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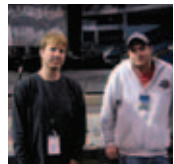
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Terry and Augsburger Talk Harman

Outgoing HP president Mark Terry (pictured) and

incoming president Blake Augsburger talk exclusively with *PSN*.

The Boy Is Back

Monitor engineer Mike Baehler (left) and FOH

Kyle Chirnside keep the sound bright and sunny for Fall Out Boy.

PIRATED SOUNDS: Alan Meyerson stands at the head of the conductor's position on the scoring stage at Todd-AO during the tracking of the score for *Pirates of the Caribbean: Dead Man's Chest*. Over Meyerson's head is a unique Decca Tree approach employing Royer R-122V vacuum-tube ribbon microphones. A total of 255 tracks were laid down to two Digidesign Pro Tools HD systems and mixed on a Euphonix System 5 console. *See story on page 24.*

Summer Touring Starts Up

by Clive Young

NEW YORK, NY—The hottest months are traditionally the biggest for touring, and 2006 seems to be falling right in line with that assessment. After a surprisingly strong spring for ticket sales, dozens of tours have taken to the highways and byways of the U.S., all in search of audiences ready to go out and have a good time. That, in turn, is keeping the major sound reinforcement companies busy.

"Touring seems to be experiencing a rejuvenation that we began to see last year and which is continuing this year," observed Dave Rat, president of Rat Sound. "9/11 really seemed to have a lingering impact on touring."

"I think it's going to busy summer for everybody," concurred Jack Boessneck, executive vice president of Eighth Day Sound. "This year's vibe is that everybody else wants to work. Last year, what was it? It was all Stones and U2; that was all anybody heard about. This year, it's 'Oh, let's go to work.'"

Indeed, it's a common theory that big-name, big-budget, big-ticket tours curtail the potential revenues of other, mid-level productions, as consumers often have to choose whether they can afford to see a few moderately priced shows or one big

Austin NAMM A Go

by Janice Brown

For the first time ever this month, the NAMM Show lands in Austin, TX for its 3-day Summer Session, July 14-16. Home to as many as 150 live music venues, Austin has been called "the live music capital of the world," and, as such, is a proper host for the annual summer gathering of music and music technology products manufacturers, distributor/dealers and consultants.

MI and pro audio retailers will be in attendance, like Guitar Center and Sweetwater, walking the show floor to catch up with vendors, see new products, and get the always valuable previews of products and technologies soon to come. Bill Wrightson, vice president, HiTech merchandise manager for Guitar Center, reveals his

tech@psn field**report:**

dbx DriveRack 4800
Network control, flexible configuration and sonic integrity characterize the 4800 Loudspeaker Management System. **Page 60.**

Hi-Def Disc Tools Emerge

by Steve Harvey

The battle of the blue-laser formats has begun in earnest, with Blu-ray Disc (BD) and HD DVD (HD) software and hardware finally becoming available at retail during the past few months. As backers of one or the other—some even of both—formats, the major film studios are the first to market with software product, of course, but for those content creators eager to enter the fray, the good news is that there are professional authoring tools available earlier in the product rollout than for previous shiny disc formats.

Earlier this year, Dolby Laboratories introduced Dolby Media Producer, a suite of professional software tools for those working in multichannel audio for the two new formats, as well as broadcast, initially only for the Mac OS X platform. The company's first such software suite, which comprises Dolby Media Encoder, Dolby Media Decoder and Dolby Media Tools, has been developed for those utilizing the codecs

Built for the Road

dbx DriveRack 4800 Loudspeaker Management System

by Sully

Welcome to my review of the dbx DriveRack 4800 complete equalization and loudspeaker management system. If any of you have read my reviews for other products, you'll know I'm loathe to list facts readily available on the manufacturer's website. Let's hit the back-panel highlights and move on.

The interface options are (4) XLRF analog inputs, (8) XLRM analog outputs, (2) XLRF AES/EBU inputs, (4) XLRM stereo AES/EBU outputs, (2) RJ 45 Ethernet connections, a RS 232 serial connection and a BNC word clock input. Any input, at any given time, can mix or route to any output. Additionally, each *internal* output can be assigned to any *physical* XLR output on the device.

In the computer control GUI, System Architect, a drop-down menu under a rather realistic picture of the back panel allows simple routing changes. For example, say the unit is set up as a stereo 4-way crossover. There are eight outputs that may be nominally configured as: left sub, right sub, left low, right low,

inthefield

to, I had zero problems getting System Architect and the 4800 to laugh and play together. I even tried to trick the processor by going offline, upgrading to a different version and sneaking the connection back on. I swear, the 4800 just chuckled at my weak treachery.

Within System Architect, the Configuration Wizard now rates as the easiest interface I've encountered since the Lexicon PCM 42. It asks...you click...suddenly the crossover of your dreams appears. The front panel, however, doesn't have this feature yet and requires manual addressing of each parameter to configure it. (I demand that conveniences become mandatory!) Pressing the "Wizard" button on the 4800's front panel elicits the message, "Wizard not implemented in this release." I'm told this is where all of the tunings for Harman loudspeakers will go in future

sponses measured at both DSP outputs were identical, with the exception of a slightly longer propagation delay for my reference.

When evaluating new gear, I march people into the test room, play some choice old .WAV files, and wait for a trend to begin. The first trend was repeated four times in a row independently—"A" sounds rounder and more forward than "B." In this case, "A" was the 4800. As we rotated the material and even, for kicks, compared another handy processor, the 4800 continued to win the listening rounds.

Pulling the 4800's pants off and poking around inside, it appears I didn't have the Jensen transformer balancing option fitted, but I would strongly recommend this to anyone purchasing it. The option was fitted midway through the Toby Keith tour, and the rig immediately became quieter. My premonitions of offset delays being incorrect proved baseless; the rig continued to shine.

I racked the 2-space DriveRack 4800 up and took it out on some one-offs with the country band I mix. Not wanting to replace the crossover installed by the PA company du jour, I strapped the 4800 across the left and right bus of my Midas XL-3. This, I must point out, is holy territory, normally occupied only by a persnickety English dynamics unit. I can feel

left mid, right mid, left hi, right hi. For those of us raised on English analog crossovers, it's a simple task to make the outputs Sub, Low, Mid, Hi, Sub, Low, Mid, Hi without affecting the linking of PEQ filters and other inserts within the software. Clever.

In the past, dbx has managed to manufacture front-panel interfaces and GUIs that were something akin to coming in late on a *Seinfeld* episode—usable, but you were never quite sure why the umbrella was funny. It's very different now. I was able to immediately navigate the front panel with relative ease. This ease of use is a very good thing, as I can't stand processors that *require* a computer to operate them. Happily, all of the features available in System Architect are configurable from the front panel as well—*with the exception of a couple really useful ones.*

The 4800 tied right onto my 2.5 Gig Toughbook. I'm running Windows 2K and used the Ethernet NIC to a Linksys router, which, in turn, went to the 4800. Since I was only running one device, DHCP was the fastest method, though I could see it being a drag in uses like touring with networked powered speakers where every box might have a different IP every day.

Just after Dale Sandberg from dbx had waved an Ethernet cable over my head and imbued me with the powers of dbx 4800 certification, I lost five minutes of my life I'll never get back to mistaking the Shure P4800 GUI for the DriveRack 4800 GUI. That said, and while I'm normally connection-challenged in just about every network scenario I'm a party

firmware upgrades.

The real-world empirical data for this review of the 4800 comes from a few places. My first exposure to the unit was on Toby Keith's *Big Throw Down II Tour* at the beginning of this year. Sound Image, the provider for the tour, has embraced the gamut of Harman products and was driving a Crown I-Tech-fueled VerTec rig with a blizzard of 4800s as processors. I'm not about to lie and say I was excited to see them. Although I still believe the dbx 160A is a spectacular compressor, the market for its DSP has not traditionally been high-end touring. While dbx has had success in selling DriveRack PAs to just about every small and medium-size sound company in America, fulfilling a need for economical speaker processing at an accessible price point, the series just wasn't something I was expecting in the racks of one of the largest country artists on the planet. After a few days of mixing the opener on the massive SI rig though, it occurred to me that somebody at dbx had decided to build a thoroughbred. It works. It works *well*.

We can talk about feature sets for pages, but the proof in this case isn't in the pudding...it's *how does this thing sound*? I set up a blind listening test using a common pair of amplifiers feeding a pair of Funktion One Resolution 2 Loudspeakers (my favorite box for this test) in the demo room at CTS Audio in Nashville. I was comparing the 4800 to my all-time favorite speaker management DSP. I loaded the identical presets into the 4800. The corresponding magnitude and phase re-

you preparing to receive the accolades you think I'm about to launch. Temporarily wrong. As it turned out, I had pressed a suck button.

One of my three favorite features of the 4800 is its ability to flex the analog gain structure to the job at hand. Why it has taken so long to do this with grace, I don't know. This feature allows you to not only maximize the gain structure of a system given the differing clip points and input sensitivities of various pieces of gear, but also allows elegant control of the amount of analog signal being fed into the A to D converters without leaving "unused gain on the table."

This was the source of my gain loss. At some point after receiving the unit, I had begun indiscriminately turning knobs (after the listening tests). It seems I had made the input clip level 28 dBu and the output clip level 4 dBu. Whoops. Once I brought the beast back into a more usable alignment, I was further able to tweak it to allow me to run my XL-3 hotter into the master bus without needing to attenuate downstream at the graphic EQ or crossover. When ballads came along, I enjoyed the fact that meters were still moving,

Product information

sound technology

Field Report

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yet uptempo didn't clip the input.

Speaking of ballad versus uptempo, another truly tricky feature is the Auto Warmth insert, which exploits the ear's decreasing sensitivity to lower and higher frequencies as the SPL decreases (ala the Fletcher Munson-based loudness button on your stereo). When a mix decreases in level (or you turn the stereo down), the tonal balance of the mix is en-

hanced by increasing the low- and high-frequency content present in the mix. The control macro for this feature has one button and two faders, "Threshold," "Amount" and "On." Try it; you'll like it. This feature is assignable as an insert on the outputs, which can be stereo-linked. I bet it rounds out 70-Volt ceiling speakers in installs just a bit, too.

OK, clearly this can continue for days and I know, if you're interested in this product, you've read the cut sheet or sat through the mildly scary training modules that dbx has on its website. If not, go here: http://www.dbx-pro.com/Download/index.htm. Download the first module, turn off the lights and close your eyes. Tell me this guy doesn't sound like his

day job is getting your sister to sign over her house to his cult. Weird.

Here's the bottom line: The dbx DriveRack 4800 is world-class. It's highly flexible, it sounds great and it's extremely easy to use. The GUI appears very stable, and it integrates nicely with other networked Harman devices. If you want to make a significant upgrade to your systems without replacing all of the really expensive stuff, buy one (or four) of these. Spec it in installs with confidence; it's no longer a choice between something good or something inexpensive. *Get both*.

But not the one I have...I'm snatching it and disappearing into the outboard gear protection program. CYA.

SPARS Tech

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to getting that show through QC.

Some key points to help get your mixes through QC: The traditional mechanical analog VU meter is best. Most mechanical VU meters have a 300-millisecond lag in response, thus the meter displays an average level over 300 milliseconds, which helps when leveling speech. It is common to observe a 10 dB or so difference between the loudest peak and the lowest valley of a given spoken sentence. This natural variance is within the bounds of normal conversation, but most likely outside the bounds of what the average network wants to broadcast. Instead of using a limiter to control the peaks (which can throw off your average), I've found it best to go through the show word by word and turn down the loud syllables and turn up the quiet ones—tedious, yes, but a good way to get consistent levels without over-processing dynamics.

I've also found that by mixing the majority of the dialog and voiceover sections of the show so that speech reaches about 80 percent of the scale, I'm able to have good Peak, VU and LM-100 values. I have an old mechanical VU meter with -20 VU at the bottom of the scale and +3 VU at the top. So for me, -2 VU is my target. That said, a half dozen hits up to 0 VU are OK (as long as it doesn't go over!) and not much speech below -10 VU. Many modern meters have "VU mode" which puts the display on a VU scale, but without the 300-millisecond average, they are not very useful for mixing for TV.

Communication is without a doubt the most useful tool of all. Nothing can replace a conversation with a QC technician or supervisor. Try to get to know these people. Call and ask questions, let them know how serious you are about submitting good work. At the end of the day, it's better to have them on your team.

Include your own QC document with the masters. Take account of the program's averages and peaks on both VU and dB scales. If you have an LM-100, include that value as well. Include a list (with time code) of problem areas that you were not able to improve. This can keep the QC tech from faulting you for something that can't be fixed. There is a difference between dB and VU! Make sure that you keep your scales clear. Hopefully, the QC tech you deal with will understand the difference...but no promises.

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Membership in SPARS, the Society of Professional Audio Recording Services, is open to studio owners, producers, engineers and anyone else involved in professional recording. For more information, contact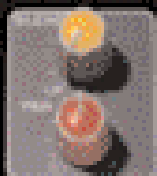 the organization at 800-771-7727, or visit www.spars.com.