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Chris Isaak

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Josh is wearing clothing provided by Rogue

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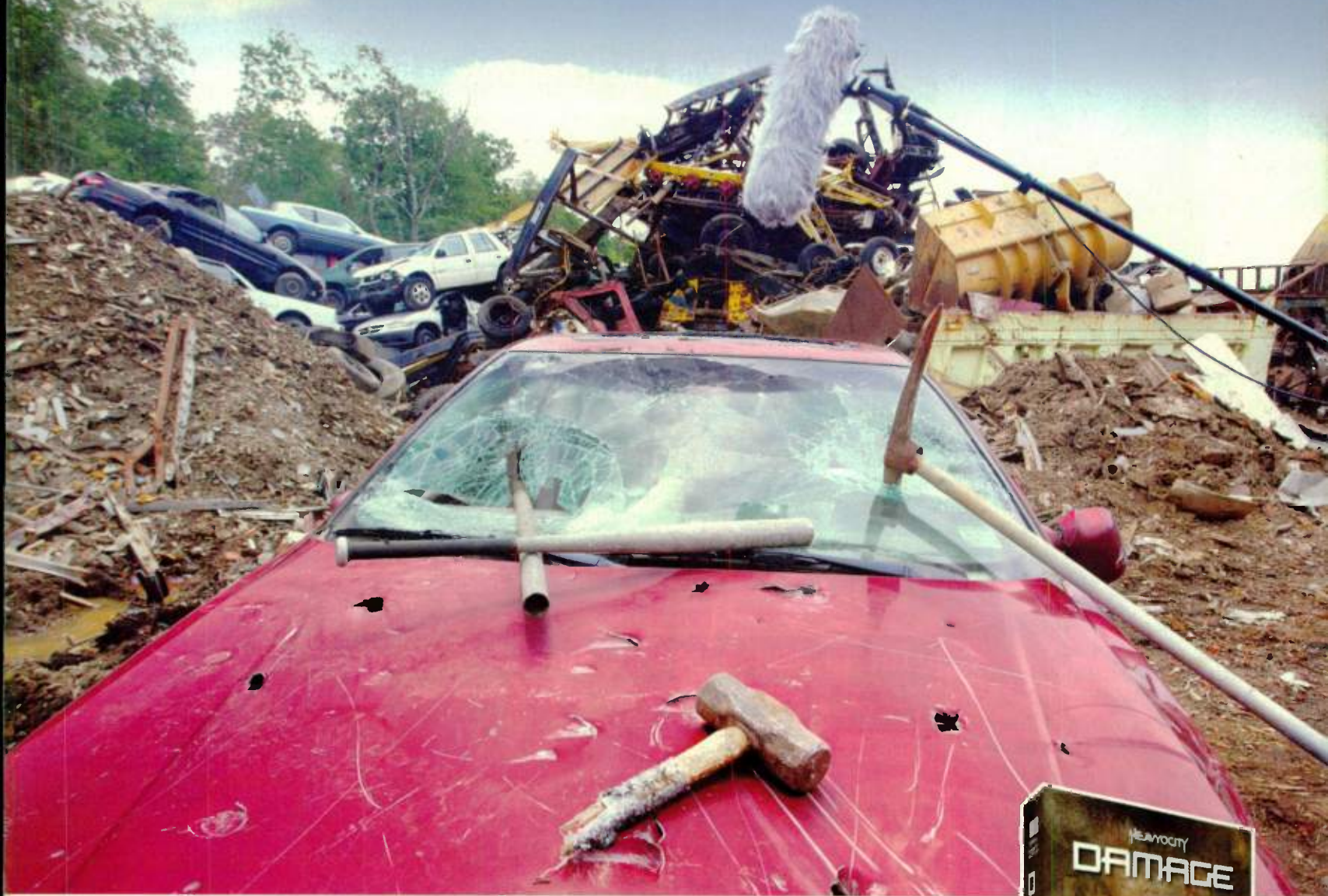
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Studio One has won acclaim from reviewers and more awards than any other DAW in its first year. It's attracted the attention of major producers including Teddy Riley who used it to create and master his posthumous Michael Jackson tracks. And now it's Studio One 2, a major upgrade that should have you thinking about what you're missing (lots!).

Studio One puts all its creative tools into a single Song window. What requires slogging through menus in other DAWs is instant drag-and-drop from Studio One's on-screen Browser.

You work faster and smarter. Instead of a complex interface that gets in the way of ideas, inspiration can be realized before it's lost.

Visit our new site at studioone.presonus.com and download a free Studio One 2 demo today.

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Built-in Melodyne pitch control – a Studio One 2 exclusive.



Celemony's Melodyne is the most sought-after pitch-correction solution in the market, and has been the model for propri-

etary solutions in several DAWs. Studio One 2 Professional seamlessly integrates genuine Melodyne so tightly that, for all



One minute Melodyne integration video

practical purposes, Melodyne is simply a part of Studio One.



Integrated mastering suite with even more tools.



Studio One Professional provides the necessary tools for professional production, including metadata embedding, phase meter, spectrum and peak/RMS level meters with K-System options... and now DDP Export, PQ editing, higher-quality sample-rate con-

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1-minute Studio One 2 mastering video

Since changes to one are automatically updated in the other, Studio One Professional keeps track of Song changes and automatically updates all Projects that contain the revised Song. No other DAW can do that!



Studio One™ 2 with over 100 enhancements.



 **Studio One 2**

Multitrack comping done right.



Single and multitrack **comping** are quick and easy in Studio One 2 — and faster than with most DAWs! No tool-switching is needed. Crossfading between takes is

automated, (you can also manually edit the fades. Auditioning takes is as simple as holding *Alt* and clicking on a take—no more manually soloing entire lanes, as in other DAWs.

 **One minute Studio One comping video**

Other new Studio One 2 Professional features include...

- Folder tracks to keep you organized
- Multitrack MIDI editing
- Browser Search
- OpenAIR Convolution reverb plug-in
- Ampire XT amp modeling plug-in
- Presence SFZ Support
- Over 20GB of custom-made loops, sampled instruments and more



Plus the core features that have won Studio One critical acclaim such as

- Elegant single-window work environment
- Powerful drag-and-drop functionality
- Unlimited audio, MIDI tracks, buses, virtual instruments and FX channels
- Content browser with sort options and preview player
- Integrated QuickTime video player
- 64-bit audio processing
- Advanced automation

Transient detection, editing and groove extraction.



Sure, you can do **transient detection and editing** in other DAWs—but it's slow, and you often have to make a lot of decisions along the way.

In Studio One 2, you can quantize multitrack drums in two quick steps: group the tracks, then quantize. Studio One does the analysis and phase-coherent quantization

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Groove extraction is as simple as drag-and-drop; extract a groove from any audio and apply it to any other audio in seconds!



 **1-minute Studio One 2 Transient Detection video**



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12.2011

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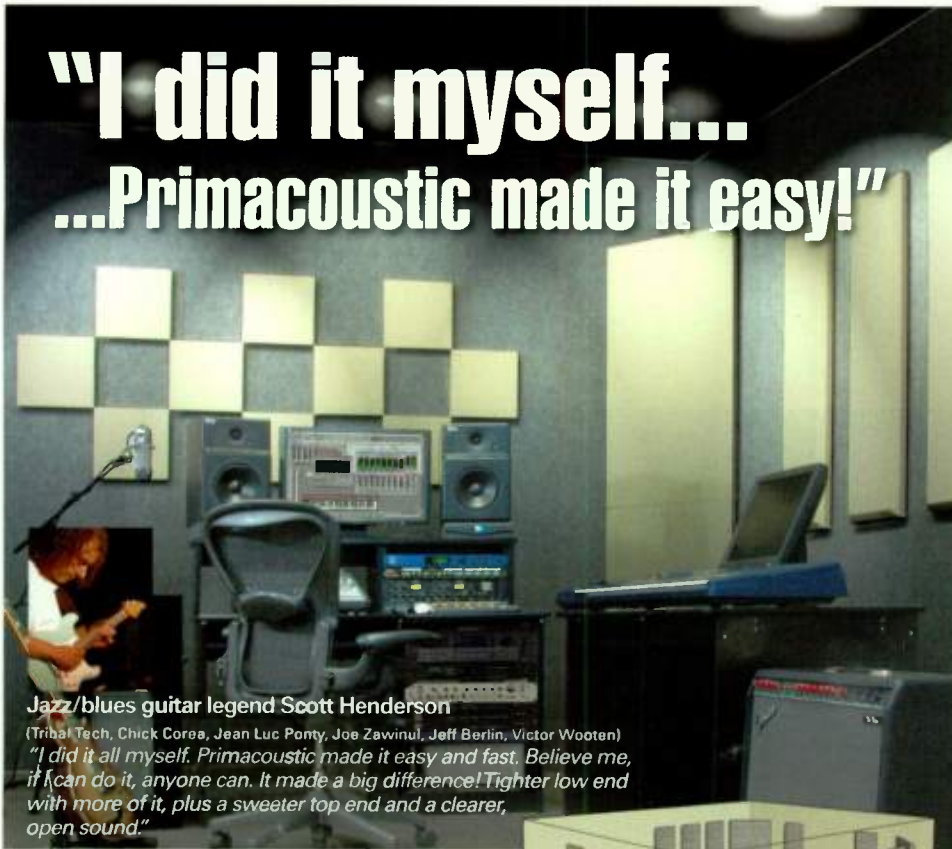
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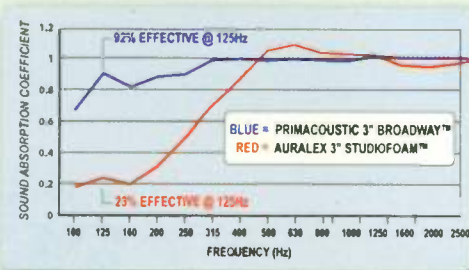


Jazz/blues guitar legend Scott Henderson

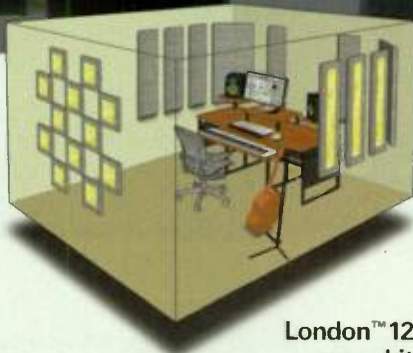
(Tribal Tech, Chick Corea, Jean Luc Ponty, Joe Zawinul, Jeff Berlin, Victor Wooten)
"I did it all myself. Primacoustic made it easy and fast. Believe me,
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with more of it, plus a sweeter top end and a clearer,
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Tests 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.



London™ 12 room kit

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.

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ZOOM

insight

Your Music Business

As 2011 draws to a close, let's take stock of the year in music business trends: From a top-level vantage point, the industry continues along its downward spiral, with more major labels merging, downsizing, and closing; artists topping charts with 20,000 unit sales (or racking up a million 99-cent deals); and piracy still running rampant. Yet at the same time, Spotify and other "free" streaming services are exploding, cloud-based services and crowd-funding sites like Kickstarter are gaining momentum, and 500 million dollars have been pumped into startups like FanBridge, RootMusic, and Songkick.

What does this all mean to the average musician? While the "industry" takes hits, the ecosystem is shifting in favor of the artist. Barriers to entry have fallen away at every step in the process, from production tools to resources for marketing and distributing music. In a new "mass of niches," fans seek unique, personalized experiences, and the web offers it all.

So if anyone can be a creator, and consumers have unlimited choices,

how do you rise above the noise?

By now, it's a given that talent is not enough—your success depends on your entrepreneurial spirit. You have to be a marketer, be shrewd about working tools to your advantage.

But you don't have to do it alone. In this month's "Easy as MP3" Master Class on page 66, label execs, artists, and tech visionaries offer advice for maximizing online distribution opportunities.

Nobody knows how this will all shake out, but in the meantime, take hold of the "business" of your music. Understand your audience, maximize your resources, and be willing to take risks. Just like any successful entrepreneur.



SARAH JONES
EDITOR
sjones@musicplayer.com

The Electronic Musician Poll

HOW MUCH MIDI PRODUCTION DO YOU DO?



IT'S PART OF ALL OF MY PRODUCTION **64%**

I NEVER DO MIDI PRODUCTION **8%**

IT DEPENDS ON THE PROJECT **28%**

COMMUNITY

"THE WORST THING YOU CAN DO TO KEEP FANS ACTIVELY ENGAGED... IS TO ACTUALLY RELEASE THE ALBUM."

Ethan Kaplan, BlackRimGlasses founder, discussing marketing momentum at SF Music Tech, September 12, 2011

Gadget Geek Holiday Hit List

Whether you're searching for the perfect gift for your favorite music tech freak or just have some spare cash burning a hole in your pocket, be sure to check out these ten cool gift ideas, which can be scored for \$100 or less.



BEEP-IT OPTICAL THEREMIN

Why wave your arms around when you can make interesting noises just by flipping on some lights? Plus, a real Theremin doesn't have a mysterious Big Red Button. **\$39.99**, thebeepit.com



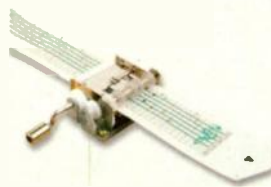
MARSHALL MINI GUITAR AMP

This 6"-high amp features tone and volume controls, runs on a 9V battery, and includes a belt hip for shredding on the go. Perfect for gigs on the Spinal Tap Stonehenge set. **\$44.99**, thinkgeek.com



SYNTHESIZER T-SHIRT

Hands-on interactive fashion! This playable shirt features five sample sounds and 8-voice polyphony. Also available: interactive drum, guitar, and "t-qualizer" versions. **\$29.99**, thinkgeek.com.



DIY MUSIC BOX

For the decidedly non-electronic musician, this hand-crank music box kit comes with paper strips and hole punch so you can create charming, old-timey versions of your songs. Or your favorite Tool song. Or "The Thong Song." The possibilities are endless.... **\$20**, kikkerland.com



THINGAMAGOOOP 2

A noisy, light-controlled analog+digital synth that doubles as a cute, pet-like object? Yes, please! Pick up an assembled version, or get the DIY kit for your obsessive circuit-bending friends. Kit version: **\$100**, bleeplabs.com



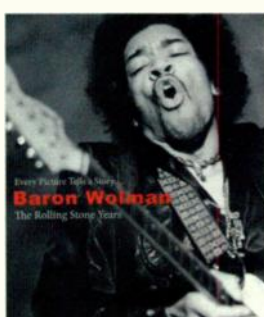
CYMBAL MOUSE PAD

Rock out your workstation with this Zildjian A Series splash cymbal-replica mouse pad, designed as a tribute to a company that's been around since 1623—a lot longer than your computer. **\$10.99**, amazon.com, music retailers



SOUNDWAGON RECORD PLAYER

For your hipster friends who think they discovered vinyl: the "world's smallest" (and arguably, cutest) record player. Listen to music through the tiny rooftop speaker while the little bus takes a road trip around your LP. **\$99**, soundwagon.jp



THE ROLLING STONE YEARS

This gorgeous coffee table book from Baron Wolman, *Rolling Stone's* first chief photographer (1967-1970) is filled with what the magazine calls "some of the most memorable unguarded images of the era." **\$37.50**, various booksellers



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Buy WearYourMusic's custom-crafted bracelets made with guitar strings once played by artists ranging from Carlos Santana to Eric Clapton and profits will be donated to that artist's charity of choice. **\$100 and up**, wearyourmusic.org



DRUMSTICK PENCILS

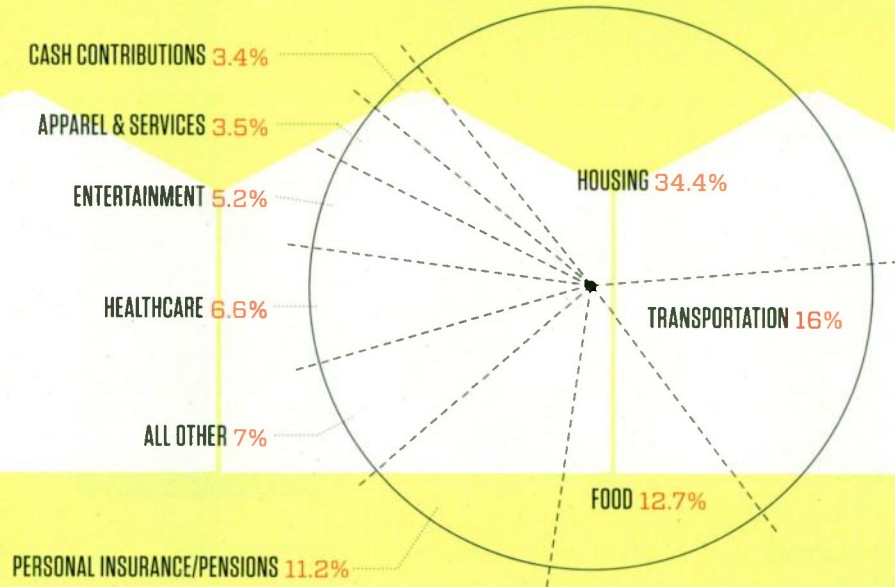
Why? Because a), they'd make the coolest Secret Santa gift ever, and b), you can't doodle during meetings with real drumsticks. **\$10**, SuckUK.com

BY THE NUMBERS

Tightening the Belt

It's often said that entertainment spending is counter-economic, but figures recently released by the US Bureau of Labor Statistics suggest otherwise. According to recently published data, household income dropped 0.6 percent in 2010, overall spending decreased by 2.8 percent, and entertainment spending fell 7 percent—the biggest decline in any expenditure segment. Total average annual entertainment spending per household was \$2,504, or 5.2 percent of total household spending. Consumers spent more on entertainment than “apparel and services” (3.5 percent) but less than they did on healthcare (6.6 percent).

Consumer Spending 2010



YOUR TAKE

How do you record BIG drum sounds in a small space?

Here's our favorite reader response. Phillip Jackson wins a Glyph GT 050Q drive. Thanks, Phillip!

I HAVE a tiny studio, as you can see here. To get the biggest drum sound, I do a three-fold recording approach:

- Tune them low, low, low. Low-tuned toms have lots of attack and have booming body. Low-tuned snares and loose snare wire give the drum lots of low-frequency information; this adds to the illusion of bigger space because sonically the snare occupies more room in the mix.
- Put those overhead mics up high, and WIDE. I get a bigger sound when my overhead condensers pick up more of the overall drum

kit sound. Moving them back away from the cymbals, balance height with space to get a good overall picture of the kit. You'll eventually compress these to get some pumping and make that kick and those toms sound HUGE. Consider using a large-diaphragm condenser mic over a small-diaphragm condenser. The larger capsule doesn't respond to transients as quickly, taming crashing cymbals and giving your mid frequencies more dominance in the mix.

- Use a room mic, in the hallway of another room. This is

more for effect—I put a large-diaphragm condenser in the other room or down the hallway to get the room sound of big drums. This sound of distance mixed with the close mics gives the illusion of a big space. I compress this channel—sometimes 8:1, or even 20:1—and slam it so that it's really pumping. You won't get the sound of the cymbals pumping with the kick, but you'll hear the room reacting. Three steps, one huge drum kit.

PHILLIP JACKSON
VIA EMAIL



Send *Electronic Musician* Your Stories, Win Gear! Talk to us! Share your stories with *Electronic Musician*, and we'll print our favorite in an upcoming issue. If we choose your letter, you'll win sweet gear! This month, we're giving away an Earthworks KickPad Kick Drum System that plugs into the XLR output of just about any mic to create “instant kick drum sound” that is repeatable, every time. Contest open to U.S. residents age 18 and over.



THIS MONTH'S QUESTION:
WHAT'S YOUR FAVORITE TRICK FOR BOOSTING THE KICK DRUM IN THE MIX?

Send your answers to
ElectronicMusician@musicplayer.com.



IF YOU COULD PLAY ANY STAGE IN THE WORLD, WHERE WOULD YOU PLAY?

Mullet Reeve

I'd play on Wall Street.

Mike Rinehart

Budokan. To have a record of my music be *Live at Budokan* would be the coolest thing ever.

Marcelo Paganini

Woodstock.

Michael Feldman

Fillmore, San Fran!

Barrie Deatcher

Red Rocks.

Russell Baudry

At this point, any stage would be awesome.

DIG MY RIG

I WAS determined to figure out a way to build a workable tracking room and mix studio on zero budget. I hand-excavated a crawl space under my home, and cruised local building projects to get as much scrap building materials as possible. I insulated the floor with materials from an apartment tear-out; I sheeted the walls with OSB (oriented strand board).

I found about 40 yards of



killer fabric that were thrown out from a furniture store; I needed a contrasting color to complete the design, and that was provided by

drop cloths—yes, the burlap kind. I cut 2x2 squares of sound board left over from a construction project and wrapped fabric around them.

I punched a hole in the house-bearing wall to have a line of sight and added a 60mm glass window from a department store display unit. The rest of the finish woodwork came from a home-remodel flooring job. Overall, a lot of hard work and tedious salvage yard trips! But, in the end, proof positive that a style-conscious studio can be built on practically nothing if you are determined enough to see it through to the end.

Steven Hartwell
Featherlight Studio
 Bend, Oregon
featherlightstudio.com

ask!

I've been hearing a lot about the advantages of solid-state drives for audio, but their high cost is making me think twice (ten times, actually). Is it really worth putting some bucks into replacing my hard drives (laptop and/or studio) and going SSD?

DONNA JOHNSON-SMITH
 SAN DIEGO, CA
 VIA EMAIL

IT DEPENDS. SSDs are quiet, fast, reliable, and—as you've already found out—expensive. For laptops, they're welcome because of their resistance to mechanical shocks, along with reduced heat and lighter weight. However, you won't extend battery life much because 2.5" drives draw less current than SSDs when idling, which they're doing most of the time. And if you need a really high-

capacity drive, it will probably cost more than the rest of the laptop.

For your studio, consider scaling a desktop computer down to two SSDs using MLC (Multi-Level Cell) technology—one for the operating system, and one for a music/recording data drive. If you have large sample, loop, or virtual instrument libraries, use a single, high-capacity,

standard hard drive to hold them. Then, keep some conventional hard drives around to back up your SSD data drive, image your operating system drive, and archive projects. (Note that MLC SSD drives are much less expensive than Single Level Cell drives, and while considered somewhat less reliable, we're recording music—not storing sensitive military data).

You can always play



the waiting game and wait for SSD prices to fall, but SSDs offer enough advantages now that for many, the current admission price is worth it.

THE EDITORS

Solid-state drives realize the potential and promise of RAM recording—but the price of admission means they're not for everyone.

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



**BASSNECTAR AND FAMILY**

MARIAVILLE, NY
JULY 9, 2011

Genre-bending DJ Lorin “Bassnectar” Ashton was one of more than 60 artists performing at the 10th anniversary of the Disco Biscuits Camp Bisco music festival, which takes place each summer in upstate New York. “Lorin is a friend of mine, and he asked me to take what he calls the ‘family photo,’ which he does at the end of his sets,” explains photographer Dave Vann. “He and his enthusiastic fans pose for a shot with the house lights up; it’s quite a thrill (and a bit of pressure) having 20,000 people pose for a picture!” Judging by the sea smiles, the thrill was shared by all. . . .

PHOTOGRAPH BY DAVE VANN





Isaak records in the Sun Studio tracking room.

On *Beyond the Sun*, Chris Isaak pays tribute to Sun Records, legendary producer Sam Phillips, and the visionary artists who shaped rock and roll

Beyond the Sun is the record Chris Isaak has always wanted to make: a collection of Sun Records covers and offshoots. It's not terribly surprising. Isaak's style—from his perfect pompadour to his sequined sport coats, from the lonely reverb on his beautiful voice to his rhythm guitar chugging on like a train—owes a lot to Sam Phillips' stable of blues and rockabilly pioneers.

In the liner notes to *Beyond the Sun*, Isaak recalls digging into the cupboard where his parents kept their old records when he was a kid: "My brothers and I would listen to these records over and over. I remember starting off to school every day, and the last song I heard

A LABOR OF

LOVE

BY BARBARA SCHULTZ



would be a Jerry Lee Lewis tune. The record player was one of those old-fashioned ones that looked like a suitcase and folded out. It had two little speakers, one on each side, about the size of a box of Kleenex. We thought it sounded fantastic, and scratchy sound or not, the records moved you.”

Over the years, the great Sun recordings of Elvis Presley, Lewis, Roy Orbison, Carl Perkins, and Johnny Cash became more, not less, important to Isaak. As he listened and learned to play along to those records, his appreciation grew deeper when he started writing his own songs and developing his hybrid '50s-meets-modern-day style. Sun music wasn't just an “influence”; it was like home to him, like a lifeline.


“I was hooked on music,” Isaak writes of his early post-college days. “I didn't have any big ideas of fame or fortune, but I was just dying to have an electric guitar, a flashy suit, and a real microphone stand instead of the broomstick taped to the back of a chair that I was using at home. It took a lot of looking, but I got the guitar, the microphone



stand, and finally the great band I had always been looking for . . . I was writing a lot of songs, and we were recording and putting out records, and the action never stopped . . . touring, filming, TV . . . and if you saw us on the records, you might not have known that we were still playing those Sun Sessions tunes. We would sneak one or two into our live shows. For years, we closed our live show with a version of an old Jerry Lee Lewis tune that was my Dad's favorite and mine, too, 'Bonnie B.'”

Over the years, success has brought Isaak the opportunity to meet a lot of his rock 'n' roll heroes, and he's played with a few. He says that being asked to perform a song with Jerry Lee Lewis for Lewis' TV special *Last Man Standing, Live* (2007) was one of the “most fun and scariest things I ever did . . .”

“These singers and their music just seem to always be a part of my life,” he writes, “always there somehow . . . a chance meeting, a record I find in a store in Japan, or a junk store in my hometown. I guess I just love the music and keep looking for it and finding it in strange ways and places.”



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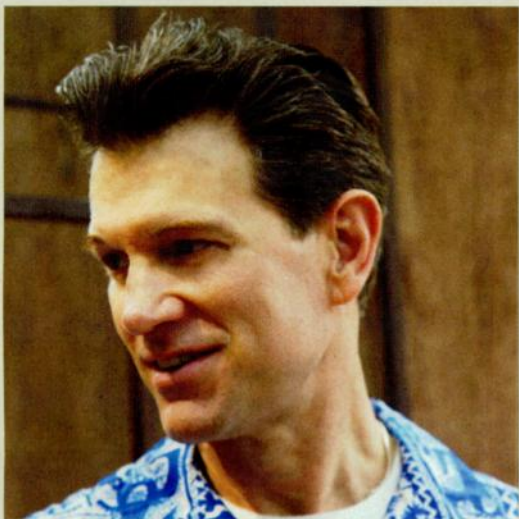
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Chris Isaak on Sam Phillips

"It's hard to look back in time and understand the meaning of what Sam Phillips did. I had so much fun making this record, and when I listen to it, I'm happy with it, but it doesn't make me think for a second that I compete with those



[original Sun artists], because they did the hardest thing of all. They stepped out of their time and made something completely new.

"Sam Phillips could have looked at Elvis and said, 'I could make a Dean Martin type out of this guy.' Because a lot of people loved Dean Martin. He could have recorded him with an orchestra. A lot of people would have gone in that direction, but instead he looked at him and said, 'No, let's do the kind of music nobody ever made before, that there's no market for, and that probably a lot of people are going to be upset with. It'll be great!'"

"Sam [Phillips] would have had maybe a 6-channel console . . . a limited amount of tracks and a limited number of mics in the room, so you have to place them in the right spot to be able to let the natural dynamics of the band work." —Mark Needham

To record most of *Beyond the Sun*, Isaak decided to go to the source—the old Memphis Recording Service studio where engineer/producer Sam Phillips founded Sun Records. Serving as his own producer, the artist first gathered his bandmates at home, in San Francisco, for some serious pre-production, and serious fun.

"When we started off, I said, 'What I don't want to do on this record is make faster versions of a bunch of rockabilly songs that we think we know but we don't really work on, and then end up with bar band versions,' Isaak says by phone from San Francisco. "I said, 'Let's listen to the records, take what we like, really rehearse it, and then forget everything we learned and just play.'"

"So we went to my house, and it was like the old days. Everybody stayed at my place, because we didn't have money to get, like, 20 hotel rooms for a month. I said, 'Come over, we'll cook spaghetti at night, and we'll play these songs, and that way when we get into the studio, it'll be quick.'"

"It was a good plan," he continues, "and it's a huge help that it was the right group for the project. My drummer [Kenney Dale Johnson] plays simple, straight-ahead; he's a great shuffle player, and he's got a great feel, a light feel. My bass player [Rowland Salley] comes from a background of playing bluegrass music, standup bass for country music, and that's the background the original Sun musicians had."

Isaak's band also includes percussion player Rafael Padilla and guitarist Hershel Yatovitz. The group's longtime engineer, Mark Needham, rigged Isaak's wood-paneled basement for recording and captured the rehearsals.

"I put in a laptop with Pro Tools 9, Manley preamps and a little Toft console, and we bought some more microphones. It's a pretty small wooden room that the band has rehearsed in for at least 20 years. We started recording in there, just to get an idea of what things would sound like, and of the 46 songs we eventually did, I think four or five of the ones we actually used on the album were from the rehearsal room."

Needham also accompanied the musicians to Memphis, for the main recording sessions in the famed Sun studio. There, the group had to work after-hours, because the facility is open for public tours during the day. The musicians took the same approach to recording in Memphis that they had in San Francisco—know the original inside out, then make it their own. In order to understand as much as they could about how the original records were made, Isaak invited in legendary engineer/producer/songwriter Cowboy Jack Clement, who worked with Phillips from 1956 to '59, including discovering and recording Jerry Lee Lewis.



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Phillips at Sun Studio.

Sam Phillips, in his own words

In 2000, I interviewed Sam Phillips (1923-2003) for Mix magazine about the early days of his career, working in his Memphis Recording Service studio and starting Sun Records. Here's what he had to say about the studio itself, and miking some of the most important singers of the rock 'n' roll era.

How did you design the studio at 706 Union?

I used the old 1-foot-square acoustic tiles, and I knew there were a lot of ways to approach it to make a live-er studio or deader studio. I never truly liked a dead room for what was I going to do with a very sparse number of people on the session—maybe two to four or five was a big band—so all that was taken into account.

I designed some angles in the little studio, about 18 by 32 or 33 feet long, and I designed a V-type ceiling with horizontal and vertical Vs on either end of the studio, and I just kind of played with it. I would go in and clap my hands. It sounds kind of crude, but that was the way a lot of people felt the vibe of a studio. I wanted to have a good sound that I felt was natural.

I never used EQ. I'd reset the mics or exchange mics. I never used EQ until we got to the mastering stage. I had very little limiting and compression. I had a homemade compressor that I made so if something got out of hand it would get it. I never complained about equipment then, even though I had to make quite a bit of it myself. I had an old, used RCA 70D board that I'd reworked that I got from a little [radio] station up in South Carolina, and I just had all I needed. I had six inputs.

I also knew that I had to use the right type of microphones. I couldn't buy some of the more expensive microphones, but I knew what I was doing with what I had. I

worked with how each different vocalist would work the microphone. Some I'd work directly in front, maybe six inches back, some I would have work across the mic.

Can you give some examples? How did Howlin' Wolf approach a mic? How did Elvis Presley approach a mic?

Well, the Wolf sat down, and he played the harmonica, too. He never liked to stand except when he was onstage. The Wolf liked to have a microphone that was more or less nondirectional, because he was going to wiggle his head regardless. He had played these little spots over in Arkansas trying to grind out a few pennies on the weekend; he always played like he was in a show. So I knew working a directional mic was not going to work on the Wolf. You would lose some of those overtones of his voice, which are just amazing to this day to me.

On Elvis, in most cases I would use a Shure 56S or, on occasion, I would use a [RCA] 77D, which is an excellent microphone if you use it right. It's just great for voice; it's just great for just about any instrument and was one of the most versatile microphones then.

I had three different microphones that I normally used on vocals, and it depended on who it was. One was the Shure, one was the RCA 77D, and the other, if you can believe this, was the old RCA 44D. It was bidirectional, but surprisingly, on a few people, it worked to get a sound that was most complementary. It made your pickups elsewhere more difficult because it's bidirectional and the vocal wouldn't be as loud as instruments normally, but I was very much intrigued by some of the things I could do with the 44D. I was experimenting all the time.

BARBARA SCHULTZ

"If we had any questions, Jack had an answer," Isaak says. "He also played guitar, hung out, and he gave dance instruction to my manager!"

It was Clement who pointed out the little dime-sized hole in the middle of the linoleum tracking room floor, carved out by Black's bass peg. "So, when you go in there to set up, the bass pretty much goes right there. If it's good enough for Bill Black, I think it's good enough for us, so that's where we started."

In the approximately 20x30-foot tracking room, the bandmembers set up with bass and piano at the center of the room; Yatovitz, on guitar, was close to the drums at one end of the room, and Isaak and Salley were at the other end.

Another Sun veteran, and another one of Isaak's heroes, guitarist Roland Janes, also joined in on the sessions. "He played for Jerry Lee Lewis on all the big hits that Jerry had with Sun," Isaak says. "Of course, Jerry Lee Lewis overshadows everything, but I'm that one guy in a million who listens to those Jerry Lee records and I turn up the guitar solos—this guy is awesome!"

Isaak and company tracked live in the little studio, vocals and all, and Isaak can't say enough about how essential Needham's engineering talent was to the outcome: "When you see the record, it says 'Chris Isaak' on it," he says, "but the reality is, Mark Needham is all over this record. You don't hear his voice, but he is such a great engineer, producer. He's the guy, particularly on this kind of thing where we were cutting massive amounts of music in a very short time. If we come back tomorrow and listen to it, and say, 'We had fun, we were playing great, but the bass sounds terrible,' it's locked onto the track because I'm singing with it. It makes you realize you better have an engineer who really knows what he's doing. Sam Phillips had a little bit of gear and a lot of talent. It takes chops to record in this style."

Needham's approach to recording at Sun was not to copy a 1950s tracking session, piece for piece, but rather to use technical information about the Sun days as a jumping-off point. For example, rather than put up old RCA 77 ribbon mics like the ones Phillips would have used, he employed a number of AEA's Big Ribbon microphones, which emulate the sound of the old RCAs.

"Chris' vocal mic is a Didrik, made by Didrik De Geer. We also used some of those as room mics," Needham says. "I set up multiple layers as far as individual mics on instruments, but on most things leaned heavily on the four to five mics: one overhead on drums, another one by the bass and kick drum; the bass was next to the drum, so a lot of time the bass and kick drum would bleed into the same mic. Then we had a couple of U 67 mics on

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the piano, and Chris' vocal and guitar.

"On some songs I would add a little more of the close mic on the piano, or turn up Hershel's guitar if I needed that, but mostly that happened organically in the room. We mainly stayed with the idea that back in the day, Sam would have had maybe a 6-channel console, so he had a limited amount of tracks and a limited number of mics in the room, so you have to place them in the right spot to be able to let the natural dynamics of the band work—you're getting those licks and solos in the room mics."

Needham also brought along some of his own Lavry Gold converters and he rented a mobile recording rig, including Pro Tools 9 and Neve 1081 mic preamps, from Gear for Days in Nashville, to duplicate the setup he uses in his own studio, The Ballroom in L.A.

"I integrated this gear into what they already had at the studio to make sure we didn't have any problems, but it's a fantastic room," Needham says. He describes the room acoustics as "mildly live. It's certainly not a very big room, and not quite as live as what we were getting in Chris' basement, which is all parallel wood walls and really bouncy, but it definitely has a unique sound."

"I said, 'I don't want to make faster versions of rockabilly songs that we think we know but we don't really work on, and then end up with bar band versions.'"

—Chris Isaak

And how did it feel for Isaak to record in Phillips' studio, side by side with the likes of Roland Janes, Cowboy Jack, and his longtime bandmates? "It's the most fun I ever had making a record," Isaak says. "Nobody wore headphones. We could hear each other play, and we went for it all at once, every time. It gave a lot of power and energy to the band."

Testament to those good times in the studio is the sheer number of songs they recorded. Beyond the Sun includes 14 tracks in a single-disc version, but Vanguard will also release a double-album version, and Isaak says he's got at least another album's worth of material in the can.

"I've been singing these songs my whole life, so when it came to choosing them and playing them, it wasn't hard work," he says. "When we're making a record, usually my manager is going, 'We need you to record a few more songs so we have B-sides.' But my management was literally saying, 'Enough, stop, please, no more!' Because I was going, 'I've got three more songs. We're set up. Let's do another!'" ■



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LISTEN

Meshell Ndegeocello

Meeting of the Minds **BY BARBARA SCHULTZ**

ON THE surface, it seems like a weird cross-pollination experiment: pairing avant-garde R&B/jazz artist Meshell Ndegeocello with a producer/performer like Joe Henry, who's all about live playing and recording. Ndegeocello's music grows where the rhythmic meets the ethereal. Henry's forte is getting the best out of singular performers like Bettye LaVette, Solomon Burke, and Elvis Costello. Just as an example, the keyboard credits on Ndegeocello's beautiful new album, *Weather*, include "various soundscapes." The keys on Henry's terrific recent solo project, *Reverie*? An upright piano. But look just beneath the surface: The keyboard player on both records is Keefus Ciancia. Ndegeocello and Henry's musical similarities are not necessarily greater than their differences, but they do share an aesthetic commitment to serving the song.

Ndegeocello and Henry have actually been friends for about 15 years. Henry sang a duet on Ndegeocello's album *Bitter*, and she returned the favor by playing bass on Henry's *Scar*, which also includes performances by Ornette Coleman and Marc Ribot. "That was an ambitious and important project to me," says Henry, "and she volunteered her services for that, which was wonderful. Since then, we've often talked in the abstract about working together."



Joe Henry

When Ndegeocello's record company, Naïve, suggested she join forces with a high-profile producer, yet still make what she calls a "jazz-budget" record, it seemed like the perfect time to call upon Henry, a multiple Grammy winner who records in his basement—albeit a pretty cool basement.

"Meshell and her family came to visit my home when they were in L.A. a year ago December," Henry recalls. "I think she was intrigued by my studio here—that it is professional as it is, and homey also. I live in the Garfield House; it was built for the widowed first lady in 1904, after President Garfield was assassinated. It's a big, old craftsman house and they put the kitchen in the basement with a couple of rooms for the cooks—a full basement that opens to the backyard, with windows on three sides."

Prior to beginning sessions in the Garfield House, Ndegeocello had put together a collection of songs she wanted to record. "I usually do a lot of songwriting at home. I use Logic, but I still play bass and guitar, so there's a lot of hand instruments involved—not just processed instruments," she explains. "For beats, I would do all programming, and I usually try to emulate something that will go with the drummer I

**"If you cast the room with musicians who really know how to listen and are really willing to disappear into the song . . . when that happens, it's not screaming out for a lot of overdubs."
—Joe Henry**

play with, Deantoni Parks. He's one of the most incredible electronic musicians I've ever heard, and he also writes all the time. He walks around with his laptop, whenever we're on tour or just anywhere, and he's constantly programming.

"Deantoni and I exchanged songs to make this album. 'Chance,' 'Dirty World,' 'A Bitter Mule,' and 'Dead End' all started out as his music, and I wrote the lyrics and melodies." Ndegeocello also collected songs, or parts of songs, from L.A.-based songwriter Benji Hughes and Ministry's Chris Connelly, who wrote the lyrics to Parks' music on "Rapid Fire."

This was a different process from the way Ndegeocello has created material for other albums, which she says have typically been "more conceptual. 'I don't think like that anymore, though,'" she says. "Now when I look for music, it's more like I get a splash of something and just go with it."

Ndegeocello says that she also switched up her main instrument before making *Weather*, picking up a Fender P Bass rather than her usual Jazz. "The P Bass has a whole different pickup system—it's a lot more dubby and not as bright," she says. "I've also been playing a Silvertone guitar, and using a series of Malekko pedals—fooling around with a lot of different sounds."

Henry encouraged Ndegeocello to shake things up in the studio, too, where his MO is to capture songs spontaneously and fairly quickly—to get the best out of the amazing musicians in the room—in this case, Ndegeocello, Parks, Ciancia, guitarist Chris Bruce—in the moment. With Ndegeocello and her bass in a vocal booth and the rest of the musicians in his main tracking room, Henry had these experimental musicians working like a band, laying down live tracks with live vocals.

"I would say 90 percent of the album is live takes," Henry says. "And Meshell was always playing or singing something. I encouraged her to play bass as much as she would, because I love her playing, and at the core of it was, for the most part, those four people playing.

"I'm not in any way against overdubs, but I find that if you cast the room appropriately with musicians who really know how to listen and are really willing to disappear into the song, leaving the right amount of space, the right amount of articulation—when that happens, it's not screaming out for a lot of overdubs," he says. "For the most part, if more noise needed to happen,

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it happened. If singing needed to recede and an instrument needed to step into the foreground, it happened.”

One of Ndegeocello's sonic signatures, in fact, concerns where her vocal sits in a song; her voice is beautiful, elegant, but it's often treated as just one part within a musical environment. She's not one of Henry's singer/songwriters sitting front-and-center, telling a story. “The vocal is just a sonic color to accompany the rest of the music,” she says. “On some specific songs, like ‘Rapid Fire,’ it's not even about the words. It's about the intended emotion, and the fact that people are going to move their bodies to it. But Joe is about the singer, and he definitely taught me something. He taught me that when musicians play to your singing, the songs have a better flow.”

Some of that singing during the live tracking was somewhat subtle—Ndegeocello just humming along to add her voice to the sound—and a lot of her final vocals were re-cut and overdubbed, as were some of Ciancia's soundscapes.

“Keefus creates a whole sonic palette from found sounds, manipulated sounds. He's sort of like a sound designer in real time,” Henry says. “He has a lot of old, arcane keyboards and then a lot of sounds

in his own computer bank, so you never know what exactly is going to come out. Keefus is changing the weather in the room sonically all the time.

“You can spend the whole day, and people do, with Keefus doing overdubs because he's got so many ideas and so many interesting ways into a song,” Henry continues. “So Meshell would often say, ‘I'm going to give you two environments on this song.’ There's all kinds of different ways a song can be successful. But we just need to find one way and commit to it, and that's why Meshell would say, ‘Do what you want, but you can do two things.’”

Live or overdubbed, everything recorded in the Garfield House is tracked by Henry's go-to engineer, Ryan Freeland, whom Henry says is a “brilliant translator.” “I say ‘translator’ because you can have the most gifted musicians in the room holding forth, but it's like having Gabriel Garcia Marquez reciting something,” he explains. “If you don't take it down, translate it, it's only for the people who were standing there. If it's ever going to leave here and be meaningful to anybody, somebody has to translate everything that was beautiful about it, even enhance that beauty, and take it out of the room. That's what Ryan does. He gets deeper and richer sounds than anybody I've ever heard.

“He also has a very musical and instinctive way of problem solving, and the greatest gift that he offers is he allows everybody to be fearless, and when people are fearless and feel supported, they'll do anything for you. They'll give you everything, because they know: Even if we're bleeding all over everybody else's mic, anything can be addressed, so don't hold anything back. You can't overestimate the significance of an engineer who can instill that kind of freedom.”

Over several years of working with Henry and others, Freeland, a multiple Grammy winner himself, has developed a hybrid, flexible Pro Tools/outboard racks setup that works as well at the Garfield House and beyond as it does in his own home studio. (Learn more about it at emusician.com/december2011.) His flexibility and Henry's devotion to music in the moment seem to have bridged any gaps between Ndegeocello's electronic world and Henry's old-school ways.

“Joe's never too attached to things,” Ndegeocello says. “He's just trying to get the best out of us. He keeps you on time, he keeps you within your budget, but mostly he's a lover of beauty.” ■

“Joe is about the singer ... he taught me that when musicians play to your singing, the songs have a better flow.” —Meshell Ndegeocello



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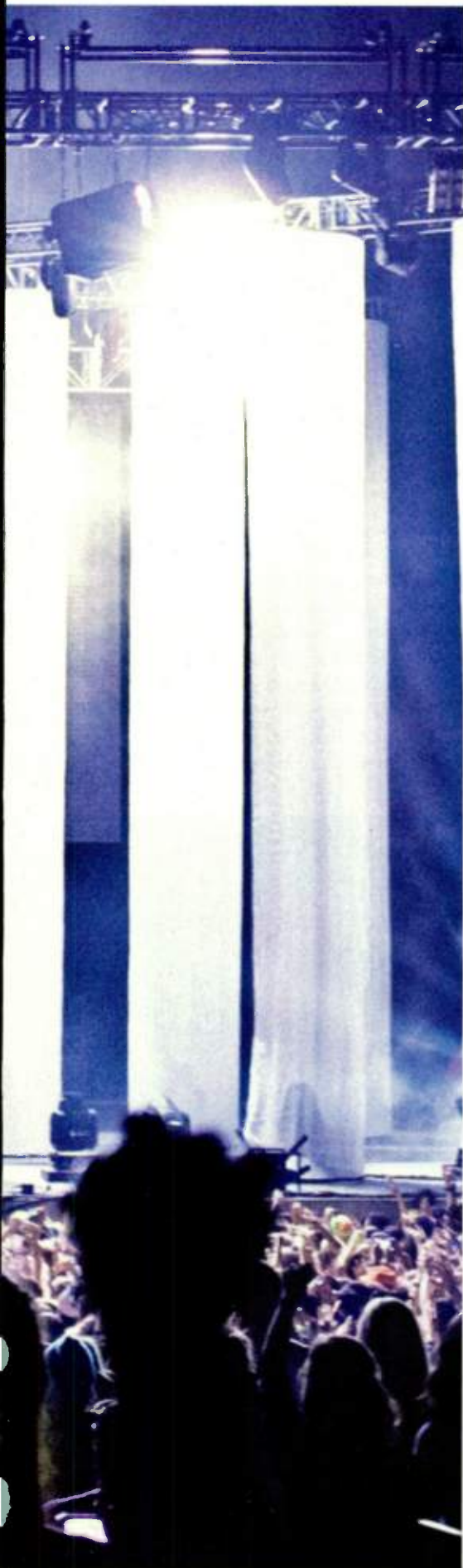
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BY TONY WARE

RYAN RADDON, a DJ/producer better known to the general public as Kaskade, has seen an increasing amount of success over the past decade. He has enjoyed dance chart success on both sides of the Atlantic, has produced Grammy-nominated remixes, has seen his crowds grow from 350 to tens of thousands, and in September 2011 was voted "America's Best DJ" by a *DJ Times* poll.

In 2010 Raddon released the album *Dynasty*, his most critically and commercially successful album to date, and with bigger success has come a bigger budget. Now the laid-back California transplant and unabashed gear dork has unleashed his latest full-length, *Fire & Ice* (Ultra Records), an album for which he made significant studio investments prior to production.

"This is my seventh album, and every single one of them has been recorded in a different studio," reveals Raddon. "I've had rooms inside my house, outside my house, wherever. In my last studio, my computer room was my bathroom, to isolate the fan noise and vibrations and all that, and I drilled a hole through the wall for the wires.

"For this new album I moved into a room in Santa Monica, and it's a fully built-out studio, the most professional room I've ever written in," he adds. "It has a nice iso room to do vocals, and it actually has its own machine room."

This studio saw a substantial influx of activity as Raddon geared up for *Fire & Ice*, a conceptual double album of a sort. "I didn't want everything to be banging dance music, but I always need more stuff for my shows," he says. "I thought it would be cool if I did this concept album where every song has two mixes, one more for the club and one that's more chill."

Raddon says he has evolved his preferred production tools over the years from an Akai MPC sampling production station, a Roland Juno-106 synthesizer, and a Rhodes electric piano through Propellerhead Reason and beyond, but certain aspects of Raddon's process have never changed. He's been a Pro Tools devotee for almost a decade-and-a-half, and often sketches grooves in Ableton Live (which he also uses extensively for sequencing a weekly

radio show) prior to importing clips into his primary workflow to fit to size.

He's a beat digger—not to the obviously symphonically spliced extent of a DJ Shadow, but he always keeps an open ear for compelling snare hits and other percussive components, whether off virgin vinyl or from crappy MP3s. He is always opening up his palette of energetic synth sounds, recently augmenting his go-to, Spectrasonics Omnisphere, with the reFX NEXUS2 virtual instrument.

"The libraries [for NEXUS2] are full of both familiar and completely crazy sounds, and it's really easy to navigate, so I used it a lot on the album, though I wish you could sculpt the sounds a little bit more." To facilitate this predisposition to fine-tune, Raddon turns to a wealth of plug-ins, such as the Epure II parametric EQ by Flux, the BX_Hybrid by Brainworx, the Massenburg MDW Hi-Res EQ, the URS N12 series 12-band graphic EQ, API 560 10-band graphic EQ by Waves, the McDSP FilterBank and more. This

in-the-box cobbling of elements necessitates his continuous quest for ways to make tracks "warmer and airier."

"The Crane Song HEDD 192 was a new purchase for [Fire & Ice], and I'm really happy with the converters on that," says Raddon. "I've got a few pieces of their outboard gear, most studios I've visited have their stuff, and I've definitely noticed a difference when I A/B against the last record." Raddon feels the positive analog-style "distortion" that the unit contributes makes up for deficiencies in his heavily sample-based productions.

Plenty of work was done in the laptop on the road. Raddon tours around 200 days a year and he says the track "Turn It Down" was almost completely arranged in airports, drawing on the NEXUS2 and Spectrasonics Trilian Total Bass Module. The track exemplifies the new toys and tones of *Fire & Ice*.

But Raddon also committed all available hours for around 10 to 12 weeks of proper pre-production time situating his new tools and

collecting his hits and riffs. Once a basic melodic and rhythmic guide was completed, he brought in singers to see which ideas best fit a proper song format. Vocals recorded, he then developed the musical bed, finalizing the sound design.

Collaborators for *Fire & Ice* included Haley, Mindy Gledhill, Skylar Grey, Neon Trees, Rebecca & Fiona, Marcus Bently, Dan Black, Quadron, Skrillex, and more. "Since David Guetta came along, more people are paying attention to vocals on dance music," says Raddon. "But I've been in that space for a while. There's so much great dance music that doesn't have vocals, but I've always been a fan of the song, not just the track.

"And I like to record a lot of ethereal female vocals, something about that appeals to me; so I use the Dragonfly microphone by Blue, into a Manley Voxbox," he continues. "I think the Manley is cool because it can sound like not a lot is there, but you can easily add just a little bit of color. This combination is light, airy, has some

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character but isn't overbearing, and I always feel like the most important thing is to get a nice, clean sound that I can mess around with a little bit later."

Only on Marcus Bentley's vocal did Raddon deviate from this setup, with a Telefunken CU-29 microphone and a Brent Averill 1073 preamp. Once vocals are in the box, Raddon most commonly pulls up the Massenburg MDW EQ, puts on a shelf, and brightens things up. The Waves DeEsser gets rid of any obnoxious sibilance, and then there's a little additional carving in the midrange. Raddon says the key to a successful track is to give each sound space, but not so much that it offers nothing to grab onto. Elements need a nose, some attack, a feeling of width with a center of body.

In a reverberant track such as "Room for Happiness," featuring Skylar Grey, this means using a production chain that begins with the Focusrite D2 EQ/dynamics control, dipped around 61Hz. This is followed by the Waves

Renaissance Vox compressor/limiter/gate, for "smashing it up a little," then the Sonnox Oxford SuprEsser and a SoundToys EchoBoy "studio tape" simulator.

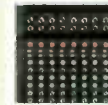
This is, however, probably the wettest vocal on the record. "Guys in Jamaica figured out a long time ago that delay is an instrument within itself, and we're catching on, but having things too wet doesn't translate in all areas," says Raddon. "Dance music can be kind of mediocre vocals, and some people just go, 'Slap more verb on it!' But it's better to scratch it and re-record than douse it. I try to not abuse it."

Ultimately, Raddon's greatest quest is to assure tracks are epic, a wall of sound without being overwrought. Drums must be punchy, synths big but defined. This is done through conscientious stacking, tucking, trashing, shelving, and squashing on every track. Drawing on the Slate Digital FG-X Virtual Mastering Processor and iZotope Ozone 4, Raddon assures the tracks pump. And Ozone's tube saturation

"exciter" function adds to that hot pop.

Raddon runs everything through his mastering hardware chain: a Millennia NSEQ-2 for sheen, the API 2500 Stereo Compressor to thicken the transients, a Pendulum Audio limiter for cohesion, and the Dangerous Music Bax EQ for body. This adds "the extra warmth, the final oomph, definitely some cool color," says Raddon, who monitors on everything from ATC Loudspeakers to Sony MDR7506 headphones.

Raddon turns tracks over for mixing to Mike Roskelley, who has worked on all of Kaskade's albums. Now a long way from the bathroom-based workstation, Kaskade tracks are never rude or crude, just a collection of appropriately dynamic flow. ■



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Recording *Odd Soul*:
producers need not
apply **BY KEN MICALLEF**

WHEN THEIR guitar player quit and their record label began counting beans and weighing losses, New Orleans polyglot players Mutemath took fate into their own hands. Damn finding a new guitarist, those dudes simply raise the collective stress level. Ditto for producers, those record label puppets whose main goal is often to stamp their sonic imprint on a band's music while positioning for points should the ensuing release move major copies. With that in mind, Mutemath opted to self-record and produce their latest album, *Odd Soul*, in their New Orleans habitation, and prohibit any producer or record label rep from entering their recording realm.

"We recorded the second album (*Armistice*, 2009) with all kinds of self-doubt and too many cooks in the kitchen," drummer Darren King recalls. "Lots of unnecessary worry.



Mutemath (left to right)—Darren King, Paul Meany, and Roy Mitchell-Cardenas.



This time, we shut the door on all of that. When [guitarist] Greg [Hill] left, he was so worn down from the methods we employed when working, he slammed the door and was gone. Then [keyboardist/vocalist] Paul [Meany] told Warner Bros. that they wouldn't be hearing from us while we were working on this record. We didn't want to

“This time, there'd be nothing that we didn't believe in.”
—Darren King

work with a producer. This time there'd be nothing that we didn't believe in.”

Will Mutemath's *Odd Soul* make believers of us all? Can an alternative rock band with an experimental itch survive on a major label without the guidance of an established producer or engineer? Holed up in their New Orleans house, with bass recorded in the bedroom, keyboards and vocals (along with their sparse recording gear) in the kitchen, and drums recorded in the dining room (with additional tracking at Piety Street Recording), Mutemath stared down the black hole of expectation.

“We began having fun and we indulged our curiosities,” King says. “Often I would build a track with samples (using an Ensoniq ASR-10) and then we'd start jamming. Then we'd disregard the samples and track instruments in any order, stop, jam again, pull it apart, go in separate rooms and work on it. There was real excitement that we weren't being held up by the analysis of a producer. We pushed ourselves. We felt safe in our environment.”

“We used a Roland 2480 (running Logic Pro 9 on a MacBook Pro with an RME Fireface 800) for tracking, along with a TEAC 2-track tape machine for drums,” Paul Meany says. “We used a 4-track Tascam for processing vocals and drums as well. We had Amek pres and Empirical Labs Distressors for everything else. We bounced a lot of the tracks over to Logic for editing and arranging and used those plug-ins as well. We used the Ad-Limiter a lot, along with the Space [Designer Convolution] Reverb.”

“In the end, we did final prep work and mixed half the album in Pro Tools,” Meany adds. “Those tracks were mainly mixed by Doug McKean and one was mixed by Tchad Blake. The other half of the record wound up back in the 2480 to be mixed. We've always thought the sound of those compressors is great, and they proved to be unbeatable, depending on the song.”

“All or Nothing” shows the new Mutemath direction, an electronic jumble of organ loops, samples and Paul Meany's high-pitched vocal. “That was built from a Fun Machine drum machine taken from a Wurlitzer organ that my wife had,” Darren King says. “I sampled the Funmaker and built the beat out that. It's an old early organ rhythm machine. I EQed it to get a certain sound

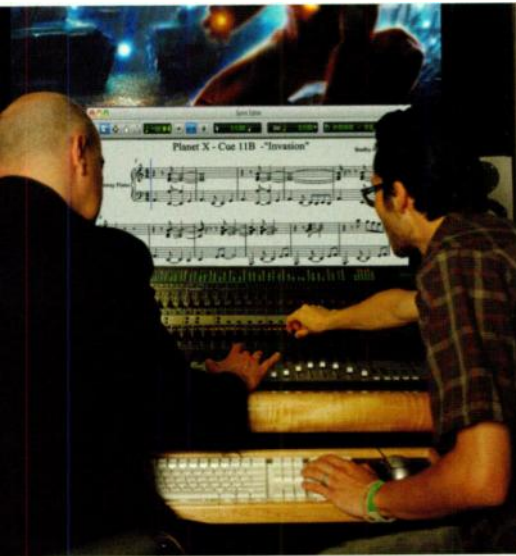
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out of it. Then I recorded real drums over it, and there's a Moog Voyager in there as well."

"We messed around with sounds a lot on 'All or Nothing' and the album as a whole," Paul Meany explains. "Sometimes we would run the signal through a Guild Maverick amp, using the spring reverb on that for a lot of our drums. It gave them a

"We wanted as few opinions as possible."

—Paul Meany

nice crunch. We also used the Maestro Rhythm-n-Sound guitar pedal for effects. Darren didn't realize it was a guitar pedal, and he made sounds out of it anyway. Then [bassist] Roy [Mitchell-Cardenas] plugged a guitar into it, and the resulting sounds were very interesting from what sabotage Darren had already created with it. That's the guitar sound we used on 'Calvaries' and 'Walking Paranoia.'"

Meany used an M-Audio Solaris microphone for his vocal, with little or no EQ. He and the band also favored Fender Princeton and Guild Maverick amps, the latter a workhouse for multiple sounds.

"We love running an SM 57 through an old Guild Maverick amp with its spring reverb engaged," King says. "That SM 57 is placed between the snare and kick. That combination did the most to color the sound of the snare and the hi-hat. It creates a punchy sound and if your sound is already deadened, it adds a unique, dull color. We did that on 'Quarantine.' Sometimes we use the reverb, sometimes just the amp sound in conjunction with conventional miking on the snare. We used the Teac 2-track 1/4" tape for drums, and the Tascam 4-track cassette recorder, using its electronics for good drum distortion. Just to amp up the drums a little bit."

For Meany's vocals, he was glad the nasties, the meanies, and the producers were nowhere in sight.

"I don't think I've ever done a good vocal take with a producer saying, 'Go!'" he says. "Usually, good things happen when I'm left alone and I can experiment and listen back. I certainly pushed myself more vocally than with any producer on our prior records.

"We were burnt out with the producer thing," Meany adds, "and wanted as few opinions as possible. Everyone always has different opinions. This record was about us re-finding our way, which is the guys in the band doing what we really believe is good music and how we want to present it. We know how to record ourselves, we know how we sound, and we know how to make music." ■

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Metallica/Lou Reed

Lulu

WARNER

"I would cut my legs and tits off when I think of Boris Karloff," Lou Reed announces on "Brandenburg Gate," the opening track to this unlikely clash of titans. Once a template is confirmed—Metallica slamming sludgy riffs as Reed spews a spastic colon's worth of humorous lyrics—it all somehow works. "I wish you'd tie me up and beat me," Lou lip-curls on "Mistress Dread," then deadpans "spermless like a girl" on "Frustration," as drummer Lars Ulrich surrounds him with punch-drunk commentary. Acoustic interludes and white noise alter the pedestrian two-way punch, but it never becomes ordinary. **KEN MICALLEF**



The Perishers *All These Years*

HEAD

Hook-laden and stylish, the band's third, thoroughly charming release draws influence from noble predecessors Big Star, The Hollies, The Who and even The Monkees, while still sounding contemporary. It's great fun to feel drawn into the songs' abundantly clever melodies, sharply woven pop harmonies, and warm, fuzzy electric guitars. You'll also find hauntingly good lead vocals, snappy drums and excursions into grungy tonalities. This collection will compel you to be on the lookout to catch them live.

CRAIG DALTON



Emika *Emika*

NINJA TUNE

What is it about Berlin that casts such an imposing shadow over the music made there? Brit emigre Emika seems to thrive on a similar sense of futurist urban dread; her debut roils with under-your-skin vocal melodies ("Professional Loving" and "Drop the Other" stand out), while stark beats and synth bass lines that move like boa constrictors highlight her dubstep roots. As a sound designer for Native Instruments, Emika knows her way around a laptop, but this isn't just machine music—it's pure art techno with a soul.

BILL MURPHY



Pistol Annies *Hell on Heels*

SONY NASHVILLE

Now that Miranda Lambert's officially a country superstar, there's probably a lot riding on the success of her new album, *Four the Record*. But she can still let loose old-school with the Pistol Annies, the trio she formed with Ashley Monroe and Angaleena Presley. Any one of these women has enough talent to write or sing most artists under the table; together they're almost too good. Sweet harmonies, bad-girl lyrics, and gritty guitar work add up to a real country record with attitude.

BARBARA SCHULTZ



North Highlands *Wild One*

SELF-RELEASED

Hipster indie bands are as common as tight jeans and facial hair, but Brooklyn's North Highlands rise above the dreck. Electric hollowbody guitars, mandolin, and violin are and gently pulse, vocalist Brenda Malvini (recalling the Innocence Mission's Karen Peris) spins magnetic melodies worthy of Brian Wilson and Mama Cass, while lithely nervous rhythms gently nudge you into a summer halo. Sweet and slumber-rific!

KEN MICALLEF



Ryan Adams *Ashes & Fire*

PAX AM/EMI CAPITOL

First and always, it's about the song. Mediocrity doesn't stand up, regardless of studio production, and a great song often needs little dressing. Producer Glyn John smartly takes a minimalist approach here, with just the right seasoning added. Small touches such as sizzling ambiance on cymbals and punchy acoustic guitars enhance Ryan's poignant lyrics and tasty hooks. Add guest appearances by Norah Jones and keyboardist Benmont Tench, and you've got a delicious repast for the ears.

CRAIG DALTON



The Mekons *Ancient and Modern*

SIN

Leave it to The Mekons—now approaching their 35th anniversary as a band—to conceive such a cool, unexpected album. Whereas the *Ancient and Modern* CD is designed to look like album of odd old photos, musically, the group's 26th album ranges from old-time dancehall ditties to anthemic '70s punk, with lots of hybrid folk-punk-rock in between. There's no beating The Mekons' early art-punk sound, but blurring the lines between "ancient" and "modern" music is always interesting.

BARBARA SCHULTZ

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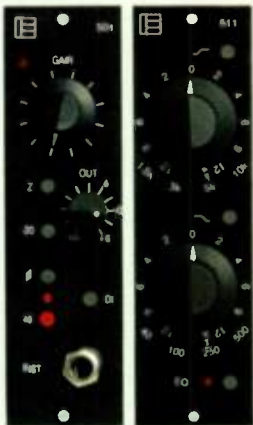
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DJ Gear for Musicians

Tools to start you down a new creative path BY CRAIG ANDERTON

AFTER ALL these years, I finally came up with a good analogy to explain DJs to musicians. You know those circus acts where a guy's spinning a plate? Then he starts spinning another plate, and then another? Then holds a pole in his mouth, bounces a plate on top of that pole, then starts another plate spinning? And how if a plate drops and breaks, it's an epic fail?

That's what DJs do, except they're spinning music instead of plates. DJs are multitasking musicians—while they're playing one cut, they're cuing up the next cut to make a seamless transition, analyzing beats, manipulating effects as part of the music, keeping tabs of timings to see how soon they're going to have to make a transition, thinking about which cuts to play next, and—most importantly—reading the crowd like a hawk to make sure they're driving the experience in the right direction.

Some say DJs aren't "musicians" because they don't play an "instrument." I disagree, because the DJ's setup has gone way beyond just playing serial musical tracks. With much software, DJs can mark loops on-the-fly in particular pieces of music, then play them against other loops, or use them as transitions. Two decks have yielded to four decks,

instrument inputs, onboard sampling, and more. The number of creative options open to today's DJs continues to increase exponentially, demanding an exponential increase in the DJ's skill set, and obviously, musical sensibility.

More than a decade ago, *EQ* magazine coined the term "performing engineer" to describe the new breed of DJs who combined mixing, arranging, signal processing, and overdubbing with more conventional DJ techniques like scratching—and it's a fertile field for any musician, not just engineers.

You say you're not interested? Well, you know that rush you get when you come up with some fantastic chord progression or a melody line that sends shivers up your spine? Remember the first time you double-tracked a vocal and made magic? You'll get the same feeling the first time you create a perfect combination of music that builds and transitions, and makes you want to move while you throw on effects and maybe even play guitar on top of it. You'll find new creative avenues, and new ways to look at music.

Even better, you can get started quite inexpensively, and simply—load the right software into your laptop and add a controller, and you're ready to go.

The Basics

Before getting into specific gear, there are some basic concepts you need to know.

THE MUSIC LIBRARY You load music you want to play on your hard drive. Most software will accept multiple file formats, and will need to analyze your library to determine the BPM (and sometimes, the key). This info gets logged into a database so you can retrieve the right music at the right time. The analysis also aids automated beat-matching—if you're following a 125BPM song with one at 127BPM, your software will be able to slow down the 127BPM track for a perfect segue. However, the analysis process is CPU-intensive—while many of these programs work with relatively modest computers, you want your tracks analyzed before the gig; analyzing while gigging can lead to audio dropouts.

CONTROLLER I'm biased: Don't even think about DJing with a keyboard and mouse. I'm sure it can be done—and you could probably drive

from New York to Seattle in a Yugo. A good controller, with good software, is a musical instrument.

AUDIO INTERFACE You'll need more than one output to send separate signals to a cue bus and the main out. Some controllers have a built-in audio interface; worst case, with no interface and only a controller, the software will use a laptop's stereo onboard sound with the main mix on the left channel, and cue on the right.

SOFTWARE Of course, you need something to control with your controller. And here's what you can do with the software...

- **CUING AND BEAT-MATCHING** Your computer will display the waveforms of the cuts you want to match, which you can line up visually and verify by listening to a cue mix that's separate from the mix that goes to the house. Sometimes this involves finding a start point and triggering it at the end of the previous track to create the equivalent of a tape "butt splice," or it might involve looping a repetitive portion and crossfad-

ing it with the end of the previous cut, then turning off the loop once the transition is complete so the next tune plays through. There are more options, like crossfading two tracks against a third—but all of these have to be cued up properly "behind the scenes," while other music goes out to the crowd.

One mechanism that makes matching possible involves two mini-turntable-like controllers, where moving a controller speeds the music up or slows it down. These controllers also make it possible to create electronic scratching and varispeed effects. Other options include sync buttons and pitch controls.

"Cue" also applies to setting cue points within a track. More sophisticated software lets you place multiple cue points ("hotcues"), then jump among them as desired.

- **MIXING** This performs crossfading, as well as adding instrumental overdubs or vocals/MCing from a mic. The crossfader lets you transition

smoothly from one cut to another. However, other faders will control the levels of different tracks, as well as external input levels.

- **EFFECTS** Computers have made beat-synced processors common. Stuttering effects, LFO-synced flanging, delays, tone controls (including "kill" controls—extremely steep notches that cut a hole in the spectrum) and more are now part of standard DJ setups. These are often played, not just "set and forget," so the processing becomes part of the music. One of the main differences among hardware/software combinations is how well they accommodate signal processing as a playable function. (Native Instruments even has a dedicated controller, the X1, which controls the effects in Traktor.)

That's enough basics. Let's progress through some gear to get you started, getting more complex as we go along. We'll start with controllers, then cover two of the most recent and important software updates.



Numark DJ2GO

\$79 MSRP, \$60 street
numark.com

CLAIM TO FAME If you're curious whether DJing is for you, DJ2GO is the simplest, most compact

(it weighs only 13 ounces), least expensive way to obtain a feel for the DJ experience. Its MIDI output is compatible with a variety of DJ software, but works out of the box with the bundled version of Virtual DJ.

THE CONTROLLER You'll find all the basics in this USB controller. There are two "decks," each with

a jog wheel-type controller, pitch bend buttons, pitch slider, sync button for automatically syncing one deck's tempo to the other's, play/pause button, volume control, cue button for cue point set/recall, and pre-fader level to the cue channel. The master section includes the crossfader, headphone level, master output level, and browse/load buttons to navigate through your music library and load tracks.

At this price, you won't find extras like effects, looping, and the like. The jog wheels can scan through the track when stopped, but it would take a better DJ than me (or one with smaller fingers) to coax serious scratching out of

them. When the track plays, you can use the controllers to bend pitch, or line up one track's beats with another before crossfading into it.

THE SOFTWARE This is a limited DJ2GO-specific version of Virtual DJ, but at this price doesn't have some of the cooler Virtual DJ features like sampling, VJ options, effects, and the like. However, it does retain many important browser features so you're not left twisting in the wind when it's time to load the next track, and the simplicity is also what makes the package a great introduction to DJing—it's not overwhelming, unless you've never DJed before. But even then, you won't take long to figure it out.

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FINAL MIX Despite the small size, DJ2GO isn't a toy—you could actually DJ a party with this as long as you didn't need to go beyond playing, beat-matching, and mixing/crossfading the two decks. The package is complete, too, with USB cable and CD-ROM with software. Some

of the buttons are lit, which helps in a typical performance setup, and the pitch sliders have a center detent for an easy return to the zero pitch setting.

Within minutes of setting it up I was bringing in tunes from my laptop's African

dance party folder and beat-matching different cuts, setting cue points, and cross-fading my way to a fun dance mix. For \$60 street, this is exceptional value—and when you move on to something more advanced, you can always pass this along and get someone else hooked.

Behringer BCD3000

\$327.99 MSRP, \$164 street
behringer.com

CLAIM TO FAME This occupies the middle ground between beginner and hardcore pro controllers. It incorporates many features you wouldn't expect at this price, yet the cost remains reasonable due to high-impact plastic construction rather than metal, and using smaller platters.

THE CONTROLLER The size is compact but not cramped; just be aware of where the volume faders are if you get hot and heavy with the platters. Virtually all switches have internal LEDs, making it easy to see what's enabled. Each deck has low, mid, and high tone controls with kill switches; the Play and Cue buttons are somewhat oversized for convenience. There's a set of FX controls along the top for each deck, and while limited when working with the bundled Traktor LE (which allows only one effect), the BCD3000 is also compatible with the full version if you want to bring on more functionality. Additional buttons provide hands-on control for setting cue points, setting loops, "relooping" (jogging the loop through a piece of music), and "scratch" is a momentary button

that acts more like braking. For traditional scratching, you'll need to use the controller platters in pitch bend mode, but of course, don't expect the same kind of responsiveness as vinyl.

The I/O is a welcome surprise. It includes an XLR mic input with gain and tone controls (high and low), as well as two turntable inputs (one switchable to line in)—you can actually use this as a stand-alone DJ mixer with effects if that's your thing. It also has a front-panel headphone jack.

Another surprise: Although the BCD3000 can't be bus-powered, it doesn't use a wall wart; instead it has an internal supply—one less thing to pack, lose, or replace if someone runs a PA speaker over it.

THE SOFTWARE Native Instruments has been doing the virtual DJ thing for years, and at this point Traktor is highly evolved from a functional standpoint, and has a refined user interface—for example, smaller labels are in all caps to make them more readily visible, and the "look" of the two decks is unambiguous.



Looping in particular is extremely well implemented—so much so that I became very interested in exploring Traktor Pro 2, which is reviewed later on in the roundup.

FINAL MIX The BCD3000/Traktor combination works very well—if I could see something on the screen, I could generally control it with the hardware. The hardware is responsive and obvious, but most importantly, this particular combination passed the most crucial test: I had a whole lot of fun with it, and even better, didn't have to think about it.

Hercules DJ Console 4-Mx

\$399 MSRP
hercules.com



CLAIM TO FAME This is a pro-level, USB bus-powered, all-metal controller/audio interface (with ASIO 2.0 for Windows, Core Audio for Mac) that looks beyond your laptop by including mic, line, and turntable inputs for mixing in external sound sources. Although it's a general-purpose MIDI controller, it comes with a fairly sophisticated version of Virtual DJ 7 LE that incorporates many features of the pro version.

THE CONTROLLER There are two physical decks and four virtual decks, all of which can play simultaneously, with controls to switch between the A/C and B/D decks. To go along with this, the CD-sized, multifunction jog wheels are a big deal—push down to scratch, or rotate without pushing to line up tracks or bend pitch; pushing without rotating is like putting on the brakes.

Sliders include the obligatory crossfader, as well as (for each physical deck) controls for volume, pitch, tone (bass, middle, and treble controls with individual kill switches), and source select with gain. It has navigation controls for finding and loading files, and cue select. Six assignable buttons call up various

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other functions (effects, hotcues, loop, bend, sampler record, etc.), whose parameters you adjust with a control knob. A shift button provides six additional functions. The transport has stop, play/pause, cue, four hotcue points, fast-forward and rewind controls, and a sync option to match deck tempos.

THE SOFTWARE Like most other MIDI-based DJ controllers 4-Mx works with various programs (Traktor Pro 2 fans can find a template online), but you may not feel the need to venture beyond the included version of Virtual DJ. In addition to expected features like beat detection there are some excellent effects, the option to integrate looped or one-shot samples into the mix, and the ability to record the overall output—nice. It even accommodates

VJing, too, and the controller treats video files like audio files. You can select transitions and apply effects, although if you expect to do video, you'll need a fairly powerful laptop with good graphics capabilities. On a more basic level, you can simply associate video files with audio files to enhance your DJ sets with video.

FINAL MIX The jog wheels have a precise, natural feel (and the internal lighting is subtle, but cool); the platter base is the same diameter as a CD, and the wheel tapers up to the surface. The construction is solid and substantial, and the complete set of inputs means you can go beyond just what's on your laptop. The ASIO audio interface is an advantage as well. Granted the pricing is beyond entry-level, but then again, so is the product itself.



NI Traktor Pro 2

native-instruments.com
\$229

CLAIM TO FAME Traktor has dominated the digital DJ software market essentially since it was announced in 2000. Back then, digital DJing was not always considered "legitimate," but Traktor played a large part in showcasing the creative potential of DJing with a computer.

Part of this is because Native Instruments has, not surprisingly, infused a musical instrument mentality to DJing; with Native Instruments-branded control surfaces (S4, S2, and X1),

the musical instrument connection becomes totally obvious—Traktor Pro 2 even integrates with Maschine. (As to computer compatibility, Traktor does Mac 10.6 or 10.7, as well as Windows XP SP3 and 32/64-bit Vista or 7.)

WHAT'S NEW Much of Traktor Pro 2 concentrates on four-slot sample decks, into which you can import loops or grab loops from one of the decks. The sample decks are interchangeable with four standard, virtual decks; each slot has its own level and filter control, and you can save anything you grab to your loop library.

Sample decks work well with a four-deck approach, as you can layer and manipulate

loops (or one-shots) against each other, as well as integrate them as accents or complements to longer tracks. To sweeten the deal, NI includes loop content with the package, but it gets really interesting when you use loops for live remixing. As expected, within reason whatever you load will sync with whatever is playing.

An additional Loop Recorder is a true sampling module that records from one or more decks, the output, or external ins if present. You can use it by itself, or transfer whatever you record to one of the sample decks.

Traktor Pro 2 has added four new effects (Tape Delay, Ramp Delay, Bouncer and Auto Bouncer) to bring the total to 32; these sync (of course!) to either track or master tempo. As “playing” effects becomes more entwined with DJ performances, this is another solid plus for Traktor Pro 2—and with a multi-channel audio interface, you can break the effects out separately, turning Traktor into a virtual multieffects.

WAVEFORMS OF COLOR The “TruWave” colored waveforms are a very useful update. I’ve seen this concept before in Samplitude, where you can basically do a visual “find and replace,” but as applied to DJs, the colorizing makes it very easy to pick out instrument sounds based on frequency (for example, kick drum). It’s a simple, effective improvement, although you’ll need to re-analyze your library for the new format. You can also zoom way in on waveforms, for extremely precise loop marking. You can’t overlay waveforms or see them in parallel, but NI’s approach is perfectly useable.

NI has certified several non-NI controllers as “Traktor Enabled,” including multiple models from Allen & Heath, Behringer, Denon, Numark, Ecler, Korg, Numark, Pioneer, Stanton, Reloop, and Vestax. If you don’t use a controller, there’s an internal mixer function with kill switches, tone controls, crossfader, etc.—but as I’ve said, DJing without a controller seems pretty pointless to me.

FINAL MIX If anyone still thinks DJs aren’t musicians, they should look over the shoulder of someone who knows his or her way around Traktor. If this doesn’t qualify as a musical instrument, I don’t know what does.

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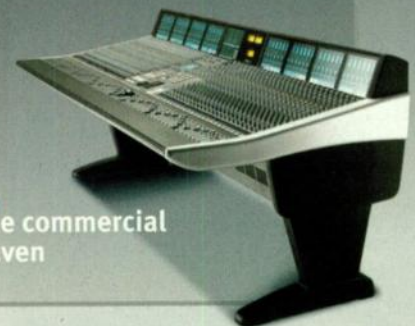
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Avid Torq 2.0

avid.com
\$249.99 MSRP, \$200 street

CLAIM TO FAME Torq has been around for several years, accompanied by the (now-optional) Xponent controller. It incorporates a perspective created by being part of the Pro Tools family, so it addresses “producer” DJs as much as club DJs.

WHAT'S NEW With version 2.0, Torq takes this orientation further. (Note that it still works back to Windows XP SP3 and Mac OS 10.5.8, but is also compatible with 32/64-bit Vista and Windows 7.) There are now four virtual decks, each with level, EQ, cueing, and crossfade, which take advantage of Torq's excellent looping capabilities (you can even “pre-loop,” which defines a loop by marking its end rather than beginning—cool). For me, one of the best features of having four decks is you can be prepping something complex on two of the decks while the other two keep pumping out the music. I've also become a big fan of having relatively short loops (4–8 measures) on two of the decks, and fading them in and out of the “main” tracks to provide accents.

Rather than being tied exclusively to Xponent, Torq 2.0 now works with other controllers (e.g., Numark NS7 and V7, Vestax VCI-300, Native Instruments Traktor S4, Behringer BCD3000, Allen & Heath Xone 1D and 4D, Denon DN-HC4500, and other hardware via MIDI learn). Yes, you can boot the software without seeing the “Please attach your M-Audio hardware” warning, and Torq retains the ability to ReWire into

host programs. I also appreciate the setup wizard, which makes it easy to hook up your hardware without drama. The browser has also been tweaked.

MORPHING À LA CARTE One major change involves effects, and how they're handled. In particular, the Traq Morph feature takes crossfading beyond level changes to morphing effects. (This is especially effective with filtering). Also, there are now up to four simultaneous effect inserts (and one VST effect) per track, groupable as effects chains.

Another change is the interface itself, which has been redesigned for a much more modern aesthetic. It takes up more screen space, but you can show/hide sections to compensate.

One difference compared to “lite” software is that in addition to beat-matching—including “groove-template”-like options for accommodating music with variable tempos—Torq incorporates zplane's excellent “élastique” stretch algorithm, so it's a lot easier to match pitch along with tempo. If it drives you nuts to fade from one cut to another that's just slightly sharp or flat... problem solved.

FINAL MIX Torq's strength has always been unambiguous hands-on control, with Xponent offering an open layout, tight integration, and full-size platters. Xponent remains a solid choice—given that Torq can generate MIDI sync, the physical MIDI I/O is convenient, and I like having jacks for an expression pedal and footswitch. But it's clear that the “separate the software from the hardware” philosophy seen in Pro Tools 9 is now part of Torq, giving DJs yet another sophisticated software option for their controller of choice. ■

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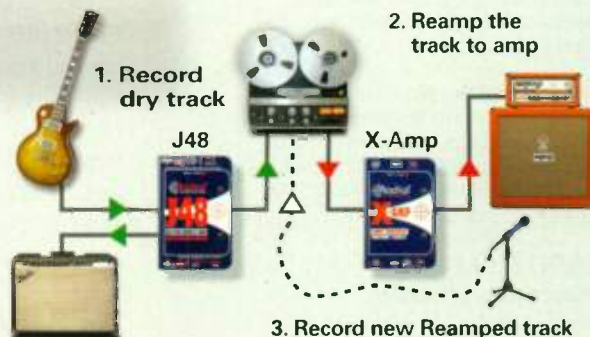
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Sonnox Fraunhofer Pro-Codec

Make data compression decisions in real time

BY CRAIG ANDERTON

YOU KNOW how encoding to data-compressed formats works: You want the best fidelity in the least amount of space, so you go through a tedious process of render, compare, render, compare, try different encoding algorithms, and so on. Eventually, you settle on something that works.

Or, you streamline the process with the Fraunhofer Pro-Codec from Sonnox. First, these are real Fraunhofer codecs. Second, you can audition up to five different encoders in real time for not just A-B, but A-B-C-D-E comparisons. Supported codecs for data-compressed formats include MP3, MP3 Surround, AAC-LC, HE-AAC, and HE-AAC v2, as well as MP3-HD and HD-AAC lossless codecs.

The Match Game The Pro-Codec works as a VST/AU/RTAS plug-in (Mac OS X10.5 or later, Windows XP/7) so it's suitable for editing/mastering programs, or even a DAW's master bus—yes, you can tweak a mix to compensate for differences caused by data compression. For example, encoding one file to 96kbps MP3 sounded okay except for the highs. With a slight boost, the results were subjectively similar to encoding at higher rates.

64-bit Windows users may be disappointed it's a 32-bit plug-in, but Pro-Codec works with 64-bit programs if they have, or you've added, a 32-bit bridge program. One caution: Piling on the codecs requires a fair amount of CPU power.

Feature Feast It's easy to compare different codecs, codec input to codec output, and the difference signal to hear what data is being discarded. You can see how much the bitrate is being reduced, and even set up sophisticated blind comparison/testing procedures. I really appreciate the glitchless switching—you're not distracted by clicks or pops—and you can automate the master in/out, which is great for setting up tests where people don't know when you're switching a codec in or out.

Furthermore, in addition to being able to export up to five files simultaneously from different codecs, you can import encoded files and save them as WAV or AIF, 16- or 24-bit—perfect for bringing a file with a format your DAW doesn't recognize into a DAW's track. Export doesn't have to be offline, as you can record files using a particular codec as you listen—in fact you can record using up to five codecs.

Note that some particular parameter combinations require re-sampling to avoid pitch shifts, which degrades realtime auditioning slightly (although if you write the file to disk or export, a higher-quality alternate codec comes into play). This isn't something you'll encounter all that much, and the program makes it clear when these conditions occur.

Plentiful graphic monitoring options include a "Noise to Mask Ratio" indicator, which highlights frequency ranges where the effects of data compression could be most audible. Even more valuable, sometimes data compression can increase levels; not only does Pro-Codec show this, but allows trimming the incoming signal to compensate.

The "More" Factor There are additional features, but one important point is this plug-in's educational aspect. You'll find out quickly what works best for your music, and also, the documentation is comprehensive. The price might seem high—but this is an extremely highly spec'd encoder/decoder, and you won't find better. ■

SUMMARY

STRENGTHS: Pro-level in every respect. Glitchless comparisons. Supports multiple plug-in formats and codecs. Extensive graphical feedback. Decodes as well as encodes.

LIMITATIONS: Requires significant CPU power when auditioning multiple codecs. Bit rates don't go below 96kbps (except for HE-AAC algorithms); lower rates would be helpful for speech.

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Alesis iO Dock for iPad

Serious I/O for iOS

BY KENT CARMICAL

THE iOS app world is thick with cool audio, recording and composition apps. But the frightening thing about the current crop of audio I/O solutions for all iOS apps is they require a dongle-type interface that connects to the 30-pin connector on the bottom. Unfortunately a standard 1/4" guitar cable has enough weight to rip out that 30-pin connector, and your heart, in a fleeting moment.

Docking seems so...“space age”!

The Alesis iO Dock provides serious I/O for the iPad's iOS platform. Made of resilient plastic, the iO Dock is lightweight and tough, bristles with killer I/O potential, and sports a clean industrial design that integrates inconspicuously with the iPad. It's completely plug-and-play; just slip your iPad into the iO Dock's rails and once docked, the whole thing grips your iPad firmly. Angled at about 20 degrees, it creates a very comfortable work surface that didn't cause my musculoskeletal system go numb in 30 minutes. An inset (provided) compensates for the iPad 2's thinner profile.

Good I/O Is the Takeaway The iO Dock packs some good connections with the pro audio world.

Inputs one and two feature combo jacks that accept both 1/4" and XLR balanced connectors; these lead into a pair of preamps with low noise, plenty of gain, and a pleasant vibe. Input Two can switch between mic/line and guitar. I tried everything from a Shure SM 57 to an AKG 414, and was rewarded with the most awesome instrument and vocal sounds I'd ever captured with my iPad. Ditto for guitar. And within GarageBand, you can route each input to a separate track for the multitrack experience.

The main outs are 1/4" balanced, and sounded fine whether connected to powered monitors or club PA systems. To keep the monitoring real, a switch toggles between direct monitoring of the iPad and iO Dock. There's also a main output control and a 1/4" stereo headphone out (with its own gain knob).

You'll find a set of old-fashioned 5-pin MIDI connectors, as well as a USB port labeled “USB MIDI.” Unfortunately GarageBand supports only MIDI in, but I can confirm that MIDI in on both connections works fine. However, while you can charge your iPad from the dock, you can't sync your iPad from iO Dock's USB MIDI port.

While Alesis's iO Dock performed flawlessly with GarageBand and various synth apps, my beloved AmpliTube would not work. An email to Alesis elicited the following: “The iO Dock conforms to all current Apple MFI development standards for apps including Core Audio and Core MIDI. If a developer has followed Apple's standards and enabled I/O via the dock and permits landscape orientation, then the app very likely works with the iO Dock.” That's good news, as the vast hordes of audio apps—although not all—comply with this standard.

What's Up, Dock? Fear flimsy connectors and sub-standard audio no more: iO Dock transforms your iPad from an audio dongle-dangler to a wicked 21st-century portable studio interface that handles the majority of your pro audio interface needs. ■

SUMMARY

STRENGTHS: Makes iPad a truly viable production workstation. iPad/iPad 2 compatible. Price is worth it for true iPad audio freaks who want to work live or in the studio.

LIMITATIONS: Though seamlessly plug and play, more informative documentation would have been welcome to delve deeper into its applications and specs.

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1

3



2

4



1
Auralex
Sustain Bamboo Series
Sound diffusers
\$420-\$1,258.95
HIGHLIGHTS Line consists of the WavePrism, WaveLens, QuadraTec (shown), Peak Pyramid Diffusor, and KeyPacs • Made entirely from 100% “eco-friendly” bamboo • can help achieve LEED certification • different units provide different acoustical qualities—eliminating flutter echoes, sound scattering and redirection, bass-trapping, fine-tuning existing treatment, etc.
TARGET AUDIENCE Studios, post-production suites, listening rooms, rehearsal spaces requiring acoustic treatment
ANALYSIS Bamboo is environmentally-friendly yet provides excellent acoustic characteristics.
auralex.com

2
Steinberg
UR28M and UR824
USB 2.0 audio interfaces
UR28M \$499.99,
UR824 \$999.99
HIGHLIGHTS UR28M (desktop) has 6 ins/8 outs, UR824 (rack-mountable) 24 ins/outs • dspMixFx hardware offers DSP-powered, latency-free monitoring • UR824 has eight Neutrik combo jack ins, 16 channels of ADAT I/O • additional DSP includes REV-X reverb and Sweet Spot Morphing Channel Strip (with sidechain-enabled compressor and 3-band parametric EQ) • bundled with Cubase AI 6
TARGET MARKET U28M: project studios; UR824: larger recording facilities
ANALYSIS The onboard DSP provides low-latency monitoring plus quality reverb, compression, and EQ; the channel strip is available for up to 8 mono (4 stereo) channels.
steinberg.net

3
TASCAM
DR-40
4-track portable recorder
\$279.99
HIGHLIGHTS Condenser mics with adjustable positioning from X/Y to A/B • 4-track recording • balanced XLR or 1/4" line inputs with locking Neutrik Combo jacks • records to SD or SDHC cards up to 32GB (2GB card included) • 96kHz/24-bit resolution • USB 2.0 for computer transfers • variable-speed playback • built-in stereo reverb, chromatic tuner, speaker, and EQ • overdub with previous takes
TARGET MARKET Portable multitrack recording for musicians on the go
ANALYSIS While there's no shortage of field recorders, TASCAM emphasizes musician-oriented features beyond 4-track recording capabilities.
tascam.com

4
Radial Engineering
PhaseQ
500 Series module
\$350
HIGHLIGHTS Phase-adjustment tool works double-duty as a phase-canceling device and summing equalizer • phase-align two signals to improve stereo imaging (e.g., with X/Y stereo mic pair) • discrete Class A electronics • variable phase control shifts from 0° to 180°; a polarity-invert switch extends this range to 360° • variable lowpass filter
TARGET MARKET Recording studios, live performance setups for modifying phase response of paired or individual signals
ANALYSIS As a phase-adjustment tool, the PhaseQ would be interesting enough, but its secondary ability to apply novel EQ effects adds an original element.
radialeng.com



5



6



7



8

5
 TC-Helicon
VoiceLive Rack
 Vocal processor
\$945

HIGHLIGHTS Effects include μ Mod (modulation), Delay, Reverb, Harmony, HardTune and Correction, Doubling, Transducer (distortion and megaphone), Rhythmic (stutter, tremolo, etc.) and Tone (adaptive EQ, compression, de-esser, etc.) • includes TC-Helicon MP-75 mic with in-body effects control • can generate vocal harmonies based on realtime input from guitar, MIDI keyboard data, or setting key and scale • 400 preset slots
TARGET MARKET Vocalists working in studio and/or stage contexts
ANALYSIS TC-Helicon keeps raising the bar for vocal processing; VoiceLive rack presents multiple effects in a rugged, rackmount package with a touch interface.
tc-helicon.com

6
 Universal Audio
Version 6.0 software
 Native RTAS support
 Free update

HIGHLIGHTS Native RTAS support no longer requires VST to RTAS adapter • plug-in category support • improved automation and plug-in preset handling • support for all Pro Tools-compatible control surfaces • Windows/Mac compatible (including Lion 10.7) • improvements for both UAD-1 and UAD-2 cards • reports effect latency to Pro Tools for Automatic Delay Compensation
TARGET MARKET Pro Tools and Universal Audio Powered Plug-Ins users
ANALYSIS In addition to the free upgrade to V6.0, optional (at-extra-cost) plug-ins include the AmpeX ATR-102 Tape Recorder (shown), Brainworx bx_digital V2 EQ, and SPL Vitalizer.
uaudio.com

7
 Plughugger
Supercharg3r
 Arturia Prophet V presets
€5.90 (approx. \$8)

HIGHLIGHTS 64 electro bass presets that use the Prophet VS engine in Arturia's Prophet V soft-synth • sounds have a modern character, unlike stereotyped Prophet VS sounds • audio examples on Plughugger's website • low prices, due to the company's "app" model, inspired by the iPhone app store
TARGET MARKET Arturia Prophet V owners who want to expand their available sounds into a more electro vein
ANALYSIS Sample libraries and sounds are going in two directions: huge libraries, and inexpensive collections of limited, special-purpose loops, samples, or presets. Supercharg3r has only 64 presets, but offers originality.
plughugger.com

8
 Yamaha
i-MX1
 iOS MIDI interface
\$110

HIGHLIGHTS MIDI interface for iPad, iPhone, and iPod Touch • compatible with any Core MIDI-compliant iOS application • simple setup—connect the i-MX1 to a portable Apple device and any instrument with a MIDI port • can play the virtual instruments in the iPad GarageBand app with MIDI keyboard • extremely compact
TARGET MARKET Those using iOS devices as a portable music platform
ANALYSIS Although lots of programs are available for iOS devices, to get the most out of them, you often need hardware control; the i-MX1 bridges the iOS world to MIDI.
yamaha.com

Marshall McLuhan predicted the implications of a global village long before the dawn of the Internet.



Photo by Henri Daumain, courtesy the Estate of Marshall McLuhan.



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Easy as MP3

So you've just made the next *OK Computer*—now what? Here's how to get your feet wet in the digital music marketplace.

BY BILL MURPHY

AS MUCH as the major record labels (and quite a few big indies) would love to see it happen, digital file-sharing isn't going away any time soon. It's the genie that Napster let out of the bottle more than a decade ago, and since then, labels and artists have been locked in a struggle—some might even call it a dance—to monetize the technology to their advantage. Meanwhile, literally hundreds of boutique start-ups have been jockeying for a piece of the pie. To paraphrase Marshall McLuhan, whoever controls the medium controls the message, and in the music industry, the key medium is distribution.

The good news is, with so many options now available for getting your music to the people who want it, it's a great time to be an artist. You don't need a label deal to be able to sell your album on iTunes, Amazon, or eMusic, or to stream



Jeff Price

it on Rhapsody, Spotify, or MOG—in fact, you don't even need a physical album. What's more, if you've already done the legwork to build a fanbase for yourself on Facebook, Twitter, SoundCloud, YouTube, and other social media platforms, then it's just a quick leap to selling your music through those nodes, as well as your own website.

If you're new to the game and all this sounds like an endless slog of mind-numbing grunt work, fear not. With a little patience and a modest budget to get started, you too can end up at an online retailer, rubbing shoulders with everyone from the Beastie Boys to Flying Lotus. The first order of business: Find yourself a digital distributor.

Grabbing the tiger by the (long) tail

First, a little history. In the past decade alone, the music scene has gone through an explosive expansion on almost every level, even as total CD sales have declined steadily. It began with new developments in the production process itself. As more affordable versions of Pro Tools, Logic, and other recording platforms came to market, suddenly anyone could make an album that sounded good. (Granted, we're tempted to argue that a lot of them could have sounded even better with the help of a professional mastering engineer, but that's beside the point.)

Pretty soon, with independent labels sprouting

“You’ve got people going, ‘Well, you don’t have any incentive to market and promote us, because you don’t make any money off the back end.’ You know what? This is my job . . . I want people to get what they paid for.” —Jeff Price, Tunecore

like mushrooms and reissue labels scarfing up lost gems and rarities from all over the globe, it all went digital. Anything you wanted, no matter how odd or obscure, you could dig it up on the web. “There is real demand for niche fare found only online,” *Wired* editor Chris Anderson said in 2004, referring to the phenomenon he later documented in his book *The Long Tail: Why the Future of Business is Selling Less of More*. And this is where digital distributors like TuneCore, CD Baby, and ReverbNation come in.

“When digital distribution popped up, it created this whole level of efficiencies,” Jeff Price explains. A music industry veteran with 17 years at the helm of the venerable indie label spinART Records, Price is co-founder and CEO of TuneCore. “All of a sudden, you didn’t have to manufacture anything, you didn’t have to fight for shelf space, and you didn’t have to buy your way into advertising programs. Digital music stores like iTunes or Amazon have unlimited shelf space, so everything can be in stock at no detriment to anything else.”

What that means is that TuneCore, with its more than 670,000 registered artists (among them Nine Inch Nails and Jay-Z), has the negotiating power to secure that piece of the long tail that you wouldn’t be able to get on your own. (iTunes won’t negotiate directly with artists unless they have at least 20 albums in their catalog.) Like CD Baby and ReverbNation, TuneCore has deals with all the top online retailers, and its registration and upload process is fairly straightforward. (For starters, see tunecore.com/tutorial/upload_itunes.)

Of course, there are differences between the three services—and these are just the top three; there are plenty more, including RouteNote, Catapult, and BelieveDigital, which screens its applicants in the same way a record label does A&R. Most notable is the fee structure. CD Baby charges a one-time fee of \$39 up front to distribute your album (\$9.95 for a single), and takes 9 percent of your sales royalties. TuneCore and ReverbNation charge a flat fee per album—\$49.99 (\$9.99/single) and \$34.95 (same price for a single) respectively, renewable annually—and let you keep 100 percent of your royalties.

TuneCore’s current rates were announced earlier this year, and comprised a substantial increase that irked many of its customers. Price insists the hike was necessary to cover the cost of initiating new services, such as strategic marketing

Bob Rock

Musician, engineer and producer for such legends as Metallica, Mötley Crüe, David Lee Roth, Bon Jovi, Michael Bubl , Bush, The Cult, American Bang, The Offspring, and 311.

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World Radio History





rjd2 (left) with Icebird partner Aaron Livingston.

and brand partnering tools for TuneCore artists. As a regular fixture on the company's message boards and one of the more hands-on and approachable CEOs in the game, Price can sound almost evangelical in his zeal.

"You've got people going, 'Well, you don't have any incentive to market and promote us, because you don't make any money off the back end.' You know what? Maybe we're not all a bunch of dicks. Maybe we actually care, and I don't need the incentive to grab more of your money to get you placed in a store. This is my job, and we're the best in the world at what we do. I want people to get what they paid for, and then the other stuff is the added bonus."

Competition among digital distributors is fierce, so their perks are constantly changing. If you want a rich social media component and the ability to build out your own store, integrate it with Facebook, and sell physical merch, ReverbNation has a leg up, with CD Baby not far behind. If you want access to experienced executives and a full-time staff with connections to all kinds of licensing opportunities, TuneCore may be for you. Research your options carefully, and read the comments sections of sites like Hypebot for opinions and testimonials.

"Twitter is the best way to interact with fans because it's a proactive relationship. You have to physically go out and follow someone... it only takes two seconds...but psychologically, that barrier is huge." —rjd2

Control mechanisms Beyond getting your music on iTunes, there's plenty you can do to reach your fans directly, and this is where managing your social media connections—and, ideally, your own website—comes into play. For an artist with an established fanbase like rjd2—who broke heavy on the experimental hip-hop scene back in 2002 with his Definitive Jux debut *Deadringer*, and now has his own imprint staked out with RJ's Electrical Connections—the web is certainly a tool for interaction, but he's diligent about avoiding social media fatigue.

"In terms of the online interaction, I chose to not do a message board when I built out my site," he says. "I've seen that devolve into a complete time-suck. You can find yourself in these really antagonized scenarios, where people are just completely trying to push your buttons. In my experience, Twitter is the best way to interact with fans because it's a proactive relationship. You have to physically go out and follow someone. I know that sounds like it only takes two seconds—you search for a name, you find it and you hit 'follow'—but psychologically, I think that barrier is huge."

rj has a number of assets in play at <http://rjd2.net> that help him connect to his fanbase and build on it. Along with his embedded Twitter feed, he posts



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regular blog updates to the site's "News" section. A SoundCloud player is in the "Music" section, with buy links to iTunes for each of his albums. And finally, a streaming MP3 from his latest project (Icebird's *The Abandoned Lullaby*) is part of a Topspin Media widget that allows new fans to download the track in exchange for a valid email address. (Since opening up its marketing, ticketing, fanbase management, analytics and online store platforms to all artists earlier this year, Topspin has become a leader in the digital space, starting at a rate of \$99.99/year or \$9.99/month. When added to your other expenses for maintaining a website and distributing your music, it may swell your budget, but if you have a lot of data to manage, it's worth it.)

If you have a website, it's a good idea to set it up with a store component so you can sell directly to your fans; besides Topspin, a number of other companies provide this service (including ReverbNation, which offers free widgets; as well as BandCamp and Nimbit), and in most cases offer proprietary or third-party Facebook and

To paraphrase Marshall McLuhan, whoever controls the medium controls the message, and in the music industry, the key medium is distribution.

mobile apps. And if you don't have a website, make one. You can start with blogger-friendly freeware (Tumblr, Wordpress, etc.), or check out companies like BandZoog, which can build you an e-commerce-ready website from scratch, with tiered pricing starting at \$9.95/month.

Minding the store When DJ, hip-hop impresario, and producer Peanut Butter Wolf (a.k.a. Chris Manak) founded the L.A.-based Stones Throw label back in 1996, he had no idea that an imprint rooted in vinyl culture would ever become a powerhouse presence online (<http://stonesthrow.com>). "I brought in a friend of mine I'd known since the '80s," Wolf says, referring to Stones Throw's in-house web guru, Jeff Jank, "and you gotta remember, he had no computer experience, but he's always been a quick learner. The site's pretty clean, layout-wise, and I notice a lot of other labels have followed Jeff's lead. We also realize that it's key to have a Stones Throw online store, because people are buying so much online



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nowadays. We did that a few years ago, and it's been a big source of income for us."

According to Jank, the Stones Throw store had a shaky start. "It seems like the Dark Ages already," he says, "but the store began as an afterthought to building a custom content management system. Once we started, it dawned on us how important our own self-managed store might be. Everything was custom-made by Covelop, an independent company like ours, guys who understand our label. We learned along the way and made a lot of mistakes, but I'm still happy we went the custom route.

With a catalog that includes modern hip-hop and breakbeat classics by Madlib, J Dilla, MF Doom, J Rocc, Dam-Funk, and more, Stones Throw has one foot firmly planted in the analog realm, with a devoted fanbase that craves vinyl almost as a life-giving elixir. Digital sales account for a significant chunk of the label's online business, but Wolf is always looking for new hooks to pursue in the real world. "I'm a record collector, for



Peanut Butter Wolf strikes a pose with a pal.

God's sake," he quips. "We all have huge record collections of every type of music that you can think of. So when we do things like throw an invite-only party around a live show that's mixed and cut direct-to-disc, with a vinyl cutter on-site, that's not anything new, but right now, no one else is doing it."

Given that BandCamp has just started a side business called BCWax, which presses and ships vinyl packages for specially selected BandCamp artists, should digital distributors be worried? Not likely, but according to Jeff Price, eventually they'll have to adjust to another development in music distribution—one that's already making waves.

"With Spotify's launch and the forthcoming Apple iMatch, everything is going to wired-in connectivity," Price observes. "Apple's whole strategy is to sell its hardware by allowing you to have access to every piece of media in the world, including your own documents, without needing a hard drive. The future of this music industry is streaming, and you're gonna see a shift again." ■



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Fig. 1 The Soundtoys EchoBoy plug-in, with its floating Tweak window open.



Fig. 2 Distortion-based effects are McDSP FutzBox's forte.

Mixing the Ultimate Lead Vocal, Part 4

Mixing with echo, multitap delay, distortion, and pitch processors

BY MICHAEL COOPER

LAST MONTH, I waxed technical about using ADT effects and reverb to fatten a lead vocal track and put it in a cool virtual space. But 'verb can sometimes wipe out a vocal's clarity and make it lose its chi. This month, I'll show you how to launch your diva into orbit without sacrificing punch and power, using echo and multi-tap delay. I'll discuss using filtered distortion for over-the-top effects. We'll close our final chapter on vocal processing with advanced tips on using pitch processors to revive a track that's dead on arrival.

Repeat Yourself Adding discrete echoes to your vocal track—as short as 50ms or as long as a full second or more—creates an illusory space without flash-flooding the dry focus that drives a song. A single long echo, panned to the same position as the dry track and with a smidgeon of feedback applied, can create a wonderful sense of depth. Multiple, variously panned echoes paint a broader expanse. For the most natural-sounding effect, roll off high frequencies for the wet signal.

To support your song's groove, synchronize all echoes and multi-tap delays to your host DAW's tempo so they repeat in time with your music. Lexicon Dual Delay (part of the Lexicon PCM Native Effects Bundle) and SoundToys EchoBoy are plug-ins that allow you to select the delay time for each echo or tap as a note value (for example, a sixteenth-, eighth-, or quarter-note) or its dotted or triplet variation. Set each tap to a different pan position and level for the biggest and most complex sound.

EchoBoy uses a drum-machine-style grid that makes fashioning your own multi-tap delay patterns a snap (see Figure 1). Sync EchoBoy to your DAW's tempo by engaging the plug-in's MIDI switch. Set EchoBoy to Rhythm Echo mode. Open the plug-in's Tweak window to program the number of beats per measure, the grid spacing (for example, 32nd notes), and so on. Then mouse-click on the grid in the left ("edit") section of the GUI to place each tap on its own subdivision beat. Each tap will snap to a grid line and be represented by a vertical

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Fig. 3 Raise the Reverb-Reduction control on the SPL De-Verb plug-in to reduce reverb on any mono or stereo track.

green bar. Drag up or down on the vertical bars in turn to increase or decrease the volume of each tap. Use the Pan menu in the Tweak window to set up preset panning patterns for the multi-tap voices.

Shock and Awe To grab your audience's attention, consider using filtered distortion on a one-line zinger sung during a full stop or breakdown. The McDSP FutzBox plug-in creates outstanding vocal effects using a combination of downsampling, resonant filters, distortion, and generated noise (see Figure 2 on page 92). Excellent factory presets do the heavy lifting for you and provide radio, megaphone, and telephone-speaker simulations; kamikaze fuzz-tone breakup; and much more.

Perform Vocal CPR Even the most dazzling effects won't breathe life into a fatally flawed vocal performance. Thankfully, several plug-ins bring moribund vocal tracks back from the dead.

Say the vocal track was recorded in a horrible-sounding iso booth, and the echo-y room tone is moving your lunch in the wrong direction. No problemo. Instantiate the SPL De-Verb plug-in, and boost its Reverb-Reduction control to diminish or eliminate that rotten ambience (see Figure 3). Unlike with mid-side processors, De-Verb will even dry up a mono track.

Some singers execute too many glisses and use too much vibrato when trying to deliver a dramatic performance. The result can sound affected and phony. Antares Auto-Tune 7 and



Fig. 4 Antares Auto-Tune 7 can adjust the amount of vibrato for each note independently of the others.

Celemony Melodyne Editor plug-ins can make it real. If the track has excessive vibrato on every line, lower Auto-Tune 7's Natural Vibrato control to tame the entire performance. To reduce vibrato on a single note, use Graphical Mode to select it and lower the Adjust Vibrato control by the desired amount (see Figure 4).

Use Melodyne Editor's Pitch Modulation and Pitch Drift tools to rein in excessive vibrato and glisses. Simply click with each tool in turn on any "blob" (note) that sounds pretentious, and drag downward with your mouse to curb or completely flatten any pitch fluctuations.

"Change" the Singer Maybe that 30-something chanteuse wasn't the right gal to sing on your teen-angst-ridden pop tune. Don't fret: You can make her sound younger using plug-ins. Melodyne Editor's formant knob and zplane Elastique Pitch's timbre control can each be goosed to "pitch up" the track's formants and take off years. You can accomplish the same thing in Auto-Tune 7 by lowering the Throat Length control. (Make sure the Formant button is engaged first.) A setting of around 92% sounds natural and gets the job done.

Soak it Up If all your time-based effects aren't doing the singer justice, try bypassing all that juice. Sometimes the best effect is *no* effect. Nothing moves further to the front of a mix more than a dry vocal. ■

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Decemberists frontman Colin Meloy is amped through a PA at Outside Lands in San Francisco.

Acoustic-Electric Guitar Strategies

How to preserve your tone when you take the stage

BY GINO ROBAIR

ONE OF the trickiest instruments to work with live is the acoustic guitar. Although amplifying it seems as simple as pointing a microphone, you'll encounter issues with tone quality and feedback on all but the quietest stages.

Early acoustic-guitar amplification systems simply added piezo or microphonic pickups to the instrument, but the resulting sound was often overly percussive, honky, and thin. Modern acoustic-electric guitars, on the other hand, have pickup systems specially designed to maintain the tonal complexity of the instrument without feedback, even at high volumes within a mix of instruments.

However, maintaining decent sound quality onstage doesn't stop at the guitar. Whether you're playing on open-mic night, touring clubs, or visiting houses of worship, it's important that you find a way to maintain the sound quality of your guitar no matter what kind of PA system you encounter. Let's examine three ways that professionals take control of their sound onstage.

Direct to the house The easiest way to work with a venue's PA system is to simply

plug your guitar cable into whatever mixer input is provided. However, this scenario gives you the least amount of control over your sound. When you have an unbalanced output and the distance between your guitar and the mixer is more than 20 feet, you will need to convert your signal to a balanced one in order to avoid signal loss. Most venues will have a passive direct box, which accepts your 1/4-inch cable and provides a balanced XLR output that can be plugged into a cable snake that goes to the front-of-house mixer.

Guitarists who are concerned about tone quality should consider bringing along their own DI, particularly one that's designed for an acoustic-electric guitar. These products not only create a balanced output, but they typically include a preamp that boosts the signal, while offering EQ controls to compensate for any peculiarities of the PA system or venue.

There are active boxes that run off a battery or accept +48VDC phantom power from the mixer, as well as passive, unpowered products. The device you choose will be determined by your budget, the type of pickup



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system you have on your acoustic-electric (whether it's active or passive), and the kinds of features you need. Typical features include a notch filter or phase switch to help mitigate feedback, a dedicated tuner output or built-in tuner, and an effects-loop. Prices start well under \$100, though the more feature-laden DI/preamps can cost as much as \$400.

Acoustic amp One drawback of plugging directly into a PA is that you must rely on

the venue's monitors to hear your amplified instrument. One way to solve this issue is by using an acoustic amp onstage; it not only provides direct monitoring but it gives you greater control over your sound with its built-in preamp and EQ.

Unlike an electric-guitar amp, which boosts midrange frequencies, an acoustic amp is designed to cover the wide frequency spectrum an acoustic guitar is capable of producing, while offering features that benefit



Portable, modular PAs such as the Bose system here make carrying your own system easy.

acoustic-electric players, such as feedback suppression. The more sophisticated products have digital effects. Acoustic amps also include balanced outputs so you can simultaneously send your carefully crafted signal to the front-of-house mixer and go through the PA.

Some acoustic amplifiers can double as lightweight, miniature PA systems and are designed for artists who play house concerts and other small venues. These products include a phantom-powered mic input for vocals and a stereo line-level input for media (MP3 or CD) players. The size and wattage of the acoustic amp you choose will depend on the kind of music play, the onstage volume level of your performances, and whether you're playing solo or with a band.

B.Y.O.P.A. The next level of amplification is to bring your own PA. Although you might think that solution is only for loud bands, there are personal PAs designed for soloists and small groups. In one sense, it is a small step up from the acoustic amp, because it not only reproduces the full frequency spectrum, but it includes mic and line inputs, EQ, and, often, digital effects. For the acoustic-electric guitarist who plays indoor and outdoor events to relatively small numbers of people, this can be the smartest way to project a quality guitar tone.

Remarkably, a portable system can be as simple as one or two powered speakers on a stand, with all the connections built into one of speakers themselves. That means you won't have to pack a separate (and often heavy) power amp and mixer. Examples of this type of system include the Bose L1 Compact (above), the Fishman SA220, and the HK Audio Elements. All three systems feature narrow, space-saving speaker arrays that are lightweight and easy for one person to schlepp. ■

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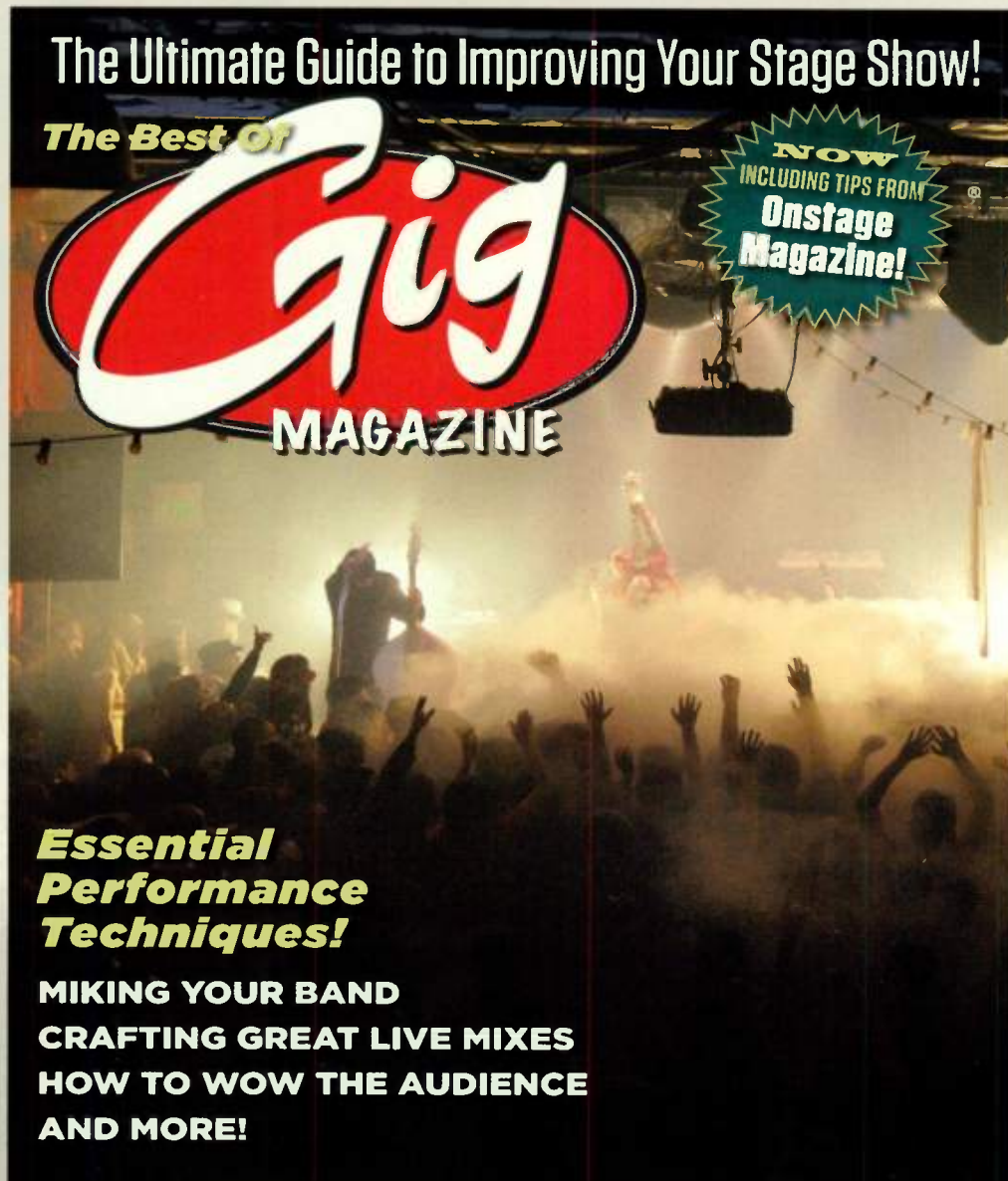
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Zachary Cepin

Tour-booking advice

Play more gigs, without going broke

BY KYLEE SWENSON GORDON

MEET ZACHARY Cepin, a booking agent for Bay Area agency High Road Touring. For the past ten years, High Road has helped many high-profile artists develop or maintain their live-music careers, including Lucinda Williams, OK Go, Robyn Hitchcock, Wilco, and dozens of others. Cepin puts together tours for his bands like puzzle pieces, making sure that the routes make sense and will help artists build their fan bases while hopefully turning a profit in the process. He negotiates dates, terms, and guarantees with club bookers all over the map. Here, Cepin offers advice to bands that want to play great shows on the road and gain more exposure without breaking the bank.

What can bands with decent track records do to persuade you to work with them? The quality of the music always comes first. I want to work with artists who are making music that I love and who I enjoy working with. The last thing I want to do is book shows for a band I don't like personally or musically solely for the paycheck. Write good songs and put on a solid

live show. Be straight-headed, surround yourself with goal-oriented people, and work as hard for yourself as you expect others to work for you.

How can bands most effectively pitch club bookers outside of their hometowns? Press kits are of the past, so forget they ever existed. Online one-sheets and social-networking sites have replaced physical press kits. People want information as quickly as possible without putting in much effort, and sending a package with a CD, a picture, and a bio is more likely to end up in someone's trash than on their desk.

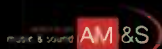
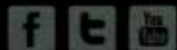
When emailing, ask about being on specific, like-minded shows, ones that look like they have a spot open on the bill. Be persistent, but don't expect to open for the Rolling Stones immediately; start with the smaller clubs before moving onto larger ones. Take a slot as part of a local show, promote the hell out of it, and bring as many people to the show as possible. Treat the club employees with respect, play your best, and don't expect to be

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paid. As you develop a fan base, getting booked will become easier and easier, and eventually, club promoters will be asking you to play shows.

What kind of leverage does a band need to negotiate guarantees in cities outside of its hometown? Expect to lose money or break even the first time you play a market. Unless you have an agent leveraging money for you based on the relationships he or she has developed, expecting someone to guarantee you money without some kind of press, past history, or a fan base is not realistic. As you develop a fan base and relationships with promoters, and prove that your band is worth their investment, the guarantees will increase.

Is it important to hit key markets multiple times to build up the fan base, and then expand to smaller markets? I'm a fan of using your geography to your advantage. So, for example, if you live in San Francisco and are making a trip to L.A. to play a show, if you can pick up a date in a secondary market like Santa Cruz or Santa Barbara on the way home to

break up the drive and pick up some additional money, even better. However, unless you have friends in a city like Fresno, a tertiary market, or are playing a style of music that does exceptionally well there, you generally need some level of success in a market like Los Angeles before folks in Fresno start paying attention to you.

What mistakes have you seen bands make that they could have avoided? Don't put the cart before the horse. Many new bands want to tour when they have no reason to. Focus on the quality of your songs, develop your live show by playing locally, and garner an audience in your hometown before branching out regionally and then nationally. If you live in a major city and cannot sell 100 tickets in your hometown, there's little reason for you to be out touring. Touring is expensive, and the last thing you need is to go broke for little-to-no gain. Be patient, realistic, work hard, and be great at what you do, and good things will come. ■

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In many cases, you won't want to adjust your playing style just to get a warmer tone.



Fig. 2. Waves DeEsser dynamically softens high-frequency transients to take the edge off guitar-amp sims.

In Waves DeEsser, choose a highpass filter for the sidechain, set the corner frequency to about 5,500Hz, and toggle the Audio button to the Split setting. Using these settings, DeEsser will compress transients only in the high-frequency band above the natural cut-off for an analog guitar cabinet; lower frequencies will not be processed. Lower the threshold slider to the point where sharp string attacks trigger gain reduction but a note's sustain doesn't. Around 4 to 6dB of gain reduction should give your guitar track a summery tone.

Boost and Cut Tape emulators and de-essers are generally the most transparent-sounding tools for warming gelid guitar-amp sims. That's because they act dynamically, or only when high-frequency transients get unruly and need to be tamed. But in cases where a heavier hand is needed, you'll need to use static equalization to microwave an ice-bound track.

If your track already has enough low-midrange content, a lowpass filter (LPF)—set

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Fig. 3. SoundToys FilterFreak provides a variety of great-sounding filters.

to roll off highs above roughly 5kHz—should be all you need to keep out the cold. The SoundToys FilterFreak plug-in allows you to adjust the steepness of the filter's slope (up to 48dB/octave!) by adjusting the Poles control to a higher number (see Figure 3). 'Bye-'bye, frigid high-frequency transients! As a bonus, the plug-in's Analog Mode produces pleasing saturation that sounds great on electric guitar tracks.

Unfortunately, an LPF can sometimes make your guitar track sound too bass-heavy. If that's the case, use FilterFreak's bandpass filter instead. A bandpass filter cuts both highs and lows. What

remains is the midrange band—where guitar tracks shine.

You can also create a bandpass filter by combining low- and highpass filters in the Softube Tonelux Tilt and Brainworx bx_cleansweep plug-ins. Tonelux Tilt emulates the subtle distortion produced by the Tonelux MP1a mic preamp's transformer; it sounds positively outstanding on guitar-amp sims. bx_cleansweep sounds less colorful but gets the job done nicely. Download a fully authorized copy of bx_cleansweep for free at brainworx-music.de. ■

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Five Reasons Musicians Should Vote for Me in 2012

BY CRAIG ANDERTON

1

The “Squash Control” law. All consumer gear will have, in addition to volume and tone controls, a “squash” maximizing control for killing the dynamic range. Mastering engineers won’t have to make unlistenable masters any more—consumers can make music unlistenable all by themselves! *Power to the people!*

2

I’ll declare a “War on Loudness.” We’ve all heard about the loudness wars. But if we make it a real war, then we can distribute trillions of dollars to musicians, who are of course on the front lines. If the Pentagon can pay \$434 for a hammer, then by golly, don’t you think your CD is worth at least \$90? Oops, excuse me . . . I meant \$900. Or maybe \$9,000. Yeah . . . that’s the ticket.

3

Mandatory drug testing. Ever since the early days of jazz, musicians have had a reputation—deserved or not—for smoking marijuana. So, I will implement mandatory drug testing to make sure that whatever they ingest is of the highest possible quality, and grown solely in the United States to dramatically improve our balance of trade.

4

I’ll get all major blocs to vote for me. To win over the religious right, part of my platform will be “Make a joyful noise unto the Lord—and find out how to make noise from *Electronic Musician* magazine!” To “woo the black vote,” Bootsy Collins will be nominated as Secretary of Funk—a newly-created cabinet position intended to loosen up all those uptight politicians and lobbyists. And for seniors, Medicare will offer free hearing aids that filter out rap and techno music, but let other sounds pass unimpeded.

5

The “NASCAR Jacket” law. While this doesn’t really have much to do with music, it’s an essential plank in my platform: All Congresspeople will be required to wear NASCAR-type jackets with the corporate logos of their sponsors. If we’re going to have the best Congress money can buy, we should know who’s footing the bills . . . right? ■

Note: To support the Craig Anderton in 2012—We at Least Need a Better Musician than Mike Huckabee campaign, go to itshopelessanywaysowhy.com.



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