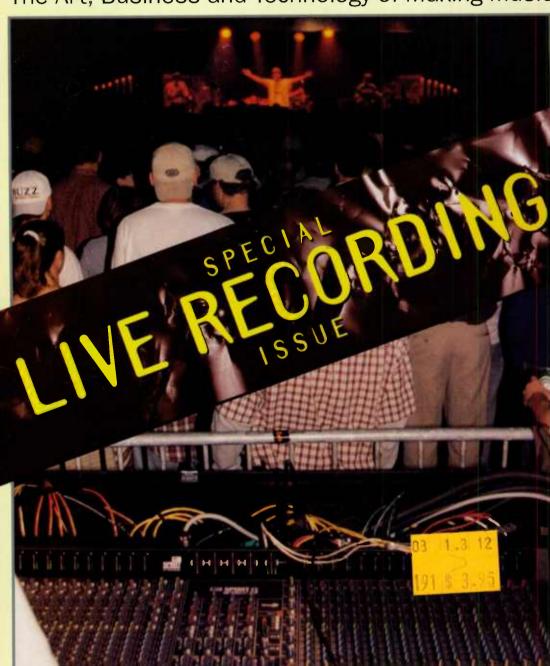
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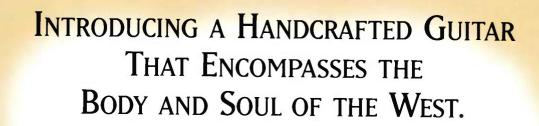
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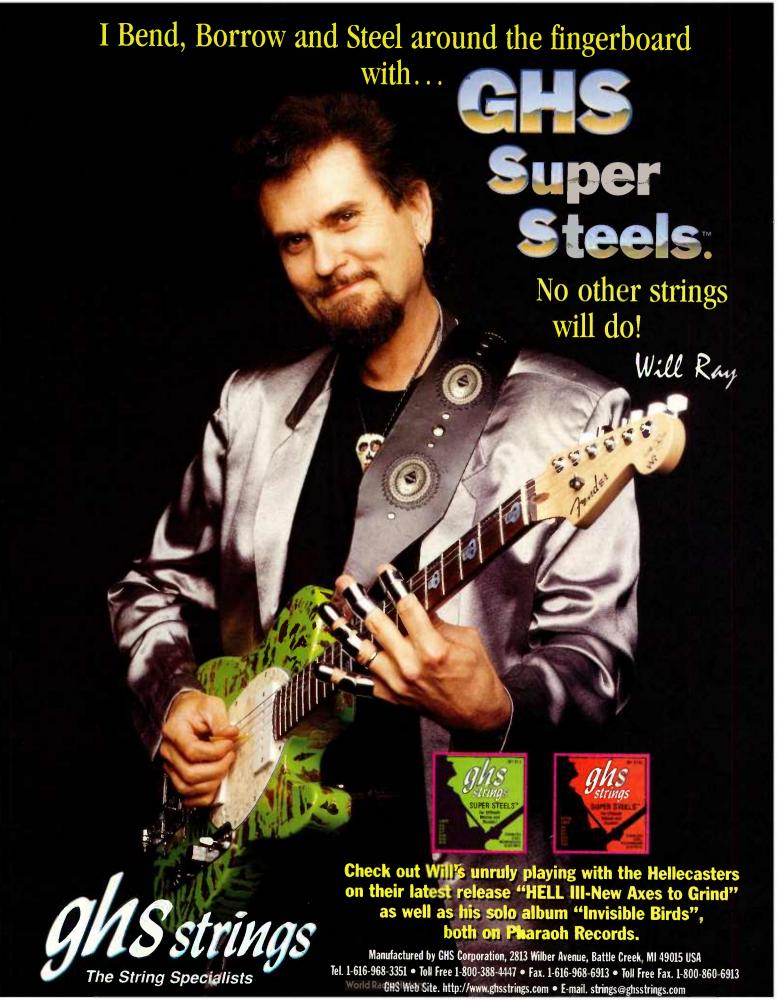
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RECORDING

A Billboard PUBLICATION

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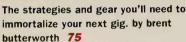
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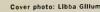
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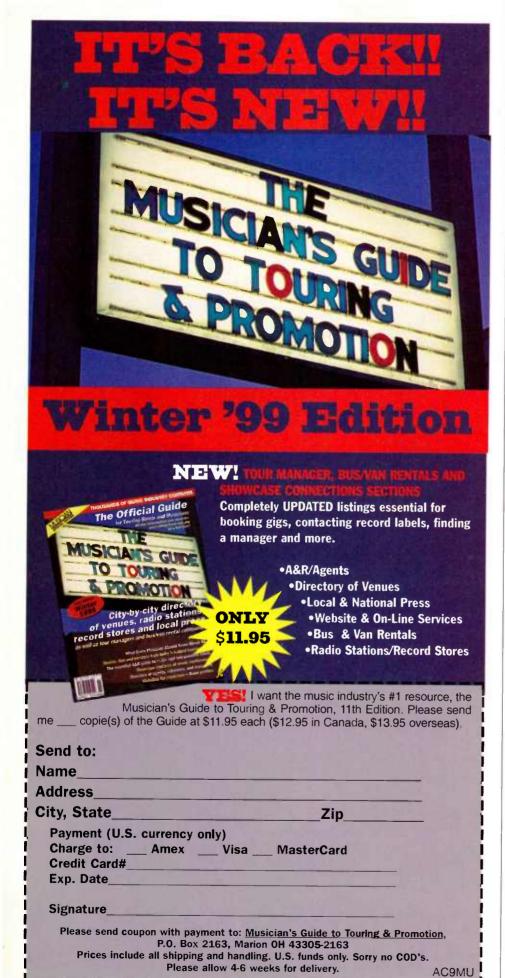


power users **DAVID TORN & TC ELECTRONIC FIREWORX**

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letters

staying healthy

Jason Zasky's article "The Agony of the Beat" (Headlines, Jan. '99) was of extreme importance, but it omitted mention of the nonprofit International Foundation Performing Arts Medicine as a place to turn for help before turning to a doctor. We have a medical advisory board and will be publishing a resource directory to make it easier for artists to find specialists. Also, the book Performing Arts Medicine, while an excellent resource, is written for other health professionals; some of the medical jargon may be hard for the lay reader to understand. Many of the fine physicians who contributed to this excellent text also write for IFPAM's health newsletter. Performance Pulse, which is written for artists: Any medical terms are either substituted or defined, and almost all of the information can be put to immediate use by musicians.

> nina paris founder/president, IFPAM IFPAM@bigfoot.com

whigged out

Thanks for the Afghan Whigs article (Shop Talk, Jan. '99). They are by far one of the most classy, original, and consistent bands of the Nineties. But Greg Dulli is dead-up wrong in saying there is no supporting circuit of zines or a word-of-mouth network to support new bands. I read in *Punk Planet* there there are currently some forty thousand zines currently in circulation. Plus there's the W. E. (*i.e.*, Wilmington Exchange), a week-long festival in coastal North Carolina that's drawn together tons of indie bands, zines, brewers, and film producers every year for three years now. I believe Dulli is so used to the biglabel money syndrome that he doesn't know where to look for anything indie anymore.

gregg yeti the flashing astonishers gcjohnso@mailbox.syr.edu

neil finn

I was pleasantly surprised—no, I was downright delighted—to see Neil Finn's name on the cover of your Dec. '98 issue (Songwriting). Since Crowded House's early success faded in the U.S. over the past ten years due to lack of label, radio, and/or fan support, I've been shocked at how few people know that Neil is still making great music. Thanks to writer Tom Lanham and to *Musician* for the insightful interview and for reminding everyone that Neil hasn't quit making

music in favor of a less harrowing vocation, like raising sheep.

matt lucas mlucas@deer-park.isd.tenet.edu

What a treat it was to see an interview with Neil Finn. It was a pleasure to read how he crafts some of his fine work. I was, however, disappointed with interviewer Tom Lanham. He misnames "Sinner," and though "Don't Dream It's Over" got plenty of U.S. airplay on pop stations, it is by no means a "stunner" compared to the multitude of other songs written by Finn. I wish that Lanham had shown a little more insight.

laurie j. bradburn west greenwich, RI

reader shouldn't confuse them with the later Custom Vibrasonics. I own a 1996 Fender Custom Vibrasonic, one of the last Vibrasonic models made. It isn't a reissue, but a new design with versatility, clean power, and that classic Fender tube tone. With 100 watts of tube power, two independent channels (one voiced for regular guitar with a "fat" switch, the other voiced for steel guitar with a "sweet" switch), tube reverb, tube vibrato, point-to-point hand wiring, and a 15" Eminence speaker, this is the most versatile amp, dollar for dollar, I've ever used. Whether I'm playing one of my Teles, Strats, or Gretsches, my Les Paul or my Sho-Bud, this amp does it all. It'll walk all over Twin Reverbs and take names.

> col. jon fort bobby purify & the duespayers col_fort@hotmail.com

good vibes

Jeff Jourard claimed to have never seen a Fender Vibrasonic amp that was more than 40 watts (Letters, Dec. '98). Jeff may be familiar only with the older 40-watt Vibrasonics, but the

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from the edit

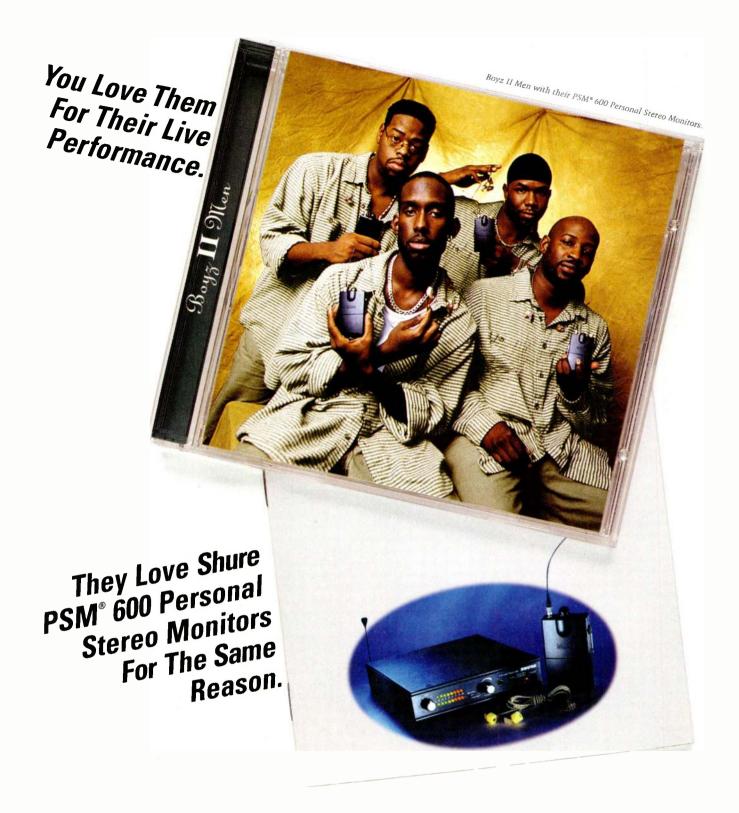
s it just me, or does it seem to you that there are more live albums than ever coming out these days? Just in the past few months we've seen concert releases by all kinds of major acts: the Rolling Stones, Aerosmith, Garth Brooks, Portishead, Rush, Pearl Jam, Hanson, 311, the Orb. What could this mean? Is everyone busy settling "contractual obligations" with their labels? Maybe. But whatever the reason, I'm happy with what I'm hearing.

At its most basic, music is about performance. The listener—or, preferably, a venue filled with listeners—is as much a part of the equation as the player and the material. Lots of great music has been made in empty rooms, from recording studios to Carnegie Hall, but most of it strives to create an illusion of the kind of energy you get when you put an artist in front of an audience. Much of it succeeds—and the measure of that success is the desire it builds among listeners to see the act work its magic in person.

We've reached the point where technology allows us to record ourselves at a gig with as much clarity and quality as we might achieve in studios, usually at a more than reasonable price. If your band has built a following on the basis of killer performances, this is terrific news. Rather than sink into the womb of a studio, you might consider making your first or next album where you're most comfortable: at your favorite club, in front of a roomful of fans.

We've dedicated this issue to helping you explore this option. From behind-the-scenes views on two of the great live albums of all time, Frampton Comes Alive and Cheap Trick at Budokan, to nuts-and-bolts examinations of what kind of equipment you'll need, how you should approach performing when the tape starts rolling, and other relevant topics, our special issue on live recording can get you started on the road toward cutting a CD that will show the world what you can do onstage. Good luck—and if you do end up with a disc that shows your band at its best onstage, please send a copy our way and tell us about it.

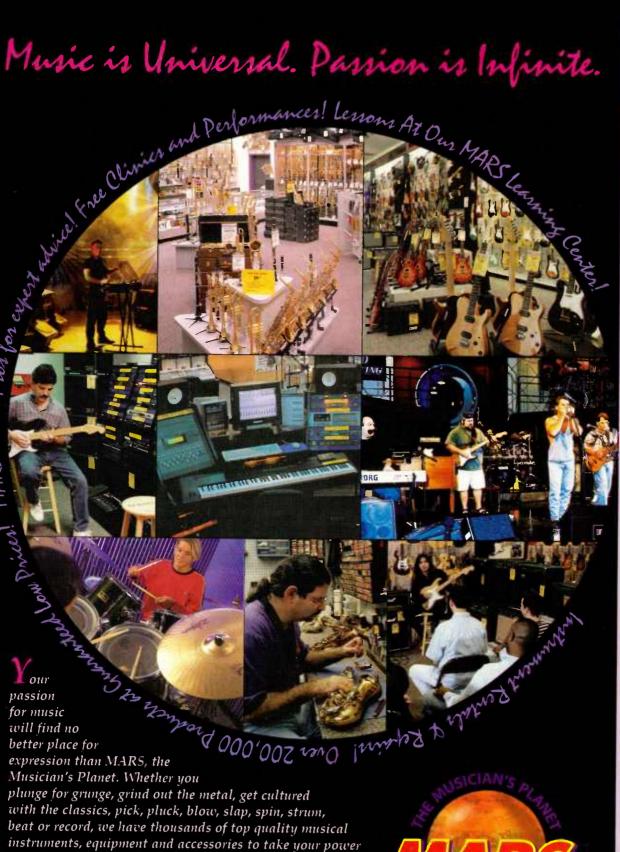
-Robert L. Doerschuk, editor



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frontman

hen Aerosmith is recording for what you hope will be a album, what's your approach to stretching out beyond the original versions of songs?

Well, it's really good to be able to stretch out when I forget what I played on the record

[laughs]. But our approach is to think like members of the audience. We've gone to shows where bands do a lot of jamming. We've certainly heard virtuoso players, but I don't think that any of us is so good that we can sustain a fifteen-minute solo. I like to hear some of the phrases I've heard on the record. When I saw

Page and Plant last summer, he [Jimmy Page] was playing stuff that was so close to the record; I hadn't heard him do that in years, and it was fuckin' great. The other extreme was when I saw them in 1976: They played, like, six songs in a three-hour set, because there was so much jamming and soloing. There's room for a bit of that stuff, and certainly there are a couple of solos in the course of a night where I'll depart [from the album]. But for the most part, the solos that

I play are as much a trademark to a song as a vocal line. Does the size of stadium stages work against you in generating the kind of intensity you get in smaller venues?

Yeah. It's all a compromise, like using a guitar cord or going wireless. You lose tone with a wireless, but using a wire means I'd have to stand in front of my amp all night.

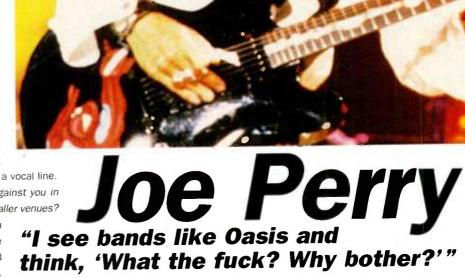
One of our basic things is, if you're not gonna put on a show, the audience might as well stay home and listen to the CD. It's exciting to see some action, whether it's Gene Simmons spitting fire or Peter Townshend swingin' his arms; it's like you can see the band getting off on what they're playing. That's why I see bands like Oasis and think, "What the fuck? Why bother going?"

What advice can you give bands that want to record a live gig? It depends on how you're going to use your tape. If it's gonna be

your demo, you don't want your finger slippin' off the fret halfway through your solo, so you've got to stand still. We've done shows that were broadcast live—two weeks ago, we did one over the Internet-where you lay

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To read more of Robert L. Doerschuk's interview with Joe Perry, visit Musician Online at www.musicianmag.com.



back a bit with your jumpin' around, in hopes that you don't fuck up the tricky things. But if you're going for a balls-out live record, you've got to not think about the tape rolling and just give it to your audience.

The performance, not the production, is the point.

Some of the best live albums sound like they were recorded on a string through a fuckin' tin can. If your band is locked in and playing at its best, people aren't going to sit there and go, "Where's your 80 cycles? How come there isn't enough 5k?" An engineer might say it,

but there's just one engineer for every fifty people who will be listening to it.

And it's not the engineers who buy all the records.

MARCH 1999

Exactly.—Robert L. Doerschuk

Chuck Leavell

s there something unique about playing live when you know it's being recorded?

It does put me on my toes a little bit and cause me to listen a little more intently to the rest of the band, so that if Charlie Watts or Daryl Jones does a little something, I can pick up on it.

Obviously you want to listen in any musical situation, but you're saying

that when tape isn't rolling, you may take a few more chances or stretch out a bit more.

It depends on the role I'm playing. In a band like the Stones, you don't do that, because it's a guitar band, so what I do is supplemental. I don't need to try and go crazy just to be heard on a live recording. My role would be to support the Rolling Stones by working within the rhythm section. On the other hand, when I recorded Unplugged with Eric Clapton, that was magical for me because it had been a while since I'd

been with a band of that stature, where I had an opportunity to take some solos and step out in front a little bit. I had a lot of things bottled up and ready to be unleashed, and that's what happened on that show.

What was there about that live date that encouraged you to stretch out?

It was the first gig I had ever done with Eric as his only keyboardist. Prior to that, Greg Phillinganes had been more or less first-chair keyboard, and I was the second keyboardist. When he resigned about six months before this event, Eric came to me and said, "Do you think you'd like to have another person onboard, or would you like to handle this by yourself?" After some thought, I said, "I think it would be interesting to simplify it a little, with just one keyboard."

Do you tend to take different kinds of

keyboards to gigs, depending on how much solo freedom you've got?

Well, I'm a naturalist, so when at all possible I stick with piano and organ, although there are certainly times when you need to

augment with some other sounds. In Eric's case, there was a bit more of that on his album *Journeyman*. A lot of the songs we were playing at that time required other sounds—but I still used my MIDled

[Hammond] B-3 to trigger them. It's incredibly convenient to have the horns down on your left hand and the B-3 on your right, or perhaps a little piano on the lower manual and organ on the upper manual.

What modules do you use to sweeten the B-3 sound?

You can't go wrong with the Korg O1W; those sounds work real well. And I have an old [Yamaha] TX81Z that I use from time to time.



"I don't try and go crazy just to be heard on a live recording."

Are there any artists you'd like to work with?
Well. if Roy Bittan ever hurts his hands. I'd love for Bruce to give me a call [laughs].

As you listen to Bittan on Springsteen records, do you hear piano parts that you would play a little differently?

Oh, yeah, of course. That's the lovely thing about music: Everybody's gonna do it their own way. When I hear a wonderful Roy Bittan passage, what goes through my mind is, "Wow, what a great

passage! I could take that and work it more the way I would do it." Although, let's face it, there are some parts that just couldn't be played any better.

-Robert L. Doerschuk

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workingmusician

STREAT

ive a cappella groups are typically as exciting as harpists, but New York-based *Double Dong* isn't your typical gospel-tinged vocal group:

This is a full-fledged punk-meets-hip-hop ensemble, and though it's quite a sight to behold their act from in front of the stage, Double Dong's Ghost Krabb is quick to point out that it's a physical wonder for them to pull off forty minutes a night. "It's pretty high energy and has a lot of dancing, screaming, and

whatnot," he says. "It's a lot of fun and I think it's pretty entertaining."

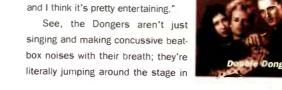
a never-ending hyperactive frenzy of dance. "It's kind of a marathon," says Krabb.

"It seems like the first song is always kind of rough and then we get oxygenated and we lose ourselves in it a little bit. It's a mind over matter kind of a thing."

So how do the members of Double Dong keep up? Krabb says he prefers "savage sports, like climbing trees, and then indoor activities like the tantric arts. We do a lot of yoga and stretching before shows, and a lot of Dancercize

to stay fit, because it does require a lot of aerobic energy."

Fred LeBlanc, who handles both lead vocals and drum responsibilities for *Cowboy Mouth*, says that the key to keeping his breath during a show is





MERL SAUNDERS IFIKNEW WHAT KNOW NOW...

As a young musician in the service, I had the chance to travel around the world. On one of those tours I ran into a musician named Duke Ellington, who was playing at the officer's club. I was nineteen years old, but I'd seen Duke play many times since I was six or seven, so I kept inching forward through the crowd until I made it up to the bandstand. I got his attention, and he said to me, "You're a musician?" I said, "Yeah. My name's Merl

Saunders—and, man, you're the greatest jazz musician!" And he said, "Hey, I'm not a jazz musician. I'm Duke Ellington. If you're Merl Saunders, you're not playing jazz; you're playing Merl Saunders music. You remember that."

Those words were what made me start writing my own music, and looking back now, I wish I'd begun doing it sooner. There's nothing wrong with playing great tunes by Hoagy Carmichael or George Gershwin, but doing

what he does before he hits the stage. "Being nervous is probably the worst thing that can happen. Even if your show is very energetic you're going to get a lot more done the more relaxed and more flexible you are," he says from a tour stop in North Carolina. As far as being relaxed, he explains, "I make sure my drums are totally set up the way I want them. I make sure everything is completely to my satisfaction when I get onstage so I don't have to think, because the more you have to think the more nervous you get, and the more nervous you get the more you struggle to remember to breathe."

On a practical note LeBlanc also uses a saline nose mist spray in order to clear his sinuses. "It's very important to breathe through your nose and not as much through your mouth, because the deeper you breathe through your nose for some

reason the more it goes through your bloodstream."

Flexibility comes through a combination of stretching his arms and legs and some basic workout things he does including sit-ups and light weightlifting. "I'm a pretty big guy, so most of the workout I do is centered around stretching and flexibility. As a drummer and an artist you can work yourself up to where you're a muscle man. but if you have no flexibility then the music can't flow through you. That's the most important part. Just because we're musicians doesn't mean that we're creating what we do; we hear it from some other place and all we're trying to do is reinterpret it. What you're doing by stretching, taking care of yourself, and staying in somewhat decent shape is allowing the music to flow through you freely." - David John Farinella

your own music is another thing. I'd tell any young musician to start writing today, even if it means humming into a tape recorder as you're sitting in your car at a stop sign.

Also, I don't want to be partial, but I'd tell any musician to be sure to spend time in New York City, the melting pot of the best musicians in the world. I'll never forget, I was about twenty-two, I had just gotten out of the service, and I was playing piano at an airman's club. This guy, the janitor at the club, kept circling me, and finally he stopped and said, "You're playing the wrong changes." I said, "Yeah? Well, you go ahead and play it!" He sat down, and when he was finished, I was crying. That's what you find on the East Coast,

you know what I mean?

See, I love the musicians I've known in San Francisco. I was very close friends with Vince Guaraldi; I followed him ever since the days when he was playing with Cal Tjader at the Blackhawk. But, really, the most intense music schools are on the East Coast. I did a lot of hanging out on the East Coast, with Jimmy Smith, Jimmy McGriff—we were all brothers, learning together. To this day, because of that time I spent in New York, I can stay about twenty steps ahead of the musicians on the West Coast. In fact, I wish I'd stayed on the East Coast a little longer; maybe I'd be able to stay about a hundred steps ahead.

-Robert L. Doerschuk



Does Your Amp Need NewTubes?

ad tubes in your amp can ruin a gig, yet many players don't know when or why to replace them. According to Paul Rivera, president of Rivera Research & Development, there is a wide variety of ailments associated with worn tubes. Symptoms of old preamp tubes are a loss of gain and/or brilliance, muddiness, microphonic feedback, and "tinkling" sounds.

Old power tubes are marked by loss of volume, muddiness, low-pitched microphonics, rattling, arcing or flashes in tubes, and frequent blown fuses (which pose a serious danger to amp and you).

Other factors that affect tube wear are the volume the amp is typically played at, how often the amp is moved, the roughness of handling, the proximity of the tubes to the speaker(s), and lastly, the bias setting (idle current), which determines the voltage an amp operates at and therefore dictates how hard the tubes work. (You can expect 1,000-2,000 hours of use from a typical set of tubes.)

To test for old tubes, set your amp to its stage volume and lightly tap the tubes with the eraser of a pencil. Hearing the tap through the speaker is normal, but excessive noise means that a tube needs to be replaced. A funny smell or browning of the silvery barium coating (inside the glass) are clues as well.—**Brett Ratner**



f you think it's difficult to "make it" in the U.S., consider the plight of *Full Circle*. This talented trio operates in the less-than-hospitable musical climate of Katmandu, Nepal, a city best-known as a base for Himalayan mountaineering expeditions. Despite the obstacles,

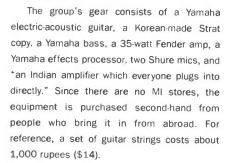
Dimple Singh (guitar/vocals), Deependra Rai (guitar) and Elvis Cormuz (bass), manage to eke out a living as full-time musicians. "There are one or two other bands who perform popular music," says Singh, "but not professionally."

Full Circle has the city's choicest gig: five nights a week at the Hotel Yak & Yeti for \$125/week, playing material by the likes of the Beatles, the Eagles, and Sting. Mostly restricted to playing covers, the band occasionally gets to showcase originals. Not surprisingly, Full Circle's songs are influenced by the foreign artists they cover, and their lyrics inspired by Nepalese sociopolitical issues. The result is socially-conscious soft rock,

which according to Singh, is in keeping with the current musical trend in Asia.

The band records in a local studio that has a Korg MIDI workstation

and a Soundcraft mixer. "There are one or two 'expensive' studios," notes Singh. "but there are no professional sound technicians or producers." Getting their music to the public is nearly impossible anyway, owing to the fact that there are no record distributors.



For all the hardships, Full Circle has achieved one benchmark of success: "We don't do anything for a day job," says Singh. "We are just occupied with music."—Jason Zasky



HOW TO PROTECT YOUR COPYRIGHTS

hen a songwriter writes a song it is considered "copywritten"—that is, the song is fully protected from infringement or unfair use under U.S. copyright law. However, most writers purchase additional copyright "insurance" by formally registering their works with the Office of Copyright at the Library of Congress in Washington, D.C.

In the music business the Performing Arts (PA) form is used to register a song (only the musical composition and lyrics) and the Sound Recording (SR) form is used to register the "embodiment" of the song in a sound recording.

A person may register as many songs as

they wish on a PA or SR, call it "The Collected Works of John Q. Public, Vol. 1," and be granted full copyright protection for each song listed on the form, which is great because each song gets protected for a single \$20 fee. But what if

someone hears one of these songs and wants to cover it? Assuming you're not a member of a performing rights organization like ASCAP or BMI—in which case you should register the song in their database—they'll have to check with the government. Will they be able to find it in the Copyright Office records? "They won't," says Page Miller, a senior copyright information specialist in D.C. "This is why we created the Corrections & Amplifications (CA) form."

The CA form allows you to "amplify" your PA or SR filing so that each of your songs is individually indexed at the Copyright Office. If a band or artist wants to cover a song you've

written or recorded, they would be able to look up your name as the song's copyright owner. If the song in question is merely one of ten songs registered on a PA or SR form, it would be protected but it will not enable a person to find it in a copyright search.

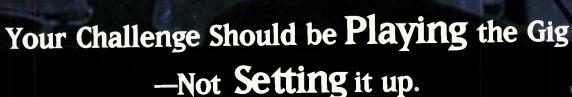
A CA form registration has nothing to do with giving the song additional protection—it just provides a tracking path to the song's author. You file the CA after you receive your registration number back from the first filing. So for \$40 (\$20 for each registration) you can fully protect all your songs. But hurry, copyright fees are set to increase significantly in July, 1999.

-Peter Spellman

For general information, call the Copyright Office at (202) 707-3000. Forms can be ordered 24 hours a day by calling (202) 707-9100; information specialists can be reached during business hours by calling (202) 707-5959.

11.1.

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EON Powered speakers provide many advantages that today's gigging musician will appreciate. For example

EON Powered speakers provide many advantages that today's gigging musician will appreciate. For example, let's look at the number one enemy of all speakers: heat. Heat robs you of acoustical output; in fact, it's like losing half of your PA. To address this concern, JBL developed the unique Thermomaster[®] Total Thermal Management System[®]. This patented combination of heat dissipating aluminum baffle and finned ports reduces the negative effects of heat build-up. For flexibility, EON's rugged design allows you to use them as

both upright speakers and tilted monitors. For convenience, EON Powered speakers weigh less than 45 pounds each, which means you might actually look forward to setting them up. One more point: since JBL engineered EON's amplifiers to perfectly match the requirements of the speaker, reliability and performance are optimally maintained. And, for great performance night after night, you can always count on that legendary JBL sound.

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here isn't a musician alive who hasn't sighed the familiar litany: "You should have been there." "Something was in the air that night." "If only there was tape rolling!" What could be worse, we all ask at some point, than a missed chance to capture the magic moment?

Perhaps it would be the mediocre moment, preserved in crystalline perfection during the one night your band finally got it together to record the gig properly. Few performers are as keenly aware of the pitfalls of live recording as multi-instrumental wunderkind Mike Keneally, whose shows are marked by heavy doses of hilarity, stunning musicianship, audience interplay, and major outpourings of energy. He's basked in the enervating red glow of the RECORD light more than a few times, and in recent years his priorities have shifted accordingly. "It's a self-fulfilling prophecy to think you're going to screw up because you're recording," he says. "In reality, nothing has changed in the world except for the fact that a button has been pushed.

"Any touring band should record their shows, especially if you encourage peculiar things to happen onstage," he laughs, sitting in an Oregon hotel room with the prodigiously gifted members of his band Beer For Dolphins. "Tapes provide amusement on the bus, or whatever the vehicle of choice is—you can have a lot of fun reabusing somebody in the band who did something really dumb! So the mindset for live recording with us is virtually the same as doing a show: Be as interactive and creative as possible, because you have two opportunities to be grandly embarrassed!"

There's scarcely a moment set aside for shame on Beer For Dolphins' go-for-broke tours—Keneally and company are too busy, and too good. And it would be hard to find another young artist with so many live recordings

already to his credit. In the decade since working with his first serious employer, Frank Zappa—who nicknamed Mike "Evelyn Wood" for his quick absorption and flawless retention of difficult melodies onstage—he's appeared on everything from *Roseanne* to albums by Screamin' Jay Hawkins. His latest manifesto, *Sluggo!*, is so textured, compelling, and visceral that it's hard to believe its production was squeezed into breaks in tours by Steve Vai, with whom Keneally is heard on *G3 Live in Concert*. (*Sluggo!* and other Keneally discs, including the Dolphins' live CD *Half Alive in Hollywood*, are on

Immune Records, 9725 Mission Gorge Rd., Ste. 211, San Diego, CA 92071; www.immunerecords.com)

Keneally made a crucial discovery about the deceptiveness of house mixes in a club, which often breed sterile, off-balance board recordings: "If you're doing MiniDisc or DAT recordings off the board, you need a separate line out, instead of just what the guy is pumping through the main P.A. system, because that guy is doing sound for the *room* as opposed to for the tape. With your bass or guitar amps razing onstage—which I tend to have so I can hear myself over the drums—that means

Guitar monster Mike Keneally comes clean on the art of live recording.

by matt resnicoff

Doin' It Live—an

that there's very little guitar going through the P.A., especially in a small room. That corresponds to very low guitar and bass levels on the board tape, which are usually vocal-heavy and weird-sounding."

But in these moments, he warns, don't forget your drummer's role in the submix, or your live tapes will sound particularly hollow: "Some sound guys don't seem to realize that tom-toms exist. It can be a frustrating experience to see a drummer playing amazingly cool, intricate-looking licks that you can't hear."

As a matter of band protocol, Keneally recommends coronating a keen-eared—or at least a reasonably dependable—band member to supervise the auxiliary "B" mix intended for your live tapes. During soundcheck, use headphones to get a quick level on all instruments. Do a bit of recording, and then have everybody stop playing so the mix specialist can make sure the results are listenable.

Keneally is always open to spicing his hi-fi live tapes with odd source material. "That's what Frank did," he explains. "On *Uncle Meat*, from 1969, there are cassette recordings from Copenhagen that have all the sonic resonance and quality of an office chair," he laughs, "but because of the performance being special, he put it on anyway. Just because a piece of tape doesn't sound too good, it doesn't mean it won't be useful at some point."

To that end, Beer For Dolphins has made certain sonic compromises for the reliable, non-linear convenience of the MiniDisc. "Portable DAT machines tend to be dicey," he reports. "I've had horrible experiences with them eating tape. There's an ease in finding a spot on a disc for cataloging, which requires an archivist's patience. A real hardcore critic of data compression will point out where it's somewhat inferior to DAT, but for us it's vibrant."

During his time with Zappa—which yielded the fine live discs Broadway the Hard Way, Make a Jazz Noise Here, and The Best Band You Never Heard in Your Life—the band struggled to balance the freedoms of performance with an overall concern for accuracy in reproducing material. While Zappa's audience could easily accept the abrupt shifts in ambience and tempo created by his liberal editing, less adventurous audiences or A&R men might not be as forgiving. If your drummer is not inclined to play along with a click in headphones, he or she might be persuaded by the likelihood that selected segments of your band's live recordings will be editable if the tempos are consistent from show to show. Keneally found with Zappa that one good take sometimes required lifting individual bars of music from as many as nine different concerts.

"By the time I was in his band, he'd graduated to 48-track digital," Keneally notes. "Much more than now, I was conscious that every single move I made was going to tape, and that he was listening with hopes of making albums. We made a lot of mistakes up there, but he ferreted them out and edited together enough segments to make it sound like we were a seamless steam engine, pumping out flaw-free music night after night. He was trying to rush release 'Ravel's *Bolero*'

as a single, but none of our performances were good enough, and he didn't have time to do the editing of different shows, so we'd occasionally even record soundchecks. That was especially unnerving, because you didn't have the audience to play to; you just knew you were doing the song live and it was supposed to be good."

Zappa never got the take, but the process taught Keneally a valuable lesson about perfectionism and the value of the flaw. His advice for fledgling live recordists comes without hesitation: "Be unafraid. If you're trying to capture something wonderful, you have to get over 'red-light fever' the moment you're familiar with the concept. Don't allow yourself to be intimidated by being recorded—revel in it gratefully, because it just means that if you do something remarkable, you can share it with someone who doesn't happen to be in the room right then."

And if it sucks? "Record over it! We just had a situation where we ran out of discs and needed to record a show, so I looked over all the city names, remembered which were marginal, and nominated one to erase. So definitely keep notes as you go along about what's good and what can be disposed of without the world suffering, because stuff starts to blur as a tour goes on."

Onstage, Keneally gets very physically involved, and he stresses the impact that this sort of energy makes on his live recordings: "There have been times I thought I was playing the most inspired stuff, and when I listened back it didn't stand up. And on nights when I honestly thought it wasn't happening at all—this happens more frequently—the supposedly 'lackluster' performance absolutely sparkles on tape. The art of live recording is to capture whatever happened. You're not doing your job properly if you're worried only about getting correct notes on the tape. If my guitar falls off, I'm convinced it was supposed to; half the fun is trying to figure out a way to get it back up again while still playing! On tape, that event might sound interesting and peculiar because I'd come up with a different combination of notes as a result of the guitar being held in a strange position. I'm not militant about playing 'right for the tape'; if something happens that's odd but works emotionally or visually for the audience, then hooray for that.

"If you record a lot of your performances," he concludes, "the first thing to do is accept it as the bare minimum fact of life: 'There's air in the room, they're serving beer, we're recording the show.' At that point you don't have to worry about anything but getting in touch with the other members of the band, communicating with the audience, and living inside the songs—tum your mind off to any other peripheral concerns. At soundcheck, I hope, you've made sure there's level going to the tape and it's not too hot, and there's some decent instrument balance. Now, turn your mind off the fact that there's a tape running. The most noble and worthwhile thing you can do with music is to inhabit it, let it inhabit you."

Contributors: Matt Resnicoff is currently producing an album by guitarpist—that's right, a guitarpist—Phil deGrui, and a compilation tribute to Michael Hedges.

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songwriting)

by michael gelfand



Bryan Adams finds out the secret to writing hit songs:

Stop Being So Bloody Precious!

ey, Mister Indie Cred! I hear you think pop music is disposable drivel for the masses. Well, you may be right, but that doesn't explain why millions upon millions of people take so much pleasure in listening to innocuous and egregiously overplayed songs. Tell me, can they all be so wrong?

Maybe the mainstream's infatuation with pop music does obscure and even prevent more sophisticated or challenging material from getting the attention it deserves. Even so, respect still must be given where it's deserved—namely, to artists like Bryan Adams, who can repeatedly combine simple words and obvious hooks with the suitable production to create sing-along tunes that can captivate the world.

Adams has been a chart-topping machine since the early days of MTV, when his song "Cuts Like a Knife" turned him from a little-known Canadian rocker into an icon in pop music. Since then, he has won numerous industry awards for songs like "Straight from the Heart," "(Everything I Do) I Do It for You," "Have You Ever Really Loved a Woman?," and "18 Til I Die," to name a few. So given his past successes and the release of his latest album. *On a Day Like Today* (A&M), it seemed appropriate to chat with Adams about what, if we're honest, captivates us all: how to write a hit song.

How do you start writing?

What happens is, I'll jot down a phrase or maybe a line on a piece of paper, and I'll have some sort of melody that goes along with it. I'll come back to it a few hours later,

and if I can see the lyric and actually hear the melody, then nine times out of ten it's going to be a good song. If I go back to look at the words and can't remember what I was doing, then it's nothing.

Is that process different from how you wrote in your early days?

When I started it was just this quest for something, and I wasn't quite sure what it was going to be. That's why my first album sounds like all demos to me: There was no direction, and I was trying to find a slot. On the second album I found that slot. I put a band together and played the songs live on tour. I worked out the arrangements with the band and then went into the studio. Don't go in and write the songs in the studio and play them with session players; that's a waste of time. If you really want to make a rock record, you have to have a band. You've got to play your songs. From the beginning the germ of an idea would only go so far in a basement studio, but once I played it live it would take on a different arrangement. or you'd find out pretty quickly whether the chorus sucked or whether the tempos needed to be moved, which is crucial to a song. You can only really discover that by playing live.

How do you apply that knowledge? How do you figure out the tempo? Generally speaking, I do everything to a click track and take it to the point where it loses the groove. We'll keep pushing up the beat until we lose it, and then we'll see where it feels best. It's got to feel right in the

pocket, and sometimes that's just the difference between different musicians: Every musician plays in the pocket differently, which makes your songs feel differently. If you listen to (continued on page 23)

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To read more of Michael Gelfand's interview with Bryan Adams, visit Musician Online at www.musicianmag.com.





The QS6.1's four real-time control sliders are assignable to any mod destination, including envelopes, LFOs and even multieffects.



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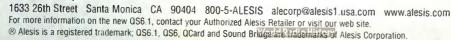
It doesn't usually happen this way. Sequels are supposed to be boring and derivative. But the new QS6.1" takes the powerful 64 voice synth engine of the original QS6 and supercharges it with double the sound memory, double the expansion capacity, new performance features and much more. So how is it that the QS6.1 got a whole lot better than the keyboard it replaced while actually costing less? The answer is that this sequel is from Alesis – the company that always delivers more than you expect.



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- Double the sound ROM of the QS6 (16MB internal)
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Alesis Corporation





songwriting

(continued from page 21)

bands like AC/DC, their music is not fast; it's just really groove-conscious. You'd be surprised at how slow songs like "Highway to Hell" and "Back in Black" are. They're not fast, but they're powerful and very accurate in tempo. That band plays like one brain. So it's not about speed, it's about finding that groove where your band is.

How much technology do you use in writing?

I wait until after the song is written. You have to be able to play the song on acoustic guitar; that's the test. If you can play it back on acoustic guitar, then it's probably going to be okay. If I can't play it back on acoustic guitar or I can't sing it back to you, then I probably won't play it on a record-even if it works as a demo in the studio. I've made too many errors that way, making songs in studios where I've used a drum machine but when you try to play it with a band, it doesn't work. So you've got to try all your songs with a band before you record them. It's really hard to learn how to play the song once you've got a record out, so play it from the beginning. Don't rely on technology, because you'll be stuck. Technology is deceiving because it sounds great: "Wow, that sounds like a John Bonham drum kit!" That might make your song sound really impressive, but it doesn't make it a better song. That's an illusion. It might sound cool and hip, but is there a song there?

How do you gauge if there is a song there? I'd play (producer) Mutt Lange what I thought was one of my better songs, and he'd say, "I like the chorus; it would make a nice verse." And I'd go, "Uh, what about the chorus?" And he'd say, "We'll write a new one. Let's take your chorus, make it the verse, and write a new chorus." That's extraordinary, because it makes for some really interesting songs. That happened with "It Can Happen Only Once."

Did it feel strange to have to relearn something you thought was already good?

No, because I was interested in seeing how far it would go. I haven't done it that much, ripping a song apart.

Was it odd, though?

I was floored.

But you were able to accept it?

Definitely. The one thing I learned working with Mutt was to stop being so bloody precious about it. It's just a song, and we're going to make it great.

What does it take to make a song hit material? I was sitting in a big New York City radio

station just yesterday, and the program director was scanning through my record right in front of me. He would play the intro and the verse, and if the chorus didn't happen for him within five seconds of the verse, he'd go, "Ah, that's nice," and then boom, on to the next song. When he found one he liked, he'd go, "Ah, now I like that song." It was very interesting to watch that, because I suddenly realized how important sequencing and variety are.

Perhaps starting out a song with a vocal is a good idea, like the Beatles' "We Can Work It Out." Thinking about drawing people in immediately is very important. We can get hung up on the art-school song thing, with a spacy intro and a Mellotron, an ethereal vocal, and then the verse. But if you want a pop hit, you want to get right to the song because (otherwise) people are already tuned out. Get right to the song.

How do you get to the point of doing that effectively?

I'm still learning. It's very easy to get caught up in the art-school way of making songs. But there is no formula. It's what works. So don't be afraid to find out what it is that makes a song work.

People often say that the good songs come very quickly . . .

Oh, yeah, that's very true.

Do those songs really come out better than the ones you have to beat on?

Anything I've ever had to beat on never was a hit. But in saying that, a song like "Summer of '69," which was recorded three times in its entirety, was a recording thing, not a songwriting thing. The difference between making that song or not making it a hit was the production: getting the right tempo, the right instrumentation, and the right space. It just took time, and I drove everybody absolutely insane. I'd say, "This version stinks. The drums sound slow, the tracks aren't vibrant. Let's go do it again." So I'd drag everybody back into the studio and we'd cut it again. You have to know where you want to go with a song and be dogmatic about it until you get it.

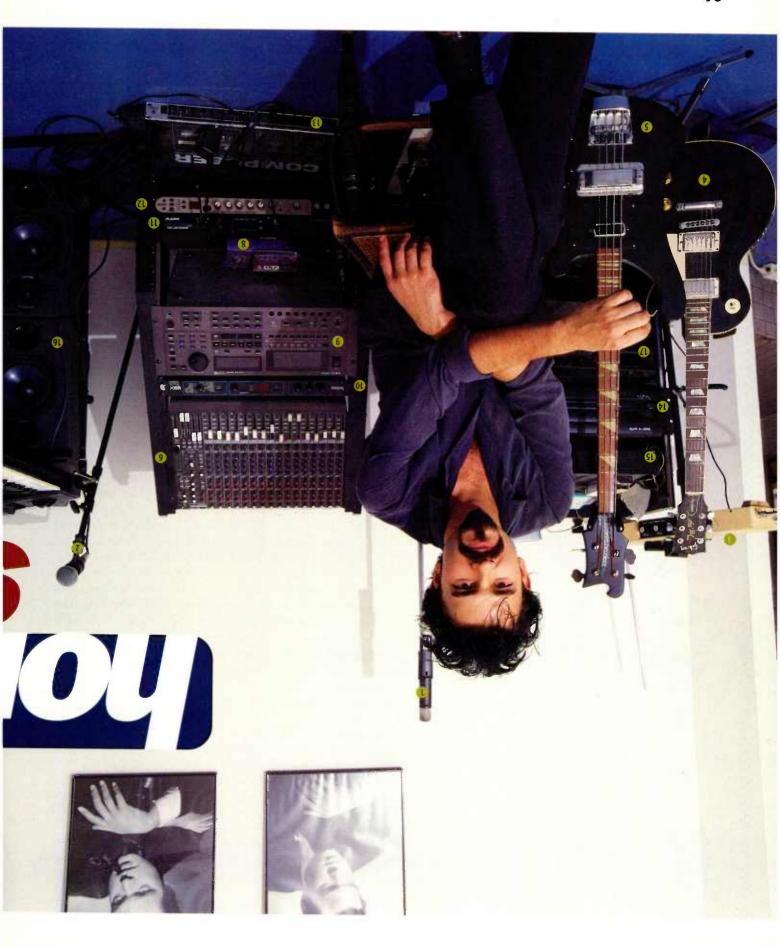
What's the most valuable lesson you've learned about writing songs?

To be really open, and if it ain't broke, don't fix it. There might be magic there even when you're making demos, but you need to be aware of it. If you're going to recut your songs, be aware of where you take them, so that you don't lose the initial charm that you had.

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Shudder to Think

by ken micallef

photo by sonja pacho

ome musicians create sparsely-outfitted home studios out of necessity, others by design. While a space crammed with computer-controlled gear allows many to produce studio-quality masters at home, New York's Shudder to Think prefer the method of a different era, when a simple four-track machine, a microphone, and a guitar were all the goods you got. Their bare bones lower Manhattan studio, conspicuously devoid of a computer, is just what the working man ordered.

"It has nothing to do with ethics or ethos," says vocalist Craig Wedren. "It's because we are lazy."

"When we sit down to make music," explains guitarist Nathan Larson (left), "our philosophy is that we'd rather be writing songs than trying to understand how to make a computer work."

It was from here, in Larson's loft apartment, that the duo recorded the "fake oldies" soundtrack, *First Love, Last Rites* (Epic), which features nearly phoned-in performances by Liz Phair, The The's Matt Johnson, Cheap Trick's Robin Zander, and X's John Doe, among others. Another film score, *High Art* (Velvel), was recorded with barely more than a Behringer processor and Shudder's other favorite piece of gear, the Kurzweil K2vx keyboard. The Shudder twins followed suit for their entries on the *Velvet Goldmine* (London) soundtrack. Now what do they say about the mothers of invention?

"For High Art," explains Wedren, "the score was based on a crystal glass organ that I made from sampling a few crystal

glasses. I just rubbed my finger around the edges of various glasses, then sampled them for the organ sounds of this ambient classical soundtrack score. You get the texture of the glasses with these nice little squeaks, a strange combination of ambient but also very acoustic sounds."

"For everything except the guitar and bass we use the Kurzweil," states Larson. "It has this wonderful array of orchestral sounds, great drum patches, and a relatively simple sequencer. We use it to augment everything we can't do live. How much can we say we love this thing? It's the most important piece of equipment either of us purchased since our first guitar."

What first catches the eye when entering Shudder studio central—after the framed photos of Orson Welles—is an equally ancient-looking Theremin, built from kit. "That is the Etherwave Theremin by a company called Big Briar," says Larson. "It looks old but it's not. We used it for an instrumental 6/8 piece on *High Art* called 'Mom's Mercedes.' "

Shudder's recording process is simple but effective. "Sometimes the guitars are first and the drums [which are usually recorded at a professional studio] last," notes Larson. "It depends where the ideas begin, whether it's with the vocals or guitar. After that the signal goes to the Mackie board, then to the Akai hard-disk recorder, with effects afterward."

For vocals, Shudder use an AKG C1000S 1, and a Shure Beta 58A 2. Along with the mics, the Theremin 3, a 1982 Custom Les Paul 3, Rickenbacker 4001 bass 3, and a

homestudio

Gibson acoustic (not pictured) run direct into a Mackie CR1604-VLZ 16-channel mic line mixer 6, as does the Kurzweil K2vx 1 with lomega zip drive 1. The Akai DR8 digital hard-disk recorder 2 carries the signal to numerous effects, which run the gamut from cost-effective workhorse to barely-working import anomaly. The Lexicon Alex digital effects processor (for slapback echo), and Alesis MicroVerb four-preset programmer 16-bit signal processor (for reverb) are hardly enough, but the Zoom Studio N1204 1 is, as they say in Manhattan parlance, "a good Canal street Japanese knockoff."

"This Japanese thing is so confusing," laughs Larson. "It has a vocoder, one of the few rack-mounted vocoders, and it's super cheap, only 120 bucks. The instructions are all in Japanese Pidgin English: 'Setting number four; makes singer sound like robot,' or 'Good for uptempo karaoke.' It doesn't say if it's a reverb or what. 'Space gun' is another setting that makes an excellent noise."

Shudder's fave effects unit, though, is the Behringer MDX2100 dynamics processor **3**.

"It's only 160 bucks," says Larson. "It's a peak limiter, compressor, a gate. . . . It's so cool, and sounds really good. We run everything through it."

"The Behringer makes it all sound crisp and fat and boss, and no one is the wiser," Wedren explains. "It's great for vocals and often we'll do an entire song and feed the complete mix through the Behringer, just to give it a little extra kick."

Far from the energetic operatic prog rock that Shudder parlayed in the early Nineties, First Love, Last Rites is like a genre-centric tribute album, covering the Sixties, Seventies, and Eighties, from the blues to doo-wop.

"Some of the songs were supposed to sound like degraded Delta blues," says Wedren. "Others were like messed-up, Flamingoes blue-eyed soul. The whole idea of the project was us working in our apartment and fantasizing, 'What if we called up our favorite singers like John Doe, or Robin Zander?' We sent out demos to everyone and they responded if they were interested. They understood that it was all low-tech. Liz Phair did

her vocal on a TASCAM DA-88, so we had to rent one of those. Matt Johnson did his in London on his [Digidesign] Pro Tools, and Robin Zander did his at his home in Florida on VHS tape. When he sent back the tapes one of the vocals was already corrupted. We mixed formats from digital to Hi-8 to VHS cassette."

Two of the tracks on the album are the original rough mixes simply because Shudder's DATs got eaten or were lost. How do they feel about that? "Great!" shouts Larson. "It's the spirit of the thing. Some of the songs cut off so you hear this boing!"

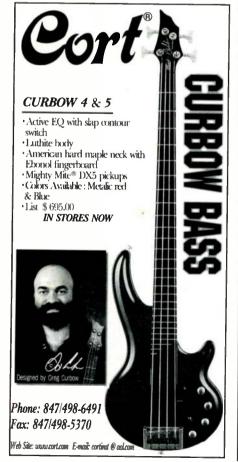
Final mixdown to the TASCAM DA-20 DAT machine @ came after more effects processing through a Boss Heavy Metal HM-2 foot pedal (for "pure white noise and crazy textures"), the Boss Super Phaser PH-2, à la Mick Ronson, and a Cry Baby wah-wah pedal model GCB-95. A Symetrix CL150 compressor is also on hand, but Wedren and Larson aren't sure what it does. They also like Marshall's JMP-1 stereo valve MIDI preamp. "It has a feature called 'Speaker Emulator.' When we did our last proper record at Electric Lady we ran the guitars straight into that, then direct to tape. We A-B'ed between an actual Marshall rig setup and the Speaker Emulator: the emulated sound was amazing."

Shudder power their low-cal consortium with the stormin' ADS 50wpc stereo power amp ⑤, purchased along Canal street's renowned hip-hop retail row. "I buy stuff from junk stores, or down here on Canal," says Larson. "Some of this stuff is right off the truck, if you know what I mean."

The ADS powers a pair of Spirit Absolute 2 speakers . "They're decent enough," ponders Larson, "but they are broken." Other gear includes a Sony TC-W320 dual cassette deck . an unseen Gemini XL-BD10 belt drive turntable, as well as some Sony headphones.

Some may dismiss Shudder to Think's casual approach toward music-making, but the duo would reply that music is in the ear of the beholder, not in the pointer finger of the red-eyed computer geek.

"Our process is all really simple," concludes Wedren. "It's just an extension of what we all grew up with, which is just four tracks and headphones. It's very mobile; we can use our gear anywhere or take it on tour. It's not about getting married to the gear, it's about writing music."





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shoptalk



Cake

Artist interviewed: John McCrea (far right)

Home base: Sacramento

Style: Dryly produced, laconic pop, with minimal instrumentation and strange lyrics seasoned by

bits of trumpet

Latest album: Prolonging the Magic (Capricorn), released October 7

What's the secret to successful touring?

When you're going to be on the road for extended periods of time, being able to be alone and think your own thoughts from time to time isn't a luxury, it's a necessity. For our first few years, we were in a small van, taking turns driving. It was pretty hardcore for quite a long time, playing sometimes nine shows in a row and driving all day, every day. It was really strange: Because we had songs on the radio, people thought we were rock stars, like we were floating on rock & roll clouds. But we were having sixteen-hour days of getting up, driving all day, then doing interviews or radio things, doing soundcheck, grabbing a bite to eat, getting on the stage, and sometimes having to drive after the show. When, I ask you, in that work day is there a chance to go and be by yourself? There really isn't one, so sometimes headphones and sunglasses have to provide space when it isn't really there.

Also, pacing yourself is very important. If you get a record onto the radio, you have to find the precarious balance between allegiance to yourself and allegiance to careerism; those are

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To read more of Robert L. Doerschuk's interview with John McCrea, visit Musician Online at www.musicianmag.com.

two different things. You'll be pulled in a thousand directions at once, and everyone who's pulling will be sorely disappointed if you refuse to go their way. During the tour for our first album there were a few gigs where we didn't play the hit single, and that pissed off a lot of people. It wasn't intentional; it was just, oops, we forgot. But I know that when we forgot to play it at one really huge gig, the people from our record company were really pissed.

How do you find the right management or booking agent?

We booked and managed ourselves for almost our first three years. You can go around for years, trying to get somebody else to validate you. But too many bands think about sending their tapes out to everybody, when in reality if they get it going themselves, those people will come around. The key is to play your music in front of an audience, figure out what works and what doesn't, and then

put the songs that work onto an album. Put everything you have into making what you think is a really good album. If you make something that you think is really good, unless you're a deluded sociopath, somebody is going to hear it and agree with you. Management and booking agents will follow, so those aren't things you should spend your energy on finding; the real thing is to try to figure out your sound.

Once we got those people coming around, we tried to find somebody who didn't make our stomachs turn, who didn't make us feel queasy about the music industry. Maybe we chose people who are good at feigning sincerity, but I think we chose pretty well. It's not just that, of course: You need to find someone who has connections. Obviously it's important that they've been working in the music business for a while, but finding people you can at least sort of trust is worth a lot too.

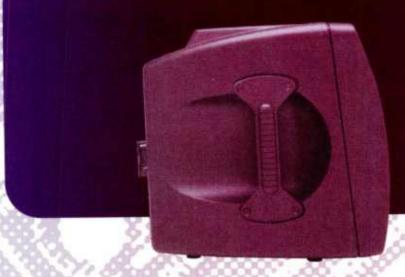
What's your most indispensable piece of equipment?

For the past three albums, there have been two things. One is my three-quarter-sized Goya classical guitar, beat up as hell, plugged into one of those Sidekick amplifiers that Fender used to give away when you bought a Fender guitar in the Eighties. The cheapness of that has a lot to do with the cheapness of our sound. And the trumpet is a hallmark as well. We didn't intend it to be; we just wanted it to play melodies that we didn't want to play on a soaring lead guitar. You know, I read *Musician* a lot when I was a kid, and it used to frustrate me. All those ads for equipment used to freak me out, because I couldn't afford any of that stuff, and I felt like I needed that equipment to make a go of it. So here I am with this Goya guitar and a beat-up Fender amp. It's weird.

"You know you can quit your day job when . . . "

I'm still not sure that I should have quit my day job. I've done it, but I'm not sure it was a good idea.—Robert L. Doerschuk

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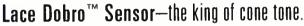
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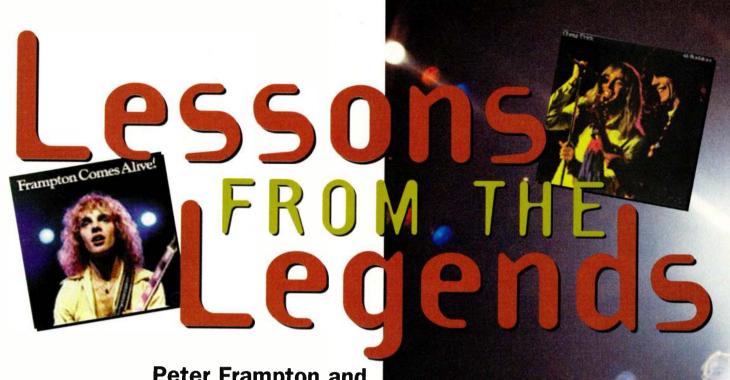








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Peter Frampton and Bun E. Carlos share what they learned from making Frampton Comes Alive! and Cheap Trick at Budokan.

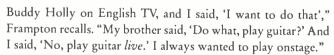
BY MARK ROWLAND

hough not often linked in the annals of rock, the careers of Peter Frampton and Cheap Trick share several common threads, not least that each act made its biggest and most lasting impression with the release of a classic live album. Frampton Comes Alive! and Cheap Trick's At Budokan were released more than twenty years ago, and both Frampton and Cheap Trick are still on the road today—which isn't such a coincidence.

"A live album sells the live act, and the act has to sell the live album," Cheap Trick's drummer Bun E. Carlos points out. "For us and Frampton, our albums were hits as the result of playing a lot of shows—two to four hundred shows for us in the previous

couple of years—and people who liked you went, 'I'm gonna get that album.' A lot of the bands in the Seventies that went and toured and did good that way before MTV are still around, because that's the way they did it."

It's also no coincidence that both Cheap Trick and Frampton draw stamina from a hunger to perform. "When I was growing up, I saw Eddie Cochran and



But live albums are "strange birds," as Carlos puts it, and their success is sometimes paved with odd twists and accidents of fate. As the following conversation makes clear, Frampton and Carlos have something else in common: They've experienced plenty of both.

What is the purpose of making a live album?

Carlos: If you're a young band, it's the ultimate demo: "Here's our band, we have these songs, here's our card." If you think your band doesn't play great in the studio but they play great live, well, here's a live tape.

Frampton: For me, the purpose is to give a different version





of your songs. If the material has already been on studio records, then there's no point in doing something exactly the same, and the band probably knows it a hell of a lot better than when they were recording it. When you play with great musicians, and I'm lucky that I always have, you don't play songs that many times in the studio, because you get it pretty quick. So when you go on the road to promote, then you mess with it and you play around with it, and it changes. And for me, obviously, the changes made a big difference.

How did your classic live albums come about?

Frampton: When we came to do that record, the *Frampton* record right before it had been reasonably successful; we'd sold about 250,000 copies. But we didn't want to push our luck with a double live album, so we mixed a single live album, which was only five tracks. It did not include "Show Me the Way" or

"Baby I Love Your Way." And we played that to Jerry Moss, Mr. M of A&M. He just looked at us from over the console and said, "Where's the rest?"

Why hadn't you included those two songs?

Frampton: Because we had only just started doing them—remember, this was the tour that was supposedly promoting Frampton. And we hadn't quite gotten them down at Winterland, where the show was recorded. So we recorded more nights: "Show Me the Way" came from Long Island, and "Baby" came from Plattsburgh, New York, the college there. We re-recorded "Doobie Wah" at the Marin Civic Center. Then Chris Kimsey and I mixed the whole thing in two sessions, a couple of weeks to start and then probably another two weeks to mix the other stuff.

Carlos: The original idea for our album was that it would



come out only in Japan. The Sony people were like, we'll tape three shows and you guys make a mix and send us a tape and we'll put it out. They thought it would make a nice souvenir for our Japanese fans, and CBS/Japan was splitting into Epic and Columbia Sony, two separate companies, so Budokan was going to be Epic/Sony's debut and Dylan's At Budokan was going to be Columbia/Sony's debut. It wasn't really in the plans to make a live album for the U.S. We'd cut Heaven Tonight in January and done the Japan tour in the middle of April, and then in the fall we mixed Budokan and Dream Police, which was gonna be our fourth album.

Were there problems with the recording process itself?

Carlos: Oh, yeah. The Japanese guys came in after sound check—in Japan you do the sound check, you take a dinner break, and you do the show at about six or six-thirty—and while we were at the dinner break they came in and miked everything. We never even saw these guys, the engineers and stuff. They put one mic between my two rack toms instead of recording each one—goofy things like that happened. The bass low end was aiming the wrong way and they set it up that way for three nights, so there was a lot of sonic difficulties we had on the album.

So what happened when you heard the results?

Carlos: We listened to the tapes in L.A. with Tom Werman and he just said, "This is terrible—go rent a theater like Kiss did and just redo your live album." See, for *Alive II*, Kiss didn't like the tapes they'd made at the Forum in L.A.—we were on tour with them at that time, in '77—so they went into the Capitol Theater in Passaic, New Jersey, the next week and recut the tracks in front of nobody. Anyway, after Werman turned it down, we called Jack Douglas and he helped us find bass where

no bass existed. The bass sounded like a tin can and he'd compress and flange it, whatever, do his Jack Douglas magic—and it really is magic. We did a few minor patches; they really jump out of the mix. There are two bars of "Come On Come On," a couple of solos at the end of "Ain't That a Shame," a couple of guitar licks there, and a couple of vocal lines on "Clock Strikes Ten."

Frampton: For us, the microphone had been knocked to the side of the bass drum, so the bass drum was very muffled-sounding; instead of the mic facing the skin, it was facing the side of the stage. There were two other occasions where we didn't have enough mic or tracks. On "Show Me The Way" I moved from my Les Paul to a clean sound going through a [Fender] Twin Reverb with a Strat. They didn't move the '57 over to the Twin Reverb, so it didn't make it to the track. And on "I Wanna Go to the Sun," Bob Morrow's piano didn't make it to the track either, so we had to replace that.

There's one thing I have to say here. There was some engineer from Los Angeles who supposedly popped in the studio when we were mixing at Electric Lady. And when you are taking numbers from different nights, you have to take some applause from each night and put it together so when you do the crossfade between the tracks it [sounds smooth.] And this one guy was possibly there when either the piano or the rhythm guitar from "Show Me The Way" was being replaced, and he went away saying that the whole album was done in the studio and the audience was added and all this. A lot of people have asked me about it since and they've even said it on the radio. And it's so unfounded! Because if you listen to the level of the audience, there's no way that we could have replaced that. Our rule was, if it made it to the tape, you keep it, if it didn't,

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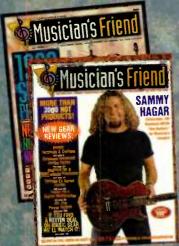


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you replace it. And those were the only two things that didn't make it to the tape.

Weren't there clams to replace as well?

Frampton: Oh, there were! But basically what you heard was what you got. When I sing out of tune, that's me singing out of tune.

Carlos: There were a couple of clams on the guitar. The vocal parts, Robin [Zander] was off mic, and when the band was mixing it, we thought, "That's neat," you know? Then the record company came back and said, "No, you gotta replace the line if it's not on

there." So we did that; it was small change. There are still clinkers all over the place if you listen: dropped drumsticks . . .

Was there ever a concern about putting it out, considering the sonic problems?

Carlos: We said, "Look, we're taking forever to mix this, so we'll give you a single album instead of a double." So we gave them a single album, and they printed up fifty thousand to sell in Japan and they sent us one, and it was EQ'd wrong; there were too many mids. We said, "You can't sell these; it would be an insult to our fans in Japan." They said, "Okay, we won't sell them to your fans in Japan." And they imported them all to the U.S. in the next two months. We found that out a year later [laughs]. That's the record biz.

Frampton: And then in those days, if you had a four-record deal with a company, it was really six, because a live album was not counted and neither was a greatest hits. So I changed the law inasmuch as *Frampton Comes Alive* had to be one of the records in that deal. I was able to renegotiate after it became a hit.

Was it a conscious decision to mix in a lot of crowd noise?

Frampton: Absolutely, because if you're gonna make a live record, but it's not hi-fi to the point where you just hear the audience at the end of the songs, why do one? That's my feeling on it.

Carlos: We left the mics on most of the time, because it provided some of the needed low end for the bass drum and the bass guitar that we didn't have on the direct tracks. I've got some room tapes that I've made from the board, and the screaming on some of the stuff was a lot louder. We had the mics up in the air, otherwise there could easily have been more screaming on there.

How conscious were you about recording those shows live?

Frampton: Well, it was our first headline show, and we did it in San Francisco, the reason being that we were able to headline there. I was more nervous about the fact that we had to stretch our fifty-minute set into an hour and a half [laughs] and that we were headlining—there were about seven thousand people there; I completely forgot about the recording truck outside. I don't remember giving track listings or anything. What I'm saying is, the event overshadowed the fact that there was a truck outside. For us it worked. Because when we went into Wally Heider's studio a few days later, Ray Thompson, who engineered it that

night, didn't do any fancy mixing; he just put all the faders at zero. And we were astounded at how good it sounded: You felt the energy on the tape, it just knocked you against the wall.

So it's better not to be conscious of live recording?

Carlos: It's a great advantage when you're new. We're putting out a live CD next year, so we taped four nights in Chicago. And kind of the exact opposite happened there. I listened back to tapes every night. And on one song, a song like "Taxman," the bass drum pattern wasn't working, so the next

night I played to the tape and changed my pattern around, and it sounds a lot better now. But see, that's twenty years down the line; I have the experience and the knowledge to do that. Twenty years ago, I didn't know any of that stuff. Budokan was like that; we were beat and tired and doing this headline show, and we hadn't done a headline show for like a year and a half, and we couldn't leave the hotel because of the screaming girls, and so it makes for a good basic rock show.

Frampton: For me it's always better to never think about it, because that'll jinx the

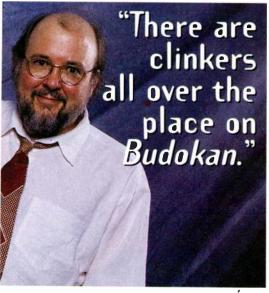
show. I don't think you can get geared up for a great show, because you never know when it'll happen. Let's say you're talking about a band that, even when everything goes wrong, they're good. So when everything goes right, they're fantastic. That's the night you're looking for, obviously: new ground, new territory, something new where everybody gets excited and that comes across. You've got to the point where those numbers come naturally but they haven't been overplayed either; you don't want it sounding like rote. But the last thing you need to think about is the truck out there. Otherwise you might as well stop [laughs].

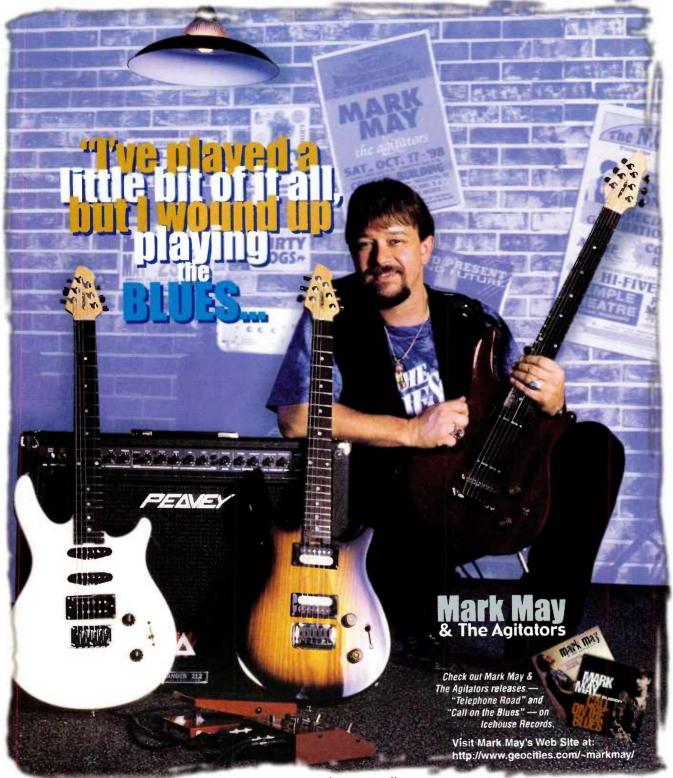
Were you surprised by the success of those records?

Carlos: It was totally unexpected. The record company said, "Look, since they've imported about fifty thousand copies of this record in the U.S. and you're making only half the royalty rate, can we put this out in America with no big campaign or anything? It'll sell maybe a quarter of a million copies, and then when you get back in April we'll put that *Dream Police* album out." So they put the live album out while we were out of the country, and by the time we got back, the thing was taking off.

Frampton: Of course, I was surprised. But it's all about the vibe it creates when you listen to it. That's why recording got ridiculous in the Eighties, when you were dropping in a syllable or a guitar note or playing one guitar chord over and over again until it was absolutely right. Rock & roll isn't supposed to be perfect. Good rock & roll never has been.

Why aren't there as many classic live albums being cut today as there were in the Sixties and Seventies?





... and Peavey."

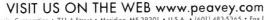
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Carlos: I don't know. Maybe it's the way they're marketed, or maybe going to see a live act isn't what it used to be since MTV came along. It always had this reputation as the album of last resort like, "We got nothin' else to do, so we'll either do a covers record or a live album or a best-of." That's not the reason we put ours out; I was always into live albums. If I like an artist, I always look for live stuff by them to see what they really sound like and see what they really do.

Frampton: My live album was so successful because we did it ass-backwards. We had no hits from the studio, whereas the Eagles, for example, had many-times-platinum records, and so the first time you hear the thing that you grow up buying, the studio record, that's the way you want to hear it. You don't want to hear it remixed, you don't want to hear the song that first moved you to buy that particular record. I

didn't have any of those! So Frampton Comes Alive was really a live best-of for people who had never heard me before. The general public didn't have a "Take It Easy" by Peter Frampton; they didn't have a big studio hit.

What was doubly amazing is that you both had big singles hits off those live albums. That really doesn't happen anymore.

Frampton: Yeah, "Do You Feel Like We Do" was number fifteen at seven minutes long. And "Show Me the Way" was number seven, and "Baby I Love Your Way" was number eleven, I think. In those days, Led Zeppelin were having all these huge albums and they never released a single. The beauty for me when that album broke was that the DJs knew all my other album material, and it was like, here's the live version.

Carlos: Well, when Rick Neilsen wrote "I Want You to Want Me" in 1975, it was a real poppy tune—even on one of the board tapes from some bar in Milwaukee at the end of '75, we're like, "Here's our hit single!" and of course we didn't even have a record out, so it was kind of a joke. You can see what happened with that song, how we tried to do it on the first album and it didn't quite work, and then the second album you can see Werman's slant, and he missed it by a mile, and then our live version, where we finally got to do it the way we think it should be done. I think the single picked up the record and got it going. And then "Ain't That a Shame" was a good single. The whole album was sort of the best



"We were astounded at how good it sounded. The energy on the tape just knocked you against the wall." of *In Color*, because that was the big seller in Japan. And then that picked up the first three albums and our whole catalog lurched forward.

Did you have any involvement with At Budokan II, which Epic put out in 1992?

Carlos: They had monitor board tapes of the three shows, with the two tracks running at the same time for reference. And they were gonna use that. We said, "Hold on, let us work with you on this." Then we found one-third of a reel from '79 to add like three more tracks to it. Then a fellow in Chicago-I don't want to mention his name—said, "Look, the bass doesn't sound right. We'll run it through this bass amp and then re-tape it and it'll sound fine," and we said okay. Well, that didn't sound fine, and then what really pissed us off is the guy made a scream loop; he took one of the audience tracks and made a loop and rolled it through the whole tape. It's like this white noise behind us, which is sickening. So we really regret the way it turned out. We wanted to remix it, and management and everybody else were like, "It's too late for that." That's about the time we started to think about getting rid of management too, which we did about two or three years later.

What are the key changes in the technological side of recording live since your classic live disc?

Frampton: The main difference today is that every mic has its own track. Frampton Comes Alive was on sixteen tracks. The drums were on four tracks, maybe even three. I remember there were four audience tracks; that makes eight, and that doesn't leave a lot, does it? So all my vocals go to one track, all Bob Mayo's vocals go to one track, then two tracks of bass, and then keyboards and guitar.

But sometimes too much separation takes away from the feel of a live show, at least to my ears.

Frampton: I totally agree. None of the songs on that album are perfect or near perfect in their performances, but there's a feel that permeates the whole record where you hear that common denominator that attracted everybody. Maybe I'm putting myself down by saying "common denominator"...

We'll call it universal appeal.

Frampton: Thank you! It's hard to put your finger on why it did so well, but I'll put my money on the fact that the feeling comes across that you don't get from any of my previous studio records.

Carlos: To do it again, I would have gone in there after the first night and said, "Let me hear me a couple of tunes, the bass drum doesn't sound good here, the rack toms are in mono, fix the bass guitar"—just technical junk. But ten years earlier, they probably wouldn't have had enough tracks to even mic the bass drum; they

would have used a stereo overhead. And it would have sounded fine. The Seventies were a strange time for technology.

Are there lessons in your live albums that can apply to bands cutting live club gigs today?

Carlos: Sure. Get as many tracks as you can. Get every ADAT you can find. That's basically it: The more you've got to work with, the better. Tape as many songs as you can on as many tracks as you can get.

Frampton: Well, basically, it's one take, isn't it? It's not like the studio, so the bottom line is that the band is good and you feel confident in the arrangements, so you feel comfortable playing them onstage; you're not just going out there and going through the motions. Make sure that you don't under-record the audience because the sound of the room is very important for a live record. Most of Frampton Comes Alive is from Winterland, but we had to re-record "Doobie Wah" at the Marin Civic Center, a much smaller beautiful performing arts type of theater, and much deader sounding than Winterland, which was the core sound. So we had to mess with the sound of the audience mics a little and digitally delay them and add maybe a little bit of reverb—just for that one song. It's pretty hard to tell that it was a completely different night.

What are your own favorite live albums?

Frampton: The Allman Brothers [Live at the Fillmore East]

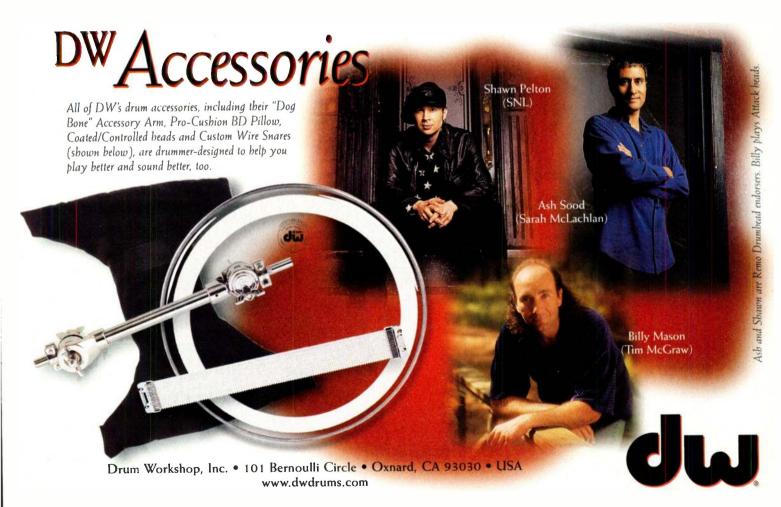
is probably my favorite. There's a Ray Charles one, a live one where he's got the mic on the front [Ray Charles Live In Concert]; that one's unbelievable. The man can make great anything records, but there's an energy and a sense of humor there, especially the track "Makin' Whoopee," where he's playing with the audience.

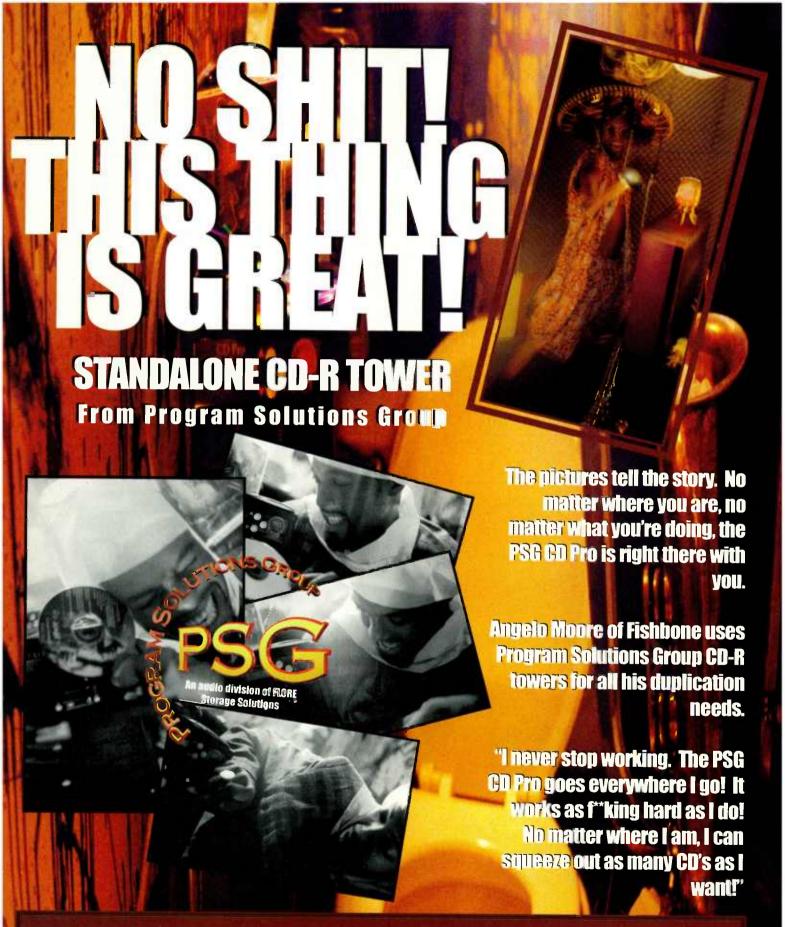
Carlos: [The Who's] Live at Leeds and [the Rolling Stones'] Get Yer Ya-Ya's Out!, even though it was heavily patched. I saw three shows on that tour, and when I heard the record I was like, where'd Mick Taylor go? He used to play lead through every song and I taped the shows I'd seen. I used to tape Cream and Hendrix and Jeff Beck and the Who, and I'd bring my tape recorder and tape for my own use. Wheels of Fire, I had that thing memorized.

How do you feel that for many fans your most defining record is a live album?

Frampton: If I feel that that's me at my best when I'm live, then I'm thrilled. It's no surprise really, when you know my work and you know how I enjoy the road.... Let me re-phrase that: I enjoy the hour and a half to two hours onstage [laughs]. But you know, it's something I've done for thirty years.

Carlos: We stand behind it, we're proud of it, even more since it's real. We didn't jack this or that up; it's a genuine live album.





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A young artist documents the challenges and rewards of doing her first live recording.

BY SAM SHABER

f Eric Clapton makes a live CD, people listen to see how their favorite songs change in concert. If Ani DiFranco makes a live CD, people put it on the stereo and re-live the energy they feel at her shows. If the Spice Girls made a live CD, people might buy it to see if they can actually sing.

But what happens if Sam Shaber makes a live CD? If I were famous and already had a long studio discography, that would be one thing. However, last time I checked, I wasn't famous, and thirteen of the fourteen songs I'd want to play in my live set would be recorded for the first time. I have been touring pretty extensively since the release of my debut effort,

In the Bunker, though, and somehow the live format feels like the way to go for the follow-up album. Plus, it's cheaper to record live than in the studio.

A live recording is a strange animal. To me, one of the most attractive aspects of playing live is the element of spontaneity—the act of taking songs that have been carved out in a certain way and doing something new or experimental with them. Music is mutable—that's one of the wonders of it—but to take that quality and capture it in a recording creates an absolute version, a new standard.

Over the past four months I've recorded four shows in New York for an upcoming album. Originally I had set up only two gigs, at CB's Gallery and the Bitter End—clubs where I play often and whose names I thought would look good on an album cover. My idea was to have the album document one show, from beginning to end. "I play these songs all the time," I thought. "How hard can this be?" When I decided which of the two shows to keep, I would stand out in front of the chosen club, get my picture taken, slap it on the cover, call it *Live at*..., and be done with it.

Ah, the naiveté....

THE Basics

The idea of doing a live album was intimidating, and I thought I would never be able to do it alone. So I decided that I needed a producer. I found one who had a wonderful résumé, filled with artists I would love to get to know and possibly open for. He had great confidence in what he could do for me. He gave me very good advice about what to say to the engineer I would use for the live recording. And when I had finished all my tracking, I would hand the tapes over to him and he would mix them and get them back to me.

The problem lay in the idea that I would hand the tapes over. I timidly asked if I could be part of the mixdown process, but he assured me that I would only be wasting time by asking for more guitar here or less audience there, and that his twenty years of experience gave him a solid knowledge of how to do a live album. He also explained that I could fix almost any

moment from the live recording with digital editing and overdubbing or adding instruments once in the studio. And, he added, until he knew exactly what needed to be done, it would be impossible to estimate the cost.

All of this made me uneasy. Though impressed with his credentials, I realized how important it was that I be completely involved in my work and not feel as though I was in the way. It was, after all, my record, my label, my project.

So after taking a deep breath and consulting with friends who suggested I read my own article in *Musician* ("How to Produce Your Own CD," Business, Jan. '99), which

explained how important it is to be comfortable with the people you work with, I decided not to use him. He had, however, given me some valuable information about how to set up for live recording, which helped me realize that it's not rocket science. The best single lesson was to get as dry a recording as possible, avoiding any effects or compression while tracking—this ensures the most flexibility later on when mixing.

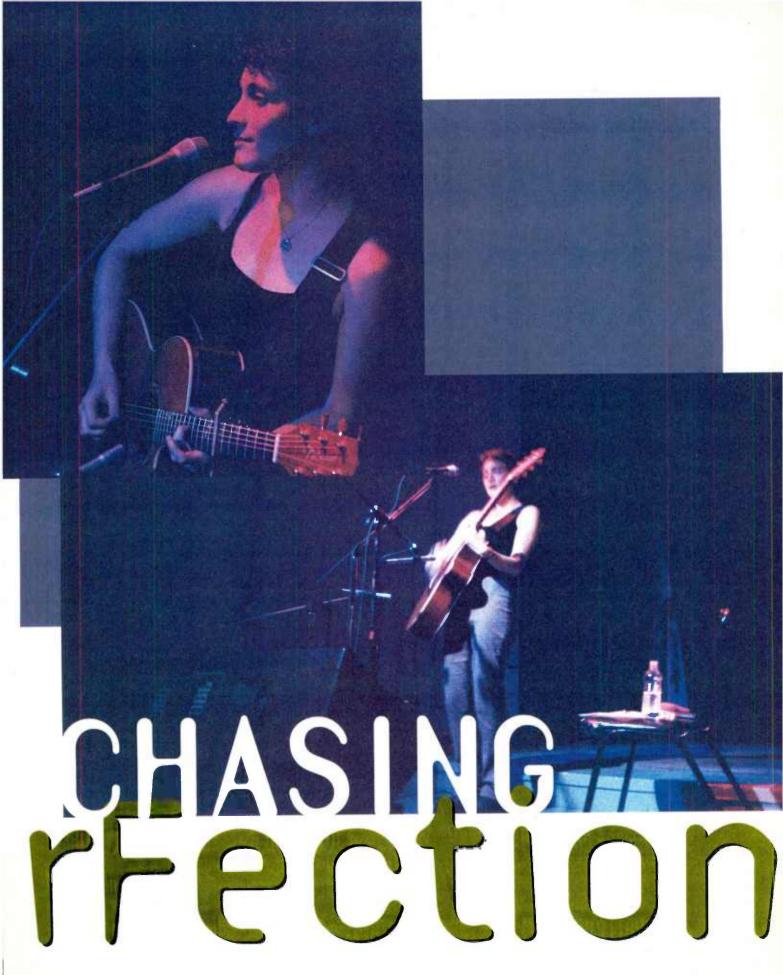
For microphones, I decided to go with the same setup I had used for my first album: an AKG C414 for my vocal, which worked well to combat certain midrange idiosyncrasies in my voice and provided a nice warm tone; for the guitar, a Shure SM81 and a Neumann KM 84 on the neck and the soundhole, respectively; and for the audience, two Shure SM58s. I had to rent everything but the 58s from a place in Hell's Kitchen called Audioforce.

The first show would be at CB's Gallery on August 25. I learned that they have a studio in the basement; during live recordings, all the lines are split to the live engineer at the board upstairs and the recording engineer (both of whom would be CB's employees) down in the studio. I knew that CB's has some of the best live engineers in the city, so I was confident in their ability, and their combined rate of \$135 per show seemed more than reasonable. Plus I now understood the importance of getting the recording as dry as possible, so I could tell them how I wanted it done.

I spent hours making a set list that I hoped would work for both the audience at the show and the album. It was during this process that I realized I would not be able to get an entire album out of a single show: The typical club set in New York runs from 45 to 50 minutes, which wasn't enough time for fourteen songs. So I picked ten and set to work on the order. Only one of these



LIVE



tunes, "Invisible Woman," was a repeat from the first album, since I felt I hadn't done justice to it the first time around.

I worried about intonation. I didn't want to waste tons of time tuning up between songs, but I was bound to be more careful with it than I am at most gigs, since this would be forever. To save time, I decided to play the first tune in standard tuning on a friend's borrowed Martin and have my Takamine ready to go in the altered tuning of the second song. It was all going to be perfect.

TAKE One

In fact, a ballad called "Perfect" was the title of that first song, however ironic that might seem for a live recording. The performance was fine, although when I went to start the second song, I picked up the Takamine and didn't think to check the tuning. At the first dramatic downstroke, I learned that it had gone slightly off in the few minutes it spent getting acclimated to the air

conditioning from the hot August evening outside. That take, an anthem called "All of This," would be unusable for the album.

After this moment, it was hard to care how the rest of the song went, but I tried to keep paramount the fact that this was a show, not just a recording session. I had made the decision not to stop or do any songs over—better to be imperfect than contrived. I've been to live recordings where the performers stop and start, and use pop filters and huge microphones; it's a unique experience in its own right, but

it feels like sitting in a recording studio instead of watching a show. I wanted to be as concerned with the quality of the audience's experience as with the quality of the recording, and I didn't want anyone paying money to watch a tense recording session. Besides, I had another gig to fill in the gaps.

After the show, I felt very good. I thought I must have at least five songs that were keepers for the album. I paid the engineers and took my soundboard cassette home to check it all out in primitive form.

LIKE, Something in the Air

I've never been good about listening to tapes of my shows. Or really, I should say that I've never been interested. Some performers listen to everything they do and pinpoint what worked and what didn't. I've always kept a written journal instead. The first thing I realized in listening to the CB's cassette was how many times I said "like" in my banter. I wanted some of this banter to go onto the album, and I thought I had come out with some good stories, but on tape I thought I sounded at times like a hyperactive Valley Girl, and that would never do. I even wondered how the audience could stand it.

There was another problem. Will Quinnell, a friend from my day-job days at Sony Music Studios, was transferring the information from my gig from the Alesis ADAT tapes to DA-88 so we could play it back in his home studio. I was excited when he called, but then the bomb dropped.

"Air conditioning," he said.

"Air conditioning?" I asked.

"You can hear the air conditioning in the room," Will continued. "I think it was picked up in every mic. You won't be able to use any of the quiet parts."

So no Valley Girl speeches after all.

Still, an energetic ditty titled "Bomb Threat in New Rochelle" seemed to be loud enough to drum out the hum of the air system. So out of ten songs, I had one. This was going to be a lot harder than I thought.

Still another problem arose in that the standard length for ADAT tapes is 42 minutes—not long enough to contain a whole show, even in New York, and the last two tunes hadn't been recorded. I would have to stop at the next show so the engineer could switch tapes. Just to be safe, I booked another show at CB's for November 12.

I continued my search for a producer and tracked down Kenny White, a producer/musician who works with Dee Carstensen,

Holly Palmer, Cheryl Wheeler, and others. He was very positive about my material, but he confused me when he asked, "Why do you need a producer?" He explained that a producer was integral mainly in arranging tunes for a recording, and since this was a solo project, there was no need.

"I just wanted to get someone in who really knows how to do this," I said.

He prompted me for a few ideas about how I wanted it to sound. I cited some recordings, most prominently Patty Larkin's *Live in the Square*, which was

recorded at Boston's Sanders Theater in 1990. I've spent the last seven years with this album; it has inspired me both musically and technically. In fact, it was my first musical image when I decided to record a live album.

"Well, I don't want you to think I'm not interested, but it doesn't sound like you need a producer," he said.

"But I don't trust myself," I admitted.

"Obviously," White replied. "But I think what you need is a great engineer who can bring the sound you're envisioning to life."

The name he gave me was Michael Golub. I called him and asked if I was dreaming to think I could get the type of sound produced in a large theater like the Sanders from my recordings in small rooms like CB's Gallery.

"Of course not," Golub replied. "It's all about creating illusions. Which recording are you talking about?" I told him about Larkin's album. "Oh, Patty's great," he said. "I've known her for about twenty years."

My jaw dropped. Golub continued in his cheerful tone: "I've got that live album somewhere. Let me dig it out and give it a listen."

TAKE Two

I didn't think about the recording much over the next few weeks. I was going on tour out west and in New England, and I was very busy confirming and promoting those shows. I did have a gig scheduled at the Fast Folk Café in New York on September 17, but I wasn't planning to record it. The Fast Folk is a far cry from the comparatively cavernous feeling of CB's

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mixdown process,

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Gallery, with a low ceiling and a narrow stage, and I wondered if recordings made there could be matched to those done at CB's. Plus, I was to leave directly from that show to go to Boston and then fly out to Denver the next morning.

Then I realized that I was leaving an awful lot of material to record at the next two gigs, and having learned the odds of doing a perfect show, I decided I should record at Fast Folk after all. I also worried that if I didn't record the show, it would wind up being the best performance of my life. So I hired Chris Kramer of On The Road Productions to record me at the Fast Folk (rates = \$300 per show).

Of course, it wouldn't be that easy. I was so busy earlier that day packing for Colorado, printing labels and flyers, buying stamps, and tying up loose ends for the next few weeks of being away, not to mention renting equipment and coordinating with Chris, that suddenly it was ninety minutes before sound check and I was only just picking up my guitar to work out a set list.

I broke down in the middle of my living room and called Chris to cancel the recording. After leaving him an inarticulate, panicked message, I hung up and called Audioforce to cancel my order. I walked a few laps around the apartment (these were small laps), talking to the rug. I tried to sing. I cried.

When Chris called back a few minutes later, something in his relaxed, steady voice made me reconsider, and the session was back on. We would even do it in the higher-quality 20-bit format instead of the standard 16-bit. I reordered the mics, closed my suitcase, and headed out.

So was it the best performance of my life? Well, it wasn't perfect, but I did get some good things out of it. I think I was just so glad to be actually performing for a few hours, instead of making phone calls or travel plans. The audience was mostly friends, and I felt comfortable risking a recording in front of them.

At a break in a jazzy tune called "City Lights Lament," I paused to tune my low E string, and everybody chuckled. And when one audience member's beeper went off in the middle of another song, I tried to make light of it so the audience wouldn't tense up. And I played more solidly than I may ever have in the past a song called "Rain and Sunshine," which tells the story of being in a car accident that took the life of Maribel Garcia, one of my best friends.

There was no air conditioning at the Fast Folk, but a siren did go by during "Perfect."

Later, while in Colorado, I spoke with Chris Kramer, who told me the recordings were pretty good, although using two mics on the guitar created a phase problem, and the guitar sound through the Neumann was a bit thinner than through the 81. Being unused to having to curb my movement onstage, I kept knocking into the 81 with the neck of my guitar. Also, we had been unable to get a screen for the 414, so when I listened to the cassette of the show, I winced at every pop and whoosh. It wasn't just my plosives, but my f's and even some of my th's.

THREE to Get Ready...

The next show was October 24 at the Bitter End. This time, I was determined to get everything right. It had to be perfect. I

was anxious about using the 414 again for my vocals, lest I pop all over the place, but I still felt that a pop screen would be too imposing for the audience.

Once again, I called Michael Golub.

"The 414 is a studio mic," he pointed out. "Why are you using a studio mic to record live? Use a live mic, like a Shure Beta 87, and then just go in there and do a great show. The performance is so much more important than the technicalities. If you mess something up, but the energy is there, it'll be a great recording."

I knew he was right. I had spent a few hours the day before

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six people?"

listening to all of my live CDs. Across the board, the word that came to mind was "holistic": The sum of any great performance was so much bigger than its parts. David Crosby hacking away from a 102-degree fever in Los Angeles in 1971, or Janis singing completely off-key, or Clapton tuning up: These moments were more vital and engaging to me

than Pink Floyd's album-perfect rendition of "One of These Days."

"But is the 87 the best mic?" I pressed. "I have midrange idiosyncrasies in my voice, you know."

"Listen," said Golub. "Three of the singers I've worked with have used the 87: Dee Carstensen, Holly Palmer, and Shawn Colvin. Now, stop worrying. Go play a great show."

Well, if it was good enough for Shawn Colvin, it was good enough for me.

Now the question of a set list had to be addressed. As far as I knew, I only had two usable tracks from the two previous shows, so I couldn't eliminate much. One song that I was definitely not going to do at this particular show was a goofy I-VI-iim-V tune about living in New York City, called "Walkin' at Night." In performance, I always vamp on the progression in the middle and tell stories about my apartment, my roommate, my neighbors, whatever appeals to me that night. Usually these stories are pretty funny, and when I find a good one, I tend to use it a few times in a row. But this was a recording. This was supposed to be perfect. The pressure I felt to make the story articulate and funny was enough to keep me from doing it at all on the studio album. I toyed with the idea of playing it straight, with no break in the middle, although I knew the monolog was what most audiences liked best. But I'm not a standup comedian, and frankly I've felt lucky every time the monolog got people laughing.

So I decided to stick with the emotional stuff for this show. Chris Kramer and I met up at the club for a sound check at six that evening. When Matt, the sound engineer at the Bitter End, came in to find mics and cables and other recording gear all over the place, I worried that he might feel like we were intruding on his work. Instead, he was excited about the project and worked with Chris to create a mix in the house that would best suit the sounds we were trying to get for the recording.

Members of the audience for the act following me started to arrive before any of my crowd had shown up. When Matt gave me the five-minute warning, my heart sank to see only a handful of my people scattered about the club. How could I display a recording from the Bitter End knowing that I had performed for only six people? Was I just kidding myself all along to think that I was ready for this?

By the end of the first song, I was surprised to see a relatively full house. Everyone applauded appropriately and sat attentively. I was actually distracted by their silence during the next tune. It felt like a *tense* silence; they had been warned that we were recording, and no one wanted to mess things up by making noise. This was not good. Why even do a live recording if the audience is too stiff to enjoy it?

After the third tune, I tried to explain to everyone that although I appreciated their obedience, the point was for them to have a good time. It was a live show in a club. Clubs have noise and drinking and festivity; this felt more like a library. I assured them that they could just be themselves and not tighten up if I made a mistake, because that's what "live" is all about.

"Besides," I reminded them, "I still have one more show to go, so I can always do these songs again."

People relaxed, but after a while my heavy-song set list started to feel a little stiff. So I jumped off a roof and went into "Walkin' at Night." I got lucky; it was my best rendition ever.

FOUR to Go

I was feeling pretty cocky after the Bitter End show, until I realized that I still had seven tunes to nail at the final taping, scheduled for CB's Gallery on November 12. I brought the tapes to Will Quinnell once again, so that he could make me a cassette to listen to. I wanted to make sure I was happy with everything I was happy with, so I would know how to make up the set list for the final show.

But the day after dropping off the tapes, I got a message from Will on my voice mail: "Sam, I went to transfer these DATs, but I couldn't get the machine to read them. Then I noticed that they're 20-bit format. We only have 16-bit capability here, and they're not compatible. I'm afraid I can't help you."

I called Michael Golub, but he had no ideas. I was going to have to go into the final show blind and just trust my instincts on the Bitter End.

7:45 in the morning of the 12th found me on the "4" train, heading up Manhattan's East Side to perform at my old high school. It would be their Thursday morning assembly, and I was to be the entertainment. It had seemed like a brilliant idea when I had it, with a guaranteed house of about five hundred people, but I was having some second thoughts. If I ever had a chance of nailing seven tunes in one gig, I told myself, waking up at seven A.M. isn't



helping my odds. I tried to warm up my voice by humming scales at a volume below that of the subway racket. Gazing out into the tunnels, I could see my bleary eyes staring back in the window.

It turned out to be the best warm-up I could have done. I included in my set list some of the tunes I would record that night at CB's Gallery. And seeing five hundred faces having a good time was inspirational.

Once again I had to pick up the microphones. Audioforce didn't carry that Røde NTI, which Chris had brought to the Bitter End, but after learning that the NTI is a condenser mic like the 81, I rented two 81s and, again, the Beta 87 for my vocals.

Instead of practicing in the afternoon, I decided to take a nap. The morning excitement had caught up to me, and I was very sluggish. I lay back on the couch and tried to meditate on a set list, but never having been one for meditating, I soon fell asleep, awakening just in time to get to CB's for sound check.

CB's engineer Chris Lewis would run both the house sound and the recording gear, as he had just brought the deck upstairs from the studio in the basement. He decided to run everything into the ADAT first, then out to the board, thus avoiding any splitting of lines. He also took a different approach to miking my guitar, putting the first 81 out from the twelfth fret, with the second pointing to the very bottom of the guitar at my right elbow. This was great, because it gave me more freedom of movement. He recorded a bit, and I listened back, checking very carefully for air conditioning. I went home to write the set list and change my clothes, bringing my guitar along to do some last-minute practicing.

When I got back to the club and began to unpack for my set, I realized that my patch cords and tuner were missing; I must have left them at home. CB's could provide patch cords, but not a tuner—so the tuning for this last recorded show would have to be done by ear.

The set I wrote was interesting, with songs which for one reason or another had not come out the way I wanted them to. I started with a song called "Sometimes It Hurts," which had been on the list for the Bitter End show but, frankly, I had forgotten to play it—which is why I made sure to put it first this time. In its angst-ridden way, it served to quiet the audience. ("Some words sound better in the rain/Sometimes it hurts to hear my name.")

The second song, "Quaalude III" (a T. S. Eliot poem, "Prelude III," set to music), has a difficult guitar part for me, but it went relatively smoothly. I managed to stay relaxed during the "Rooftop," the fastest song I've written, with a double-time strum throughout. Even "Perfect" went almost perfectly. I found that I was even able to discover things in some of the tunes as I played them, probably because I was able to keep my concentration together. In fact, my concentration may have been a little too intense; I barely said a word between each song, as though I was afraid to let go of the control.

The last two songs of the set were the trickiest. Maribel Garcia's brother Horacio had come to the show; this would be the first time he would hear "Rain and Sunshine," the song about his sister, performed live. As I made the introduction and explained some of the story, I felt his eyes on me, and it made

me nervous. But in the end, I think it helped me to really feel the emotions of the song and relax into it, instead of tensing up about the chords and vocals.

Then it was time for "All of This," a song I had never managed to record to my satisfaction. Now it was my last chance to get it onto an album. But it had been a strong set so far, and my confidence was high. My voice was primed from all the singing I'd been doing since nine o'clock that morning, and I started in with a solid first verse and chorus.

"Somewhere in all of this," I sang, "I have found a . . ." Twang!

The G string snapped.

I have never broken a string mid-song. It's happened between songs as I've changed tunings, but never during a song—and certainly never during a final recording of a song I really needed to get right. But this was where having an audience came in handy. It was suddenly so important to make the moment comfortable for everyone that I couldn't let myself get upset. I told a dumb joke as I threaded the string through the classical bridge of my guitar. (Thank God I don't have to deal with pegs!) In a moment so short that even I was impressed, we were off and running again. And then . . .

Twang!!

This time it was the high E string. I couldn't think of another joke, so I decided to just concentrate on replacing the string. I hope at least I looked relaxed.

Looking back, I think that in a strange way breaking two strings made me even more determined to enjoy the song. Sure enough, at

the end of the evening, I felt amazed and satisfied that I had somehow stayed in tune and managed to nail all seven songs. I was done! And when Chris Lewis walked up to me with my tuner and two patch cords in his hand, which he'd just found near the mixer, I was able to laugh about it.

This may not be the end of the story. Now begins the task of listening to the tapes,

including audience response and pre-song banter, and picking the best of everything. Michael Golub has explained to me that if I have a great take of a song from one gig but a lame audience response, we can "fly in" a better audience from one of the other tapes. I can even fix pitch problems in otherwise good vocal takes by doing some overdubs in the studio. I can make the whole thing sound like one continuous show, or I can fade in and out between tunes.

I don't know how much of this I want to get into, being a purist at heart. But I'm not holding myself to anything. The main point is to get as much life on tape as possible, while maintaining tight, well-performed versions of these new songs.

No big deal. Just perfection.

Contributors: Sam Shaber chronicled the recording of her debut CD in our January '99 issue. For information on her performances and sale of her albums, call (212) 330-7927.

"THE PERFORMANCE is more important than the technicalities. If you mess something up, but the energy is there, it'll be a great recording."

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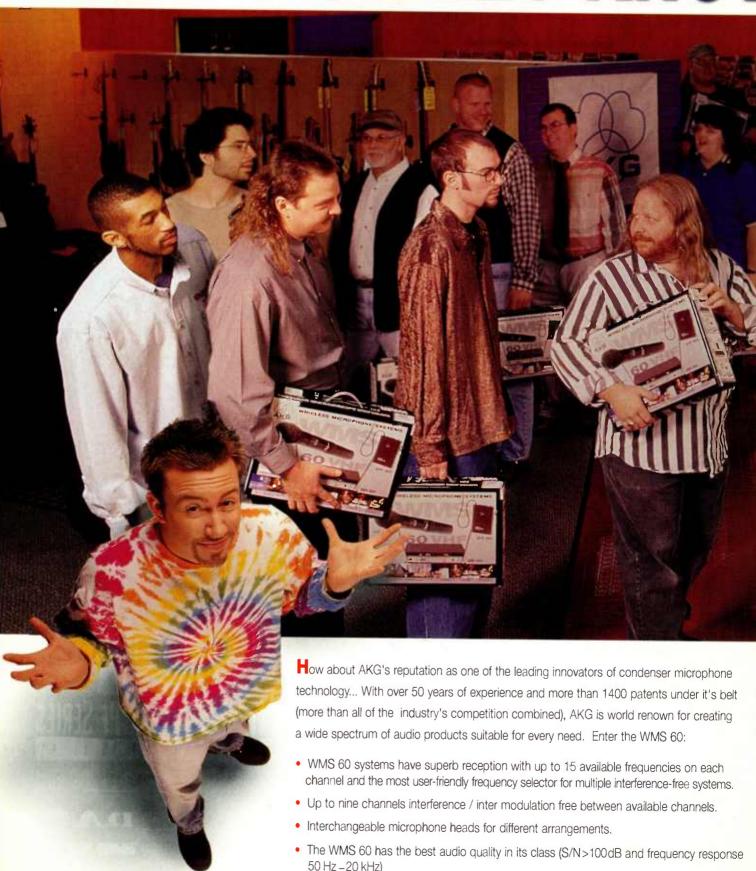
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e know, we know: Some of the greatest live albums ever made aren't even mentioned in this issue. It's not that we don't want to tip our hats to those artists, producers, engineers— and, yes, audiences—who worked together to create all the classic concert discs. Problem

is, there are just so many of these records in the catalog—far more, once you start listing them, than you might think.

And so, on behalf of the *Musician* staff, here's a total of five (more or less) thumbs up to Dylan for the *Albert Hall* former bootleg, to Cream for *Wheels of Fire*, to Johnny Cash for *Folsom Prison*, the Orb for *Glastonbury*, Jimi for *Band of*

LIVE
RECORDING

Gypsies, James Brown for Live at the Apollo, the Chemical Brothers for Heavenly Sunday Social Club, Kiss for Alive!, Zappa for all kinds of stuff, Ellington for Live at Newport, "Charlie Chan" for Live at Massey Hall, the Talking Heads for Stop Making Sense, the Band for Last Waltz, Miles for Live at the Fillmore, Evgeny Kissin for Carnegie Hall...

You get the picture. To pick the best of this bountiful crop is a fruitless exercise. Instead, I asked the staff to come up with a list of their favorite live CDs and look into the stories behind them. Some of their choices proved surprising, and much of what they dug up casts these memorable albums in a light that can best be appreciated by readers who have been there themselves, up on the stage, squinting into the glare. Ready? The tape is rolling . . . — Robert L. Doerschuk



Live at Leeds The Who (MCA)

Few, if any, live albums have done a better job of hitting the listener right between the eyes with the full force of a rock band performing at its peak than the Who's epochal Live at Leeds. The

original *Leeds* album contained only six songs—"Young Man Blues," "Substitute," "Summertime Blues," "Shakin' All Over," "My Generation," and "Magic Bus"—but who cares? Those six

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songs delivered more than enough high-testosterone ferocity to fill the 1,500-capacity hall with a devastating sound that clearly defined the band's "maximum R&B" style.

After many attempts to record the band live to two-track during an extensive tour of the States in 1969 (all of which were deemed failures by Pete Townshend and, for the most part, quickly destroyed), sound engineer Bob Pridden recorded the Who's Feb. 14, 1970 show onto an eight-track, 1" tape machine that had been set up in the kitchen beneath the auditorium at Leeds University.

Unfortunately, as with any early live recording, glitches were common, and *Leeds* had its share. According to Pridden and Jon Astley (who remixed and remastered 1995's extended fourteensong reissue of *Leeds* with Andy Macpherson), some of the splitfed "leads" running from the stage mics weren't properly connected, which resulted in intermittent pops that rendered four of the eight tracks (kick drum, snare, bass, and guitar) unusable for much of the event; the concert lasted more than ninety minutes longer than the length of the original record.

Thankfully, when the technology needed to declick the corrupted tracks became available, Astley and Macpherson jumped at the opportunity to fix many of the previously unlistenable performances. After baking the original analog tape to prevent it from shedding, Astley recorded the eight original tracks onto a Mitsubishi 32-track recorder, then recorded an additional eight tracks from there against time code onto a hard

disk recorder. Using Cedar Audio's DDC-1 Declicker to fix the existing clicks, Astley was able to bring the damaged tracks back in time when necessary during the remix process.

"On the original recording, you'll hear the clicks, and this is in fact why Pete couldn't use 'Heaven and Hell' and any of the *Tommy* stuff [when Townshend mixed the original record]," recalls Astley. "'A Quick One . . .' was very bad, 'Tattoo' was very bad, 'Fortune Teller' was very bad. He couldn't use any of those on the original recording because of all the clicks. It was amazing. The bass drum track on 'Heaven and Hell' was actually clicking all the way through the song, and I guess people heard it in the audience—maybe that's why they're so quiet."

With all the tracks finally made usable, Astley and Macpherson set about remixing the entire concert; on isolating the individual tracks they were delighted, if not surprised and even amused, by much of what they heard. "There was only one track of ambience," says Astley, "and it's not a very nice-sounding ambience, but it's funny because the record needs it to make it the way the record is. You wouldn't choose that kind of ambience on a live recording. It's a very, very odd-sounding record, and that [ambient track] is part of the charm. That's probably why it doesn't sound like anything else."

Pridden goes a step further, believing that this quirky ambience and mic bleeding are what make the record sound so fantastic. "The leakage is horrible," he says, "but when it all comes together, it's like the teeth of a comb. Bear in mind, they were *very* loud,

and there were real problems with separation—but it made them sound bigger. It breathed. If you set a mic in front of an amp, it doesn't sound like *that*. Basically, the sound on *Leeds* is a freak."

One big part of the Who's sound during this period was their use of tape loops onstage, but since the concert was being recorded to multitrack rather than two-track, Pridden decided to keep everything dry and add effects only during the mixing process. To recreate the sound of the original recording, Astley and Macpherson devised similar-sounding delays in the studio. "The band used them as timing devices to play off the loop. They'd play off the slapback as it came through the P.A.," he explains. "So Andy and I recreated a lot of those things that they had done live. Both of us had seen the band in the Sixties and Seventies and were big fans of what Bob was doing [running tape loops for the band], so it wasn't a big deal."

Since Astley and Macpherson were recreating certain aspects of the original recording, they decided to ask John Entwistle and Roger Daltrey to re-record some of the vocal tracks—twenty-five years later! "They'd actually gone back in the studio and done backing vocals to double the live stuff on the original album," he says, "so for things like 'Happy Jack,' which wasn't on the original, I [either] had to make do with vocals that were there or mend a couple of things." (Entwistle sang "Heaven and Hell," and Daltrey re-sang the line "My name is Ivor, I'm an engine driver," on "A Quick One...")

While the band's nearly fifteen-minute version of "My Generation" may stand as the greatest single performance in the live-album catalog, it's their overall stamina and unflagging drive that are most impressive throughout Leeds. It's awe-inspiring to think that even this extended release doesn't include the majority of the material—almost fifty minutes' worth—from that evening's performance of Tommy, but that's only because the band wanted a single CD and was unwilling to break up the performance midway. As Pridden sums up, "It was a bloody great gig. They were being serious about recording, and I think they got the nervousness over recording out in the States so that it made no difference to them at all." It sure sounds that way.—Michael Gelfand

At Fillmore East

The Allman Brothers Band (Capricorn Classics)

With the release of At Fillmore East in July 1971, the Allman Brothers Band reached a watershed moment in their career. Although the album didn't immediately register as a critical hit, the success of the project had a dramatic and lasting effect on the band's psyche. According to Tom Dowd—who

produced At Fillmore East, as well as previous and subsequent studio albums—the musicians weren't entirely comfortable in the studio prior to making Fillmore East. "When this album

came out and they heard how good they sounded, they gained confidence and never looked back," he says.

Assisted by engineers Larry Dahlstrom and Aaron Baron, Dowd recorded the band for three nights (two sets per night) on sixteen tracks. With the notable exception of the first set, he characterized the recording process as "smooth as silk." Without the opportunity to consult with the band prior to rolling tape, a few surprises were almost inevitable. "We ran along about three or four songs," recalls Dowd, "and all of a sudden an assistant looked at me and said, 'Well, where do I put the horns?' I said, 'What horns?' He said, 'Look, two horns just came onstage and another guy.' I was completely dumbfounded. When I heard what they were playing I didn't even wait for the set to finish. I tore backstage and as the band was coming off I grabbed Duane [Allman] and said, 'Duane, do not allow the horns back onstage for the second set. They are not complementary at all!' He said, 'What do you mean?' I said, 'They're out of tune and they don't know the songs.' He said, 'Well, they played with us a couple of days . . .' I said, 'Duane, scrub the horns, please. I beg you.'

"That night, after the concert, I grabbed the tapes, put them under my arm and took the band up to the Atlantic [Records] studio, and let them listen to the entire show," continues Dowd. "Even though it was multitrack we tried to mix on the fly, so when we listened back we had something that resembled intelligence. In doing this little study, we determined that there were one or two songs they didn't have to do again if they didn't want to, and there were one or two songs we had to change or do better. The next night, again, we went back to the studio and let them hear everything and how it was recorded." After the last show, they retreated to the studio one last time and went through everything they had. "In listening—and this is a strange aside," says Dowd, "but it's the way it happened—there were one or two versions of 'Whipping Post' that we fancied. And on one of them there was some guy in the audience yelling, 'Ahey! Play "Whipping Post"!' And everybody laughed when we heard this take, but when it came down to which take to use we decided there was a better version. When I finally mixed the album down, I took the line, 'Play "Whipping Post"!' and I flew it in from the take we weren't using,

so that it would be in there as a little touch of humor. But it was not the take the guy actually said it on."

It's worth noting that when Dowd revisited the original tapes to create a CD version of the album, he neglected to again fly in the "Whipping Post" request, prompting some listeners to wrongly infer that he switched takes. A more significant discrepancy between the original version and updated release concerns "In Memory of Elizabeth Reed." The original version is two different takes spliced together; with the benefit of hindsight, Dowd decided to splice the takes at a different point. And on the subject of overdubs, Dowd says, "I can say in all sincerity that there was not one overdub on the album. What you hear is what they played. If there

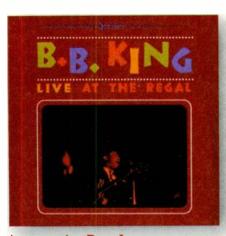
had been a need for overdubs I don't know how we would have done it, because the morning after we finished the last show they were in a Winnebago going to another gig. What I had on tape



was what I had to work with."

Interestingly, At Fillmore East was also mixed in Quad. According to Abbey Road mastering engineer Peter Mew, these were the tapes that were used to create the DTS surround-sound CD, which provides an odd but illuminating mix, with not only the hall ambience but the guitars placed in the rear speakers (Duane on the left and Dickey on the right) and the two drum kits panned front left and right (organ, bass, vocals, and blues harp take up the center). The mix was done by Brad Miller for Mobile Fidelity Labs; unfortunately, Miller has since passed away, so it's impossible to get a first-hand account of the method behind the creative process.

Over the years At Fillmore East has enjoyed ever-more critical claim, and in Dowd's opinion, deservedly so: "I said when I made it that it was an exemplary album depicting the fusion process. Over the years it's stood the test of time and proved worthy of any evaluation you want to make. You wanna look at it musically, you wanna look at it engineering-wise, performance-wise, it's on solid ground. You can't deny that it's a great album."—Jason Zasky



Live at the Regal B. B. King

(MCA)

Perhaps the most critically acclaimed live album in the entire canon of the blues, B. B. King's *Live at the Regal* is one of those happy accidents of fate whose enduring success continues to baffle its makers. As King himself puts it, "I always thought it was good, but why they put it over everything else I've ever

done, I can't figure it out. I don't argue with my critics, though. If they say it's the best, I say, 'Thank you, thank you.'"

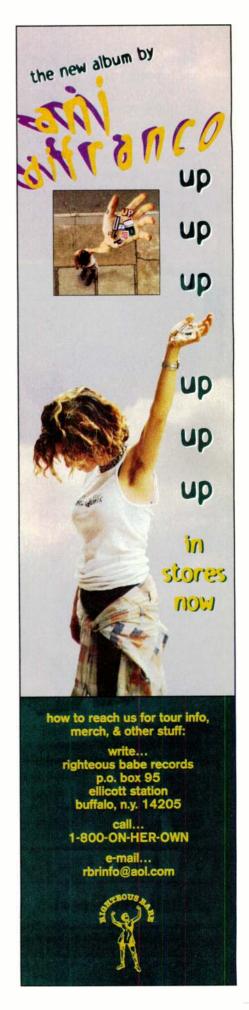
For B. B., Regal was a night like any other. The album was drawn from two shows on November 21, 1964, following a decade's worth of three hundred one-night stands per year. Of course, part of what makes Regal such a classic is precisely that: It's a faithful rendition of a blues master in his early prime, reeling off a catalog of pearls like "Sweet Little Angel" and "Everyday I Have the Blues." On this night, though, King's ace septet was notably augmented by a loyal Chicago audience who ratcheted up the intensity of his performance with a charge that King says "was like going to church."

"Every once in a while you're in a pretty good place, you've got a good sound, with good engineers working, and you've got an audience that money couldn't buy," he observes. "They seem to be enjoying everything you do, and you don't have to prompt them to do this or that, and it makes a big difference: You feel like you're doing something important and you have more confidence, so you go for broke."

Regal was the first of several collaborations between King and Johnny Pate, a producer and A&R man for ABC-Paramount who'd first gained notice for his horn arrangements on albums by Curtis Mayfield and the Impressions. "ABC-Paramount wanted a record right away," Pate recalls, "and to me the easiest thing was to do a live record, 'cause B. B. was coming in to the Regal. I told him, 'All you have to do is set up and do your show,' and he said, 'Fine.'"

Thirty-five years later, Pate's recollections of the recording gear he used that night are understandably hazy, but he does remember telling engineer Ron Steele to capture the audience. "I said, 'Make sure they're miked up enough to get any response or reaction,' and that was one of the things I really pushed hard in the mix. We also tried to give it enough echo and reverb to create that live sound, and I think that helped, along with B. B.'s charisma."

Indeed, it's hard to imagine a recording where the audience is such an intrinsic part of the sonic experience. B. B. frames his songs as stories told to intimate



and Cris Kirkwood of the Meat Puppets. Stretching the rules a bit, Cobain and Novaselic snuck a couple of small amps onstage, but they were hardly noticeable, sonically or visually. ("I think some of the flowers helped to cover them up," Litt laughs.) Grohl's last-minute decision to play the set with brushes and *Hot-Rod* bamboo sticks proved to be momentous. "It was not really thought out that much," Litt remembers. "But there was a lot of room for the bass signal when the drums aren't being played hard, so it gave a good sound to Krist's acoustic bass guitar [a Gibson hollowbody acoustic/electric model]; it also enabled a lot of space for the vocals and harmonies."

An hour later, the performance was over. No retakes were done, no overdubs made, and the audience filed out, by many accounts, stunned by what they had witnessed. "The last number was the Leadbelly tune, and it was just so gripping, one of the most absolutely amazing moments ever recorded," says Litt. The torture in Cobain's voice is utterly primal, evoking a pain as tangible and real as Lennon's bloodcurdling "Mama don't go/Daddy come home" two decades earlier.

"When they finished the show, they were really excited," Litt remembers. "They kind of huddled with me afterwards and said, 'Should we do more?' Because they were having a good time; they were having a better time than they thought they were going to have, in my opinion. And I remember Kurt saying, 'No, this is perfect. Let's stop here.'"

Five short months later, of course, it all stopped for good, and Litt and the remaining band members faced the difficult task of assembling the album posthumously. "I didn't work extensively with Kurt in the studio, but I knew he was somewhat of a perfectionist. He didn't belabor things, but he knew when something was right. It was very hard to make decisions on material after his passing, but the *Unplugged* performance was undeniable. Plus, the band members and the record company and I knew that he was so excited by how it had come out, so it was an easier decision to release it." According to Litt, the record embodies the entire incredible performance that evening—even down to the song order—with nothing added or subtracted later, except for the deletion of a little between-song banter.

It is rare when an artist has the courage to redefine himself; rarer still when it is done in full view of the entire world. MTV Unplugged in New York captures an astonishing moment in time. It stands alone, a stark memorial to Kurt Cobain's troubled life.—Howard Massey



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Kenny Greenberg and Scotch Ralston find similar challenges in making two very different live records.

BY JASON ZASKY

e've all heard the old adage, "It's not what you know, but who you know." It may be true in most areas of life, but in the case of live recording it's the inverse that's relevant. While knowing the right people may enable you to record for less money, what you know will prove even a more important role in whether your recording will be worth a damn.

To further your knowledge on the process of recording live, I sat down with Scotch Ralston (seated right, with 311 lead singer Nick Hexum)—who recorded, mixed, and produced 311 Live (Capricorn)—and Kenny Greenberg (left), who produced and played guitar on his wife Ashley Cleveland's You Are There (Cadence/204). Despite the stylistic differences between the two artists—Cleveland describes herself as a "rock & roll gospel singer," while 311 plays a loud brand of hip-hop/funk/jazz-influenced hard rock—both producers had similar experiences recording their respective albums. And while both records were

recorded primarily in mid-size or larger venues, their advice is relevant to rooms of any size. In fact, the success of a recording is in large part determined by what you do *before* and *after* you roll tape.

How did your live albums come together?

Greenberg: In our case, we were out on tour opening for a bigger act [Amy Grant], and halfway through the tour the soundman said, "Here are your DATs of the multitracks." It was like, "What

multitracks?" They happened to be recording all the shows so we got all these multitrack recordings of us playing live, and that gave us the idea for a live record.

LIVE

RECORDING

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Ralston: That's always the best way. When someone else is recording, just pick up on that. When we decided to try some live recording, we started out carrying around an ADAT and an eight-track digital recorder in our sound rack. Those recordings were fairly good, but the only problem is that the EQ you would use to record something and the EQ you would use to make something sound good in a live environment would be completely different. So the recordings turned out okay, but we knew when we actually decided to do a live album we would probably have to pay an outside company to come in with recording devices we didn't have with us.

What kind of a budget did you have to record 311 Live?

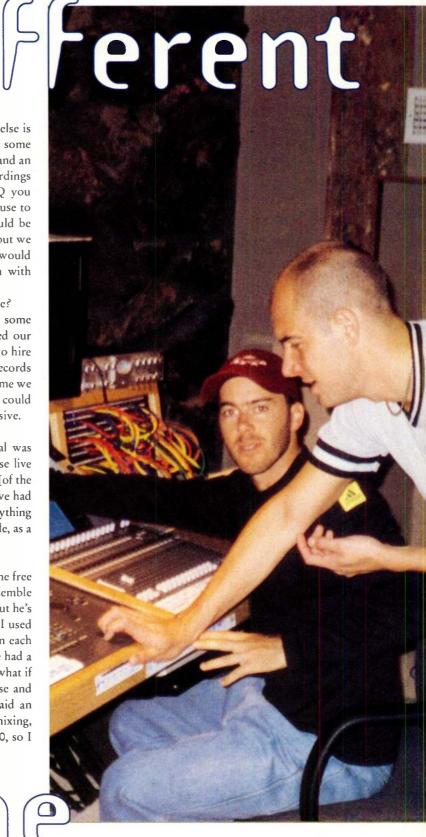
Ralston: Our budget was basically, "Hey, spend some money, but keep it as small as you can." We investigated our options and found that it was most cost-efficient for us to hire a local recording truck. It pulls up behind the stadium, records you, gives you the tapes, and leaves. Fortunately, by the time we did that, our concerts started to get a little bigger and we could afford that. But I don't think it's too outrageously expensive.

And for You Are There?

Greenberg: We didn't have a budget and so our deal was basically done on a favor basis. We happened to get these live recordings, and then we did a TV show, and the producer [of the TV show], Michael McNamara, let us use the tapes, and we had a couple of acoustic vocal performances that didn't cost anything to do. Then Richard Dodd, who's a mixer here in Nashville, as a favor to me assembled it all and dumped it to 24 track . . .

Ralston: Well, you lucked out.

Greenberg: . . . In the process he said, "I've just got one free day, and I'm not gonna really mix it, I'm just going to assemble it and dump it over to 24 track and push up the faders." But he's a great guy and started tweaking around a little bit. And I used three of the mixes he did; he just spent a half an hour on each tune. Then I did some sessions for this other guy, and he had a little mix room and a couple free days, and I said, "Well, what if we trade and I bring my tapes over?" So he mixed those and then for the remaining things we needed to mix we paid an engineer. I spent a total of about \$3,200 for studio time, mixing, and multitrack tapes. In mastering I spent another \$3,000, so I



he

Sam

did the whole thing for \$6,200.

What equipment did you use for recording?

Greenberg: The Amy Grant tour stuff was done to DA-88s . . .

Ralston: That's a popular format for live recording because they're so small and portable.

Greenberg:... And on the tribute to the Stones—the one song from our record that's on that [TNN's Stone Country tribute]—they were recording everything to 32-track digital Mitsubishi, but we dumped it all to analog 24, just because there's so many studios

that have 24-track tape machines. We felt like that was our best bet once we started to mix.

Ralston: That was a good plan. Usually the best plan is to try to get a good recording of some kind, and go somewhere else to mix it later. As far as equipment goes, we tried to keep it simple for recording; just a console and tape machine. We used the same microphones we use for our live setup,

but they have these little splitter cables that send one signal to the track and one signal to the console, so the live recording EQ doesn't affect the live sound EQ.

If you had no budget but wanted to record, how would you do it?

Ralston: The best way is to get a stereo microphone and a DAT recorder and record from the best spot in the room, if possible. We've done that a couple times to experiment. Some of the recordings we got are not too shabby. I wouldn't release them, but it's kind of interesting to hear the audience's perspective.

It's probably a good approach to do something like that a few times before you actually go and spend money.

Greenberg: Oh, definitely.

Ralston: That's something good because you can see how you sound and what you need to improve on before you record. Also, it's a good reference to listen to your material from someone else's point of view.

Greenberg: And I'd say record as many shows as you can get away with recording. You can go back and fix—we didn't fix anything—but you're going to have shows where there's a lot of tempo weirdness, or noise, or something breaks down. That's the main thing that worked in our favor; we had a lot of shows to choose from.

Ralston: Yeah, that's something we came up against. We took to doing the recording we've done, and on some tapes the quality was a lot better than others. And when we found the ones that were quality recordings, we didn't have as much to choose from as we thought. So it's a great idea to record as many performances as you can.

Kenny brought up the subject of overdubbing . . .

Ralston: Yeah, we didn't do any fixes on our stuff, because we wanted to keep it live. But it's real tempting.

Greenberg: It is tempting. I totally agree with that. But there's something sacreligious about it, because there's so many live recordings you hear that are just too perfect, and it kind of pisses you off a little bit. What's the point? So we consciously said, "It is what it is, mistakes and all." Once we assembled the live stuff that we liked, we played it for people, and the stuff they liked was some of the stuff with the most mistakes, and it was like, "Hey, this could apply to studio recording as well."

Ralston: It's kinda fun to hear some mistakes now and then. If you're going to start overdubbing and do a perfect product then you might as well just do a [studio] record. We just tried to mix it the best we could to make it sound like a pro product.

Is there extensive overdubbing on most live albums?

Ralston: It's hard to say. It just depends how bad it really is

[laughter]. Sometimes vocalists will be sharp or flat and say, "Oh, I don't want to put that out. People will think I can't sing."

What about recording crowd noise?

Ralston: That's something I wish we'd done more of. Because it's great to hear the audience's response. Sometimes you can even hear one person screaming something hilarious, and we get a big kick out of that. One thing that we did—maybe we didn't tell everyone—but we sampled a

—Kenny Greenberg

"So many live recordings

It kind of pisses you off

are just too perfect.

a little bit."

little bit of crowd, moved it around.

Greenberg: We did a similar thing. We had problems on the shed shows. As the opening act on shed shows you're playing for the few people who are walking in, and there were a couple performances where the first couple songs in the set, we finished the songs and you could hear two or three people [claps slowly] clapping, but it was the performance we liked, so we took clapping from the end of the show and sampled that and put it in.

Ralston: And that's no big deal. It adds hype to the record.

Greenberg: The other thing about the sheds: They're not really great sounding places to play.

Ralston: I hear that.

Greenberg: We found that compared to the club shows, the ones in the outdoor sheds, when we tried to use the room mics, they were so tinny sounding that we had to use a lot of EQ. We listened to the club room mics and tried to match with EQ the shed ones. Even though you wanted to have the room—the excitement of playing in a big place—they just sounded lousy.

Ralston: Yeah, we had to fade our mics up and down a little bit. We had the same problem.

So you suggest recording in clubs?

Ralston: Club recording can be really good because it's usually a smaller space and there aren't as many reflections, and if they're filled with people, the people soak up a lot of the reflections.

Greenberg: That's exactly right.

Ralston: Either that, or the best type of recording is completely outdoors, with no roof or anything. That sounds great.

Most bands don't have too many opportunities to play in an open-air space though.

Ralston: But I would tell a band if they have a chance to perform in an outdoor venue without a roof or walls, then that would be a good show for them to record, if possible. So if they have a show like that coming up, start practicing recording with a DAT player and get ready.

Scotch, how much interaction did you have with 311 before recording the shows? What kind of direction did you provide, if any?



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Ralston: Nothing, really. It was, "Hey, we're recording tonight, so play good [sic]." They just did their thing and I did mine. I didn't really emphasize that we were recording, otherwise it might be, "Oh, gosh, we're recording and I'm going to suck."

For the most part, Kenny, you guys weren't even conscious of being recorded.

Greenberg: Yeah, and for us the best stuff was from when we didn't know we were recording, because we didn't care.

Let's talk a little more about budgets. Scotch was explaining what he would do if he had no budget. Well, what if you had a minimal budget? Let's put it at a couple different levels.

Ralston: With a minimal budget you could go with an ADAT or a Roland VS-1680, something that's portable that you can record quality on. I would interface that with the live recording console and just record directly from the microphones. That's pretty cost-effective. All you have is the cost of the unit itself, but you can get ADATs pretty darn cheap these days. Also, once you have it on ADAT you can go somewhere else and mix it. That's how we did it for a long time, and we got some pretty good performances that way.

And the next step up would be to go with the truck?

Ralston: Yeah, the next step up would probably be the truck. I don't know if there's anything in between I can think of right off the bat.

Let's say you're at the point where you're finished recording, you're finished mixing. Mastering a live recording is a big production, isn't it?

Greenberg: Most of the money we spent was on mastering. Ralston: Yeah, if you're going to release it, you usually have to master it. That's kind of a standard.

Greenberg: We found that with multiple shows, and also with multiple mixes, that to get a cohesive professional product we had to spend three days in mastering. And once you compress and EQ—especially with a live thing—all the crowd noise and white

noise affects it. I was surprised by how much it affected it. So mastering was a real struggle.

Ralston: We had to master three separate times to get everything to match up.

If you record, say, six different shows and use all different equipment, was a problem getting the consistency between all the recordings? It

"If it's something you're going to release, spend the extra dime. If it's... a demo, save as much money as you can."

-Scotch Ralston

sounds like you may have to spend more on the back end if you record a lot of shows.

Ralston: We concentrated on the mix on trying to match up the sound between shows, but we still had to master a lot to get it to match up.

Greenberg: And then we would try to compare them to studio albums we liked. It completely didn't work. Eventually we just stopped doing it.

Did you try to do that with other live albums too?

Greenberg: I eventually went to the Stones Get Yer Ya-Ya's Out!, also because we did a Stones song ["Gimme Shelter"] on

the record.

What about you, Scotch?

Ralston: The whole time we were doing ours, the band kept saying, "Listen to the Bad Brains album!" I myself, didn't have any particular album in mind. We just went with what we thought was right. When we put our tapes up, we found it sounded a lot better than we thought it would, so we didn't have to search too far to find something to reference.

What kind of advice do you have for bands who've never recorded before?

Ralston: Rehearse before you record, and plan ahead which songs you want to get the best recording on. If there are any in particular you like the most, try to contour your set so those songs come when you're warmed up and have the energy flowing. Usually, [with] the songs at the beginning, there are problems getting everything together with levels and the vibe.

Greenberg: Also, try to go for as much separation as you can get. In retrospect, I would probably not have had the guitars quite as loud. Guitars often record better when there's smaller amps. Everybody has that same experience.

Ralston: Yeah, but tell that to the guitar player [laughter]. What would you do differently if you were doing your albums again?

Greenberg: There's a guy named Buddy Miller who plays with Emmylou Harris, and he recorded their live record, and he was saying that once he realized they were really going for it he got a bunch of really good mic pre's and carried them around. I would get some really good mic pre's to try and get better quality in the sound.

Ralston: That's a good one. In retrospect, my big change would be the placement and the attention we paid to the room mics. I'd say, between shows that was the biggest difference, and the only thing that may have been lacking on a few shows is the sound we got on our room mics.

Any suggestions about placing room mics?

Ralston: That's one good thing about going to a venue before you record, is to find a good place to put the mics. Somewhere where there's a good stereo image, but don't put them in the empty spots in the house or they'll sound really weird. Try to put them where people will be.

Where they're hopefully going to be [laughter]. Ralston: Yeah, "Imagine people here!"

Final thoughts?

Ralston: If it's something you're going to release, spend the extra dime. If it's something that's going to be a limited release, like a demo, save your money as much as you can.

Would either of you like to record other bands live?

Ralston: If I'm going to do recording, I'd prefer to be in a studio, to be honest.

Greenberg: I don't think anyone wants to spend a lot of time making live recordings.

Ralston: Yeah, it's tough. You're fighting the elements. You have to have a big slab of glass between the recorder and the band [laughter].





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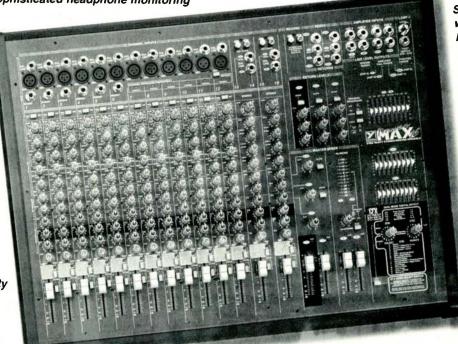
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How to get the most

by peter spellman

here's more to playing a killer gig than plugging in, saying a prayer to the gods of groove, and wailin' away. In fact, the rule for performance is pretty much the same as the rule for success in just about any line of business: It's all about being able to maximize limited resources.

Live performances are one of the most potentially rewarding avenues for bands in terms of networking and exposure. Yet few take full advantage of the opportunities that gigs present. Each live job should be seen as an opportunity to expand your skills, your fan base, and your media contacts and industry relationships. Sound complicated? Don't worry: We've boiled it all down to twelve essential points. Follow them, and you'll not only rock the house-you'll kick your career into a higher gear, and improve your chances for long-term success.

things to do before the show

1. Find out about the room where you're going to play. Know the stage size. Find out what time bands are expected to soundcheck, and to begin and end playing. Learn whether there's a dressing room. Check out the sound and lighting system, if they're provided, and talk to the club's sound tech. If possible, ask other bands who've played the room for tips and pointers. Remember, you're there to perform a show, not worry about all these details once the show begins. Get the right information before the gig, and you'll have much less anxiety while you're onstage.

- 2. Rehearse your show straight through as if it were the real thing. Your show should be a visual feast as much as an aural banquet, so pay attention to your stage presence as well as your stage sound. Practice any movements or dance steps you're planning to use at the gig. You may also want to hold a full dress rehearsal and have someone snap some photos or shoot a low-budget video of the group, so that you can actually see what the audience will see. This is always educational—and often humbling! But swallow your pride and learn from what you see-remember, you're trying to make the most of this gig.
- 3. Publicize the show. Print up a bunch of flyers with all pertinent information, including contact number. You're competing with a lot of other events, so you want your flyer to stand out. Use colorful paper and eye-catching graphics. Seek the advice of a friend who's an artist, or go the extra distance and have a professional create a killer (continued on page 68)



(continued from page 67)

gig poster, leaving a blank space at the bottom for all relevant info.

Once you have your poster in hand, it's time to send it out. First, mail it to your fans, your primary support base. Second, you'll want to send it to all music writers in the local media. To find out who they are, check the most recent edition of the *Musician's Guide to Touring and Promotion* for information about your area. You can also visit your local public library and look for *Gale's Directory of Publications and Broadcast Media*, which lists more than 36,000 print and broadcast media, and the *Broadcasting Yearbook*, which covers radio, television, and cable outlets throughout the ILS and Canada

Write down contact information for all dailies, weeklies, and monthlies within a tenmile radius of where your show will happen. Your list should include music publications as well as mainstream press. Chances are vou've already started such a list, but now's good time to make sure it's comprehensive. Jot down phone numbers as well as addresses, because you'll want to call each publication to find out two thingsfirst, the name of the arts and entertainment editor, to whom you'll send your notice; and second, how much "lead time" the publication needs for printing a concert listing, so that you can be sure to get your information to the publication in time for it to be printed before your show.

You'll also want to send a good photo of your act. It's worth the expense to have one taken, since your gig listing will receive lots more attention—and a better display in print—with artwork. Make it as easy as possible for the editor to use the photo by finding out the exact specifications required for photo submissions when you call about the other items.

The next list you'll want to assemble involves local radio. Most stations have regional concert listings as part of their news segment, so be sure to target a flyer to each. If the gig is extra-special—in a high-profile showcase venue, for example—you may also want to send out personal invitations and free tickets to local music industry representatives, including record executives, A&R contacts, booking agents, personal

managers, entertainment attorneys, and radio personnel. Think *maximization*: It's better to invite too many than not enough.

Besides your mailings, you'll want to post your flyers in music stores, hangouts, inside the venue (don't forget the bathroom stalls!), and on all college and community bulletin boards in the area.

If you want to save money on the mailings, you can reduce your flyer to one-quarter size, from 8-1/2" by 11" to 4-1/4" by 5-1/2", and print it on postcard stock. This lowers your postal rate by thirteen cents per piece. If you're doing huge mailings on a monthly basis, check with the post office about getting a bulk mail permit for additional savings.

things to do during a show

Okay, the big night is here. You walk into the club, greet the sound engineer (you've already made sure that you know each other), park your belongings in the appropriate space, and start setting up on the familiar stage. Smooth. But there are a few more things you can do to make tonight's show truly memorable.

- 4. Have a banner with the band's logo hanging behind the stage, high enough to be easily read by everyone in the house. You'd be surprised how many people wander into clubs and hear bands without having any idea who they are. A visible banner solves that problem. You say you don't have a banner? Try calling Bannerama at (617) 899-4744, or the Banner Barn at (800) 537-7469.
- 5. Place "table tents" with band information and gig schedules on each table around the club. Use sturdy postcard stock for best results. And here's a tip from singer/songwriter Lisa Stansfield: Try putting the lyrics to one of your songs on the tent to give people more reason to take it home.
- **6.** Set up a visible area for merchandise, including T-shirts, tapes, and CDs. The person—not a band member, incidentally—in charge of selling this stuff can also make sure that new fans add their names and addresses to your mailing list. Be sure there are lots of writing instruments and plenty of paper on hand. Put the T-shirts on hangers for greater visibility. And keep a bowl of candy well stocked on the table.
- 7. Make sure everyone in the band and support crew has plenty of band business

cards in their pockets throughout the gig. Distribute them liberally.

8. Remember to make your show visually as well as aurally exciting. You're on display, and all your clothing, colors, movements, and lines should blend with the music you're playing. Give the people what they want: a feast of sight and sound.

things to do after the show

Alright, you just had a great gig! A lot more people know about you now than before this evening. There's a small buzz brewing, and now it's time to heat it up.

- 9. First, before you leave the club, try to secure another glg with the owner or booker while you're fresh in their mind. At the very least, seek a verbal commitment, then call within a few days to confirm and formalize it.
- 10. Make sure the dressing room is in the same condition in which you found it. This may sound trite, but it's a basic human consideration. An un-trashed dressing room will speak well of your act.
- **11.** Strike while it's hot! As soon as possible, follow up on any industry contacts made at the gig. Call and thank them for coming to the show. Build rapport, *Network*.
- 12. Send a personal letter to all new fans, thanking them for coming to the show and informing them further about the band and other ways they can support you. Try encouraging them to call club owners, request your songs at radio stations, buy your music at local retail outlets, and tell their friends about you.

Of course, you can forget about all of this and just play the gig. After all, you're musicians, not publicists. Music is what you do best, right?

Right . . . but more and more, we see success going to the smarter bands, the ones that go beyond just performing, because they know how to organize publicity, work the radio, boost promotion, and generally maximize and optimize their limited resources. After all, why should one gig equal one gig when it can have the impact of ten? Maximization is the key. Go for it!

Contributors: Peter Spellman is career development coordinator at Berklee College of Music and author of Music Biz Know-How: Do-It-Yourself Strategies for Independent Music Success. Contact him at www.mbsolutions.com.

editor's pick



A Workstation for All Seasons

ou can't have everything. Where would you put it all?"—Stephen Wright

Actually, truth be told, the new Yamaha EX5 pretty much does offer everything—at least everything you could reasonably ask of a pre-millennium synthesizer workstation. Under the unassuming hood of this single instrument is the most complete collection of synth technologies you'll find anywhere, anyplace. We're talking old technologies (subtractive analog-style synthesis, FM synthesis, an arpeggiator, and an onboard sequencer with many of the same editing commands found in

dedicated boxes produced by Yamaha and its competitors more than a decade ago), current technologies (sampling and sample playback, physical modeling, multi-effects), and new technologies (something called "Formulated Digital Signal Processing"—a complex series of algorithms that enable finely controlled pitch- or velocity-

specific processing). Add to this a strong MIDI implementation, numerous expansion options (including, unusually, a professional digital output), and a 76-note keyboard. The result is a synthesizer that not only excels in producing some of the finest retro sounds out there (with particularly strong emulations of Seventies-style keyboards such as Rhodes, Wurlitzer, Clavinet, and Hammond and Farfisa/Vox organs) but also provides a broad palette of new tone colors never before heard and a massive set of tools with which to create your own sonic masterpieces.

In short, this is one serious instrument.

Under the hood of the Yamaha EX5 is the most complete collection of synth technologies you'll find anywhere, anyplace.

by howard massey

But, as Mr. Wright so aptly pointed out, there's a tradeoff for having all these goodies in box. The issue certainly isn't flexibility, and it isn't really price, either: The EX5's price tag of \$2,695 is actually less than you'd pay for many competing 76-note keyboards. (There's also a 61-note keyboard version—the EX7—and the EX5R rackmount, both priced at \$2,195.) Instead, the major restriction is computing power. One could reasonably *(continued on page 70)*



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argue that the EX5 is a bit under-endowed in this department, especially when you really put it through its paces. That said, this is still an amazing product—one that not only encapsulates the best of the past 25 years' worth of development but also gives a good sense of what the next generation of synthesizers is going to be about.

Physically, the EX5 is a beast; figure on having lots of available real estate and a heavy-duty stand to place it on. In addition to the usual complement of footpedal, footswitch, and breath controller inputs and center-sprung pitch-bend wheel, you'll find two modulation wheels (one center detented) and a ribbon controller (a personal favorite of mine), as well as a series of six "soft" knobs under the large central backlit LCD. All of these can be used to alter just about any aspect of the sound in real time (including effects parameters), and can also be assigned to independently transmit any MIDI control change message. This, along with the EX5's dual MIDI inputs and outputs, makes it well-suited as a master controller, either in the home studio or onstage.

Out of the box, the EX5 provides two analog inputs (for sampling) and four analog outputs; all are unbalanced 1/4" jacks. For another \$150, you can install an optional board that adds an additional four analog outputs-or, for two hundred bucks, you can spring for a board that adds a stereo AES/EBU digital output on XLR jacks, as well as a word clock input to ensure proper synchronization. Unfortunately, there's only room for one or the other of these output options. Other expansion options include a SCSI interface (\$250) and Flash ROM memory expansion (call Vital Technology at [877] 926-2425 for 16 meg modules, priced at around \$200 to \$300)-more about these shortly.

If you've worked with any of Yamaha's keyboards over the past ten years, much of the EX5's nomenclature (and, alas, the morass of nested menus) will be familiar. Individual sounds are called "voices," while collections of sounds layered, velocity-switched, or assigned to different keyboard ranges (and/or set to respond to different MIDI channels) are called "performances." The instrument comes loaded with 256

preset voices (including six drum kits) and 64 preset performances, and there are another 256 slots in which to store your own voices, plus 64 more slots for the storage of your own performances. Most of the presets are sonically excellent, and many of them, particularly the keyboard and string sounds, are absolutely superb.

Four basic synthesis techniques are available: sample playback (of both permanently stored ROM waves and your own custom samples), virtual acoustic modeling of pipe and string sounds (as found in Yamaha's VL series of synths), virtual physical modeling of analog synthesizers (the oscillator-into-filter-into-amplifier model found in the old analog synths of yore, as well as Yamaha's more recent AN series; here, this process is used to create FM sounds), and the previously noted "Formulated Digital Signal Processing" (FDSP for short). The latter provides models of devices like electric piano and electric guitar pickups (with user-defined properties, such as positioning and placement) and allows you to create the weirdest flanging. phasing, and ring and pulse width modulation effects you've ever heard, all of which can change dramatically as you play different notes at different key velocities.

Each of these synthesis techniques has its strengths and weaknesses. For example, sample playback provides the most realistic sounds, since they are digital recordings of the actual sounds themselves—but real-

The EX5 pretty much redefines the term 'full-featured.'

time control is limited. In contrast, virtual acoustic modeling provide sounds expressivity phenomenal but don't necessarily yield the most convincing sonic emulations. In recognition of this, the EX5 allows you to combine different synthesis processes within a single voice, though certain restrictions apply-for example, you can only combine a VL "element" with sample playback elements.

As you might expect, there's a huge number of editable parameters, making the

EX5 a dream come true for propellerheads like me who enjoy customizing sounds or creating new ones from scratch. Although many menus let you adjust multiple parameters simultaneously via the six "soft" knobs, the fact is that there are *lots* of menus and way too little screen space for all the parameters that need to be viewed. This is one synth that will benefit greatly from a computer-based patch editor; while there will undoubtedly be a number of these on the market soon, it is unfortunate that Yamaha didn't develop one themselves for inclusion with the instrument.

There is, however, a Mac- and Windowsbased sample editor provided on disk, but bear in mind that, while the EX5 can sample. it wasn't designed to be a sampler. This means that you can record your own CDquality (44.1 kHz, 16-bit) sounds into it, but the onboard editing is sparse, and the storage capabilities are extremely limited. Out of the box, there's only 1 meg of RAM provided: This translates to a puny twelve seconds or so of mono sampling time, or six seconds of stereo. You can install up to 64 megabytes of additional RAM, using standard 72-pin DRAM SIMMs, but RAM memory is volatile, meaning that all your samples are erased when the EX5 is powered down. A better option is the aforementioned Flash ROM memory; it's currently available in only 16 megabyte modules (larger ones are being tested), but at least the data is held in memory even when the power is off.

Getting samples into and out of the EX5 is somewhat problematic, though. There is a built-in floppy disk drive that reads standard PC-formatted disks and is capable of importing WAV or AIFF files (as well as Akai

S1000 files), but these must of necessity be small (less than 1.4 meg) and therefore short in length. To import or export longer sample files, you'll need to add the SCSI option, which allows you to connect pretty much any hard drive or CD-ROM player. This would be a good thing except for the fact that the EX5's SCSI implementation is way slower than the rest of the world's. As a result, loading and saving times are very poky, even if you hook up a super-whizzbang, extra-fast hard drive. You can completely forget about

using SCSI to load samples into RAM during live performance; your audience will be filing out the door long before the transfer is complete. Instead, you'll need to opt for loading sample data into Flash ROM in the comfort of your home beforehand—an alternative that's both somewhat costly

(adding \$450 to \$550 to the instrument's basic price) and limiting (16 megs vs. 65 megs).

The "workstation" label implies the presence of an onboard MIDI sequencer; the EX5 actually has three of them. One is a fairly standard linear 16-track "song" sequencer, which has 30,000-note capacity and 480 ppq resolution but unfortunately only holds one song in memory at

a time. The second is an eight-track "pattern" sequencer, which allows you to record short, repetitive phrases, drum machine style. The third is the arpeggiator. All three offer pretty much all of the editing features you'd expect in a dedicated hardware sequencer, including event list editing and various quantization routines, such as a real-time "groove" playback quantization that lets you impose a predefined "feel" (one of the 100 presets or your own prerecorded groove) onto your recording. Integration between the three is especially tight-for example, you can not only assemble patterns into a song (and then overdub linearly on top), you can extract sections of specific tracks within a song and turn them into patterns or arpeggiation "styles"; you can even record the output of the arpeggiator into a song track. Arpeggiators are, of course, an important adjunct to techno music, and you're unlikely to find any more comprehensive or powerful than the one here. There are fifty preset arpeggiation "styles," many of which are highly syncopated; you can also create your own from scratch. Arpeggiation operation can also be written as part of a voice or performance, so it is easy to create a sound that is in fact a whole series of notes-a characteristic of some of the EX5's more esoteric presets.

And what would a modern synthesizer be without effects? As you might expect, the EX5 excels here as well. First of all, every element within a voice and every voice

within a performance can feed independent reverb and chorus effects. (There are twelve reverb types and seventeen chorus types to pick from.) Happily, the reverb tails are smooth and exhibit little of the graininess often found in keyboard effects. In addition, there are two insertion effects, which can

The EX5 is a dream come true for propellerheads like me who enjoy customizing sounds or creating new ones from scratch.

be applied to individual elements within a voice or (within certain restrictions) individual voices within a performance. These include many of the chorus effects types, plus EQ, compression, amp simulation, autopanning, and pitch change, as well as a number of clearly Nineties algorithms, such as LOW RESOLUTION, NOISY, and DIGITAL TURNTABLE (complete with programmable click density and level).

There are loads of other features too. Space precludes listing all of them, but some of my favorites include resampling (where your playing of an internal voice or performance, including its multieffects, can be saved as a new sample), key mapping (where each note on the keyboard can be used to trigger a pattern or play back a sample), scene memories (which allow you to create and store two variations on a voice and then morph between them in real time with a wheel or footpedal), the ability to different tunings (including annly microtunings) independently each element within a voice, a dedicated front panel EFFECTS BYPASS button, sample-and-hold LFO waveforms and the ability to modulate LFO speed (particularly useful in creating "controller sets" vibrato). (collections of controller routings, allowing both multiple sources to a single destination and single sources to multiple destinations; up to sixteen can be programmed per voice), the ability to receive MIDI Time Code and to transmit MIDI Machine Control, and the ability to save sequence data as Standard MIDI Files (SMFs) and to play SMFs directly from disk (you can even accompany them in real time) without having to load them into the onboard sequencer.

As wonderful as all this sounds, there is a caveat, as we warned you at the beginning of this review. While the CPU at the heart of the EX5 handles basic operations flawlessly. it seems to fall short when you start placing demands on the instrument. For example, there is the SCSI issue noted above. There is also a noticeable delay when storing voices, and a momentary muting of all tracks when a single track is muted in the sequencer. And limitations and restrictions abound: While total polyphony is 126 notes, VL elements are monophonic and AN elements can play a maximum of only two notes. Only two voices can be layered together in performance mode (though a single voice can itself contain up to four layers), and a performance can only contain one voice that uses VL or AN synthesis. In these kinds of performances, only one insert effect can be applied, and only to one voice. (Even in performances that contain all sample-playback voices, the insertion effects can be applied only to a maximum of four voices.) Worst of all, there can be audible note smearing when playing dense chords of two voices layered in performance mode (either from the keyboard or via MIDI), and sequencer playback timing can suffer-sometimes tremendously-when asked to play back dense tracks or while overdubbing clusters of chords.

But, hey, this is the bleeding edge. Warts and all, the EX5 pretty much redefines the term "full-featured." It's a superb choice for recording or for use as a master controller in a MIDI home studio. If you're into programming your own sounds (and you don't mind battling a truly awful owner's manual), this is total hog heaven. For live use, I'd be a little more cautious, especially if you frequently need multitimbral operation or rely on using a sequencer to play "one-man band" accompaniments, but there's no denying the impact this puppy should have on keyboard players everywhere for some time to come. So you can have everything—now you've just gotta figure out where to put it all!

Special thanks to Athan Billias, Phil Clendeninn, and Avery Burdette.



1 Guyatone micro effects series

Guyatone's ultra-compact effects pedals (2 3/4" x 3 7/8" x 1 1/2") are now available in the U.S. and Canada. The five models pictured are the WR-2 Wah Rocker (\$89.95), an envelope filter that produces a variety of auto-wah effects; the MD-2 Micro Delay (\$129.95), which offers 30-800 ms delay time: the MC-3 Micro Chorus (\$99.95), which features chorus and rotary speaker effects; and the TZ-2 Fuzz (\$89.95) and HD-2 Harmonic Distortion (\$79.95), which provide retro-style fuzz and transistor distortion, respectively. All models are powered via AC adapter or nine-volt battery and feature a heavy-duty stamped aluminum chassis. electronic silent switching, and LED effect indicator. A three-year parts and labor warranty is included. F Godlyke Distributing Inc., 328 Mason Ave., Haledon, NJ 07508; (973) 835-2100; www.guyatone.com

2 HHB Circle 5 studio monitors

Looking for affordably-priced monitors for your studio? Available in both active (\$1.399) and passive (\$749) versions, the Circle 5 has fluid-cooled softdome tweeters and an 8" bass driver, which employs a synthetic polymer cone. The cone is mated to an aluminum voice coil, which operates in a fieldcanceling magnet, enabling the monitors to be used in close proximity to computer and video monitors.

The active version is powered by a two-channel amplifier pack that delivers 120 watts RMS to the bass driver and 60 watts RMS to the tweeter. These monitors utilize a push-pull design, an extra-large toroidal transformer, and long-life capacitors, with

ringing in the mid-band. Both versions feature a solid-state polyswitch to protect the tweeter from excessive input. > HHB Communications, 626 Santa Monica Blvd., Ste. 110, Santa Monica, CA 90401; (310) 319-1111; www.hhbusa.com

3 TASCAM CD-RW5000 compact disc recorder

Designed to meet the demand of the growing number of home recording enthusiasts and audio professionals who want to print their own CDs, the CD-RW5000 (\$1,299) has the ability to read and/or write to all currently available media, including CD, CD-R, CD-RW, CD-R-DA, and CD-RW-DA. This two-rack-space unit features XLR balanced and RCA unbalanced analog I/O, an AES/EBU digital input, S/PDIF coaxial and optical digital I/O, a sync start function, auto or manual track increment capability, an erase function, and parallel control I/O capability. The CD-RW5000

> also has the ability to automatically detect the sample rate of an incoming digital signal, and if necessary will convert that signal to the 44.1 kHz CD standard.

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4 W. Paul Guitars Timeless **Timber Collectors model**

Does wood that has been preserved in ice cold water for a hundred years make for a superior instrument? The folks at W. Paul guitars think so. Recently, they began building limited edition models from Timeless Timber, old-growth virgin timber that was submerged in the frigid waters of Lake Superior for a century, and is now being recovered. William Paul's patented soundport system electrics feature a contoured hollow-body with neck-thru construction. The soundports---which lead into a hollow chamber---are hand-sculpted into the front of the body and designed to maximize sustain. The Collectors model pictured (\$9,000) is yellow-phase, yellow-flamed birch, although instruments are also available in birdseye maple, black ash, and red-phase flamed-yellow birch. A maximum of fifty collectors models will be made per year, and production of Standard Timeless Timber models (\$6,000) is limited to 150 per annum. Each guitar is hand-signed, dated, serial-numbered, and comes with a certificate of authenticity detailing the history of the wood. If you're experiencing sticker shock, keep in mind that non-Timeless Timber W. Paul guitars are priced in line with what you'd expect from a custom shop. > W. Paul Guitars, 1018 Madison St., Waukesha, Wl, 53188; (414) 896-7794

5 Allen & Heath ICON series digital mixers

Designed primarily for live sound applications, the DL1000 (\$1,395) and DP1000 (\$1,595) are the first two models in A&H's new line of compact digital mixers. Both units feature six mic/line inputs, plus two dual stereo inputs which can double as mono mic inputs. In addition to the LR output, the units provide configurable AB amp outputs, plus monitor, aux, and LR recording outs. Users can program and recall settings in Song patches, which can then be sequenced and triggered by footswitch, pushbutton, or MIDI control. A Pause patch sets levels and effects for between-song requirements. Key settings, such as gain, levels, and mutes, are on dedicated controls, including 100mm faders for all inputs and main outputs. Other settings are created and adjusted via rotary controls used in conjunction with a backlit LCD. Also included are two built-in effects processors, with over eighty adjustable presets, plus noise gates and compressors. > Allen & Heath

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6 QSC Audio PLX series amplifiers

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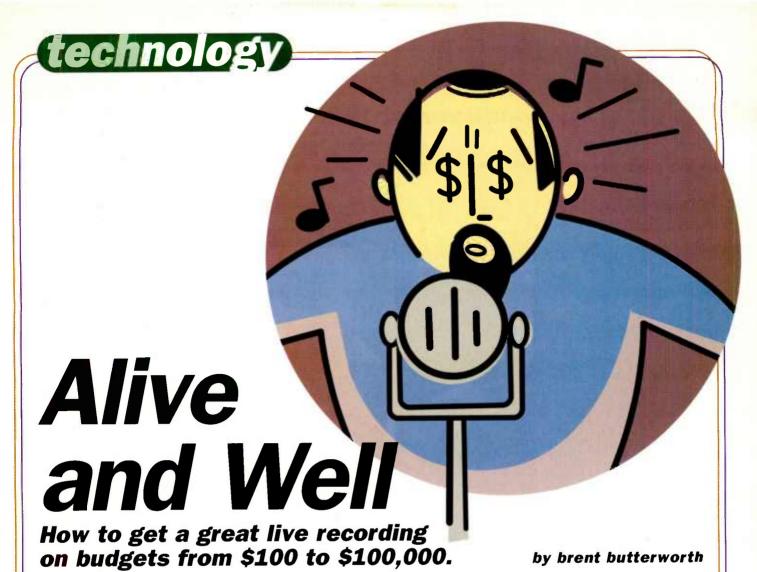


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World Radio History





here's a lot to be said for studio recording—hey, studios gave birth to *Electric Ladyland*, *Pet Sounds*, *Nevermind*, and thousands of other amazing albums. But for the band on a budget, hourly studio rates can lead to the poorhouse before you've even finished the first tune. There's a much, much easier way—a way that produced successful recordings that range from *Kiss Alive!* to *John Coltrane Live at the Village Vanguard*.

That method, of course, is live recording. Although it's almost impossible to achieve the same level of control as you can get in the studio, live recording offers two big plusses: the excitement of a real performance, and the ease of just slapping up a few mics, rolling tape, and letting the mistakes fall where they may—after all, no one expects

you to sound perfect on a live gig. In this article, we'll take you through all the techniques that make a great live recording, starting with the simplest and cheapest methods, then moving all the way up to a full-blown multitrack live recording. We'll even tell you how to spruce up those recordings once you're ready to release them.

starting in stereo

By far the easiest way to make a live recording is to stick a stereo mic in front of your band, plug it into a recorder, and hit the red button. It might sound like a low-rent way to make your first CD, but many (if not most) classical recordings are made this way, as are some of the best folk and jazz albums.

There are guys who've devoted years to perfecting stereo recording techniques, but the basics are pretty simple. The easiest way to start is with a stereo mic. You can get a great one, the **Audio-Technica AT822**, for as little as \$399; this mic, with unbalanced stereo outputs, is great for use with inexpensive DAT, MiniDisc, and cassette recorders. (The balanced output version, the AT825, will run you \$525.) You can step up a notch to the **Shure VP88** (\$1,194), which offers adjustable pickup width, or down to the **Sony ECM-MS907** (\$99), probably the least expensive usable stereo mic on the

market. (My jazz group made a demo CD from some live tapes recorded casually with an ECM-MS907 after we bombed in the studio.)

You'll get extra flexibility if you go with two separate mics. You can use two cardioid mics, with one capsule placed directly atop the other and the two mics pointed 90 to 100 degrees apart. Don't use vocal mics for this purpose: Mics like the Shure SM58 have a "presence peak" that makes vocals more clear, but that won't make (continued on page 76)





(continued from page 75)

your band sound natural. Get a mic designed for recording instruments, like the **Shure SM81** (\$529) or **BG 4.1** (\$275), both of which have a fairly flat frequency response.

You can also use two omnidirectional mics, spaced seven inches apart and angled 100 degrees apart; this technique, called "ORFT," is a favorite of many stereo fanatics. If you have mics with adjustable polar

patterns, you can try more esoteric techniques, like Blumlein and mid/side—but that's a whole 'nother article.

Any good stereo recorder will work great in this situation, although it's obviously a lot more convenient to use a small, portable recorder, like the pocket-size DAT or MiniDisc machines made by Sony. These have unbalanced inputs, so if your mics have balanced (XLR) outputs, you'll have to use a stereo mic preamp, transformers, or a small mixer between the mics and the

recorder. You'll also need adapters to get the signal from the mics or the mixer into the recorder's minijack input. DAT and MiniDisc are both capable of producing a recording you'll be proud to release on CD. You can also get an acceptable recording with a good cassette deck, such as a Sony Pro Walkman.

No matter what recorder you choose, consider using the automatic recording level function if it's there. True, the automatic limiting circuitry in personal recorders is never as good as that in a stand-alone stereo compressor/limiter, which will do the same thing with much better sonic results. On the other hand, it's tough to predict exactly how loud your group might get. Unless you're very conservative about how you set the manual recording level control, you run the risk of getting a tape full of distortion when the excitement builds and your band really starts cranking.

board feeds

The problem with plain stereo recording is that if you're using a P.A. system, anything amplified by the P.A. will be going through a mic, into the P.A., out of the P.A. speakers (which usually don't sound too pretty), into your recording mic . . . you get the idea.

What you need is a way to capture some of the sound of the room in which you're performing and the crowd (we hope) that's there to hear you, yet get a much cleaner sound than you'd get by recording what's coming out of the P.A. speakers.

The answer is what's called a board feed. That means you connect your recorder straight into the mixing board. Anything that's sent to your P.A. speakers also gets sent to



your recorder, so the connection's essentially the same as it would be in the studio, and the sound is a lot clearer.

It's usually pretty simple to connect a stereo recorder to a mixing board; most boards have a pair of stereo RCA jacks designed to feed a tape recorder. Even if the board doesn't have a tape output, it'll almost certainly have an extra pair of outputs somewhere—probably on a pair of 1/4-inch phone jacks. Slap in a pair of 1/4-inch-to-RCA adapters, hook up your recorder, and you're ready to make history.

If you're playing a large venue where every instrument in the band runs through the P.A., you've got it made. In fact, if the club you're playing in has a house P.A., ask the sound tech to give you a board feed. He or she will hook up your recorder to the board, and you'll have a clean recording. Since all the instruments in the band are close-miked, you won't pick up much of the venue's ambience, but the mics will probably capture enough crowd noise to give the recording a live feel. And, of course, you can always add reverb later.

When you record from the P.A. mixer output, you get the same mix they're hearing

in the house, which may or may not be a good thing. If you want a different mix, you can use two auxiliary sends from the board to feed your recorder. For example, you can use Aux 1 to feed the left channel and Aux 2 to feed the right, then mix instruments and vocals into the two channels as you wish. This also lets you adjust panning: If you want to pan the guitar left, turn up its Aux 1 and turn down its Aux 2 send. Plug a pair of headphones into the recorder to monitor the new mix.

If you're playing a smaller venue where some of the instruments don't run through the P.A., you've got a problem: If you pull a board feed, but the instruments aren't miked, you'll get plenty of guitar, bass, and vocal, but not much rhythm. One solution is to use a four-track recorder to record a board feed on two channels, and a stereo mic on the drums. Or if only the vocals are amplified, you can record those off the board and stick a stereo mic in front of the band to capture the rest. A four-track recorder can give you an advantage even if all the instruments run through the P.A.: You can use it to record a stereo board feed plus a stereo mic feed to capture the ambience of the room. By mixing the sound from the mics with the board feed, you can usually achieve a good tradeoff between the clarity of the board feed and the ambient, live sound of the stereo mic feed.

Any four-track will do the job here, but hard-disk recorders like the Fostex FD-4 or MiniDisc recorders like the Sony MDMII-X4 will give you a much better recording than cassette multitracks. You can also get an edge in sound quality if you use a good condenser mic for your vocalist instead of the inexpensive dynamic mics found in most P.A. systems.

maxing out with multitrack

If you have a professional-quality multitrack recorder, like an ADAT, a DA-88, or an eight- or twelve-track hard-disk recorder, you can actually do a full-blown live multitrack recording that will rival studio recordings for sound quality—and maybe even let you go back and fix some of your mistakes later.

To use an eight-track recorder like a DA-88 for live recording, you will need a P.A. board that has either eight busses to feed the eight tracks or individual outputs for each channel. Ideally, you'd go all the way and record every single onstage microphone and

every directly-fed instrument (like keyboards) onto its own track, and even devote a couple of tracks to a stereo mic to pick up the crowd noise. This would let you mix everything exactly the way you want it, just as you could with a studio multitrack recording. Unfortunately, for all but the smallest bands, this technique would require from 16 to 48 tracks, or even more.

You can do a more than decent job, though, by using an eight-track recorder and performing submixes. If the P.A. mixer has submixing functions (and all of the better ones do), you can mix the drum mics down into a stereo mix on Sub 1 and Sub 2, and feed that into tracks 1 and 2 of the multitrack. This lets you feed a bass into track 3, two guitars into 4 and 5, and vocals into 6 and 7. If you want to correct mistakes later in the studio, you can probably punch into any of these tracks—although it'll be tough for the drummer to do that because you'll have to exactly replicate the original drum mix to make the punch sound natural.

If you're counting, you probably noticed that you've got an extra track left. Can you use that for overdubbing some keyboard or harmonica parts, or an extra backing vocal? You betcha. It ain't true to the "live" concept, but if it sounds good, do it.

fix it in the mix

It's very difficult to hear how your live recording is turning out while you're doing it: The sound from the P.A. leaks in through the headphones, and if you're setting up for both a gig and a recording at the same time, you've got more pressing matters to consider. Once you get that recording home, though, there's plenty you can do to make it sound more like *Frampton Comes Alive* and less like a Grateful Dead bootleg.

First and most obvious, there's equalization. Many live recordings suffer from a boomy, bloated sound caused by room resonances in the bass frequencies. You might be able to fine-tune these out with a 1/3-octave EQ, but an easier solution is to turn the bass down two or three decibels. For the mids and treble, just trust your ears: Twist the controls back and forth until you get the best sound. Don't go overboard, though; too little EQ is better than too much.

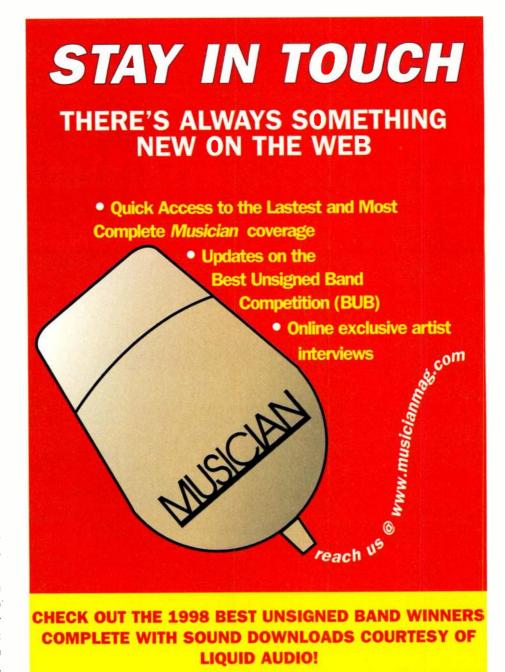
A touch of compression can do much to

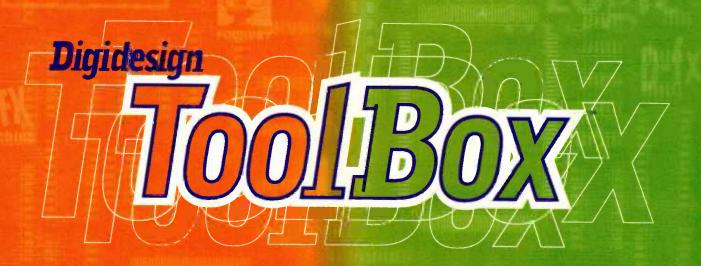
make a live recording sound more like a good CD. As with the EQ, keep it light: Three to six dB of compression applied to the stereo mix, at a ratio of 2.5:1 or 3:1, can even out the peaks and give your band a smoother, slicker sound.

You may even want to add reverb, especially if you recorded entirely off a board

feed. Once again, don't overdo it: The Madison Square Garden mode on your reverb won't make it sound like you were opening for Alanis if there are only twenty people clapping for you at the end of the song.

Contributors: Brent Butterworth is editor of Home Theater magazine and a working musician in New York.





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powerusers

by dave olivier

ook somewhere beyond the far banks of the mainstream, and there you'll find David Torn. On scores for *The Big Lebowski*, *Kiss the Girls*, *Conspiracy*, and other films, and in numerous solo and group releases with Don Cherry, Patrick O'Hearn, Mark Isham, Bill Bruford, Andy Summers, Jack Bruce, and Vernon Reid, just to name a few of his collaborators, Torn lays down the kind of textural experiments that have established him as one of the most respected innovators in the crowded field of guitarists today.

Which makes him an ideal match for FireworX by TC Electronic, probably the most complete multi-effects processor to come along in a while. Here's a brief tour: FireworX explodes with more than 35 algorithms, including delay, ring modulator, digital cruncher, sweeping filters, chorus, vocoder, format filters, and chaos noise generation. It also offers two hundred factory presets, with names like Dub the Universe, Angry Robot, Hangover, and Mars Invaders. But its ease of use and depth of manipulation are likely its main attractions. The modulation matrix, for example, is almost overwhelming. And, joy of joys, it comes with a well-written manual.

Torn has used just about every delay device known to man, from the old days with his MXR two-second delay as a looping device and the original Primetime for processing, to everything that Eventide, Lexicon, and TC have to offer. Even so, Torn insists that "FireworX [is] the first dedicated audio mangler—that's

my primary and lasting take on the thing. When you really want to chew up an audio source, or distort, destroy, or just plain alter a sound, the FireworX really shines."

Torn is known for triggering his lush textural through extensive processing of the audio path, as opposed to triggering a synth from a guitar. "Being a player, someone who actually picks up and touches an instrument, it's always appealed to me more to be able to alter the personality of the instrument with real-time processing," he explains. "In the beginning, we



The Sky's the Limit

Avant guitarist David Torn launches the processing power of TC Electronic's FireworX

stuff can really come through. I want to be able to translate all that and manipulate it, and the FireworX helps me do that."

For example? "One of the tricks I've learned on the FireworX is that you can exceed the DSP resources by resetting the DSP limit to FREE, as opposed to SECURE. You'll get a warning as you process, and if you continue to add algorithms, even though you'll still get these little caveats, it can get very wacky. One of my favorite sounds is the sound of a tube amp totally about to blow up; this sound is analogous

to a computer going into meltdown. You can't change any parameters when the warning sign is up, but after it goes away you can continue. I have five or six presets that use this technique; they all sound different, and

they're all dependent on the input signal. I've found, so far, that with certain tonal guitar loops and cheesy drum machine loops, I can get unbelievable, absolutely killing industrial noise rhythmic effects. It's hard to describe this kind of digital distortion, but it's rude, it's really fun . . . and it's a real-time event!"

Torn has actually integrated the FireworX into his everyday creative routine. "It definitely covers new ground for me," he points out. "The



[guitarists] were the guys who got the flangers and the little delay boxes and the distortion pedals—and FireworX is just a continuation of that. There's a lot that just can't get translated via MIDI triggering synth sounds—like whacking the body of the guitar while holding a chord, or hitting the bridge with your ring, or sliding your right hand down the strings. There are lots of those kinds of techniques for guitar that are really specific to electric stringed instruments but, if you were driving a synth, there's no way all that

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(continued from page 79)

way I've got my rig set up now, one of my looping devices is solely dedicated to feeding my FireworX, and this makes for some wackyass shit. My first experiment was that I took one guitar and noise loop-which was kind of pretty, kind of musical with some rhythmic elements to it-and put it through the

FireworX, no longer listening to the original signal. I created something completely new by first shifting the pitch in a couple of directions and modulating the center frequency of the ring modulator by using the input level from the loop as a control. Then I added all kinds of filtering. The beauty of all this is how relatively easy the FireworX makes the whole process."

Like an audio engineer's outboard rack of effects devices, the DSP and routing capabilities of the FireworX can be combined in creative and exciting ways. "I like coming up with new kinds of things," Torn says. "Like maybe something a little backwards-a very short reverb feeding the cruncher in series rather than the reverb coming last and making a beautiful sound. One of the things I liked was using the ring modulator and, instead of using the traditional vocal mic as a control signal, I used a voltage pedal for a slightly cleaner effect. I set this up for my friend Tony Levin to put his bass through the vocoder as the carrier-and, wow! It's a joy to have something that's been set up to manipulate-made to

By his own admission, Torn is the last guy you'd expect to set up a MIDI cable. Even so. he's enthusiastic over the fact that the FireworX's external control input lets the user access up to twenty modifiers, thus offering enormous control from a single pedal, "It's a very flexible, very powerful, kind of modulation patch bay. With a minimum of paging, you can actually get into the modulation matrix and alter things very quickly. For a screen this tiny, TC did an unbelievable job of keeping things visual."

mangle, so to speak-in these ways."

When asked if any particular FireworX preset strikes his fancy, Torn doesn't hesitate. "Yeah! They have a distortion algorithm called Cruncher. What it does is to basically turn the input signal into that low-fi sound that kids love today. You can quantize the grain size, and this control allows you to change the resolution. What I think it does is to lower the bit and sample rate, and this gives you some hellish sounds. I sometimes do a similar thing with samples, where I change the bit rate from 16 to 7 and also skip addresses in the bit rate; as a result, I get these aliasing noises that you can tune. Fortunately with the FireworX, the sound is so good that these 'bad' sounds are actually quite good. For me, the Cruncher and the ring modulator are worth the price of admission . . . and there's so much more than that in there.

"I think I'm a Power User in that everything I've done with the FireworX has been unusual. and that's really what this thing was designed for. There are other boxes out there that do this or that, but what you can do inside this thing is unbelievable. Who knows what I'll come up with six months from now?"







beneath the solo guitar and dreary lyric about a dying blue-collar town. The impact is undeniable, yet DiFranco credits spontaneity rather than any forethought for the result.

"I had recorded the song, and I was listening to the playback and saying, 'Okay, I guess that take will, do,'" she recalls. "But the two engineers were sitting there, so I said, 'Well, I do hear this sound in my head.' I described it, and we all sat around and stared at the ceiling, and then one of them said, 'You know, the water cooler kind of makes that sound when I put the new jug on.' So I miked a water cooler and started moving the water slowly inside of it. We put that on analog tape, then we slowed it way down until it had that kind of breathing monster vibe. That's a lot of what the studio is about: You listen, you hear things, and then you try to manifest them."

Sometimes the muse delivers, sometimes not. The most ambitious cut, a thirteen-minute marathon called "Hat Shaped Hat," crackles with a gospel intensity, and "Angel Food" has a silken groove smoothed by soulful organ and wah-wah bass—yet each conveys a feeling of disorganization, of trusting the moment in a way that can work onstage but perhaps tax a listener's patience on disc. Compared with more economical and melodic material, such as "Come Away From It," with its hypnotic harmonized chorus, or with the seductive prayer-meeting imagery of "Everest," these performances arguably take longer to say less.

DiFranco acknowledges the difference: "I write songs, and I write poems. The songs are constructed as songs; the melodies are built into the lyrics as part of the process. But I've also written 'spoken word,' which sometimes I don't combine with music, and sometimes I do. On this record there are a couple of examples of that, and there are a couple of tracks where I brought lyrics alone into the studio and we took it from there. Prior to this album, I always brought completed songs to the session; here, I developed a few with my band in the studio, and that is new for me."

Artists these days assume a dual role, of creating quality work and documenting their own growth. These obligations can be contradictory—or they can connect, and something brilliant results. *Up*... has its moments of golden synchronicity; more important, it inspires us to take risks, create enough moments of beauty to make a project worthwhile, and then move on.—*Robert L. Doerschuk*

John Lennon

The John Lennon Anthology (Capitol)

t's okay, you can say it: This whole "anthology" trend is just a cynical marketing ploy, a way to weasel fans out of big bucks in exchange for third-rate material that was collecting dust in the vaults for good reason. The only catch is—and this is the part that sucks us in every time—sometimes the stuff that gets

unearthed actually does what it's supposed to, which is to reveal or flesh out aspects of the artist that were previously obscure. For a fair amount of its lengthy duration, that's just what *The John Lennon Anthology* does.

Most of what's on this four-CD collection of studio outtakes, live recordings, and home demos recorded between 1969 and 1980 won't surprise those who've heard the *Los Lennon Tapes* radio

john lennon

series or the subsequent flurry of bootlegs—though the improvement in sound quality here is nothing to sneeze at. Still, the *Anthology* is a valuable item because of the unvarnished portrait it presents of Lennon the creative artist at work.

And make no mistake about it, the man did work, hard. "He would really work a song in the studio," says producer Rob Stevens, who, with the considerable help of Yoko Ono, compiled the Anthology from approximately two thousand hours of tape and mixed the final package. "At least twenty takes of a song was normal. On Plastic Ono Band there are some in the forties. You can hear the ebb and flow of the band: They'd be on it, then they'd lose it, then they'd get it back." John also knew exactly what he wanted, as made clear by his orders to the session musicians between takes of "Going Down on Love," from Walls and Bridges in 1974. Annoyed at what he felt was excessive ornamentation, he tells them he

doesn't want to hear any fills or trills—"nothing but four on the bar except for what's written."

Given Lennon's distaste for noodling, it's odd that the solo albums he produced himself—Mind Games, Walls and Bridges, and Rock & Roll—are the most overproduced of his career, too glossy and busy. Stevens says that's partly because "John didn't like the sound of his voice, so he would mix it low and try to cover it up with

a wall of sound." One of the Anthology's great virtues is that it strips that gloss from many of this somewhat underrated period's best songs, giving us alternate readings that are often more vital than the original releases. Case in point: "One Day at a Time," sung in a lower register without the female backing vocalists, comes across as a delicate McCartney/Brian Wilson pastiche. "Nobody Loves You When You're Down and Out" is far more powerful without the orchestral arrangement. And "Whatever Gets You Through the Night" improves immeasurably without Elton John singing along on it. (Sorry, Elton.)

Perhaps the most historically interesting recordings on the Anthology are the home demos made in 1976-80, a period during which John had always maintained he was musically inactive. Most appear on the fourth CD, entitled Dakota, including a couple of brilliant Dylan parodies; the propulsive, unclassifiable "Serve Yourself" (sung in a thick Liverpudlian accent); and a bunch of fascinating song-inprogress snapshots. "He recorded those demos using a technique called sound-on-sound," Stevens, "except this was an even more Neanderthal version. He would start off playing and singing the

song through one of those old Marantz cassette decks with a built-in speaker. Then using another identical deck, he'd play back the first deck, not even through the line but through the speaker, add another vocal and guitar part, and then bounce it back again." With only this rudimentary setup, Lennon got his song ideas across more than satisfactorily, as the original demo for "Woman," among others, demonstrates.

Besides the *Dakota* tapes, a lot of the source material for *The John Lennon Anthology* came from the tape library—if you want to call it that—of the old Record Plant studios on 46th Street in New York. "They had in their basement, among the mold and the mildew, about six hundred reels of Lennon tapes, mainly multitracks from *Mind Games* to *Rock & Roll*," Stevens recalls. "Those were excavated, and that's not the wrong word, in 1987, and in 1988 I was given the job of transferring all those reels to digital. Some of the

tapes were in pretty bad shape, but nothing was irretrievable, I'm happy to say." With the exception of the new Sir George Martin string arrangement added to "Grow Old With Me" (a move that was justified as in keeping with John's wishes; he'd wanted strings on the song to begin with), there are no overdubs on any of the tracks. Also, Stevens reports that most of the slapback echo or reverb you hear was printed to the original tape: "I added some when there wasn't any, but I made sure to use less rather than more."

As thrilling as the process of compiling the Anthology was for Stevens, it was also depressing, for obvious reasons. During the four-year selection period, he says, "I kept a list of tracks under the heading 'What Might Have Been'." On that list were many of the more rocking moments on disc four, including John's explosive noise-guitar solo on an outtake of "I Don't Wanna Face It" (at the end, he jokes that he's worn his pick down to half its original size) and an absolutely savage rendition of "I'm Losing You" recorded with three members of Cheap Trick, which is far superior to the rather tame Double Fantasy version. What these tracks prove is that John Lennon at forty was still every inch a rock & roller, that he wasn't about to go soft in his old age, that there was much more to come. On The John Lennon Anthology you can hear preserved the evidence, not just of what might have been, but also the genius that was.

-Mac Randall

Son Volt

Wide Swing Tremolo (Warner Bros.)

hen Jay Farrar and Son Volt recruited David Barbe to record some sessions for them after-hours in a lingerie factory in Millstadt, Illinois—just a stone's throw from the Belleville garages where Farrar cut his teeth back in the days of Uncle Tupelo—Barbe thought their mission was a little vague. "Jay had designs on making an album out of all this," says the engineer and all-around studio *meister* from his home in Athens, Georgia, "but he had nothing specific in mind."

So Barbe loaded up his eight-track and his "esoteric" microphone collection and headed for Illinois, figuring he'd help the band lay down some B sides and demos, record some songs, and see what developed. But the two-week session went so well that Son Volt used the work as a jumping-off point for *Wide Swing Tremolo*, their third album and proof positive that the band can hold its own with Jeff Tweedy's more celebrated Wilco, that other country-flavored phoenix that rose from the ashes of Uncle Tupelo.

From that first session with Barbe, Son Volt saved two takes that appear here—the rustic "Hanging Blue Side" and the haunting, acoustic "Streets That Time Walks"—as well as initial versions of the Gram Parsons-inspired "Strands," the luminous "Medicine Hat," and the lyrical "Question." The material also reflects how Farrar



LUNaexorcises the ghost in the machine

ecording an album can be a blissful experience, particularly when you're able to lock into a groove that makes the noisy outside world recede and ultimately disappear. That's exactly what's happened for the members of Luna, who have spent the past few weeks tucked away in the softly-lit spaciousness of New York's RPM Studio, recording the basic tracks for their newest record [untitled as we went to press) on Elektra. But everyone knows that pleasant dreams can be interrupted, and in Luna's case technology is making an untimely wakeup call; in the midst of recording overdubs, the Akai 3000 XL sampler they recently purchased is refusing to communicate with their new Zip drive.

Even with the technical glitch, the band remains calm. "It's not like the last [record], when we went mad," says guitarist/vocalist Dean Wareham. "We spent three and a half months making that one and we got on each other's nerves, but we can put it behind us," he laughs. "I think that anyone who's ever been in a band long enough knows that it's like a family: Problems arise and you work through them, or you give up. We all get along. We like each other. It wouldn't be very pleasant if we didn't."

While engineer Brian Zee wrestles with the various components in an attempt to make them work properly, producer Paul Kimble decides to work around the problem and suggests that bassist Justin Harwood ready himself for a trumpet overdub on the outro of "Hello Little One." "I'm actually just going to make noises on it," says Harwood as he walks out of the control room. "That's hard to do that with a machine. Machines don't like making random noise—nor do musicians, but of course, I'm a bass player."

Kimble's ability to manage the studio clock is just the type of conscientious initiative that Luna was looking for in a producer; this album differs from recent efforts in that the band gave the production reins to a producer who is also a musician. "He [Kimble] knows what it's like to be on the other side of the

microphone singing, and he knows what it's like to be told to do something fifty times in a row," explains Wareham.

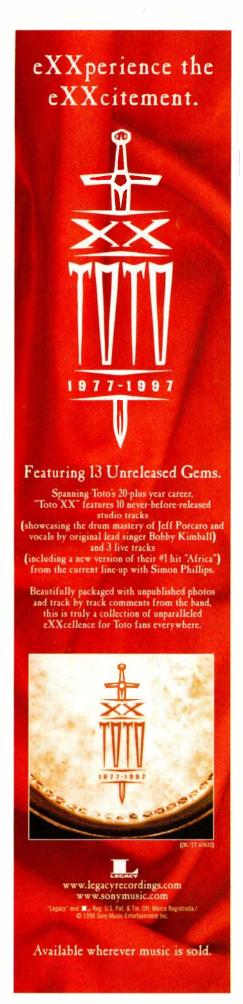
"It's hard to get four people to agree on any producer, but those Grant Lee Buffalo records [Kimble was the bassist and producer for Grant Lee Buffalo] sound great," says Wareham. "He's a nice guy with the right attitude and is into working quickly, and part of the reason for having a producer is that you have a lot of different opinions and you need someone to stand above the band a little bit and mediate or to say, 'That's a good enough take, let's move on.' Sometimes we produce ourselves, but on this record I don't feel like I have to be in the control room every second—I trust Paul."

As Harwood warms up in the main room, Wareham clarifies the bassist's seemingly extemporaneous approach to his new instrument. "He doesn't actually play the trumpet, but it's in the right key for the song, and he'll do some atonal stuff that fits into one section," he says. "I think he knows the part, but he doesn't have many choices in terms of what he can play." Asked whether that worries him, Wareham laughs: "You have to do that to songs sometimes. You want things to sound a little bit fucked up... I think. We don't want to sound like we're a bunch of perfect professionals playing perfect little parts. We're not of that caliber. None of us is formally trained."

Once Zee has the song cued up, Kimble listens to Harwood's meanderings for a few minutes and instructs him on what specific notes will work best.

"Justin has a certain flare on the horn that you just can't duplicate," he mutters as Harwood steps closer to the mic. After a few passes through the section, Harwood manages a magical succession of blustery trills that has everyone in the control room delighted. "Those first six or seven passes were Monk-like," says Kimble into the talk-back mic. "That's Edvard Munch, not Thelonius," whispers Wareham with a playful nudge.

-Michael Gelfand



records

and Son Volt have grown together, both as writers and as studio technicians. "This isn't your standard Son Volt setup," Barbe points out. "There are more layers, more ideas, more sounds."

Much of that evolution has to do with Barbe's influence. While Son Volt already had a museum of amps and over forty instruments to work with (including a "truly great" pre-World War II Supro guitar amp they used "night and day" to supplement Farrar's Vox AC30), Barbe brought in a collection of tube mics and ribbon mics, Shure SM57s and Sennheiser MD421s.

"Between the two of us, the equipment pieces fit together nicely," he figures. So did their

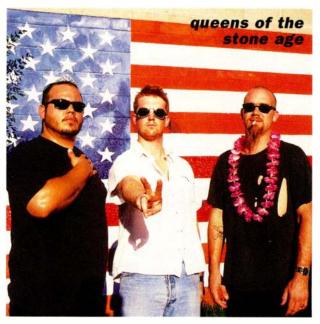
common work ethic: Over the course of those two weeks, they rolled some nine hundred hours worth of music onto a total of 22 digital tapes, using three Alesis machines. When the recording was over, they took the keepers to Mitch Easter's place to mix and transfer them to a single reel of two-inch tape. "Mixing to an analog tape made a tremendous difference in the way the record sounds," says Barbe.

Coupled with the band's unforced performances, Barbe's handiwork gives Wide Swing Tremolo a relaxed, easy feel. As Jay Farrar's writing gains in lyricism, his voice increases in character, and his band's versatility builds with every song, Son Volt is on its way to becoming the leading light of roots rock.

---Bob Gulla

When it is that dry, the separation between instruments and vocals is more apparent. No one is going for that sound now; it's like robotic stuff but played with old crummy analog gear. It really changes the production values and what comes out of the speakers."

Recorded "Avril 3-21, 1998 en Estudio Monkey, Fontado de la Palma," as the album liner on Garth puts it, OOTSA (Homme, drummer Alfredo Hernandez, and bassist Carlo) used lavers of orange shag carpet to deaden room echo, going so far as to pitch a canvas tent over their drummer and his 1973 chrome Ludwigs. "Arrested for driving while blind" is given new meaning here.



Queens of the Stone Age Garth

(Loosegroove)

n the mid Seventies, the rage was full on for flat recording-getting a sound so dead and airless that even a black hole couldn't escape the vacuum. Drummers from Al Jackson to Bill Ward covered their drum heads with tape for a dull tomtom thwack, guitarists from Memphis to Jamaica let reverb-less chinka-chinka rule, while singers became one with their oh-so-close mics. But just as digital would devour analog, flat production has been banished from today's hard-drive world.

Funny, though, that no one told Queens of the Stone Age. Formerly known as Kyuss, a Black Sabbath-infused band that honed its chops at allnight generator parties in the Mojave Desert, QOTSA plays "robotic trance rock," a scalding brew as menacing as Vanilla Fudge yet as deliciously melodious at ZZ Top's "La Grange."

"Kyuss was always about a big room sound," says guitarist/vocalist Joshua Homme. "But QOTSA is the polar opposite: It's about tight, dry, and dead. The idea was, if we could get it as dry and focused as possible, even the slightest touch of reverb would sound like a rushing waterfall.

For his part, Homme uses just one guitar: a rare 1975 Ovation GP. The sound is fat and burly but also streamlined and biting, something like a deer's head attached to an armadillo's body. "I have never seen another one and I've been looking for fourteen years," gushes Homme. "It's kind of a bittersweet thing. I found the guitar when I was ten and bought it for \$199, and I've searched for another one ever since. It's twohorned like an SG, with the weight of a Les Paul, and these big, inch-and-a-half-deep pickups. I don't really use pedals, but I have a revolving set of amps, from a Tubeworks head to an old Ampeg bass amp. I'm kind of scared to talk about it, actually."

Citing Iggy, Eno, Can, Devo, Hank Williams, Björk, and Tom Waits as influences, QOTSA simply rocks on Garth. No glammy pretense in the wobbily majestic "You Should Know," no squeamish silliness in the blazing "How to Handle a Rope," no kidding in the manic shuffle of "Hispanic Impressions." QOTSA is definitely into jamming, but the band's main motive lies in its woozy melodies, which are perpetually pared back, downshifted, and kicked into buzzing overdrive.

"Queens is about focused parts," states

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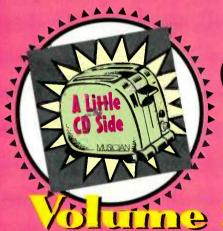
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Homme. "There only needs to be one of something unless there is an absolute need for an accent or a harmony. That way, live we can accomplish everything and more." On *Garth*, the proof is in your ears.

-Ken Micallef

Midnight Oil Redneck Wonderland (Sony)

anny Aussies Midnight Oil have been masters at mixing political savvy with rock & roll savagery since their 1983 benchmark 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Fired by towering frontman Peter Garrett's nail-spitting charisma, the twined guitars of Jim Moginie and Martin Rotsey, and drummer Rob Hirst's relentless thwack, they've turned lyrics about cultural dissipation ("The Power and the Passion") and aboriginal land rights ("Beds are Burning") into radio-hit anthems.

But twentysomething years into their career, challenges to Midnight Oil's command of might and right are mounting, not only from progeny like Rage Against the Machine but by the beatmad, blipping sonics of electronica and trip-hop, which are turning a young generation's ears away from guitar-based rock.

"As a five-piece rock band, which is a dinosaur idea, we stand apart from the Prodigys and the Chemical Brothers and their ilk, who are studio technicians who take a DAT on the road," observes Rob Hirst. "For Redneck Wonderland we were challenged to reinvent ourselves in a way that would still sound angry but also current, in the framework of a five-piece rock band."

To that end, the Oilers turned their latest into a sonic safari by finding new ways to record, enhance, and create their basic red-brick rock sound. For power blasts like "Blot" and "What Goes On," Hirst explains, their producer Magoo "set up a large monitoring system in the studio as though we were playing a concert, which creates an entirely different drum sound and edge. For a band like ourselves, where our reputation is firmly in the live domain, it's a battle to get the same sort of energy in the studio."

Although tracks like "White Skin Black Heart"—a biting indictment of conservative politicians, triggered by their resurrection of racebaiting in the latest Australian electionssuggest the sound of sampling and sequencers, "it's actually me playing live in a style that sounds like a typical loop," Hirst reveals. "Then, using various miking techniques and signal processing [mostly a Sherman multi-effects unit] and even running the drums through various amplifiers, the electronic-sounding qualities of what I played are enhanced. But I can play the same parts live. I tried to take a lift out of the Kraftwerk book: A lot of their stuff was played by a drummer who prided himself, in a very Teutonic way, on playing just like a machine."

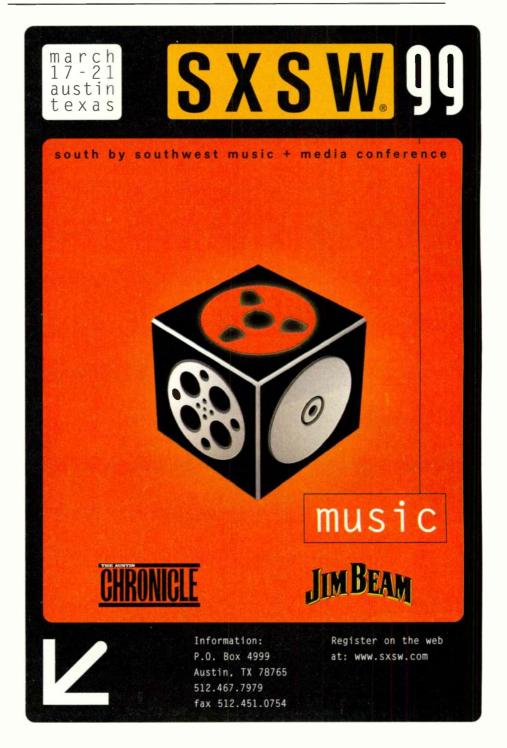
Magoo's mongrel pack of small transistor

guitar amps from the Sixties also had their way with Garrett's voice—notably on "White Skin Black Heart," where his lead vocal is trailed by a wraith-like rasp of itself. The guitars also make bold sonic statements on the brutish "Concrete," which begins with a high, pitch-shifted tone that breaks up deliciously as the Sherman bleeds notes together while tracking Moginie's picking. The guitarist's extreme bending—he pushed strings nearly off the neck, Hirst relates—sounds

like a robot's scream, a fine foil for a song about the death of the natural world.

Midnight Oil's new adventures in hi-fi have hit their mark Down Under: Hirst reports that a fresh generation of fans is swarming to their shows. But the most important sound on *Redneck Wonderland* is that of the band's very human heart, which drums its concern for man's future on each strident track.

-Ted Drozdowski





Portishead

Roseland NYC Live (Go Beat/London)

any musicians who exploit samples and turntable cut-ups fail miserably when asked to perform live. How many of us have waited until three in the morning for a U.K. drum 'n' bass dude to strut his wares, only to suffer a boring spin of some other DJ's records because said dude simply couldn't cut it?

Playing their first U.S. gig in more than two years at New York's Roseland Ballroom, Bristol angst-hop masters Portishead faced the dilemma of replicating their epic sampling tableau of their Dummy and Portishead albums. But rather than rely on samples, Portishead brought a full band, eight horn players, and a 32-piece string section to accompany Beth Gibbons' torch vocals and Geoff Barrow's savage turntable expressionism. The results are astounding: Guitars and keyboards resound, strings weep, turntable scratching and vocals are marvelously upfront. In sum, Roseland betters the band's studio albums with a visceral production that endows each song

element with superior depth and clarity.

But for Portishead engineer/producer Dave McDonald, *Roseland* was a monstrous migraine. "There was so much overspill into the vocal microphone," he explains. "To get accurate definition on the instruments without having overspill from the drum kit on the strings, or the strings going down the vocal mic channel, it all added to a kind of sonic weirdness. It was hard to remove the live room sound but keep a slight air of it as well."

McDonald employed a Midas X13 mixer for the live sound, with a line running to an outside recording truck where a Neve board handled the orchestra mix, which was sent back to McDonald and then to the band's monitor mix. Mics included a Crown for Gibbons, AKG C414 and D12 mics on the drums, and 38 Fishman Transducer mics for the orchestra. "The P.A. was directly above the stage, so when the string players finally got used to their own sound, the P.A. kicked off with the bass and drums, and the strings couldn't hear. And that was spilling into 38 open mics as well. It was hard work."

Portishead's performance justifies

McDonald's efforts. Gibbons' psychotic-by-wayof-Billie-Holiday singing is the stuff of future legend, and the added instrumentation gives the band's spooky, drenched-in-misery elegies all the majesty of an electrified Mahler symphony.

"We'd been touring for a year," says McDonald, "so we'd developed more energy, more aggression, more impact. We wanted to translate what was going on in our minds into the live recording. That is why there's a difference between the studio and live albums; now we have that intensity and fire. We'd gotten an attitude. We wanted to *kneecap* people."

To get at literal kneecap level, Portishead played not onstage but in a semi-pit surrounded by a clapping, howling audience. "We didn't want the audience to think we were special, like, 'Bow down to us onstage'," McDonald explains. "We are just ordinary people who like music."

Ordinary people who like music? Maybe. Ambitious artists who have raised the stakes for live recording and performance to a new level? Definitely.

-Ken Micallef





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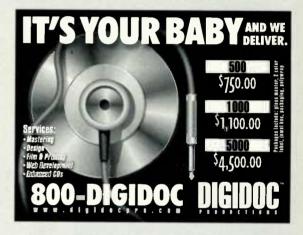
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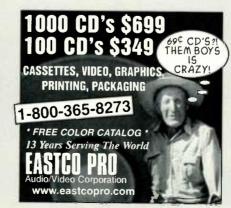
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The Awful Truth About Live Recording

love listening to live albums. Such classics as James Brown Live at the Apollo or Jerry Lee Lewis at the Star Club are nothing less than defining moments in popular music. But as a performer, I'd rather have my teeth

cleaned by a perky hygienist while listening to a Muzak rendition of "I Believe I Can Fly" than record a live album. Ice storms, P.A. meltdowns, throwaway tunes the producers insist on using, tape machines with mysterious hums, fights among audience members, air conditioners cutting on without warning: Anything can happen while it's costing you—or, worse yet, your record label—five hundred bucks an hour.

Which means, of course, that being on the edge of nervous hysteria, the sudden appearance of bizarre rashes, and gastrointestinal distress are all facts of life in any live recording situation. Fortunately, there are a few adjustments you can make to

keep things from getting worse:

Plan on recording at least two shows. Don't even think of trying to get it all in one take, on one show, in one night. If you can afford it, try to record at least two complete shows, on two different nights.

Pick a good time of year. Check

to see if any big events will conflict with your session—a

football game, a state fair, a Jehovah's Witness convention. Try to record in the early spring: Rain is okay, but snow keeps people at home, and mid-summer heat makes for a restless, uncomfortable crowd.

Plan your songs. Practice your solos, and if possible, time them. Virtually every artist who has ever recorded a live album complains about a lost solo, or a great song that didn't get recorded because the engineer was changing tapes, or a bad mic cord, or a sudden outburst by



an audience member. (More about this in a minute.)

Control your crowd. A good performance + an enthusiastic crowd = a great recording that needs only minimal edits. A good performance + an enthusiastic crowd + one intoxicated friend of the club owner yelling "Let's Get Drunk And Screw!" between every song

and standing next to the audience mic going "Wooooo!" during your best solos = lots of time-consuming, costly edits in post-production.

Make sure you have a designated peacekeeper; unless you know the club real well, bring your own. They don't have to look like Goldberg's little brother, as long as they can be polite and quietly assertive when needed. If you do have to use them, have a prearranged signal, such as

"Hey, buy that man another one!," instead of the more crowd-provoking, mood-squelching "Would somebody please shut up this ignorant spawn of Satan before I shove my Kurzweil up his . . ."

Create an atmosphere. Make the room as dark as possible, and keep the temperature at no more than 72 degrees. This advice was given to me by an old club owner, and it never fails to help focus a crowd. And finally . . .

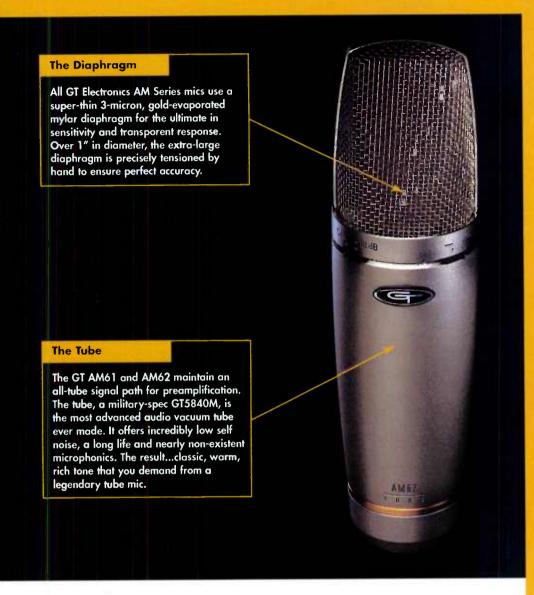
The Universal Rule of Live

Shows. Never play any song or say anything that you don't want to end up somewhere, sometime, on an album. Just ask Chuck Berry, who thought the tape was off, decided to kill some time at a gig, and as a result became known to an entire generation

as the man responsible for "My Ding-A-Ling."



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