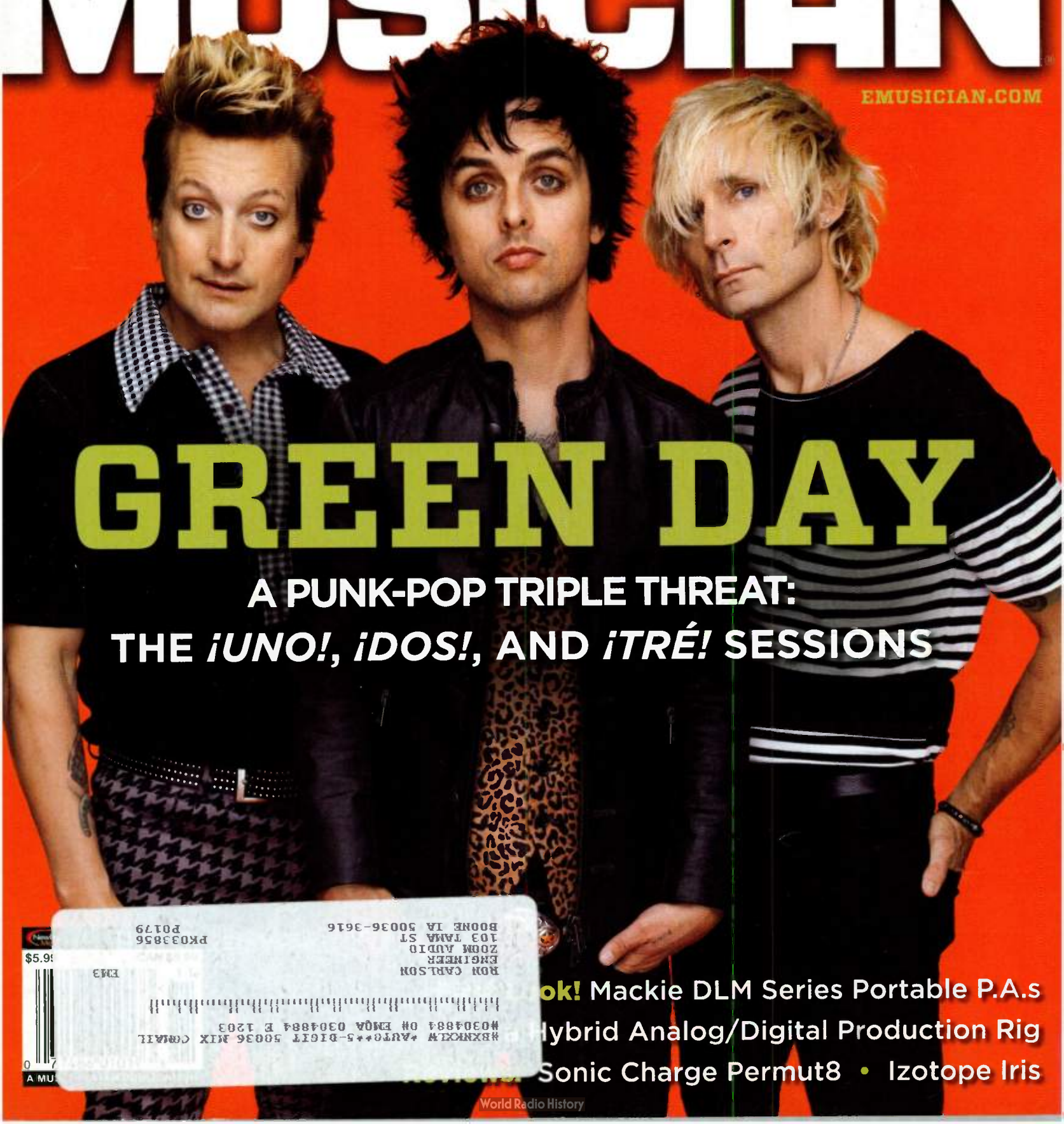


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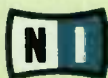
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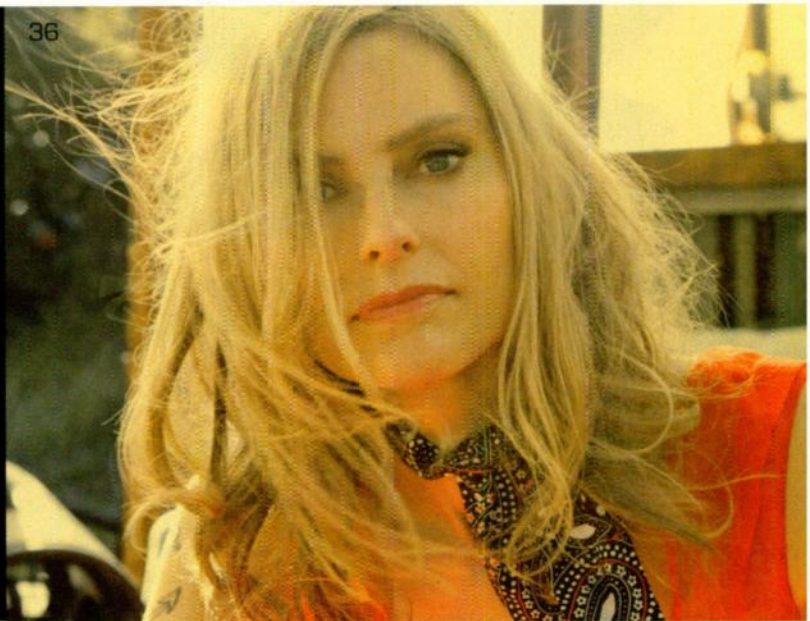
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insight

Unsung Heroes

AT THIS year's AES show, attendees will have a rare opportunity to catch a screening of *The Wrecking Crew*, which documents an elite group of session musicians who formed the backbone of hundreds of hits that came out of L.A. in the '60s and '70s. If you've heard records by the Beach Boys, Frank Sinatra, The Byrds, Simon and Garfunkel, or the Mamas and the Papas, you've heard the Wrecking Crew.

Though the film pays tribute to the immense talent and versatility of these players, its larger point is this: Despite their prolific careers, there had never been any real acknowledgment of their impact on these songs that are so deeply woven into our culture.

Recorded music is a collaborative art form built on the contributions of songwriters, artists, producers, and engineers. And in the age of digital delivery, though you think it would be easier to track information,

those working behind the scenes are actually in danger of losing the recognition that they deserve—which impacts not just their livelihood, but their story. Fortunately, organizations such as The Recording Academy are making great strides campaigning for practices that ensure everyone receives credit, for our paychecks and for posterity. But these initiatives need your support. Read "State of Play" on page 12 to find out how you can get involved. Make sure *your* story is told.



SARAH JONES

EDITOR

sjones@musicplayer.com

COMMUNITY

**“THE COMPANY LIKES HITS,
THE FANS LIKE HITS, AND
THAT’S WHAT HE’S THERE TO
DO—MAKE HITS. WE’RE NOT
IN THE ART BUSINESS.”**

Universal C.E.O., Lucian Grange on Justin Bieber’s manager, Scooter Braun, in *The New Yorker*, September 3, 2012

POLL

How much of your annual revenue comes from sound recordings?

TEACHER	3%
SESSION PLAYER	4%
PERFORMER	6%
RECORDING ARTIST	11%
COMPOSER	10%
ALL	6%

Data represents income over past 12 months; information courtesy Future of Music Coalition Artist Revenue Streams survey (money.futureofmusic.org), May 2012



AES Launches Project Studio Expo

This year's 133rd AES Convention in San Francisco (October 27-29) introduces the Project Studio Expo—a free event, open to the public, featuring exhibits and a rich roster of seminars and clinics. Focused on leading-edge project studio technology, and developed in partnership with *Sound On Sound* magazine and *Electronic Musician* Executive Editor Craig Anderton, the Project Studio Expo offers practical recording techniques and best practices from industry leaders. Anyone who records, mixes, or masters in a project studio can take advantage of this opportunity to listen, learn, and connect with their peers and mentors.

The seminars cover popular, “must-know” topics including studio acoustics, mixing secrets, mastering in the project studio, tracking and recording techniques for superior sound quality, making music in the iOS world, live performance with laptops, keeping the human element in the digital age, Q&A sessions, and much more.

For additional information and to register in advance, visit aes.org/ProjectStudioExpo.

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As always, support us in helping lead in the new direction, including...
 • Hands-on seminars and Project Studio Expo clinics
 • All day long networking opportunities
 • Exhibits

CLINICS:
 Keeping the Master Element in the Digital Age
 Ways to Keep in the Messy Area and Mastering
 Total Tracks! Get It Right At The Source
 Choosing & Receiving Your Sample Source
 Mixing Secrets: Production Tricks To Use With Any DAW
 Master Your Tracks: D V Tracks To Complete With The Mix
 Make Music With Your iPad: Hot Apps, Great Gadgets & All Things iOS
 It Won't Sound Right If You Don't Hear It Right
 Music, Acoustics, Monitoring & Critical Listening
 Take Your Studio On Stage: Live Performance With Laptops, Latching Pedals & Other Audio Tech
 You Ask, We Answer! Q&A

**Tools and Techniques...
 Recording Clinics...
 Brilliant People.**

WHAT: Recording Clinics, Q & A, Networking, and More...
WHEN: AES 133rd Convention Oct 27-29, 2012
WHERE: Moscone Center San Francisco, CA
FREE* Advance Registration: www.aes.org/ProjectStudioExpo

*Project Studio Expo is open to all levels. Other AES Convention ticket categories apply. May require separate paid registration. Please Email: info@aes.org or [4157601234](tel:4157601234)

ask!

I'VE BEEN USING A PRESONUS INSPIRE 1394 AND IT'S WORKED FINE, BUT I NEED TO UPGRADE TO MORE INPUTS. I'VE ALWAYS BEEN TOLD THAT FIREWIRE HAS MORE BANDWIDTH THAN USB, WHICH MATTERS AS I WANT TO DO MORE RECORDING AT 96KHZ. BUT IT ALSO SEEMS FIREWIRE IS BEING PHASED OUT, AND I DON'T WANT TO BE STUCK WITH A DOORSTOP. SO . . . FIREWIRE OR USB?

NED STOLTZ
BROOKLYN, NY
VIA E-MAIL



Is FireWire an endangered species? Not if Thunderbolt has anything to say about it.

FireWire and USB started became common in the mid-'90s. USB has more general market share than FireWire; formerly “FireWire-only” companies (like PreSonus) now make USB 2.0 interfaces. FireWire 400 and USB 2.0 are roughly equivalent in terms of performance, while FireWire 800 has higher bandwidth than USB 2.0. Although USB 3.0 changes that, there are presently no USB 3.0 audio interfaces. (Many USB 2.0 models are compatible with USB 3.0 ports, but they don't take

advantage of the higher speed.)

The correct answer depends somewhat on your platform. Few, if any, new Windows laptops include FireWire, and most probably don't include an Express-Card slot suitable for a FireWire adapter. However, most Windows desktop systems include at least FireWire 400, and if not, adding a FireWire 400 or 800 card is trivial. Although the Mac seems to be phasing out FireWire, it's phasing in Thunderbolt—and the Apple

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If you need a FireWire interface, or one has the features you want, you'll have no problem keeping it alive for a long time (except for some Windows laptops). But if a USB 2.0 interface suits your needs better, it will have plenty of bandwidth for most recording applications.

THE EDITORS



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 Keeping the Human Element in the Digital Age
 What's So Cool About Recording... and More
 Total Tracking! Get It Right At The Source
 Choosing & Recording Your Final Source
 Master: Secret Production Tricks To Use With Any DAW
 Master Your Tracks! DIY Reverbs To Compete With The Pros
 Make Music With Your iPad! Hot Apps, Great Gadgets & All Things iOS
 It Won't Sound Right If You Don't Hear It Right: Studio Acoustics, Monitoring & Critical Listening
 Take Your Studio On Stage: Live Performance With Laptops, Learning Pedals & Other Studio Tech
 You Ask, We Answer! Q&A session

WHAT?
 Recording Clinics, Q & A, Networking, and More

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 AES 133rd Convention
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*Project Studio Expo is open to the public. Other AES Conventions are limited to members. Photo credit: Sound On Sound magazine

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STATE OF PLAY

Metadata can be the missing link between music creators and their paychecks

By Maureen Droney and John Spencer

AS THE music industry continues to evolve, a major component of the consumer experience has been left behind: listeners' awareness of the people, skills, and intention that went into creating it. Those album covers, sleeves, and booklets we used to pore over—the credits, liner notes, lyrics, artwork, etc.—haven't really made the leap from physical to electronic distribution.

It used to be common for music buyers to scour the back cover to learn who the players were, who wrote the songs, who produced them, where and by whom they were recorded, and to read the liner notes. From lyrics to “special thanks,” this information gave listeners a personal relationship with the artist. It informed them about the intent and the process of creating the recording.

Today, due to technological advances welcomed by creators and fans alike, we can use our smart phones to identify a particular song or album. But almost all music services—whether purchase or subscription based—only show consumers the name of the song, the artist, and perhaps, a copy of the CD cover. Technology has left credits, and a wealth of other information, behind.

However, proper crediting and documentation—a.k.a. metadata—actually plays a much more important role for artists in the digital age. Artists, labels, and other royalty stakeholders now have compelling business and financial reasons to ensure that accurate metadata is collected and linked to their creative works.

If you're a music creator and you're reading this, you're probably wondering, “But how am I supposed to *do* this?” That's a reasonable question, because, currently, it's not readily apparent which metadata should be collected in what form, or where it's supposed to go.

But the landscape of metadata collection and distribution is changing—in a positive way. Much of this work has been under the radar, as the creation of metadata standards doesn't make for sensational headlines. But without these standards, creative stakeholders aren't going to be properly credited. Even more important, in a number of scenarios where their music is played or downloaded, those stakeholders also might not get paid. Given the fact that many such payments are fractions of a cent, it is more critical than ever that we have a unified, well-structured standard for those payments to be credited appropriately.

A number of U.S. and global organizations have been working to create this structure. One of the leaders in the e-commerce standardization process is DDEX (ddex.net), an entity working with labels, aggregators, and e-commerce providers to create standardized XML (Extensible Markup Language) messaging suites for electronic releases and digital sales reporting. CISAC (cisac.org) has created the International Standard Naming Identifi-

er or ISNI (isni.org), an International Standards Organization (ISO) specification for unique personal identifiers that assigns to performers and creative participants a unique numeric code without releasing any private information such as social security numbers. Additionally, The Recording Academy and its Producers & Engineers Wing* (grammy.org) are deeply involved with the standards process in several ways, from the newly launched “Give Fans the Credit” advocacy campaign (givefansthecredit.com), to working with media- and data-management company BMS/Chace and the Library of Congress in creating standards for the collection of technical, descriptive, and performer information during the recording process (CCCdata.com).

All of these initiatives will play significant roles in the continued development of the standards process, which ultimately will enable content creators to collect metadata in a variety of ways. Whether via dedicated app, web portal, or DAW integration, creators will be able to provide XML output containing rich, standardized metadata. This will help everyone, from content creators to resellers, to provide accurate documentation, and facilitate proper crediting and payment.

So what can we do while the standards are still being created?

- Producers, take ownership of the documentation process; work with the artist to collect and document accurate information and assign credits. If you're not personally collecting the appropriate metadata, assign the task to a trusted assistant.
- Deliver as much metadata as possible to the label along with the final recorded masters.
- If you are self-producing your project or are an independent artist, make sure you keep as much documentation as possible.
- Visit givefansthecredit.com and sign the petition. Help us show how much credits matter—both within our industry and to music fans.

The bottom line is that all participants in the music industry—from artist to producer to label to digital music provider—have a role to play if we want our credits back.

Maureen Droney is Senior Executive Director of The Recording Academy Producers & Engineers Wing (producersandengineers.com). John Spencer is President and co-founder of BMS/Chace (bmschace.com).

Gadget Geek

Better mixes start with better mixing skills. Quiztones is a frequency ear-training app that employs unique quiz-based training exercises to teach audio engineers, producers, and musicians to intuitively recognize sounds such as sine waves and pink noise, as well as real-world sounds such as frequency-altered drums, acoustic guitar, electric guitar, bass and vocals—useful skills for mixing, adjusting EQ settings, and identifying/eliminating feedback. The app comes in Mac, iOS and Android versions. The newest version, for Android, is available at an introductory price of \$1.99. To learn more about Quiztones, visit quiztones.net.



DIG MY RIG

This is my gig rig I use when I'm playing keyboards with the original instrumental progressive rock band Brainstatik, and for my solo ambient PYXL8R performances. It isn't too complex, but I've got a pretty wide range of sounds at my disposal!

Gear:

Korg M50 synth. The yellow limited edition attracts a lot of attention, and it matches the yellow gaffer's tape that I use!

Korg MicroX synth. Goes anywhere and sounds great!

MacBook, running patch editors for both synths, as well as NI Kore and Kontakt.

Small Alesis mixer, to submix my outputs for stereo sent to the D888.

Korg D888 multitrack recorder/mixer, which the rest of the band plugs into, and lets me record all of our performances. I mix Brainstatik live on stage during the performance, because we don't trust house engineers to sort out all the strange sounds that are created onstage.

2 ProCo DIs

2 M-Audio sustain pedals

UPS backup, just in case!

Over the years, I've tried to have less gear on stage and, for me, this is the bare minimum. Setup and teardown is pretty quick, which, when playing festivals, has become essential.

Obviously, I love Korg gear; I started that obsession back in 1975 (just out of high school) with the purchase of a Univox Maxi Korg. It was cool being the only kid on town with an actual synthesizer back then!

KEN PALMER
VIA EMAIL

CASSANDRA WILSON: STORMY SOULSTRESS

NEW YORK, NY
JUNE 28, 2012

Two-time Grammy Award winner Cassandra Wilson is one of the most inspired vocalists in jazz, her amalgam of country, blues, gospel, and folk styles as original as her rustic, darkly intoned vocal delivery. Making a rare appearance at the Blue Note in New York City in support of her latest release, *Another Country*, Wilson performed as chameleon: one song donning guitar for a funky swamp boogie, the next surrendering the spotlight to one of her crack bandmembers as she responded with complimentary shout-outs, another song a ruminative, dirge-like ballad that made time stand still. But as can be seen here, Wilson is also at her best when she's at her most playful, eyeing some lucky someone with equal parts love, lust, and mischievous good humor.

PHOTO BY KEN MICALLEF





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 **YAMAHA**

GREEN DAY

The power trio take a back-to-basics approach in the studio to recapture their punk-rock soul.

BY KEN MICALLEF

You're in the most popular punk rock band of all time, your 1994 major label debut sold 10 million units, and it's been an upward spiral ever since: umpteen Platinum-selling albums (65 million worldwide) a smash Broadway musical, enough Grammys to prop open a door made of Ununocium, and a John Varvatos advert that shouts "sell out!"—but you're smarter than that. So what do Green Day's Billie Joe Armstrong, Mike Dirnt, and Tré Cool do for an encore? After the 3D production glamour of their 2009 Butch Vig-produced opus *21st Century Breakdown*, the band reacted by going underground, kicking in the jams, and attempting to recapture/reinvent their punk-rock soul.



Green Day (left to right)—Tré Cool, Billie Joe Armstrong, and Mike Dirnt.



Jingletown, Green Day's Oakland studio, features a newly-refurbished Neve 8068.

"There's no right or wrong way to achieve something that's in your head or a sound you are searching for. It might require plug-ins, EQ, or nothing at all. There are a lot of things you can do with just a microphone."—engineer Chris Dugan

Recalling the riotous count-off to Sam the Sham and the Pharaohs' insane 1965 hit, "Wooly Bully," *Uno!*, *Dos!*, and *Tré!* are Green Day's response to anyone who ever asked, "Whatever happened to the *real* Green Day?" A song-packed trinity of punk-rock primitiveness, *Uno!*, *Dos!*, and *Tré!* were recorded over a three-month period in Green Day's Jingletown Recording Studios (formerly Studio 880) in Oakland, CA, but not before a major studio renovation, the purchase of a vintage Neve desk, and a bare-bones recording approach established the band's new normal. But Billie Joe, why three albums?

"Because we had a sh*tload of songs!" Armstrong exclaims from a tour stop in Zurich. "We had about 70 songs and we were having fun. But we stayed away from being in a professional studio altogether; we thought, 'Let's just stay at Jingletown and jam these songs out.' Before we knew it we had it down to 30-something songs. We didn't want to do a double or triple record, so we just decided to release in three volumes: *Uno!*, *Dos!*, *Tré!* We thought it was funny."

Green Day reunited with career-long producer and Warner Bros label boss Rob

Cavallo, who pondered the psychological implications of releasing three albums successively within three months.

"What is the journey of these three albums and how will we present these to the fans?" Cavallo mused. "What is the intuitive nature that will make a song feel like a *Uno!*, *Dos!*, or *Tré!* song? Billie knew what he was trying to say on *Uno!*: that feeling of hope and fun and excitement before a party. Then *Dos!* is the party, just going for animalistic hedonistic enjoyment, just wrecking yourself. Then *Tré!* is the next morning where you're reflective and hung-over."

Armstrong began writing and demoing songs in 2010 while performing as St. Jimmy in *American Idiot: The Musical*, on Broadway. Every night after the show, he'd return to his New York apartment and write, working up songs on guitar, bass, and drums and tracking everything, including vocals, on a small portable studio rig. Longtime Green Day engineer (and tour videographer) Chris Dugan details the setup: "There are four mics on the drums: kick, Shure Beta 52; snare, Telefunken M80; sort of an 'over-under' stereo mic setup to get the toms and cymbals with a pair of AKG 414s. Armstrong tracks his guitar

and bass through a Line 6 POD. And he sings into a Shure SM7. These are all connected to a Mackie 1604 mixer. The stereo L/R outputs are sent to the line inputs of an MBox. All of the levels are set on the 1604. He monitors through a pair of Dynaudio BM6As."

Inspired perhaps by Green Day's newfound success with the middle-class tourist crowd that typically attends Broadway musicals, or the chart-topping success of *21st Century Breakdown*, Armstrong hit his serious songwriting stride.

"There's no such thing as writer's block," he says. "'F*ck it,' I thought, 'I am going to write whatever I want and somehow it will find its way.' I set up this little studio in my apartment in New York and at night I would do St. Jimmy, and the songs just kept coming, and I kept recording. Then back in Berkeley I'd go surfing in the morning, and end up doing demos at home there too. Whenever I was inspired, I would just do it. I tried to be as disciplined and do it every day if possible. We demoed everywhere, but really, this the most 'New York' record we've ever made."

Green Day demoed songs as a band all over the U.S., scoring time and tracks at Electric Lady (NYC), Yellow Dog Studios (Austin, TX),



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and JEL Recording Studios (Newport Beach, CA). Then they returned to Jingletown, and literally, let it rip.

“They absolutely went for first takes and that energy,” Chris Dugan says. “Before cutting demos at Jingletown, we converted one of the rooms into a jam space. The band would rehearse every day and I would track that with just a couple mics in the room. The guys played the songs, tried out ideas and then we would listen back, and we’d tweak the songs together as a band. Ultimately, that paid off when we tracked, ‘cause they would just crank ‘em out. It was great.”

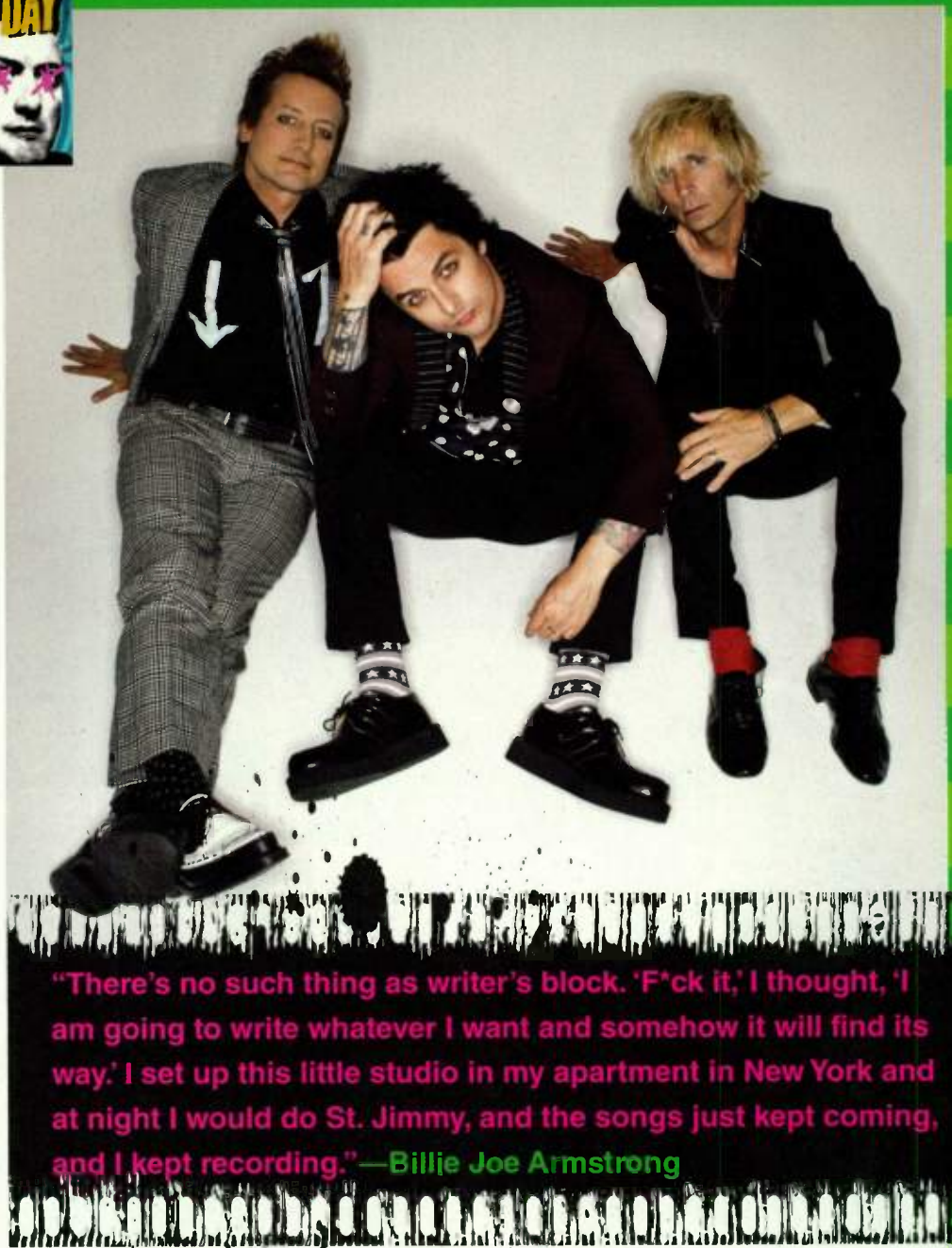
Armstrong concurs. “We were so well rehearsed we just went in and blasted through the songs, three records in three months,” he recalls. “We knew the songs and all of our parts and all the arrangements, so it was just, ‘Let’s rock out.’”

“Our intent was to be a little more ‘garage band,’” Rob Cavallo adds. “It had a lot to do with pre-production, though we had specific room mics and ways to make the [mix] sound what I would call ‘hi-fi garage rock.’ You’re hearing two guitars (including second guitarist Jason White), bass, drums and vocals recorded in a very raw, unaffected manner. It’s very old school and natural, not a lot of EQ and no effects, just natural reverb rooms.”

For Dugan, who was encouraged to go production crazy on *21st Century Breakdown*, Green Day’s initiative to pare it back and make it raw hit a harmonious internal chord.

“This was a more stripped-down approach in every regard: the music was stripped down, and so was the tracking,” Dugan explains. “There are some similarities between these records and *21st Century Breakdown*, but it’s more stripped down overall. Some noises would pop up and we wouldn’t chase them down, we would leave them in. We didn’t spend time nitpicking anything, it was all about the vibe of each song. As long as everything was jelling and locking together, everyone was cool with it. I was always on guard: ‘Oh shit, I’m hearing stuff left and right, a bum note here or there. Should I cut it out? Mute it? It was, ‘No, let it roll.’”

Cavallo and Dugan looked to AC/DC’s



“There’s no such thing as writer’s block. ‘F*ck it,’ I thought, ‘I am going to write whatever I want and somehow it will find its way.’ I set up this little studio in my apartment in New York and at night I would do St. Jimmy, and the songs just kept coming, and I kept recording.” —Billie Joe Armstrong

Back in Black as a sonic template, adopting its one-two (don’t forget -three) punch of minimal miking techniques and head-pummeling goodness to make those about to rock completely satisfied.

“We weren’t trying to re-create *Back in Black*, but use it as inspiration,” Dugan explains. “Guitar amps were miked with one mic, and we didn’t go for such huge drum sounds. The last record was recorded at Ocean Way because of their amazing drum room; that’s everyone’s favorite drum room. But again, this was more bare-bones. These three records are definitely a departure from the production you heard on the last

two records. The last record in particular we added extra guitars and layers of things. There is absolutely no layering on this record. There are two guitar parts, bass and drums and vocals, and a lead guitar. That’s it. We recorded acoustic guitar and strings for a couple songs, but for the most part it’s straightforward rock and roll.”

Before tracking began, Green Day ditched their Dalcon 32x24 board (used primarily for playback) for a refurbished Neve 8068 32-channel recording console purchased from Vintage King Audio in Ferndale, Michigan. Additional mods made the Neve even more flexible.

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“We had a guy up in the Bay Area, Sean Green, do a really cool fader-reverse mod which added some cool routing options for playback and mixing,” Dugan says. “I was drooling going to work every day on the Neve. The 8068 is a classic rock-and-roll desk. We used it for both tracking and monitoring, straight into Pro Tools 10. We used Neve 1073 preamps on guitars, a

8068, Green Day completely renovated Jingtletown’s Studio A. “The [425-square-foot] control room was completely remodeled,” Dugan explains. “Kevin Hughes designed it; he’s an amazing acoustician. Dennis Stearns did the installation. This is where the band recorded *Warning*. And we demoed everything for *American Idiot* in that room. But we completely overhauled the room, treated the ceiling, treated all the walls. The biggest change was at the rear of the room where there were doors leading into a machine room. We removed the

hi-fi system, you’d wonder where the low end went. Now it’s like wearing prescription glasses; everything is clearer. You have to have a correct room for playback.”

At this point, it goes without saying that Green Day and Dugan wanted a raw, practically primitive sound. While the sonic identity of *Uno!*, *Dos!*, and *Tré!* practically screams more compact, streamlined and somehow less saturated than *21st Century Breakdown*, the thing that really stands out is its overwhelming immediacy and presence. Clean, in-your-face, trashy, ugly? Yes. Plug-in-produced? No.



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—Producer Rob Cavallo

The live at room at Jingtletown, from the drummer’s perspective.

Chandler LTD-1 for tracking vocals; bass went through the Neve 8068, and drums almost entirely through the Neve, but the kick drum went through the LTD-1 and snare through a Vintech Audio X73.”

In keeping with Green Day’s simpler approach, they avoided the corporate studios of L.A. for the homey climate of their native Jingtletown in Oakland. The Neve 8068 console was the final element in making their home-base studio capable of creating an old-school, yet clean, classic rock sound.

“The guys said, ‘Let’s not go to L.A., let’s do this at home, ourselves,’” Dugan recalls, “and that was part of what prompted buying the Neve desk. ‘We don’t need to go to L.A. for a huge sound; let’s make a record that doesn’t sound like that. Let’s make a record here; what do we need?’ So I went looking and found the Neve.”

In addition to purchasing the Neve

doors and built a sort of false wall with all this crazy batting in it. [The backside of the wall was covered in special wood to which holes were drilled.] That turned the back room into a huge bass trap. The bass trap is approximately 12x8. The low end would filter through the wall and get trapped in that room and in then never come back out. The low end filters straight through it and just blows right past you. The low end doesn’t build up and bounce off the back of the wall, like you would typically expect sitting in front of a wall.

“Now when we monitor playback,” he continues, “we get a clearer window of the music. In a room with a lot of low-end buildup, if I wasn’t in tune with the room or I wasn’t aware of it, I would probably cut a bunch of low end off the bass guitar and bass drum because it would sound too big. When in reality, if you listen to it in a car or on a

“I’d like to say I did all sorts of rad stuff, but we kept it very basic,” Dugan reiterates. “It was truly the band and their choice of instruments to make a song trashier or go for a particular sound; they did it on their own. I didn’t do anything with plug-ins. It was, ‘If we need an ugly sound, let’s bring out that sh*tty amp and crank it up.’ To me, that’s the right way to do it. We captured what it was that everyone wanted to do and how they wanted it to sound. It’s more like, hit Record and make sure that everyone is getting what they want on a very organic level. There were times when we would track everything live, other times we would cut parts individually.”

Guitars, bass, drums and vocals were all hit with the same directive: Keep it simple, keep it real.

“I didn’t want to go for a modern Marshall amp sound,” Armstrong says. “I wanted to do something that sounded more like a classic



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rock tone. I used a Gretsch guitar, and we figured if we couldn't find the exact vintage amp we were looking for we would just build it. But I did use a Vox AC 30 and a 1974 Marshall JTM45. We miked the room and captured that."

Where Armstrong used four different amp/cab combinations on the last album, this time, two amps and one 2x12 cab apiece between two guitarists fit the bill, miked by a single AKG 414 through a Neve 1073 pre. "Another factor is the second guitar player, Jason White," Dugan says. "Each guy tracked a pass, so we had two guitar parts by two different guys on every song. They each had had different amps, Billie through AC 30, Jason through the JTM 45."

Armstrong also changed out vocal mics but his tried-and-true tracking approach remained. "I've always been quick at recording vocals," Armstrong told this reporter in 2009. "It's about warming up, getting my throat and chest in the right position, and then emotionally preparing to go for it. When you go through the demo process, you know what kind of emotion the song will need, and when to scream and when to whisper. This is why I like to take time and really get all the arrangements done and know what kind of vocal take I am going to end up doing before I start recording the album tracks. At the vocal session, I start softly and try not to overdo it, so I don't ruin myself for the day. I get myself in the zone, and eventually, my voice just starts to happen. I sing about eight inches from the mic, and throw down around three takes. We'll comp performances if necessary, but, most of the time, it's all pretty much live takes."

"This time, I wasn't comfortable using one of the big microphones with the panty hose on it [a Telefunken U47m was used on *21st Century Breakdown*]," he says today. "I wanted to use something that was more handheld, 'cause I was so used to that doing demos. I feel like I have more control over my voice using a handheld mic. And I wanted more of a live approach to my vocals, and this is more of a live approach than we've ever captured with my vocals than on any album, ever."

"I feel like I have more control over my voice using a handheld mic. And I wanted more of a live approach to my vocals, and this is more of a live approach than we've ever captured with my vocals than on any album, ever."

—Billie Joe Armstrong

Dugan used a Shure SM7 for 95 percent of Armstrong's vocals. "He felt comfortable holding it in his hand, and he didn't have to stand in this little taped-off box on the floor. So SM7/Chandler Ltd 1/Pro Tools, no compression, no nothing. I did EQ the toms kick and snare. But no EQ on the guitars or the bass, really straightforward."

For Dirnt's bass, Dugan used a Sennheiser MD 421 on an Ampeg SVT bass cab thru a Neve 31102 pre, then a DI out of the back of a new Fender Bassman head. DI was "post preamp of amp so I got cool grit," then another DI off Dirnt's Fender Precision; ultimately Dugan summed cab, bass DI, and cab DI.

Rather than mic each drum, top and bottom, as on the last album, Dugan pared down the mics while remaining basically true to his previous setup. "I used a Shure Beta 52 on the inside of the bass drum," Dugan says, "then the NS10 speaker trick on the outside of the bass drum. I used Josephson E22s on the toms; for the last record we double-miked toms, top and bottom, but not this time. I stuck with the Telefunken M80 for the snare. I used the same overheads as last time, a pair of ELA M 251s. Then AKG 451s on the ride cymbal and hi-hat."

Uno!, *Dos!*, and *Tré!*'s back-to-the-bars approach is obviously closer to a home-studio intent than the megabuck investment

most likely incurred on *21st Century Breakdown*. It gave Dugan newfound respect for the home recordist's means and methods.

"After going through [a simpler approach] myself, [at first] I wanted to reach for a lot of those tools and toys and really mess with stuff. But we just relied on the instruments. There's no right or wrong way to achieve something that's in your head or a sound you are searching for. It might require plug-ins, EQ, or nothing at all. There are a lot of things you can do with just a microphone. I would tell someone to start with the sound source first. Try to tweak it and get it to a good place first before having to reach for all sorts of processing. Capturing the source in a very clean way is the right place to start in my book."

Releasing three albums in a row might appear as hubris, or the out-of-touch provocations of multi-millionaire rock stars, but *Uno!*, *Dos!*, and *Tré!*'s proof lies in the music. From *Uno!*'s thoughtful opener, "Nuclear Family" and *Dos!* stocking-stuffer "Stop When the Red Lights Flash" to *Tré!*'s galvanic "Sex, Drugs & Violence," this punch-drunk trinity reflects not only Green Day's desire to reconnect with their fans but a return to a simpler recording ethos that made them punk rock icons, Broadway stars, and wealthy beyond their wildest dreams.

"A lot of people were asking me, 'Will you ever do a record like *Kerplunk* or *Dookie* again?'" Armstrong says. "But I had to be inspired. After *21st Century Breakdown*, I felt inspired to get in a room together with Mike and Tré and bash out some songs. We really wanted to capture the sound of everybody being in the same room together and to really bring the listener inside with us. We really captured the energy of why we like playing music. It's sort of a classic-sounding Green Day record." ■

Ken Micallef has covered music for all of the usual suspects, including DownBeat, The Grammys, and Rolling Stone. His first book, Classic Rock Drummers (Hal Leonard), is currently in reprint status while he ponders the sonic perfection and current resurgence of the vinyl LP.





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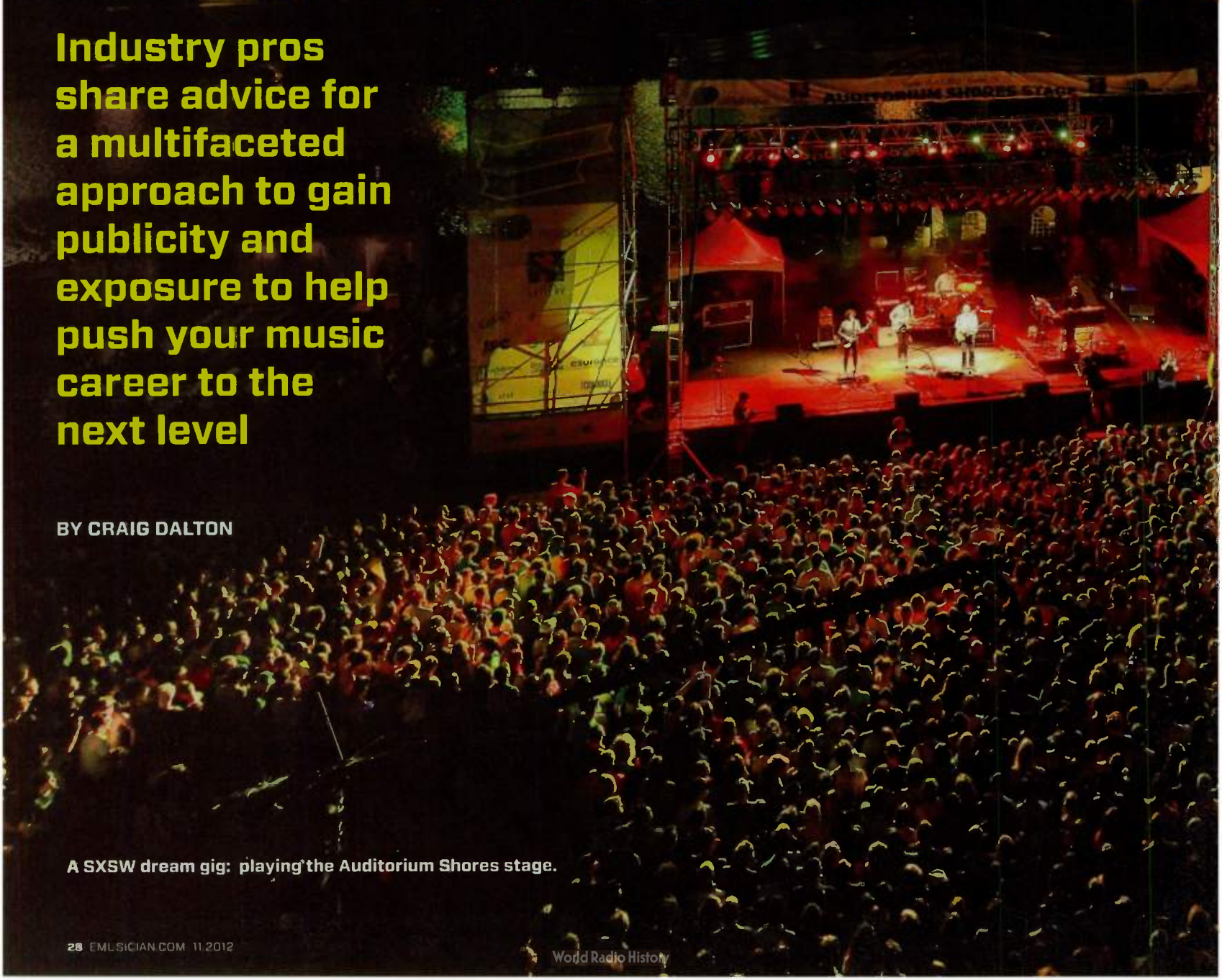




THINKING BIG

Industry pros share advice for a multifaceted approach to gain publicity and exposure to help push your music career to the next level

BY CRAIG DALTON



A SXSW dream gig: playing the Auditorium Shores stage.



Chances are that as a musician, you've heard a lot of career advice from a lot of people. We're all familiar with the question, "How do you get to Carnegie Hall?" Well, we all want to be "the next big thing," but the path to get there has radically changed. One thing's for sure: The answer isn't just "practice, practice, practice." Nowadays, you also have to "promote, promote, promote."

With today's technology, the tools to produce everything yourself are accessible and affordable. However, there are legions out there just like you who are doing the exact same thing. Social media and music distribution websites are crowded with thousands of DIY efforts. The chance of these efforts impressing someone who can put your career dreams on the fast track seems about as likely as picking the right sequence of numbers to win the lottery. So how do you rise above the noise?

As much as we'd like to say having great music is enough, publicity and exposure can make or break an artist. Today, there is more than one pathway to successful promotion of your act. *Electronic Musician* talked to several

industry insiders, who shared valuable advice for calculating your next steps toward stardom.

Forming a game plan Let's assume that you're already good, and that you have something to promote: Good music. A website, song clips, YouTube videos. And let's assume you have the social media thing down, and that you're touring, at least locally. What next?

"I always recommend coming in with certain goals to accomplish as an act," says CMJ Showcase Director Matt Macdonald. "Have some goals set like finding a music lawyer or a booking agent, or getting synchronization licensing because a sync agent likes some of the songs you'll play. These goals will certainly vary,

THINKING BIG

However, they have a particular business model and a specific way of marketing a specific type of artist in a particular type of way." And these roles are changing, he says: "Where radio (terrestrial) used to be the channel, and the DJ was the editor, or the channel was the retailer and the editor was the buyer for Tower Records, the concept of who's editing to the masses changes annually and monthly. Now it's channels like Spotify and consumer brands presenting new music through extensive social media connections. They have the organization, budgets and marketing teams in place already. Through a program we have called Red Bull Sound Stage, one of our acts is appearing on David Letterman in September. I'll tell you that as a guy who came from the traditional music business model, that any label or agent would trip all over themselves to get a slot on Letterman, because it's one of a handful of ways to reach such a mass audience."

Bumbery offers his perspective from his long tenure at a major label. "It appears that the changes continue as they try to figure out a new model," he says. "I feel like the amount to be gained to being signed to one isn't as big as it used to be. Of course, there is more money for emerging artists, and the labels are able to pull in more money from the multi-rights deals. I have seen this work well in some cases, but it's in no way a guarantee. As an indie for the past two years, I've also been on the other side, where I've worked with bands who have left the major-label system, spent a lot less on making and promoting their albums, hiring the teams that they want to work them and recouped in under two months."

Eldeiry emphasizes a multi-faceted approach, and a long-term strategy. "I don't think that there is any one thing that will make or break a band. I would never put more weight on festivals than I would on a feature in a local alt-weekly. It is the combination of all those things—as well as good music!—that will build a career. Don't worry about hype or buzz...that is almost guaranteed to go away. Focus on the things that will shape your career, things that will live forever. Your record will live forever; an item on a big blog lives for about a day before it's archived and forgotten."



Austra: a band with a plan.

The festival phenomenon Assuming you've polished your stage act and are touring or at least performing locally regularly, showcasing at a festival is a chance to take your act to the next level.

Arguably, the two most important festivals are SXSW and CMJ. Each year, literally thousands of bands submit their applications for a coveted showcase slot. The scale of these festivals is huge, with attendance as large as 350,000 attendees and 2,200 acts at SXSW, and 1,300 acts playing CMJ. However, it's important to have realistic goals and expectations going in. First, realize that a festival gig is not a magic ride to stardom. Ask yourself, what are you going to accomplish if you get in? You're going to have to make a significant investment of travel expense, time and effort, and there's no guarantee of a return on any of that. Are you ready to make the supreme effort?

"There's been a myth attached to the festival where people assume that SXSW is

a place where young bands go to get signed, says SXSW General Music Manager James Minor. "It does happen sometimes, but this is rarely the case. The proper mindset an act should have when coming to play SXSW, is that they are attending because they are at the point in the career where they will greatly benefit from the potential media exposure and have the proper work ethic to not only perform well, but to network and promote themselves effectively with the hopes of making the right connection which could in turn elevate them to the next stage in their career."

Sonicbids.com is SXSW's exclusive submission engine; CEO Panay says pacing and preparation are key. "The thing is, don't try too early in your act's career. You should have both experience and some very clear objectives that you want to accomplish with an important showcase opportunity. You must be ready to stand out in the crowd; if you aren't doing that already, you aren't ready to showcase."

"Having great music and a great performance is the most important thing, a history of some touring and playing notable venues in their home town or elsewhere is good, and certainly touring nationally helps," adds CMJ's MacDonald. "We aren't looking for someone who's just thrown together some tracks in their bedroom."

Panos stresses a point that's important to remember in any promotional efforts. "You need to make sure your band's calendar is up to date. It is the single most important marketing tool a band can have. Where have you played? Are you playing within a one-mile radius of your home, or are you building credibility with regional or national touring, or even getting gigs outside your own country? Are you already getting booked at well-known venues?" Panos also emphasizes video as a key tool, and it doesn't have to break your band's budget: "With videos being inexpensive or even free to make with an iPhone, having a solid idea of what the band looks/feels/sounds like live onstage is very important. Give me something cheaply produced that really shows the band's stage presence and the way an audience responds to them over some \$10,000 slickly produced video that's made as though you were marketing it to MTV."

Minor adds, "The key thing that artists



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depending on where you are at in your career, but having goals other than just being there is important." Be ready to make the most out of what could be one of your most important opportunities ever.

This is the time to have all of your promotional materials together, whether you're launching a social media campaign, booking local gigs, recording an album, or applying to festivals. Think of this as presenting your best possible resume; you aren't going to get the job by making a poor impression.

Publicity, promotion, and the new paradigm

"It's a cultural instinct to wait to get picked," author Seth Godin wrote, concerning the waning influence of industry 'gatekeepers,' on *Seth's Blog* (sethgodin.typepad.com). "To seek out the permission and authority that comes from a publisher or talk show host or even a blogger saying, 'I pick you.' Once you reject that impulse and realize that no one is going to select you—that Prince Charming has chosen another house—then you can actually get to work." That said, a little publicity, done right, can go a long way.

You can handle PR yourself, or you can bring in the big guns; it all depends on the stage of your career. Publicists have an omnipresent role in helping shepherd many acts to fame. They have the contacts, know the ropes and can help you climb them. However, just like in any other aspect of your business, you need to know when you really need one (and when you can handle the job yourself), what they can and can't do for you, and how you need to prepare to work alongside your team.

Laura Eldeiry, publicist at Nasty Little Man PR, works the media front line for a long line of major acts such as the Foo Fighters and Jack White, as well as newer bands such as White Rabbits. She believes bands should choose a realistic publicity route for the stage of their careers. "A firm like ours [is ideal] when they're actually selling music and touring enough to make their sole livelihood. They should have a real booking agent, a real manager, a real label...otherwise, why hire a real publicist? I think smaller, local acts are better off hiring a friend who's a big fan, or doing it

themselves. You can ask club promoters for local media lists and contact them yourself."

Brian Bumbery started BB Gun Press in 2011, after 17 years in PR, eight of them at Warner Bros. His roster includes Green Day, Muse, Metallica and many other marquee acts, as well as emerging artists. For Bumbery, the earlier an artist has a publicist, the better. "A publicist can help a band develop their story. The media, be it blogs, magazines, TV or radio, are all vehicles for an artist to get his/her points across and reach the masses, and you'd be surprised how many people have a compelling story, but just have a difficult time expressing themselves. Giving a great interview is a performance unto itself, and all it takes is a little practice."

"Don't worry about hype or buzz...that is almost guaranteed to go away. Focus on the things that will shape your career, things that will live forever. Your record will live forever; an item on a big blog lives for about a day before it's archived and forgotten."

—publicist Laura Eldeiry

It's important to have realistic expectations about what a publicist can and can't do. "I think a misconception is that we can build 'buzz' when in fact, that's not what we aim to do at all," Eldeiry says. "We help shape careers. For smaller acts, it is to help solidify their place in the music world." Bumbery adds, "Just because you make an album, doesn't mean people are going to respond to it, listen to it or offer you the cover of a magazine. Ultimately a band's or artist's music is going to be the thing that a blogger/journalist/TV booker/

producer will get first, and that music will have to speak to them on some level. With our relationships, we can get the music to these people and in many cases get the music listened to. It doesn't mean they're going to like it."

Once upon a time, getting signed to a major label and getting airplay on terrestrial radio put you on the path to fame. There's no denying the marketing machine of a major label, and who doesn't want their song on the airwaves? But today there are countless new options for bands to get new music out to people's ears and gain fans.

Alexandra Greenberg is Vice President at Mitch Schneider Organization, a veteran PR firm that represents iconic and cutting-edge artists ranging from David Bowie, Aerosmith, and the Smashing Pumpkins to Deadmau5, Paul Van Dyk, and Junkie XL, as well as international festivals and events such as the Vans Warped Tour and Voodoo Fest. After working in PR for more than a decade, Greenberg has seen promotional channels evolve dramatically. "Ten years ago, focus was on placements in magazines (there were more of them then), newspapers (there was more space in print at that time for music), TV and fanzines," she says. "Nowadays, I'm pitching premiere placements for song streams, downloads, and videos on the web. Placements with blogs and online counterparts to magazines are also really crucial to the success of a PR campaign."

"There are many channels to work with," says Bumbery. "Developing an artist is always the best for an emerging artist. Start building the house from the foundation up. Start seeding their music in the blogs, both on a regional and national level. It's really important to not take a band from their culture but to invite people in. Continue to build the base with them while they tour and then introduce them to the larger media, late-night television shows, etc."

Panos Panay, CEO of Soncibids, which helps more than 60,000 bands connect to more than 26,000 promoters online, is heavily involved in consumer branding as an outlet for new music. "I won't sit here and tell you that labels have no value," he says. "Certainly, a 40- to 60-year track record of knowing how to market an artist and create a buzz is valuable."

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However, they have a particular business model and a specific way of marketing a specific type of artist in a particular type of way." And these roles are changing, he says: "Where radio (terrestrial) used to be the channel, and the DJ was the editor, or the channel was the retailer and the editor was the buyer for Tower Records, the concept of who's editing to the masses changes annually and monthly. Now it's channels like Spotify and consumer brands presenting new music through extensive social media connections. They have the organization, budgets and marketing teams in place already. Through a program we have called Red Bull Sound Stage, one of our acts is appearing on David Letterman in September. I'll tell you that as a guy who came from the traditional music business model, that any label or agent would trip all over themselves to get a slot on Letterman, because it's one of a handful of ways to reach such a mass audience."

Bumbery offers his perspective from his long tenure at a major label. "It appears that the changes continue as they try to figure out a new model," he says. "I feel like the amount to be gained to being signed to one isn't as big as it used to be. Of course, there is more money for emerging artists, and the labels are able to pull in more money from the multi-rights deals. I have seen this work well in some cases, but it's in no way a guarantee. As an indie for the past two years, I've also been on the other side, where I've worked with bands who have left the major-label system, spent a lot less on making and promoting their albums, hiring the teams that they want to work them and recouped in under two months."

Eldeiry emphasizes a multi-faceted approach, and a long-term strategy. "I don't think that there is any one thing that will make or break a band. I would never put more weight on festivals than I would on a feature in a local alt-weekly. It is the combination of all those things—as well as good music!—that will build a career. Don't worry about hype or buzz...that is almost guaranteed to go away. Focus on the things that will shape your career, things that will live forever. Your record will live forever; an item on a big blog lives for about a day before it's archived and forgotten."



Austra: a band with a plan.

The festival phenomenon Assuming you've polished your stage act and are touring or at least performing locally regularly, showcasing at a festival is a chance to take your act to the next level.

Arguably, the two most important festivals are SXSW and CMJ. Each year, literally thousands of bands submit their applications for a coveted showcase slot. The scale of these festivals is huge, with attendance as large as 350,000 attendees and 2,200 acts at SXSW, and 1,300 acts playing CMJ. However, it's important to have realistic goals and expectations going in. First, realize that a festival gig is not a magic ride to stardom. Ask yourself, what are you going to accomplish if you get in? You're going to have to make a significant investment of travel expense, time and effort, and there's no guarantee of a return on any of that. Are you ready to make the supreme effort?

"There's been a myth attached to the festival where people assume that SXSW is

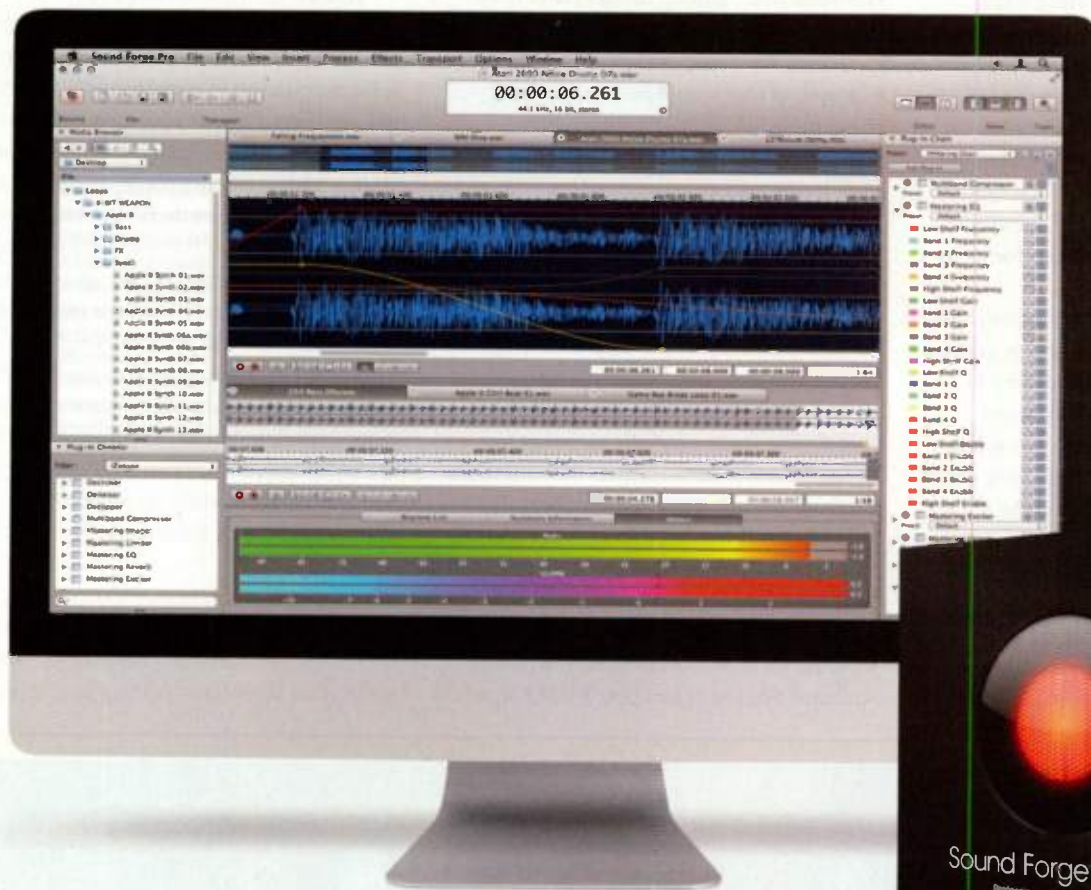
a place where young bands go to get signed, says SXSW General Music Manager James Minor. "It does happen sometimes, but this is rarely the case. The proper mindset an act should have when coming to play SXSW, is that they are attending because they are at the point in the career where they will greatly benefit from the potential media exposure and have the proper work ethic to not only perform well, but to network and promote themselves effectively with the hopes of making the right connection which could in turn elevate them to the next stage in their career."

Sonicbids.com is SXSW's exclusive submission engine; CEO Panay says pacing and preparation are key. "The thing is, don't try too early in your act's career. You should have both experience and some very clear objectives that you want to accomplish with an important showcase opportunity. You must be ready to stand out in the crowd; if you aren't doing that already, you aren't ready to showcase."

"Having great music and a great performance is the most important thing, a history of some touring and playing notable venues in their home town or elsewhere is good, and certainly touring nationally helps," adds CMJ's MacDonald. "We aren't looking for someone who's just thrown together some tracks in their bedroom."

Panos stresses a point that's important to remember in any promotional efforts. "You need to make sure your band's calendar is up to date. It is the single most important marketing tool a band can have. Where have you played? Are you playing within a one-mile radius of your home, or are you building credibility with regional or national touring, or even getting gigs outside your own country? Are you already getting booked at well-known venues?" Panos also emphasizes video as a key tool, and it doesn't have to break your band's budget: "With videos being inexpensive or even free to make with an iPhone, having a solid idea of what the band looks/feels/sounds like live onstage is very important. Give me something cheaply produced that really shows the band's stage presence and the way an audience responds to them over some \$10,000 slickly produced video that's made as though you were marketing it to MTV."

Minor adds, "The key thing that artists



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need to keep in mind is that they should provide us with an application that's as complete as possible. Uploading a few songs, videos, and select press are essential, but including more information can really make a difference. Did you tour the US a few months ago? If so, that's a great thing for us to see. Do you have a booking agent, publicist or manager? Once again, even though these are not detrimental to acceptance, they are good things for us to know about."

Once you secure a spot, remember that being on the show roster doesn't guarantee an audience for your set. You'll need to promote yourselves through as many methods as possible right up to your last tune up and first song count off. Blog about your experiences on the road to the show, pass out flyers once you are there, update your fans and potential audience on your Facebook page and Twitter feeds, go out and talk yourselves up in person to anyone and everyone. You want a packed house? Bring friends to help you if you can. You

are going to have to earn your audience, because there will be a tremendous amount of other acts playing all over town at the same time as you. We asked, are there common traits among the acts that have gained the most showcasing?

James says, "My personal favorite recent example of this would be Austra. They came to SXSW in 2011 with a really well-thought-out plan, the backbone of which was non-stop touring. They toured before the festival to spread their name around, came to SXSW and played a very select handful of shows, and pretty much continued touring through the end of the year. Now, the fact that Austra have a great record and live show aided their success quite a bit, but I wholeheartedly believe that SXSW was a pinnacle moment for them. Austra paid their dues and did those tours where no one was there. I firmly believe that if you have something special, and back it up with hard work, people will take notice."

"If there was a basic formula, I'd be a wealthy man" says Macdonald. He cites Alabama Shakes at last year's CMJ as a

great example. "They didn't have a lot of name recognition coming into the event, but they put on a great show to the right people, and word just spread from there."

This all reinforces a key point: No amount of publicity or exposure will help you get to the next level if you don't have a solid foundation of a strong work ethic, a willingness to "own" your career, and *really* good music. "Just because you record an album doesn't mean people will like it or listen to it," says Bumbery. "Just because you're on festival bill doesn't mean people are going to show up and watch you. You better make that performance memorable.

"Things don't happen overnight," Bumbery continues. "It takes hard work on all fronts. Artists should never wait for a record label, publicist, or promoter. There are many things they can do to get the ball rolling even while recording their album. Don't wait for anyone." ■

Craig Dalton is a freelance writer, musician, and Recording Academy member who has contributed features and reviews to both Electronic Musician and Mix magazines.

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LISTEN

Aimee Mann

**Corralling live-band chemistry
and '80s pop brilliance**

BY BARBARA SCHULTZ

WHEN A brilliant songwriter and singer like Aimee Mann sets out to make a pop record using The Cars as a sonic point of departure, cool things are going to happen. The artist who was once best known as a pioneer in the wide-open field of Internet music distribution has an Elvis Costello-esque facility with words and a beautiful melodic sense. Meanwhile, she and her producer/bassist Paul Bryan (Grant Lee Phillips, Nina Nastasia) have a deep knowledge and critical distance, which help them use sounds of their musical influences as springboards for brand-new ideas.

Mann's latest, *Charmer*, does point to elements of The Cars' massive, hooky guitar and synth sounds, but there are loads of other evocative moments, too, stemming from source material that spoke to Mann and Bryan as they made the album. They found inspiration in everything from New Wave to old detective shows.

Mann and Bryan are constant collaborators, so sounds and arrangements are always being developed, even from the songwriting stage. "He's always around," Mann says. "When we're on tour, we play together, and we're really good friends. When I write a song, I always send it to him and we start talking about it way before the [recording] process starts."

By the time Mann has a full album's worth of material written, Bryan will have a reasonably firm grasp of the sounds that they'll be working on in the studio, so he pulls together the musicians and instrumentation they'll need, and then he and Mann will rehearse with the band for a couple of days before their studio session.

"Paul takes great players that play together in an interesting way, and he knows how to ensure that there is a *group* thing that happens—that



“Some producers are not sensitive to [ensemble energy]. For instance, one thing that will really kill it for me is doing too many takes.” —Aimee Mann

magical thing that’s more than people playing the songs,” Mann says. “He’s so good at directing it and allowing it to happen. Some producers are not sensitive to that. For instance, one thing that will really kill it for me is doing too many takes. It really helps to rehearse beforehand, because if you get the band in the studio and try to learn the song on the spot, all the spontaneity is wasted on takes that have mistakes, when people are just learning the chords. The goal is to get fresh takes when people are really inside the song.

Mann and Bryan have a kindred spirit in engineer Ryan Freeland (Bonnie Raitt, Ray LaMontagne, Joe Henry), who tracked most of *Charmer* and mixed on his carefully designed Pro Tools-meets-analog rig in his personal studio, Stampede Origin (ryanfreeland.com). This is Freeland’s sixth Aimee Mann album; he started with her when he was Bob Clearmountain’s

assistant and she was making *Bachelor No. 2* (2000). So if you trace Freeland’s path, Mann’s albums are markers along his successful and rewarding career. And he’s definitely with her in terms of his general approach.

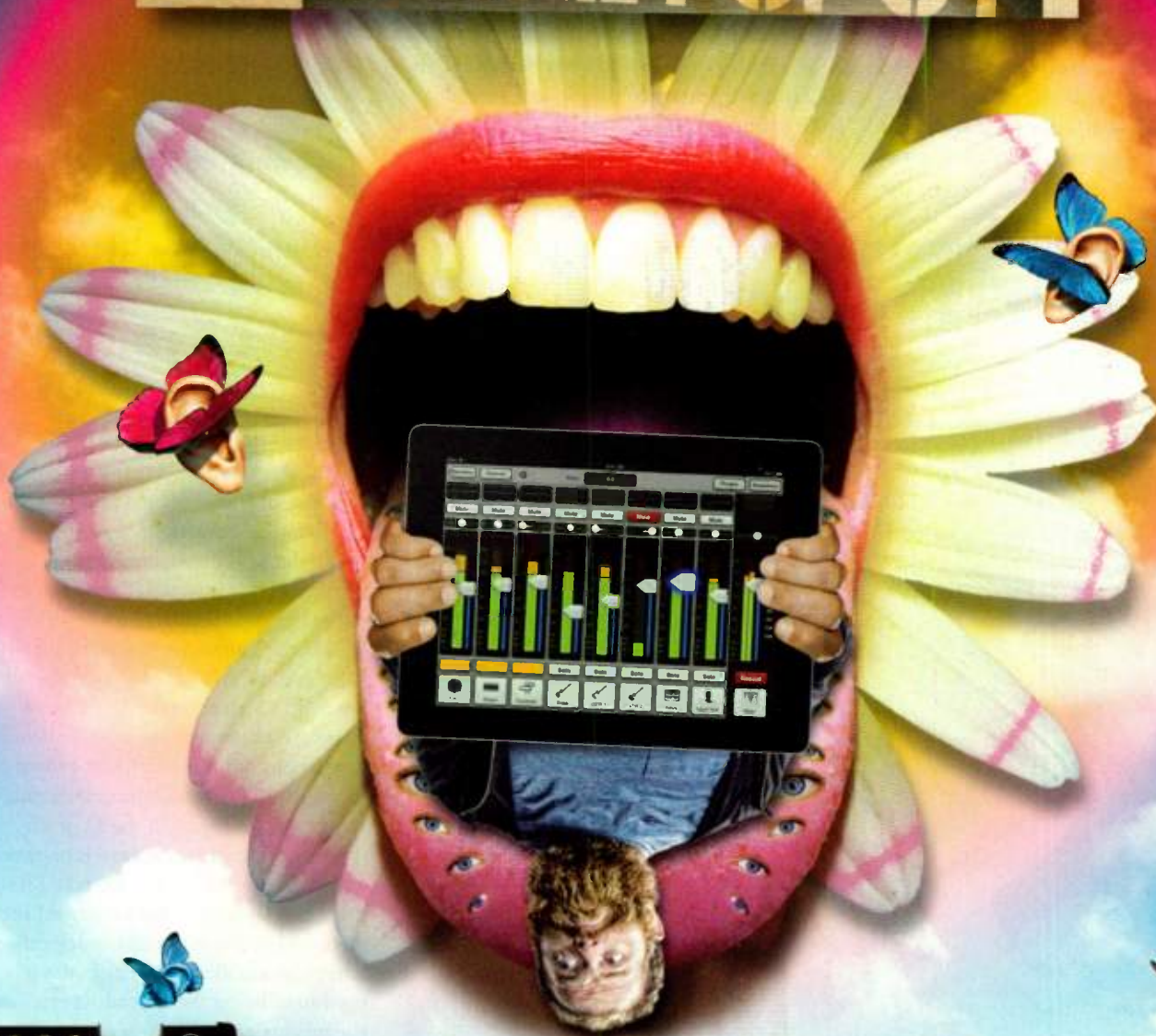
“I like making quick but informed choices and keeping the creative momentum,” Freeland says. “You keep everybody on track and focused that way. The thing is that it can always be different. Do you want something brighter? Something darker? Something softer? Something more distorted? Something cleaner? It could be anything, you just need to make a choice. I constantly think of this quote from [Willem] de Kooning that says, ‘In art, one idea is as good as another.’ In engineering, the decisions you make are what define your style; someone else will make a different choice. There isn’t a definitive right or wrong, there’s just what you like and how you hear it.”

Not surprisingly, the musicians did a fair amount of full-band, live tracking in Freeland’s 900-square-foot studio space. The largest room at Stampede Origin is the control room, so the keyboard rigs—two of them, for multi-instrumentalist Jamie Edwards and keys/piano player Jebin Bruni—were set up in the room with Freeland. Drums and bass were in the main (medium-sized) tracking room, electric guitars were in one iso booth, and Mann sang and played acoustic guitar in another booth.

Freeland captures her vocal with effectively the same chain he’s been using since 2000: a Neumann M49 mic (in the past she’s also used a U47) to a Brent Averill 1073 MPF (mic pre with filter) to a Summit TLA-100 compressor.

“On a number of the takes, we got keeper live vocals,” Freeland says, “Or they were close enough to where I could edit between live

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takes. What's interesting with Aimee is her guitar playing is fairly loud and her singing is fairly soft, so if you put mics in the right positions—even though she's playing acoustic and singing live—I can actually replace the live vocal while keeping the live acoustic. This is great, because the live acoustic is often driving the track and difficult to replace without messing up the vibe.

To showcase the vintage and offbeat instrument sounds Mann was going for, “I used more funky stuff on the keyboards,” Freeland says. “I really like air on instruments—on acoustic instruments or even with amps I like to have a little bit of air or a little bit of the room in them. So with keyboards I always tend to use old tube mic pre’s, like Ampex MX10s, which are just interesting



“I went for a very specific kind of sound on *Charmer* that’s very different from Aimee’s other albums.”
—engineer Ryan Freeland

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sounding. Or I've been using my pair of Retro Instruments Powerstrips: They're really amazing-sounding boxes with a great DI. I wanted to run the keys through something that sounds a little weirder than what's coming straight out of the keyboard DI."

Electric guitars were taken with a Royer R-121 and an SM57. "I play with the blend or the pan," Freeland says. "If you want a wider sound, you can move them wide; if you want a really pin-pointy sound, move them close together. I'll use the brighter back side of the 121 if I want it to match the 57, or the front side if I want a darker contrast. It happens really quickly, but often within one take I'll run in there and move mics back a bit and spread them wider. I have to make quick calls about what it seems like will work in the mix. This is the fun of being the recording engineer and the mixing engineer; you can blur the line and make what are usually mix decisions while recording."

Meanwhile, however, some of the in-session musical ideas weren't sitting right with Mann. "Jamie Edwards is just a master sound crafter," Mann says. "His sounds are so inventive, and the parts he comes up with are terrific. But there were a couple of things that just weren't working, and I was having a hard time explaining. I had a really specific thing in mind for certain songs, but it can be like: "I'll know it when I hear it," which is not helpful to anyone. "Just keep trying some shit and we'll see!" That's not an instruction. [Laughs.] So when something didn't seem right, Paul

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and I holed up together at his studio and went back to certain source music that had been an inspiration for me when I was writing the record.”

“Charmer’ was the big struggle,” Mann continues. “The guitar was hooky, but it was almost too hooky, and it was starting to drive me crazy. So we went back and listened to The Cars and Split Enz, which is a perfect example of that kind

of stiff, chunky rhythm guitar with a synthesizer on top, and we listened to Blondie—pop music of that era. It was very instructional. Another thing we went back to, one of the big points of reference, was actually the *Rockford Files* theme. If you listen to the song, that sound was right at the forefront. The *Rockford Files* theme was a big influence on this record.”

Revisiting their source material helped

Revisiting their source material helped Mann and Bryan pinpoint and capture the guitar, synth, and keys sounds they were after. They re-recorded a few parts, and Freeland incorporated the new parts into the mix in Stampede Origin.

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Mann and Bryan pinpoint and capture the guitar, synth, and keys sounds they were after. They re-recorded a few parts, and Freeland incorporated the new parts into the mix in Stampede Origin. “Most of the sound of my mixing comes from my 2-bus chain and the way I control it,” explains Freeland, who employs an API summing mixer and a host of analog outboard gear. “It’s the sound of my analog EQs and a little bit of analog compression. Also my reverbs are all analog: I have an EMT 140 plate and some old spring reverbs and a Watkins/WEM Copicat echo. All the effects for everything I’ve done for the past two years have been outboard analog effects. In a way, it’s part of defining a signature sound for my studio. I’ve heard plate reverb plug-ins sound really good on individual things, but as soon as you start trying to put a little bit of everything there, it doesn’t work the same. There’s an interaction that happens when you’re hitting a real plate with multiple instruments—and the kind of smear of the picture it gives you—that I find really compelling.

“I went for a very specific kind of sound on *Charmer* that’s very different from Aimee’s other albums,” Freeland continues. “The sound I was going for was very specifically trying to ride that pop line, but also being more ragged and tough and not quite so *beautiful*, because we wanted to rock out a little more. Sonically, we went for a little less smooth, a little more punk. To some extent, it came from the drummer, J.J. Johnson, being so subtle in the way he’ll shift the groove from verse to chorus. And of course Aimee is always going to sound like Aimee, but it’s fun that after all these years we keep reinventing.” ■

Barbara Schultz is a frequent contributor to Electronic Musician and Mix, as well as a book editor and reviewer, among other things.



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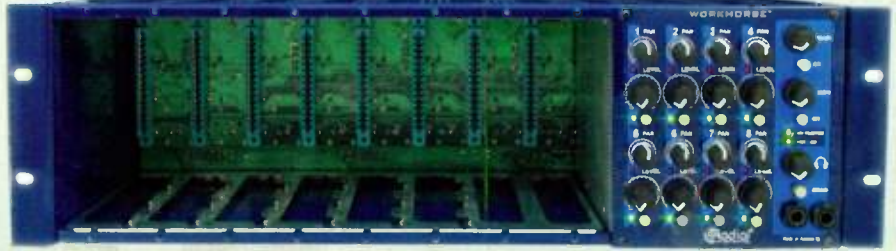
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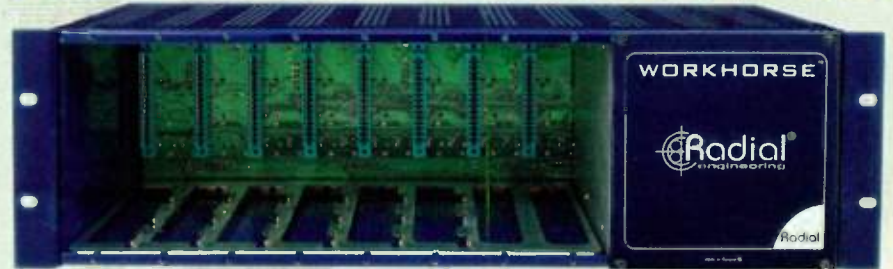
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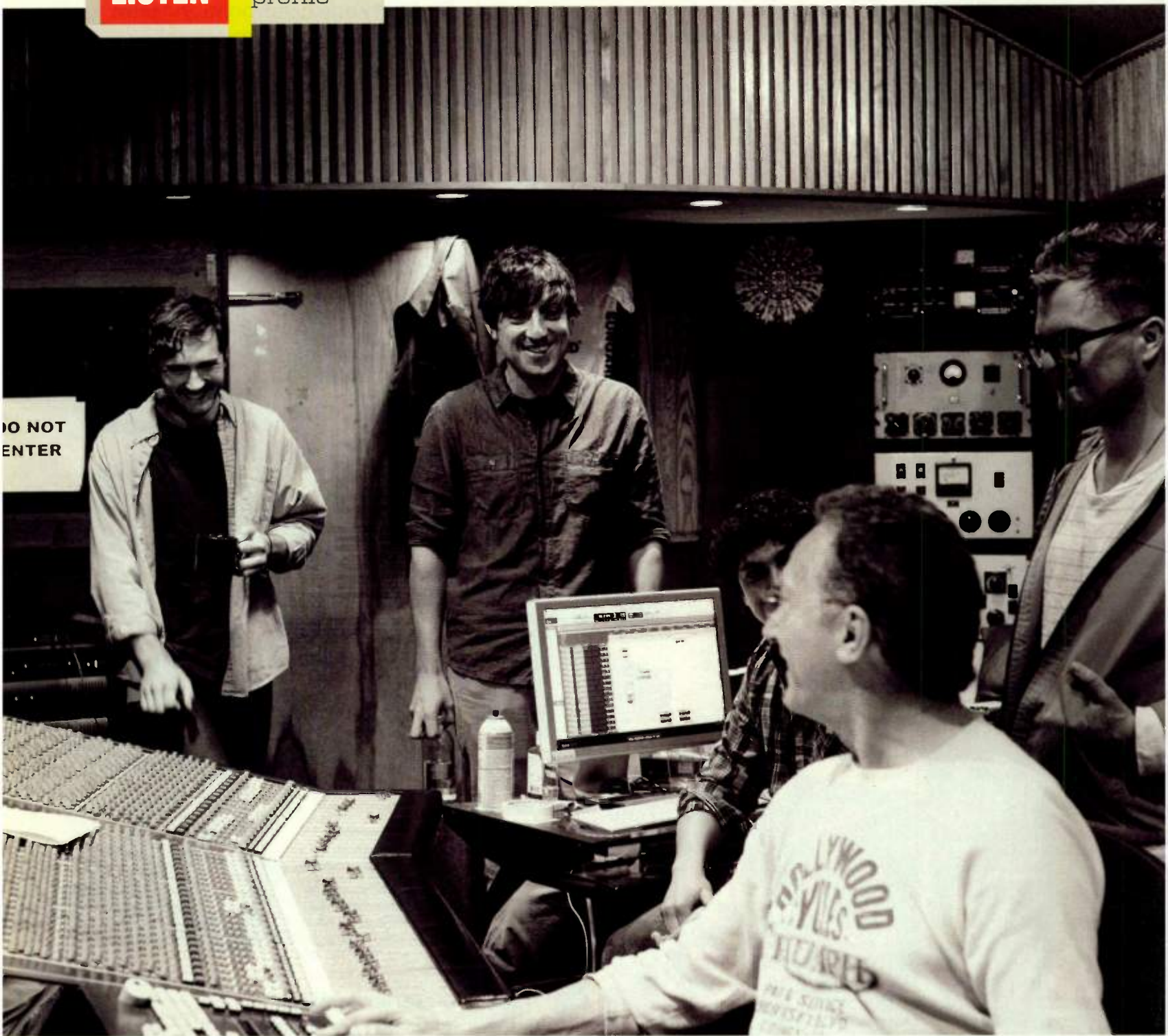
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Grizzly Bear take a break to listen back to tracks during the *Shields* recording sessions.



Grizzly Bear

Crafting sparse, heavy arrangements in off-the-cuff studio sessions for *Shields*

BY TONY WARE

NOW ON their fourth album, *Shields* [Warp], Brooklyn psychedelic folk-rock quartet Grizzly Bear returned to the church where the members previously recorded much of 2009's acclaimed *Veckatimest*. After writing retreats that took band members from Texas to Cape Cod, Grizzly Bear reconvened in a space of unhurried searching and sumptuous natural reverb to wrap up tracking.

With bassist/producer/engineer Chris Taylor's three rack boxes of outboard gear and his computer rig in tow, the band laid down tracks for ten songs about finding renewed thrills in raw, pleasingly unpredictable overlaps. "I bring everything I have," explains Taylor. "I might as well use it or get rid of it. And I need it all because I like a variety of timbres. It's not about going for a unified, 'creamy' sound; I weave gear in and around the room and the band to create various characters out of instruments so that they work with and against each other in a way that's dynamic."

Make no mistake, the ecclesiastical surroundings offered a familiar enclave appropriate for an album of inward-looking journeys, but no preconceived gospel of how to write and record Grizzly Bear was being strictly preached.

"Every album is a different process, and our way of getting to whatever we end up recording

even ends up being different on a song-to-song basis," reflects drummer Chris Bear. "For this album, we just started floating demos around, passing them back and forth between one another, and it got to a point where we had quite a bit of stuff, demo-wise, to work on. At that point we went to Marfa [Texas]... and we did end up recording 10 or 11 things in various states of completion. But once we stepped away from it, we weren't sure it was all working, so we had to reassess.

"In the past, songs would come from a specific person's vision and be presented to all of us more or less in the form they were going to be when we got to recording them," continues Bear. "However, a lot of what became this actual record ended up happening in a much more spontaneous and off-the-cuff way with all of us writing more together and people jumping in on ideas at earlier stages of the game."

Splitting into every possible grouping at varying times and locations, Taylor, Bear, singer/multi-instrumentalist/band founder Ed Droste, and singer/guitarist Daniel Rossen mapped out nervy riffing, pensive chords, supple melodies, and a more forward approach toward vocals and drums. Writing for each other on Grizzly Bear's most collaborative

album to date, every member of the band made sure to leave enough uncertainty in each arrangement to allow each other to play with the depth, focus, and saturation in the tracks.

"I think something we're always striving for, and a cinematic analogy is very fitting, as we think of the tracks in a very visual way . . . is the watery moments when the song dunks into the ocean, you lose some focus and you're disoriented, and then you come back up above the water and it all tightens up again," says Bear.

Awash in possibilities, Grizzly Bear took the initial sketches gathered from the New England sabbaticals and Southwestern sessions and headed back to Brooklyn to flesh them out. With the prime directive to go in all directions, Taylor set up for several months of exploratory recording to find and own a sense of density for plucked strings, burbling keys, and resounding percussion.

"I would say [2006's] *Yellow House* was dense because it had a spirit of throwing in

the whole kitchen sink, just trying stuff out all the time, overdubbing like crazy, taking one melody and having three instruments do it. But for this album we were really trying to have each instrument represent something distinct, and when you put all those parts together it's both sparser and heavier than anything we've done.

"It feels almost myopic, but before if you have three instruments doing a melody it sounds a bit like a party," continues Taylor. "Having the melody played by one instrument, it feels much more serious, more convictive, and that gives it a greater sense of density."

To capture this dynamic friction and creatively manipulate frequency hype, Taylor uses a collection he describes as "big-sounding preamps and small-sounding preamps and sh*tty-sounding ones, gritty-sounding ones, and tube-y-sounding ones." With Pro Tools HD and a Mytex Digital 8x192 Series AD/DA at the core of the signal chain, Taylor swapped in and out a Neve BCM 8-channel sidecar

console (lovingly overdriven), Chandler TG Channel MKII, and LTD-1 preamp/EQs, Thermionic Culture modules, including the Culture Vulture distortion/enhancer and Phoenix compressor, a Retro Instruments Sta-Level compressor, an Empirical Labs EL8 Distressor, and more.

"The post-production phase doesn't exist for me," explains Taylor. "I don't think, 'Oh, I'll put some effect on that later.' I avoid plugins. I don't want to construct an arrangement without knowing the luster, size, and personality of an instrument, so you can know what role it will serve and what space it will require."

The exception to this rule (which, like all Grizzly Bear rules, is only as concrete as the current instance calls for) is Taylor's use of a Nagra portable audio recorder. It had its tape physically manipulated in a pseudo-post-production capacity (or played like an instrument, if you prefer) to create a variable swell of "glassy, sparkly, crashy, thrashy"

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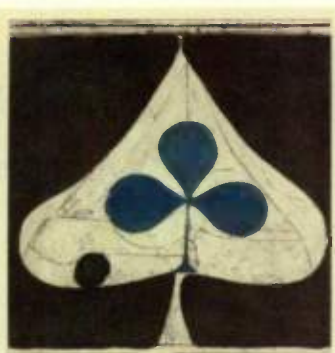


World Radio History

clutter, an eroding shimmer effect heard on bombastic opening track "Sleeping Ute."

Along with swapping preamps and compressors, Taylor draws from a signal-processing arsenal for colorization that includes various Electro-Harmonix, Univox, and MXR pedals and rack units. One of Taylor's most evocative effects, however, is to utilize the naturally reflective façades found in such settings as a church sanctuary. With an array of mics that includes the Shure SM57, a Neumann U 87 set to various polar patterns, some Microtech Gefeil M930s, a large-diaphragm Curtis Technology condenser, and a beyerdynamic ribbon microphone, Taylor used the room to his advantage.

"We don't set up gobos or sound abatement . . . we just look for ways to pull multiple spaces and different reverberant surfaces from the one space," says Taylor. "For instance, there was a hexagonal lamp in the church and we set up our instruments at the right distance and miked it on a specific angle to pull this bright



"A lot of what became this record ended up happening in a spontaneous, off-the-cuff way, with all of us writing more together and people jumping in on ideas at earlier stages of the game."
—drummer Chris Bear

reverb out of the church, but it's softened and tamed by using a little dark ribbon.

"And I definitely like a 57 on wood surfaces, because it has a boxiness to it that's harsh in a good way without being too detailed," he continues. "I set that up on a pew about 10 feet away, and I'm always looking for more ways to make a tone more spacious but without it sounding like a diffused cathedral. And if you want a little of that, you just point a mic into the church. Whatever is appropriate for the song—wet, dry, distorted, emptied out, or epic—I pit a little of all of it against each other in the mix."

Sculpted through conscientious proximity, volume, and placement to manifest songs within songs, *Shields* clusters realistic responses into woozy, meditative, unforced chamber-pop that takes journeys without distancing itself from the listener. ■

Tony Ware is a regular contributor to Electronic Musician.

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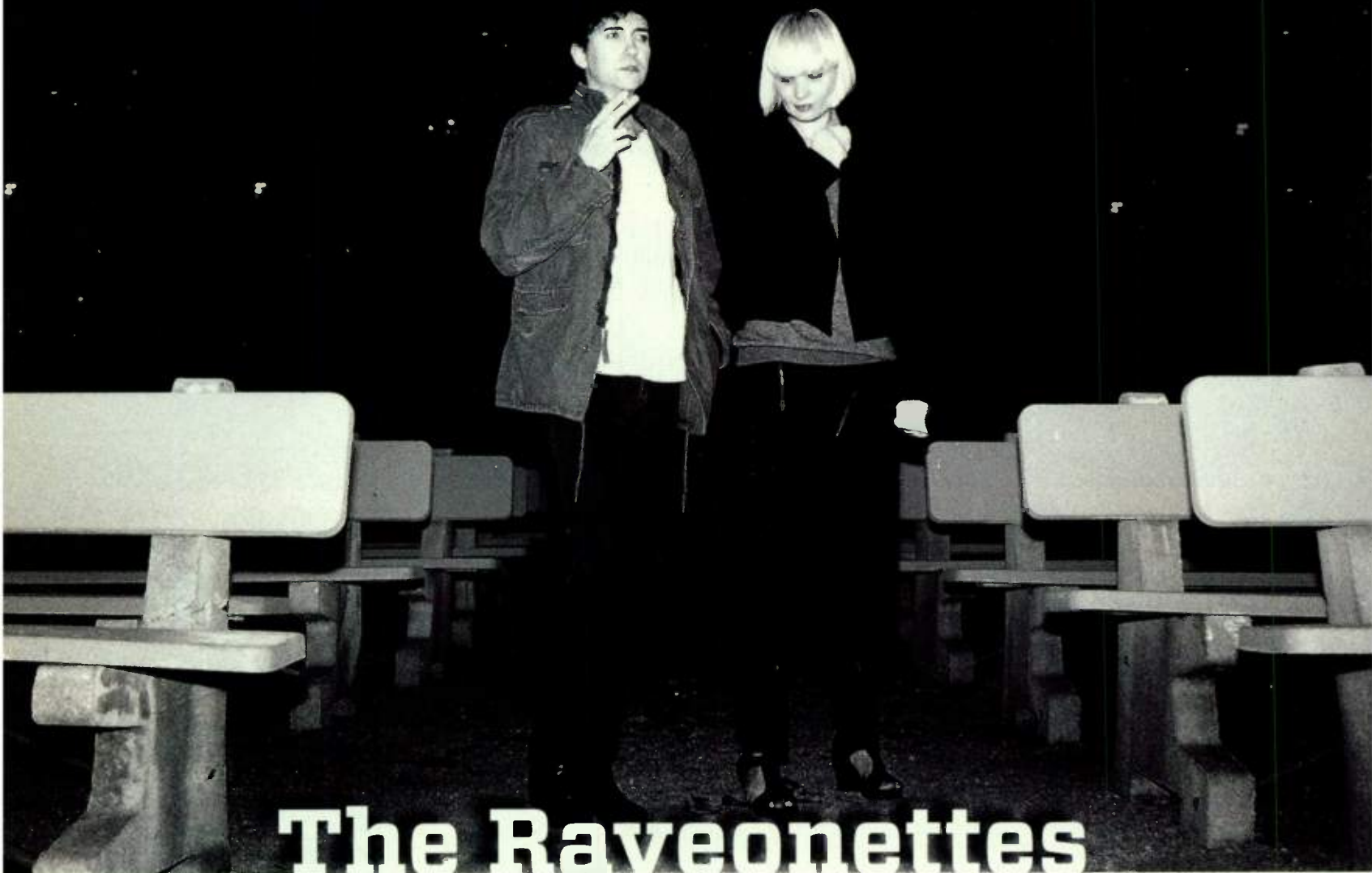
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World Radio History



The Raveonettes

The holy grail of vintage sounds—found in a laptop

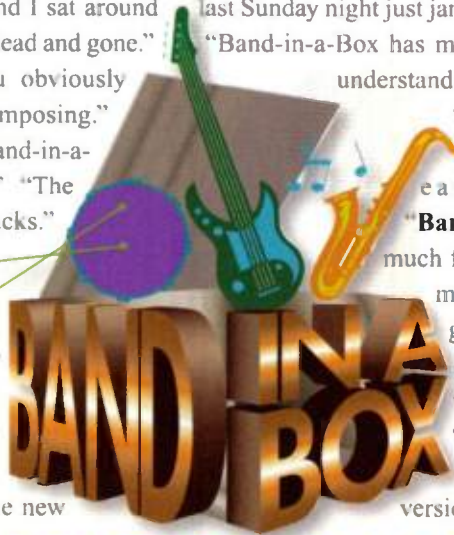
BY LILY MOAYERI

THE DANISH duo of Sune Rose Wagner and Sharin Foo—neither of whom live in Denmark—turned another corner with their sixth album, *Observer*. Since their debut some 10 years ago, it has been the soda-shop fuzz, crackling surf guitar, and dueling shoegaze-y vocals that have characterized The Raveonettes. But on *Observer*—which was recorded in one week at Sunset Sound in Los Angeles—it is the piano that takes center stage. Wagner has been using the piano to write the last three albums, but only this time did he decide to keep the piano during the recording process.

“For the last year and a half I’ve been looking for a guitar pedal that sounds like a piano. It’s non-existent—unless you want to sound like a synthesizer,” says Wagner, speaking from a choice housesitting gig in upstate New York while his place of residence, New York City, sizzles in the stifling summer heat. “You can translate the piano to the guitar, but it has a very different vibe to it. It was really difficult to play the last two albums live because there were such weird chords and fingering. I love guitars but they have their limitations. I find it easier to write melodies and interesting motifs on the piano. I thought,

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The Raveonettes—
Sharin Foo (left)
and Sune Rose
Wagner.



For as much as Wagner loves vintage sounds, it's surprising that he doesn't like to use guitar amps. "We use them onstage because sometimes it sounds better than just coming out of the monitors, but our front-of-house guy never uses them."

why not keep it as it is? It might add some intensity and gloominess to our sound that wasn't there before."

It has proved to be a good call on Wagner's part. There is a depth to *Observer* that was previously missing from the band's sound. Simple music is still at the heart of what The Raveonettes do, but the subtle accents (of which there are many), are more defined on the new album. On "Curse the Night," for instance, it is Wagner who sings the high-pitched verse. On the chorus, he added an extra kick drum to beef up the bottom end and put guitar parts through Eventide's Space pedal to open up to a big,

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stereo sound. The stompbox was a new find for the reverb-mad Wagner, who thought he had every possible reverb-making toy already.

"The Eventide has this modulation chord and so many parameters you can change to make different sounds," he says enthusiastically. "I only use one setting and touched two parameters, and it was the sound I was looking for. All of a sudden the mood of the songs changed to how I wanted it to be to begin with and didn't know how to get."

Wagner uses pedals and outboard gear—including the Yamaha SPX90, Eventide H3000 Harmonizer, and Empirical Labs Distressor—but he often relies more on plug-ins, such as Logic's Space Designer reverb. However, it's taken him hours of tweaking until he felt satisfied with plug-in effects. "Going back to our first album, it took months and months of trying out everything to learn how to use plug-ins to create what I thought was an authentic vintage sound without using any vintage gear at all," Wagner says. "You can create all these sounds that sound like they were created in the 1960s on your laptop."

And for as much as Wagner loves vintage sounds, it's surprising that he doesn't like to use guitar amps. "We use them onstage because sometimes it sounds better than just coming out of the monitors, but our front-of-house guy never uses them," Wagner says. "It just goes DI into the board through the pedals. And at home I run the guitar through the Shadow Hills Mono Gama mic pre and Dual Vandergraph comp."

It's interesting insight into the inner workings of The Raveonettes, particularly because the band was lumped in with The Strokes/White Stripes garage-rock movement upon releasing their first album. And in addition to largely avoiding guitar amps, The Raveonettes don't use live drums, either. Wagner, who considers himself a drummer before anything else, can create a good fill or any other drum sound on electronic pads. But he spends countless hours finding the right sampled drum sound that fits each song. He has a large sample library of both sounds he has sampled himself and library sounds. Wagner will go through 400 different snare samples to find 40–50 usable ones.

"I'll take an electro sample, but then I'll put on an old jazz snare drum, give it a little bit of that vinyl punch—a layer, maybe two or three sometimes, to make sure the song is right," he



On *Observer*—which was recorded in one week at Sunset Sound in Los Angeles—it is the piano that takes center stage.

says. "When we were at Sunset Sound, we had a full drum kit. Every time we would record a new song, I would have a shot at the live drums, and every time we would say, 'Let's hear the sampled drums again.' Even when we use real drums, they always play along to sample drums. I've always thought guitar amps and drums were more for a punk band."

Meanwhile, for vocals, Wagner and Foo sang through a trio of mics simultaneously: a Neumann U47, Neumann U87, and Shure SM57. They would mute and solo each one and choose the mic based on which sounded best for each song. Although Wagner does the majority of the production himself, producer Richard Gottehrer (Blondie, The Go-Go's) stepped in during the vocal-recording stage. "[Gottehrer] was a songwriter in the Brill Building and produced a lot of great albums," Wagner says. "Vocals are all he cares about. A good vocal performance that speaks to people is where he's coming from. So I know when he says that was a great take, he's probably right." ■

Lily Moayeri is a Los Angeles-based freelance music journalist. She dislikes it when people post/tweet/text/email pictures of cats. You can find her writing aggregated in her feline-free blog at pictures-of-lily.com.



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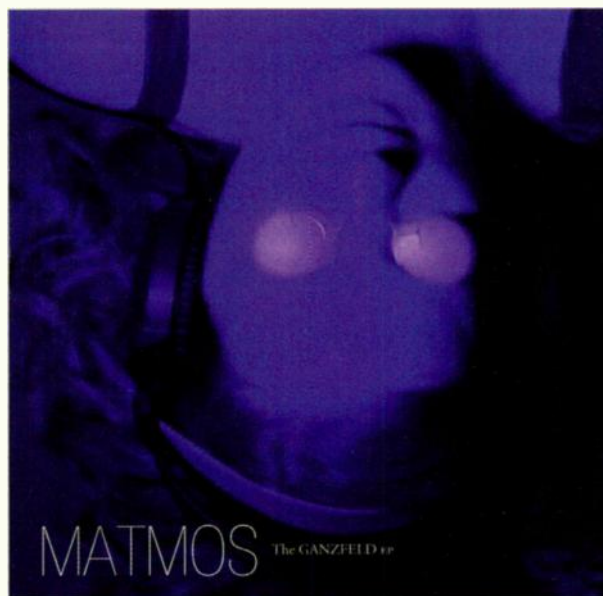
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Matmos

The Ganzfeld EP

THRILL JOCKEY

LEAVE IT TO M.C. Schmidt and Drew Daniel—the feverish minds behind Matmos—to celebrate 20 years of making music together with a parapsychological foray into telepathically composed music. It sounds like a mouthful, but these three songs offer a compelling taste of *The Marriage of True Minds*, due next year. What emerges is a rich collision of electro-acoustic sounds (“Very Large Green Triangles” and the voice-based experiment “Just Waves”) and techno minimalism (the mesmeric Rose remix of “You”) that could rock an art opening, a road trip, or a séance just as easily as a dance floor.

BILL MURPHY



Meshell Ndegeocello *Pour Une Ame Souveraine: A Dedication to Nina Simone*

NAÏVE

After making *Weather* last year, Meshell Ndegeocello said producer Joe Henry had wanted to focus more on her voice but she “wasn’t ready”; she has typically treated vocals as just part of her sound. She’s ready now. This tribute to Nina Simone’s songs and spirit shines a light on Ndegeocello’s lovely, soulful vocal instrument—on her terms, of course, surrounded by fluid, rhythmic music, and with the help of some wonderful guests. Sinead O’Connor, for example, sings an avant-garde blues “Don’t Take All Night.” Marvelous.

BARBARA SCHULTZ

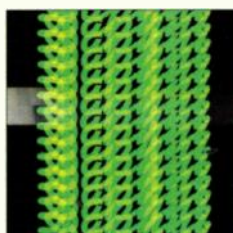


Bat for Lashes *The Haunted Man*

CAPITOL

Natasha Khan’s music draws comparisons to Björk, Kate Bush, and Imogen Heap, but she’s clearly defined her own style in the spaces between piano-based “popera” and electronic songscapes. Artfully programmed and instantly memorable, the songs on her latest album sparkle with a musicality that leaps out at you, from the dream-drifting “Lilies,” where Khan hits the upper reaches of her silky tenor, to the otherworldly tribalist stomp “Horses of the Sun,” which recalls the left-field experimental pop of Brian Eno and King Crimson (believe it or not).

BILL MURPHY



Daphni *Jiaolong*

MERGE

Daphni is Dan Snaith of Caribou’s after-hours club DJ alter ego. Born out of his DJ gigs post shows supporting Radiohead, Daphni’s debut, *Jiaolong*, is a portal to Snaith’s minimalist/track-y/disco diva side. Afro rhythms, dark percussive loops, and repetitive vocals thread together these moody cuts. From the soul-flecked, piano house of “Yes I Know” to the acidic meltdown of “Ahora,” *Jiaolong* is varied in its simplicity, playing like a DJ set rather than an artist album.

LILY MOAYERI

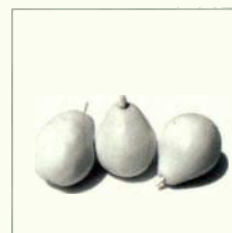


Tussle *Tempest*

SMALLTOWN SUPERSOUND

San Francisco quartet Tussle has been channeling the krautrock/no wave continuum since 2001, and the four instrumentalists return at their most motorik. In contrast to 2008’s *Cream Cuts*, *Tempest*’s tonal mass is denser. There’s far less room sound, fewer stray transients; the synth-prominent arrangements are more carefully sequenced rather than gradually intertwining. Produced by JD Twitch of Glasgow DJ duo Optimo, equally a fan of freeform psychedelia and machine soul, *Tempest* presents on-rails grooves dappled with flushes of circuit-bent saturation.

TONY WARE



Dwight Yoakam *3 Pears*

WARNER BROS.

Country superstar Dwight Yoakam’s self-produced major-label return includes songwriting collaborations with Kid Rock and with Ashley Monroe (Pistol Annies), and two tracks co-produced by Beck. One new musical development: Yoakam plays electric rhythm guitar (rather than acoustic) on these songs, which pumps the tracks up in very cool ways. But overall, this varied, carefully arranged album just sounds like Dwight Yoakam: a great, authentic songwriter who sings like an angel.

BARBARA SCHULTZ



Goldenboy *The New Familiar*

EENIEMEENIE

Country superstar Goldenboy has the ingredients to be a serviceable indie-pop group, but tends to fall just this side of memorable. The latest release, *The New Familiar* is a case in point. Always pretty, Goldenboy’s head-swaying melodies stop short of gorgeous. Layered dual vocals fill out the undefined corners of “The Right Chemistry,” and strings plus whistles almost give “Steal Your Face” some bite. For the most part, however, *Familiar* shuffles through indiscernible song after song—inoffensive but permanently in the background.

LILY MOAYERI



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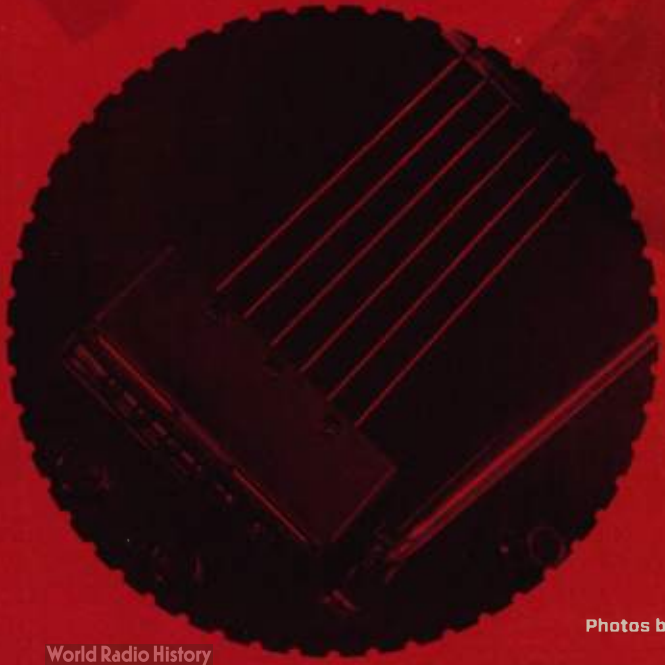
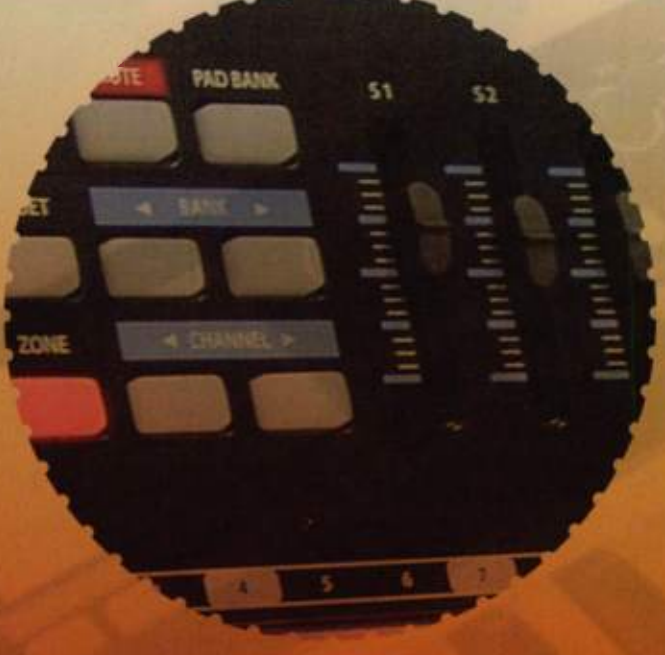
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Roundup

Control Freaks, Unite

**Whether you're
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drummer, or DJ,
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BY CRAIG ANDERTON

EVER TRY playing a software synthesizer with a mouse? Ever try painting a 747 with a Q-Tip? You get the point: Tedious does not equal fun, and we're supposed to be playing music—not tediousing music. Music is a hands-on activity, and the more you can wrest control over your software from your mouse to a special-purpose control surface, the better.

There's been a vast proliferation of controllers lately as more musicians go virtual and want a better link to their software than a keyboard or mouse. This roundup covers a little something for everyone, and serves as a fine example of the variety of controllers targeted at electronic musicians.



Korg microKEY25

USB-powered, micro-key portable keyboard
\$110 MSRP, \$70 street
korg.com

Laptops and iPads have inspired compact controllers, designed for music on-the-go, that can fit in a travel bag, small suitcase, or even a laptop bag. However, they're also convenient to pop into a USB port when you want to check out something without even leaving your chair.

The microKEY25 has (duh!) micro keys with just enough key motion resistance for a more-than-decent feel. The USB port is a standard B-type connector; while class-compliant, a dedicated USB/MIDI driver allows using editing software. The keyboard's velocity is very predictable, but there's no aftertouch. Concerning accessories, the microKEY25 comes with a 32" cable.

The microKEY25 weighs 1.43 lbs., draws less than 100mA from the USB port so it's iPad-powerable with the Apple iPad Camera Connection Kit (however, Korg recommends a powered hub for extended use), and works with Core MIDI-compatible apps such as Korg's iMS-20. Controls include a joystick and four buttons: Arpeggiator, sustain/tap tempo, octave down, and octave up.

The octave buttons use color and flashing to indicate the current octave range; the joystick defaults to modulation when moved up, breath control when moved down, and pitch bend in the left and right directions. (Push down for an additional switch control.) Except for bend, all of these can be re-assigned to different controllers.

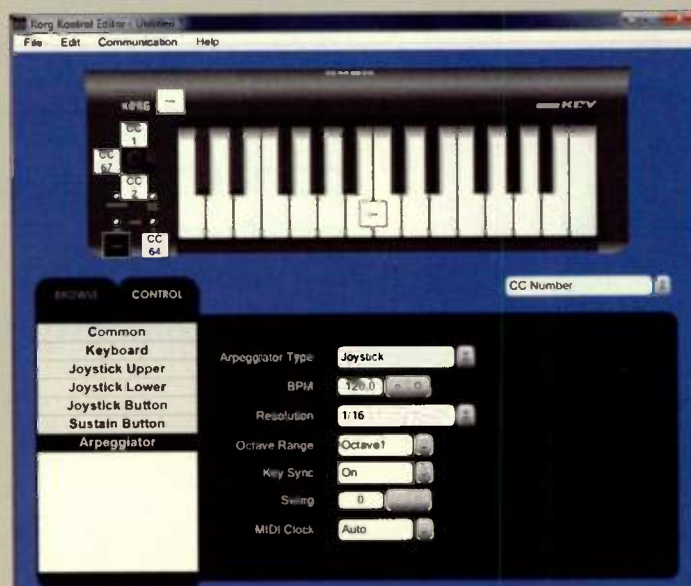
Software The microKEY25 comes with licenses for downloadable free software: Korg M1Le virtual synth (with \$99 upgrade offer to the full Korg Legacy Collection Special Bundle), instruments from Applied Acoustics Systems (Strum Acoustic Session, Lounge Lizard Session, and Ultra Analog Session), Toontrack's EzDrummer Lite software drum sound module, and a discount coupon for Ableton Live, Live Suite, and Live LE software. You can also download the

free, cross-platform Korg KONTROL editor and USB-MIDI driver.

The KONTROL software lets you re-assign controllers, choose arpeggiator characteristics, and select one of eight keyboard velocity curves or a variable constant velocity value. Any custom edits you write to the microKEY25 stay in the unit until changed—it doesn't revert to the factory defaults on power-off.

The Arpeggiator It's fun, and can accept external clock, run internally, or with the Auto setting, sense external clock and if not present, run internally. You can use the joystick to control direction (up or down, off or triggered) and when running internally, there's tap tempo using the Sustain button. Note resolution is 1/32 to whole notes, with a range of up to four octaves—there's even swing.

Good Things, Small Packages, and All That The microKEY25 seems like it would hold up well—I tried twisting the case to check for flex, but it was insignificant. The keys feel better than you would expect given the price, and the KONTROL editor adds useful flexibility. I also appreciate the joystick; while small, it's off to the keyboard's left so you can manipulate it easily while playing the keys. Korg has the "small" thing down (I use their nanoSERIES2 controllers a lot), and the microKEY25 is no exception.



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Samson Graphite 49

USB keyboard/DAW

control surface

\$299.99 MSRP, \$199.99 street

samsontech.com

Keyboard controllers range from “I just want a keybed with a minimal budget hit” to elaborate affairs with enough faders and buttons to look like a mixing console with a keyboard attached. Samson’s Graphite falls between those two extremes—but its capabilities lean more toward the latter, while price leans more toward the former. It’s compact, cost-effective, solid, and definitely worth a close look.

Overview Graphite 49 has 49 full-size, semi-weighted keys with velocity and aftertouch. (It’s not “afterswitch,” but rather, is quite smooth.) Controllers include nine 30mm faders, eight “endless” rotary encoders, 16 buttons, four drum pads, transport controls, octave and transpose buttons, mod wheel, and pitch bend. Connectors consist of a standard-sized USB connector, 5-pin MIDI out, sustain pedal jack, and a jack for a 9V adapter—generally not needed as Graphite 49 is bus-powered, but if you’re using it with something like an iPad and Camera Connection Kit, tone module, rack synthe, etc., you’ll need an AC adapter.

Despite the low price, I don’t think reliability will be an issue—the box showed obvious signs of serious “UPS abuse,” but it worked as soon as plugged in.

Operational Modes Graphite 49 has four main modes. Performance mode is optimized for playing virtual synthesizers or hardware tone modules, and provides full access to its hardware controllers. Zone mode has a master keyboard orientation, with four zones to create splits and layers, but the controllers aren’t in play except for pitch bend, modulation, and pedal. Preset mode revolves around control surface capabilities for several popular programs, while Setup mode is for creating custom presets or edits.

There’s a relationship among these modes; for example, any mode you choose will be based on the current preset. So, if you create a preset with Zone assignments and then go to Performance mode without changing presets, the Performance will adopt Zone 1’s settings.

Control Surface Options The control surface capabilities are under-documented; you’d never even know that Graphite 49 is Mackie Control-compatible. Fortunately there’s now a link at the samsontech.com site that details how to use Graphite 49 with various programs, but you’ll need some controller and MIDI savvy to create your own presets.

I tested the presets for Apple Logic, Avid Pro Tools, Ableton Live, Cakewalk Sonar, Propellerhead Reason, MOTU Digital Performer, Sony Acid Pro (also Sony Vegas), and PreSonus Studio One Pro. They all worked exactly as advertised, but note that Reason control is intended for individual modules (e.g., you can control the mixer, synth, or effects devices, but only individual channels in the “SSL” mixer as each channel is a separate device). There are also presets for Steinberg Cubase and Nuendo, Mackie Tracktion, MK Control (whatever that is!), Adobe Audition, FL Studio, and Magix Samplitude as well as 14



user-programmable presets and a default, general-purpose Graphite preset. I’d like to be able to save and load presets via Sys Ex, but 14 user presets will likely be all most people need.

The faders control level while the rotaries edit pan, with the buttons usually controlling solo and mute, with some variations. The Bank buttons change the group of 8 channels being controlled (e.g., from 1-8 to 9-16), while the Channel buttons move the group one channel at a time (e.g., from 1-8 to 2-9), and there are also transport controls. With Pro Tools, you need to select HUI mode, which doesn’t support the Bank and Channel shifting.

The adoption of the Mackie Control protocol is vastly more reassuring than, for example, M-Audio’s proprietary DirectLink control for their Axiom keyboards, which usually lagged behind current software versions. We’ll see whether these presets can be updated in the future, but it seems that the “DAW-specific preset element” relates mostly to labeling control functions, as the Mackie protocol handles the inherent functionality; besides, you can always . . .

Roll Your Own Editing follows the usual cost-saving arrangement of entering setup mode, then using the keyboard keys (with—thank you!—highly readable labels above the keys) to enter data. The relatively large and informative display is also helpful. Thankfully Samson has developed a software editor, but the front-panel programming is pretty transparent.

Rather than describe all the possible edits, some of the highlights are choosing one of seven velocity curves as well as three fixed values (individually selectable for the keyboard and pads), reversing the fader direction for use as drawbars with virtual organ instruments, assigning controls to the five virtual MIDI output ports, changing the aftertouch assignment to a controller number, and the like. Also note that the pads, sliders, rotaries, and buttons have *two* separate banks so you can access double the number of parameters compared to the number of physical controls.

Pretty Darn Slick Overall, this is a highly capable and appealing controller—it even comes with Native Instruments’ *Komplete Elements*, which is a sweet bonus. Although Samson is a new name in controllers, Graphite 49’s full-size keys, compact footprint, comfortable keybed, control surface capabilities, and pleasing aesthetic design are a big deal—and at this attractive price point, you’re also getting serious value. Samson is a new name in controllers, but Graphite 49 and its related keyboard Carbon 49 (less expensive and very iPad-friendly) have made an auspicious beginning. Graphite’s full-size keys, compact footprint, comfortable keybed, control surface capabilities, and pleasing aesthetic design are a big deal—and at this price, you’re also getting serious value.

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World Radio History

Synesthesia Mandala mk 2.9

USB drum controller and
sound library

\$349 direct

synesthesia.com



Although Mandala mk 2.9 is intended for real drummers (hey, it's good enough for Joe Barresi, Danny Carey of Tool, and Will Calhoun), it's also of interest to all electronic musicians. For example, although it includes sound-generating, cross-platform "Virtual Brain" software that you can play through an audio system as you would other electronic drums, it's also a MIDI controller that can drive virtual drums, and rewire audio into DAWs.

Its main feature (aside from responsiveness) is a multizone strike surface that can detect up to 1,000 different strike positions, incorporated in six circular strike zones. It also has 128 concentric "rings" that extend outward from the center and define a MIDI controller value. The package comes with the pad itself, software with a sound library and interface, a pair of sticks, bolt for a mounting stand, USB cable, and 1,500 samples from a Ludwig Black Beauty snare drum (which is also compatible with NI's Battery).

The Virtual Brain This editor for Mandala pads also accesses a proprietary sample library with more than 600 multisampled sounds; you can also load your own (WAV, AIF, SDII). Many of the multisamples are "position-based" samples from center to edge, which replicate the feel, not only the sound, of various instruments. Virtual Brain handles up to three pads (although you can connect as many as you want to your computer for use with a program like Battery), and the company offers a discount for multiple pads.

Each zone has volume, pan, pitch, and reverb send controls, as well as the option to choose its sound. You can insert up to two series effects per zone, choosing from 14 possibilities (including some nice lo-fi options) as well as settings for tonal sounds, an amplitude envelope, and up to 26 velocity curves (including 10 user-programmable curves). The user curves can have any arbitrary shape, and are programmed on a Tools page where you can also define a per-pad LFO and create a custom user scale.

The Tones options are very interesting. You can set a sound root note, associated scale, which notes will sound within that scale, and a pattern so that successive hits change pitch in a variety of ways. But the icing on the cake is the per-zone Zone Control window, which can

tie seven zone parameters and all effects parameters to strike position, strike velocity, and LFO, as well as set the range each controller covers.

Finally, each pad has its own "global" effects rack that affects all zones. It features three series effects, drawn from the same roster as the zone effects, as well as a limiter and the global reverb that works with the zone sends.

What It All Means This flexibility lets you control multiple sounds and effects with a single pad. Melodic sounds can provide a sort of mini-gamelan, with some zones having very precise, controlled velocity curves while others can be almost "switched" to trigger sounds. You can have exceptionally sophisticated control over a single sound, or work with multiple sounds and have a virtual kit on one pad. I wouldn't necessarily call this merely a drum pad, but more like a percussion pad... maybe even a percussion ensemble pad.

Extensions You can feed audio directly into a DAW via ReWire. (However, with 64-bit Windows, this requires working with 32-bit program versions—64-bit ReWire hasn't been implemented yet in Virtual Brain.) Other ways to pipe in audio include using Soundflower on the Mac, or Virtual Audio Cable with Windows. As a MIDI controller, you can choose the MIDI channel and controller number caused by striking the surface, but the MIDI notes themselves are fixed (60-65). This works for many drum programs, but hopefully a future rev would allow a way to assign these notes as desired. The documentation could use elaboration—some features, such as zone linking, aren't explained (although to be fair, it's not hard to figure out), and the description of using ReWire is pretty much non-existent. But these aren't deal-breakers, and the software itself is stable.

So Is It a . . . Hit? \$349 may seem steep for a pad, but you also get a cool sound library and editing software. Furthermore, I have no doubt that the technology necessary to implement the multizone/multiposition technology is not trivial. Add in the effects and tonal possibilities, and Mandala reveals itself as a sophisticated, novel controller that goes well beyond your basic drum pad.



YouRock Guitar YRG <Gen2>

**Guitarist-friendly
MIDI controller**
\$359 MSRP, \$249 street
yourockguitar.com

We covered the original YRG in the July 2012 issue—but now only a few months later, we have <Gen 2>. Just don't expect a *guitar*; expect an extremely cost-effective MIDI *controller* with surprisingly responsive and accurate tracking that lets you employ guitar technique (and looks like something out of Guitar Hero).

It works so well because the neck's "frets" and "strings" are raised plastic that serve as switches, although they do feel quite comfortable. Six physical "dummy" strings trigger notes with velocity, and there's a pitch bend wheel disguised as a whammy bar. (Of course, you can't do conventional finger vibrato.) YRG does USB over MIDI with Mac/Windows, sends MIDI out a 5-pin DIN connector, or outputs audio over a stereo 1/8" headphone jack or mono 1/4" guitar cable from a set of onboard sounds.

However, it's *crucial* to download the manual, study it, and delve into the various menu tweaks to optimize YRG for your playing style. And the more you know about synth setup, the better; YRG works best in mono mode, with a multi-timbral synth (or six instances of a synth) where each timbre or instance responds to one channel and is set for a single note of polyphony. This configuration provides the most guitar-like feel and highest accuracy.

Ch-ch-ch-changes The <Gen 2> version uses a new pickup design, and while the original tracked very well, the new version tracks even better. There are also more variables to optimize tracking, and the whammy bar now transmits bend data over all channels when in mono mode—a welcome improvement.

I didn't cover the unit's internal sounds in my original review because to my ears, they weren't a selling point. However, the new

sounds are vastly improved, and you can layer a guitar and synth sound—so with battery power, you can just plug into your interface for instant guitar synth sounds. (Use four AA batteries, not USB, with the internal sounds unless you have an *extremely* clean USB power source.)

Furthermore, you can restrict the layers to particular zones, like synth bass on the bottom three strings, and guitar on the top three strings, or on all strings . . . whatever works. The 99 presets can now store the chorus setting, transposition, pan, and zone data. MIDI implementation is more sophisticated, and includes (really!) the ability to trigger clips and scenes in Ableton Live, as well as move the area within the Ableton clip matrix being controlled. The frets and two body switches (e.g., for preset up/down) can serve as MIDI switch controllers, and you can map the joystick to MIDI controllers. There are various other minor improvements and options, and all the features (like alternate tunings and recording) from the original version are retained.

Finally, in addition to being able to buy an optional headstock (recommended—even though the headstock serves no functional purpose, it makes for more comfortable playing), you can now customize the <Gen 2> with a pickguard.

Is This the Answer to MIDI guitar? No—but it's a *great* answer to a guitarist-friendly MIDI *controller*. I not only appreciate its accuracy and tracking speed, but also, that I need to do very little MIDI data cleanup after recording. Although the YRG-1000 turned a lot of heads—even for people who thought they wouldn't like it—the YRG <Gen 2> improves the concept and execution even further.



Native Instruments Traktor Kontrol F1

Remix Deck controller for Traktor Pro 2.5
\$279 direct
native-instruments.com

DJs continue to go beyond the “two turntables” concept—tempo-synched effects, more decks, live instruments, re-sampling, and more. Native Instruments has pushed the DJ envelope for years; the Remix Deck feature that debuted in Traktor Pro 2.5 is a far more sophisticated version of the sample decks from previous versions. The Remix Decks combine features associated with sampling, Ableton Live’s clip view, and conventional Traktor decks (quantizing, sample display with playhead, loop controls, sync, etc.). Additionally, it’s easy to save and load complete Remix sets. In a way, this feature is like adding a DJ-oriented sampler.

Traktor Pro allows assigning any or all of its four decks to Remix Decks. Each one has four sample slots (roughly analogous to four “tracks” of samples), a level and filter control (up for highpass, down

for lowpass), and 16 cells for each slot in which you can load one-shots or loops; a slot can play one cell at a time. But, the thing that makes this more of a “remix” deck is its ability to capture samples from a Track Deck or the loop recorders. You can also drag-and-drop patterns from Maschine, which is very cool and makes it easy to populate the Remix Decks with patterns. To summarize, each Remix Deck is a 4 x 16 matrix of samples, whose content can be loaded, replaced, and fluidly edited. With sufficient practice you can build music on a “cellular” level from these components instead of, or in addition to, full mixed tracks.

That description only scratches (get it?) the surface of the Remix Decks’ capabilities, but let’s proceed to the F1 controller, which is optimized to control these decks. I use F1 with the S2, and they work together very harmoniously.

The advertisement for Roland R-MIX features a central image of the software interface on a computer monitor. The interface shows a colorful spectrogram and waveform. To the left, a man is shown playing a keyboard. To the right, a woman is shown singing into a microphone. The text 'R-MIX Audio Processing Software' is prominently displayed in the bottom right of the image area.

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With its intuitive visual interface, Roland’s R-MIX gives you an amazingly clear picture of what’s happening inside your audio, offering a unique approach that makes working with sound quick, productive, and fun!

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Get more info and download a free trial version at RolandUS.com/R-MIX.

Roland

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Enter the Matrix NI does serious hardware, and F1 is no exception: metal panel, four 45mm faders for slot level control, four rotary pots for the slot filters (with center detent for flat response), legible labeling, 16-pad matrix, and various selection/navigation buttons. Although optimized for Traktor Pro, NI's Controller Editor program can reconfigure the various controls for other applications (just don't expect a mini-Maschine; the pads aren't velocity-sensitive).

A downloadable Kontrol F1 tutorial set showcases the main control options and serves as a fine introduction. It also demonstrates the extensive use of color and visual feedback to guide you while using F1. Although learning its capabilities isn't particularly difficult, becoming good at playing F1 requires practice. (Got any musician friends who diss DJs? Put together a set with F1, play it, then say "here, you try it." Sit back, watch, and laugh.)

The Eyes Have It F1 is primarily about triggering the slot's cells, but it's also a self-contained "ecosystem" in which you can specify quantizing, adjust key and pitch, reverse samples, trim length, set sync, browse for samples, change "pages" of four slot cells to play other groups of four cells, and more. That may sound daunting, but I can't emphasize enough how intelligently F1 uses color. For example, you can call up a view in the matrix that shows the play mode at a glance: A blue button indicates one-shot, green indicates loop, and dim shows there's no sample loaded in that cell. Trigger mode and sync are equally obvious. You can also choose colors when playing to remind you what kind of sound is in which cell, and a dual 7-segment display provides further feedback.

Kool Kontrol With the S2, I tend to choose two Track Decks and two Remix Decks; until F1 came along, I moused around the Remix Decks and that seemed adequate. But after using F1 extensively, I realize just how inadequate a mouse is for unleashing the Remix Decks' potential. If you use the Remix Decks, you need F1. And if you don't use them, you almost certainly will after you find out how much fun it is to control them with the Kontrol F1. Native Instruments has done it again. ■



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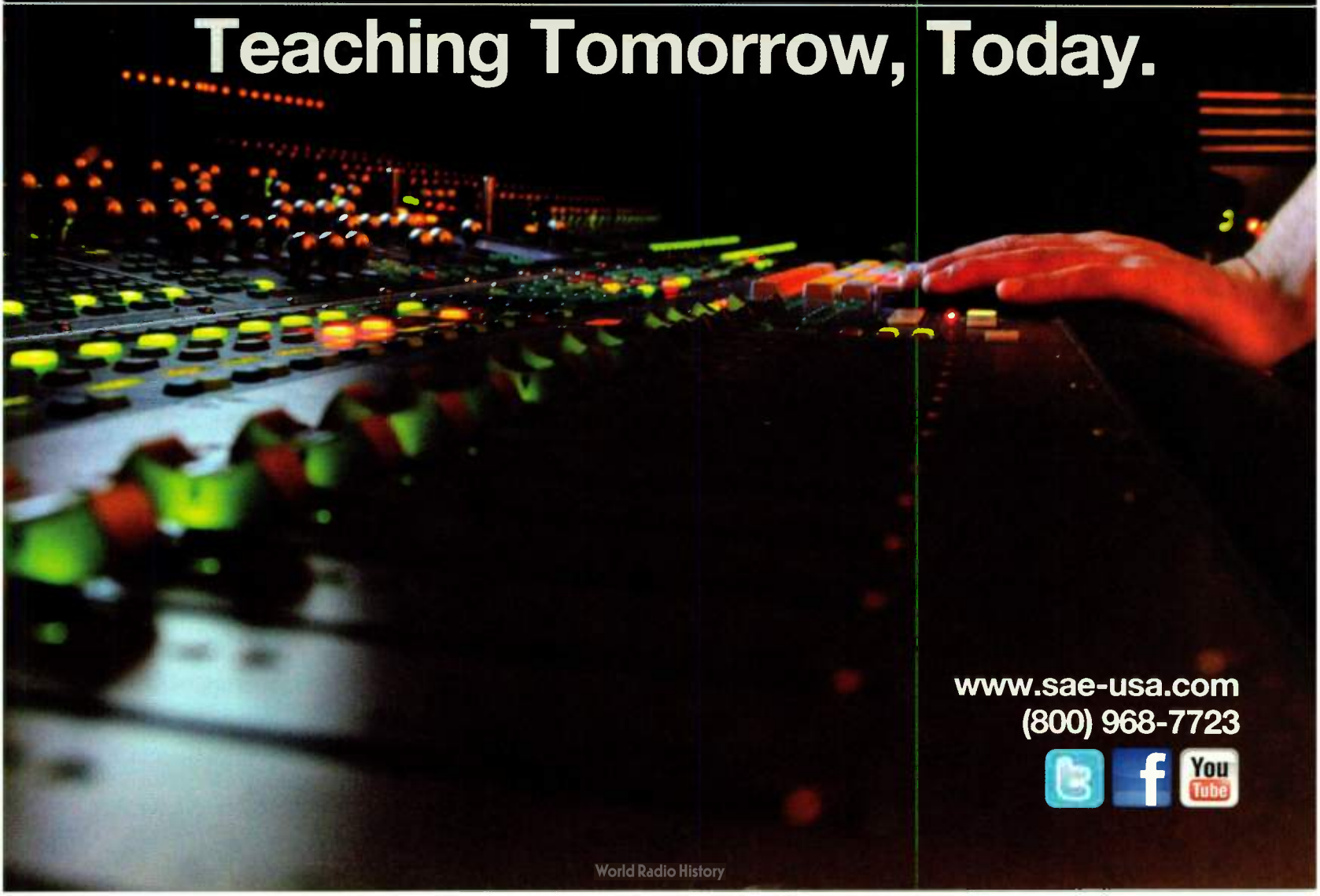


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Fig. 1. Left to right—DLM12S, DLM12, and DLM8.

Mackie DLM Series Powered Loudspeakers

Targeting the world of portable P.A.s

BY CRAIG ANDERTON

MACKIE ROLLED out their DLM Series with a launch event, so we could get some actual “hands-on” experience with the products. My overriding takeaway: Mackie is underscoring the rapid rise of portable P.A. systems by emphasizing a product line (see Figure 1) that’s clearly designed for the increasingly commonplace small- and mid-size venues.

The Series consists of the DLM8 (MSRP \$879.99) and DLM12 (MSRP \$1,059.99) full-range powered speakers, with 8” and 12” speakers, respectively, and 1.75” compression driver, and the DLM12S subwoofer (MSRP \$1,249.99) with a 12” speaker. Each has a 2,000-watt Class D power amp, and the DLM8 and DLM12 both feature coaxial, vertically-aligned speakers. This configuration provides a more coherent sound, while minimizing interference between the two drivers. They share a common magnet, which simplifies the design and also reduces weight. The DLM8 is 22 lbs., the DLM12 31 lbs., and the DLM12S 48 lbs. The sub is in a wooden enclosure, while the others use polycarbonate ABS plastic. The DLM8 and DLM12 have “kickstands”

that angle the speakers at 50 degrees for monitoring applications.

The powered speakers include an onboard digital mixer, the DL2 (see Figure 2). It offers two inputs, one with combo jack and mic/line switch, the other with combo jack for instrument or line; and two RCA phono jacks. (I didn’t see any phantom-power capabilities.) A Thru jack carries the signal from input 1 or a mix of the two inputs. Each input has a level control, 3-band EQ, and send control for one of the 16 onboard effects. Six speaker-voicing options include a multiband feedback reducer, speaker/overload protection, three storable presets, and switchable 300ms delay for balcony placement and such.

The sub connections (all XLR) are two line-level ins, two full-range outs for sidefills and the like, and two high-pass outs for direct connection to DLM loudspeakers (with presets voiced for DLM and SRM-series full-range speakers). However, the DLM12S is intended for use with other systems too, so the digital crossover controls are exposed. It also folds in speaker protection, three presets, and switchable 300ms delay. All units in the series

have bright, readable OLED displays.

Mackie set up a demo in a club and played a variety of material including Brandi Carlile, AC/DC, and some dubstep to give the subs a workout. Also, singer/songwriter Glen Phillips (formerly with Toad the Wet Sprocket) did a live acoustic set. I immediately noticed two sonic signatures: First, the sound is *clean*. I’m sure they weren’t pushing anywhere near 2,000 watts, but the substantial reserve power may have been the reason the transients sounded well-defined, and the bass had authority. Second, the response was even. The highs were present but not “screechy,” and there was minimal “boxiness” as the mids had no significant peaks or dips. The bass slides on the dubstep were telling, as there were no “response holes” during the slides; the bass is tight, too, as evidenced by the kick on the AC/DC cut. I also had a chance to A/B the DLMs against some competitive speakers, and again, the response’s evenness was apparent.

We’ll be getting review units in as soon as possible for a thorough review, but this is a product line worth watching. Meanwhile, there’s more information at mackie.com/DLM. ■



Fig. 2. DLM12 control panel (same as DLM8).

Plug in, record



Record guitar and vocals with GarageBand

iTrack Solo provides the best solution for recording your instruments and vocals using an iPad. Featuring a Focusrite microphone input – developed with over 25 years of professional audio experience – and an input to record directly from electric and bass guitars, iTrack Solo is the perfect companion for any singer-songwriter wanting to take their demos to the next level.

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World Radio History

Sonic Charge Permut8

Seriously twisted low-fi processor

BY JIM AIKIN

SUMMARY

STRENGTHS: Fresh sounds. Extremely versatile. Deliberately low-fi.

LIMITATIONS: Cryptic user interface. Deliberately low-fi.

\$66 MSRP
soniccharge.com

YOU MAY think you know about effects processors, but Sonic Charge Permut8 will mess with your mind. Permut8 is the weirdest effect I've ever seen. It can be a delay line, bit crusher, pitch shifter, random sample-and-hold, sample slicer, ring modulator, comb filter, stereo chorus, or even signals from outer space—all through manipulating a few simple controls. Did I say "simple"? There's madness in its method.

Delay The action centers around a stereo 12-bit, 192kb memory buffer. Twelve-bit? That's part of the low-fi goodness. The incoming audio signal is written to the buffer continuously, as in a standard delay line. The data can then be read from the buffer in many different ways. The read "head" (if you like the tape recorder metaphor) can jump around slowly, back up, or jitter at audio rate. The clock frequency can be synced, allowing a single pass through the



Sonic Charge Permut8 uses two versatile digital instructions to read from the audio memory buffer.

buffer to last for up to eight measures, or it can be un-synced and jammed up as high as 352kHz for screaming ring modulation.

An animated graphic at the bottom of the panel shows what's happening with the write and read heads. The rest of the user interface is truly bizarre. Even after repeated trips to the manual, I'm not always sure what's going on.

Operations The read operation is controlled by two digital instructions. The first instruction can be AND, MUL, OSC, or RND. The second can be OR, XOR, MSK, or SUB. The data for each instruction consists of two 8-bit words, and the values of the bits are set independently with the banks of switches.

In some modes, the 8-bit words produce a numerical value between 0 and 255. If you know binary arithmetic, this won't throw you. With OSC, the first 8-bit value controls the rate of a triangle-wave oscillator, and the second value controls the amplitude. The oscillator controls the speed of the read head; with large amplitudes it can back up, producing "tape reverse" effects. RND does the same, but the modulation is stepped rather than smooth.

With MSK (mask), eight of the switches turn the effect on or off in an eight-step rhythmic pattern. This lets you create,

perhaps, a dental drill burst or an upward pitch-shift of an octave that is heard strictly on the off-beats. The MUL (multiply) operation causes the read position to move faster or slower through the buffer, producing pitch shifts. The OR and XOR operations can give you even more serious audio damage.

Other Features Naturally, there's a feedback knob. You can insert a low/highpass filter in the feedback path, or apply it to the input or output, as well as overdrive the input for clipping (if you don't enable the input limiter). The Write Protect switch freezes the buffer's current contents, so you can modulate and manipulate it in an endless loop. Thirty programs reside in memory for quick switching. If your host supports routing MIDI to plug-in effects, you can "play" Permut8 in real time from a MIDI control surface. If not, autom8!

Permut8 will be a must-have for glitch and heavy dance music—basically, for anybody who wants to wake listeners up. There's a three-week trial download. What are you waiting for? ■

Jim Aikin started at Keyboard in 1975, and has been writing about music and technology ever since. His recent books include Csound Power! from Cengage Learning.

If Your Mix Sounds Good on These, It'll Sound Good on Anything

HS80M

HS50M

HS50M

- 5" white polypropylene cone
- 3/4" dome tweeter
- 70-watt biamplified power
- XLR and 1/4" connectors
- Room Control and Frequency Response Switches

HS80M

- 8" white polypropylene cone
- 1" dome tweeter
- 120-watt biamplified power
- XLR and 1/4" connectors
- Room Control and Frequency Response Switches

HS10W

- 8" long stroke 120-watt woofer
- Dual XLR and 1/4" inputs
- 3 balanced XLR outputs (Mix, L&R)
- Phase switch
- Low/High cutoff

HS10W

HS Series Powered Monitors

The new HS Series powered monitors were designed to be true studio reference monitors in the tradition of the famous NS10MS. That means, mixes that sound good on Yamaha HS speakers will sound good on anything. In fact, that's the ultimate test of a reference monitor. Even better than that, HS series speakers not only sound good, they look great, too.

The HS10W powered subwoofer complements the HS speakers and easily handles today's bass-enhanced music or the most dramatic surround effects. The HS10W subwoofer uses a bass reflex design cabinet that maintains high efficiency and low distortion. You can combine HS50Ms or HS80Ms with the HS10W subwoofer to create different 2:1 (stereo) and 5:1 surround sound systems. So check out the new standard in near-field reference monitors at a Yamaha dealer near you.



The New Standard
in Near-Field Monitors



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iZotope Iris

A virtual instrument that blends the visual with the audible

BY CRAIG ANDERTON

SUMMARY

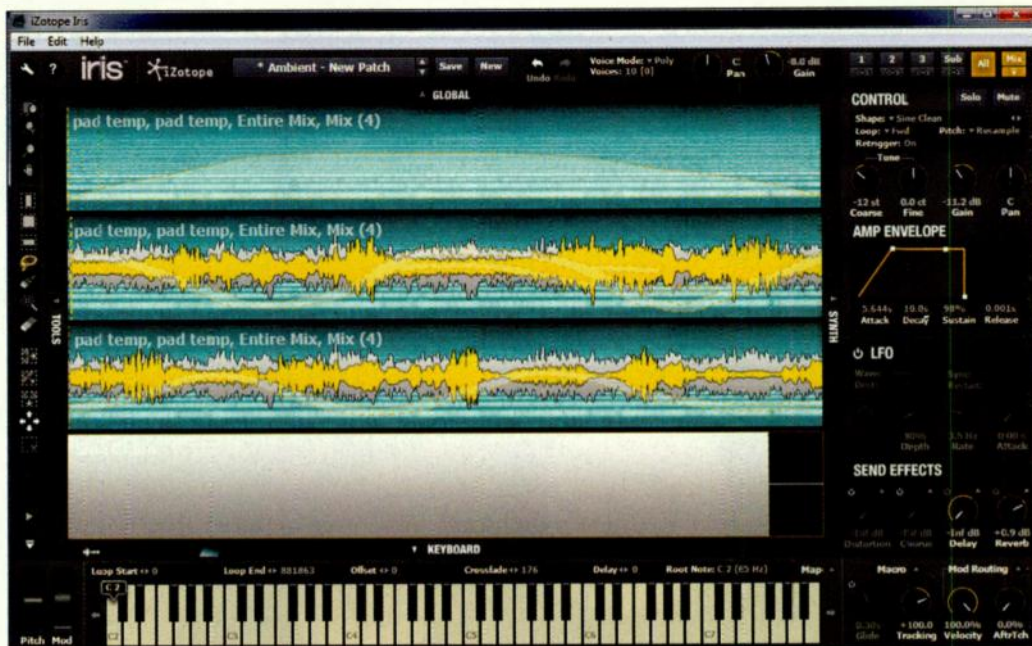
STRENGTHS: Unique synth technology and sounds. Generous sample library and useful presets. Excellent MIDI learn and macro creation capabilities.

LIMITATIONS: Difficult to get predictable results without scaling the learning curve.

\$249 MSRP
izotope.com

IRIS TAKES a novel approach to synthesis; you can download a trial, but you'll need some background on how the program works before you check it out—so read on.

A “3D” World Most music software deals with two dimensions: amplitude and time. Iris includes a Spectrogram display, in which the X-axis indicates time, the Y-axis represents frequency, and brightness corresponds to amplitude. This isn't a new concept; iZotope RX 2, Adobe Audition, Steinberg Wavelab, and Roland's R-Mix allow editing based on this kind of display so you can, for example, isolate the kick drum from a loop and remove it. However, applying this technique to an instrument is indeed something new.



Iris's unique Spectrogram display (upper strip) sets it apart from other virtual instruments.

Note that simply dragging across part of a waveform doesn't fully exploit this type of display. So, Iris includes additional tools that resemble those found in paint programs—you can “lasso” a portion of the signal in only a specific frequency range, while encompassing a particular amount of time and volume level. You can also erase sections (for example, a particular range of harmonics), and move sections of the waveform. These tools can create conventional results, such as erasing a range of frequencies for filtering. But Iris can also warp traditional sounds in unique ways—like isolate an environmental sound's tonal elements to create a tone you can play from a keyboard.

So while Iris uses samples, you can “get inside” the sample and modify it in ways that conventional samplers can't do. As a result, your “oscillator” sounds are pretty much unlimited. Iris also includes a conventional “sub” oscillator (pulse, saw, sine, sine clean, pink noise, or filtered pink noise) that lets you, for example, establish a root note so sounds lacking an obvious tonal identity can have an “anchor.”

Synth Modules Oscillators notwithstanding, Iris employs a fairly traditional synth architecture. You can layer up to three samples with independent editing, as well as do splits. Modulation options include an ADSR amplitude envelope and multi-waveform LFO

with tempo sync and restart options. The LFO can modulate pitch, amplitude, or pan, but no more than one destination simultaneously.

There's a minimal effects collection: Distortion, Chorus, Delay, and Reverb, with a choice of Send or Master global effects modes. In Send mode, each sample has its own set of effect-send controls. Master mode precludes send effects, as all four effects are applied to the composite sound of the mixed samples. You'll also find excellent MIDI learn and macro creation capabilities (ideal for live control), and a master section with 8-mode filter, ADSR envelope, global LFO, and host tempo sync; this is also where the Master Effects depth amount controls become operative if Master Mode is selected for the effects. There's even a virtual keyboard.

Wrapping Up If you're looking for a great virtual analog synth, that's not what Iris is about; and it takes practice to learn how to obtain predictable results. But the reward is that you can create rich, deep, novel sounds that have no equivalent with other synths. (iZotope realizes not everyone is going to make their own sounds, so the 4GB sample library, 500 presets, and optional expansion packs are welcome.)

Tired of saying “been there, done that?” Give Iris a spin. ■

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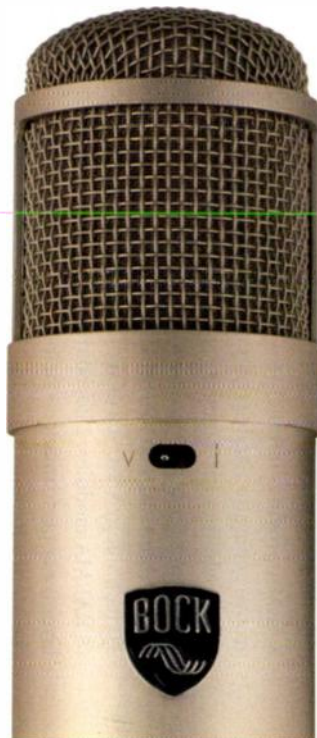
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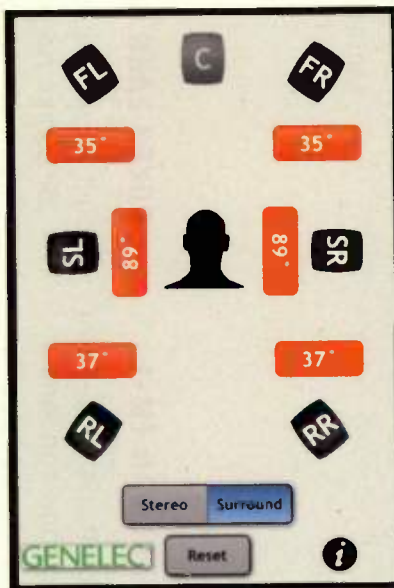




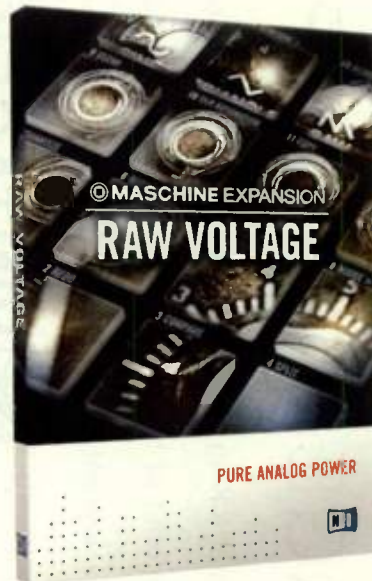
1



3



2



4

1
Karma-Lab
KARMA Motif
XS/XF software
\$199

HIGHLIGHTS Formerly available only for Korg workstations, KARMA provides interactive groove generation and arranger-like capabilities for Yamaha's Motif XS/XF • Mac/Windows compatible • 3rd-gen KARMA 3.0 technology • 8-track design (6 KARMA modules, 2 keyboard layers) per performance • maps the Motif's Remote Mode to KARMA's interactive features • intelligent chord trigger transposition • stutter features
TARGET MARKET Yamaha Motif XS/XF owners

ANALYSIS KARMA technology brought fascinating algorithmic and groove capabilities to Korg workstations, which has since expanded to Yamaha's Motif line.
karma-lab.com

2
Genelec
SpeakerAngle
iOS device app
\$0.99

HIGHLIGHTS Enables correct setting and matching of the angling ("toe-in") of both stereo and 7.1 surround sound speakers • compatible with iPhone 4, iPad 2, iPhone Touch 4th gen, and later models of those devices • detailed information screens provide a tutorial on speaker angling, as well as step-by-step instructions for using SpeakerAngle
TARGET MARKET Recording engineers, sound contractors, home theater

ANALYSIS As more people become aware of the importance of acoustics, speaker placement is being re-visited. This app helps optimize speaker placement and therefore improves acoustics.
genelecusa.com

3
Hosa Technology
Second-Generation
Elite Series
Mic cables
\$42.75-\$203.55

HIGHLIGHTS Nylon webbing over PVC jackets • gold-plated Neutrik connectors • available in both Lo-Z (XLR3F to XLR3M) and Hi-Z (XLR3F to 1/4-inch TS) configurations • 20 AWG Oxygen-Free Copper (OFC) conductors with 95% OFC braided shield • 3 to 100 feet lengths

TARGET MARKET Live performance, recording studios, presentations
ANALYSIS Good mic cables are crucial; the 2nd-generation Elite Series (guitar cables are also available) is optimized for reliability, stability, and sound quality despite a lower price tag than some "boutique" cables.
hosatech.com

4
Native Instruments
Raw Voltage
Maschine expansion
\$59

HIGHLIGHTS Use with Maschine or Maschine Mikro (compact version available for iMaschine) • kits, instruments, and patterns based on modular analog synthesis • includes 140 patterns with styles ranging from broken, jagged rhythms to flowing grooves • wide sonic scope suitable for many musical styles

TARGET MARKET Maschine owners seeking new sounds
ANALYSIS Maschine has been a hit for Native Instruments and also serves as hands-on controller for their Komplete bundle. This latest pack continues NI's emphasis on increased content, not just software and hardware.
native-instruments.com/rawvoltage



5
Auralex
HoverMat
Isolation platform
\$269.99

HIGHLIGHTS Isolates a drum set from the floor or a hollow stage • reduces coloration from floor resonance, improves sound isolation • more portable (simply rolls up), lighter, and less expensive version of the HoverDeck • 4' x 6' section of Auralex's SheetBlok sound barrier material, covered with charcoal gray Ozite-type carpet
TARGET MARKET Recording studios, live performance setups
ANALYSIS "Floating floors" aren't always an option for stage or studio, so the HoverMat provides an inexpensive alternative intended to provide vibration isolation from drum sets.
auralex.com

6
Voodoo Lab
Giggity
Guitar mastering pedal
\$210

HIGHLIGHTS Analog mastering preamp for guitar with Loudness, Body, and Air tone-shaping controls • four-position preamp voicing selector • adds warmth and roundness • five-year warranty • hand-built in the USA using high-grade components • true bypass switching • how-to videos on youtube.com/voodoolabvid
TARGET MARKET Guitar players: live and in the studio
ANALYSIS Giggity is not a simple overdrive or boost pedal but is intended to fine-tune the overall sound. It's particularly well-suited after a pedalboard but before a clean amp.
voodoolab.com



7
Chauvet DJ
Mega Trix
Effect light
\$249.99

HIGHLIGHTS Mobile, lightweight, LED-powered effect light • projects mid-air aerial effects, sharp beams of light, and animations that flow across any surface • super-crisp optics • three independent pods housing 192 RGBW LEDs • includes complex, automated programs and three channels of DMX control for custom light shows
TARGET MARKET Live acts, clubs, mobile DJs, and club DJs who want to upgrade their lighting effects
ANALYSIS Acts are demanding more compact, portable, and less-expensive lighting. Mega Trix includes an internal mounting option for most tripods and speaker stands that doesn't interfere with speakers or other fixtures.
chauvetlighting.com



8
Antares
Auto-Tune Live
Plug-in.
\$249

HIGHLIGHTS Realtime pitch correction and Auto-Tune vocal effect for live or tracking • ultra-low latency • realtime MIDI control of key performance parameters • humanize function for natural, realistic pitch correction • natural vibrato control • automatic formant correction • includes Antares' Throat Modeling technology • RTAS/VST3/AU for Mac, RTAS/VST3 for Windows
TARGET MARKET Live performance and tracking applications
ANALYSIS Auto-Tune has been big in studios for years, but the live version's low latency and extensive MIDI control offers a new level of realtime control.
antarestech.com



1



2



3



4



5



6

1
TASCAM
iU2 Audio
Interface
\$199.99

WHY Obtain pro-audio quality and less distortion with iOS devices

FEATURES TASCAM's iU2, with dual XLR inputs and phantom power, offers pro-audio quality by providing all needed preamplification and conversion. Subsequently, the iU2 sends the signal as digital audio to the iOS device—thus bypassing the internal audio. The iU2 also features a hi-Z instrument input, stereo line ins, S/PDIF out, MIDI I/O, and Windows/Mac compatibility.
tascam.com

2
IK Multimedia
iRig STOMP
\$59.99

WHY Integrate iOS effects into a pedalboard (or use stand-alone)

FEATURES Picture a stompbox case that plugs into your pedalboard but doesn't have any onboard effect. Instead, it connects to your iOS device, which provides the effect—or effects—with an app like AmpliTube for iPad. iRig Stomp also includes a bypass switch, headphone output for practicing, active output stage, and input gain trim knob.
ikmultimedia.com

3
Line 6
MIDI Mobilizer II
\$99.99

WHY Use MIDI devices with iPad, iPhone, iPod touch

FEATURES MIDI Mobilizer II supports Core MIDI, Apple's standard for iOS MIDI apps (as used with GarageBand for iPad), and offers 5-pin MIDI in and out connectors. LEDs indicate when MIDI messages are being passed through. It also supports Line 6's free MIDI Memo Recorder app for storing and exchanging patches, MIDI sequences, and more.
line6.com

4
Blue Microphones
Mikey Digital
\$99.99

WHY Provides high-quality stereo mobile audio recording

FEATURES A 230-degree rotating case design connects directly to your iOS device and contains dual cardioid condenser mics. The circuitry bypasses internal audio electronics to provide a direct digital signal, thus offering higher audio quality. Mikey Digital also features manual or automatic volume control and incorporates a line input and USB pass-through.
bluemic.com

5
Apogee Electronics
JAM
\$99

WHY Superior audio quality for guitar and bass when using apps

FEATURES JAM provides a high-impedance interface for your guitar or bass (with hardware input level control), and converts the signal to digital for a direct feed to the iOS device's 30-pin port. Requiring no configuration, a multicolor LED provides status indication and input-level monitoring; it's also Mac-compatible, including Mountain Lion.
apogeedigital.com

6
Sonoma Wire Works
GuitarJack Model 2
\$199

WHY It's more like a portable studio interface than just a guitar interface

FEATURES Built like a tank (so you'll probably want a connector extension cable), GuitarJack has a dedicated 1/4" instrument input (low- or hi-Z selectable) and 1/8" stereo jack for simultaneously recording line- or mic-level audio (with 0–60dB gain control). It has 24-bit ADA conversion to accommodate a future 24-bit firmware update, along with a high-output headphone amp.
sonomawireworks.com

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At GearFest 2012, Craig Anderton led a presentation on integrating analog and digital studio technology.

LEARN

master class

Analog/ Digital Synergy in the Studio

Seminar Highlights from
Sweetwater GearFest 2012

BY CRAIG ANDERTON

GearFest, held every Summer on the Sweetwater campus in Fort Wayne, Indiana, has become the premier Midwest event for musicians. Over the years, founder Chuck Surack has transformed it from an informal gathering where musicians can connect and check out gear to an ever-growing, two-day event; this year GearFest featured a mix of booths from 220 manufacturers (many of whom didn't exhibit at Summer NAMM), visitors from around the world, more than 80 seminars and workshops, a flea market for used gear, celebrated keynote speakers, "you-have-to-be-there" deals on gear, and some pretty cool music. Some of this year's featured speakers were Thomas Dolby, Lee Roy Parnell, Marcus Miller, Fab Dupont, J. R. Robinson, Jeff Loomis, George Massenburg, and Electronic Musician's own Craig Anderton.

The thing that makes GearFest successful is that, while it's obviously Sweetwater-centric, it has transcended its origins to become a summer music event second only to Summer NAMM. Among the many seminars featured at GearFest was the Craig Anderton-led presentation on





Fig. 1. Yamaha's Motif series was designed to serve double-duty as a basic control surface for a variety of DAWs—not just Steinberg's Cubase AI.



Fig. 2. This shows the FireWire button enabled in PreSonus's StudioLive 16.0.2 mixer; inputs 1-3 are set to inputs coming in from FireWire instead of their analog inputs.

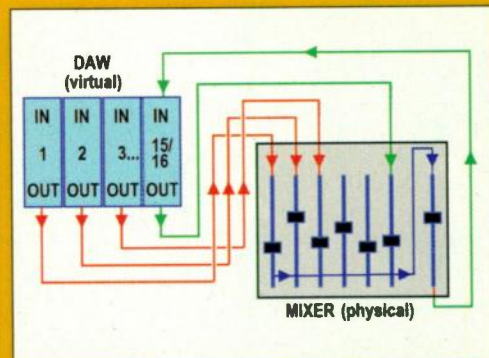


Fig. 3. This routing allows not only mixing your DAW through a mixer's faders, but also recording your 2-track master back into the project from which it came.

integrating analog and digital in what he calls "the hybrid studio." Although we can't take you backward in time to GearFest itself, we can certainly present the highlights of this well-received seminar. —Sarah Jones

ALTHOUGH THERE'S much hype around analog vs. digital technology, let's remember analog's original meaning: "represented by a continuously variable physical quantity." Analog is more than just a type of technology; in fact, most studios already combine analog and digital—transducers are analog, as are moving air, ears, and instruments. Furthermore, levels, sends, EQ, and similar elements, even if implemented with digital technology, aim to give a smooth, analog feel.

Mixing is a good example of an analog process, but also note that a mix can be a performance (just ask DJs, or consider sessions back in the '60s when multiple sets of hands worked a large-format console), and it's also an inherently polyphonic activity.

This is why mixing with a mouse is often unsatisfying: It's a monophonic device in a polyphonic world. Fortunately, there are plenty of control surface options—from keyboards like Yamaha's Motif series, whose sliders (Figure 1) can map to a variety of DAWs, to multifader controllers like the Mackie Control, Euphonix Artist Series, or Behringer BCF-2000, and to individual channel faders like the PreSonus FaderPort or Frontier Design AlphaTrack. And of course,

In the days of tape, studios would mix down from a multitrack to a separate tape recorder. But with the hybrid studio, you can record your stereo mix into the same DAW project you're mixing.

there are specialized control surfaces, like Novation's Launchpad, or Akai's APC20 and APC40 for Ableton Live.

The Mixer as Control Surface Another option is a conventional mixer working with an audio interface that has multiple audio outputs, or a mixer with a FireWire or USB 2.0 interface (PreSonus StudioLive series, or the latest digital mixers from Yamaha, Phonic, Alesis, and others). There are several benefits to using a mixer as a control surface:

- You can route the output back into the DAW feeding it to record a stereo mix.

- Real faders encourage mixing as a performance.
- You can perform with EQ and other controls.
- It offers easy interfacing with analog effects via inserts and auxes.
- Using the mixer's processors takes a load off your computer.
- Analog mixers can lend an "analog" character.
- Workflow is much faster than using a mouse.
- This approach is DAW-agnostic.

Of course, there are disadvantages too:

- Mixer settings aren't saved with a project by default.
- There may not be enough hardware ins or outs.
- Mixers take up space.
- They can be less convenient, due to the need for extra connections.

Interconnections My first "mixer as control surface" experience involved a Panasonic DA7 digital mixer and Creamware SCOPE interface. Both had dual ADAT Lightpipe ports, which allowed sending 16 DAW outputs to 16 DA7 inputs. Some faders handled individual instruments, while others covered submixes. In those days computers were pretty slow, so the DA7's onboard processing was a big advantage.

Although connecting via analog patch cables from a multi-output interface to a mixer

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Yamaha just (re-)invented the small format digital mixer. Over ten years ago, we were the first company to make an affordable moving fader mixer for stage and studio. When you are mixing live, motor faders let you easily see exactly where your main, aux and monitor levels are at the touch of a button. In the studio, they let you take full control of the powerful automation features of your DAW. The 01V96i continues our tradition of digital mixing innovation with 16-in/16-out USB 2.0 computer connectivity, Virtual Circuit Modeling effects and advanced DAW control for Cubase® (as well as Pro Tools®, Logic®, Sonar® and Digital Performer™).

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96
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DAW control

100mm
Faders

CUBASE AI

01V96i
EDITOR

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Scan code for 01V96i info



is doable, using an ADAT, USB, FireWire, or MADI digital connection—now offered by many mixers—keeps the signal in the digital domain and minimizes cabling. However, you do need to know how to set up the mixer to talk to your computer. Typically, you assign DAW outputs to FireWire buses, which then go to individual channel inputs; these are then enabled for FireWire inputs as opposed to standard analog inputs (Figure 2, page 82). Now you can do your mixing moves in real time, using the mixer's faders.

If the mixer has built-in DSP, that can supplement any plug-ins used in the DAW

With the hybrid studio, you can record your stereo mix into the same DAW project you're mixing . . . once you have the perfect mix, it's now in two tracks of your original project. When you save the project, you also save your mix.

itself; if your mixer can save snapshots, you can call them up in real time as part of the mix. And if there aren't enough faders, you can send a premix of parts whose level doesn't vary much (or which use DAW automation) to two channels, thus reserving the other faders for "important" mixing moves.

Mixing and Mastering In the days of tape, studios would mix down from a multitrack to a separate tape recorder. But with the hybrid studio, you can record your stereo mix into the same DAW project you're mixing.

Referring to Figure 3 on page 82, the DAW outputs (red) are going into mixer inputs via FireWire. Meanwhile, the mixer's stereo master out (green) feeds back into the DAW (in this example, using interface inputs 15 and 16). Now when you want to hear your final mix, simply

EM Live!

by Sarah Jones



A MAJOR GearFest highlight was EM Live!, presented by our own Craig Anderton, who created a virtual issue of *Electronic Musician* especially for the event, and brought the magazine to life by taking "articles" off the printed page, projecting them on a giant screen behind him, and performing live presentations for each article.

Subbing for my usual Insight editorial, Craig opened by presenting an editorial on "Why DJ Thinking Matters," and demoed the concepts he was talking about by using Native Instruments' Traktor Pro 2 to do a live mashup—complete with tempo-synced effects, dangerous crossfades, and more. For our New Gear section presentation, Asher Fulero from Moog Music came onstage and demoed the new MF-104M analog delay, which had just been introduced at GearFest the previous day. Now *that's* new gear!

And of course, what's *Electronic Musician* without one of our exclusive Roundups? Craig did a DAW compare-and-contrast (Figure 4) of Adobe Audition, Sony Acid, Steinberg Cubase, Acoustica Mixcraft 6, Apple Logic Pro, Avid Pro Tools, Ableton Live, MOTU Digital Performer, Propellerhead Reason, PreSonus Studio One Pro, and Cakewalk Sonar X1. He managed to cut through the marketing hype to give a clear, objective account of each DAW's strengths and limitations.

Taking the place of print Q&A, guitarist Neil Zaza came onstage and was interviewed about all things guitar, but the conversation drifted toward amp sims and, specifically, Eleven Rack. Zaza's engaging, humble, personable style was definitely a hit with the audience. Then former *EQ* editor and acclaimed author Mitch Gallagher closed out the interview segment by sharing his formidable expertise about guitar tone, as exemplified

in his latest book, *Guitar Tone: Pursuing the Ultimate Guitar Sound*.

Craig ended EM Live! with a demo of a Power App using Cakewalk's Sonar X1, but in the same way we often run out of space in the print edition of *Electronic Musician*, he ran out of time before he could cover everything he'd planned. But no matter: The crowd's enthusiastic reaction made it clear that *Electronic Musician* could be a great live act as well as a magazine.

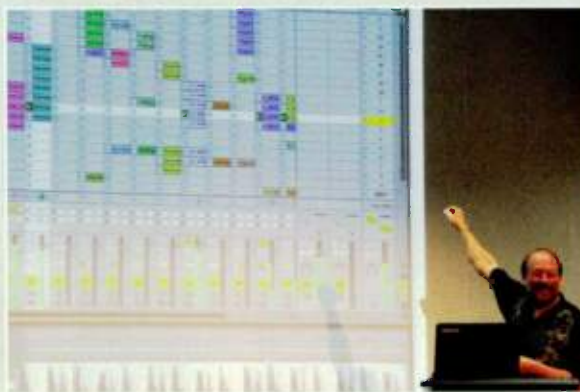
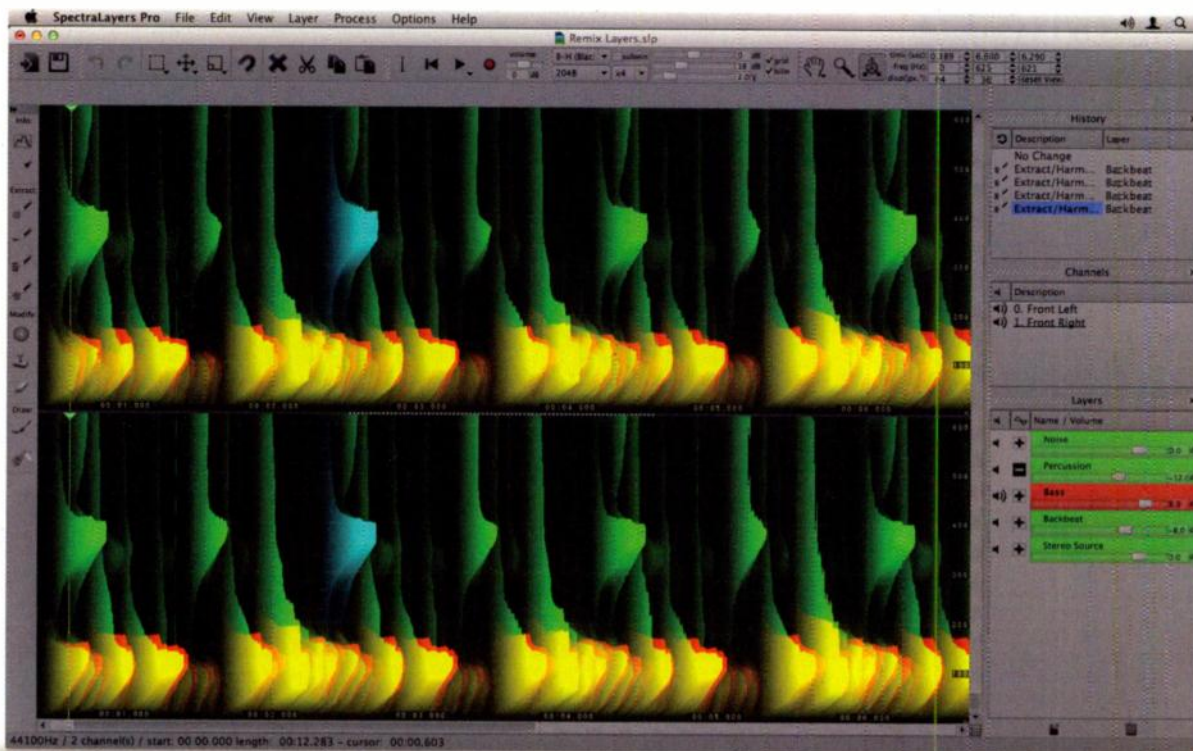


Fig. 4. The realtime "DAW roundup" was a highlight of EM Live! Here, Craig helps people wrap their heads around Ableton Live.



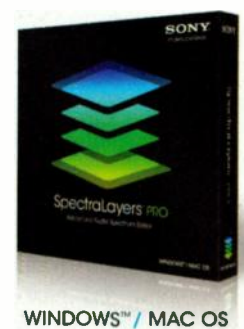
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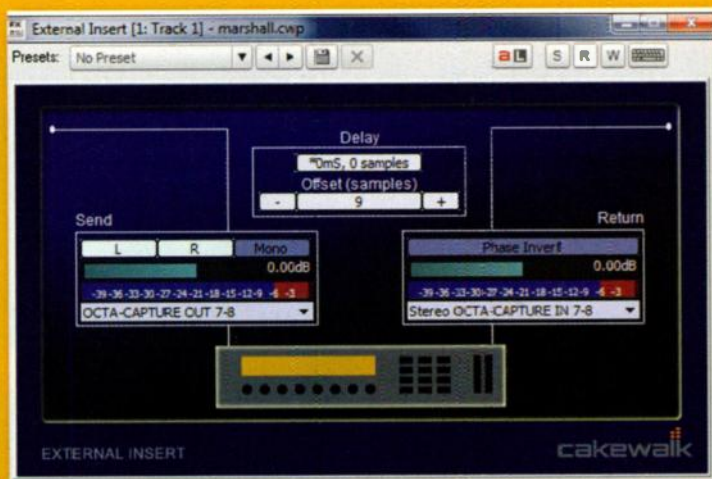


Fig. 5. Sonar X1's external insert plug-in routes a channel's signal out of the DAW, into a hardware effect, then returns the signal to the DAW channel.

Although some people treat analog vs. digital as some sort of technological holy war, you don't have to buy into the hype.

play back the track where you recorded the final mix.

And if your mixer doesn't have moving faders, you can do a sort of "pseudo-automation." Start mixing; if you make a mistake partway through or miss a move, locate your DAW to a place before the spot where the mistake occurred, then set up your faders, pan, etc. the way they're supposed to be. Start playback, punch before the mistake, then carry on with the mix from there. Even better, once you have the perfect mix, it's now in two tracks of your original project. When you save the project, you also save your mix.

Integrating Hardware Effects As your mixer will almost certainly have aux buses, it's easy to add aux effects like hardware reverb units. But even without a mixer, it's not hard to add hardware effects to individual DAW channels. Most DAWs have some kind of "insert" plug-in that looks like a standard

plug-in, but acts like a virtual insert (see Figure 5). It routes the channel's output to a hardware interface output, which you patch to a hardware effect input. The effect's output patches to an unused interface input, which then returns to the insert plug-in and proceeds to the DAW's mixer. The DAW will typically "ping" this effects loop, and compensate for the additional latency introduced by going through another stage of analog interfacing. However, note there is one limitation: You can't do a faster than realtime bounce through hardware; any track bounces need to be done in real time.

"Hybrid" Isn't Just For Cars Although some people treat analog vs. digital as some sort of technological holy war, you don't have to buy into the hype. Simply choose the right tool for the right job. Sometimes you'll get the best results by embracing both analog and digital technology. ■

Best of the Best

The new Electro 4D features everything from the award winning Electro 3 series, adding a brand new set of physical drawbars, the tone wheel organ engine from the Nord C2D and USB-MIDI - all in an ultra portable package sporting a 61-note Semi Weighted Waterfall keybed.

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Dynamic Duo

Discover how advanced live-mixing techniques such as sidechain and parallel compression can polish a performance

BY STEVE LA CERRA

IN THE July issue of *Electronic Musician*, we looked at basic dynamic processing. This month, we'll explore advanced techniques for compression.

Watch Yer' Bottom End Many compressors feature a "sidechain," which acts sort of like a remote-control path. The compressor "listens" to the sidechain, compressing audio based on the sidechain input. Usually, the signal in the sidechain is the *same* signal being compressed, but what if we could trigger compression by sending a *different* signal to the sidechain?

Here's an example: You patch a compressor on a guitar channel and use an aux send to route the lead vocal to that compressor's sidechain. Now the vocal controls compression on the guitar track. Every time the vocal

enters, the guitar level is automatically ducked down a bit (thus the term "ducker"). Attack and release times are usually set fast, so that as soon as the vocal starts, the guitar level drops and vice-versa. This technique is used in radio commercials to create a "donut"—an ad spot where music automatically drops to background levels when the voiceover enters and becomes louder when the voiceover ends. You can use that technique in karaoke situations where you want the MC's voice to duck the music.

Sidechain filtering is useful when compressing signals with strong content in a particular frequency range. If you compress the L/R mix of a dance track, you may find that every time the kick drum hits, it sucks down the level of the lead vocal. That's because the compressor is sensitive to the low-frequency

energy from the kick. The cure is to apply a filter to the sidechain and remove some of the low frequencies (say everything below 200Hz). Filtering the bottom end stops the compressor from reacting every time a kick drum hits.

A de-esser is actually a compressor with an EQ'd sidechain. The sidechain has an EQ boost in the upper mids and highs (say anywhere from 3.5kHz up to 8 or 9kHz), making the compressor very sensitive to sibilance. Every time there's an "s" sound, the compressor attacks it and brings it down, but other sounds do not trigger compression. It's worth repeating that the sidechain is *not* the audio path. When you see a button labeled "sidechain listen" on a compressor, it lets you temporarily hear the signal that is triggering compression.



Fig. 1. This screenshot shows parallel compression applied to drum tracks in Pro Tools. Sends are used to route the drum tracks to an Aux track labeled "CmprDrms" (Compressed Drums). This track has a compressor (Kramer PIE) plug-in inserted, creating a new compressed version of the drums which is mixed in with the original drum sounds for a unique effect.

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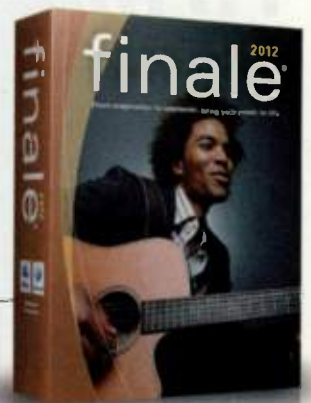
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Parallel Worlds Another interesting technique is known as parallel compression, whereby multiple versions of the same signal are processed differently. A popular application is to have two versions of the drums in a mix: the 'normal' version and then a super-compressed version. Adding the squashed signal into the mix helps stabilize the drum kit's level and adds body without sucking the life out of them. If you want to get nuts, you can compress for distortion as discussed in the July issue. With a hardware console, you'll need to route the drums to the L/R master as well as to a bus or aux out. (In live applications, I find it easier to use a bus output—two for stereo.) In the case of the bus out, patch the compressor on the bus insert and set the compressor for a low threshold, fast attack and release, and high ratio. Assign the bus faders to the L/R master and mix to taste. You can also use an aux send to feed the drums to a compressor and return the compressor back into an unused channel

where you can add EQ; if you crank the lows at 100Hz and the highs at 10kHz on the compressed signal, you have what is known as the New York Compression Trick.

Usually, the signal in the sidechain is the same signal being compressed, but what if we could trigger compression by sending a different signal to the sidechain?

To do this in a DAW, create an aux send on each channel and route it to a new aux input channel (see Figure 1 on page 98). Insert a compressor on the aux channel and feed the drums to the aux sends. The aux sends are set pre-fader so that moving the drum channel faders does not change the compression. Set the compressor to

squash, and you're in business. In a DAW or digital console, you'll have to beware of latency, which can at times cause phase problems between the original tracks and the compressed tracks. This is due to the fact that the compressed versions are processed an extra step, which may result in a slight delay. If the DAW has automatic delay compensation, turn it on. If that doesn't solve the problem, record the processed signal, zoom way in on the original and processed tracks, and manually move the compressed track until it lines up with the original.

Next time we'll check out advanced gating techniques. ■

Steve La Cerra is an independent audio engineer based in NY. In addition to being an Electronic Musician contributor, he mixes front-of-house for Blue Oyster Cult and teaches audio at Mercy College White Plains campus.

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TRUEBLOOD

“In *True Blood* . . . we have a certain sound in the vampire bar that’s sort of electronic metal goth, and we use that fairly regularly in small doses. Coming into next season, we’ll be looking for more of that.” —Gary Calamar

viewing space. Calamar and his company GO Music are right there riding the wave. He currently oversees the music for HBO’s *True Blood* and Showtime’s *Dexter* (which started its seventh season on September 30), but his list of credits includes *House* (FOX), *Weeds* (Showtime), *Entourage* (HBO) and the films *Varsity Blues* and *I Love You Phillip Morris*, among others. Tune in to his radio show on Sunday nights, and you’ll hear a wealth of indie and alternative music. So how does he choose what to pitch to the producers he works with, and what can you do to get your music in front of him?

“I get bombarded,” he admits, “so I don’t really have a formula. I read a lot of music publications and blogs, and I listen to my colleagues at KCRW and Sirius XM—I just try to keep my ear to the ground as much as I can. But if you’re not out playing or getting press, there are licensing companies that I’d recommend if you want to join forces—companies in L.A. and New York that are in tune with what projects are going on. It’s still very tough for them to get music in, but to have them as an ally is a valuable thing. I’d hate to leave anybody out, but there are companies here like Natural Energy Lab and Sugaroo and Secret

Road that all do great jobs, and represent different types of artists.”

Each show tends to have its own musical flavor as well, depending on the locale or the storyline. *Dexter*, for instance, because it takes place in Miami, licenses a fair amount of Latin music, but composer Daniel Licht also plays a prominent role in setting the show’s mood. “I will say we visit some strip clubs in the new season of *Dexter*,” Calamar says, “so we’ve got some appropriate music for that. But the music isn’t quite as much of a character as it is in *True Blood*. For instance, we have a certain sound in the vampire bar that’s sort of electronic metal goth, and we use that fairly regularly in small doses. Coming into next season, we’ll be looking for more of that.”

These days it’s no mean feat to get your music placed in a popular show. Not only is the competition fierce, but the deluge of new artists getting into the game has exerted downward pressure on the fees they and their publishers can demand. On top of that, network producers and music supervisors will sometimes try to use the promotional value of a show as a selling point, especially if their licensing budgets are small. Calamar is lucky enough to have

some leeway with HBO and Showtime when it comes to going after the big names; case in point: the song “Let’s Boot and Rally,” which Calamar wrote himself and recorded with Iggy Pop and Best Coast’s Bethany Cosentino, for a recent episode of *True Blood*. But he’s always willing to give new artists a shot if they’ve done the hard work to build some buzz.

“Again, it’s easy for me to say, but it’s good if you’re not only pitching your music to music supervisors, but also playing out at clubs and getting some press and getting some airplay. Sooner or later, you’re gonna come to my attention, and then if it’s appropriate, you’re in. I do like to use bands that have things happening on their own, because it’s always nice to have some additional excitement going on around the music.” ■

Bill Murphy is a freelance writer based in New York City, and a regular contributor to Electronic Musician and Bass Player.

**More Online**

Read more on GO Music and the licensing companies.
emusician.com/november2012



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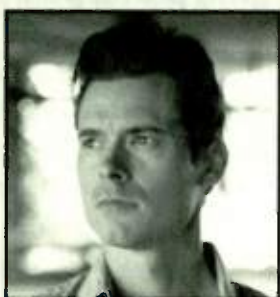
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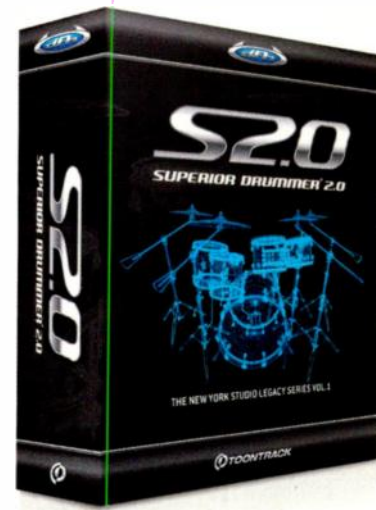
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The Audio Bond

Take collaboration and social connection to new heights with SoundCloud

BY KYLEE SWENSON GORDON

WHEN SOUNDCLLOUD was first founded in 2007, sound designer Alexander Ljung and musician Eric Wahlforss aimed to create a tool that key players in the music industry could use to share tracks. But within a few months, it was giving MySpace a run for its money as the premier online social audio platform.

Based in Berlin, London, and San Francisco, the company's 100-plus employees uphold SoundCloud's mission to "unmute the web." By allowing its 15 million registered users to create, record, promote, and share their sounds easily, SoundCloud connects producers, artists, and fans in unprecedented ways.

London-based Music Relations Content Manager (and musician) David Adams knows the ins and outs of SoundCloud as a tool for producers and artists. Here, he relays some creative tips to unleash the potential of the platform.

How can SoundCloud help musicians and producers increase exposure and opportunities in ways that other sites can't?

SoundCloud allows sound creators to instantly record or upload original audio content; embed sound across blogs and social networks such as Facebook, Twitter, and



David Adams at Millennium Stadium in Cardiff, Wales, for the 2012 Olympic Games soccer tournament.

Pinterest; share publicly and privately; receive detailed analytics; and get feedback from the community directly onto the waveform.

An artist's voice is a powerful tool: Beyond the realm of beats and lyrics, musicians can interact with fans using audio announcements, tour diaries, or recorded messages. To discover other ways artists can use their voice, this SoundCloud 101 gives some great tips [soundcloud.com/101/artists-voice].

Another way musicians can increase engagement with fans is through timed comments. It's not just a place for fans to leave comments but for artists to interact directly—they can reply to fans, leave in-depth commentary around their music, and share a link within the waveform for more context. Our community building 101 has some great tips on the subject [soundcloud.com/101/community-building].

Producers can create music on DAWS such as Pro Tools and then post straight to SoundCloud. What are some other partnerships musicians will find helpful?

SoundCloud has an open API that has allowed for numerous integrations to help artists throughout the lifetime of their music—from the first stage of exporting tracks directly to

SoundCloud to other integrations that help with distribution, marketing, and analytics.

With SoundCloud baked into Pro Tools 10, audio producers from all fields can share their sounds privately with collaborators for feedback or share polished works with the world. Furthermore, once a musician has his music on the web, Flavors can help build out a website featuring their sounds at a low cost. Integrations with services such as TuneCore and CD Baby give access to distribution channels. And integrations with Webdoc and Thinglink allow musicians, and their fans, to share sounds in expressive ways.

There are more third-party tools appearing all the time, such as Email Unlock, which allows musicians a free service to collect emails with a shareable HTML5 widget in return for a download, using SoundCloud to connect their sound to the service.

Is it risky for artists to share raw, unfinished tracks with fans well before the songs are mixed, mastered, or even fully constructed and polished?

Sharing a regular stream of ideas shows another element of how artists can provide fans further access. For instance, Deadmau5's f*ckmylife profile [soundcloud.com/

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[fuckmylife](#)] shows an artist giving fans further insight to his creation process. There are no limits to how an artist can interact and collaborate with a fan from here, such as Deadmau5 using a fan's vocals as part of the track "The Veldt."

Snoop Dogg and 50 Cent have also shared ideas and collaborated with fans. Case in point: 50 Cent tweeted out a link to a freestyle and then asked producers to finish the track. [[soundcloud.com/50_cent/for-the-producers-ghetto](#)].

Artists can also create simultaneously with fans. Madeon is a great example with his *24 Hour EP* project. He asked other music creators to create a three-track EP in 24 hours, which he shared through SoundCloud.

Fans use SoundCloud to listen to music for free. Does the service help artists monetize their music?

In addition to partnerships with CDBaby and TuneCore, SoundCloud offers customizable "buy" links where an artist can add a call-to-

action URL to activate fans. Options for this type of link include our integrations with:

Ganxy: [soundcloud.com/apps/ganxy](#) (Sell through iTunes, Amazon, and direct to fans with Ganxy, all from a single SoundCloud Player)

Vibedeck: [soundcloud.com/apps/vibedeck](#) (Sell or share your tunes direct to your fans quickly, easily, and professionally)

DIY: [soundcloud.com/apps/diy](#)

Goodsie: [soundcloud.com/apps/goodsie](#)

Gumroad: [soundcloud.com/apps/gumroad](#)

The SoundCloud platform also offers key stats to artists so they can know who, when, and where their fans are listening to their sounds. The metrics show where fans are listening via location to help artists with tour routing and marketing/release plans. The stats also show where artists' sounds have been embedded by blogs, giving them opportunities to follow up for further

editorial coverage. Find out more about stats on SoundCloud with this 101 [[soundcloud.com/101/stats](#)].

What's a common mistake bands are making these days that they could avoid?

I don't believe there is one common mistake artists make, as it's always about learning and understanding what works for them as a creator and what connections best suit their fans. My parting advice to a band is to always be ambitious and curious when it comes to how they use SoundCloud. A great place to learn more about ways of utilizing SoundCloud is the 101 section of our site [[soundcloud.com/101](#)] or to find out more about companies that are integrated with SoundCloud in our app gallery [[soundcloud.com/apps](#)]. ■

Kylee Swenson Gordon is a writer, editor, and musician based in Oakland, CA. In addition to making music with her indie-pop band Loquat, she's a frequent collaborator with EDM producers.

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Ableton Live

Process audio within specific frequency ranges

BY CRAIG ANDERTON

OBJECTIVE

Spread mono signals to stereo without using delays, process specific instrument frequency ranges without affecting other frequency ranges, and more.

BACKGROUND

Ableton Live's Multiband Dynamics processor can also serve as a three-band frequency crossover. Creating three parallel, identical tracks with Multiband Dynamics, then soloing different Multiband Dynamics frequency ranges, allows processing individual frequency bands.

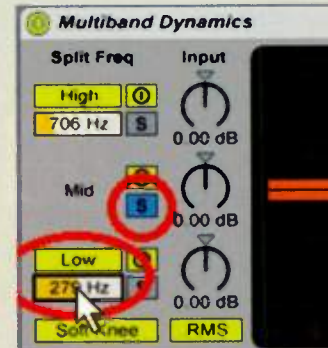
TIPS

- Steps 2 and 3: If needed, readjust the High and Low parameters so each band covers the desired ranges.
- Step 5: This composite screen shot shows the solo buttons for each Multiband Dynamics processor.

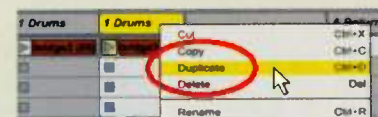
Step 1 Insert the Multiband Dynamics preset into an audio track, then click on the B(elow) and A(bove) buttons to verify that all thresholds are at 0.00 and all ratios are at 1:1.00.



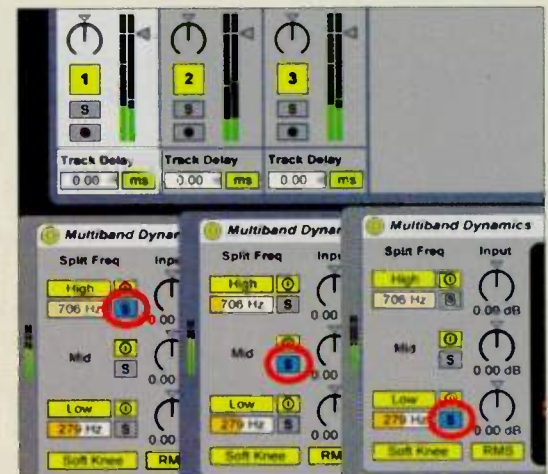
Step 2 Solo the high-frequency band. Click the High parameter, then drag up/down to set the desired high-frequency band range.



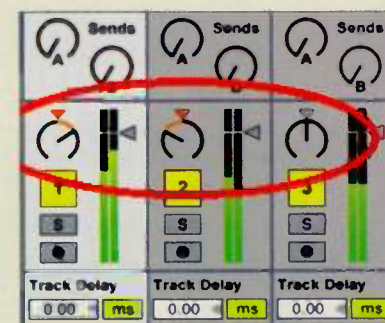
Step 3 Solo the mid band. Click the Low parameter, then drag up/down to set the mid band's lower frequency limit. Solo the Low band to verify the low band's frequency range.



Step 4 Right-click in the track name and duplicate the audio track. Do this again to create three tracks total.



Step 5 Solo the High band for the first track, the Mid band for the second track, and the Low band for the third track.



Step 6 Pan each frequency range as desired (shown), process the tracks individually, use different send effect amounts for each frequency band, etc.

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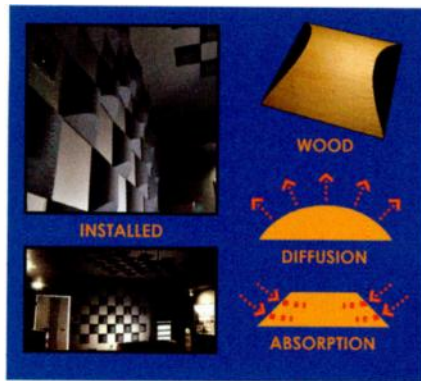
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1

The DX7 Rhodes

Remember how the first time you heard it you were astonished by its almost-transcendent sound quality? And how it still sounded great after you'd heard it a few dozen times? And how after hearing it for the 34,554th time on yet another truly horrific new-age album like *The Celestial Yoga Dream Faeries of Spirit Bliss*, you never, ever wanted to hear it again?

2

Gated Reverb on Drums

Steve Lillywhite and Hugh Padgham didn't invent gated drum reverb, but hey, we'll blame them anyway. Why? Because they made hit records with Peter Gabriel highlighting that sound, so copycats concluded that using gated reverb would give them hit records. The fad came to an abrupt end when they realized that *being Peter Gabriel* would give them hit records. And they weren't him.

3

The Fairlight Sampled Shakuhachi

It added a cool ethnic flavor at first. But then you heard the same attack every time it played. The same opening flourish. The same breathy sustain. The same inelegant fade in glorious 8-bit fidelity. And that's when you sadly realized that sampling *definitely* had its limitations—as did the people who kept using it. Over and over. And over.

4

Vinyl Crackle Samples

There's an old Hollywood saying: "Above all, you *must* be sincere. Once you can fake that, you've got it made." So in that spirit, let's add an air of authenticity with something *totally fake!* The ultimate irony, of course, is advertising vinyl-crackle samples as "recorded in pristine 24-bit, 96kHz quality." I *must* be missing something.

5

The TR-808 Handclap

Hip-hop? Sure! Techno? Yeah, why not. But then the clap started showing up everywhere: Rock music that should have known better. Icelandic whaling songs. Poison's comeback album of Sinatra ballads. Monistat commercials. Yes, that infectious 808 clap spread like . . . well, you know.

ON
STAGE.
THE GO.
STOP.



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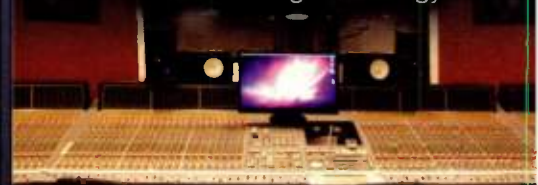
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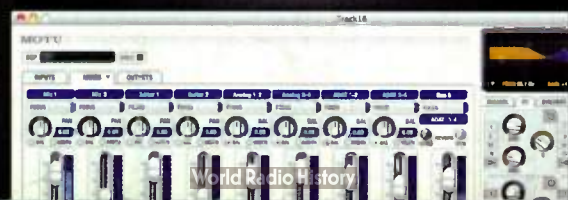
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