

electronic MUSICIAN

RECORD • PRODUCE • PERFORM



DANGER MOUSE

Reinventing the Spaghetti Western Score

15 Killer Recording and Giggling Tools! +

Take Control of Your Sound Onstage
Tap Into Licensing Revenue Streams

07.2011

NeigEay

\$5.99 CAN \$6.99

07>



0 71486 01017 3

EMUSICIAN.COM

Danger Mouse
(right) with
composer
Daniele Luppi

TURN YOUR INSPIRATION INTO MUSIC, INSTANTLY

CTK-7000 WK-7500

With the new CTK-7000 and WK-7500 you can capture those moments of creativity so they'll never get lost. Featuring 800 incredible tones, 250 built-in rhythms and a powerful 17-track sequencer, you can turn out broadcast ready, professional tracks. Once you've created your masterpiece you can save your song file to an SDHC card. Better yet, you can save it as an audio recording. That's right, these new keyboards can mix down internally and save your new song to an SDHC card as an audio file. This includes audio captured from the mic and instrument inputs. With the new CTK-7000 and WK-7500, music and sharing it has never been this easy or affordable.

visit: www.casiousa.com

CASIO®

CASIO is a registered trademark of CASIO Computer Co., LTD in Japan. Specifications subject to change without notice.

World Radio History

Arturia®
MUSICAL INSTRUMENTS



Beat the future



SPARK
Creative Drum Machine



Spark is a highly creative drum machine, combining the hands on control of hardware with the power of software.

By using analog synthesis and physical modelling as well as samples, Spark's sound engine opens a new realm of possibilities in drum design.

Spark not only integrates seamlessly into any studio configuration, it is also perfect for your live performance, thanks to uniquely designed controls.

Loaded with 30 different kits including emulations of famous drum machines, virtual acoustic drum sets and innovative sounding beatboxes, Spark is your weapon of choice to take your music further.

Now get ready to Spark your creativity!

www.arturia.com

PreSonus' new Smaller size. Lower price. Even big

Why settle for a mixer that just mixes when you can have a finely integrated **system** that gives you total control over your performance, your sound, and your recordings.

Our new StudioLive™ 16.0.2 is designed for bands, ensembles, and solo musicians who want it all in a small package that they can control right from the stage.

The most portable digital desk you can control from a MIDI footpedal.

Think of the possibilities.

With the tap of a tootsie, recall over all volume settings, effects settings and assignments, and global mixer Scenes, including individual channel levels and all 130 Fat Channel signal processors.

The third PreSonus desk you can control from a laptop.

There's a reason we have one of the largest software engineering staffs of any mixer manufacturer: so we can deliver intuitive, seamlessly integrated control and recording software.

Naturally, the 16.0.2 comes with **Virtual StudioLive™ (VSL)**. Plug in a FireWire-equipped Mac® or PC and quickly drop entire Scenes to the desk for instant recall of all channel, effects, and

graphic EQ settings. Or save unlimited settings *from* the mixer. Share presets with friends via email, IM, or disk swap. Fine-tune Fat Channel and graphic equaliser settings with a rich graphic user interface.



Control the StudioLive 16.0.2 from multiple iPad's.

Anywhere in the venue is "front of house" after you download **StudioLive Remote** free from the Apple App Store. Onstage musicians can adjust their own aux mixes; when you

do the math, multiple iPads and StudioLive Remote are cheaper than most "personal monitor systems" and do a lot more. This is an elegant app with separate Channel, Aux, and Fat Channel screens — and it even displays real-time channel levels.

Record everything. Play it back for virtual soundchecks.

Record all individual tracks, auxes, and a stereo mix with two clicks, using **Capture 1.1**. You can even insert markers between songs and export them individually, instead of as one ginormous file.

Open your live recording directly into Studio One Artist DAW and tweak the performance to your heart's content (or record directly into Studio One).

Besides delivering custom-mixed backing tracks, the StudioLive 16.0.2's bidirectional FireWire interface lets you do "virtual soundchecks" to ring out your P.A. and monitors *before* the rest of the band even arrives.

Recording and production software that's not a third-party afterthought.

Capture offers simple cut-and-paste editing tools but for really sculpting your recordings, we've included **Studio One Artist™**



Full-on DAW production with Studio One Artist™

1.6. Created by veteran digital audio workstation programmers, it's easier to use and way more powerful than anything that ships with competitors' desks. A one-window GUI and drag-and-drop functionality frees you from tedious pull-downs and pop-ups so you can focus on creating music.

Studio One Artist comes with twenty-five 32-bit plug-ins and over 4 GB of third-party goodies such as Native Instruments™ Kore Player and Toontrack™ EZDrummer Lite.

Software aside, StudioLive 16.0.2 is an awesome piece of hardware.

Although smaller than its 4-bus siblings, the 16.0.2 has the same highly-respected PreSonus sonic DNA.

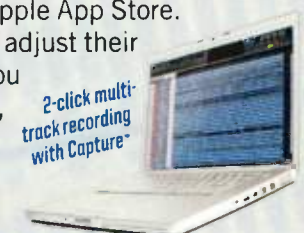


XMAX™ Class A microphone preamplifiers that can render the finest musical details with ear-boxing dynamic range and a noise floor somewhere near the core of the earth.

Jet PLL™ digital synchronization for better stereo separation and clearer, more transparent audio.



Laptop control with Virtual StudioLive™



2-click multi-track recording with Capture™



StudioLive 24.4.2



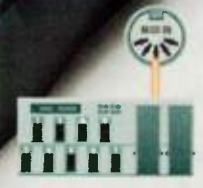
StudioLive 16.4.2



NEW StudioLive 16.0.2

StudioLive™ 16.0.2 System. Greater possibilities.

- 16-input digital mixer with 12 XMAX™ Class A microphone preamplifiers & 4 aux mixes
- 16-in / 16-out FireWire digital recording interface (24-bit, 48 kHz)
- Fat Channel effects section, assignable to channels, mains, & auxes • 22 high-pass filters • 24 expanders • 24 compressors • 24 limiters • 24 three-band semi-parametric EQs • 12 phase inverters
- Dual 32-bit digital effects processors (reverb & delay)
- Control via MIDI with optional footswitch
- Control from a FireWire-connected Mac® or PC laptop with included Virtual StudioLive (aka VSL)
- Wireless control with StudioLive Remote iPad® app thru VSL
- Scene automation with up to 80 global mixer Scenes & 99 Fat Channel presets
- Two-click recording via Capture 1.1 software (included)
- Studio One Artist recording & production software with unlimited tracks & 4 GB of extra resources (included)
- Comprehensive Talkback section for live & studio use
- High-def A/D conversion with 118 dB dynamic range
- Built for years of heavy use, with rugged, steel chassis & military-grade buttons
- 60 mm wear-resistant faders
- Optional rack mount



The only ultra-portable mixer that lets you control volume, effects, and mixer Scenes from a MIDI pedal!

High-definition analog-to-digital converters with a whopping 118dB dynamic range to perfectly digitize the most brutal heavy metal drummer or screaming vocalist.

The same attention to detail goes for build quality, too. The StudioLive 16.0.2 has a flex-free, solid-metal chassis; sealed rotary encoders; and military-grade buttons and faders that can withstand years of bar smoke and road dust.



It's flat-out easy to use.

We didn't invent small-format digital consoles. We just rescued them from geekdom by getting rid of all that infuriating complexity (like bank switching; nasty, nested menus; and the like).

Critical controls like Mute and Solo have color-coded buttons. Each Fat Channel signal processor—such as downward expander, compressor, and 3-band semi-parametric EQ—has its own set of hands-on controls. Or adjust all critical functions from your laptop (VSL) or iPad (StudioLive Remote).

The more you know, the more you'll want one.

Check out the StudioLive 16.0.2 overview video (see the express URL and QR code symbol at the start of this ad), visit our Web site for an excruciating amount of detail, or visit a PreSonus dealer and get your hands on one today.

©2011 PreSonus Audio Electronics, all rights reserved. StudioLive, Capture, XMAX, and Jet PLL are trademarks of PreSonus Audio Electronics. Studio One is a trademark of PreSonus Software Ltd. Mac, iPad, and Apple are registered trademarks of Apple, Inc. All other trademarks, registered trademarks, and figurative marks of our imagination are the property of their respective companies. So there.

The woman behind the iPad: Ashley Creekbaum, PreSonus International Inside Sales



Baton Rouge USA • www.presonus.com

From Mics to Custom Computers,

Sweetwater®

Connects You with the Music Gear You Need!



 Value Added Reseller
Professional Audio

 Sweetwater
creation station



Sweetwater Is the Best Place to Buy Your Next Computer!

The best way to put your mix together fast is to start with a rock-solid system. With a custom music production computer from Sweetwater, you'll be ready to hit the ground running. Choose one of our custom Creation Station PCs or a Mac, and have our expert staff set up a complete system, ready to meet your needs. Your computer will arrive fully loaded, with all software installed and all hardware tested. And thanks to our FREE tech support, your entire system will stay up and running smoothly — no hassles, no headaches.



Get Ableton Live and a Novation Launchpad at Sweetwater!

(800) 222-4700 • Sweetwater.com

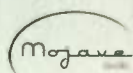
SENNHEISER

MK-4

This amazing vocal-ready mic fits your project-studio's budget!

SE Voodoo VR1

Boutique ribbon mic performance at a price any engineer can afford!



MA-300

The world-class sound of the MA-200 with multi-pattern



R84

An unbelievably affordable modern rendition of a classic ribbon mic!



New!

New!

New!

zoom

H4n

This versatile recorder sports a pair of studio-quality stereo mics!



R-101

Get the legendary sound of a Royer ribbon, without breaking the bank!



Follow this tag to learn more about Royer's amazing new R-101 ribbon mic

RØDE

N5

Perfect for acoustic instruments, this mic is an incredible value!



FREE Professional Advice

We're here to help answer your questions.



FREE Shipping

Almost everything ships to you for free.



FREE Technical Support

Knowledgeable pros are here to back you up.



FREE Warranty*

You won't find free 2-year coverage like this anywhere else.



LOWEST Possible Prices

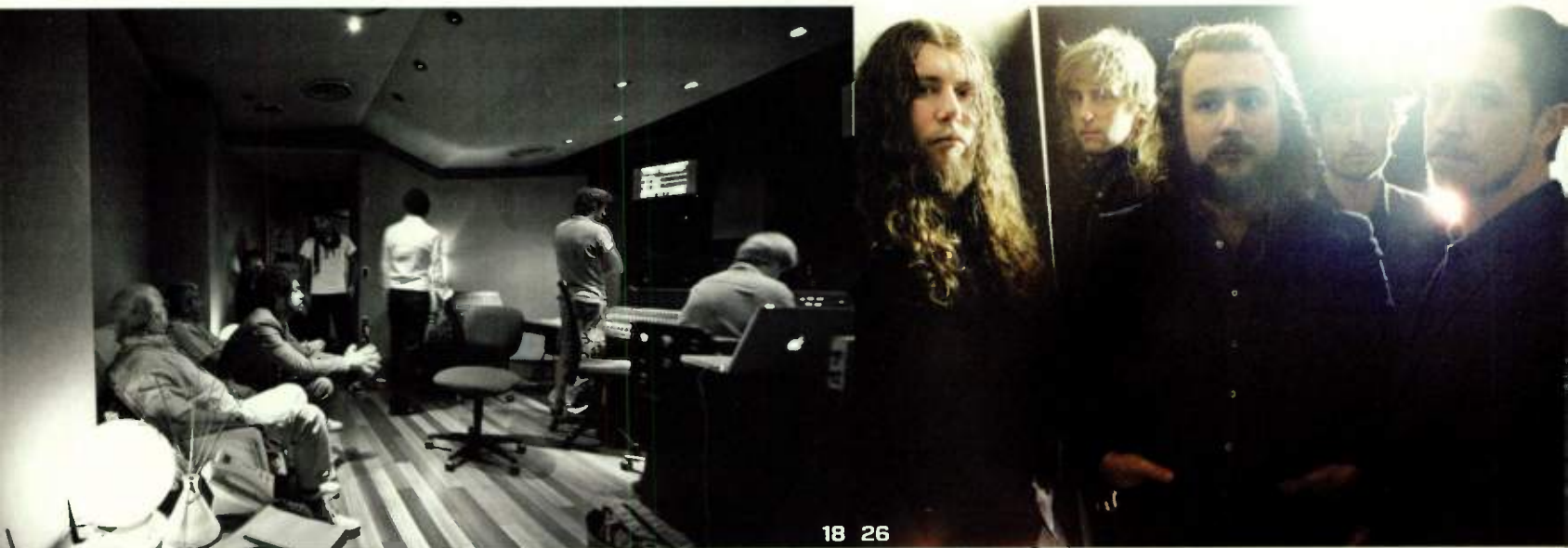
Get the gear you want, at the right price.

* Please note: Apple products are excluded from this warranty, and other restrictions may apply. Please visit www.sweetwater.com/warranty for complete details.

electronic MUSICIAN

COVER FEATURE

18 **Danger Mouse** On *Rome*, the musician/producer embarked on an ambitious five-year collaboration with composer Daniele Luppi to give classic Italian film-style music a 21st-century twist.



18 26

LISTEN

- PROFILES** 26 **My Morning Jacket** Jim James and crew collaborate with producer Tucker Martine to take a back-to-basics recording approach on *Circuital*, their sixth studio album.
- 32 **Death Cab for Cutie** The indie rockers find inspiration in a linear production process for their latest release, *Codes and Keys*.
- 38 **Amon Tobin** The musical mad scientist explores psychedelia and sound design on *ISAM*, his first project since 2007's *The Foley Room*.
- 42 **The Soundtrack Beat Battle** Get hip to Nashville's ultimate throwdown of undiscovered producers.

PLAYLIST 46 Music reviews from *Electronic Musician* contributors

LUST

- ROUNDUP** 48 **The Portable Performance** Just in time for summer! Craig Anderton reviews key gear for "gigs to go," from mics to laptops.
- REVIEWS** 58 **Fishman Loudbox Mini** acoustic amp
- 60 **SPL Passeq Analog Code Plug-in** software EQ with M/S processing
- 62 **FXpansion Geist 1.0.3** software-based sampling instrument
- NEW GEAR** 64 Tools to help you make better music, in the studio or onstage



LEARN

MASTER CLASS 66 **Is This Thing On?** Think you have no control over your sound on a club gig? Think again. Veteran engineers from L.A.'s Troubadour and San Francisco's Great American Music Hall and Slim's share advice for taking a more active role in shaping your sound onstage.

TECHNIQUES 74 **Production** Create Big Group Background Vocals

78 **Drums** Small Room, Big Drum Tracks—No Problem! Part 3

84 **Business** Sync or Swim

88 **Performing** Ready Your Set, Go!

90 **Vocals** The Singer's Gig Bag

94 **Power App** Manipulate Clip Grooves in Ableton Live

DEPARTMENTS

12 **Community**

FIRST TAKE 16 **Cage the Elephant** rocks Coachella

CRAIG'S LIST 98 **Five Warning Stickers** CDs Should Have Had

EM (ISSN 0884-4720) is published monthly by NewBay Media, LLC 1111 Bayhill Drive, Suite 125, San Bruno, CA 94066. EM is a trademark of NewBay Media. All material published in EM is copyrighted (©) 2011 by NewBay Media. All rights reserved. Reproduction of material appearing in EM is prohibited without written permission. POSTMASTER: Send address changes to EM, P.O. Box 15606, North Hollywood, CA 91615. Publisher assumes no responsibility for return of unsolicited manuscripts, photos, or artwork. All product information is subject to change; publisher assumes no responsibility for such changes. All listed model numbers and product names are manufacturers' registered trademarks.

Canada Post: Publications Mail Agreement #40812608. Canada Returns to be sent to Brauchip International, P.O. Box 25542, London, ON N6C 6B2. Periodicals Postage Paid at San Bruno, CA, and at additional mailing offices.

**"I did it myself...
...Primacoustic made it easy!"**



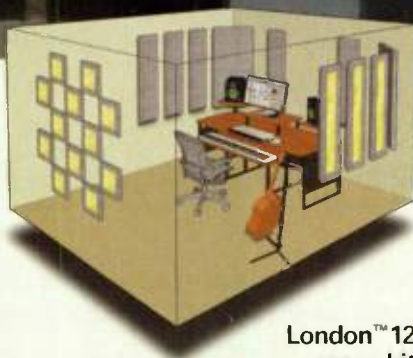
Jazz/blues guitar legend Scott Henderson

(Tribal Tech, Chick Corea, Jean Luc Ponty, Joe Zawinul, Jeff Berlin, Victor Wooten)

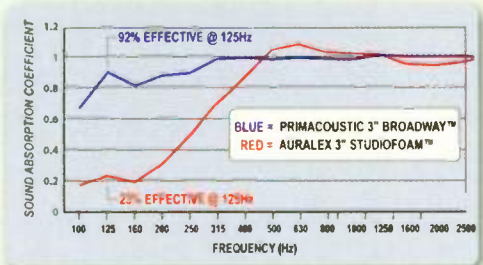
"I did it all myself. Primacoustic made it easy and fast. Believe me, if I can do it, anyone can. It made a big difference! Tighter low end with more of it, plus a sweeter top end and a clearer, open sound."

Right from day one, we have been led to believe that a great sounding room could only happen if you custom built it from the ground up. Although world class studios will never be replaced, Primacoustic can get you closer than ever before!

Start with our highly acclaimed Broadway™ panels. These feature high density 6lb glass-wool for maximum absorption. Unlike foam that only attenuates the highs, Broadway panels deliver smooth, even absorption down into the difficult to manage bass region. The result: **Recordings are more balanced and mixes translate better to other rooms.**



London™ 12 room kit



Tests performed by Riverbank Labs on Primacoustic Broadway™ panels and common acoustic foam. Both absorb high frequencies but as sound shifts to bass, the foam stops working.

Installation is easy: unlike foam that ruins your walls, Broadway panels hang like pictures. They take no time to put up and look terrific! Each panel features resin hardened edges and is individually fabric wrapped in a choice of three architecturally neutral colors.

For those that want to go the extra, Primacoustic offers a wide array of bass traps, diffusers and ceiling clouds to suit.

**Primacoustic...
great sound made easy!**



... take control of your room!™

A division of Radial Engineering Ltd. - 1588 Keblet Way, Port Coquitlam BC V3C 5M5

www.primacoustic.com

All trademarks property of their respective owners. Specifications and appearance subject to change without notice.

EXECUTIVE EDITOR Craig Anderton
canderton@musicplayer.com

EDITOR Sarah Jones
sjones@musicplayer.com

MANAGING EDITOR Debbie Greenberg
dgreenberg@musicplayer.com

CONTRIBUTORS
Jaime Babbitt, Jon Chappell, Michael Cooper, Marty Cutler, Craig Dalton, Blair Jackson, Mike Levine, Ken Micallef, Bill Murphy, Barbara Schultz, Bud Scoppa, Marsha Vdovin

ART DIRECTOR Patrick Wong
pwong@musicplayer.com

STAFF PHOTOGRAPHERS
Paul Haggard phaggard@musicplayer.com
Craig Anderton canderton@musicplayer.com

GROUP PUBLISHER Joe Perry
jperry@musicplayer.com, 770.343.9978

ADVERTISING DIRECTOR, NORTHWEST, MIDWEST & NEW BUSINESS DEV.
Greg Sutton
gsutton@musicplayer.com, 925.425.9967

ADVERTISING DIRECTOR, SOUTHWEST
Albert Margolis
amargolis@musicplayer.com, 949.582.2753

ADVERTISING DIRECTOR, EAST COAST & EUROPE
Jeff Donnenwerth
jdonnenwerth@musicplayer.com, 770.643.1425

SPECIALTY SALES ASSOCIATE, NORTH
Contessa Abono
cabono@musicplayer.com, 650.238.0296

SPECIALTY SALES ASSOCIATE, SOUTH
Donovan Boyle
dboyle@musicplayer.com, 650.238.0325

PRODUCTION MANAGER Beatrice Kim

MUSIC PLAYER NETWORK

VICE PRESIDENT John Pledger
EDITORIAL DIRECTOR Michael Molenda
SENIOR FINANCIAL ANALYST Bob Jenkins
PRODUCTION DEPARTMENT MANAGER Beatrice Kim
DIRECTOR OF SALES OPERATIONS Lauren Gerber
WEB DIRECTOR Max Sidman
MOTION GRAPHICS DESIGNER Tim Tsuruda
MARKETING PROJECT MANAGER Tyler Reed
MARKETING DESIGNER Joelle Katcher
SYSTEMS ENGINEER John Meneses
ASSOCIATE CONSUMER MARKETING DIRECTOR Christopher Dyson

NEWBAY MEDIA CORPORATE

PRESIDENT & CEO Steve Palm
CHIEF FINANCIAL OFFICER Paul Mastronardi
VICE PRESIDENT OF WEB DEVELOPMENT Joe Ferrick
CIRCULATION DIRECTOR Denise Robbins
HR DIRECTOR Ray Vollmer
IT DIRECTOR Greg Topf
DIRECTOR OF PUBLISHING OPERATIONS & STRATEGIC PLANNING Bill Amstutz
CONTROLLER Jack Liedke

REPRINTS AND PERMISSIONS

For article reprints please contact our reprint coordinator at Wright's Reprints: 877.652.5295

PLEASE DIRECT ALL ADVERTISING AND EDITORIAL INQUIRIES TO: ElectronicMusician, 1111 Bayhill Dr., Ste. 125, San Bruno, CA 94066 PHONE 650.238.0300 FAX 650.238.0262 EMAIL electronicmusician@musicplayer.com

PLEASE DIRECT ALL SUBSCRIPTION ORDERS, INQUIRIES, AND ADDRESS CHANGES TO: 800.289.9919, outside the US 978-667-0364, emmag@computerfulfillment.com

Back Issues are available for \$10 each at 800.289.9919, 978.667.0364, emmag@computerfulfillment.com

Periodicals Postage Paid at San Bruno, CA, and at additional mailing offices.

Follow us on





The Check's in the Mail—Literally!

Jacqueline Van Bierk – TAXI Member
www.jacquelinevanbierk.com

I love color, especially pink :-)
I love writing music and performing with my band. I love to do the things people say are impossible, and I never take "No." for an answer. I'm a dreamer, a believer and I am most *definitely* stubborn. I never really bought into the "struggling musician" mentality. I knew there had to be a way to turn my talent into a full-time career.

I've been writing music for a very long time, and had tons of songs sitting on my computer with no purpose; they just didn't fit my band's style. A friend told me about TAXI and brought me to their free, members-only convention, the Road Rally. Like many musicians, I was skeptical but thought, "Well, I've been asking for a sign, so I'd better go."

The wealth of information there just blew me away. Everything that previously seemed so "far out of reach," was now within my grasp.

I signed up with TAXI and started writing for specific music industry requests. All of the sudden I had a purpose, became very focused, and was finishing a lot more songs and tracks because I had targets and deadlines.

Getting Paid to Do What You Love

I've become a much better musician and songwriter, and I've made friends with talented and established collaborators I've met through TAXI. Now I'm signed to two major music libraries, and my music is on two huge daytime TV shows, and several more.



TAXI®

The World's Leading Independent A&R Company

1-800-458-2111

World Radio History

There's nothing more gratifying and inspiring than getting checks in the mail for doing what you love. Seriously, I never thought I would be writing for the TV shows I now write for. I'm so grateful my friend encouraged me to join TAXI. If I hadn't, I'd probably still have a computer filled with "brilliant little orphans" that might have never been heard.

I Spent More on Coffee!

There are so many opportunities right in front of us that sometimes we don't *see* them. I was spending more on coffee than what a TAXI membership costs. I used every excuse possible to delay joining. Ironically, I wouldn't be where I am today if it weren't for TAXI and all the great friends I've made on its Forum and at the Road Rally. And this is just the *beginning*.

If our purpose in life is to do what we truly love, then I'm living my dream. What's stopping you? Call TAXI now!

COMMUNITY

insight

Own Your Stage Sound

Who doesn't love summer? Not only can you finally shake off that studio tan that you've been cultivating all winter, it's also a great time to pick up extra gigs, from club shows to outdoor concerts.

It's funny . . . onstage, unlike in the studio, musicians tend to take it for granted that sound is being handled by someone else. Granted, running sound in concert venues requires a certain level of experience and specialized equipment that isn't accessible to many musicians. But just because you might not be hands-on with a P.A. like you are with a DAW, doesn't mean you're not responsible for learning your role the sound-reinforcement process, and how becoming a more active participant will not only improve your relationship with the sound engineer, it will actually make you sound better.

This month, we approached veteran club engineers with

decades of experience mixing thousands of bands, to learn how musicians can get more informed and involved. ("Is This Thing On?," page 66.) They had plenty to say, but the gist was this: Come prepared, and show respect for the process, and for others. Remember that their goal is the same as yours: for you to sound your best onstage. So learn what you can do, to do your part. In the end, everyone benefits.



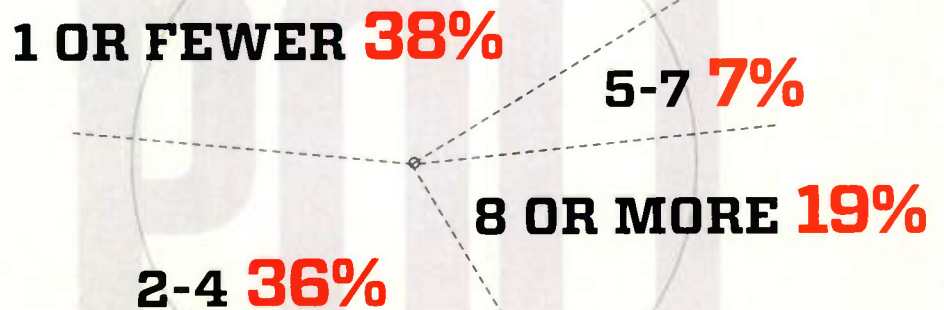
SARAH JONES
EDITOR
sjones@musicplayer.com

"THE CD HAS GONE FROM A REVENUE GENERATOR TO A MARKETING EXPENSE."

Phil Hawken, COO of ESL Music, at the Rethink Music Conference, April 27, 2011

The Electronic Musician Poll

HOW MANY GIGS DO YOU PLAY EACH MONTH?





Gadget Geek

PLAYING (OR RECORDING) GIGS IN THE DARK? SHED SOME LIGHT ON THE SITUATION WITH MIGHTY BRIGHT'S 2-LED USB-POWERED LAMP. THE BRIGHTEST IN MIGHTY LIGHT'S USB LINE FEATURES TWO LEDs THAT SHINE FOR 100,000 HOURS EACH, MOUNTED ON A SUPER-FLEXIBLE GOOSENECK THAT FOLDS UP FOR STORAGE JUST ABOUT ANYWHERE. AT \$14.99, NOT A BAD INVESTMENT. GET THE SCOOP AT MIGHTYBRIGHT.COM.

BUZZ

The FY11 Budget Deal: What Does it Mean for the Arts?

At the eleventh hour on April 15, Congressional leaders in Washington struck a Fiscal Year 2011 budget compromise to avoid a government shutdown, which includes \$155 million for the National Endowment for the Arts and \$25.5 million for the Arts in Education programs at the U.S. Department of Education. The agreement finalizes the rest of FY11 funding. Thanks in part to advocacy by the Recording Academy, Congress has restored a portion of the Arts in Education funding and protected the National Endowment for the Arts (NEA) from more drastic cuts.

NEA: In February, the House of Representatives voted to decrease funding for the NEA by \$43.1 million (nearly 26%) to a level of \$124.4 million for FY11. The Senate did not pass this bill. The \$155 million provided for the NEA in the final funding bill is a \$12.5 million cut from the current level of \$167.5 million. While any cut to the agency is a setback to the substantial progress made in re-building the NEA's budget after the deep 40% cut in the mid-'90s, the \$155 million allocation is higher than both the initial House bill (\$124.4 million) and the President's current funding request (\$146.3 million).

Arts in Education: On March 2, 2011, both the House and Senate agreed to eliminate a number of small education programs at the U.S. Department of Education, including the complete defunding of the Arts in Education program, a \$40 million fund that supports competitive grants and national initiatives. The final funding bill includes \$25.5 million for the Arts in Education fund—enough to continue the next year of funding for multi-year grants currently in progress, with \$10 million available for additional arts education expenditures.

In a climate of historic budget slashing, the partial restoration of Arts in Education funding is a true victory, thanks in large part to the leadership of Senators Thad Cochran (R-MS) and Tom Harkin (D-IA) and the efforts of grassroots advocates who quickly mobilized to tell their stories about the value of arts education.

Victor Ledin is a Grammy-nominated classical producer and a governor of the San Francisco chapter of the Recording Academy.



FEEDBACK

Which earns you more money, your recordings or your shows?



Trent Nighman
Shows, and merch. Recordings are just "advertisement" for the shows.



Steve Van Velvet
Anyone who answers with "recordings" is not playing shows!



Guillermo Carrasco
My shows, of course; but how can I make more shows if I have no new records, just doing the old stuff?



Chris Dunnett
In lump sums, my recordings have earned more, but overall, definitely shows, if you add them up.



YOUR TAKE

What's your best trick with an iPad audio app?

Here's our favorite reader response. Luke wins a Glyph GT050Q hard drive. Thanks, Luke!

OUR COMPANY does lots of conferences, which means we use lots of lectern microphones. These are very sensitive to audio and are susceptible to feedback. We purposefully induce feedback and use the realtime analyzer in our iPad apps (IOscope and Spectrascope) to find exactly which frequency is problematic. Then we just pull the exact offending frequency down using graphic equalizers and thus have no problems further. The nice thing is that the inefficiencies of the phone mic have been corrected, so the app is quite accurate. We use it on live shows, too.

LUKE ABRAHAMS
CAPE TOWN, SOUTH AFRICA



Send *Electronic Musician* Your Stories, Win Gear! Talk to us! Share your tips with *Electronic Musician*, and we'll print our favorites in an upcoming issue. And if we choose your letter, you'll win sweet gear! This month, we're giving away a Blue Microphones Spark—a versatile condenser mic with finely detailed, uncolored sound that features a unique Focus Control switch for a wider range of recording styles; for more, see our review in the June 2011 issue. Contest open to U.S. residents age 18 and over.

NEXT MONTH'S QUESTION. **WHAT'S YOUR MOST CREATIVE RECORDING TECHNIQUE USING A SINGLE MICROPHONE?**
Send your answers to ElectronicMusician@musicplayer.com.



	2000	2005	2010
CD	92%	85%	49%
OTHER PHYSICAL	8%	6%	4%
DIGITAL FORMATS	0%	9%	47%

THE BIG PICTURE

Digital Downloads Vs. CD Sales

It's no surprise that digital downloads are blowing away CD sales. What may be surprising is the rate of growth: According to the RIAA's recently-released 2010 Year-End Shipment Statistics, digital downloads reached a record 47% of music shipments last year, up from just 9% in 2005. Even more telling, dollar value of digital single shipments rose 12% over 2001 to 1.36 billion in 2010—hardly enough to offset the 22% same-year drop in CD shipments.



The two combo input connectors on MOTU's Audio Express can accommodate mics or instruments.

ask!

I see interfaces with "high-impedance instrument inputs," and they're supposed to give better sound. But when I patch in my pedalboard output, I really don't hear any difference. My P-bass sounds great, though. So when should you use, or not use, the instrument input? Can you fry it by putting in too strong a signal?

SPENCE FEDER, FT. WORTH, TEXAS
VIA E-MAIL

Good question—most companies just assume you know how to use instrument inputs. They came about because standard guitars and basses with passive pickups generate too much output for mic inputs, but often not enough for line level inputs; more importantly there's an impedance-matching issue,

as guitar pickups have a high output impedance compared to line-level devices. Furthermore, pickup impedance increases with frequency, so plugging in to a low-impedance input "dulls" the sound, as it loads down high frequencies more than low frequencies.

Your pedalboard already has a low-impedance output (as

would any individual effect) that's probably line-level, or close to it. So, as it can produce sufficient level and doesn't have impedance-matching problems, you can use it with a line input. It should also work with the instrument input, although you may not need as much gain as for standard pickups. Your P-bass, on the other hand, has passive pickups and is exactly the type of signal an instrument input wants to see. You would not "fry" an instrument input when using

normal instrument or line levels.

Guitars and basses with active pickups, or onboard preamps, generally don't need instrument inputs although they may produce relatively low-level signals in order to be more like a traditional guitar. In this case, there's no harm in going through an instrument input, and it may actually be a more suitable match because extra gain is available compared to line-level inputs.

THE EDITORS

Got a question about recording, gigging, or technology? Ask us! Send it to ElectronicMusician@musicplayer.com.



**CAGE ROCKS COACHELLA
INDIO, CA
APRIL 16, 2011**

Cage The Elephant rocked a high-energy set for a roiling sea of sweaty fans at the Outdoor Theatre at Coachella 2011. The band was one of hundreds of acts performing on stages and in tents at the annual festival, which draws more than 80,000 diehard music lovers to the outer limits of southern California for three days of nonstop entertainment under a burning desert sun. As temps soared into the triple digits, Cage singer Matt Shultz—recalling an early Kurt Cobain in his filmy red dress—surfing the crowd three times, singing all the while. Long live the stage dive.

PHOTOGRAPH BY DAVE VANN



Many Roads Lead to *Rome*

**Danger Mouse and
Daniele Luppi Give
Classic Italian Film
Music Ideas A 21st
Century Twist**

BY BLAIR JACKSON



Danger Mouse (left)
and Daniele Luppi



The team assembles in Forum's Master Studio to listen back to tracks.

Album.” That year Danger Mouse also produced Gorillaz’ *Demon Days* album. Burton, it turns out, was also a huge fan of Italian film music, so he and Luppi hit it off immediately.

“I saw a lot of those classic Italian movies when I was in film classes in college,” Burton says during a break from working on U2’s long-awaited next album. “They had this great mixture of dramatic, melancholy music with strings, mixed with these psychedelic electric guitars. And the way the drums were played had a lot of interesting rhythms—a little bit jazzy, but some of the drums almost sounded like it was coming from R&B or some James Brown stuff. There were also some avant-garde things in there, as well. It was a great mixture of things with a lot going on.”

It wasn’t long after they met that Burton and Luppi began working together: Luppi contributed some bass, organ, and synth parts to the mega-successful 2006 *St. Elsewhere* album by the duo known as Gnarls Barkley—Cee-Lo Green and Danger Mouse. The smash hit single from that disc, “Crazy,” contained elements from a piece by Italian film composer Gianfranco Riverberi, and other tunes of the album borrowed from Nicholas Flagello and Armando Trovaioli. The logical next step in Burton’s and Luppi’s friendship was writing music together—and it was that partnership that evolved into the *Rome* album, which would both pay tribute to and expand upon their mutual love of Italian film music.

“At first we worked independently,” Luppi says. “I have a piano and a Hammond organ, so I mainly worked on those. We wrote sketches and played them to each other and found we were on the same page and we both liked each other’s material.” Burton adds, “I would be writing ideas on piano and guitar, putting melodies together and working on instrumental song structures, and he was doing the same thing, and we would kind of pull them together and add to each other’s songs, or mix them together.”

Once they had a number of pieces written, in October 2006 the action shifted to Forum Studios in Rome, where Luppi once again assembled the cream of veteran Italian soundtrack musicians, including a few who had worked on *An Italian Story*—guitarist Luciano Ciccaglione, bassist Dario Roscaglione, and keyboardist Antonello Vannucchi—plus stalwarts such as drummer Gege Munari and keyboardist Gilda Buttá. The day before the first instrumental tracking sessions found Luppi scrambling around Rome in a van digging up period instruments for the players—a couple turned up in the collection of a Vespa mechanic, who was paid in wine for the brief rentals; how Italian!

For more than 40 years, Forum Studios has been a center for recording Italian film music. Built underneath an old church in the Parioli section of Rome, and initially known as Ortophonic Studios, the facility opened in 1970 specifically to do soundtrack work—the original owners were

“This was never supposed to be a kitsch-y, nostalgia kind of thing. It was more like, ‘Let’s make a record that has a great mood to it, and a great sound as the background, and then do modern songs over the top of it.’”

—Brian Burton, a.k.a. Danger Mouse



Left to right—Daniele Luppi, Norah Jones, Danger Mouse, and Jack White

composers Morricone, Piero Piccioni, Luis Bacalov, and Armando Trovaioli. Through the years, all sorts of projects have been recorded there, including classical, pop, rock, and jazz albums (Clapton, Quincy, Eno, Chili Peppers, *et al*), but it is still the go-to studio for soundtracks—Oscar winners *Cinema Paradiso*, *Life is Beautiful*, and *Il Postino* were all scored there.

The heart of the three-studio complex is an enormous live tracking room (Studio A) that can fit 80 musicians and has a high ceiling, several support columns, parquet wood floors, and acoustical treatment on some of the upper walls and ceiling. The control room is equipped with Neve VR Legend 60-channel console with Flying Faders; Genelec 1039A and PMC IBIS main monitors; scads of outboard gear, including Teletronix LA 2A, Urei limiters and EQ, and a wide range of Lexicon digital reverbs; and for this project, the studio's Studer A820 two-inch 24-track. "Brian and I decided from the beginning we had to record to analog tape," Luppi comments. "It goes with the sound we were looking for."

Engineering the sessions was Fabio Patrignani, son of the man who designed the studio for Morricone and company, Franco Patrignani, himself a noted engineer who later ran the studio with his wife. Franco was also a colleague of Morricone's principal engineer Sergio Marcotulli, whom Fabio assisted while still a teenager. Though Marcotulli is long retired, Luppi brought him into Forum for a day at the beginning of the *Rome* sessions "partly to show him respect," Luppi says, "but also because I wanted him to take a look at what we were doing with the mics. He could say, 'This is how we did it,' and 'You know, the drums sound a little better in that corner over there.' He knew the studio so well."

To Luppi, it was important to record *Rome* at Forum because "I wanted it to have a big sound. When you record in a big space, you hear the air, you hear the sound of the place. Also, I knew I wanted to have an orchestra and the choir, which that room [at Forum] is perfect for. But even when you record a single instrument—a harpsichord or an acoustic guitar—I wanted it to be close-miked but also have a mic up in the air to capture the room. Doing that let us add less reverb later at the mix stage."

Though Luppi and Burton arrived in Rome with charts fully written for the basic tracking group, "a lot of times the players took it further themselves and made it better," Burton says. "Sometimes we would start a song and the whole feel of the song would be wrong, but it wasn't their fault, because for us it was like, why tell them exactly what you're

looking for? Why not let them try it based on what you've put in front of them and see what they do with it? I've always found it's a lot better to let people do whatever it is they're instinctively going to do even if you have an idea in your head. If you don't, you might miss out on some really good ideas."

Early on, both producers fell in love with the thick and snappy bass sound that engineer Patrignani was getting out of Dario Roscaglione's Fender VI six-string bass and Bassman amplifier with an Electro-Voice RE20 mic and a "wet" EMT plate reverb. That bass is the foundation of most of the songs on *Rome*, along with Gege Munari's minimally miked mid-'60s Gretsch drum kit. The studio also has its own echo chamber and that was utilized on a couple of guitar parts for that extra echo-y '60s sound. Burton liked the bass sound so much he brought a Fender VI onto a Black Keys album he worked on shortly after these first sessions.

While Luppi and Danger Mouse tended to other projects during the early part of 2007, the vocal component of *Rome* was just starting to take shape. Luppi says that having some time off from the project allowed him and Burton to gain some perspective on where to go next: "If we only had a few months to do this, once we did the [basic] tracks, you might think, 'All right, this is sounding pretty retro, so maybe we should get an older singer like ['60s pop and rock vocalist] Mina to match the music and finish the record that way.' But because we had time, we could say,



'Let's have a twist—let's turn in a direction you would not normally go. Let's not do what's obvious—let's do something else.' So we went more modern and that's how we ended up with Norah Jones and Jack White on the record."

Burton had played some of the basics to White, and White liked what he heard so much he volunteered to pen lyrics to three of the

"themes" and then he cut his own lead vocals at Blackbird Studios in Nashville (where he lives). A famously versatile and expressive vocalist, White brilliantly uses both his higher and lower registers on his tunes, harmonizing with himself to powerful effect. Burton notes, "We didn't know which way we wanted to go—higher or lower for the lead vocal—and they ended up sounding really good together, so we left both in."

Luppi and Burton wanted a female vocalist to contrast with White's tunes, and were excited when Norah Jones agreed to sing three songs for which Burton wrote the lyrics. Her tracks were cut at Glenwood Place in Los Angeles, where Burton has worked often during the past five years. Her vocals, too, are doubled and tripled and compressed and slightly distorted to give them a more mysterious edge. The song "Black," which she sings, is good example of the album's eclectic elements coming together to create an unusual and emotional song: It features some funky wah-wah guitar, "a musical theme that's like a Serge Gainsbourg thing," Burton says, referring to the French pop icon, "and then I thought it would be cool to have the lead vocal be a little Dylan-y, but then you have Norah Jones sing it and it turns into this other thing. It's amazing that it works as well as it does," he laughs.

With the lead vocals in place for the album's six songs, Burton and Luppi returned to Forum Studios in the fall of 2007 and added other vocal parts for some of the other nine mainly instrumental pieces—backgrounds by the Cantori Moderni, octogenarian Alessandro Alessandroni's legendary four-man, four-woman "choir" which added (usually) wordless vocal passages to so many Italian film soundtracks and pop songs in the '60s and '70s. (Alessandroni was also the moody whistler on those famous Morricone soundtracks.) Patrignani says he captured the Cantori with three overhead Neumann U87s spaced evenly above them about three or four feet. Adding haunting vocalizations to a couple of tunes, too, was 72-year-old soundtrack warbler Edda dell'Orso.

A whole 'nother year went by before Burton and Luppi went back to Forum a third time, this time to cut strings with the Rome-based B.I.M Orchestra, whom Patrignani again recorded with a large complement of U87s, both for sections and as elevated room mics. Though some of the string parts had been conceived during the initial writing sessions, other arrangements were developed to fit with the finished vocal parts—another luxury of the album being stretched out over a long period.

Originally, Burton says, "We thought of

More Inputs. More USB.



SCARLETT PLUG IN SUITE INCLUDED

Scarlett 18i6

18 IN / 6 OUT USB AUDIO INTERFACE CAPABLE OF RECORDING YOUR WHOLE BAND WITH FOCUSRITE QUALITY

Two award-winning Focusrite preamps and 16 additional inputs allow you to capture inspired takes, without having to constantly re-patch your studio.

Scarlett 8i6

8 IN / 6 OUT USB AUDIO INTERFACE FEATURING TWO AWARD-WINNING FOCUSRITE MIC PREAMPS

Outstanding sonic performance and flexibility at a truly affordable price - Scarlett 8i6 is designed to make home studio recording and mixing easy without sacrificing audio quality.

CLASS LEADING INTERFACES. WHATEVER YOUR PORT.

THE FOCUSRITE SAFFIRE RANGE
AWARD WINNING FIREWIRE
INTERFACES



www.focusrite.com/interfaces

The only interfaces with Focusrite pres.
For further information: (310) 322 5500

Focusrite
SOUND IS EVERYTHING



More Online
 Read outtakes with
 Danger Mouse and
 Daniele Luppi.
emusician.com/july2011

mixing it in Rome, but we decided it would be much less expensive to fly Fabio over here and mix at Glenwood Place [to half-inch analog] rather than having Daniele and me and my mixing engineer Kennie Takahashi go all the way over there. Glenwood has a great board [a Neve 8068], too. But it was really important that Fabio was part of it. He knows how that music is 'supposed' to sound, but at the same time we all had our opinions, and we tried out a lot of different approaches, and in the end the album sounds quite a bit different than when we came back from Rome and mixed the backing tracks."

Indeed, it was at the mixing stage that the album really took on its modern sheen. Even when the backing tracks have that deep '60s sound, and the strings their languorous majesty, the vocals are 21st-century all the way, panned and effected in interesting ways. Two of Jones' tracks also clearly owe a debt to contemporary hip-hop, which is definitely Danger Mouse territory. So, though the press coverage of this album has portrayed it as some glorious throwback to an earlier musical universe—and there *are* the reverb-drenched guitars, wheedling Farfisa organ, spooky celesta parts (played by Gilda Buttá) and prominent strings from that world—the overall feel of the album is quite fresh and contemporary, as you'd expect from a restless creative spirit like Danger Mouse.

"This was never supposed to be a kitsch-y, nostalgia kind of thing," Burton concludes. "It was more like, 'Let's make a record that has a great mood to it, and a great sound as the background to it, and then do modern songs over the top of it, but not make it seem too out of place. I had great confidence that it would work out.'"

Adds Luppi, "We wanted to do something creative and unique, make a different kind of pop record for today, rather than just a replica of a non-existent movie soundtrack." ■

THANK GOG!



The most advanced drum replacement software ever created has now arrived.

Drumagog 5

Featuring the most accurate triggering known to man
 Automatic open and closed hi-hat detection
 Multiple room and mic samples • Plug-in hosting
 Built-in convolution reverb and morph engine
 Volume independant triggering • Automatic ducking
 Automatic left/right samples replacement
 and much, much more

Get the whole story at www.Drumagog.com

LISTEN



My Morning Jacket

Jim James and crew play for keeps on *Circuital*

BY BUD SCOPPA

TUCKER MARTINE'S two most recent album projects have been all about location, location, location. Last July, the Portland-based producer headed from the rustic Oregon barn where he'd recorded the Decemberists' back-to-basics surprise hit *The King Is Dead*, to a church gymnasium in Louisville to begin work on My Morning Jacket's *Circuital*. "I went right from one to the next," says Martine, "and there wasn't much of an adjustment for me, because both were such unconventional studio environments."

What's more, both bands were committed to the idea of recording live off the floor, an approach My Morning Jacket would take the whole nine yards, recording to two-inch tape with the five musicians arranged in a circle at half court of the cavernous, high-ceilinged gym. The idea of location recording wasn't new to these guys—they'd recorded their early albums in a Kentucky grain silo.

"In some ways, we've come full circle, though I hate that term," says MMJ frontman Jim James. "I feel we've progressed musically and personally, but just happened to be returning home for this record and making it in a very





Tucker Martine captured MMJ studio sessions with his iPhone camera; see more of his shots at emusician.com.



LISTEN profile



**“We purposely painted ourselves into a corner. There’s a vitality that comes through when you record that way.”
—Tucker Martine**

natural way—just the five of us playing in a circle, going for live, emotional takes from each band member.”

“They’re a fantastic band,” says Martine, “and what does it sound like when they’re in a room together and things are spilling into each other? So we purposely painted ourselves into a corner. There’s a vitality that comes through when you record that way. It’s the sound of people that have to make it work right now and not rely on fixing things later. It also becomes a general feeling of embracing imperfections. There was no computer in the building, so you couldn’t get tired or lazy—it was out of the question. No one wanted to do anything reminiscent of the days of old as much as not falling into the traps of modern record-making, like not needing to commit early on to arrangement or performance.”

“I worked with Tucker doing backup vocals on Decemberists and Laura Veirs records, and we hit it right off,” James explains. “We both have the same goofy, f**ked-up, surrealist sense of humor where nothing and everything make sense. I can see a caterpillar on a tree and call it a basketball, and he knows exactly what I mean. Tucker is in a league of his own. His ears are golden and he is a surrealist—which a lot of producers I’ve met can’t fully wrap their heads around. That’s why we loved and gravitated to Tucker.”

The band had set up in the gym before Martine’s arrival. “Our friend Kevin Ratterman, one of the greatest producers and engineers on the planet, had recorded

there,” James says of the space. “I went to visit and thought it was really special. We also wanted to work with Kevin on this record, so he and I brought all our gear into the wonderful old turn-of-the-century church and we went to town. I gave the guys very simple demos and we began working on them and getting levels.” As soon as Martine showed up and familiarized himself with the setup, they started going for takes.

“It really did create a circle amongst everyone’s brains and hearts as well as the mics,” James says of the resulting experience. “It is so cool to solo a mic and hear bits of everyone else in that mic, as opposed to having it completely isolated and sterile. Obviously, sometimes you need some isolation, but for the most part the bleed was good.”

The “let it bleed” approach extended to James’ vocals; he chose to sing his lead parts—and play guitar at the same time—surrounded by the rest of the band.

“Jim really stepped up and rose to the occasion, because that is such a difficult thing to do,” Martine marvels. “That’s the biggest challenge of making a record this way—getting the singer to peak at the same time the band’s performance is peaking. As a singer, you can always weasel your way out of it and do a scratch vocal, but Jim wouldn’t let himself have any outs. I’m sure he felt the pressure to get it quickly, because he knew that everyone else was probably gonna be delivering the goods early on. If the band has played something great several times but the vocals aren’t

Circuital Signal Paths

Tucker Martine breaks down the chains for each band member.

Guitars: "All electric guitars were recorded with Royer 121s. Lead guitarist Carl Broemel's amp ended up in the sanctuary, and a Neumann KM86 captured the room. Acoustic guitars were recorded with either a Neumann M49 or a pair of Neumann KM86s, depending on the song."

Bass: "I used a combination of the direct signal through the EVil Twin DI and an EV RE20 on the cabinet."

Piano: "The piano was recorded differently on each song. On 'Circuital,' a Shure SM91 was taped to the back of the little spinet that belonged to the church; this reduced drum bleed a lot and gave it a mid-range presence that helped it cut through the track. That mic was crushed with an 1176. A pair of Shure SM57s were used on 'Freak Out,' and Neumann KM84s were used on 'Movin' Away.'"

Drums: "A Shure SM57 or a Neumann KM86 was used on the snare, with an AKG D112 on the kick. The mono overhead kept changing: KM86, M49, Peluso C12, or RCA 44. I always ran at least one drum mic that was distorted, compressed, or both, to be able to dial in attitude and crunch as needed. The Atomasonic Dynoray was helpful for this, as were the Thermionic Culture Vulture and UA 1176. Mic pres were API 212 and 512. I often used a dbx subharmonic synthesizer on the kick, for low end that you feel more than hear."

Vocals: "On some tracks, Jim's lead vocals are the driest and most natural-sounding he's ever recorded (though he broke out his trusty EMT 140 plate reverb recording the backing vocals). His favorite mic on the sessions was an old RCA 77 ribbon mic, on loan from Carl Broemel's dad. All vocals went through an 1176. Sometimes it was hit too hard, because Jim would get excited during a take, and by the time I saw it, it was too late to change it—and we had our keeper take."

Love Sound?

Make It Your Career – BE CRAS

Music and sound are with us every minute of every day, at the airport, the mall, everywhere.

We're moved by music in our cars and on stage. We're absorbed into other worlds by the sounds in video games and movies. Where does all this music and sound come from?

Who makes it? **CRAS PEOPLE MAKE IT!**



CONSERVATORY OF RECORDING
ARTS & SCIENCES

1.888.694.3526 | CRAS.edu

2300 East Broadway Road, Tempe, Arizona 85282

BE CRAS™

CRAS - The Conservatory of
Recording Arts & Sciences

Be creative, have the skills, and be exposed to the multitude of career opportunities in recording, live sound, and gaming.

Be certified in the critical technologies and protocols of audio production.

Explore and master important classic technologies such as multi-track tape, tube signal processing and microphones.

11 months of total hands-on immersion... without a mountain of debt.

280 hours of working studio internship.

Be thoroughly prepared to enter the world of audio production, certified and confident in your skills.

Wanna BE CRAS? Contact us to learn how you can become skilled in: studio recording, live sound engineering, production/post production for film and television, and video game sound.

Deischell is CRAS

"In researching the handful of Audio Engineering programs around the country, the instructors at CRAS seemed to have the most experience in the industry. I was also drawn to the short-but-intense nature of the program."

LISTEN

profile

quite there, you hate to ask everyone to keep going even though there's nothing to improve on for them. So they just have to take one for the team."

MMJ had no such problem, thanks to James' inspired singing amid the band's taut playing, resulting in keeper performances in the first few takes once they had the arrangements nailed down. At the same time, they were flexible in achieving their goal within certain parameters. On some songs, James was sequestered in a room in order to minimize the bleed, while Bo Koster and his piano were also isolated in some instances.

The July sessions lasted nine days, during which the band got four of the songs that wound up on the record, including the epic title track. There was no air conditioning, with all the windows and doors closed in order to cut down on the sounds of cars passing and birds chirping (some of which can be heard on the record if you listen closely). But, true to the spirit of the project, the band made the most of the sweatbox conditions. "It added to the sense of urgency and intensity," says Martine. They reconvened for two weeks in November and laid down the remaining six

tracks while bundled up in parkas and scarves; the gym had no heat, either.

But the pivotal moment went down back in July when they got that keeper take of "Circuital" and climbed up on the stage at the end of the gym where Martine was positioned to listen through the Proac Studio 100 monitors. "That was a really special moment," the producer recalls. "They were all dancing around the room and bobbing their heads with their eyes closed, and then, when the song was over, they were hugging and high-fiving each other. It was so inspiring to see veteran musicians who were still able to get that much joy out of making music together. It was like we were all going on an expedition together to find something magical, and there it was. We found it, and no one was afraid to have unbridled joy about it. That's how it should be."

It's performances like that one—inspired, synchronous, and clutch, like a veteran basketball team kicking it into high gear at crunch time in a tight playoff game—that make *Circuital* such a thrilling, even ecstatic, listening experience. This was one bold experiment that paid big-time. ■



More Online
Check out session pictures and read interview outtakes. emusician.com/july2011



BUY SHURE GET FREE STUFF*

FOR MORE INFORMATION VISIT
FULLCOMPASS.COM/SHURESTUFF

4GB USB
Memory Key



Stadium
Blanket



Rolling
Backpack



Rolling
Duffel Bag



Get the free
mobile app at
<http://gettag.mobi>



- PURCHASE \$250 = FREE 4GB MEMORY KEY
- PURCHASE \$500 = FREE STADIUM BLANKET
- PURCHASE \$1000 = FREE ROLLING BACKPACK
- PURCHASE \$2500 = FREE ROLLING DUFFEL BAG

Quantities are Limited, Call Today!

*Qualified Shure purchases include microphones, wireless microphones, electronics and most replacement parts



Call 800-356-5844 or visit fullcompass.com

World Radio History



Request your FREE
504-page catalog today!



Did you know you can use two Roland® OCTA-CAPTURE™ at the same time on your Mac or Windows platform?

How else are you going to get 16 digital mic pre's with Compression, High-Pass filters, Phase Invert and eight discrete monitor mixes with effects for under \$1200?

Oh, and we'll throw in our Auto-Sens function, which provides optimized input levels on any channel with the push of a button.



Only with the Roland OCTA-CAPTURE

Limited
Time Offer
Begins
April 1st!



Purchase an
OCTA-CAPTURE
and download
SONAR X1 STUDIO
for FREE!

To learn more about the OCTA-CAPTURE, visit your local Roland dealer or visit RolandUS.com/go/OCTA-CAPTURE.

Roland®





LISTEN

profile

Death Cab For Cutie

Finding inspiration in a linear process

BY KEN MICALLEF

In the July 2008 issue of *EQ* magazine, Death Cab For Cutie producer/guitarist/songwriter Chris Walla proclaimed, "I don't like to look at my music," referring to the ubiquitous computer screen found in any modern recording studio. "Was Glyn Johns sitting in the studio with the Rolling Stones thinking, 'God, I can't wait to look at waveforms?'" Walla harangued. "Computer screens are placed more strategically than the monitors in some studios. It drives me f**king crazy."



**“I still prefer to work with tape when I can . . . but that presupposes making a certain kind of record.”
—Chris Walla**

Fast-forward three years later and Walla has warmed to his audio enemy. Where once he and Death Cab For Cutie relied entirely on analog consoles and Studer tape decks, DCFC's latest effort, *Codes and Keys*, embraces the digital world. Though Walla once bellowed, “There is no automation [on our records]—it’s me cutting the half-inch masters together. I have never done it any other way, and I never will. People are making great records in digital platforms but I am not one of those people,” *Codes and Keys* is a digital production (aided by multiple hardware effects) that documents the group’s ongoing evolution and refinement. All praise to Pro Tools?

“I still prefer to work with tape when I can,” Walla asserts. “But that presupposes making a certain kind of record. *Narrow Stairs* [DCFC’s 2008 release] was definitely that record, and the Telekinesis record I did [*12 Desperate Straight Lines*] never left the tape machine. I’ve made a few records in Logic over the past three years, and it’s

an experience we had not yet had as a band. We knew we didn’t want to record live in the room together. We haven’t changed enough as musicians or writers to have it feel like a very different experience without really changing the toolset. That seemed to be the thing to do, and we did it in grand fashion.”

DCFC—Walla, Ben Gibbard (guitar/vocals), Jason McGerr (drums), and Nick Harmer (bass)—recorded *Codes and Keys* at Sound City in Van Nuys, Warehouse in Vancouver, Two Sticks Audio, Avast! in Seattle, and Tiny Telephone in San Francisco. The group used a plethora of retro (and retro-styled) hardware, including effects (Publison DHM 89, Lexicon Varispeech 26/27, Lexicon PCM 41), synths (EML ElectroComp, Cyclodon Technosaurus, Mobius FutureRetro), and drum machines (Roland TR-606). But how did digital actually change the process?

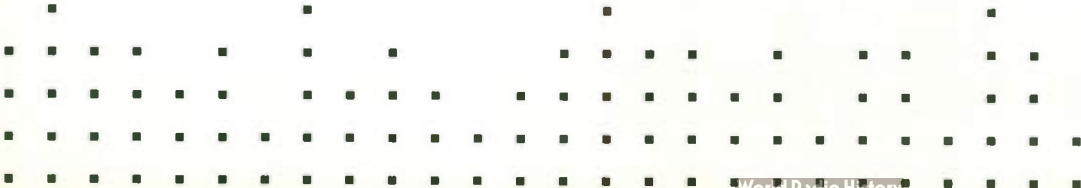
“It’s still a really linear process for us,” Walla says. “We have a rule: If there is a part that

KOMPLETE SOUNDS BETTER.



© **KOMPLETE AUDIO 6** lets you experience the sound of KOMPLETE like never before. This new, premium-quality 6-channel audio interface provides everything you need to record, play and perform music: four analog ins/outs, digital in/out, MIDI and low-latency performance – all in a sleek, rugged metal casing. The two mic inputs are armed with high-end pre-amps while Cirrus Logic® converters deliver pristine, transparent sound. So upgrade your setup with KOMPLETE AUDIO 6 – because KOMPLETE sounds better.

www.native-instruments.com/kompleteaudio6



NI NATIVE INSTRUMENTS

THE FUTURE OF SOUND

repeats elsewhere in the song, that always gets performed. We don't cut-and-paste and move it into place. So there's still a performance element to it. There are no full band takes on this record, and only one song where two people play together at the same time."

Though *Codes and Keys* may follow Walla's "linear" approach, much of the album sounds



"The last couple of years, I've been really into the linear process of old electronic music."

—Chris Walla

APHEX

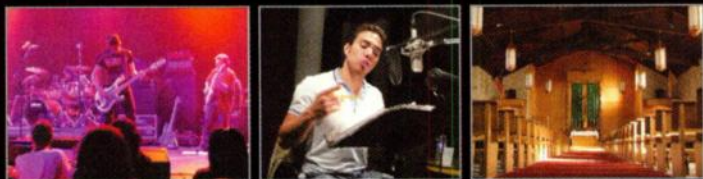
NEW APHEX. NEW PRODUCTS.



The New ApheX CHANNEL[®] Processor For Commercial, Home And Project Studios.

Seven of ApheX's Most Popular Tools in a Single Rack Space

- Automatic Compressor · Parametric EQ · Aural Exciter[®] · Big Bottom[®] · Tube Mic/Instrument Preamp · Logic-Assisted Gate · De-Esser ·



MAKING YOUR WORLD SOUND BETTER.

WWW.APHEX.COM 1.818.767.2929



a DWV ENTERTAINMENT company

heavily processed. Perhaps that's down to instrumental and hardware choices, but sequencers, layering, and vocal irregularities dominate a song like "St. Peter's Cathedral," a veritable textbook on the wonders of reverb.

"You're hearing mostly physical reverbs, either the AKG BX20, EMT 140, AMS RMX 16; it's all old outboard reverb junk," Walla laughs. "The reverb on the drums is the house Lexicon 480L at London Bridge in Seattle, tracked live. That is something we made decisions around. The snare top was patched through an envelope filter on the Korg MS20. A pair of PCM41s were inserted on the drum overheads. For the Moog and the chattery MS20 sequencer reverb, we used Avast!s EMT 240 gold-foil

plate. A lot of that is inherently noisy, so it all went through a Roland SN550 on the way in—that's a '90s Roland frequency-dependent expander; it's really good for stuff that has tails or that you don't want to lose the top frequency of. It's good at building an envelope around the actual core of whatever your signal is. I found it in Michigan for 150 bucks!

"The SN550 is really only a couple of knobs," he adds, "like an old-style dbx box where there's only 'more' or 'less'. The threshold is really slow and soft; it rolls the top off and on as the signal gets louder. You can set the threshold and how much you are pulling out of it. If you put it on the tail, you get that sense of space and spit and sparkle that you get from a reverb only while it is engaged. If the singer sings with sibilance, you get that character of the reverb, but then it's like you're rolling in a lowpass filter as the signal tails out. So that sense of space on the tail end closes in and disappears."

"A lot of it involved pre-treatment," adds engineer Beau Sorenson. "Like, one signal hit a PCM41 and another signal hit a DHM 89 then we decided which one to keep. We usually record everything, then un-mute it and listen and either use it or not."

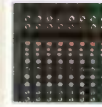
Codes and Keys reverb process owes much to mix engineer Alan Moulder, who worked at his (and Flood's) own Assault & Battery 2 in London.

"Alan used a lot of Ekdahl Moisturizer," Walla recalls. "It's a tabletop, hybridized modular synth/spring reverb. Totally old-world /new-world execution device. The record is built on boxes like that, not the computer. Even the Flower Electronics Little Boy Blue, that's a modular synthesizer in a Radio Shack project box. Two oscillators and a couple filters and a little mix knob and if you cram a snare drum through it, it's killer."

Ultimately, Walla cites his brain change not as a love affair with anything new, but as a discovery of something old.

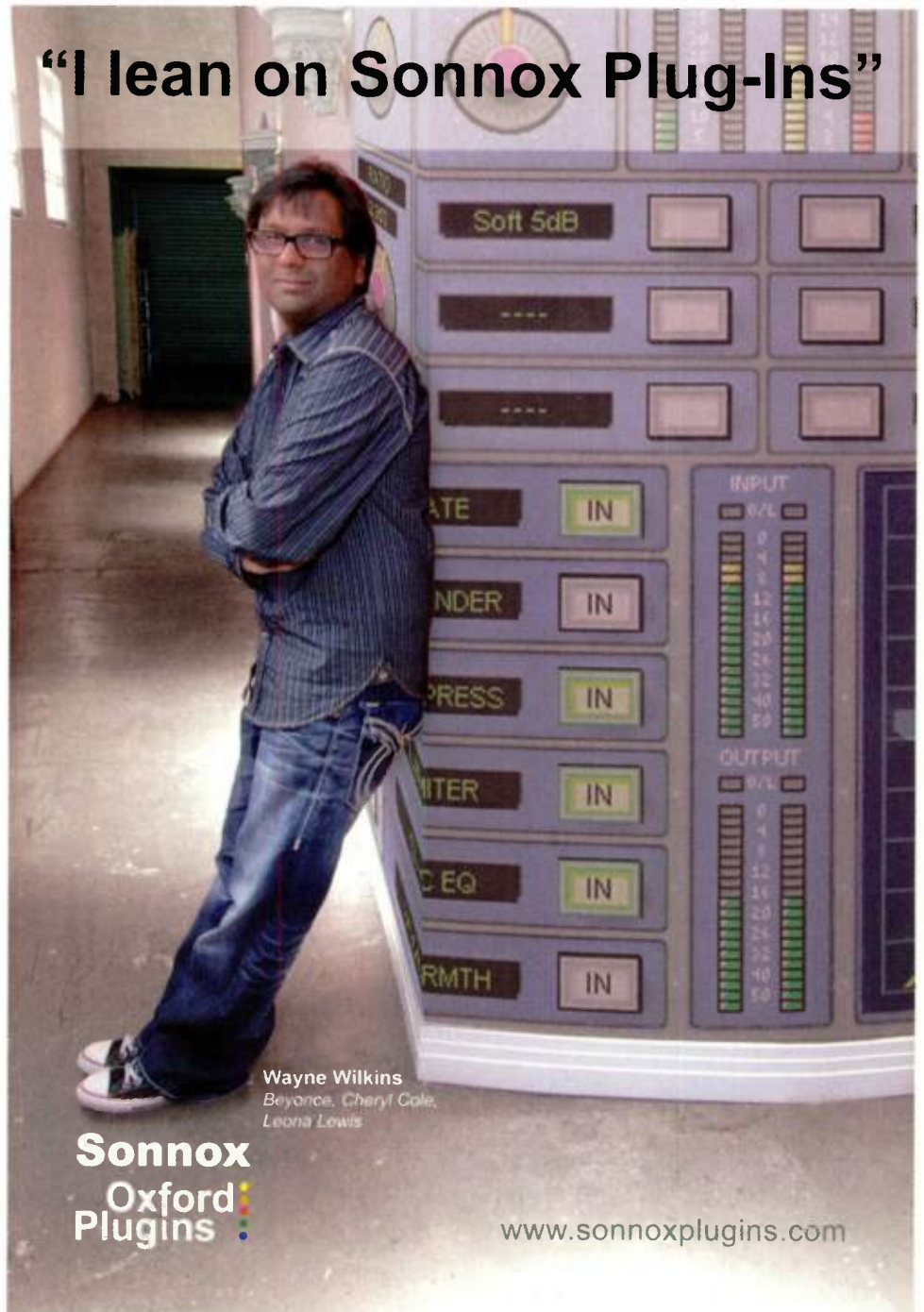
"The last couple of years, I've been really into the linear process of old electronic music. Especially the second side of David Bowie's *Low*, and records by Ash Ra Tempel and Manuel Göttsching; New Order's *Power, Corruption & Lies*. With all those old machines [they used], if you set them up

and it sucks, you're not going to work on the track for 15 hours. [Using old analog gear] is like having a car without a steering wheel: If you want go left, you have to actually pick it up and turn it and set it back down. But if you get something that's awesome, you can work on it for 15 hours. And you can continue to build it and layer on top of it. It really inspires you." ■



More Online
Read interview outtakes with Chris Walla and Beau Sorenson.
emusician.com/july2011

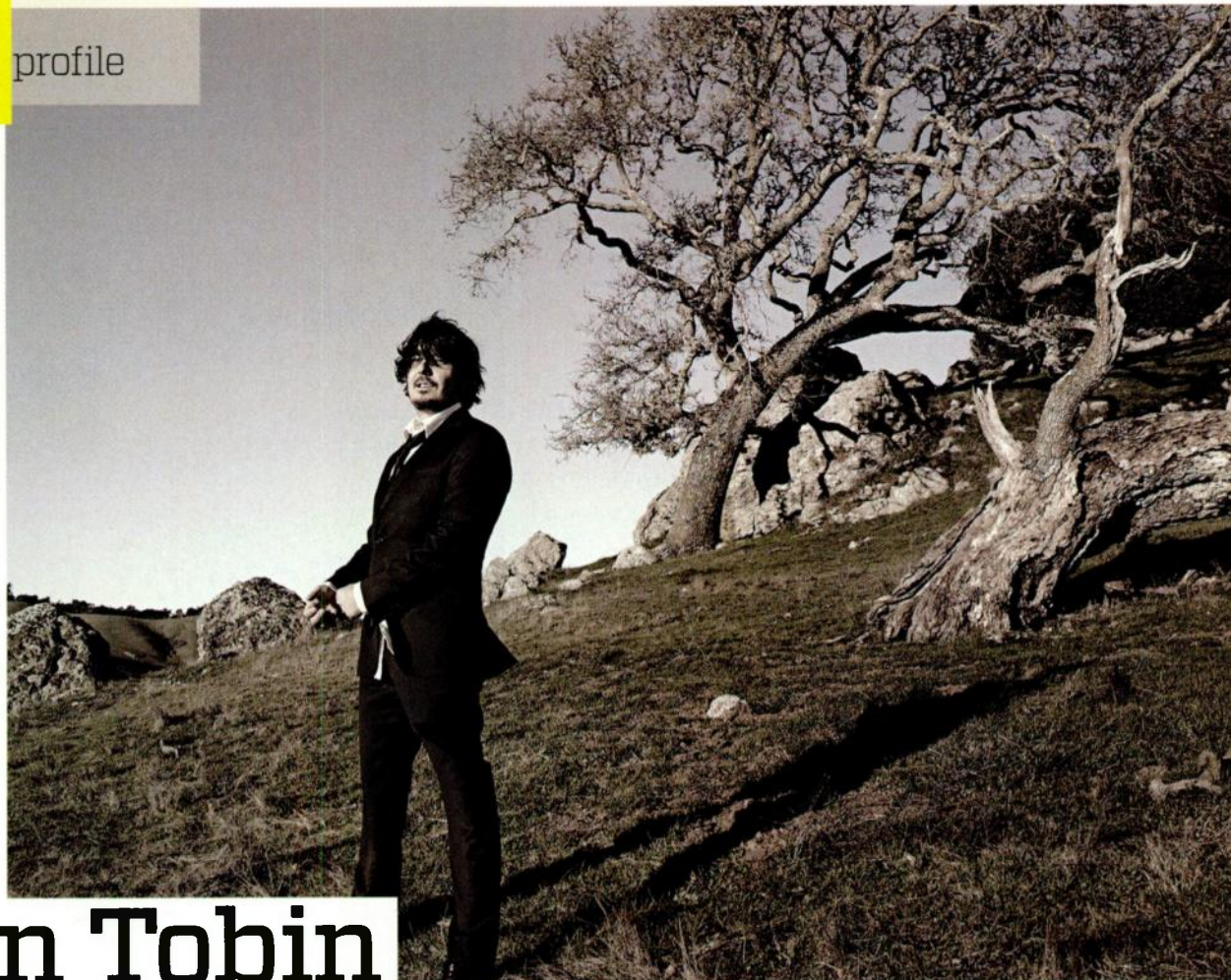
"I lean on Sonnox Plug-Ins"



Wayne Wilkins
Beyoncé, Cheryl Cole,
Leona Lewis

Sonnox
Oxford
Plug-ins

www.sonnoxplugins.com



Amon Tobin

The musical mad scientist digs deep into acoustic modeling, sound design, and synthesis for a radically new musical vision on *ISAM*

BY BILL MURPHY

CAN A steep learning curve get in the way of creativity? Not if you're Amon Tobin. A few years ago, after he moved his home studio from Montreal to a secluded spot north of San Francisco, he opted to take a leap into the unknown. Up until then, Tobin's music had been largely sample-based—bent beyond recognition, to be sure, but still reliant on vinyl sources. That started to change with 2007's *Foley Room*, a lively canvas of environmental “found sounds” and acoustic performances that were chopped, molded, and reworked into songs with synth-y melodies and engine-like rhythms. Now it was time for the next level.

“I spent over a year just educating myself about synthesis,” Tobin explains. “I wanted to make sound design a part of the music, and vice versa—something more than just creating samples. And the starting point was based on the idea of trying to build playable instruments out of anything I can find.”

ISAM (Ninja Tune, 2011), or Invented Sounds Applied to Music, isn't highbrow *musique concrète*, but it's a far cry from the jazzy drum-and-bass blowouts that won Tobin such a cult following in the late '90s. Now he can take *any* sound—rustling paper, a creaking chair, a plucked rubber band, even

his own voice—and spectrally analyze and process it inside a high-octane Kyma X system, sometimes augmented with GRM Tools or Applied Acoustic Systems plug-ins. He then “plays” the MIDI-mapped result on a Haken Continuum fingerboard controller and builds sequenced tracks on Cubase.

“I didn't concentrate on doing elaborate field recordings,” Tobin says. “In fact, I did several tracks where I didn't leave the studio at all. I just looked around the room to see what I could use. A lot of the time those sounds were mixed with synthesizers or multi-sampled instruments, but I quite liked the idea of keeping it simple. Once you take a sound and convert the waveform into its different sines and harmonics, you have an awful lot of room to maneuver.”

If Tobin sounds cagey about some of the moves he made, it's only because his approach to composing is so improvisational at its core. But *ISAM* does have its signposts. The Rhodes-like melody and airy strings that emerge from the pulsing chaos of “Journeyman” are loosely based on sounds designed by Edmund Eagan specifically for the Continuum. Mellotron and flute emulations form the basis of “Dropped from the Sky,” with the song's psychedelic vocal harmonies giving a nod to the Beatles'

React. Revolve. Record.

The new multi-pattern Reactor pushes the envelope of modern microphone performance and design while making multiple mic setups a breeze.

FEATURES

- Large-diaphragm premium condenser capsule
- Three recording patterns: Omni, Cardioid, & Bi-directional
- Swivel head allows for flexible placement and multi-mic positioning (like Mid/Side, X-Y)



- Unique selection method with magnifier for easy toggle
- Fully discreet, Class A solid state components
- LED backlit pattern selection
- Simple pop filter installation
- Includes custom designed storage case and shockmount



Microphones

www.bluemic.com/reactor

©2011 Blue Microphones. All rights reserved. Reactor and Blue Logo Oval are trademarks or registered trademarks of Blue Microphones. Options and specifications are subject to change without notice.

World Radio History



“3D” MIDI Control with the Haken Continuum

Introduced by inventor Lippold Haken at the 2004 NAMM show and progressively refined since then, the Haken Continuum is the arguable centerpiece of ISAM. The unit allows MIDI control in three dimensions—X, Y, and Z-axis (keyboard pressure)—and has its own built-in set of sounds designed in Kyma by Edmund Eagan.

“It’s really flexible for getting your fingers inside a sound,” Tobin observes. “With a very small movement, you can control various aspects of it. It’s like having a very liquid and really powerful control over your sounds.”

For a demo by Tobin himself, check out: amontobin.com/galleries/videos/making-sounds-isam.

Revolver period. (Speaking of which, the Björkishly layered female vocals of “Wooden Toy” and “Kitty Cat” are indeed Tobin’s.) On the flipside, the fractured, sci-fi dubstep feel of “Goto 10” and “Piece of Paper” originates with the pliable Continuum control surface, which Tobin tweaks and prods almost as if it were a turntable (see sidebar).

“Everything on the record is moving in a real physical way,” Tobin says. “It’s the same fluidity that you get with actual instruments. Here they just sound synthetic because they are synthetic, and I’m quite fascinated with that. To me it’s all about mixing these worlds of recorded, found, and synthesized sound. I’m not claiming to invent the wheel here, but I had to form a working method that I was totally unfamiliar with, and that really opened up possibilities that I had no concept of before.” ■



More Online

Watch Amon Tobin play the Haken Continuum fingerboard controller. emusician.com/july2011

Better Recordings Start Here



LEARN THE TOOLS

Alfred's Teach Yourself Pro Tools LE

By Michael Demus
Book & DVD

Alfred's Teach Yourself GarageBand

By Mike Lawson
Book & DVD



GET THE SOUND

The Studio Builder's Handbook

By Bobby Owsinski
Book & DVD

The Ultimate Guitar Tone Handbook

By Bobby Owsinski
Book & DVD



MIX & MASTER

The Mixing Engineer's Handbook (2nd Edition)

By Bobby Owsinski
Book

The Audio Mastering Handbook (2nd Edition)

By Bobby Owsinski
Book



BUY THEM TODAY at alfred.com or at any of these fine retailers:

amazon.com

BARNES & NOBLE
NOOKS & LENS

Guitar
Center

Long & McQuade

“Simplicity is the
ultimate sophistication.”

Leonardo da Vinci

oneknob

plugins for pro audio



Brighter. Driver. Phatter. Filter. Louder. Pressure. Wetter. **Better.**

Contact your dealer to save even more. www.waves.com





The Soundtrack Beat Battle

The ultimate
throwdown of
undiscovered
producers

BY MARSHA VDOVIN

HOW MANY ways do young musicians/DJs/producers get discovered? Musician/producer Courtney "Coko" Korinne wanted to do something to help emerging producers and songwriters get into the spotlight, so she created the Soundtrack Beat Battle series in Nashville. Similar to a rapper's freestyle face-off, 14 select producers from all over the world make CDs filled with their own music tracks and play some of their best material in front of a live audience, and three judges. The judges usually include a celebrity artist, a label rep, and an established producer—past judges have included Bryan Michael Cox, Nitti Beats, and representatives from Atlantic, Universal, and J Records.

Watching people onstage playing CDs may not sound that engaging, but Korinne explains,

"A lot of people think, 'Okay, a producers' beat battle, that doesn't sound fun. It just sounds like somebody just presses Play and stands there.' But if you watch some of the videos we have up on our site or YouTube, you see that they actually 'perform' their beats, so if a guitar part is coming in, they're jumping around playing air guitar, or if something thunderous comes in, they pound their fists, and make wild facial expressions. They really can get the crowd into it."

Now in its second year, The Soundtrack Beat Battle takes place bimonthly at the Limelight Entertainment Complex in Nashville, with a Grand Prize winner selected at year end. These winners score a variety of cash and product prizes, but most importantly, they get the chance to produce an album and

20SERIES REBATE



\$50 REBATE



AT2050

Three switchable polar patterns: omni, cardioid, figure-of-eight

\$30 REBATE



AT2035

Large diaphragm for smooth, natural sound and low noise

\$20 REBATE



AT2041SP

Studio Microphone Pack: AT2020 side-address condenser and AT2021 small-diaphragm condenser

\$10 REBATE



AT2020

Ideal for project/home-studio applications

\$10 REBATE



AT2020USB

Side-address studio condenser with USB digital output (Windows and Mac compatible)



Visit audio-technica.com
for details and rebate form.

For products purchased between
June 1, 2011 and August 31, 2011.

 **audio-technica**
always listening



“I was tired of people telling me that there was no way for an urban artist to get discovered in Nashville”

—Courtney Korinne

video for that year’s celebrity rap artist, to be sold on iTunes and distributed to DJs across the country.

Korinne emphasizes that the goal is to get the producers to another level within their career. “Some beat battles are just for entertainment: They just have them, you get on the stage and perform, that’s it, then you’re on about your business. We don’t want to just host a beat battle and send the winner home with a prize. These producers need placement opportunities that will spring forth their career. They need to network and receive as much exposure as they can—that’s our main focus.”

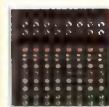
The Soundtrack Beat Battle was inspired by Korinne’s own experience working as a producer and musician. Originally a drummer, she was soon making beats for urban, hip-hop, and R&B artists, but she found that she wanted to get out from behind the scenes but didn’t want to leave her home in Nashville. Inspired by similar beat battles in NYC and LA, she decided to start her own showcase in town.

Hip-hop in Nashville? Not necessarily what you might expect from the country music capital. But these days, Nashville is a melting pot for all types of music from gospel, pop, rock, and soul to hip-hop and R&B. The Soundtrack Beat Battle attracts people from all cities over the East Coast and the outh, including Atlanta and New Orleans.

“I was tired of people telling me that there was no way for an urban artist to get discovered in Nashville,” commented

Korinne. “Everyone suggested that I should move to a bigger city. But I knew that we had just as much talent here in Nashville as any other place. Someone just needed to bring the record labels here and let them witness for themselves. Since this beat battle has launched, the music industry reps have been blown away.”

Beat battle prizes are impressive: The grand prize winner wins \$2,500 in products from Big Fish Audio and a pitch meeting with the vice president of urban A&R at Sony/ATV Music Publishing, plus \$1,000 in cash and a feature in *Electronic Musician*. Topping it off, the grand prize winner will produce a record and shoot a video with New York rapper Mims (“This is Why I’m Hot”); the song will be sold on iTunes and distributed to 50,000 DJs across the country via Digiwaxx. The next battle is July 20th; learn more at soundtrackbeatbattle.com/. ■



More Online

Watch videos of recent Beat Battles.

emusician.com/july2011



Courtney “Coko” Korinne

CMS40



"It was a **WOW**
moment from
the beginning."

Review English - MIX Magazine

"Nothing short of
MIRACULOUS"

Over Karlsruhe - Future Music



CMS 40 - \$450/ea

Focal Professional CMS 40

Joining the critically (and real-world user) acclaimed CMS 65 and CMS 50, is the ultra new, ultra compact CMS 40 Active Monitor. And when we say compact, we really mean it. Measuring no more than 9" high and featuring front porting, it can be placed almost anywhere - even flat against a wall. Yet don't let its diminutive size fool you, this baby packs a mighty big punch with a market leading 25 watts Class AB power.

visit www.focalprofessional.com to find a focal specialist near you.

Focal Professional is distributed by Audio Plus Services - www.audioplusservices.com - 800.663.9352



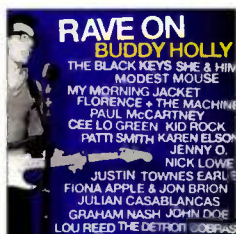
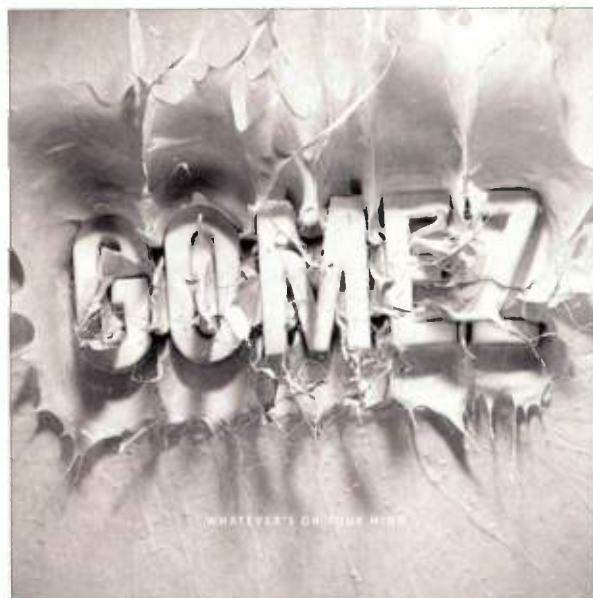
Gomez

Whatever's On Your Mind

ATO RECORDS

REMEMBER THE House episode when the good doctor takes an LSD-enhanced shower to the spaced-out strains of "Get Miles" by Gomez? This album, resplendent in its summery indie-pop sheen, isn't anything like the band's 1998 debut, but there's a lot going on in the background to appeal to the acid dreamer in all of us. From the scratchy programmed percussion of "Just As Lost As You" to the bouncing synth stabs of "The Place and the People" and the sweeping Mellotron-like textures of "That Wolf" and "X-Rays," atmosphere here is king.

BILL MURPHY



Various *Rave On Buddy Holly*

FANTASY/CONCORD

Forget any pre-conceptions: The remakes on this eclectic 75th-birthday tribute to Buddy Holly are as visionary as the originals. The vibe is fresh and experimental, while remaining reverent. Plenty of ear candy here: Patti Smith's "Words Of Love" is breathtaking with its dreamy synth tones, while Kid Rock's "Well...All Right" features delightful Stax horn section grooves and classy backing vocals. You won't find formulation, with artists as varied as Modest Mouse to Lou Reed checking in with their own spirited interpretations. It's definitely a fun romp through some of the best songs ever written.

CRAIG DALTON



Blackfield *Welcome to My DNA*

KSCOPE

What do prog rockers do when the notes become too much? If you're Porcupine Tree's Steven Wilson, you chill out, slow the beats, and dust off the string synths. Blackfield is as established as PT these days, Wilson ensuring his brand's viability as his fans grow old and gray. But there's plenty here for those seeking their Floyd/Crimson fix. "Go To Hell" plays word games over a 7/4 groove, undulating guitar riffs, and Hans Zimmer-worthy strings; "Rising of the Tide" recalls Yes' Jon Anderson collaborating with Nile Rodgers.

KEN MICALLEF



Dave Alvin *Eleven Eleven*

VEPROC

The latest from Grammy Award-winning singer/songwriter/guitarist Dave Alvin reunites him with a couple of former Blasters bandmates—pianist Gene Taylor and his brother, singer Phil Alvin, who duets with Dave on the humorous "What's Up With Your Brother"—but the musical style on *Eleven Eleven* is more electric blues than rockabilly. Gritty, bleak, evocative—the world of Dave Alvin's songs is dark, but his magical playing and sultry voice elevate the mood.

BARBARA SCHULTZ



The Bo-Kays *Got to Get Back*

ELECTRAPHONIC

The Bo-Kays carry the torch for Memphis soul with surprising success. The record scans like a collection of vintage Stax singles, combining funky instrumentals like the lead track, "Hi Roller" (the name says a lot), and powerful performances by legendary vocalists William Bell, Percy Wiggins, Charlie Musselwhite, and Otis Clay. There's also a spoken vocal (on "Work That Sucker") by former Isaac Hayes guitarist Charles "Skip" Pitts, who's now a member of this superb retro group.

BARBARA SCHULTZ



The Horror *The Horror Wilderness*

TAPETE

Popular Swedish indie rockers hit their stride on their third release, tacking sweet vocals and bittersweet moods to choogling guitars and driving club beats. Lost in a haze of escaped loves and lost chances, their music penetrates your groove spot while achieving wistfulness. "Believe In Magic" pans stereo guitars over an effervescent chorus; "The Forest" recalls The Police's "Walking On the Moon," all low-end rumble and itchy electric strumming.

KEN MICALLEF



When Saints Go Machine *Konkylie*

IK7

This Danish quartet mines a lot of the quirky synth-pop moves that have become *de rigueur* for Scandinavian artists—minimalist beats, coldly Kraftwerkian effects, and elasticized vocals—but they do it with a compositional flair that recalls Brit trance and trip-hop mainstays like Massive Attack, Way Out West, and Zero 7. This isn't to say that Konkylie (literally, "conch shell") sounds unoriginal; the jittery textures of "Parix" and the sci-fi tribal pulse of "Jets," for starters, help bend Nikolaj Manuel Vonsild's already otherworldly voice into even more unusual and alien shapes.

BILL MURPHY

The Workhorse™ ...

Works with the old - Advances the new

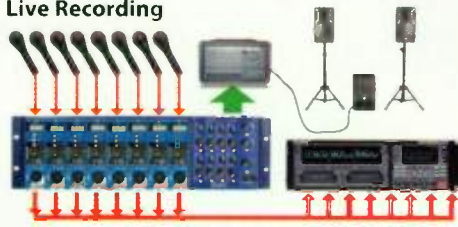


Workstation Interface



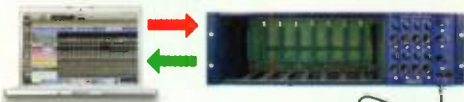
The Workhorse is the perfect analog interface for your workstation. Create the ideal channel strip by selecting modules and feeding them together then audition the mix without latency with your nearfield monitors or via the dual headphone outputs.

Live Recording



Plug in 8 Radial PowerPre™ mic preamps and use the rear-panel D-sub to feed your recorder. Use the XLR outs to feed the PA and the stereo mix buss for headphones and in-ear monitors. Gang two or more Workhorses together for live 24-track recording.

Analog Summing



Prefer analog summing over digital? The Workhorse is equipped with a high performance analog summing mixer that lets you combine tracks without digital artifact. And with Jensen™ transformer outputs, adding warmth to your mix has never been easier!

Today, recording

is all about capturing creativity and creating new sounds that will make a great song stand out. The Workhorse™ is a creative tool designed to do just that.

Unlike previous 500 series racks that only let you route signals using a patch cable, the Workhorse™ opens the door to unlimited possibilities. You can route in series, in parallel, split signals and record direct all at the same time. Add unique modules like the Radial EXTC™ or X-Amp™ to bring in guitar pedals or send tracks back through amps or effects. Let your imagination flow.

The Workhorse™ features eight slots with a built-in 8-channel summing mixer. You can use any standard 500 series module such as those made by API® or Neve™ and with full D-sub connectivity, you are ProTools® ready. Easily fly tracks to and from the Workhorse for the warmth and character of old-school transformer coupled analog. And with a stack of new Radial modules to choose from, you can add even more character to your sonic landscape!

The Radial Workhorse™ – advancing analog audio to new heights.

Radial
engineering
...power tools for power players™

View the Workhorse Video at:
www.radialeng.com/re-workhorse.htm

www.radialeng.com

1588 Kebeet Way, Port Coquitlam BC V3C 5M5 tel. 604-942-1001 email. info@radialeng.com

PowerPre™

100% discreet mic preamp with a transformer coupled output. Three position voicing switch lets you add breath for added clarity, clinical purity when needed or extra beef when the track has to stand out.

X-Amp™

Class-A reamper® equipped with two transformer isolated outputs to stop hum and buzz from entering the system. The X-Amp is the magic tool that lets you achieve astonishing results.

Komit™

The Komit combines old school diode bridge limiting with the very latest in VCA compression. Auto tracking for slow, medium and fast transient response makes getting great compression easy.

JDX™

Tap the signal right from your amp for fat tones reminiscent of a half-stack Plexi and get the consistency of direct patching every time. Works equally well on bass and guitar.

PhazeQ™

Like adjusting the focus on a pair of binoculars, the PhazeQ lets you combine any two tracks and bring them into sonic phase. Think of it as moving your mics around the room by simply turning a dial.

JDV-Pre™

Combination class-A feed-forward instrument preamp and direct box designed to deliver the absolute purity of the instrument without coloration, hype or sonic extension. There is no equal.

EXTC™

Guitar effects routing system lets you add excitement, spice and creative spark to any recording by combining lo-Z tracks with hi-Z guitar effects pedals. Front panel send and return patch points make it easy!

*Also available separately as the Workhorse WR8 Rack and the WM8 Summing Mixer. Visit www.radialeng.com for more info.





Fig. 1 The mic's body is a little larger than some typical stage mics, but remains very portable.

LINE 6 XD-V70 DIGITAL WIRELESS MIC

Reliable wireless operation with a multiple-identity dynamic unit

Wireless mics have a lot going for them: You can stroll into the crowd unencumbered by wires, pass the mic around to fans, and generally, have a lot of fun with not being tied down—when they work, of course. Between

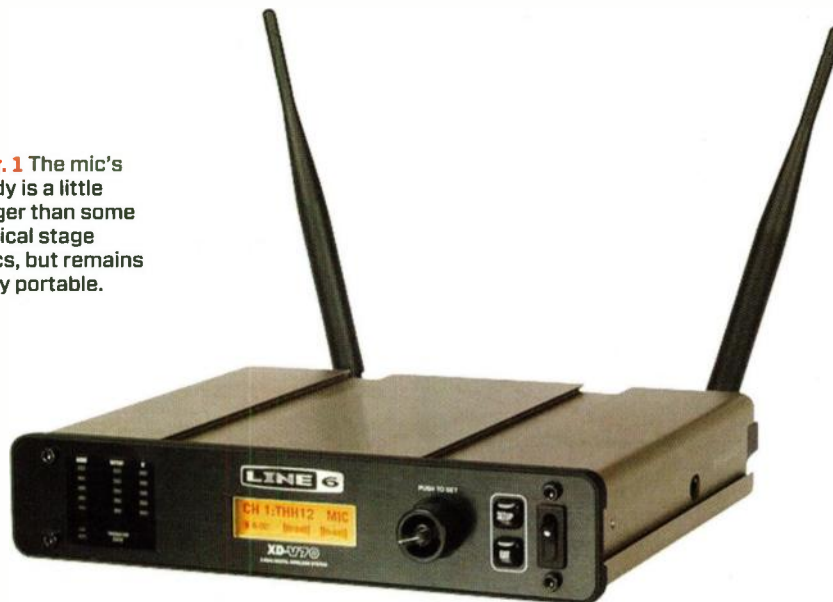


Fig. 2 The receiver is solidly built, and easy to set up.

dead batteries, fades, drop-outs (meaning the RF, not dropping the mic—although that can be an issue!), and receivers that don't really receive, economical wireless mics sometimes have a less-than-stellar reputation. And that's why I never used one, until I had a chance to check out Line 6's XD-V70—my first experience with a digital wireless mic. Now I've become dependent on it.

WHAT IT IS

This is no toy; it's a solidly-built dynamic mic (Figure 1), with several advanced features. You can unscrew the top and replace the capsule with various models from Heil and Shure. The XD-V70 uses the 2.4GHz band, so you won't get interference from broadcasters or other high-power RF transmitters. Although this frequency is used by wi-fi, Bluetooth, and some wireless phones, the XD-V70's signals are encoded using a different protocol, and it ignores other signals. It also spreads the signal over multiple bands and then reassembles it for redundancy, thus preventing dropouts.

PORTABILITY FACTOR

Well, it's a wireless mic . . . duh. Can't get much more portable

than that. As to the receiver (Figure 2), while it's solidly-built, it takes up little space, although of course it needs a cable to go back to your mixer or portable PA, and an AC outlet for the adapter. The carrying case for the mic is durable, well-padded, and has space for backup batteries (two standard AA types). The mic's barrel is a little larger than a Shure SM58, but I don't find it uncomfortable to hold.

SPECIAL SAUCE

It's digital. So what? Here's what: If you go out of range—which is up to several hundred feet with this sucker—it just stops. No noise, hiss, artifacts, or issues: Either it's happening exactly as expected, or it's not happening at all. It also models several different mics, so if you're used to working with an A-T AE4100, Shure SM58 or Beta 58, E/V N/D767, or Sennheiser e835, you'll get the sound you're expecting; the models are surprisingly realistic when A/B'ed with the original. This sounds like a great idea, but at least with my voice, the native Line 6 capsule sounded best, so overall I found modeling to be of limited use. However, you can also consider the modeling as potential

XD-V70 DIGITAL WIRELESS MIC
\$699.99 MSRP

STRENGTHS:

Rugged build quality is well-suited to live performance. Digital technology prevents unpleasant surprises and works reliably. Does mic modeling. Uses standard batteries. Protective, well-padded mic case.

LIMITATIONS:

The mic user interface is teeny (unlike the receiver's easy-to-read display), but you only have to set things up once per gig (at most).
line6.com

EQ if you want a brighter or darker sound, which could make it easier to tailor the sound for something like a portable PA if you habitually equalize your voice and the PA restricts you to something like a high and low shelf. Also note that there are no pops or clicks when you turn the mic on or off—a simple, but useful, talent.

CONCLUSIONS

The XD-V70 works reliably, sounds great, has excellent build quality, and made it so I no longer look at wireless mics with doubt and suspicion. It definitely costs more than entry-level analog models, but easily justifies its price tag.



More Online
Download a white paper on digital wireless technology.
emusician.com/july2011

The image shows two professional Shure KSM microphones mounted on boom arms in a recording studio. The microphones are silver and feature a distinctive spider shock mount. The background is a blurred studio environment with wood-paneled walls and a cello visible on the left. The lighting is warm and focused on the microphones.

THE UTTERLY GLORIOUS FUSION OF TECHNOLOGY AND ARTISTRY.

SHURE KSM MICROPHONES Exquisite craftsmanship and exceptional engineering that sets a new standard of clarity and control. Ultra-sensitive, with extremely low self-noise and superior handling of high sound pressure levels. Pure audio mastery. Period.

www.shure.com/americas

© 2011 Shure Incorporated

SHURE[®]
LEGENDARY
PERFORMANCE™

World Radio History



Fig. 4 The Vyzex editing software is not a “bundled bonus,” but an essential part of the package.



Fig. 3 The four knobs near the middle of the front panel are all about realtime control.

**VENOM
SYNTHESIZER**
\$599.99 MSRP

STRENGTHS:

Optimized for live performance. Excellent editing software. Plenty of I/O can make this the hub of a live act. Compact. Includes an audio/MIDI interface—convenient if you want to combine Venom with a laptop setup.

LIMITATIONS:

If you're looking for a workstation, this isn't it: 12 voices, no ROMpler sounds, no sequencer. Panel lettering can be hard to read under low light. No aftertouch. m-audio.com

M-AUDIO VENOM SYNTHESIZER

It's not just portable, it's engineered for performance applications

Before the *EQ/EM* merger, *EM* ran an online-only Venom review in January 2011 (http://emusician.com/midi/avid_maudio_venom_review/index.html), approaching the evaluation from a synthesis/studio standpoint. So it's time for the other shoe to drop, and cover the other—and some would say even more important—part of its split personality: live performance.

First, what makes for a live performance keyboard? It sometimes seems that simply means, “you can lift it.” But Venom made this roundup because there are several design decisions that were clearly intended to optimize its operation in a live performance context. Given the price, tradeoffs must be made—

but M-Audio made sure those tradeoffs tilted in favor of live performance instead of following the workstation paradigm.

WHAT IT IS

Venom is a compact keyboard (Figure 3) that eschews the obligatory sequencer and zillions of voices in favor of a simpler synth philosophy for live performance. There are only 12 voices—a small collection by today's standards. For performance, though, you *do* have only ten fingers. You might think Venom's multi-timbral mode (four timbres) would stress out the voice count, but the way it's intended to be used, this isn't as big an issue as it might appear because you'll often use one or more timbres for a limited number of voices (e.g., bass, drums).

Surprise: It's almost like a DJ machine, too. You can wind up the four voices with drums (there are lotsa included drum sets—if nothing else, this is a great drum tone module), nasty synth bass, some cool arpeggiated figure (yes, there's a sophisticated

arpeggiator), and then play a lead line on top of it.

PORTABILITY FACTOR

Venom has a four-octave keyboard, and is easy to carry. The case is plastic; don't drop it—but this construction does keep the weight down. The wall wart (no internal power supply) also reduces weight, but it's a good idea to carry a spare—just in case.

SPECIAL SAUCE

Much has been made of Venom's ability to produce nasty, dance/industrial/electro-oriented sounds. That's true, but it can make conventional synth sounds as well—what you won't find are pianos, French horns, and other ROMpler-type instruments.

One of the most clever design decisions is conceding that you won't be able to program everything from the front panel, so it doesn't even try. Instead, you get the superb Vyzex cross-platform editing software (Figure 4) so you can tweak sounds, big-time, then bring the synth to the

gig and use the four easy-to-grasp knobs and button (along with arpeggiator, transpose buttons, pitch bend and mod wheels, etc.) to perform realtime performance moves with six banks of strategic parameters. This cuts down on one of the biggest expenses—hardware—without limiting your ability to shape sounds offline.

And this frees up bucks for generous I/O: mic and instrument inputs, RCA external audio in (for CD players etc.), 5-pin MIDI in and out, stereo audio out, expression and sustain pedal ins, headphone out, and even a USB audio/MIDI interface.

CONCLUSIONS

Another synth? No. This is a performance instrument with a personality, and it's a personality I really like. I haven't had this much fun with a hardware synth in a long time, and the price is certainly right.

More Online
Catch a DJ set/demo video of the Venom by Craig Anderton. emusician.com/july2011



Fig. 5 No, this photo hasn't been cropped; the screen is actually that thin.



Fig. 6 The body is really thin. How thin? This thin.

APPLE MACBOOK AIR

The next-generation laptop makes the live performance cut

I hadn't paid much attention to the MacBook Air. It looked like a glorified netbook, which certainly has its place . . . but wouldn't you need a MacBook Pro if you were a performing laptop musician? Not any more, because it seems Apple injected an iPad with MacBook Pro steroids—and if you're looking for a truly portable live performance computer experience, the MacBook Air is tough to beat.

WHAT IT IS

MacBook Air is the smallest, most portable computer in the MacBook line and offers models with 11" and 13" screens; this review covers the 13" model shown in Figure 5, which I'd strongly advise for stage use.

When the original MacBook Air was introduced, the lack of an optical drive was considered

a serious limitation, but with the new model having dual USB 2.0 ports (one on each side—see Figure 6) and with so much software being downloadable (and no program in recent memory requiring periodic CD insertion as copy protection), the point is moot and the result is one less mechanical concern. MacBook Air has Apple's famous industrial design, but it also benefits from aluminum unibody construction; it's not just a pretty face, but a comparatively tough one that weighs in at 2.9 pounds.

PORTABILITY FACTOR

The processor is an Intel Core 2 Duo processor—same as the original MacBook Air—which is powerful enough for guitarists to run amp-sim software with sufficiently low latency (I had no problem running Guitar Rig), or keyboard players to load up a bunch of virtual instruments as well as MainStage 2 (which it can also run). If you have downtime in the hotel room, yes, you can run Logic 9 without hiccups and as expected, GarageBand comes pre-installed,

although Logic Express can be pre-installed optionally at extra cost. Native resolution is 1,440 x 900 pixels (16:10), which is fine for most music programs.

SPECIAL SAUCE

Don't like hard-drive whine? MacBook Air is built around Flash memory, so there are no moving parts and there's no noise (other than when a fan kicks in under heavy use), making it tempting for studio as well as stage—and there's no waiting for a hard disk to spin up, either. Solid-state memory is also far more rugged than a hard drive, which is important for mobile musicians; I've played gigs where the bass/sub was so loud that laptops literally bounced on the table, which does not make hard drives happy. And taking a page from the iPad, the trackpad is multitouch. That doesn't mean your applications can take advantage of it yet, but the capability is there for when they do. The one bummer: no backlit keyboard—I guess you'll need to dedicate a USB port to something like a Mighty Bright USB LED light.

MACBOOK AIR

(13" DISPLAY, 1.86GHZ, 2GB RAM)

\$1,299 MSRP

(128GB FLASH STORAGE)

\$1,599 MSRP

(256GB FLASH STORAGE)

STRENGTHS:

More powerful than the original MacBook Air. Light and compact. Resistant to vibration thanks to Flash memory and no optical or hard drive. Two USB 2.0 ports. Very readable display, and video port for driving external displays.

LIMITATIONS:

No backlit keyboard. No FireWire or Ethernet connector. Native vertical screen resolution limited to 900 pixels.
apple.com

CONCLUSIONS

As with most Macs, you can configure the MacBook Air within certain parameters—1.86 or 2.13GHz processor, 128 or 256GB of Flash RAM, 2 or 4GB of system RAM. For performing you'll probably want 4GB of system RAM and if you can swing the bucks, 256GB of storage; this of course raises the price of entry. Still, I was quite surprised by the level of performance from this Lilliputian computer. They say small is beautiful, but in this case, it's powerful enough (and the build quality inspires enough confidence) for live performance and DJing—and those are pretty demanding tasks.



More Online
Learn more about the MacBook Air.
musician.com/july2011

LUST

roundup



Fig. 7 It's hard to believe this keyboard weighs only 15 pounds, but it does.

CASIO CTK-7000 PORTABLE KEYBOARD

It can't make up its mind what it is... which is a good thing.

Synthesizer? ROMpler? Workstation? Songwriting tool? One-man-band

keyboard for the local Holidome? Soundtrack generator? Live performance keyboard for people so hip they mock people who think Casio is unhip? Answer: All of the above. This is one of those head-scratchers where first you wonder how they fit all that stuff in there, then you wonder who at Casio will get fired for setting the price.

WHAT IT IS

The CTK-7000 (Figure 7) is the 61-

key version of the semi-weighted, 76-key WK-7500, but the feature set for both is identical. There are 800 onboard tones, 64 notes of polyphony, and 250 rhythm patterns built in, but the rear panel gives clues about what's going on here: 1/4" dynamic mic in, 1/4" instrument in, 1/8" jack stereo line in, 1/4" stereo headphone out, 1/4" left and right outs, 1/4" sustain/assignable pedal jack, and USB port for cross-platform audio/

CTK-7000
\$599.00 MSRP
WK-7500
\$699.00 MSRP

STRENGTHS:

Exceptional value. Full sequencer. Can record audio and backing tracks to SD card. Mic and instrument inputs. Built-in speakers. Light weight. Can be battery-powered. Versatile collection of sounds.

LIMITATIONS:

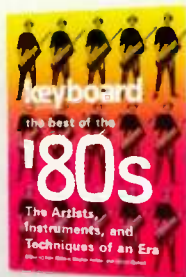
No physical MIDI connectors (but USB over MIDI). No aftertouch. Mod button instead of mod wheel.
casio.com

MIDI data transfer.

At heart, the CTK-7000 is an arranger keyboard. There, I said it.

THE BEST INTERVIEWS FROM 35 YEARS OF **keyboard**®

THE MUSIC, THE VISIONARIES, THE PLAYERS, AND THE GEAR



THE BEST OF THE '80s The Artists, Instruments, and Techniques of an Era

Features 20 interviews with noted players, producers, and pioneers like Jimmy Jam & Terry Lewis, Duran Duran's Nick Rhodes, Peter Gabriel, The Human League, Chick Corea, and Frank Zappa.

ISBN 978-0-87930-999-2 \$14.99



CLASSIC ROCK

It's all here: the gear, the songs, the road stories, and the inspiration behind some of the greatest songs of the '60s, '70s, and '80s.

ISBN 978-0-87930-952-7 \$14.99



SYNTH GODS

This book spotlights artists who changed the course of music history and inspired generations. Features in-depth profiles of Jan Hammer, Wendy Carlos, Rick Wakeman, Brian Eno and many more.

ISBN 987-0-87930-930-5 \$19.95

25% off at halleonardbooks.com!
USE PROMO CODE NY11

**Backbeat
Books**
AN IMPRINT OF
HAL•LEONARD®

PrismSound

Portable, versatile and
unbeatable sound!
*Joshua Blair and
Mark Ronson (Sphere studios)*

The only interface for the job

ORPHEUS
Professional FireWire
audio interface

When looking for a high quality I/O solution. There is only one choice.

Orpheus provides Prism Sound's world renowned performance, sound quality and state-of-the-art clock technology in a dedicated FireWire unit compatible with both Windows and MAC OS X.

Orpheus features line, microphone and instrument inputs, selectable RIAA Equalization for turntables, a built-in premium-quality monitoring mixer and concurrent ADAT and switchable S/PDIF or AES3 digital I/O plus support for outboard MIDI devices. The Microphone inputs include MS matrix processing and dual headphone outputs are provided each with their own volume control.



Contact us now to arrange *YOUR* Orpheus demo.

sales@prismsound.com www.prismsound.com
UK +44 (0)1353 648888 USA +1 973 983 9577



METALiANCE
CERTIFIED



Fig. 8 The larger-than-expected display makes navigation relatively easy.

But this isn't just for playing "Blame it on the Bossa Nova," although I suppose you could if you wanted. For songwriting, you have instant backing tracks that make it easier to come up with melody lines and lyrics; I use arranger keyboards to do soundtrack beds in genres where I don't normally go. (Don't tell anyone.) They can also give you ideas at the press of a button.

PORTABILITY FACTOR

Two words: 15 pounds. Three

more: Batteries or AC. Four more: Two built-in speakers. Yes, you can take it to the beach, or on top of a mountain, and hear what you're playing on speakers or headphones. Furthermore, you don't have to bring along a control surface, as there are nine sliders for realtime control—specifically, mixing sequencer tracks or playing with the organ sounds' virtual drawbars. By the way, if you crave 76 keys, the WK-7500 weighs only 19 pounds.

SPECIAL SAUCE

The CTK-7000 can record your mic or instrument input along with the sequencer's backing tracks to an SD or SDHC card (2 to 32GB), so if you do hit songwriting pay dirt, you can catch that inspiration fast. The sequencer is no slouch, either: 16 tracks, along with a system track for recording style and chord changes if that's your thing. Nor are you limited to recording, as there are multiple editing options—including event note editing down to individual notes—and a decent-sized backlit LCD (Figure 8), along with a transparent operating system, to facilitate tweaking.

A second 8-track pattern sequencer lets you create patterns (with six sections—intro, end, variations, etc.) if you want

to go one better than a drum machine backing and do custom arrangements.

CONCLUSIONS

Go ahead, make your Casio/arranger keyboard/built-in speaker jokes. They'll be funny until you actually get your hands on one of these. No, it's not necessarily going to replace a big-bucks workstation, but the amount of performance capabilities packed into a keyboard at this price and weight is further proof that as long as you're not buying food, gasoline, clothes, or an education, your dollar can still go pretty far these days. ■



More Online
Download the CTK-7000 and WK-7500 manuals.
emusician.com/july2011



Your Own Music on iTunes™ & More

Keep All Your Rights, Get 100% Of The Royalties

Upload audio as high bit rate .mp3 or in .wav or FLAC format

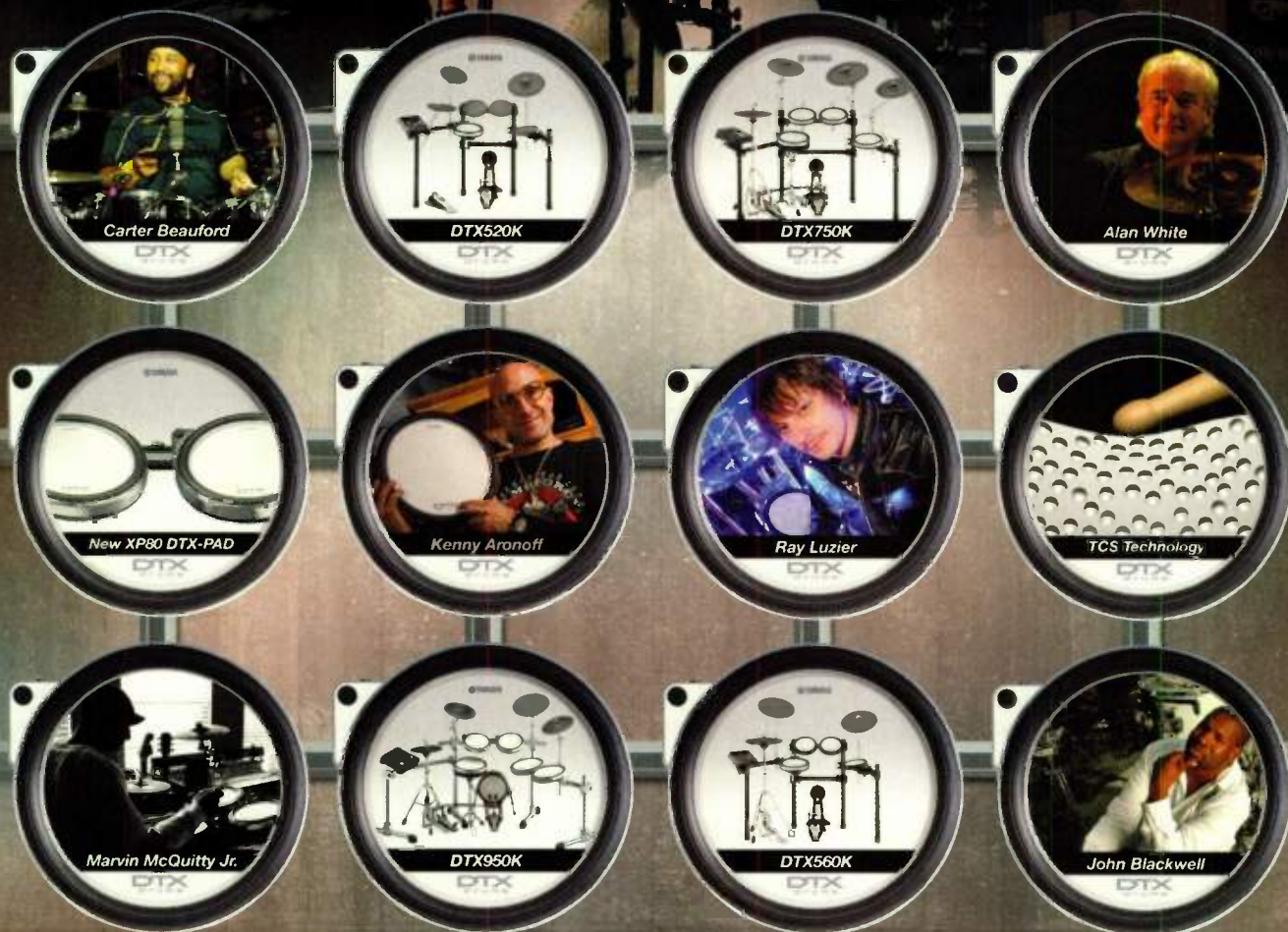
- Live Times As Fast As 24-72 Hours
- Customizable, Detailed Sales Reports
- 25 Free TuneCore Media Players
- Free Daily/Weekly iTunes Trend Reports
- Free Exclusive iTunes Artist Ping Page

\$9.99 Singles & Ringtones
\$49.99 Albums

JOIN NOW
FREE ACCOUNT

GO TO TUNECORE.COM/EM

There's Only One Thing These Great Drummers Have in Common.



The Yamaha DTX-PAD is the Only Electronic Drum Pad They Will Play.

They are each unique artists who play different styles of music using different acoustic drums with different sticks, heads and cymbals, but they all agree on one thing: The Yamaha DTX-PADs come closer to the dynamic response and feel of a real drum than any other e-drum on the market.

Yamaha DTX-PADs with Textured Cellular Silicone heads are now available in a wide range of DTXdrum kit configurations starting at around a thousand dollars.

DTX drums

Visit: www.4wrd.it/DTXEM2



Scan QR code for DTX information



The Loudbox Mini is a 60-watt, two-channel acoustic-voiced combo amp that includes reverb and chorus, housed in a compact and attractive cabinet.

Fishman Loudbox Mini Acoustic Amp

60 watts of acoustic power in a compact package

BY JON CHAPPELL

FISHMAN IS a manufacturer whose reputation is built on the specialized task of amplifying acoustic instruments, from pickups to effects to amps to P.A. systems. The Loudbox family of amps accommodate both instrument and microphones, and are designed for stage, studio, and home use. All provide mixer-like functions for solo and small-ensemble acoustic-based acts. The Loudbox Mini (\$461.46) is the smallest and least expensive of the line, but just because it's a mini does not mean it's not mighty. I was struck by how well Fishman combined the key factors of size, power, and price into one great-sounding unit.

It's a Looker The Loudbox Mini represents an aesthetic departure from Fishman's previous industrial black-box scheme. This understatedly handsome unit just looks more "acoustic," with its attractive blends of wood-colored browns and beiges and black highlights, and is very much at home placed between an acoustic bass and a dreadnought guitar. The front panel is nicely beveled, positioning the knobs at an optimal viewing angle, whether the amp resides on the floor or is perched on a stand or stool.

Ergonomic Operation Two independent channels allow for instrument and XLR mic inputs. Each channel has separate gain Low, High, and Reverb controls; the instrument channel features additional Mid and Chorus, plus a phase switch. At the far right is a Master level control. The reverb and dual-mode chorus (Mild and Thick) both sound very good, and are tailored to acoustic settings. I found them musically useful even in their extreme ranges.

The back panel is also placed at the top of the amp and is beveled as well—a nice touch that facilitates optimum accessibility. In addition to the power cord and power switch, there's an XLR output and two Aux inputs—one 1/4", one 1/8" stereo mini. The aux jacks are quite an innovation, as both can be used simultaneously. You could run your MP3/CD player into the mini jack and then use the 1/4" for an external preamp signal (controlling the level at the source). Effectively, this arrangement turns the Loudbox Mini into a three-channel amp with an aux input. With 60 watts and a two-way speaker system (a 6.5" woofer and a 1" tweeter), the Mini can well-accommodate this setup.

No bigger than a lunchbox, the Fishman Loudbox Mini was an able addition to my acoustic rig, far more tailored, well-voiced—with Fishman's excellent EQ—and suitable than a powered speaker or a conventional combo amp. It can be placed almost anywhere because of its small size and felicitous look, and the gorgeous, clean sound effortlessly fills the room. It's an ideal companion for conventional stages, restaurants, street gigs, and, of course, the rehearsal studio. ■

SUMMARY

STRENGTHS: A surprisingly powerful and compact two-channel amplification system for an acoustic instrument and dynamic microphone; dual aux-in jacks; loud, clear sound; excellent EQ and voicing for acoustic guitars and other acoustic stringed instruments.

LIMITATIONS: No headphone jack, no phantom power.

\$461.46 MSRP
fishman.com

Isn't your source colorful enough?

Since 1995, Grace Design has been building some of the most transparent and musical pro audio gear available. Pure, warm, dirty or clean, our mic preamps are designed to simply reveal the color that's already there.

m501 – air and detail for the 500 series rack. Our signature transparent mic preamplifier circuitry is the perfect palate cleanser for all the high calorie treats in your lunchbox.

m101 – the original high performance single channel mic preamplifier. Huge bandwidth and headroom to capture all the details of your source. Our exclusive ribbon mic mode makes it the first choice for gain hungry ribbons.

m103 – the complete input solution. Our transparent, musical microphone preamplifier coupled to a silky smooth 3 band EQ and a sweet, open optical compressor. The m103 transforms ordinary tracks into beautiful recordings.



GRACE
DESIGN

www.gracedesign.com

World Radio History



SPL Passeq emulates the high-end, analog passive equalizer by the same name, adding an M/S mode.

SPL Passeq Analog Code Plug-in

Software EQ with M/S processing

BY MICHAEL COOPER

WHEN I reviewed the hardware incarnation of the SPL Passeq dual-channel passive equalizer for *Electronic Musician's* sister publication *Mix* four years ago, I was totally blown away by its sweet, natural, and round sound. Now SPL has meticulously modeled the sonic performance of that equalizer to create the Passeq Analog Code® plug-in. The company also added mid-side (M/S) processing capabilities to the plug-in, a boon to mastering engineers and something the hardware model lacks.

Like passive analog equalizers, the Passeq plug-in uses separate controls to boost and cut. The different inherent Q factors for each of its 72 frequency selections enable you to craft complex EQ curves by simultaneously boosting at one frequency and cutting at an adjacent one.

None of Passeq's filters are narrow enough to effect notch-filtering or other surgical tweaks. The plug-in's forte is broad tonal shaping. True to the hardware version, none of the EQ sections have separate bypasses, an ergonomic drawback.

Like the Real Thing? I had used the hardware Passeq on my mix bus four years ago while mixing an acoustic ensemble. Referring

to my meticulous notes for one song, I recalled essentially the same mix setup, using the Passeq plug-in in lieu of the hardware unit. (For technical reasons, the chaining of analog compression and Passeq had to be reversed for the new mix.)

By slightly altering my original boost and cut settings in the plug-in, I arrived at a superb sound that was very close to what I had achieved with the hardware Passeq four years earlier; the hardware evinced a little more depth, nuance, and transparency. A/B'ing the plug-in's active and bypassed states, highs sounded sweeter, mids smoother, and lows rounder with Passeq equalization applied. It sounded as if all the tracks had been recorded using better mic preamps—and all my preamps are high-end.

On mastering sessions, M/S mode allowed me to make mixes wider, apply shimmering highs solely to stereo elements and lend bottom-end heft to only center-panned tracks like kick and bass. I only wish Passeq included separate solo functions and meters for mid and side channels.

Passeq also sounded great on individual tracks. Acoustic guitar sounded smoother and sweeter, kick and bass guitar rounder and meatier.

The Big Picture Passeq won't handle all your equalization needs. You'll need an additional equalizer or two to do high-pass, low-pass, notch, and bandpass filtering. Passeq is also much subtler than the vast majority of equalizers—you'll find yourself using a lot more boost and cut before you hear it working. But if delicate analog-like smoothing, a round bottom, and silvery-sweet highs are what you're after, Passeq is your EQ. It sounds superb. ■

SUMMARY

STRENGTHS: Superb sound quality. 72 frequency selections. M/S mode included. Modest price.

LIMITATIONS: No separate bypasses for EQ sections. No solos or meters for mid and side channels. Can't do low-/high-pass, notch or bandpass filtering.

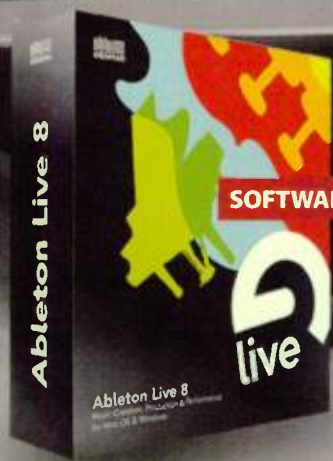
\$199 MSRP
spl-usa.com



The Professional's Source™



COMPUTERS



SOFTWARE



INTERFACES

MICROPHONES

TOOLS FOR CREATION

When it comes to the B&H sales staff, knowledge and experience are a given. We offer unparalleled expertise and solutions for the Pro Audio professional.

Visit our SuperStore in the heart of NYC, give us a call, or browse our newly expanded Web site featuring live assistance, and experience for yourself the most knowledgeable and helpful sales staff anywhere.



420 Ninth Ave, NYC
Visit Our SuperStore



800-947-5509
Speak to a Sales Associate



bhphotovideo.com
Shop conveniently online



Geist's Song Mode, top right, lets you drag and layer patterns across a timeline.

FXpansion Geist 1.0.3

Software-based sampling instrument

BY MARTY CUTLER

AS STURDY, self-sufficient rhythm production centers, the hardware groove sequencer is hard to beat, but feature-wise, software equivalents—especially FXpansion Geist, with its MPC-like design and richer feature set—easily tip the balance toward the virtual world. Geist includes AU, VST, and RTAS versions (Mac), and VST and RTAS (Win).

Geist's operational roots originate in FXpansion Guru. Like most MPC-fashioned gadgets, Pads trigger samples, or collective patterns in a Scene, which are then assembled in song form. Anyone familiar with Guru, any MPC, or a drum machine will have little trouble getting up and running. Geist's clean, focused displays improve on Guru; for instance, the larger, easier-to-navigate retractable browser doesn't occupy space on the main work surface.

Switch Hits Pattern-based at its heart, Geist's intuitive and supremely flexible Song Mode reminds me of MOTU Performer's Chunks page, in which you can freely drag and layer sections of patterns across a timeline. Geist's ability to switch between pattern-based sequencing to a linear workflow makes the process interesting.

Geist's Sampler page is miles ahead of its

hardware kin. Besides external sources, you can resample from Geist tracks, or capture audio output from DAW tracks. With a couple of audio loops in Logic, I inserted the included Spitter plug-in, which routes the audio tracks to the Geist Sampler. Creating transient-sliced grooves required moving the slice markers around for smoothing grooves. Sometimes, numerically dividing sample slices did the trick. The sampler encourages experimentation; simply triggering phrases I dragged to the pads almost always yielded great results. Unfortunately, there seems to be no direct way to sample virtual instruments in the standalone version.

Slick Tricks The Multi Graph view is one of the slickest modulation schemes I've encountered. With a few drags of the mouse, and in seconds, I was able to create panning, filter squelches, buzz rolls, reverse playback, and pitch changes for each pad's sounds. I painted in some modulations and inserted a slew of interesting preset modulation shapes.

Still, there's room for improvement. Geist standalone defaults to 4/4 time; create other time signatures manually by altering the pattern length and/or using triplet time for step lengths. Guru came with many more preset groove templates, but Geist's method of creating them is far more flexible. Think of Geist as being more about facilitating groove-preset creation than giving you multiple "canned" options. I miss some of Guru's excellent ethnic loops and creative, circuit bent kits. Otherwise, Geist is a deep and fun program you can dive into without short-circuiting your creative muse. ■

SUMMARY

STRENGTHS: Intuitive workflow. Brilliant Multi-Graph modulation. Samples external sources, resamples its own output, or DAW tracks. Song Window adds a visual grasp of song structure.

LIMITATIONS: Standalone can't record virtual instruments; slightly tricky to program time signatures other than 4/4. Not as many groove template presets as Guru.

\$249 MSRP
\$125 CROSSGRADE FROM GURU
 fxpansion.com

Chuck Leavell

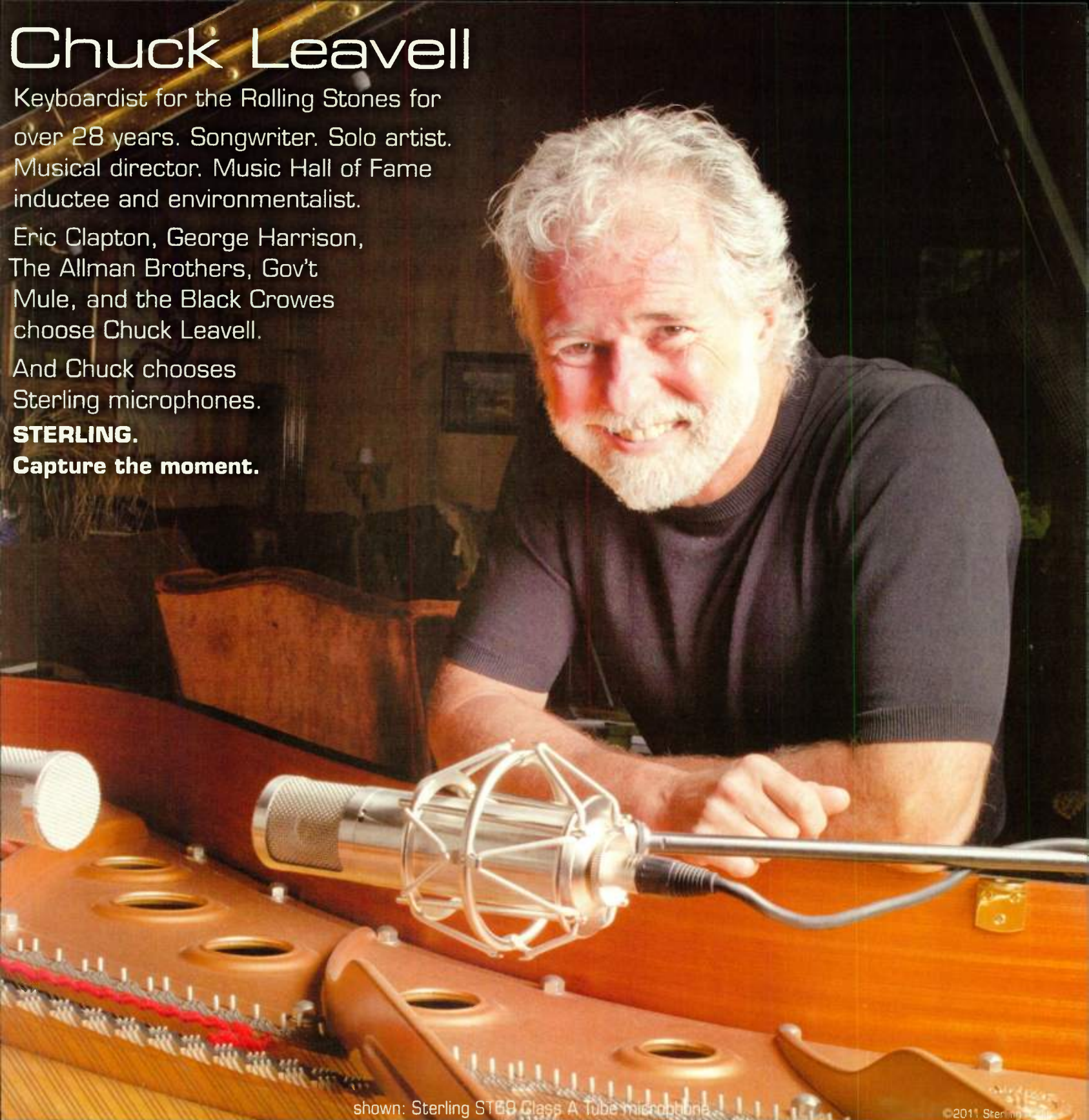
Keyboardist for the Rolling Stones for over 28 years. Songwriter. Solo artist. Musical director. Music Hall of Fame inductee and environmentalist.

Eric Clapton, George Harrison, The Allman Brothers, Gov't Mule, and the Black Crowes choose Chuck Leavell.

And Chuck chooses Sterling microphones.

STERLING.

Capture the moment.



shown: Sterling ST60 Glass A Tube microphone

©2011 Sterling



STERLING



See our Chuck Leavell interview at
YouTube.com/SterlingMicrophones or visit sterlingaudio.net

NEW GEAR FROM MUSIKMESSE 2011



1
PreSonus
StudioLive 16.0.2
 Compact digital mixer
\$1,499.95
HIGHLIGHTS 8 mono, 4 stereo channels • 5-pin DIN MIDI I/O • “Fat Channel” processing on all channels and buses • scene and effects preset save/recall • 16 in/16 out FireWire recording interface (24-bit, 44.1/48kHz) • “Capture” live recording software included • onboard 32-bit digital effects processor
TARGET MARKET Live performance and smaller recording studios
ANALYSIS The larger-format StudioLive mixers have been extremely popular, so it’s not surprising that PreSonus has extended the line to a larger potential audience. Yet the 16.0.2 includes the same kind of feature set, and excellent mic preamps, as its bigger brothers.
presonus.com

2
Line 6
M5 Stompbox Modeler
 Digital signal processor
\$279.98
HIGHLIGHTS 100+ effects in a single box • six dedicated knobs for tweaking • 19 delays, 23 modulation effects, 17 distortions, 12 compressors and EQs, 26 filters, 12 reverbs • 5-pin DIN MIDI I/O • stereo I/O • tap tempo • expression pedal 1/4” input
TARGET MARKET Live performance or studios, for augmenting an existing roster of effects
ANALYSIS The M5 does only one effect at a time, but if you’re looking for an effect, it’s probably in here. Stage applications are obvious, but it’s also a useful hardware insert effect for DAWs.
line6.com

3
Yamaha
Vintage Plug-In Collection
 Three effects plug-in bundles
\$TBA
HIGHLIGHTS Channel Strip offers two compressors and one EQ • Open Deck emulates four different tape recorders • Vintage Stomp has three phasers, flanger, and wah • VST 2.4, VST 3, and AU formats
TARGET MARKET Those who want to add vintage, ’70s-type analog sound qualities to DAWs.
ANALYSIS These were originally offered as add-on effects for the DM2000 and O2R96 mixers; with Yamaha now the steward of Steinberg’s Cubase, making these processors available as plug-ins for DAWs is a logical next step—particularly with the ongoing interest in “vintage” sound.
steinberg.net

4
Apogee
Duet²
 USB 2.0 audio interface for Mac
\$595
HIGHLIGHTS 2 in, 4 out • redesigned breakout cable with two balanced combo ins and two balanced outputs • soft limit • 24-bit resolution; up to 192kHz sample rate • configurable touch pads • full-color OLED display • mic pres have a gain range of 0 to 75dB • Maestro 2 control software
TARGET MARKET Macintosh owners with small recording setups or who do portable recording; particularly well-suited to GarageBand and Logic
ANALYSIS This is a major update of the original Duet interface, and despite the diminutive size, offers unusually high-quality preamplification and conversion.
apogeedigital.com

All prices are MSRP



5
HK Audio
Soundcaddy One
 Portable PA system
\$TBA

HIGHLIGHTS Vertical array with six 3.5", wide-range speakers • 70-degree audio dispersion • subwoofer with three 6-inch woofers • 600W class D power amp • integrated four-channel mixer • XLR line output for cascading additional systems

TARGET MARKET Musicians playing live concerts in smaller venues, particularly when wide audience coverage and very quick setup are important

ANALYSIS Compact array systems continue to proliferate, and why not? They provide solid coverage, at reasonable volume levels, in a portable, relatively lightweight format that fits in a compact car and sets up in minutes.

hkaudio.com

6
Roland
Quad-Capture
 USB 2.0 audio interface
\$349

HIGHLIGHTS Two combo XLR/TRS inputs • VS-series mic preamps • Auto-Sens for automated level-setting • extremely low-latency drivers • 24-bit resolution; supports sample rates up to 192kHz • cross-platform • can be bus-powered • durable construction • 5-pin DIN MIDI I/O • phantom power • hi-Z instrument input • bundled with Sonar X1 LE

TARGET MARKET Recording enthusiasts who don't need a lot of I/O, but want high audio quality
ANALYSIS Despite being its first full-function USB 2.0 interface, Roland's Octa-Capture has been a surprise hit for the company. The Quad-Capture capitalizes on that success with a compact, less-expensive interface for smaller studios.

rolandus.com

7
Pelonis Sound and Acoustics
Model 42
 Monitor speakers
\$1,099 (pair)

HIGHLIGHTS Active, bi-amplified system • controlled/powered externally by four 100W amplifiers and 96kHz DSP, with five-band parametric EQ • two-way dual concentric speaker • 0.75" (19mm) titanium dome with neodymium magnet system • rated maximum SPL 106dB • rhomboid shape allows multiple mounting options while still listening to the sweet spot
TARGET MARKET Recording and post-production studios desiring a compact system that's scalable to surround and other multi-channel formats

ANALYSIS Chris Pelonis is acknowledged as one of the world's top studio designers, and now his speakers are available to the general public.

pelonissound.com

8
Radial Engineering
Q3
 500 Series EQ module
\$700

HIGHLIGHTS Design based on passive inductors • features four controls: top-end boost, midrange cut, bass boost, and gain makeup (to offset losses caused by passive circuitry) • each band has a 12-position switch with a different preset curve at each position • fits 500 Series racks (when used with Radial's Workhorse, Q3 can include an effects loop)

TARGET MARKET Recording and live performance rigs where EQ is more about adding "character" than applying surgical precision
ANALYSIS Inductor-based EQs offer a different kind of sound quality compared to traditional resistor-capacitor designs, and the Q3 provides this type of processor in a compact, "lunchbox" format.

radialeng.com



LEARN

master class

Is This Thing On?

Think you don't have any control over your sound at a club gig? Think again. Own your tone with these tips from veteran house engineers.

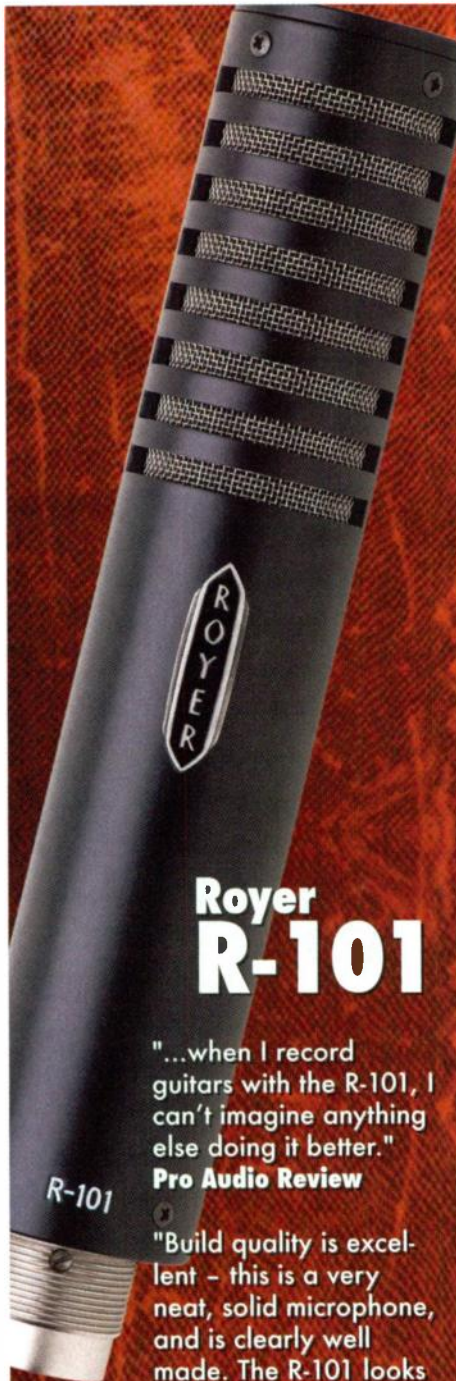
BY BLAIR JACKSON

Bobby Crown, chief sound mixer at the legendary Troubadour club in Los Angeles, figures that sometime this June he will mix his five *thousandth* band there. Over the course of eight-and-a-half years, he's handled front-of-house or monitors (or occasionally both in the early days) for every sort of act imaginable, from the most delicate singer-songwriters to thrash bands who had his ears ringing for days.

Up the coast in San Francisco, Lee Brenkman has mixed . . . well, *who knows* how many acts



Dave Vann



Royer R-101

"...when I record guitars with the R-101, I can't imagine anything else doing it better."

Pro Audio Review

"Build quality is excellent - this is a very neat, solid microphone, and is clearly well made. The R-101 looks and sounds far more expensive than it is."

Sound On Sound

"There are ribbons and there are Royers... and the R-101 is a Royer through and through."

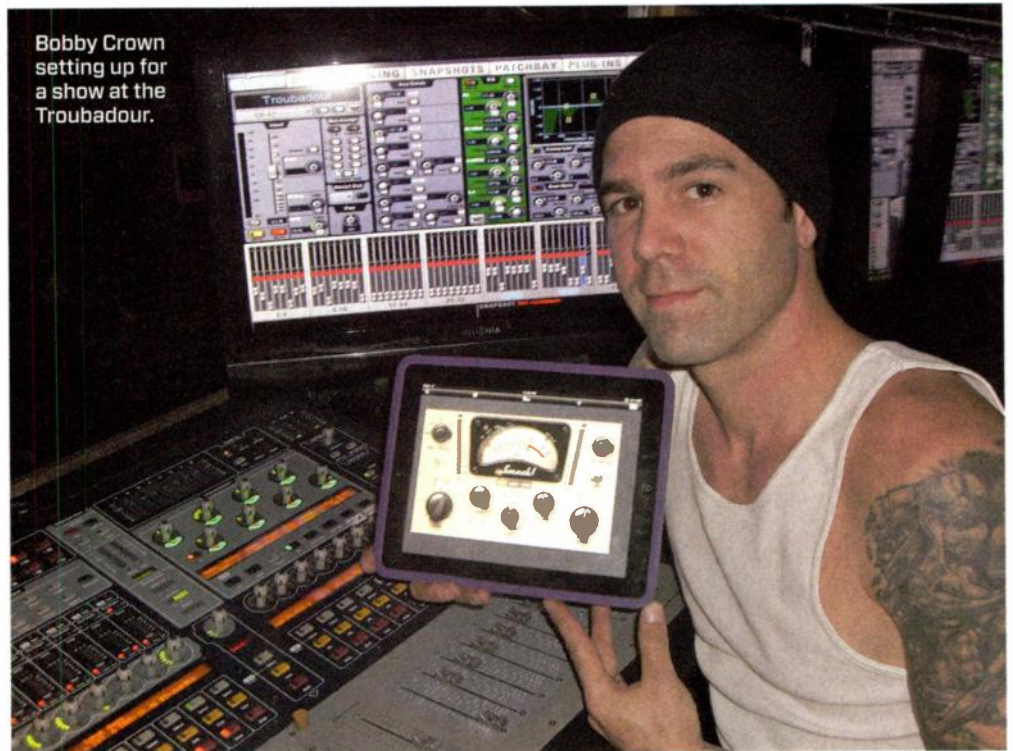
Recording Magazine



Royer Ribbons

818.847.0121

www.royerlabs.com



Bobby Crown setting up for a show at the Troubadour.

since he started doing sound work at the beautiful and venerated Great American Musical Hall way back in 1972. These days, he doesn't mix shows there as often as he used to, but as head of the sound department for both the Music Hall and Slim's nightclub nearby, he oversees a cadre of 12 freelance mixers.

Since both veterans have worked with so many young acts of every genre through the years—occasionally seeing those young pups move up to Big Dog status—we thought it might be interesting to talk to each about the vital relationship between sound pros and live bands at the club level and perhaps peel away some veils of mystery in the process.

THE BANDS

Brenkman: At the Music Hall and Slim's, we're basically dealing with three levels of bands. Bands that could be and are playing larger venues, but sometimes play smaller places, like ours. Sometimes they're cramming an arena rock tour into this small room, trying to cram 20 pounds into a 10-pound bag.

Then there are bands where this is their job, literally. They're club bands or medium national touring bands. Those tend to be the ones that are most organized, yet also most flexible. They know the situation when they come into it, and they know how to make it an easy day for themselves and the house staff.

And then at two extremes, there are bands that are bar bands and bands that are programming their music on their laptops at home. Some of those have no idea how to perform live. They have no concept how to interact with an audience or walk onstage.

We've also got baby bands who, right out of the chute, want a level of technological sophistication from the venue, at the venue's expense, that many headliners aren't even asking for—a dozen stereo monitor mixes, or, 'How come you don't have the same \$3,000 condenser microphones to put over the cymbals that we used to cut our demo?' **Crown:** Some bands come in and they're really knowledgeable about all their gear, but they lack the social skills to communicate effectively with the sound person. And there are some bands that come in that don't know anything about their gear, but they can play like no one else, and they can or they can't talk to you well.

ADVANCE PLANNING

Crown: In the best-case scenario, the band or their management will fax an input list and their advance sheet to the promoter, and most of the time it will state whether they have their own sound person, but you can't presume that. Many nights, I don't know until the band arrives if they have a sound person.

The Devil's In the Details

Small Issues That Can Add Up to Trouble

Lee Brenkman: One thing that can be trouble is singers and instrumentalists who want to play with a microphone through effects. A singer will say, "I want to run my vocal mic through this delay stomp box," and they've gone to Guitar Center and bought a cord that has an XLR connector on one end and a 1/4-inch connector on the other end, and they don't understand why the output of the stomp box is noisy and not very loud, because they forgot that they need a transformer to convert the microphone level to the instrument level and impedance that the stomp box wants. Worse yet, they buy a delay pedal the day of the gig and they want to try it out at their sound check. This is not the place to try out new toys. The best thing to do is stick with the stuff you know and you're familiar with.

Bobby Crown: With some of the new electronic bands that make everything at home with Ableton Live or Reason, they don't have a subwoofer in their house to really hear that low end but they know they want it. So they push that in their mix and it sounds fine in their headphones, but then they bring it out live and there's so much bottom end that the engineer has to compress it, key filter that out, high-pass it out—do anything he can so he can bring the mids and the highs up, but then that takes stuff away. It doesn't translate well, and it can really throw things off.

www.solidstatellogic.com

Work Faster. Sound Better.

From our integration of the project studio environment, through to our pioneering large-format studio consoles, SSL has defined the hybrid approach to modern production workflow where the very best classic SSL analogue console technology meets high-speed DAW control.



Nucleus.
In-the-box pro
project studio

Matrix.
Integrate your
analogue outboard



AWS.
Mid-scale commercial
studio powerhouse

Duality.
Large-scale commercial
studio heaven

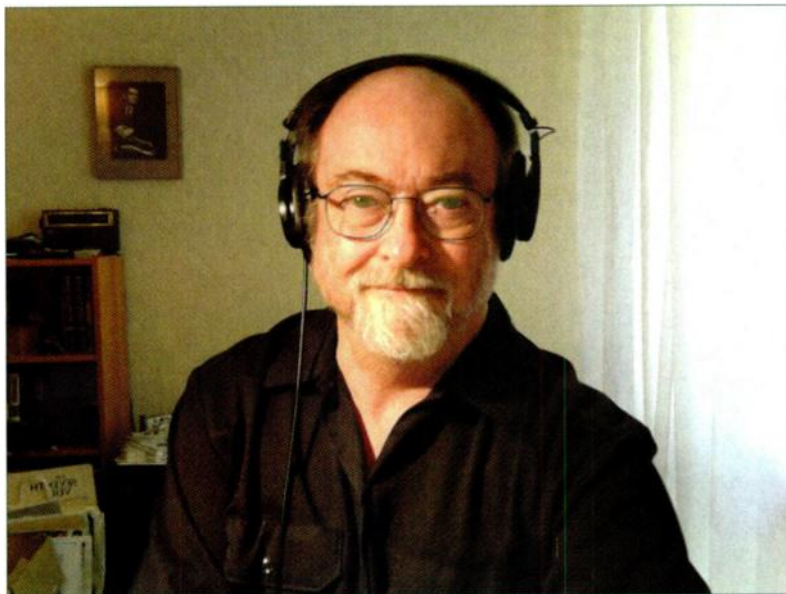


Advanced DAW Control :: High Speed MIDI Over Ethernet ::
Transparent SSL Mic Pre's :: Classic SSL Analogue Processing ::
Depth & Definition With SuperAnalogue™ Summing ::
Studio & Artist Monitoring :: Streamlined Session Management

Hybrid workflow solutions. This is SSL.

Solid State Logic

SOUND | | VISION



Lee Brenkman oversees 12 mixers at the Great American Music Hall and Slim's in San Francisco.

The input list is usually comprised of every instrument the band has or needs in order for their show to happen correctly. But those are often wrong. Someone will fax a 24-channel input list, and if the band doesn't have a sound person and they're not there yet [for sound check], we always set up what we call a standard grid, which is a basic five-channel drum package, two guitar microphones, two bass microphones, two keyboard DI's, an acoustic DI, and three vocals up front and one on drums. That whole input list falls in 16 channels, which most bands can fit into. Even if a band has an input list that might have two snares or two overhead channels—things we don't include in our input list—if they don't have a sound engineer, we'll make it the way we want it. We don't run overheads in the Troubadour because it's a small room. And we don't need two mics on anything. Sometimes people will come in and have this extensive list. We'll try to cut it down, not to take anything away from them, but just because it's not needed. If a headliner comes in and they have a sound guy, we'll follow exactly what he wants, but we'll also try to convince him not to use overheads or double-mics, unless he has his entire mic package—then he can use anything that he wants.

Brenkman: Almost every band will give you an input list and a stage plot. Only the absolute bottom-of-the-bill, "Gee, we're thrilled to be anywhere other than our neighborhood bar" bands don't. Some bands will send you, in addition to an input list and a stage plot, either a spreadsheet or some sort

of graphic representation of how they like their monitors: "Okay, in the singer's monitor, he wants 100 percent of his own voice and 75 percent of the background vocals and a fraction of keyboards. And the keyboardist wants to hear his vocal on top and all the other vocals underneath." Not very many do that, but it does help as a starting point.

BRINGING IN EQUIPMENT

Brenkman: A lot of bands at all levels bring in their own mics. That's not a problem. When it becomes a problem is when they bring their own mics but they expect the club to provide stands and cables that they will not share with the other bands on the bill. You have a headliner that says, "Once our stuff is set up, we don't move it." Or, "We'll take our mics on your stands away and the other bands will have to deal with what's left."

Or, they bring in their own mixing consoles—both front-of-house and monitors—and won't share. Especially now that bands are touring with digital consoles—what we call medium-format consoles. For years, people who have in-ear monitors have brought in their own small digital consoles for the in-ear mix, and that's not a problem because they're usually prepared—they have their own splitter, so they plug the mics into their splitter, which splits the signal into their monitor mixer and off into the house. But when a band shows up with their own mixer and their own in-ear rig and no splitter, it makes for a very complicated night if there are three other bands on the bill.

Crown: Generally, most younger, local bands

"Almost every band will give you an input list and a stage plot. Only the absolute bottom-of-the-bill, "Gee, we're thrilled to be anywhere other than our neighborhood bar" bands don't."

—Lee Brenkman

STUDIO+ RESCUE

WITH
FRANCIS BUCKLEY

STUDIO RESCUE IS HEADING TO
ATLANTA!



Following on from a successful string of Studio Rescues and makeovers in LA, the team at RØDE are literally hitting the road with Francis this summer and heading to Atlanta to makeover twelve lucky people's studios.

Don't know what we're talking about? Head to rodetv.com/studiorescue and check out season one and you will know exactly what we are excited about. Got a studio that needs some love? Let us know.. especially if you are in Atlanta.

While you're at RØDE TV, check out some of the other great programming on now!

**WATCH STUDIO RESCUE
AND OTHER EXCLUSIVE VIDEOS
FOR THE MUSICIAN & ENGINEER
NOW ON RODETV.COM**

RØDE TV 

EXCLUSIVE VIDEOS FOR THE MUSICIAN & ENGINEER

www.rodetv.com

**GOT A STUDIO
IN NEED OF RESCUE IN
ATLANTA?
VISIT
STUDIORESCUE.COM
TO REGISTER**



LEARN

master
class

George L's

Instrument cables
Patch cables
Jumper cables

Think outside the box
for purer sound!

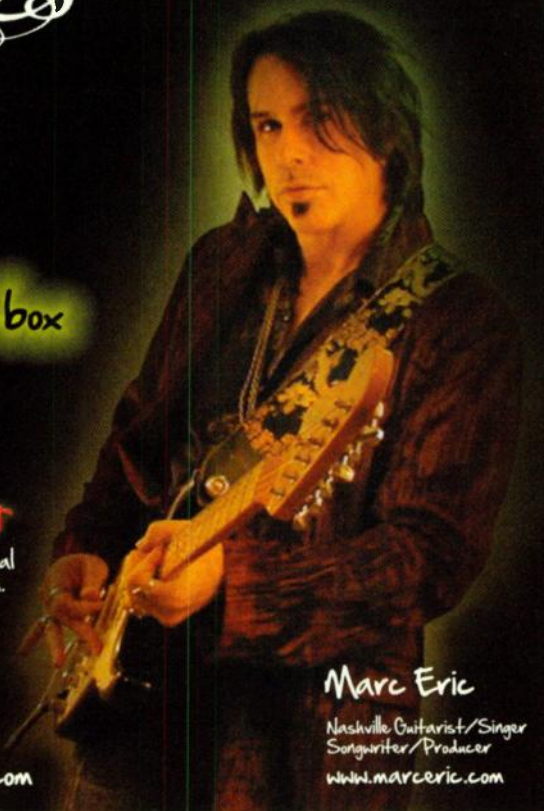
George L's Effort Kit

Everything you need to maximize the signal strength and quality of your pedal board. Make custom length cables in minutes!

10 .155 cable/10 right angle plugs & jackets

Get Award Winning Sound with
The Original High End Cable.

615 868 6976 www.georgels.com



Marc Eric

Nashville Guitarist/Singer
Songwriter/Producer
www.marceric.com



WOMEN'S AUDIO MISSION

Changing The Face Of Sound

JOIN TODAY!

RECORDING CLASSES
GEAR DISCOUNTS
CAREER COUNSELING
JOB PLACEMENT
LOW-COST STUDIO SERVICES

www.womensaudiomission.org

don't bring in their own microphones. Touring engineers might have their own package that they carry with them, especially vocal mics. In fact, I'm surprised that people who use different mics every night don't spring for the \$100 or whatever to have their own mic that sounds good and is clean. We clean out vocal mics as much as we can—usually like three times a week we disinfect them, and we wipe them with alcohol every day—but there's something to be said for having your own reliable mic for every show. It's not that expensive.

Some bigger bands are tied into their own small monitor consoles and in-ears. If you're doing that, you want to have the same microphones night-to-night if you can so you don't have to change much; it's more consistent.

Brenkman: It's still up to us to decide who we let the good stuff out for. For example, at both clubs we have three tiers of SM58. You put the really nice one out for the singer-songwriters you can trust. You have a middle class that you use for everybody. And then there's what we call the Trent Reznor autograph model, which only goes out for the hardcore and thrash bands. You don't want to put out a crisp, ball-never-been-dented SM58 for somebody who's going to throw it at the audience, stomp on it, or stick it in a bodily orifice. All of which does happen.

SOUND CHECK

Crown: Once the band is set up, we obviously like to do an extensive line check and make sure everything is correct. Then we ask them to do a verse and chorus, so they can hear a soft part and a loud part immediately and tell us what they need to make the monitors perfect. I explain to them through the talkback that the house [P.A.] is going to be off until the monitors are perfect, *then* we'll turn it on, but there's always some person who's listening who's saying, "I can't hear the vocals" or "I can't hear the keyboards" and I have to explain that there's a strategy to the way we work.

When we get the monitors perfect, we work on whole songs. Usually, at that point, if the monitors are dialed in and they have a pretty good example of what they need in their wedges, they'll play a song and be happy. We'll tell them, "It sounds even better when the room is full of people, but it's a good start." And we get to hit Save [on the club's Avid SC-48 FOH console] and they'll know how things are when they return.

Brenkman: One thing every band needs to know is that sound check is not supposed to be rehearsal time. So you sometimes have to decide how long you let them continue and when you say, "Hey, we've got three other bands to sound check before the doors open." And when you're one of those other bands, it's gun-and-run. Sometimes it's just the headliner and the first band on the bill getting a sound check. Everybody else gets to put their amps on stage and do a tap check: "Okay, this works, this works."

Usually, monitors almost always take more time. Because with front-of-house you're dealing with one system; monitors, you can have up to a dozen people up there, who all want something else. U2 has four people mixing monitors!

With bands that have been playing in really small clubs or in their own basements, the perceived volume of their backline stuff in a larger space sometimes doesn't feel right to them until it's too loud. After working at places where, if they're lucky, the vocals are almost audible onstage, suddenly they can hear everything and they tend to overdo it with the monitors. Even at a place like the Music Hall or Slim's, if the vocals exceed a certain point in a monitor wedge, the audience is actually hearing the wedge bouncing off the back wall of the stage as much as they're hearing the P.A.

DURING THE SHOW

Crown: As they're doing their set change and we re-mike everything, we go back into the booth and we look and see what's been done. Usually the drummer is done first and the guitar players are still setting up. We'll go through the line—"Can I hear the kick again?" If it's saved, when I un-mute, he's going to hear exactly what he needs to and I'm going to hear it the way I left it, and we'll make a little bit of adjustment usually. I won't un-mute any channel unless I've verified it. If all the lines are verified, there shouldn't be a problem during the set, though obviously you're still usually making minor changes.

From time to time with upcoming bands who are getting their chance to headline—they're playing L.A., all the agents are here, their friends are here—they want to look pro, but for some reason "pro" to these bands is not going out and setting their stuff up and doing a line check. Sometimes, without mentioning anything to us, they actually expect us to remove their drums and move pedal boards and move things around. We'll move the wedges, move some guitar cabinets, but we still need to check everything. Some bands think that because I told them it was okay and I hit Save, they can just walk down and turn it on and it works. Sometimes it *does* work, but if they don't line check, they're asking for trouble. I've been known to go up to the dressing room and say, "Hey, I need someone to go through the channels with me." They don't want to be seen setting their gear up. But if things get mis-patched, for instance, we have to fix it during the set, and it ruins the essence of the magic trick that everybody wants to see. ■



More Online

Read interview outtakes with Lee Brenkman and Bobby Crown.
emusician.com/july2011



Microphone Cables

Live Wire Elite is a premium mic cable that lays flat, coils easily, is incredibly durable and accurately transmits every nuance of sound that your heart pours into it.

**Better by Design
Guaranteed for Life**



available at



www.livewire-usa.com

©2011 Live Wire



Create Big Group Background Vocals

Tracking and mixing tips for building a huge ensemble sound

BY MICHAEL COOPER

GROUP BACKGROUND vocals—multiple parts sung by an ensemble—present an interesting challenge: How do you make them sound big without swamping the rest of the production? Try these recording and mixing tips for colossal yet clear “BVs”!

Weed Out the Bottom The key to great-sounding BVs is bass control. If your room’s acoustics will allow it, use an omni mic to record. Unlike cardioid and other directional mics, an omni doesn’t exhibit any bass proximity effect, so you can sing within kissing distance of it without adding any blurry or boomy bottom end. If the sound is still too murky, use the mic’s built-in high-pass filter (HPF) to dump more lows; a rumble filter may not remove enough bass, but a roll-off below 150Hz should work great. If your mic doesn’t have an HPF, use an equalizer or EQ plug-in with a gentle roll-off slope.

If your group has laser-focus intonation and atomic-precision phrasing, gather everyone around one omni mic and record the lot to one track. (A good omni mic will pick up sound with equal level and consistent timbre from all directions.) If, on the other hand, the group sounds too sloppy, record each singer in turn to a separate track; that way, you’ll be able to tighten and tune up each part during mixdown to produce a cohesive whole. (The tips in the rest of this article will assume you’re recording each singer to a separate track.) Avoid mic overload like the plague; you’ll need super-clean tracks to avoid having the BVs turn to porridge when combined at mixdown.

Go Easy with Tubes What sounds great on one BV track may disappoint when used for all of them. For example, it might sound fantastic to use multiple tube stages—mic, preamp, and compressor—to record one singer. But do that for several singers in turn, and all that tube luster will turn your group BVs to mush once they’re tucked into your mix. To maintain clarity and edge when multitracking BVs, use only one vintage-style tube stage while recording. (You can probably get away with using two tube stages with equipment using very modern, ultra-linear, low-noise designs.) I’ve had terrific success combining the lush Lawson L251 tube



ReValver™ MK III.V

ReValver™ MK III set a new standard for capturing the true characteristics of vacuum tubes while giving players the unprecedented power to tweak amp models at the circuit level. ReValver MK III.V continues that trend with the introduction of nine exclusive new modules, representing some of the most sought-after amps, effects, and stompboxes ever made. With enhanced component modeling and RTAS support, plus true 64-bit performance, ReValver continues to be the most advanced amp modeling software on the planet.

Peavey knows tone and the Sales Engineers at Sweetwater know amp modeling software. Let the experts at Sweetwater plug you into Peavey ReValver MK III.V today.

Sweetwater

Music Instruments & Pro Audio

(800) 222-4700

www.sweetwater.com



INNOVATION. AMPLIFIED.™

World Radio History

Music
lives...

and your
hearing survives!

Protect

the hearing you
have now, and
for years to
come.

H.E.A.R.® today,
hear tomorrow.™

We can help.

H.E.A.R.® is a non-profit organization co-founded by musicians and hearing professionals that is dedicated to the prevention of hearing loss in musicians.

Support

H.E.A.R.®
hearnet.com™

Purchase your
hearing protection
at www.hearnet.com

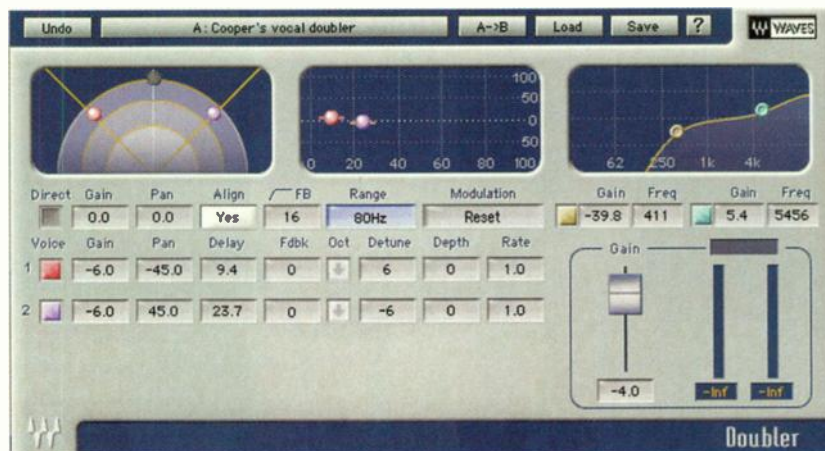


Fig. 1 Use Waves Doubler to mushroom the size of your group BVs. Here's one of my favorite custom presets.

mic (in omni mode) with the crystal-clear Millennia HV-3D solid-state preamp.

Tee Off Once all the BVs are recorded, listen for hard, sharp consonants such as t's that don't voice exactly at the same time on every track. Eliminate those that are ahead or behind the subdivision beat. In fact, you don't need more than one prominent hard consonant to voice in an ensemble to define a lyric, so delete any that are causing flammng that keeps the BVs from sounding tight.

Keep a Lid on Each Track When every singer tracks the same levels as the others in an ensemble singing multiple harmonies, a beautiful gestalt occurs in which it becomes difficult to pick out the separate parts and the group sonically becomes a single organism. To produce this effect, compress each track individually as needed before combining them. This will prevent any one voice from jumping or dipping in level with respect to the other tracks. It won't work to bus all the BVs to one aux channel and apply a compressor to the aux.

Tune Up The use of Antares Auto-Tune on lead vocals has its champions and detractors, but for ultra-tight BVs, it's an absolute godsend. The more harmony parts you have in an arrangement, the easier it is for one off-key singer to create distracting dissonance that ruins the blend. True, too much tuning can flatten a *lead* singer's unique character. But BVs aren't supposed to have a lot of individuality

that attracts attention; their purpose is to support and meld, not take the spotlight. So don't be afraid to lightly tune each BV track.

Auto-Tune's Auto mode is fast and effective for all but the most ear-bending phrases. For a thicker-sounding effect, use a different Retune speed for each BV track. A Retune speed of 15 to 35 ms usually works great for BVs.

Double Your Pleasure Recording each harmony part several times—each take to a separate track—is a great way to craft ginormous BVs, but the process can be exhaustively time-consuming. Use a doubler to simulate this effect in seconds.

The Waves Doubler plug-in sounds fantastic for this application (see Figure 1). Bus all of your BV tracks to the same stereo aux channel. Instantiate Doubler on the aux. Detune two Doubler voices +6 and -6 cents, respectively, and delay them roughly 9 to 25 ms (using a different delay time for each voice). Set the feedback parameter for each voice to zero. Pan the voices apart and mute the direct signal. (You'll combine the 100%-wet output of the plug-in with your dry tracks in your DAW's mixer.) In Doubler's equalizer section, roll off all lows below approximately 400Hz to avoid adding mud and boominess to your svelte dry tracks. Boost high frequencies above 5 or 6kHz to add shimmer and heighten the effect. Now you can ride the aux fader as needed to adjust the level of the effect—without affecting your dry BVs—dynamically throughout the song. *Voilà*—an instant battalion of BVs! ■

Be Moved

Inspiration meets Integration

Get Moving

Connectivity meets Mobility



MOX6—semi-weighted 61-note

MOX8—88-note graded hammer action

moX-The Mobile Motif

For the past decade, Motif synthesizers have been the industry standard for both live performance and studio production. Combining Motif technology with new multi-channel USB computer integration technology and bundled VSTs, the MOX 6 and 8 are the most powerful, mobile and affordable Yamaha music workstations ever. They are destined to bring Motif music production to a whole new generation of players and producers.

- 1217 Voices and 355MB of waveforms taken directly from the Motif XS
- 256 Performances with 4 arpeggios that spark your musical inspiration
- Direct Performance Recording to the internal Song and Pattern sequencer
- Extensive keyboard controller features for all major VSTs and DAWs
- Built-in 4-in/2-out USB audio interface with one-cable computer connectivity
- Comprehensive cross platform software bundle including: Yamaha YC-3B organ, Steinberg Prologue Virtual Analog, Cubase AI DAW
- Extremely lightweight for mobility (MOX6—15.4 lbs, MOX8—32.6 lbs)



For detailed information scan
QR code or visit www.4wrld.it/moxem3



©2011 Yamaha Corporation of America. All rights reserved.



Fig. 1 An AKG C 414 B-TL II multi-pattern condenser mic is set to figure-8 mode and placed under the hi-hat. Its null point is aimed toward the snare drum in order to reject its sound.

Small Room, Big Drum Tracks—No Problem!

Part three in a three-part series

BY MICHAEL COOPER

WELCOME BACK to our kick-around of tracking trap drums in cramped quarters. If you read the first two installments in this series over the past couple months, you've already got a firm grip on the best ways to set up the kit and mike up the traps using the microphones' null points to your advantage. In this final chapter, we'll pow-wow on scintillating ways to record cymbals and set up a room mic or two in your space-challenged pad o' percussion.

Keep This Under Your Hat I like to place a bi-directional (aka figure-8) condenser mic on the hi-hat with one of its null points aimed at the snare drum (see Figure 1). A side-address bi-directional mic, such as the AKG C 414 B-TL II, may be placed either above or below the hi-hat with its capsule pointed toward the spot where the hat is struck. The top of the mic (or any other null point perpendicular to the dual diaphragms) should be aimed directly at the snare drum for maximum rejection.

I prefer placing the mic under the hi-hat, where it is least likely to be hit accidentally by

a drum stick. Also with this setup, the hi-hat creates an acoustic-shadow effect that blocks the crash cymbals' high frequencies from bleeding into the hi-hat mic.

Bi-directional mics have an inherently heavy bass-proximity effect—the closer this type of mic is placed to its source, the more bottom end it will produce. That's an advantage when miking a thunderous floor tom, but the last thing you want is a hi-hat track with a lumbering bottom end. Roll off low frequencies on your hi-hat mic using either the mic's built-in high-pass filter (if it has one) or third-party EQ. Doing so will simultaneously emphasize the hat's high frequencies and weed out any bottom-end bleed from the traps—a win-win.

Hang 'Em (Not Too) High You'll want to use two condenser mics in a spaced-pair configuration to record the kit's crash and ride cymbals. Because the mics are hung above the cymbals and aimed downward at them, they are called *overhead mics* or *overheads*. In a room with a short ceiling, I prefer to use

INTRODUCING **2 IN 1** TECHNOLOGY



Gemini 5

The world's first dual technology FET / Tube mic in one

- Simultaneous, discrete FET and Tube outputs
- 2 high end mics for the price of one mid range mic
- Gemini II capsule gives exceptional performance
- Record your one perfect vocal or guitar take and have 2 options to drop into your mix.



Contact: 512 847 5696
www.fingerprintaudio.com
sales@fingerprintaudio.com



Sound Engineering
www.seelectronics.com

cardioid mics for overheads because they will reject any phase-cancelling slapback echoes that bounce off the ceiling and arrive at the rear of the mics. Small-diaphragm condensers generally yield the most detailed highs.

In a small room, your primary goal is to capture the sound of the cymbals—not so much the entire kit—with the overheads. The overheads will pick up pleasing bleed from the traps, too, but you should leave the job of recording ambience primarily to the room mics; that will allow independent control over potentially suboptimal acoustics. To ensure you'll capture excellent direct cymbal sounds, position the overhead mics one to two feet above the cymbals, on the far side (away from the drummer) and angled down. Move the two overheads around until all the cymbal hits are in good balance, with none leaping out or sounding understated, and their stereo imaging sounds consistent with that produced

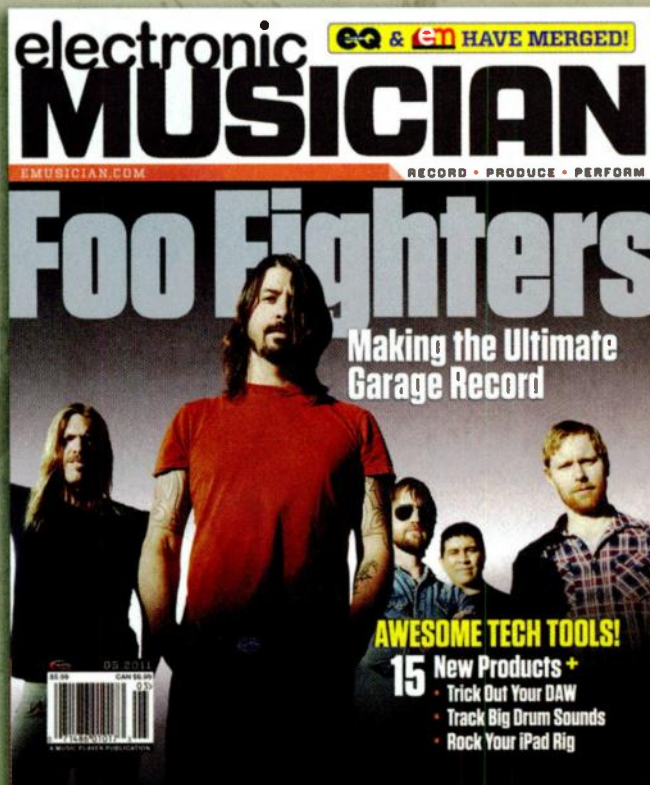
by all the mics on the traps. Also make sure the crash cymbals, when struck, don't flip past the mics' zero-degree axes, or their tracks will sound phasy.

Give it Some Room The primary purpose of a drum *room* mic is to capture the ambient sound of the kit. There are many ways to set up room mics in a large studio, but most of them sound like doggy poo in a small room. In a room with an 8-foot ceiling, don't bother placing a room mic above the drum kit or the drummer's head—you'll be lucky if you can get the capsule four feet away from the batter heads. It won't pick up much room tone and the direct sound will cause phase issues with close mics on the traps. No net gain.

A better strategy is to place one or two room mics at least six feet in front of the drum kit. (You'll need a room that measures at least ten feet long to allow this.) If for lack of space

the rear of the mics must be placed near a wall, use cardioid mics to reject reflections off the wall that would otherwise cause nasty-sounding comb-filtering. For a great live snare sound, aim a spaced pair of room mics under the cymbals and at the snare drum. To de-emphasize the kick drum and rumbly bass frequencies, make sure the mics are raised well off the floor. Alternatively, for a bottom-heavy sound, lower the mics so they're within kissing distance of the floor.

Only the Beginning So much of crafting killer drum sounds depends on mixing techniques implemented long after the tracking session is over. But without great tracks to begin with, it's always garbage-in, garbage-out. This series of articles defies the sacrosanct myth that you can't mint monster drum tracks in a small room. I'm gonna go Barack on ya and say, *yes we can!* ■



The **ALL NEW**
Electronic Musician
covers all aspects of
modern music making

- Studio to stage
- Production to performance
- Gear to career

Get the new *Electronic Musician*
One year for \$23.97.
That's \$1.99 an issue!

Sign Up at www.mymag.com

Your Prayers Have Been Answered



Neve 1073LB
100% Discrete —
500 Series Mic Pre



Neve 1073LBEQ
— Single Channel
500 Series Equalizer



Both the mic pre and EQ section of the classic Neve 1073 mic pre/EQ are now available for your 500 Series rack. The 1073LBEQ module can be inserted between the input and output stages of the 1073LB mic pre, creating a true 1073 classic audio path.

The Neve Classic Series is available exclusively at

 vintagekingaudio

WORLD CLASS AUDIO | WORLD CLASS SERVICE

Arrange A Gear Demonstration Today!
888.653.1184 | WWW.VINTAGEKING.COM



VK 500 SERIES SPECTACULAR
Buy any (4) 500 Series Modules &
Get A FREE RACK
www.vintageking.com/free-rack

Go all out with your new all-in-one MOTU studio

Run DP7 on a new quad-core iMac, add a 6 x 6 Audio Express interface, and customize your system with the latest desktop studio technology.



Digital Performer 7
'Alloy' theme

Audio Express
CueMix app

DP Control App
for
iPhone, iPad,
and iPod Touch

Apple iMac

Now with a quad-core processor in every model, up to 3x faster graphics, and much more

New quad-core Intel Core i5 processors are standard on the new iMac. Choose a 21.5-inch iMac with a 2.5GHz or 2.7GHz quad-core Intel Core i5. Or expand your view with a 27-inch iMac featuring a 2.7GHz or 3.1GHz quad-core Intel Core i5. You can even configure iMac with the fastest quad-core processor available — the Intel Core i7. All the models use Intel's recently refined chipsets, which perform up to twice as fast as the previous generation. What's the bottom line for your MOTU studio? More tracks, more plug-in processing, more virtual instruments, and ultra-low latency.

MOTU Audio Express Personal studio I/O with mixing

Thanks to MOTU's hybrid interface technology, the Audio Express connects to any current Mac or PC via FireWire or high-speed USB 2.0. Connect your mic, guitar, keyboard, and digital input, and you are ready to make pro-quality recordings in your personal studio or mix live inputs on stage.



Shure Beta 181

Ultra-compact side-address instrument mics

Designed for discrete placement and control in live or studio environments, Beta 181 features interchangeable cardioid, supercardioid, omnidirectional and bidirectional capsule options for superior versatility. The small diaphragm design provides superior audio with consistent, textbook polar responses in a form factor small enough to get close to the source in the tightest conditions. High SPL handling, ultra smooth frequency response, and interchangeable polar patterns make this the perfect stereo mic pair for any technique in the book.



Genelec 8040A

Active bi-amplified studio monitor

With performance comparable to much larger systems, but in a compact package, the bi-amplified Genelec 8040A is ideal for use in many MOTU studio situations where wide frequency response is needed but space is limited. Use the 8040A for nearfield monitoring in project/home studios, edit bays, broadcast and TV control rooms, and mobile production vehicles.

Expert advice

Call your Sweetwater Sales Engineer today for expert, up-to-the-minute advice regarding every aspect of your MOTU all-in-one studio. No one knows MOTU better than Sweetwater!



Value Added
Reseller
Professional Audio

Sweetwater®

Music Instruments & Pro Audio

(800) 222-4700
www.sweetwater.com





Sync or Swim

If you're not licensing your music, you should be. Here's how you can get started.
Part 1 of 2

BY BILL MURPHY

WITH RECORD stores closing, CD sales in the tank, legal downloads leveling off, and major labels shedding employees while they jockey for their next merger, is the music business as we once knew it just a zombie waiting for a bullet to the head? One thing's for sure: The old paradigm has given way to an entirely new landscape where connectivity and technology run the show. As Tom Petty once put it, the future is wide open.

"If you ask me, there hasn't been a time this exciting in the music business since the dawn of rock and roll," says Paul Anthony, founder and CEO of Rumblefish, Inc., one of the prime movers in music licensing for film, TV, video games, and social media. "Back in the day, there were just a lot of tiny independent labels. It was the Wild West, and as long as you were smart, you could figure out ways to do some really interesting things. Right now there are unbelievable opportunities for what we call the middle-class musician. It's not about making a million bucks—it's about making fifty or a hundred thousand a year as an artist, just on your music."

For the artists who take advantage of it, licensing is just another revenue stream to add to CDs, digital, merchandise, and—if touring is part of the equation—ticket sales. Strange thing is, the licensing stream is very often the most lucrative of them all. So why aren't more people talking about it?

Part of the answer lies in the sexiness of social media. Facebook, Twitter, and YouTube have proven to be essential for curating your online profile and connecting to your fans. But to be a truly agile artist in today's market, you have to do more. Assuming you're already registered with a performing rights society such as ASCAP or BMI, you own your publishing (and thus the synchronization rights that attach), and you're regularly writing and recording, here are a few preliminary moves that can help you get your work in front of the right people.

Pick a Niche and Own It Don't spread yourself too thin when it comes to your sound, style, and creative direction. Music supervisors and music placement reps want honesty and authenticity; believe it or not, they can sense when you're winging it. "If they're looking for a song to evoke a certain emotion or character or situation," Anthony explains, "then you've

PROFESSIONAL RECORDINGS. STUNNING SOLUTIONS.



NEW!

MRmk2 Series Powered Studio Monitors

- All-new professional transducers
- Precision powered amplifiers
- Custom waveguide maximizes sonic clarity
- Top-notch cabinet design

Onyx Blackjack

Onyx Premium Recording Interfaces

- Premium Onyx mic preamps
- High-end Cirrus Logic® AD/DA conversion
- Flexible, powerful and professional
- Rugged and ergonomic designs

MR8mk2

MR5mk2

Onyx Blackbird

Our Onyx™ Premium Recording Interfaces and all-new MRmk2 Series studio monitors deliver superior sonic results in amazingly ergonomic packages. With meticulous design, high-end components and ultra-professional sound quality, the results are simply beautiful.

   www.mackie.com

© 2011 LOUD Technologies Inc. All rights reserved. "Mackie", the "Running Man" figure, Onyx, and MRmk2 are trademarks or registered trademarks of LOUD Technologies Inc. Booyakasha.

 **MACKIE®**

World Radio History

really gotta nail it, because you're up against a lot of competition."

Crunch Your Metadata When you're ready to start pitching your work, the way that you describe it is just as important as the music itself. "Put yourself in the producer or director's role," Anthony says. "They don't search for songs the way consumers do. I

The way that you describe your music is just as important as the music itself.

recently got a request for love songs with lyrics in Chinese. I wouldn't even know a Chinese love song if I heard one, but if someone sends me a song with metadata that says, 'This is a love song in Chinese, and here are the lyrics,' I'll probably use it. The more metadata you have—lyrics, adjectives, who the musicians are, what the style is—the better."

Get To Know Your Community It's easy enough to submit your work to licensing reps like Rumblefish (see sidebar), but you should also stay plugged into the grapevine. Indaba Music (indabamusic.com) is a social network for musicians and a vital source of information about new music placement opportunities, remix contests, and potential collaborations. Indie Music Tech (indiemusictech.com) is a pretty solid music technology blog that often posts links to licensing offers, contests, and newly emerging music-placement companies.

It takes a decent bit of grunt work, and sometimes even a willingness to do your first job for free, but once you get into it, you'll find that licensing is definitely one aspect of the music industry that's very much alive and well.

In the next issue: one artist's story of how he broke into film and video games. ■

Licensing Links

For just about any possible use of music you can think of, there's a company that covers it. Keep in mind, though, that when you submit your work to these services, it can take time to get a response; be patient but persistent. For more sites like these, visit <http://bit.ly/cNcfms>.

Rumblefish

musiclicensingstore.com/submit_music.shtml

At this writing, Rumblefish has stopped taking new submissions while it retools its uploading system, but expects to resume shortly.

Pump Audio

pumpaudio.com/artists/index.php

Beatpick

beatpick.com/artist/submitNewMusic

Jingle Punks

jinglepunks.com/submit_music

NEUMANN.BERLIN

Introducing the KH 120

Trusted in the audio industry for over 80 years, Neumann now introduces the first product in a line of studio monitors. To learn more, contact your Neumann retailer today, or visit us online at: www.KH120.Neumann.com

FREE DIGITAL EDITION!

THE BEST OF GIG!

Showstopper Ideas from **Cheap Trick & Kiss!**

The Best of



**Tons of Tips for Putting
on Electrifying Shows!**

**Own the Stage!
Improve Your Sound!
Promote Your Act!
and More!**



NewBay

Hundreds of Essential Giggling Tips
www.guitarplayer.com/bestof



Ready Your Set, Go!

Put together a killer show song sequence by following these three simple steps

BY MIKE LEVINE

A WELL-THOUGHT-OUT set list can be vital to the success of your gig. You wouldn't put together a CD without thinking long and hard about the selection and order of the songs; nor should you construct a set list without just as much careful consideration. But what really makes up a good set list? It obviously depends quite a bit on the style of music that your band plays, but here are some general guidelines to maximize the impact of your song sequence. (Note that these steps are designed for a group or solo act playing a one-set gig, but the principles can obviously be applied to multiple-set engagements, as well.)

Start with A Bang If you're trying to grab the audience's attention (and of course, you are), you want to make sure you start the show out with one of your really strong songs. First impressions are very important, so your first number should be one that stylistically represents what your music is all about. In most cases, your opening tune should be up-tempo, but be careful to choose something that you are

confident that you can play before you're really warmed up.

End with A Splash Your ending number should be the pinnacle of your set, a song that you hope will leave the audience shouting for more. This is where you should pull out all the stops. It's also important to keep a good song in reserve so that you don't have to repeat something if you are called back for an encore.

Mix It Up A good way to approach putting together your set list is to first decide on the opening and ending songs, then fill in the rest of the set. As you're picking out these in-between songs, remember to not put too many similar songs back to back. Watch especially for songs that have the same kind of feel (for example, you don't want to do two ballads in a row). If you also vary the song tempos and the keys, your set will be more interesting and will hold the crowd's attention better. When your set list is done, be sure to make copies for each bandmember, written or printed in large, easy-to-read letters (crucial for those dark stages) with the keys noted for each song. ■

CHECK IT OUT!

Guitar Player

ON THE iPad



GET THE APP TODAY!

www.guitarplayer.com/iPadAPP



The Singer's Gig Bag

Essential gear and accessories for live shows

BY JAIME BABBITT

I'M GOING to share some must-haves for any professional live singer. You may not need to bring all these things to every single gig, as your band or the venue may provide them, but you need to have them in your arsenal. The following is excerpted from my book, *Working With Your Voice: The Career Guide to Becoming a Professional Singer* (Alfred).

The Big Bag Designate one bag that's large enough to be used for all things gig-like: energy bars, throat drops, snacks, water bottle, makeup, music books, guitar picks, nail clippers (guitarists and keyboardists: never thought about that one, eh?), lyrics notebook, clothes, and more. It's a bad idea to keep some items in your knapsack and some in your guitar case and some in your handbag. That's how we forget things.

Your Own Mic I always bring my own microphone to a live gig. Put some light-colored masking tape around the base of yours and print your name and phone number on it with a black Sharpie. Print that information on the mic case, too. Throw it in your gig bag and you are good to go. Don't forget to have your own 25-foot mic cable as well. You might never need it, but you never know.

Carry a mic stand. Many bands and clubs supply them, but it should still be part of your rig. Most portable stands cost less than \$80. Because I'm a guitarist and percussion player, I use a boom stand. Many singers might like a little more play, so I recommend getting a gooseneck attachment if you get a straight stand; I promise your hands will thank you. I've smashed mine on straight mic stands during dramatic singing moments roughly 8,000 times in my life.

Some bands require singers to use wireless handheld microphones; wireless mics cost hundreds of dollars more than their wired counterparts, so shop carefully if one is in your professional future. Look for reputable brands and watch out for mics costing well below 100 dollars.

Another microphone option is the wireless headset. Headset mics cost

WANNA ATTEND SUMMER NAMM?

NOW YOU CAN!

wanna [®] music day

★ SATURDAY • JULY 23 ★

- ★ Hundreds of exhibits from leading music products companies
- ★ Master artist clinics, workshops and valuable panels and educational sessions
- ★ The latest guitars, basses, amps and accessories that you can play
- ★ Tons of live music

Summer 
NAMM

★★★ **TICKETS \$15** ★★★
\$20 AT THE DOOR

To buy tickets or for more info, visit www.namm.org/summer/2011/wannaplay

**BASS
PLAYER**

GuitarPlayer

keyboard

**electronic
MUSICIAN**

MODERNDRUMMER

Replace batteries after every gig without fail.

hundreds of dollars more than wired mics, and the same quality-control advice applies here as for the wireless handheld: You'll be much more satisfied if you stick with headsets made by reputable audio companies.

You might consider buying stock in the Duracell battery company. Just kidding! Still, replace batteries after every gig without fail.

Read It and Sing: Your Music Stand

Find out what the protocol is for your particular gig situation and act accordingly. I do not have any love for those portable metal

stands. They are very flimsy and way too easy to knock over; I'd steer clear of them. Some clip onto your mic stand. They're smaller than the big, black Manhasset music stands we've all seen, but they can work very well.

Here's my two cents about music stands: I've used them many times in my career—they're a must for studio work and are useful for certain corporate or party band gigs, so I won't mess up the lyrics or song order—but I personally cannot stand the way they look onstage. As a singer, they make me feel self-conscious, and as an audience member, I get the sense that folks onstage using them don't really know their material. Granted, there are many times when music stands are par for the course: If it's a complicated jazz or classical "reading" gig, or if there are just too many brand-new songs thrown at you all at once, or if everyone in the band has one, that's fine. But, if it's just you up onstage flipping pages, well . . . not so much. Do your best to memorize your repertoire for any given gig; your internal code of ethics and your bandleader will thank you for it.

Earplugs Your ears should be as much of a professional concern to you as your voice, and you need to do everything in your power to be good to them. If you're playing in a loud band on any kind of regular basis, and you're not on in-ear monitors, consider using earplugs to preserve your hearing. You'll use earplugs at rehearsals, on your gigs, and at loud gigs that you attend as an audience member. Skip the foam plugs from the drug store. They do provide physical protection from high SPLs; however, they heavily attenuate high end, which provides a lot of detail, and singers who use these often find that they simply can't hear their voices or their range of vocal nuances well enough. I recommend buying musician's earplugs that are fitted by a trained hearing professional. These earplugs are molded just for you, attenuate frequencies more evenly across the spectrum, and come with filters that offer varying amounts of protection. They'll probably run you around \$150, but they're worth it. It takes a little time and effort to get used to singing with earplugs. Nevertheless, I'm here to tell you that I've used them for years, have acclimated to them and wouldn't be caught dead on a live gig without them. ■

Stay connected between issues

Subscribe to:

Key News

Keyboard's **FREE** e-newsletter!

Twice a month . . .

- Get the latest artist and industry news
- Read highlights from the *Keyboard* forums
- Check out the latest features on KeyboardMag.TV
- Get playing tips from the experts
- Go beyond the pages of *Keyboard*!

keyboard

Subscribe today at KeyboardMag.com!

KNOWN AS ONE OF THE NATION'S BEST BEAT BATTLES

THE
**SOUNDTRACK
BEAT BATTLE**
NASHVILLE, TN
MAY 28, 2011

**REGISTER
NOW!**

GRAND PRIZE WINNER
WILL PRODUCE A TRACK FOR

MIMS

PLUS:

A PITCH MEETING
WITH SONY/ATV IN LA

A TWO-PAGE MAGAZINE FEATURE

CASH
AND MORE!

FOR MORE INFORMATION CHECK OUT
WWW.SOUNDTRACKBEATBATTLE.COM



electronic
MUSICIAN

big
audio

ABLETON LIVE 8

Apply different grooves to audio or MIDI clips

BY CRAIG ANDERTON

OBJECTIVE

Alter a clip's groove by applying a groove template.

BACKGROUND

Groove templates alter velocity and timing within a clip, thus giving it different possible "feels."

TIPS

■ Step 5: You can also open and close folders within the Grooves library using the Enter key.

■ Step 6: This affects only the instance of the clip in the project, not the original clip stored on disk.

Step 1

In Live's Library, open the Grooves folder.



Step 2

Open a folder containing the kind of groove you want, then drag the groove on top of a clip to impart its feel to the clip.



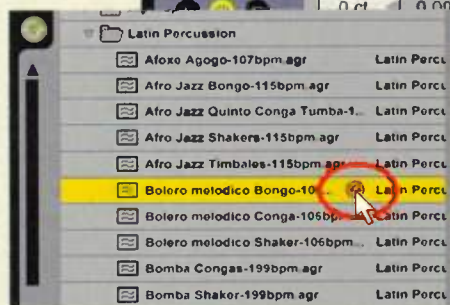
Step 3

To audition grooves quickly, first click on the clip's Groove Hot Swap button in Clip View.



Step 4

A "hot swap" button shows up next to the selected groove in the Grooves folder. Click on the button to select the groove.



Step 5

For even faster auditioning, use the computer keyboard's Up/Down arrow keys to step through the grooves; hit Enter to audition the selected groove.



Step 6

To write a groove's characteristics to a clip, click on the Commit button.





GIK Acoustics
Quality Treatments at Affordable Prices
 "The GIK Monster was the perfect trap to reduce a resonance that I detected in Studio B."
 Bob Katz Mastering Engineer
 1.888.986.2789 • www.gikacoustics.com
 "Bringing your sound to life!"




Smooth, rich, vocals. No frills. Good parts.
 The HM-7U delivers world-class vocals at a home studio price. Features a *K-47* type capsule for a smooth top end and rich chewy mids, plus a transformerless dual FET circuit and premium *WIMA* capacitors. Low cut filter and phantom power light. Comes with a shock mount, road case and 30-day money back guarantee. Go to kelaudio.com
Call: (204) 260-6861
 KEL Mics - Be your own sound 





Whitewater Recording
 Audio/CD Mastering • CD/DVDs
Complete Mastering \$375
 After complete analysis of your mixes, we will creatively adjust necessary dynamics, equalization, stereo enhancement, maximize volume, clean up fades/starts, encode CD text and ISRC codes and create a PMCD or DDP file set ready for replication.
1000 Retail CDs \$1199 Short-run CDs • 50 \$169 100 \$299
 (includes graphic design, color insert, color cd print, box, wrap)
828-684-8284 Check us out on the Web and Facebook
 184 Sleepy Gap Rd. Serving the recording industry since 1987
 Asheville, NC 28704 www.whitewaterrecording.com




XQP 545
 Optical Disrupter
 asymmetrical distortion
 500 series, VPR Alliance Approved



 Nice guys. Yes we are.
www.xqpaudio.com



QS8
 The only monitor controller with cue mixing capability.



QS8 Features:
 Talkback to artist
 Cue mix capability
 Eliminates latency on overdubs
 Passive Control room monitoring
 Analogue summing 4 stereo stems
 Like having a console in a 1U space

In the end it's always analogue.
 www.colemanaudio.com
 coley@colemanaudio.com
 Phone (516) 334-7109

R • Shield
 • The new concept for performers
 • High level noise isolation foam padded ear cups
 • Robust chassis mechanism headband structure



R-11
 Hi-definition Balanced Armature Speaker Drivers With Customized Fitting Kit

R-10
 Lightweight 10mm Neodymium Rare Earth Magnet Speaker Drivers

R-30
 Hi-definition Balanced Armature Speaker Drivers With Customized Fitting Kit

WE LIKE MUSIC TOO


www.rockitsounds.com

CATEGORIES

- EDUCATION/TUTORIALS
- ACOUSTIC PRODUCTS AND SERVICES
- PARTS/ACCESSORIES
- MIXING/MASTERING
- FURNITURE
- SOFTWARE
- EQUIPMENT REPAIR

EDUCATION/TUTORIALS

BE A RECORDING ENGINEER
ONLINE COURSE
 BRAND NEW online practical training in Multi-track Recording. Join our successful working graduates or build your own studio. Diploma/Career guidance. Registered School. **FREE INFO:** Audio Institute of America. Established 1980 www.Audioinstitute.com
 814 46th Ave. San Francisco, CA 94121

ACOUSTIC PRODUCTS & SERVICES

High-end acoustics for serious professionals



REALTRAPS is the premier source for high performance acoustic treatment. Our customers include Bob Katz, Barry Gibb, Charles Dye, Tony Maserati, Nile Rodgers, Bob Clearmountain, Butch Vig, and many others. Whether you're a seasoned pro, or a hobbyist wanting the very best acoustics possible, REALTRAPS has the ideal solution.

Please see our web site for a wealth of product information, demo videos, and amazingly clear explanations of acoustics.

www.REALTRAPS.com

Call Toll-Free: 866-732-5872

Acoustics First
www.acousticsfirst.com
 Materials to Control Sound and Eliminate Noise™ **800-765-2900**

MUSIC PLAYER NETWORK
 Your gateway to artist news, gear reviews, lessons, and more...
www.musicplayer.com

ACOUSTIC PRODUCTS & SERVICES

SILENT Source
 58 Nonotuck St., Northampton, MA 01062
 Info: (413) 584-7944 Fax: (413) 584-2377
ORDER: 800-583-7174
 Silentcore Fabric Panels • Sound Barrier • Isolation Hangers • Tube Traps • Primacoustic • WhisperWedge • ProFoam • Clearsonic • Hushfoam • R.P.G. Diffusers • Sonex • Sound Quilt • More
www.silentsource.com
info@silentsource.com
QUALITY • PRICED RIGHT • INTEGRITY

Hollywood Loops
 Rex2, Apple, WAV, Kontakt
www.hollywoodloops.com

Pocket Sound Booth™
 \$50 MSRP
 ambient sound & echo reduction for microphones
 popscreen & windscreen included
www.pocketsoundbooth.com

PARTS / ACCESSORIES

JustStrings.com

World's Largest Selection of Guitar & Bass Strings!
www.juststrings.com (800) 822-3953

www.emusician.com

MIXING / MASTERING

MASTERING
"BIG LABEL" Sound...Guaranteed!
 Located in New York Serving the U.S. Since 1989 **\$475. Complete Album Deal!**
1-800-692-1210
www.musichousemastering.com

SOFTWARE

BAND-IN-A-BOX IMPROVEMENT PRODUCTS***
 You can put a Better-Band-In-Your-Box.
 Norton Music (since 1990)
www.nortonmusic.com

FURNITURE

custom furniture ●●●●●



What can we create for you?

ARGOSY®
www.ArgosyConsole.com

EQUIPMENT REPAIR

BLOWN SPEAKERS?

SPEAKER REPAIR CENTER

Restoring is an art form at Parts Express

- Fast turnaround -
- Over 40,000 speakers restored -

Get an instant repair quote at:
parts-express.com/src
1-800-270-7964

725 Pleasant Valley Dr. Springboro, OH 45066



**Your local CD and DVD replicator
with offices in NYC and on Long
Island.**

Play-It Direct: one stop production services for world class quality CD and DVD Duplication and Replication, Graphic Design, Printing, DVD authoring and CDROM programming, all under one roof. Think of us as your personal production team. Choosing Play-It means: Unparalleled 1 to 1 service - Strict attention to detail - Competitive pricing!
800-815-3444
www.play-itdirect.com



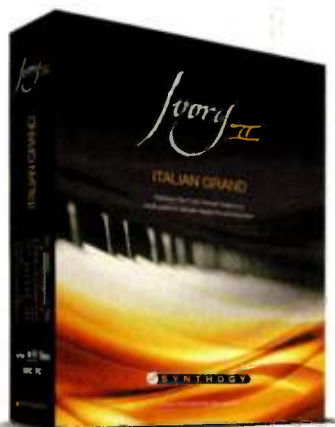
**The Control 2P Compact
Powered Reference Monitor
System**

JBL Professional
Now Available

Delivers accurate performance in a compact form-factor. Internal 35 watt/ch. amplification, and professional feature-set make the Control 2P ideal for desk-top production, A/V and broadcast applications, and monitoring of electronic musical instruments.

SRP: \$249.00

www.jblpro.com
818-894-8850



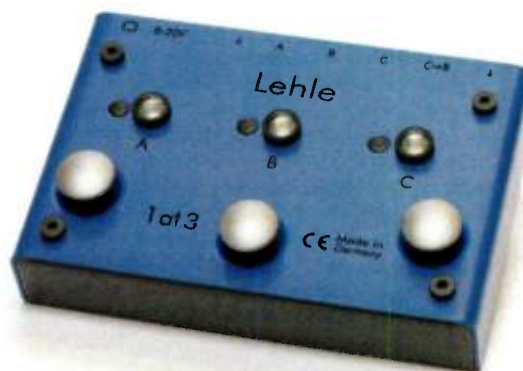
Ivory II – Italian Grand

Now Available

Featuring the same award-winning piano engine found in Ivory II Grand Pianos, the Ivory II Italian Grand boasts a spectacular 10 foot piano with incredible tonal range. Enhanced with their exclusive Harmonic Resonance Modeling, the largest of Synthogy's virtual pianos, (with up to 18 velocity layers) rewards your touch with a sublime wash of color and nuance you must play to believe.

SRP: \$179

Distributed by ILIO
www.ilio.com
(800) 747-4546



1at3

Lehle

Available Now

Your musical mEnage a trois is here! The Lehle 1at3 SGos is a genuine True-Bypass switcher that routes your guitar signal to three outputs. If you have more than one amp you need this pedal on your board!

SRP: \$399

www.lehle.com
805-644-6621



Five Warning Stickers CDs Should Have Had

BY CRAIG ANDERTON

Remember when the Parents Music Resource Center said CDs should have stickers warning of “Explicit Content”? Well, they had the right idea—but the wrong direction. What we *really* needed were warning stickers like these.

- 1
- 2
- 3
- 4
- 5

“Contains music where client told the mastering engineer to make the CD ‘as loud as possible.’ *This just in:* Modern music playback devices have an innovative human interface device called a “volume control” that allows the *consumer* to make music *as loud as they want!* Isn’t technology wonderful?”

“Contains human-played drum parts quantized to a grid.” I’m with Dave Grohl (“Grohl’s Garage,” *Electronic Musician*, May 2011) on this one. Drum machines are exempt, of course, because they’re machines—their souls are quantized. (Just ask Kraftwerk.)

“Contains music created by one person, with no outside input whatsoever.” Projects like this generally do not end well. Even Prince, who really *can* play everything himself, listens to other people.

“Contains the one song you bought this for; the rest is filler.” Translation: Go to iTunes and download the single.

“Contains music made by someone a record label executive wanted to sleep with.” These *never* work out—I played on some of their sessions. ■

Work. The Wasted Time Between Gigs.



Musician's Friend



Friend Us. Fan Us. Follow us
for weekly deals just for you.

Best Selection, Price & Service. Guaranteed.

musiciansfriend.com

800.776.5173



Equip your studio with the advanced UltraLite-mk3 Hybrid audio interface

Compact 10 x 14 Firewire • USB 2.0 recording system

The UltraLite-mk3 Hybrid audio interface has both FireWire 400 and USB 2.0, so you can connect it either way to any current Mac or PC and enjoy pristine audio quality, zero-latency on-board mixing, studio grade effects, professional balanced connections, rock-solid DDS™ clocking, bullet-proof drivers, renowned reliability, and award-winning sound.

Learn more at motu.com/ultralite-mk3



Hybrid technology
in a rack-mount interface...

The 828mk3 Hybrid
28 x 30 FireWire • USB 2.0 audio interface
motu.com/828mk3

Hybrid
Firewire 400
USB 2.0

16-bus mixer
for monitoring
and live mixing

Modeled EQ,
compression,
and reverb

Stand-alone
operation with
LCD control

Tuner and
advanced audio
analysis tools

AudioDesk®
workstation
software

