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**World Radio History** 

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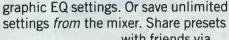


## PreSonus' new Smaller size. Lower price. Even big

Why settle for a mixer that just mixes when you can have a finely integrated system that gives you

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with friends via email. IM. or disk swap. Fine-tune Fat Channel and graphic equaliser settings with a rich graphic user interface.

trackrecording



Anywhere in the venue is "front of house" after you download StudioLive Remote free from the Apple App Store. Onstage musicians can adjust their own aux mixes: when you 2-click multi-

do the math. multiple iPads and StudioLive Remote are

cheaper than most "personal monitor systems" and do a lot more. This is an elegant

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

Capture offers simple cut-and-paste editing

tools but for really sculpting your recordings. we've includ-



#### ed Studio One Artist™

1.6. Created by veteran digital audio workstation programmers,

it's easier to use and way more powerful than anything that ships with competitors' desks. A one-window GUI and drag-anddrop functionality frees you from tedious pull-downs and pop-ups so you can focus on creating music.

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

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

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StudioLive 24.4.2

StudioLive 16.4.2



metal drummer or screaming vocalist.

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

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

and QR code symbol at the start of this ad), visit our Web site for an excruciating amount of detail, or visit a PreSonus dealer and get your hands on one today.

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

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## electronic MUSICIAN

#### COVER FEATURE

18 **The Flaming Lips** "We want people to listen to this music and feel like they're on drugs," says producer Dave Fridmann about the Lips' ongoing, multi-release recording project that spans "multitrack" YouTube videos, USB drives, and gummy bear skulls. Get the weird and wild studio backstory.



#### LISTEN

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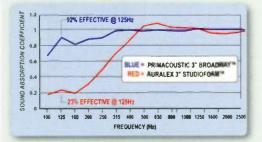
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#### Can a music program create professional, real-sounding arrangements and solos for your songs from only a chord progression?

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"Brilliant!" "All of the new say, the pedal steel is perhaps the greatest brilliant program.""The RealTracks are for creativity." "This is a great gift to jazz wow. This changes everything." "It's piece of software." "I tried with many amazingly accurate!" "This is absolutely tunes fast with help of your Audio Chord song... perfectly." "Wow!" "I am blown amazing." "Awesome." "Is this cool or won't regret it (and if you do, there's the never thought I'd see the day this was but you guys are incredible." "This is stoked about how good everything sounds "Amazing, simply amazing." "[RealDrums]

whole new species." "I'm awestruck."

ND:IN:A:BO

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As an old BE-BOPPER circa late 40s, most of the cats I played with are

player." "Can't say enough good about your products. You obviously

quickly build an arrangement for composing." "Thanks to BB

BB." "Band-in-a-Box was the solution to an old

you can't buy happiness." "This is absolutely a must-have

product." "Band-in-a-Box is now on a whole other level of

RealTracks coming!" "It blows my mind."

realism." "I was absolutely blown away at the

Box program is extraordinary!" "Your product is

forward." "Un. Believable" "I can't believe how fast

new version." "They've outdone themselves this

a-Box every chance I get." "This new musical

evolutionary. If it were a living creature, it would be a

ease and "RealTracks is by far the easiest way

is the holy grail for accompaniment software."

"Many kudos all around." "You never cease to amaze me. You got it." "Wow and Double Wow." "The RealTracks and RealDrums sound awesome." "Long live PG Music!" "Mind bending." "I am frankly amazed at most of the styles." "I am absolutely Kudos to you and your team!" "First time I did a song with Band-in-a-Box, I couldn't believe it!" "I use it in the classroom and also in creating music in my studio. It is a fantastic piece of music software to own. I am greatly impressed." "I use Band-in-a-Box regularly. It has improved my musical talents by far and I enjoy it very much. Thanks to all who have helped make this program so fantastic!!!" "I am very impressed with your fantasic Improvisational program." "It's a great educational tool." "This is the most powerful, cost effective, user friendly music software I have seen." "BIAB is my best learning tool." "J'ai la premiere version de Band-in-a-Box et j'aime beaucoup." "A truly great product!" "It's just incredible! I am a practicing jazz musician and was absolutely dazzled by your soloist feature." "Awesome software at a fantastic price!"

#### Our Customers Think So.

#### insight

#### Breaking the Rules

Many great albums are born of tried-and-true recording techniques. Certainly, plenty of situations demand approaches that yield predictable, high-quality results. But, to quote a friend of mine, "there are all kinds of pretty." So to that end, we're all about shaking things up this month:

In our cover story ("Freaky and Fearless," page 18), we find studio inspiration in The Flaming Lips, those revelers in the bizarre who continually seek new ways to shatter recording conventions (cassette 4-tracks, movie projector speakers, and cymbals behind the drummer, anyone?) and defy expectations.

And in our "Learn: Piano" column on page 86, we take a look at prepared piano, the technique of weaving foreign objects around the inner workings of the instrument to create unusual timbres. Feeling adventurous? Adding

an atmospheric or percussive element to your song can be as easy as wedging a golf tee between two strings.

Finally, Craig Anderton puts some old audio myths to bed once and for all in "Craig's List" on page 106.

Getting outside your comfort zone is the only way you're going to grow. Remember, technology is there to serve you, not the other way around. Break some rules, take some chances, embrace your mistakes. You'll be better for it.



SARAH JONES
EDITOR
sjones@musicplayer.com

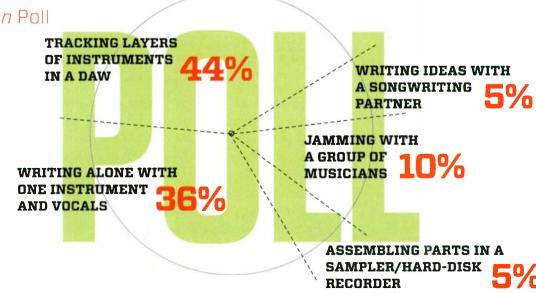
## COMMUNITY

"IT IS DEPRESSING TO
THINK THAT, IF MOZART
WERE ALIVE TODAY, HE
WOULD UNDOUBTEDLY BE
KNOWN AS WOMO."

British conductor Lev Parikian, on Twitter, May 20, 2011

#### The *Electronic Musician* Poll

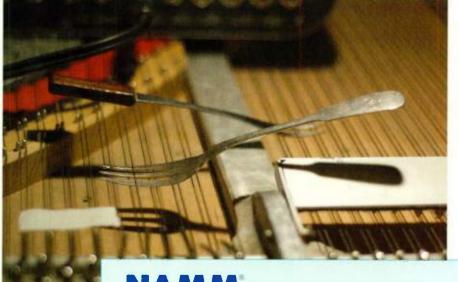
## WHAT'S YOUR SONGWRITING PROCESS?





## Prepared Piano: Send Us Your Pics!

DO TRY THIS AT HOME! You can create some pretty wild and wonderful sounds by inserting unusual objects in the strings of your piano; to learn more about prepared piano techniques, read our Learn column on page 86. Send us pictures of your experiments; we'll print our favorites in an upcoming issue! Email ElectronicMusician@musicplayer.com.







#### **SUMMER NAMM OPEN TO THE PUBLIC**

Hey Nashville! Itching to get your hands on the latest and greatest music gear? If you have 20 bucks, you can check out the Summer NAMM Show on Wanna Play Music Day, July 23rd. In addition to roaming the exhibit halls-formerly accessible only via an industry-insider badge-you can check out production workshops, sound-reinforcement clinics, and a whole lot of killer live music. While you're there, check out Guitar Player's Guitar Superstar competition, hosted by Larry Carlton. Info at namm.org/summer/2011/wannaplay. See you in Music City!

#### BY THE NUMBERS

#### POP SHOPPING



149,501,966
official views of Rebecca Black's
"Friday" in its first three months
on YouTube

#### \$24,900

estimated weekly net sales generated by "Friday" at its peak, through iTunes, CD Baby, and Amazon





## How do your music media purchases break down?



Praveen Lakkaraju
100% downloads
... for a normal ear,
there's not much
difference from
CD and AIFF, or at
least the difference
is low enough for
convenience to take
precedence.



Gino Sigismondi
I try to buy vinyl
when possible,
because I like to
feel like I'm getting
something tangible.
I enjoy the process
of sitting down in
front of the stereo,
putting the needle
on the LP, looking at
the cover art, etc.



Emmy Sonatina
I would think folks
would want to
choose quality
over convenience,
if they know it's
available and
worth it.:)



Carl Hardwick
I only buy CDs
... ever. I want
the best quality
and MP3s are
taking us back
to the quality
of 8-tracks! No
thanks.

#### YOUR TAKE

#### What's your favorite trick using a ribbon mic?

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

on drums. I love the rich, natural sound it gives to the vintage kit. It really focuses on the "thick" part of the toms! It also diminishes some of the "dreaded digital cymbal shred"—*i.e.*, transients that can be troublesome in our digital world. The figure-8 pattern on the ribbons also cuts down on excess room reflections. I can usually get a fair representation of the kit with two ribbons on overheads, a kick (D12, D112, RE20), snare (DPA4099 or Shure B57) and hat mic (josephson C42). In a live setting, I always use ribbons on guitar amps . . . particularly Fender thru a Fender amp; very nice tone! MICHAEL FELDMAN

Send Electronic Musician Your Stories, Win Gear! Talk to us! Share your tips with Electronic Musician, and we'll print our favorites in an upcoming issue. And if we choose your letter, you'll win sweet gear! This month, we're giving away an Audio-Technica AT2020 USB side-address studio condenser mic with tripod desk stand, pivoting stand mount, USB cable and storage pouch. Contest open to U.S. residents age 18 and over.

NEXT MONTH'S QUESTION: HOW DO YOU RECORD USING THE NATURAL ACOUSTICS IN YOUR HOME?

Send your answers to ElectronicMusician@musicplayer.com.

World Radio History















#### DIG MY RIG

AISLIN, By definition, means "dream" or "vision." We are a digital recording studio, located in Nixa, Missouri. I just got started: just built this studio in December 2010/ January 2011. I am off to a good start, and ready to book clients. The studio was built by Arlis Moon of Oklahoma, and is run by me, Matt Grojean (studio and touring musician for Rookie of the Year and Neal E. Boyd).

**Matt Grojean Aislin Recordings** Aislinrecordings.com



Studio One Pro's Multiband Dynamics processor is providing a little bit of compression in the upper midrange (1.2 to 4kHz), and a slight volume boost (no compression) above 4kHz.

#### ask!

When would you use a multiband compressor instead of a standard type? I understand multiband compressors are used for mastering, but what about for vocals, drums, etc.? What makes them better than standard compressors?

**MATTIAS SCHNEIDER, HAMBURG, GERMANY VIA EMAIL** 

Whether a multiband compressor is "better" or not depends on the application. With a standard, singleband compressor, any signal that exceeds the thresholdregardless of frequency-will trigger compression. For example, a strong kick drum could affect the cymbals and hi-hats. Multiband

compressors split the signal into multiple bands (typically four or more), and each band has its own compressor. Compression can occur in one band independently of any other band.

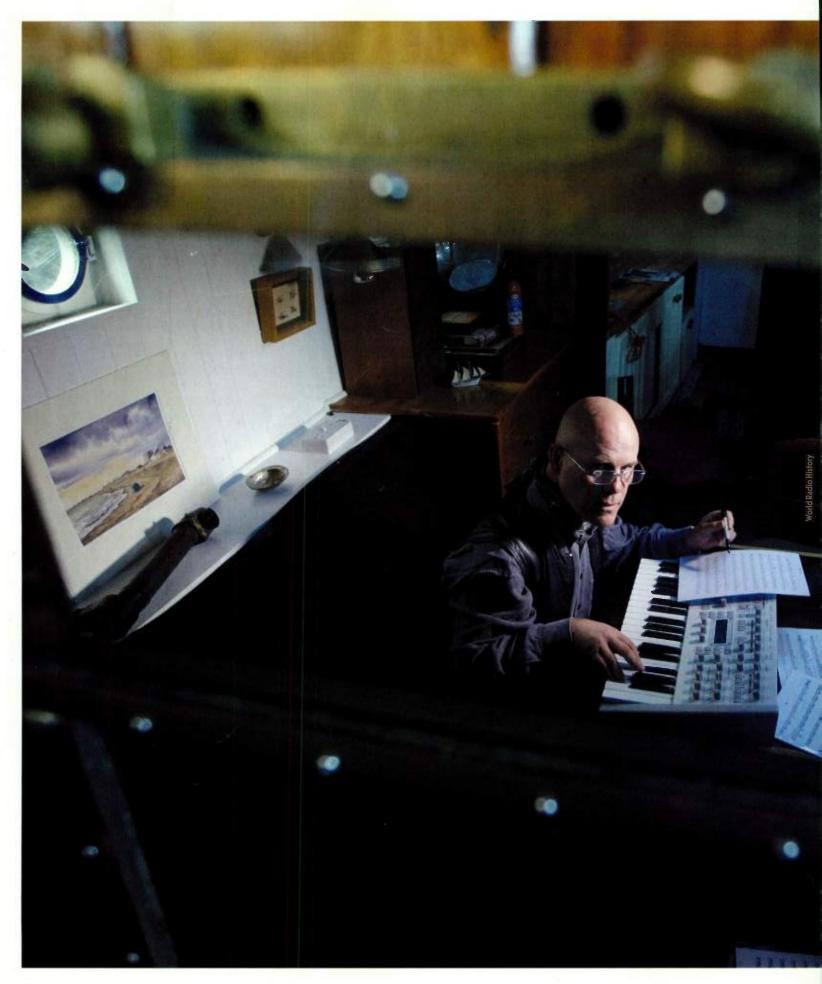
Multiband compressors are popular for mastering, because they can handle complex program

material where there's energy spread across the audio spectrum. However, they can also be effective with individual instruments-like slap bass, where you might want to compress the lower frequencies for a "rounder" tone, and use the upper band not to compress the slap, but simply

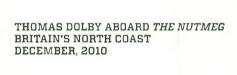
reduce its level.

Another trick is to set multiband compressors so they don't compress, and use them as crossovers for multiband processing. This issue's Power App (page 102) shows how to use Logic Pro 9's multiband compressor plug-in to create multiband distortion. THE EDITORS

Got a question about recording, gigging, or technology?



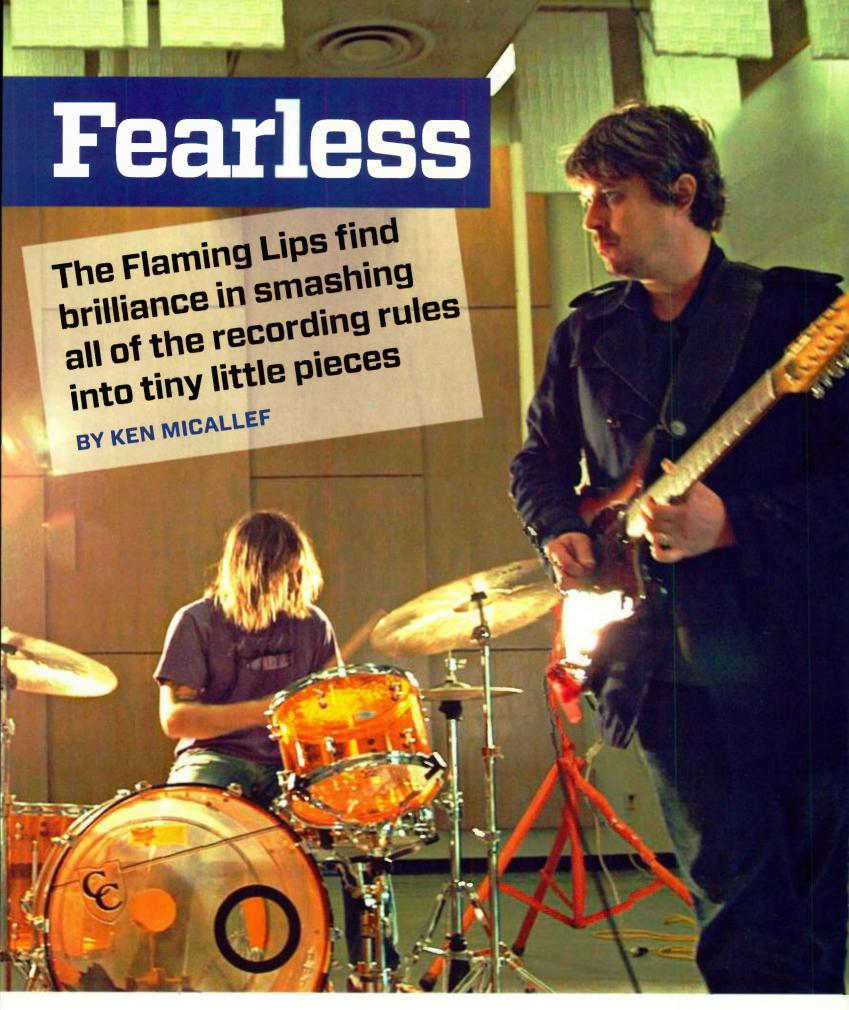




Thomas Dolby's backyard studio, the Nutmeg of Consolation, was once a lifeboat on the British merchant vessel Queen Ann stationed in the South Seas. Now, it's dry-docked behind Dolby's seaside home on Britain's North Coast. "I wasn't able to have the proverbial garden shed with a studio in it," says Dolby, who found the boat on eBay and outfitted it with Avid Pro Tools LE; Nord Lead 3, Casio, Access Virus TI Polar synth, and CME UF Series keyboard controllers; Millennia Origin channel strips; and an AKG C414. Solar panels and a wind turbine power the rig: "On a very windy and sunny day, I can work ten to 12 hours."

PHOTOGRAPH BY JANA CHIELLINO





e worked with a producer once who had worked with Michael Jackson," Wayne Coyne recalls from his home in Oklahoma City. "He said that while Michael

Jackson was singing in the studio, he'd be dancing; his feet squeaking on the floor would make these noises. When they'd turn off the vocal track, those noises and that inherent funkiness would be gone. It's because Michael Jackson was so alive and into it. He's tapping his jeans and his shoes are rubbing the floor—those noises aren't something that you try to leave out. Michael Jackson knew that. He would take chances. Noises are part of the atmosphere of the music, and the reason the music is being made."

The noises, the atmosphere, the music, and the absurdity of it all have made The Flaming Lips one of the most influential and innovative groups of the past 20 years. While other rock bands have collapsed and major labels have crumbled, The Flaming Lips and their loyal Warner Bros. backers have extended their unique brand of colossal head music. The Oklahomabased band rarely bothers to record live together anymore, preferring to record snippets of basic tracks in their individual home studios (a TASCAM 4-track for Coyne, Pro Tools for bassist/engineer Michael Ivins, a bevy of stomp boxes through Pro Tools and Propellerhead Reason for multiinstrumentalist Steven Drozd). Files are then handed off to longtime producer Dave Fridmann, who, both with the band and without, further warps the music at his Tarbox Road Studios in upstate New York.

"They create their parts at Wayne and Steven's rehearsal places," Fridmann explains. "Michael

engineers the sessions. They bring it to me, and we add weird sounds on top of that. It's a deliberate attempt to not overanalyze what we're doing and really just get to, 'Do I like it? Do I not like it?' A lot of times you think, 'That's cool; maybe we can apply this filter to create this other juxtaposition.' No. We like it or not. If you like it, we're moving forward."

After magnificent malcontents like At War with the Mystics (2006), Embryonic (2009), and The Flaming Lips and Stardeath and White Dwarfs with Henry Rollins and Peaches Doing The Dark Side Of The Moon (2010), The Flaming Lips threw off those shackles that bind. Earlier this year The Flaming Lips pronounced plans to release new music every month for a year. February saw "Two Blobs F\*\*king," followed in March by the 12" EP, The Flaming Lips with Neon Indian, a collaboration with synth stylist, Alan Palomo. The Flaming Lips 2011 Gummy Song Skull (with internal USB stick) followed, a seven-and-a-half-pound edible gummy bear skull of all Lips music. The band plans to collaborate with Panda Bear, James Murphy, and Jimmy Page (who wants to work in-studio with the Lips, eschewing Internet file sharing); completed collaborations include The Flaming Lips with Prefuse 73, Lightning Bolt, Ghostland Observatory, and Black Moth Super Rainbow. The Lips/Prefuse 73 12" recently hit the streets; next up: a "little fetus" (Coyne) of Flaming Lips music. And if you look fast, you can find all of this music on the Internet, for free.

Coyne's description of Rhode Island duo Lightning Bolt as "a psychedelic freakout band" also applies to the current Flaming Lips projects, collaborations and otherwise. Take a track, any track: Steven Drozd's Bonhamish drumming dominates a

"We don't want to use the same coloring and texture and plug-ins that you hear everywhere. It's our duty to create things you've never heard before."

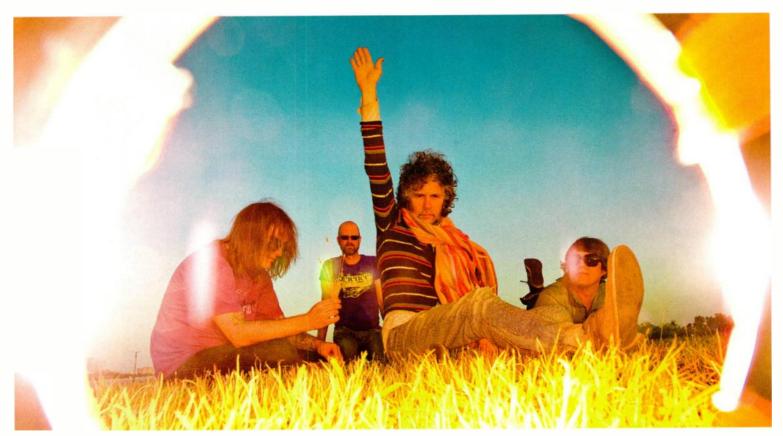
-Wayne Coyne





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mix one second, followed by the velveteen blasts of Neon Indian's vintage synths, or the eclectic Dadaesque cut-ups of Prefuse 73 (Guillermo Brown), and dripping guitars worthy of Jimi Hendrix's version of the "Star Spangled Banner."

"It isn't so much a sonic thing as creating something ethereal, or simply an art project," Fridmann says. "Listen to this, and hopefully you're going to feel like you're on drugs. Elements of the production are live, some are not. It's like how [Miles Davis'] In A Silent Way was all edited together. In some ways you don't know what the final result is going to be until it's done."

Coyne confirms the band's nearly instant music approach, and the inner workings of his brain that put them there. "Unless you're just a complete egotistical f\*\*king fool you always run into this dilemma of thinking 'This is great,' and ten minutes later you think, 'This sucks.' We're trying to create music in a realm where you're slave to your subconscious saying, 'Take me away, let's see what happens.' The minute you do that you're a slave to this other dimension of thinking that's very critical. You hope that you'll get hypnotized. But if I had any regrets about what we're putting out, well, it's just too f\*\*king late."

**Creating the Embryo** Flaming Lips tracks can begin anytime, anywhere, and often do. "Sometimes I will be at Steven's and we'll literally just play a piece of a drum track, and then loop it and add a bass track," Coyne says. "Then we turn both of those into a loop. Some of this began on my TASCAM cassette 4-track. If I like a minute out of something, I'll put

it into Pro Tools with Michael [Ivins] and we'll turn that minute into a couple of minutes of a groove. Other times we just play something for 20 minutes and we record. There's no process that is out of bounds, but it's all about listening.

"I sent Prefuse what I thought were finished tracks and he found a way to do something," he continues. "Then we took the end of one of his tracks, just a loop of a string line, and turned it into another track. That became 'Guillermo's Bolero.' Some things happen in a moment; that's the spirit we like to be in. Some of this we will regret, so what! But sometimes I regret *not* doing something. You can never live completely satisfied."

Fridmann and the Lips use any means necessary to create the feeling of drug-induced psychological transportation: extreme/minimalist miking techniques; vocals recorded on handheld tape recorders into a Korg Kaoss Pad or one of Steven Drozd's vintage stomp boxes; running entire mixes through a Vox AC30 amp with what sounds like a torn speaker; destroying a mix by overloading synthesizers; extreme panning to create "a drum set heard down the hallway" effect (Fridmann). Fridmann lays the responsibility on Coyne, Coyne credits Drozd's stomp box collection.

"Steven's distortion pedals provide a complimentary tone to my voice," Coyne says. "Like I'm from some other dimension. That's where most music gets its power. Even a Beatles track like 'Strawberry Fields Forever,' you think, 'What the f\*\*k? Where is Lennon's singing coming from?' It's more electronic than the electric guitars."

Drozd's 50-plus collection of guitar pedals

"Why not put a microphone 30 feet away from the scene of the crime?"

-Steven Drozd

provides part of the Lips' arsenal. An avoidance of damage control provides the rest. "I have a lot of old stomp boxes," Drozd says on the phone from Newark International Airport, where his ticket to Dublin has gone missing. "Nothing too crazy. A Systech Harmonic Energizer for one. It's really just a bad overdrive pedal with a crazy filter. We also used a Roland [AG-5] Funny Cat [Harmonic Mover & Soft Distortion Sustainer] from the mid-'70s. It's a fuzz pedal with compression and an auto wah feature. There's a separate EO frequency area for the auto wah. The Musicmaster bass through the Harmonic Energizer is a wicked combination. And we ran guitars through the Funny Cat a lot, but not a whole mix. On 'In Our Bodies Out Of Our Heads' (Gummy Skull), that dripping, melting guitar sound is actually a Pro Tools plug-in. Some kids think I am running 20 crazy effects custom-built for me, but sometimes it's actually just a Pro Tools plug-in. We use a healthy combination of those with old stomp boxes."

Tarred and Flaming Dave Fridmann's Tarbox Road Studios offers gear both vintage and contemporary, including an Otari Concept Elite 40x24 with Total Recall Eagle Automation, Neve 24 input 5104, Otari MTR-90 II 24-track recorder, EMT plate reverbs, an old pair of Ashly GQX-3102 stereo 31-band EQs (his favorite distortion tools), and an otherwise stunning collection of microphones, editing tools, preamps, effects, amps, and instruments. (Learn more at tarboxroadstudios.com.) But the concept is heavymental when the Flaming Lips arrive. Starting with miking placement.

"It's very limited miking," Fridmann says. "We used the [Shure] KSM44s quite a bit, frequently through the Otari's preamps. My technician, Greg Snow, has endlessly modded [Ampex] 351 mic and 610 mic pres. He labels the switches, 'Don't touch this!' or 'Danger!' Of course, we touch them all. They're just ginned up so if a mouse whispered in China it would blow up your speakers. If you choose anything that has any volume to it, you get a crazy sound.

"Miking-wise," he continues, "the idea is like making a cool sample of yourself. When you sample somebody else's music, you capture this atmosphere that someone else has created and apply it to your art. We create atmospheres and purposely put ourselves in these awkward situations where the drummer's cymbals are behind him, for example, so he has to play that way."

Using minimal miking when the Lips record at Tarbox Road, Fridmann practically follows antistandard approach. It's like spraying a wall with cherry pie and watching for what sticks. "We'll put the drum mic near the bass amp and the bass amp mic near the keyboard player, and put the vocal mic next to the guitar amp," Fridmann elaborates. "It's about doing some strange things to push yourself in a direction you wouldn't normally do in the studio. Whatever the book tells you to do, don't do it that way; do something different. Sometimes even to the obvious detriment of the recording.

But it creates an atmosphere, it creates a space, it creates an idea while you're making the recording that is totally different from a normal studio environment."

Like John Lennon, who famously hated the sound of his own voice, Coyne enjoys treating his vocals, but he doesn't leave it up to the producer alone. He'll sing through one thing, put it through another thing, pass it off to Drozd, and then expect Fridmann to add effects beyond that.

"Dave has these rare mics, as well as the shittiest little broken mics," Coyne says. "I prefer the latter. If I sing into one microphone, he'll place other mics around me to grab different types of air or layers or depths. The one we end up using a lot looks like something you'd see a guy in a car lot using. It's an announcer microphone [Motorola RMN 5068] that makes anyone sound like they are talking from beyond. It creates a mood. I sing through that more than the other microphones. At home it's my mic with the TASCAM 4-track, but often Steven runs [that signal] through some f\*\*ked-up DeArmond Thunderbolt wah-wah pedal that gives my voice a



Producer Dave Fridmann

"Whatever the book tells you to do, don't do it that way; do something different."

-Dave Fridmann

#### Dave Fridmann On Maintaining Mystery in the Mix

"Steven or Kliph [Scurlock] will be playing drums in a room. Down the hall it sounds cool, but when you get closer, it just sounds like drums. As long as you can maintain that mystery in the mix, whether you're behind a door or under a blanket, that's what makes it interesting. We'll catch some weird reflection in a certain spot, then try to capture that to tape. It's a weird combination of playing something the right way with the mic in the right position, with the right setting. But if you move the mic two inches over, it's gone. We create these atmospheres and possibilities other than what you'd normally have with standard miking. In that way we can effectively sample these environments and put the listener into a space immediately without having to manipulate or create that space later. That's the only space there is. You don't have to decide later, 'Oh, do we like this or not?' It's not a choice, that's all we have."

different tone. And even if we don't use the 4-track, I still run a lot of things through the TASCAM's preamp. Maybe it's a tone that not everyone likes, but I like it and I know what it is. We don't want to use the same coloring and texture and plug-ins that you hear everywhere. It's our duty to create things you've never heard before."

Fridmann used an Ampeg SB-12 head for Michael Ivins' live bass, running it through an old "Kodak movie projector speaker cabinet miked with a Neumann TLM 170," he explains. That's got this really punchy sound. It's not really just the amp, but that old speaker, it's a highly efficient speaker. It's not meant to take too much power."

Proving that he will close-mike when that type of sound is desired, Fridmann admitted to using "anything that's plugged-in" to record the guitars of Coyne, Drozd, and Derek Brown.

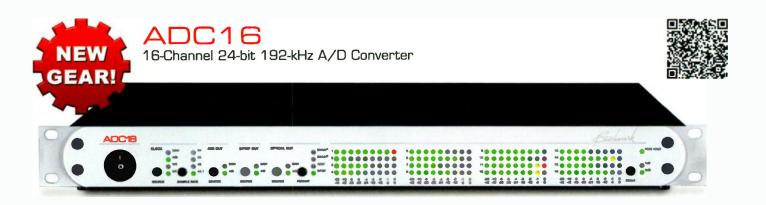
"I've been using the DPA 4006 lately," he says. "Usually pretty straight on the cone, because the sounds they come



The Flaming Lips 2011 Gummy Song Skull release features a USB stick loaded with music and buried inside a sevenand-a-half-pound edible gummy-bear skull.

#### **EQ** and Wayne Coyne

"I'm just battling back whatever Wayne's sending me," Fridmann laughs. "Sometimes he's running his mic through a guitar amp or a stomp box with the high end turned up all the way, into a Kaoss Pad. Or he's singing through a handheld tape recorder. It's pretty shriek-y by the time I get it. I mostly try to get things back into a repeatable listenable format. Often that will require multiple stages of compression and de-essing along with some heavy EQ as well. I will go back and forth: an EQ, compressor, de-esser, then another stage of those three in a row, running de-essing, compression, and EQ. I want to affect the first compressor a certain way, so I will EQ that. Then when I get the compression I want, I de-ess that, then I will go back again—I might want to take 20dB on one de-essing frequency, so I will do a broad one then a more tight one on the second round of EQ. I will do a de-esser, then another compression stage, then a final EQ. Some of this will happen on the board, some of this will happen with outboard gear. Sometimes even a plug-in. These are the lengths I go to to accommodate Wayne, but it's not necessarily the perfect way to record vocals. You have to do whatever you can to make the artist comfortable, no matter how ridiculous it may seem."



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up with are so ridiculous anyway, if I can just capture that, I am pretty good. I don't need to add any more character to those."

For the Neon Indian collaboration, Alan Palomo played what sounds like a Mellotron but is actually a Yamaha CS60 through a Vox AC30 amplifier. He also brought along (and ran direct) an ARP 2600 and a Korg MS20, and the Lips played an old Suzuki Omnichord (on the brain-dribbling, droning sonic delight, "Is David Bowie Dying?"). Often, the synths momentarily threaten the mix, then quickly take over entirely, then as quickly disappear.

"Some of that synth [overload] is intentional where you just have a couple of microphones and whoever is loudest in that channel, that's what you get," Fridmann says. "Or sometimes there are elements happening in real time, then we might decimate the mix, which could be anything from putting the entire mix through a chain of three Eventide 3000s in a row and seeing what happens. Sometimes we run the mix back out through a couple of amps and throw some pedals before that. It's a real conglomeration. Whenever we feel dissatisfied, let's do something we're not supposed to do and see what happens."

**Drum Down** Drum miking is the X factor in any Flaming Lips recording. Drums come from anywhere and are processed through anything. Though Fridmann's random technique is one option, he occasionally opts for close-miking the drums with two transducers, tops.

"Wayne, Michael, and Steven do a lot of recording at home, [but in my studio] I want to have the capability of having a normal sound if desired, so I will use a few mics on the drums," he says. "I'll usually place a DPA 4006 overhead and another one in front of the kick just because I've never done it before. Then you have a screaming Vox amplifier a foot away from the drums and a Moog going through it. So all bets are off. The miking becomes a non-issue. We'll try something to try it, but what's happening in the room is so chaotic it almost doesn't matter."

Drozd explains his various drum conceptions-miking and otherwise. "Why not put a microphone 30 feet away from the scene of the crime?" he asks. "Going back to 'Brainville' (from Clouds Taste Metallic), for example, I had three bass drums, with one tuned as the snare drum. The secondary bass drum would play the two and four usually associated with the snare drum. And my hands did nothing. That's an example of setting up in a weird way to make yourself play differently, therefore playing a rhythm you might not normally play. Two of the Gummy Skull tracks I recorded upstairs at my house with one mic. a KSM44, placed between the bass drum and snare drum ten inches off the floor. That's why those drum sound's frequency range is really small. Dave beefs it up, but it's only one mic.

"At times," Drozd adds, "I've set up two snare drums: a giant rock snare drum, and a smaller dance muffled snare. Then 'Race for the Prize' has two distinct kits: a huge Bonham kit, then an Eagles-sounding kit. I beat the wideopen drums like mad, then the soft drums I play like Karen Carpenter. I do that a lot."

Is failure an option for The Flaming Lips? Where does any band, even one as seemingly crazed and definitely as creative as The Flaming Lips find the courage to bare it all? With an ongoing year-long world tour happening concurrent with their scheduled musical collaborations, the Lips may finally be stretching themselves too thin. Or maybe that's the idea all along.

"Being fearless means you don't care if you fail," Coyne claims. "The way to be fearless is to try it. If it's safe, don't do it. If you're doing the same thing you used to do, do something different. In those times that we are at our bravest, I wake up and think, 'F\*\*k, what are we doing?' But I don't want to return to the normal rational way. I like living with the oblivion and making whatever music and saying whatever comes to mind."



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## LISTEN

## Dave Stewart

The Blackbird Diaries
Documents Wild Ride
in Nashville

BY BARBARA SCHULTZ



Stewart tracking in Blackbird Studio D.

t's an iconic group of albums that bear the name of a recording studio. The Beatles' Abbey Road, Hendrix's Electric Ladyland, and Elton John's Honky Chateau are a few . . . and after his many decades of studio work, as half of Eurythmics, as solo artist, and as producer (Tom Petty, Aretha Franklin, Mick Jagger, Stevie Nicks, Joss Stone, etc.), there's no question Dave Stewart understood the significance of calling his latest solo album The Blackbird Diaries.

In the liner notes to this made-in-Nashville, eclectic, only slightly countrified rock record, Stewart describes first meeting Blackbird Studios owners John and Martina McBride, who treated him to a great night of hi-fi listening and high-end

adult beverages in Studio D, where they would later record: "I remember being in a room with two-and-a-half thousand little sticks of wood pointing at me while *Sgt. Pepper's* was coming at me in surround sound. John was serving vintage dessert wine and laughing . . . John McBride's enthusiasm for music and recording was so infectious that I knew I had to record with him in that very studio."

Stewart proposed five days of cutting live in the studio: "... not trying to be country, just my own style, a little Dylanesque-meets-Leonard Cohen-meets-Tom Petty-meets-Lou Reed-meets-Johnny Cash-sounding kinda thing with my low vocals and some quirky Beatles-type chords and melodies thrown in." He asked McBride to put together a band of musicians who would fit his complex sound.

"I get an email from Dave that says, 'I want to make my first solo album in forever, put a band together for me. Think Neil Young *Harvest* type feel, yet a bit more ethereal." says McBride. "I'm thinking, 'Ethereal' doesn't that mean more reverb? I'm not sure, exactly."

Enter the bandmembers: drummer Chad Cromwell (actually plays with Neil Young live); bass player Michael Rhodes (a consummate country sideman and versatile, melodic player); electric guitarist Tom Bukovac (Stewart: "Tom instinctively knows not only which of his 50 vintage guitars to pick up, but hones in on the exact tone within minutes"); pedal/lap steel guitarist Dan Dugmore (McBride: "There should be a law in Nashville that he needs to be on every recording session"); and keyboardist Mike Rojas (Stewart: "He plays a grand piano like he's tickling under a baby's chin").

"John [McBride]
is somebody
who mixes
live sound; I
asked him to
engineer the
studio sessions
because I
wanted to have
that feeling."

-Dave Stewart







By phone from the office of his Weapons of Mass Entertainment business office in Southern California, Stewart says, "John helped pick certain musicians who were known for their amazing character of playing, but also because they could play improvising on the spot, and they also loved English music. It wasn't just straightforward country players. Each one of them had a huge amount of musical knowledge. And they also had all of these amazing vintage amplifiers and guitars and things. It was kind of an instrument fest."

Stewart, who says he has been inspired by vintage instruments and gear since Kraftwerk producer Colin Plank turned him on to vintage synths in the 1980s, also calls McBride's studio "Aladdin's cave of amazing equipment: vintage instruments, vintage microphones, old valve amplifiers. And John is somebody who mixes live sound; I asked him to engineer the studio sessions because I wanted to have that feeling."

With an insane amount of instrument and recording technology at hand at Blackbird, an artist/producer could spend endless hours belaboring sounds, but that is not how Dave Stewart rolls. During five days of basic tracking, he worked a "schedule" of songwriting in the late morning/early afternoon hours (either in his room or over coffee at

the Pancake Pantry), tracking with the band from 2 to 7, and pouring vodka martinis for musicians, crew, and friends in the evening. (A tip from Dave: Coconut water cures a vodka hangover.)

McBride says that working at the pace of "Dave's world" was liberating—all ideas were welcome, but nothing was "tweezed or overanalyzed." But that doesn't mean McBride didn't put a lot of care into the recordings:

"Technologywise, I went for the moon, as I like to do," McBride says. "I wanted this to be real, not a bunch of manipulated, processed sounds. I also wanted to make a record that the band would be able to play live and have it kill."

McBride says that 95 percent of his miking/mic pre choices could have been made in 1970. He used loads of tube mic pre's, because "Dave has a beautiful way of rounding things off, and analog distortion is beautiful. It sounds good to our ears, whereas digital distortion sounds like ass. I wanted to make sure that if we were going to overload a microphone or mic pre, there were tubes involved. Also, we recorded to Pro Tools at 96k so I wanted to frontload everything as analog as possible and as tube-and transformer-heavy as possible, so we could keep the warmth and the beauty and the love that I experience when I hear great recordings that have been made on tape."

"Never once in the entire process of recording, overdubbing, and mixing did I ever put one touch of EQ or compression on any guitar."

-John McBride

Just a few of the details of his miking scheme include:

Guitars: "You'll love this," McBride says.
"On [each of the three guitarists], I used one
microphone, an RCA BK5B, on each cabinet
running through an RCA BA11A mic pre. That's a
ribbon mic going through the right mic pre with
the matched impedance. Never once in the entire
process of recording, overdubbing, and mixing
did I ever put one touch of EQ or compression on
any guitar. The guitars you hear are these guys
plugging in and me hitting record. They sound
incredible! We just had great players who have
great tone, and we stayed out of the way."

McBride also notes that many of the guitars played on the album came from his studio's collection, including a 1956 Strat, a '55 tele, a 1949 Gibson SJ200 acoustic, and a 1937 Martin D28.

Vocal miking: "I had a [Neumann] U47 [mic] on Dave with a V76 mic pre. I also had, at various times, a couple of EMI mastering EQs with a [EMI] Curve Bender, and that always seemed to work well. We also used a Pultec once or twice on Dave's vocal, just for fun. His voice doesn't need a lot of EQ by any means. And we were using a really over-the-top amount of compression on Dave's vocal. I know it won't say this in any instruction manual, but I ran Dave's vocal into a [UREI] 1176 then into a Fairchild, then into an [Empirical Labs] Distressor, and then back. It's a rarity that you would chain together those three compressors, but it worked. And if it's unnatural, it's not in a negative way. It's just in your face."

Stewart also sang a couple of keeper vocals into a Shure SM7 in the main tracking room with the band: "On the song 'Beast Called Fame,' which has a big drum part—I mean loud drums, rockin' guitars—he liked the vocal he did [in the room]," McBride says. "So I took all the 10k off the vocals, because the cymbals would have killed us all, and it still cut through in a beautiful way."

McBride also kept a couple of Neumann U47 vocal mics set up for guests, including his wife, Martina, who duets with Stewart on the track "All Messed Up on Love," and The Secret Sisters, who added their harmonious backing vocals to a couple of tracks.

Other vocal guests include Colbie Caillat on "Bulletproof Vest" and Stevie Nicks on "Cheaper Than Free," a sweet love song that was co-written long-distance between Stewart in Nashville and Nicks in L.A.

"I'm sitting there in the control room, and Dave and Stevie are on the phone together writing the song," McBride recalls. "They're writing the lyrics right there in front of us, and 10 minutes later, we're recording [the band tracks]. The whole experience of being in Dave's world was like that. It's crazy, but it's crazy in a great way."







### Incubus

Brendan, Brandon, and the boys up the ante by dialing it back

#### BY BUD SCOPPA

If Not Now, When?, the aptly titled sixth studio album from Incubus, shows what can happen when an inspired, cerebral band intersects with an energized producer. The new record is the fourth on which the SoCal band has worked with Atlanta-based veteran Brendan O'Brien (Pearl Jam, Bruce Springsteen, Stone Temple Pilots), and it's by far their most surprising collaboration—not at all what you might expect from a band that was tagged as nu-metal when it started out back in the 1990s.

In a note to Incubus fans, frontman Brandon Boyd colorfully but accurately described *If Not Now, When?* as "our unabashed, romantic, lush, sonic love letter to the world. It's darker, slower, more rich, more refined, and more involved than anything Incubus has birthed to date."

"That's how Brandon talks," says O'Brien with a laugh.
"But what he has done on this record is, he has stepped up and written lyrics and melodies that invite people in. In the past, he's written songs that were introverted; he wanted you to think a lot and try to figure it out. This time, I said to him, 'Listen, you're one of the best in the business and you have an opportunity to prove that. Right now's the time, and if you guys are all up for this, I'm into it.' I told them I thought we should go about this by doing whatever it takes to put the lyric and melody and the groove above all else, and I think we've done that. Everybody stepped up, and I think these are the best songs Brandon has written in his career. Hopefully, the public will agree."

The album opens with three tracks that emphatically set an understated yet assertive tone in the elegant title song, the classic-rock referencing "Promises, Promises" and the beautifully nuanced "Friends and Lovers," which

cruises along on a deceptively powerful groove from drummer Jose Padilla II, who founded Incubus with Boyd and guitarist Michael Einziger in 1991, when they were all students at Calabasas High School. "Jose really embraced the whole idea of making everything he played mean something," says O'Brien. "The groove is super-important because it has to

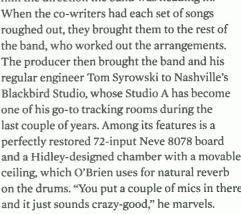
work with the vocals and the melody, and he made a conscious effort to really support the song. I think it shows."

The genesis of the new album "was just very different," says Einziger, who teams with Boyd in writing most of the band's material. "Usually, at the beginning of the process, we would write a bunch of loud rock songs. But this time there

emerged a desire to make more subtle music that made more use of space rather than filling in all the space with as many notes as possible. The feelings that were coming out of the music weren't like anything we'd experienced in the past. For me it was an indescribable feeling, because we were charging into unexplored territory for us as a band. It's exciting and scary, too, because we've amassed this dedicated fan base over the years, and we have no idea how they'll react to this record."

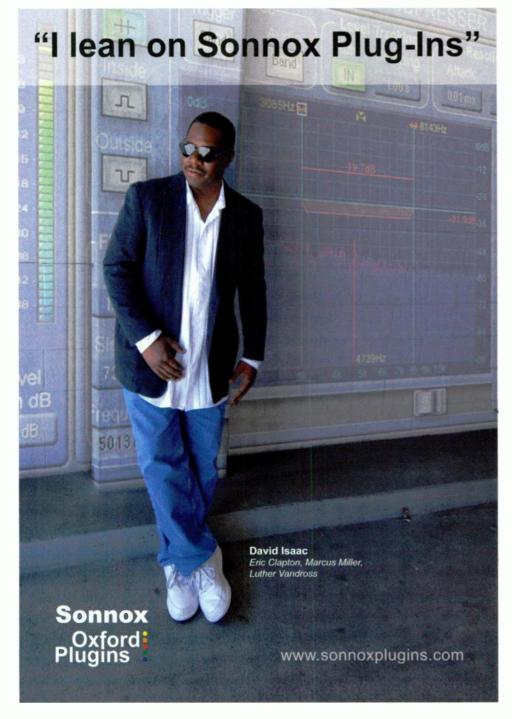
Last summer, O'Brien spent a week in San Francisco with Boyd and Einziger for one of several writing sessions, which revealed to him the direction the band was heading in. When the co-writers had each set of songs roughed out, they brought them to the rest of the band, who worked out the arrangements. The producer then brought the band and his regular engineer Tom Syrowski to Nashville's Blackbird Studio, whose Studio A has become one of his go-to tracking rooms during the last couple of years. Among its features is a perfectly restored 72-input Neve 8078 board and a Hidley-designed chamber with a movable ceiling, which O'Brien uses for natural reverb on the drums. "You put a couple of mics in there

They were on a roll from the first session, quickly shaping one track after another despite the complexity of the arrangements,



#### Michael Einziger on the **Band-Producer Dynamic**

Over four albums, the five musicians and their producer have formed a tight bond—so tight the band members didn't even need to discuss the specifics of what they were going for with O'Brien. "We just all get in a room together, and the music leads us all," Einziger explains. "We each have our own filter that all the music gets passed through. We like the way Brendan filters through things, and I like the way the other guys in the band filter through things, too. We're all like a series of barriers that the musical ideas pass through. It's unquantifiable, really."





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# profile

#### Brendan O'Brien on Song Sequencing

"This is the band's sequence," says O'Brien, but it's very close to what I would've come up with. Since CDs took over, when the A- and B-side didn't mean anything anymore, I'm of a mind that you put your best songs first, and you hope that the second half of the record will live up to the first half. You can't make people wait for the great songs-you've got to throw 'em right in there."

completing seven in all, "For the most part these songs were made as records, as opposed to trying to capture a live performance," O'Brien explains, "Our approach was oldschool-let's put these pieces together and make sure that every note counts. We'd worked out the basic arrangements of everything before we went in, but we didn't do any sonic preparation beforehand. The idea was, we

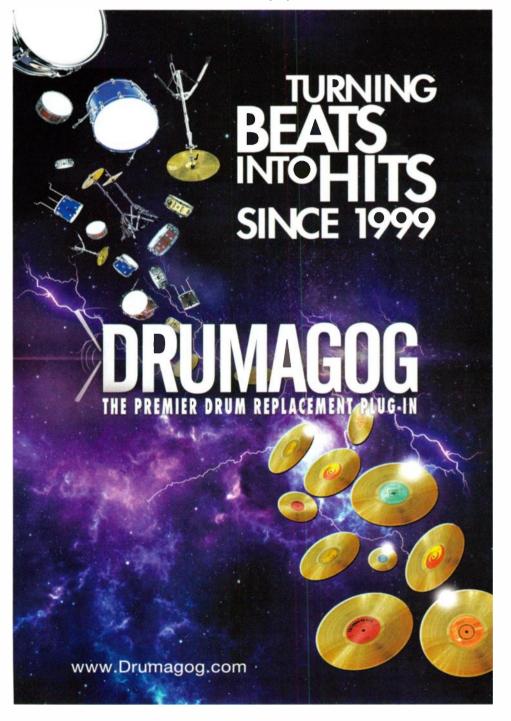
were gonna build these tracks, and a couple of them were built from the groove up. I have this little Yamaha sequencer called a Tenori-On, and on a bunch of the songs I put together little loops with the Tenori-On to build the song from, and Jose would play with that instead of a click track. And in some cases the loop became part of the finished track."

During the subsequent break, Boyd and Einziger wrote another set of songs, including "If Not Now, When?" "That was the first thing Brandon and Mikey played for me," O'Brien recalls, "and I was like, 'Holy shit, that is stunning. That is a song, my friend.' We took our time on that one, too."

O'Brien is known for the nonstop momentum he generates and maintains in the studio. "One of the reasons we've worked with Brendan over and over is that he likes to work quickly, and so do we," says Einziger. "Even with building all the songs from the ground up, it was still the quickest record we've ever made."

They finished the record in a couple of weeks last fall at Henson Studios in Hollywood. When Boyd was having a problem nailing the lead vocal on the title track, O'Brien suggested that he switch to an SM57 and hold it in his hand while he sang. It worked. "Boom-he just sang like a bird," says O'Brien. "It was a transformation." That's a perfect illustration of O'Brien's resourcefulness.

It's been five years since Incubus' last LP, 2006's Light Grenades, and Einziger believes the band couldn't have made a record this sophisticated until now. "A lot of the sound of this album just has to do with the passage of time," he says. "We've grown up. Each time we go through the process of making an album, we have to dig deeper, and it keeps changing over time. That doesn't mean we're always gonna sound like this; it's just where we're at right now. We can never really plan out what kind of album we'd like to make; even if we did. it wouldn't come out sounding the way we'd envisioned it. There's an air of mystery about the whole thing-we never know what the totality of the vibe is gonna be. But this time we found what we were looking for."







# "I'm on a CD with Amy Winehouse Because I Joined TAXI."

Anj Granieri – TAXI Member www.anjmusiconline.com

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# Sublime with Rome

After 15 years, the Southern Cali ska-punk band is back—with a vengeance

#### BY BILL MURPHY

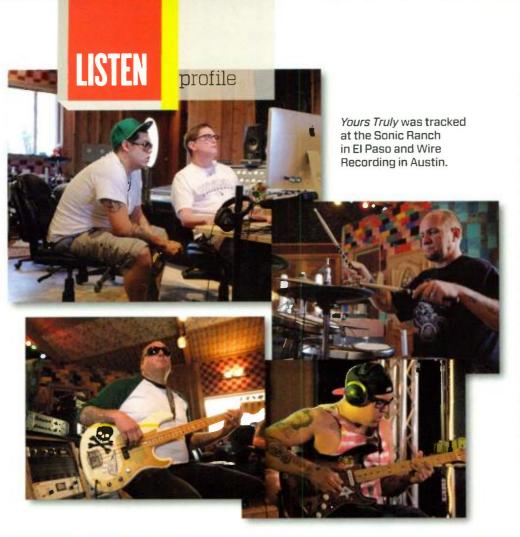
Ask veteran drummer Bud Gaugh what it feels like to play songs that he hasn't touched since 1996, let alone write an album's worth of solid new material, and even over the phone he seems to bristle with enthusiasm. The lively vocal and guitar chops of 23-year-old Rome Ramirez certainly have something to do with it, but more than anything else, Sublime with Rome—as Gaugh, Ramirez, and original Sublime bassist Eric Wilson now call themselves—are a hard-rocking, surf reggae and dub-fueled power trio to be reckoned with. In the end, that's reason enough for Gaugh to feel stoked.

"All the other projects that I've been involved with over the years have been a lot of fun and genuine in their own right," he clarifies, citing the Long Beach Dub Allstars (with Wilson) and the short-lived supergroup Eyes Adrift (with Nirvana's Krist Novoselic and the Meat Puppets' Curt Kirkwood), "but coming back and playing Sublime music has been really special. It's hard to explain. Rome has his own style and he's really on it. Not that I don't miss Brad, because I think about him constantly, but Rome has shown that he has what it takes to be a great songwriter and a great performer."

No one claims to be able to replace Brad Nowell, whose death in 1996, just weeks before the release of Sublime's now classic self-titled major-label debut, cut short what was sure to be a brilliant musical career. Sublime with Rome's Yours Truly (Fueled By Ramen) is, in one sense, a tribute to Nowell and to Sublime's diehard fans, but it's also the work of a band looking to stake out a legacy of its own. For that task, Gaugh thought it was only fitting to invite Sublime's original producer and engineer—the Butthole Surfers' Paul Leary and Austin-based studio wizard Stuart Sullivan—to take part in the joyful chaos.

"It's always been chaotic with these guys," Leary jokes. "After Bud asked me to produce the record, we got together for preproduction in Orange County. Rome had done some demos, but instead of really working on songs that were already written, the band was coming up with new songs. So a lot of this record was written in the studio and not planned out at all—plus we had a really hairy schedule, so we were pretty much producing by the seat of our pants."

If the tone and frenetic tempo of the album's leadoff single "Panic" are any indication, the band may have been pressed for time, but they made the most of it. Yours Truly was tracked almost entirely at the Sonic Ranch in El Paso, Texas (sonicranch.com), with additional sessions at Stuart Sullivan's Wire Recording in Austin. Both studios are outfitted with a wealth of vintage analog gear, which had a



lot to do with the album's overall thick-andcrunchy sound.

Of course, it helps to have a custom Neve 8078 console, fully loaded with 31105 mic pre/ EQs, at your fingertips, too. "We had fantasies about using the 2-inch tape machine here," Leary says, "but there's so much analog sound on the front end, with the board and all the preamps, that you can use Pro Tools mostly just for recording."

As a rhythm section, Wilson and Gaugh have played together since they were kids, so at this point locking up a fast ska groove or a loping reggae skank is second nature. Wilson's primary weapon of choice was a Fender P-Bass (or Lakland copy) with a '67 Ampeg SVT blueface amp. "We used an Avalon U5 direct box and paralleled a Universal Audio 6176 channel strip, which I really love on bass," Leary says. Wilson tends to really dig into the strings, especially on a fat-bottomed workout like "You Better Listen," which meant Leary had to pay special attention to the 1176 compressor section of the UA unit. "Where he first hits the string, there's this big attack, then there's a lull where the string recovers, and then there's the note. I usually set the EQ flat, but the main thing is the compressor. You



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# LISTEN

#### profile



#### **More Online**

Watch behind-thescenes videos on the making of *Yours Truly*. emusician.com/august2011 want a slow attack, a fast release and a 4-to-1 ratio, and then dig in early. I've recorded entire albums with nothing but the 6176 on bass, and it sounds beautiful."

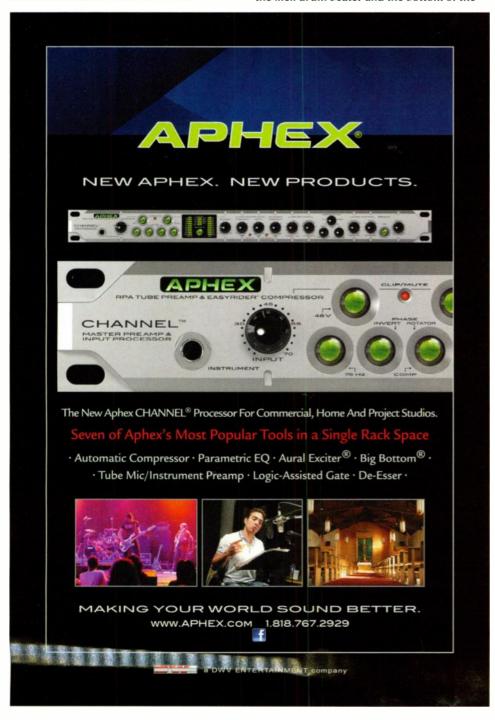
Gaugh had two different drum kits set up in the live room, with up to 18 mics on his main kit to maximize the sonic choices. "I always like to put a trick microphone somewhere at every session," Leary explains. "My latest is to place a Royer 121 about halfway between the kick drum beater and the bottom of the snare head, with the bright side [of the mic] toward the snare. Then you just cream it with a 1073 or some kind of Neve preamp, and slam it with a compressor as hard as you can. Mix a little dash of that into the drum kit, and it gets pretty exciting." The net effect is a lo-fi grainy texture that bites through the punked-out riffs of "My World," for starters.

For Rome Ramirez, who represents the youth contingent in the band, working in a high-end studio still wasn't a totally new experience, but he learned a few things from Leary about tracking vocals and guitars. "Paul and Stu have an analog mindset that really put me in check," he admits. "It's like, 'f\*\*k using plug-ins when we can get it straight with the right mic and all this dopeassed outboard gear!' So there was very little post-production on the guitar tones—it was mainly my '97 Strat and my Divided By 13 amp, with some mixing and matching for distortion [including a Keeley Fuxx Head pedal on the solo for 'My World'].

"For my vocals, we did three sessions and locked into the [Neumann] U47," Rome continues. "We'd go into the Neve with an 1176, quick attack, and then smooth it over with an LA2A—just real natural. And the U47 at Stuart's studio almost feels like it was put on this earth just for me. It has a really good response on the low end, and it's really tailored to my style of singing, which is pretty sibilant." Listen for it on "PCH"—a song that immediately stands out for its summery melody and front-loaded lead vocal.

Beyond the core trio, there are plenty of other sonic elements—the ray-gun synth on "Lovers Rock," for example (courtesy of Rome's production partner DJ Flict and his Yamaha Motif), or Wilson's Moog Taurus stabs on "My World"—that make *Yours Truly* more than just the sum of its individual parts. As Gaugh describes it, the album reveals as much about the band's creative process as it does their new musical direction.

"There were times when we were in the studio, it was like we'd gone past the moon already and into another orbit," he marvels. "There's no rhyme or reason, and then suddenly you bring it back in, and it would be the best new part of a song that we ended up with. We ran it through the Subliminator, if you will [laughs]. Paul was always listening for that, and I think it really comes through in what you hear on this record."



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# Rockstar Energy Drink UPROAR Festival 2011

#### THE BANDS BEHIND THE BEDLAM By Tony Ware

Welcome to our three-part series profiling the artists headlining the Rockstar Energy Drink UPROAR Festival. In this first installment, we feature Seether, Three Days Grace, and Art of Dying. For the complete band lineup, tour dates, and more information, visit <u>rockstaruproar.com</u>.

# Seether

#### A Front-Forward Power Trio

SOUTH AFRICA'S Seether has spent the past decade directing catharsis into modern rock chart success. Fronted by singer-guitarist Shaun Morgan, augmented by bassist Dale Stewart and drummer John Humphrey, Seether has toured on material collected over five Gold- or Platinum-certified albums that celebrate the command of negative space and dynamic flares exemplified by such band idols as Nirvana and Tool. Now, with the release of 2011's *Holding Onto Strings Better Left to Fray*, Seether has captured the balance between presenting a frothing live entity and slow-burning recording artists.

Partnering with producer Brendan O'Brien (Pearl Jam, Rage Against the Machine, AC/DC, Mastodon) and sequestered at Blackbird Studios in Nashville, Tenn., Seether worked across several sessions to flesh out introspection and articulate inner demons, writing in the studio to bridge random impulses and knowing nuances [piano, strings, organ]. The result includes more clearly matured melodies, as well as a lucid representation of the band's innate musicianship.

"He let us play our own guitars, the gear we tour with," says Morgan. "So we were playing Schecters and Mesa Boogies ... and Brendan was totally cool with everything sounding different [from a prearranged session of rare producer-selected guitars and immaculately miked amps]. If the song is already a good song in his mind, it doesn't matter what you use to record it. He helps make the album sound like the band, not the producer and his \$5,000 Gibsons."

Early in the band's career, on the 2002 album *Disclaimer*, Seether experienced a producer/mixer whose efforts resulted in an album that was "machine-like, robotic ... so linear," says Morgan.

"It sucked the life out of the album." Since then, the band has been driven to work increasingly hard to present a waveform that both expands and contracts, or expresses "both the light and the dark without anyone's foolish compression shoving it all in one box," says Morgan.

Onstage, Seether is not overly theatrical or concerned with image. The band embodies a frontforward power trio. On Holding Onto Strings Better Left to Fray, meanwhile, the guys and O'Brien took cues from power-pop crunch to prog embellishments and worked with the stereo field. "[Brendan] understands it's there for a reason, so he'd pan a back-up vocal to the right or the left, and if you listen in headphones, there's a dynamic that keeps you interested, like the albums from 20 years ago and beyond," says Morgan. "So many albums have become guitars straight down the middle, drums down the middle, vocals down the middle, and what's the point of having stereo if you're going to mix it as a type of mono? Brendan was great with not doing that; we didn't even have to say anything to him, he just thinks the way we do."

Even live, Seether's sound engineer works delay, pan, and volume to build what is integrally a buffeting mono experience into a stereo, stacked presentation. That's where any manipulation ends, however. Onstage, Seether doesn't do anything that takes away from the sonic grit and emotional volume. "We don't push Play on any back tracks and attempt to play just like the album," says Morgan. "We're just three guys who get up on stage and attempt to play our best, and have the most fun doing it. We adjust the length of the cable according to stage size, plug it in, and it works. We work hard to keeps things really simple and make sure that it sounds good."



# Three Days Grace

Cutting Loose, Reining It In

THREE DAYS Grace punctuated 2009 with the release of their third full-length, *Life Starts Now.* A determination to rise despite the ragged edges permeates the album from the title on, and the band's newfound commitment to take what you've got, make the best of it, and deliver proved an integral element in recording sessions.

"I think a lot of producers and bands [right now] have made the mistake of thinking heaviness is defined by layer upon layer ... but we're huge fans of classic rock records where it was all about the musicianship between a few guys who understood you could be minimalistic but sound huge," says Neil Sanderson, drummer/keyboardist for the Canadian band, who split their home base between Toronto and Vancouver, where *Life Starts Now* was recorded.

Congregating in Warehouse Studios with producer Howard Benson (My Chemical Romance, Papa Roach, Daughtry, Art of Dying), Sanderson, vocalist/guitarist Adam Gontier, bassist Brad Walst, and guitarist Barry Stock set out to take advantage of the studio's big, natural-sounding tracking rooms and room-miking to eschew shiny processing for an openness. The band, who has been together since high school, found themselve in a position that allowed them to deliver a boomy, harmony-laden sound incorporating new inspirations like electric piano, all the while tastefully

informed by feeding off the energy of touring's expanses. It's the sound of a band cutting loose, but tempered by the knowledge of when to pull back.

"You see all these 'metal' drummers, and they're just sloshing the shit out of their hi-hats. But I find over-the-top cymbals shrink the sound, so I tend to play with my hi-hats closed up, even in spots where it's the natural tendency in rock to open it up and slosh through a part," says Sanderson as an example. "I tend to close it up a little bit, even live, and it just cleans it up and makes it more concise, because it's important to take into account a frequency that can compete against vocal and guitar. It's important to be mindful of when to frame certain instruments, doing what it takes to make them pop."

Of course, there are considerations even to these considerations. Sanderson emphasizes that Three Days Grace has always been a band who is not about overdoing it, but he's also not against experimenting with overdriving Logic's ES2 synthesizer or demoing breakbeats through drum modeling to potentially open some future sonic possibilities. Ultimately, however, the band aims to never be about hiding behind bells and whistles, and to never be too timid to be "guys who are a little rough around the edges, rockin' out and releasing the emotion to make crowds go crazy!"



# **Art of Dying**

Living It Up, In the Studio and On Tour

ART OF Dying is living it up. Speaking from the road, guitarist Tavis Stanley is feeling no pain, aided by a few beers and a triumphant performance. Of course, this is par for the course for the Canadian hard rock quintet, formed in Vancouver, British Columbia, in 2004. Indeed, it's hinted at right in the band's name.

"The phrase 'art of dying' comes from a longer sentence, 'The art of dying is my life to live,' which is saying you don't know when you'll pass away, so it's all about making the most of your time here while you're on this planet," explains Stanley. "And we do that with our music, we do that in our show, we do that in our lives; we just basically have a good time and create the best possible scenario for ourselves and to inspire others to do the same."

With their approach that says the glass is half-full, but still needs a refill, Art of Dying has captured their positivity-enriched, melody-borne riffage on 2011's sophomore album, *Vices and Virtues*, recorded in Los Angeles with in-demand producer Howard Benson (Three Days Grace, P.O.D., Three Doors Down). Additionally, some finishing production was done in Chicago with Intoxication Records' label head Dan Donega (of Disturbed). Building on an appreciation for the dynamics of Led Zeppelin, Aerosmith, Van Halen, Metallica, and Alice in Chains, the band–Stanley, guitarist Greg Bradley, bassist Cale Gontier, drummer Jeff Brown and vocalist Jonny Hetherington–constructed multi-part vocal harmonies atop drop-B

tuning and quickened rhythms, though they weren't afraid to throw in some ballads.

"On this record, Cale, Jonny, and I just pushed ourselves over the limit, went into the vocal room with a bottle of champagne and some beers and sang higher and harder than we've ever sang before," laughs Stanley. "We also opened ourselves up to more experimentation with Howard Benson's team. We put like an 89 [gauge], a big, fat bass string, on Jonny's late-'70s [Gibson] Firebird, and recorded that for the heavies. And we'd do some strange stuff, like going next door to the studio to a gym and recording skipping ropes spinning through the air for a swirling, windy reverb, and then drumming rhythms on dumbbells. You can hear that in the bridge on 'Completely,' and there's probably some bottles smashing in the background if you listen hard!"

Armed with an arsenal of Yamaha drums; Ampeg, Marshall, Mesa Boogie, and Bogner amps; Ernie Ball bass; plus Les Paul, Yamaha SG, Schecter, and B.C. Rich guitars; Art of Dying blended tonal concepts and vibey arrangements originally demoed to Logic or Garage Band running on a MacBook Pro. Art of Dying also recorded a duet with fellow Canadian Adam Gontier of Three Days Grace, which may see itself fully performed as the two bands tour together for the UPROAR Festival. The final result assures the stage will be alive with rousing anthems of determination.

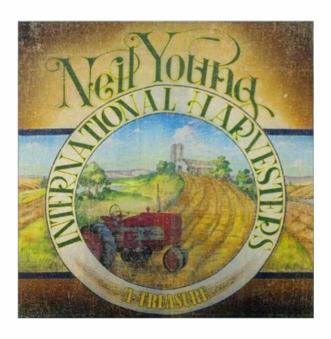




#### Neil Young with The International Harvesters

REPRISE

FROM HANK to Hendrix, Neil Young is renowned for exploring any musical genre he can wrap a guitar string around. This live collection from mid-'80s tours showcases a band of legendary Nashville sidemen, including the late, great Ben Keith. With traditional country meter and melody, the band follows the beat like a bird dog on a covey of quail, while Young's vocals channel Hank William's swagger. Selections include familiar and previously unreleased songs. A Treasure will be released in several enhanced formats. If you're a fan of the Nashville vibe, this is an adventure into the past that you can't miss. CRAIG DALTON





BON IVER Bon Iver

JAGJAGUWAR

Working with a 10-piece ensemble. Justin Vernon reconjures the magic and mystery of his mesmerizing 2008 debut, For Emma, Forever Ago, recorded in an isolated Wisconsin cabin during the dead of winter. "Towers" seems to encapsulate the whole of early-'70s Cali country rock, "Calgary" mates a soaring melody with a percolating groove, the widescreen closer "Beth/Rest" has the epic scale of the theme from a classic western film, and practically every track turns on Vernon's signature movemultitracked vocals. BUD SCOPPA



**Various** True Soul: Deep Sounds From the Left of Stax

NOW-AGAIN

This incredibly rich anthology of rareties from the True Soul Label contains dozens of the best '60s/'70s funk and soul songs vou've never heard. Lee Anthony's Little Rock, AR, label was left of Stax, alright (and not just geographically). These nicely remastered tracks are rougher, grittier, funkier, and looser than Stax recordings-and often in a good way. Included are detailed notes and vintage photos on the recordings.

BARBARA SCHULTZ



Teddybears Devil's Music

BIG BEAT

Guest vocalists galore step out on the Swedish electro-punk trio's latest, which has gone through some changes since its soft release in Sweden (the most obvious-and questionable-being the replacement of up-andcomer Maipei's feisty lead vocal on "Cardiac Arrest" with dance-pop diva Robyn's smoother take). Gems here include Eve's robotically groove-pushing "Rocket Science," Wayne Coyne's sunny and psychedelic "Crystal Meth Christians," and Rigo's slurry retread of Duran Duran's "Rio" on "Tek It Down."

BILL MURPHY



Sonia Leigh 1978 December

This young singer/ songwriter-recently signed to Zac Brown's Southern Ground Artists label-has sort of an Americana Melissa Etheridge thing going on, with her tough, soulful vocals and dynamic weave of electric and acoustic guitar sounds. Among the many strong songs on 1978 are the affirming lead track "Ain't Dead Yet," the old-style country "Bar," and a sweet, reggae-grooving duet with Brown on "Roaming."

BARBARA SCHULTZ



R.E.M. Lifes Rich Pageant (25th Anniversary

Edition) CAPITOL/I.R.S.

While not as celebrated as other R.E.M. albums, Lifes Rich Pageant holds an important place in the canon. Not only was it the band's first LP to go gold, it's the record on which they morphed from floating like a butterfly to stinging like a bee. Recorded at John Mellencamp's Indiana studio by his longtime engineer/producer, Don Gehman, Pageant delivers one knockout punch after another, from the jangle-onsteroids opener "Begin the Begin" to the aggromajestic finale "I Am Superman."

BUD SCOPPA



Kindest Lines Covered in Dust

This New Orleans-based group's Telefon Tel Avivproduced debut doesn't smack of any sense of place-which goes a little against the grain, considering the blows NOLA has suffered since Katrina. Truth is, singer Brittany Terry's mission feels much more personal, and even though she sounds like she's miked from the bottom of an abandoned well, her Morrisseyesque delivery on such standouts as the minimalist indie-tech groove "Running into Next Year" and garagepop-fueled "Prom Song" really gets under your skin-in a good way. BILL MURPHY

WAVES PRESENTS



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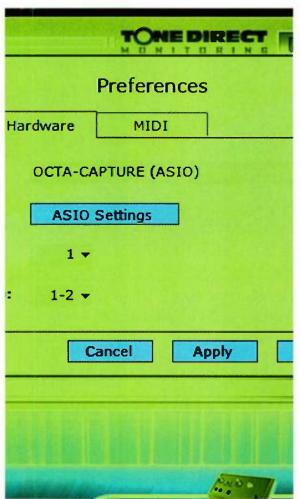






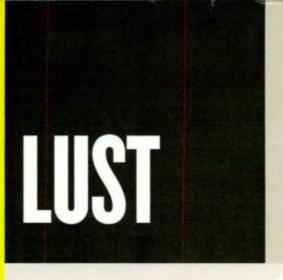














# High-Tech Guitar Effects

Whether you're gigging or recording, tweak your tone to perfection with these new amp sims and accessories

BY CRAIG ANDERTON

Hit Rewind. More than 22 years ago, Tech 21 had an interesting product idea: something that would let guitar players obtain the *sound* of various cranked tube guitar amps, yet feed directly into a P.A. or tape recorder—and SansAmp was born. Then in 1998, Line 6 introduced Amp Farm for Pro Tools TDM, which popularized stuffing guitar amps into computers. But, new ways to process and amplify guitars didn't end there. . . .

Hit Fast Forward. Today, Tech21 and Line 6 continue to evolve. IK Multimedia parlayed the success of the first native amp simulator into a complete line, Native Instruments formed a separate division just for guitarists, Waves teamed up with Paul Reed Smith on the G|T|R plug-ins, Peavey added soft amps to their hardware versions, Avid fed their Eleven plugin steroids and turned it into a rack computer interface and stage multi-effects, while plenty of smaller companies—Studio Devil, Softube, Scuffham, iZotope, and others—have joined the quest for the ultimate software amp. What's

more, programs like Cubase, Sonar, Logic, Digital Performer, Samplitude, Mixcraft, and others now bundle software amp sims with their DAWs. And that's just the tip of the iceberg.

**Hit Record.** Today's advanced computers can handle complex, detailed amp and effects simulations in near-real time. And as many guitarists have learned, not only can software amps create sounds you've never heard before, but work with conventional amps or effects to give the best of both worlds.

Hit Play! The argument over whether amp sims are as "satisfying" as a real amp will persist, but there's no question that sims have made tremendous strides in fidelity, ease of use, and efficiency. Even the skeptics admit that when listening back to a recorded track, it's difficult (and sometimes impossible) to tell the difference between the model and the "real thing."

Yes, we've come a long way—now let's find out what's taking us further.





#### roundup



The Budda SuperDrive 18 Series II is one of the latest ReValver amp models. Note the new VC/L-2 Compressor/ Limiter emulation.

#### Peavey ReValver MK III.V

# Amp/effect modeler gets multiple new models

The latest version of Peavey's flagship amp sim offers 12 preamps, 21 amp heads, 9 power amps, 12 "studio" effects (EQ, dynamics, reverb, an outstanding emulation of their VC/L-2 compressor/limiter, etc.), 21 stomp boxes, two speaker options (convolution and modeled), and a set of tools-like insertable level control, signal splitter, tone stack, single tube stage, polyphonic tuner, chromatic tuner, and more. Although Peavey amps are well-represented, you'll find other classics too-ReValver

III.V subscribes to the "more is more" credo.

#### **Nice Rack**

ReValver III.V uses the rack paradigm-insert modules, then drag into the desired order. But what distinguishes ReValver III.V from all other modelers is the multiple "levels," almost like a videogame. You can simply load presets, or go further and modify existing presets, create new ones, or dive down to the component level and literally tweak individual components. Want a 500V plate voltage? Or 50V? Change the plate load, or cathode resistor? Or a different power supply, or output transformer, or tone stack, or. . . ? You can even see the results of your tweaks as they apply to a sine wave, transient response, transfer characteristics, or Bode plot frequency response.

The only bummer: You need to apply changes before you can hear the results, even including modules like the Speaker Construction Set. After a while, though, you'll get a sense of how various changes affect the sound.

#### **Tweak Time**

The good news: You can make just about any sound you want, and the distortion can be "smoother" than average. The bad news: With this many options, you have the freedom to make bad sounds, too.

I preferred the modeled speakers over the convolution ones—until I used EQ to add some notches to the convolution cabinets, which I felt improved the sound. And there are surprises: Eliminating the "Marshall" EL34 output stage, and using a different cabinet from the default, gave a unique sound I haven't obtained with other sims.

The presets are okay, but I don't think they fully represent the exceptional sounds you can get from this sim. With almost all of them, though, one or two simple tweaks (usually EQ output shaping) can transform them into standouts. Sometimes just calling up a basic amp/speaker combo, and making a few edits, is all you need.

RTAS performance is now on a par with VST/AU, and the VST hosting—which is technically difficult to do—is more robust. Although stable, III.V is relatively new and still has a few glitches regarding Windows 7 permissions; however these are minor fixes, not structural problems.

This is a truly remarkable piece of software. It's the polar opposite of the Softube approach: Rather than limiting you to known, good sounds, ReValver III.V lets the inmates run the asylum. No other amp sim gives you this degree of control over the sound, and if you have the patience to really learn what it's about, you'll be amply rewarded.

PEAVEY REVALVER MK III.V VST/AU/RTAS/ STANDALONE \$299.99 MSRP

#### STRENGTHS:

Mind-boggling flexibility, with editing down to the component level. Lots of modules. If you can hear a sound in your head, spend enough time and you'll probably get it. Good clean and crunch sounds—not just distortion. 32/64-bit versions.

#### LIMITATIONS:

Takes dedication to learn in depth. No realtime preview of deeper edits. Presets don't necessarily show off the full potential. peavey.com



**More Online** Download a ReValver demo.

emusician.com/august2011

# TOTAL VISIT OTTOMS SELECTIONS SELECTIONS

The SVT emulation adds a useful new element for bass players...but there's lots more.

#### Avid Eleven Rack Expansion Pack

# New amps, cabs, and effects for studio and stage

I think Eleven Rack's success surprised even Avid, but it makes sense: Eleven Rack is one of those pieces of gear where all the pieces fit together like the stones in a Mayan temple. From the readable display and large front-panel typeface (yes, this matters), to the obvious workflow, to the sounds themselves—and of course, the dual identity as audio interface/ stage multi-effects—Eleven Rack hits the high points.

But the Expansion Pack takes it to, well, twelve. There are 13 new amp emulations, eight new cabs,





and six new effects: two distortion, MultiChorus, sophisticated stereo delay (ducking, EQ, panning, cross delay, etc.), studio compressor, and four-band parametric EQ.

#### **Test Time**

Of the new amps, I immediately took to the Marshall JTM45 emulation-its big, beefy sounds, with a smooth distortion character, make it a natural for hard-rock power chords. The Super Reverb model is another winner, with the right degree of sparkle. I've always liked the Eleven Rack Custom amps, but the Modern Super Overdrive delivers truly satisfying high-gain sounds. These are just some highlights . . . check out the emulation of all three Bogner Ecstasy 101b channels, and also, the Eleven plug-in's speaker breakup feature is now included.

But aside from the new cabs,

the "channel strip" parametric EQ can really make the amps sing-you can tweak amp/cab combinations to slide into a track as if they had been sprayed with WD-40. Sure, you could always insert an EQ plug-in within Pro Tools, but now you can take that tweaked sound on stage. An unexpected bonus is lowpass and highpass filtering with 6, 12, and 24dB slope options—but as you can add resonance, it's possible to (for example) pull down the very highest frequencies to rein in the brightness, while adding a peak around 4-5kHz to add definition. Thumbs up.

Also thumbs up: a channel strip-style compressor. Add that to the EQ, and you have a useful vocal-processing setup.

I also had good luck feeding the distortion stompboxes into cabs (no amps) and using the EQ to tweak that as well. Arguably, though, the new effects' star is the Dynamic Stereo Delay—thicken and layer your sound with delays; think Edge-type vibes. You can sync to tempo, and thankfully, this includes my favorite dance track staple—dotted half-notes.

If you have an Eleven Rack, the price is right. Even if you use only half of the new features, it's still a great deal—the new amps alone are welcome. I hesitate to use the term "no-brainer" because in these tough times, \$99 isn't a trivial expense. But there's no doubt you get value received.

If you don't have an Eleven Rack, this just might put it on your Gear Acquisition Syndrome radar, especially if the "stage and studio" split personality interests you. Eleven was something special before the expansion pack appeared, but now it's gone up another notch.

AVID ELEVEN RACK EXPANSION PACK FIRMWARE UPDATE \$99 MSRP

#### STRENGTHS:

Lots of new amps and cabinets. Several new effects. 4-band parametric is tremendously helpful when going direct. Simple firmware update.

#### LIMITATIONS:

Software editing still available only in a Pro Tools environment— otherwise, you need to edit via the front panel. avid.com



More Online Hear tracks made with Eleven Rack.

emusician.com/august2011

Scuffham's S-Gear amp suite is economical, but nonetheless includes dual convolution engines and three amp models.



#### Scuffham S-Gear

Three amps plus delay and convolution

It seems every time I do one of these roundups, there's a new, "dark horse" amp sim maker; this year, it's Scuffham. S-Gear is the least expensive of the sims reviewed here, but nonetheless features three amp models, a sweet delay module, dual convolution cabinets (with seven impulses and four filters, as well as two virtual mics with four positions each), natural-sounding noise gate, and solid preset management.

The three amps have different

SCUFFHAM AMPS S-GEAR WINDOWS VST/ STANDALONE \$75 MSRP

#### STRENGTHS:

Inexpensive. Wonderful delay. Relevant control complement. Comes with dual convolution engines, and you can load additional impulses. Straightforward to use/

#### LIMITATIONS:

Not yet available for Mac. With high-gain sounds, be careful about hitting the input too hard as the meters don't display short, high-level transients. scuffhamamps.com

characters. They're intended not to model specific amps, but create their own sounds from the ground up. I appreciate this approach; it's not always necessary to sound just like, say, a Marshall JCM800 or Vox AC30, as long as you capture the spirit that would make an amp iconic.

#### **Tone Time**

The effective complement of controls allows squeezing multiple sounds out of the models. The delay does long delays, chorusing, chorus/delay, and offers two different timbres (including analog bucket-brigade delay emulation). A power-amp config module lets you emulate sag, perform a highfrequency cut, and set the presence frequency. Nice.

Initially, although I liked the clean and crunchy sounds, I found the high-gain/distortion sounds harsh, due to nasty digital artifacts, and the controls unresponsive. After a "WTF"? email exchange with the designer (who had designed Marshall's JMP-1, so he knows his stuff), it turned out that my style of playing (hard pick, heavy strings, and highly percussive), coupled with very high-output pickups, was generating initial transients that were much stronger than the average signal level—these were slamming the input, but because they were so short, they weren't showing up on the amp's input level meters.

The solution was simple: I lowered the pickups a few millimeters. This reduced the ratio of transient strength to signal level, the artifacts went away, the controls worked as expected, and the high-gain sounds became rich, warm, and responsive-it was definitely an ugly-duckling-transforms-intoswan experience. (As a bonus, this fixed some artifacts I had been getting with a couple POD Farm amps, too . . . so I'm leaving the pickups where they are.)

The dual convolution speaker cabs are a big deal, as you can pan them and create true stereo images, while choosing different impulses for the two speakers so their sounds complement each other. (You can load other impulses, too-you're not locked into the 56 included impulses.) In some ways, I preferred the filter

speaker responses; regardless, if you choose your "virtual mics" and positioning carefully, you can get some huge-yet authentic-sounds.

Download the fully functional 15-day demo, and check out Scuffham's amps for yourself. They definitely have their own sound, and even if you already have several amp sims, they provide an excellent complement because they're not trying to sound like some specific amp. This is one dark horse that I predict will still be around for next year's roundup.



More Online Download the S-Gear demo.

emusician.com/august2011



#### Line 6 POD Farm 2.5

#### Hardware independence and 64-bit support

Version 2.5 isn't about more amps and effects, but system integration. POD Farm is now hardwareindependent-it no longer requires a Line 6 audio interface. (That said, Line 6 still makes the only interfaces with their "ToneDirect" technology that slashes latency.) The package now includes license manager software that can authorize POD Farm 2.5 for a certain number of Line 6 hardware devices or computers; iLok

authorization remains available too.

Furthermore, there are now native 64-bit versions of not only their plug-ins, but the "elements" introduced in POD Farm 2.0 that allow using specific processors, such as reverbs or preamps, without having to instantiate an entire POD Farm, POD Farm has always been good for more than just guitar, bass, and synths (I'm a fan of using it on vocals and drums); the elements underscore that ability. I tested the 64-bit plug-ins in 64-bit versions of Cakewalk Sonar XI and Sony Vegas, and they worked flawlessly.

One more cool addition: POD Farm 2.5 can now work standalone without restrictions That's not a Photoshop trick-POD Farm is actually working with a non-Line 6 USB interface.

(V2.0 could do standalone, but only with the TonePort or POD studio interfaces). So if you want to stuff one heckuva guitar setup in a laptop, be my guest.

There's not much else to add, except that 2.5 is a free update to registered 2.0 users ... so if you're a POD Farmer, fire up your browser and start the download. And if you're not, there's a free trial that works without functional or time limits, although there's only a limited number of models. It's a useful program in its own right, and if you like what you hear, you can always get a license for the full version.

Line 6 has been incrementally upgrading their software over the last few generations, so if you haven't tried the latest and greatest, you might want to hear what you've been missing-even the free version has some great tones.



World Radio History

LINE 6 POD FARM 2.5 VST/AU/RTAS/ STANDALONE \$99 STANDARD, \$299 PLATINUM (MORE MODELS) MSRP

#### STRENGTHS:

Now hardware independent-use with any USB interface. No restrictions for standalone operation. 64- and 32-bit versions. Versatile, with models specifically for voice and bass as well as guitar. Huge number of available tones. Single or parallel (two paths) effects configuration.

#### LIMITATIONS:

Non-resizeable window. No new effects or amp models in addition to the extensive collection that was previously available. line6.com



#### roundup



IK Multimedia AmpliTube Custom Shop

# Build your rig, one model at a time

IK Multimedia doesn't just have new models, but a web-only Custom Shop that sells all IK models—amps, cabs, effects, and rack processors—so you can create your own rig, a piece at a time, based on your needs and finances.

If you don't have already have AmpliTube 3, download AmpliTube 3 Free. It has all of AT3's functionality—it's no "lite" version—and includes four amps, five cabs, three mics, nine stomp effects, two rack effects, and a digital tuner. No, it's not the full version's 160 devices, but it's enough to make some cool noises.

Then, check out the custom shop and buy "credits" (\$1/credit, dropping to 60 cents in bulk). You can download anything and audition it for 48 hours, every two months. If you like something, buy it—prices range from five to 20 credits, which don't expire. If you already have AmpliTube 3, included models will show as having been purchased, while other models have the "Try or Buy" option.

#### Let's Go Shopping

IK put some real thought into the shopping experience. You can browse all models in a particular meta-category (like Amp, Cab, Stomp Box, etc.) or by more limited categories (like only Clean Amps), and mix 'n' match across the AmpliTube line—download a bass effect from AmpliTube SVX, or a cab from AmpliTube Metal. There's

The Amp aisle from the Custom Shop; note the just-purchased T-Rex Mudhoney and Nu-Tron III poking out from behind.

info and a full-size image for each model; new additions are noted, and there's a list of top sellers so you can see what other people thought was worth the bucks.

Armed with 125 credits, I hit the virtual aisles. The first thing you notice about this shop: No one is playing "Stairway to Heaven" badly, at 127dB. We're off to a good start.

The current top-selling amp is the Soldano SLO-100, so I started there. I hit "Try," and a few seconds later, it was loaded in AT3. (Note-Custom Shop has to be open in your browser during the trial period.) As it's boring to watch someone shop, I'll keep it short: I went for the Soldano for its outstanding leads, Orange Tiny Terror for chunky rhythm, the crushingly brash Orange RockerVerb 50, and the Fender Princeton for its vintage vibe (tough decision between that and the Fender Champ, tough).

IK recommends amp cabs, and they're only five credits, but I went for the T-Rex Mudhoney stompbox. (Try it with no amp, the 4x12 Modern M3 cab, and a rack parametric stage with a 6dB

IK MULTIMEDIA
CUSTOM SHOP
VST/AU/RTAS
MODELS

MODEL PRICES VARY

#### STRENGTHS:

Well-organized shopping experience. Anything can be tried out for 48 hours, every two months. Good descriptions of models.

#### LIMITATIONS:

Applies only to
AmpliTube 3 and
AmpliTube 3 Free.
You need to keep your
browser open while
trying models.
ikmultimedia.com

cut at 2300Hz and Q=7—all honey, no mud.) After testing out the Nu-Tron III, I had to have it, too—it nailed that soul sound of the '70s.

All the new models are worthwhile; there's no "filler." Some, like the Soldano, add something significantly different to the roster of models. Others, like the Nu-Tron, add a variation on existing effects. (AT3's existing envelope filter lacks the Nu-Tron's "snap" or down drive option.)

Did I have fun? You bet! The new models are excellent, and the Custom Shop concept gets a major thumbs up.





#### MOTU ZBox

#### Guitar pickup impedance adapter

Standard guitars with passive pickups can't drive line inputs or mic inputs effectively, so interface manufacturers introduced special

"instrument/hi-impedance" inputs to accommodate guitar. These prevent pickup loading, thus preserving level and high-frequency response. (With pickups, loading reduces highs and level because impedance increases with frequency.)

However, many real-world guitar amp inputs do add slight, but noticeable, loading. A tube stage's

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#### MOTU

**Z**вох

HARDWARE ACCESSORY \$39.99 MSRP

#### STRENGTHS:

Inexpensive. Passive no power needed. Adds a subtle smoothness to amp sim tone.

#### LIMITATIONS:

The degree to which it improves tone depends on multiple factors (but it never makes the guitar sound worse).

input also interacts with guitar.
These combine to create what
some guitarists call a "warmer"
tone although technically, it's not as
"accurate" as a hi-Z input.

#### **Enter ZBox**

ZBox is a simple, passive box with two 1/4" inputs (high and low impedance, relatively speaking), and an attached 18" output cable terminating in a 1/4" unbalanced out. To transform a high-impedance input (whether in an interface, mixer, wireless transmitter, etc.) into one that's more like a "real" guitar amp, a resistor network provides the necessary loading, while four silicon diodes connected in series provide (very) soft asymmetrical clipping starting at around 2.8V—so it's just barely shaving the tops of the positive peaks.

With amp sims, despite the best efforts at modeling, feeding in a bright signal—which happens with a high-Z input—can sound brittle. ZBox adds a subtle rollback of the highs and also interacts with the midrange, but the effectiveness depends on several factors.

Using active pickups, or inserting an effect between guitar and ZBox, is pointless; to work its magic, ZBox must insert between the passive guitar out and interface Hi-Z in. Also, rolling back the guitar's tone or volume control greatly reduces ZBox's effect. I tested it with a Strat bridge pickup going through the Softube White Room (set for heavy distortion) and Les Paul neck pickup going into the Softube Green Room, then recording both for an online web clip. Listening back, the effect is

subtle, but noticeable. The Low-Z input loads the signal down enough so a bit less level feeds the sim, which equals pulling back the drive somewhat. But there's more to it than that. Using either input—especially with the Les Paul—gave a timbre I'd characterize as "rounder" or "smoother."

Depending on the pickup, playing style, and amp sim setting, ZBox's effect ranged from barely noticeable to both significant and useful. This is the kind of box you could hard-wire into the signal path when feeding a sim—it can't hurt, and more often than not, definitely helps.



More Online

Hear ZBox in action.

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One of the mics is outlined in red to show that it's being moved. You can click-and-drag to reach the corner of the room where the other cab resides.

#### Softube Metal Amp Room

#### Quality metal modeling

Softube amp sims haven't really gotten the attention they deserve, perhaps because they follow a very

different sim philosophy: Instead of opting for a huge variety of amps and effects, Softube models setting up a couple mics with an amp, in a studio—there are zero effects.

Softube claims quality and simplicity over quantity; their plug-ins aren't designed to make pre-produced guitar sounds, but give an amp/room/mic toolset. How good are these tools? Let's load Metal Amp Room and find out.

#### Get A (Metal) Room

The metal-optimized amp has an Engl Powerball-inspired lead channel, a hybrid Engl/Marshall JCM800 rhythm channel, and two different 4x12 cabs (England Marshall-like), each with a dynamic and condenser mic. You can move the mics along an imaginary track that extends about 4-5 feet away from the amp and moves inward, curving as it gets closer to provide off-axis and on-axis placement. A balance and width control (basically two complementary panpots) simplifies setting up a blend; you can also throw one mic out of phase.

Because of the potentially high gain, there's a clever, programdependent noise gate whose decay tracks string decay. But one of my favorite features is Softube's SOFTUBE METAL
AMP ROOM
VST/VST3/AU/
RTAS, iLok required
\$199.99 MSRP

#### STRENGTHS:

Outstanding cabinet, miking, and room modeling. Easy to create good sounds. Useful presets for the terminally lazy. Sophisticated noise gate. Consistent levels. Don't overlook the rhythm settings—this is more versatile than the name indicates.

#### LIMITATIONS:

Designed to perform one specific task, albeit very well. Relatively expensive. softube.com "super-normalize," which keeps the output within rational levels regardless of the preamp and master control settings.

Softube downplays switching off the lead setting and using the "Marshall" cabinet, but I obtained some muscular, defined hard rock timbres-even Svd Barrett's early Pink Floyd guitar sound, which was a real surprise. Metal Amp Room is far more versatile than the name implies.

#### **Tool Time**

Compared to other sims, the probability of dialing in a really appropriate sound within seconds using Metal Amp Room is very high-given Softube's philosophy, that makes sense. But you don't even have to do that, as the presets present a good mix of tones.

But here's where it gets really interesting. Some of my favorite sounds were feeding AmpliTube amps (cabinet bypassed) through the Softube cabs, with the Softube amps bypassed. I also liked combining the Softube amps with Waves G|T|R cabinets-although the sound was quite different than the Softube cabinets. Perhaps not

surprisingly, mixing and matching with Softube's Vintage Room produced excellent results, POD Farm and Guitar Rig seemed most dependent on matching their amps and cabs, so separating them produced mixed results-from "turn it off!" to "wow."

My takeaway: The Softube cabinet/room models are outstanding-whether used with Softube amps, or ones from other modelers. The Softube amps are excellent too, but the other modelers provide more amp variations that work extremely well with the

Softube cabinets, thus offering a wider range of possible tones.

Metal Amp Room seems ideal for those who want to get a hard rock/metal/heavy sound quickly, with "can't-go-wrong" customization possibilities. And Softube is right: This is a helluva toolset. Try the mix and match shuffle with other sims, and you'll hear what I mean.



More Online Get Softube demo licenses.

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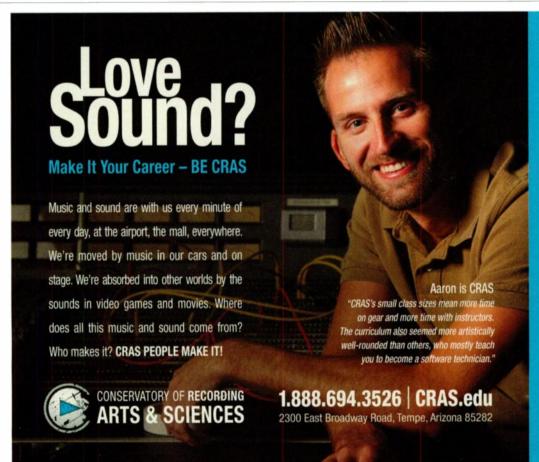


This signal chain follows Amp and a Cabinet with EQ. Filter Delay, and Ambience to build a complete sonic environment.

#### Ableton Amp

#### Live adds amp/cab simulations

Created by Softube, this add-on works with Live 8.2 and above. The Amp component itself has



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LIVE-SPECIFIC FORMAT
\$129 MSRP

#### STRENGTHS:

Classic amp sounds cover a wide range of useful, high-quality sounds. Has all expected basic parameters. Cabs offer the basics too, including a bass cab and (albeit limited) miking choices. Intelligently complements Live's existing roster of effects.

#### LIMITATIONS:

Works only with Live. Requires pre- and/ or post-processing for "produced" guitar sounds.

ikmultimedia.com

voicings for Clean, Boost, Blues, Rock, Lead, Heavy (as in "Metal"), and Bass. Controls include Gain, a Bass/Middle/Treble/Presence tone stack, Volume, and Dry/Wet balance control.

The Cabinet component roster is 1x12, 2x12, 4x12, 4x10, and 4x10 bass. Mic choices are dynamic or condenser, with placements for near on-axis, near off-axis, and far; again, there's a Dry/Wet balance control.

## What Makes This Live-Specific?

Live already bundles a bunch of superb effects—not just the usual chorus and delays, but innovative, unusual effects like Grain Delay, Erosion, Filter Delay, etc. So, all the bucks for Amp go to the amp/cab emulations instead of being spread out over a virtual pedalboard.

#### **Some Assembly Required**

Amp follows Softube's "here are the tools, you do the rest" philosophy. If you just insert Amp and Cabinet and expect a killer guitar sound, you may be disappointed; of course, you can find plenty of "pre-fab" racks with complete setups, or make your own.

For example, most cab/mic combinations have an "amp sim resonance" that, although technically representing what a mic hears from an amp, doesn't necessarily represent what your ears hear in a room. The accompanying screenshot shows some Amp post-processing that creates a more "organic" sound (at least to my ears!). Three stages of EQ notch out the resonance, cut a bit of bass to emulate an open-back cabinet, and warm up the sound by trimming the highs slightly. The Filter Delay adds three discrete

echoes for stereo space that helps define a large room size, while the Reverb uses ambience to fill in the space between the echoes.

As this is Live-specific and you can download a free trial, we won't go deeper. Suffice it to say the amp sounds perform as advertised, and the cabs really come to life once you start tweaking. If you're looking for plug-and-play guitar sounds with emulated vintage effects, you're probably better off with other sim packages. But for the experimentally-minded—and what Ableton Live user isn't?—Amp and Cabinet round out Live's toolset with plug-ins that are good for more than just guitar and bass.



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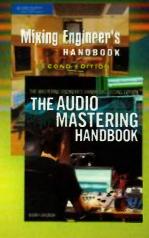
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Audio Media

"They have us spouting words like "phenomenal punch", "clear as a Montana sunny day" and "hell ya!" to anyone within earshot. If hearing exactly what is happening in your favorite music or in your professional audio work is critical, the KNS 8400 will handle it with audiophile accuracy."

Headphones.com

"I received favorable comments all around on their sound quality and extreme listening comfort... which were followed by expressions of real surprise when I revealed how little they cost! These headphones provide a noticeably different listening and soundstaging experience than other headphones in their class."

Recording Magazine

"The lack of high-end hype is appreciated for long or loud tracking sessions, and the bottom end is slightly plump without being too "poofy" or having "one note bass" syndrome. Their clarity isolation low weight, fold-ability and comfortable car pads make an ideal headphone experience.

**Pro Audio Review** 





Arturia Analog Experience—The Laboratory

Augment studio or stage sound with virtual analog synthesis

#### BY CRAIG ANDERTON

EACH PRODUCT in Arturia's Analog Experience Series includes a metal-encased keyboard with wood ends; tons of sounds drawn from their ARP 2600, CS-80, Jupiter-8, Minimoog, Moog Modular, Prophet-5, and Prophet-VS virtual instrument emulations (sort of "Arturia's Greatest Hits"); and editing/library software (Mac/Windows, standalone, or VST/AU/RTAS plug-in).

Laboratory is the most ambitious and editable yet of the series, with a USB-powered, four-octave keyboard including smooth and controllable aftertouch (not "afterswitch"), four percussion pads, ten control knobs, nine envelope sliders, transport with MMC out, pitchbend and mod wheels, octave buttons, various navigation controls and switches, and 2-line by 16-character backlit LCD. The controls aren't specific to Laboratory, but generate standard MIDI messages suitable for other MIDI devices.

The Sounds There are 3,500 patches—and fortunately, a searchable browser to help find the ones you want. For example, you could browse Minimoog bass presets, or brass... or ARP 2600 and CS-80 strings. You can also specify characteristics, like bright, dark, long, simple, soft, etc.

I'll let the purists debate whether "virtual analog" is really analog or not; while they're debating, I'll be making some warm, satisfying sounds. I was raised on analog synths, and I feel Arturia is faithful to what made them special—part of which was realtime control.

Have It Your Way Being able to edit presets is part of the "analog experience." Two of the knobs edit chorus and delay mix, two handle filter resonance and cutoff, two more control LFO rate and amount, and four "wild card" controls edit different parameters in different patches, as chosen by Arturia. You can save edited versions, while 10 "snapshots" let you call up selected presets fast (helpful for live performance). For full editing, if any of the seven Arturia synths are installed on your computer, you can open presets in them. Another nice touch: You can play two presets simultaneously on the keyboard.

Scenes The 200 "scenes" are genre-specific collections of splits; some include arpeggiation, so you can get a nice groove going—which can be enhanced by triggering drum loops or hits on the four pads. While no one will mistake this for a multi-timbral workstation, the Scenes can be quite inspirational, and kickstart the songwriting process.

Is It For You? If you already have a good controller and a bunch of soft synths, Laboratory is probably redundant. (However, you can buy the sounds sans keyboard for \$299.) But, it's a superb package for a DAW owner who would love to add the sounds and realtime control associated with analog synths, as well as a quality keyboard and general-purpose MIDI controller. Despite the low price, the synth-action keyboard is no toy; the feel is solid and playable. Overall, Laboratory is an easy, cost-effective way to add "the analog experience" to a recording or live performance setup.

#### SUMMARY

**STRENGTHS:** Cost-effective. 3,500 presets with searchable browser. MIDI controller works for more than just controlling Laboratory patches. Refined aftertouch. Basic, but generally effective, editing options.

**LIMITATIONS:** Not multi-timbral. Sometimes parameters you want to edit aren't available.

\$399 MSRP arturia.com

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## \$30 REBATE



#### AT2035

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#### AT2041SP

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

## \$10 REBATE

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#### AT2020

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#### AT2020USB

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





review



There aren't a lot of controls; you need taste more than technique to use this properly.

## Waves Aphex Vintage Aural Exciter

The mystery plug-in of the '70s enters the virtual world

#### **BY CRAIG ANDERTON**

INTRODUCED IN 1975 (and the result of a "happy accident" when, upon miswiring a hi-fi amp kit, inventor Kurt Knoppel realized he was on to something), the Aphex Aural Exciter was one of the first "magic-secret-weapon-how-does-it-work" processors. It was originally available only via rental (at \$30 per finished minute of recording, which worked out to about a grand per album—in 1975 dollars!). Nonetheless, many famous artists used it to add a certain silky, transparent brightness that imparted clarity and definition that you couldn't obtain with EQ.

The Aural Exciter takes a very different approach to processing, as it sidechains high-passed distortion (with some phase-shift mojo) to create musically-related harmonics you then mix in with the main signal. Basically, it creates highs that *didn't exist*, rather than boosting existing highs. The added signal is level-dependent, so it comes into play only with louder signals.

When introduced, the Exciter was often overused by engineers who put too much on an entire track, or used it in places where EQ would have been a more appropriate choice. As a result, it got the same kind of bad rap that overused processors like loudness maximization and pitch correction get today. But over time, cooler heads

prevailed and the Exciter started to be used for broadcast, DJ applications and yes, still in the studio—where despite digital's preservation of the high end, sound sources like acoustic guitars, vocals needing sparkle, guitar amps, and the like all fell under the Aphex spell. In one form or another, a million Aphex Aural Exciters have been sold since its introduction.

Going Soft And now the Aural Exciter has transitioned into the plug-in world. Operation is basic, with few controls: a choice of two processing "characters," the option to isolate just the exciter signal if you're using the plug-in as an aux effect, meter source selection (in, out, effect level), input and output level, aural excitement amount, and just in case you want the funky parts, adjustable hum and variable, and modeled noise. (Some people feel this is part of "the sound," although of course you can defeat it if desired.)

In typical fashion, Waves modeled the vintage, tube-powered unit—not the modern, solid-state variants—and provide stereo and mono components. Resolution goes up to 24/192kHz; available formats are TDM/RTAS/Audio Suite/VST/AU.

As to whether the emulation is accurate, Waves thinks so, Aphex thinks so, and having worked with the original, I think so, too. Granted, when overused, the Aural Exciter adds what seems like a caricature of high-frequency response. So don't do that! This is a processor that when used subtly, can definitely enhance sounds in a way that EQ can't. It's ideal for restoration (an often-overlooked application), and can add a wonderful sparkle to tracks that lack, well, excitement. And it costs a lot less then it did to rent the original.

#### SUMMARY

**STRENGTHS:** Provides an accurate emulation of a classic, and still very useful, effect. Easy to use.

**LIMITATIONS:** You just know some engineers are going to overuse it. Requires iLok.

\$250 Native, \$500 TDM MSRP waves.com

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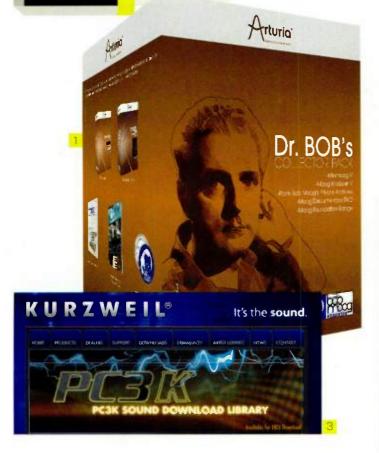




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1 Arturia

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HIGHLIGHTS Box set includes Arturia Minimoog-V and Moog Modular V soft synths, Moog documentary DVD, book of unreleased material from Bob's private archives, and Bob Moog Foundation button • limited to 1,000 copies • all profits go to the Bob Moog Foundation TARGET MARKET Musicians who want not just a couple of fine soft synths, but a truly collectible box set that pays tribute to an industry legend ANALYSIS Bob Moog contributed much to our industry, and his foundation and archives continue

much to our industry, and his foundation and archives continue that tradition. *Dr. Bob's Collector Pack* isn't just about what you get, but what you give; all profits help further the foundation's work.

arturia.com

2

#### Cakewalk

#### Neal Peart Drums Vol. 1

Expansion pack for Session Drummer 3

#### \$99.95

**HIGHLIGHTS** Consists of samples from the Drum Workshop Signature Snakes and Arrows kit • recorded by producer Nick Raskulinecz (Rush, Foo Fighters) through Neve channels using vintage tube and ribbon mics · stereo kit · created by Sonic Reality specifically for Session Drummer 3 • 12 pads/12 outputs TARGET MARKET Users of Sonar 8.5 Producer and Sonar X1 Producer, which bundle the Session Drummer 3 virtual instrument ANALYSIS Session Drummer 3 ships with multiple kits, but is expandable. The Neil Peart kit joins the recently-released Andy Johns Expansion Pack, also for Session Drummer 3, to present more sonic options for Sonar users.

cakewalk.com

3

#### Kurzweil

## PC3K Sound Download Library

Free expansion sounds for PC3K owners

#### \$free

HIGHLIGHTS All sounds are free of charge • the first two collections of samples/programs are from Kurzweil's *Synthscapes* (complex, layered digital waveforms) and *Take 6 Vocals* (vocal articulations, with single and ensemble voices), both developed originally for the K Series keyboards

TARGET MARKET PC3K owners, K-series owners who've upgraded to the PC3K and want to use some of their familiar sounds ANALYSIS A cliché of marketing is to sell the razor cheap, and make money on the blades—but more companies are offering free (or at a nominal fee) downloads as incentives to purchase their gear.

kurzweil.com

4

SONAR XI

#### Primacoustic

London Studios-in-a-Box Turnkey room treatment kits

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HIGHLIGHTS London 8 includes fundamental tools required to treat a home recording studio • London 10 increases the panel count, for larger spaces • panels are made from 6 lb, glass wool; edges are resin-treated, surfaces are encapsulated in micromesh and covered in acoustic fabric • comes with hanging hardware, screws, and wall anchors

TARGET MARKET Project studios and post-production suites requiring acoustical treatment

ANALYSIS Acoustical treatment is crucial when creating a mixing/recording environment; the London series simplifies the process by including multiple treatment elements in a single package.

primacoustic.com



Chauvet

#### MiN Laser FX, MiN Laser **RGX, MiN Laser Star**

Palm-size lasers for live performance

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ні**дн**і**днтя** Ultra-compact lasers • projects thousands of red and green laser beams onto any surface • weighs under one pound • includes wireless remote control, two mounting stands (truss or table top) • Laser FX projects six different effects • MiN Laser RGX projects thousands of beams • MiN Laser Star projects dozens of green stars • all comply with U.S. Federal health standards TARGET MARKET DJs, clubs, parties, small-venue concerts ANALYSIS More acts are bringing their own lighting to complement sound systems; these units are portable, effective, and inexpensive. chauvetlighting.com

#### Scratch DJ Academy Mix!

Cross-platform DJ software

#### \$49

**HIGHLIGHTS** Analyzes music libraries, identifies tempos in BPM and bars • detects musical key • Playlist Hints highlight compatible songs using BPM/key matches • customizable Scratch FX • song transition previews for faster mixing, with volume normalization and auto crossfade • integrated MP3 ID3 Tag Editor • compatible with multiple audio formats TARGET MARKET Beginner to pro DJs who do their own mixes ANALYSIS Many DJ programs offer beat detection, but this stand-alone program can analyze a music library independently of other programs. It also includes educational content, so it's suitable for beginning DJs who want to learn the basics of creating a DJ mix.

stantondj.com

Native Instruments Komplete Audio 6

#### Audio interface

#### \$339

ні**дн**і**днтя** Six-channel audio interface for live and studio • highly portable • cross-platform operation • four balanced analog I/O • digital S/PDIF stereo I/O • bus-powered • integrated MIDI interface • bundled with Komplete Elements, Traktor 2 LE DJ software, Steinberg Cubase 5 LE, and a \$30 voucher for the NI Online Shop

TARGET MARKET Project studios, laptop-based performers, DJs, mobile recording

ANALYSIS More companies offer compact audio interfaces that go beyond the usual 2-in/2-paradigm; Komplete Audio 6 is about both studio and live applications that need small size, yet a reasonable amount of I/O.

native-instruments.com

Electro-Voice

#### R300-HD

Handheld wireless mic system

**HIGHLIGHTS** Simple configuration and setup—ClearScan selects the best available channel, EZsync sets the transmitter to the same frequency as the receiver via infrared • 32 preset channels • HT-300 metal handheld transmitter features the PL22 cardioid dynamic mic capsule, backlit LCD, and battery gauge • runs up to 14 hours on two AA alkaline batteries • receiver can be rack-mounted or set on tabletop TARGET MARKET Live performance for vocals and instruments, MCs, DJs ANALYSIS The R300 system is designed for multiple applications, depending on the package you choose, with a premium placed on fast setup time and easy configuration. Build quality is also suitable for professional applications.

electrovoice.com



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Sonnox



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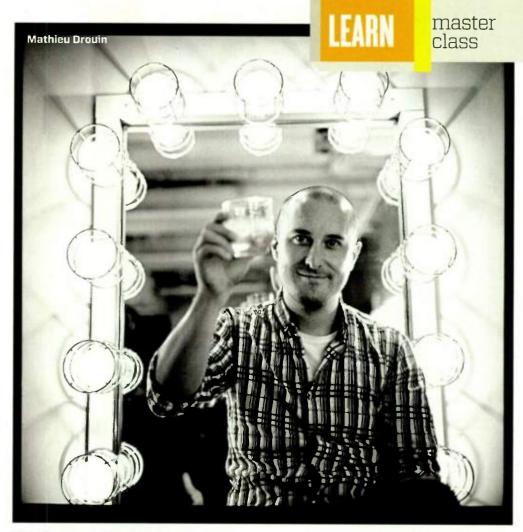






Try Before You Buy | Easy Financing Options Studio Installations | Buy | Sell | Trade "There's an opportunity for the power base to shift back away from the record companies and the publishers toward the artists and their managers."

-Mathieu Drouin



The Manager's Perspective "You look at the situation as it exists today and it's inevitable that, on the medium-term event horizon, there's a lot of opportunity for the power base to shift back away from the record companies and the publishers toward the artists and their managers," says Mathieu Drouin, the young and forward-thinking Montreal-based manager for the multi-Platinum-selling Canadian indie band Metric. "There's the opportunity to re-evaluate the value chain, to cut out a lot of the middlemen."

Drouin has supercharged Metric's career for the digital age over the past three years, using a finely-tuned set of objectives that he repeats like his mantra. "I think that quality is hyper-efficient online," he says. "If you have something that's of quality and you start with whatever fan base you already have, and you give them the tools and the incentive to do the marketing for you in highly network-affected environments like the social networks, you can engineer virality on a super scale, orders of magnitude greater than you could in just a traditional brick-and-mortar world of word-of-mouth. Then what you'll find is—if it is *indeed of quality*, and people like it, it spreads."

And so does free music. The irony, he says, is that the more a song is given away, the more it sells. "In my opinion, you've got people who buy music and you've got people who don't. That being what it is, if you can give away the music and that builds the brand and you make money in every other revenue center, at the end of the day, if that's what it takes to succeed and you can build a business that way, what's wrong with that?"

Drouin insists that you have to structure yourself properly from the very start, which includes maintaining full ownership over your copyrights. "Alex Patsavas, who's one of the most powerful music supervisors in America, she'll call sometimes at eleveno'clock, you know, and say, 'I need a song for this theme and I need to clear it tonight! What do you have?' She calls us because she knows that with that one phone call, we can clear the master, the publishing, and the artist's name and likeness. So, part of taking advantage of the potential represented by this future is knowing how to structure yourself, and that in my perspective means not fracturing your rights."

Drouin also suggests building as many

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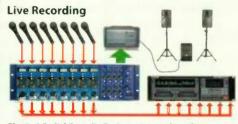
Guitar effects routing system lets you add excitement, spice and creative spark to any recording by combining lo-Z tracks with hi-Z guitar effects pedals. Front panel send and return patch points make it easy!

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

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

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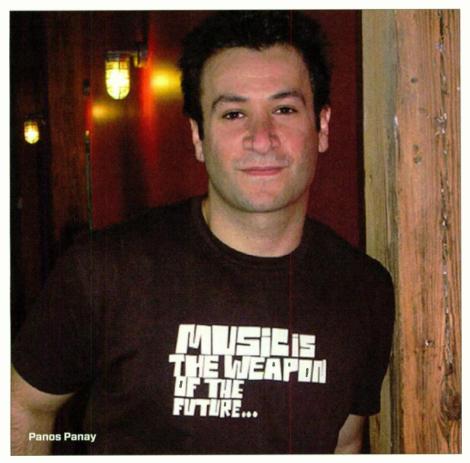
direct-to-fan touch points as you can, so as to communicate, harness, and direct that army of fans in focused directions toward focused objectives. "Basically, what gives value to your copyright is people knowing about it and liking it. Once you have a fan base, and there are people who are aware of it, the music gatekeepers in the licensing world will start licensing your music. So do what's necessary to get people to value them without necessarily worrying about making a buck for it right away. The money will come."

The Producer's Perspective Jim Jonsin is a Grammy-winning super-producer/ songwriter who's collaborated with the likes of Beyoncé, Kelly Rowland, B.o.B, Usher, Eminem, Kanye West, T.I., Danity Kane, and Jamie Foxx, to name a handful. Although that list is decidedly "major," his Florida-based Rebel Rock Entertainment also works with a lot of unsigned artists, songwriters and producers, so he clearly speaks from a strong "indie" perspective as well.

"There are so many new artists coming out now, left and right," he says. "That's because the internet is so accessible to these young artists and there's nobody stopping what they're doing. And I also think that makes it so that fans buy less of 'one thing' but more of a lot of 'other stuff." Such a fragmented marketplace has been cited by many as being at the very crux of the crossroads that is the new music economy.

"For the majors, this is really a big adjustment period. They're really going to have to adjust more than the artists, writers, and producers. This is easy for us! Find the artists that the majors are trying to grab, we produce them. Do a joint venture with the artist and we all make money," says Jonsin.

Jonsin finds fault with popular VEVO channels and videos on YouTube that boast seven-figure viewing tallies vet don't reciprocate with royalties to the nonfeatured performers and producers. "How do you play all these videos with advertisement going on and nobody's making any money from it-no one but YouTube? Excuse me, but that's just bulls "t," he continues. "I'm thankful for BMI and the other performance rights companies, because they're actually trying to figure out a way to get paid from all that. Similarly, if you have an artist who's doing extremely well on touring but they're not selling records, I think [the structure] should be adjusted to where the writers and producers get a little piece of that because those songs are doing so well for them, but the consumers aren't going out and turning over sales, so the only one making money is the record label and the artist."



The Promoter's Perspective While the traditional concert business is having a hard time adjusting to the realities of consumers having less disposable income, "live music" is not just what's performed in stadiums and arenas—"and doesn't always entail a show that involves a consumer buying a ticket," says Panos Panay, CEO of the Sonicbids.com matchmaking site for bands and concert promoters.

According to the National Association of Campus Activities, U.S. colleges eager to entertain their student bodies with live music spend nearly \$250 million each year. "Most of this goes to artists who generally earn less than \$3,000 per show," points out Panay, whom his company refers to as the "artistic middle class."

And consider this interesting stat: House concerts have grown in the past two years to become one of the primary touring outlets for emerging artists. Some estimates put the number of house concerts that took place last year in the U.S. as high as 250,000.

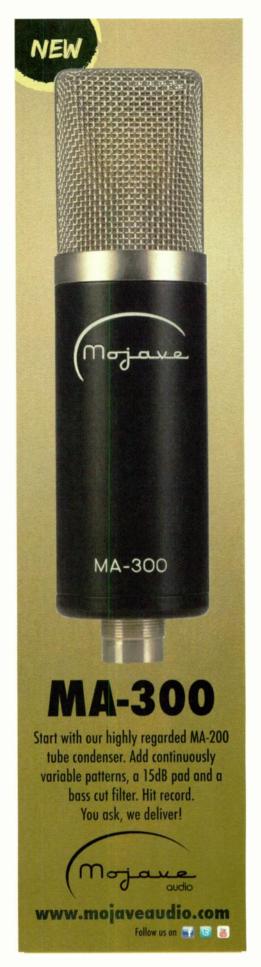
Even more promising for emerging artists, there's been steady shift of corporate sponsorship money in recent years toward more "niche" artists who do not yet have an entrenched public image

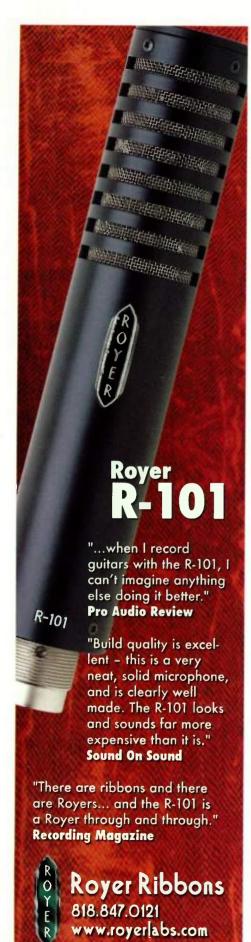
like say, Taylor Swift or Lady Gaga. Why?

"Because more and more companies are realizing that coveted young consumers, coming of age today, demand authenticity from the brands they will endorse—a trait most associated with independent, nonmajor label artists. Not to mention that these artists tend to be less expensive and carry less PR risks than artists with large public profiles," says Panay.

He also points out that, in the past couple of years, large consumer brands ranging from Diesel, Converse, Gap, Ford, and Levi's, to more niche ones like Midas, Zippo, Jägermeister, and JanSport, have all spent millions creating programs that use emerging music as the primary marketing means of their wares to social media. Could it be that these brands with all of their marketing muscle and deep pockets are becoming the new record labels?

Controlling Digital Assests Patrick Sullivan, President & CEO of RightsFlow, a technology-enabled licensing and royalty service provider, says that many established artists are often surprised to find out they may already have earned revenues being held in limbo.







"Money that
artists aren't even
aware of is being
collected and
administered to
mechanical and
performing rights
organizations
outside of the
United States."

-Patrick Sullivan

"There's a lot of money that was left on the table with the digitalization of music and the revolution that started back in 2003 with iTunes," he says. "Money that artists aren't even aware is being collected and administered to mechanical and performing rights organizations outside of the United States. So, one thing we discuss with artists is to make sure that everything's properly registered so that we can get it accounted for and collected," says Sullivan.

Indeed, copyright owners owe it to themselves to ensure that their assets—the music created—be tied to the metadata of songs put up for sale on iTunes or Rhapsody, or that webcasters make available for streaming.

"Our business, in effect, has become that—a content management of data to help release past royalties due for independent songwriters and artists," says Sullivan, adding that the core of RightsFlow is in tracking metadata, and encouraging and helping the creators tie their assets to the metadata so that it's properly registered in all digital music services and sync services.

"Fundamentally, I think that's something that was never in the control of the artists and songwriters in the past," says Sullivan. "It was granted or administered to organizations that weren't properly set up for the digitalization of music. I think that's a very big challenge today because, when you look at money that's being withheld in SoundExchange, upwards of hundreds of millions of dollars that are not getting accounted for. And that's not for any lack on SoundExchange's part, but because of the lack of the content data being upstreamed to the right administrators or directly to organizations like SoundExchange."

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# Mixing the **Ultimate** Lead Vocal, Part 1

Tame your track with dynamics processing

BY MICHAEL COOPER

EVERY PRODUCER worth his or her salt will tell you that the success or failure of a noninstrumental recording hinges primarily on producing a riveting lead vocal track. While recording a great performance is the critical first step in the process, the mix engineer must work his specialized techniques on the raw track afterward to take it to the next level and rock everyone's world. Simply slapping a compressor and equalizer on an insert is rarely enough. Wowing your audience takes some wizardry.

In this multi-part series, I'll show you how to sprinkle fairy dust on the singer's track to create a magic moment. Before it can cast its spell, however, a bewitching vocal must first be made to sit properly in the mix so that it sounds powerful but doesn't overwhelm the band. In this first installment, I'll show you how to use dynamics processing to do just that.

Mind Your Signal Chain In most cases, you'll want to place dynamics processing on the vocal track before any EQ so that the compressor doesn't limit the effect of your tonal adjustments. (In an upcoming installment, I'll reveal a cool trick that takes the opposite tack.) Post-EQ placement would arbitrarily condition the compressor to dip levels when the singer hits a part of his or her range that has EQ boost applied, which may not be what you want. Use dynamics processing first to rein in the track's levels. Then apply EQ to shape its tone.

mixing

De-Ess First Sibilance (a whistling sound that can occur when the vocalist sings lyrics containing an s, f, or t) can create very transient and large signal peaks (up to 20dB!) that leap out of a mix and distract. Most soft-knee compressors are too slow and nondiscriminating to catch these ephemeral,



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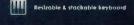
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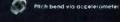
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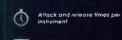








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Fig. 1 iZotope Alloy's de-esser module is highly effective and simple to operate.



Fig. 2 Softube's Tube-Tech CL 1B plug-in models the high-end opto tube compressor of the same name and sounds outstanding on lead vocals.

high-frequency peaks. But even though they're always late to the party, their gain reduction function can still be whipsawed by sibilance after-the-fact. That's why it's important to place a de-esser (dynamics processing tailored toward taming sibilance) on a sibilant vocal before any compressor you use to create density or control average levels.

To quash sibilance, you usually need to use a limiter or hard-knee compressor that employs peak-detection circuitry. The limiter must offer a sky-high ratio of 20:1 to 50:1, lightning-fast 50µsec (0.05ms) attack time and a release time of 40 to 60ms. It should also allow access to its sidechain.

To de-ess the vocal track, first copy it and insert an equalizer on the copy. Using a shelving filter, boost the equalizer to the max (even 24dB is okay) above 5kHz. Cut below 5kHz as much as possible. Bus the heavily-EQ'd track copy into the sidechain for a limiter placed on the original vocal track. Now the limiter will "hear" a screechy version of the vocal with highs cranked and lows removed, making it ultra-sensitive to any sibilance. Set the limiter's threshold so that gain reduction occurs when whistling fricatives sound but not when sustained vowel sounds are voiced.

If this setup sounds like too much work, don't fret. Several purpose-built de-esser

plug-ins do most of the heavy lifting for you. iZotope Alloy (see Figure 1) provides the most effective and best-sounding de-esser I've heard in plug-in form and doesn't require copying your track or complicated sidechain routing. Simply adjust the frequency band you want Alloy to treat (in Multiband mode) and tweak the attack, release, and threshold controls. Goodbye, sibilance!

**Squeeze Next** After de-essing (if necessary), use a soft-knee compressor to reduce peaks so that the vocal doesn't pop out in the mix and dwarf other elements. Putting a lid on peaks also allows you to raise the overall level of the vocal without clipping. That prevents softer phrases from being buried or sounding weak. The overall effect is one of increased size, loudness, and density.

Opto-electronic compressors generally offer the most natural and transparent sound for treating vocals. The best plug-ins I've heard that emulate opto compressors are the Waves CLA-2A and -3A and the Softube Tube-Tech CL 1B (see Figure 2). All three plugs have an uncanny ability to perfectly seat a highly dynamic vocal track in a mix without making it sound quashed. And their operation is so simple, an amoeba could swing it.

A vocal track that exhibits wildly fluctuating levels may need especially heavy



Fig. 3 The McDSP 4040 Retro Limiter is a great choice for taming runaway vocals.

compression to force it into submission. In this case, you'll get much better-sounding results by chaining two compressors in series instead of making one compressor do all the work. Set the first compressor's threshold high enough that it reacts to only the strongest peaks. This allows the second compressor to focus on smoothing average levels and creating density. The compressors each perform softer action than a sole compressor would need to in order to get the job done, resulting in a more transparent and natural sound.

**Set a Limit** If compression doesn't fully rein in vocals running amok, place a brickwall limiter at the end of your track's signal chain as a last resort. The Waves L1 plug-in and McDSP 4040 Retro Limiter plug-ins are very effective for this purpose (see Figure 3). But tread lightly—too much brickwall limiting will defenestrate nuance and depth and introduce audible distortion.

Only the Beginning Now that your vocal track's dynamics have been deftly controlled, the next step is to craft a captivating tone. I'll discuss some tips for doing that in next month's segment, along with strategies for fine-tuning the vocal to make every lyric have maximum impact.

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Fig. 1 I've prepared two notes; one with a golf tee, and the other with inexpensive speaker cable.

# Sticks and Stones and Other Stuff

A beginner's guide to the prepared piano

BY GINO ROBAIR

IN 1940, composer John Cage came up with a solution for getting a wide variety of percussive timbres without filling up a stage with instruments. By weaving objects within the strings of a grand piano, he was able to create sounds that resembled wood blocks, gongs, and marimbas, as well as new and unusual sonorities. Thus, the prepared piano was born.

Although the concept may seem esoteric, it's very easy to prepare a piano, and the resulting sounds are great for adding a melodic, rhythmic, or atmospheric element to a song. Preparations can be used to isolate a string's harmonic, dampen a note so that it sounds percussive, or create a complex, bell-like timbre. In fact, getting unusual sounds is as easy as placing a golf tee between two strings (see Figure 1).

Where Do I Begin? Start by using objects from around the house, such as screws,

bolts, pencils, erasers, dimes, and packing tape. Note that the upper notes of the piano have three unison strings for each pitch, whereas the lowest notes have one and two. Some objects work best when there are three strings. For example, you can weave a dime between the three strings in the middle register of the piano to get a gong-like sound. Put a large, rubber eraser between two of the lower bass notes to get a percussive sound with a clear harmonic above the fundamental pitch.

A preparation object's mass and location on the string help determine the resulting sound. Once you find a timbre you like, try moving the object along the string to see how the sound changes.

If I'm in a hurry, I alternately install golf tees and 1-inch sections of plastic-coated speaker cable in the middle and upper registers. The former gives me complex ringing tones, while the latter gives me a

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pitched thunk. In the highest octave or two, I'll cover the strings with 3M shipping tape, which vields pitched woodblock-like sounds.

If I have more time, I will place some screws or bolts in the middle register. To get a tambourine-like sonority, place the bolt through a washer before setting it between the strings. Be sure to leave room

Getting unusual sounds is as easy as placing a golf tee

between two strings.

for the washer to bounce around when the note is struck.

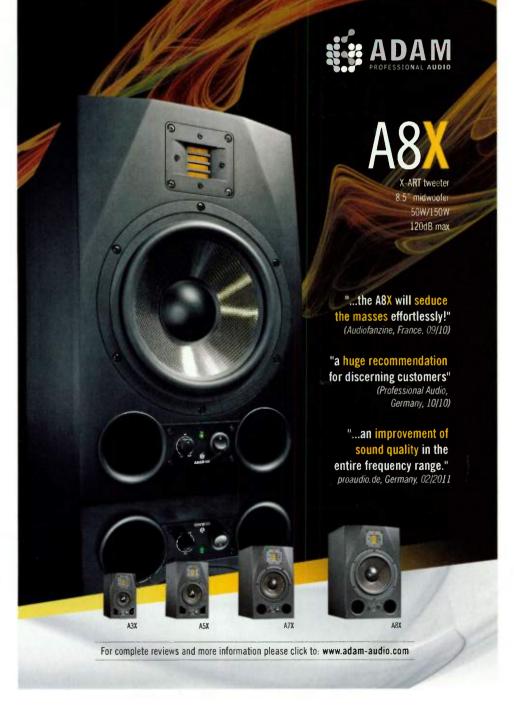
Preparations work best on grand pianos, because the objects don't fall out. If all you have is an upright piano, you can get great sounds by weaving dimes between strings, or by securing bolts and screws with a nut on the other side of the strings. (Before you try this, please read the section at the end of this article.)

Infinite Sustain Once you're working inside a piano, you'll quickly find ways to excite the strings without using the keyboard. For example, you can pluck the strings with fingers or a guitar pick, or tap them with a varn or rubber mallet. You can also hold down the sustain pedal and scrape on the metal crossbars or frame with a moistened finger, a rubber ball on a chopstick, or the flat end of a drum stick or mallet handle: The strings will resonate based on the harmonics you get from the material you're scraping with. With a little practice, you can get a ghostly wail that rings for half a minute or more.

If you're looking for a sustained pitch, there are a couple of ways to bow the string. The easiest is to rosin a couple of long strands of horse hair from a violin or cello bow, weave them under the strings you want to play, hold down the sustain pedal, then drag the hair from side to side across the string. Getting the hairs under the strings takes a moment, so if you need to do this in the middle of a piece. weave them around the strings ahead of time, but place the hairs at the far end of the piano string until you need them. Rosined fishing line also works well for bowing.

Another common way to bow the strings requires a wooden Popsicle stick or coffee stirrer. Glue short lengths of horse hair or fishing line around the bottom of the stick, parallel to its length. Then, while pushing down the sustain pedal, quickly brush the stick up and down the string. The resulting sound is more percussive, but it doesn't require you to set things up ahead of time. I've also seen pianists bow the notes with rosined sticks to get this effect.

My favorite way to get sustained sounds is by using an Ebow, a battery operated device designed by Heet Sound for use on guitar. The Ebow works the best on the middle register,



where there are three strings per note. Push down on the sustain pedal to lift the dampers, then gently press the Ebow down on the outer two strings of a note. The center string will start singing almost immediately.

If you need to locate specific pitches while you're playing inside the piano, but the string layout confuses you, it's easy to mark the notes. Simply cut little squares of masking tape, write the note names you want on each one, and place them near the corresponding string. (Be sure not to put them on the string itself.) By marking the strings ahead of time, you'll quickly identify each pitch in the heat of the performance.

R-E-S-P-E-C-T If done correctly, piano preparation doesn't damage the instrument or put it out of tune. Leaving the piano as you found it should be your goal.

Concert pianists (and many piano tuners) will tell you that it's never a good idea to touch the strings; oils from your fingers get left on the strings and attract dirt, which holds moisture and eventually oxidizes, leading to corrosion. So don't be surprised if some piano owners are reluctant to let you near the interior of their instrument. Respect this, because a piano is a major investment.

However, there are plenty of people who don't mind if you play their instrument like a game of "Operation." Before you lift the lid of a high-quality piano, there are a few things to keep in mind. First, be sure that the material with which you prepare the strings is softer than the strings themselves. Avoid metal objects that may damage or mark the strings. Although this seems restrictive, you can get a lot of mileage from wood, rubber, felt, and plastic. When I inquire about preparing a piano for a concert or recording, I pull out my non-metal objects first, just to assuage any fears the piano owner may have. However, if the piano is a beater, I'm happy to put the bolts and screws into action.

The second rule is to press down the sustain pedal before inserting anything between the strings. This keeps the damper felt from being damaged as you spread the strings apart with a preparation.

Finally, when selecting materials to place between strings, be sure the object's diameter is similar to that of the distance between

the strings, so that the preparation doesn't inordinately increase the string tension or damage the instrument.

Once you start exploring the interior of a piano, you'll find a seemingly endless universe of sound. And with some creative use of effects and editing, don't be surprised if you wind up with a hefty library of unique samples.







An army of roadies scrambling in Woodlands, TX, for Tom Petty & The Heartbreakers.

# Damage Control

Eight pre-show tips for trouble-free gigging

BY PAT KIRTLEY

TROUBLE, AS the lyrics of almost any blues tune will tell you, is a part of life. If you're a performing musician, trouble can take the form of equipment failure that can ruin a show. In an ideal world, all musicians would have expert tech staff to repair and maintain their gear, but the reality is, most bands and solo performers, especially during the up-and-coming phase of their careers, have to deal with on-the-gig gear troubles themselves. There's never any guarantee of a show going off without a hitch, but if you take these simple preventative steps, you can minimize your risk of a meltdown.

**Don't blow things up!** Hooking up amps and speakers correctly is critical. It's the one area of audio in which significant amounts of power are transferred. If you hook up a mic incorrectly, about the worst that can happen is that it won't work well. But if you err in

connecting speakers to amplifiers, the resulting smoke may signal serious, costly equipment damage. Always check the amplifier's instruction manual when hooking up unusual speaker loads.

Once you have your equipment setup dialed in, write it down! You can make simple connection diagrams for the P.A. system, instrument amps, and keyboard setups, including all cable routing and the basic settings of knobs, switches, and faders. If anything is accidentally changed between gigs, you have a reference point from which to proceed. That can save critical time before a show.

Lighting equipment that uses dimmers has a bad reputation for causing noise and buzzing in audio gear. If you can, power the lights from an AC circuit that is separate from the one you're using for the audio gear.

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### Do not cut off, bypass, or disable the ground prong on AC power cables.

When present, the ground prong performs the function of isolating human beings from dangerous voltages when certain types of internal equipment malfunctions occur.

Create an equipment checklist to be used prior to loading out for the gig so that you can avoid leaving some critical widget behind. Also, make photocopies of important sections of instruction manuals for all equipment, and put all this information in a three-ring binder with index tabs for quick access.

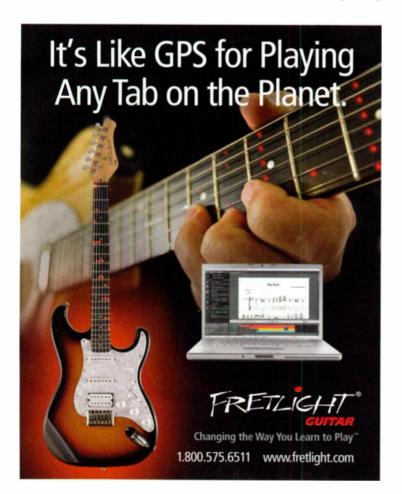
### Keep audio cables separated from AC power wires and transformers. Power

cables, motors, and transformers generate magnetic fields, which can induce hum in nearby audio cables. Keep audio cables at least half a meter away from power cables. If the audio cables must cross a power cable, they should do so at a 90-degree angle to minimize hum pickup.

If you must use AC power extension cords, make sure they have the proper rating. The ubiquitous 6-outlet switched "power strip" should be used only for devices with small power requirements (rack effects units, keyboards, CD players, and so on) and must be used with care to avoid overloads. The maximum rating for many small power strips is only 10 amps. (And that doesn't mean 10 guitar amps!)

# Arriving early at the venue is essential; it gives yozu time to familiarize yourself with the layout and scope out the best stage setup for your equipment.

If the setup and soundcheck go smoothly, small problems are less likely to become gig-threatening experiences. Reduce the possibility of turn-on transients damaging speakers by applying power to mixers, processors, and effects units first; turn on power amps as the very last step. Reverse the sequence when powering down.







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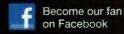
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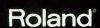
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# Gaming the System

Junkie XL demystifies some of the basics of scoring films and videogames

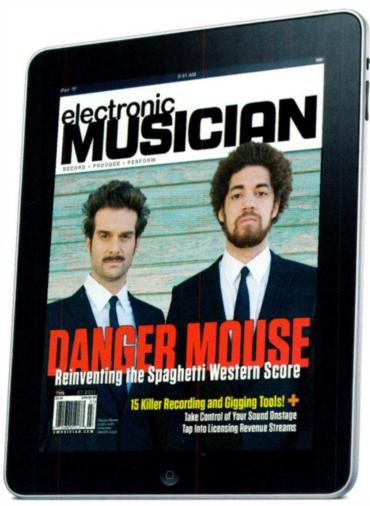
BY BILL MURPHY

LET'S SAY it right up front: Even if you're an established artist with a string of albums under your belt, there's no easy way to break into the film and videogame market. But there are a few steps you can take—and a few harsh truths you'll have to accept—to optimize your chances. Just ask Tom Holkenborg, whose edgy work as Junkie XL has rocked basements, clubs, and stadiums worldwide since 1995. Now based in Los Angeles, he's built himself a tidy second career as a score composer; his first game was Microsoft's *Quantum Redshift*, and his work has been in films from *Blade* to *The Matrix* franchise to *Inception* (the latter with composer Hans Zimmer).

"It took me ten years of living here to figure out how the hell this industry works," he jokes. "And unless you're extremely talented, you won't get a call from someone like EA Games after you send them a demo. The work pressure on a project is so insane, they need to know that you can deliver. Sometimes we're talking about 90 or 100 minutes of music that needs to be done in four weeks. It's very hard to trust an upcoming composer with a workload like that."

Even so, it's still crucial to have a preexisting catalog of music out there [as 1 alluded to in last issue's column on music

# electronic MUSICIAN





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Scores for movies like Inception fuse music and sound design.

licensing], whether it's in the form of label-released albums, a content-rich and regularly updated website, a well-curated social media presence (YouTube, SoundCloud, etc.), or a combination of all three. As Holkenborg concedes, he had the good fortune of putting out a hit album (1997's Saturday Teenage Kick) that drew the attention of several directors and game developers. Once his foot was in the door, his first challenge was to adapt to a whole new way of making music.

"The discipline that comes with films, videogames, and commercials is completely different than being an artist," he explains. "You're working with a team. It's not just you who determines what the outcome is gonna be. That's a difficulty with many artists, because they can't deal with the criticism, the work stress, or the fact that when you work on a film, sometimes you have up to 30 or 40 picture revisions, and you have to rework your music completely."

Holkenborg teaches a university course on the subject; by and large, his students are less interested in pursuing a career as a recording artist or producer, and are more focused on becoming film or videogame composers almost exclusively. That route presents its own set of challenges, but with the right skillset (and mindset, when it comes to your level of enthusiasm and commitment), you can create some opportunities.

"Obviously you need to be talented, and you've gotta know your stuff when it comes to software and plug-ins," Holkenborg says.

"And it sounds pretty basic and intuitive, but one thing you can do is to look for a job within a videogame company. You can start as an in-house sound designer or composer, and build your career from there. It's exactly the same with films. Look for an assistant's job with an established composer; after three to five years, you'll learn how everything works, and people in the industry will get to know you, so eventually you can get work on your own."

Take the initiative with your research. Most of the major game developers— Activision, Electronic Arts, Rockstar Games, Ubisoft, et al—post job openings online, while film composers are almost always reachable through their personal websites or management reps. But perhaps most importantly, keep yourself informed about all the latest changes in music production and sound design technology; Holkenborg predicts that the two areas will continue to overlap more intimately and often as computer processing power increases and creative tools become more sophisticated.

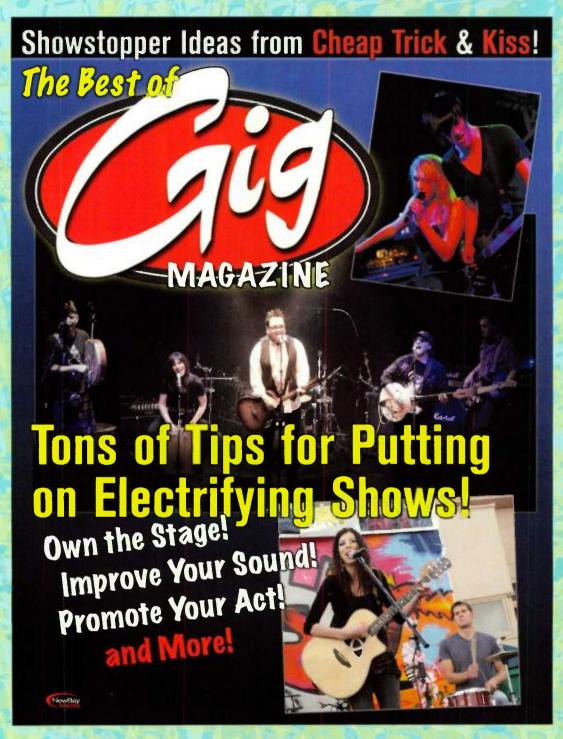
"When you listen to new movies like Inception, there's a real blending of the sound design and the music," he observes. "But there's still not a box out there that can live morph a drum kit with a vocal, or a real live orchestra with a bass guitar. Kyma is capable of doing a lot of that in real time, but I'm talking about something with a hundred thousand times more processing power. If you look at what we can do right now—live time-stretching and tempo changing, and all the things you can do on the fly in programs like Ableton Live—all that was impossible ten years ago, so imagine where we'll be 15 years from now. It's gonna be insane."



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Fig. 1 An amp recorded in a tile-and-glass shower benefits from extra color provided by early reflections.

# Rock the House

You might be reading this in the perfect echo chamber

**BY GINO ROBAIR** 

ALTHOUGH DIGITAL reverb provides the most convenient way to add ambience to a track, there's nothing like capturing the sound of a real room. But if you think that only concert halls and high-end studios have useful acoustics, guess again. Many sonically interesting spaces already surround you, and the unique qualities of the rooms in your home or apartment offer plenty of creative mileage.

Room to Room Most of us think we know our living space fairly well, but how many of us have actually *listened* to it and evaluated its sonic potential? Whether small (bathrooms, closets), medium (bedroom, kitchen), or large (living room, garage), every room has an acoustic personality that can be exploited, given the right mic placement (and perhaps some compression).

For example, bathrooms typically have the largest number of reflective surfaces (tile, glass, fiberglass) of any room in the house, so they make excellent echo chambers, whether for tracking, reamping, or as an aux send while mixing. However, a kitchen can also be acoustically interesting,



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thanks to its wooden cabinets, linoleum floor, glass windows, and the metal doors of the refrigerator and dishwasher. Oddball tonalities, which might be perfect for helping a guitar solo or vocal overdub stand out in a mix, can be achieved by miking from inside a tub, a sink, or the drum of a washing machine.

Start by going around the house with an instrument or two and listening to how they sound in each room. Pay special attention to characteristics such as reflections, decay length, and overall tone color. Although you can simply clap your hands or snap your fingers in each room, you'll get a better idea of the tonality each space has to offer if you play the instruments you're likely to record in there. For example, I thought that our newly remodeled living room, with its wood floor and high ceiling, had potential as a great live room, but it wasn't until I strummed an acoustic guitar in there that I discovered how balanced its frequency spectrum was.

As you'd imagine, carpeting, heavy curtains, and plush furniture will dampen an environment's high frequencies and the overall ambience within a room. Nonetheless, this darker, drier timbre might be perfect when you want to capture an intimate-sounding vocal or a tight, close-miked drum sound.

Don't be discouraged if a room sounds boxy. Sometimes it might just be the sound source. For instance, a loud drum set may sound terrible in a rectangular bedroom that has a low ceiling, whereas close miking a small combo amp in there might give you an interesting slap-back effect.

Location, Location, Location Getting the proper balance of direct and room sound in a reverberant space depends on where you place your singer or instrument relative to the microphone. Of course, the closer you place a mic to the subject, the more direct sound you'll get. But the mic's polar pattern should also be taken into consideration, because it plays a major role in determining the blend of ambience and direct sound. By their nature, omnidirectional and figure-8 patterns yield

Start by going around the house with an instrument or two and listening to how they sound in each room.

more room tone than a cardioid, though the latter will still give you a good sense of the room's ambience in a close-miking situation.

Let's begin by recording vocals in the bathroom. Place a large-diaphragm condenser 7 to 12 inches away from the singer; the spacing will depend on how much room you want in the track and how loud the singing will be. If you have a multi-pattern mic, select omni mode. For more ambience in the blend, raise the mic about six inches above the singer, but point it down towards his or her mouth. As you position the mic, monitor the sound from your DAW using headphones until you find the sweet spot that fits the song.

When you place a sound source or microphone close to surfaces such as walls and floors, early reflections will begin to color the sound. In a highly reflective room, that's something you can exploit. For example, to add sparkle to a droney guitar bed, I recorded a small combo amp in a tile-and-glass shower (see Figure 1), with a bidirectional ribbon mic placed 18 inches away from the amp. The front of the mic captured a direct sound that was saturated with early reflections, while the back of the mic brought in the sustained ambience from the rest of the room.

bistance Equals Depth Larger spaces—hallways, living rooms, garages, basements—not only provide extra reverberation, but you can utilize their size to thicken up a track by combining close and distant mics. The greater the distance you have available, the longer the delay you can create. Sound travels at roughly 1,125 feet per second, so you gain a 1ms delay

for every foot of distance between your source and the microphone.

Large rooms are great for getting big, dynamic drum sounds, especially when you combine a few close mics—on the kick and snare, for example—with strategically placed overheads and room mics (and some compression to glue it together in the mix). Electric and acoustic guitar tracks can also benefit from having space around them when recording.

In addition, uncarpeted hallways and stairwells make great reverb chambers. I recently used an echoey stairwell to add a rich stereo ambience to an old analog string synth by placing the amp at the top of the stairs and a spaced pair of omni mics at the bottom.

Here's a recipe for thickening an electric guitar track when you have some distance to play with. Begin by placing a dynamic mic close to the grille of the amp, positioned a few inches left or right from the center of the speaker. Next, place a large-diaphragm condenser mic five to 15 feet away, and five feet above the floor, but pointing down toward the amp. Assign each mic its own track and hit Record. This setup will add dimensionality to the sound when the tracks are combined in mono, or add spaciousness when the tracks are placed on opposite sides of the stereo field.

A similar technique is to place a pair of condensers in an x/y stereo configuration a few feet from the amp, but pointing at the opposite side of the room. This will yield more of a stereo-delay effect from the room mics that you can blend in with your direct mic. Of course the success of distance miking depends on the position of the amp and mics, as well as the sonic qualities of the space.

If you've got additional inputs available on your interface, add a couple of mics in places you think will have interesting sonic characteristics—behind or above the instrument or amp, just outside a doorway, or inside a cardboard box or trash can, a few feet away. When you blend tracks that have radically different timbres, it can lead to an exciting and unusual mix.

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# Apple Logic Pro 9

Multiband processing made easy

### BY CRAIG ANDERTON

### OBJECTIVE

Split a part into four different, nonoverlapping frequency bands, then process each band individually.

### BACKGROUND

Multiband processing is particularly powerful with guitar, as applying distortion to separate bands gives a focused, detailed sound.

### TIPS

■ Step 2:

Experiment with different crossover frequencies, especially with instruments other than guitar.

■ Step 2: These settings defeat compression, turning the Multipressor into a crossover. The other parameters don't matter.



### More Online

Hear the difference between single-band and multiband distortion. emusician.com/august2011

### Step 1

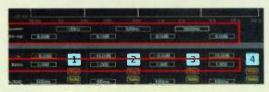
Create four audio tracks, then record your guitar part into one of them.

After recording, click on the guitar part, then option-drag into the three other tracks to create four copies of the same track.



### Step 2

Insert the Multipressor in Track 1's top insert slot, and doubleclick on it to open the GUI. Set the three crossover frequencies to 100Hz, 520Hz, and 3,500Hz.



Set all gain makeup controls to +6.0dB and all ratios to 1.000.

### Step 3

Insert your guitar amp of choice (e.g., Guitar Amp Pro) in the insert slot following the Multipressor, and choose an amp sound you like.

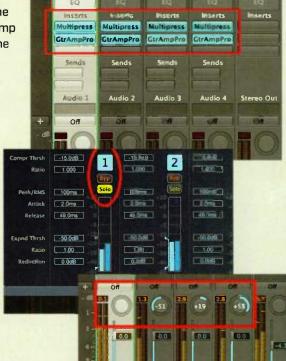


### Step 4

Command-Option-drag the Multipressor and guitar amp to copy them into the same inserts on the three other quitar tracks.



Open up the Track 1 Multipressor and solo the first band. Solo bands 2, 3, and 4 in the Multipressors on Tracks 2, 3, and 4, respectively.



### Step 6

Pan the four tracks as desired to create a huge stereo spread.



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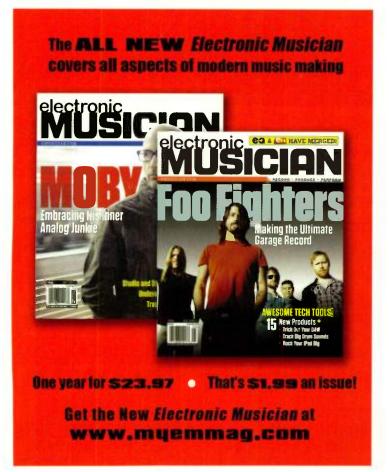


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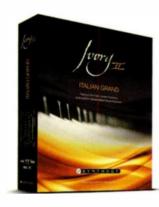
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Five Digital Audio Myths— Busted!

**BY CRAIG ANDERTON** 

Music as we know it has been destroyed by [insert bogeyman digital technology: Beat Detective, Auto-Tune, etc.]. No, lazy people misusing your bogeyman digital technology of choice have destroyed music as we know it.

2

Vinyl contains actual waveforms, so it's inherently accurate and doesn't need drastic digital-audio-type filtering. Oh, but it does: a +20dB boost at 20Hz, a -20dB cut at 20kHz, and a very specific filter shapethe infamous RIAA curve. In fact, vinyl requires teeny-tiny little bass waveforms so the phono cartridge doesn't imitate "dancing shrimp" at the sushi bar.

3

Here's why digital audio sucks: because of the stair-stepping at the output caused by sampling. Here, let's hook up this oscilloscope. Zoom way in. No, zoom in more ... more ... now, what do you see? Right! That's why they're called output-smoothing filters.

Boosting EQ at 25kHz for "air" is ridiculous unless you're a dog. These filters have skirts that extend into the audible range, and can affect the highs in subtle ways. Besides, my dogs like listening to music, and they're always asking for more 25kHz. And for better woofers.

5

Tape is a more natural way to record than digital technology. Yes, if you think that suspending a zillion little magnetic rust particles in plastic and then telling them how to line up as they get dragged past an electromagnet, which has to be fed by a high-level supersonic signal just so the audio doesn't sound like a buzzsaw, is totally natural.





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