

# MIX

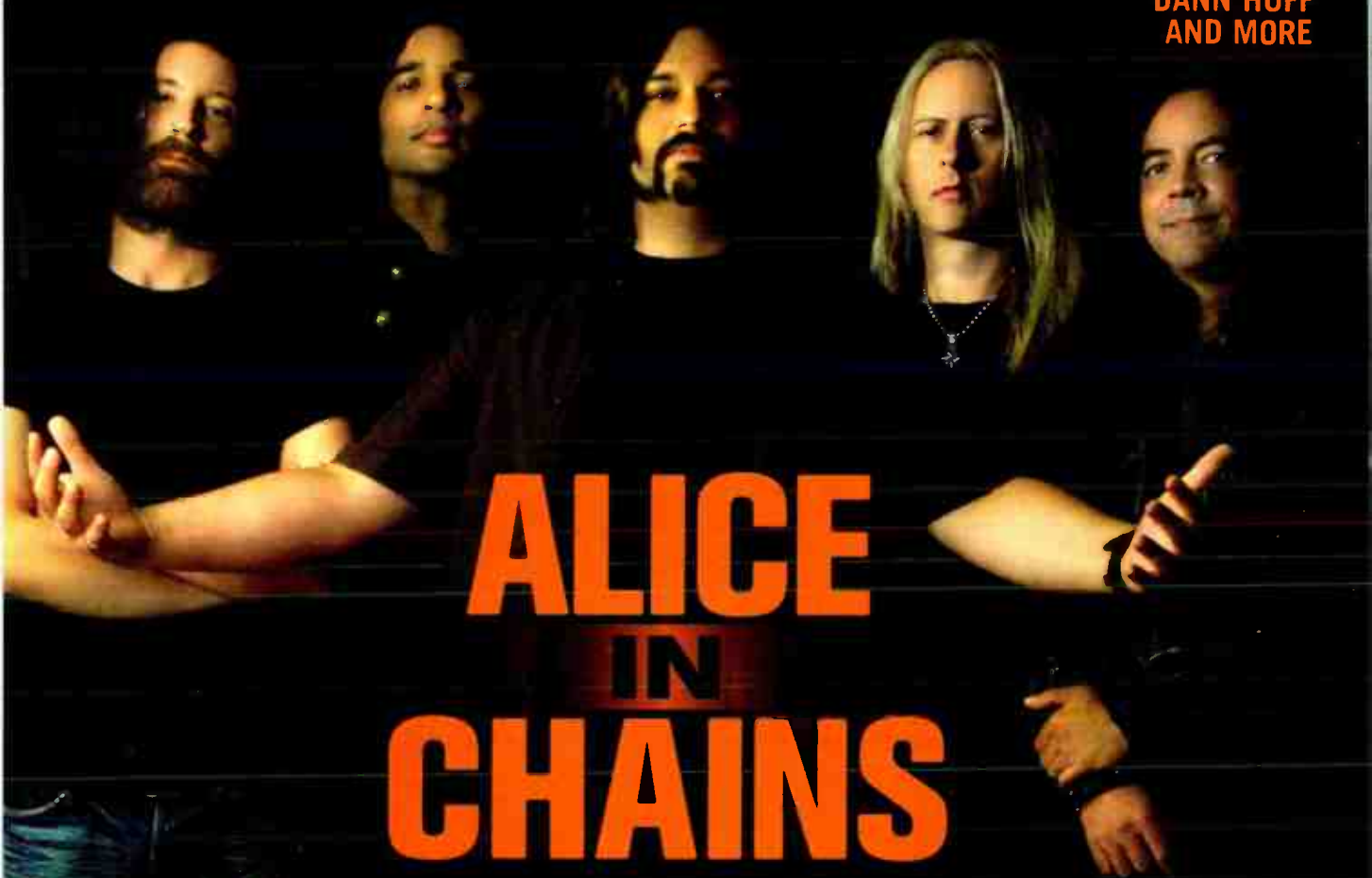
PROFESSIONAL AUDIO AND MUSIC PRODUCTION

Phish Live | First Look: Logic Pro 9 | TEC Nominees

WWW.MIXONLINE.COM | SEPTEMBER 2009

## The Producers

PHIL RAMONE  
NICK LAUNAY  
JOE BOYD  
R.S. FIELD  
DANN HUFF  
AND MORE



# ALICE IN CHAINS

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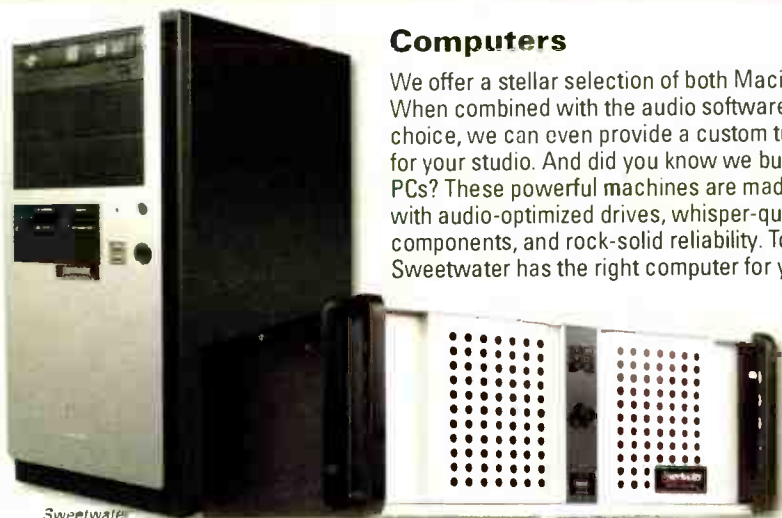
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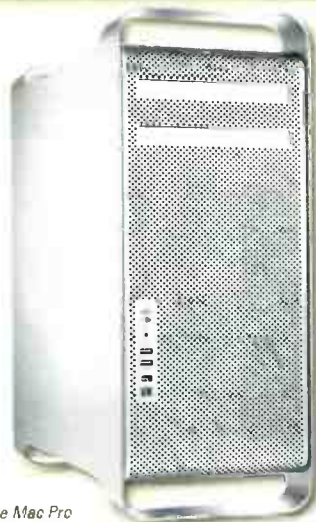


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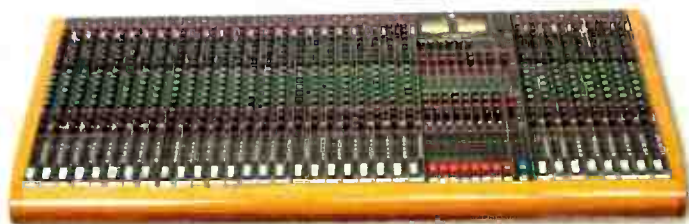
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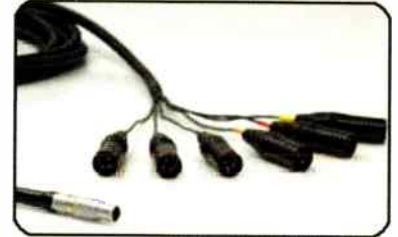
## :: on the cover

**On the Cover:** The reformed Alice in Chains recorded and mixed their comeback release, *Black Gives Way to Blue*, at Studio 606 and Henson Studios (Hollywood). See page 26. Photo: Beatriz Thibeaux.



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## So You Wanna Be a Producer...

**T**here was a point during the Anatomy of a Hit panel at Mix Nashville this past May when producer Dann Huff turned to moderator Peter Cooper and said, with a laugh, "You're not going to ask me what a producer does, are you? Because I don't have any idea." This from a guy who scored a rare hat trick in 2009 with consecutive Number One albums on the country charts from Keith Urban, Martina McBride and a couple of guys named Rascal. When we picked up the conversation for this month's back page, he elaborated, again with a chuckle: "The producer is the guy who orders lunch."

It's an age-old question, bordering on the cliché: What does a producer do? It's a question we ask all the time here at *Mix*, and the answers we get run the gamut, changing over time as technologies evolve and the music-business model morphs. There was a time, not that long ago, when top producers picked up the phone and were handed projects. Very rare today. There was a time when budgets allowed producers to book seemingly unlimited time, in multiple rooms, at a top facility. Not so much anymore. There was a time when a single producer worked on a single project, then worked on another one, then another. Today it's just as likely that multiple producers work on multiple projects at multiple times. There was a time when A&R men roamed the...okay, today producers are the A&R men and women.

There is no job description, there is no right way to do things. Some producers abhor technology as an impediment to their art; others dive into the grid and craft a beat that is radio-ready by the afternoon. Some prefer to do most of their work at home and concentrate on pre-production; others want to bounce off the artists and engineers and live in the environment. Some very talented cats with long track records can't seem to find a gig; some kid just out of school can blow up with a monster hit. The life of a producer is unpredictable. It's always been that way.

In this, our annual issue devoted to producers, we asked a lot of questions about techniques and styles, and we got back a lot of different answers. Joe Boyd wants to make decisions early and let the players play, while Nick Launay let us know why he loves tape. Tony Shepperd has gone indie, and Ken Coomer likes to start, naturally, with the drummer. R.S. Field just wants the quickest and cleanest signal path, eschewing "transatlantic cabling." Nick Raskulinecz, featured on this month's cover for his work with Alice in Chains, will get you a rock guitar sound that you can take to the bank.

But if there is one common thread, one element of the art and craft of producing that all seem to agree on, it's that they work for the artist and the song. The legendary Phil Ramone sums it up nicely when he says, "The whole generation of music in the last 10 to 15 years is to the wall—heavy limiting, heavy compression. The purist is going to say, 'Where is the dynamic range and why is it being screwed with?' And the counterargument comes out: 'Well, we have to deal with radio so we want to make sure our record is louder.' But it still comes down to the song."

Right on,



Tom Kenny  
Editor

## MIX

EDITORIAL DIRECTOR Tom Kenny [tkenny@mixonline.com](mailto:tkenny@mixonline.com)  
EXECUTIVE EDITOR George Petersen [gpetersen@mixonline.com](mailto:gpetersen@mixonline.com)  
SENIOR EDITOR Blair Jackson [blair@blairjackson.com](mailto:blair@blairjackson.com)  
TECHNICAL EDITOR Kevin Becka [kbecka@earthlink.net](mailto:kbecka@earthlink.net)  
GROUP MANAGING EDITOR Sarah Benzuly [sbenzuly@mixonline.com](mailto:sbenzuly@mixonline.com)  
COPY CHIEF Barbara Schultz [bschultz@mixonline.com](mailto:bschultz@mixonline.com)  
ASSISTANT EDITOR Matt Gallagher [mgallagher@mixonline.com](mailto:mgallagher@mixonline.com)  
LOS ANGELES EDITOR Bud Scoppa [bs7777@aol.com](mailto:bs7777@aol.com)  
NEW YORK EDITOR David Weiss [david@dwords.com](mailto:david@dwords.com)  
NASHVILLE EDITOR Peter Cooper [peter@petercoopermusic.com](mailto:peter@petercoopermusic.com)  
FILM SOUND EDITOR Larry Blake [swelltone@aol.com](mailto:swelltone@aol.com)  
SOUND REINFORCEMENT EDITOR Steve La Cerra  
CONSULTING EDITOR Paul D. Lehman [lehrman@pan.com](mailto:lehrman@pan.com)  
CONTRIBUTING EDITORS Michael Cooper Heather Johnson  
Eddie Ciletti Gary Eskow Barry Rudolph Bob Hodas

SENIOR ART DIRECTOR Dmitry Panich [dmitry.panich@penton.com](mailto:dmitry.panich@penton.com)  
ART DIRECTOR Isabelle Pantazis [isabelle.pantazis@penton.com](mailto:isabelle.pantazis@penton.com)  
PHOTOGRAPHY Steve Jennings  
INFORMATIONAL GRAPHICS Chuck Dahmer

SENIOR VICE PRESIDENT Kim Paulsen [kim.paulsen@penton.com](mailto:kim.paulsen@penton.com)  
VICE PRESIDENT Wayne Madden [wayne.madden@penton.com](mailto:wayne.madden@penton.com)  
ASSOCIATE PUBLISHER Mark Holland [mark.holland@penton.com](mailto:mark.holland@penton.com)  
DIRECTOR, KEY ACCOUNTS Joanne Zola [joanne.zola@penton.com](mailto:joanne.zola@penton.com)  
WESTERN SALES DIRECTOR Erika Lopez [erika.lopez@penton.com](mailto:erika.lopez@penton.com)  
EASTERN SALES DIRECTOR Paul Leifer, [pleifer@aol.com](mailto:pleifer@aol.com)  
CONTENT DIRECTOR, ONLINE & EVENTS Erin Huton [erin.huton@penton.com](mailto:erin.huton@penton.com)  
ONLINE SALES DEVELOPMENT DIRECTOR Angie Gates [angie.gates@penton.com](mailto:angie.gates@penton.com)  
CLASSIFIED SALES MANAGER Julie Dahlstrom [julie.dahlstrom@penton.com](mailto:julie.dahlstrom@penton.com)

MARKETING DIRECTOR Kirby Asplund [kirbyasplund@penton.com](mailto:kirbyasplund@penton.com)  
MARKETING COORDINATOR Tyler Reed [tyler.reed@penton.com](mailto:tyler.reed@penton.com)  
EVENTS PRODUCER Jennifer Smith [jennifersmith@penton.com](mailto:jennifersmith@penton.com)

PRODUCTION MANAGER Liz Turner [liz.turner@penton.com](mailto:liz.turner@penton.com)  
CLASSIFIED PRODUCTION COORDINATOR Linda Sargent  
[linda.sargent@penton.com](mailto:linda.sargent@penton.com)

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CHIEF EXECUTIVE OFFICER Sharon Rowlands [sharon.rowlands@penton.com](mailto:sharon.rowlands@penton.com)  
CHIEF FINANCIAL OFFICER/EXECUTIVE VICE PRESIDENT Jean Clifton  
[jean.clifton@penton.com](mailto:jean.clifton@penton.com)  
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**LIST RENTAL:** Marie Briganti [marie.briganti@walterkarlinfo.usa.com](mailto:marie.briganti@walterkarlinfo.usa.com)  
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## Point of Origin

I am a jazz artist/producer/musician and I wanted to let you know a few facts about your article "On the Cover: Memphis Meets Music City at House of Blues" (May 2009, about House of Blues Studios in Nashville). My father, Pasquale, and I built the studio from the ground up. It was called Stonehenge Music Recording Studio, and Chuck and Randy Allen bought it from us. Since then, they added a control room and lounge.

No big deal, but I thought you would like to know.

*Steve DellaVecchia*

*Steve—Studio manager Mike Paragone did mention your name and gave full credit, as did studio owner Gary Belz; my apologies for not working it in.*

—Tom Kenny



## Gee Whiz

As someone who started off working at Radio Shack selling 6x9-inch car speakers, it made me laugh out loud to read George Petersen's analogy about "whizzer cones" in the Sterling ST-69 review (May 2009). I haven't thought about whizzer cones in decades. Thanks for the chuckle.

*Lynn Fuston  
3D Audio Inc.*

## Unsung Woodstock Engineer

I read the article about recording Woodstock in the July issue of *Mix* ("Sound for Picture: Woodstock (Re-) Generation"). I very much appreciated Eddie Kramer's remembrances about his Herculean efforts to get the whole thing on tape. However, I couldn't find any mention of his co-engineer, Lee Osborne, who was my former teacher. Lee is credited on the CD as co-engineer, but wasn't mentioned anywhere in your article. I'm wondering why.

From the stories I've heard from Lee and his compatriots, John Chester and Bob Godard (who built and ran the sound system at the Fillmore East), it was basically an exercise in recording under battlefield con-

ditions, and Lee certainly did his share of the heavy lifting. I particularly remember a story about how one of the guys had to run out of the trailer in the middle of a set and pound another ground rod into the muddy field, because the previous one just suddenly failed and the hum was atrocious!

I and all of my fellow students at NYU Film School in 1972 gave Lee a lot of extra consideration when we would walk into the classroom and find written on the blackboard: "Class canceled—Lee stuck in North Carolina with The Airplane." He was that band's road mixer for a while, as well as the sound engineer for some of Martin Scorsese's early films, including *Mean Streets*.

Why is there no mention of this truly pioneering mixer, nor any mention of his album credit in your Woodstock article? I can only hope that this helps Lee's star shine just a little brighter in the future. He is truly a brilliant and extremely talented guy.

*Tom Zafan*

## Keys to Success

I never trusted [*Wired* magazine editor] Chris Anderson's theory

[an economic model that Anderson calls the "long tail," as described in the May 2009 "Mix Interview"]. It was based on data from Rhapsody, which does not represent actual choice or purchases of music. (I am assuming this based on Anderson's quotes.) Rhapsody uses technology to create radio channels and its subscribers choose a channel, but not necessarily the songs.

We see today, as always, that popular music sells the most, gets ripped-off the most and is shared the most. By definition, popular music is music that many people enjoy. Mass acceptance usually happens after many people are exposed to the same song. There are as many successful artists today as in prior years, and there have always been three main groups of musicians: musicians who create interesting new product regularly and can sell out large venues; up-and-coming artists who can support themselves or earn some money from music;

and hobbyists, who play some gigs and record tunes in their garages but do not make money from music. I believe Anderson is a hobbyist musician.

Every sector of the music community has seen a decline in revenue. Convenience has trumped the economy of music and listening quality. The public has access to music in many more places now. Artists cannot get their music on the radio unless a major record company spends a huge amount of money. The radio audience has declined and a vast number of people still listen. Sirius and XM have miniscule numbers of people listening to each channel, and the same goes for most Internet channels.

A "local music" paradigm has always worked: An artist develops a local following, plays in clubs, gets played on college radio and creates street teams. My theory: If a band is successful selling beer and T-shirts, they might have a career. Today, there are many more ways artists can make recordings—thanks to manufacturers who have helped democratize recording technology—and gain exposure.

None of the above guarantees that an artist can become successful. There is the potential of a longer tail for music consumption, but it looks like the curve as presented by Anderson is not reflective of music commerce.

The formula that works: Write a great song that lots of people enjoy. There are no rules.

*Elliot Mazer III*



Next month's issue focuses on new products and technologies to be introduced at the AES show in New York City. E-mail your favorite New York recording story to [mixeditorial@mixonline.com](mailto:mixeditorial@mixonline.com).

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## Le Studio Mobile, Le 30

Owner/operator Guillaume Bengle is celebrating his company's 30th anniversary in the remote-recording field, and recently added a second remote truck to his arsenal. The new mobile studio's twin Yamaha DM2000V2 boards handled the broadcast recording of this year's Canadian Juno Awards, a project the company has covered for more than 23 years.

Looking back on his live-recording work in the 1970s, Bengle says, "We used a 12-input console and a ½-inch 4-track recorder, each weighing about 200 pounds located in the kitchen of the clubs we worked in. It soon became obvious that the equipment should stay in the truck and only microphones and snakes were taken out.

"The business was very different 30 years ago," Bengle continues. "Most of our work came from radio and about one-third from recording projects. Television came a bit later. Today TV and DVD projects account for about 80 percent of our business."



Le Studio Mobile owner/operator Guillaume Bengle

## Tour Providers Join Forces

Delta Sound ([deltasound.co.uk](http://deltasound.co.uk)) has acquired Sound by Design, providing SR customers—sound, lighting and staging—with an expanded equipment set from which to spec, including DiGiCo consoles, L-Acoustics and d&b cabinets, and Meyer Sound and EM Acoustics gear. Both companies will operate from Delta's headquarters near Hampton Court in Surrey, England, effective October 1.

"Paul [Keating, Delta managing director] and I have been talking about this for about 15 months now,

## CHACE JOINS DELUXE

Deluxe Digital Media has acquired the assets of Chace Audio, a full-service audio post-production facility pictured below. Bob Heiber, president of Chace, will

continue to lead the facility and become VP of audio for Deluxe Digital Media. Chace will operate under the name Chace Audio by Deluxe and will remain in its current location.

According to Deluxe senior VP of operations, this venture will "allow us to strengthen our post and post-production abilities and better serve our customers across the life cycle of content."



From left: Paul Keating, Andy Callin and Mark Bonner (Delta Sound)

since we met at a party in Dubai that neither of us was invited to," says Andy Callin, managing director of SBD. "We'd already come to the conclusion that it was what we wanted to do before the market started to contract in some areas."

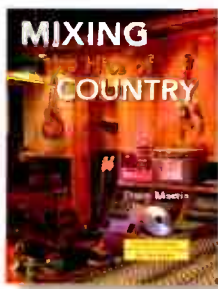
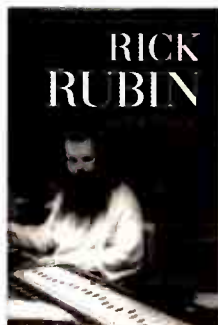
Adds Keating, "Diversification is key at the moment, and we're all looking forward to being able to offer our clients so much more than we could before."

## Bookshelf

**Behind the Glass Vol. II**, by music journalist Howard Massey, is a collection of first-person stories from inside the studio with such hit-making producers as Bruce Swedien, Daniel Lanois and T Bone Burnett, who talk frankly about their studio secrets, crafting their sounds, etc. Upstart producers such as Mark Ronson, Darryl Swann and Patrick Strump also give their two cents. Hal Leonard, \$24.99; halleonard.com.

**Rick Rubin: In the Studio**, by Jake Brown, comprises behind-the-scenes stories of how Rubin created hit albums with such artists as the Red Hot Chili Peppers, Run-DMC, Johnny Cash, the Beastie Boys, Audio-slave, Tom Petty, Metallica, Danzig, Slayer, LL Cool J, The Cult, Weezer, the Dixie Chicks, Linkin Park, System of a Down, Rage Against the Machine, Jay Z, Neil Diamond, Sheryl Crow and Slipknot—to name just a few! Independent Publishers Group, \$17.95; ipgbook.com.

Dave Martin (Grammy-nominated audio engineer, owner of Java Jive Studios in Nashville) has written **Mixing the Hits of Country**, which offers recording, engineering and mixing techniques to produce hits in the “Nashville mold.” The book includes two DVDs (Mac/PC) with WAV files for every instrument and vocal tracks to 10 contemporary hits that can be imported into a reader’s digital recording software for a step-by-step lesson. Hal Leonard, \$59.99; halleonard.com



## Industry News

**Jim Bowhall** returns to **Crawford Post** (Atlanta) as creative director...**New York City**-based **Hyperbolic Audio** welcomes mixer **Steve Bucino** to its staff...**Opus 1 Music Library** (Los Angeles) announcements: **Sauna Krikorian**, head of film licensing, and **Stacey Palm**, head of TV licensing...**Tim McCall** and **Peter Owen** are the new international sales managers at **L-Acoustics** (Marcoussis, France)...Managing sales for **Shure** (Niles, IL) in the Northeast U.S. is **Rick Renner**...Joining **Neutrik** (Lakewood, NJ) is **Thomas Chudyk**, distribution manager...New distribution deals: **Grace Design** (Boulder, CO) taps **Sound-Link Marketing** (Cambridge, UK) for the UK; **Midas Consoles North America** (Los Angeles) is the exclusive distributor for Midas and **Klark Teknik** in the U.S. and Canada; **Audessence Ltd.** (West Sussex, UK) appoints **Independent Audio** (Portland, ME) as its exclusive distributor; and **Sweetwater** (Fort Wayne, IN) will sell **API Audio**'s (Jessup, MD) rackmounted gear and **Arsenal Audio** by API line.



Jim Bowhall

Steve Bucino

## on the move

**Marc Bertrand**  
TC Group Americas  
CEO



**Main Responsibilities:** profit/loss responsibility for the sales, distribution, marketing and operations for North America.

**Previous Lives:**

- 1994-2009, various roles at Tannoy North America
- 1990-1994, Norm's Whitney Communications business service manager
- 1987-1989, *Mississauga News* sales rep
- 1986-1987, *Milton Champion* sales rep

**My favorite part of the job is...** working with a world-class team of people, not only at TC Group Americas, but also at the brands we represent.

**If I could work in another profession, it would be...** hockey: I have very little talent, but a great passion for the game.

**Currently in my iPod:** Led Zeppelin, Tragically Hip, Rush, Rolling Stones, Stone Temple Pilots, AC/DC, and the occasional dose of James Taylor and Jimmy Buffett.

**When I'm not in the office, you can find me...** in no particular order: the golf course, at the hockey arena, the lacrosse game, the baseball diamond or playing bass in a really fun band.



## FOCAL TURNS 30

Lyon, France-based Focal/JMlab recently celebrated its 30th anniversary and invited *Mix* and others for a look at its manufacturing operations. The company specializes in speakers for high-end audiophile, car and pro audio applications. Pictured, from left: David Kutch (The Mastering Palace, N.Y.), Nicolas Debard (Focal), Dominic Baker (Focal), Simon Côté (Audio Plus Services), Daniel Jacques (Audio Plus Services), Christopher Walsh (NewBay Media) and Kevin Becka (*Mix* technical editor).

## Swedien on Writing "In the Studio With Michael Jackson"

*"I don't think people have realized how serious Michael [Jackson] was about the musical part of it, and he was indeed. 'Serious' is a mild expression—he had a passion for the music. I've worked with major forces in the music industry and I think Michael was perhaps the top of the heap there, and I just figured I'd be remiss if I didn't say something about it in detail. How could you not? To be in such an important place as that was, at that point in music, I had to tell this story."*

—Read more of this interview with Bruce Swedien on recording Michael Jackson at [mixonline.com](http://mixonline.com).



L-R: Quincy Jones, Michael Jackson, Swedien

## UPLOAD TO MASTER

*"Abbey Road's been responsible for mastering some of the music industry's most influential albums, and we're so excited to be able to offer this same level of quality*

Abbey Road Studios' Alex Wharton



*to the young bands out there that could be the bands to watch in the future."*

—Abbey Road Studios mastering engineer Alex Wharton on offering online mastering services at [abbeyroadonlinemastering.com](http://abbeyroadonlinemastering.com)

## POLL RESULTS

How many ribbon mics do you own?

- ZERO: 64%**
- TWO: 21%**
- FOUR: 6%**
- MORE THAN FIVE: 7%**

**Get your voice heard:** Visit [mixonline.com](http://mixonline.com) for this month's poll:

How important is high-definition recording in your work (sample rates of 96kHz/24-bit or greater)?

## Mix Master Directory Spotlight



This month's featured listing from the new online-only Mix Master Directory ([directory.mixonline.com/mmd](http://directory.mixonline.com/mmd))

### Middle Tennessee State University

One of the largest and best-equipped music industry programs in the world, MTSU has eight pro studios, two production labs and three concentrations: Audio Production, Songwriting and Music Business. Offering both undergrad and Master's degrees in Recording Arts

**ARE YOU LISTED? MAKE SURE AT [DIRECTORY.MIXONLINE.COM/MMD](http://DIRECTORY.MIXONLINE.COM/MMD).**

## Last Call!

Mix subscribers.

If you haven't done so already, head on over to

[www.broadjam.com/TEC](http://www.broadjam.com/TEC)

to vote for this year's T&C Awards. Check out page 15 for a full list of the nominees



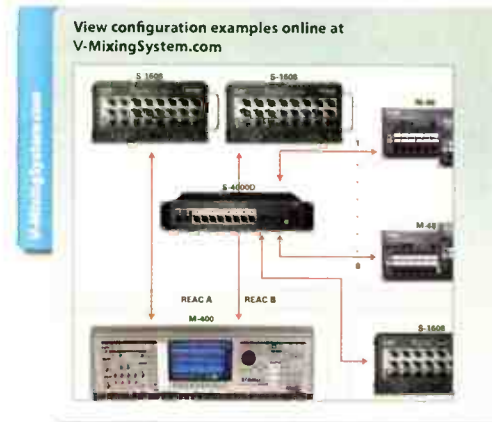


# The Evolution Continues

## M-400 V-Mixer Console **NEW Version 2**

Since its introduction, the RSS V-Mixing System has been recognized as the answer to high-quality, easy to use and cost-effective digital audio transport, mixing and recording with unprecedented configurability and convenience for live sound and performance. The V-Mixing System's evolution continues with Version 2.0 software for the M-400 V-Mixer that introduces LCR, new effects plus control and integration for the new RSS M-48 Live Personal Mixer.

By offering a total system solution including Digital Snakes, 48 channels of mixing with integrated effects, multi-channel recording and now persona mixing, the V-Mixing System offers the highest value live digital audio production solution and the easiest way to evolve from the analog world.



[www.V-MixingSystem.com](http://www.V-MixingSystem.com)

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## 2009 NOMINEES

### OUTSTANDING TECHNICAL ACHIEVEMENT

#### Ancillary Equipment

AKG K702 Headphones  
Lab.gruppen PLM 14000 Amplifier  
Manley Labs Backbone  
Neutrik convertCON XLR Connector  
Novation Nocturn Controller  
Sennheiser HD800 Headphones

#### Digital Converter Technology

Apogee Electronics Symphony 64 PCIe  
Focusrite Saffire Pro 40  
Millennia Media AD-R96/AD-D96  
MOTU UltraLite Mk3  
SSL MAD! Extreme  
TC Electronic Desktop Konnekt 6

#### Microphone Preamplifier Technology

AEA RPQ Mic Pre with Curveshaper  
Empirical Labs Model EL 9 Mike-E  
Focusrite ISA One  
Grace Design m101  
Summit Audio ECS 410 Everest  
Universal Audio 710 Twin-Finity

#### Recording Devices

Alesis ProTrack  
Korg MR-2000S  
Nagra VI  
Sound Devices 788T  
Tascam DR-100  
Yamaha Pocketrak 2G

#### Microphone Technology/Sound Reinforcement

Astatic-CAD 930VPL Variable Pattern Boundary Mic  
DPA Microphones Model 4099  
Earthworks Flexwand  
RØDE M1  
Sennheiser E965  
Telefunken M80

#### Microphone Technology/Studio

AKG C 214  
Brauner Valvet X  
Holophone Portamic 5.1  
Neumann TLM 67  
Schoeps MK-22  
Telefunken U-48

#### Wireless Technology

AKG DMS 700  
Lectrosanics HM Plug-In Transmitter  
Line 6 X2 XDR955  
Mipro ACT 727  
Shure URI-M Micro Bodypack  
Sony DWT-B01/DWR-S01D Digital Wireless

#### Sound Reinforcement Loudspeaker Technology

Community Entasys Column Line Array  
EAW MicroWedge  
JBL EON500 Series  
Meyer Sound Labs UPQ-1P  
Renkus-Heinz IC Live  
Tannoy VQ Range

#### Studio Monitor Technology

ADAM Audio A5  
Event Opal  
Focal CMS65  
Genelec 6010A/5040A  
JBL LSR2300  
M-Audio DSM2

#### Musical Instrument Technology

Arturia Origin Synth  
Dave Smith Instruments Mopho  
Moog Music The Moog Guitar  
Nord Electro-3 73 Stage Piano/Organ  
Spectrasonics Omnisphere  
TC Electronic RH450 Bass Amp

#### Signal Processing Technology/Hardware

Arsenal Audio by API ET-R24 Equalizer  
Chameleon Labs 7802 Opto-Tube Compressor  
Eventide Pitch Factor Harmonizer  
SSL Logic E-Series X-Rack Modules  
TC Electronic Power Core 6000  
Universal Audio UAD-2 Quad

#### Signal Processing Technology/Software

Antares Audio Technologies Auto-Tune Evo  
iZotope Ozone 4 Mastering Suite  
McDSP Retro Pack  
TC Electronic LM5D for Pro Tools HD  
Universal Audio Moog Multimode  
Waves Tony Maserati Collection

#### Workstation Technology

BIAS Peak Pro XT6  
Cakewalk SONAR V-Studio  
Digidesign Pro Tools 8  
MOTU Digital Performer 6  
Steinberg Cubase 5  
Studio Network Solutions Ellipse/Enterprise Fibre  
Channel HBA

#### Sound Reinforcement Console Technology

DiGiCo SD8  
Avid Digidesign VENUE Mix Rack System  
Midas Pro6  
Roland RSS V-Mixer Version 2  
Soundcraft Si3  
Yamaha IM8

#### Small Format Console Technology

Allen & Heath ZED R-16  
Euphonix MC Control  
PreSonus StudioLive 16.4.2  
Roland M-48 Personal Mixer  
Smart AV Tango  
Solid State Logic Matrix

#### Large Format Console Technology

AMS-Neve Genesys  
Euphonix System 5-MC Version 1.4  
Lawo MC<sup>3</sup> 56  
Oram Professional Audio Oram X-Dream  
Solid State Logic AWS 900+ SE  
Tree Audio 500

### OUTSTANDING CREATIVE ACHIEVEMENT

#### Tour Sound Production

AC/DC Black Ice, Clair Global  
Coldplay Viva La Vida, Eighth Day Sound (U.S.), Wigwam Acoustics (Europe)  
Dave Matthews Band, Pro Media/UltraSound  
Nine Inch Nails Light in the Sky, Firehouse Productions  
Robert Plant & Alison Krauss, Thunder Audio

#### Remote Production/Recording or Broadcast

83<sup>rd</sup> Annual Academy Awards, ABC  
51<sup>st</sup> Annual Grammy Awards, CBS  
Hit Man: David Foster at Friends, PBS  
JVC Newport Jazz Festival, PBS  
NFL Super Bowl XLIII Half-Time Show, CBS

#### TV Sound Production

American Idol, Fox  
Fringe, Fox  
James Taylor: One Man Band, PBS  
Saturday Night Live, NBC  
24, Fox

#### Film Sound Production

Hellboy II: The Golden Army, Universal Pictures  
Iron Man, Paramount Pictures  
Slumdog Millionaire, Fox Searchlight  
The Dark Knight, Warner Bros. Pictures  
WALL-E, Pixar Animation Studios

#### Studio Design Project

Downtown Music Studios, New York City  
Germano Studios, New York City  
Great City Productions Studio A, New York City  
Odds on Recording, Las Vegas  
Playback Recording Studios, Santa Barbara, Calif.

#### Interactive Entertainment Sound Production

Dead Space, Electronic Arts  
Gears of War 2, Microsoft/Epic  
Killzone 2, SCEA  
Little Big Planet, Sony Computer Entertainment  
World of Warcraft: Wrath of the Lich King, Blizzard

#### Surround Sound Production

Chris Botti in Boston, Chris Botti (DVD)  
Hit Man: David Foster at Friends (BD)  
If All Goes Wrong, Smashing Pumpkins (DVD)  
Legends Live at Montreux 1997 (BBD)  
Live at Wembley Stadium, Foo Fighters (BD)

#### Record Production/Single

"I Kissed a Girl," Katy Perry  
"No One," Alicia Keys  
"Strange Overtones," David Byrne and Brian Eno  
"Viva La Vida," Coldplay  
"Wichita Lineman," James Taylor

#### Record Production/Album

Covers, James Taylor  
Everything That Happens Will Happen Today, David Byrne and Brian Eno  
Fearless, Taylor Swift  
Seraphic Light, Saxophone Summit  
Viva La Vida, Coldplay

# MODERN LEGEND.

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Thanks,  
Walter



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Walter Orange  
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World Radio History

# SESSIONS

## Radio Bonnaroo

Radio has taken a real beating from music critics over the past decade, often with good reason as far as playlists, consolidation and lack of variety go. But even as the media world embraces the Facebook/Twitter global bombardment, it's important to remember that terrestrial radio still has tremendous reach—locally and across the country. It might not be the model

for breaking a single, but it sure works for Bonnaroo.

Yes, Bonnaroo Facebooks and Twitters, pre-, during and post-festival. But for the 80,000-plus onsite, local radio station 101.5 in Manchester, Tenn., becomes Radio Bonnaroo, with live 24-hour programming to the grounds. A mini-station is also set up backstage, with six radio booths broadcasting out to the world, including stations from Nashville and L.A. All of the artist interviews and studio performances are recorded and cut up there, then sent out.

"This is our sixth year handling marketing for the festival," explains Sean O'Connell, founder of Music Allies in Asheville, N.C. "Early on we created a network of allied radio stations to strengthen the Bonnaroo brand, and the studios here are just one part of a year-round campaign. It becomes an immersive broadcast

that provides our partner stations incredible content and gives radio programmers and DJs the chance to live like rock stars backstage on a tour bus."

Music Allies also builds an on-site recording studio each year, outfitting a trailer behind the radio station. Here artists come in one end and do a radio interview, then move to the middle where a fully functional recording room has been set up, with a living room feel. They then exit the other end of the trailer for a later performance onstage. David Gehrke of Nashville designed the trailer, dubbed The Hay, for as much isolation and treatment as is allowed, with assistance and support from Auralex.

"Oh, that damn Hay!" laughs O'Connell. "In 2004, our recording studio was incredibly small. Luckily, we were nestled in some trees and they absorbed some of the low end. The next year we built multiple broadcast studios and the on-site radio station, and it became apparent the soundproofing wasn't going to dampen the external noises—especially the low end—to give us the

high-quality recording we were looking for. Out of frustration, I hopped in my car and took a long drive to decompress. As I was driving, I noticed all the farmland nearby had hay bales piled up. Something clicked in my head. I pulled over on the side of the road and waved down a farmer riding on his tractor. I bought 600 bales of hay from him and we've used hay every year since for sound insulation!"

Bonnaroo is that unique combination of old-school and ultra-hip, from the artists they select to their messaging to the world. "I have strong feelings about radio, both positive and negative," O'Connell concludes. "My company does marketing through all kinds of media partners, and the truth is, when radio gets behind something, it has an incredible effect. The negative is that the companies that own these stations are run by some very short-sighted people. I am a music guy first and foremost and I am eager for radio to get back to being proactive and turning people on to music they love."

—Tom Kenny



Ani DiFranco records live in The Hay.

## project studio Chip Z'Nuff Studios



Chip Z'Nuff tracks rock and hip-hop artists in his home studio near Chicago.

On the day I interview Chip Z'Nuff about his busy home studio in Blue Island, Ill. (South Chicago, [www.ChipZnuffStudios.com](http://www.ChipZnuffStudios.com)), he's just returned from Japan, one of the many pockets where his band—late-'80s, early '90s melodic hard-rock hitmakers Enuff Z'Nuff—is still revered. Back home, Z'Nuff, as always, has a slew of projects lined up for his self-named project studio, which sees a steady stream of rock and hip-hop projects come through its doors.

Besides carrying the Enuff Z'Nuff banner around the world these days and touring in Adler's Appetite, fronted by original Guns N' Roses drummer Steven Adler, the renowned live bassist is also an in-demand session player and producer, with a reliable engineer as a studio partner—Brendan Jeffreys, whose credit list includes work with the likes of Blondie, INXS and Ray Charles.

After many years of making albums in con-

Scott Peets' Design FX Remote truck was used to record live performances by James Taylor and band for the soundtrack to Judd Apatow's current

film, *Funny People*. "We spent a couple of days recording James Taylor at the Skirball Center [L.A.]," says Peets. "He and his band performed many of his hits. The song 'Carolina on My Mind' is featured in the movie. We also recorded the 'jam segment' for the film at Sony Studios."...More live recording: Venezuelan funk-rock band Los Amigos Invisibles performed at the iTunes store in Downtown Manhattan as part of the Latin Alternative Music Conference. The Grammy-nominated group are currently touring to promote their new album, *Commercial*, on David Byrne's Luaka Bop label. Soviet-American singer/songwriter Regina Spektor also performed. Dubway Studios (NYC) engineers Jason Marcucci and Mike Judeh recorded both performances and mixed them at Dubway...At ZAC Recording (Atlanta), Simon Illa set up shop in the Front Room. Producer Illa is currently working with Vonnegutt, D. Woods (of Danity Kane), Ben Grant (of The Status) and several other artists...Newly discovered



Scott Peets (left) of Design FX Remote with music supervisor Jonathan Karp

Andy Warhol recordings of the opening-night performance of the off-Broadway musical *Man on the Moon* (music composed by John Phillips), which were captured from Warhol's front-row seat, were recently transferred at The Warhol Museum in (Pittsburgh), and digital files were then sent to The Magic Shop (NYC). Engineers Steve Rosenthal and Warren Russell-Smith restored them with the help of restorer/software developers Plangent Processes... Odds on Recording (Las Vegas) reports recent sessions with the Las Vegas Philharmonic for an Air Supply album, as well as jazz vocalist Little Jimmy Scott.

Send "Sessions" news to [bschultz@mixonline.com](mailto:bschultz@mixonline.com).

## Clatter&Din Captures Audio and Video



From left in Clatter&Din's control room: Sunshine Stevens of ad agency Cole&Weber-United; members of The Coats Kerry Dahlen, Keith Anderson and Jamie Dieveney; Kevin Thomson of Cole&Weber-United; and The Coats' Kevin Thomson

PHOTO: ERIC STEINMAN

Clatter&Din (Seattle, [www.clatterdin.com](http://www.clatterdin.com)) hosted simultaneous audio/video sessions for a Washington State Lottery TV and radio spot. The commercial, for the "Match 4" game, was engineered by staffer Eric Jonsson in the facility's new studio, which was designed by the Russ Berger Design Group and went online in February of this year.

"This was one of the first sessions we did in the new live room," says Clatter&Din co-owner Vince Werner. "Our old rooms were of the small, dead variety, which works great for voice-over, but not for music. This new space that Russ Berger designed is fantastic-sounding. We couldn't have done the Lottery project in our old space."

For the "Match 4" project, ad agency Cole&Weber-United hired a cappella group The Coats, whom they renamed the "Match 4s." Coats member Jamie

Dieveney wrote and produced the music, which included plenty of vocal pyrotechnics: "There was a human beat box," Johnson says. "Even though it sounds like there's drums and synthesizers and turntables, it was all done with their voices."

Audio was recorded and mixed in Pro Tools, and, "In this world of integrated everything," Werner says, "we ran not only mic line but SDI line back to our Final Cut Pro room from one of the mic panels. We set up a green screen in the booth and video with a Sony EX1, and recorded the uncompressed SDI video signal to our Final Cut booth. We fed that back to the control room so the client can sit in a fabulous acoustic environment and watch what was happening on an HD projector as it went down. It was a really hybrid thing."

—Barbara Schultz

by Blair Jackson

ventional studios, and learning a lot about studio craft in the process, Z'Nuff finally went the project studio route in 2004, turning his house into a multiroom facility. There's a sizable control room in the basement, with a Mackie console (for monitoring), a Pro Tools setup, an Otari 2-inch tape machine (which he and Jeffreys still like to use to record bass and drums) and a nice collection of outboard gear—favorite pieces include an Eventide Harmonizer, TC Electronic 2290 and an old Alesis Quadraverb ("Great on guitars," Jeffreys says). The duo mixes most projects in the box these days, so they also use various plug-ins.

"Upstairs is where you sing and play guitars and do overdubs," Z'Nuff says. "We have video available upstairs and downstairs." Adds Jeffreys, "We modify the setup depending on the project. For our standard setup, we have the drums set up in the nice wood living room, which sounds great, and we have our vocals and guitars off in a room, which was a bedroom, so we're usually a two-room studio that way. But if a band wants to come in to do a live thing, we set 'em all up downstairs in the control room. We all

wear headphones and we cut it looking at each other." The mic collection includes a pair of Neumann U87s; Sennheiser 421s; AKG 3000s, 414s and a D112; and plenty of Shure 57s and 58s.

Blue Island is a quiet Chicago suburb. "Fortunately, there aren't really any houses right nearby," Chip says with a laugh. "I have half a football field of space next to my house, so there are never any complaints. The bands can stay here all night and make as much noise as they want. We also have four bedrooms and a kitchen so they can sleep here and eat here—it's almost like a B&B recording studio."

Among the groups that have worked recently at Chip Z'Nuff Studios are Twista, Dale Bozzio (Missing Persons), Blue Rage, Six Foot Model and Johnnie Rotten Jr. The studio also does audio work for local schools, and recently added mastering as a service. "I've been pleasantly surprised by all the entertainment that wants to come through here," Z'Nuff says. "From Hong Kong to Blue Island—we love 'em all!" III

# L.A. Grapevine

by Bud Scoppa

**I** had two reasons for visiting what was previously the A&M Records lot in Hollywood: one professional, the other personal. My destination was the top-line facility now known as Henson Studios, where the bulk of the overdubs and mixes for Alice in Chains' new Virgin album *Black Gives Way to Blue* were done. (See cover story on page 26.) But I also wanted to soak in the present-day



**Mike Inez of Alice in Chains (left) and producer Nick Raskulinecz in Henson Studio A**

atmosphere of a spot where I'd spent five of the best years of my label life during A&M's golden age in the 1970s.

Entering through the back gate, I look around, and, apart from some cosmetic changes—a brick surface replacing the asphalt of the courtyard and fresh paint on the buildings, along with plenty of landscaping—the lot is unchanged from the last time I'd been here more than a decade ago. I spot what used to be the carpentry building (now bearing the nameplate the Barn), the photo department (the Loft), international (with a giant Kermit the Frog now popping out of the front wall) and the art department, later the HQ of IRS Records (the Shack). After peeking into the window of my old office in the publicity bungalow (the Schoolhouse), I gaze at the front gate, above which another Kermit, decked out in Little Tramp duds, poses on the spot where the iconic A&M trumpet logo had stood until 1999, when Herb Alpert and Jerry Moss sold the company to Universal Music Group.

Taking a left toward the front doors of the building that houses the studios, I notice that the Chaplin Soundstage is still in use, and above it the row of offices that had been the product management department where I'd worked with Jeff Ayeroff, Jordan Harris and the late Jamie Cohen, sharing space with staff producer David Anderle.

Jaime Sickora, the chief engineer, gives me the tour. We walk into the control room of Studio A, where I spent many hours with The Tubes as they recorded their 1976 album, *Young & Rich*, with producer Ken Scott, and the memories come flooding back. The Neve that once sat here was removed soon after the sale; in its place is an SSL SL 9080J that's slightly smaller than an aircraft carrier.

We head down the hall to B, where The Carpenters once made records, and where producer Nick Raskulinecz and engineer Paul Fig completed the Alice project, working outward from the SSL SL 6072E/G, while playing back through Van Haaff/A&M hybrid main monitors. Meanwhile, on the other side of what Sickora refers to as "a secret door," Randy Staub was simultaneously mixing tracks on Studio Mix's 6072E/G.

"Henson has the best-sounding control rooms in Hollywood," says Raskulinecz, explaining why he chose the facility. "And the quality of the studio is just untouchable, from the tech to the equipment to the maintenance. A lot of it had to do with having Randy come down from Vancouver and start mixing before we were done. I knew he mixed Metallica's *Black Album* in there, and that it's his favorite place to mix in L.A. It just made sense for us to be recording and for him to be mixing right across the hall—it was perfect."

"I worked at Henson as an assistant back in the mid-'80s [when it was A&M]," Staub says. "I've mixed so many records there that I have a point of reference right away, and it saves me a lot of time and energy."

The SSLs were another attraction for Raskulinecz. "On every record I make, I like to track on Neve and APIs and then overdub and mix on SSLs," he says. "I

consider that the winning combination. The 8058 we were tracking on at Studio 606 was just 36 channels, and by the time we left we were up to 60, 70, 80 tracks, so it was great to be able to give everything its own fader. Summing all that stuff in Pro Tools just doesn't sound good to me, so I'm really into spreading it all out. I'd rather sum it in the console in a stereo bus because that's what it was made for, with a lot of head room. Plus, the stereo buses in those consoles at Henson have been modified and they sound great. We pushed computers and hard drives to the max; it was really fun using all the technology.

"The first time I worked in that B room, I loved it, man," he continues. "Aside from the sound in the control room, the live room is the perfect size—and there was enough room on the floor to play our dice games, which was very important. That was honestly the first record where I've ever done something like that, and it was a great tension-breaker when we were recording guitar tracks, getting performances and dealing with tuning issues. Somebody'd say, 'Let's roll some dice,' and we'd all stop what we were doing and get down on the floor. We probably wasted a lot of studio time, but we had a damn good time. And I won a bunch of money."

Sessions are going on in the mix room and the SSL-equipped Studio D, where Emmylou Harris and I collaborated on the Gram Parsons/Flying Burrito Brothers 1976 anthology, *Sleepless Nights*, so both are off-limits. So is C, which is now in its eighth year of a long-term booking; Sickora is not at liberty to name its occupant, nor today's clients, in keeping with Henson policy. They're extremely protective of their clients here.

When I ask her what qualities draw clients like Paul McCartney, The Eagles, Alicia Keys, Mariah Carey, Justin Timberlake and Pearl Jam to Henson Recording, Sickora says, "It has to do with the sound of the rooms, our gear, our staff and the first-class service we provide," adding that nine-year-veteran studio manager Faryal Russell "does an incredible job of taking care of people."

On the way out, I wander around the lot, breathing in the still-magical vibe. The campus of the Jim Henson company remains as charming a work environment as you're likely to find in L.A. It also serves as a downright ideal setting for making records. ■■■

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**O**n his first night in Nashville, R.S. Field headed for the women's dormitory at Vanderbilt University. There, coeds wiggled around in a little basement bar where the only available drink was sangria, sold in open-ended, fluted bottles.

"This was 1982, and the band that night was Tim Kregel & The Sluggers," says Field, recalling his shock at seeing a roots-rock band of the highest order there in the heart of Twangtown. "The people I was with couldn't believe somebody in Nashville was playing something that we liked that was rock 'n' roll. We knew about Rodney Crowell and Rosanne Cash, but that was a kind of hybrid

works on the APIs at House of David and Omnisound. He'll also pipe in good words for Fairchild and Universal Audio compressors, and Trident A Range mic pre's. And he prefers a blend of analog and digital given access to his favored Apogee or RADAR Nyquist converters.

"I learned what I didn't like about digital real fast," Field says. "But then I put some effort into learning about clocks and converters, and I believe now that you can make great records with the new gear. It's all based on the same stuff, like headroom and dynamics."

Field has also made a mark as a songwriter, penning "Powerful Stuff" for the Fabulous Thunderbirds and numerous Wilder songs, including set-list staples "Tough It Out," "Human Cannonball," "How Long Can She Last (Going That Fast)" and "Hittin' Where It Hurts." His songs and his productions trade on quirk, surprise and the kind of groove that can't be quantized.

**Producer R.S. Field in House of David Studios, where he co-produced Justin Townes Earle's latest album, *Midnight at the Movies*.**



country. This was like seeing Dave Edmunds and a southerner rolled into one."

Back then, Kregel was a kingpin of a burgeoning Nashville scene that was experiencing its first flushes with national success in the form of Jason & The Scorchers. Field and his fellow Mississippi-bred pal Webb Wilder were soon a major part of that scene, and, for the past quarter-century or so, Field has been Music City's most significant and intriguing roots-rock producer. He has helmed much-loved albums by Wilder, Billy Joe Shaver, Sonny Landreth, Alison Moorer, John Mayall and numerous others.

"If I have a secret, it's to let personality come to the fore, even if it's skewed," he says. "That, and that gear is like furniture: It's better to have a few nice pieces than a whole bunch of junk. Early on, I'd try to figure out why the records I produced didn't sound 'famous' to me. That's how I found out about signal path and gear and all that."

As for signal path, Field prefers the quickest, cleanest path. He eschews what he calls "trans-Atlantic cabling," and he's wary of patchbays. On the gear front, he likes API boards and often

"I'm always trying to find the drum sound that's in my head," he says. "The '80s made it where nobody could have drums that sounded like drums, and it was a lot of work to figure out why they didn't sound right. Like, 'Why are we gating it, again?' I learned to hate hi-hats for a while. Sometimes the best thing is to fire and forget. People get to be beat detectives, so analytical about it all, but when I go back to the drummers I love, it's real drummers like Earl Palmer and Roger Hawkins and Ringo. Who now would let Keith Moon play like he did? I was listening to 'All Along the Watchtower' with Hendrix, and there's no pocket: It's like a bag of beach balls rolling down the steps. And it's lovely. Not like a jam band, either. It's this great freedom to choogle."

This year, Field won praise for his work as producer of Justin Townes Earle's *Midnight at the Movies*, which earned a Best Album nomination at the Americana Music Awards. He's also producing Moorer's next album, and he's been thinking about finding a way to educate aspiring producers.

"I'm interested in trying to teach the monkey business," he says. "I don't know why anybody would want their kid to major in it, but that's my new goal. I think there's a lot of folly in these super-entrenched programs that are teaching the business model that is gone with the wind. I think there's more to teaching how to listen, what to listen for and how to try to have something to say. Content is the answer to every question. Some of these kids are leaving programs without thinking about content. They need Jimmy Reed to rise from the grave and throw up on them, or something." III

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UNIVERSAL AUDIO  
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# NEW YORK Metro

by David Weiss

**N**ew York City bedrooms are the site of some legendary creative acts. That doesn't mean that every music producer working in New York City wants their studio to be situated in a bedroom, however. Fortunately, a convenient option is emerging for solo practitioners who want to work in their own space and at their own pace, but with the energy of a team and the amenities of a world-class studio close at hand.

Spin Recording Studios ([www.spinmusicstudios.com](http://www.spinmusicstudios.com)), in the Queens neighborhood known as Long Island City, is offering New York City's producers the latest, uh, spin on the creative beehive. Today, Spin provides an elite corps of music-makers the ability to work in production suites tailored specifi-

rehearsal studios to supplement their income. Benjamin was more than ready to move on to a more pro approach for the new location with four production suites. "The production rooms lend themselves to what we're doing," he explains. "Each producer brings his own gear into the suite, which has a vocal booth. Now they're in a facility with a lounge, a kitchen, and they can use our studio to sell their craft because everyone pops into the Spin control room and live room before they go to the production suites.

"At the same time, we expected we'd get business from these guys. If they need a world-class live room, it's right here, or they say, 'We should really spread this out on the SSL and mix there.' And that's basically what's been happening."

The Spin suites have already attracted successful producers like Josh Wilbur, whose credits include Lamb of God's *Wrath*, which debuted at a healthy Number 2 on the *Billboard* charts earlier this year. Also in-house are emerging writer/producers like Terence Dover, whose production for New Zealand band Midnight Youth scored the group a Number One radio hit and a Gold album at home.

Before he came to Spin, Dover had been working and living out of a studio within his loft space in Greenpoint, Brooklyn,

where he wrote and recorded with Avril Lavigne and multiple indie artists. When the hipsters in his 'hood started evolving into young professionals

who were less tolerant of having a music studio next door, however, Dover was happy to learn he had an option opening up in Long Island City. "I had done a few records at Spin and enjoyed the room," he says. "When Pete called me and said there was a room at the new facility, I said, 'Put my name on it.'

"The initial attraction was to have the facility right down the hall, and there is a wow factor of showing clients the SSL, but really what I found the most compelling was the camaraderie. Here you have the water cooler aspect, with all the guys making records. It's a synergetic energy that makes you want to do good work and reach a certain level of achievement."

Before Dover could get settled in at Spin, Benjamin and Chinboukas had their reasons for selecting him as a tenant. "It was a perfect fit," Benjamin notes. "First of all, we knew him—first and foremost you think trust. And from a business sense, we knew we could possibly get work out of this relationship, be able to say, 'You're here. Why go somewhere else when you can just walk down the hall?'"

With a metal man, Broadway specialist, rock maven and pop prodigy all onsite, the producer-friendly Spin Recording Studios has taken a definite turn for the common good of all its tenants. "It's not just one person doing something—it's a situation where everybody wants everybody else to succeed," Benjamin observes. "Everyone looks out for the next person. That's what a good family is made of." ■



At Spin Recording Studios are (L-R): producer Nik Chinboukas, owner Peter Benjamin, writer/producer Terence Dover, assistant studio manager Kurt Nepogoda

cally for the needs of today's producer.

For owner Peter Benjamin, Spin's producer pod-based model came on the heels of a common New York City studio scenario. "This guy showed up one day in 2007, and said, 'I just bought your building: You can either stay here and I won't renew, or I can buy you out of your lease,'" Benjamin recalls. "We let him buy us out of our lease, and it took us about a year to find another location."

Benjamin left behind a spacious control room and one of New York City's best-sounding live rooms at their first location, but were determined to replicate them nearby. "Cost was the first major consideration for staying in Long Island City—square-foot prices have gone through the roof on the other side of the bridge [in Manhattan]," Benjamin says. "Second, I had a client base, and I didn't want to throw a monkey wrench in everything by saying that we were opening up in another neighborhood."

Benjamin and his team—including producer Nik Chinboukas, studio architect Alex Kyrazis and assistant manager Kurt Nepogoda—may have actually surpassed their original goal of perfectly re-creating recording conditions at Spin Version 1. The new 650-square-foot live room features a striking staggered ceiling, open but well-controlled acoustics, and the famed former Bearsville Yamaha C6 grand piano. A newly acquired SSL 4068G/G+ console is the centerpiece of the highly comfortable 450-square-foot control room. Meanwhile, a well-equipped B room with an Amek 44-channel console and Pro Tools HD3 Accel handles the overflow.

While the old Spin had depended on an annex of 11 hourly

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# ALICE

IN

# CHAINS

## THE SONIC MASSIVENESS OF *BLACK* GIVES WAY TO *BLUE*

By Bud Scoppa

In 1990, Seattle-based Alice in Chains were opening for Van Halen, Ozzy Osbourne and even Poison, playing a post-punk/metal hybrid that emphasized bitter truths and sludgy tempos, seemingly turning singer Layne Staley's battle with heroin addiction into a theme. After Nirvana and Pearl Jam put Seattle on the alt-rock map, Alice in Chains got a song on the soundtrack to the 1992 Cameron Crowe film *Singles*, cementing the band's grunge cred (to the sneering indifference of the members) and setting the stage for *Dirt*—released that same year—a rough beast slouching toward the top of the charts and eventual status as an art-metal landmark. By '95, when the band released its self-titled third album, Staley's addiction had caused them to stop touring, and the lack of a follow-up studio LP suggested that the singer's demons were getting the best of him. Staley succumbed to a fatal overdose of heroin and cocaine in 2002.

When the word spread last year that the surviving members—guitarist/singer Jerry Cantrell, drummer Sean Kinney and bassist Mike Inez—were making an Alice in Chains record with another singer, the news was greeted with disbelief by the band's obsessive

fans, who believed the group had died with Staley. "I personally thrive on shit like that," says Cantrell. "If you tell us we can't do something, that just gives us more fuel to achieve it."

The new album, *Black Gives Way to Blue*, the band's first studio album in 14 years, is a dark, lush, engulfing and ultimately uplifting work that wrestles with absence as both a tribute and a challenge. It introduces vocalist and guitar player William DuVall, 42, who's been playing off and on with Cantrell since 2000. "William is not Layne, and he's not trying to be," Cantrell asserts. "But there are some similarities, which work for the band. Even though the personnel is different, it's evolved in a natural way."

Says Kinney: "Layne's an impossible person to replace, so that wasn't even a thought. Will doesn't come in and try to do a karaoke version of the past—he puts his all into it and makes it his own; he's a real talented guy and he fits in well. It takes awhile to find your place in a pre-existing dynamic, but he did, and the dynamic changed a little because it had to—one of us isn't here anymore. But Will had it—the parts, the chops, the whole thing. He brought *himself*—he does

In Henson Studios, where the mixing and some tracking were done are (L-R) drummer Sean Kinney, bassist Mike Inez, producer Nick Raskulinecz, guitarist/vocalist Jerry Cantrell, guitarist/vocalist William DuVall.



what he does and it works.”

In early 2004, Kinney suggested to Cantrell and Inez that they do an Alice in Chains one-off to raise money for tsunami relief, and that became the first of a series of “little steps” taken by the band. “Every time something came along, we’d sit down and evaluate it and do whatever we were comfortable with,” says the drummer. Eventually, those steps led to a pair of 2007 tours with Velvet Revolver, with DuVall singing Staley’s parts.

Cantrell picks up the thread: “During those last couple of years of playing the old material, we’d jam pretty much every day. Cool riffs would come up, we’d record them and, by the time we got home from a tour, we’d have a disc full of ideas. I’ve got a little Pro Tools setup in my guest bedroom, and I’d work on those things in the downtime, putting stuff together. We did a makeup show with Velvet Revolver in November of 2007, and I started working about a week after that. I spent from November to March writing, passing ideas back and forth on the Internet, and once we had a body of work that we wanted to pursue and



Producer Nick Raskulinecz (left) at the 8058 in Studio 606, and engineer Paul “Fig” Figueroa

see what it turned into for real, then we started thinking about taking the next step. Dave Grohl’s always been a good friend and a big supporter of us going through this process, and he’s got a great studio that he built out in the Valley, Studio 606. His partner is Nick Raskulinecz, who produced the last three Foo Fighters records. Dave says, ‘Man, you gotta come work at the studio and use

Nick—you guys would be great together.’”

When Raskulinecz got the call from manager Frank McDonough that Alice in Chains wanted him to produce an album, he didn’t know what to think. “To be honest, at first I was a little hesitant,” he says, “because I grew up listening to Alice in Chains, and how can there be Alice in Chains without Layne Staley? But my curiosity got the

# Alice In Chains

best of me, and I went over to the studio where they'd been cutting demos and met the guys. We all hung out outside for a couple hours and talked, breaking the ice. Then they took me in the studio and played me a track. When I heard those guitars and those guys started singing, that was it—I was in. I looked at Jerry and said, 'I don't need to hear anything else.' I was just blown away by how they'd kept the original sound intact with Will's voice. I couldn't believe it, man—I was floored."

The song they played Raskulinecz was "Check My Brain," now the no-brainer lead single—a track so mind-blowingly heavy, and so memorable, that it immediately silences all those fans who questioned the surviving members' decision to pick up where they'd left off. A glorious moment occurs on the completed track when Alice in Chains' menacing minor-key chords, bent into gnarly new shapes by Cantrell's calloused fingers, burst into Technicolor as Cantrell and DuVall break out those unique underneath harmonies in the goosebump-inducing refrain: "California's alright/Somebody check my brain." Crank it up and you can't help but be swept away in its relentless thrall, just as Raskulinecz was merely by hearing the demo.

"We worked with some good producers in the past," says Cantrell, "and we've always had a pretty good idea of what we're doing musically and what we want. Even before we got in a room with Nick to do preproduction at the end of last summer, he already had a ton of ideas laid out in his head. I could see the thought he'd put into amp-and-guitar combos, and he had a lot of things worked out tonally that he thought would work best with us. Plus, he has so much enthusiasm; he's a stoner kid that just loves makin' music, just like we are."

"There was a lot of preparation, a lot of homework, for me and my engineer, Paul Fig [short for Figueroa], on this record," Raskulinecz confirms. "As an Alice in Chains fan, and now as their producer, I knew what I wanted to hear: I wanted to hear the record after *Dirt*, which I don't feel they ever made. The challenge was to maintain that consistency and the sonic massiveness, especially when it came to the guitar tones and the vocal layering. I got back into my 19-year-old head space, trying to reconnect with why I got hooked by those records in the first place. I drove around blasting *Dirt*, just zoning in on the hi-hat or the lead guitar tones or the vocal sound. I did it because I've never made a record with a huge band like this one that's replacing a fundamental part of their sound. Jerry Cantrell knows how to write amazing songs; it was my job to not mess it up."

Studio 606, which Raskulinecz helped con-

struct, boasts a Neve 8058, a variety of vintage and modern outboard gear, a big tracking room and an extra-large control room. "I think about making records like going on a camping trip," he says. "The control room is the campsite and the console's the fire. That's where we're gonna live for the next few months. I knew it was gonna be a long project, and we wanted to be someplace that was really comfortable, as well as great-sounding. Half of this job is about knowing how to turn knobs and push faders; the other half is knowing how to hang out with people, to get them to trust you."

On the first day of the project, the band set up in the tracking room of 606 with their live rigs and jammed while Fig gradually dialed in sounds. "Nick starts with the drums and builds it up from there," the engineer explains. "The band doesn't usually play to a click track, so we wanted to capture that breathing throughout the song, with Sean vibing off the guitars."

Kinney was behind his custom DW kit, boasting a 23-inch kick drum, lots of big cymbals and an oversized hi-hat. Raskulinecz and Fig soon realized they needed to use dynamic mics so that the cymbals didn't overpower the snare and kick, eventually going with Audio-Technica ATM 125s, with an AKG D 112 on the front, while sticking with AKG 451 and 414 condensers on the toms. They added a touch of compression on the kick and snare, and had a tent built around the kick drum. RCA 44s on crush were used left and right for the close room sound, with a pair of Earthworks in the back. "We actually mult'd a couple of scratch-vocal mics for extra room sound and pushed it hard through an 1176," says Fig.

The most important sonic issue, obviously, was Cantrell's guitar setup. "A lot of Jerry's sound comes from his G&L guitars—he's nicknamed them 'Porno' and 'No War,'" says Fig. "He used this Bogner Fish preamp he's had for years and went out to a couple of his own 1412s, and then Nick has an awesome collection of vintage Marshall cabs. Then it was about getting the right mic and finding the sweet spot. I placed it right in front of the cone, and if it got too dark or too bright, I'd go out there and make sure it was feeling good. We didn't use any EQ; it was all mic and guitar amp. Jerry can be an intimidating guy, and when we got our sound up, he came in, grabbed his guitar, turned around, smiled, and said, 'Yeah,



PHOTO: GREG WATERMANN



PHOTO: GREG WATERMANN

Top: Guitarist/vocalist William DuVall. Above: Guitarist/vocalist Jerry Cantrell (left) and Raskulinecz in Studio 606.

man.' We knew then we were on the right track."

Cantrell switched between his G&Ls and Les Pauls on the main rhythm parts, and cherry-picked from Raskulinecz's collection for flavors, favoring a '57 Gold Top—a Les Paul Custom Raskulinecz describes as "fretless" because the frets are so worn down—and, on almost every track, a '63 SG with P-90 pickups. "Jerry has a staging amp that goes to two cabs," Fig continues, "and we'd blend in a HiWatt, an Orange and sometimes Nick's favorite Marshall, a 2550, and we'd do a whole pass on four or five tracks on one guitar. We'd blend a couple of mics per cab, which kept it open-sounding and more flexible for Nick. On top of that, Jerry likes to double his parts, and thank God he's an awesome player who can hear himself great." The rhythm parts were placed left and right, doubled left and right, and centered. "That took awhile," says Fig, "because of tuning and making sure the tones really locked in together. We didn't want a big smearing of guitars; we wanted it to sound like one big hand."

The first song they tackled was "Check My Brain." "When we finished the vocals on the first song, everybody breathed a sigh of relief," Rasku-

linecz recalls. "We were all going, 'Yes! This is gonna work.' I felt a lot of personal satisfaction because I knew then we'd really done it."

Fig still marvels at "that bendy riff—it's so killer, so catchy and so heavy. Jerry had to play it perfectly because we had to stack the guitars and make everything fit. Then Mike's bass had to go on, and Jerry and Will had to sing on top of it. That was the hardest part: You go from guitar to guitar, and the scale on the G&L is different from the Les Paul's. The guitar tech was doing lots of tuning to make sure we could intonate for parts."

When asked how he did it, Cantrell laughs. "Even guys that play are like, 'What the f\*\*\* are you doing?' It's basically two notes on an E string. You start already into your bend on the first fret and let down, and then you bend up on the second fret and then go into the bend on the first fret, and it just repeats itself. It's a tough bend because it's right next to the nut, and on the bass it's even more difficult. Mike's fingers were starting to bleed, so we tuned it down so he could do the bend on the G, but his hand was still hamburger by the time he got done with it. That song's pretty basic, but it's not the rote thing that somebody would come up with, and that's where you get the individuality of this band."

"Sonically and musically, the band is intact, and on this record we did what we've always done—we make it thicker, layer, do different tones and get blends—and that requires you to give performances that are exact," Cantrell points out. "There are a few punches—'This part isn't right; cut me in'—but for the most part, vocally and in terms of musical performances, it's either top to bottom or seriously long passes."

When the band and the production team reconvened at Henson (Hollywood, the site of this month's cover shoot) in March, they attacked guitar overdubs and the bulk of the lead and harmony vocals. "Jerry and Will have great pitch together

and a great vibe," Fig raves. "That part of Alice didn't die; when you hear those harmonies, it's almost like hearing a ghost."

As for their ability to perpetuate those trademark harmonies with DuVall, "It doesn't undermine Layne's contribution to this band at all," says Cantrell. "If anything, it should stamp it in stone that it's something we created together, and he gave me the confidence to take on that challenge and become a better vocalist."

Raskulinecz describes "A Looking in View," the first track to go to radio, as "an intentional leak. It's gone all over the world now, and they're playing a seven-minute song on the radio. When was the last time that happened?" Little wonder they've been playing this track, with Cantrell's charging-woolly-mammoth riffage acting as DuVall's bodyguard as he steps out to blend his voice with Cantrell's through the entire song. Releasing it to introduce DuVall and thus reassure the hungry hordes was a typically savvy Alice in Chains move—bold, defiant, swaggeringly self-confident—and it worked like gangbusters. "MY HEART JUST STARTED BEATING AGAIN 14 YEARS LATER!!!!," one fan commented in the iTunes Store. "The WORLD needs this band!"

"If we had gone through that process and we felt that it didn't live up musically to the legacy of the work we'd done before, then we would've shelved it—and shelved it happily, too," says Cantrell, "and known for ourselves that this is the end of it, and that's cool. But that didn't happen. I've never done a record where I've worked that hard, or where everybody worked that hard, in that unified

a way. And I think it really shows. Nick and Fig put their hearts and souls into that record—they cared about it and believed in it. And Randy Staub f\*\*\*in' killed the mix." Staub mixed the record in Studio Mix at Henson, next door to the tracking room where the band was still working. "As for mixing while the band is still recording, for me that's pretty much business as usual," Staub says. "Almost every record I did with [rock

producer] Bob Rock was like that, and many others as well. I like having the artist and producer around."

Says Kinney: "I'll never be okay with how things happened with Layne, but there's nothing I can do about that. We did this record for why we needed to do it, and now it's everybody's. I keep hearing that people are surprised by the record,



Sean Kinney behind his custom DW drum kit in Studio 606

and I can see that, but it's not surprising to me."

"We oughta know how to sound like ourselves," says Cantrell, pausing to let out a macho laugh before turning serious. "And you know what? That's cool, man, 'cause the boy lives in that. Layne lives with us. When you've lost somebody as unique and integral as Layne was, and on top of that him being our best friend, you've got that whole dynamic to deal with. Is this record something positive to add to the catalog? Does it stand up? Is it worthy? And the answer is yes, it is. But you don't know that until you go through the process. We busted our asses, and we were rewarded with a f\*\*\*in' good record that exceeded even our own expectations."

According to Raskulinecz, the defining moment of the project happened when Cantrell did his vocal on the title song, which closes the album. "It's really Jerry saying goodbye to Layne," he explains, "and that moment was very powerful, very emotional. Jerry was on the mic singing about his guy, and it brought us all to tears—five grown men crying. It's just one vocal track, and Jerry's never let himself be as vulnerable as he did on that song. When people really listen to it, they're gonna feel the same emotion we had that night, during that moment. That's why I do this—for those moments. I hope this record takes them right back to the top, where they belong." III

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



Alice in Chains kicking back in the lounge at Henson Recording

# Channel Strip Plug-Ins

## INPUT FLAVORS FOR YOUR DAW

By George Petersen

In the saga of audio processing, there is one common character that continues to play a consistent role: the channel strip. It was—and still is—the fundamental building block of the signal path.

In the past, analog designs gave the user a defined set of processing tools to work with, which could be bolstered by inserting outboard gear if needed. Then digital desks came into the picture, offering a fixed range of onboard, DSP-based audio tools, which could be upgraded over time or added to with new software. When DAWs evolved to take center stage, the roof was blown off, as they gave the user the independence to put together separate EQ and dynamics plug-ins from many manufacturers in any order.

In a true case of going back to the future, all-in-one channel strips have come back to play a role again, this time in the form of third-party plug-ins. Users see value in buying a strip that can be instantiated one time per channel and satisfy a range of needs at bundle prices. And in terms of versatility and, in some designs, the ability to move the order of processors to suit personal preferences and needs, channel strip plug-ins go well beyond their analog and digital console predecessors.

To see what's new in this regard, we looked at what's available in plug-in offerings from third-party suppliers and uncovered quite a selection. It should also be noted that many of these products are available as time-limited, downloadable, try-before-you-buy demo versions to check out on your own.

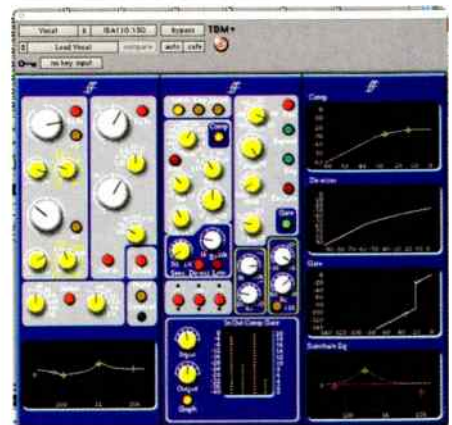


### Eventide

Part of the Anthology II Bundle, Eventide's ([www.eventide.com](http://www.eventide.com)) E-Channel is a set of 15 plug-ins for use with TDM Pro Tools systems—PC or Mac. Version 6.x or 7.x. Included is a gate, compressor/limiter with sidechain control, five bands of 48-bit double-precision parametric equalization, transformer emulation, extensive I/O metering and a user-configurable signal path that's optimized for multiple instances. The entire 15-plug-in set lists for \$1,195.

### Focusrite

Retailing at \$599, the Focusrite ([www.focusrite.com](http://www.focusrite.com)) Forté Suite channel strip is a Pro Tools





TDM/RTAS plug-in based on the company's legendary \$1.5 million Forté recording console from the mid-'80s. The scalable Forté Suite can perform both as a combined channel strip plug-in or as individual ISA 110 EQ or ISA 130 dynamics (including compressor, de-esser and noise gate). The 192kHz-compatible suite features graphical representations of EQ, compression and related module curves; sidechain input; and frequency filters for the dynamics processors. Additionally, the ISA 130 compressor supports all Pro Tools surround formats.

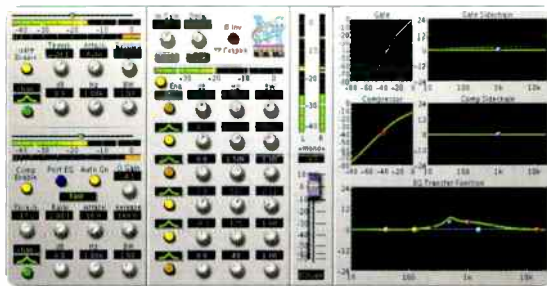
### McDSP

Designed to deliver the big analog board sound, McDSP's ([www.mcdsp.com](http://www.mcdsp.com)) Channel G (offered in TDM, AudioSuite and RTAS versions for Windows and Mac OS X) has three compo-



ments: a G Dynamics plug with expander/gate, compressor/limiter and a filter section; the G Equalizer, a 5-band console-style EQ and filter section; and G Console, which combines the G Dynamics (settable as pre/post-EQ) and G Equalizer configurations. Analog Saturation Modeling is also included. Channel G HD (TDM/RTAS/AudioSuite) lists at \$995; the RTAS/AudioSuite-only Channel G Native version is \$495.

Providing similar sonic performance in a smaller DSP footprint with 4-band equalization, McDSP's Channel G Compact HD is offered in TDM/RTAS/AudioSuite versions at \$495, or Channel G Compact Native (RTAS/AudioSuite) at \$295. All Channel G configurations (standard or compact) seamlessly integrate with Digidesign's D-Control and D-Command control surfaces, and feature calibration modes for music and post-production work.

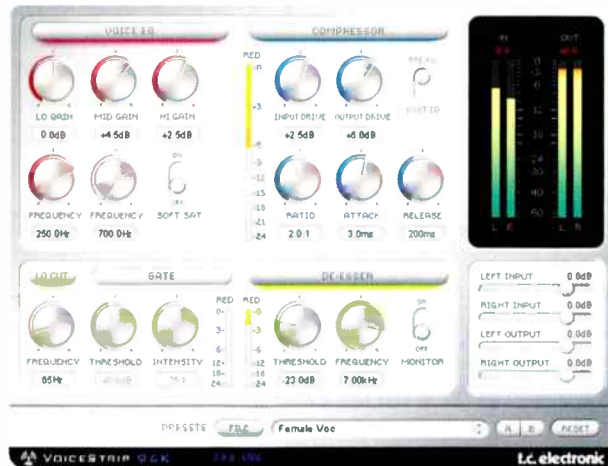


### Metric Halo

A pioneer in DAW plug-ins, Metric Halo ([www.mhlab.com](http://www.mhlab.com)) originally introduced the concept of large-console channel strip-style processing to the Pro Tools TDM platform. The new Version 2.2 of the company's ChannelStrip (TDM, \$699; RTAS, \$345) is Universal Binary and builds on the advantages of Pro Tools 7.3 while supporting earlier versions including Mix, HD and Accel PCI/PCIe. ChannelStrip features delay, expander/gate, compressor and 48-bit precision, 6-band parametric EQ. Users on a budget will appreciate the now GarageBand version of ChannelStrip, which brings Metric Halo-quality processing to that platform at an affordable \$89.

### TC Electronic

Offered as part of the TC Electronic ([www.tcelectronic.com](http://www.tcelectronic.com)) PowerCore 3 software upgrade (now at V. 3.2) for its DSP extension systems—PowerCore PCI mkII, Express, Unplugged, Compact, FireWire, X8 and 6000 models—VoiceStrip is a complete voice-processing channel, with compression, gating, de-essing, dedicated voice EQ and low-cut filter. The EQ



and compression are modeled on classic vintage tube hardware, and all of the modules can run simultaneously with stored presets for recalling sounds quickly. The upgrade (for Mac OS 10.4.10 and above, or Windows XP SP2/Vista 32 systems) is free for PowerCore hardware owners.

### Universal Audio

Universal Audio ([www.uaudio.com](http://www.uaudio.com)) markets an assortment of plug-ins for its UAD-2 Powered Plug-In series DSP systems for laptop and desk-



top DAWs, with VST, Audio Units and RTAS support for Mac OS Tiger (10.4), Leopard (10.5) and Windows XP/x64, Vista 32/64. The company's current catalog offers three channel strip options; all work with older UAD-1 or the new UAD-2 hardware.

UA's CS-1 Channel Strip is a free download, configured as a single plug-in using a single insert, or the three components (EX-1 EQ/compressor, DM-1 delay modulator and RS-1 Reflection Engine) can be used separately. The EX-1 combines five parametric bands and full-function studio compression. The DM-1 provides stereo chorus, flange, dual-delay and ping-pong effects, with controls for recirculation, HF damping and LFO selection. The RS-1 adds early reflection

# Channel Strip Plug-Ins

control with room shape/size controls, forward and reverse gating, and echo/multitap delays.

Designed to emulate a certain high-end British console, the \$249 UAD 4K Channel Strip from Universal Audio has models of the 4000 G+ mixer. This plug-in is compatible with UAD-1 and UAD-2 systems, and features Type-E "black knob" equalization and filters, gating (with a "no chatter" mode), versatile compression that ranges from transparent to an aggressive VCA style, and a sidechain function that inserts the EQ or filter bands into the dynamics section.

Officially licensed from AMS-Neve, the \$299 Neve 88RS Channel Strip is a Universal Audio-modeled software re-creation of the EQ and dynamics section of the 88 Series large-format analog board. The modules can be placed in any order, including being used to sidechain the EQ to the dynamics section. The EQ is 4-band with parametric midrange control and high- and low-shelving, along with -12dB/octave HF/LF cut filters. Dynamics include compression/limiting and expander/gate, and a global section offers output gain control, bypass switches and a phase-invert switch.



## URS

Unique Recording Software ([www.ursplugins.com](http://www.ursplugins.com)) offers the URS Classic Console Strip Pro with input stages, compressor, sidechainable filters and equalizer (TDM/RTAS/Audio Units/VST, \$1,199; Native RTAS/Audio Units/VST, \$599) and the URS Classic Console Strip with compressor and equalizer (TDM/RTAS/Audio Units/VST, \$399; Native RTAS/Audio Units/VST, \$199). All include Mac and WinXP support. The Pro version also has ducking/de-essing, 30 selectable input stage algorithms and 4-band parametric EQ, with a choice of five algorithms for each band. The

DSP-efficient standard URS Classic Console Strip has a compressor with digitally re-created transformer input characteristics followed by a feed-forward 1975 VCA gain-reduction amplifier.



## Wave Arts

TrackPlug 5 is but a single component of Wave Arts' ([wavearts.com](http://wavearts.com)) Power Suite 5 (\$599 boxed or download), which also includes reverb, peak limiter, multiband dynamics and "panoramic" panning plug-ins. The channel strip features up to 10 bands of 64-bit EQ with choices for parametric, low/high shelf, low/band/highpass or notch filtering. Adaptive RMS/peak detectors reduce undesired low-frequency distortion while comprehensive metering aids in the setup dynamics thresholds. Other features include an adjustable look-ahead delay; soft, medium and hard compressor; and gate characteristics and automation of any control through compatible host applications. Mac requirements include OS 10.4 or later and a host program that supports the Audio Units, MAS, VST or RTAS plug-in architecture. Universal Binary (Mac Intel) support is offered for Audio Units and VST only (no RTAS support). PCs require Windows 2000, XP or Vista and a host program that supports the DirectX, VST or RTAS plug-in architecture.

## Waves

AudioTrack from Waves ([www.waves.com](http://www.waves.com)) is offered in Native (\$150) and TDM (\$300) versions for Mac or PC, as well as being included in its Mer-



cury, Diamond, Gold and Platinum bundles. This single-step plug-in combines input gain fader, 4-band EQ, compressor/expander, gating, output level fader and metering for input energy (post-EQ), dynamic action and output level with peak hold.

Part of Waves' Mercury, Diamond, Platinum, Vocal, Renaissance Maxx and Broadcast & Production bundles, the Renaissance Channel puts EQ, compression, limiting and gating in one plug-in. The 4-band parametric equalization puts a visual display above the controls for fast, easy operation, and in addition to the independent compression and gating, it includes phase reverse, EQ/dynamics routing switch and a stereo rotation control.

Waves' SSL E-Channel is included in the Studio Classics and SSL 4000 bundles, supporting Mac/PC TDM, RTAS, Audio Suite, VST and Audio Units. As the name implies, this is an officially licensed re-creation of the discrete design and Class-A VCA chip circuits from Solid State Logic's 4000 Series console. The 4-band EQ (plus LP/HP filters) is based on the Black Knob equalizer that developed with George Martin, and the soft-knee compressor/limiter and expander/gate in the dynamic section is modeled on SSL's LS611E and can be routed pre/post-EQ.

Another extension of Waves' Studio Classics and SSL 4000 bundles is the SSL G-Channel, which puts the equalization and dynamics of the G Series consoles into a single plug-in. The 4-band EQ models the characteristic pre-boost dip, pre-cut rise and broad Q of the original hardware. The Dynamics section has soft-knee compression/limiting and expander/gate with automatic output makeup gain.

One of Wave's latest releases, the Maserati VX1 Vocal Enhancer (available in the Tony Maserati Collection and Mercury bundles) puts versatile input controls tailored for vocal use in a simple interface. Controls include sensitivity, treble, bass, compress and output level, along with delay, decay, reverb and Flexible contour switching between presets. III

Mix executive editor George Petersen also operates a small label at [www.jenpet.com](http://www.jenpet.com).

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# The Producers

MANY VOICES  
TELL THE STORY  
OF TODAY'S  
PRODUCTION  
TECHNIQUES

In the May issue of *Mix*—our annual theme issue, which focused on “Getting Noticed, Getting Heard, Getting Paid”—we explored the ways that new music business models have pushed producers to expand their services, particularly their involvement in artist development. We continually explore the changing role of the producer in these pages—sometimes from the business side, but more often from a creative perspective. The producer’s job—part bandmember, part therapist, part cheerleader, part musical mentor—constantly evolves along with the project at hand, and the business in general. Books could be written on the role of the producer—and they have been.

*Mix*’s former Nashville editor, Rick Clark, is currently working on a book that delves into production techniques (*Mixing, Recording, and Producing Techniques of the Pros: Insights on Recording Audio for Music, Video, Film, and Games*, published by Thomson). Featured are conversational contributions from engineers, mixers and equipment developers, as well as top producers, covering topics ranging from technology to temperament. Here, with thanks to Clark, is what some of the producers have to say about their work and the state of the recording industry.

—Barbara Schultz



## Joe Boyd

Though American born-and-raised, producer Joe Boyd made his mark in England beginning in the mid-'60s, and now has credits spanning more than four decades and scores of artists, including Fairport Convention, Nick Drake, R.E.M., Kate Bush, Pink Floyd and the Flaming Lips.

### Live Band and a Live Room

Everyone talks about how much the recording process has altered in the past 30 years. And it’s true that digital recording has changed the game tremendously. But for me, the essentials remain the same: getting as much of a live feel as possible while maintaining a high-quality sound that permits achieving a mix of the highest quality. That means getting as much of the track recorded live, as well as using rooms that

are live, have character and reward an approach that takes risks by forgoing isolation in most cases.

It is important that musicians have a sense of occasion and danger in recording. Putting down tracks or vocals with endless opportunities to correct and perfect accomplishes the opposite of what I look for in a recording. When there is one track left on a 16-track machine for vocals, for example, the singer and the producer have to choose after each take whether to go for another or erase the last pass. This puts everyone on edge and forces great performances out of singers.

People sometimes comment on the depth and warmth of the recordings I made with [producer/engineer] John Wood at Sound Techniques [London] in the 1960s. Recording in modern, small, dead rooms cannot accomplish this. To me, many if not most modern recordings sound shiny and two-dimensional.

You could say that 2-track recording is the purest form of record making. Four-track, 8-track, et cetera, through the present limitless expanse of possibilities on Pro Tools have all been steps backward in terms of making recordings that will endure the test of time.



## Nick Launay

Versatile producer/engineer/mixer Nick

Launay's credits include the Yeah Yeah Yeahs, Silverchair, Nick Cave & The Bad Seeds, The Posies, David Byrne (with and without Talking Heads), Midnight Oil and INXS.

### Analog and Digital

I think analog still sounds better than digital for many reasons, but a lot of it has to do with how you line the tape machine up and what tape machine you use. It's not just about renting any old Studer and throwing black-and-brown tape on it. It really depends on what tape you use and what level you record the different instruments at. I do, however, think that with digital we can be way more creative, allowing us to manipulate sound in wild ways. So for me, it's a combination of both that makes for the best-sounding and most imaginative recordings.

Nowadays, you'll find a lot of really good young engineers who know their Pro Tools and are killer with their plug-ins, but just have no idea about tape because they've simply never used it before. When using analog for the first time, the most common mistake is to record hi-hats, bass drum and snare really loud on tape. You can wind guitars and bass on really loud and it sounds great, but anything percussive that's got high transients, you've got to leave a lot of headroom. Using analog tape is a whole art in itself.

If today's dwindling budgets allow me to record as I prefer, I'll go all the way analog for the basic backing track. I'll record the band backing tracks all at once with the band playing together, in the same room, looking at each other, sometimes without headphones. I do whatever it takes to get the most energetic or moody performance. Then I will edit the 2-inch old school-style with sticky tape. I'll often do lots of edits on the 2-inch. We might do 10 takes of a song and then decide

that take 8 is the one, but the middle section was better from take 2. So I'll go back to take 2 and edit that section into take 8 and so on.

I've done up to 30 analog edits in one song. When the arrangement on 2-inch is the way I want it, I'll stripe it with code, sync it up and bounce it to Pro Tools with the idea that we'll do all our overdubs on Pro Tools. So now we've got lots of extra tracks to do vocals and overdubs and go crazy with plug-ins if we want. Then at the end of the day, when it comes time to mix, I'll sync the Pro Tools back up with the original 2-inch so that the basic backing track is

analog and the rest is digital.

Analog absolutely sounds better than digital, but digital allows us musical types to get what we imagine in our heads to come out of the speakers quicker.

### The Art and the Deal

I'm sure there will always be major labels around trying to push 16-year-old artists. What's a 16-year-old going to sing about? The whole industry is going this way, and I think now you have this backlash where people are saying, "I'm going to come up with my own thing."

Ten years ago, 95 percent of my clients were major-label, now 95 percent are indie.

—Tony Shepperd

They create a record for \$30k, and they're touring the hell out of them.

The real [deal] out there is the indie side—the indie rock bands. They need to rob Peter or pay Paul to make this record, but it's a great record. And that's the kind of stuff that people want to hear. And it may only sell 10,000 copies, but those are 10,000 hardcore fans. You have major-label artists who've sunk one-and-a-half million dollars into a record and sold 5,000 copies.

I think there is still art that is growing out of this crap. Something is dying, but something is being born and it's music once again. It needed to happen and get to the point where the money chasers who only wanted the money for a quick buck making records for 15-year-olds are finally either getting out of the business or realizing there's no money in it. So go! Now, let's get back to making some real music. I was talking to Kenny [Loggins] about this around last January. Ten years ago, 95 percent of my clients were major-label, and now 95 percent are indie. It could be an indie client like Kenny, who used to be a

major-label client. Now I have indie artists who say, "I have \$10k and a bunch of friends who want to make a record." I say, "Yes, sure, we can do it!"

You can make great records that fit the artist. I produce all the time with artists one on one. You get together with the guys and figure out what's best for them. I'm the kind of guy who will shepherd the project and put this thing together and help, but this is your album. You've got to let me know when this is going too far, and you know your audience and what they're wanting to buy.



## Tony Shepperd

Engineer/producer

Tony Shepperd has worked with an array of popular artists, including Madonna, Kenny Loggins, Diana Ross, Lionel Richie, Whitney Houston and even a Cheetah Girls remix.

floundered, and ultimately Elektra's parent company, Warner Music, dropped the band in 2004. With that, the band took some time off. They just didn't realize how much time would pass before reconnecting for another record.

While Jenkins, drummer Brad Hargreaves and guitarist Tony Fredianelli took a hiatus from each other, the music industry and its listening community morphed in all sorts of peculiar ways. The major labels lost some control while the independents gained ground. The Internet became the primary medium for discovering and (hopefully) purchasing new music, and social networking became the way to market that music and make "friends."

Thanks to these new tools, Third Eye Blind did not go dormant. Their fan base remained active and even grew during the past few years, and their live shows continued to sell out thanks to a bevy of new fans that discovered the band on Pandora and iTunes.

Building on this virtual community, the group teamed with Indaba Music to launch "Studio Access" ([www.indabamusic.com/studio\\_access/3eb](http://www.indabamusic.com/studio_access/3eb)), which gives fans and musicians inside access to the band's creative process. There, Third Eye Blind posted stems of newly recorded tracks and invited fans to create their own mixes. The band then chose their favorite version of each track and posted them on their Website, and MySpace and Facebook pages. "There's a huge community of musical, talented people, and I think the new music paradigm will allow more of these people to make a living in music," says Jenkins. "A lot fewer people become billionaires, but more people make a living. Sounds good to me."

Listening to their fans' interpretations further inspired the trio to move forward on a wealth of new material. Almost immediately after *Out of the Vein* hit shelves in 2004, the band started writing—sometimes on a tour bus, other times during soundcheck. Over time, the band had



PHOTO PAUL DE BENDICTUS

Engineer Sean Beresford in the control room of Third Eye Blind's converted carriage house studio.

compiled nearly two albums' worth of song ideas, but plans to re-enter the studio repeatedly got put on the back burner in lieu of side projects and other personal and professional endeavors.

When Jenkins got the green light from his well-off friend to convert his carriage house into a studio, the real possibility of a new recording—and recording facility—came into view. "First, we went back through all of the hard drives over the past five years and made rough mixes of all of the versions of all of these songs," says engineer Sean Beresford. "It was interesting to go back through three different versions of the same song, all very usable and all with cool ideas."

While Beresford sorted through the archives, he also advised Jenkins as he focused on the studio's design and equipment. Working with noted studio designer Chris Pelonis, Jenkins revamped the mid-sized space to include a spacious control room, a recording room that's large and live enough for guitar overdubs or a cozy band rehearsal, and a well-appointed 6x6-foot amp closet. The bathroom can also double as a small iso booth.

Jenkins kept the windows to allow for natural light but added another set of half-inch-thick panes for noise control. (Both in and out: Because the studio is located in a residential neighborhood, they have to keep things quiet. But just like every San Francisco neighborhood, cars and buses make it noisy.) Pelonis also designed a pair of custom main monitors for the facility, which Jenkins pairs with a set of Barefoot Micromain MM27s and, at the time of our visit, a pair of Focal studio monitors.

To equip the facility, Jenkins moved in his Hellos Olympic

Studio preamps, racks of Neve 1073s and 1081s, and a few compressors, but he knew he needed a desk more powerful than his old Helios 20-channel line input console from his former San Francisco studio, Morningwood. He also knew he wanted a console that he could keep well into the next decade. He turned to Beresford for advice. "Stephan kept referring to the excitement that he had making his first record with Eric Valentine, which was recorded on 2-inch tape and mixed on a Neve," the engineer says. "He seemed to want to get back to more of an organic sound."

Beresford led Jenkins to Wunder Audio president Mike Castoro, who was in the process of developing the WunderBar, a modular desk based on the company's popular PEQ1 pre-amp/EQ modules, which feature Neve, API and Wunder stereo bus "flavors." They got the first one built. "It's basically a brand-new, '70s-style console," says Jenkins. "It's all discrete."

Fully equipped with the best of both worlds—WunderBar, vintage outboard gear, a Studer A827 2-inch machine and a Digidesign Pro Tools HD3 with Lynx Aurora converters and an Apogee Big Ben master digital clock—the band recorded drums, bass and some guitar parts to tape, and vocals and other guitar parts in Pro Tools. The band took advantage of the historic ballroom at their disposal by recording drums in the large live room, with 48 ties connecting them to the studio more than 225 feet away—just past the fountain and flower garden. A video monitor above the console maintains visual connection.

Although the band intended to record live in the ballroom, cabling and soundproofing issues—as in, the ballroom has none and neighbors with very expensive houses live very close by—prevented that from happening the way they intended. "We ultimately recorded drums in the ballroom, and bass followed by guitar



The bandmembers in their Victorian live room

in the control room," says Beresford. "We did, however, experiment with the best way to position in this room and with various miking techniques."

Although the band tried out some new techniques, they generally aimed to keep the recording process technically straightforward. "We focused on keeping our priorities straight," says Jenkins. "Is the song good? Is the feeling of the song in the fingers of the player, and are those fingers coming down on an instrument that has a timbre and tone that's really working for that song? And is it recorded into the right amp or in the right room? We wanted to make this album as flat as it comes in the tracking process—as close to that initial impulse as possible."

For the most part, however, Beresford stuck with standard miking techniques and choices. He used a Mercenary Audio KM69 for overheads, acoustic guitar, strings, cello, violin, percussion and piano. "It's the most-used mic on the record," he says. Other favorites are the AEA R88 ribbon mic and a vintage pair of Neumann U67s that Beresford used on drums and piano.

Beresford miked the drums with an AKG

D 112 inside the kick, a Soundelux 195 FET outside of the kick, Shure SM57 and/or SM7 on the snare, an AKG 451 and sometimes an Earthworks QTC50 on the hi-hat, and Sennheiser 421s on the toms. For vocals, Jenkins sang through his trusted Telefunken ELA M 251, which he's used on almost every record, and which Beresford paired with a Mercury M66 compressor.

With some of the rough mixes in place, Jenkins began seeking out "big-name" engineers to mix the record. In the meantime, Beresford, who began working with Jenkins and Co. as an assistant engineer in 2000, mixed "Non Dairy Creamer," which appears on the band's recently released *Red Star* EP. He then mixed the remaining songs on that disc, as well as six of the tracks on *Ursa Major*. Tony Hoffer mixed three songs and Chris Lord-Alge mixed two, including the catchy debut single, "Don't Believe a Word," which has the melodic drive of the classic Third Eye Blind songs of the past.

More than two years have passed since Beresford first sorted through those hard drives packed with song ideas, and the music forums have been ablaze with posts from fans wonder-



ing when *Ursa Major* will really see the light of day. Despite scheduling conflicts and other random delays, Jenkins emphasizes that the process really did go fairly smoothly, and he looks forward to greeting audiences old and new, both in person and on the Web. "Even though the making of this album has taken a long time, the actual recording went very quickly," Jenkins says. "That's a product of the confidence and spontaneity that we have taken on from this new group of fans." ■

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World Radio History

Clockwise from front: Lancelot Hall, Touter Harvey, Junior Jazz, Ian Lewis and Roger Lewis (in chair).



PHOTO: PETER ANCONI

# Inner Circle

## REGGAE VETS OFFER THEIR "STATE OF DA WORLD"

By Blair Jackson

There are worse fates than being heavily associated with a single song. In the case of long-running reggae band Inner Circle, they will forever be linked in the public mind with the catchy song "Bad Boys," which became the theme song for the reality series *Cops* beginning in 1989. But that only scratches the surface of this group.

In fact, some of the members of Inner Circle have been playing together since they were teenagers in Jamaica, backing up rising star Bob Marley at one point and then establishing themselves as one of the most popular acts on the island during the late '70s when they were led by the great Rastafarian singer Jacob Miller. Miller's death in a car accident in 1980 derailed the band for a while, and founding members Roger Lewis and Ian Lewis (guitar and bass, respectively) and longtime keyboardist Touter Harvey relocated to Miami, where they opened Circle House Studios.

They re-formed in earnest in the mid-'80s with a new singer, Calton Coffie, and adapted a slightly more commercial sound that incorporated more from R&B and pop elements (actually, part of their roots) than their grit-

tier previous sound. "Bad Boys" originally came out in 1987, but it was when *Cops* really took off in the early '90s and became an unexpected worldwide phenomenon that Inner Circle hit its peak. The song topped the charts in Sweden, of all places, did well throughout Europe and reached the Top 10 in the U.S. in 1993; other lesser hits followed in the late '90s. Since then, there have been a couple of other singers, but through it all, the Lewises and Harvey have kept Inner Circle strong while their Circle House compound has grown to encompass three SSL rooms and the band's own separate Digidesign ICON-equipped studio/rehearsal space, and has become world-renowned in the process.

The group's new album, *State of Da World*, is their first studio effort in a while, and it nicely showcases the current lineup of the group—the Lewises, Harvey, drummer Lancelot Hall (a 20-year Inner Circle vet) and singer/guitarist Junior Jazz (a 10-year member)—augmented by an impressive array of guests plucked from different strains of reggae, including Damian Marley and Ste-

phen Marley, Mutubaruka, Morgan Heritage, Steel Pulse's David Hinds and the eclectic duo Slightly Stoopid. The album spans a wide range of styles, from glossy, electronic keyboard-dominated pop reggae (even using in-vogue electronically pitched vocals here and there) to tougher and deeper more "traditional" sounds, and even a couple of creamy R&B-inflected ballads. As one might expect from the album title, there is a social consciousness coursing through many of the songs: Inner Circle, like so many reggae bands, envisions a world where there is freedom from oppression and justice prevails; where love reigns supreme—and ganja is legal. There are two songs dealing with that theme on the album, including a re-make of their own "Mary Mary" (with Slightly Stoopid). I'm just a few minutes into a conversation with Roger Lewis when he brings that topic up.

"They puttin' all these people in jail—for what, mon? For smokin' God's good herb? It not right," he says in his thick Jamaican patois from the group's headquarters at Circle House Studios. "Weed should be decriminalized and put right alongside alcohol, because we firmly believe that if you can drink alcohol, weed supposed to be legal, too. So we sing about that, too."

Roger Lewis bristles somewhat at a question about the group's commercial inclinations—clearly, he's heard this line of questioning before: "Some people say we're too happy for them. They call us a 'glad-pop' band. They love bands like Burning Spear because they hard-core spiritual. But people don't understand the versatility of us. Listen closely to this album, mon. There's a lot there beneath the surface. When we made this, we said, 'Let's give them truly what's in our hearts, our wealth of experience, some social commentary.'"

The album was two-plus years in the



making; not surprisingly, it was tracked at Circle House in the group's own space. Roger Lewis notes that it started out purely as a group effort: "None [of the songs] were done with the guests in mind originally. The thing about creation is you don't know where something is going. You start with a riddim, you start with an idea, you start with a feel, let it evolve. You come up with something, work wit' it, and than maybe later you say, 'Damn, that would sound more wicked wit' *dis* guy on there or wit' *dis* kind of sound.' But we started trying to record the tracks live, as a band, like old-time Jamaica."

What was a typical session like? "Gather around midday or one o'clock every day," Roger Lewis replies, "then go to one or two in the morning, depending on the vibe. Jammin', workin' songs out. In between there's a lot of food eatin' and the domino playin' and arguing." [Laughs] The group doesn't have to worry about the expense of studio time, or hiring an outside engineer, either—bassist Ian Lewis has been covering that end of things for the band for some time.

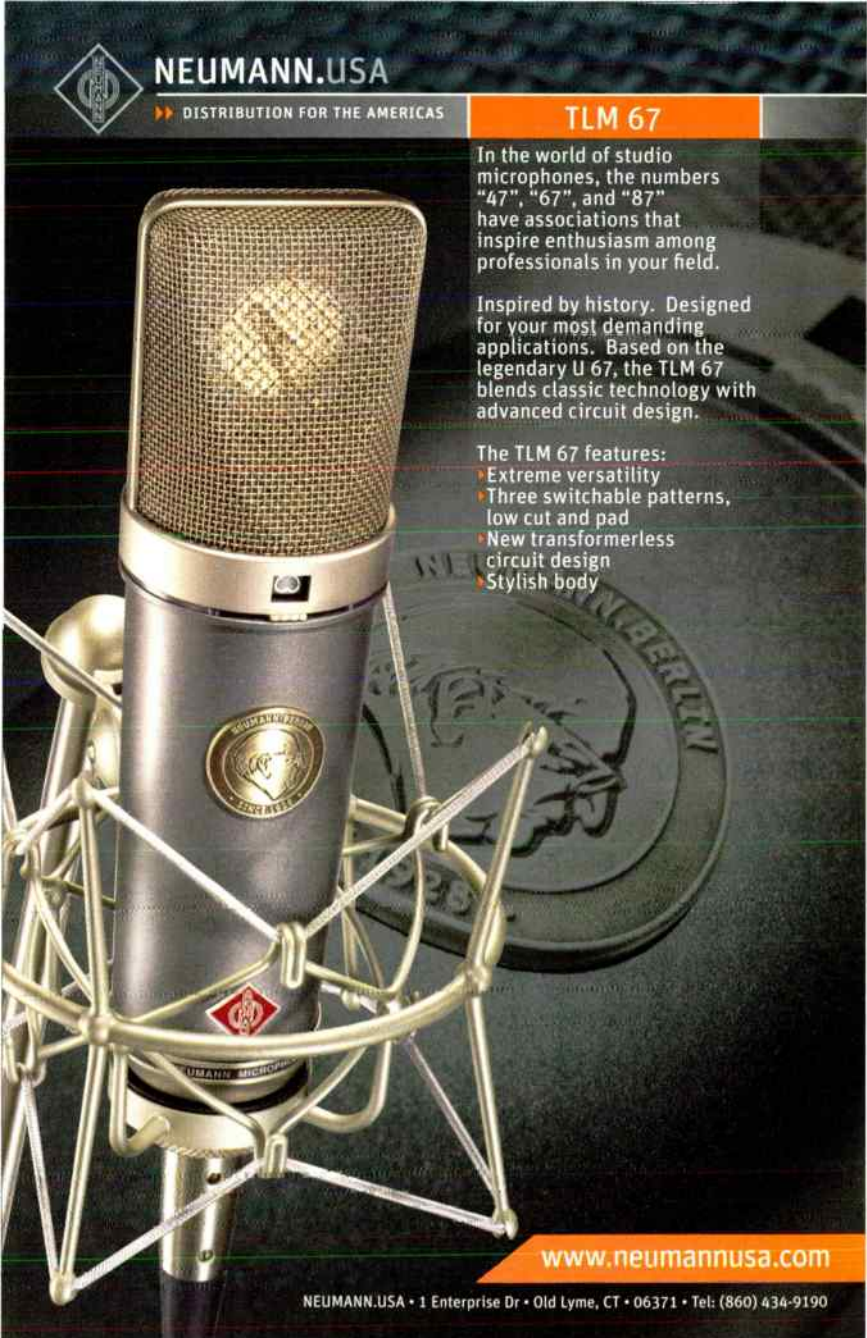
Asked who his mentors were in learning engineering, Ian Lewis credits Jack Nuber, who cut some of Bob Marley's later albums and worked with Talking Heads, Robert Palmer and others down at Compass Point and other studios; producer/engineer Alex Sadkin (Marley, Third World, Black Uhuru, Thompson Twins, Duran Duran, et al); and, more recently, Lou Diaz, who he says taught him Pro Tools. *State of Da World* was a hybrid analog/digital project, "using a lot of tube stuff—LA-2As and old EQs and preamps. I used [Neve] 1073s and 1081s, bringing them in through Pro Tools—that's why the kick and the bass sound so good; we work a lot on that to give it that old reggae sound.

"What's funny is most people don't realize that a lot of that [classic reggae sound] was just two mics in a room, but you had *very* good musicians who were creating the sound. A lot of it was 2-track and 4-track—when we went to 16-track in Jamaica, it was like, 'Man, it's too much tracks!' [Laughs] Now, with Pro Tools you can hit 60 tracks and not realize it. You have so many choices, and you say to yourself, 'Where am I going with this record?' You do one bass line and you really like it, and then another and you like that even more, and then when you go back to the old one, you can mix and match the pieces. Those choices are good choices, but when you're going to stack 23 tracks of vocals, that's when it's the bad choices."

Reggae, Ian Lewis says, has unique challenges from an engineering standpoint because of the importance of the drum and bass rhythm. "It's not like hip-hop where you got 16 tracks of drums and you might hit them all hard [in a mix]. With reggae, you want to make sure you get that crack off the side stick, use some compression to hold that bass tight, get the kick drum hitting right, work the rhythm guitar... you have to know when the points are going to collide and then guide it so it all hangs together and nothing gets in the way of anything else. It has to work together right but not lose the over-

all feel. Once you get the drums, bass and guitar together, overdubbing is easy."

Ian Lewis notes that Junior Jazz's lead vocals were captured with a Neumann U87, "and we didn't need to comp them—when the red light goes on, he knows what he's doing. He's got a good strong voice. Sometimes we'll double on some notes. And, of course, we'll use some unison vocals and maybe a two-part harmony on top." And then there were the guests: "Oh, man, every one was different," Ian Lewis says. "Every guy works differently. But it was cool. Technically, it's no problem. It's all about the vibe." III



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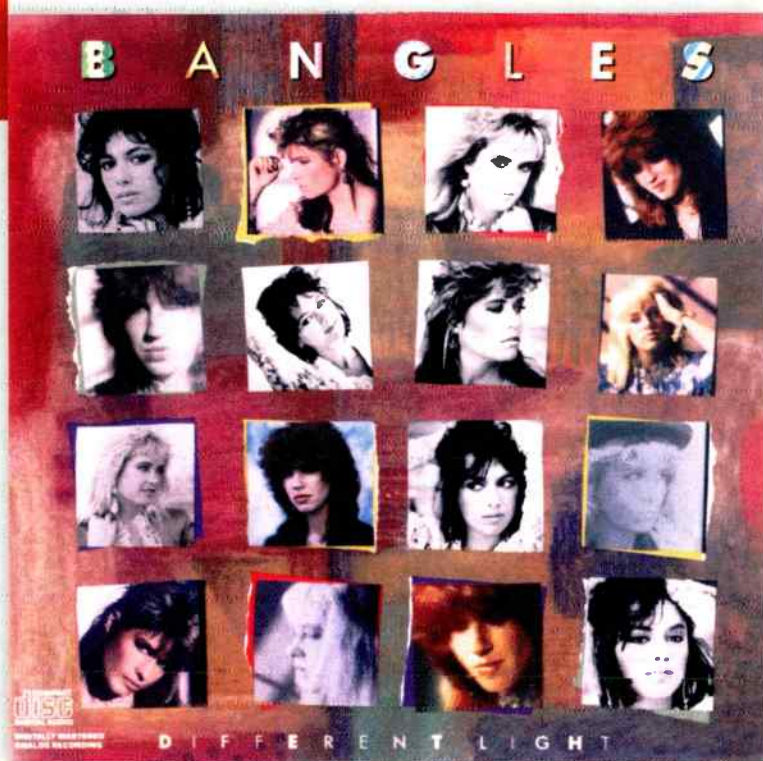
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# CLASSIC TRACKS



Drummer/vocalist **Debbi Peterson**, guitarist/vocalist **Vicki Peterson** (leg up), guitarist/vocalist **Susanna Hoffs** and bassist/vocalist **Michael Steele**

## The Bangles

### "WALK LIKE AN EGYPTIAN"

By Gaby Alter

What kind of a song is The Bangles' "Walk Like an Egyptian," anyway? More than a novelty hit and not quite an actual dance craze, it strikes the perfect balance between playful and cool, sexy and silly. While its lyrics, like those of many novelty hits, are funny and even ridiculous at times, they also carry a Utopian message—a unification of all countries through a fictional dance. Even the Soviet Union and the Japanese, the United States' military and economic adversaries during the '80s, are called to join.

The song is also given weight by its musical richness. Over its instantly recognizable shaker-and-drum-machine groove, The Bangles add grit with rock 'n' roll bass and guitars, and sweetness with deadpan pop vocals. There's a plethora of percussive bangs and gong sounds that, while underscoring the joke-y title reference of the song, also makes it unusual and sonically adventurous. And

there's the unique lead vocal trade-off—three of The Bangles take turns singing verses and choruses. All this adds up to a song that is humorous without being campy, joyful and a touch ironic without being cynical. "There was an aspect of fun and light-heartedness, and I think 'Egyptian' kind of epitomizes that part of the '80s," says Susanna Hoffs, one of the group's guitarists and vocalists. "It's hard to go in and say, 'I'm going to write a song like that.' It was a magical thing and no one could have planned or predicted it."

The Bangles emerged during the early '80s as part of the "Paisley Underground," a group of Los Angeles bands that incorporated folk-rock and psychedelic influences from the '60s and '70s, along with some of that era's peace-and-love vibe. (Some say this was in explicit contrast to the violent punk scene of the time.) Echoing bands like the Beach Boys and The Byrds, The Bangles and their cohorts had

a predilection for rich vocal harmonies, jangly guitars and sun-drenched West Coast pop melodies.

The Bangles also had a garage-pop aesthetic that ran through much of their first album on Columbia, *All Over the Place*. While it garnered critical acclaim and attention from college radio, the group had yet to break into mainstream commercial success when they began recording the follow-up, *A Different Light* at L.A.'s Sunset Sound Factory. "With *A Different Light*, in some ways we were trying to be a little more sophisticated," says guitarist/vocalist Vicki Peterson.

*A Different Light* was engineered by Tchad Blake and Peggy McLeonard, and mixed by David Leonard. It was the second time The Bangles had been paired with David Kahne, a producer who had worked with such acts as Romeo Void, Rank & File and Fishbone. Kahne wryly refers to their collaboration as a "forced marriage," though he adds, "the results are pretty good, and we're all still healthy, walking around, so everything is okay."

"It was not an easy process," says Peterson of the album's writing and recording. "Some of that was trying to work out our relationship with David Kahne, and figure out whether it was a good working relationship or not. We knew he was very talented and brilliant in his way, and made good records, so we had to weigh that against all the other issues."

The tension between The Bangles and Kahne was evident during the selection and recording of "Walk Like an Egyptian," a song written by an Akron, Ohio-based producer named Liam Sternberg. While Vicki Peterson remembers she liked the song's demo that

Kahne played them—"It was so out of left-field and cool"—her sister, drummer/vocalist Debbi Peterson, had strong objections, according to Kahne, because of the drum machine groove. "The Bangles were essentially a garage band," Hoffs elaborates. "We were very much about playing things in our own primitive way as self-taught musicians. 'Walk Like an Egyptian' was more calculated in a certain way. And one of the main things that differentiated it was that it was created around a groove invented on a drum machine. It almost felt like: Is it gonna be Bangle-y enough? Is it gonna be cool to have this departure from what we usually do?"

Once the band agreed to Kahne's proposal, there was the question of who would sing it as The Bangles rotated lead vocals from song to song. Debbi Peterson was initially slated to do it, but Kahne felt she couldn't nail the part, so he began auditioning the other members of the group. "We'd never had to audition for our own songs before, so that was a little uncomfortable, I think, for everybody, including for Debbi, who didn't make the cut, as it were, in David's eyes," Vicki Peterson says. "It made it feel like, whose record is this anyway? But on the other hand, all these things were happening for a reason, and it was not impossible to see that the greater good was being served for the band itself and for this record we were trying to make." In the end, Vicki Peterson took the first verse and chorus, bassist/vocalist Michael Steele the second, and Hoffs sang the last.

Like the demo, The Bangles' version is built around an Alesis drum machine groove. That mechanical shuffle defines the song in a way that a live drummer couldn't capture: Vicki Peterson notes that the group continues to use programmed drums when they play the song in concert today. Also on the rhythm track are a Peruvian shaker, a trash-can lid, a gong and a bongo sound played on the pre-choruses by producer Mitchell Froom.

"Froom was across the hall, and he had a new Emulator synth, which had a bongo sample in it," Kahne says. "That was kind of a big deal because those Emulators cost \$14,000, and they had 8 megs of RAM in 'em, so it seemed [at the time] like they had this massive sample capability—you could put in a really low-level, 8-bit sample of bongo drums."

While the song was markedly different from The Bangles' other material, they made it irrevocably theirs when they laid down the vocals. "Part of that is having sisters in the band—the genetics work to our advantage,"

Hoffs says. "If you look at the Beach Boys and other bands that have had family members singing together, there's a really cool thing that happens. The sound of all of our voices together was unique, so that made it a Bangles song more than anything else."

Kahne recorded the vocals of the group with his standard setup: a Neumann U47, API preamp and 1176 Blackface. "We would work out all the harmonies [ahead of time], and then when they sang them, they did it as a group," he says. "There was no overdubbing individual people, which makes for a different kind of recording process. We would double the vocals most of the time, but they would sing together as a group, and we would get a different kind of relationship that you don't get recording each person, even if they're supposedly singing the same part. There are intonation things, phrasing things—like somebody might pull a little late, so it'll make the second chorus seem a little different than the first."

"David Kahne was a real perfectionist," Hoffs remembers. "But I have to say, it built my chops as a singer. He didn't do a lot of comping of vocals. He really wanted the lead vocal to be done on one track, so if there was something not working or a section that could be better, even within a line or a phrase, he would want us to punch it in. It was kind of a difficult process, but I learned a lot—I think we all did—about arrangement and, in particular, about vocal harmonies. I have a Pro Tools studio in my own house now, and the way I layer my own vocals, a lot of that I learned from David Kahne." She also notes that The Bangles continue to record now as they did then, singing around a microphone rather than recording vocals individually.

While The Bangles and Kahne were ultimately pleased with the results of the recording, nobody expected it to become a huge hit. "Manic Monday" emerged as the album's first single, another cover famously written for the group by Prince (under the pseudonym Christopher). That song went on to reach Number 2 on the *Billboard* charts, blocked from the Number One spot by Prince's own single "Kiss."

Vicki Peterson remembers having serious doubts that the record company would



The Bangles express themselves to producer David Kahne.

back "Egyptian" as a single at all. "It was just so left-field and odd, and there was nothing like it on the radio. When I found out they were going to release it, I thought it was hysterical and I loved it. And then it took off." The single hit Number One in the fall of 1986 and propelled *A Different Light* all the way to Number 2 on the album chart in early 1987.

The Bangles had a number of strong singles after "Egyptian," including "Eternal Flame" and the Simon & Garfunkel tune "Hazy Shade of Winter." A few years later, the stress of constantly touring together—and other priorities, such as starting families—finally caused the group to separate. In the early 2000s, however, the group reunited, and since then they've toured sporadically, recorded one album and begun work on a second, this time co-produced by power-pop songwriter Matthew Sweet (who has also cut two fine albums of cover tunes with Hoffs). The Bangles have also resumed touring, though only a few times a year now in place of the hectic schedule of their major-label days. And David Kahne's very successful producing career is still going strong, with collaborations the past few years including the likes of Paul McCartney, Regina Spektor, Kelly Clarkson and many others.

People continue to love "Egyptian," including younger audiences. "It's a cyclical thing of being fascinated by things that happened before you were around to experience them, just like when I was in high school in the '70s and there were all these shows like *Happy Days* about things in the '50s," Hoffs says. "Little kids that couldn't have possibly had access to it through the normal routes—it's not played on Top 40 radio anymore—know about it. It's kind of become part of the lore of that time." III

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PHOTO: DAVE VANN



By Donny Emerick and Joanne Zola

## Phish

### JAM BAND MAKES TRIUMPHANT RETURN

Almost five years after a tearful breakup in a muddy field in their home state of Vermont, definitive jam band Phish reformed with its original members earlier this year. After a rousing three-night reunion run at the Hampton Coliseum (Hampton, Va.) in early March, the band kicked off a 27-date national summer

tour at Boston's Fenway Park with stops headlining the Bonnaroo Music Festival and a four-night run at Red Rocks Amphitheatre in Denver.

Warmly referred to by technology-savvy fans as Phish 3.0, the band (and early adopters of Internet communities and digital downloads) have upgraded

their live sound system to match their digital roots.

"Everything has changed," says front-of-house engineer Garry Brown, who is mixing the band for the first time, but has previously worked with guitarist/frontman Trey Anastasio. "We have a line array with a digital console.

There is nothing newer that can be brought to the table. The band gave me 54 songs in advance, and now it's just a matter of going with the flow. I have no idea what songs they are going to play, so it's a general mix and any changes [are done] as we go."

Brown is mixing on a Digidesign VENUE, a board that he has used for three-and-a-half years. "The multitracking is much easier. We're recording 82 channels and it makes it so much easier to plug in some cables and away you go. I've got [the Crane Song Phoenix] on every input and every output. Everything goes through

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## Sound All Around

Eighth Day Sound is supplying the tour with a d&b J Series line array comprising (per side for the mains) 14 J8s, a couple of J12s, six J Subs and three B2 subs. The sidefills each take 10 J8s and two J12s; power is via 48 d&b D12 amps.

"We think that this system is the way of the future for us as a company and for live audio," comments Jordan Zur, systems engineer who has been with the sound company as a project manager for 11 years. "It sounds good, it's ideal for mixing sound, and it's blown everybody away." Other crew members from Eighth Day include techs Vince Beller and Kurt "Crumpy" Wolf.

At FOH, Brown relies on a Dolby Lake Processing system, which he calls one of his favorite tools: "That's my lifeline, but that's because I do a lot of EQ'ing. People accuse me of over-EQ'ing. I do a lot of little things as opposed to a lot of big things. Instead of an octave cut, I do 15 little cuts to make a collective. There have been times when I'm using three pages of filters at 26 filters per page. It's a powerful thing."



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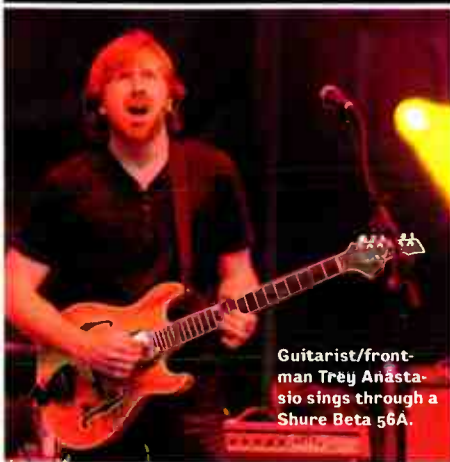
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Keyboardist Page McConnell uses three wedges.



Guitarist/front-man Trey Anastasio sings through a Shure Beta 56A.

it three times before the signal hits the Crane Song Head. It warms it up and puts a bit of grit and distortion into it."

Brown is also bringing Waves Platinum Bundle plugs into his mix. "I use loads of C4s; it's a great compressor and a fundamental thing, especially on the bass guitar. It's just so flexible. I also use MaxxBass, Renaissance Bass and the L2." Other pieces of gear at FOH include Crane Song HEDD, SPL Transient Designer 4 and Apogee Big Ben. [Eds. Note: Brown has switched to using a DiGiCo SD7, a follow-up story will appear in an upcoming issue of Mix.]

Monitor engineer Mark Bradley is also on the digital train, mixing on a Yamaha PM5D without any additional outboard processing. "It's all inside," Bradley says. "There's no effects or reverbs, just a few gates and compressors and that's it. I'm doing the basic thing and they don't require much. This is the boring end of the snake."

Bradley, who was with the band for years before their five-year hiatus, says that one major change for Phish is the move to Telefunken M80 mics on vocals. He is running about 45 channels into four stereo mixes and a drum submix. The band doesn't wear in-ear monitors; instead, monitoring is via 10 d&b M2s, four M4s, two Q Subs (all with amps) and six Clair Bros. 12AMs with six QSC amps.

"These guys are pretty basic—they're old school," Bradley says. "Everybody's on two wedges, except Page [McConnell, keyboardist] has

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Above, from left: Garry Brown, Mark Bradley, Vince Buller, Kurt Wolf and Jordan Zur. Inset: Front-of-house engineer Brown at the Digidesign VENUE board.

three. The key is the wedges sound good and the desk sounds good. They always were pretty level-headed guys. They're excited to be back, as am I."

## Extended Mic List

### Drums

- Kick: Shure Beta 52, Beta 91, Yamaha subkick
- Snare: Shure SM57, Neumann KM 184
- Rack/Floor Toms: Neumann KM 184
- Overheads: Royer SF2
- Woodblocks: Sennheiser e 604
- Mini-Congas: Shure SM57

Vocals: Shure Beta 56A

Electric Guitars and Amps: Shure SM57, Royer 121L

Acoustic Guitars: Radial J48

Piano: Earthworks PM40, Helpinstill pickup, Shure SM57

Hammond B4: DI

Clavinet: Sennheiser MD409

Moog: Radial J48

Key Tar: Radial JDI

Bass: Radial JDI, Yamaha Subkick

Vacuum Cleaner (Really!): Telefunken M80

The stuff that's online is basically the board mix with added audience mics and a delayed mic at FOH all blended together to a 2-track mix.

—Garry Brown



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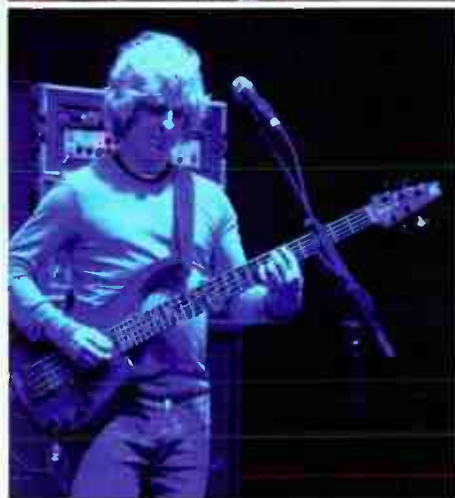
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Above: Drummer Jon Fishman. Below: Bassist Mike Gordan.

### Recording

Along with his live sound duties, Brown also manages two recording suites during each performance: One is a Digidesign Pro Tools LE system for a live recording download series appropriately named Live Phish; the second is an HD system multitracking every input for the band's archives.

"What's online is the board mix with added audience mics and a delayed microphone at FOH all blended together to a 2-track mix," Brown explains. Audience mics include Telefunken M216, Shure SM81 and AKG C414 models. "The Live-Phish engineer, Micah Gordon, gets the two tracks, chops it up and labels it. The whole thing is up on a Website an hour or so after the show." Beginning with the Red Rocks show, they are doing a separate mix directly from the stage inputs exclusively for online. This is a live multitrack mix as opposed to a FOH soundboard/audience mic matrix. The files are uploaded nightly as both MP3 and FLAC formats for purchase. III

Donny Emerick is a writer in Rhode Island. Joanne Zola is Mix's sales director of key accounts.

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# SOUNDCHECK

## The Dead Return

In October 2008, Grateful Dead founding members Bob Weir, Phil Lesh, Mickey Hart and Bill Kreutzmann—joined by Warren

of 16 MILO and two MILO 120 line array loudspeakers each. Left and right side arrays of 10 MILO and two MILO 120 loudspeakers

"The Meyer Sound system provided us with a consistent, clean and powerful image across a wide range of venues," says Featherstone, who used a pair of IID-1 audio monitors at the mix position. "Even with more than 90 open microphones on the stage we had very little leakage back onto the P.A. system."

"Over the course of time, The Dead have tried just about every brand and make of vocal microphones." Featherstone continues. "When it came time to do [this tour], I was trying out different simple dynamic mics with the intention of keeping the stage wash down and the tone of all vocal mics the same. My goal was to use the same microphone model on all of the six vocal positions, so when the band was not singing the front-line wash would at least sound consistent."

"Finding a microphone that could handle and reproduce all voices well was not a simple task. Bob Weir had previously used the Telefunken M 80 and suggested I check it out. The M 80 microphone has an incredible balance of fidelity and rejection. These microphones worked flawlessly in the Dead's somewhat hazardous live sound environment."



PHOTO: JAY BLANKENBERG

The Dead performing onstage, from left: Jeff Chimenti, Phil Lesh, Bob Weir, Bill Kreutzmann, Warren Haynes, Mickey Hart

Derek Featherstone

Haynes and Jeff Chimenti—played a second show for the Obama campaign, called "Change Rocks" at Penn State University. (The first one was in February 2008 at a San Francisco concert called "Deadheads for Obama.") On January 1, 2009, the Dead announced a 22-show, 17-city tour. Pro Media/UltraSound provided a Meyer Sound MILO system, handled by front-of-house engineer Derek Featherstone.

The system, designed to provide up to 360-degree coverage for the tour's multiple arena dates, included main left and right arrays

each were augmented by identical arrays covering far-left and far-right areas.

The rear areas were served by left and right arrays of 12 MICA line array loudspeakers each. Sixteen 700-HP subwoofers handled low frequencies, with eight each flown below the main MILO arrays. An additional nine M3D-Sub directional subwoofers were groundstacked at the stage. Left and right frontfills of three CQ-1 loudspeakers each and a pair of UPJ-1P VariO loudspeakers at centerfill complete the setup.

## tour log

### American Idol

The American Idol tour has kicked off once again, showcasing the Top 10 finalists from the reality show. *Mix* caught up with front-of-house engineer Randy Lane.

PHOTO: CHRIS MARKSBU



PHOTO: JIM MARGG/GETTY IMAGES

#### How did you get involved with this tour?

I received a call from Clair Global, the company that provides audio for the American Idol tours, informing me that the tour would need a front-of-house engineer for the tour during 2008. Jim Ebdon, the tour's FOH mixer and sound designer, was already slated to do the Maroon 5 tour, so I stepped in to cover 2008 and was invited back for this year's tour.

#### How much gear are you carrying?

The tour is carrying 28 i55 and 20 i5B supplemental bass cabinets flown with six BT-218 subs on the floor.

#### How do you have your board set up?

I have a Yamaha PM5D-RH with a DSP5D extender. My setup has one MY16-MD64 MADI card for recording 64 tracks per night if the need arises. We've recorded one show for iTunes release and I mixed the tracks on the road during days off.

#### What would you say is the most important part of your mix?

Vocals are the primary consideration. They must hit every seat in the house so the P.A. is tuned primarily to make sure that vocals make it to the last seat in the house.

#### When you're not on the road, where can we find you?

So far this year, I have been on the road most of the time with Julio Iglesias and with James Taylor. That's kept me busy and on the road the whole year.

## fix it

### R. Kelly FOH engineer Rob "Cubby" Colby

It's a very straightforward, live show. I like the R&B/funk attitude of the music, and it's always been something I've enjoyed to mix. Robert [R. Kelly] is very involved in the production from the programming to the producing; it's very clean-sounding audio and the band is extraordinarily good. Using the offline [DiGiCo] D5 editor, I can build all of my VCA, effects, label

all my inputs and essentially turn everything on before I get there. That way, you're off to a more comfortable start, at least for me. I'm more prepared and I know where everything is. It doesn't take two to three days of production rehearsals to figure out how you would want to set up the layer/banks of the console because I've already done it prior to arriving for rehearsals.



# The Fridge Brings In Chilled-Out System

London-based live music/dance club The Fridge ([www.fridge.co.uk](http://www.fridge.co.uk)) recently underwent a complete overhaul—increasing capacity to 1,700—which included creating space for direct loading

wealth of onboard plug-ins available, including Sonnox and McDSP collections. A Pro Tools HD2 recording system provides 64 track recording and Virtual Soundcheck system. In

addition, an effects rack holds TC Electronic D2, Lexicon PCM70, Yamaha SPX990, Drawmer DS201 and dbx 160X. A Midas XL3 40-channel console sits at monitor world, with effects including Klark-Teknik DM360 graphic EQs.

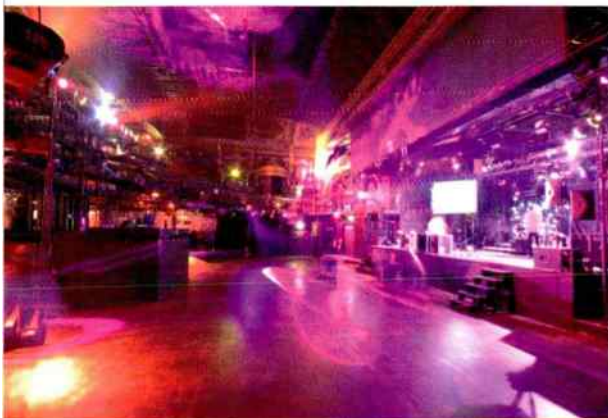
The new P.A. is a d&b J Series speaker system; handling in/side/drum-fill and delay are various d&b models. Monitor wedges include d&b Max Cabinets and Crest amps. An assortment of mics (Shure,

Sennheiser, Beyer) and DIs are on-hand.

“We are really excited about this—that increased capacity has made all the difference to the promoters and agents,” enthuses co-owner Andrew Czewowski.

from the rear of the venue, a rewire and a new P.A. and lighting system installed.

Sitting at front of house is a Digidesign VENUE Profile with 48 mic/line inputs on the stage rack. Traveling engineers will find a



Included in the new Fridge audio install are a Digidesign VENUE Profile and a Midas XL3 boards, a Pro Tools HD2 recording system and a d&b J Series speaker system.

## load in



Monitor engineer Ben Booker spec'd Allen & Heath's new iLive-T digital mixing system for PJ Harvey's European tour.

*Wicked's* second North American tour is the show's first production to be equipped with a fiber-optic audio distribution system, thanks to Wireworks Corporation...A DiGiCo D8 console is being used at FOH for a Take That “tribute” musical, *Never Forget*. This is the first production that sound designer Richard Brooker has used the board...Loudness Sonorizacao (Sao Paulo, Brazil) purchased its first L-Acoustics system and powered 108P enclosures, the latter serving as a surround sound system for *The Phantom of the Opera* in Buenos Aires, Argentina...ADLIB Audio and Lighting and engineer Walter Jaquiss were employed for John Barrowman's latest tour, which also saw two Soundcraft Vi6 digital consoles.

## road-worthy gear

### AKG Updates C 747

AKG's new C 747 V11 condenser “pencil microphone” features an enhanced hypercardioid polar pattern offering improved off-axis rejection for ambient noise and feedback control in difficult environments, along with a frequency response tailored for improved spoken-word presence. Also new is a switchable low-frequency roll-off filter and integrated RFI shielding to help screen interference from mobile phones and wireless mics. The C747 V11 ships with a shock-mount/adaptor, mini-gooseneck, stand adapter, mounting clamp, thread link and windscreen. [www.akg.com](http://www.akg.com)

### MediaMatrix nControl

Designed to expand the capabilities of the MediaMatrix NION system, the nControl auxiliary hardware/software package provides additional control processing with increased Python scripting capabilities and lets users monitor the operation and status of all devices on a network via SNMP. Devices with serial ports connect to nControl either directly or to a supported network serial server for control and management. The nControl can act as a media server, including audio recording and playback over CobraNet. GPIO expansion enables the use of TTL logic, switches, LEDs and other custom circuitry for additional control-driven functions. [mm.peavey.com](http://mm.peavey.com)



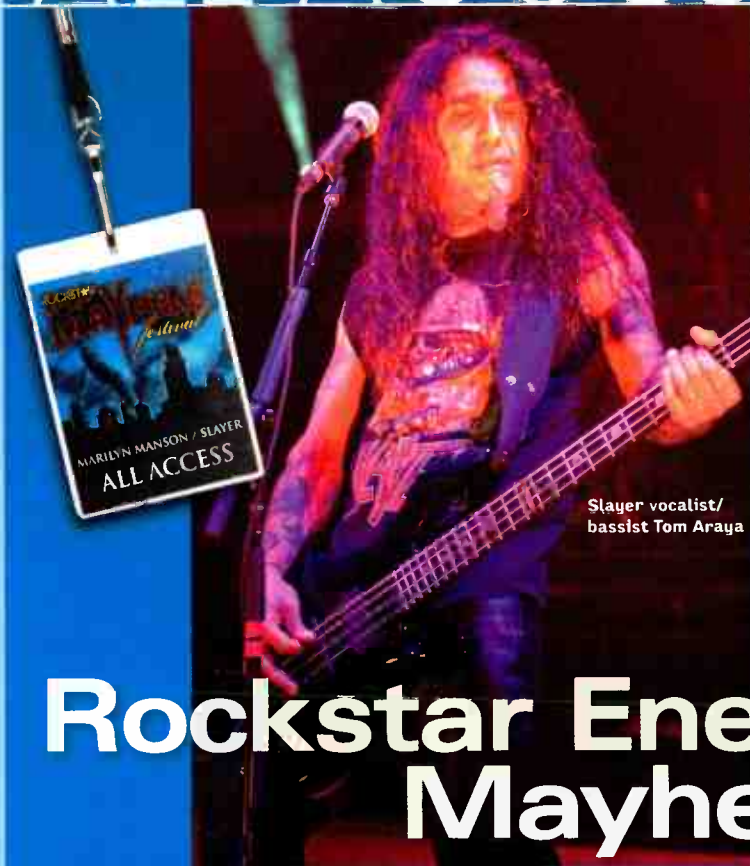
### Celestion CDX1-1720 HF Drive

The CDX1-1720 is a 1-inch exit, neodymium magnet, titanium-dome compression driver with a “next-generation” phase plug developed at Celestion's UK headquarters for lower distortion and higher max SPLs. A deep-drawn, 1.75-inch diameter titanium diaphragm increases stiffness to reduce dome breakup within the critical 2kHz to 10kHz listening band. Specifications for the 8-ohm driver include 50-watt RMS power handling, 800 to 20k Hz frequency response and 107dB (1w/1m) sensitivity. [www.celestion.com](http://www.celestion.com)



# ALL ACCESS

Photos & Text by Steve Jennings



Slayer vocalist/  
bassist Tom Araya



Marilyn Manson

## Rockstar Energy Mayhem Festival

The Rockstar Energy Mayhem Festival is an all-metal gathering where performances, dB levels and hardcore fans fully live up to the name of the event. When "Mayhem" touched down in the San Francisco Bay Area's Shoreline Amphitheater in July, *Mix* caught up with headliners Marilyn Manson and Slayer's audio team, as well as Jagermeister Mobile Stage front-of-house engineer/production/road manager Davé Summers.



Marilyn Manson front-of-house engineer George Chapman III

Marilyn Manson's front-of-house engineer, George Chapman III, mixes on a Digidesign VENUE with a sidecar, using such onboard plug-ins as the Eventide Anthology package, AmpFarm amp simulation, Smack! and Focusrite comps, and EQ3 7-band parametric EQ. "I find that using the third-party plug-ins really gives me a chance to get as close to the studio sounds as possible in the live environment," Chapman says.

Rat Sound is providing all the gear and P.A. systems, which comprise 15 L-Acoustics V-DOSCs in the main hang with four dV-DOSC downfills, another eight V-DOSCs for outfills and two V-DOSCs for centerfills on the downstage edge. "We have been lucky to get the new V-DOSC subs that go with the new K1 system, and we are using them both in standard mode and cardioid mode, depending on the architectural layout of the venue, as well as trying the various crossover settings in the amps," Chapman says. "I found that I like the subs in cardioid mode with crossover at 100 Hz—it seems to work best for the show's dynamics. This is so much fun to mix because there is so much going on and so many cues. I would say that, as a sound engineer, you couldn't ask for a more fun, diverse show to mix."



Slayer front-of-house engineer Tim Quinby

Slayer FOH engineer Tim Quinby mixes on a MIdas Heritage 3000, running 32 inputs from the stage and an additional 10 channels of effects returns. His rack gear comprises Draumer 201 noise gates, Empirical Labs Distressors, Fatso Jr., Summit tube comps, TC Electronic 2290 delays, Yamaha SPX990 reverbs and Radial Phazers.

"Based on our previous co-headline run with Manson, the Rat Sound guys put together a great system," Quinby says. "We also have a boatload of L-Acoustics SB28 subs stacked in a cardioid sub array. 'Milk' [FOH system tech] and the guys out here have handed me a smooth, well-designed rig with plenty of horsepower every day.

"After 20 years on tour and 10 years with this band, I can say mixing FOH for Slayer might possibly be the best gig ever."



The Jagermeister Mobile Stage features a Peavey VersArray system (below, left).



Trivium takes the Jagermeister stage.



Slayer monitor engineer Ron Musarra is mixing on a Yamaha PM5D (no plug-ins). Vocalist Tom Araya sings through a Shure Beta 58A. "I go through two to three Beta 58s a show due to Tom's strong voice blowing the diaphragms out, and also moisture issues," Musarra says. "No one's on in-ears, but I do give an ear mix [Shure PSM500s] to [Kerry King guitar tech] Armand Crump. I give singer Tom two mixes—three wedges total (d&b M2s): inner being vocal only; outer pair, drums only. I mix a very loud stage with drums, drums and more drums in all the mixes. It can be challenging at times. Drummer Dave Lombardo gets loud guitars on top of it all. I minimally gate the drums; it's all about EQ and a great drum tech, Norm Costa, to tune them."



Over on the Jagermeister Mobile Stage, FOH engineer/production/road manager Dave Summers (above) reports that gear onstage includes 16 Peavey VersArray 212 line array enclosures, 16 VersArray 218 subs, 30 Crest Audio Pro 9200 amps, 10 Pro 8200 amps, four Pro 7200 amps and two Peavey Architectural Acoustics Digitool processors for system management.



Manson monitor engineer Bruce Danz mixes on a Yamaha PM5DRH.

Bruce Danz, Marilyn Manson's monitor engineer, mixes on a Yamaha PM5DRH, opting to not use any plug-ins; instead, he gets a feed of an Eventide plug-in from FOH, as well as a rack-unit Eventide H3000.

Manson sings through a Shure SM58 with a UR wireless system. "I have them numbered and on four-way switchers," Danz says. "He throws them around a lot: I have a guy that just runs and puts out new ones and tries to retrieve the thrown ones. I keep at least 12 mics set and ready for every show.

"For wedges, we are using d&b M2s. They are one of my favorites next to the V-DOSC FM113s, and I use four V-DOSC line array boxes a side, flown for side-fills.

"My main thing is watching Manson at all times, which can be tough with all the smoke and strobes going on. We have our cues worked out; it's just about seeing him and running his cues as quickly as possible. Getting the vocal on top of all the stage volume gets tricky, but that's metal man."

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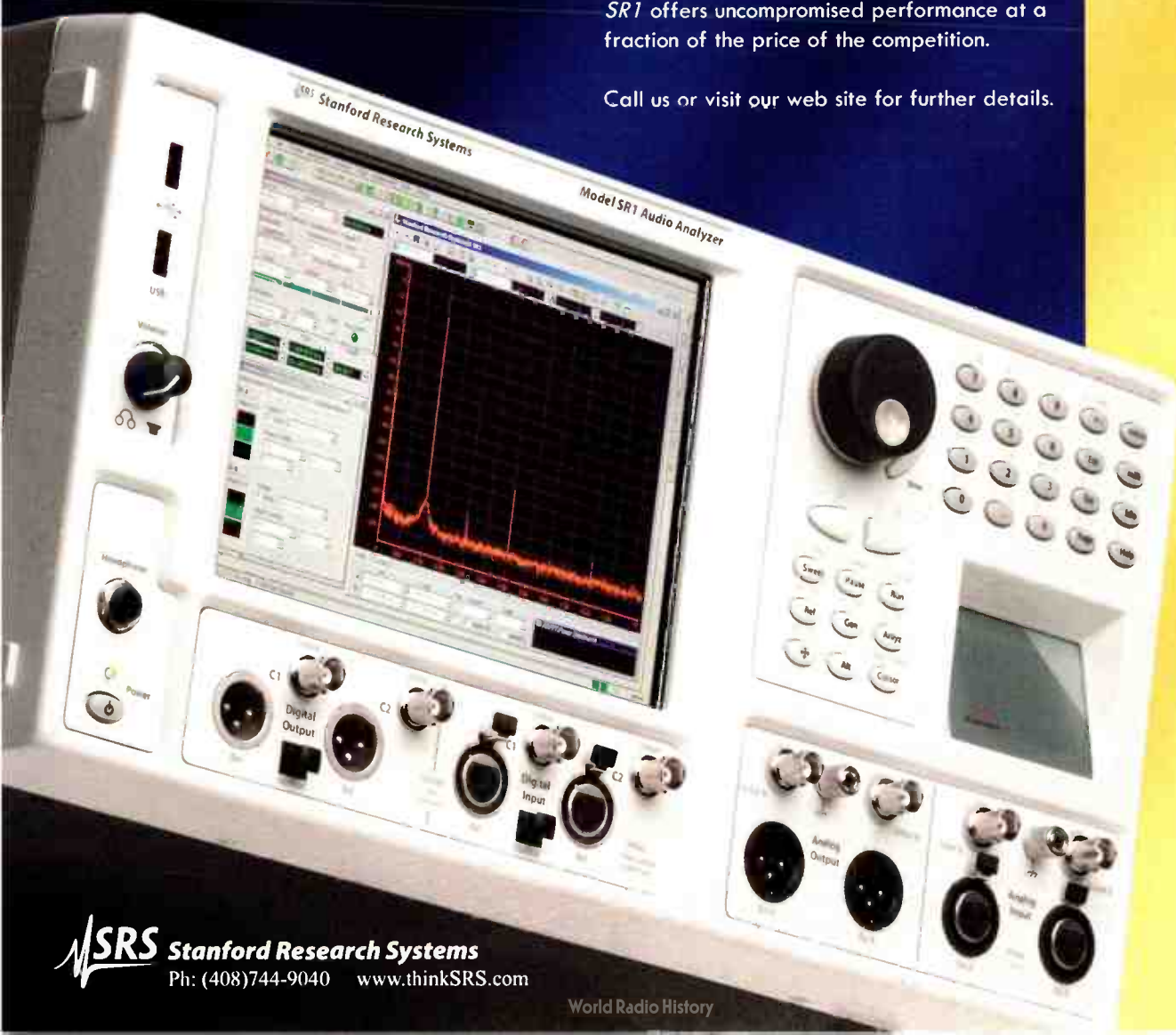
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PHOTOS: COURTESY PIXAR ENTERTAINMENT

Vince Caro's recent projects include Pixar's short film "Presto" and the feature *Up*.



By Barbara Schultz

# Pixar's Vince Caro

## CAPTURING THE VOICES OF ANIMATION

Pixar Entertainment's resident vocal recordist/mixer, Vince Caro, broke into voice recording for animation 20-plus years ago when he was on staff at RCA Studios in New York City. His first voice-for-animation project: Disney's blockbuster *Beauty and the Beast* (1991). Following the success of those sessions (which included helping to record the orchestral score and songs, as well as the speaking actors), recording voices for animation became a strong thread running through a varied career that has also included work on everything from jingles to Broadway cast albums to episodes of *The Simpsons* to several of his friend Harry Connick Jr.'s albums. As an RCA staffer, then as a free agent and more recently as part of the Pixar team, Caro recorded voices for every major Disney animated release from *Beauty* through *Chicken Little* (2005). It was his work for Disney that led him to become a go-to recordist for Pixar's New York-based talent, beginning with the animators' much beloved feature debut, *Toy Story*.

Studios and technologies have come and gone since Caro moved his family

and his career to California to become a full-time Pixar engineer, but he has remained one of the constants in Pixar's impressive run of creative, high-quality animated films.

### *Tell me how your relationship with the animation studios began.*

Disney came in to RCA to record the score for *Beauty and the Beast*, and we also did the dialog. It was done quite differently from how we make the movies now. All the voice talent who were singing for the soundtrack would record with the orchestra from nine to noon, and they would take a lunch break. Then Angela Lansbury [the voice of Mrs. Potts] and Jerry Orbach [the voice of Lumiere] and a few of the other people would come to another studio and record the dialog. Doc Kane, the Disney mixer, came for the first session and then he left. He said to me, "Take over because I need to get back to California. You can do this." Meanwhile, I was also assisting Mike Farrow upstairs, who did the music.

*Were there prescribed techniques for recording dialog for Disney in those days?*

With Disney and with Pixar, we now have a really tight spec on how we do our dialog recording—what mics we use and which mic pre's. We also try to use about the same-sized room. But at this point with Disney, in the '80s and early '90s, their main spec at the time was that it was all analog with Dolby SR. The only other spec we had back then was to use a [Neumann] U87 microphone. They wanted that to be the same wherever they traveled around the world.

### *Back then, did a lot of the voice talent come to you in New York?*

For the most part, up until we did *Mulan* [1999]. We chased Eddie Murphy all over the country for that, but certainly when I was at RCA, it was me at RCA in New York or Doc Kane on Disney Stage B in L.A. for voice talent, though for *The Lion King* [1994], there were a couple of times we had to go to London to record Jeremy Irons [Scar]. But RCA closed while we were still working on *Lion King*.

### *And then what happened?*

We made Howard Schwartz Recording our home base. We finished *Lion King* there, and we might have done a little bit of *Aladdin*, and then it was *Poca-*

hontas [1995] and *The Hunchback of Notre Dame* [1996], which was again between Stage B in L.A. and Howard's in New York.

**When working at Howard Schwartz's studios, were you still working some on score and some on dialog?**

We mostly focused on dialog. Every now and then, they would send me a 2-track mixdown of a song, and say, "We need you to record a vocal for this song," or they would need a demo version of a song, but it was really just becoming dialog for me with Disney.

**Were you happy with your career taking that direction away from music?**

I missed being part of the music, but at that point [after RCA closed], I was a freelance engineer, so whatever work I was getting was great. And I still had other music clients, like Harry Connick.

**It sounds like you were keeping busy as a freelancer. Tell me how you ended up making the bold move to join Pixar on the West Coast.**

When Pixar started *Toy Story* [1995], they called Disney, and said, "Who does your voice recordings in New York because we need to record Wally Shawn for [the dinosaur character] Rex." So I got to do a bunch of recordings for *Toy Story*, and that started my relationship with them.

Then during one of our recording sessions for probably *Cars*, John Lasseter said to me, "We're building a new building and with a recording studio. Have you ever thought about leaving New York and moving to the West Coast?" I said, "No, I hadn't," but he said, "Well, once we get this up and running, we're going to need someone to run it, and we've always worked with you so think about it."

Well, that was before 9/11, and the results of 9/11 were that the business in New York basically collapsed. More studios closed, and all of these great engineers I knew couldn't find work. I scuffled around for a few years, taking whatever gig I could, and some of them were horrible. It was one gig after another of, "I want it fast, I want it cheap, I don't care about the quality," and I was thinking, "This is not working for me."

Then out of the blue, [Pixar post-production supervisor] Paul Cichocki called, and said, "We built our studio and we're trying to build a sound department here at Pixar." I was thinking, "This is a godsend"—not just because I needed the work, but also because whenever I worked for Pixar, they never said, "I want it fast and cheap." It was always, "We want it the best it can be."

**Tell me about the studios there.**

We have a decent-sized room, where we record to Pro Tools. Normally, we do one or two people at the same time. We have a Sony DMX-R100 digital console that we're replacing next month with a Digidesign D-Command and custom monitor section. When I came here, I brought in good Focusrite Red 7 mic pre's, which is what we've been using since *Mulan*. That came about because Eddie Murphy goes from a whisper to a scream, and the first session I did with him, at his house, he could easily distort the microphone or the mic pre if I wasn't careful, so I brought those pre's along on my second Eddie Murphy session, and I got everything and I've never had a problem since.

**Do you still use those U87 mics?**

Yes, and one of the other things Doc Kane and I have agreed on is what we call the "scream mic," which is a [Neumann] TLM 170 back about four inches from the 87. We place it a little lower and on its side. The TLM170 goes up to about 134 dB, whereas the 87 is about 118, and so it gives us that much more headroom. What will often happen is the director will say, "We want this fairly quiet, in a stage whisper," and if it's someone like Robin Williams or Eddie Murphy or Billy Crystal, they'll give you that, but then they'll also give you one where they're screaming. Ninety-nine



"With the Recoils, I'm really enjoying the balances, especially the low end which holds up at low volumes as well as loud. When I listen to the recordings elsewhere, I feel the results are more representative of what I am hearing when I record."

~ Ed Cherney  
(The Rolling Stones, Bonnie Raitt, Jackson Browne, Eric Clapton, Buddy Guy)



"I was suspect at first, but after a few minutes with the Recoils I realized how much difference they made. Especially on the low end. I'm keeping these. They work."

~ Al Schmitt  
(Barbra Streisand, Steely Dan, Ray Charles, Quincy Jones)



"My nearfield speakers sound better on the Recoil Stabilizers than they did without them. The bottom is solid, the vocals are clear and my speakers don't fall down. It's a great product."

~ Daniel Lanois  
(U2, Bob Dylan, Peter Dinklage, Emmylou Harris, Ron Sexsmith, Robbie Robertson)



"I trust my ears and how stuff hits me. Because I work in the same place all the time, I immediately know when things get better. I'm excited again! The Recoils look cool, are well built and I hear a tighter low-end. I like them!"

~ Gary Pazcosa  
(Alison Krauss & Union Station, Dixie Chicks, Dolly Parton)



"The Recoils definitely give you a more focused low end and more definition of where things are placed in the stereo image. They're an inexpensive and musical upgrade to your monitoring situation."

~ 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)

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percent of the time, we get it with the 87 and the Red 7 mic pre's, but there's that one percent you just miss and the TLM always catches it.

**What type of guidance do you give to actors you work with to get a great take?**

The one thing that we always tell people when they start on a project is, "Please don't get annoyed if we ask you to do another one or many more." For animation, you have to overact and do things louder and faster than you normally would do when you're acting a line. So for someone like Holly Hunter [in *The Incredibles*], it took her a couple of sessions before she was at ease doing this. Or Christopher Plummer, who was Charles Muncie [in *Up*]  
—he is a classically trained actor. When he says, "That's the one," he doesn't want to do another one, but you have to tell them, "It might be annoying if I ask you to do another one, but a lot of times it's because of a noise or we need it a little bit faster." Other times, we'll ask them to push over the emotion because we don't have your face or your eyes to tell the story like a live-action director would have.

**Now that you are on staff at Pixar, are you pigeonholed as a voice recordist or do you also participate in any of the music recording?**

I do occasionally help with other things. There's

a short film tied to *Wall-E* called *Presto*. It's about a little bunny who is the partner of a magician, and it takes place in an old-time theater.

I got to record all the music and all of the vocalizations. I say vocalizations, not dialog, because nobody talks in our short films. We went to the scoring stage at Skywalker and Scott Stafford, the composer, and Doug Sweetland, the director, said this is really an homage to the old Warner Bros. cartoons. So we want it to have that kind of sound when it starts—kind of small and mono—and then when the score really kicks in, it should sound big and modern. So what I did was to double up everything with old ribbon mics and I also used modern condensers and tube mics. Then we mixed it both ways—with the ribbon mics in mono, smaller panning, then panning out to the modern microphones—and we mixed every cue as both a modern 5.1 mix and smaller, with the old ribbon mics. Then the music editor was able to mix and match.

**In Pixar's feature films, are characters written and animated with specific actors in mind?**

There's not usually just one actor in mind. Some-

times what they'll do is they'll take dialog from movies or TV shows that a few actors have done and they'll animate a character to that voice to get a test. That's how they chose Ed Asner as the voice of Carl Fredricksen for *Up*. Once they did that and saw Ed Asner's voice with this character, they said, "We have to get Ed Asner."

**Is it true that you are getting a new studio soon?**

We're building a new building with a whole new studio, a bigger room, which is nice because this room is a little small, and it's nice to get a little air between the mic and the performer. In a small room, you really have to mike tight or you start hearing the room. It's almost too much for an animated feature to have it so close-miked; it becomes difficult to create any kind of natural ambience. ■



Engineer Vince Caro in his control room at Pixar



*"I have to say that I am very impressed; the difference I hear in the sound of my nearfields is pretty sinking. 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  
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World Radio History



Founder/drummer Phil Ehart with orchestra

# Kansas

## RIGHT AT "HOME" ON NEW LIVE DVD

By Blair Jackson

When classic/prog rock titans Kansas decided to do something special to celebrate their 35th anniversary this year, "They didn't want to just do another retrospective," says StarCity Recording's Jeff Glixman, who has worked with the band since the earliest days, including producing most of their best-known works. "We realized one thing we had not yet done was to shoot a video of Kansas symphonic performance, something they have been doing in recent years. But even this we wanted that to be different, so we picked a special place to shoot it, and we brought in Steve and Kerry."

"Steve and Kerry" are guitarists Steve Morse and Kerry Livgren, two of the band's most famous alumni, who for one night only augmented the solid latter-day line up of original Kansas members drummer Phil Ehart, guitarist Richard Williams and keyboardist Steve Walsh. Twenty-five-year member bassist Bill Greer and 10-year member, Violinist David Ragsdale, round out

the quintet. As for the "special place" to shoot the two-hour DVD, they chose intimate White Concert Hall on the Washburn University campus in the city where the group (and Glixman) got their start. Topeka, Kansas—hence the DVD title, *There's Now Place Like Home* (a variation on the famous *Wizard of Oz* line). Washburn's symphony performed the gig, and Kansas commissioned Larry Baird, who had created string arrangements for Kansas previously (and has worked with the Moody Blues and others) to score a few songs featuring Livgren and Morse that would be unique to this concert. Baird conducted as well.

"When we did a site survey [at White Concert Hall], we realized it could be a technical nightmare," Glixman says. "It is definitely not set up to handle a full rock band and orchestra. It's quite small—the ceiling heights were restrictive, the stage size was restrictive—and there are no rigging points in the hall, so there was no way to hang anything. A custom-designed truss that was supported from the ground was constructed to handle the lighting and sound system. There wasn't much room for people to move onstage, so to maximize the available space, we figured we'd move the lights and move the cameras on big jibs to create the motion. This worked really well. [Director] Steve Angus and the Camp Digital team did a fantastic job with lighting and staging."

To help document the event, which took place on February 7, 2009, Glixman tapped Nashville's Camp Digital to handle the video

end. However, there was only room for one truck outside the small hall, so the audio recording equipment, including three Pro Tools HD rigs, came in via flypacks and was set up in an ancillary space near the facility's choir room. It was an eight-camera shoot, and between the band and orchestra, producer Glixman and engineer Zak Rizvi (another StarCity Recording fixture) easily filled up 96 tracks of Pro Tools—the second two rigs were for backup, which came in handy once during filming when two of the systems briefly fell out of sync. Kansas production manager Chad Singer handled the FOH mix; Heil Sound supplied the plethora of band and orchestra microphones. Lily Salinas was the key production coordinator on the StarCity side, while Tom Gregory handled that aspect for Camp Digital.

The shoot went amazingly well—the band performed exceptionally before an adoring crowd that responded to every number with a standing ovation. In addition to playing favorites such as "Dust in the Wind," "Carry On Wayward Son," "Song for America," "Miracles Out of Nowhere" and "Point of Know Return," the band also dipped into their extensive catalog for a few perhaps unexpected treats, such as the Morse-era tunes "Musicatto" and "Ghosts/Rainmaker." Morse and Livgren had never played together before, but got along famously. The chemistry in the group as a whole was palpable: "When they were done and the symphony players were leaving the stage, the band suddenly broke into 'Down the Road'—it was like they didn't want to leave."

Despite having both a line edit and a live mix of the show, the audio and video for the DVD were completely rebuilt by Glixman and Rizvi at StarCity (in Bethlehem, Penn.). "There are so many tracks of the orchestra," Glixman notes, "that to get a proper handle on it, we mixed down 8-channel stems in our B room, which we then brought into our A room and added to the [band] mix on the [SSL 9000] K."

Glixman and Rizvi took some liberties when it came to the surround mix panning—"laying it out so it was more balanced than it was in the hall," Glixman says, adding, "I also had a Royer stereo mic in the back of the hall and that makes for the best ambient surround material you can imagine; it's real natural."

Glixman, who truly has seen and heard it all when it comes to Kansas, is effusive in his praise for the band's performance on the DVD: "It was an incredible event. Probably one of the top five Kansas concerts ever." III

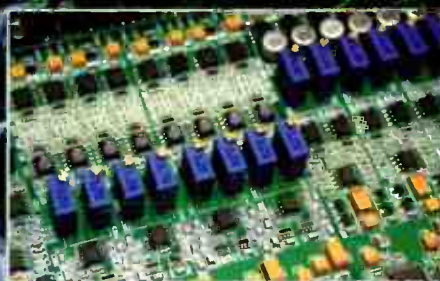


Fiddler David Ragsdale and guest Steve Morse

# THE NEW AURORA 16-VT Variable Trim AD/DA Converter

## Variation on a Theme

The Aurora 16-VT offers all of the features of the industry-standard Aurora 16 AD/DA converter, with the addition of Variable Trim for all 16 analog inputs and 16 analog outputs. This allows users to manually set the analog input and output levels within a range of +8.5 dBu to +24 dBu.



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**weiss**



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**digidesign**



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**Summit Audio TLA-100A Tube Leveler**

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- Al Schmitt



**SSL X-Desk SuperAnalogue Mixer**

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**Solid State Logic**



**A Designs EM-PEQ  
500 Series Equalizer**

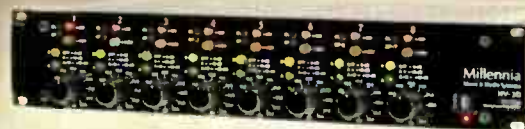
"The EM-PEQ has this great muscular solid low end that I have probably only heard on an original Pultec. It can turn a wimpy kick into the kick drum of the gods."  
- Ronan Chris Murphy



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- George Petersen, *Mix Magazine*

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# Tech

## NEW PRODUCTS

### Vintage Gain Crusher

**Analogue Tube AT-101**

The AT-101 (\$19,000) from Analogue Tube ([www.analogue-tube.com](http://www.analogue-tube.com)) is a faithful re-creation of the original Fairchild 670 stereo limiter. The sturdy unit is handmade with Grayhill switches, Sowter transformers, Hovland caps and a new-generation 6386 remote cut-off triode developed to replace the original 50-year-old tubes. Controls on each channel include input gain, AC threshold, DC threshold, 6-position time-constant switches and metering switches. Improvements on the original include a hinged front panel, stereo-link switch and a power supply mod with controlled heater voltage switch-on to help extend the life of critical tubes from power-ups.



### Big Screen Sound, Smaller Boxes

**Meyer Acheron Studio**

A more compact version of the acclaimed Acheron 80 and Acheron 100 cinema screen loudspeakers, Meyer Sound's ([www.meyersound.com](http://www.meyersound.com)) Acheron Studio (targeted at \$8,500 each) is now shipping. Designed for smaller recording stages, post-production facilities and smaller theater/screening rooms, the systems are voiced for perforated or non-perf screen installs. The 30.8x25.4x16-inch (HxWxD) enclosures feature onboard DSP, 700 watts of noiseless convection-cooled Class-A/B MOSFET bi-amplification, a 15-inch woofer and a 4-inch compression driver mated to an 80x50-degree horn based on the technology of the larger Acheron systems. Options include subwoofer(s), surround channels and remote monitoring of system parameters via a PC.



### Space-Maker

**Vienna MIR Mixing Software**

Vienna MIR (\$1,695) is a stand-alone Windows application that runs exclusively with Vienna Instruments ([www.ilio.com](http://www.ilio.com)). MIR's Control icon lets users move and rotate instruments freely on the



### Handy Handheld

**Sony PCM-M10 Recorder**

The Sony ([pro.sony.com](http://pro.sony.com)) PCM-M10 (\$399) is a palm-sized compact recorder featuring electret condenser stereo mics, USB port (Mac/PC), 4GB internal Flash memory, 96kHz/24-bit capability and a microSD/Memory Stick Micro (M2) slot. Other features include a built-in speaker, cross-memory recording, digital pitch control, digital limiter, low-cut filter, track mark functions, a 5-second pre-recording buffer and A/B repeat capability. The PCM-M10 comes supplied with Sound Forge Audio Studio Recorder Edition software.



concert stage, changing their volume and stereo width within a 3-D environment. Using Multi-Impulse Response convolution, Vienna MIR combines directional and reflection information from every instrument, assembling all of the acoustic interactions into an accurate re-creation of musicians playing their instruments in place and in space. Minimum system requirements include PC Intel quad-core i7-920 or better, with Vista/Windows 7 64-bit and 12GB RAM.

## Model Behavior

### Focusrite Saffire PRO 24 DSP I/O Solution

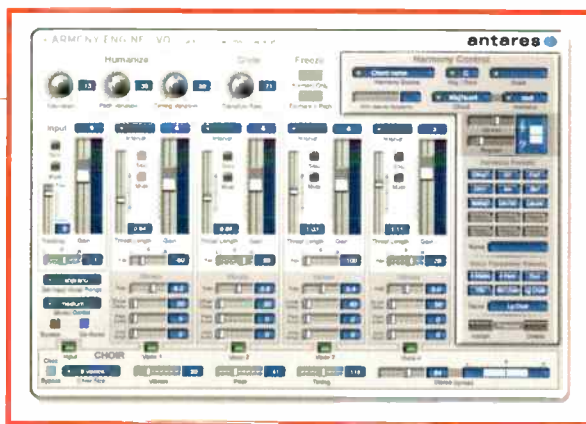
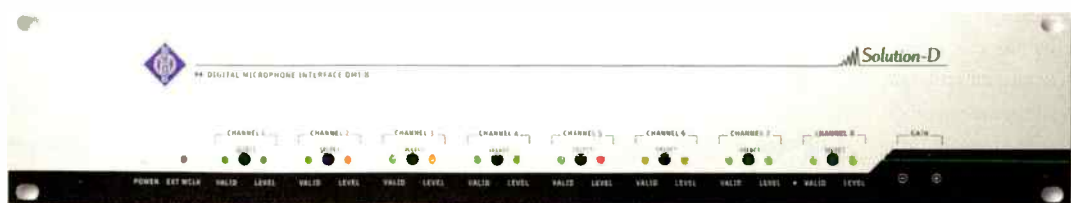
Focusrite's ([www.focusrite.com](http://www.focusrite.com)) Saffire PRO 24 DSP (\$499) is a 16-input/8-output FireWire audio interface featuring Virtual Reference Monitoring (VRM) for headphone monitoring of 15 different modeled sets of speakers in different acoustic environments from different positions. Other features include twin mic preamps, A/D converters, six analog outs, ADAT inputs, stereo S/PDIF I/O and two virtual "loopback" inputs for routing digital audio between software applications. Users can also take advantage of the onboard DSP to power Focusrite Studio Suite, Compression, Gating, EQ and Reverb plug-ins for latency-free, professional tracking solutions. Added extras include Saffire Mix Control software, Focusrite's Xcite+ bundle, Ableton Live 7 Lite, Novation's Bass Station soft synth and more than 1 GB of royalty-free samples from Loopmasters and "Mike the Drummer."



## Digital Mic Interface

### Neumann DMI-8

The DMI-8 (\$3,498) 8-channel digital microphone interface from Neumann ([www.neumannusa.com](http://www.neumannusa.com)) boasts all of the features of Neumann's DMI-2 while offering 8-channel operation and the ability to change mic settings without a computer. Features include AES-42-to-EBU conversion, synchronization of the microphones without a sample rate converter, automatic word clock or AES-11 sync, and 44.1kHz to 192kHz operation. The rackmount unit offers D-Sub 25 outputs with Tascam and Yamaha pin assignments, ADAT interface and open architecture for connection to other multichannel interfaces such as EtherSound and MADI.



## Working in Harmony

### Antares Evo

Evo (\$249) is the latest harmony-creation tool from Antares Audio Technologies ([www.antarestech.com](http://www.antarestech.com)), promising faster pitch detection with greater accuracy; smoother, artifact-free pitch shifting; and seamless, natural-sounding throat modeling. Other features include four formant-corrected harmony voices, five channels of Antares' CHOIR Vocal Multiplier, humanization features for natural-sounding performances and a flexible real-time preset system for harmony and vocal type. Users can also set harmonies at fixed or scale intervals, define harmony chord-by-chord and play the four harmony voices on a MIDI keyboard. Evo is available for RTAS (Mac/PC), VST (Mac/PC) and Audio Units (Mac OS X).

## Affordable Phantom Power

### Nady SMPS-USB/2X

Nady ([www.nady.com](http://www.nady.com)) has released two new phantom-power supply units. The SMPS-USB (\$69.99) provides single-channel, 48VDC phantom power for condenser mics featuring a balanced XLR I/O and a USB port for computer use (Mac/PC). The SMPS-2X dual phantom power supply (\$59.99) has two separate XLR I/Os allowing for stereo recording. Other features include a durable/compact all-metal housing and 18-volt AC power supply. III



## Apple Logic Studio

### A Big DAW Bundle Gets Even Bigger

On September 12, 2007, Apple unveiled the first version of Logic Studio software and it was an immediate success. The product combined the power of its Logic Pro DAW/MIDI platform with the MainStage live performance app, Soundtrack 2 audio post software, 80 studio effects plug-ins, 40 virtual studio instruments, the Studio Sound Library (18,000 loops, 5,000 SFX) and production utilities including WaveBurner CD mastering, Compressor 3 surround encoding and more. Meanwhile, its \$499 pricing turned a lot of heads and brought converts into the Logic fold.

#### All That and More

It was a tough act to follow, but now, two years later, Apple is shipping the next version of its Logic Studio bundle with major upgrades to Logic Pro and MainStage, and more than 200 new features. It's a lot to go through, but let's touch on some highlights.

The star of the show is Logic Pro 9. Its new Amp Designer and Pedalboard guitar-sound models offer a quantum leap beyond the previous Guitar Amp Pro plug-ins, with 25 vintage and modern amp head re-creations, 25 speaker cabinets (with modeled mic placements positioned in 3-D space) and a selection of 30 virtual stompbox pedals—overdrive, distortion, fuzz, delay, chorus, flange, phaser, tremolo, treble boost, wah, etc. These two plugs alone are worth the upgrade investment, but there's more.

A new Flex Time toolset lets Logic users easily manipulate the timing and tempo of audio tracks for tighter performances, whether locking an entire performance to a grid or simply aligning a few bars of bass guitar to a kick track. Alternatively, you can fill an edit gap that results from removing a breath between vocal phrases simply by selecting and dragging the previous note to meet the next phrase. You can use varispeed on projects or segments for tape-style accelerando effects or to simulate the sound of record turntable-style speed-up/slow-downs.

Also, the Selective Track tool allows merging tracks (or takes) between different Logic projects and precisely matching them, even if



Logic Studio now features major upgrades to Logic Pro and MainStage.

they were cut at different tempos. And with a few clicks, the new Drum Replacer function can replace (or create a doubled track) with triggered samples to deal with weak-sounding or thin drum tracks.

The Quick Swipe Comping feature in the original Logic Studio let users easily build flawless vocal/solo composite performance tracks. The new version retains this functionality while adding the ability to access edit tools—such as cut, copy, paste, crossfade, etc.—without leaving the comping environment. And the Edit Groups function can sync selections across related tracks, such as multiple channels of drums or multi-miked vocal ensembles.

#### And More Yet

After the first version of the MainStage live performance application—with its brilliant implementation of intelligent keyboard splits—we figured Apple had hit the ceiling, but this new version goes way over the top. The just-added Playback and Loopback plug-ins in MainStage 2 provide the ability to trigger backing tracks, while creative, real-time loop recording adds a versatile performance tool onstage; plus, it's a great idea generator for developing recording ideas. Paired with Apogee's ([www.apogeedigital.com](http://www.apogeedigital.com)) slick new \$395 GiO footswitch controller/interface,

which has presets written for MainStage, you get foot control over transport functions, punch-in, looping and Pedalboard effects.

Also in the Logic Studio bundle is the multitrack post-production DAW Soundtrack Pro 3, expanded with extra features such as Voice Level Match for consistent volume between multiple track/takes, an Advanced Time Stretch function and increased integration between Final Cut Pro and Logic users, along with the Compressor 3.5 app for encoding in a variety of formats. And the WaveBurner CD mastering/authoring package has been enhanced with graphic parameter automation and real-time graphic visualization of edits, including region and parameter changes.

#### The Fine Print

A Mac Intel machine is required to run all applications. Not so good if you have a G5, but not so bad if this is the excuse you've been waiting for to upgrade your rig. You'll also need Leopard OS 10.5.7 or higher. What's the good news? Retail is \$499, with \$199 upgrades to owners of Logic Studio or Logic Pro and \$299 upgrades to Logic Express users.

We'll present comprehensive reviews of the entire package in the October issues of *Mix* and *EM*, but in the meantime, more info is available at [www.apple.com/logicstudio](http://www.apple.com/logicstudio). ■



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## JBL LSR2328P Studio Monitors

### Two-Way, Bi-Amped Active Speakers for Budget-Conscious Users

There is no doubt that everybody reading this magazine has heard a JBL speaker either live, in the studio or at home at one time or another. JBL was the audio production speaker manufacturer *du jour* back in the '70s before losing its market-leading position in studio monitors. However, with recent releases and innovations, JBL has made strides in regaining its former prominence. The new JBL LSR2328P is part of this trend, raising the bar for performance by speakers priced at less than \$1,000 per pair—of which there are many. Speakers in this category just keep getting better, and this new transducer shows that JBL has really done its homework.

#### Start Me Up

Powering this two-way system are two Class-A/B monolithic power amps rated at 95 watts on the low end and 70W for the top. The 8-inch woofer has a 1.5-inch voice coil with a tempered paper cone with butyl-rubber compliance. The tweeter has a 1-inch diaphragm comprising a silk substrate with an epoxy coating. The LSR2328P receives signal via balanced XLR, ¼-inch TRS or unbalanced RCA connectors on the back panel. A maximum peak SPL rating of 123 dB at 1m is plenty of volume to deafen even the most die-hard pressure junkies.

Controls on the back panel include volume (-INF to 0 dB) and high- and low-shelving EQ. The HF shelf has a three-position switch fixed at +2.5 dB, 0 dB and -2.5 dB at 7 kHz—a very usable range. The LF has the same three-position switch, but its range is more applicable to low-frequency issues in small rooms—+2 dB, 0 dB and -3 dB—with the shelf set at 120 Hz. It would be nice to

include a DIP filter around the 160Hz range as this is a problem area in desktop production environments, but it's not a deal-breaker by any means.

#### Listen Up

JBL's cabinet design provided positive results in my listening tests, resulting in a wide sweet spot. The monitor's Linear Spatial Reference design achieves this by way of its Elliptical Oblate Spheroidal waveguide (the EOS). Concurrent with this design philosophy, the LSR2328Ps remain highly accurate at all listening levels, in many spatial positions, as you move about your tracking/mixing domain.

Within the wide sweet spot, I was simply blown away by the speakers' performance. First off, I wanted to listen to and compare them to my own studio's LSR6328Ps, despite the LSR2328P's greatly reduced price point. Granted, the LSR6328Ps have more depth and accuracy of soundstage, but it is absolutely amazing how much the LSR2328Ps sound like the LSR6328Ps. The midrange imaging is smooth, accurate and well-tempered, with no harshness whatsoever. The low end is punchy and smooth down to the rated 37 Hz. (I would love to hear the complementary 10-inch subwoofer designed for these speakers.) The upper end is exceptionally smooth and accurate. This all amounted to mixes that translated well to other systems when I compared results.

I listened to many different types of source materials, including mastered CD releases in a variety of styles and original Pro Tools session files. At both high- and

low-SPL levels, the detail prevailed. Pianos carried their timbre and harmonic structure at low and high levels, reverbs could be heard into the background and breath sounds were retained at all levels.

#### Sign Me Up

I can't emphasize enough how superbly these transducers have been executed. I love my JBL LSR6328Ps, but the LSR2328Ps carry on the tradition with great aplomb. When I found out (*after* testing) that these speakers have a street price of \$349 each, there was no question that within this price range, a new standard has been created. Rest assured, these are speakers that you can rely on to make translatable tracking and mix decisions. I recommend them, period. III

*Bobby Frasier is a consultant and engineer.*



The LSR2328P's wave guide offers a listening window of  $\pm 30$  degrees horizontally and  $\pm 15$  degrees vertically.

#### PRODUCT SUMMARY

**COMPANY:** JBL Incorporated  
**WEB:** www.jblpro.com  
**PRODUCT:** LSR2328P  
**PRICE:** \$439 each (MSRP), \$349.97 each (street)

**PROS:** Affordable. Accurate. Great imaging. Superb midrange.  
**CONS:** No 160Hz EQ DIP control.

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## Teaboy Audio Studio Recall Software

### Easy Online Organization of Recording Session Chaos

Session documentation and recall are crucial in any competitive audio production environment; this is true now more than ever thanks to the decentralized and fragmented nature of modern recording and mixing operations, which are still evolving. Designed to ease the process, the Teaboy recall software can help organize session data in ways that a console and/or DAW can't.

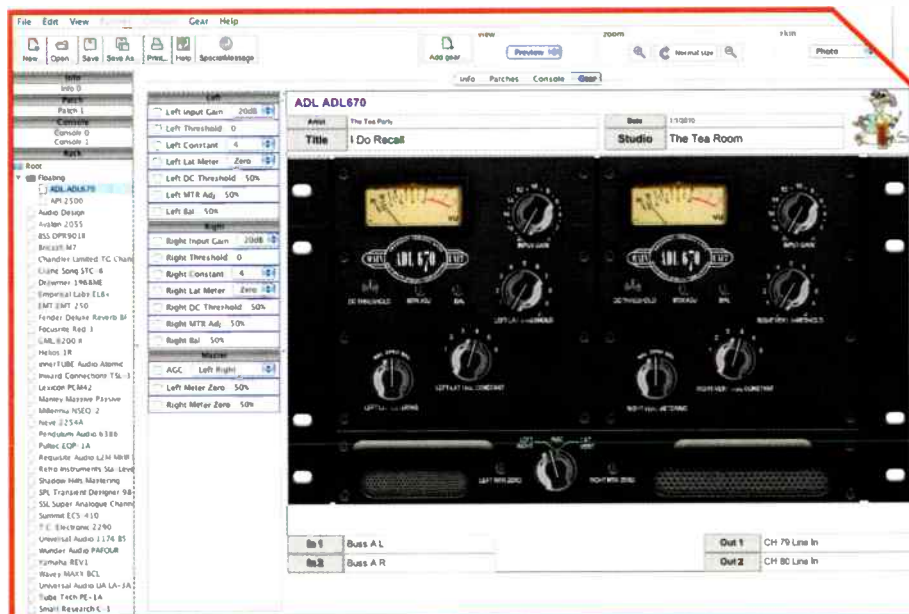
#### It's Easy Being Green

In the past, a paper-based approach and a good filing/storage system have kept session details in order. This is not only wasteful, but also potentially catastrophic if documentation is lost or compromised as it moves around. Using the Teaboy software interface, you can document general session data such as artist, producer, and technical and contact info—but that's just the beginning. There are also pages for documenting a patchbay, console setup, channel labels and outboard gear.

The Outboard gear page is Teaboy's best feature, offering color renditions of hardware with movable knobs, buttons and switches, or you can choose to look at mechanical drawings with the same abilities. There are currently more than 800 pieces of gear in its library, including obscure vintage gear, new models and even guitar amps and stomp boxes. You can then store your session data locally, export it as a PDF or upload it onto Teaboy's server for later retrieval.

#### Details, Details

I found Teaboy intuitive and well-thought-out, but I did have some problems with the inter-



One of Teaboy's best features lets you document outboard gear via slick renditions with movable knobs, buttons and switches.

face. For instance, the double finger-scroll on an Apple laptop doesn't work on the Gear page, nor does Teaboy provide scroll bars for zoomed-in gear that runs off the page. Also, the software was sometimes clunky; e.g., tabbing doesn't get you to the next field on some pages, making for slower data entry. These bugs and missing features are somewhat annoying, yet the software lets you quit out of the program without first bringing up a Save dialog; according to the manufacturer, this is a Java issue that is being worked on and applies only to Mac use.

Teaboy needs an Internet connection to set up and save your session. This is potentially a problem when trying to move a laptop around a room without wireless capability. One workaround is to open a session online, export it, then go offline and work with the exported session, returning online later to save. However, you can't close the software offline and must return within 24 hours or you'll lose your data.

For a free trial membership, Teaboy lets you create a song, enter documen-

tation and load gear. There's no limit to the amount of gear allowed, but saving, printing and exporting are not supported. The Standard Membership allows you to store 10 songs in the online database (with a maximum of 10 pieces of gear for online storage) and import/export and PDF printing for an unlimited number of songs stored locally (\$9.99 a month or \$40 for six months). Pro Membership steps it up with unlimited song storage in a secure online database, unlimited local storage of import/exported songs, unlimited gear per song and unlimited PDF printing of songs (\$19.95 a month or \$95.94 for six months).

#### Is It Tea Time Yet?

Teaboy keeps session details in order, and the cost makes it worthwhile for studio operators who want to keep their ducks in a row in an elegant manner. Although I found the interface to be lacking, I get the feeling from the forums and Website that the developers will listen to their user base and grow the product over time. For a Version 1 release, I give Teaboy a solid B-minus. III

#### PRODUCT SUMMARY

**COMPANY:** TEABOY AUDIO

**WEB:** www.teaboyaudio.com

**PRODUCT:** Teaboy 1

**PRICE:** Standard, \$9.99 a month or \$40 for six months; Pro, \$19.95 a month or \$95.94 for six months

**MINIMUM SYSTEM REQUIREMENTS:** Windows XP, Mac OS X, Linux, Java 1.5 or later

**PROS:** Great organizational tool for session documentation. Substantial and growing list of slick outboard gear templates.

**CONS:** Interface can be clunky. Limited use offline without an Internet connection.

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## Mixosaurus Kit A DAW Drums

### Standout Virtual Kit Sounds Like the Real Thing

Mixosaurus Kit A is a 122GB drum sample library powered by Native Instruments' Kontakt. (Kontakt Player 2 is included with the kit.) The behemoth library and virtual instrument ship on a FireWire 800 or eSata drive.

In addition to the supplied Kontakt Player 2, Kit A Multis can also be played in Native Instruments Kontakt 3 or 3.5, or the newly released Kontakt Player. The latter three will support 64-bit RAM addressing, allowing far-greater RAM access in stand-alone mode or with a 64-bit-capable DAW (assuming your computer's operating system is also 64-bit).

Kit A Includes more than 80,000 stereo 24-bit samples of a 14 piece drum kit played with sticks. Kit pieces include a 22-inch kick (with a selection of four different beaters), 14x6.5-inch brass snare (including three different levels of muffling), four toms (measuring 14, 12, 10 and eight inches), 14-inch hi-hat, two ride cymbals (20 inches/light and 21 inches/heavy), three crash cymbals (18, 17 and 15 inches), 17-inch china cymbal and 8-inch splash cymbals. You also get stick clicks. All instruments except for stick clicks include multiple articulations. For example, the 18 snare articulations include stick-tip hits, rim shots and side sticks. The MIDI mapping for all 108 articulations spans a nine-octave keyboard layout. Kit A also includes a large library of outstanding MIDI grooves.

Up to seven alternating samples are available in every velocity layer of every articulation, greatly enhancing realism. The all-important hi-



Kit A comes with Kontakt Player 2, which provides a sample library browser, instrument rack, on-board processing, rudimentary mixer and virtual keyboard.

hat can be modulated with a MIDI continuous controller to change foot pressure in nine stages (from completely closed to open).

Close-mic setups for the drum kit include mics inside and outside the kick drum, above and below the snare, and both near and distant to the hi-hat. Samples derived from three different stereo overhead-mic setups, ambient stereo PZM mics and stereo acoustic reverb-chamber returns (dubbed "room") reproduce all the bleeds for traps and hat. These ambient tracks are also the only outputs for all the cymbals (except hi-hat), which don't have close mics.

Every mic is routed to a different output in Kontakt Player for a total of 16 outputs, or all can be routed to a stereo Kontakt output. For each kit piece in Kontakt, you can adjust the level balance between its close

mics (if any) and the volumes of its bleeds into the overhead, PZM and room mics. You can also tweak each instrument's MIDI dynamics, MIDI delay (turning eighth-note hi-hat patterns into 16th-note ones, for example), sample envelope, and filter and distortion processing.

### Big Bang

I tested the Kit A AU plug-in in Digital Performer (DP) Version 5.13 using an 8-core, 2.8GHz Mac Pro fitted with 6 GB of RAM and running Mac OS 10.5.4. A kit that uses many alternating samples and plays complex patterns can quickly surpass a 32-bit system's roughly 3GB real-world RAM limit for applications and cause disk-streaming dropouts. Kit A mitigates these issues by providing alternative Multis with fewer articulations or mics (or both), Kontakt scripting with fewer processing options, and sample-purging and offline-bouncing facilities.

Kit A sounds absolutely stunning in its fidelity, depth, nuance and realism. Playing a well-

### PRODUCT SUMMARY

**COMPANY:** MIXOSAURUS (dist. in the Americas by MV Pro Audio)

**WEB:** www.mixosaurus.com

**PRODUCT:** Kit A

**PRICE:** external drive, \$899.99; internal drive, \$799.99

**MINIMUM SYSTEM REQUIREMENTS:** Mac OS 10.4 or later, G4/G5/Intel Core Duo CPU, 1.4 GHz or faster, 2GB RAM; Windows XP SP2, Pentium IV/Athlon CPU, 1.4 GHz or faster, 2GB RAM, FireWire 800 or eSATA port (eSATA 1.5Gbps Plug-and-Play support required for host card/port driver)

**PROS:** Uncannily realistic sound. Multichannel outputs. Outstanding control over bleed into ambient mics. Includes superb MIDI grooves. Supports all MIDI drum formats.

**CONS:** MIDI translation can't be executed globally and isn't retained when changing patches. Somewhat limited RAM access in Kontakt Player 2. Steep learning curve.

By Michael Cooper



Kit A ships on a hard drive (internal or external) carrying 122 GB of drum samples across numerous layers and articulations.

programmed MIDI groove, it sounded every bit as real as a live drummer (for an audio sample, visit [mixonline.com/Online\\_Extras\\_Main\\_Page](http://mixonline.com/Online_Extras_Main_Page)). Kit A supports all major MIDI drum formats. I used DP and Toontrack EZplayer pro to play and arrange Kit A and third-party MIDI grooves alike. However, you can only transpose incoming MIDI notes for one instrument patch at a time when translating from third-party MIDI-drum formats; no global command exists. You must also re-enter your MIDI settings if you switch to a patch that uses more or fewer alternating samples.

I could set DP's buffer size as low as 128 samples when using Kit A in real time. Unfortunately, I couldn't load more than 1.6 GB of Kit A samples into RAM without crashing Kontakt Player 2 and DP. The full-featured Kontakt V. 3.02 easily loaded and played Kit A Multis and provided access to slightly more RAM. Using a beta version of Kontakt 3.5, I could load a 2.17GB kit without a hiccup.

### Dead-On

Kit A's learning curve is steep, but the many video tutorials included are a great help. This package is one of the very best-sounding virtual drummers I've heard to date. Prepare to be totally blown away. III

Mix contributing editor Michael Cooper is the owner of Michael Cooper Recording in Sisters, Ore. Visit him at [www.myspace.com/michaelcooperrecording](http://www.myspace.com/michaelcooperrecording).

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## More Vacuum Tube Tales

### Mysteries of Two Vox AC30s

A simple excursion into geek territory can turn into a revelation or three; you might experience profound light-bulb moments or merely the simple reminder of a component not to be taken for granted. The Vox AC30 is a great amp. The preamp section has versatile EQ, reverb and an effects loop. The 30-watt power amp section has interesting features, like a tube rectifier (earlier versions were solid-state), and modern niceties like bias and filter capacitor switches on the rear panel for vintage/modern options.

A few years ago, a famous band came through town with a troubled Chinese-made AC30 guitar amp. In the four hours allowed for a diagnosis, I replaced a broken bias resistor and a suspicious standby switch. The EL84 output tubes were also suspect because they were behaving as though microphonic—a strange, harmonically crunchy resonance when the amp was played loud enough to vibrate them. I had no EL84s in stock but would later learn that they were not the problem, so when another ailing AC30 came in, my curiosity was piqued.

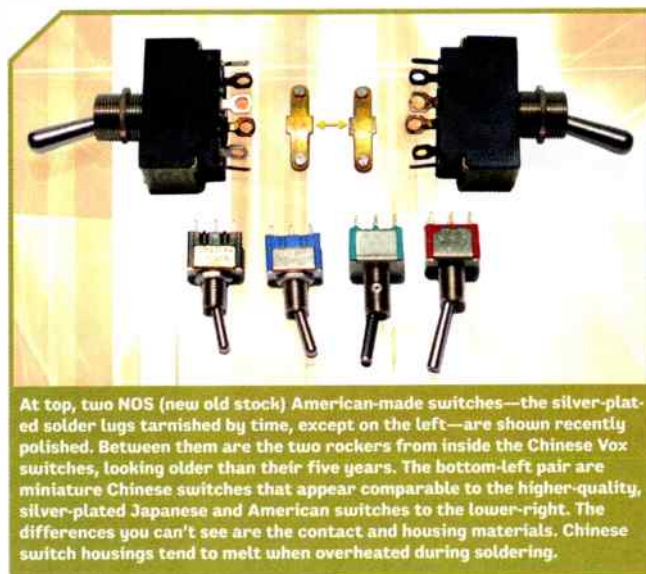
The second AC30 was DOA. I replaced a blown fuse, and in such cases a gentle wake-up call from Mr. Variac is the safest way to bring troubled power amplifiers back from the dead. (Variac is the trade name for a variable-voltage auto-transformer, easily recognizable by its giant knob.) Rather than a traditional “hard-boot,” the Variac’s soft-start lets me look for the warning signs—potentially excessive voltage or current—before damage can occur. For example, visible glass-fuse wires will “flex” during slow power-up; stop in time and they won’t blow. The Variac was barely beyond 75 percent when the 5AR4/GZ34 rectifier tube began arcing. Clearly, something was wrong.

A Web search harvested plenty of info about short-lived 5AR4s. The general consensus is that modern tubes aren’t up to vintage standards, but it’s too easy to blame all of them. Even during the heyday of the Thermionic era, there were loser tubes. I confirmed this with my Uncle Vince and his pals from the early TV era. Sometimes only one particular manufacturer’s version (or production run) would work in certain critical applications, yet all had the same designation. Guitar amp designs—and users—are often abusive, and I profess sympathy for the tubes.

### Tube Amp ABCs

A vacuum tube’s gradual warm-up time may give the impression of slow and gentle, but the power transformer and the power switch take the initial hit because a cold tube filament looks more like a short-circuit. (Its resistance goes up when warm.) Tubes take time to “warm up” because their filaments glow reddish-orange instead of the yellow-white of an incandescent light bulb. The orange heat is high enough to burn electrons off the cathode but low enough to ensure longevity. In an all-tube amplifier—one with a rectifier tube and no standby switch—the high voltage (HV) comes up slowly as the rectifier tube warms up. During this temperature transition, the preamp tubes may start out with a rush of noise that settles down eventually—reason enough to leave gear powered up during a session or at live gigs.

Once the filament is hot enough, negatively charged electrons need somewhere to go and the positively charged plate (the large metal struc-



At top, two NOS (new old stock) American-made switches—the silver-plated solder lugs tarnished by time, except on the left—are shown recently polished. Between them are the two rockers from inside the Chinese Vox switches, looking older than their five years. The bottom-left pair are miniature Chinese switches that appear comparable to the higher-quality, silver-plated Japanese and American switches to the lower-right. The differences you can’t see are the contact and housing materials. Chinese switch housings tend to melt when overheated during soldering.

ture under the glass) is absolutely irresistible, so the current flows easily. The bias circuit stops the stampede and optimizes current flow. Perhaps due to random noises, the standby switch was invented. This ultimate mute switch interrupts the HV power supply—aka, the B+—leaving the aroused electrons with nowhere to go.

However, designers have not been consistent about how standby switches are wired. On this recent AC30, the switch is between the HV center-tap and ground. Other versions relocate the switch after the rectifier and filter capacitors. If the rectifier tube is already warmed up, a switch at the center tap sees the initial stress of charging a capacitor quickly. The post-rectifier standby switch lets the filter capacitors charge up to a higher-than-normal voltage, because without the power amp, there is no load. In this application, the voltage must be within 70 percent of the cap’s voltage rating or the overcharging could potentially shorten the cap’s life. When in standby, one solution is to simulate the power amp load with resistors. A third option is rewiring the standby switch in series with the rectifier’s filament so that the HV slowly turns on (or off). This is kinder to the tubes, transformer and capacitors.

### One Last Check

The AC30 is hardly technician-friendly: It’s not easy to audition tubes or gain access to the electronics without pulling the entire chassis out of the cab. So before my assistant reloaded the chassis into the cabinet, we did one last test, only to hear a strange buzz from the power transformer, as if it were intermittently shorted.

After the amp sat idle for a week or two, the lack of exercise and self-cleaning increased the switch’s contact resistance. A new switch fixed the final problem and I disassembled the old ones to see why they were failing. On the inside, both switches were Double-Pole/Double-Throw (DPDT) types with six contacts, but on the outside, only four contacts are “available.”



making this strictly an on/off switch rather than the optional on/on. Inside the switch are two brass "paddles," one for each pole (circuit). Riveted to the brass are two silverish "buttons" that mate with either of two internal contacts (one unused).

In this case, the "common" (wiper) connection at the pivot point was a poor-quality brass (an amalgam of copper, zinc and a healthy dose of impurities). The lack of quality materials and an environmental seal caused the brass to tarnish. This added resistance at the pivot point, which worsened each time the switch was thrown with the power on. If you've ever accidentally plugged something in with the power switch on, the resulting spark is visual proof that circuitry can be "reactive," the reflected inertia of all the stuff being driven. Inside a switch, sparks from high voltages or currents can become a self-oscillating arc, degrading the switch contacts by depositing carbon until there is more resistance than conductance.

Normally, spring-loaded contacts mate with enough force/impact to make a solid, reliable connection. And if the internal contact pressure/

## AUDIO SCIENCE

The most basic passive electrical components, switches, literally make or break a circuit. Mechanical switches come in many forms—including rotary, toggle, slide, lever or pushbutton types—but all are either continuous (like a light switch) or momentary (like a doorbell) styles. These also come in "normally on" or "normally off" versions, depending on whether engaging the switch makes or interrupts the circuit flow. The simplest, most common switch is a SPST (Single-Pole/Single-Throw) type, with one set of contacts that are connected ("on") or disconnected ("off"). Other variants include the SPDT (Single-Pole/Double-Throw) with a single contact that can connect to two different contacts; and DPDT (Double-Pole/Double-Throw), where two isolated contacts can be routed in two different ways. Some rotary switches are ganged, providing for complex switching—such as SP8T, 4P12T, etc.—from several stacked "wafers" (layers) of contacts, all moved from a single knob.

impact or wiping action is sufficient, the switch self-cleans its contacts. By design, switch contacts should have low resistance, which means using (or plating with) high-quality materials (nickel), precious metals (silver) and gold for audio applications. III

*Eddie thanks Christian Groves and Tom Morrongiello for their Voxes. Visit Eddie at [www.tangible-technology.com](http://www.tangible-technology.com).*

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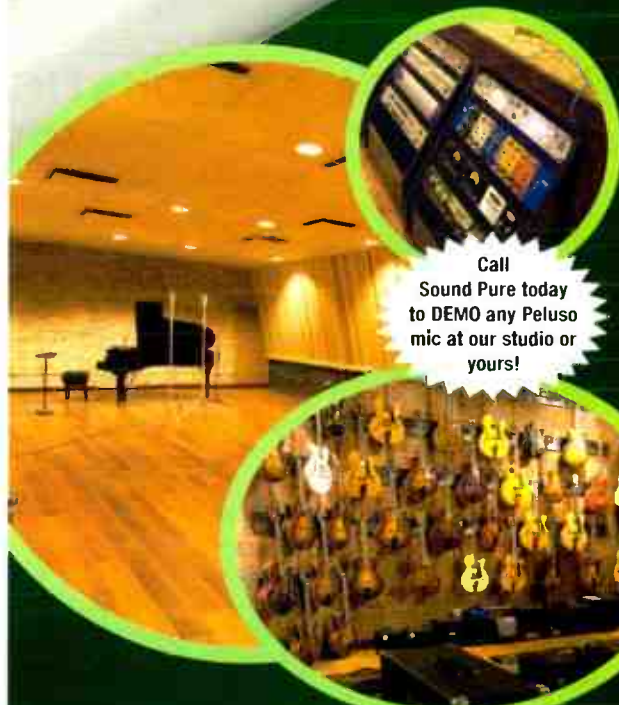
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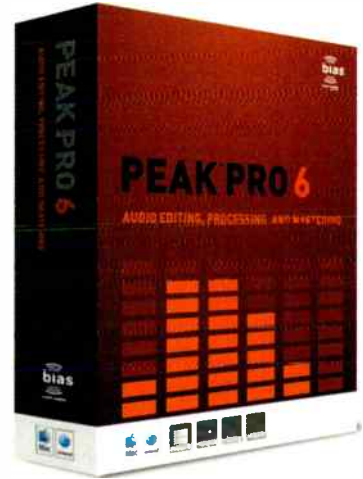
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## Dann Huff

Multi-Platinum producer/  
guitar player is at home on  
both sides of the glass.

***You've had quite a career, playing on some big records. What's kept you in Nashville?***

It's just like anything else, a series of decisions. When I moved back from L.A. in 1990, in my mind I had quit playing sessions. I had a band with a couple of hits on the radio and I thought that was where my career was going. That fell completely apart with the advent of grunge music, and I found myself back in Nashville twiddling my thumbs. I was kind of green on country music, not a country musician at all. But I was lucky enough to fall into that rock niche that was here in Nashville. Records in Nashville at that time were embracing techniques from rock music, so it was a great fit. A few key producers took me under their wing, and I was off and running.

***Nashville in the mid-'90s was booming. What was that like?***

All of a sudden, it was money, money, money. As with any boom, quality control became something of an issue. There was just a lot of money being made. And our business was being remade and cemented. You find the nuggets of gold, but most of it was hurried-up product. Hurried-up product selling a lot of units.

I love Nashville, and since I was raised here, I think I can speak about it candidly. It's like you can insult your own family, but if anyone else does...Money and power blinds everybody. When you have that kind of infusion of capital, it attracts a lot of people. And at that time, a lot of talent looked at Nashville as a place to land. So I think the overall effect was that it helped solidify the town as more than a stepchild of both coasts. There's always been a perception problem with Nashville as bare feet and cowboy hats, but it no longer feels like a stepchild. It is solid here. The talent base is stunning.

***Everyone talks about the players. What's your take on the recording scene?***

It's kind of the last bastion of live tracking. The music that is made here still, by and large, depends on interaction. Talk about the "X" factor. That's where stuff happens that you can't manufacture in small bedroom recording studios. There's something about collaboration in music, historically. Music is a language, and when one person is talking to himself, it can be brilliant, but it's not going to have the same effect as people exchanging ideas. Rubbing shoulders.

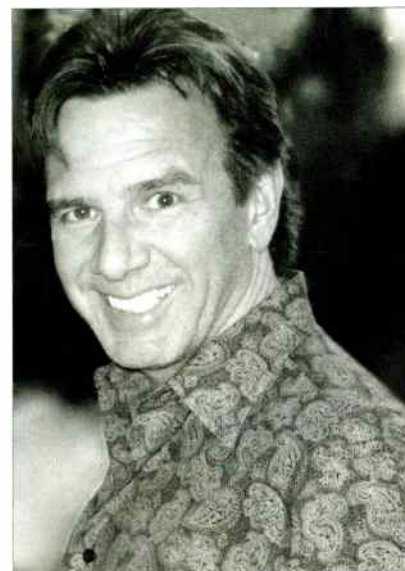
***You've been quoted over the years as being rather nonchalant about technology.***

I think at first we're all enamored of the power of DAWs. You're a sound god, and the euphoria of not having to make a decision at the moment is great—we all missed stuff when we were analog-bound. But music is still about an idea, and the most direct way to articulate that idea. You can't be precious about the process. Certain music needs a clarity and a dance mentality, getting into the grid side of music. If that communicates it the best way, that's the way to go. Other types of music, once you go down that avenue, you take some of the humanity and some of the qualities out that can strip the soul out of the music. I think imperfection is absolutely as viable as the grid. No one size fits all.

The beauty of the process is that everybody develops their own way of getting there. That's how the great recordists of the past did it. Nobody taught them, and they were blindly groping. We can still blindly grope, we just have too many decisions on the way there! [Laughs]

***Yet I also understand that you like a good room and a clean sound.***

Sound is a relationship in a space, and the room is like a fifth member of the band. Sometimes we forget to utilize that. I've always felt more comfortable in those funky studios, and I like recording in a lot of different places. Obviously, McBride [John, owner of Blackbird Studios, Huff's frequent home] has, without a shadow of a doubt, the greatest facilities in Nashville. John is a good friend of mine, and he says to me, "Why are you recording at XYZ?" But he understands that it's important that you move



around a bit. I did the last Keith Urban record, and Keith likes to work in spaces that are a little bit dodgy. He enjoys the edginess of that type of environment, patching things together with chewing gum and rope. It brings out a different kind of mentality in making the record. Musicians play a little different in that setting; it's a little less professional, you're kind of hanging on for dear life. It's the idea of using a space as something that's more than just an inanimate object. It's adopting it into the process itself.

***So you know how to make a record; what's your take on distribution?***

I think we've been educated for a good period of time that we musicians do what we do and the business does what it does. Now we've started to realize that this thing we've done is not generating the income it once was. The pie is getting smaller. I think we have to get out of this idea that mass distribution is what we're aiming for. It's viable distribution. Finding an audience, targeting it and setting our sights into a realistic financial goal from that.

Manage your expectations. That doesn't mean to set your set sights low. I think in America we are taught that bigger is better. Bigger is just bigger. I think you have to remember what defines better and go for better. III

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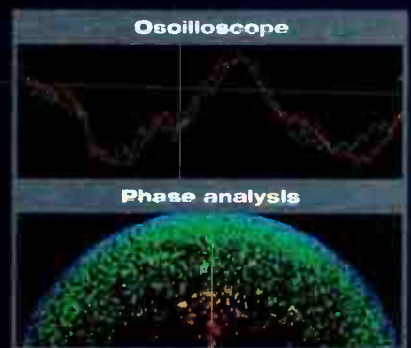
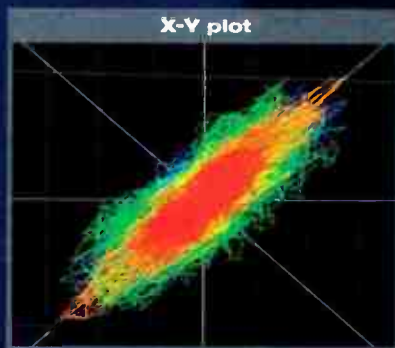
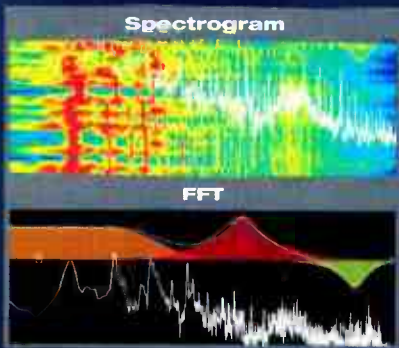
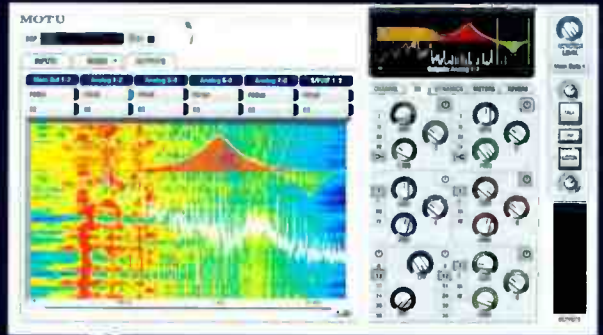
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