

MIX

PROFESSIONAL AUDIO AND MUSIC PRODUCTION

Event Opal Monitors | Classic Tracks: Merle Haggard

WWW.MIXONLINE.COM | MAY 2009

SPECIAL REPORT

GETTING
NOTICED
GETTING
HEARD
GETTING
PAID

An inside look at how artists, producers and engineers are taking control of the new world order

- **MIX INTERVIEW:**
CHRIS ANDERSON
APPLIES 'THE LONG
TAIL' TO MUSIC
- **THE VALUE OF 'FREE'**
- **TAKING LIVE TO THE**
NEXT STEP
- **ARE YOU MAKING**
MONEY?

DUNCAN SHEIK
ONSTAGE



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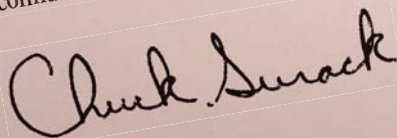
Thirty years ago, I founded Sweetwater based on one philosophy: to provide my friends and customers with the kind of service and support that I looked for — but never found — when I was making gear purchases for my own recording studio. As we celebrate our 30th anniversary as a company this year, I’m proud to say that we have stood by that commitment, and we will continue to stand by it.

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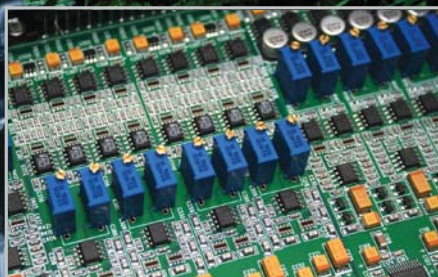
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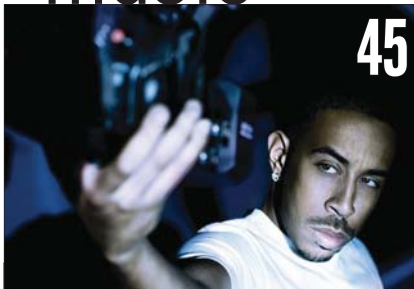
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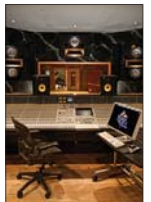
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Studio A at House of Blues Studios, Nashville, designed originally by Tom Hidley, houses an SSL 9000 console, custom Kinoshita monitoring and sightlines to die for. Photo: Mike Paragone. Inset: Ben Laing.



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Who Has the Answers?

Napster seems so long ago. Really. A dotcom boom has come and gone and come again. A computer-industry visionary snuck in and changed the music industry. CD sales tanked, but there was hope in videogames, and later *Guitar Hero* and *Rock Band*. Kids were sued for piracy, but the Boss could still count on Platinum sales. But then the credit crisis hit, and it became shockingly apparent that the recording industry was much more a part of the Big Picture than any of us have been willing to admit.

Professional audio has long been interdependent with the computer industry and the greater entertainment industry, but mainly from a production standpoint. As long as music sold, the recording chain was fed. Artists booked engineers and together they booked studios; studios bought equipment, vintage and bleeding edge; manufacturers built the equipment out of passion and for commerce; and ads were bought in magazines like *Mix*. When music sold, all was well.

But production is not the issue. Today it's all about distribution. Make no doubt about it: The future shape of every aspect of the recording industry will be tied to how media is distributed, and the comfortable recording-mastering-pressing-shipping pipeline is as old as the 45 in an iPod world.

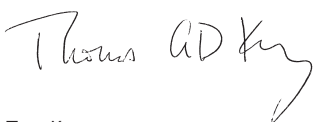
As the *Mix* editors gathered at the end of last year to discuss 2009, and this issue specifically, the overall economy was in shambles. So we asked ourselves, in this crazy mixed-up world where "free" is considered good business and a pickup on Facebook can do more than a \$2 million marketing campaign; where we're reading books called *Wikinomics* and *The Long Tail* to understand music; and where Twitter can change our sense of "must-have" and redefine hype, at least until the Next Big Thing: How does anybody get noticed? How does anybody get heard? How does anybody get paid?

There are no correct answers, of course. We raise the issues in the following pages, but what works in Dallas might not work in Des Moines. A producer's distribution tour experience in Boston might give a band an idea in Phoenix. It's scary, but it's wide open. And whether it's a free download promotion or a paying gig, a Webisode on spec or a song on *Call of Duty IV*, distribution is the key. And the Big Answer will come from the community, not a boardroom. Count on it.

.....

You don't need to look farther than your morning paper to know the media has been slammed by the downturn. And *Mix* is not immune. Sarah Jones, for the past 13 years a fixture in the Tuesday morning *Mix* editorial meeting and for the past year-and-a-half the editor, was let go in April as part of an overall company reorganization.

These kind of realities hit hard, as they have throughout our industry. Sarah was a fixture in the industry, and though she got her start here at *Mix* covering software and production tools, she grew and developed an overall sense of the industry, and of publishing, that led to her posting as editor. We at *Mix* will miss her keen eye, her solid judgment and her office-filling laugh. Best of luck, Sarah.



Tom Kenny
Editorial Director

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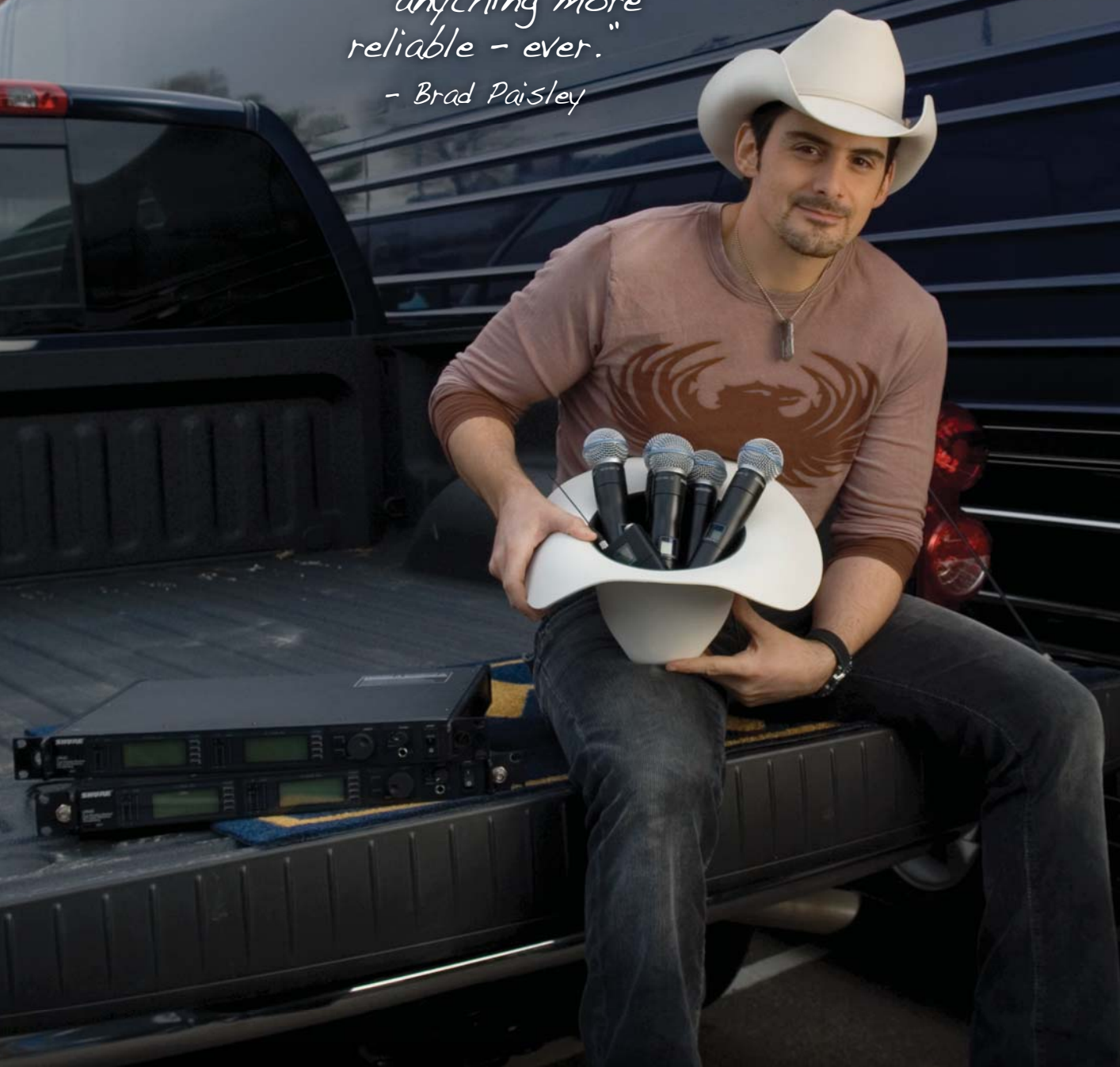
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Stormy Weather

A Mix reader tells us about his most memorable live gig:

Several years ago, my brother invited me to hear Gregg Allman play at one of the few concerts we have in our little county each year. At the southernmost tip of the county on Solomon's Island there is a plywood-covered band shell that backs up to the Chesapeake Bay, and for the audience they put out folding metal chairs on the parking lot in front. As the concert began, dark storm clouds started brewing over the bay, and before long there was lightning and thunder. The sky then opened up and dumped on us a torrential rain; the stagehands rushed to cover the equipment and especially wrap the front-of-house console as the rain started pummeling the crowd, but the band played on.

Before long, leaks started coming through the band shell, and in a short while the P.A. gave out. But the band rocked on, and I was in heaven. I was in the second row, maybe 15 feet from the band, and with no P.A. you could

hear Gregg Allman's organ, the drums, the horns and Derek Trucks' guitar with better than studio clarity and separation. (Their stage amps still worked.) They kept on rocking, even after Gregg lost power to his keyboards, until none of them had power anymore. It was the best concert I had ever attended, and that was the day I became a hardcore fan of Derek's guitar playing.

Peter Wharton

Stags Cliff Studios

Chesapeake Beach, Md.



I believe that [in] the shorter amount of time that people have now, they will understand the importance of switching over and prepare properly. Those people who haven't switched over by now are very fortunate to be given this window of time.

Erick Lindberg

I think the FCC made a mistake in postponing the changeover to digital television. People saw and heard advertisements on TV and the radio for months preparing them for the switch. Now by postponing it, the FCC is allowing people who ignored the alerts for the first changeover to continue to put it off until a later date. People can't feel the full effect of the change until the change is complete.

The FCC should have gone on with the change according to plan, and if people didn't go through the right preparations, then that's their problem. According to an FCC news release, 421 television stations didn't terminate their analog stations until midnight on Tuesday, February 17. That Tuesday, 28,315 calls were made to the FCC consumer hotline in regards to confusion about the transition. People were unaware of how to reset their televisions or when they should do so. It's obvious that people took the subject too lightly and failed to adhere to the warnings.

The change to digital shouldn't have been postponed because the people who ignored the issue the first time are being let off easily and will do the same for the second deadline.

Marc Coppola III

February Consumer Changeover

We asked readers to tell us whether the FCC's postponement of the wireless band changeover from February to June was a positive decision, or whether it simply added to consumers' confusion.

[The FCC's decision] simply added [to the] confusion; the date has been set in place for years. I remember buying a CRT TV back in 2005 and seeing a sticker on it about February 17, 2009—and that wasn't even the first I'd heard about it. I think if people did not know about it by that date, then they must not care about TV and therefore would not be affected by it. Also, the fact that a lot of stations still turned off their analog broadcast towers on February 17 just added more confusion. Even my 80-plus-year-old grandparents knew about the change way before it happened.

I guess one idea is that some

people cannot afford the converter boxes, but I don't see how an extra few months will help that situation.

Chris K.

It was a bad decision that serves no meaningful purpose other than to appease stupid people with their heads in the sand. An incredible amount of money was spent in the last two years to educate people on what was going to happen on February 17, but the general public was still confused and delaying the date did nothing but cost broadcasters more money spent on electricity to power their old analog transmitters.

Les Rupp

In response to our question about the FCC's postponement, Marc Hunt, who teaches video and sound production to high school students at the Harkness Career and Technical Center in Cheektowaga, N.Y., asked his junior-class students to write about their reactions. Here are

two of his students' letters:

I think it was a good idea to extend the deadline. It allows companies and people a little extra time to prepare.

The day after the change was supposed to take place, the FCC received 28,315 calls on its consumer hotline. According to the FCC, 421 nationwide television stations didn't terminate their analog broadcasting until midnight of February 14, 2009. There was a lot of confusion about this. A lot of people were unprepared [due to] lack of knowledge, not enough money or procrastination. In giving more time to people, I think they will understand the importance of getting prepared.



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Memphis Meets Music City at House of Blues

Let's start with the news. East Iris Studios is now House of Blues Studios, Nashville, joining in name its sister facilities in Los Angeles and Memphis. There's been no major facelift, no change in the Tom Hidley design or the artwork on the walls. The vibe—which has attracted the likes of 3 Doors Down, Faith Hill, Yusuf Islam and countless others over the past 11 years—is intact. There's just about to be a lot more of it.

In this age of branding, community building and viral marketing, you couldn't have a more recognizable name in the greater music industry than House of Blues. Studio owner Gary Belz knows this; he is one of the founders of the worldwide entertainment/venue company and has run studios under the licensed name since the early 1990s. Though he's owned facilities in Nashville for nearly 15 years, and operated them under the larger HOB Studios umbrella, Belz has never felt the pull to add the moniker. Now, the Memphis native says, the time feels right, and he's going to bring a little bit of the Delta with him.

"We in Memphis have always had a little bit of jealousy toward Nashville," he says with a chuckle. "It's only 200 miles away but a completely different world. Billy Gibbons likes to say that every now and then a cloud comes over Memphis and sprinkles this magical rain and we change music, and then it moves on. It happened with Sun, with Stax. And we tried it with House of Blues Records at one time. But Nashville is the center. We lost Elvis to Nashville, Carl Perkins, Johnny Cash. I've done business here for a long time, and I've always enjoyed Music Row and my relationships here with people like Tony Brown and Norbert Putnam. I guess you could say I'm following a long trail of Memphians."

Belz is one of the truly unique characters in an industry that is filled with characters. He is a partner with his long time friend Isaac Tigrett, who is co-founder of the Hard Rock and one of the founders of the House of Blues. He and Isaac continue to build hospitals and water systems through the Sri Sathya Sai Central Trust for the poor in India. He is a businessman with interests in food, hotels and entertainment, and he has devoted much of his life to a deeper understanding of our true role in this world through his longtime relationship with a spiritual adviser. He knows to



PHOTO: MIKE PARAGONE

L to R : Michael Rhodes (session bass player), Gary Belz (owner, House of Blues Studios), Kenny Greenburg (session guitar player), Darrell Brown (producer/songwriter)

the line item the studio equipment package he might broker, and he is a member of the Clinton Global Initiative. He thinks worldwide, but he seems so local, equally at home at a water summit or behind the bench as his beloved Memphis Tigers lost in the Sweet 16. He moved to Encino, near Los Angeles, in 1990, but he hasn't lost his Southern gentleman charm.

"I'm really just a trustee of these businesses I'm in," Belz says. "When we renovated the Peabody Hotel in Memphis, I considered myself the trustee of George Peabody. And it's the same in the studios. I don't sit down and engineer. I'm more comfortable on the hospitality side, and I've always just wanted to provide the best rooms, with the right vibe, for people to make music in."

Belz purchased East Iris from Chuck and Randy Allen in 1998, but it's not the first time he's toyed with the idea of establishing an HOB Studios in Nashville. He and partner Allen Sides bought a church on the Row in 1994 but settled on the name Ocean Way Nashville instead. It would later be sold to Belmont University.

The Allens built East Iris in 1997, and Belz sold them the SSL 9000J that now sits in the Hidley-designed Studio A, pictured on this month's cover. Belz in fact sold them much of the gear the studio is known for and bought the whole place soon after. While A is a true A room, the first moves to expand East Iris really began around

2002 with the remodel of Studio B.

"Studio B is where I got my start," says studio manager Mike Paragone, who joined East Iris in January 2002 out of MTSU and was running the place by the end of the year. "We expanded the room by about 400 square feet for the 4000 E Series, and we brought in Michael Cronin to do a proper acoustic treatment. I'm pretty proud of this room because of its success and the way it sounds." B was the site of a recent Golden Globe-nominated Trina Shoemaker mix of John Travolta and Miley Cyrus for the recently released Disney movie *Bolt*. It's a noted favorite spot for Shoemaker and producer/engineer David Leonard.

The Studio B remodel was soon followed by the addition of a house next door, now home to rooms for Mitch Dane and Vance Powell. The buildout continues, meanwhile, on a house across the street that will become Studio C, a Pro Tools production room with two iso booths that is expected to open this month. But the big move is coming in June/July of this year, when the Berry Hill neighborhood will be shut down for the oversized trucks to roll up and drop in Studio D from House of Blues Memphis—lock, stock and barrel—on the newly poured foundation right behind Studio C across the street.

"I'm really doing it," Belz says. "We hired this guy, JC, who does this kind of thing all the time. We

continued on page 72

BEYOND RARE.

Dan Scalpone
Senior Account Manager
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Johnny K
Grammy-nominated Producer
Staind, Disturbed, 3 Doors Down,
Plain White T's, Black Tide

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EXCLUSIVE

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compiled by Sarah Benzuly

Mix Nashville Returns!



They don't call it Music City for nothing. After a successful inaugural year in '08, we're gearing up for another great event on May 19 and 20, 2009. Mix Nashville includes two jam-packed days of expert panels, master classes, hands-on product demos and artist performances at Soundcheck Nashville—two days of studio, live, songwriting, networking, education and performance! Panelists include Chuck Ainlay, Csaba Pefocz, Bill VornDick, Steve Bishir, Fred Paragano, John Spencer and many more. Visit mixonline.com/ms/nashville for programming and panelist details.

The Move to Music City

JamSync's documentary short *I Came to Nashville* features interviews with musicians who traveled to Nashville to jump-start their careers, including Manchester, England-born songwriter Geoff Thurman and music group Stone Crossing. According to director/editor K.K. Proffitt, "We wanted to show artists in Nashville who come here seeking their fortune in the music business. Many people realize that there's much more to Nashville than country music,



Geoff Thurman tells us his story.

but the mainstream media often ignores this." The documentary was recorded to Tascam HD-P2 and Zoom H4 recorders. "At one point," Proffitt recalls, "the batteries on one

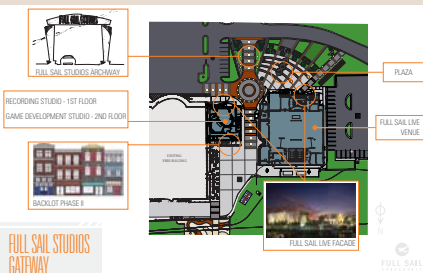
of our Lectrosonics [UCR411A digital hybrid systems] failed so we had to use room audio from the AKG [C 24]. I wasn't happy about it because you can hear a lot of room ambience, but you can't do 'another take' in a documentary."

Expanding Education



Full Sail University (Winter Park, Fla.; with help from MRI Architectural Group) has undertaken a 2.2-acre landmark project called Full Sail Studios Gateway, including a multipurpose/live-performance venue, two-story studio complex, outdoor plaza and expansion of the film studio Backlot. The Full Sail Live Venue is a 22,000-square-foot, acoustically engineered facility with seating for 500 people featuring a movable/demountable stage and high-end A/V equipment. The building that houses the game-production and recording studios is a two-story, 10,600-square-foot space

where hallways with oversized windows allow guests to observe the recording process going on inside the studios and acoustic isolation areas. The expected completion date is spring 2010.



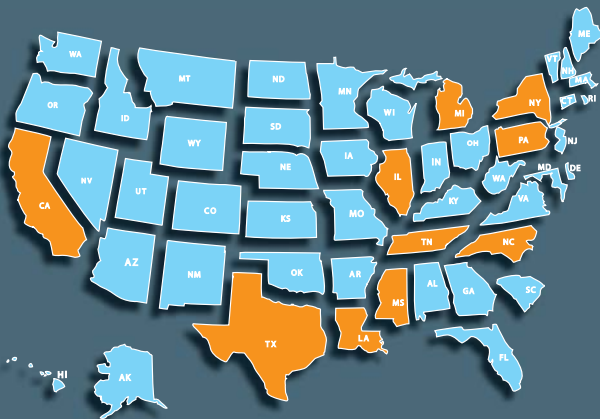
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"Audio is the next puzzle piece for us in providing cool, affordable multimedia to creative producers, so you can get images, video, and music or sound effects in one trusted place from a single account."

—Kelly Thompson, COO of iStockphoto, on launching iStockaudio

TOP 10 STATES THAT PRODUCE/SUPPORT INDIE MUSIC

- #1 Texas
- #2 California
- #3 Tennessee
- #4 New York
- #5 Illinois
- #6 Michigan
- #7 Mississippi
- #8 Louisiana
- #9 North Carolina
- #10 Pennsylvania



—Results generated from a five-year music-tracking process tabulated by Roots Music Report, February 15, 2009

Ian MacGregor
Infrasonic Sound
recording/electrical
engineer

Main Responsibilities: engineering/producing artists that I bring into the studio, as well as assisting Infrasonic's co-owners Pete Lyman and Jeff Ehrenberg with their sessions. I also design pro audio equipment, mainly for Shadow Hills Industries and Standard Audio.

Previous Lives:

- 2002-2007, Orange Whip Recording engineer
- 2000-2002, Millennium Media test and assembly tech

My favorite recording moment was...

watching Jason Livermore mix an EP I produced/engineered for L.A. band Dead Country at the Blasting Room in Ft. Collins, Colo.

I knew I was in the right industry when...

I realized I could use my experience in electronics to further my interest and progress in being a recording engineer.

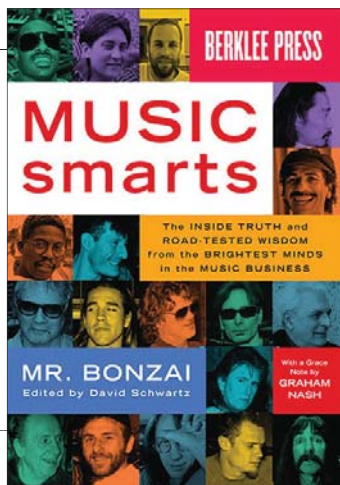
Currently in my iPod: *Ruiner* by A Wilhelm Scream and *Ga Ga Ga Ga Ga* by Spoon.

When I'm not in the office, you can find me... at Infrasonic Sound engineering or roaming around L.A. looking for tacos.



Bookshelf

Music Smarts: The Inside Truth and Road-Tested Wisdom From the Brightest Minds in the Music Business features the music world experiences of such heavy-hitters as George Martin, Tom Petty, Phil Ramone, Brian Wilson, k.d. lang, Carlos Santana and many others. Designed as an illustrated pocket guide, Mr. Bonzai's latest book is now available from Berklee Press at www.berkleepress.com.



Industry News

Pro Media/UltraSound (Hercules, CA) named **Greg Horn** to the position of director of engineering...**Greg Laube** fills the newly created director of business development role at **Margarita Mix** (Santa Monica, CA)...**Wohler** (Hayward, CA) news: **Jeff McNall**, manager of national sales and market development, and **AV Group**, sole Australian distributor...New sales director for the Asia Pacific region for **Fair-**

light (Sydney) is **Lukas Bower**...**Shure** (Niles, IL) hired **Fred Sicko** as sales manager for the company's Europe, Middle East and Africa business unit, and added **Vladimir Arezina** to its global legal services division...The **Harman Pro Asia** (Kuala Lumpur) office added **Eric Goh** (regional sales director for South Asia), **Kit Roche** (office manager) and **Raymond Tee** (application engineer)...Distribution deals: **Char-**

terOak (Enfield, CT) brought on **Ansata Computer Systems Pvt. Ltd.** as exclusive dealer in India; **Fault Line** (Northern California and Hawaii) and **Mac West Group** (Southern California and Southern Nevada) join **Aviom's** (West Chester, PA) distribution group; and **Reflex Marketing** (Hempstead, NY) will handle sales for **SoundTube** (Park City, UT) for New York Metro and New Jersey. III



SESSIONS

Planet10 Studios—Services Set Chicagoland Facility Apart



Planet10 partners (from left) Vince Consolo, VP marketing; Jim Johnson, president and chief engineer; and Frank Lucas, VP sales

As we worked on this special issue of *Mix*, it became increasingly clear that audio businesses that will get noticed, heard and paid today are those that offer value-added services to help artists navigate the ever-changing music business model. Jim Johnson, one of three partners in Planet10 Studios (Palatine, Ill.), knows that—even

beyond the recording/production facilities and services he provides in his Carl Yanchar-designed studio—his clients need an advocate.

“My partners, Frank Lucas and Vince Consolo, and I have been playing a long time and we’ve made a lot of connections,” Johnson says. “One of the main things we do with our clientele is help them after the fact—once the recording is done. We do everything we can to get them shows and help them network with promoters and management and booking agents and other bands.”

Johnson moved to the Chicago area from L.A. several years ago because he enjoyed the Second City’s focus on quality playing. The studio business that serves as Johnson and his part-

ners’ home base is situated in the lower level of a 10-story office building. The 2,800-square-foot space includes a MIDI recording/pre-production suite in addition to a main recording studio that includes a 1,600-square-foot control room and a live room with two iso booths. “When I moved here from L.A., this was one of the first studios I worked in,” Johnson recalls. “It was called Studio 53 back then and there was an SSL console and two 24-track tape machines.” In its current incarnation, Planet10 offers a Neve 8108 board, Steinberg Nuendo Version 4.2, and B&W, Dynaudio and Genelec monitors, among others. (A complete gear list is at www.p10studios.com.)

However, it’s the extra help Johnson and company give their clients that makes the studio a unique bargain for local bands. “We want to help further their careers. Most studios just take your money, and they don’t care what happens after that, but we try to

get them the best recording possible and then try to help them get it out there into people’s hands.”

That help includes managing some of the bands he records, and arranging showcases and opening gigs. He notes the near-success story of former clients Sleeping Shelby, whom he recorded before helping them build their fan base and grab attention by appearing in, and winning, the local Bandemonium battle of the bands. Sleeping Shelby also appeared at regional indie music convention Mobfest, and Johnson entered them in a contest to open for a Bon Jovi concert at the United Center. Winning that contest, Sleeping Shelby performed (for free) in front of an arena full of Bon Jovi fans. Johnson was disappointed when the band “imploded,” but he remains committed to going the extra mile to stimulate his clients’ careers and create great relationships with local bands in the bargain.

—Barbara Schultz

project studio Family Caverns



Lillian Berlin of Living Things in the Berlin Family Caverns studio

Living Things is a hard-driving but hook-heavy rock quartet of three oddly named brothers—Lillian (lead vocals, guitar), Eve (bass) and Bosh (drums) Berlin—and their guitarist friend Cory Becker. Lyricist Lillian Berlin writes a lot of overtly political and socially conscious material, but underneath that veneer they’re a solid band with echoes of everyone from the Stones to T. Rex to Iggy Pop in their sound. They’ve put out two albums: The first, *Ahead of the Lions*, was recorded by Steve Albini; their latest, *Habeas Corpus*, was cut at Hansa Studios in Berlin, Germany (ground zero for classic David Bowie and Iggy records), with producer Michael Ilbert (who mixed the first disc).

Living Things also have their own studio, nicknamed the Berlin Family Caverns, in their ancestral home in a woodsy, rural area outside of St. Louis. The control room—which is equipped with a Quad 8 Ventura console, and Neve BCM 10 and Neve Melbourne sidecars chained together; KRK and Yamaha monitors; and MCI 8, 16 and 24-track recorders—is in the basement of the house; tracking takes place in various rooms upstairs that are tied in by audio and video to the basement. The band records its demos there and even did a

DeFord Scores Indie Thriller



Randy DeFord of Oak Road MultiMedia

Filmmaker/musician Randy DeFord of Oak Road MultiMedia (Monticello, Ind.) has been in the studio scoring the latest independent film from 25 North Filmwurks, *Goss Acres*. DeFord composed an opening theme that is reminiscent of 1960s horror movies for the film, which he says is a crime drama/thriller.

DeFord uses a Dell 4600 Windows-based workstation running Power Tracks Pro 12.0 MIDI sequencing. He generated all of the sounds for the theme using vintage Roland GS64 and E-mu Proteus 1 sound modules. Final mixes come from a Mackie Onyx 1640 analog mixer and a Peavey Addverb III for reverbs. He monitors via Alesis Monitor 2s.

"The [opening] song combines classical guitar with strings and punctuations with harp-sichord, timpani and low Taiko drum patches," DeFord says. "The song modulates about mid-stream and brings in standard drum kits to keep the pace, and then adds high-octave strings to reinforce the low, melodic orchestration."

DeFord says that to create the right mood,

he needed a soprano siren-quality voice for melody tracking with the strings; this was provided by singer Julie Powers. "A dual vocal was tracked for the introductory melody, and then a high soprano part was used after the modulation to get the siren qualities needed," he says. "One of the trademarks of the '60s-type horror films was their use of high female voice. *Star Trek* was another theme that utilized a high soprano voice that's become a trademark for that original series. The qualities of human voice could not be tracked with synthesis or sampling. I had to have that human element to emulate that era, and Julie created that."

Track Sheet

Bryce Avary of the Rocket Summer finished tracking his second full-length LP for Island/Def Jam at Ocean Studios (Burbank, CA). Avary and CJ Eiriksson produced the

album, and Ocean staffer Albert Mata assisted...Rourketown Studios (Northridge, CA) has taken delivery of a custom Sterling Modular console installed by Vintage King. The hybrid console features both a D-Command Control 24 and a discrete Tonelux console...India.Arie recorded and did a video shoot for Walmart Soundcheck in Studio A of Avatar Studios (NYC) with producer Charles Gant, engineer Anthony Ruotolo, and assistants Justin Gerrish and Fernando Lodeiro. In Avatar Studio B, Vampire Weekend self-produced tracks, working with engineer Shane Stonebeck and Gerrish assisting...Engineer Oscar



Engineer Oscar Ramirez in Christina Aguilera's personal studio

Ramirez has been working with Christina Aguilera, writing and recording material in the artist's private studio (Beverly Hills, CA). The facility is based around an SSL AWS 900+ board, and SSL reports that eight channels of XLogic mic amps and dynamics modules were recently added to augment the 24 channels available on the console.

Send "Sessions" news to bschultz@mixonline.com.



The Rocket Summer, front: Jordan Lott. Back, L-R: Bryce Avary, Brian Dong, CJ Eiriksson, Greg Ruoff, Albert Mata.

by Blair Jackson

full song on the new album at home—the catchy "Shake Your Shimmy."

Where did they get their recording knowledge? "I learned everything I know from our first record with Steve Albini," Lillian Berlin says. "We had made some demos before the first album, but we didn't really know what we were doing. After we got our deal, we went to work with Steve and spent about six weeks with him at his place and it was like going to recording school. Then, we had a little money from touring and Steve suggested we buy some stuff, so we bought a couple of tape machines from him, and when we got home we set it all up and started recording on our own. He was a great teacher!"

The group began recording *Habeas Corpus* at home, but they were dissatisfied with the results and eagerly moved to producer Ilbert's Berlin base,

where they stayed for more than eight months. "It was actually cheaper there than here," Lillian Berlin says. "But it also totally affected the writing. We basically scrapped the songs we brought over there and wrote new, better ones."

The members like to record live, together, which poses an interesting problem in their multifloor home studio when they're engineering themselves. Who runs the board? "That's the gymnastics of it," Lillian Berlin says with a laugh. "We roll the machines, one of us jets upstairs and there's always five minutes of blank tape before we play a note!" And that hasn't encouraged them to go tapeless? "Funny you should mention that," Lillian Berlin replies. "We just got a Pro Tools HD setup recently and discovered that, yeah, it's a lot easier and cheaper to do that!"

Other favorite pieces of gear in the Living



Things' studio includes Neumann U47 and 67, Brauner VM-1 and an assortment of RCA ribbon mics, and Neve 1073 mic pre's. "It's a comfortable place to work," Lillian Berlin says. "We can play as loud and long as we want, and nobody cares." III

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- "Mixing - The Best of Both Worlds" by mix engineer Fab Dupont (J. Lo, Queen Latifah, etc.)

Saturday, June 27

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GETTING NOTICED

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Six years ago, in *Mix*'s May 2003 issue, our cover asked the question, "What Can Save the Music Industry?" There was much fretting and consternation about peer-to-peer downloading, the precipitous collapse of the major record labels, the inferior sound of MP3, the near-evaporation of the great middle market in recording studios and the general malaise that seemed to be seeping into every corner of the business like some sinister gas released from a super-villain's high-tech arsenal. And that was five years before what has become the worst economic downturn since the Great Depression.

But a funny thing happened on the way to abject despair and sure ruination: A lot of people figured out ways to survive, cope and even thrive. The music industry changed—evolved, as it always has—and a lot of people learned how to confront and even embrace the new realities of the Internet/digital age. Sure, there were casualties along the way (with more to come) and plenty of collateral damage, but by working smarter and being more open to alternative business models—some of which seem to fly in the face of traditional ways of working and making money in the music industry—many have discovered ways to navigate through the rapids on their way to calmer waters.

There isn't much point in rehashing what went wrong, who's to blame, etc. We just need to understand that we're in a different world now. For better or worse, the days of seeking out the lucrative album deal, landing a big recording advance, taking your sweet time to make an album and then going on a long, possibly money-losing promotional tour at the label's expense are pretty much over. Do not be fooled (or seduced) by the enormous sums being paid by corporate giants like Live Nation and others to secure "360 deals" (albums, touring, merch, etc.) with the likes of Madonna, Jay-Z, U2 and others—those are out of reach for 99.9 percent of artists. For the rest, it's going to take creative thinking on the part of bands, managers, marketers, record labels and others to succeed in the new music economy.

Join us now as *Mix* takes a closer look at some of the strategies being employed in different strata of the rapidly changing music business. Barbara Schultz examines how the role of producers is changing to incorporate extra musical realms such as career development, promotion and other aspects once considered the domain of record companies. David Weiss looks at ways artists are squeezing more income and exposure out of live performances through downloads, Webcasts and broadcasts. Bud Scoppa uncovers some of the new secrets of "Getting Paid" in what is increasingly a world where "free" rules. And in this issue's "Mix Interview," I chat with *Wired*'s Chris Anderson, author of the nouveau economics best-seller *The Long Tail* and a fascinating February 2009 *Wired* cover story on the value of "free."—Blair Jackson

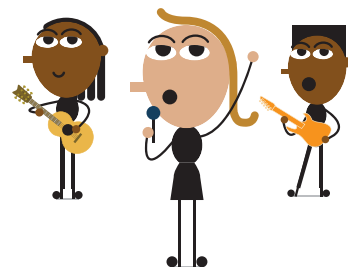


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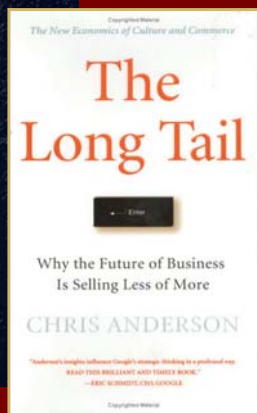
Chris Anderson

Wired Editor's Book *The Long Tail* Sheds Light on the Changing Music Business Model



Chris Anderson has become famous for coining the term “long tail” to describe a recent economic model in which, even though we live in a culture obsessed with and dominated by the blockbuster movies, music and books that account for around 80 percent of all sales in those categories, there is also big money to be made these days from the staggeringly large number of niche and “failed” products that come out every year. Yes, Walmart has become the largest seller of music and DVDs in the

world, but it carries only about 10,000 or fewer CD titles at any given time—just the hits, really, of today and yesterday—because the space they have available in their retail stores is so limited. But Anderson uses the example of such modern businesses as Amazon.com,



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eBay, Rhapsody and iTunes to show that when the storage of physical items is no longer an issue—for Amazon and eBay because they are aggregators; for Rhapsody and iTunes because their product is digital information—then almost everything, in theory, can potentially be made available for sale, and it turns out there is a market for just about everything, no matter how obscure. A given book or album or song at the long end of the “tail” (in Anderson’s model) might sell only a few copies a year, but when you multiply that by the huge

number of titles along the “tail,” it adds up to a significant number.

Anderson first outlined his hypothesis in an October 2004 article in *Wired*, and expanded upon it in his thought-provoking 2006 best-seller called *The Long Tail: Why the Future of Business Is Selling Less of More*. In the book, he offers a cogent and detailed analysis of how the tremendous global growth of the Internet and the concomitant rise in digitization of music, movies and books are changing economic assumptions and democratizing both information and commerce. We are no longer limited by the tyranny of the brick-and-mortar sellers, who make their buying choices based on whatever is most popular; now, with a few mouse-clicks, we can hunt down just about anything we want, read multiple, unfiltered opinions about whatever it is online and, in the case of downloads, have it immediately.

And then there is *free*. Between YouTube, MySpace, media Websites and untold numbers of peer-to-peer music “sharing” sites, there are hundreds of thousands of hours of music and videos available at no cost on the Internet. This has, of course, had a tremendous impact on *all* media—from the traditional music business to newspapers—and we are just beginning to understand the ramifications of this development. It has spelled doom for many businesses—but will it also be an opportunity for others, just as the “long tail” has been? Chris Anderson is on top of this trend, too: In 2008, he wrote a fascinating cover story for *Wired* titled “Free! Why \$0.00 is the Future of Business,” and that is also becoming a book due for release this summer.

In mid-March, we talked with Anderson about some of the issues in *The Long Tail* and *Free* and how they relate to the music business. I wish I could say he had encouraging words for music industry pros, but that is not the case.

If there continues to be a decline in income for both artists and studios because of file sharing and a general devaluation of recorded music—and making records becomes just a loss-leader for bands to make money performing live—what will be the incentive for crafting a great studio album?

That’s a rhetorical question, I presume. Obviously, if the studio album is viewed

as a promotional sampler, a taste of what you do musically, which will monetize or not monetize some other way, then obviously you want that taste to be as good as possible.

When I hear that argument, though, I think of Revolver or Sgt. Pepper: Here’s what The Beatles did after they stopped playing live. But in today’s climate, if they couldn’t then go out and play the material live, how would they make money off of it?

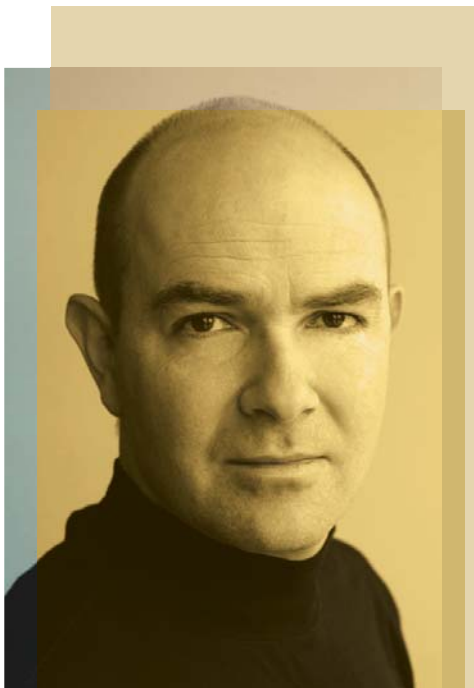
I see where you’re going. You know, I’m resistant to try to apply one-size-fits-all models to the music industry. I’m resistant to tell anyone in the music industry what to do. I can’t save the industry.

All I can really do is tell you what’s happening from an economic perspective. I was in bands for most of my 20s; I *get* this. Your magazine is writing for industry professionals, right? Well, industry professionals are probably like two percent of the people who are in music one way or another. Most people who are in the “music industry” are amateurs; they have day jobs. They do it for fun, for expression, for the sheer joy of it. ’Twas ever thus.

I’m a “long tail” guy. I don’t care about the head, and I know lots of people do, and as a consumer I like the head, but from an economic perspective I don’t focus on the head. What you’re talking about is mostly the head. There’s more to the industry than that. And I also think that most of the non-hit musicians were failed by the old models. They weren’t signed to labels, they weren’t distributed in the stores, they couldn’t afford the great studios, they weren’t making the epic albums in the first place. What the new system has going for it, of course, is it’s easier to do more of those things yourself so you’re no longer dependent, in quite the same way, on getting that deal and working in a big studio, and there’s certainly not the same stigma associated with being on an independent label—what does that even mean now?—or putting out and marketing an album yourself. So, yes, it’s different, but is it worse? Not for most musicians. They don’t need the old system.

What, if anything, do you take away from the Radiohead experiment of putting out an album and then letting people pay whatever they wanted for it?

I take away that it worked well for Radiohead. I understand that everybody wants to know what the silver bullet is; they want to know the secret formula that works for everybody. There is no secret formula that works for ev-



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—Chris Anderson

erybody. It's just like if you asked, "What kind of blog works well?" There is no formula. Every blogger has to figure out their own path, their own way. It's the same way for bands. It used to be possible that if you were fantastically lucky, you could just let the system handle all the business nonsense—get signed and let the pros do the work. That's just not the case anymore. Every band has to be their own business manager and create their own marketing and figure out what's right for them and their audience. I know it's tiresome. I know it's not what they signed up for, but it's the only way. So the Radiohead example would not work with everybody.

I hear that for your new book, Free, you want to allow people to read it for free online. What do you think that will do?

I don't know exactly. I think it will be a fun experiment. The aim is to maximize its reach. Free lowers the barrier of entry to zero so more people will sample the book one way or another. I believe in the physical book. The difference between books and music is that the physical book is, for many people, still the superior form; especially to read 80,000 or 100,000 or more words. For most people now, though,

the CD is the inferior form. They don't want it in that form; they want it on their iPod, so if they buy a CD, they have to rip it and then they have to transfer it and it's a hassle. Free works in books terrifically because the free digital form is a sampler for the paid physical form. Free works in music, as well, where the free digital form is marketing for the paid experiential form—the concert. But the downside is that people have to go on tour, which is a hassle. Not everybody can, not everybody wants to, etc. In a sense, free works better for books because every author can use it, whereas free music only really works for touring bands.

Concerts are where we have the least control, as an audience, especially when it comes to pricing. Bands are trying to make up for losses in album revenue by charging more for tickets. So you have all this free stuff on the Internet, which is great, but the concert experience is becoming increasingly available only to an elite.


Yeah, could be. That would be bad. The whole concert world is not there yet. We still haven't figured out ways to promote concerts properly and we haven't figured out ways to keep the monopolists out of it. It's disappointing how unreformed the concert business is. The StubHubs

of the world were a huge advance because that added at least some democracy to the process. Before, it wasn't price that determined if you could go, but could you take the day off work to stand in line or to speed-dial a number? So now with the StubHubs of the world, you can at least pay your way—money can talk. But as you say, it limits who can go to a show, which, of course, is a bad thing.

It seems completely corrupt to me—the way these online companies get tickets before the general public, and then they charge these exorbitant prices. To me, it feels worse than the days when a few scalpers would be outside a venue peddling high-priced tickets.

I can see that. It probably is corrupt. It's broken. But there are lots of industries that are broken right now. I have confidence that concerts—unlike a broken industry like the CD industry—are still an incredibly important part of the music industry and will probably only grow going forward. There's nothing wrong with the product; it's the industry around the product, and what will change that is for people's buying habits to change—to not pay the high prices, or for bands to figure out other ways to reach more of their fans.

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The way that songwriters have traditionally been paid is sort of an early version of micropayments, where you get two or three cents from your song being played on the radio. But now you have a world where there are zillions of Internet radio stations competing with terrestrial stations. Coupled with the trend toward not paying for music at all, this has left songwriters as particularly vulnerable.

Well, aren't Internet radio stations supposed to

be paying royalties?

Sure, but my understanding is that many of them don't, and it's tough for ASCAP and BMI to police that and regular and satellite radio.

So how can they enforce that they get royalties? I don't know. My sympathies are mixed on this one. I think the royalty rates are kind of too high for Internet radio. I wish artists could opt-in or opt-out. Everyone who puts music on MySpace for free has pretty much decided that they'd rather give the music away and reach an audience than be paid for it. I wish there was an easy way for them to enable Internet radio stations to distribute their music for free, as well.

This whole conversation has been based on the assumption that musicians want to be paid. Are you sure that's true? I know some musicians want to be paid. But I think there are a lot of musicians who would really just rather be heard. Being forced to pay for music, whether it's the Internet station or the consumer, interferes with being heard. I think people should have a choice—do you want to be paid or do you want to be heard? Because it is a choice.

Well, getting heard is a crapshoot in itself.

Absolutely, but your odds of being heard are improved if you lower the barriers to entry.

How can artists learn the ropes of where to go and how to get heard?

Again, it's like asking how can bloggers learn the ropes. Participate. See what other people do. The idea that you can be an "artist," isolated around your art—it's a lovely idea, but it just doesn't work anymore. Somebody in the band has to be the marketing lead. They have to build the presence, maintain the presence, they have to do community management, they have to do the e-mail list. You've got to have a business head. If you want to be a commercial band, then you are entrepreneurs and you're a startup company, and no one's going to do it for you; you've got to do it for yourself.

No Doubt did something fascinating the other day: If you go to one of their concerts, you can get their entire back catalog for free. This is a pretty good incentive to go to one of their concerts.

With so much free stuff out there, has the relative success of iTunes and Rhapsody surprised you?

They're not selling music as much as they're selling convenience. It's a time-money calculus. If you're young, you've got more time than money, so you're more likely to use peer-to-peer more. If you're older, you've got more money than time and you will pay for convenience. So to me, iTunes and Rhapsody are simple convenience: "I can't be bothered to track things down on peer-to-peer, and 99 cents here or there, or \$14.95 a month is just not meaningful to me compared to my time."

Is there anything that you said in The Long Tail that has been changed by circumstances of the market since?

Not really, but there were a lot of misunderstandings about *The Long Tail*, which I attempted to deflect in the book, but which were misunderstood anyway. The first was this notion that I was announcing the death of the blockbuster, which is not true. It's the death of the *monopoly* of the blockbuster. The second is sort of my own

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fault because of the subtitle we put on the book. Fundamentally, *The Long Tail* is about culture. It's true that you can build businesses around the long tail [concept], but most people won't. Most of the long tail's effect is just cultural diversity and variety, and I think everyone assumed they could make money on the long tail, which is not the case. Only the aggregators really make money in the long tail. You can build an audience in the long tail, you get more choice as a consumer in the long tail, but by and large the long tail is dominated by nonmonetary forces. I wrote it as business book, so it's my own fault if people read it entirely through a business lens. But it's a business book because culture books don't sell. [Laughs]

So is *Free a tangent from The Long Tail*?

Somewhat. The chain of logic goes like this: Infinite variety—which is what *The Long Tail* is about—was enabled by unlimited shelf space. Unlimited shelf space is only possible when shelf space costs nothing. Free shelf space created a cultural revolution that we're all enjoying today. What else can free do? So that's what the new book is.

How much of all this is generational?

A lot!

I'm a baby boomer. I've never downloaded something peer-to-peer. I still love CDs, but I've certainly benefited from the long tail of e-commerce. I've gotten incredible things from Amazon and other places I thought I'd never find.

It's not entirely generational, but it's heavily generational. Basically, everything I do divides readers into two camps. There's people over a certain age—I'm not sure what that age is; maybe 30—and they're like, "No way. This is complete bullshit." And there are people under 30 who say, "Duh! You wrote a book about *that*?" My kids can't believe what an idiot I am for writing a whole book on "free."

My teenagers haven't really explored peer-to-peer, which I personally think is to be admired, so they buy from iTunes or, actually, they prefer the sound quality of CDs, as do I. And they'd never listen to music on an iPhone. But then, when I think about this issue historically, we listened on shitty transistor radios, and commercial cassettes were pretty bad.

That's right. MP3s are worse quality than CDs—I guess. I can't really hear the difference, to be honest. I suppose that disqualifies me from talking about music because

I'm such a cretin. Unfortunately, I'm often listening to music on headphones on airplanes, so I'm not really the guy to be listening the difference between MP3 and WAV. [Laughs]

When you go around the country speaking, do you find that people are desperate for solutions to all this?

I think *some* people are desperate for solutions. I find the words "music industry" to be really limiting. When they say "music industry," what they really mean is record labels. And frankly I don't have an answer for the labels. Maybe they're going to go away. It happens. But when you look at the rest of the music industry—the artists themselves who are by and large able to get an audience—it's okay for them. The fans get extraordinary exposure to the diversity in new music. The touring, the licensing, the merchandise—in some ways it's never been better. For the labels it's never been worse. I don't really feel music needs to be fixed. I don't think there's anything wrong with it. I think there's something wrong with the very narrow slice of professional, classic distribution of music. III

Blair Jackson is the senior editor of Mix.



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Getting The Music Noticed

For Newer Artists, Producers Who Multitask Can Make All the Difference

By Barbara Schultz

It's 12:15 p.m. on March 27, 2009. Remember this so you won't blame *Mix* magazine if everything in this feature is old news by the time our May issue is printed (around April 30). The music business—all business—seems to be changing that fast. Within months, we all saw “social networking” transform from trendy buzz words to an essential promotional tool, along with viral marketing, “freemiums” and “tweeting.” In some ways, the entire music-business model has turned upside down. How many times have you read in *Mix*'s live sound section that an artist or band is “touring in support of a new release”? Yet that's not necessarily what's happening. More likely, an artist is giving away new songs online, or at least streaming them, to drive paying customers to their shows—the one source of revenue and in-the-moment musical joy that no one can really experience online, even if the concert is streamed live worldwide. You don't see Michael Jackson rolling in the money from a farewell double-album—yet.

For newer acts especially, the process of artists accumulating a fan base and promoting music to the point where the parties involved can quit their day jobs has changed completely. So it follows that for music producers—those musician/therapist/parent/business manager/advocate types who have often played for *points*—it's a new world. We talked to a handful of ultratalented producers in our industry who have addressed the morphing model by stepping up their involvement in their clients' careers, doing every job from artist development to putting together business plans to producing on spec. Not surprisingly, most of these guys were already wearing a lot of hats when file sharing started rocking the boat.



James McKinney

PHOTO: ALIEN IMPLANT

The Producers

Carmen Rizzo is a two-time Grammy nominee whose talents as an electronic musician, mixer, remixer, composer and/or producer have contributed to recordings by Seal, Coldplay, Alanis Morissette, Paul Oakenfold and many more. He also co-founded the world-beat/electronic-fusion group Niyaz and co-produced the debut release from the collaboration Lal Meri (Six Degrees).

Producer/engineer/mixer **Brandon Mason** began his career at Bearsville Studios, and along the way has worked on recordings by Norah Jones, Tim McGraw and Ricky Martin. Other clients include New Order, David Bowie, the Secret Machines, The Zutons and his latest focus, rock 'n' rollers Loomis & the Lust.

An R&B/urban-music producer/keyboardist/composer/arranger/vocalist, **James McKinney** has performed with luminaries such as Stevie Wonder, Rachell Ferrell and Kenny Lattimore, as well as discoveries like Eric Roberson and Annaya Gregory. He runs independent label New Moon Recordings, and co-produced/co-wrote the 2009 Grammy-nominated performance of “Loving You” (Music) by Wayna and Kokayi.

Nashville-based producer/guitarist/label exec **Paul Worley** is a two-time Grammy winner for his work with the Dixie Chicks. His many other production credits include Big & Rich, whom he signed as a new act to Warner Bros. in '02 when he was VP of A&R there, and smash Capitol artists Lady Antebellum.



Paul Worley

PHOTO: DANIEL DUBOIS

The Front End

Anybody can make a record now, but the business of getting music out there and making

sure listeners take notice and maybe pay for it is changed. How has this affected the way you approach new work?

Rizzo: It's important for someone like me to choose records carefully that I can truly get [more] work from. You want people to say, "You worked on that record? I love that record," and want to hire you. I can remember many years ago I mixed a Britney Spears song for a producer, and I thought, 'Shit, will I be getting calls for this kind of work?' Thank god the song was not on the album...

For so long, you got a call from a record company, you showed up, worked and they paid you in 60 days. It was almost like you're a plumber; that doesn't happen anymore. I made the conscious choice a long time ago to carve out my reputation and take chances on music I like rather than just work for hire. It has paid off. You have to go out and find the work. You want repeat customers.

Mason: For the most part the model of label A&R developing talent isn't really in place anymore, so the producer has to do the A&R part. You try to find an artist that's really comfortable on-stage with a sound that's well-established in their own minds—then you can get down to the heart of crafting and presenting the artist's vision in the studio. This begins to take shape during pre-production. It's important to make sure you're not searching for each song's basic concept when you get into the studio because you need to turn records around pretty quickly today.

Last summer, I came across a fantastic rock 'n' roll band from Santa Barbara [Calif.] called Loomis & the Lust. They found me through my manager, Joe D'Ambrosio. They wanted help to take their music to the next level. They sent me demos, and I shared advice about how they could develop their sound: try a different tempo here, rewrite the bridge to this song. Once we got to where it seemed like we had an album together, I went to Santa Barbara and stayed with them for a few weeks, to continue working on the songs. That all happened before we went into a recording studio.

McKinney: I'll always take a chance on artists I believe in. If I think the artist has a future, I will A&R the whole record, even as far as developing a business plan for the record, developing the artist, production, all the way through art direction for their release. A producer has to do everything in their power to make sure the release represents their best work.

Worley: Our business, as a business of only providing producing, engineering or owning a studio—any of those creative services—is dying. Now we have to be much more entrepreneurial in our thinking about whom we choose to work with. Look at them as an act, and say, "Is this the kind of act that is going to succeed and have a career, regardless of whether or not they are signed by a major label?" I'm



Carmen Rizzo

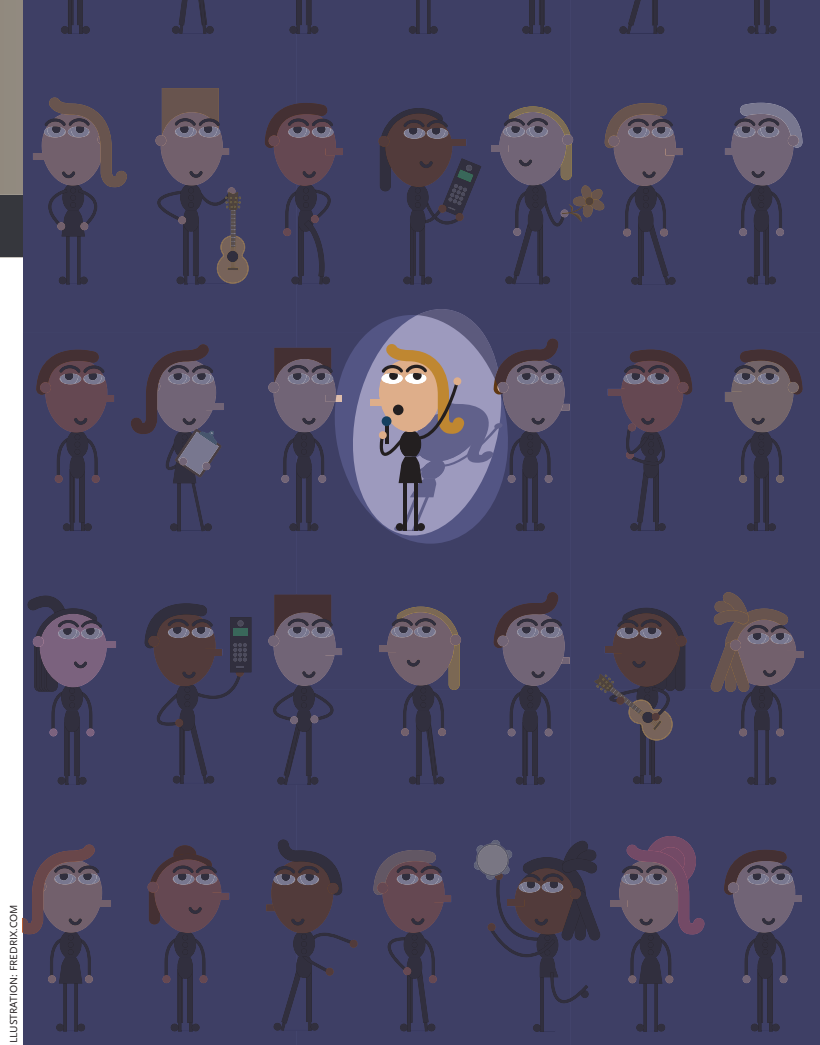


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doing a lot more work at discounted rates upfront, and even for free upfront, to be involved with people I think have a future.

The Value of Free

We're all trying to make use of promotion methods such as viral marketing—giving music away to create buzz and reaping the rewards of a larger fan base. Radiohead gave an album away, which generated so much interest that they made a great profit. Nine Inch Nails did a similar thing last year. What is the strategic value of "freemiums"?

Rizzo: I think it's important to give some music away, but I don't subscribe to the Radiohead idea of giving away a record for free. I believe in giving the fan something like a free download of a song. I personally—and I've been saying this for years—think the future is a subscription-based fan. Meaning, let's say you're Radiohead and you've sold countless records, and you have 1 million loyal fans, and imagine you don't need a record company. You just have a small office where you mail out your product and your fan pays, let's say, \$30 per year. And for that fee, they get a physical CD, a digital download of the album, a T-shirt, a discounted ticket when they come through your town, and a newsletter.

Mason: I think that as long



Brandon Mason

Getting the Music Noticed

as the music is self-released, we're using it as a marketing tool to get people to shows. Of course, we're selling CDs and merch at shows and online, but generally the music should be available for free to listen to, streaming on their MySpace page. [With Loomis & the Lust], we're using recorded material to promote the live shows. We would like to get the record to a label so that songs can be sold to a wider market, but "free" right now is a promotional tool and a marketing tool to generate interest and create fans, and to generate excitement that we can take to the record companies.

McKinney: I'm more in favor of streaming or sampling than giving away a record. I love the viral marketing effect that [social networking sites] have because you can make the music available without giving it away. Also, the whole fear of file sharing never really bothered me much. When I was growing up, we had tapes and we made tapes for friends and it wasn't a big deal. I don't think it's different now. It has an impact that people burn CDs, but to have music available for people to listen to and become fans is very important because what I want for my artists is real fans who will buy a whole album.

Worley: Early on, I believe in giving 100 per-

cent to start any business. If you're a young act, give your music away early on: Give it away online, give it to your fans. The data is showing that if you become popular, people will come back and pay for the music that you gave them *and more* if they feel that you have something to offer.

Here's an example: There was an artist—this is about two years ago—and he wasn't a straight-down-the-middle kind of artist, so the label was wrestling in their minds over how to promote him. His manager said, "Let's just go out on the road and stir something up."

So he went back to Athens [Ga.], where he's from, and the manager started stirring up interest and was able to go back to the label and say, "You need to come down and see this." So the label guys rode down to Georgia, went to see him at a club, and it was a dream come true: They saw cars and pickups and hundreds of kids milling around the parking lot, and they go in and it's packed. It was an incredible show.

So they went up to the manager afterward, and said, "How did you do this?" And the manager hemmed and hawed, and said, "Well, we kind of spread some music around and got people familiar with the music." And the label ex-

ecutives said, "What music?"

They had been giving away the label's music in that marketplace to get people excited to come to shows. At first the label executive was irritated. He said, "You're giving away my music? You have no right to do that!"

But it got everybody excited, and he's been a very successful act, with very successful records, and the largest sales market, percentage-wise, was that market where the music was given away.

Facebook Fans

Social networking sites were trendy when they were introduced; now, they're just part of the fabric of social interaction and music promotion. What's the best way to use these tools?

Rizzo: I have thousands of "friends" on MySpace. How many of them are really fans? I'm not sure. But you have no choice in servicing all social networks, as well as your Website. This is the only way you can market yourself for free. But you should also not fly the flag too high of your play counts or how big your fan list is, because you have to take it with a grain of salt.

But everyone uses this now. Even the majors and the heavy indies, with the few in-house staff they have, that's what they're doing: viral mar-



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~ John Leventhal

(Shawn Colvin, Rosanne Cash, Joan Osborne, Michelle Branch)



"The imaging and solidity of the low mids and bass is just astounding. The Recoils are an amazing product I never knew I needed. Now I can't live without them. Damn you!"

~ Nathaniel Kunkel

(James Taylor, John Mayer, Good Charlotte, Little Feat, Bon Jovi, Neil Diamond)

Recoil Stabilizer™

The Recoil Stabilizer is a unique monitor platform that decouples the loudspeaker and stabilizes the system with a special massive laser-cut plate. The results are astounding: Bottom end is tighter and more defined, transient response is improved, imaging more detailed. Mixing is easier and recordings translate better on other systems. They truly are worth their weight in gold!

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Razorblade™ quadratic diffuser

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Control bass, mids and highs with this 3-way wall-mount acoustic absorber. Effective from 40Hz.

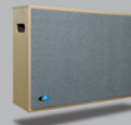
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Combination bass trap and broadband absorber with 3-way control over sound. Effective from 40Hz.

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G-Trap™ stackable absorber

Combination bass trap and gobo. Absorptive panels on both sides with internal rigid membrane. Effective from 75Hz.

Size: 24" x 36" x 10"



Stratus™ acoustic ceiling cloud

Controls reflections over listening area. (three panels shown)

Size: 24" x 48" x 2"

keting on the Web. I tell new artists it's not easy, but you can do the same thing yourself.

Mason: People don't turn on the radio to hear new music anymore; it's passed from person to person. That's the new radio. Somebody sends you a song with the e-mail heading, "Check this out." Or people spend hours clicking from one link to another, finding some new music to fall in love with. So social networking is an important way to generate interest.

McKinney: Not only do fans get to stream the music and listen to it as many times as they like, they can also see what the artist is doing—find out where they're playing, get more information, read their blog—and these are fan-building things, which are very valuable.

Worley: I think that as a new artist, you get involved in [social networking], and you do it actively, and you get good at it, and you talk to people who want to reach you on the Internet. You make yourself available. That's where you collect your fan base and your data. If people engage with you, try to give them something, whether you're just talking to them or giving them music. But get them involved in your culture, and if you can, get their phone number or their e-mail address. Then you've got something of value.

Live Rules

With artists giving more and more recorded music away and counting on revenue from a live performance, where's the money for producers today?

Rizzo: One point that needs to be made is that producer points are almost useless these days, in my opinion. Getting paid on the back end is often hard to collect. If you're the producer of, say, a Beyoncé record, then this doesn't really apply, but for 90 percent of producers out there, it's essential to get paid up front rather than get paid on the back end and hope it makes money.

Mason: When I decided to get into this industry, I wasn't interested in only being locked up in a studio with clients to make records. I wanted to be involved in developing artists from the ground up, and then continue to provide guidance and support for the project after production is finished. It's very rewarding on a creative level, and it means I have a financial stake in more aspects of their career.

McKinney: As a producer and a label owner, I have to make sure that the investment always fits the business and the budget of the record. I always look at going beyond just being the producer to being an investor and a middleman.

I have groups like Fertile Ground out of Baltimore, an independent group that has put out maybe six CDs in the past 10 years and has sold well over 100,000 CDs, a lot of them at live shows. Same thing with Eric Roberson. He's constantly on the road and keeps putting out a new record every year, and sells hundreds of thousands of records as an independent artist. So the record and live shows are not separate for me as an investor; they go hand in hand.

Worley: I'm not just a producer; artist development is what I do. I always intend to be involved in my artist's culture, not just their studio career. If I'm going to take on a client, I'm taking them from the ground floor up and giving them the benefit not just of my recording ability and my collective years of wisdom; I also want to be involved as a manager and as a publisher. I might not be into all these things for every artist I work with, but at least some of these things, so if I develop their career I have an opportunity to participate in the income and the career the artist is making. **III**

Have any of your projects benefited from the model of giving music away as a "freemium"? Send your stories to mixeditorial@mixonline.com.



"I have to say that I am very impressed; the difference I hear in the sound of my nearfields is pretty striking. They seem more 'in focus' and have more low frequency extension. Even the low mids are clearer. WOW!"

~ Roy Hendrickson

(Miles Davis, Pat Metheny, B.B. King, Cheap Trick)



"The Recoil Stabilizers are absolutely amazing! I've been raving about them to every producer, engineer, and friend that I know! They proved themselves as soon as I put them up! It's incredible how much difference they make!"

~ David Isaac

(Eric Clapton, Stevie Wonder, Madonna, Whitney Houston)



"In these days when the focus seems more on esthetics than performance, it's nice to see a product that excels at both. The Recoils are terrific! The bottom end on playback feels very solid. It's a pleasure mixing with them. Consider me a fan!"

~ George Seara

(Rihanna, Herbie Hancock, 50 Cent, Sting, Finger Eleven)



"With the Recoils I immediately noticed improvements in the low end clarity, to the point that I no longer needed a subwoofer. Incredibly, high frequency detail and image localization also improved."

~ Chuck Ainlay

(Mark Knopfler, Dire Straits, Vince Gill, Lyle Lovett, Sheryl Crow, Dixie Chicks)



"The Recoils work superbly! I feel like the bottom end is very true and clear, and that the mids are right where I expect them to be. They took my monitoring system up a significant notch."

~ Ryan Hewitt

(Red Hot Chili Peppers, Flogging Molly, Blink 182, Tom Petty, Robert Randolph)



"The Recoil Stabilizers are great! A huge difference from regular foam pads. They sound more stationary and connected. I'm quite happy with them."

~ Elliot Scheiner

(Steely Dan, Fleetwood Mac, Sting, The Eagles, Queen, REM, Faith Hill)

"worth their weight in gold."

~ Jon Thornton - Resolution magazine



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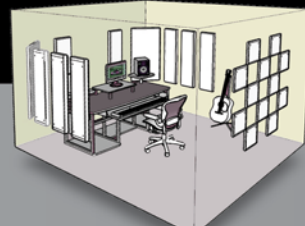
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Getting Paid

There Are More Outlets Than Ever for Intellectual Property, But Where's the Money?

By Bud Scoppa

So you're struggling to make a living doing something you're good at and enjoy, but it's like the Wild West out there, where most of the laws have yet to be written and it appears that *nobody* is in control. With the assumptions you made when you decided on a career in music as outdated as yesterday's papers, you need a new map to set you off in the right direction—to figure out where the money is. But that map doesn't exist.

The traditional music business model, which is based on the selling of physical product, may be irreparably broken, but at the same time music is *everywhere*: streams, downloads, ringtones, ringbacks, videogames, music games, video jukeboxes, video on demand, Webcasts, podcasts, widgets and more, as well as the traditional media of radio, TV, movies and—oh yeah—CDs.

In the sixth edition of their reference book, *Music, Money and Success*, attorneys (and brothers) Jeff and Todd Brabec devote 30 pages simply to laying out the various areas now in play in the constantly expanding digital realm. "In this new world," they write, "you have a combination of the old rates, concepts and laws applying in some cases, with other areas being subject to the negotiation of completely new rates based upon new business models, laws, negotiations, court decisions and developing industry practices."

Is your head spinning? Join the club. Not even the best and the brightest have figured it all out.

What haven't changed are the basic components: the song and the recording themselves. But how much revenue can they generate, and for whom? This is where it gets complicated. In new media, recordings—and the songs they contain—can be either downloaded or streamed, with separate licenses and royalty rates for each. Audio works fall under the category of mechanical rights, just as they do in the physical world, while streams, like radio or TV airplay, fall into the area of synchronization rights. Downloads and streams can be either audio-only or audio/visual. Mechanical only applies to audio works; once you put a visual behind a recording, it falls under the synchronization right. And when a copyrighted work is used as a ringtone, in a videogame or in some other nontraditional form, additional layers of complexity come into play.

"Everyone's wondering where the income is coming from and how do I survive?" says author Jeff Brabec. "You've gotta know how the business works to know where it's all coming from. You don't want to make a bad deal, that's for sure."

"There doesn't seem to be an incredibly high expectation on the part of a lot of bands about the whole 'get rich' thing anymore," says ASCAP's Tom DeSavia, a former A&R executive. "Now, it's, 'How do I make a living salary? How do I survive?'"

"A musician wanting to 'make it' is going to have to completely change their conception of what it means to 'make it' in 2009 versus 1995," artist Amanda Palmer asserted during a panel at SXSW. "Being a superstar is completely diluted nowadays... I'm spending a lot of time connecting with fans, and I don't feel as much of an artist as much as a promoter of Amanda Palmer. All of this instant connection has taken the place of making art. An idea that might have translated into a song before might now go into my blog instead."

"Looking at young artists, the ones that have vision and drive, and for whom the major-label deal is not the Holy Grail, are going to succeed," said Michael McDonald of Mick Management during the same panel. "If the definition of success is to make a living, and degrees of how comfortable a living, that needs to be the goal."

Useful Information

According to BMI new media guru Richard Conlon, TV is now the primary revenue generator on the performance-rights side, having overtaken radio. And while new media presently represents less than two percent of the pie, it's growing rapidly and generating revenues at a multiple of that percentage. Almost all of the usage is from streaming via subscription services like Rhapsody, MusicNet and Napster; ad-supported major portals like MSN, Yahoo! and AOL; social sites like Facebook and MySpace; and mobile services including cell phone radio, ringback tones and audio/visual. Breaking down A/V, about one quarter of all streams are music-intensive. All of these areas are growing.

"At BMI, I think we're very well positioned for a usage-based economy and a service economy," says Conlon. "We don't care about selling products or manufacturing discs. We care about monetizing *use*, and use is what's gonna happen, whether it's subscription or ad-supported or bundled services with ISPs."

Hybrids Get Good Mileage

The days of putting all your eggs in one basket are over, according to New York-based manager Joe D'Ambrosio. "In these demanding times, the lines have blurred and people have to do other things," he says. "Since I went on my own eight years ago

Everything But the Kitchen Sync

The good news for the rest of us is that nontraditional means of kick-starting and conducting careers—and potentially making money—are plentiful these days.

Says Todd Brabec, who recently left ASCAP after 37 years to devote his time to teaching and speaking, “Just consider all the new uses that have come up, like greeting cards, interactive dolls and toys, even musical door chimes. There are a lot of licensable situations out there.”

Jeff Brabec picks up the thread: “Novels use lyrics from songs and pay for that use. These are all publishing and songwriting areas ver-

sus the record label area. That’s why this article is important with respect to the song aspect because so many producers are songwriters.

“Videogames have obviously become a major source of income for writers, music publishers and record companies. The labels have a real asset in the master recordings. But the great thing about the publishing business is that we’re not tied to one particular master. Mechanicals have gone down, but other areas are increasing. So the music publishing and songwriting aspects are still hanging in there, and in some areas are actually going up.”

Sound to Picture

Referring to the oft-stated contention that “TV is the new radio,” Tom DeSavia notes that Sara Bareilles and Ingrid Michaelson are among the previously unknown artists who have broken big from having their songs used in prime-time series. “Until the last few years, the biggest request we got from bands we were courting was, ‘Will you showcase me?’ That was our carrot on the stick. Now it’s, ‘Will you do a show for music supervisors for me?’ or, ‘Will you showcase me at Sundance or Tribeca in front of filmmakers and music supervisors?’ With the contraction of A&R at the labels, music supervisors like Alex Patsavas, Gary Calamar and Lynn Grossman have become the new cool A&R people. They’re the audience bands want to get in front of, and that is a way to generate real income.”

“Nothing pleases me more than to see a new artist that I’ve discovered get some screen time,” Calamar says. “At the same time, the biggest priority is finding a piece of music that works for the scene and adds to the drama, humor, emotion, action in a significant way. I’m finding music all over the place. I keep my ears to the ground. I read a lot of music magazines, blogs, MySpace, iTunes. And KCRW, of course. [Calamar hosts *The Open Road*, airing Sundays from 9 p.m. to midnight on the NPR station, with archived shows streaming on KCRW.com.] I seem to be on everybody’s—and their brother’s—mailing list. Yesterday, I was walking down the street and a car stopped and the driver handed me a CD. I’m open to well-known or obscure artists. Obscure artists are, of course, generally easier to work with budget-wise, which is always a key factor.”

Calamar points to his use of Sia’s “Breathe Me” to play over the climactic moments of the *Six Feet Under* final episode as “the most dramatic case of turning someone’s career around” in his own experience. “Sia’s label was about to drop her and had decided not to release her album in America. I knew her from her work in Zero 7 and had been playing the track on my KCRW radio show.”

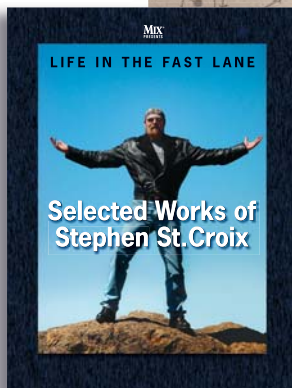
As for the remuneration: “There is a fee that is paid to the record label and the publisher to license the song,” Calamar points out. “Depending on their deal, some of that money will hopefully trickle down to the artist. Of course, the exposure will help bring out more people to their live performances, which is probably the most significant area where artists are getting paid these days.”

“At ASCAP,” DeSavia points out, “we can actually say how much money you’ll make if you

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Stephen St.Croix inspired, provoked and educated *Mix* magazine’s readers for 18 years in his one-of-a-kind column, “The Fast Lane.” As an inventor, musician and engineer, St.Croix offered his audience a wealth of knowledge and vision, as well as a Harley-riding rock-star attitude. Now, two years after his death, the editors of *Mix* have selected the best of St.Croix’s columns, presented with never-before-seen photos, notes and drawings from his personal files. This book takes “The Fast Lane” beyond the pages of *Mix* and lends new insight into the life and mind of Stephen St.Croix.



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Resources for Producers and Engineers

The Recording Academy Producers & Engineers Wing advocates for equitable compensation on behalf of recording professionals. In our back-page Q&A this month, Maureen Droney, senior director of the P&E Wing, discusses her organization's current projects, including research into new streams of revenue, development of compensation models, development of a recording metadata collection tool to facilitate proper crediting and payment, and sup-

port for the Performance Rights Act.

Droney also wrote a feature on the use of metadata and file management, key components in tracking and recovering payments owed to producers and engineers; read it at mixonline.com/studios/business/digital-track-sheet. For general information about the P&E wing, visit www.producersandengineers.com; for answers to specific questions, e-mail p&ewing@grammy.com.

have a song used in a series, if it's the theme song, if the show gets syndicated. That performance income is making up for the lack of mechanical royalties. ASCAP used to be seen as the bank and an afterthought; it's amazing to see how important we've become to the limited industry. It used to be an ancillary source of income; now, it's the primary source, except for touring, if you're lucky. It's a totally different world."

DeSavia notes that composer Michael Giacchino jumped from videogames to scoring

TV series like *Alias* and *Lost*, as well as movies like *The Incredibles*. Similarly, Shawn Clement's CV includes TV series *Buffy the Vampire Slayer*, several videogames and the upcoming feature-film *Quantum Quest*. "I'm a big fan of getting yourself out there, whether Facebook or Twitter or directories," Clement said in the March issue of *Mix*. "There is film, TV, videogames, Webisodes, cell phone content—endless opportunities for the working musician who is open to a lot of new things. Now there may not be a lot of money at first, but there wasn't money at the

used in an iPod Nano campaign, which resulted in a deal with Columbia Records.

"In the old days, no self-respecting band wanted to have a song used in a commercial," says DeSavia. "But then Led Zeppelin started shilling for Cadillac and it all became okay. And then, when U2 did the iPod commercial with 'Vertigo,' everyone saw what it could do for records. Here was a heritage band that all of a sudden had a big hit single. More recently, Wilco had multiple songs used in a VW campaign.

continued on page 72

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Beyond The Stage

By David Weiss

Live Streaming, Next-Day Downloads Mean More Revenue, More Pressure for Concert Sound Business

As the global economy speeds headlong to Doomsday, someone should get the memo to the live concert industry. Other indicators in the music business seem to be just down, down, down, but the latest statistics on concertgoers tell a different story.

When Live Nation, the world's largest producer of live events, reported its 2008 fourth-quarter earnings, the numbers were both surprising and encouraging: promotion of almost 7,000 events with more than 13,000,000 attendees. For the whole year, the total was more than 22,000 events with more than 52,000,000 ticketholders. Both the quarter and the year overall represented double-digit gains over 2007. With the likes of Madonna, Coldplay, the Jonas Brothers, Nickelback and AC/DC all on tour in 2009, live sound may stay on the healthy side.

One of the ways that Live Nation acts, and thousands of other artists performing live every day, create such impressive buzz and revenue stems is from integrating evolving technology platforms. Touring and merchandising can represent lucrative revenue streams by themselves, but more and more bands, labels and promoters realize that any show that's not captured on audio and/or video, and subsequently made available via the Web, broadcast or other means is a wasted opportunity to increase revenue and/or exposure.

A touring artist since the formation of his band Less Than Jake in 1992, drummer/Paper and Plastick record label founder Vinnie Fiorello has seen the expectations of live audiences evolve significantly. "Audiences are not only looking for the immediacy of being entertained, but because of advances in the Internet and the ability to cherry-pick the entertainment that they have, they're looking for something after the fact," he observes. "Not only are they going to see Less Than Jake at the [Baltimore venue] Ram's Head tonight, but they'll be looking on YouTube for live updates, live feeds and videos. It's a very interesting position to be in as a band because you not only have to be prepared to play live, but have what you play live immortalized for people to see after the fact.

"As bandwidth becomes faster, people are looking for video. When all you had was a 56k modem, all you could get was audio. Now that you have a fast enough connection to stream video easily without any hookups, 15 to 17-year-olds are looking for video. If they like *South Park*, *90210* and Less Than Jake, they want to be able to pull that up at the drop of a hat. There's a vast amount of entertainment out there from a few keystrokes. As a band, you have to keep up with that, provide it or be left behind."

Hank Neuberger, president of Springboard Productions Inc., takes this attitude on the road for artists such as Smashing Pumpkins, Prince, Lenny Kravitz, Dave Matthews Band and scores more. Specializing in digital media production for broadband, broadcast, mobile, IPTV and Blu-ray DVD, Neuberger's team is on hand to ensure that every desired means of distribution is covered once a gig's last note has sounded.

Says Neuberger, a Grammy®-winning producer, "Just like I was doing in the recording studio, now I'm working with video and audio in a live setting where the audience is. I'm just making sure that our mission extends the impact of the artist and doesn't get in the way of it on the path to these multiple formats.

"Every production is literally different, and what impacts the decisions we make and the communications we have with FOH and monitors are the deliverables, or the final windows of exhibition: Is it broadcast? Is it Webcast? Is it satellite radio? Is it downloadable video or audio only? Is it for movie theaters? There are so many options now, and they all require different solutions."

Neuberger and his team of video and recording engineers communicate closely with stage managers, and front-of-house and monitor engineers before deploying their technology to the concert site, which could include separate multitrack Digidesign Pro Tools recording systems either in Flypacks or on trucks, truck-based HD video production and a variety of hard drive- or disk-based storage solutions.

"It's all in the pre-production," he confirms. "If the pre-pro is good, if everybody is in touch and communicating, it makes



all the difference. The reason that's critical is that we're going to need to not only agree on real estate for camera positions, but also how we're going to capture audio, because, generally speaking, the FOH position is not ideal for capturing multitrack audio. The FOH's Number One priority is to give the best mix possible to the live audience in the room, so I generally opt for a separate mobile recording solution that does not get in the way of the live audience or distract anyone working on behalf of the artist from their mission. In a festival, we always take the live FOH 2-mix and have that on our desk as our primary backup. Sometimes there are effects that the traveling soundman knows that only exist on FOH. We rely on the FOH expertise at every show."

Once Neuberger knows who and what will be where at the gig, staying organized is critical. "At a festival like Coachella or Rothbury, we might shoot and record multiple stages on multiple days that can total as many as 60 or 70 different bands. Multiply that times the multitrack and a number of cameras—having your storage plan for prelabeling your tapes, DVDs, your Pro Tools hard drives and video hard drives is essential. Then knowing where they're going to go if there's an edit is key, as well. Typically, the more you can get done onsite when everyone is in the same place, working on the same project is the best, but, of course, there are parts that are going to happen after the show."

While Neuberger and his team travel from show to show to make gigs and festivals as download-ready as possible, there's also a new breed of club appearing that is built with after-show availability in mind. One such example is New York City's Le Poisson Rouge, which planned ahead for maximum-quality live recordings—often available the next day online—by enlisting recording studio designer John Storyk of Walters-Storyk Design

Group to shape the space.

"There's an awareness on the part of our public that concerts are recordable in very high quality, and they can often be made readily available," says David Handler, who co-founded the 800-capacity Le Poisson Rouge along with Justin Kantor and opened in 2008. "That was our priority in working with John because he's predominantly a studio designer. Likewise, our decision to have 5.1 surround was not only to accommodate film screenings, but contemporary music that is made that way."

Handler points to a series of Rickie Lee Jones concerts at Le Poisson Rouge as an example of the workflow. Her shows were recorded onsite, mixed and mastered immediately, and then made available for paid download the following day. Guests who had signed up and paid in advance received a file in their inbox the next morning. Le Poisson Rouge has also begun a relationship with the site www.amiestreet.com, an independent music download site for distributing live recordings of Le Poisson Rouge concerts.

"We're working on partnerships for live concerts, working artists and labels with whom we already have a relationship, and when our artist plays, it's available on Amie Street for download," Handler explains. "It does require quite a bit of interaction in terms of rights and license to record and make material available. The best relationships are ones where communication is good. We're coming to artists with this opportunity, and they are more often than not wholeheartedly into it."

Handler notes that the genres of acts in his club that are most receptive/proactive in the downloadable-recording department are indie and electronica acts, followed surprisingly closely by the next generation of classical artists that often play

at Le Poisson Rouge. "In a sort of Darwinian way, those who embrace it will reap the reward for it, and those who don't have to endure what comes with that.

"Human beings playing in front of you are a more and more valuable commodity as machines take over you in more ways. The idea of the live show is fascinating, and in the digital era where record companies have to reinvent themselves, live is leading the way in providing value to the listener."

Right on the frontlines of this crossfade between the live and recorded experience are engineers like Jason Marcucci, who is the chief engineer for New York City's Dubway Studios. Just as importantly, he's a frequent live sound engineer for Apple's in-store iTunes concert recordings, VH1 Soul Stage and Palladia (MTV's HD channel) broadcasts, as well as the person who's often responsible for the subsequent mixes.

Marcucci has observed that coincident with the growing importance of the live show broadcast, Webcast or download is many bands' reduced willingness to take chances with their sound or playing onstage. "Bands are increasingly sensitive of how the live performance comes off: I've found more bands trying to sound more like their record live than it used to be," he observes. "What I think has changed is that, after the fact, bands don't want to be seen as having any flaws in their performances. With a lot of modern rock bands, it's not just somebody at a Grateful Dead show capturing everything and feeling okay with it. They're screening the mix, making sure the vocals are in tune and that nobody screws up.

"I'm not sure if it's a good thing or a bad thing, but you find yourself really making it like



FOH engineer Philip Harvey stays in the moment during a live mix.

a record in the mix. You shouldn't be surprised that you have an A&R guy at the show really listening to what you're doing, and maybe later telling the band how you did. I'm usually instructed to listen to the record, and try to get close to that."

Can you say "increased pressure on the engineer"? Marcucci points out that this means he may be expected to—practically on the fly—deliver the same mix live (and/or replicate it later in the studio for scheduled release) on a set that may have taken weeks to mix in the studio. "The goal should be like I've been the sound guy for a year and know it really well," he says. "I usually get everything from talking to the band/management and listening to the record. The way to get ahead is to do your homework and know the way the band wants to sound. And what I'm finding mostly is that they want to sound loud, big, maybe a little more aggressive than they are, but with cues to the record all over the place."

Out of near-everyday necessity, Marcucci has learned to interface clearly with the video/multimedia team and be on top of their needs and terminology. "Sometimes I send out timecode and they lock to me, sometimes I've had to slave my rig to black burst [a blank video signal also known as "video sync" or "house sync"] or video reference, and sometimes I send timecode out to just a slate. I've definitely had to know how to do all three scenarios.

"The essential things to know for video are, one, make sure you're on the correct sample frequency and timecode frame rate, which has been discussed prior to setup with the video personnel. Usually for video it's 48 kHz, but confirm that just in case they're working with a weird camera. I've heard horror stories where people are not on the same sample frequency so the digital video is not matching with the audio. You can expect big problems for yourself if that happens.

"And, two, know how to slave your recorder to the recording video reference. If you can slave your recorder to sync to that, or do the opposite and know how to send it on, you'll be okay. With your recorder—Pro Tools, Logic, RADAR—the manual should talk about sync issues. And try it out before the day of the gig!"

For plenty of other live sound professionals, however, the standard situation remains one where spontaneity is still paramount and tech-



Hank Neuberger (left) and TD Russ Rodriguez at Coachella video control

nical demands are almost wholly focused on the live show alone. Philip J. Harvey has found that touring with the likes of the White Stripes, The Raconteurs, Modest Mouse and many others remains relatively uncomplicated. "Before I did any studio recording, my mantra was, 'I love live because there's no Rewind button,'" he says from a North Carolina road gig with Modest Mouse. "There's the moment: Here it comes. There it goes! It was either the best, the worst or something in between. No do-overs. There's magic in the live moment, and that's exactly why people go to shows."

Still, Harvey has a vision for how to be as flexible as possible for his clients, traveling with a MacBook Pro, Logic and a Metric Halo 2882 I/O unit, plus a FireWire hard drive. "I'm trying to have multitrack recording as part of my package for a band or a tour," he says. "I've set myself up to say, 'I can record and mix FOH.' So the obvious question is, 'Can you mix what you just recorded?' Having enough time to do that on tour is the rough part. Most of the time, I mix in the hotel room on a set of Meyer HD-1s that travel with me. I get a foundation of a mix together on headphones, then check them on HD1s in the hotel room and in the venues.

"I think there will be a growing demand [for concert audio recordings]. Even if the quality isn't as great, that magical night that a fan spent in front of their favorite band—they want to relive that experience. We're going to see more and more fans with expectations of next-day downloads."

Even for people who seem capable of covering every technological front, however, there's no one formula for staying ahead of the constantly evolving systems for recording and distributing live music. "Things change constantly—there are people doing things on the set that you want to know about," Springboard's Neuberger states simply. "You have to learn something new every day." III

David Weiss is Mix's New York editor.

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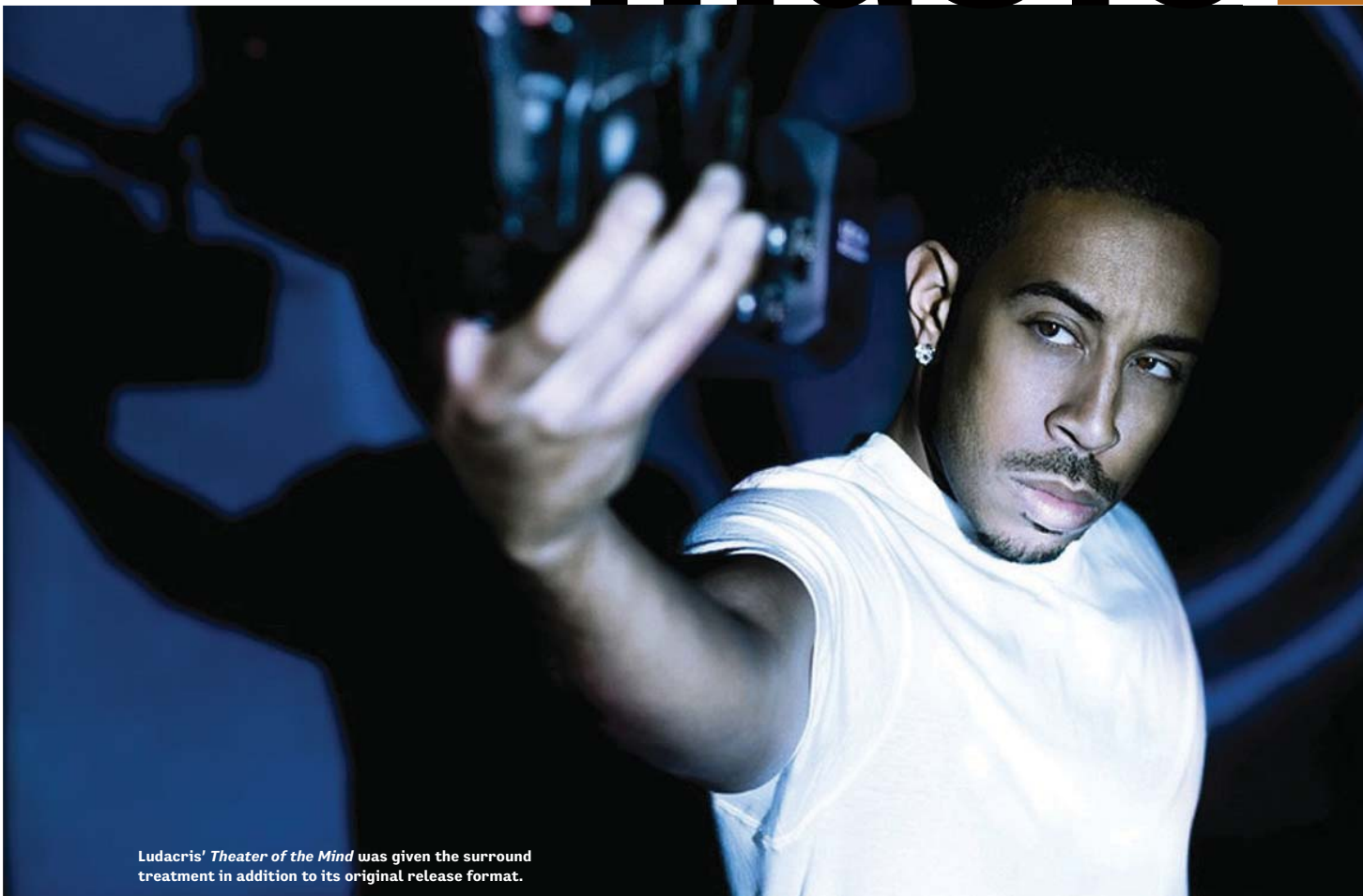
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Ludacris' *Theater of the Mind* was given the surround treatment in addition to its original release format.

By Blair Jackson

Ludacris in Surround

'THEATER OF THE MIND' BRINGS RAP TO THE FORMAT

Like a lot of people in this industry, when I first heard The Eagles' "Seven Bridges Road" remixed in 5.1 surround at an AES show in what now feels like a lifetime ago, I was convinced that surround had arrived! With home-theater systems flying off the store shelves, high-profile mixers suddenly landing surround assignments left and right, conferences exploring the topic and even a slick magazine dedicated to the

art form, it seemed like a can't-miss trend.

But it didn't catch on. As is often the case with developing technologies, there were format wars (SACD vs. DVD-A), confusion about player compatibility (will it play on my DVD-V player or do I need new hardware?) and, even after a few years, disappointment with the paucity of titles available. Quietly, the trumpet fanfares died away

with the formats themselves, and the studios that had put in 5.1 mix rooms looked for film and videogame work to use their full capabilities.

But now there are stirrings again in several quarters. Various specialty labels are quietly putting out surround discs or offering surround downloads, and the momentum seems to be building anew. One perhaps unlikely player in this brave new world

of surround is a company better known as a hardware manufacturer than a record company. Monster Cable, which began 30 years ago as a maker of high-end audio cables, has diversified to include everything from loudspeakers to computer, videogame, and portable audio and video accessories. In 2005, it introduced Monster Music, a record label dedicated to releasing 96kHz surround products. Under the stewardship of company founder Noel Lee, who is also an engineer and musician, Monster Music put out a handful of releases in its first three years, including the Grammy-winning George Benson/Al Jarreau disc *Givin' It Up*, a live album from 3 Doors Down called *Away From the Sun* and 5.1 remixes of a couple of classic discs, one old and one recent—the Vince Guaraldi Trio's *A Charlie Brown Christmas* and Ray Charles' *Genius Loves Company*. And now comes the release Lee hopes will take Monster Music from its boutique audiophile status to a more commercial level: David Rideau's remix of last fall's Ludacris hit album, *Theater of the Mind*.

Of course, having a record label that specializes in surround releases benefits Monster in a couple of ways—after all, a good 5.1 system needs lots of quality cable, right? (Lee even admits that the format wars and special players required by the first-gen surround releases “was great for our company—but not for many other people.”) But beyond that, Lee genuinely seems to want to exploit the surround medium because “it's amazing! Anyone who hears it agrees. And now, a lot of the technical barriers are diminished—not gone, because you still have to have the speakers around the room. But you can get

a standard DVD player to play the format. All the releases we've had so far have been DTS and Dolby Digital, so you can choose the audio quality you want. There's already been good acceptance of surround with films and games; our goal is to bring music along, too.”

As for the decision to partner with Ludacris, Lee notes, “We needed a relevant performer who would connect with today's mass audience and also be a spokesperson for the format. We spoke to many different people, but it was Luda who said, ‘I want to be the first artist in the hip-hop genre to break into 5.1 HDS surround. [HDS is the Monster format's trade name.] So we talked to him for a long time when he was planning his *Theater of the Mind* album, and he was really enthusiastic—‘Yeah, let's do it!’ And after he heard the mixes, his mind was totally blown.” An added bonus is that *Theater of the Mind* was released both as an HDS DVD and in 7.1 Blu-ray with added HD video footage.

The choice of Rideau as the mixer of the project would seem to be a natural: During the course of his 30-year career, he's engineered and/or mixed for a who's who of R&B and smooth-jazz artists, such as Shalamar, George Duke, The Whispers, Earth Wind & Fire, Babyface, Gladys Knight, Janet Jackson, Patti LaBelle, Boney James, George Benson, TLC, Larry Carlton, Lionel Richie, Al Jarreau—it's a *long* list, but admittedly short on rap names. He has done several surround projects in the past, however (his favorite is the 2004 *Live Sessions* by the West Coast All-Stars, featuring Tom Scott, En Vogue, Chris Botti and others), and he relished to chance to work with a mainstream rap artist like Ludacris.

Theater of the Mind gave Rideau a wonderful playground in which to work. Alternately serious and lighthearted, poetic and profane (sometimes both at the same time), the album has the Atlanta-based Ludacris as the master of ceremonies in a string of pieces that are socially conscious one moment and darkly humorous the next, and which paint vivid portraits of street characters and the requisite tough-and-tender heartbreakers; all the while, Ludacris himself boasts and jokes and chides and occasionally gets real serious. The guy's got a million one-liners—many of them based around sports imagery—but he also lets his impressive list of guest rappers and speakers bring their own *flava* to the party, including T.I., The Game, the ubiquitous Lil' Wayne, Ving Rhames, Spike Lee, Chris Brown and T. Payne. Sonically, the album was *already* a marvel before Rideau got to his surround mix, with loops and sequenced parts and voices and effects all bursting forth in unexpected and often playful ways. Kudos to the 17 engineers and six mixers listed in the credits.

I asked Rideau to lead me through his approach to a project like this: “The first thing you do is listen to it with great attention in the stereo form,” he says. “And while you're listening, you're thinking, ‘Maybe I can break out these talking voices over here and to the rears, and maybe I can bring this effect or this reverb to the rears.’ There's a general plan you follow, but also a lot of it is inspirational as you get into experimenting with panning.”

“The sequence of events in this case is, after I listened to the record really closely, I requested to all the producers and engineers and mixers, and I put the word out to the record company, that in a perfect world, I'd love to have [Pro Tools] stems of *everything*. Now that's an instant turn-off for most mixers because it's a lot of extra work. If you can imagine how many elements there are in a song.

“Some things were simpler, but the average would be at least 40 passes of a five-minute song. What happens is, for every element that you like to have a separate stem for—kicks, snare, hi-hat, other percussion, background or lead instruments; whatever—in a perfect world, what a remixer like myself would get is off the stereo bus: That element solo'ed, and at the same time I'm also getting the effects—whatever treatment is on that element, I'm getting the stereo version of that on a separate track. It's a *lot* of stuff—it's *more* than an ocean. Some mixers sort of do it automatically—Dave Pensado, Manny Marroquin [both mixers on this album]—they're bud-



David Rideau on working on this remix: “There's a general plan you follow, but also a lot of it is inspirational as you get into experimenting with panning.”



Monster's Noel Lee with hip-hopster Ludacris

dies of mine, so when I call over to the studio, and say, 'Hey, I need stems,' they're like, 'Okay, they'll be there in an hour.' And it also makes a difference when you have a nice studio with assistants who can do that stuff for you.

"But in some cases, with guys like me who do a lot of mixing in my own studio, you call, and say, 'I need stems.' and it's, 'Oh, my god!' So with the guys who didn't automatically print stems, I would go through each song and try to get the bare minimum of what I'd like to have separate. Needless to say, I wanted a lot, but in some cases I know you can have five things making a backbeat that I don't have to have separate. Anyway, I went through and made lots of notes on the stuff that I wanted, and the guys were for the most part very accommodating and very cool. In some cases, guys even said, 'The track is so simple, I'll send you the entire session and you can work off the session,' and that worked fine, too. There were three or four of the tracks that I started from scratch myself, and I either derived panning from the session itself or in some cases I did the stems myself from the sessions."

How closely did you replicate the feel of the stereo mix? "My Number One goal, personally, is not to have any of my buddies pissed off at me; that's where I'm starting from," Rideau says with a laugh. "Because I'm a mixer, I know how it is—you put your heart and soul into a project, and the producers and writers and artists all have visions, and I don't want to screw that up. I'd like to *enhance* it.

"It's not a remix where you're saying, 'All right, I'm erasing everything but the vocals and bringing in a new guitarist!' I didn't do any vocal overdubs. I made it clear from the outset my

intent was to preserve what they had done and make it more exciting for a new format. That said, there were times when I added some effects—a little bit of room in some cases, a little bit of delay—but it's not that obvious; it's a dimensional thing. You take something that's in the front spectrum and you take it off by itself as an element, and all of a sudden it's naked. So my idea was to try to have it sitting in a space that's maybe created by another instrument. You might have percussion or something that's dry because it's sharing a space with something else that has a room or a tail of some kind, and it doesn't seem like it's dry as a bone, but you pan it to left-surround, and it's like, 'Here I am! I'm naked!'"

At Rideau's L.A.-area personal studio, Cane River Studios, "I did some premixes and got things generally organized and figured out conceptually where I wanted to put some elements and did some experimenting on placement," he says. But for the main mix, he traveled north to Studio 880 in Oakland, in part so that Lee, who works across the San Francisco Bay, could give his input. "Studio C there has a [Digidesign] ICON 32-fader with a surround package on it, and that was ideal for this," Rideau says. "I had everything I needed, especially after I tortured them with six hours of setting up monitors—I'm really critical with the setup for surround and Noel is *hypercritical*. Part of Noel's thing is he wants to be able to get not only the five discrete panning positions of the five surround speakers, he wants to have the five discrete phantoms in between each of those pairs, and if I can't make that happen, he wonders what's wrong because that's part of his HDS concept. I had JBL LSR monitors, which were great, and

Monster also has their own speakers, so I had both sets and I definitely used them both."

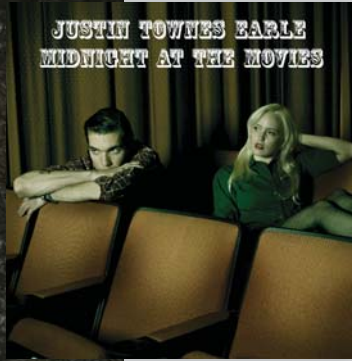
Though Rideau says that when he's mixing at home, "I'm generally an out-of-the-box kind of guy, in surround I'm exclusively in the box because that's the only manageable way for me to make that it happen—because it's recallable, it's totally automated and also because I've got some cool plug-ins!

"I can do a lot with just a mouse," he continues, "but when I'm getting to the crazy stage—as I like to call it—at that point I'd like to have a joystick. And Noel Lee *requires* a joystick. [Laughs] He will not go into a studio that doesn't have one! 'Okay, take that and move it over here and back over here.' Noel wants it to be exciting. He wants it to be dynamic—not to the point where it's distracting, but to where it's helping emote the feeling of the song.

"I felt like we could take some chances and be creative with panning and effects because the title of the record was *Theater of the Mind*. One of my favorite tracks is called 'I Did It for Hip-Hop,' and there's a point where a guy does one of the most amazing scratch solos you'll ever hear. As soon as I heard it, I thought, 'Oh, my god!' and on the next pass I grabbed the joystick and did a light pass in his solo going *crazy*, and it was quite a rush. The whole thing was just so much fun. I've never laughed so much working on a project. That Luda is a very clever fellow."

Rideau also has high praise for Lee: "He has some of the best ears in the business; he's a real visionary. It's rare to have a guy that geeky, like me, and passionate, like me; it's a weird combination of things. And to have a company he started in his garage for \$1,500 and making it into what it is today—you have to have a vision. You can see it in projects like this. It's more than just a business to him."

But it is *also* a business, as Lee freely acknowledges. One of his goals with the Ludacris remix, he says, is "to proliferate the format through our retail channels to the Monster Cable audience, so hopefully there will be enough people who will say, 'That's a great thing! Boy, when's the next one coming out?'" It remains to be seen whether you can make a business out of it. I'd say the business model is still not there yet completely. We're not looking at it as a major revenue stream for the company; we're just looking at it for enhancing the canvas that artists can create on and give people a phenomenal musical experience they can't get any other way. By that measure, at least, it's already a great success." ■



Justin Townes Earle

'MIDNIGHT AT THE MOVIES' IS OLD-TIME WITH A TWIST

By Barbara Schultz

Nature or nurture? When he was growing up, Justin Townes Earle didn't have a lot of time with his father, Steve Earle. Yet the son has a remarkable, fully formed talent, a rebellious streak a mile long and, already, a drug-darkened history at the under-ripe age of 26.

Earle's *Midnight at the Movies*, his sophomore release for Bloodshot Records, is a near-perfect Americana album. The old-time instrumentation Earle favors is twisted just enough by his intense vocal and moody vibe—an approach encouraged by Earle's co-producers, R.S. Field and Steve Poulton, both of whom also worked on Earle's debut, *The Good Life*.

"I didn't want it to be too much of a wax-museum thing," says Field, whose credits include John Prine, John Mayall, Buddy Guy, Billy Joe Shaver, Todd Snider and many more. "We were not trying to be so reverent on this album with our anachronistic tones. I think we went for more ambience on the melodic choices and the instrumentation; we pulled back more veils on this one. It's not quite as out-and-out rootsy in its approach; some of it is dreamier."

Field and Poulton brought Earle and his band back to the same studio and engineers they'd used on *Good Life*. Recording almost entirely live in House of David (Nashville), the musicians were recorded by engineer Adam Bednarik—to Pro Tools HD, using Apogee AD16X converters—and mixed by Richard McLaurin on the

studio's 1970s API 2832 console.

Bednarik says that Earle was situated in a cubby-like space when they tracked the first album, but he moved out into the room for *Midnight at the Movies*. "He was out next to the piano and I built a little gobo house for him," Bednarik explains. "We wanted things to sound a little more open and to have better sightlines to the band. On the first record, they had rehearsed everything and learned all the songs, but on this one they were coming in fresh and learning the songs in the studio, so it was good for Justin to be able to see everybody, give some looks and guide."

Bednarik used a combination of tube and ribbon mics that he placed for room ambience, as well as close-up. "For Justin, I stereo-miked his acoustic guitar and he sang into a [Shure] SM7 to cut down on bleed. Then I used a 1073 as a mic pre, and went into an 1176 followed by an LA-3A. Since I knew it was going to be mixed on the API, I tried to use different outboard mic pre's to complement it for the mix stage—a lot of Neve mic pre's and some tube mic pre's. There are some 1073s and 1272s and a [Vintech Audio] Dual 72. I tried to just get everything to sound really open and big and natural by working with mic placement and getting it to sound good on the front end.

"I ran some stuff through compressors," Bednarik continues, "but not really to compress it—just for the sound. I also worked a lot with

the low end, which is pretty huge on this record with the upright bass and the kick drum. I tried to get a really natural sound on everything, but also separate it so that

the frequencies aren't masking each other."

"Adam always leaves me lots of room to do what I want when I mix," McLaurin says. "Unless there's something very specific they're trying to do [during tracking], he doesn't commit to some certain sound, which leaves me a lot of leeway for mixing."

McLaurin says he could hear the "dreamier" approach to *Midnight at the Movies* when he received the basic tracks. "So I followed their lead," he says. "I think the material dictated that, and so I tried to expand on that a little bit—keep it in that realm. We were working quickly, so we had to pull things up and go with our gut. I remember going between our plate reverb and my AKG stereo spring chamber—that tends to be a little dark and in keeping with what they wanted."

McLaurin also used the LA-3A during mixing. "That was for the tone of it," he says. "It tends to make whatever I was hearing with his voice, only more-so."

The mains at House of David are Dynaudio M2s, but Bednarik and McLaurin both do most of their monitoring on Yamaha NS-10s. McLaurin says Field was often present during mixing, and there's a lot of comfort and trust there. "I've mixed a lot for R.S. Field. He is great to work with because he knows how to direct the energy in a room better than anybody I've ever seen, and you're not even aware it's happening."

For his part, Field gives a lot of credit to co-producer Poulton: "We kind of just hold hands and skip along together and try not to get in each other's way," he says. "Steve is really creative—he's a bandleader and a songwriter and a real bohemian. He has known Justin a long time, whereas I haven't. I think Steve did a lot of work with Justin before the first album, preparing the ground."

"But Justin is also just a naturally great songwriter, and he's got a lot of confidence in the studio without being arrogant," Field continues. "It's easy to get a performance out of him, and I'm not sure he even knows you can overdub stuff to death. No, I take that back. I'm sure he knows. He's bright as a searchlight." ■

CLASSIC TRACKS



Merle Haggard's

"MAMA TRIED"

By Gary Eskow

Slicked up and properly packaged, many of today's country music stars lack the root experiences that influenced George Jones, Waylon Jennings and other great talents who defined country and western in the middle years of the 20th century. Even among this earlier crew, however, Merle Haggard stands on separate ground.

His well-documented bio includes the loss of his father at an early age, a slide into juvenile delinquency and, ultimately, a series of adult incarcerations that informed Haggard's writing and added a mournful inflection to his singing. Best known in *non*-country music circles for his 1969 hit, "Okie From Muskogee," a humorous jibe at knee-jerk leftists, Haggard scored his fifth Number One hit on *Billboard's* country chart with "Mama Tried," which was released a year earlier and, as much as any song, helped define his public persona.

"Mama Tried" was originally written for a low-budget Bonnie and Clyde-type movie called *Killers Three*, produced by Dick Clark. The lyrics are from the perspective of a troubled adult who regrets the path he's taken in life, ignoring the sage advice of his dear mother, who had to raise her son without a father. It's not *exactly* Haggard's own story, but it's close, and it rings with the wisdom of truth: "And I turned 21 in prison doing life without parole/No one could steer me right, but Mama tried, Mama tried/Mama tried to raise me better, but her pleading I denied/That leaves only me to blame, 'cause Mama tried." The music is Bakersfield twang—spare, direct, right on the money.

Recovering from lung surgery a few months ago, Haggard was in fine form in a spirited conversation during which he discussed his memories of recording "Mama Tried" and other topics. In conversation—as in song—it's best to just let

Merle Haggard do the talkin':

"[Western swing pioneer] Bob Wills was a big influence, absolutely. When I was a boy, radio was in its prime. There was no television, and going to a movie was a big deal. So radio was the main source of music and entertainment of all kinds. Bob Wills was all over the radio, all day. There was a 100-kilowatt station that broadcast from Rosarita Beach, in Baja, Mexico, just across the border from where my family lived in Southern California. I used to catch their 7 p.m. Bob Wills show with my dad, and then listen to *The Lone Ranger*. Bob is still the best performer I ever heard or saw.

"My mother was a devout Christian, and she raised me the same way. She was left to widow when I was 9, and there was nobody in the house but her and I, so I felt over-obligated to her. I also felt that she had so much work to do to try and raise me, it probably caused me to leave home early. My mother was the finest lady in the world. She died in 1985.

"I think going to prison did make me a better man; in fact, I'm sure it did, yes. I was a young guy when I went there, thought I was bullet-proof tough. Maybe I was, I don't know—nobody ever took anything away from me on the inside. I learned a lot about the meaning of honesty in prison. You can't tell somebody something in prison and not do it because they'll see you the next day—bad dealings on a carton of cigarettes will cost you your life.

"There was that whole Bakersfield sound thing, a reaction against the Nashville sound that was getting so big and lush, but remember, it was only 80 miles from Bakersfield to Capitol Records Studio [in Hollywood] where we recorded 'Mama Tried.' The live echo chamber they had—still have—was a big part of the Bakersfield sound.

"We worked in both studios there—actually recorded 'Mama' in Studio A, the larger room. We had no preference; both were great studios, and each one had access to the echo chambers. Things were done much differently back then. You had three hours to record two or three songs. I'd meet with The Strangers, my band, in a coffee shop at 9 o'clock to discuss the arrangements; I sort of hummed the songs to them in

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“As I recall, we recorded ‘Mama’ and ‘Workin’ Man Blues’ in one session, and ‘Today I Started Lovin’ You Again’ and ‘White Line Fever’ in another. Hugh Davies was the engineer. We discussed the mics we’d use, but he was the guy with experience in that area. I worried about the songs and arranging.”

In 1967, Bob Norberg was hired as an assistant engineer at Capitol and told to report immediately to a session that was under way. “The night supervisor sent me to Studio A to assist on a session of Merle’s,” says Norberg. “It wasn’t ‘Mama Tried’ that they were cutting, but I think they were working on that album.

“Capitol was a 4-track studio at the time, with a pair of Scully half-inch tape decks in each room,” Norberg continues. “The band was taped on two tracks, Merle’s vocal was on the third and the fourth track was left open for background vocals. Glen Campbell and Bonnie Owens were the backup singers on that album, and I remember thinking it was kind of funny that Glen was singing background because he was already an established solo artist at that time. Ken Nelson produced the album.

“Capitol Studios was built in the late 1950s as a mono facility, but the electronics were modified to 3-track shortly thereafter. The consoles were built in-house by Capitol engineers. In those days, they had a lab on Fletcher Drive in Glendale where the boards were built. They used Langevin solid-state modules for every mic channel; I think each board had 12 inputs. The studios switched over to 4-track in 1967.

“Most of the country material was recorded in Studio B, but we used Studio A, the bigger room, for Merle’s record and some other country recordings. There were hinged units attached to the walls that were soft on one side and hard on the other, which let you control the acoustics of the room. How noticeable was the change in coloration? To tell you the truth, we didn’t change things around that much. I do remember that if we had a classical session in room A, we’d often angle the hard sides out to give the studio a more live sound. Both A and B had this hinged arrangement, and even after the renovations that took place several years ago, Studio B still has them.

“We always cut Merle’s vocal with a U67. Buck Owens, too. I know Merle talked about the echo chambers. There were actually four of them under the parking lot, and about a year after I started working at Capitol we built four more! Many purist engineers

and producers love these chambers and still use them to this day. They’re acoustic stereo chambers, two speakers and microphones in each one. Different speakers and mics will impart a slightly different characteristic to the sound.”

“Mama Tried” features a withering guitar signature from the pick of Roy Nichols and a rolling dobro part performed by James Burton. A Louisiana native who still lives in Shreveport, Burton was happy to discuss his time as a member of The Strangers and the Capitol Studios sessions. As every student of the era knows, Burton almost singlehandedly developed and defined the rock lead guitar sound. How did it happen?

“Mother and dad bought me a ‘52 Tele, and I got into playing slide and steel guitar early on. I experimented with using banjo strings on the guitar to get a lighter sound and an unwound third string to get a twangier, funkier sound. I was able to create a whole different sound and technique, using the fingers and finger-picks to create banjo-like rolls on both the guitar and dobro. I used this technique on ‘Mama Tried.’

“Merle wanted a kind of banjo sound, and I thought the dobro would work well. Recording with Merle was a real treat. He was real easy to work with, and his singing was so good. [Producer] Ken Nelson was also a great guy to work with. He liked the simplicity of country music, wanted lyrics that told a good story and wasn’t into lots of strings or other overdubs.

“Normally, my sound was my sound. I’d have the engineer come in and listen to my amp, and I’d let him know that the tone it was producing was exactly the sound I wanted on the record. I didn’t want an engineer to EQ my sound at all. I was very careful to set the treble and bass to work with a specific song and artist. It was all in my ears.

“Merle is a great example of an artist who wrote material that reflected the life he lived. There are a lot of great writers today, but something’s gone out of country music. Maybe it’s the computer or marketing. It seems that we’ve lost something along the way.”

Haggard says, “I’m proud of the way ‘Mama Tried’ has stayed in people’s minds and hearts, and maybe helped define me. Even today, 40 years after it was released, I’ll do a concert and guys will come up and show me tattoos that say ‘Mama Tried.’ They’ll tell me—sometimes with tears in their eyes—how that song captures what they feel about their own mothers. That means a lot to me.” ■

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Duncan Sheik sings into a KMS104.

By Sarah Benzuly

Duncan Sheik

VOCALS SHINE THROUGH HOUSE RIGS

Duncan Sheik's shows are always about the vocals, and Sheik's singing style ranges from whisper-quiet songs such as "For You" or "Touch Me" (from his Broadway musical *Spring Awakening*), to powerhouse tracks like "Barely Breathing," or "We Don't Believe in You" from his latest album, *Whisper House*. Com-

plementing Sheik onstage is a stellar eight-piece ensemble that helps take his sound beyond typical singer/songwriter fare. The responsibility of delivering Sheik's production to the audience belongs to front-of-house mixer/tour manager Adam Robinson, who often mixes monitors as well, as the tour does not

have a monitor engineer.

The tour is hitting medium-sized venues, so Robinson is relying on house gear (including P.A.) at each stop, although he carries an FOH effects rack and a pair of EAW MicroWedges for Sheik's mix. "Typically, we're 25 inputs, with our opener taking up another six

inputs and then sharing some inputs from our list,” Robinson says of the house boards. “As for outboard gear, I bring a few pieces but try to keep it to a minimum as I’m also tour and production-managing. I have a BSS DPR404 quad compressor because it’s really the nicest compressor I could get a hold of that fits in one rackspace. I’m using them on my three vocals and my cello channel. They’re also a great choice of compressor because of the built-in de-esser on each channel. [Vocalist] Holly Brook’s singing style is light, pure and angelic, but leads to very pronounced sibilance, so it works great for her. [Vocalist] Lauren Pritchard



From left: Holly Brook (piano, vocals), Gerry Leonard (guitar), Sheik, Lauren Pritchard (background vocals), Kevin Garcia (drums), George Farmer (bass) and Nick Gallas (clarinet).

SOUND

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has a very strong voice, but also a pronounced peak around 2k that’s really hard to EQ out; the de-esser works great here. I’ll use house compression on a few extra inputs, when available.”

Also in Robinson’s outboard rack is a TC Electronic M3000, which he uses as a dual send/stereo return unit for two different effects. “Its excellent-sounding, clean reverbs allow me to create a little more atmosphere for the *Whisper House* ghost-story songs without crowding the mix,” he says. “Even when using a digital console at FOH, I’ll use the TC for my reverbs.” Added to his rack is a Lake Mesa EQ that sits between the board and as many outputs as he can manage to connect it to. “In several years of touring with the Lake, I’ve found that it’s my ‘Swiss army knife’ when it comes to bringing life back into an ailing house rig or making a spectacular system sound even better.”

Invisible Monitor Engineer

According to Robinson, most of the venues supply a monitor console and engineer, although there were times when he had to take the reins. The nine musicians onstage require eight wedge mixes, one of which is the EAW MicroWedge (developed with Dave Rat of Rat Sound), which Robinson calls his “ace in the hole.” “Any engineer who has worked with the Neumann [KM 104] in front of stage monitors will tell you that it really lends itself more to the artist using in-ears. The focused sound of the MicroWedge, along with its small form factor, really allowed me to tuck it tightly inside the null of the mic, helping to minimize feedback.

“We also did a bit of work on the input side of the processor, EQ’ing out the typical frequencies that would feed back. Having this gear each night saved me a lot of time in setting up Duncan’s vocal mix as I didn’t have to spend extra time notching out feedback. Typically, each day I’d just EQ out any room/stage anomalies and just turn the mix way up! Duncan likes to have a

ton of gain-before-feedback, as he'll go from almost whispering to strong, loud vocals. The MicroWedge guaranteed that each night he would get what he needed out of his floor mix."

Mike It Up

The tour is carrying an assortment of Sennheiser and Neumann mics, including the KMS104 for Sheik's vocals. "He's got a great ear and really knows how to work the mic



Engineer Adam Robinson

well," Robinson says. "We both agree that the Neumann is probably the best-sounding vocal mic you can put onstage. Lauren sings into the new Sennheiser e 965 switchable-pattern condenser. It exhibits a similarly flat response to the Neumann but is a bit tamer in stage monitors. We had been through so many different mics with Lauren trying to find the right sound for her. The moment I got my hands on the 965, I knew it was the right fit and she took to it quite well." Brook sings through an e 945, while drummer Kevin Garcia's kit takes mostly Sennheiser 900 Series. Gerry Leonard's guitar amp is miked with a Sennheiser e 906.

"I'm using a Helpinstill system on the piano combined with a Neumann KM184 to bring some 'wood' back into the sound," Robinson adds. "The orchestral instruments—clarinet, bass clarinet, French horn—are also Sennheisers. The cello utilizes a pickup."

As most of Sheik's songs tell a story, the mic selections are an essential consideration in Robinson's overall mix style—everything must remain clean so that the vocals are intelligible. "Really when it comes down to it, though," he says, "I just bring my usual style of mixing clean, clear and punchy to this show and it translates well. As he's proven over and over again, Duncan can write a hit song, but beyond that, every single one of the musicians playing with him is amazing, so it's a true pleasure to have such great source material to mix." III

Sarah Benzuly is the group managing editor for Mix, EM and Remix.

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Pro Audio Review*



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SOUNDCHECK

Signature Audio Expands



Senior manager Sam Walton inspects the install one last time.

PHOTO: JEFF NOWAK/J2 CONCEPTS

Signature Audio—a full-service audio sales and technical services company—now offers artist booking, touring and production-management services with new sister company Signature Professional Group (www.signatureprogroup.net).

According to senior manager Sam Walton, “The problem currently in the market is that if you are a smaller entity looking for entertainment or production management, or a smaller artist looking for representation, management or technical services, you don’t have many options. Our goal is to fill that void and provide high-end solutions to the

smaller side of the industry.”

Signature Audio will remain as the audio sales, technical services specialist and production supplier. The company was recently called in to do a sound system overhaul at University Liggett School’s (Grosse Pointe Woods, Mich.) upper-school auditorium, which included rearranging the speaker arrays that comprise two cabinets (JBL Application Engineered AM-6215 loudspeakers) acting as a small line array to cover the main auditorium seating. There are also two side-fill speakers (JBL AC-18/26s) that cover the side seats on either side of the auditorium. Special care was taken to

shade the arrays and side-fill speakers to give the same tonality and SPL to each seat in the house. The company installed JBL Application Engineered AC-16 loudspeakers in the booth, powered by Crown Audio CTS Series amplification, which also power the main left and right loudspeaker arrays. System processing is handled by a dbx DriveRack PA. The system also uses Furman PL Series power conditioning and a Middle Atlantic Products rack system. The package was completed with 12 AKG WMS-450 wireless mic systems with power and antenna distribution.

But the sound company’s work didn’t end there: While working during school hours, the crew incorporated the students into the project. “The students were impressed with the treatment that they received from these high-end professionals and feeling empowered to really be included in the install,” says Dr. Philip Moss, chairperson of the venue’s Creative and Performing Arts Center. “That’s a special thing. That’s not something that you contract for or buy.”

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tour log

Nickelback

Monitor engineer Mike Mule (Dashboard Confessional, Rush, Van Halen, Whitesnake) is currently out with Nickelback, spec’ing a DiGiCo SD7 board from Clair Global. “The SD7 is a natural progression for me, having worked on a D5,” he explains.

The engineer is handling more than 50 inputs coming off of the stage, including eight vocal channels, two drum kits, and various electric and acoustic channels.



Monitor engineer Mike Mule

“With eight positions around the stage,” he says, “it was important to grab the main vocal dynamics, EQ and sends, and spread them to the other positions and be able to follow [lead vocalist] Chad Kroeger and [lead guitarist] Ryan Peake with their own distinct settings to any mic they walk up to. Also, allowing me to configure my console when needed is a big help with opening acts and when the ‘oh, by the way’ changes come. A case in point was with opening act Saving Abel, who started on wedges and then brought in an in-ear package. We were able to reconfigure the console and add all the new mixes and arrange them to the engineer’s liking without losing any of his previous settings.”

“I’m old-school in the fact that we try to get everything to sound good from the source and not have to overcompensate with EQ and dynamics,” he continues. “I use them when needed and try not to load every channel up with unnecessary ‘signal diminishers.’ That makes the amazing dynamics, such as comps and gates on this console, that much more unnoticeable. The EQ section is amazing: There’s no plus-or-minus 18 going on, if you know what I mean.”

fix it

Steve Miller monitor engineer Ira Malek

There is always something new to learn on the [Yamaha] PM5D. For example, you can’t really store a song per scene on other consoles for a seasoned rock band because the dynamics are making you work the desk, not the scene. With PM5D’s Version 2 software, I am able to go to the mixer’s setup and set it up to whatever I may need, making it that much more musical; the console doesn’t limit

me. Steve is on Future Sonics ear molds, and two of the other musicians are on ears, plus the guitar tech, and there are five wedge mixes. The great thing about the 5D is that I’m almost playing it like a keyboard; I’m basically mixing for Steve’s ears. He used to have one full desk and a separate split just for him. By using the PM5D and going to in-ears, I have eliminated three wedge mixes and sidefills,



so the inputs are open for less EQs and more effects sends. I’m old school; I just need a knob. For monitors, one scene to one song changes your mix dramatically.

Blues Finds New Venue in Memphis

Where U.S. Highways 61 and 49 intersect—the town of Clarksdale, Miss., the fabled Crossroads—holds a familiar lure for music fans: Ground Zero Blues Club, created by Mississippi native/actor Morgan Freeman and blues aficionados Bill Lockett and Howard Stovall in 2001. Soon after, the group felt the pull that brought so many bluesmen before them to Memphis. It's where Clarksdale native Ike Turner cut rock 'n' roll record *Rocket 88*, and where Elvis Presley and Jerry Lee Lewis began their careers. A city so linked to the blues made a natural second home for Ground Zero, but the audio installation at Ground Zero Blues Club Memphis is a much larger installation than the century-old wooden Clarksdale venue.

"The original Ground Zero Blues Club is housed in a 100-year-old cotton warehouse," says Kent Morris of Cornerstone Media, an audio consultant who upgraded the original Ground Zero Blues Club to a Peavey Versarray

line array system before tackling the Memphis club. "There were many acoustical differences between the two projects and several new challenges." For example, the Memphis venue is a brand-new facility constructed of concrete floors, walls and ceiling, with a full glass wall along the front of the club. It's also a combination bar/restaurant/performance hall, while the original venue emphasized the performance aspect.

"We had to be careful about creating a performance area that wouldn't blast the other areas of the venue," Morris adds. "We needed a more distributed audio system. A great benefit of the Versarray is that you can move energy from the front of the room to the back in a very controlled way. Because the enclosures control sound dispersion so well, we could focus their energy onto the dancefloor and those tables nearby where the people most interested in hearing the music would sit."

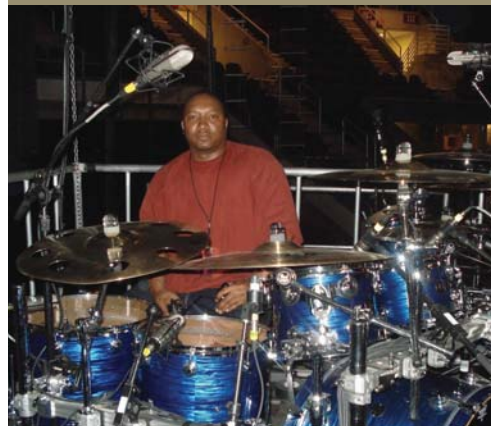
The system comprises four Versarray 112 enclosures, each with two 218 subs underneath. The team also set up a slightly delayed Impulse 2652 speaker that covers the side area where people are seated, and another two for the bar area along the back wall. Peavey's Architectural Acoustics Digitool MX digital signal processor was used to control the individual areas separately. Sitting at front of house is a Crest HP-8 32 board, while a Crest XRM lives at monitor world. The venue also boasts an extensive collection of Peavey mics and processing.



Morgan Freeman, Hartley Peavey and Bill Lockett

PHOTO: IWAN BARN

load in



Lil' Wayne's 2009 I AM MUSIC tour's production manager, Maceo Price, chose a number of CAD mics for the drum kit, saying, "The drums are monstrous. It's toms and snares all day, and the snare cuts glass. You get a lot of pressure out of them without the mics cracking up."

On Tina Turner's current world tour, sound engineer Dave Natale deployed AKG C 214 mics and a WMS 4500 wireless system...Co-sound designer Eric Stahlhammer selected a Soundcraft Vi6 digital board for the play "Peter and the Starcatchers" at La Jolla Playhouse (La Jolla, CA)...All five models in JBL's Control 40 Series of in-ceiling loudspeakers have received a UL listing under UL1480 and UL2043...The Lexington Opera House (Lexington, KY) got an audio facelift, which included a new L-Acoustics KUDO line source array system spec'd by the opera house's technical coordination team: Andrew Gilchrest, Michael Lavin and Chris Musinski.

road-worthy gear

EAW Compact Line Array and Sub

EAW is shipping its JFL210 Compact Constant Curvature line array and matching JFL118 subwoofer, a lightweight package designed for small and medium venues, both portable and installed. Two neodymium 10-inch woofers and a 3-inch diaphragm compression driver/horn on the JFL210 modules form high-SPL, easily configured arrays with predictable output and coherence, with horizontally symmetric, consistent coverage when flown, pole-mounted or ground-stacked. Options include the JFL118 single-18 flyable sub and UX8800 (4-in/8-out) digital processor/system manager/controller.

www.eaw.com



Peavey IPR Power Amps

The resonant switch-mode power supplies and high-speed, Class-D topologies of Peavey's IPR Series amps dramatically reduce weight (the IPR 1600 is only seven pounds) while increasing output power, reliability and thermal efficiency. The 2-channel amps offer onboard 100Hz crossovers,



variable-speed fans, DDT™ speaker protection and DC/clip/temp safeguards. Beyond the standard IPR 1600/3000/4400/6000 models are versions with built-in, 32-bit, floating-point DSP offering EQ presets, delays, crossovers and more—accessible from a front panel LCD screen.

www.peavey.com

Turbosound TCS Models

Turbosound's new TCS Series offers a variety of products for fixed installations, ranging from a high-power, three-way, bi-amp/tri-amp switchable system to 12- and 15-inch active/passive two-ways and an ultracompact, 6.5-inch passive model to two single-15 arrayable subs and a large-format, double-18 sub. New Dendritic waveguides deliver improved arrayability, with true Turbosound voicing. Options include rotatable 90x60/60x40/90x40 horns in the trapezoidal cabinets, Class-D self-powering with network control, weather resistance, flying hardware and a wide choice of colors.



www.turbosoundusa.com

ALL ACCESS

Photos & Text by Steve Jennings



When “nu-metal”—a hard-hitting combination of metal and rap—first hit the airwaves, Slipknot was at the forefront of this “nu-wave” and made it all the more splashy as they only perform in costumes. Die-hard fans know them by their individual masks, while newbies can get to know each band-member by the number on his sleeve: 0 to 8. *Mix* caught up with Slipknot’s Thunder Audio-supplied tour at Sacramento, Calif.’s Arco Arena, while they were out supporting their latest release, *All Hope Is Gone*.



Vocalist Corey Taylor (#8) sings through an Audio-Technica AEW-T6100.



Front-of-house engineer David “Shirt” Nicholls (right) and systems engineer Chris Moon

Front-of-house engineer David “Shirt” Nicholls (left) is mixing on a Digidesign VENUE with the Venue Pro Pack and Eventide Anthology Pack. “I couldn’t be without the VENUE,” Nicholls says. “Also, I have my trusty A-T 4050 microphones; they take a battering on a Slipknot stage. It’s not unusual to see one of the vocal mics (T6100s) go flying up into the seats only to be back up onstage the next day working fine—I’m sure they’re bullet-proof!” Thunder Audio is providing the Meyer P.A., which comprises 16 MILO boxes, six flown HP700s and nine Nexo CD-18 subs on the ground per side. Nicholls uses a tablet with the Compass software, a laptop running RMS speaker-management software and SIM for analysis. System control is via Meyer Sound Galileo. The side-hang features 10 MICA boxes per side, with four UPJs for front-fills.



Monitor engineer Ron Hurd (left) and monitor tech Tony Sabato

Monitor engineer Ron Hurd (inset) is mixing the show on a Yamaha PM5D console. “I’m not using any plug-ins or rack gear except for an [Apogee] Big Ben word clock,” he says. “Six of the nine guys are on ears: Ultimate Ears with Sennheiser G2s.”



Guitarist Jim Root (#4)



Guitar tech Martin Connors

Stage-right guitarist Jim Root uses his signature Telecasters and a signature prototype Stratocaster. According to guitar tech Martin Connors (left), amps include two Orange Rockerverb 100s: one for stage and the other for his iso cab. The amp is miked with Audio-Technica 4050s.



Guitarist Mick Thomson (#7)



Guitar tech Drew Foppe (left) and bass tech Ernie Hudson

Guitarist Mick Thomson (stage-left) plays his signature-model Ibanez (MTM1) electrics "loaded with Seymour Duncan 'Blackouts' active pickups and Ovation (MT37 model) acoustic guitars," says guitar tech Drew Foppe. "Mick uses signature Rivera KR7 guitar heads with a custom-tailored EQ function and gain structure. These amps are three channels, each with a boost and played through custom Rivera 'Seven' cabinets loaded with Celestion G12K-100 speakers. On stage, he uses Rivera's new Silent Sister single 12-inch iso cabinet. An Audio-Technica AE2500 dual-element mic is mounted inside the cabinet."



Drummer Joey Jordison (#1)



According to drum tech Sol Engelhardt (above), Joey Jordison's kit is miked with Shure Beta 91 and Beta 52 (kick), Audio-Technica AT 350 (toms), AE 5100 (hats, snare bottom), AT23 (snare top) and AT 4050 (overheads, ride).



Bassist Paul Grey (#2)

Bassist Paul Grey uses Audio-Technica wireless going through all Peavey gear (Tour 700 preamp and 2600 power amp); mics are Audio-Technica AE 3000.

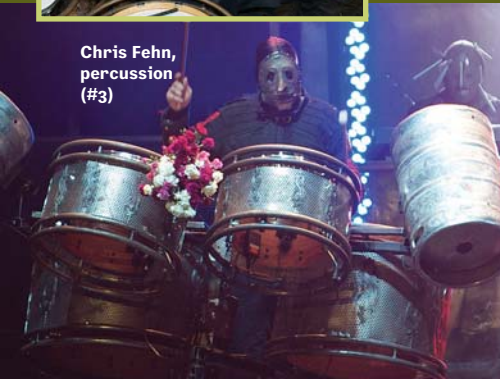


Shawn Crahan, percussion (#6)

Shawn Crahan's stage-left percussion setup is miked with Audio-Technica AT23s, says percussion tech Sean Kane (left). On stage right is percussionist Chris Fehn's setup, which sees AT-35 mics, says his tech, James "Chief" Yepa (right).



Chris Fehn, percussion (#3)



DJ tech Pat Williams

DJ Sid Wilson uses two Technics SL-1210MG5 turntables, DJ Starscream's *Full Metal Scratch-It* glow-in-the-dark signature vinyl records, Mackie d.2 Pro mixer, Korg Kaoss Pad KP3 and Pad MiniKP, and DigiTech Whammy pedal. In addition, says tech Pat Williams, sampler Craig Jones' (rear stage-right) gear comprises a Korg Kontrol49 MIDI keyboard, Akai Z4 rackmount sampler and Roland Fantom XR rackmount sampler/synth.



Sid Wilson, DJ (#0)



Craig Jones, sampler (#5)

Tech

NEW PRODUCTS

Hot From NAB

Yamaha MY8-SDI-D De-Multiplexer Card

Designed for broadcast applications, the Yamaha (www.yamaha.com) MY8-SDI-D (\$3,199) allows the user to input HD-SDI-embedded audio signals directly to a host Yamaha digital console or DME (Digital Mix Engine). The card has one HD-SDI input with one HD-SDI Thru output, and can replace the need for conventional converters used to feed Yamaha digital mixing products. The unit has eight selectable channels (two groups of four chan-



nels) of the 16 channels of audio in HD-SDI, and the card can sync to video or audio signals. Fitting into the I/O option slots on Yamaha products, the MY8-SDI-D has a range of four, eight and 16 I/O options, enabling direct interfacing to EtherSound, CobraNet, AES/EBU, MADI, ADAT, mLAN and other formats.

Dancing With DAWs

Smart AV Tango Controllers

Tango DAW controllers from Smart AV (www.smartav.net) offer control over a range of Mac/PC production software. The 8 (\$7,990), 20 (\$14,980) or 32-fader (\$23,370) units can customize screen layouts to suit user workflows between Logic, Nuendo, Cubase, Pyramix, Pro Tools and Final Cut Pro. Each channel strip has a dedicated Hold button, 100mm touch-sensitive motorized fader, Inject and Solo touch-points, mute and a touch-sensitive encoder/switch. The 16 inline soft controllers are tied to the screen graphics and conform to the task at hand, as do the active controls—a high-res Smooth Feel encoder, active button and touch-sensitive motorized pot—all assignable to any parameter with a touch of the screen. The user-definable touch-screen adds more control over parameters and quick switching between setups.



Up Close and Personal

Roland Systems Group M-48 Live/Studio Mixer

For live or studio work, the M-48 Live Personal Mixer (price TBA) from Roland Systems (www.rssamerica.com) offers individual musician mixes, controlling more than 40 audio sources managed in 16 assignable stereo groups. The M-48 features level, pan and solo controls; plus, there's 3-band EQ on each group, with a built-in reverb, ambient mic for listenback and I/Os for multiple headphone/wedges and interfacing with iPods, metronomes and external recording devices. Units connect via Roland's Ethernet Audio Communication (REAC) Cat-5e protocol from the RSS S-4000D splitter and power distributor, providing the digital audio stream and power to up to eight M-48s. Multiple S-4000Ds can be used in larger configurations.





High-Performance, Retro Styling

Equation Audio F.20

Equation Audio (www.equationaudio.com) is shipping its F.20 (\$699) large-diaphragm, side-address condenser microphone, which features a supercardioid transducer with a nearly 1-inch diameter (22mm) proprietary electret capsule, switchable 80Hz roll-off filter and 16dB pad. The mic's advanced HR-2295 high-resolution head amplifier provides low-noise performance with 20-20k Hz response and 150dB max SPL handling.

Let's Share

SNS Version 3 SANmp Software

A free upgrade, SANmp software Version 3 from Studio Network Solutions (www.studionetworksolutions.com) brings workflow enhancements and a new look/feel to its volume-sharing software for Fibre Channel and iSCSI SANs. Features include redesigned Admin



and Client GUIs for faster access to the most important information about the SAN. New drive icons for the Mac Desktop offer at-a-glance indication of the status of mounted volumes, and new tool tip/shortcut keys allow operating SANmp without touching a mouse. The software is compatible with OS X Tiger and Leopard, Windows XP (32/64-bit) and Windows 2003. It also supports major Mac/PC applications, including Final Cut Pro, Premiere Pro, Avid and Pro Tools.

Easy on the Ears

Ultrason Edition 8 Headphones

With their interior ear cups covered in fine Ethiopian sheepskin, the Ultrason (www.ultrason.com) Edition 8s (\$1,499) are surely comfortable. But beauty is not just (sheep)-skin deep; these headphones employ Ultrason's latest S-Logic™ Plus technology, promising an impartial acoustic feeling with a more spacious tonal perception. The closed-back headphones include Mu-metal shielding to reduce the amount of radiation directed to the listener by up to 98 percent, 40mm titanium-plated drivers, gold-plated adapters, 6-foot cord, 12-foot extension cable and leather storage/transport bag.



Tone Shaper

elysia museq Equalizer

New from elysia (www.elysia.com) is museq (price TBA), a 2-channel analog EQ offering sound-shaping capabilities and optimally matched parameters. Each channel has three parametric bands with switchable Q, along with outer bands featuring low/high shelving that can be separately switched into a low/high-cut mode with an extra resonance peak. Each gain controller can be used in Boost or Cut mode, and there's a switchable option for adding more "color" to the signal. museq features discrete analog circuitry, an oversized transformer, conductive plastic pots and special current feedback amplifiers. III



Event Electronics Opal Studio Monitors

Compact, Two-Way Gems From Down Under

Named after the national gemstone of Australia, the Opals are new studio monitors from Event Electronics. Despite their relatively compact 22.6x15.4x15-inch enclosures, Opals were intended to create a two-way system that delivers the power, accuracy and fidelity of large three-way systems.

This was no easy task. From day one, designer Marcelo Vercelli took a completely new look at the process, with the intent of creating a no-compromise monitor with world-class performance. There's no off-the-shelf stuff here; all the components were built from the ground up, combining new and traditional technologies.

Discovering Opals

The 8-inch woofer has a neodymium motor and a low-mass, composite carbon-fiber/paper cone that's stiff enough to provide midrange out to 10 kHz, yet delivers 35Hz bass with remarkable 30mm-plus excursion. The woofer's dual X-Coil™ design combines an active and a parallel second voice coil for improved transient response, even under extreme workouts. The tweeter has a 1-inch beryllium/copper-alloy dome mated to a neodymium magnet structure and mounted on an asymmetrical elliptical waveguide for dispersion control in the horizontal and vertical planes. The entire HF unit and illuminated Event logo are rotatable for using Opals on their sides.

A 1.6kHz center-point, 8th-order (48dB/octave) active network handles crossover duties. The onboard bi-amplification provides 600 LF/140 HF watts of peak power via linear Class-A/B amps. Looking inside, components are top-grade, while heavy toroidal transformers and massive rear panel heat sinks contribute much to Opal's

47-pound heft, so be wary of meter bridge placement. Full-power THD specs for the amps are in the 0.004-percent range. Neutrik combo XLR/TRS jacks handle balanced or unbalanced inputs; a 15-pin D-sub connector is provided for a planned digital input module.

Finished in a black powdercoat, the molded aluminum enclosures have

no parallel surfaces, and all sides are radiused to minimize diffraction effects. Heavy interior ribs both add strength to create a solid, non-resonant enclosure, as well as break up any possibility of standing waves within the cabinet. Along the rear panel, threaded inserts (M8 Omnimount pattern) allow for various, secure wall-mount possibilities, which should be appreciated in 5.1/7.1 installations, particularly for hanging rear-surround channels.

In rear-ported designs, LF energy exiting the back of the enclosure can create unpredictable acoustical results. Opal's front ports use a patent-pending, variable-impedance approach that combines slotted vents along either side of the drivers with flared airways that substantially reduce air-distortion artifacts.

Ready, Set, Opal

Opals self-mute during power-up, so there are no nasty whumps. Beneath a removable cover on the front baffle are knobs for tweaking Opals to personal taste or acoustical considerations. In addition to a brightness switch for the illuminated Event logo, controls include level (± 6 dB input sensitivity), quarter/half/full-space (LF compensation for wall or corner placement) and LF/HF shelving filters. I liked the latter:



Opal's curved enclosures have no parallel surfaces.

These are gentle, extremely wide-Q filters offering subtle ± 1.5 dB tweaks, just enough for a little fine touching.

The semiparametric, cut-only LF filter with a sweepable frequency control (40 to 280 Hz) and two six-position switches for adjusting Q (narrow to wide) and cut depth (0 to -20 dB) were highly useful. This let me selectively notch a problematic room mode with surgical precision without destroying adjacent frequencies. After this minor tweak, I was ready to go. There was no adjustment period where I felt I had to get "used to" the monitors. These sound great right out of the box.

Event plans to offer an optional software/calibration mic package for simplifying room/speaker setup, but it wasn't shipping in time for this review. Yet thanks to the front controls, I could make tweaks without moving far from the sweet spot and, once set, the cover hides the knobs from unauthorized twiddlers. During setup, I detected no port noise (wheezing or chuffing), which can be a problem with some front-ported systems, although with nearly 750W of amps in each box, up close you can discern a bit of amplifier hiss when no signal is fed into the Opals.

In Session

Tracking drums on a large analog board, the Opals shined. They had no problem handling

PRODUCT SUMMARY

COMPANY: EVENT ELECTRONICS

WEB: www.event1.com

PRODUCT: Opal

PRICE: \$1,999 each (\$1,499 street)

PROS: Excellent low/mid/high tonal balance with superb bass reproduction. Wide, even soundstage. Front controls provide easy tweaking.

CONS: Heavy (94 pounds/pair). Some amp noise discernable while idling.

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extreme dynamic range. The reproduction of extremely fast transients on snare and cymbals was impressive, as if I was standing in front of the kit rather than seated in the control room. Thanks to the 600W LF amps and the driver design, the level and acceleration speed to the woofers is incredible. Opals seem to have an inexhaustible amount of headroom and there was no distortion at all. The net effect was like listening to a large three-way system, with chest-thumping bass that was full, yet never out of control.

Traditionally the Achilles' heel in most two-way designs, Opals' excellent midrange definition and detail made a huge difference when working with vocals, letting me clearly hear nuances in mic/preamp selections when tracking or making subtle signal-processing decisions in the mix. And piano/flute/violin session playbacks showcased the invisibility of the crossover point, which was totally seamless. The balance between lows, mids and upper-end was spot-on—at any level—so mixing on Opals was an absolute pleasure. Thanks to the low-distortion performance, there was almost no hearing fatigue, even during long listening periods. You can mix on these for days on end.

Designed to match that of the woofer, the HF waveguide's horizontal splay provides wide, even coverage with smooth response, with no off-axis smearing and a well-defined L/R soundstage over a wide listening area.

Working on a video score spotlighted Opal's LF performance. This project had drums, bass, synth and various sound effects, including a bubbling scuba tank that was pitch-shifted down an octave, creating huge amounts of sub bass that lesser systems may not have reproduced. This LF capacity was also handy on another video project—a live concert combining stage mics with distant mics at the center and rear of the room. Here, phase adjustments were critical, and mixes made on the Opals translated precisely to larger systems, as well as small TV speakers.

Setting Standards

With the Opals, Event has created a world-class system that may become the new standard. Combining absolute accuracy and large three-way performance from a relatively compact two-way system, serious studio pros will definitely want to give these a listen. III

George Petersen is Mix's executive editor.

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The Professional's Source

Atlas Pro Audio Juggernaut Mic Preamp

500 Format Module With Selectable Transformers

The Juggernaut is a single-channel, Class-A, fully discrete preamp module. It is designed to be powered by any API 500-compatible housing or in Atlas' Revolver rack, which can fit two Juggernaut modules. Slide a Juggernaut into one of the Revolver's two slots, secure two front panel screws, and you're good to go. The Revolver's rear panel provides latching XLR I/O for each module, a power switch and an IEC AC cord.

Color Me, Quick

Juggernaut's main attractions are push-buttons that switch the audio path between iron- and nickel-input transformers, changing the timbre. Nickel input provides greater bass extension and lower THD, while iron input provides a little more color. A nickel-output transformer can also be installed in lieu of the factory-installed iron one prior to racking the module in the Revolver. This is a simple operation, yet it requires a little manual dexterity. Atlas is providing the nickel-output transformer at no extra charge for a limited time.

A +THD button pads the output -10 dB. Other controls activate 48-volt phantom power, invert polarity, provide up to 25 dB of boost, and mute the unit's output. These switches are thoughtfully designed. When activated, they're backlit by an LED. The mute control is nonvolatile, and the phantom-power switch is turned off on power-up to avoid potential damage to other gear. Even if the mute switch is disengaged, the unit is automatically muted for a few seconds on power-up to avoid a thump. You must press and hold the phantom switch to engage 48V power—there is no risk of unintentional engagement here.

Continuously variable rotary controls for ad-

justing gain and input impedance are detented for repeatable setups. The latter varies mic load between 300 and 10k ohms. Depending on whether the boost and +THD switches are engaged, gain can be varied between +12 and +70 dB—plenty for use with low-output ribbon mics. You can pad the Juggernaut's output 10 dB while cranking the gain control to saturate the input transformer for more color. A 1/4-inch DI jack is also provided on the front panel.

Double My Pleasure

Atlas provided two Juggernaut modules, so I installed a nickel-output transformer in one and left the factory-installed iron-output transformer in the other. In general, the iron-output transformer produced a more saturated and colorful sound, but the nickel output sounded stunning in its depth, detail, clarity and natural warmth. The two input transformers sounded subtly different on some sources and night-and-day dissimilar on others.

The combination of nickel-input and -output transformers produced gorgeous acoustic guitar tracks, which were miked in stereo with B&K 4011 condensers. Surprisingly, this transformer combo produced a warmer and thicker sound than nickel in/iron out, while retaining sweet sparkle and detail.

When I miked a guitar cabinet with a Coles 4040 ribbon mic, the Juggernaut produced superb electric guitar tracks. Nickel in and out lent a warm, round, clean sound to Strat tracks—great for accurately capturing a guitar tone that was already lush at the mic. Iron-input and -output transformers, on the other hand, added presence and crunch to another guitar that needed extra hair. Simultaneously kicking in the boost and +THD switches grew a beard on the track!

On kick drum using an AKG D 112, nickel in and iron out produced a beautifully defined beater snap and a tight, deep "chest hit." Switching to iron input brought out the beater snap even more, but



The Juggernaut preamp offers variable impedance, backlit switches and a front DI input.

the shell resonance wasn't quite as meaty.

Nickel input with iron output on an AKG C 414 TLII was my fave on vocal tracks, lending the perfect balance of size and definition. Iron in and out sounded a tad less defined. Nickel in and out gave the most realistic—albeit more clinical—sound.

Thumbs Up

The Juggernaut is pricey, but this is no one-trick pony. Loading a Revolver with two modules using different output transformers provides tones ranging from sweet purity to velvety saturation. Thoughtful features and ergonomics make the Juggernaut a joy to use. Any studio would benefit from having a Juggernaut or two, but the preamp's sonic versatility makes it a serious contender for anyone looking for one preamp that does it all. Considering that you can also install another company's Series 500-style modules in the companion Revolver rack, there's no doubt this is one great product. ■

Mix contributing editor Michael Cooper is the owner of Michael Cooper Recording in Sisters, Ore. Visit Cooper at www.myspace.com/michaelcooperrecording.

PRODUCT SUMMARY

COMPANY: ATLAS PRO AUDIO

WEB: www.atlasproaudio.com

PRODUCT: Juggernaut

PRICE: \$895; nickel-output transformer: \$50; Revolver rack: \$399

PROS: Outstanding sound quality. Produces a wide variety of tones. High gain. DI input. Unsurpassed ergonomics.

CONS: Alternate transformers can't be electronically switched but must be physically swapped.

Violet Design Wedge Microphone

Large-Capsule Condenser Offers Big Low-Mids and High Sensitivity

Noted for the striking industrial designs of its products, Violet Design debuts the distinctive-looking Wedge—a single-diaphragm, cardioid condenser, side-address microphone.

The microphone's preamp is a Class-A circuit using a FET, a bipolar transistor and capacitor-coupled output section, and no transformer. The microphone has a 20 to 20k Hz response with a gentle lift that starts at about 2.5 kHz, peaking in the 5 to 7kHz range and rolling off starting at about 15 kHz. Self-noise is rated at 5 dBA (DIN/IEC A-weighted) and max SPL for 0.5-percent THD is 135 dB. Sensitivity is 30 mV/Pa, and it uses less than 1.75 mA of 48-volt phantom power current.

The mic's internal construction is excellent and rugged, with two small PCBs mounted back-to-back on metal rails using brass hardware. The center-tapped, 1.1-inch, 6-micron capsule is shock-mounted on the end of an aluminum "stalk" that is more than two inches long and extends above the lower body. The onboard electronics is a Class-A circuit using a FET, a bipolar transistor and capacitor-coupled output section, and no transformer. The Wedge comes in a foam-lined wooden box, along with stand-mount but not a shock-mount, which is available as an option.

Wedge in the Studio

At a studio with a classic API console, I compared the Wedge to both an AKG C-451 and a vintage C12. When recording acoustic guitars, I heard an increase in the low-midrange frequencies, which allowed me to place the mic

farther away. I started by placing the Wedge over the sound hole about 18 inches back. However, aiming the capsule toward the guitar's bridge and moving out about 20 inches proved to be the sweet spot, striking a good balance of string brilliance vs. the guitar's body tone. The pickup pattern, as compared to the C-451, is very broad and allowed more freedom for the guitarist to move around without a sound change.

On vocals, I compared the Wedge to a large-diaphragm AKG C12. The C12, by comparison, sounded almost scooped out in the low midrange. The Wedge was as bright sounding as the C12 although not as smooth in the high frequencies. My singer has a boomy sound so he had to work the Wedge farther away than the C12—and just as well, as I noticed that the Wedge was more sensitive to pops and wind noise. I would recommend always using the shock-mount and a good pop screen.

Recorded with the Wedge, assorted hand percussion and tambourines sounded great. Shaking a tambourine about two feet away produced a good balance between the "hit" and back-and-forth shaking. The hits accented the backbeat, while the shaking covered the eighth-note subdivisions. To assert control, some producers like to record separate tambourine passes of each, but the Wedge made the hits more present over the shaking than the other mics—a natural-sounding balance. When I used both the C12 and C-451, the impact of each hit sounded distant as if it were com-

pressed and out of balance.

The Wedge was a solid winner for miking electric bass guitar cabinets. That extra low midrange worked perfectly for the sound of the metal-coned speakers of a 350-watt Hartke bass amp and Fender Jazz Bass combination. The recorded bass sound was round and full, yet it retained all the spunk when the bass player popped strings. For the same reason, I recommend the Wedge for out-front miking of kick drums as the Neumann U47 FET is often used. The Wedge's long length would work well for poking through a small hole in the top of a bass drum tunnel.

All Good

Violet Design's Wedge is an all-around, good studio workhorse microphone. Although its extra length may preclude tight miking on snares or inside of kicks, I found it to be a dependable and warm microphone—especially good for bright and brash sound sources. I used it like any other condenser microphone but a little farther away from the source and got surprisingly good results every time. III

Barry Rudolph is an L.A.-based recording engineer/mixer. Visit www.barryrudolph.com.



The Wedge is a fixed-cardioid mic with a gentle frequency "bump" between 2.5 and 7 kHz.

PRODUCT SUMMARY

COMPANY: VIOLET DESIGN
WEB: www.violetusa.com
PRODUCT: Wedge
PRICE: \$654

PROS: Fat, warm and present sound even at longer distances from sources.

CONS: For a side-address condenser, this mic's length could limit its use for close use in and around drum kits. Use of a shock-mount and pop screen is mandatory due to its wind and vibration sensitivity.

Sterling Audio ST69 Condenser Microphone

Three-Pattern Tube Mic Offers Flat, Natural Sound

It would be far too easy to dismiss Sterling Audio as another “like all the rest” line of Chinese-made microphones. However, for several years now, Sterling Audio has carved its own niche, including developing a close connection with Groove Tubes founder Aspen Pittman, resulting in innovative products with affordable pricing and excellent performance.

Sold exclusively through Guitar Center-family companies—such as GC, GC Pro, Musician’s Friend and Music 123—the Sterling Audio ST69 tube studio mic package includes the PSM1 power supply, 20-foot 7-conductor cable, shock-mount and aluminum transport case.

Bright Looks, Big Insides

The ST69 is a 7.5-inch, 1.2-pound condenser model with an attractive, machined stainless-steel body and brushed finish. Looks can be deceiving, so I was interested in what resided under the case. The electronics are an all-discrete, Class-A design with nice touches, such as high-end Wima capacitors and a large, custom-designed, nickel-core transformer with thick ferrite metal shielding. The miniature Groove Tubes GT6205 tube is shock-mounted on the underside of the board. Hand-selected for low noise, the 6205 is actually a pentode, but in this case it is wired to operate as a triode.

The ST69 has a 1-inch diameter, evaporated gold Mylar diaphragm with a thickness of just 3 microns. Protruding from the center of the diaphragm is a Disk Resonator™, a 1-centimeter-diameter brass disk resembling a donut shape. Raised above the level of the diaphragm, the

disk acts like a Helmholtz resonator—essentially in the same manner as a loudspeaker whizzer cone, but in reverse. This preserves the sensitivity of the large capsule, while extending the capsule’s high-frequency response without resorting to equalization or other active filters.

Switches on the front of the mic body select a 10dB pad (for 140dB max SPL handling) and highpass filter (12dB/octave at 75 Hz), with a third switch on the backside for polar pattern (omni/cardioid/figure-8).

In Session

The ST69 rides high in the shock-mount, so the switches are easily accessible. The mic ships with an extra set of elastic cording for the shock-mount—a nice touch. I wasn’t wowed about the plastic angle-adjustment knob. This doesn’t have the same quality as the rest of the package, and its small size and close proximity to the shock-mount frame make it hard to tighten. There’s no non-shock-mount mounting clip, which limits placement somewhat, but this shouldn’t be an issue in most applications.

Once set up, I switched on the power supply and was greeted with a burst of warm-up hiss, which subsided after about 60 seconds as the tube warmed up and the electronics stabilized.

My first session was on a male vocal with the ST69 in cardioid. The cardioid pattern is fairly wide, with even, uncolored off-axis response. The mic’s gentle proximity effect provided a nice warmth around 200 Hz when used close in. The twin-layer mesh grille does a good job of handling breath noise when the source is kept at least four or five inches away, but for tighter work you’ll need an external pop shield. In cardioid, the mic had a smooth, mostly flat natural sound, with a slightly rising (+2dB) upper mid-range boost around 5 to 8k Hz and extended HF “air” out well beyond 12 kHz. There was no need for EQ here, and I had the same experience in recording flute and acoustic guitar overdubs. The result was full and round with plenty of top articulation that made the tracks sound like the instrument in the room.

Used close-up in the figure-8 pattern, the



The mic’s Disk Resonator is visible under the mesh grille.

ST69 has a huge proximity boost with a low-end pump that provided an instant Barry White effect on vocals and a great sound on acoustic bass. With extended HF reproduction and nearly identical front and back lobe response, the ST69 is an ideal candidate for M/S miking, as well.

In the omni pattern, the ST69 was very flat out to 10 kHz, followed by a slight bump around 12 kHz and plenty of high-end response. Combining a single ST69 above a kit (with an Audix D6 kick mic for punch) offered a drum sound that was natural and balanced.

One thing that surprised me somewhat was that the ST69 picks up everything. Used as an ambience mic 10 feet up on an AiRR Support boom, the ST69 had no problem reproducing distant piano bench squeaks, page turns, rattling drum hardware and air handling noise—a combination of wideband problems that other mics may have missed entirely.

With a low \$599 street pricing, I was initially skeptical about the Sterling ST69. But it sounds great and would serve equally well in a large studio collection or as a single mic that can handle almost any recording application. III

PRODUCT SUMMARY

COMPANY: STERLING AUDIO

WEB: www.sterlingaudio.net

PRODUCT: ST69

PRICE: \$1,199 (\$599 street)

PROS: Great build quality. Combines the smoothness and warmth of a large-diaphragm capsule with the extended HF of small-diaphragm models.

CONS: No stand clip. Availability is limited to certain retailers.

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The Pride of D.I.Y.

Building Your House of Cards

The inspiration to do-it-yourself has many muses, from purely creative to über-frugal. Like all “sound” investments, the rewards come gradually at first. If you want to jump onto the geek merry-go-round—without it breaking down or you getting flung off—it’s better to start within your comfort level and get results rather than get lost, frustrated and stuck with a box of parts. Let’s consider a few options.

Wire Monkey

Making cables is a good entry-level task so long as you accept that the first attempts are just for practice. Look at how other cables are made and do your best to emulate them. A wiring project is geek therapy: advancement through repetition and a great exercise in honing fine-motor skills.

After stripping insulation and tinning (applying solder to the wires and the connector), the key to good wiring technique is to butt the insulation right up to the solder connection and not have any exposed bare wire (to avoid short circuits). The amount of insulated wire from the end of the cable’s outer jacket to the connection should be as generous as circumstances allow; a common mistake is cutting these too short. Bare shields should be sleeved with either Teflon or shrink tubing. Larger-diameter shrink is also used to overlap the junction from the outer jacket to the individual wires—at least 1/4-inch on each side, 1/2-inch total.

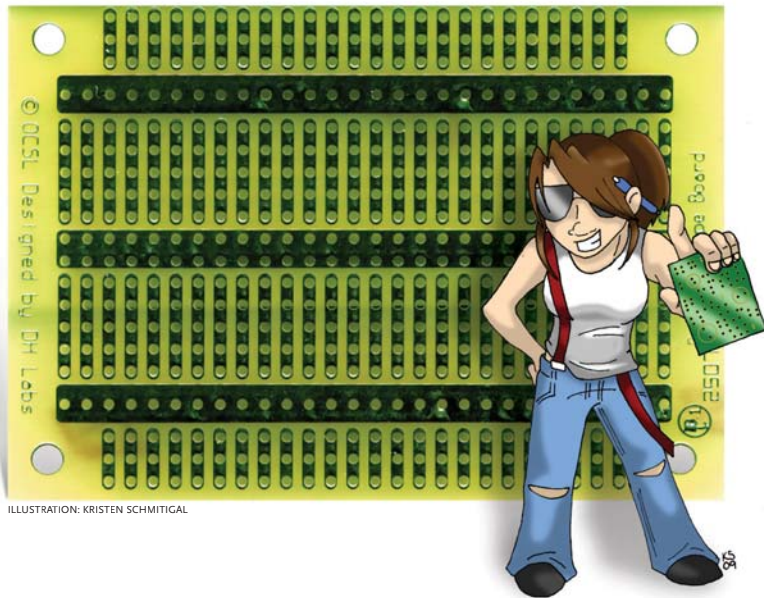


ILLUSTRATION: KRISTEN SCHMITZ

Kit and Kaboodle

Kit building is equally therapeutic and lets someone without an electrical engineering degree build something useful. In addition to fine-motor skills, “growth” can be realized in the simpler things, like using a multimeter or the ability to recover from an accidental resistor spill, thanks to an understanding of the resistor color code. The ABCs of electronics include learning to identify and correctly orient electronic components into their designated positions, and correlating physical parts with their schematic symbols. Master these basics, and you’re ready to move on to schematics.

A great first-choice project is a fuzz box because many circuits are variations of a similar diode-clipping theme. Earlier designs use germanium diodes (still available), followed by silicon diodes and even LEDs. Each diode type has a sound and each sound is typically equalized to remove some of the high-frequency edginess and LF mud that comes with “super-crunch.”

After picking a circuit you want to learn more about, I recommend drawing the schematic as an exercise. Do the same for other fuzz box schematics, making a point to lay out the major components—such as op amps—in the same place to make comparisons easier, with pattern recognition being the goal. Once the circuit similarities are obvious (the forest), component differences will reveal themselves (the trees), and from there the natural progression is to build and listen and tinker and listen until you understand how component *values* change the sound and which sound is your sound.

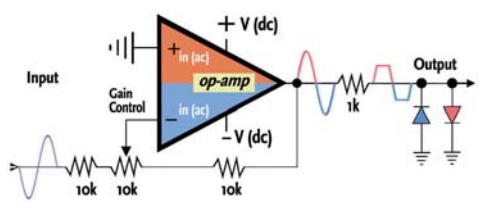
Bread and Board

Buying a kit might be the easiest way to get started, but if you’ve stumbled upon some similar circuits and want to experiment before committing—and not have to mess with soldering, unsoldering and re-soldering—a

AUDIO SCIENCE

A Simple D.I.Y. Fuzz Box Project

A simple fuzz box comprises an operational amplifier (op amp) and diode “clippers.” The amplifier’s gain range is unity (no gain), ± 6 dB. The circuit is only designed to drive the diodes until they conduct, causing clipping. A separate amplifier would be used to optimize the instrument interface. An op amp has two audio (AC) signal inputs:



non-inverting (+) and inverting (-); the former is grounded in this application.

Color-coded sine waves in and out confirm polarity inversion and the respective diodes responsible for “damaging” each wave half. An op amp has two power inputs, as well. For simplicity, this circuit runs on bipolar power. (Most stomp boxes run on a single 9-volt battery.)

—Eddie Ciletti

solder-less breadboard makes the job easier. Let's continue with the fuzzi box theme using an op amp. Once the circuit is up and running, the breadboard becomes a playground where you can easily swap diodes and capacitors for ease of experimentation.

At the top *and* the bottom of the breadboard are two horizontal rows of red and blue connections that are typically used for power and ground distribution. In between are two vertical columns of five connections each, separated by a "moat" that can be straddled by an IC. Poke the components in the holes, use solid wire jumpers to make the remaining connections and you're ready to rock.

Between solderless breadboard and printed circuit boards are prototype boards (plated through-holes to make soldering easier) and perf board (a perforated board without any copper or traces). Hole spacing is typically one-tenth of an inch to accommodate an IC's pin spacing. RadioShack has the most accessible options, which are all made on a phenolic-base material. Those boards can easily break when stressed. However, that same trait becomes useful when cutting a large board down to size—the board easily snaps along the grid.

Darren Hovsepian—president of DH Labs, a company specializing in high-end cabling—created the D-4 Proto Board to try out op amps and some application-specific audio ICs. This \$5 prototype board allows a seamless transition from the solderless breadboard. While it can be used for any simple circuit application, it is intended for op amps. The three large horizontal traces are for bipolar power distribution, plus rail (com-

mon-neg rail). Like the solderless breadboard, the op amp straddles the horizontal center path/ground bus. Each vertical trace can connect multiple parts to each op amp pin.

High-quality circuit boards are made of a Fiberglas-epoxy material. These are typically green, but also come in red, blue and black. Suppliers of generic boards include DH Labs (www.audioexpress.com), Electronics Plus (www.electronicplus.com), Ocean State Electronics (www.oselectronics.com) and SchmartBoards (www.schmartboard.com).

Building a Prototype

Once you are confident that your circuit achieves the goal, be sure to annotate the original schematic, or draw a new one, before constructing the real deal. If you have a prefab kit, you can hope that all of your variations will fit into the existing holes. While it's easier now than ever to make a professional-looking project inside and out, I highly recommend *first* building a prototype to get all of the kinks out. Live with what you've built for a while before making it beautiful.

Be curious enough to tinker and you will master the basics. Keep up the tinkering and the ultimate reward is the ability to think "circuits," like thinking in another language, and eventually derive your own custom circuits from a mental library of "stuff that does this or that." ■

For more Eddie Ciletti, visit www.tangible-technology.com.

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And just think, back in the early '90s, that was the most un-Pearl Jam thing you could do."

New Model Army

Reacting to the radically changed landscape, a new breed of proactive individuals has arisen, tossing out the conventional wisdom as out-moded and drawing up their own career blueprints—in the process giving a whole new meaning to the term "independent." Singer/songwriter AM, a Hotel Café regular, self-produces and self-releases his music—"and off one album he's had 63 placements," DeSavia marvels. "He has no interest in getting a record deal; he's focused exclusively on recording himself and getting placements." Greg Laswell, who produces and engineers his own records for indie label Vanguard, is another in a growing field of proactive artists who derive their income primarily from licensing their material, and that primary form of exposure enables them to sell tickets and records. Both are making a decent living doing what they love.

Grace Potter & The Nocturnals, a Vermont-based group that got traction on the jam-band circuit, are on their third album for Disney's Hollywood Records. For them, the traditional

"We don't care about selling products or manufacturing discs. We care about monetizing use, and use is what's gonna happen, whether it's subscription or ad-supported or bundled services with ISPs." —Richard Conlon, BMI

model is working. Their label, which has exhibited remarkable patience during an era that prioritizes immediate results, has put the band together with producer T Bone Burnett, a situation that wouldn't have happened if Potter and her crew were still on their own. But they don't rely on subsidies from Hollywood to cover their overhead. They do it by "touring our faces off," says Potter.

"That's not the only solution, but it's what we know," she explains. "Sometimes you just can't get over what you were born to do. No matter what happens, we can always go back to ground zero and pack ourselves into the van we pooled our money to buy in 2003, as long as we can scrape together \$40 for gas and get ourselves dinner. And hopefully by the end of the

week we'll be able to pay the rent. We're not selling a lot of records—I hope someday we can be that band. But we're lucky to be on a label that can sweat it out with us. You can't wait for the tide to turn; you have to turn it yourself."

"There's every reason to be optimistic," says Richard Conlon. "People are going to use music. Maybe consumers won't be buying CDs, or buying downloads for that matter. But whatever happens, music is going to be used. It's not like the music is gonna turn off everywhere. Writers will write, artists will record, consumers will listen and enjoy. If you keep those fundamentals in your head, you'll realize the sky *isn't* falling by any sort of metric." III

Bud Scoppa is Mix magazine's L.A. editor.

On the Cover *continued from page 16*

can't drive it up the interstate; we have to take the back roads and we have to take the roof off to get under a couple of places. But it's such a great room. And we'll take care of Ralph Sutton there in Memphis because he doesn't want to move and that's his room. But I believe in the synergies of things working together, and that will complete the House of Blues picture. We have variety and segmentation, and we can offer something for everyone, no matter how

they want to work."

"The next couple of months are going to be crazy," adds Paragone, citing the beyond-the-call-of-duty contributions of assistant engineer Heather Sturm and chief tech Ted Wheeler in the whole process. "Studio C will be positioned as something more than you can get at home, with more choices in mic pre's, mics or outboard gear. But I don't want to compete with myself, so it will be more fo-

cused on production. And then the historic Studio D will be getting the API that Gary used to have in House of Blues Encino before he put in the Neve. It's classic '70s API, one of the first built, with that vintage 550A EQ, transformers, wires, the famous 2520 op amp. Real, real simple, and it sounds amazing. We get calls all the time for an API room. Now I'm going to have one."

The API, built originally for a remote truck and said to be a favorite of T Bone Burnett, David Leonard and others, was given to Belz by Dan Aykroyd. "Danny came over right after I moved [to Los Angeles] in 1990," Belz recalls. "He's always loved music, of course, and at the time I was using the control room as a meditation center and the studio as my office! He said, 'Gary, you need to put music in this studio.' And he brought over the console. That was after we'd started Memphis, and it got me going in Los Angeles. And now that console is going to Nashville."

The fact that Memphis Studio D and the vintage L.A. API are meeting in Nashville seems a fitting manifestation for a man whose life, professional and spiritual, has had its own fill of circuitous and synchronous moments. As he says repeatedly, he's not a businessman; he just takes all his friends' best ideas and tries to make special places. He certainly has one in Nashville. III



From Left: studio manager Mike Paragone; Paul Franklin, steel guitar; Al Sutton, engineer; Kid Rock; producer Rob Cavallo; assistant engineer Heather Sturm

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- Barry Rudolph, *Mix magazine*



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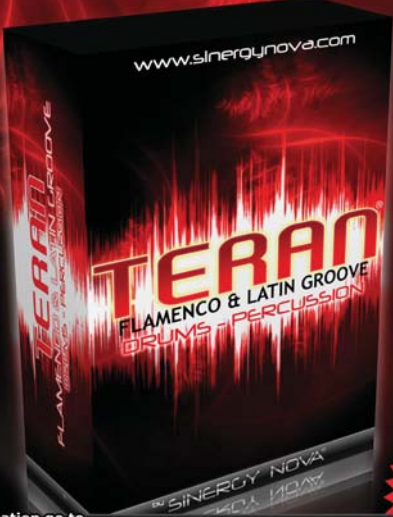
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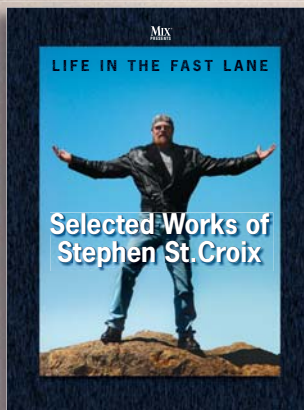
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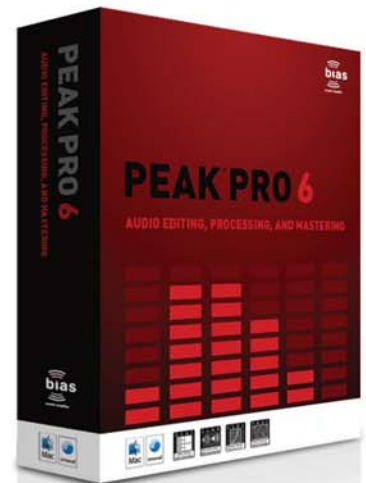
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The legendary RØDE NT2-A features a large-diaphragm (1") condenser capsule with switchable polar patterns (cardioid, figure 8, omni), highpass filter (flat, 40Hz, 80Hz) and pad (0dB, -5dB, -10dB). The all Australian-made NT2-A features incredibly low self noise and a wide dynamic range, and was the recipient of the MIPA "World's Best Studio Microphone" award in 2006. The NT2-A is the go-to mic for any musician and engineer that demands reliability, quality, and performance.



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Antelope Isochrone OCX Premier reference master clock based on aerospace technology

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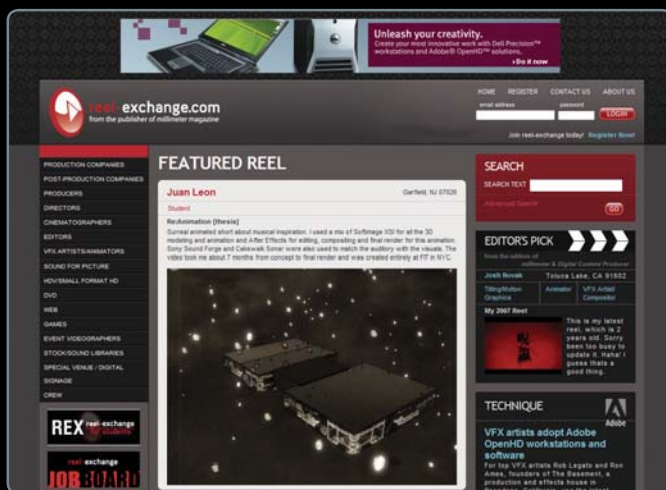
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from the publisher of *millimeter* magazine

Maureen Droney

The senior director of The Recording Academy Producers & Engineers Wing serves as an advocate for quality recordings and the professionals who make them.

How has the role of the P&E Wing changed in response to new music business models and to the changing economics in our industry?

We've become more politically and educationally active. In general, we're working hard to be more relevant and valuable to our members' lives. As the streams of income shift and new revenue areas open, it's important for producers and engineers to have a seat at the table. Years ago, when some of the decisions were made about revenue distribution, they did not have that seat. The main reason producers have not been paid performance royalties in the U.S. is that in the past, including in 1995 when the digital legislation was passed, there wasn't an organized voice speaking for them.

We also work to inform our members regarding items they might want to include in their employment agreements and to help them keep up with what's happening, both in terms of revenue streams, and also technology in general. For example, with technical seminars, like in Miami where recently the Florida Chapter sponsored seminars on hardware versus software, with equipment shootouts where people got hands-on opportunities to hear the differences, see what the pros and cons are, and make their own informed decisions.

You wrote a feature for us last year about the use of metadata (see "Digital Track Sheet," October 2008). Can you summarize what the P&E Wing's metadata project will accomplish?

We're a partner with BMS/Chace and the Li-

brary of Congress in developing a recording data-collection tool that will travel from the very beginning of a project to the end points of sale and filing copyright. It would help ensure that those who work on music get credited accurately and paid accurately.

This issue of Mix tries to address the "value of free," how to give music away to generate interest but still make a living. What do you see as the potential sources of revenue for engineers and producers in the age of free music?

There are so many new concepts; I don't think anybody knows the answers yet as to what will work. Some people think the 360 deal is a good model, but nobody knows exactly how to cut these deals. What does your 360 deal cover and how long is it? Does it run for what you determine to be the life cycle of a specific album—or for some other length of time? We don't know the answers, but we need to be aware of the possibilities so that we can ask the right questions and, when appropriate, negotiate for an equitable share. If you're working on a project and it could be given away as a freemium or sold as Prince did, giving [*Planet Earth*] away with the *Daily Mail* newspaper in England for a large sum of money, producers and their managers should be able to take this into consideration when they're negotiating compensation.

The first step for us is to identify what these different models are and then try to figure out what's fair for those who have participation in a project. It's not just about what you can get for yourself; it's also about how you grow the industry and figure out equitable distribution of the new streams of income.

Producers we interviewed for this issue talked about how their jobs have evolved into doing a lot of A&R, owning their own labels, having a stake in more aspects of a project.

Just getting a nice clean project sent to you to mix, or just getting a project wrapped, sealed and delivered to you with a generous budget is now not really the norm. Producers may own labels or be part-owners or find talent themselves and put together investors. But that's really how



the industry started! If you look at many of the major record companies, they originally grew out of that entrepreneurial and independent spirit.

We're certainly seeing a reversion to a D.I.Y. attitude, but these indies have the Web and the rules are so different.

I had an argument with a friend of mine who is a vice president of the Consumer Electronics Association when the Live Nation/Madonna deal happened. I said, "What do they know about distribution or putting out a record?" But she said, "What do you mean distribution? You put up a Website." And I thought, "She's right!" Someone of that stature may not require the same infrastructure that they used to need to sell music. So if you can get the word out, you can sell that way. But, and this is kind of a mantra of mine lately, to have sales and payments tracked properly for everyone, it still comes back to the metadata systems operating in a standardized, open-source way. Companies are starting to realize that when you could sell a piece of media like a CD for \$26.99 or \$18.99, it wasn't quite so crucial that you accounted for every fraction of a cent. But now that, in many cases, we're selling music for such small amounts of money, everybody needs to get onboard so we can have accurate, efficient and interoperable systems in place. ■

Grace Design A/D Converters: Superior Performance by Design

A/D converter quality is the sum of its parts: the analog input, the converter, and the clocks. Our total attention to all three results in what many of the world's leading audio engineers believe to be the most musical, transparent sounding A/D converters available.

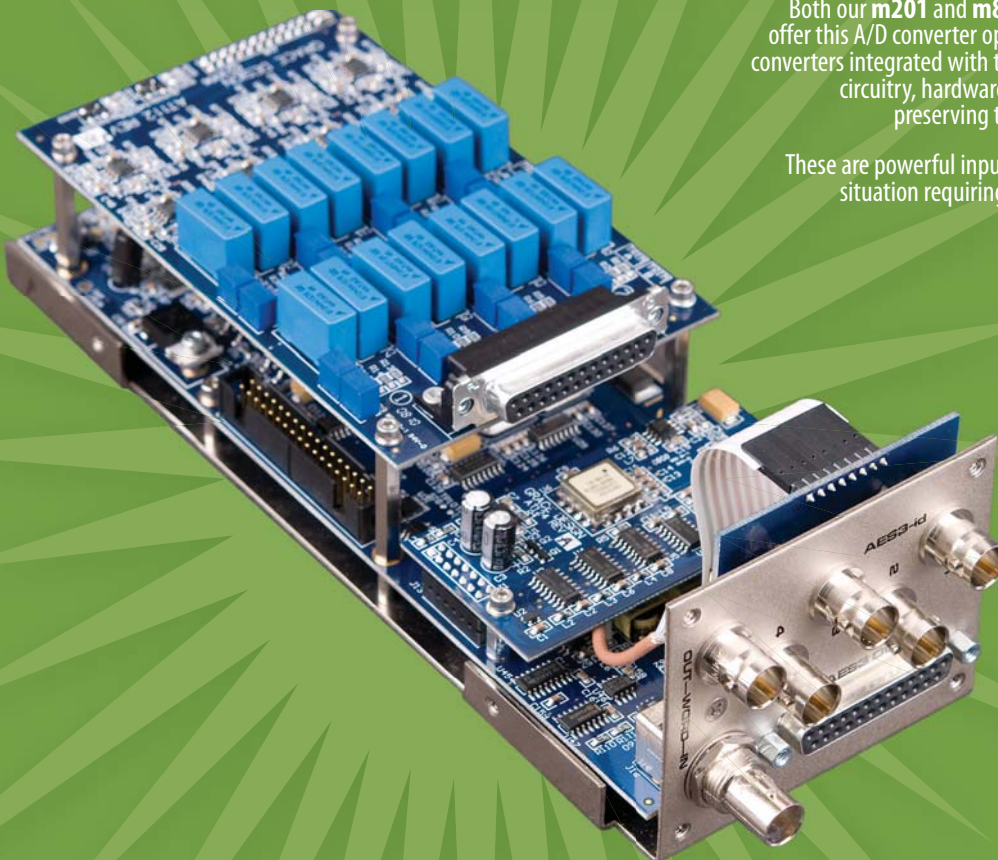
Our experience with analog design translates to input circuitry which is musical and pure. Passive components are chosen for sonic performance, while close attention to grounding and power supply layout eliminates distortion caused by interference from the digital circuitry.

Next, the A/D converter ICs we use are chosen for their wide dynamic range, musicality, low latency and low distortion. They are capable of 120dB dynamic range with distortion and noise at less than -110dB.

Still, a perfectly designed analog input stage feeding the finest converter is only as good as the sampling clock. So for internal clocking we use an ultra low jitter quartz oscillator. For external clocking, our proprietary s-lock™ two stage PLL provides near jitter-free recovered clock without the use of sonically dubious ASRC's (asynchronous sample rate converters).

Both our **m201** and **m802** microphone preamplifiers now offer this A/D converter option. The advantage of having the converters integrated with the preamplifier is key - extraneous circuitry, hardware and cabling is eliminated, further preserving the purity and fidelity of the signal.

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