on the distro panel popped.

After checking several configurations on the distro, we finally got a stable one, and got through the sound check. In the middle of the first set, though, I lost the mids, so I sprinted back to the distortion to find that one of our breakers had popped. Mind you, as I was running around, the band was still playing (we were recording the show), and the crowd was doing its best to stay out of my way so I could do what I needed to do. Anyway, I reset the breaker and sprinted back to the FOH (being cheered by the crowd because I had fixed the sound problem), hoping that things would be ok. And they were — until the third set when it popped again, and again, and again…(Wait for it)…And again. Finally, at this point, one of the organizers came up to me and told me that a beer truck had been sharing the same circuit as the amps, and that was popping the breaker. He had just moved the beer truck to another outlet, and we went the rest of the show without another power problem, which amounted to eight more songs.

Phil “Swordfish” Clark
www.soundsiteaudio.com

If you’d like to see yourself featured in “In The Trenches,” visit www.fohonline.com/trenches to submit your information to FOH, or e-mail sbriese@clearwing.com for more information.
Spending God’s Money

By Jamie Rio

I am certainly not attempting to be blasphemous with the title of this piece. If anything, I just want to add a little levity to the very serious task of getting a realistic budget when delving into a house of worship sound project. If you read my last piece (and I hope you have), I described my modus operandi for approaching worship sound. I’ll give you the Reader’s Digest version. 

First, I talk with the musical director and the pastor, priest, rabbi, etc. Then I go to a service or a concert and go into the sanctuary and crank up the existing system. After that, I simply offer my recommendations. Let me make a quick point here. I belong to a church and believe in a God. It is a fact that many churches believe that the money they collect from their members is God’s money. Keep this in the back of your mind when you are making your pitch. It’s also a good idea to visit some of your local houses of worship just to listen to the systems. 

Now that you are going to make a proposal, this is the point where all your diplomacy, salesmanship and communication skills really kick in. By now, you should know the needs and desires of the pastor, musical director and general staff with regards to the new system. Some churches only want to reach their congregation at the Sunday services. Others put on plays and musicals for the local community. And some of the houses of worship in my town (Los Angeles) have regular TV and radio broadcasts. If you don’t know what the goals and needs are, you’d better find out. Very often, the senior pastor may have a different vision than the musical director. Just make sure you are in communication with all the decision makers and check writers at all times. Whatever the religious organization you are working with, there is always a hierarchy of command. You may only have to deal with one person, but don’t count on it.

Unless otherwise instructed, I put together three bids for any church system or upgrade that I intend to install. The first bid represents the dream system for the particular house of worship. This bid encompasses my recommendations for the best possible sound and equipment I can put into the room. There are times when this is the proposal that is immediately accepted. An example of this would be a system going into the “money is no object” or “anything for God” church. If you are lucky enough to land that type of gig, amen to ya. However, it has been my personal experience that my dream system proposal usually carries a pretty big sticker shock with it. It’s not that I am some kind of insane sound madman. It’s just that great gear costs money, and installing that great gear can be expensive.

And that is the reason I present bid number two. In this proposal I will usually offer a less expensive mixer or cabinets, and maybe fewer mics and less outboard gear. If I could ballpark it for you, I try to present the second system at 25% to 30% less than the first. The labor is the same; I am just cutting costs with the gear. I prepare bid three at another 15% to 20% discount, but generally that bid only serves as a closer for bid number two. It is simply human nature not to want to be at the bottom, even if they can’t afford to be at the top. Oh, by the way, I bid out some of my live sound shows in much the same way. When I am putting together a proposal for a show, I will offer my services for one particular price. If the client is knocked out by cost or wishes to haggle, I will offer system B and C for the event. I don’t mean to digress away from my church writings, but clients of this sort usually buy the B (middle) system for the same above-mentioned reason.

There is one other tool I use for closing an install deal, and that is inviting the client (pastor or staff member) to a nearby church that I have already worked on. I am mentioning this technique last because not all of you have a roster of clients that you can show off. Although, as soon as you get one install under your belt, you can use that as leverage for your next one.

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It’s a fact that many churches believe that the money they collect from their members is God’s money. Keep this in the back of your mind when you are making your pitch.”
Dear Anklebiters,

I run a small sound company out of my garage, and I can no longer fit all of my equipment in my trusty work van. Lately I have been renting a small box truck from a local homeowner truck rental store. This really gets me into and out of my shows. Now, 10 years later, I have to rent a box truck that has lift gates as well as ramps. This is very convenient for me since I can walk to the truck rental place and pick up the truck. I did rent from a place once when I was 30 feet up in the air, but with the recent stand down it was better for me to rent closer. I also negotiated with the closer place for the lower price, so it has worked out well for me. Brian, what would you like to offer?

Brian: I’ve had good experiences with both Enterprise truck rental and Penske truck rental. Both of these companies have dedicated commercial truck fleets, which are only rented to business owners. In addition to having amenities like a lift gate, they also have E-track inside the cargo box so that I can use all of the standard ratchet straps and secure my gear. I have gone in with my own truck and it is very easy, but it’s a good sign of growth.

I guess that it depends on where most of your shows are and how much help you have to load and unload. I can’t load a truck by myself, and it is difficult for me to load and stack in a tow. Brian, how do you load your truck?

Brian: Frequency. I do all of the show prep and initial truck loading by myself. If shows of any size larger than speaker-on-a-stick gigs, I have some help scheduled to be at the show to assist with truck dump, load-in, etc. on through the load out and unloading of the truck. Fortunately, my truck is equipped with a ramp, and all of my equipment is in road cases with wheels. Some items are a little on the heavy side, so I have begun to leave the one really heavy case strapped into the truck when I unload the remainder of my equipment at my show. In this situation, a case that weighs about 30 pounds is a real help, especially when I unlash a CDL A for a while, but I let it go because I thought that I would fill it. It was huge to me, and it is a very expensive piece of equipment. It does not fit in the truck when I need it, or someone who is qualified to drive another non-CDL box truck if I was to rent a second truck for a show. I am very grateful for the idea of getting my CDL license and replacing my current truck with a basic truck tractor and a pup trailer. This way I could simply rent a 48- or 53-foot trailer when I needed more space. Not to mention I would have trouble exceeding the 80,000 pound limit of a tractor trailer. But hey, all this takes money, right?

Paul: I also have fitted my rental truck from top to bottom and front to back. I also towed a generator on one show for 700 miles and back. The rental truck usually got down to 25 MPH on the mountains and about 55 MPH on the flat. It was a long trip! I did have a CDL Class A for a while, but I let it go because I didn’t want to drive trucks all the time. I don’t know about you, but my 53-foot trailer with gear is not what I would routinely call an Anklebiter. I have a show coming up that will require a rental truck, two trailers and another vehicle to tow a generator. I have gone in with others just to do the show. I use Budget Truck Rental, and they have corporate and local accounts. I am able to get a truck for as long as I need one. I rent trucks that have lift gates as well as ramps. This is very convenient for me because I can walk to the truck rental place and pick up the truck. I did rent from a place once when I was 30 feet up in the air, but with the recent stand down it was better for me to rent closer. I also negotiated with the closer place for the lower price, so it has worked out well for me. Brian, what would you like to offer?
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Heads or Tails continued from page 27

So what about quality? Are manufacturers improving quality on powered speakers?

Overall, yes. Failures do not happen frequently, but they do happen—most often at the most inopportune times. To that point, quality is always a concern. We noticed that customers never ask which manufacturer makes the amp inside the powered speaker. The burning question is never the brand name, more so how many watts to ensure there is enough for the rig.

Buying requirements for speakers are the same no matter whether they are active or passive. Coverage, frequency range (speech or music) and loudness (at given distances) are important to consider, as are any problems in the coverage area. Customers often confuse a speaker’s wattage handling capability with the sound pressure level (also known as dB or the sensitivity rating) versus watts. We always steer them to the spec sheets on our web site to look at the sensitivity and other characteristics of the box.

I’m sure you get a lot of customer calls about microphones. How do you help people figure out what they need for their application?

There is one product that has been the king of hand helds for a few reasons: it’s not too expensive and it’s a reliable workhorse. It also scores well with handling and tonal quality. We suggest customers not only consider the performance of a microphone but also who and how it will be used. For instance, if a handheld vocal microphone is going to be passed around frequently, we would suggest considering a dynamic over a condenser, as condensers typically are more sensitive to the shock of getting dropped and also moisture. A recent favorite of ours has a new product that has put a new twist on an old concept. Its one-piece construction and micro design inspired the microphone classification of “earset,” which is somewhere between a headset and a lavaliere. It keeps a very small lavaliere element held close to the mouth for better performance and better gain before feedback. Whether using a handheld or a wireless, customers need to understand the difference between moisture-resistant and waterproof. Some microphones have an anti-sweat ring so that the moisture drips off of the ring and doesn’t go into the mic element but are not truly waterproof. The distinction is important since there is always moisture whether from sweat or saliva.

Any final thoughts on buying gear?

Whether shopping for audio or a new car or a sweater, people will want the most features and best value for the money. Trade shows, magazine ads and new product reviews are good sources of information, but the best way to form your own opinion is to get out there and listen. Visit churches, theatres or any venue with live sound, and talk to the guys and gals who use this stuff everyday. They can give invaluable insight into what works, doesn’t work and what truly stinks despite what the glossy brochure may tell you. 🎤
We Are
controlling
Transmission

We live in a media saturated environment, where we are constantly receiving and processing excessive amounts of information, which we then file and store away in the recesses of our overworked and over-stimulated brains. Often we disseminate this information as verified knowledge, with, more often than not, only a partial understanding of whatever the subject might be. All of us lead busy lives, and there are only so many hours in the day that can be devoted to following up on all the information we receive in that given time. Between work, family and whatever civic duty or the other side it is all it becomes increasingly difficult to find the time for more than the headline news, and even if we find the time to actually read a paper we, more often than not, skim the headlines and give a quick read to the article before moving on to the next headline. With all the information that we are required to process, it’s not surprising that we take what we need from any given article or sound bite and then spew it back out with the authority of an expert. It is also not uncommon for us to be a bit cynical about some of this information we receive due to the fact that it is often wrong.

Listen to the news and one day there will be a story regarding the curative effects of coffee, and the next day there will be a piece decrying all caffeine related products as evil spawns of the devil and agents of incurable disease. We live with great paranoia, as we are told that because smoking tobacco is deadly it needs to be banned from restaurants and other indoor spaces, yet it is still legally sold to anyone with proof of age. Obesity has become a national health problem, and we are informed that it is all the fault of trans fats. The next day everyone is speaking about trans fats as if they are experts.

We form our opinions based upon information we read in the gossip columns or magazines, and it’s often difficult to separate journalism from editorializing, as many headlines already give a slanted opinion before you can even get to the article. Journalists report and you decide, but whom can one believe? On one side the conservatives say it’s the liberal press who is slanting the news, and on the other side it’s the liberal press who is slanting the news. Let’s also assume that if the report in question is not in best interest of NBC that there might be an executive order killing the merger. That said, let’s bear in mind that marketing and name-brand recognition, in an over-saturated market, is crucial to the survival of any given product, and often the quality of a product is not as important as the perceived quality of said product. The sound reinforcement industry is no different than any other. It is a competitive market with very little wiggle room, and for whatever reason there are certain products that become fixtures on the scene and others that will always stay on the periphery. As I said before, this may be due more to the perceived quality of the equipment than the actual quality of said gear. It is the job of each company’s marketing department to find a market and create a demand for their product, and it is advertising that is the main ingredient in this equation — and, while the advertising is the mainstay of the magazine, it is also the readers and buyers who are the mainstay of the advertisers. Therefore, it is important to maintain the integrity of the magazine for the sake of the advertisers as well as the readers and buyers.

Even as great equipment is imperative to live sound, and commerce is vital to the American way, the truth is that the most important part of a live mix is the operator of said equipment. We can all be duped by misinformation and a hard sell, but despite all the bells and whistles and glossy sell, the final say regarding a piece of gear comes from us—the engineers. We are the ones out on the front line making the final decisions regarding the ergonomics of every piece we use, therefore we should expect that the information we receive about the equipment be unbiased and unclouded by special interests — after all, we are the ones who can make or break a piece of equipment no matter how it is sold.

I was in the studio the other day and the producer told a story about Chet Atkins. He said that Chet was in the studio playing a new guitar and everybody was gushing about how great the guitar sounded. After listening to the other musicians and engineers praise the beauty of the guitar and its wonderful sound Chet put the guitar in its case, walked away and said to everyone, “How’s it sound now?”

E-mail Baker at blee@fohonline.com

coming next month...

• production profile
  more than 20 bands in half a dozen venues over three days. it’s not Bonaroo, it’s Vegoose

• FOH interview
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