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PROFESSIONAL AUDIO AND MUSIC PRODUCTION

SPECIAL REPORT

MAY 2003

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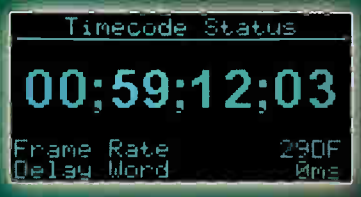

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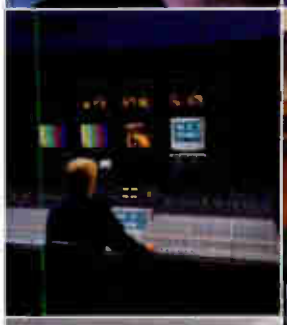

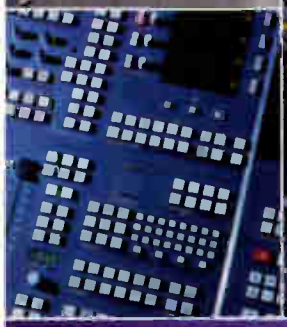

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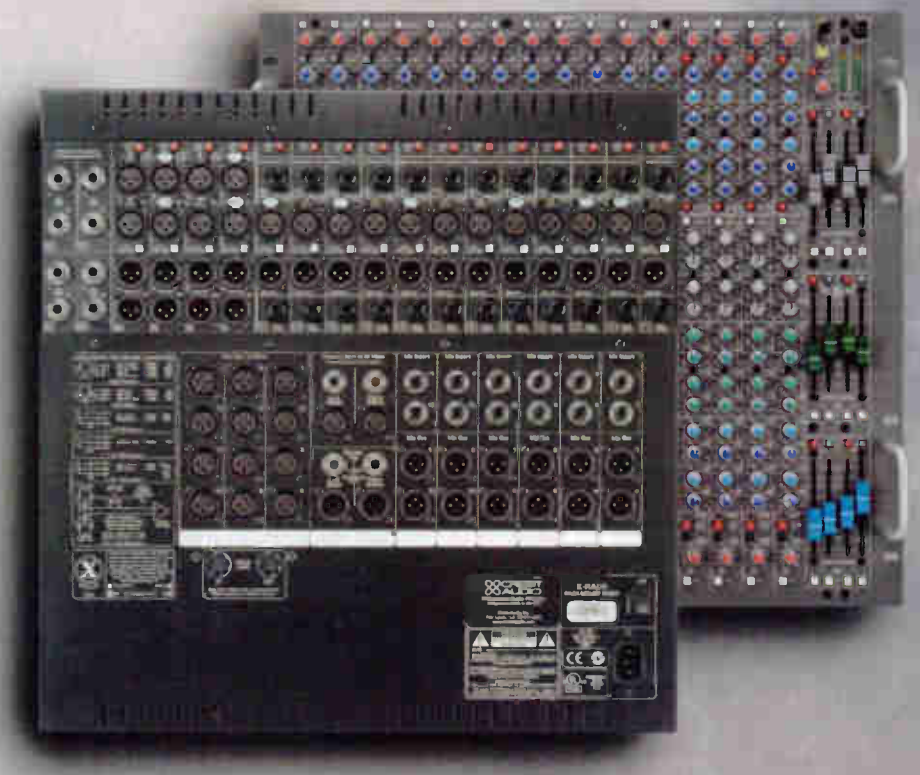

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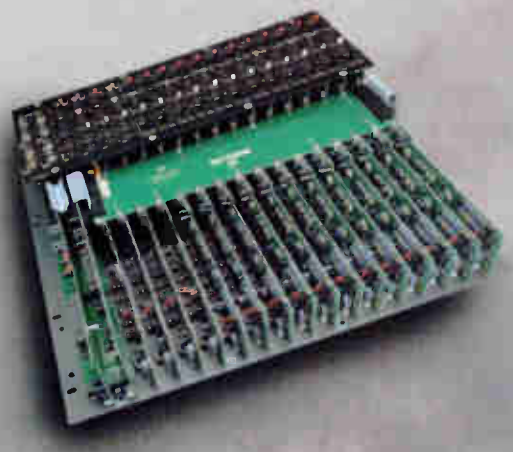

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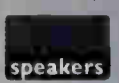

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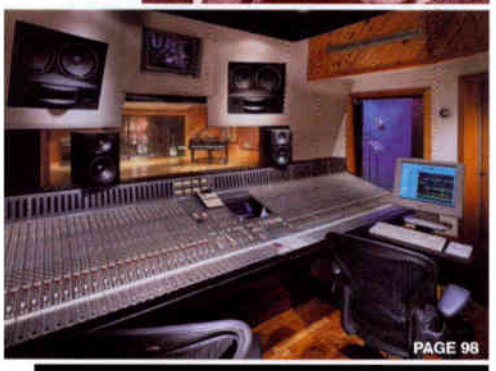

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A studio's success rides on the right mix of technology, service, reputation and fiscal management. Maureen Droney learns how studio owners are coping with the industry's downtime and staying ahead of the game.

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Giant labels with shrinking rosters have cut a lot of artists loose. Maureen Droney talks with performers who have found alternative ways to break out of the regional circuit and make national names for themselves.

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Does the downturn in music retail sales and label stock values spell doom for equipment manufacturers, or do shrinking production budgets add up to a run on low-cost gear? Ron Franklin finds out how manufacturers are faring.

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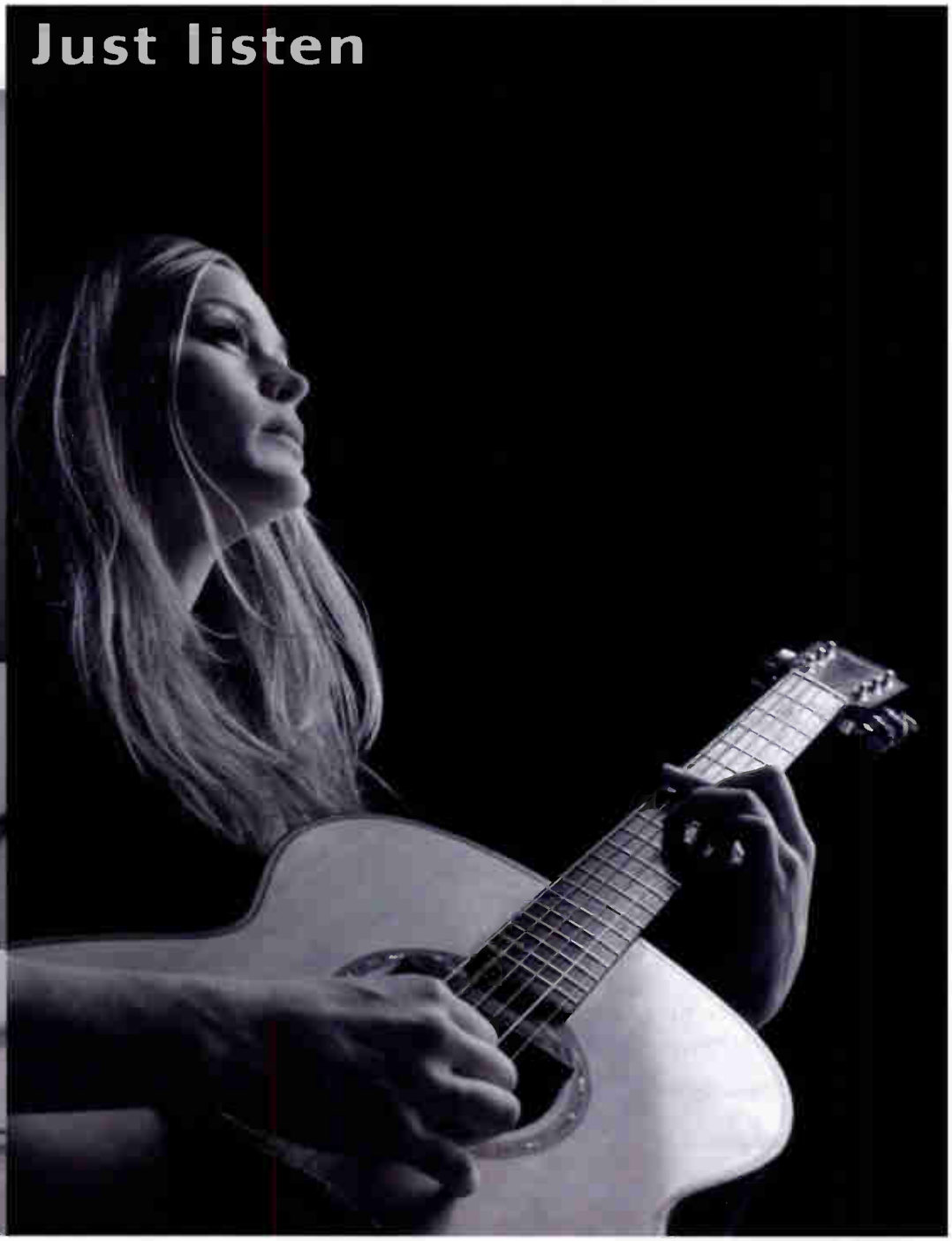
Trust your ears

Just listen



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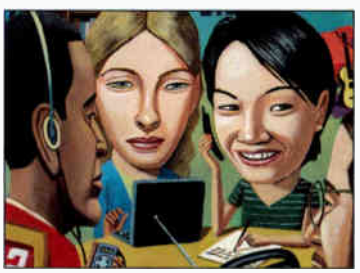

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Mix ONLINE EXTRAS

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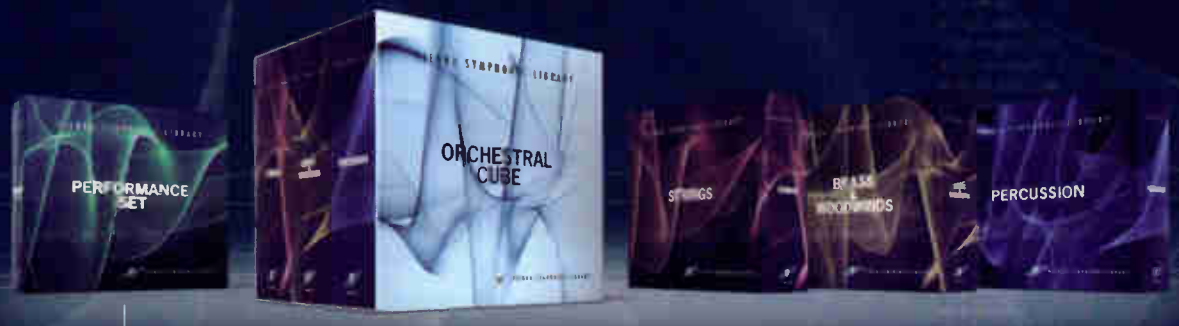

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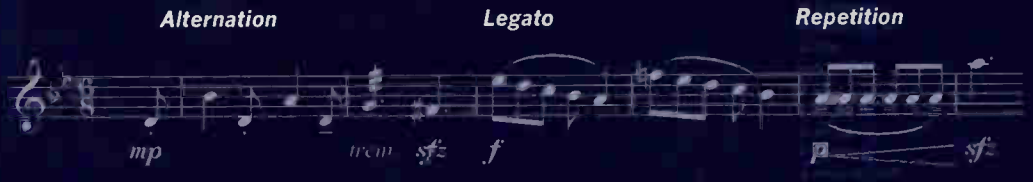

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What Is Going on Here?

What have you done to my *Mix*? Where's the 342-input console on the cover? Well, a funny thing happened on the way to our May issue: The music industry came under attack.

Beginning in late January, a deluge of consumer press—from *Wired* to *U.S. News & World Report* to *Business Week* to *The New York Times*—predicted the death of the music industry. The arguments all seemed to be variations on a tired theme: CD sales were down, while CD burning was up. File sharing is wired, physical media is tired. The kids have no respect, the labels are dinosaurs. The detractors were many. The solutions offered were few. Then the talk stopped. The media moved on to the next "story of the month."

Through it all, the one angle the press missed was that the music industry does not exist in a vacuum. Look around today: What industry isn't suffering? What president or CEO hasn't gone through consolidation or reorganization? What company isn't looking for new and inventive ways to make money? Yes, the music industry—as represented by the Big Five—suffered a down-year. And, yes, the pressures from file sharing and new means of distribution have smashed the model that existed for so many years. But the music industry is far from dead.

We in professional audio are both integral to and intertwined with the music industry at large. While tucked away in studios creating and producing—or behind a FOH or monitor board—we are at the same time beholden to consumer behavior. But we are also aligned with the computer industry, the telecom industry, the live event industry, the installed sound industry; if it involves entertainment, we are in the mix. This makes it especially hard to evaluate lags in equipment sales, drooping tour schedules or stagnant studio rates. The challenges facing our industry are far more varied than responding to a "crisis" in the music business. But we thought we'd start there.

So, rather than your usual collection of profiles, projects and announcements, we've devoted nearly an entire issue of *Mix* to the single question: What can save the music industry? We don't pretend to have all of the answers, and in the following pages, you might wind up with more questions than you came in with. This is a good thing: Everyone involved—whether in manufacturing or A&R, musician or engineer—has a vested interest in these issues. The mutation that is taking place right now in the music industry is very real, and it's still in its infancy.

No piece of technology, no breakthrough album from a Seattle-like scene and certainly no big label contract is going to save the industry. But some 19-year-old kid might come along and really shake it up. Or some portable download payment scheme might bring the moolah—in $0.05, $0.50 or $0.99 waves—rolling in. Who can tell in 2003 what the industry will look like in 2004? The landscape is changing even as you read this.

So peruse our Special Report, and please take some time to tell us what *you* think will save the music industry. The time to think creatively is *now*.

Tom Kenny
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George Petersen
Editorial Director

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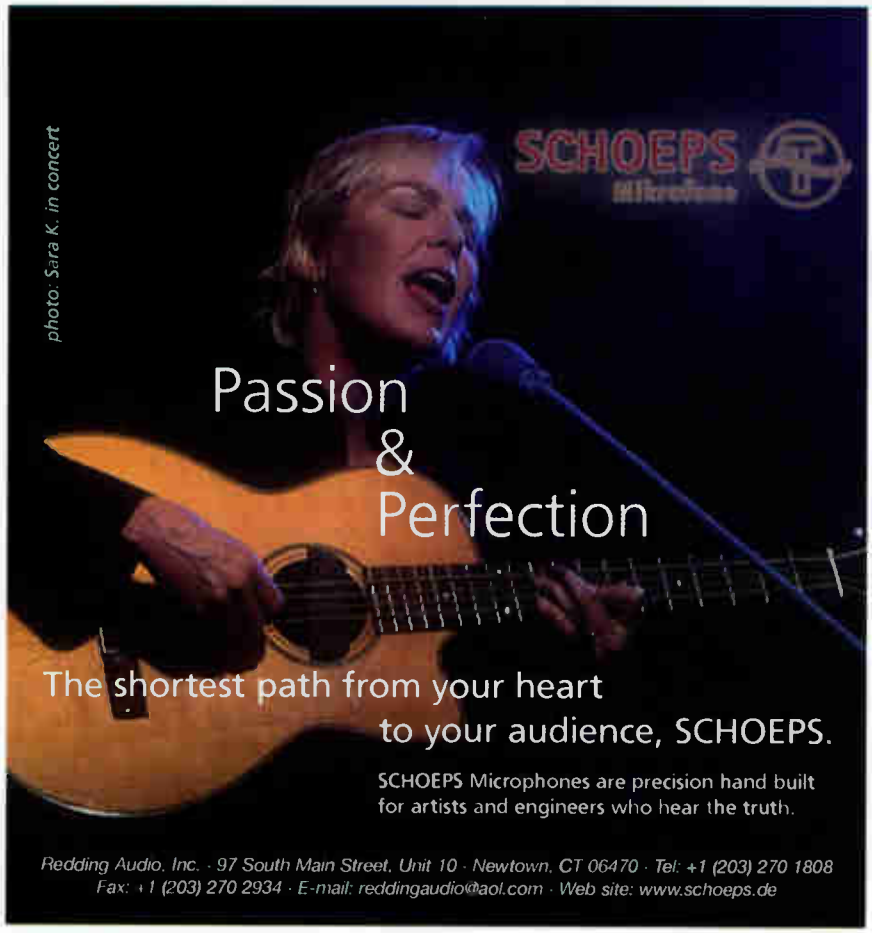

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World Radio History

Letters to Mix

Every month in this space, we print our readers' reactions to the audio production and application articles, news and product reviews we usually publish. This month, we approached individuals from all walks of the music industry and asked for their "Feedback" to one question: What can save the music industry?

Unabridged versions of these and other responses—plus a space to add your own opinion—can be found at mixonline.com. —Eds.

GIVE THEM WHAT THEY WANT

The high-level answer is simple: give consumers what they want. Digital music is all about flexibility, so we have to deliver services that offer more value than the peer-to-peer options. We have to think about music on the Internet as a service, not retail music sales.

Steve Grady
General manager, Emusic.com Inc.

TEACH HONESTY

The record industry should teach the young consumers that the music they steal today will lead to no music being recorded tomorrow. The whole point of mass pop culture is that everyone can comment and get in the same groove on the same thing. If there are 200 million Americans listening to 150 million bands, by definition, none of them will achieve critical mass. Therefore, educate the consumers about the fact that the critical mass is important enough to pay for.

Peter Fish
Composer, principal, Tonic Studio

THE FUTURE OF LABELS

This is the most radical change I'm seen in the music industry in the 33 years I've been in it. Music is losing its prominence as a leisure-time activity, competing with DVD, video games, 100 channels of cable, and rampant copying and downloading.

I imagine the "majors" will still exist, but there will probably be less than the five we have now. They will all be multimedia conglomerates. Many indie labels will cease to exist. Companies like mine will survive, but with a smaller number of new releases and much more dependence on direct sales to consumers, mostly online. Amazon, or some entity like it, will probably be our number one retail outlet.

Bruce Iglauer
President, Alligator Records

VALUE-ADDED

I wish I had a clue as to what we can do, other than make better records with better songs that people will buy. But wouldn't it make sense for the labels to add value to the CDs they're trying to sell for $18 apiece? Perhaps an automatic entry into a sweepstakes to win tickets to the artist's show, swag or a car? Something you can't download or copy.

I believe surround versions of albums could become a substantial market when the hi-fi manufacturers put a "music" button on their surround receivers that bypasses any DSP designed to enhance movie soundtracks. Until then, and until the general public gets an explanation of what it is and what gear they need to play it, surround is sure to remain a novelty.

How about nuking Clear Channel? That's sure to help!

Bob Clearmountain
Engineer, owner of Mix This!

MUSIC FIRST

Norah Jones and the Dixie Chicks have just exemplified the best solution to many of our problems: great, unique artists and music. The business side will adapt to market forces.

Luke Lewis
Chairman, Universal Music, Nashville

MUSIC ALWAYS

Who says the almighty Music Industry needs saving? Is it just your assumptions or your job or your little corner of it that's under attack? Get over it! The theater has been dying for twice as long as I've been alive, but in recent years, it has been just as vital and fascinating and even profitable as ever. Music will always be a part of culture. Don't try to save the industry; try, instead, to serve music.

John Flynn
Partner, Timeline Films

ARTISTIC CONTROL

It will be musicians and the revival of local and regional music scenes. Musicians are taking a more active role in handling their own careers: recording their own art, booking and promoting their own tours. Consumers are fed up with the major-label side of the industry, and many bands have felt let down by the indie labels. It's only natural that artists are progressively taking more advantage of the newer technologies to produce, distribute and promote their own work.

Brian Herb
Engineer

WHAT ARE WE TRYING TO SAVE?

I'm not sure the music industry needs saving. There is a large contingent of independent musicians, labels, studios, college radio and distribution that are doing just fine. Why should we bemoan the death of four or five companies that have grown so large and ineffective that they have, for all intents and purposes, outlived their purpose? F*#k 'em. Let 'em die.

Fewer than 5% of the records made sell 10,000 units. Those records get much of the exposure they so richly deserve because of P2P file sharing. No, they may not be the next Beatles, but they may be the next Sparklehorse; if we would stop trying to save the "record industry" and start supporting independent music, these kids may have a shot at making a living.

In the days when most of us in the industry were barely a concept, independent labels grew the music that would be the backdrop of several countercultures. They brought us the music that shaped several generations; unfortunately, those generations have refused to let go of the power structure they created as a "counterculture."

The original pioneering and independent spirit has never left the music industry. Studios that are owned and operated by "small-time" sole proprietors are not only prospering, but bringing us the backdrop for my children's generation. When artists like the Black Eyed Snakes can't be found on commercial radio with a Geiger counter, burn it down and start again.

Fletcher
Mercenary Audio

MIX ONLINE EXTRAS

Send Feedback to *Mix*
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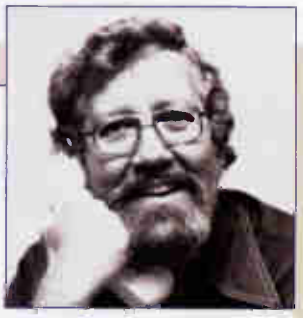
JEEP HARNED, 1930-2003



Grover C. "Jeep" Harned, the founder of MCI Electronics—a manufacturer of studio consoles and recorders during the 1970s and 1980s—died on March 13, 2003.

After earning a bachelor's degree from Mississippi State University, Harned joined the U.S. Army, serving as electronics instructor. In 1955, he opened Music Center Inc., a store catering to the growing hi-fi market. Harned soon hooked up with Mack Emerman, who had just opened Criteria Studios and had trouble with the facility's custom-built 16x3 console and ½-inch 3-track recorders. This "quick-fix" job lasted some 18 months, as Harned redesigned nearly all of Criteria's gear.

During the early '60s, Harned built consoles, preamps and record electronics. In 1965, his business name became MCI Inc., and he focused on making replacement solid-state Ampex 350 recorders. Word about MCI spread: Harned got a call from Tom Hidley (then manager of TTG Recording Studios in Hollywood), asking if MCI could create 24-track electronics for an Ampex 300 that Hidley modified to handle 2-inch tape. That first 24-track went into service at TTG in 1968, creating a stir among competing studios and leading to a recording revolution.

MCI showed its own recorders at AES 1971, and a year later, intro'd the concept of the AutoLocator. MCI began building a "production" console series, and soon off-the-shelf pro studio mixers became reality. Later, a Nashville audio dealer named Dave Harrison, who later founded Harrison Consoles, came to Harned with an idea of a console with in-line (as opposed to "split") monitoring. In 1972, the MCI JH400 Series—the first in-line console—was born. In 1978, MCI unveiled a 32-track analog deck that recorded on 3-inch tape. It went nowhere. MCI did much better with its JH500 and JH600 Series consoles, which became ubiquitous fixtures in studios.

Harned sold MCI to Sony in 1982 and retired. He will long be remembered as a pioneer who made significant advancements to the state of pro audio.

MIX ONLINE EXTRAS

—George Petersen

APPLE MAY BUY UMG

If you need more proof that the computer and music industries are converging, sources told *The L.A. Times* and *The New York Times* that Apple is reportedly in talks with Vivendi Universal to purchase its Universal Music Group for as much as $6 billion. Such a move would make Steve Jobs, Apple's co-founder and chief executive, one of the most powerful players in the record industry.

According to these sources, Apple hasn't made a formal bid but may offer up to $5 billion or $6 billion for the music company before Vivendi's April 29 board meeting. Vivendi has been trying to cut its debt by selling its assets, including its U.S. entertainment businesses.

This move also seems like an unlikely pairing, as Apple coined the term "Rip, Mix, Burn," what some in the music industry see as an invitation for illegal online music downloads.

According to the *Wall Street Journal*, Microsoft was also approached by Vivendi's Universal Music Group as a buyer. The *Journal* reported that Universal Music heads, including chairman Doug Morris and Interscope Geffen A&M label chief Jimmy Iovine, are looking for other buyers or investors.

Apple and major labels also recently announced plans for an online music subscription service, in which Apple users could buy and download digital music files on their Macs or iPod portable music players. It is expected to debut at the end of April.

Steve Jobs

PHOTO COURTESY OF APPLE

According to the *Wall Street Journal*, sources close to Jobs said that he is only interested in using UMG's music for Apple's new service, not in buying a record company.

AES CONFERENCE FOCUSES ON SIGNAL PROCESSING

The AES 23rd International Conference (May 23-25, 2003, in Copenhagen, Denmark) will feature a technical program, including paper sessions on signal conversion and perceptual effects; DSP in recording; interfacing loudspeaker and room; creating space with DSP; and DSP in loudspeakers.

The keynote address by Jeff Bier of Berkeley Design Technology Inc. (Berkeley, Calif.) is entitled, "Trends and Directions in Signal Processing Hardware for Audio Applications" and will explore how recent advances in DSP hardware have altered audio processing.

Online registration and complete program information are available at www.aes.org/events/23.

THE NUMBER GAME

$47.6 billion	45 million	24%	3 to 4 thousand	66
Overall value of music industry in 2001 (source: *Music Week*)	Number of viewers for the 45th annual Grammy Awards	Percentage of broadband-equipped households in the U.S.	Number of labels (both major and indie) existing in 2003 (source: Music Registry)	Number of times "music industry" appears in this issue

World Radio History

COMPILED BY SARAH BENZULY

NARIP PRESENTS "INDEPENDENT'S DAY"

From left: Alan Beck, Tess Taylor and Jon Levy

A capacity crowd of more than 300 filled Los Angeles' Platinum Live club on February 26th for "Independence Day: Charting a New Standard for Success," produced by the National Association of Record Industry Professionals. The panel discussion featured representatives from five established indie labels, whose rosters covered the spectrum from punk rock and electronica to R&B and pop. Panelists' opinions were as diverse as the music, from Alan Beck, president of R&B/soul label ITP Records, who tries "to ignore the mainstream of the business," to Greg Latterman, founder of Aware Records (home to Train, Drops of Jupiter and 2003 Grammy-winner John Mayer), who "has always focused on bands that are middle-of-the-road."

Not surprisingly, a lively discussion, moderated by NARIP president Tess Taylor, ensued. Topics ran the gamut from how to deal with (or circumvent!) radio, to CD pricing, international distribution, Internet strategies, the importance of diversification and whether free downloading is boon or bane for indie labels and their artists. Besides Beck and Latterman, speakers included Joe Escalante, lawyer/Vandals punk rock guitarist/head of Kung Fu Records & Films; Jon Levy, co-owner of dance and electronica's Moonshine Music & Movies; and Tom Osborne, general manager of Artist Direct's iMusic imprint (Johnny Marr, Folk Implosion, Lisa Germano).

"The industry's down right now," admitted Latterman, "but a lot of it is because a lot of the boy bands and girl bands that were selling 10 and 15 million records two, three, four, five years ago [aren't anymore], and thank God they're all gone now. If you pull those bands out of the percentages, we'd be flat; maybe a little bit down. It's not all doom and gloom...and the Internet and downloads build bands and break bands, too. You just have to figure out how—if you're going to sell a CD—to give value. You have to make people want to buy it."

Each panelist had a unique take on how to do that: Beck has his own radio show and promotes concerts; Escalante and The Vandals tour with Kung Fu's baby bands as support; Levy puts out "artist-driven" compilation CDs; and Osborne focuses on marketing artists who have an established fan base. One common theme that emerged from the discussions was the necessity for diversity, whether it was in merchandising, management, publishing, concert production, DVDs, video or films.

"As independents, I think you have to focus a little less on whether sales are up or down," noted Levy. "It's more about your profit. We're small businesses like every other small business in the United States. We don't have the luxury of saying, 'Hey, we just lost $5 million, but we've got a Number One record.' That's fine if you're a top executive at a major label. You'll get a bonus for that. But as independents, what's important is: Are you making money?"

Founded in 1998 by Taylor, a classical pianist and former MCA Records marketing director, NARIP is a networking and continuing-education organization for record industry professionals. NARIP sponsors regular events and workshops, and also provides job listings. Based in Los Angeles, NARIP is also opening branches in New York and London, with Canada soon to follow. Visit www.NARIP.com.

—*Maureen Droney*

CRAZY FROM STUDIO TIME

PHOTO: DAVID GOELZ

BERNIE GRUNDMAN MASTERS *DIAMOND DAVE*

At Bernie Grundman Mastering, David Lee Roth recently mastered his new album *Diamond Dave*, which was recorded at Henson Recording and is scheduled for a July 8 release on the Magna Carta label. Pictured are (L-R) Nathan Jenkins, programmer; David Lee Roth; Alex Gibson, engineer/co-producer; Jeremy Zuckerman, programmer; and Brian "Big Bass" Gardner, mastering engineer.

200 million
Number of downloads of file-sharing software (source: GartnerG2, March 2003)

62 million
Number of viewers for the January 2003 President's "State of the Union Address" (source: Nielsen Media Research)

172 million
Current Internet universe estimate (source: Nielsen//NetRatings Audience Measurement Service)

8.9%
Percentage that CD shipments fell in 2002 (source: RIAA)

309,000
Number of DVD-As sold in 2002 (source: Nielsen SoundScan)

World Radio History

PAMA MAKES PRO AUDIO DEBUT

The nonprofit Professional Audio Manufacturers Alliance, organized by veteran industry executive Paul Gallo, intends to be the collective voice and forum for the senior executives of more than 400 manufacturers of pro audio products.

Charter regular membership will be offered, and executives of companies affiliated with the pro audio industry can enroll as associate members. PAMA will be based in New York City and retain Washington, D.C., legal representation.

For additional information, contact Gallo at 212/696-1799 or via e-mail at pgallo@pamalliance.org.

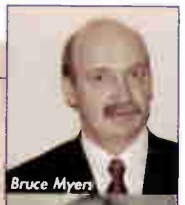
Paul Gallo

EIGHTH ANNUAL MIX L.A. OPEN

The Mix L.A. Open charity golf tournament, presented by the Mix Foundation for Excellence in Audio, will take place Monday, June 9, 2003, at the Malibu Country Club.

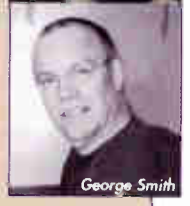
This popular industry event is a "best-ball" tournament. Registration and a continental breakfast begin at 8 a.m., with the shotgun start at 10 a.m. In addition to the different contest holes, Steve Thomas BMW will once again be providing a Z4 roadster for the hole-in-one competition. An awards ceremony, silent auction and dinner are scheduled for 3:30 p.m. For more information about sponsorships and entry fees for individuals or companies, visit www.mixfoundation.org. Contact Karen Dunn at 925/939-6149 or Karen@tecawards.org.

INDUSTRY NEWS



Bruce Myers

Celia Williams



George Smith

Bruce Myers is the new president of DPA Microphones' (Denmark) U.S. subsidiary (Lyons, CO)...**Mackie** (Woodinville, WA) promoted **Frank Loyko** to senior VP of sales, worldwide. At the same time, **Paul Rice** stepped down as the company's senior VP of international sales and business development, while **DK Sweet** enters the newly created position of director of external affairs...Taking on all product design, engineering and research for **Sigma Electronics** (East Petersburg, PA) is **George Smith**, director of engineering... Sennheiser **Electronic Corporation** (Old Lyme, CT) named **Robb Blumenreder** as its associate product manager for Innova-Son. Former Shure regional sales rep **Jim Schanz** joined the company's East Coast sales team...The new product application specialist for **QSC Audio Products'** (Costa Mesa, CA) marketing services division is **Tim Biden**. The company's new product planner is **Tim Van Grove**...Joining **Euphonix Europe** (London) is **Jon Stansfield**, digital product specialist. In other company news, **44.1** (Paris) was named distributor of the year...Commercial music and sound design company **Endless Noise** (L.A.) appointed **Celia Williams** to executive producer...**Marc Lindahl** has completed his transition from Eventide to **Manifold Labs** (Little Ferry, NJ) as VP of marketing and strategy...**Harman Music Group** (Sandy, UT) appointments: **Buzz Goodwin**, VP of worldwide sales, and **Noel Larson**, director of marketing and communications...**Lexicon** (Bedford, MA) added **Brian Zolner** to its ranks as VP of pro sales worldwide... Founder/former president of Sound Chaser **Paul Erlandson** joins **Carillon Audio Systems** (Ringwood, N.J.) as Western regional sales manager.

SOMETIMES A JOB IS CHILD'S PLAY

"I'll never grow up, never grow up, never grow up, not me." From left: Roy Harter, composer/producer/engineer; Dan Donnely, didgeridoo; Adrian Henke, ukulele; Rob Schwimmer, theremin; and session player Ali McCordi. Not pictured: Mark Stewart from Paul Simon's band and Phil Duffy of Skin Flints.

PHOTO: NEAL MCLOUGHLIN

Hothead engineer Roy Harter recently composed and produced all of the original music for the redesign of Noggin, a children's network. Harter selected a group of musicians (including members of Stiff Little Fingers, Polygraph Lounge, Moby and Paul Simon's band) to play the new music according to very strict rules: Only household objects could be used as percussion; no reverb (for intimacy); only one microphone at a time (to encourage spontaneity); all strings had to be under 2 feet tall; and toys were encouraged as instruments.

The result: The Alley Pond Park Ensemble (named after Harter's local playground in Queens, N.Y.). Harter and Hothead director and engineer Jim Stauffer are currently recording all of the Noggin character voices and voice-overs, as well as choosing new character sound effects.

"Laura Corby, Matt Perrault and Doris Grieder [Noggin producers] really gave us free rein," Harter said. "It was a pleasure working with producers who really trusted our musical instincts. It put all of the musicians at ease and really made the sessions a party."

Send Your "Current" News to Sarah Benzuly at sbenzuly@primediabusiness.com.

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World Radio History

BY STEPHEN ST.CROIX

Beat to Hell

Or, There's Hell to Beat

ILLUSTRATION: MICHAEL KNAPP

I haven't bought a CD in four years. I will probably never buy one again.

I mean, what the hell has been released for *me* lately? I like surf, blues (real and southern), rock, ska and 20 superfringe things like heavy-metal death surf and progressive big-band zydeco. Now, I do realize that I might not be representative of today's average consumer. And I guess this is the problem: I'm not a 15-year-old girl.

Because the labels have decided that the most lucrative market is teen and preteen half-naked bubblepop, I've been pretty well left out in the cold—along with a thousand creative artists who don't happen to wade in the mainstream.

So you see, as a consumer, I have absolutely no need for the labels anymore. The labels are universally hated anyway, so it somehow makes me feel like I belong.

DELIVERY? YOU THOUGHT CONTENT WAS BAD...

Now, the music I want may well be out there somewhere, but it's not making it to *me*.

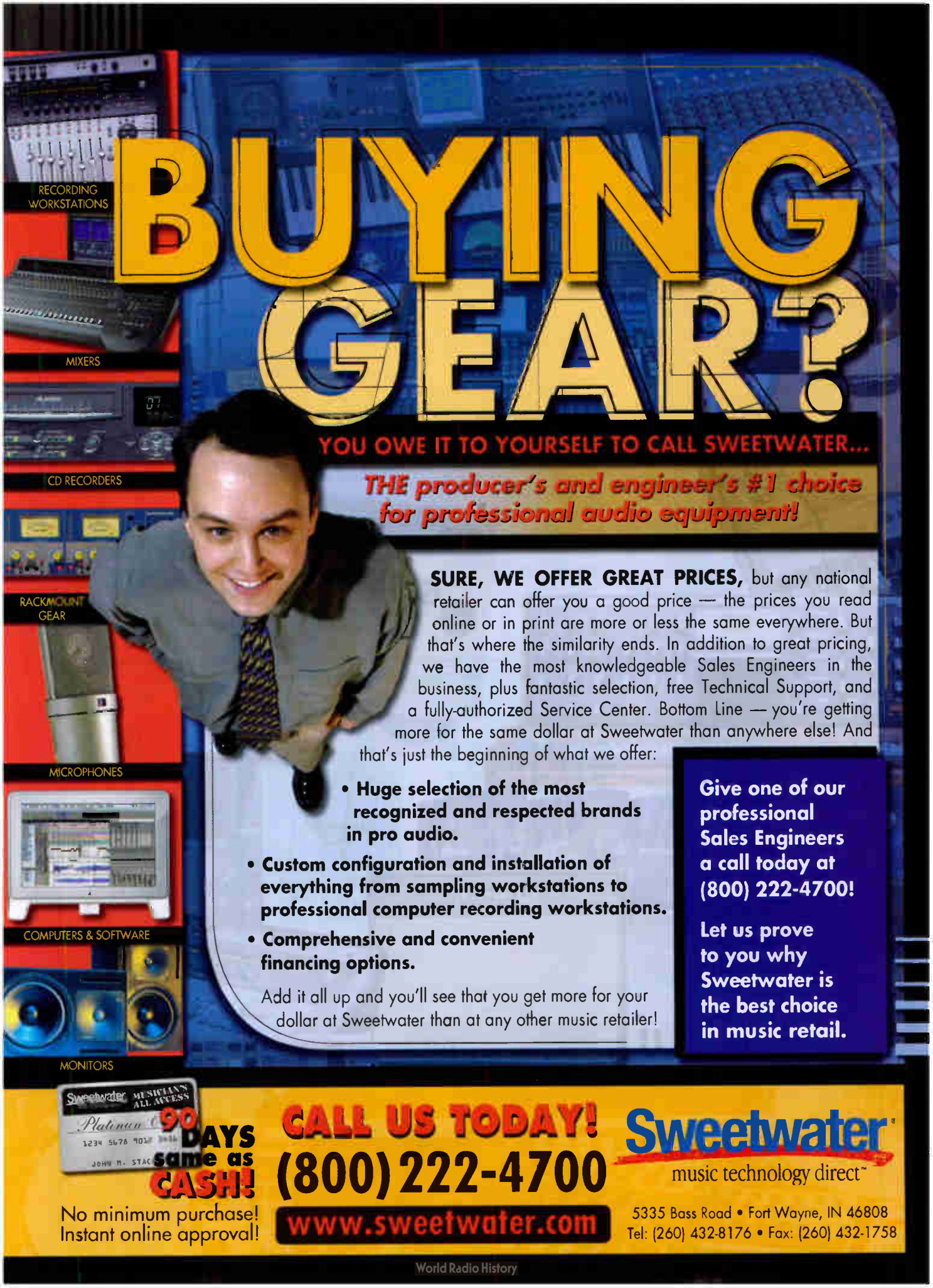
Part of the problem may be that I dislike commercial radio so much that I haven't listened to FM in 10 years, and never will as long as they keep trying to sell me crap when all I really want is to hear music. It's that damned not-being-a-15-year-old-girl thing again.

XM or Sirius may someday do it, but both content and technical limitations concern me today. Not to mention that both have commercials, the very thing I thought you were paying to avoid. I don't get it. I don't have it.

And then there's CDs. I could groan about the ridiculous *price* of CDs. So I will. There is *no* excuse for what these things cost. But wait. Who cares? The *real* point is that there is no excuse for them still *existing* at all.

The technology is 21 years old! Back when they first appeared, they were cool as hell, with their huge storage potential of 640 to 680 meg, and so tiny they could *almost* fit in your pocket. They certainly

World Radio History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made my 140k floppies look ancient.

But now CDs look pretty stupid. In fact, they are an embarrassment. They are huge in a bad way (they *still* almost fit in your pocket) and small in a bad way (still 680-meg, and still 15 tunes or so). Hell, my little iPod is so small (in a good way) that one CD completely covers it, and its tiny 20-gig drive (big in a good way, with 40s coming) has 3,217 songs in it today. That's a bit more than on a CD.

CDs are painfully slow. They ended up not being so indestructible after all. They scratch and crack; 40,000 miles on a jet sands their surfaces down to milky diffusers that make them unreadable in many players.

They have songs on them that I don't want, in an order I don't want. At least in Europe you can buy a lot more singles or EPs—four songs on a mini-CD. But still, I am egotistical enough to want to control my own sequencing. The iPod does this in spades.

Nope, I no longer have any need for CDs. They are beyond obsolete. Well, that's not entirely true. Certain brands of blanks with smooth topsides are excellent for watching solar eclipses. Two or three of them together do the job nicely. I have also used them for welding on occasion. It boils down to this (and, by the way, this is why I will *never* buy any copy-protected CD)...

Specific companies that own songs that we would all love to have are not taking *any* steps at all to make their huge libraries accessible within *any* new model.

CDs are just shiny tortillas that hold the music so it doesn't get on your hands when you shove it into the gaping digital jaws of hungry computers.

RIP, MIX, BURN

Well, Apple slogans aside, I have now ripped every CD that I own, and I have 11,000 songs stored on disk in a nice, listenable, slightly compressed format. So for me, it's Buy, Rip and Compress a Little, Save on Drive. Somehow, it's not as catchy.

I admit it. I am accepting a certain amount of high-quality compression for the incredible joy and ease of having The Perfect Music Database For Steve. I can certainly hear the difference, but I enjoy the incredible convenience and control so much that I accept the trade-off. Yeah, I know, it surprises me, too.

iPods are everywhere in my life. They are on my desk, in the bedroom, in the studio and hard-wired into the cars.

And the CDs themselves? Four hundred are aging nicely in a stupid Sony CD changer and the rest are in a box. I don't know where either the changer or the box is anymore. I ripped them all over a year ago.

AND LISTEN

Isn't this what it's about? I *listen* to 50-times the music that I did before. All because of iTunes. Because I can find the exact song I want, instantly. Or the type:

—*CONTINUED ON PAGE 148*

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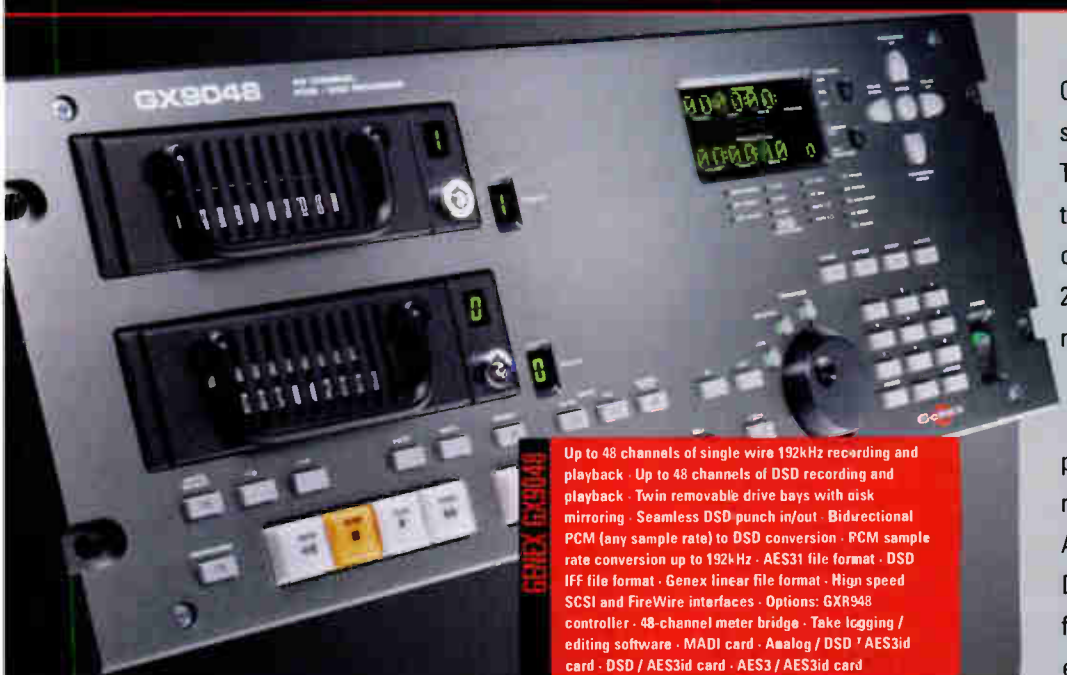

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World Radio History

BY PAUL D. LEHRMAN

The Kids Are All Right

Learning From the Next Generation

ILLUSTRATION: CHARLIE POWELL

When I was in high school, I loved to write incendiary satirical articles for the school paper about then-fashionable topics like war, racism, drugs and music. (Gee, not much has changed, has it?) One was so outrageous that I asked the editors to use a pseudonym in the byline.

The article, which contained not a grain of truth, caused a huge uproar. Letters were written to the local newspapers, committees were formed, resolutions were introduced. Administrators pontificated about how a lowly student could have come by such damaging knowledge. Eventually, the tempest died down, but nobody bothered to ask who the author actually was or whether the article was serious.

Which brings us to the music industry today. We know sales are down and people are downloading music without paying for it. But besides that, despite all of the hot air, falling-sky predictions and moral proclamations, no one seems to really know what's going on.

Maybe that's because no one has asked the people who are really going to decide the future of the music business: the kids. Young people in that crucial 18 to 25 demographic are forming the tastes and preferences that will rule their buying habits for the rest of their lives. I see lots of efforts being made by corporate America to influence their tastes and behaviors, but not much in the way of finding out what they really think and want. So I asked. And the answers were pretty interesting.

I talked to seven young people, four men and three women, aged 20 to 22, from all over the country. Six are in college. Some are looking to pursue a career in music; others are just enthusiastic listeners. These kids are worth listening to. Like it or not, our future depends on them.

The participants (not their real names):

Terri: from Texas, in her last year of college as a music-industry major and looking to have a career in music marketing. She plays the piano "for my own amusement."

Chris: from Los Angeles, majoring in electrical engineering, also in his last year of school. He has seriously studied songwriting and plays in a band.

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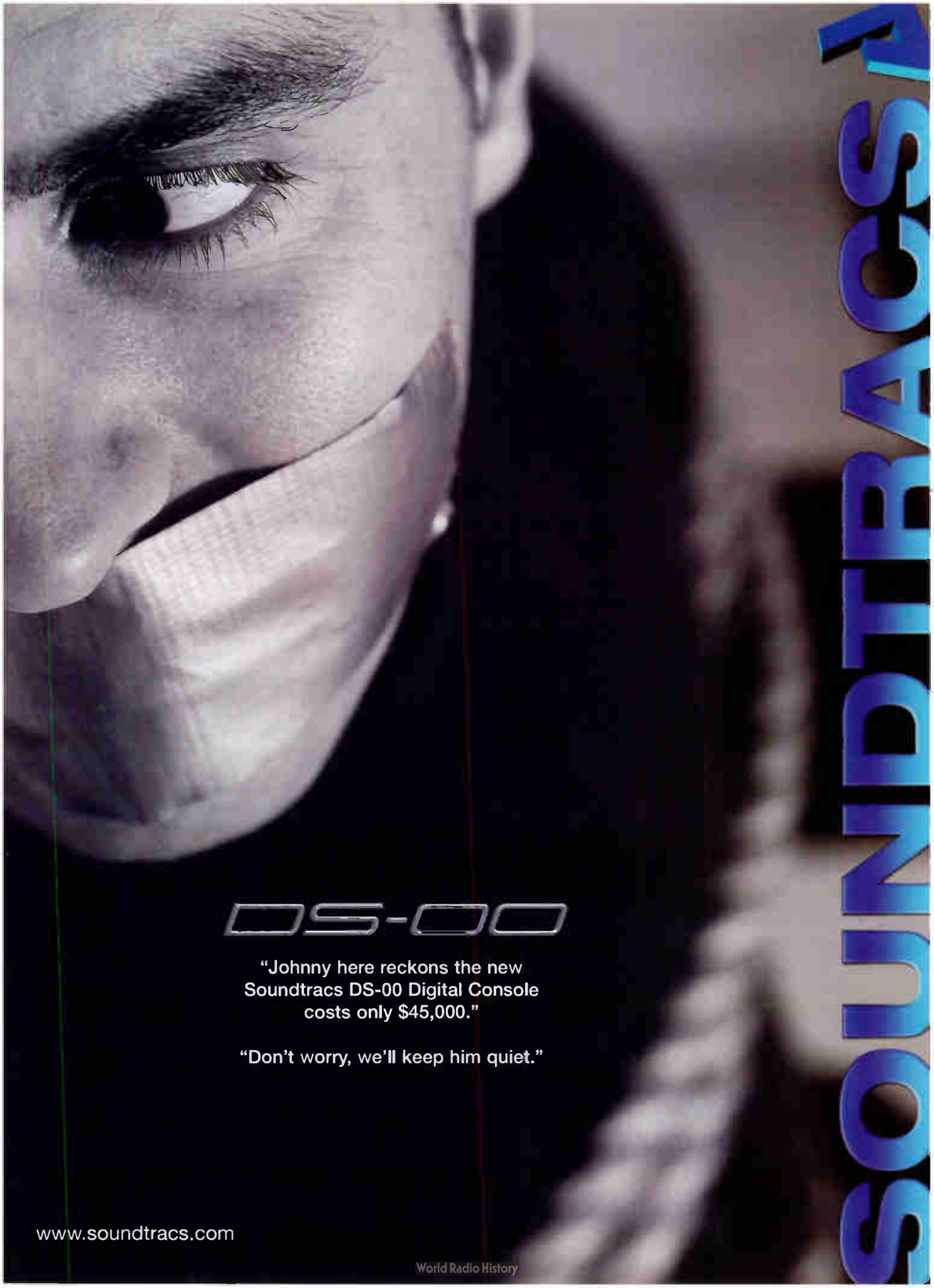

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Amelia: from New York, a psychology major. She plans to go to law school.

Rob: from Pennsylvania, majoring in biomedical engineering. He's a singer and works with a semipro a cappella group.

Wayne: from Tennessee. He didn't finish high school and now works with cars. Many of his friends are going to music school, and his stepfather is a successful studio session player.

Anna: from Chicago, an environmental engineering major, also very interested in cultural anthropology and ethnomusicology.

Eric: from Massachusetts, enrolled in a college music-industry program, plays bass in a band "for fun."

Where do you get the music you listen to? Do you pay for it or get it free?

Rob: The music I listen to regularly is off of CDs, but when I'm at my computer or when I'm traveling, I listen to MP3s downloaded from one of the P2P services. When I'm going on a long trip, instead of waiting to rip all of my CDs to MP3, it's often just faster to download it and burn it directly onto an MP3 CD.

Amelia: I buy CDs, burn them from friends, download music and also listen to the radio. I download more than anything. I pay for maybe 30 percent of what I listen to.

Anna: I don't download anymore since Napster shut down. I buy CDs, more used than new. There is nothing I enjoy more than buying used CDs. I would much rather spend my money on a CD than clothes, and nothing makes my day like a cheap CD.

Eric: I haven't bought a CD in a long time. When Napster was getting put down, and Metallica and the others were making so much noise, I thought a lot of the bands were crybabies, so I stopped listening to mainstream stuff. I know the people in a lot of the local bands, and they just give their CDs away for promotion, to get their sound out. I don't really use KaZaA much anymore. I used to, every once in a while, but I go through newsgroups now. You get the whole CD; you don't just pick and choose one song, which might not even be what you want.

Wayne: I don't buy new music—mostly. I used to work at Tower, so I try to go to Tower, but like everybody else says, it's too damn expensive.

Terri: I don't buy many CDs. The last time was a few months ago for a gift. My little sister still buys them. She's 13; for her, they're still cool. I listen to the radio when I know a station that's good, but radio gets old and bland. I just listen on my computer, getting music from KaZaA.

What would you consider to be a fair price for a CD?

Chris: Under nine dollars.

Anna: For used CDs, about $7.99 or $8.99. New ones I try not to buy for over $14.

Rob: Sub-10 dollars, unless it's a new release and I'm really into the band, then I'll pay $16 or $17. There have been times when I was going to the store to get one $17 disc and I ended up not buying it, but spending $20 on two other discs.

Wayne: You pay $20 and there would be two good songs on it. You get home and you're pissed off that you bought it. I go to used stores, but mostly for vinyl. It sounds better to me than CDs.

Terri: For the price of a CD, I can eat for a week. I'd pay nine or $10. You can find those, but it's usually in used CD stores, or else they're really old and I don't want to listen to them.

Eric: I honestly don't feel that going

—CONTINUED ON PAGE 152

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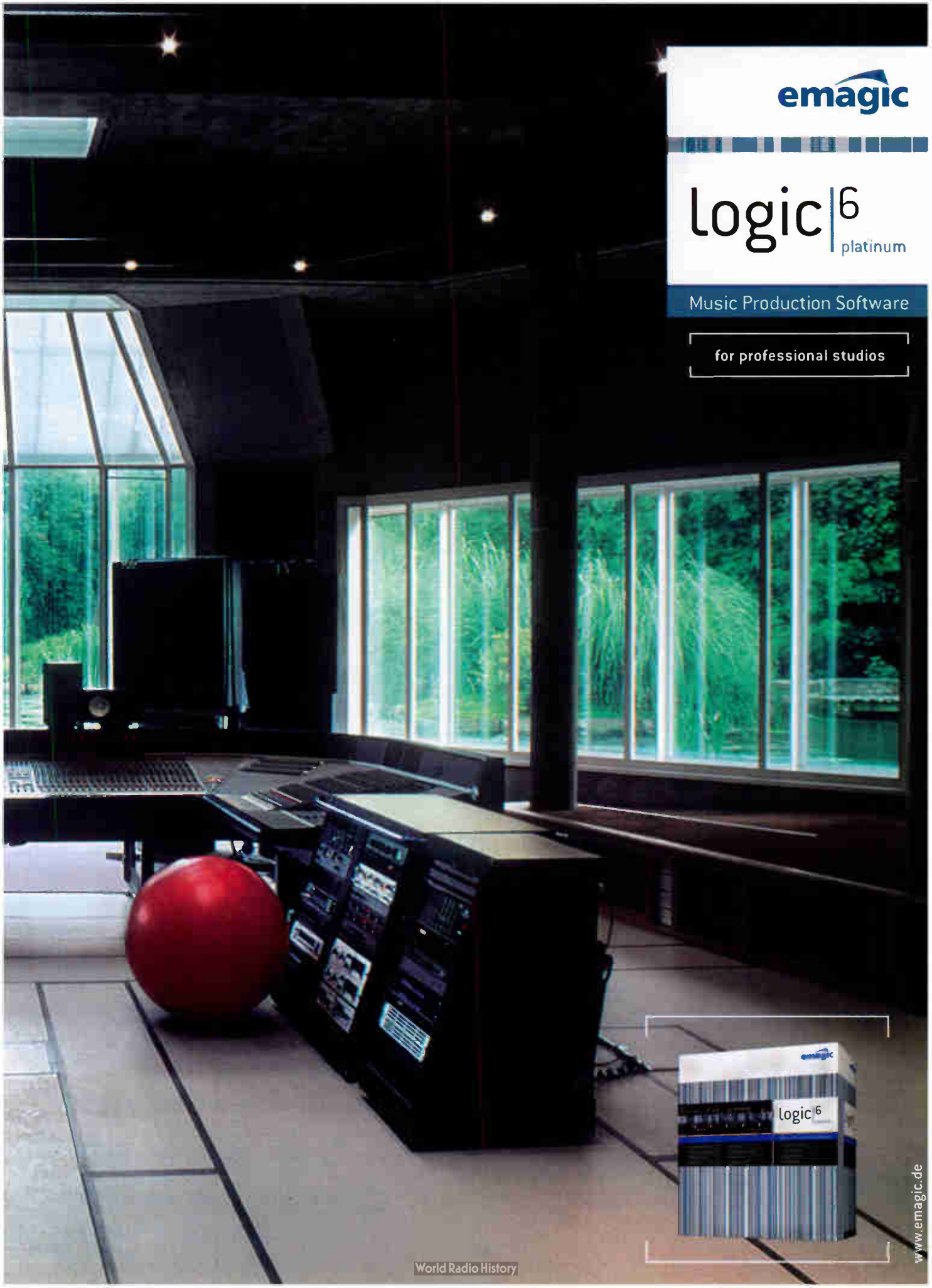
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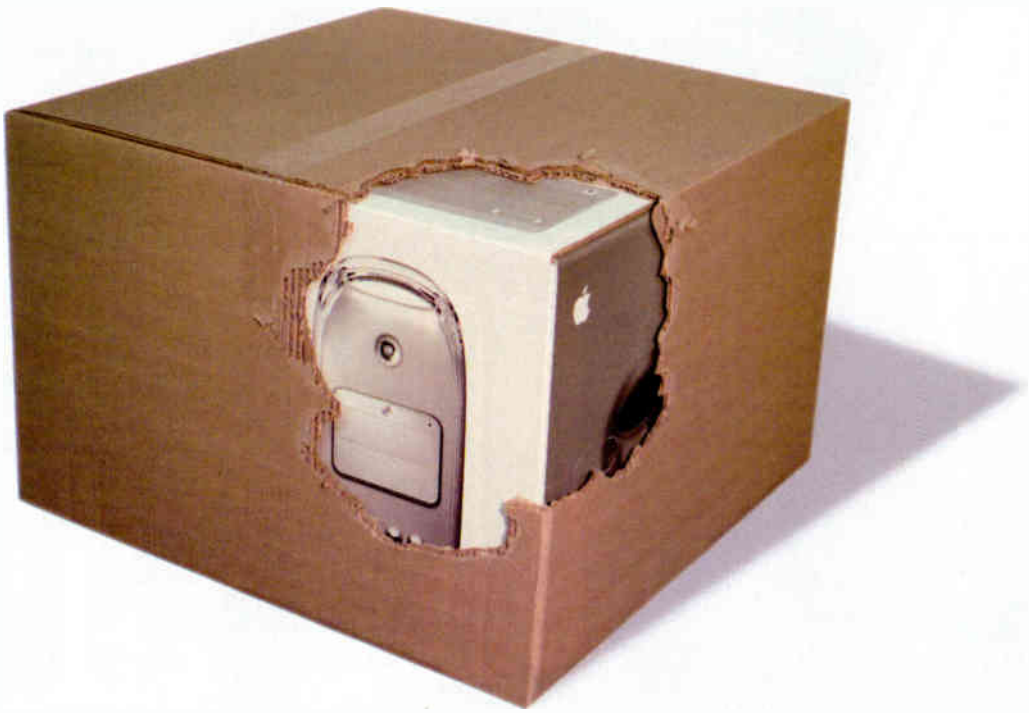

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SPECIAL REPORT

MIX

WHAT CAN SAVE THE MUSIC INDUSTRY?

THE RUMORS OF ITS DEATH HAVE BEEN GREATLY EXAGGERATED, BUT ONE THING IS FOR CERTAIN: THE MUSIC INDUSTRY OF TOMORROW WILL LOOK NOTHING LIKE IT DOES TODAY. AND FOR MANY, FROM INDEPENDENT LABELS TO INNOVATIVE STUDIOS TO INTERNET PIONEERS, THIS IS A GOOD THING. JOIN US AS WE BREAK DOWN THE CURRENT STATE OF THE INDUSTRY AND LOOK AHEAD TO THE BRAVE NEW WORLD.

World Radio History

A Fine Mess

"There must be some way out of here,"
said the joker to the thief
"There's too much confusion,
I can't get no relief..."

—Bob Dylan, "All Along the Watchtower"

The popular music industry has become astoundingly big over the past couple of decades, pervading nearly every aspect of society in some way. The entertainment landscape is littered with thriving companies big and small that are connected either directly or tangentially to the music business, and that employ hundreds of thousands of people. Look at the current *Billboard* album chart and you'll find one album after another that's selling in the millions, with new ones bulleting upwards, bubbling under, ready to explode to a mass audience any day now. Magazines and television programs are filled with glowing hype about singers and bands of every stripe: Has there ever been a bigger celebrity culture in this country? Rock and hip-hop stars are the new entertainment royalty, like the film stars of yesteryear. Isn't it wonderful?

Well, yes...and no. Under the glittering veneer, there is a darker story emerging—about Trouble, with a capital T, right here in River City. It's a story about people losing jobs, companies folding left and right, and the bedrock of the music industry turning into quicksand. It's a story about greed, ineptitude and a changing of the guard—a new world order in the industry. There's been plenty of name-calling and finger-pointing, as everyone tries to figure out what's really going on, who the players are, what the game is and what it all means in the grand scheme of things. Life would be so much simpler if we could all just be Oliver Hardy—you know, the chubby half of the '30s comedy team of Laurel & Hardy—and frown disapprovingly and stick a plump finger in Stan Laurel's chest and say, "Well, Stanley, this is *a fine mess* you've gotten us into." And Stan would sort of squeak and cry and nervously play with his tie, but with the blame applied, we could feel better about the situation and ourselves. But, of course, it's much more complicated than that...

YARRR! BEWARE THE PIRATES OF THE INTERNET!

The issue that has nearly everyone in the music industry in a lather, fretting and sweating like some scared character in an R. Crumb comic, is the proliferation of Internet "file-sharing" sites, which have made literally millions of songs available to music fans for free, without regard to such niceties as paying royalties to musicians, songwriters

World Radio History

BY BLAIR JACKSON

DARK DAYS IN THE MUSIC INDUSTRY, AND HOW WE GOT THERE

and record companies. Strictly speaking, most of the file-sharing that goes on over the Web is not "piracy," because 99% of the time, no money exchanges hands. Anonymous folks upload digital files to a site; anonymous folks download the files to their computers and then either transfer them to CD, carry 'em around on MP3 players, or just listen on computer while they Instant Message or play video games. However, it *is* piracy, inasmuch as many people now view the free Internet swapping sites as their primary outlet for obtaining new music, and money they might have spent on CDs is being "stolen" out of the pockets of the rightful recipients of their entertainment dollars. (Of course, there's no telling how many people would buy much of the music they currently get for free off the Web, but there's no doubt that billions of dollars are being drained out of the music industry every year by this practice.)

It turns out that the rise of digital technology has been a double-edged sword. On the one hand, it led to the development of the great cash cow of the '80s and '90s, the compact disc. But all those lovely little ones and zeros that make up the digital bitstream also allowed music to find its way to every corner of the Internet faster than you can say "Napster," and to be reproduced on millions of bootleg compact discs spanning the globe. (Actual CD piracy is

World Radio History

A Fine Mess

thing: Compact discs are too expensive, and that fact has aided the proliferation of online music sharing. When compact discs were introduced in the early '80s, they were priced several dollars more than vinyl discs because, we were told at the time, there were only a couple of plants worldwide equipped to manufacture the discs, and because the packaging (remember the bulky "longbox"?) had required factories to retool. The record companies trotted out the figures to back up their claims; at the same time, they assured us that the price of CDs would drop as more plants were built.

But guess what? The price never did go down. The CD became an enormous success, embraced by all but a few vinyl junkies and anti-digital audio cranks. After a relatively brief period of really harsh-sounding new albums and bad-sounding remastering jobs (ever hear the first *Born to Run* CD? Yuck!), engineers learned to work with the new medium and a wave of magnificent recordings paved the way for a true digital revolution. And by the time CD players started turning up in new cars, the war was over: Vinyl was dead, and the cassette had been mortally wounded. Now all that remained was for us all to re-buy our entire record collection. And the record companies *cleaned up*, because not only did they make obscene amounts of money on new compact discs, which became cheaper to manufacture with each passing year, they cashed in because we *had* to have that CD version of Hendrix's *Electric Ladyland*. (Wow! Four vinyl sides on one compact disc!) And then there was the remastered version made from the original masters instead of the bogus copies they never told us were copies of the masters, and then—what's this?—the new higher bit-rate version authorized by engineer Eddie Kramer himself!

Now, consumers were not the only people to get the shaft in this arrangement. It wasn't long before artists realized that the record companies were suddenly achieving profit margins worthy of a scheming oil company, and many succeeded in restructuring their deals to give them more of the compact disc profit pie. Prices continued to rise during the '90s, and there was grumbling among the public at large, but it wasn't until computer manufacturers began to routinely include a CD burner as part of home computer packages that people began to openly revolt. After all, the price of blank media kept moving south, and it was obvious that the record companies could get them even more cheaply than consumers, so why is that new Sting CD carrying an $18.98 list price? Increasingly, people borrowed CDs from friends and burned their own, or bought used copies, or went online to find the songs they wanted.

The last couple of years marked the rise of DVD-Video—visuals *and* good sound (including surround!) *and* longer playing time for either movies or music/concert videos—often priced below what a conventional CD costs, and all of a sudden the compact disc looks even more like a big rip-off.

WEASELS ON THE RUN

It's hard to feel very sorry for the major record companies in all this. They're still making money—heaps of it. Album sales may have "trended down" (to use a particularly odious bit of corporate-speak) the past couple of years because of factors discussed above, but there are still more multi-Platinum artists today than there were 20 and 30 years ago, and there are more albums in general being sold today than during the so-called Golden Age of the record companies (late '60s through the early '80s). Meanwhile, companies are running much leaner and meaner, and many labels have disappeared completely, as labels have been swallowed up by larger companies, leaving many an artist with broken contracts and shattered dreams. With a few exceptions, "artist development" has become a cruel oxymoron at the major labels. More common is for labels to drop acts that don't show some commercial clout right away. Can you imagine if Bruce Springsteen was coming up in today's record business climate? He probably would have been dropped after his second album, *The Wild, The Innocent and the E Street Shuffle*.

Record companies have always depended on cashing in on the latest musical trends to make their enormous profits, and nothing has changed in that regard. This business has always been both fickle and cyclical. Right now, we're in a period in which both country music and "urban" music (that's African American artists, plus Eminem) are topping the charts, with a little residue from the great teen pop wave of two years ago still in the mix. But it wasn't that long ago that anyone who wore a flannel shirt and could claim some connection to the Seattle grunge scene was being signed and selling a lot of records, and before that there were the synth-driven "haircut" bands, and before

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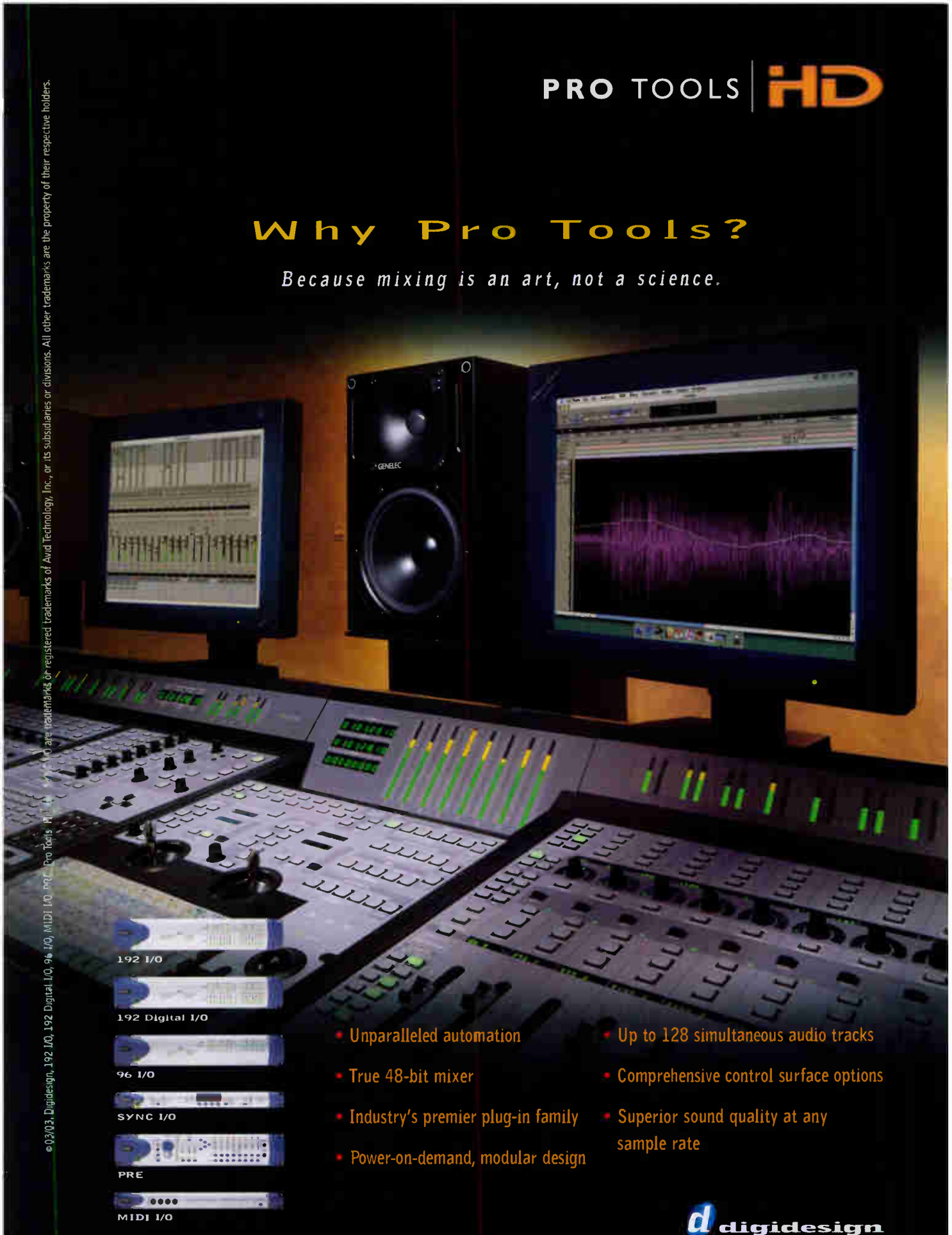

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A Fine Mess

that the new wave and disco and every flavor-of-the-moment that preceded that, all the way back to the Fab Four, which is when all hell first *really* broke loose in the record industry. The difference between 15, 20, 25 years ago and today is that the big record companies used to have large, dedicated A&R staffs that went out of their way to find exceptional talent across a broad spectrum of musical styles, and were always looking to *anticipate* trends, rather than reacting to whatever was popular and then scrambling to find a way to grab a part of the trend-dollar. The other thing that has changed is that as the major labels have been gobbled up by larger corporate entities, there has been more pressure on them to make larger and larger profits to feed the *über*-company's bottom line. As a result, fewer chances—both artistic and financial—are taken all along the line. The CEO of AOL Time Warner does *not* care whether this or that artist has great potential; it's "Why is that record division not meeting its profit goals? Fix it!" And suddenly there's a slashing of the artist roster, a purging of middle managers and an increasingly frantic determination to sign artists who can quickly make money for the company.

Add to this the '90s phenomenon—evidently lifted from that paragon of fiscal ineptitude, professional sports—of major record companies trying to lock up artists to ridiculously extravagant long-term contracts, and then plunging even deeper into potential debt by letting their marquee artists run their own "custom" vanity labels, and you have a further recipe for financial disaster. How many great artists could have been signed and recorded for the $30 million dollar buyout Mariah Carey received as a severance package, when she was released from her original deal? And you wonder why CD prices are so high...

DIGITAL BLISS, DIGITAL BLUES

Our own little corner of the universe—the professional audio industry—has been hugely affected by both the digital revolution and the changing fortunes of the record industry. The rise of digital technology has been both a boon and a bummer. On the one hand, it has brought a number of new products and manufacturers onto the scene, ranging from makers of computer plug-ins to expensive all-digital recording consoles. The analog vs. digital debate that has been fought out in the pages of *Mix* and in recording studios all over the world for the past two decades has done nothing to slow the proliferation of new digital technology, but it has also had the unexpected effect of spurring other areas of analog product development, from preamps to compressors to digitally controlled analog consoles. And, of course, the supposed "coldness" of digital sound—more an argument 10 and 15 years ago than today—has fed the entire retrosonic movement that worships vintage microphones, compressors, limiters and preamps, and has led to the resurrection of several pieces of classic gear.

The ascension of budget-priced modular digital multitracks occurred at a point in history when conventional recording studios were already beginning to be supplanted by home studios stuffed with decent-sounding, easy-to-use semi-pro equipment. This affected midline studios the most, as now nearly anyone could make a reasonably good demo at home, and many musicians found that using inexpensive MDMs in creative ways—perhaps adding just a good mic or two; maybe a high-quality rented preamp—let them do more at home than had ever been possible before. High-end studios continued to offer professional equipment and unsurpassed recording spaces, but most of those facilities had to accept the inevitable and offer MDMs to musicians who couldn't afford the higher rates that better-sounding two-inch tape demanded. The situation has only been compounded by the runaway success of Pro Tools and other computer-based recording and editing systems, which have been embraced by home recordists and top studios alike, and which have effectively changed the economics of professional recording for the time being.

While the price of some recording equipment has fallen over the years, top-of-the-line consoles, microphone and outboard gear is still quite expensive, and both studio construction and labor costs have gone up significantly. Studios are expected to keep up with the latest shifts in technology to stay competitive. Yet, across the board, studio rates have remained stagnant or even dropped because of intense competition from home studios and other commercial facilities. At the same time, recording budgets have absolutely plummeted in recent years—the days of the six-month studio lockout are long gone (for all except the first-tier artist), and extreme budget consciousness has seeped into every facet of the recording process. Just the other day, I

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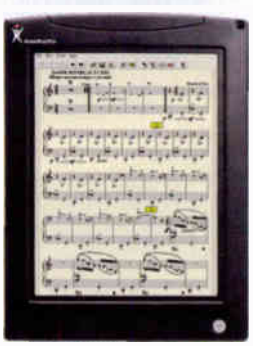
The farthest these fingers should ever have to reach is from A-flat to G-sharp.



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was visiting a top studio and asked whether a certain well-known producer still had his private workspace there. "No, when his budgets disappeared he had to find a cheaper warehouse space to set up in," was the melancholy reply. This is happening all over the country, as record labels find that cutting production costs by shaving time off a project, using cheaper materials and paying desperate studios, producers and engineers below-rate-card fees, is a quick, easy way to save money for their corporate overlords—even if it's at the expense of the quality of the project.

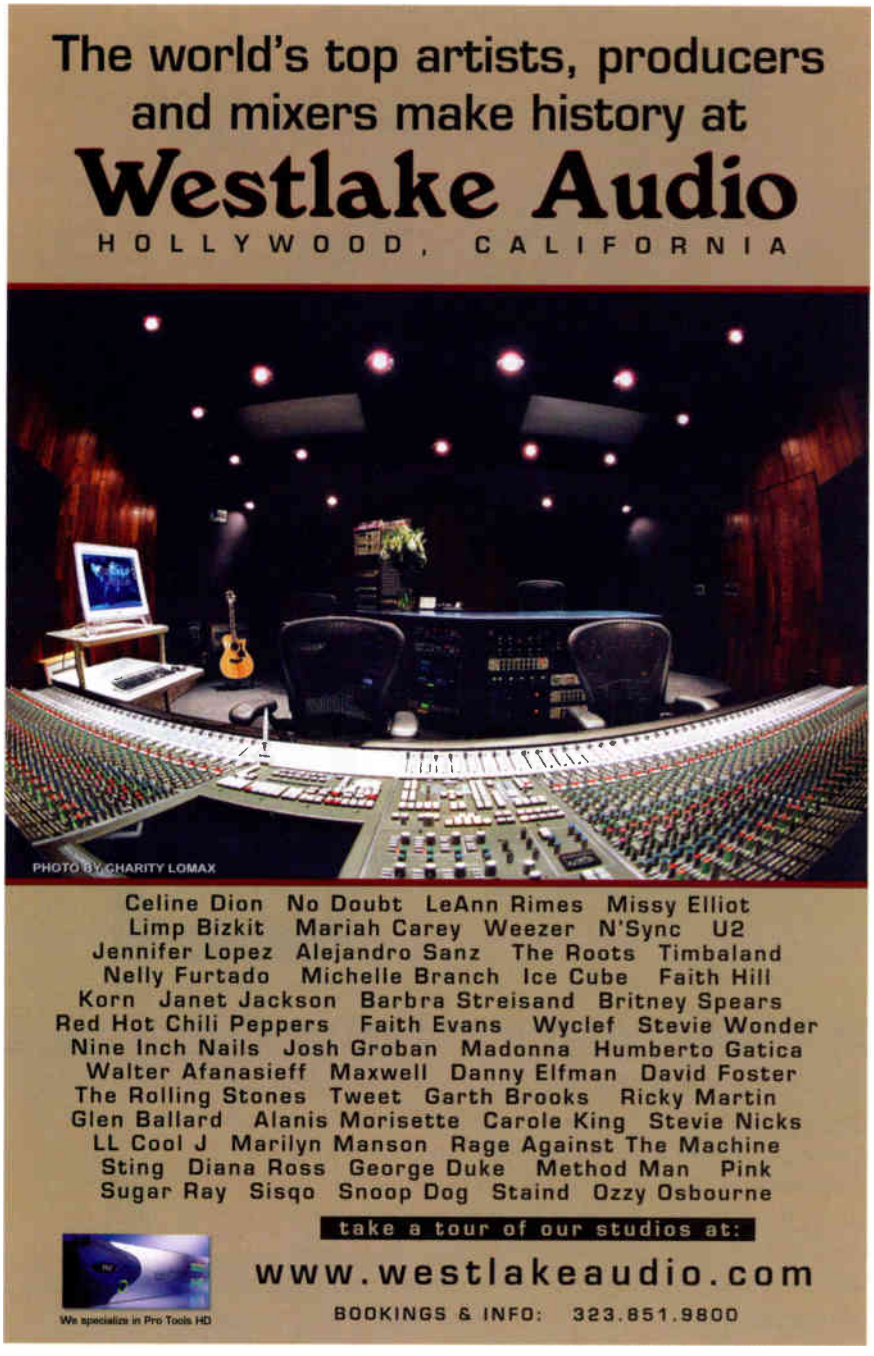
RADIO DAZE

Just as there has been a huge amount of corporate consolidation and attendant fiscal conservatism in the record industry, the radio airwaves are also controlled by fewer and fewer major players, and one—Clear Channel Entertainment—has become so dominant in many of the top 25 markets, that its main competition is often with itself. This is what media deregulation has wrought, and you might very well believe that this represents a great triumph for the free enterprise system, but the fact is this is very bad for the music industry. Any time there is a move toward greater standardization and homogenization of radio formats—an inevitable by-product of corporate centralization—it is bad for artists and record companies, because play lists inevitably become narrower and less flexible, which means fewer records are making it onto the air.

Radio has always been a tough nut to crack—an unpredictable and at times cruel monster, devoid of memory or loyalty, fractured into hundreds of tight formats that keep changing their own requirements for entry. But radio is still the single most important medium for selling CDs (although landing a video on MTV's *TRL* sure gives a disc a pretty good boost, too). The trick for record companies is to match their artists to the appropriate station format(s) in each market; find programmers who are willing to take a chance on new artists (or in the case of more established or "classic" artists, to play their newer music instead of their 30-year-old hits—no easy task); and then hope that other stations will follow the risk-takers and give their discs some exposure. No matter what the format, the majority of stations around the country will wait for some sign that a song is "happening" in some major market before they add it to their play list, but even the hippest commercial stations are under tremendous pressure to "guess right." And they are much more likely to yank a song from their rotation if it doesn't get a quick response than they were during the halcyon days of progressive FM radio, when DJs were allowed to go deeper onto an album than the predetermined "focus" track. At least the major labels have the promotional machinery in place to bring multiple tracks from the same album to radio over a period of several months—if they think it's worth the money and effort to do so. But pity the tiny independents who have neither the clout nor the de facto payola (whatever the current currency) to go beyond a simple, expensive first mailing of a CD to hundreds of radio outlets already deluged by "product."

THE CONCERT CONUNDRUM

It was just a few years ago that a friend in the industry joked, "Some day we're *all* going to work for Clear Channel." He wasn't kidding. Not only does the mega-corporation own more than 1,200 radio outlets and 39 television stations in the U.S., it also owns dozens of live entertainment venues of varying sizes (as well as three quarters of a million outdoor advertising display sites of all types, but that's another



World Radio History

story). Through the aggressive acquisition of various production companies around the country, Clear Channel has also become one of the leading tour promoters in the world, which means it can place tours in its own venues and then promote shows locally and nationally on its own radio stations: What a sweet deal (for them)!

Even before the emergence of Clear Channel as the *capo di tutti capi* in the touring music industry, concert ticket prices were escalating rapidly, thanks in part to groups such as The Eagles and Fleetwood Mac, whose exorbitant demands on their reunion tours in the mid-'90s forced promoters to charge more for tickets—and people eagerly paid the high prices. The Eagles getting $75 a seat opened the floodgates for other popular bands, and now we have yuppies in $300 seats at Rolling Stones shows, U2 tickets near the back of hockey arenas for $150, and decent seats for most major arena and stadium concerts hovering at somewhere between $75 and $100. No wonder so many tours are playing to way under capacity houses—the greed of bands, managers, promoters and, perhaps most villainous of all, the ticket services, has turned concert-going into an elitist entertainment available only to the well-heeled; sort of like what opera has become, except on a grander scale. In retrospect, it seems almost comical that rock impresario Bill Graham originally closed the Fillmore East and Fillmore West in the early '70s because of what he claimed was the unchecked avarice of everyone in the live music chain; why, he was going to have to charge $7.00 a ticket!

While it is true that the economics of touring have changed significantly in recent years, with travel and lodging becoming more expensive and the record companies increasingly reluctant to support "showcase" tours (i.e., tours to gain exposure, not to make money), the tight control of a few monopoly companies, such as Clear Channel and Ticketmaster, has only made the situation worse, as there is no longer serious competition in most major markets, so pricing structures cannot be effectively countered or challenged. When you're basically the only game in town (or the country) you can make up your own rules, and that is precisely what's happening.

ENOUGH DOOM AND GLOOM!

So, those are a few of the problem areas that have music industry people wringing their hands and running for cover from what they perceive as a falling sky. They're serious and they're real.

But the good news is that this is an industry filled with bright, resourceful people who are capable of figuring out ways to extricate us from this depressing swamp. We're all in branches of this business because we love music and we're inspired by the boundless energy and imagination of musicians, and by the thousands of behind-the-scenes support personnel—technicians, engineers, roadies, secretaries, etc.—who keep the starmaking machinery running smoothly. It is incumbent on *all* of us to come up with practical solutions to our common woes, and that is partly what this special issue of *Mix* is all about.

Join us as we explore many of these issues in greater detail and, hopefully, shed some light on some of the technologies, people and companies that are successfully adjusting to the new economic realities of the music industry, and in the process changing long-established paradigms and rewriting the roadmap to the future. Yes, the Internet *can* be your friend. Studios *will* survive. You *can* still make a living in this industry. But it's time to think and act boldly and creatively, or be swept into the dustbin of history like your old collection of 45s. ■

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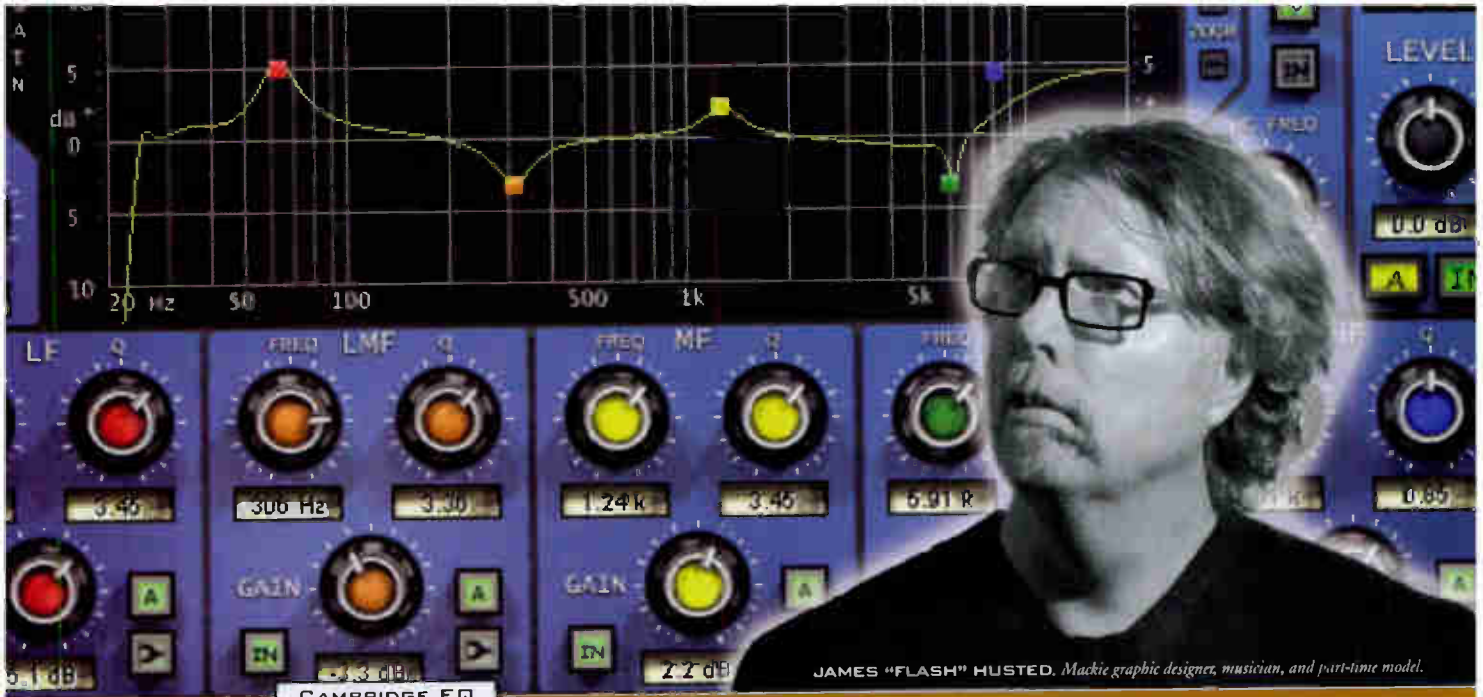

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Record Label Remedy

The well-publicized troubles in the music industry have claimed many victims: artists, producers, broadcasters, club owners, publishers, studio owners, etc. Few sectors, however, have been as deeply affected by these uncertain times as the record companies themselves. In the past few years, labels have experienced double-digit declines in CD sales, stiff competition from other forms of entertainment and an adversarial climate in their relationships with artists and the general public.

There is little dissent among record executives about the causes of the industry's woes. With uncharacteristic unanimity, they all cite piracy—whether in the form of CD burning or file sharing—as the biggest threat they face. Executives also largely concur on their proposed remedies for this bleak situation, though they differ somewhat in their approaches.

The first priority, they say, is to create a legitimate and compelling online music marketplace that attracts a substantial percentage of the audience that is now downloading illegally. Charles Goldstuck, president and COO of the RCA Music Group, says, "We have failed miserably in giving consumers a legitimate alternative for online music, and they have gotten frustrated. They've been forced into a position where it's much easier for them to experience music through a peer-to-peer network than to buy music through legitimate channels. We have to create a viable, legitimate music-distribution environment."

Val Azzoli, co-chairman and co-CEO of The Atlantic Group, agrees. "The obvious answer," he says, "is to curtail or stop illegal downloading. That's the silver bullet. We, as an industry, need to give consumers a secure, safe haven to download as many songs as they want—for a price. Downloading right now is hurting us, but in the end, it will save us."

The "legitimate" and "secure" systems that Goldstuck and Azzoli describe have existed for more than a year, but their initial incarnations have been widely criticized as overpriced, cumbersome and paltry in their repertoire offerings. However, in the first few months of 2003, major label-run systems such as pressplay (owned by Univeral Music Group and Sony Music Entertainment) and MusicNet (a joint venture between AOL's Warner Music Group, BMG Entertainment, EMI Recorded Music and Real Networks) have vastly increased their catalogs, and new systems like Listen.com's Rhapsody and Full Audio's MusicNow have debuted to generally favorable reactions.

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BY PAUL VERNA

HOW CAN COMPANIES REINVENT THEMSELVES?

GOING ONLINE

The services vary widely in terms of their specifics, but they generally offer a subscription on the order of $10 per month for streaming and approximately 99 cents per downloaded track. Some services, like pressplay, allow downloads to be burned on CDs, whereas others permit only "tethered" downloads—i.e., ones that will work on the user's hard drive but cannot be transported to another device.

While early versions of the label-operated online music systems were limited to portions of those companies' recorded catalogs, new licensing agreements opened up a pool of approximately 250,000 tracks to all the major services, thereby leveling the playing field.

No one is pretending that these label-operated online systems, even in their "new-and-improved" versions, will solve all of the industry's woes. After all, as Motown president and CEO Kedar Massenburg says, "I'm not competing with Columbia or Arista; I'm competing with free." Nevertheless, the moves represent a step in the right direction. "The investments are starting to happen to create a more sophisticated, legitimate music listening environment," says Goldstuck.

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KEEPING PRICES DOWN

The key to the industry's success in re-educating the mass public to pay for music is keeping prices down, not only in its online offerings but in the brick-and-mortar world, as well. In fact, many executives admit that the perceived high price of CDs was the most significant factor in disenfranchising consumers and driving them to free peer-to-peer networks like the now-defunct Napster and newer services like KaZaA, Gnutella and Morpheus.

"Somehow, we have allowed consumer behavior to reach a point where copyright laws are being flaunted and violated, but again, we're not giving them alternatives," says Goldstuck. "We may have to relook at pricing structures for music. People say, 'How can your music be priced higher than DVDs?' In my opinion, if you have something hot, price it more; otherwise, price it less. At $17.99, there are certainly CDs that are great value and things that are not."

If lowering the price of CDs would yield a better bang for the consumer buck, then delivering value-added product at full price would serve a similar purpose.

Danny Goldberg, chairman/CEO, Artemis Records

Danny Goldberg, chairman and CEO of New York-based independent Artemis Records, says, "Labels have to add value to the product. The movie business has done a brilliant job giving added value to DVDs by including directors' commentary, bloopers, cut scenes, etc., so people went from renting videotapes to buying DVDs. They want to own the product.

"Experiments with combining DVDs and audio are a clue for the music business," he continues. "If there was a 50 Cent [the rapper] product that also had a video on it, as much as it's selling, it would sell millions more."

Along with the need to keep prices down and add value by bundling DVDs and unique content with CD releases, the music industry is intent on implementing copy protection for CDs, if not as a panacea, then at least as a deterrent to wholesale CD copying.

Citing the alarming statistic that sales of blank CDs outpaced sales of prerecorded CDs for the first time last year, Goldstuck says, "It's a clear indication that it's easier for consumers to burn discs than buy [prerecorded] discs. When you can buy 100 blank discs for $19.95 and you have a CD burner at home, it's a real incentive for you to save $15 and not buy records. That's as clear evidence as you're ever going to find that the CD burning phenomenon has reached epidemic proportions. This is not about fair use—people making copies for themselves. It's people making copies for friends. It's not cool to buy music anymore."

Accordingly, says Goldstuck, "Copy protection has to be put in place as a deterrent in the short term, to create road bumps so it's not as easy to copy CDs at random."

Others agree. Goldberg says, "If you

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can make it a little harder to copy, the vast majority of people won't have the time or the patience to do it."

At the same time, executives realize that no amount of copy protection will wipe out file sharing or CD cloning. Even if the music, computer and electronics hardware industries *could* implement an ironclad protection system—a prospect that's doubtful at best—the resulting climate would be detrimental to free commerce, according to Goldberg.

"I don't support an obsession with copyright laws to the exclusion of positive marketing ideas and added-value ideas," he says. "Even if you win every legal battle—and it's likely that the labels will win every legal battle—you end up with a prohibition type of situation. If you spend all your time with sticks and no time with carrots, that doesn't work in the entertainment industry."

CAN'T WE ALL GET ALONG?

While labels grapple with high-tech solutions to their business problems, they are also increasingly turning their attention to improving relations with their artists and, by extension, the general public.

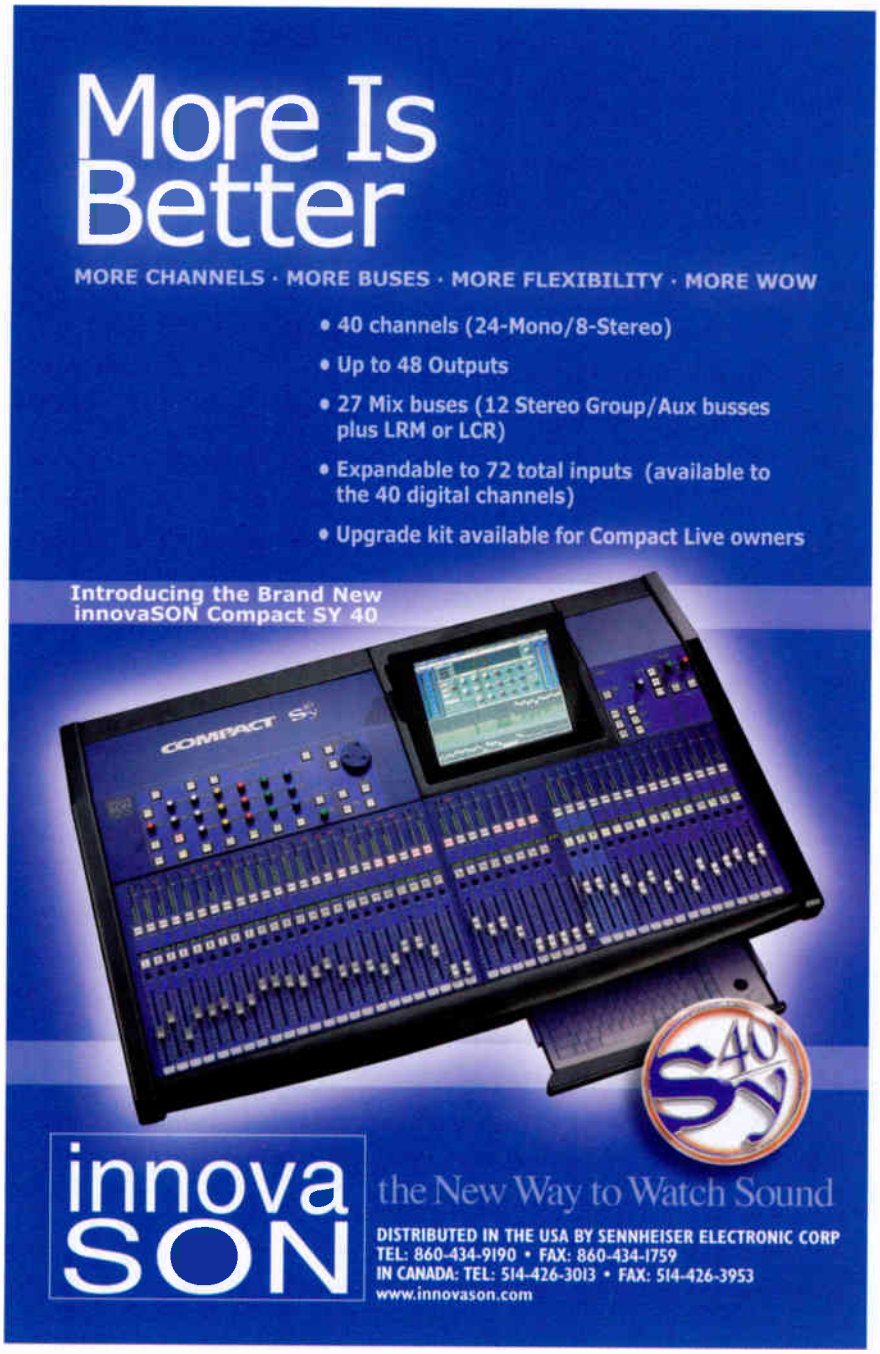
Val Azzoli, co-chairman and co-CEO of The Atlantic Group

"Now more than ever, artists and record companies really have to become partners," says Azzoli. "We're all in this together."

"We need to change some of the chemistry of those relationships," adds Goldberg, "so it's a team effort to try to create success as opposed to a love/hate relationship. That's an unrealistic and idealistic thing to expect to happen, but it's a goal. If there could be a little more of that atmosphere, the money that is spent could be focused in a productive way."

The evolution in the relationship between record companies and artists should include a new vision of the role of the label, according to Goldberg. "We have to create a culture where artists don't look at the labels as parents or banks, but as service providers," he says. "We can have economic relationships with artists, but we can't be the address where every single dream comes true and every investment is made. Labels have to earn that by handling their economics in ways that are minimally more transparent. We can't magically make something profitable just because an artist thinks it should be profitable, but we can make the accounting more transparent."

Azzoli says he often advises new artists to think in the long term rather than get blinded by promises of big payments upfront. "I say to artists, 'You have a record deal, hallelujah! Now let's write a three-year game plan. We'll go into the studio for two months to make our album, then we're going to go on tour, then we'll take two weeks off in August.'"



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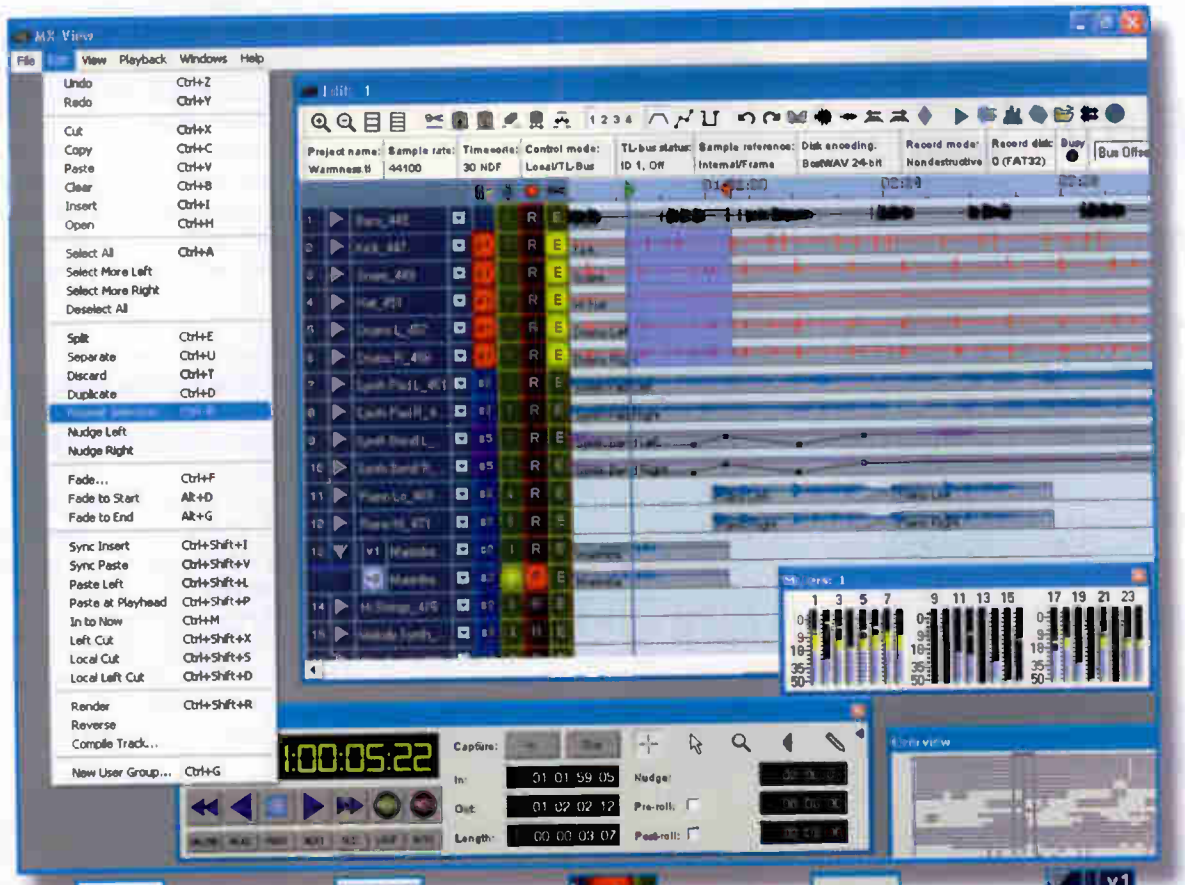

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"When I started as a manager with Rush," continues Azzoli, "we toured 10 months of the year, made an album, then went back on the road. We had a two-week vacation in August, and then it was back to work. What I say to young bands is, 'You have a five-year window. Man, get married at year six! You can't afford to lose momentum.'"

Azzoli blames some of the industry's troubles on frivolous spending, which he says occurs at the hands of all parties: labels, radio and artists themselves. "What we have to do is pretend that the '90s never existed and we have to go back to 1974 or 1984 from an operational point of view," he says. "The amount of money that's being wasted in the music industry is unbelievable. It's wasted on frivolous things like, is it important to spend $250,000 on an album cover? At the end of the day, I don't think so. The artist will say that it's part of artist development, but before, they didn't have to have a choice. Is an album cover as imporant as it used to be? No. Before, all the information about a band was on the album cover. Now you go to www.band.com and you have all the information you need."

A&R P'S AND Q'S

As labels and artists rethink their relationship with each other, the A&R roles of majors and independents will probably remain as polarized as they have been, according to industry sources.

"Smaller labels have a tendency to sign what they love all the time," says Goldstuck. "When you look at majors, it's still a business. The Donnas have had a lot of success, so now the rock/punk girl-band thing is back where all labels are looking for that type of act; the same thing happened with Alanis Morissette. It's understandable. Every label has to break a certain number of artists, and it's easier to go with the popular trend."

Perhaps the biggest factor in the majors' conservative A&R approach is corporate consolidation. Since the mid-'90s, every major record company has been owned by a conglomerate with interests in the consumer electronics and media industries. To their parent companies, the music divisions are a small and cryptic piece of an increasingly complex puzzle.

"When you involve Wall Street and when you involve people who are not

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artist development-friendly, it stifles creativity to a certain extent," says Motown's Massenburg. "That's the downside. But on the other side of it, being a business man, it makes you come up with ideas to be creative and more budget-conscious."

Does the majors' focus on proven trends present an opportunity for independents to seek and promote cutting-edge acts?

"We haven't really been actively signing artists who have been disenfranchised from major labels," says Dan Storper, CEO of Putumayo World Music, a label that specializes in compilations but has also signed its share of artists in recent years, including Miriam Makeba, Oliver Mtukudzi and Mariana Montalvo. "However, I do think independents can be effective at building an artist's career through developing creative marketing and promotion plans, which often are under the radar of the major media but can be very effective. We continue to believe in the importance of 'tastemaking,' i.e., getting CDs to be played in cafes, restaurants, boutiques, etc."

Goldberg, who prior to launching Artemis held senior-management positions at Atlantic, Warner Bros. and Mercury, says, "Most artists who are unhappy with the majors are unhappy because they're not getting the attention they feel they deserve. What we can offer is a culture where people who are marginal at majors are superstars for us. That's historically what independents offer and what they offer today."

Major or independent, labels have plenty of talent to choose from, according to executives interviewed for this story, who cite the 2003 Grammy® Awards ceremony as evidence of the quality and diversity of today's music.

"When you look at this year's Grammys, there was a tremendous amount of talent on display," says Goldstuck. "There's nothing wrong with the creativity coming out of the music industry. From a creative standpoint, the industry's as healthy as it's been."

"Listen to India.Arie, Norah Jones or John Mayer," says Massenburg. "Everything is cyclical, and people are looking for real music from real artists. You're hearing a lot of organic, soulful music these days."

Motown president and CEO Kedar Massenburg

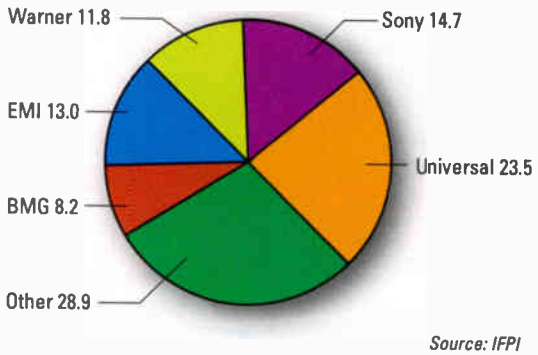
LET'S GET SMALL

While every record company, big and small, continues to seek ways to maximize its business, some executives advocate a realignment of expectations. "The industry's shrinking and we're all panicking," says Azzoli. "Like everything else, the key to success is not to panic. Yes, it's shrinking, but it's not going to shrink out of existence."

Goldberg adds, "Everybody has to become more willing to make money on success rather than getting paid in advance. That includes executives who got used to higher salaries than may be possible and artists who got used to higher advances than may be reasonable. The marketing expectations have to conform to the realities of the business. We all have to accept the fact that it's a smaller business, and if we have any sense about us, we should thank God that we get paid for listening to music." ■

THE LABEL BREAKDOWN

record companies' percentage of world market share for 2001



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Dualtone: Small and Proud

BY BARBARA SCHULTZ

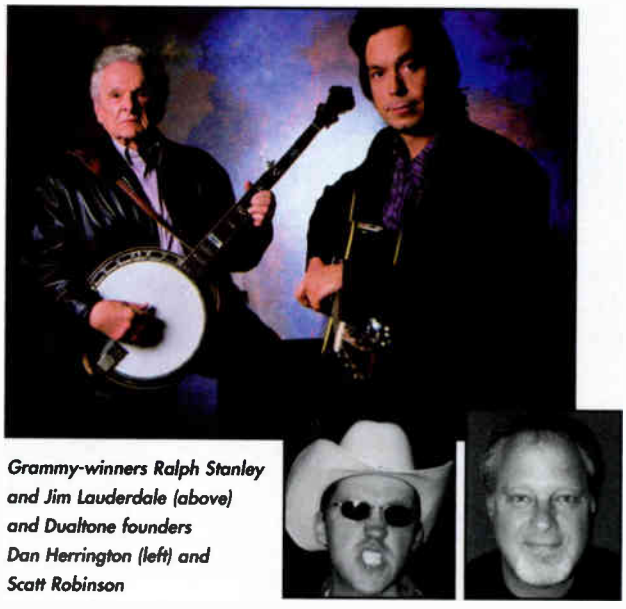
Especially in these economically troubled times, independent-label owners wear their difference from the majors like a badge of honor. They are quick to point out that whatever success they achieve is accomplished on lower budgets, with smaller marketing machines and fewer connections. Scott Robinson and Dan Herrington—partners in the two-year-old, Nashville-based Dualtone label—have earned their badges and wear them proudly. "With the majors' budgets and their business models, they sign 10 artists, seven or eight fail, one or two breaks even, and one pays for all 10," Robinson explains. "With our business model, our first year of business, we had nine deals. Seven made money; two failed. So, we had the complete opposite of the majors' result. We're not making 500 million dollars a year, but we're filling a void that exists within the industry, and it's working."

Robinson and Herrington are both former major-label insiders who worked in artist management (Robinson), marketing and sales (Herrington) for Arista and BMG, respectively. Their inside knowledge gives their boutique roots/country label a leg up on a lot of other indies; when they need to, they can play the majors' game. "We have major distribution," Robinson says. "We're with BMG. When Dan and I started this company, we did research into why a lot of great independent labels fail. There are a lot of cool labels out there that put out great music, but a lot of them were operated by folks who didn't come from the industry. They didn't know how to get records on the radio. They didn't know how to get records written about in *Rolling Stone*. They didn't know how to get records into Wal-Mart or Tower or Best Buy. We know the buyers at the chains and the mom-and-pops. We know the writers at the major publications. We know the radio programmers. We had access to a lot of resources. Our first year in business, we almost had a Gold record; our second year in business, we won a Grammy."

Singer/songwriter Jim Lauderdale received the Best Bluegrass Album Grammy this year for *Lost in the Lonesome Pines*, his second collaboration with the legendary Ralph Stanley and the Clinch Mountain Boys. Lauderdale is typical of the Dualtone roster, which also includes artists such as David Ball, Chris Knight, Radney Foster and Victoria Williams—all talented writers and performers who had careers before signing with Dualtone but have flourished since. "I just think the industry as a whole has to be really conscious about careers," Robinson says. "Artists' careers are not a disposable commodity. I would like to see a return to the days when artists have multiple-record careers instead of one-record careers. You look at the *Billboard* Top 200 today, and it's very hard to find any names who are even on their third or fourth record.

"I've been on both sides of the table," Robinson continues. "I've been pitched, and I've made the pitches. I know how a label works, and I know the artist's needs. So when we created Dualtone, I said, 'Lets create something more artist-friendly that is more realistic, and let's sign artists that we believe need to be around for the next 10 albums.' We're not about signing an act, dropping an act, signing an act, dropping an act, but signing an act and building a career across multiple records. It's about making the right kind of records, smartly.

AN INDIE LABEL SUCCESS STORY



Grammy-winners Ralph Stanley and Jim Lauderdale (above) and Dualtone founders Dan Herrington (left) and Scott Robinson

"A perfect example of where we can cut corners and be more cost-effective is recording costs. Our costs are probably from an eighth to a third of what the majors spend. We spend anywhere from $10,000 to $50,000, depending on the project. The majors spend from $75,000 to $350,000. We never felt like if we made a record that cost us $30,000, that if we spent another $50,000, we would have sold 100,000 more records.

"Or online distribution," Robinson continues. "It's not the main source of income, but it is a revenue center. We put our site up for $1,500 or $2,000 when we started our company, and within 60 days, it had paid for itself. Not that we're selling thousands of units, but we're selling hundreds of units, and it's a great information site: a great way to help promote and sell product."

Dualtone is working from its own well-conceived, self-determined plan and having decent success at it, far from the madding crowd at the major labels. But Robinson believes that the solution to the majors' problems is pretty obvious. "They just need to have great music," he says. "Look at Norah Jones, *Buena Vista Social Club*, *O' Brother*—records that didn't have a lot of airplay in the beginning. I think the industry needs to stop making records for the 13- to 16-year-olds and start making more great music, because when it's offered up, people react. In other words, let's not make a lot of disposable music. Let's make great music that we're proud of and can stand the test of time."

Mix ONLINE EXTRAS

Barbara Schultz is Mix's senior associate editor.

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Surround Salvation

Don't have your dark suit cleaned just because you think that any day now, you're going to be attending a funeral for the compact disc. That format isn't going anywhere any time soon. Yes, CD sales dropped some 10% last year, and Internet file sharing has shown itself to be a formidable foe of prerecorded CDs (but actually a boon to blank CD sales). The fact is, the compact disc is one of the most successful entertainment technologies of all time, and at this point, it is pervasive worldwide. People like the way they sound and like the format's portability and durability. Downloading songs off the Internet is still something that relatively few people do at this point, though the financial impact of this practice has undeniably been dramatic the past two years.

How do you compete with "free"? That's the conundrum that's been tossed around in record company boardrooms with increasing urgency the past couple of years. Tops on the list of solutions seems to be the notion of somehow training the populace to pay for music at "authorized" Internet sites. This is complicated and fraught with a certain degree of peril, as it involves cooperation among companies that are traditionally competitors (though the airlines seem to have worked this out with Orbitz); an admission that the labels' historic reliance on the brick-and-mortar model is perhaps outdated; and appealing to people's innate sense of morality to eschew the free online swapping bazaars in favor of legitimate sites that actually generate revenue for the artists and record companies. Not an easy task, but not necessarily impossible.

Then there's the idea of giving consumers more for their CD dollars: the value-added approach. Of course, the relative length of the CD compared to a traditional vinyl record has always been a selling point. The record companies have raked in millions of dollars by selling remastered albums that include "bonus tracks": B-sides, outtakes and other related material to fill out the CD's 79-minute potential playing time. But that material is as easily bootlegged and/or ripe for file-sharing sites as any other music on CD, so that concept has lost a little of its luster as a marketing tool. What *has* caught on, though, is including in a CD package a bonus DVD-V featuring live footage and music videos, for that extra incentive to buy rather than download. So far, this practice has not been widespread, but it has proven successful for both popular and new bands, and we are likely to see more of it in the coming months. It's two media for the price of one, and you can bring in a third when you get into discs that also contain lyrics, biographies, photos and other information that can be read on PCs.

Another area with considerable potential for the mu-

World Radio History

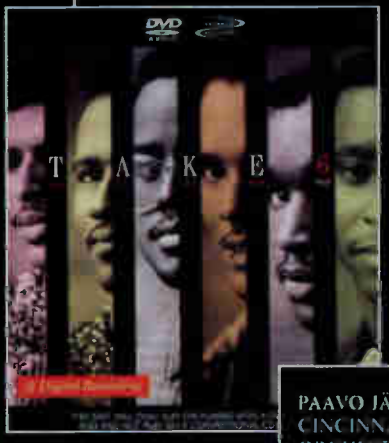
BY BLAIR JACKSON

CAN MULTICHANNEL AUDIO BRING THE MUSIC BUSINESS OUT OF ITS DOLDRUMS?

sic industry is high-resolution, multichannel audio. The audio industry has felt this excitement for a number of years. Who among us has not marveled at a surround demo at an AES show, or in one of the pioneering 5.1 control rooms, or salivated at the mere suggestion that we will someday be able to hear all of our favorite albums in crystal-clear, completely enveloping, multichannel sound? The industry loves it!

But does the public? Does the fact that people have become conditioned to being wowed by crisp, loud, multichannel audio at their local multiplex mean that they want to replicate that experience at home, and with music-only product? Does a generation that thinks MP3 and other compressed Internet-friendly audio schemes sound "fine" care about the wonders of 24-bit, 96k clarity or a floor-shaking subwoofer? Do people who have embraced CD and, more recently, DVD-V want to get involved with *another* format? And speaking of which, "Do I buy SACD or DVD-A, and will any of these things play in my DVD-V player, and I don't think I can fit a center-channel speaker on top of my digital cable box and...*aaaaugh*! Help me, Mister Wizard!"

Okay, calm down. Let's look at some of these issues and put them into focus. It really is going to be a cool revolution. And it *is* coming.



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Surround Salvation

FORMAT FRENZY

Why are we not surprised that the birth of surround audio discs as a popular format has been rather *difficult*, with competing formats, hardware compatibility issues and consumer confusion? After all, the Beta vs. VHS videotape war wasn't so long ago. Sony and Philips, developers of the compact disc, were lucky in the early '80s: They had no competition for a digital audio delivery system, and the CD quickly became a standard. (However, that didn't prevent both Sony and Philips from failing spectacularly with two other competing digital technologies: the MiniDisc, which does have its share of users today but did not live up to Sony's high expectations; and Philips' Digital Compact Cassette, which virtually *no one* bought.)

Today, there are two major formats vying for your surround audio dollars: DVD-A, which has been supported by Toshiba, Panasonic and several other manufacturers that were part of the DVD Forum; and Sony/Philips' SACD. Until fairly recently, the two systems were wholly incompatible: You needed a different player for each format. Within the DVD-A group, there are also competing encoding schemes offered by Dolby (AC3 and MLP—Meridian Lossless Packing) and DTS Entertainment (Coherent Acoustics digital audio compression algorithm), though most multichannel re-

Mastering Both Ways

Stephen Marcussen

When we spoke to Stephen Marcussen, whose Marcussen Mastering Studios in Los Angeles has done pioneering work in both the SACD and DVD-A formats, he noted, "Being a studio owner, I can tell you that equipping a multichannel room is an expensive proposition, especially the way I've done it. We have a custom console that's completely handmade. Right now, there's only so much surround work to go around, and if I were building a studio today, I don't know if I'd build a surround room. Two years ago, I almost regretted it. But clearly, surround will grow and people will grow into it. I hope so," he adds with a laugh.

Does Marcussen have a preference between DVD-A and SACD? And is one easier or less expensive to work with? "My take is that they both sound great," he says. "If they're handled poorly, either one of them can sound bad. I don't think there's anything wrong with the formats. I think that Dolby and DTS sound good, too. I think 96k is really solid. I enjoy it. And I particularly enjoy it when we're not being hyper-competitive and smacking everything up into the last dB. When you're able to be realistic about utilizing the format, it can be really impressive; some of it is absolutely stunning."

As for the cost of mastering a typical surround project, Marcussen says that 5.1 usually adds about a full day of work on top of the 2-channel master. "It is an expensive world to work in, but everything the client can do to get the bookkeeping in line in advance really cuts the cost. You don't want to pay me to sit around and determine whether the master take is A, B or C."

Working in the two formats is different, "because DVD-A is PCM, we get to use more tools," he adds. "The technology is more accessible. You can plug in your favorite digital box on it; whereas in an SACD world, there are no external digital boxes that are equalizers or limiters or compressors or any of those tools. Working in SACD, you have to really be on top of your game."

—Blair Jackson

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ceivers are equipped to handle both. Consumers have been justifiably confused by the plethora of hardware choices facing them in the brave new world of surround audio, and disappointed by the relative paucity of software offerings for either DVD-A or SACD.

When we asked Jim Kessler, senior buyer for DVD at Best Buy, the nation's largest home electronics chain, how hardware sales for the two formats were doing, he replied frankly, "Not very well. I think the biggest issues are, number one, the content and what's available. I think between the two formats, there are still fewer than 1,000 titles, which is not a lot of discs. And then, number two, is what do you play them on? We've taken the stance that having two formats like this is not customer-centric, so what we've really been pushing manufacturers to do over the past two years is create a DVD player that will play both formats, and that's finally happening. Pioneer will have a piece mid-year that will play both DVD-Audio and SACD and will retail at only $179. We expect that to do pretty well, much better than the model they have now that's like a $500 or $600 piece.

> The majority of customers just don't listen to music that way anymore: sitting down and really listening carefully and picking apart all the different nuances that go into the music.
> —*Jim Kessler, Best Buy*

"Even with the price coming down so low," he continues, "I believe the target audience is still relatively small for either DVD-Audio or, especially, SACD. The majority of customers just don't listen to music that way anymore: sitting down and really listening carefully and picking apart all the different nuances that go into

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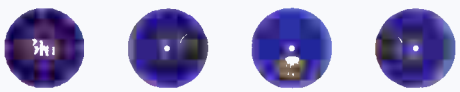

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albums, it must be noted that these discs did not include surround mixes of those albums and that, as is usually the case now, the SACDs included a conventional CD layer, allowing the discs to be played on a conventional CD player. At this point, no one knows what percentage of the people purchasing the discs are listening to the high-resolution versions of those early Stones gems and how many are just popping them into their cars and portable players and listening to the CD layer. Then there's the example of audiophile classical, jazz and blues label Telarc, which has been routinely putting out hybrid CD/SACD surround discs for some time now and racking up impressive sales. There are no numbers to tell us who's listening to which format; just that sales are brisk and there's definitely a buzz about the SACD layer. In both cases, the hybrid discs have unquestionably given a boost to the surround industry: The more hybrid discs a person owns, the more likely he/she is to eventually spring for a system that will reveal the full glory of the high-resolution layer.

The Warner Music Group is the largest of the U.S.-based majors to adopt DVD-A, and though they have been slow to release titles, they are definitely bullish on the technology. "We feel that DVD-Audio is the more natural choice of the two formats for the following reasons," comments Paul Vidich, executive VP, strategic planning and business development for WMG. "Number one, the extra content included only on DVD-A discs: videos, interviews, photos, etc.; content that has proven very popular on DVD-Video discs. SACD does not support graphical or video capability. Second, SACD does not have renewable copy protection, which is clearly an important aspect in today's climate. And third, unlike DVD-A, which plays on all DVD players, SACD generally requires the consumer to purchase new hardware."

To clarify the last point: WMG's DVD-A discs contain a Dolby Digital 5.1 mix that can be played on a standard DVD-V player. However, the high-resolution surround mix cannot be played on current DVD-V units. As Vidich notes, "We recognized that some consumers might not necessarily appreciate the difference between the Dolby Digital 5.1 mix and the higher-resolution mix, but our research showed that the vast majority of consumers could appreciate the difference between a stereo mix and a 5.1 mix. We've found that music fans simply

Paul Vidich, executive VP, strategic planning and business development, Warner Music Group: "We've found that music fans simply love the surround mix."

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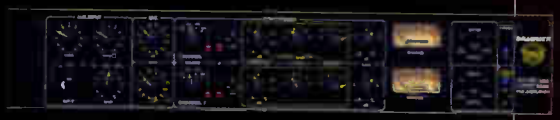

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Surround Salvation

love the surround mix, and DVD-A offers consumers the flexibility of enjoying the surround mix without having to upgrade their equipment."

Still, no matter how wonderful a great surround mix sounds, there is always going to be a sizable segment of the population that is simply not going to purchase the requisite receiver and speakers; in many cases, there are insurmountable space considerations: Some people just have no desire to move "beyond" stereo music listening. But this is an industry still in its nascent stages, and there are changes afoot on many levels, not all of them related purely to music.

GOING MOBILE

"Surround audio is very important for the future of the industry," stresses Craig Eggers, director, consumer electronics technology marketing for Dolby. "From the Dolby perspective, we've seen surround sound migrate from the cinema to the home theater, and it now has also migrated to the PC platform; it's become extremely important in the gaming community. About 70 percent of the top games out there are encoded with Dolby surround sound, and there are more and more people who are using that as their entry to surround audio. And then the car is the next stop."

Nearly everyone seems to agree that the future of surround audio lies not in the sale of home systems, but in cars.

"My first thought after I heard DVD-Audio was, 'God, I've *got* to get this in the car!'" Eggers says with a chuckle. "We believe that the car is a natural environment for Dolby technologies. And quite frankly, when you look at the demographic that's really into souping up their cars, multichannel surround sound—particularly DVD-Audio—really offers that crowd a chance to get away from the *boom-boom-boom* and to get into something that's an extremely compelling experience. And that's just the leading edge of the movement. Once the systems start going in cars and people hear it, it's going to change the way they listen to music."

Adds DTS' DelGrosso: "I did this presentation six years ago, when I produced some of the first music remixed in [surround] with Boyz II Men and Marvin Gaye, and we had to jury-rig a car, but the equipment is readily available

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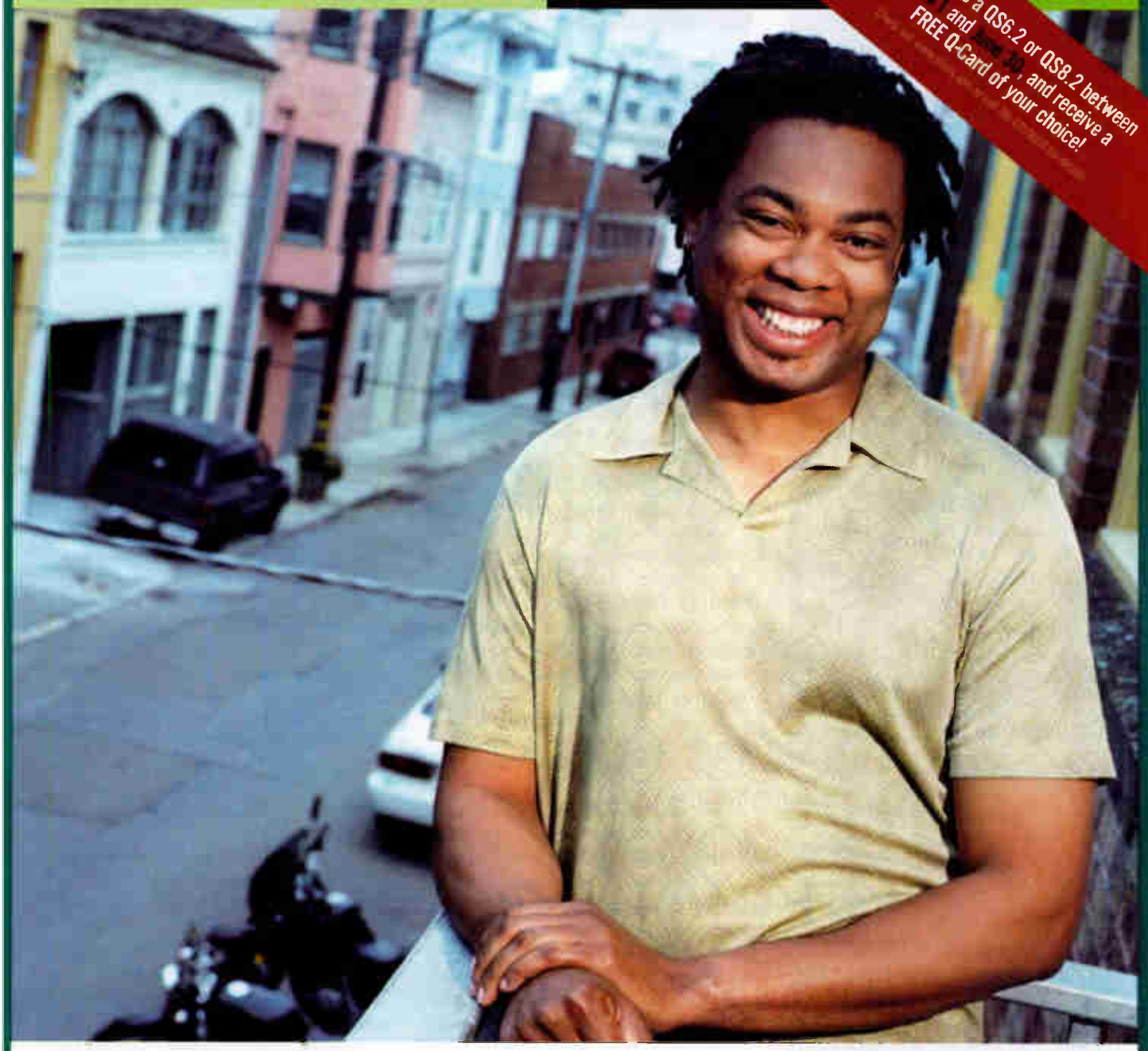

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Surround Salvation

now. There's Kenwood, Clarion, Eclipse, Pioneer, Panasonic; there are a lot of great car audio companies that have 5.1 decoding. It doesn't take a lot of research to know that in a lot of cars on the road right now, there are speakers in the front, speakers in the back and subwoofers. Now, all we have to do is add the center—or not, because there's still phantom center capability—and maybe beef up the sub and rewire it all so you can put discrete sound in each channel. Then you've got a system that blows away your previous system. They're already here. In a couple of years, they will be *common*."

AND THE WINNER IS...

It is possible—likely, even—that the widespread proliferation of surround systems in cars, coupled with the computer gaming industry's continuing embrace of the technology, will lead to more work for people throughout the audio industry, as well as increased profits for the record labels and game manufacturers willing to put *in* some money to put *out* the software that will help drive the boom.

Over the past few years, a number of top recording studios and mastering facilities have invested considerable sums in surround mixing environments. Some are, no doubt, wondering when the big return is going to come, as the spread of surround has been slower than originally predicted by its most ardent adherents. But eventually, when new cars are routinely equipped with surround audio systems, the record companies will suddenly have dollar signs dancing in their eyes again, and surround mixes will become nearly automatic on every new project, which will bring more money into the studios and put more cash into the hands of manufacturers who outfit the surround mixing and mastering rooms. And, naturally, you'll have the opportunity to buy all of your catalog favorites one more time—more money for the studios, engineers and labels.

The surround revolution is not going to solve all of the music industry's woes overnight. As Sony's Kawakami notes, "The market is very segmented and complex [right now]. Different products appeal to different consumer groups. The music-downloading consumer is a very different consumer from the music collector that you'll find flipping through the racks at Tower Records. And for now, the size of the market for music moved through brick-and-mortar as packaged media dwarfs any of the electronic music-distribution models."

Warner Music Group's Vidich says, "While WMG is strongly committed to helping create a legitimate market for music on the Internet, and has made a catalog of tens of thousands of tracks commercially available for a variety of online services, we feel that optical disc-based formats offer the highest-quality music enjoyment that simply cannot be made available over the Internet due to the extremely large amounts of data that are required. There continue to be hundreds of millions of satisfied buyers of optical media—CD and DVD—around the world, and we expect these physical music carriers to be an important part of the industry for years to come."

Even so, it's important that the brick-and-mortar model continually has something new and exciting to offer—like surround. It helps, too, that DVD-A and SACD are very difficult to pirate thanks to their technical complexity and the various value-added extras that are turning up more and more on the DVD-A discs in an effort to make them a better value than regular CDs and more in line with the wildly successful DVD-V format.

"Right now," comments Dolby's Eggers, "the CD represents a handshake between the consumer and the record company, and it's a one-time handshake. But it can be so much more. With DVD-A, you've got a video feature, so you can have interviews with the band on there, or lyrics, sheet music, more album art. Why *not* put Websites on the disc itself? Why not put the artist's fan club on there? We can put the record company's Website on there. Take it one step further. I don't think record companies have a problem with me making copies of content if it's for my own personal use. If that's truly the case, why not put an MP3 of that content on the disc itself so the consumer doesn't have to rip it? It's there for them to be able to take it and move in to their portable players, etc. In other words, DVD-A can be about a lot more than just a superior-sounding audio product. And it becomes more than just me giving the record companies and the artists some money and them giving me a shiny, silver disc. It makes the whole experience of purchasing and listening to music much more interactive, and that will be good for everyone." ■

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SONIC PERFORMANCE: The theoretical sonic advantages of digital consoles are well known but not always realized. John Cardinale of the world-renowned Carnegie Hall says, "What impressed us the most is that it's extremely stable, and sounds very quiet and clean, almost like a digital recording console. And, it translates the audio passing through without colorization." Top tours, concert halls, houses of worship and broadcast facilities all over the world (lots of golden ears) trust their art to PM1D every day.

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Master section includes encoders, 100mm motorized faders and LCD displays for MIX and MATRIX Outputs and DCA Groups as well as switches for fader "flip" functions and MIX and MATRIX layers.

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Paying to Play

Has it really been three years since Napster appeared on computer screens worldwide? That can seem like an instant or a lifetime, depending on your view of "Internet time." Since then, illegal file-sharing music sites have spread through the Net like wildfire, igniting the most significant copyright debate our industry has seen in decades. There have been lawsuits and countersuits, injunctions and offshore servers, hacks and breakthroughs.

And all the while, consumers continued to swap their MP3s online, in effect determining how music was delivered through this medium. The media focused on illegal file sharing but largely ignored the other problem: There were no legitimate choices for those who wanted to download their favorite songs over the Web.

Reacting to widespread consumer demand for downloadable music, major-label-backed services such as pressplay and MusicNet launched last year—albeit without much fanfare. Initially, they offered little to attract customers: limited marketing push, limited content, limited flexibility and limited access—a limited business plan. According to a recent study, less than 1% of the general U.S. population had even heard of these sites, let alone visited them. It was a rocky start.

But today, the label and other subscription services offer a wide range of content to compete with the file-sharing sites. Though this business model is still in its infancy, the services are ready for the mass market. A good majority of major-label content has been licensed; there are more options for what users can do with the music that they buy, whether they want unlimited streaming or a la carte downloads; and pricing plans are in place. All systems go.

$9.95: AN ALBUM OR A MONTH?

In the physical world, music fans walk into a record store and know exactly what they're purchasing; whether on vinyl, cassette, CD or DVD, an album is an object—a collection of songs on a physical medium—that's theirs to keep. The same idea holds true in the online CD retail marketplace: A user can surf on over to Tower.com, Amazon.com, BestBuy.com, find the CDs that they want and proceed to the online checkout stand. But in the "invisible" universe of streaming and downloading, the concept of music as a physical product is undergoing a radical change.

"Consumers already understand how to download music on the Internet," explains Emusic.com's general manager Steve Grady. "What we have to do is give them a very

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BY SARAH JONES AND SARAH BENZULY

WHAT IS MUSIC WORTH ONLINE?

good reason to pay for that as a service. If you think that's about selling units, then you're on the wrong track. It's not about how much you're making per unit, it's about how much you're making."

Music services are trying to get consumers used to the idea that $9.95—or any comparable monthly sum—can buy them a chunk of time, not a physical product. Most sites today offer unlimited streaming and/or "tethered" downloads (those that can only be played on the computer to which they were downloaded) or a la carte "portable" downloads, which, for about a dollar a song, consumers are free to copy to their portable devices and burn to CD. It's still too early to determine which combination of these services will work best, because no single model will work for all music fans: Some will appreciate the "discovery" aspect of unlimited downloading, while others will demand portable downloads so that they can take their music on a morning jog or weekday commute.

Even as this new music-by-the-month notion sinks in, a generation of Web-bred consumers is emerging with their own sense of what is valuable. "The generation that's there now is still relatively accustomed to buying CDs in a physical format," says Grady. "Those kids who are 10,

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Paying to Play

11 and 12 years old are growing up in a completely different world. It's not that they're not willing to pay for something, but they don't associate the same kind of value with something that they're downloading over the Internet as they do a CD that's bought in the store. That's just reality; let's accept it and build something around that.

"What you have to do is get people to pay for some service around the music that makes it easier for them to pay for it than it is to steal it," Grady continues. "That's the battle: adding value to the music, adding value to the whole experience of finding the music that they want. That's what people are ultimately going to pay for."

FORGING A NEW BUSINESS

Subscription options average about $9.95 a month, a marketing decision based on the idea that a month of access will cost less than the price of a single CD. For example, Emusic began with two levels of service: $14.99 per month for a three-month subscription, or $9.99 per month for users willing to make a 12-month commitment. "We have a mixture of light, medium and heavy downloaders, and that mix has to ultimately be profitable," says Grady. "There are things that we can do that a peer-to-peer network could never do, such as guarantee the quality of a download. When you download a track from us, you're downloading it from our servers; you know what it's going to be, you know what the encoding rate is, you know that all of the tracks were encoded with a quality encoder.

"Just giving you the keys to a big warehouse full of music is not good enough," Grady continues. "And that's what the peer-to-peer networks do. If you know exactly what you're looking for, you don't really have a problem. A lot of what we're offering is a discovery service: a way for people to find new music that matches their interests at a low cost."

Some services position themselves as offering everything for everybody, from the casual shopper who might buy a handful of CDs a year to a new-music junkie who is scouting out the latest unknowns and obscure acts. pressplay currently boasts 250,000 songs from the Big Five and 100 indies. "It's for the power user to the novice," says Seth Oster, pressplay's VP of corporate communications and public affairs. "All of the music's in there, it's extremely easy to use, it's extremely easy to find, it's extremely easy to stream, download and burn." Added values include six decades' worth of *Billboard* chart data and prereleases of exclusive tracks. "Right now, we're offering four songs exclusively from Celine Dion's new album," says Oster. "You cannot get them in stores right now, you cannot hear them on the radio, you can only go to pressplay." Other features include permanent downloads for less than $1 and unlimited streaming for $9.95 a month.

As sites have developed during the past year, it has become obvious that the quantity of content is of prime importance. Why would consumers visit six different sites to get six different tracks when they could conveniently go to one site and get everything that they wanted? Possessing licensing deals with the major labels and indies has become an important selling point to attract consumers away from the free file-trading sites.

Listen.com's Rhapsody was the first online subscription service to host titles from the Big Five. It offers a variety of subscription options (including a seven-day free trial), with added features such as CD burning and Internet radio access. And to make the experience more user-friendly for paying consumers, sites are partnering up with other companies, i.e., hosting various players. RealNetworks recently invested in Rhapsody, offering its technology to bring the subscription beyond a user's PC. This strategy follows a year-long activity for Listen.com: partnering with consumer electronics companies to bring Rhapsody into consumer's homes, such as connecting a PC to a user's home-theater system. The key is convenience: Consumers want the ability to find music easily, go mobile with their music easily and pay easily.

MusicNet is unique among the services in that it is based on a business-to-business model, providing custom content and programming for its distributors via a software developer's kit; meaning, a site may "feature MusicNet," but MusicNet.com is not a destination for music shoppers. "We're responsible for acquiring content from the labels—the five majors—as well as key independents," explains MusicNet's general manager/executive VP Ellie Hirschhorn, "protecting it in DRM [digital rights management]; programming our service, not only making tracks available but also providing editorial; reporting back on the usage to our label partners, as well as our distribution partners—all this non-consumer-interface enablement of the business."

In what may be the biggest mass-market test of music services so far, MusicNet recently partnered with America Online. AOL's 27 million members are now offered "MusicNet on AOL" as a tier of service integrated into their AOL accounts. "That takes a deep level of cus-

Digital Music Subscribers by service level (% of total revenue)	2002	2003*	2004*	2005*	2006*
CD-quality streaming, non-interactive/interactive	90%	82%	77%	73%	69%
Access plus tethered downloads/permanent downloads plus CD burns	10%	14%	17%	21%	25%
Pay-per-track downloads	0%	4%	5%	6%	6%

* = projected

Sources: GartnerG2, March 2003

U.S. Digital Music Services Revenue; average household dollars spent	2002	2003*	2004*	2005*	2006*
Web users from home via PC (%)	49.8	52.6	55.3	57.1%	58.3%
Number of subscribers (millions)	0.499	0.994	1.9	3.5	5.8
Annual revenue: digital music subscriptions	$29.9 million	$92.5 million	$197 million	$374.5 million	$661.1 million
Average annual spending per online PC household subscriber	$59.92	$93.06	$102.63	$107.54	$113.41

* = projected

Sources: GartnerG2, March 2003

As online music download services offer increased flexibility, revenue is projected to increase. By 2006, projected revenue is $661.1 million.

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tomization, which our software developer kit approach allows us to take," says Hirschhorn. "We also are integrating into the trusted and familiar AOL customer service and billing." This way, MusicNet is built right into a monthly ISP statement, making payment for the service a relatively transparent (read: easy) experience.

MusicNet also works with individual labels to provide custom artist promotions for its partners. "Much of the content released by labels is proprietary but nonexclusive," says Hirschhorn. "So they give first looks, first listens, content that comes out before radio, or tracks that didn't make it onto an album. It's not always exclusive, but how we promote it may be very different than how other people do it. So, if AOL Music, for example, is doing an 'Artist of the Month' with Faith Hill, we may be able to extend the 'Artist of the Month' to an additional window of time [i.e., extending the promotion for an additional month] or we may be able to get related content that isn't available to other distribution partners."

While many Internet companies are drawing from record-label marketing and promotions expertise to design a profitable and legal digital downloading business, one company has strayed from this line of thought. Last January, Echo was formed through a consortium of mass-market music retailers (including Best Buy, Hasting Entertainment, Tower Records, Trans World Entertainment, Virgin Entertainment and Wherehouse Music) and Echo Networks, a defunct site where users once streamed music files with other users. Unlike most other services (yet similar to the MusicNet model), there is no Echo.com: The individual retailers' Websites will each host their own download service.

According to the founder of Echo Networks and current CEO of Echo, Dan Hart, the agreement allows the retailers to set their own prices, while Echo's mission is to license the best possible wholesale prices from the labels. Hart approached retailers because their marketing capabilities and long-standing relationships with consumers and labels would provide a solid base to enter the market. "The concept is really simple: to try to finally make a legal digital music market work for the mass consumer. For these companies, 10,000 subscribers and 100,000 downloads is not interesting. What *is* interesting is tens of millions of subscribers and billions of downloads: truly a mass-market phenomenon."

According to Hart, retailers make approximately 800 million paid CD transactions a year. That translates into 800 million opportunities for a cashier to tell someone about the digital music service and put a starter kit into a checkout bag. "If you've got a million subscribers, hypothetically paying in the $5 to $15-a-month range, you've got anywhere between a $60 million and $180 million annual business," Hart says.

While Hart sees the dollar signs, he cautions that there are still hurdles to overcome, mainly with content. "Even in the case when you license from all of the labels, you have individual song publishers who haven't cleared their songs. There are still ways in which [the major labels] can go further to embrace the consumer to a greater degree. Maybe the timeline is going to happen faster than they would ideally like, but I think they see it coming. It's a choice of do nothing online and let free file swapping destroy your business, or embrace online and save your business. It's an obvious choice."

GETTING THE WORD OUT

In the online world of music services, the subscriber is king. While there are plenty of opportunities to pull in secondary sources of revenue—from paid song placement and ad sponsorships to audio-hosting services—most services are banking on subscriptions to pull in the real money. To do that, they need to reach a larger public. Some services say that the best indicator that people are willing to pay for music is the high number of upgrades from free trial to paid service. pressplay, for example, cites a 60% conversion rate. "We've been fortunate that the press coverage of this space has been extremely high, and then word-of-mouth adds some value," says Oster. "We will be doing marketing this year, not only online but offline, and that includes various forms of media in different parts of the country. It's a revolution of sorts taking place, where the music industry is recognizing that they have to find new ways of marketing themselves and selling their product."

Listen.com partnered with Lycos Music to offer a "Free Access Week" in February 2003, allowing consumers to test-drive the service. Customers received a 50% dis-

—CONTINUED ON PAGE 156

MP3.COM: The Musician's Network

As more and more sites join the party, MP3.com continues to do what it has done during the past five years: provide a place for independent artists to set up shop and promote their music. That is where MP3.com differs from the other services: Its business model is built around the artists—10,000 of them active subscribers—with a variety of services to help musicians get their music out without the costs and hassles in dealing with a major label.

"By the nature of our domain name—our Web address—and all of the content features that we have, we get a lot of traffic, about 20 million visitors a month," says MP3.com's VP of marketing Mike Matey, who recognizes that value to potential advertisers. "We can target females or teenagers or males over 35 years old; if you want to slice-and-dice the database, we can do that. And there's the e-commerce services, such as selling CDs and artist subscription programs. Our sister site is Emusic [both sites are owned by media conglomerate Vivendi Universal], so we send a lot of customers over there to become subscribers."

MP3.com has always operated under the philosophy that it is important to have multiple revenue streams by "not tying your cart to one business model," says Matey. "We've always sold advertising on our site, we've always had e-commerce. We've focused a little more on the e-commerce side because the ad market's been tough lately. But for the most part, that is still a healthy part of our business.

"We know what our active artist base is, we know how many have already subscribed, we know what brings people into the program," he continues. "We just continue to target the top tier of prospects through our e-mail newsletters, through advertising and through the artist admin area. There's a couple hundred thousand that we're marketing to—to convince them that they need to upgrade. And that is a focus of our marketing efforts, obviously, to increase that subscription base. But we still care about free artists because they provide a lot of value to our Website. They put content up, they tell their friends to check it out, they increase our audience size."

The site is also building its subscription base by hosting CD-listening parties and recently launched an Internet radio service and an instant-messaging service.

—Sarah Jones and Sarah Benzuly

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radiation pattern that doesn't require corrective equalization (which adds tonal coloration and robs an amplifier of headroom). The driver creates an expanded stereo soundstage that's just plain e*normous*, and it delivers incredibly precise imaging, with even subtle panning movements easily discernable. The sweet spot? Big enough for the whole band *and* the producer.

DIO MONITORING

EVENT ELECTRONICS

World Radio History

Working Smart

BY MAUREEN DRONEY

PRODUCER DON GEHMAN AND ENGINEER MARK DEARNLEY

Anybody who's spent time in a studio lately has observed what happens when inexperienced producers collide with the endless choices offered by digital recording. Adrift in a sea of tracks and derailed by system crashes and mismanaged hard drives, sessions founder. Meanwhile, bored musicians wait, losing the edge that sparks a great track. On producer Don Gehman's projects, you'll find a different scenario. Applying a disciplined approach, he lays groundwork that frees him up to achieve what he's really after: spontaneity and passionate performances.

Gehman has had plenty of career success; he has produced numerous hit records, including multi-Platinum outings by John Mellencamp and Hootie & The Blowfish. A few years ago, with an eye to the changing business—and a better quality of life—he chose to reinvent his recording style. To that end, working with engineer Mark Dearnley (AC/DC, Paul McCartney, Carl Perkins), he's put together a streamlined record-making process that combines classic techniques with digital speed.

"It was a conscious decision," he explains, speaking from Sound Design Studios in Santa Barbara, Calif., where he is finishing up sessions with Blues Traveler. "It actually came about from having my second child. If I were going to keep making records, and also really be a dad, I had to figure out how to have more flexible hours. Instead of working 12 hours straight every day, I wanted the ability to put something up, work on it for three hours and put it away having accomplished something."

Gehman met Dearnley, a computer expert and early Pro Tools convert, in 1999, and was impressed with his skill. The two set about designing a system that would enable total recall for an entire project. The end result led to more than Gehman anticipated; he now finds himself making records more efficiently, more economically and, he says, more creatively.

To capture a performance's special energy while a song is fresh, Gehman prefers to arrange songs in the studio rather than during pre-production—something many producers, fearing chaos, avoid. Gehman often fills a studio with vast amounts of instruments and equipment during a session, all of it miked and ready. The setup is precise and time-consuming, but then, "Engineering problems are sorted, we've got everything we need and can shift into creative mode.

"It's good to rehearse a little so you get comfortable," he comments, "but the magic happens early on; sometimes, before you even realize it's happening. It's when you have to come back and get on track again that kills a lot of time. When we're putting together the arrangement and honing a groove, it's all happening fast. If you're recording all of that, you wind up doing a few takes that have everything you need.

"The cut-and-paste part of today's technology makes it easy to composite any take into the final production and still have a live performance," he continues. "We can get one, or sometimes more, full songs done in a day: a core track, vocals, backgrounds, some overdubs and a rough mix. Every band we've worked with in the past year has been really excited by the process."

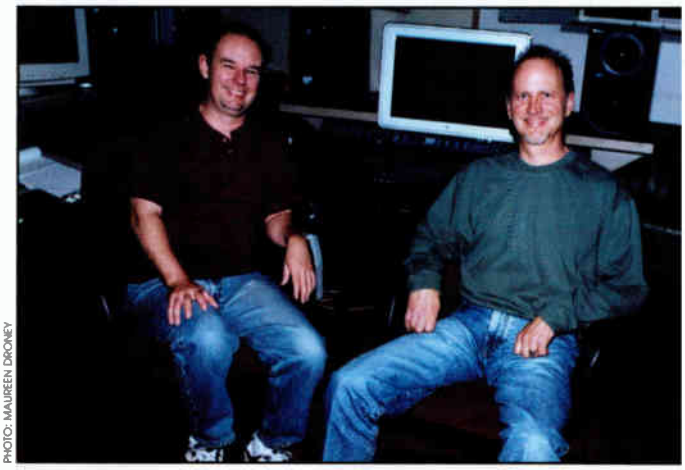

PHOTO: MAUREEN DRONEY

Engineer Mark Dearnley (left) and producer Don Gehman

Blues Traveler guitarist Chan Kinchla agrees. "As a musician, it's a much more intuitive way to build songs," he says. "When you're in the creative moment, speed is good. You can only stay focused for so long. Working this way, there's no time to sit around on the couch and sputter out."

Of course, cut-and-paste production is routine these days. What sets Gehman's sessions apart is not only the amount of live material recorded, but the ability to access it quickly. That's Dearnley's domain. He admits that it requires a lot of processing power, special attention to file management, rigorous backup habits and a penchant for fast decision-making.

At the Blues Traveler mixdown, Dearnley was beta-testing DMOD software to upload high-quality, encrypted mixes to the Internet. "You can assign permission for a one-day time frame," he notes. "Bandmembers get a full, uncompressed version to download and burn. If they want to send a portion to someone else, I can give it 'play-only' permission so it can't be burnt. The band can hear good-quality mixes and give us feedback without being here."

"Mark and I have both been through the process of working with bands on albums that took over a year," concludes Gehman. "We learned all of the things that you should never do. We know that our job is to cut to the quick with the songs. Now, with the systems we're using, we can make a project for half of the cost that we used to and get the same quality—maybe even better!" ■

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World Radio History

BY OLIVER MASCIAROTTE

Can You Spare a % of a Dime?

Building an Online Micropayment Scheme

ILLUSTRATION: MAE LAROBIS

What ho, semi-loyal readers? This month, we're looking at the pebble in the shoe of online music commerce: micropayments. I'm sure you've all had the urge to actually purchase a song online. Trouble is, how the heck do you pay for it when all you want is one measly song?

Actually, paying for stuff online is easy, and a credit card works fine most of the time. But small-value items require a new way of payment when you can't—or won't—fork over some coinage, which was *so* last century. That's where micropayments come in.

Though the definition is fluid, I think of micropayments as being an ephemeral payment method, where no physical cash changes hands and where goods or services cost a dollar or less: downloading a song from a second-tier band for $0.85 or paying $0.07 to read an online 'zine article. Okay, fair enough, but how does one take advantage of such micropayments? Well, there are two methods: the wallet (a prepaid debit account) or the trusted intermediary, a bonded broker.

The wallet approach is simply an escrow account with electronic assess, authentication and low transaction fees. You deposit real dollars into the account, usually via credit card, and a vendor withdraws funds from that account. Examples are PayPal, Mondex and WorldPay.

The other approach to microtransactions, the trusted intermediary, is also straightforward. Bonded brokers are everywhere in commerce and a few micropayment schemes are basically intermediaries that are brokering your microtransaction. A good example of this is Peppercoin, founded to commercialize payment protocols. It's a well-thought-out method; although, at the time of writing, Peppercoin's founders had not yet deployed their system.

I believe that micropayments have floundered for several reasons. First, the point-of-sale infrastructure is spotty. Obviously, there are plenty of financial infrastructure vendors out there that would love to sell you their "solution," but computing infrastructure is only half of the problem. One cannot be in front of a personal computer all of the time, and most solutions are PC-based. What about parking meters, newspapers, candy and other low-value goods and services outside the home that would benefit from a ubiquitous micropayment scheme? A possible solution is the smart card, like American Express' Blue product. Amol Deshmukh, field marketing manager for SchlumbergerSema's Smart Card and Terminals division, told me that, "Smart cards provide convenience and security for the consumer, while offering low-cost transaction authorization along with platform and application versatility for the seller." Schlumberger developed the world's first memory card prototype and issued the world's first microprocessor-based smart card way back in 1981, so when Deshmukh mentions "platform," he means a complete micropowered computer. Smart card technology is available in a variety of embedded forms besides the well-known credit card format, includ-

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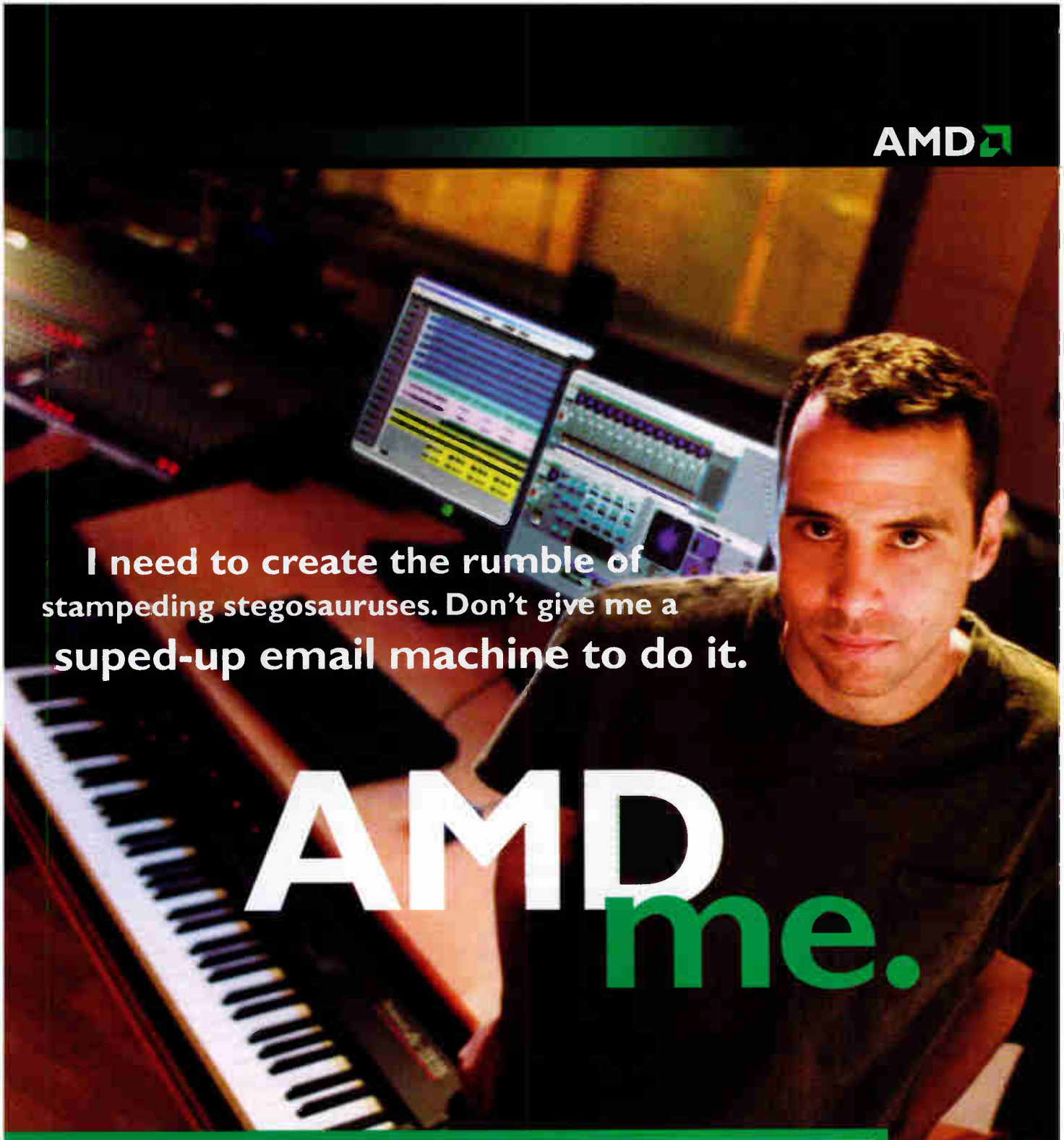
AMD



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These days, if you're a frequent abuser of microgoods, you're more likely to use a subscription payment model. Subscriptions are easy and convenient for buyers. For merchants, subscriptions are highly desirable because they guarantee a reoccurring revenue stream and allow them to forecast profit and demand. When a business can plan ahead, it can control costs. If, however, you can't see what's down the road, you tend to either fall into a pothole of unanticipated demand and piss off your customers because of poor service, or you overbuild and die from debt burden. This brings us to the second problem with the current state of most micropayments: The profit model is questionable.

Though the majority of micropayment providers have either folded or been absorbed by slightly more profitable companies and then gassed into a comatose state, there are still dozens out there that'll gladly take your money in exchange for a, "...scalable, secure, real-time, carrier-grade network solution that enables service and content providers to monetize digital content resources and profitably define, deliver and bill for content-based services along the complete Internet content distribution value chain." *Say what?* That little pile of verbiage is courtesy of Enition and is typical of the continuing mindset in the Web business community, where all customers are magically "partners," and building massive organizations without the promise of reasonable revenues is still taken as a sensible thing (prospect?).

Granted, it can be expensive to gather the resources needed to build a viable Web-based company, but it doesn't have to be. Just look at Google. The real problem is that, when your overhead costs are larger than your profit, you can't stay in business and most current transaction fees are higher than the profit from any single microtransaction.

Another problem on the profit side is fraud. When the business model is based on a razor-thin profit, then how much cheating can you tolerate? Leon Schenkler, founder of micropayment company Internet Dollar, was asked in an interview with planetgold.com about problems with fraud. "Sure, we encounter a lot of fraud with credit cards, which caused us to stop accepting credit cards. Out of 100 deals, about 93 were fraudulent. We also encounter PayPal fraudulent activities and the usage of I$ (Internet Dollars, his service) to withdraw funds from hacked PayPal accounts." Schenkler goes on to mention that high surcharges and banking fees eat up profit and banking overhead and cannot be controlled unless there's sufficient consumer buy-in to scale up the number of transactions. Schenkler says, "There is the chicken-and-egg paradox. No users of I$, no sites. No sites, no users," which brings us to the third problem faced by micropayments: too many choices.

If, as a consumer, you had well over a dozen different wallets, each containing a small amount of a single, foreign currency that was only convertible at that country's local bank, you'd grudgingly put them all in a drawer to gather dust. The same goes for e-wallets: In the world of micropayments, choice can be a bad thing.

Russ Jones, business manager of HP's defunct MilliCent micropayment technology, agrees with the need for a standard markup language for a micropayment link. In a 1999 *Wired* interview, he said that, "Without any existing standard, each micropayment supplier has had to invent a new way to indicate the price of a URL...Standardized pricing markup will do for Internet content what the Universal Bar Code standard did for retail merchants." Though it seems like most of the momentum for microtransactions dissipated during 1999, the Worldwide Web Consortium (W3C) finished its "Working Draft for the Ecommerce/Micropayment Activity" that year. In the ensuing months, lots of folks have been working on XML syntax and other necessary pieces of the infrastructure puzzle.

Consumers want value for their guilders, retention of established fair-use practices and, most importantly, they want convenience. Until there are two or, worst case, three competing micropayment systems worldwide, the concept will languish in obscurity. If payments are simple, priced right and perceived as secure, maybe there'd be more moola flowing into artist's pockets, along with less whining from the media conglomerates. Or, then again, maybe not.

MIX ONLINE EXTRAS

OMas provides finely wrought, opalescent jars of heady clue musk to savvy vendors and end-users alike. This month's rant was composed while under the influence of Zuco 108's chill, tropical Tales of High Fever *and the classic sounds of Charlie Parker, Bud Powell, Dizzy Gillespie, Charlie Mingus and Max Roach's* Jazz at Massey Hall.

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SRS6.5A Rear

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and fun way to access music that it just blows my mind that the music industry is still trying to resist, fight and control it rather than embrace, enhance and learn to derive revenue from it. They'd rather kill it first to prove that they have control and then turn around and figure out a way to dole it out to people. It's a bankrupt philosophy.

Regarding peer-to-peer networking, do you feel that the cat's been let out of the bag: that no one will want to pay for downloaded content?

No, I don't believe that.

What if in the process of registering, by subscription or a la carte, the user became part of the distribution process, kind of like Amway meets the Discover Card?

Right, sure. Every time it changes hands, it triggers a micropayment.

Has this occurred to anyone?

Yes, it has, although not specifically the way you describe it. Digital-rights management, DRM, is a virtual architecture that allows each licensee to dictate whatever the rules might be. For example, the file can go out for free but expire in 30 days *or* can be passed one time, from one person to another, *or* the user can listen to the first 30 seconds and if it's the desired file, there's an option to make the micropayment.

There were a handful of DRM companies three or four years ago, the most established of which is Intertrust.com. It went public with a market cap of a billion dollars at its peak and was purchased by Sony and Philips in November 2002. It's an idea that the majors would desperately like to see happen. I don't know if the technology really works yet: if it's foolproof and un-hackable.

Why does everyone—consumers and artists—hate the record companies?

The Industry's at war. I think it's about control. You can make all of the financial arguments that the industry has been shooting itself in the foot, but it is an industry built on a foundation of ownership and exploitation of intellectual property rights. Allowing peer-to-peer networking and Silicon Valley companies to manage that part of their business requires them to give up control.

When I spoke to one record company executive, who wanted to stay off the record, about cash flow, she said that it wasn't a matter of the record companies losing money, but that they made less money. In the '90s, there was so much growth, "irrational exuberance" in Greenspan-speak. Do you think it's just economic reality that the record industry has to downward-adjust its growth expectations?

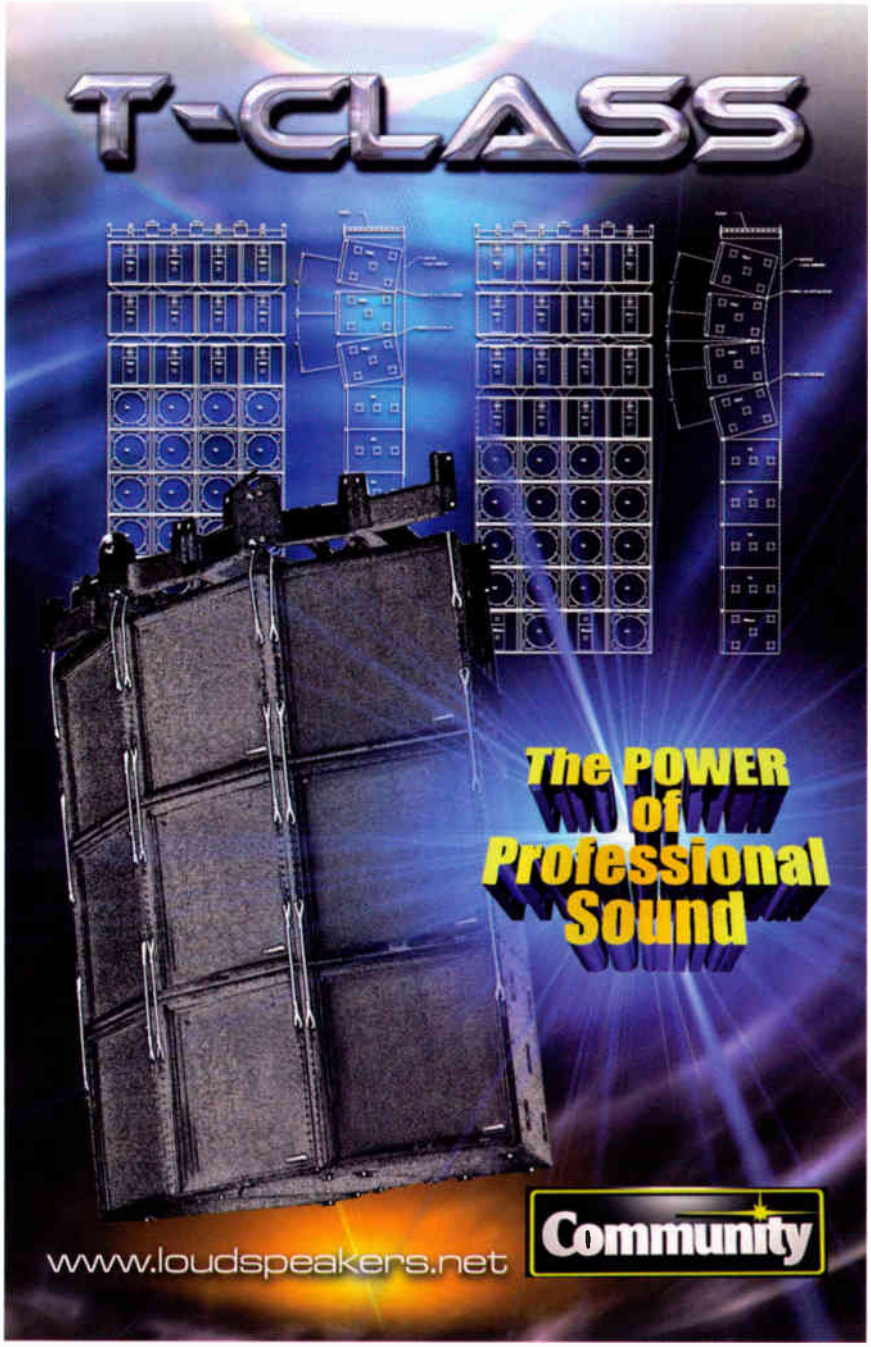
Well, the record companies lose money in some quarters and hope to make up for it in other quarters, like the holiday season.

Do you foresee the majors returning to the minimalist production, a la the current indie scene and 20-ish years ago with new wave?

I think that will be a component of the future: The industry will downsize, though I don't think it's a solution for the majors. I do think that the financial model and the distribution model are busted; it's not just the fact that they're spending too much, there are fewer people buying CDs. As you put it, consumers and artists dislike the major labels. It's a terrible business. Who wants to be at war with everybody?

Has anyone ever done research to determine how many independent and vanity CDs are pressed vs. the number of CDs the majors are putting out?

Well, I think it's less. I think the whole business is contracting, no doubt about it.



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So, what do you think will save the Music Industry?

Downloading is definitely on the rise, but not because it's free—that's probably third on the list—but because it's immediate and the selection is virtually unlimited.

Selection is definitely not what radio's about.

Right. People are still engaged; they still want music, but they want a choice. So I say, just give the people what they want. It's so simple. We need a legitimate Napster or KaZaA, with a subscription model like cable television. All you can eat for a low monthly fee, plus gold, platinum and titanium membership—whatever. Quick, easy, inexpensive and legit. Once the proper economic relationship is established, all of the bells and whistles can be added.

Do you think that the record companies would consider rewarding customers who are, in essence, assisting in the distribution of content?

I don't know if the record companies would consider that. Even DRM adds a layer of friction. For all these years, the industry sales model has been unit-based, like selling bottled water. Now, it's running water. Technology has changed the rules. Now, distribution is so much easier and consumer-friendly. With the exception of premium channels, you don't pay for itemized programming on cable television. I think music access should be like that: the virtual jukebox in the sky, whether from a server or peer-to-peer.

You're saying that the threshold for success is simplicity. For me, that would be the compilations I get from my friend Bob. If radio was less restricted, he'd be a very successful DJ.

They used to make A&R guys out of people like that and then they'd ruin them! Now, he can be Virtual Bob on the Internet.

What about the difference between the fees record companies and the RIAA want to collect from Internet radio vs. traditional radio?

It's true and justified, but first you need to understand why terrestrial radio pays music publishers but not the performance [recording]. The reason for the latter dates back to the second World War. Back then, there were two broadcasting systems—Columbia and RCA—and it boiled down to a performance fee exemption for one of the networks (I don't remember which) to get their music played. The exemption eventually became the norm. Radio stations in any other industrialized country in the world pay both publishing and performance [record company] fees, but they are small. The online fees are very, very small: something like seven-tenths of a penny. The problem is that the advertising revenue for online services is not the same.

Now that you've left the messy music business behind, what are you doing now?

I've always had a passion for classic cars, so I started a locating, brokering, import and export business. Just me, a laptop and a cell phone. I'm having a lot of fun doing that, as well as listening to music, making compilations, downloading music —even of CDs that I own—because it's faster than gathering them up and ripping; certainly easier than transferring vinyl. And, I've got a 14-year-old son who is a downloading maniac, and I closely watch his habits. ■

"Tech's Files" will be technical again next month.

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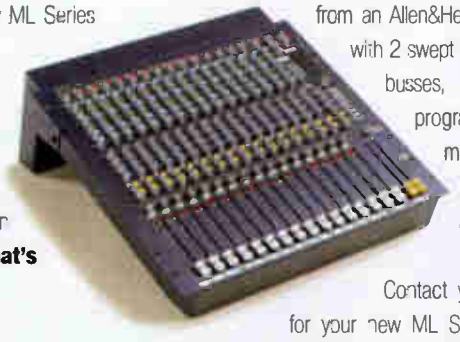

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Commission. The Telecommunications Act of 1996 removed the cap on the number of radio stations any one company could own nationwide, and for the first time allowed one company to own and operate multiple stations in a single market. Michael Powell (Secretary of State Colin Powell's son), the new head of the FCC, has made it clear that he is in favor of further deregulation. We now live in a radio world dominated by Clear Channel (which owns 1,238 stations nationwide and rising) and Infinity, where "branding" can make the "classic rock" station in one city sound an awful lot like the one in 10 other cities.

There are alternatives to the same ol' radio blues. But they're not likely to come from terrestrial broadcast. And they're not likely to be free.

SATELLITE DELIVERY

These days, Abrams has his mind on the future of radio as a premium music, audio entertainment and information service delivered via satellite and the Internet. As the senior VP and chief programming officer for Washington, D.C.-based XM Satellite Radio, Abrams believes that enough of the public is so sick of bad radio that once people hear XM's offerings, they will drop $200 or more for the receivers and $9.99 a month for 100 channels of music, news, talk, sports and entertainment.

Larry Rebich, VP of programming and market development for the other major satellite service, New York-based Sirius, shares Abrams' enthusiasm. "With the absence of having to be concerned with advertising support on those music channels, we are free of conventional music-programming practices," says Rebich. "The emphasis is on music experts and knowledge of the music. Our stream designers—as we call them here—are musicologists, journalists, musicians and people who have radio-programming backgrounds."

Both Sirius and XM are designed to be more than just "radio," but rather premium programming alternatives, similar to HBO or Showtime. The question is, can a public that is used to free radio be convinced to pay for it? Market studies conducted for XM optimistically project that as many as 49 million people will subscribe to satellite radio by 2012. To reach that kind of number, satellite services will have to greatly increase public awareness, especially among drivers.

The automobile is one of the primary places people listen to music and hear news. Both XM and Sirius have secured agreements from auto manufacturers to offer receivers. Most recently, Hertz closed a deal that provides consumers with the opportunity to experience Sirius while using their rental cars at more than 33 major airport locations, beginning in July.

"We have great support from GM, Daimler-Chrysler, Ford and BMW, and once these things are available in every new car, it is a given that this will happen," says Rebich. "It is five years out at the very most. XM will reach a million subscribers this year, which is very good. I am completely sold that this idea is going to work, but it won't happen overnight."

In the spirit of trying to personalize the listening experience, both XM and Sirius have made it possible for people to contact DJs and programmers with feedback and requests. "Our customers are paying us directly for the entertainment experience that we're delivering to them," Rebich notes. "So it's really important for us to maintain customer satisfaction."

We now live in a radio world dominated by Clear Channel and Infinity, where "branding" can make the "classic rock" station in one city sound an awful lot like the one in 10 other cities.

And they are also trying to do right by the artists. On March 19, 2003, XM and Sirius reached a royalty agreement with the music industry to pay for music delivered over the services. "The royalties paid under this agreement will be an important new revenue stream for the 3,000 labels and thousands of artists we represent," SoundExchange executive director John Simson told *The Hollywood Reporter*.

THE INTERNET

Satellite radio is definitely ramping up and making its push in the marketplace; but for a few years now, there has been another option: the Internet. Who hasn't tuned in to a conventional station such as NPR while at work or, better yet, listened to a favorite program on their own schedule, not the station's? Lately, there has been a rise in music services such as Nullsoft's ShoutCast, Live365.com and Yahoo's LAUNCHcast Plus, which provide users with access to thousands of music channels, allowing them to create their own "stations." To listen, all a user has to do is sign on and start checking out the offerings. The sound on these sites isn't as high as satellite, generally streaming at 56k MP3 and offering 128k MP3 for more premium services. While a large percentage of the "channels" are amateurs that share streams of as many as 200 songs, there are signs that there is a lot of passion for music out there.

"It is funny you mention giving the radio back to the people, because that is exactly what we are in the business of doing," remarks Raghav "Rags" Gupta, COO of Live365.com, which offers more than 15,000 stations on its site. "The best way to think about us is as the eBay of Internet radio: We provide people with the tools and server space and the infrastructure and the bandwidth and so forth, and they come on and create radio stations on our site and promote it. We've got churches streaming sermons on our site, sports teams doing games—that is what the Internet is about."

With the evolution of GPS and wireless Internet availability for cars and cell phones, I asked the two satellite providers, "What's keeping free Internet radio from landing in your car and serving you on the go?" Abrams says, "Nothing, but it's all about the best content, which is why XM is waging a content war: FM, Internet, satellite or whatever."

Gupta notes, "That is the promised land of Internet radio. One day, when you look out there and all the cars and these other devices can get the Internet, then it is a matter of getting them a DSP. Boom, you basically are able to play Internet radio, whether it is files you download or stream, which is probably the more likely consumption."

As people continue to find new ways to be entertained and informed, the line between the audience and creator will continue to blur, and maybe we *will* get our own radio.

"We believe that the Internet IP connectivity is going to get out to mobile environments and other devices, at which point, it really becomes just like radio," Gupta says. "You're going to have just another band on your device. Philips Electronics already has a couple of Internet radio devices out there on the market, like a boombox [that has] an Internet jack. In the future, you could be driving around in your car listening to your own station."

MIX ONLINE EXTRAS

Rick Clark is Mix's Nashville editor.

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FIRST WE LISTEN

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Studios Fight Back

The music industry is founded on dreams, magic and, sometimes, a hefty dose of illusion. For artists, engineers, producers—and studios—the maxim "You're only as good as your latest hit" often holds true. Because of that, in the competitive and image-conscious world of recording studios, it's difficult to get people to talk honestly, on the record, about the realities of their business. For this story, however, several of them did.

Many—maybe most—studios weren't founded on traditional business principles and they have never been hugely profitable. From the rise of independent studios in the 1960s and '70s, through the downturn of 1979, the go-go '80s, an early 1990s recession and the boom years of late '90s hip hop and pop, studios have had their ups and downs. It's often remarked that rates charged by top recording facilities hit their peak sometime in the '70s, while the expense of salaries, real estate and, above all, equipment have increased—along with inflation—exponentially. So, no, a recording studio has never been a great place to make a lot of money, and after the grim economics of the past two years, there are few who aren't aware of that fact. With budgets slashed and home studios the norm, there's less business to go around. Many facilities have closed their doors and many more are for sale—with few takers.

Still, the question, "Is it the end for commercial recording studios?" brought an emphatic "No!" from a surprising number of veteran players. They're cutting costs, making deals, taking salary cuts, working harder and making tough decisions.

KEEPING PERSPECTIVE

Larrabee Studios, with seven rooms in three locations, is Los Angeles' largest recording operation, as well as one of its most successful. Owner Kevin Mills has maintained for some time that, examined in the context of the economy as a whole, the recent deluge of press about the music industry downturn is somewhat exaggerated. Citing a February 10 article from *Business Week*, Mills comments, "It's [got] a fascinating statistic chart of retail music sales. In 2002, there was a downturn of 8.5 percent from 2001. But book sales were also down, as well as theme park attendance, advertising revenues, baseball—we could go on and on. Even at 2002's declined level, 20 percent more CDs were sold than in 1998, back before CD burning, downloading, MP3 and all the woes of the labels.

"What that means to me," he continues, "is perspective. The late 1990s were boom years for the economy in general. Now we're in a recession, with unemployment at

World Radio History

BY MAUREEN DRONEY

CHANGING TIMES, NEW CHALLENGES

a nine-year high. Retail sales are down overall, and there's a giant restructuring going on. The music industry is essentially owned by five companies. At least two of the companies—AOL Time Warner and Vivendi Universal—are in financial difficulty, not because of their music divisions but because of the rest of their companies. And Sony is affected by the terrible Japanese economy, where the stock market just hit a 20-year low."

Mills points to the massive sales of rapper 50 Cent's debut release, along with Eminem's recent multi-Platinum CD, as examples that music retailing is far from dead. "The demographic most likely to download music for free is males 16 to 20," he notes. "That's also the demographic that's bought 12 million Eminem CDs, a good measure in any year! There's a plethora of fresh, young talent selling multi-Platinum, whether it be Avril Lavigne, Pink, Michelle Branch or Norah Jones. And look at how the older generation is selling: Santana, *O Brother*, Elvis, The Beatles and Paul McCartney."

While Mills sees promise in the music industry, he admits that the recording side of it is in for a rough ride. "Certainly, the studio business was overbuilt," he contends. "In recent times, money was cheap; it was boom times, like the stock market. A lot of people thought all

Kevin Mills of Larrobee Studios

World Radio History

they had to do was buy an SSL and some speakers and it would be, 'Roll up the Brink's truck.' There were a lot of new operations that were not all that well-thought-out in terms of a business plan.

"The reality is, if you run a large-format-console studio, you've got to be able to offer more at a better value every year. It's no different from Macy's! The competition is constant, and you have to constantly refine your business and the price."

ing for films. Albums are all that we do."

Given that, Frager has still followed a diversity route by adding a surround mix studio and a 24/96 mastering suite. In addition, courting independent label work, Frager has begun offering recording packages. "I just put together, for a band," he says, "the studio, three houseboats in Sausalito and a caterer. We made it so economical that they were able to fly here from Boulder [Colo.] to do the album.

String Cheese Incident at The Plant. From left: producer Youth, Bill Nershi, engineer Clive Goddard, Plant owner Arne Frager, Michael Travis, Keith Moseley, Michael Kang and Kyle Hollingsworth.

LOCATION, LOCATION, LOCATION

Prime location—in musician-rich Marin County, Calif.—has helped keep The Plant in Sausalito going for almost 30 years. But a great location, and even a star-studded clientele with chart-topping albums, doesn't guarantee that a studio will make money. "A lot of people have called me in the last year to ask if it's true that The Plant is closing," admits owner Arne Frager. "I suppose the reason is that we've had three lousy years. It's been very difficult, but we've just completed a new financial arrangement that allows us to strengthen and expand the business. So we're very much alive."

Although Frager acknowledges the benefits of his unique location, he stresses other reasons for The Plant's endurance. "One of the things I think has helped," he offers, "is that for the whole 30 years of the studio's existence, it's focused on one niche: making pop music. We don't do audio for commercials or voice-overs or mix-

"Another important thing we've done is reduced our overhead by nearly half in the last four years," he adds, "basically by raising funds to pay off our debt and lower our monthly nut. And finally, there's the factor that we've consistently turned out major albums by major artists. We make sure everyone is aware of that. I travel to L.A. frequently to meet managers and people at record companies to look for projects. We have a 30-year reputation, the improvements, the reduction of debt and the fact that I'm aggressively out there publicizing us."

MAKING IT WORK

Another top-tier facility that's endured recent rocky times is Nashville's Emerald Entertainment, which has emerged from several turbulent years of expansion followed by a Chapter 11 reorganization. "Obviously, it was a huge event for us," says Emerald studio division VP Scott Phillips. "But we've come out of it revitalized, with an SSL 9K in our marquee mix room, something that every one of our clients was asking for. Since it's gone in, we're booked in there 25 to 28 days a month."

Owner Andrew Kautz is candid about Emerald's tribulations. "Our primary cus-

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tomers were going through consolidation," he states. "Looking ahead, we realized that we needed to have price strata for our services. The only way to do that was to expand. We didn't have room to do that, so we had to purchase other facilities."

Ironically, one of the opportunities for expansion was the Chapter 11 filing of the venerable Masterfonics. During negotiations, the studio leasing business was rocked by the Terminal Marketing scandal. Financing dried up, and with a deal based on the assumption of credit terms no longer available, Emerald was forced into Chapter 11. There, under the protection of the court, it was able to obtain more favorable financing.

Kautz is proud that Emerald emerged "paying everyone 100 cents on the dollar. Our goal was not to use the court system to get out of our debt, but to organize it so that we could afford to pay for it. It was a very tough time for us, but it forced us to figure out better ways to do things.

"A big part of our culture was having the newest, latest gadget," Kautz adds. "But when you stop and ask how the purchases translate into revenue, you unfortunately don't get to buy a whole lot of gadgets. You have to really put a value on positioning and on the public relations that you can get out of a purchase. In the music industry, business and finance have been bad words. We like to think of it all as creative, but it *is* a business."

Business in Nashville may have been difficult lately, but it's been even more so in New York. In recent years, many studios have closed, and since 9/11, things have been tougher still. Yet several facilities have hung on and even upgraded, including the five-room Sound on Sound Recording.

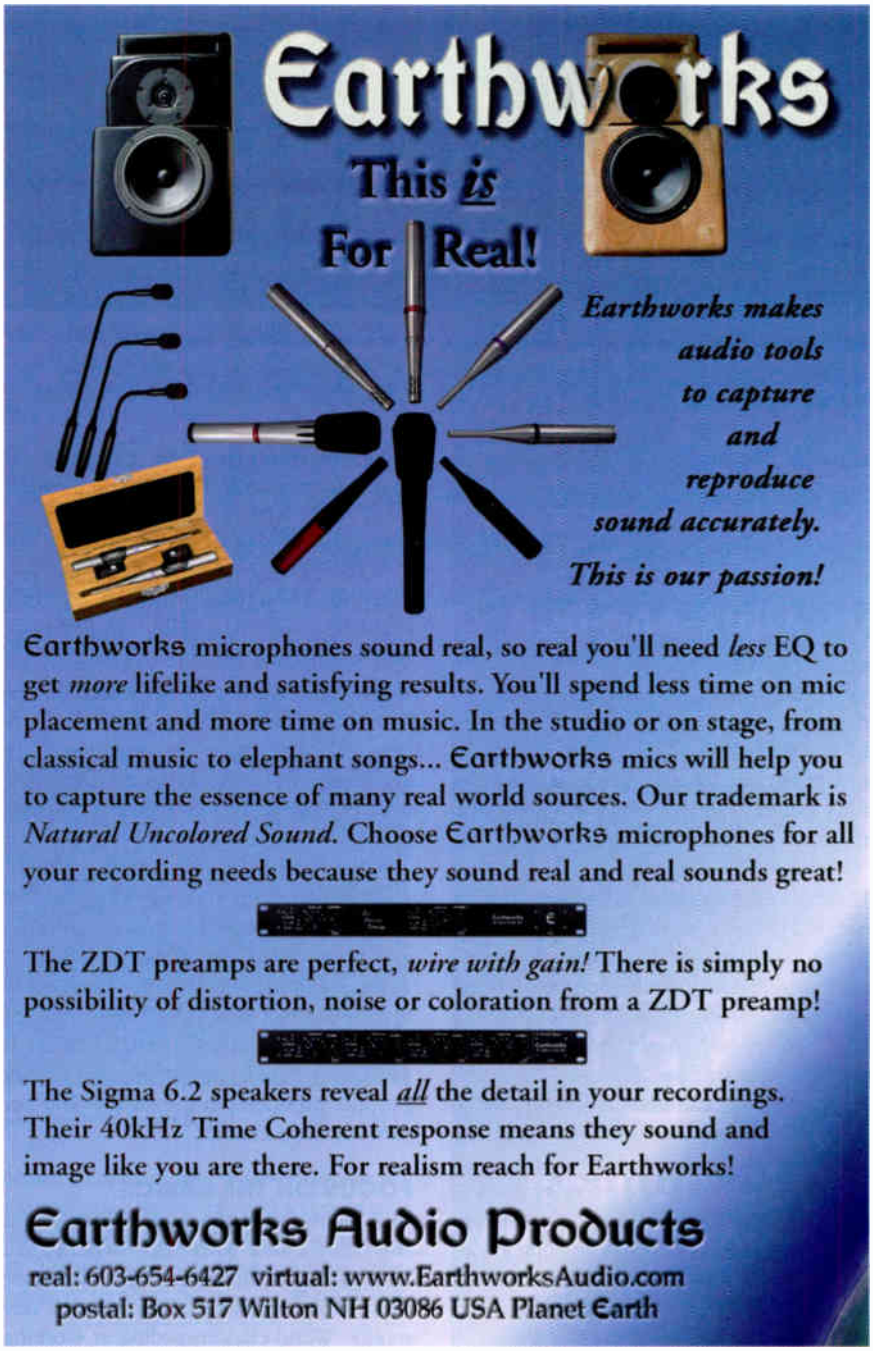
"It's not really a secret," comments owner David Amlen, who is also president of SPARS (Society of Professional Audio Recording Services). "If your clients are busy and they're loyal to you, you're going to have work. The trick is, how do you find those clients and how do you keep them happy? That's an individual thing—different for everyone. But you also have to be smart about your costs and about having the right people working for you."

One tack Amlen has taken is to make Sound on Sound's rooms more mix-friendly. "We already have something that few New York studios do," he relates. "An 800-square-foot recording space, with three booths, for tracking. We observed that mixing budgets are more stable, so we invested a lot into that area, especially with our custom monitors. We wanted to provide the kind of listening environment that people can't get at home."

Amlen remains optimistic about the overall future of the music industry: "Bad news sells; we all know that. But are we really any different than any other business? Revenues are down everywhere. They've been going up for 20 years in the music business. Now we're living in a reality where everyone has to work harder.

"Thanks largely to the motion picture association lobbies, Congress has started to go to bat to help on piracy issues. The MPAA and the RIAA are starting to work together, which can only help the music industry recover. If you look for them, there *are* things happening that are going to bear fruit."

Andrew Kautz, owner, Emerald Entertainment



World Radio History

BY MAUREEN DRONEY

Grass-Rooted Creativity

SECRETS TO SUCCESS IN TROUBLED FINANCIAL TIMES

In Nashville, but off of the beaten path—both geographically and client-wise—is Alex the Great Recording, a residential, rock-oriented studio owned by Brad Jones and Robin Eaton. "Our strategy has been adaptability toward lower budgets," says Jones. "Studios that have to make a monthly note on an expensive console are having a hard time. We have never bought a fancy console. We've just used a Mackie; now in the age of Pro Tools, we hardly even use that. We *have* bought fancy outboard mic pre's and microphones and vintage instruments. That's been our survival trick, coupled with the fact that we've always catered to indie rock bands. We're in Nashville, but not a part of Music Row. We don't do country. Actually, we're in Berry Hill, where the rent is a third of what it is on Music Row. All of these things have made us more resilient."

Alex the Great is in a homey converted warehouse with a built-in apartment. "We offer a good rate that includes accommodations for a small band," continues Jones. "Most studios with living accommodations are out in the country, but we're right in town. We have a big enclosed courtyard with lots of plants and no sign out front. The artists like that they can create their own world and not be bothered. Another edge is that we have all kinds of interesting vintage instruments. We want to seduce the musicians, as well as the engineers. And musicians like being surrounded by cool, old stuff. They all tell us they like our vibe."

In Portland, Ore., Larry Crane publishes *Tape Op* magazine and runs Jackpot Studios, which specializes in analog tracking. "A lot of the work we do is rock 'n' roll-oriented," he observes. "People come to us asking for 'that tape sound.' I actually think that there's somewhat of a backlash to the proliferation of small digital studios. I wanted to do something different that would set us apart."

Crane has added some digital gear because, "A lot of people are coming in to track drums and then taking the tracks home to a computer to add the rest of their parts. Sometimes they come back to mix, or sometimes they just rent gear from us to mix at home."

Portland's lower cost of living has contributed to the growth of a lively music scene; it's also part of what's enabled Crane to carve out a niche. "There aren't a lot of studios in the Northwest," he says with a laugh. "Here, my lease is super-affordable, and there's a good live music scene that keeps me busy.

"There is something about having a more personality-driven studio," he admits. "If you have an engineer who builds a strong local reputation, the studio is more than just a studio: It's got a face to it. A lot of places that are put together as commercial studios—with an owner/manager who hires engineers—are a little more generic. Musicians and bands don't respond to that as well. There are studios here in town like that. They're great places with better gear than I have, but there's no buzz about them."

In Williamsburg, Brooklyn, Mission Sound, fitted with a Neve 8026—a tracking console originally built for Air Studios—also specializes in live band recording. Recently, owner Oliver Straus increased the volume of his business by forging relationships with a number of publishing companies. "I'm happy to say that we do almost exclusively what I've always done, which is live bands," says Straus. "What's different now is, we're working with publishing companies on a lot more of the initial, developing aspects. We're definitely doing more volume. Another benefit is that people tend to get 'married' to us. In many cases, we develop clients because, due to the quality of what we do, many of our demos go right to CD. We work very fast, and we get a good sound to tape or Pro Tools. The relationships we've developed with songwriters and publishers have also led to some soundtrack work for us."

Customized gear, regional representation and a burgeoning Portland music scene add up to Jackpot's success.

Straus comments on the trend for artists to present finished product to labels: "There's been a philosophical and strategic change with the producers and writers I work with. They want to get it right the first time. Except in a very few instances, there isn't the big payoff budget to be gotten anymore. And because of the way music is pigeonholed and how marketing departments can have final say, artists want to present who they are from the get-go. They don't have the luxury of figuring out who they are after they're signed. We're on a mission to preserve the integrity of the music, and it also helps keep the fun in the studio!" ■

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Getting Noticed

Fresh talent is what keeps the music industry vital and, ultimately, profitable. The paradox? There's more and more music being made, but fewer and fewer traditional ways for it to gain attention. Narrow radio formats, shrinking A&R departments, scarce label deals but lopsided label support in favor of "name" artists, limited tour support, less music on MTV, even a shortage of 'zines—it all adds up to the fact that today's artists have to work harder to get the word out about what they do.

A strong, creative vision is essential. Beyond that, a savvy understanding of new media and markets provides a leg up. Here, *Mix* checks in with some artists and music business entrepreneurs who are honing their vision, reaching the public and reaping the rewards.

BACK TO BASICS

Texas-based singer/songwriter Pat Green has been doing pretty well for himself. Literally. Although Green is now signed to Republic/Universal Records, he previously released six albums—self-produced and independently distributed—on his own Greenhorse imprint, and combined, they've sold over a quarter-million copies. At $8 to $15 a CD, coupled with touring, merchandising and sponsorships from Miller Beer and Justin Boots, Green was making a nice living for himself, his band and his family—without a major-label deal. In 2000, he grossed upward of $1 million. He was offered record deals in Nashville, but, as he says, "with a standard Nashville contract, I was going to lose money."

It wasn't *just* about the money. As Green, who's been called a Texas version of Jimmy Buffett, told *Pollstar* in December 2002, "I wanted to be able to have autonomy over the creative side. With six records out before I ever signed, I had time to develop myself. We'd sold a lot of records on our own and were making plenty of money...I didn't want to have to change. When Republic came in and offered us everything that we wanted, I was overjoyed. It was a perfect situation for me."

Although rooted in country, Green's music is, as he describes, "a fusion of all the things I grew up with, from The Doors to Stevie Wonder to Willie Nelson." His independent streak and his reluctance to go the typical Nashville route meant borrowing $12,000 from family and friends to record his first album. After album two, he was still working for his stepfather's wholesale gasoline business, playing nightclubs and college parties on weekends. Students began buying the albums and word got out. It was on to college town bar gigs, and the long road up

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BY MAUREEN DRONEY

NEW (AND NOT SO NEW) MODELS FOR PROMOTION AND MARKETING

from there, until in 2002, between February and April, 180,000 fans showed up in concerts to see him headline, including a show at Billy Bob's, in Fort Worth, where 5,800 tickets sold out in 35 minutes.

We caught up with Green on his tour bus outside of Richmond, Va., in March, and asked if he'd always had a game plan. "We've just been in the right place at the right time," he says, "to take what we've learned and expand and capitalize on it. When we were starting out, I couldn't get anybody from a label to look at me. Honestly, I'm glad about that. I was too young, and my songwriting wasn't up to snuff. It made me, and the people around me, figure out how to sell ourselves: how to get on radio, get a marketing plan and spend our own money to promote the records. We started selling so many records that when we finally signed a label deal, we had enough autonomy that, pretty much, nobody was going to be able to say, 'This is what we expect out of your record,' or, 'These guys need to be in your band,' or even, 'This is how it needs to look.'" Taking his music from Texas, where he'd become a star, to a national market meant taking steps back, including playing to much smaller crowds. "You take your medicine," he comments. "You want it so bad, you just keep working harder. In those smaller venues, you do

Pat Green

World Radio History

better shows than you do in the big ones. And you make sure you get down in the crowd and shake their hands, buy them a beer, and say, 'Come back and see us next time.'"

OUT OF NOWHERE

In March, the band Trapt topped *Billboard*'s Heat Seeker charts, selling 12,000 CDs in a week. Their manager, Drake Sutton-Shearer of Zig Zag Communications, offered insight into the process that had gotten the band, described as "four guys who hang out and play music," to a place where their eponymous Warner Bros. album generated a buzz.

"There were two years of marketing themselves [and two self-released albums] before they were signed," Shearer explains, "then continuing to market themselves with the help of Warner Bros. Trapt was incredibly motivated, playing live in the San Jose [Calif.] area and creating hardcore fans via the Internet. They put up a site on iuma.com, where kids go to look for bands. Every night, [vocalist] Chris [Brown] was e-mailing back and forth with hundreds of kids from all over."

Ultimately, it was on the strength of a four-song demo that Trapt, who has been called "compulsively original," was signed. All involved were well aware of the commitment still required. "In this climate," Shearer observes, "a baby band has to prove that it has a really reactive record before you're going to get the kind of investment you want from the record company. We had to make this record react any way we could: shows, the Internet, talking to people and, of course, radio.

Trapt, from Heat Seekers to Warner Bros.

"You sometimes, in this day and age, have to choose between the cost of touring and the cost of promoting to radio," he continues. "We knew we had to get to radio, because Trapt isn't an 'image' band. The basis of this band is that they have great songs. We'd signed a publishing deal with Warner Chappell. For touring, we initially turned to them, as well as to Warner Bros., to assist us. We also invested a significant portion of our own funds into the road. We decided to tour sporadically, to keep the band on their toes live, while, with Warner Bros., we put together a plan on the Internet that would create an awareness of the songs and the band's identity before going to radio."

Trapt's Internet campaign included blasts to a weekly e-mail list of 10,000 fans, hundreds of Webzine reviews and interviews, winning a vote-for-your-favorite-artist promotion on Coke.com, an AOL/Sessions appearance, servicing the single "Headstrong" to AOL radio for worldwide streaming, 300,000 downloads of Trapt's Winamp "skin," and the creation of Internet fan "E Teams" who helped spread the word. Also on the Website was a pop-up player, which fans could IM or e-mail to friends, containing songs and the band's live-at-the-Roxy video.

"We've had over 1.7 million unique visits to our player," Drake asserts. "If all kids wanted was free music, I don't think we would have sold any records. Prior to the album release, we decided to offer for sale, online only, 2,000 signed CDs. That helped sell over 1,000 copies in a month—huge for a new artist with no retail presence. We also decided

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to offer the full album as a download at $7.99, something no one else was doing at the time.

"This whole Napster/KaZaA thing, people are fighting it, trying to protect their investment. But I think—more even than free music—kids like the convenience of being able to audition a song. In a matter of minutes, they can decide if they want to discover more about the artist. In a record store, they can't go to the counter and say, 'Can you open these 50 CDs so I can listen to them?'

On the non-Internet fronts, there were retail in-stores, almost daily radio station acoustic visits and a focus on sports. Trapt performed at the Gravity Games, "Headstrong" was played on NHL broadcasts and at ESPN's Winter X Games (and also featured in the trailer for the Bruce Willis movie *Tears of the Sun*). "Street team" marketing was ongoing, including distribution of posters, stickers and song samplers, along with Red Bull-promoted student listening parties.

As the album was climbing Heat Seekers, touring attendance was up 400% from December, "Headstrong" was set to spin on both MTV 2 and MTV, and Trapt was booked to headline the Under the Radar tour. Momentum was building, and the band was working harder than ever.

"There's a lot of bad press about labels at the moment," Shearer concludes. "I'd like to take a more positive position. We feel very fortunate to have, at Warner Bros., a passionate group of people who believed in this record from the start and who, from day one, have kept all of their promises. There's a lot right with the music industry, but bands today have to be willing to invest in themselves, even after they reach an agreement with a label."

THE INTERNET'S WIDE REACH

It's not only AOL/TimeWarner artists who are featured in promotions on the online behemoth; AOL now has promotional agreements with approximately 90 record labels. According to Evan Harrison, executive director of music industry relations for AOL Music, his job is to "go out and acquire great content by working with labels, artist managers, lawyers and every facet of the business."

"We want to make it easy for people to discover, experience and, ultimately, *own* music, regardless of the format they own it in," he explains. "AOL is in 28 million households in America. A key factor is that these households pay a monthly bill, so they already have their credit card on file. With an audience that large, it didn't seem like a tough sell to convince record companies that we could create great programming. Where this is going... is to connect the dots to sales."

50 Cent: Big on AOL, big at retail

Harrison's department has a team of four who work closely with labels to keep in touch with new music. "We sit down with the label and listen," he continues. "We pick what we think will really resonate with our audience, starting up to six months before a record comes out. We write a complete marketing plan. For a group nobody's heard of yet, we have a program called AOL Breakers, where we take an interest very early on. We've done this for Michelle Branch, Avril Lavigne, Vanessa Carlton, The Used, Tattoo, Lucy Woodward, Miss Dynamite...

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Up, Down, All Around

The theory goes like this: If people buy fewer CDs, then record company budgets shrink and recording studios make less money. This means that studios don't buy as much new equipment, so the technology companies that build those wonderful audio toys experience a drop in business. Well, maybe. There is an equally compelling argument that independent CD releases and the democratization of recording capabilities through studio-in-a-box software and less-expensive equipment mean better sales to a larger mass audience. There may be smaller budgets for major releases, but there is just as much music—and audio—being produced.

Pro audio is no longer a cottage industry that's immune to economic factors of the global market. The growth in affordable digital technologies means that professional audio is now part of a larger media system. And when political and economic uncertainty strike, our little industry feels the ripples.

So what's really going on with pro audio technology and manufacturing companies? Between the advent of digital processing, computer-based production, Internet marketing and a changing recording industry, what must pro audio manufacturers do to stay competitive and relevant? Are only big-ticket hardware companies affected? Are software companies being decimated by piracy? Have we reached the crossroads where existing business models have permanently changed?

HOW'S BUSINESS?

The first issue to be addressed is overall sales trends. Are markets up, down or flat? Computers play a major role in contemporary audio production, so companies with an emphasis on computer-based products seem to be faring well. M-Audio designs and manufactures audio and MIDI interfaces, keyboards, speakers and microphones. The company also distributes Ableton, Propellerhead and Arkaos software, so it has staked its claim firmly in the computer audio and music arena. According to M-Audio marketing director Adam Castillo, "Computer-based music production is the healthiest segment of our industry, and that's where we see all of the success stories." As a result, according to year-end financials, M-Audio sales were up by 74% in 2002.

Even companies traditionally associated with hardware electronics find that having a hand in the computer arena helps even out the product mix. Universal Audio president Matt Ward says, "For a small company, we are very diverse. We have analog hardware and software plug-in

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BY RON FRANKLIN

PRO AUDIO MANUFACTURING AT THE CROSSROADS

systems for virtually every computer-based audio system out there. Universal Audio sells to three overlapping markets: We sell hand-built analog mic preamps and compressors primarily to high-end recording users; Mackie sells our UAD-1 DSP card with Powered Plug-Ins to the native workstation/desktop music market; and we sell TDM plug-ins to users of Digidesign's Pro Tools Mix 24 and Pro Tools|HD systems." According to Ward, sales are up and the company is looking to double the amount of space it now occupies.

Another company that is strong in computer-based audio products is TC Works, a division of TC Electronic. According to Ralf Schluenzen, CEO of TC Works, the company's Powercore product has fueled the company's market success: "Our key product is Powercore: doing approximately 60 to 70 percent of our turnover and still rising. We were quite fortunate with Powercore, bringing such a relevant product to market that was accepted much faster than we anticipated.

"It is always a concern to have such strong product dominating sales so much," Schluenzen admits. "However, in this case, we are talking about a platform; i.e., the products are the software products utilizing it—like Assimilator, the included plug-ins and so on. Obviously, there will

Jeff Radke

Adam

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be more. Also, in May we are launching a FireWire version of Powercore, expanding the platform. In other words, a car manufacturer makes the most money selling cars, so I would like to compare Powercore more to a category than a product."

Having a hardware component involved is significant and seems to be a common theme with many of the companies interviewed. Schluenzen notes that, "the software products alone would not be able to fund this business." One of the most successful companies at combining computer-based hardware and software into systems solutions is Digidesign. Not surprisingly, Digidesign has been able to maintain business growth. General manager Dave Lebolt says, "Our business experienced healthy revenue growth in 2002, and our fundamentals have remained strong during the worldwide economic downturn. Key drivers included new products like Pro Tools|HD, Digi 002 and the Mbox." These products cater to the high-end, mid-segment and lower-end users, offering diversification to different markets and providing Digidesign with more financial stability.

Yamaha is the world's largest manufacturer of audio products and musical instruments. According to Larry Italia, general manager of the Commercial Audio Systems division of the Yamaha Corporation of America, "Sales have been up significantly for us in the commercial audio area; by 'commercial audio,' we mean all markets except MI. I think our business is unusual in this regard and see most of the major competitors trending downward."

Larry Italia of Yamaha

INDUSTRY FEAR FACTORS

This last comment—"We're okay, but our competitors are having problems"—was echoed by several companies. We wanted to know what factors are seen as most responsible for this.

The obvious place to start is the recent slump in the record business. Whatever the reasons given—song-swapping services, piracy from home CD burning, the high price of CDs, etc.—it's clear that less revenue in the pipeline that eventually leads back to artists and studios can affect equipment purchases. Several executives saw this as a potential problem. Lebolt of Digidesign says, "Declining sales for the majors can hurt our overall sales as [tighter] recording budgets affect both larger recording facilities and artists' personal studios. Less money in the industry hurts everyone."

Yamaha's Italia points out that the effect goes beyond the recording studio and into the concert hall. "The drop in record sales is obviously a negative," he says. "It affects not only our recording products business, but touring sound, as well."

"The drop in record sales is a dangerous trend," adds Schluenzen. "The major labels have their own share of blame in this situation, as they were too slow to react to the dramatic market changes. At the same time, we're in a situation where a lot of things are changing—all at the same time and extremely fast due to the Web and technological advances in general."

ON THE PLUS SIDE

The counter-trend, then, is the growing power that technology has put within reach of independent musicians with modest resources. This applies to both the supply side (the recording process itself) and to the distribution side, with the growth of alternate music-distribution avenues.

Several independent factors are at work here:

- The recording studio focus has

The Price of Piracy

Bob Ellison

One of the scourges of the computer-based studio economy is software piracy. If software companies can't profit from their investment, then users will be left without new features, upgrades and proper support. We spoke to Bob Ellison, president of Syntrillium, manufacturer of Cool Edit Pro, about the issues involved.

Is software piracy an issue for Syntrillium? How important is it?

Software piracy is a fact of life. In some markets—like Central and South Americas, parts of Asia and Eastern Europe—Cool Edit is very widely used, despite the fact that almost no sales have been recorded there. A Mexican systems integrator once told me that pirated copies of Cool Edit Pro are in use at virtually every radio station in that country.

What steps does Syntrillium take to prevent software piracy? How do you feel about using software keys or dongles?

We make it difficult for unsophisticated computer users to pirate our software, but our anti-piracy measures are pretty mild. Our goal is to discourage the "casual pirate"—someone who might pirate the software if it's easy and convenient, but who otherwise is willing to pay—but to not waste our efforts deterring dedicated hackers.

Dongles represent what we think is wrong with extreme anti-piracy measures. Everyone dislikes having to use dongles: They add to the price of the software, they create sales fulfillment and technical support problems, and they mean treating every user with a basic level of distrust.

How does software piracy affect your company? Can you quantify the financial impact?

We cannot quantify the financial impact, and we do not play the false game of some other software companies that like to count every pirated use as money out of their pockets. What hurts us most is when those who *can* afford the software choose instead to pirate it, and when the attitude that it's okay to pirate software becomes common.

One area in which piracy has a more calculable financial impact is in service and support. People call and e-mail Syntrillium every day for technical support for pirated versions of our software. We do what we can to efficiently weed out this deadweight cost, but it still consumes manpower and money that would otherwise be dedicated to serving paying customers.

How does it affect the audio industry as a whole?

Software piracy is probably more prevalent in the audio niche than in most other software niches, because while musicians and recording engineers invest deeply in their interests, their monies are commonly strained, and software piracy represents a simple way to save

—CONTINUED ON PAGE 117

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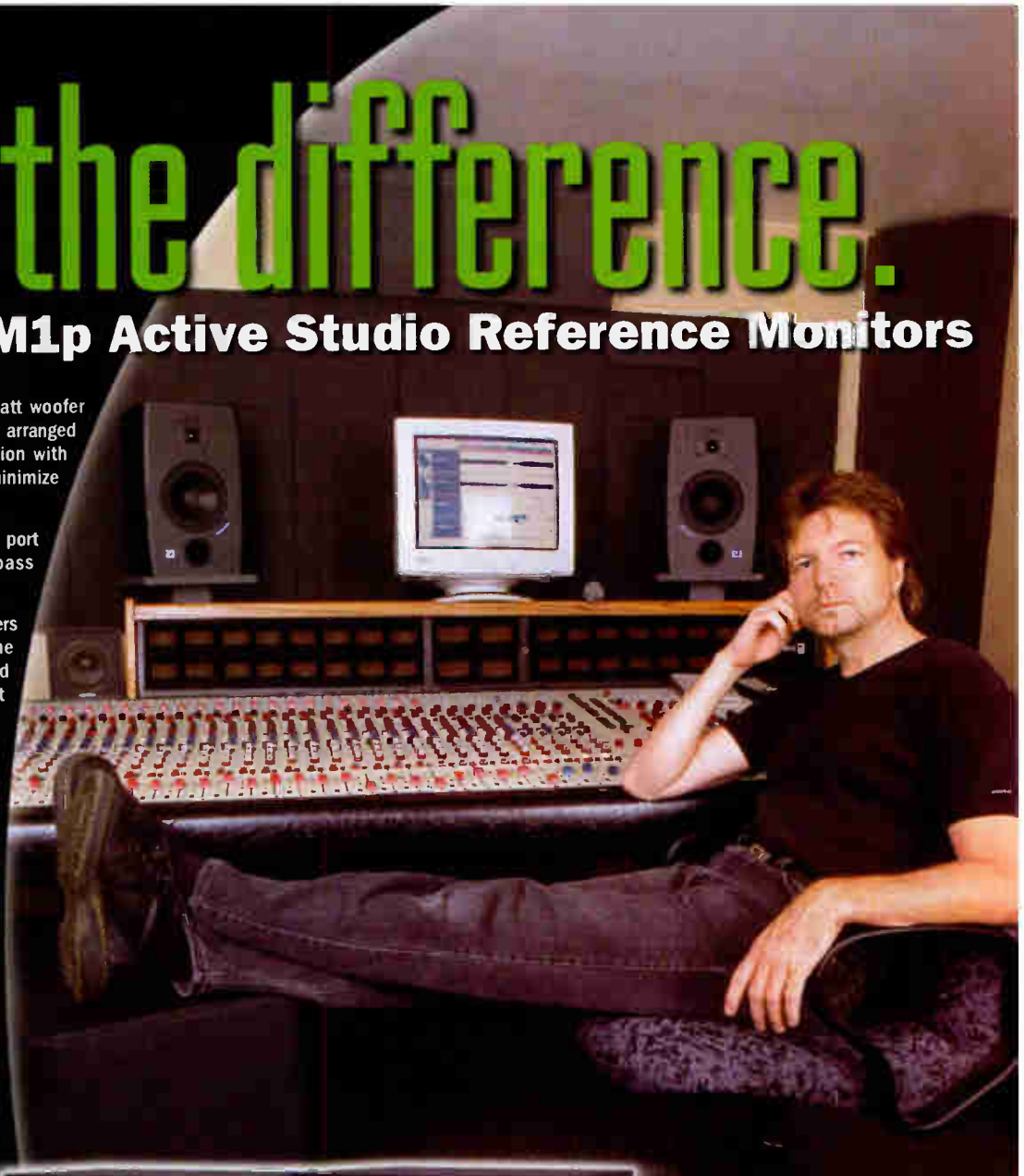
Hear the difference.

Yorkville YSM1p Active Studio Reference Monitors



- Rugged 6.5-inch shielded 100-Watt woofer and shielded 1-inch silk dome tweeter arranged in a symmetrical, vertical configuration with drivers mounted slightly forward to minimize reflections off of cabinet face.
- A precisely tuned 2-inch cylindrical port directly below woofer increases bass response in the compact cabinet.
- Bi-amped power module that delivers 115 watts (85-Watts of power to the woofer, 30-Watts to the tweeter) and generates less than .05% distortion at full power.
- Specialized tweeter overpower limiting and woofer over-excursion limiting protect speaker components.
- +9/-6dB input trim control and defeatable limiter are standard.
- User selectable EQ filtering ensures more flat frequency response, regardless of speaker placement. - Dipswitches on the back of the monitor allow the engineer to select overall tone shaping for the cabinet. This allows the end user to tune the monitor for location, (i.e. Full Space for use centered in the room (+2dB boost @ 20Hz to 80Hz) Half Space for use against a flat wall (0dB boost or cut), or Quarter Space for use in corners (-2dB @ 20Hz to 80Hz).
- Additional user selectable high frequency filter (+2dB boost @ 10kHz to 20kHz) has been added to allow further tweaking of the monitor to individual tastes.
- XLR & 1/4-inch TRS combi-jack balanced inputs are provided.

Easy to set up, easy to use.

"The beauty of all active near-field monitors is the ease of use. Plug it in to the control room outputs of any mix desk, or to the audio output of any sound card, set the input levels and you're away.

With a YSM1p system, all essential components are driven independently ensuring maximum efficiency, clarity and performance."

- **PETER HAMILTON**, Producer, engineer.

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shifted from large facilities to home/project studio production;

• the use of computer software for audio processing has increased; and

• independent music-distribution channels have grown.

Nearly everyone sees a business benefit in these developments.

"While the record industry is in a state of flux," Lebolt says, "there has been an explosion in terms of smaller indie labels, artist self-promotion using the Net and grassroots interaction. Our gear has been part of the trend toward democratization and 'bedroom creation' that makes this possible, so our business is generally positively affected."

M-Audio's Castillo likewise sees benefits: "The increase in the power and capabilities of CPUs and software have enabled a 'democratization' of music production. The 'Everyman' can now accomplish what amounts to commercially viable music production with a relatively modest investment. Today, we're seeing more and more 'non-musicians' getting into content creation. Thanks to programs like Reason, coupled with MP3 distribution, the barrier of entry into this arena has been greatly lowered."

Although the benefits of software-based production are clear, a note of caution was given by several companies: As products become more software-centric, piracy becomes more of an economic issue for manufacturers, to the point that most build it into their business plan.

"Native processing sales are quite disappointing, piracy being the main reason," admits Schluenzen. "In my opinion, this is only a symptom of the general lack of a truly working business model for intellectual property in the increasingly networked digital world." For more on piracy, see the sidebar on page 114.

WHERE TO SELL?

Most manufacturers depend on a network of resellers to bring their products to the masses. These distribution channels for pro audio and music gear have also gone through a lot of recent changes. For many years, it was the pro audio specialty shop that afforded the only outlet for high-end audio components and systems. As more and more capabilities became available at lower price points, the line between pro audio and MI stores began to blur. Boutique pro audio dealers are still an attractive way to go for many professionals looking to outfit a studio. They provide a systems approach to building integrated packages, have knowledgeable sales staffs and provide personalized service.

But for many buyers, the large retail chains such as Guitar Center, Sam Ash and others provide a convenient way to find all but the most esoteric and expensive gear. Of course, business fundamentals still count in the age of superstores, as proven by the October 2002 liquidation of the Mars Music chain. Mars once boasted as many as 50 retail outlets, but its demise left a number of manufacturers with uncollected receivables and a lot of orphaned customers.

A company that took a different approach to retail is proving that pro audio and music gear can be sold without depending on a "brick-and-mortar" location. Sweetwater Sound Inc. has grown dramatically since its inception in 1979 as a recording studio in Fort Wayne, Ind., to its present status as one of the largest pro audio and music distributors.

Sweetwater has gone far beyond the old "mail order" mentality to provide knowledgeable service and support from a staff who knows the equipment and the business. The company has three in-house studios so that they can keep a finger on the pulse of how the gear they sell is used

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in the real world. According to Jeff Radke, VP of sales at Sweetwater, this approach has paid off: "We've worked very hard and have been fortunate to experience nice, consistent growth, even in 2002."

Radke sees the trend toward project studio production as just part of the overall puzzle and believes that there will always be a place for larger studio facilities in the overall production chain. "We operate a studio facility here with three rooms so it's a trend we're very aware of," he says. "However, this isn't necessarily a new trend at all...it all really started in a big way back in the early '80s. The fact remains that while wonderful recordings can be made at home, unless you have the right room, the expertise and the complete complement of gear, it's very difficult to get the same quality of sound you'll get recording in a serious studio. One trend we've seen is projects being largely tracked at home and then refined, polished and mastered at a larger facility."

WHAT WOULD YOU BID?

The successful use of the Internet, telephone and mail-order catalog sales is not exclusive to Sweetwater, of course. Guitar Center owns Musician's Friend, a popular Web destination for audio buyers; Sam Ash has a robust e-commerce site; sites such as Zzounds.com and several others prove that there are plenty of shopping options on the Web. Another reseller category is represented by auction sites such as Digibid.com and the mother of them all, eBay.

eBay has grown to be one of the few enduring success stories to come out of the dotcom boom-bust era of the late '90s. Although known originally for auction-style trading, eBay also offers trading in a fixed-price format. Many manufacturers and importers find it to be an efficient way to find a home for inventory closeouts and specials.

According to Giles Cassels, the general manager for music instruments, "eBay is the number one online marketplace for musical instruments, with over $340 million in musical instrument sales in 2002. The category is a first-destination marketplace for a wide variety of musicians, studio professionals and DJs, with a strong

—FROM PAGE 114, THE PRICE OF PIRACY

money. Piracy takes a lot away from the revenues that audio software developers could otherwise realize, and therefore inhibits new development and investment. So, fewer products are developed, and the software consumers are hurt as much as the developers.

What would you say to musicians who feel software is too expensive?

I would ask, "What does that mean?" It's a ridiculous statement. Software development is hugely expensive, and software companies price their wares the same way companies in other industries price theirs: according to what they think the market will bear. Unless a software product is free, someone will think it is overpriced. Like any elective product, we say about our software: If you think it costs too much, don't buy it.

What can be done by the industry to bring software piracy under control?

We must appeal to people's sense of fair play. Musicians want to be paid for their work and their intellectual property: music, lyrics and performances. So do software companies. All of our products are available as free downloads for fully functional use and evaluation. Because of this, we are especially—grimly—amused when people claim to have pirated our software only because they want to try it before paying. —*Ron Franklin*

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AES AMSTERDAM

Product Hits From the 114th AES Convention

By Rob Alexander

From March 22-25, 2003, the Audio Engineering Society returned to Amsterdam—everybody's favorite city—for its 114th convention. Coming on the heels of the competing Frankfurt Musikmesse and NSCA shows earlier in the month, AES floor space was much smaller than previous years. However, in spite of this and the beginning of war in Iraq just two days before the show(!), attendance was surprisingly good, and AES executive director Roger Furness was "absolutely delighted" to see such a large turnout, helped in part by Amsterdam's sunny, mild spring weather.

The talk at the show was dominated by SSL's (www.solid-state-logic.com) release of the all-new C200 digital console (reviewed on page 134) with multiple formats for audio, multimedia and broadcast applications. Along with SSL's new C100 compact broadcast console (previewed in last month's *Mix*), the C200 caused quite a stir. Other SSL highlights included the sale of its largest 9000 J XL console to date to SAE owner Tom Misner for the school's new world headquarters, currently being built in Byron Bay, Australia.

At the **AMS-Neve** (www.ams-neve.com) booth, Misner continued his spending spree, purchasing a Neve 88R at the same time. The hot news at Neve was the DFC2 digital film console debut, incorporating the latest 3.0 Encore automation and a new dynamics section with 96kHz signal processing. The company also celebrated with Belgium's Galaxy Studios, which purchased the world's first large-format DSD console designed for Super Audio CD production.

Neve DFC2

Fellow British console manufacturer **Calrec Audio** (www.calrec.com) demoed its Zeta 100 production mixer, offering broadcasters a full range of purpose-designed digital alternatives to its existing analog products. **Sony** (www.sony.com/proaudio) announced that its range of Pro Tools TDM plug-ins now support both Mac OS X (Pro Tools 6) and Windows XP for the OXF-R3 digital console. **Digidesign** (www.digidesign.com) publicly demoed Pro Tools 6 for Windows XP for the first time, and it was due to begin shipping in April.

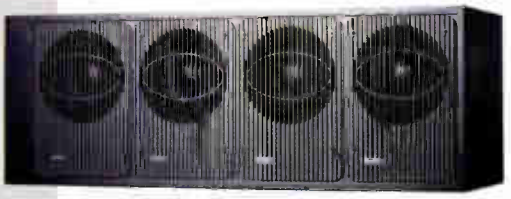
French company, **InnovaSon** (www.innovason.com) unveiled its new Sy80 digital mixing console, featuring an entirely new DSP module and Sensoft 8, the company's real-time console software manager.

Steinberg (www.steinberg.net) debuted a new controller unit for its Nuendo system called ID: Steinberg Input Device. The company also announced that Nuendo Version 2.0 would ship by the end of April. Across the hall, **Euphonix** (www.euphonix.com) showed its integration between Euphonix control surfaces and Nuendo, with System 5 set up to control both the Nuendo DAW and Euphonix DSP.

Genex Audio (www.genex.co.uk) introduced the GX9000, ultraprecision converters and multiformat digital multitrack recorder. Offering both PCM and DSD capabilities, the new range comprises the GX9000 8-track and the GX9048 48-track, with 192kHz PCM recording performance and up to 48 channels of DSD data.

Audio data-compression specialists **APT** (www.aptx.com) announced the 5.1 TCP/IP WorldNet SkyLink, a direct result of collaborative work between APT engineers and audio experts at George Lucas' Skywalker Ranch in California. WorldNet SkyLink can offer 5.1, 6.1 or 7.1 multichannel audio, plus SMPTE timecode and has been designed for remote director approvals. The unit can deliver content in real time or "Store 'n Forward," depending on available data rates.

Neumann (www.neumannusa.com) celebrated its 75th anniversary, with a cool Sound Engineering Contest 2003 (the winner received a chrome-plated pair of M149 tube or Solution-D digital mics) and debuted the BCM104—the first in a line of broadcast mics—and the TLM127, a mid-price studio mic. Shipping this summer, the TLM127 is a low-noise (7dBa), large-diaphragm, multipattern condenser with an onboard switch for cardioid or omni and a remote-pattern switching option to be offered in the future.



Genelec 7073A

No preamp required! **ADK Microphones** (www.adkmic.com) unveiled its Stealth Pro Audio line, featuring a studio mic with onboard Class-A, line-level output electronics. The first models are due later this year, with a 192kHz digital out version in early 2004.

England's **Linn Products** (www.linn.co.uk)—renowned for its high-fidelity audio components and systems—made its first foray into the professional monitor market with the 328A fully active loudspeaker.

Another company celebrating a historic milestone at AES was **Genelec** (www.genelec.com). Now 25 years old, Genelec showed what they rightfully called the "big daddy" of subwoofers: The new 7073A features four 12-inch woofers, providing an incredible 124dB sound pressure output, twice the output of the 7071A.

The 116th AES moves to Berlin, Germany, in May 2004; meanwhile, book those hotels soon for the 115th AES, October 10-13, 2003, in New York City. ■

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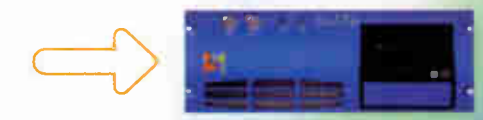
DSD 8

DSD 2



PCM 8

PCM 4

DSD8: 8-channel DSD mastering and Super Audio CD authoring system

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STOP Mousing Around!

By Erik Hawkins

These days, with so many wonderful control surfaces available, there are few excuses not to interface with your DAW or digital audio sequencer using a mouse or computer keyboard. No matter what your platform and working style, there's a control surface with real faders and knobs that will fit your desktop and budget.

It should also be noted that an increasing number of digital consoles—ranging from a Yamaha 01V to a Euphonix System 5—can be configured to mix virtual tracks on a DAW or MIDI system. However, rather than get sidetracked here, this article focuses on dedicated controllers.

Sorting through all of the different models to find one that works best for you can be tedious, so to simplify the process, let's explore the pros and cons of various control surfaces on the market today.

Digidesign Control|24 System

Control surfaces come in two basic categories: those that interface with a variety of programs, and those specifically meant to operate with a particular DAW or sequencer. But from there, the field is wide open. Some units are as big as a small analog console; others are easily balanced on one hand. Some have moving faders; others don't. Some have sidecar expanders for more faders, knobs, meters or a joystick; some units are entirely self-contained. The majority require a MIDI interface, but a couple do not. A proud few sport a built-in speaker monitoring section, but most lack such features. When it comes to surround monitoring, the situation is worse; fortunately, outboard 5.1 monitor controllers are available from companies such as Blue Sky, Coleman Audio, SPL, Studio Technologies, Tascam and others.

Before committing to any product, take stock of all the features. Do you mostly work with one DAW/sequencer or several? Do you have a lot of desktop real estate or just a little? Are moving faders crucial to your work? Will eight faders be enough? Is the option to expand important to you? What about metering? Do you have the available MIDI I/O or USB ports? How will you monitor audio? Do you need a talkback mic to communicate with talent in the studio?

World Radio History

Finding The Right DAW Controller

CM Labs DashBoard

DEFINING THE CONTROL SURFACE

It's easy to mistake a MIDI controller—especially one with faders—for an actual control surface. To make matters more confusing, there are a few MIDI controllers that double as control surfaces. But, while all MIDI controllers can control your digital audio sequencer's MIDI tracks' mixer, not as many can control its audio tracks' mixer. In contrast, all control surfaces can control both.

Like MIDI controllers, control surfaces use MIDI to communicate with the program that they are controlling. However, the types of MIDI commands sent by a control surface and recognized by a virtual mixer are not usually standard fare. For example, Mackie's (www.mackie.com) **Mackie Control** ($1,299) sends out doubled-up pitch-bend commands from its faders. A template—often called a "profile"—that maps the control surface's commands to the virtual mixer's elements must be written into the DAW/digital audio sequencer. Once the control surface is connected to your computer, you must then select its matching profile in your application, though a few are auto-sensing.

A majority of the control surface base units have MIDI Machine Control (MMC) transport keys and eight faders. Currently, most faders are motorized. The majority of units employ MIDI ports to communicate with your applications, though some offer alternatives (like USB or Ethernet). The control surfaces in this article are designed to be used with a high-quality external audio interface (such as MOTU's 896 or Digidesign's HD system). These are not units with a built-in I/O, like Tascam's US-428 and US-224, which are equal parts control surface and audio interface.

DEDICATED UNITS

If you generally depend on one DAW/sequencer for all of your work, then you should consider a dedicated control surface. This will give you unparalleled control over your favorite application. The surface will have faders and knobs with labels that perfectly match your program's functions. Even the unique and hidden features of your software will be accessible from a dedicated surface.

The downside is that a dedicated unit won't work with any other programs. If you change, even temporarily, to a different DAW/sequencer, your control surface will be nothing more than a real-estate hog.

Probably the most well-known dedicated surface is Digidesign's (www.digidesign.com) **Pro Control** ($11,995). If comprehensive control of Pro Tools TDM is what you need, then this is the surface to get. It has a ton of dedicated keys, comprehensive meters, a jog/shuttle wheel, built-in QWERTY keyboard and a well-designed monitoring section with three stereo output pairs (5.1-ready) and a talkback mic. The **FaderPack** ($6,495) expander offers more faders, while the **EditPack** ($7,495) gives you total editing control, including two motorized joysticks.

Also providing Pro Tools TDM control, Digidesign's **Control|24** ($7,995) includes 16 Focusrite Class-A mic preamps. The company's **Digi 002** ($2,495) provides dedicated control over Pro Tools LE, and also doubles as an 8-input digital mixer with onboard effects and a decent monitoring section. None of the Digidesign control surfaces use MIDI ports to interface with your computer. The Digi 002 is FireWire, and Pro Control and Control|24 employ RJ-45 Ethernet connections.

For the ultimate control of Emagic's Logic Audio, nothing beats Mackie's **Logic Control** ($1,299) surface. It has a jog wheel and great meters, but lacks a monitor section. The **Logic Control Expander** ($1,099) adds another eight faders. MIDI I/O ports are required for Logic Control and each Logic Control Expander, so a large system comprising several units

Emagic Logic Control by Mackie Designs

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trols are missing, but an additional fader section and an edit sidecar—the DashBoard ($999)—can be added for jog wheel functions. At NAMM, CM Labs introduced MotorMate, with eight motorized faders, jog wheel and monitor section.

New to the scene is Mackie's Baby HUI ($799). As you can guess by its name, Baby HUI is a very scaled-down version of the HUI. It packs motorized faders, multifunction rotary encoders and a host of keys. Though at less than a third of its big brother's price, it's a solid deal. Baby HUI will function with any DAW/digital audio sequencer that supports the HUI protocol.

Peavey PC 1600X

If you can do without moving faders, Peavey's (www.peavey.com) PC 1600X ($350) or its predecessor, the PC 1600, is an old favorite. Sixteen faders in a slender box—no frills. This unit has one of the longest manufacturing runs of all MIDI controller fader boxes. As a result, there has been ample time for many software developers to write its profile into their applications.

If you need more faders in less space, check out JLCooper's new CS-32 MiniDesk ($500). It packs an incredible 32 faders (not motorized), jog wheel, transport keys and an odd assortment of knobs and buttons into a 1x8.8x9.25-inch (HxWxD) chassis. It's available with either MIDI or USB ports; the latter can even draw its power directly from the USB bus. It can use the venerable CS-10's profile. JLCooper still makes this control surface, too, though it's been updated to the CS-10² ($800), MIDI or RS-232. It's a good alternative to the PC 1600X. The company also offers the MCS3v2 USB software to map the CS-32's controls to your applications. It's a free download off its Website; the Mac version is out, but the PC version won't be available until later this year.

MONITOR SECTIONS: THE MISSING LINK

We can normal mic and line inputs to our sound cards' interfaces, and we can control our digital audio sequencer with a control surface, so why can't we throw out the analog mixer? Because we need it for a monitor section. I've asked several manufacturers point-blank why they don't include a dedicated monitor section. The answer was always one of two responses: "You don't need a dedicated monitor section. Just control your speaker level from your virtual mixer's master fader." Or, "It was a cost issue."

Steinberg Houston

Controlling speaker levels from your virtual mixer is definitely not ideal. If you run into a feedback situation and your control surface doesn't have a dedicated master fader, searching for the virtual master with your fingers in your ears is tricky. Monitor and master levels are supposed to be separate so that you can turn down your speakers without killing your master output. If you need to run a copy to DAT and you don't want to listen to the source, must you turn your powered speakers off? Unlike pro analog consoles, virtual mixers don't provide a way to route the master to different monitor outputs at the press of a button. Serious mixing requires more than one set of reference speakers; the ability to quickly switch between different sets of speakers during a mix is essential.

A computer-based multitrack recording setup has the potential to be much more compact than a traditional analog system. But if you must keep an analog mixer sitting at the side of your control surface, then the setup is no longer so streamlined. A small, quality analog mixer that can provide adequate sends to multiple speakers and a master level control costs around $400. It seems to me that this money would be better invested in a control surface containing a monitor section, rather than a sidecar analog mixer. That solution is not elegant and not ergonomic.

If you decide on a control surface that doesn't have a monitor section, Furman Sound (www.furmansound.com) has a possible solution. The SRM-80A ($649) is a single-rackspace signal router (with an optional remote controller) that can take a stereo feed and pipe it to four separate sets of speakers and outputs, each with their own level control, along with built-in headphone amp, mono and dim switching. A less space-efficient solution is to use a small Mackie mixer, such as the 14x2 ($629). Or, you can always keep your old, large-format analog console and just stand it up in the corner. (Just a joke. No letters, please!)

EXPAND YOUR SURFACES

Controlling your digital audio system with real knobs and faders is a joy. A mouse and a computer keyboard are fine for word processing but not for recording and mixing. If you're used to a mouse and key commands, keep in mind that when you transition to a control surface, familiarity with the new interface will not happen overnight. But as you acclimate, tasks will begin to proceed faster and faster, and you will spend less time staring at your computer screen. A big advantage of control surfaces is that over time, they help us to get back to using our ears to record and mix instead of our eyeballs.

Finding the right control surface for your needs does not need to be challenging if you ask the right questions and double-check product compatibility before purchasing. Consider these pivotal decision points: dedicated or universal; support by custom profile or the ability to use another control surface's profile; motorized or nonmotorized faders; meters on the control surface or on your computer screen; expansion options; size and space considerations; and monitoring. Address all of these points to your satisfaction, and you're sure to choose a winner. ■

Visit Erik Hawkins' indie label at www.muzicali.com to hear music made with today's studio gizmos and check out his virtual studio recording book, Studio-in-a-Box, *published by ArtistPro.com.*

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Tools of the Trade

TERRATEC PRODUCER PHASE 88 RACK

TerraTec Electronic (dist. by Fostex, www.fostex.com) offers the TerraTec Producer Phase 88 Rack, a 24-bit/96kHz multiple I/O interface for PC-based recording. The modular system offers eight high-quality analog inputs/outputs (+4/-10dB-switchable) in an external rack module that connects to the Phase 88 PCI bus card. In addition to S/PDIF digital I/O and two MIDI I/Os, the unit has two balanced mic inputs. Up to four Phase 88 Rack systems can be cascaded for up to 40 physical I/Os. The PCI bus card features 20-channel mixing and 20x4 routing.

DRAWMER M-CLOCK

Drawmer's (www.drawmer.com) M-Clock multiple-output AES Grade-1 master clock generator incorporates onboard up/down sample-rate conversion with the capacity to interconnect up to 28 digital audio devices and 12 clock outputs at sample rates up to 192 kHz. Each of M-Clock's four sample-rate converters offers simultaneous AES/EBU, S/PDIF and Toslink outputs—all locked to the same internal master clock. The M-Clock also offers Superclock for Digidesign Pro Tools Mix 24 hardware interfacing and AES 11 (Digital Black) to synchronize semipro units without word clock inputs.

BBE SOUND ACTIVE DI

Incorporating BBE's Sonic Maximizer circuitry, the DI-100x active direct box from BBE Sound (www.bbesound.com) offers a 15dB pad switch, ground lift switch, balanced XLR output, impedance balanced ¼-inch tip-sleeve output, plus ¼-inch tip-sleeve input and thru connectors. Finished in a Ferrari-red baked-enamel finish, the DI-100x has a thick, extruded-aluminum housing with recessed switches and a nonslip bottom pad. Additional features include 1% metal film resistors and mil-spec circuit boards.

HELIOS OLYMPIC SERIES

The legendary Helios Electronics (dist. by Vintage King Audio, www.vintageking.com) has resurrected the Olympic Type 69 Series EQ, which was used by

The Beatles, the Rolling Stones, Bob Marley, Led Zeppelin and others. Available in 1U dual-mono or mono vertical module versions, this classic discrete 3-band EQ/preamp is similar to the original, but with much-improved build quality, additional 30Hz and 16kHz EQ settings, and a Sowter input transformer based on the original Lustraphone (Olympic) transformer models.

SONIC IMPLANTS SYMPHONIC STRINGS MINI

Sonic Network offers Symphonic Strings MINI, a $449.95 subset of the 20 CD-ROM Symphonic Strings Collection production library, featuring members of the Boston Pops and Boston Ballet string sections. Sections include first violins, second violins, violas, celli, basses and section ensembles. The six CD-ROM MINI version is available in Gigasampler and Soundfont formats; other formats are planned. MP3 demos are available at www.sonicimplants.com.

MACKIE CONTROL C4

Mackie Designs' (www.mackie.com) Mackie Control C4 is a hardware controller for plug-ins/virtual instruments, providing an analog-style interface, eliminating the need to constantly "bank switch" to access parameter-rich software modules. The C4 has four banks of eight V-Pots each, and four full-size displays and corresponding knobs for instant access to as many as 32 separate software parameters. C4 is supported by MOTU Digital Performer and Emagic Logic Audio, and it may be used independently or with additional Mackie Control and/or Mackie Control Extenders. Price: $1,099.

QUANTEC REVERB PROCESSORS

Quantec Tonstudiotechnik (dist. by HHB, www.hhbusa.com) intros two new 24-bit Yardstick reverb effects processors, both containing the top features of all past DSP-based Quantec reverbs. The Yardstick 2496 room simulator offers dual-mono/stereo inputs and up to six outs, each with assignable individual delay of up to 0.2 sec-

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onds. All I/Os are digital via AES/EBU. The Yardstick 2403 is a similar version with XLR analog I/Os.

Z-SYSTEMS Z-QUALIZER

Z-Systems (dist. by Transamerica Audio Group, www.transaudiogroup.com) debuts the z-Qualizer, a 6-band, stereo digital parametric EQ. The half-rack unit combines digital precision and repeatability with the openness of a fine analog EQ. Center frequency, gain and bandwidth (Q) are variable and filter band overlap. Capable of handling up to 24 bits at up to 192 kHz, the unit outputs 24/20/16 bits and features both TPDF and POW-r wordlength reduction. In addition to stereo-linked and dual-mono operation modes, the z-Qualizer supports M/S (mid-side) encoding and decoding. Presets can be loaded/unloaded via MIDI, and snapshot automation is possible via MIDI program change commands. Connections are AES/EBU I/Os and MIDI In/Thru. Retail: $1,200.

BEHRINGER V-AMP PRO

The V-AMP PRO modeling guitar amp and multi-effects processor from Behringer (www.behringer.com) features a 24-bit/96kHz AES/EBU and S/PDIF outputs and Ultra-G cabinet simulation. This rackmount unit offers 32 virtual amp models and 15 speaker cabinet simulations. Features include a wordclock out, balanced analog stereo direct outs, and effects such as delays, flangers, rotary speaker, wah and reverbs. Custom amp/cabinet combinations may be stored in 125 memory locations. A free Windows editor is downloadable from the Internet. Price: $269.99.

SPL GAINSTATION MIC PRE

SPL's (www.spl-usa.com) GainStation mic preamp is available either as an 8-channel rackmount device or a single-channel unit. Features include peak and FET limiters, separate instrument inputs and switchable input impedance. The unit has two separately controllable preamp stages (tube and transistor) with fully discrete Class-A circuitry throughout.

TC FIREWIRE INTERFACE CHIP

TC Applied Technologies, a newly established subsidiary of TC Group (www.tcgroup.tc), has announced the DICE II IC, a single package chip that handles all standard pro audio I/O formats, including the IEEE-1394 (FireWire) interface. An integrated solution to interface digital audio products, the DICE II can support a total of 96 FireWire audio channels at 96kHz sample-rate and features two sample rate domains, each with an on-chip PLL. Additional features include: AES receiver/transmitter (eight channels in each direction); ADAT receiver/transmitter with S-MUX support for 96 kHz; ARM 32-bit RISC processor; IEEE-1394 Link Layer Controller; and support for 100-meter runs of Ethernet cable. Multiple DICE II chips may be arrayed for greater channel handling capability.

NATIVE INSTRUMENTS ABSYNTH 2.0

Absynth 2.0 from Native Instruments (www.native-instruments.com) offers 800 new musical presets, a revised DSP core and new sampling/synthesis options. Absynth 2.0 is now a synth and sampler, with a new Patch window to mix sampling, granular sampling, subtractive, wavetable, FM, AM, ring modulation and wave-shaping synthesis. Each voice has six synth oscillators (or three sampling oscillators), four filters, three ring modula-

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tors and a wave-shaping distortion function. Waveforms can be drawn by hand or created by drawing harmonics. Most parameters can be controlled by Absynth's envelopes (each with up to 68 breakpoints); synched to the tempo; and envelopes can be dynamically controlled via MIDI. Each envelope can be modulated with its own variable-speed LFO. A new Link mode allows multiple envelopes to be chained together, with adjustable time, amplitude and slope scaling. New filters include 2-/4-pole lowpass and multipole allpass filters.

KORBY AUDIO "THE CONVERTIBLE" The Convertible, from Korby Audio Technologies (www.korbyaudio.com), is a revolutionary mic system with interchangeable capsules that re-create the sound of classic mics, such as the Neumann U47 and U67, Elam 251 and AKG C12. The body is hand-wired, using hand-selected discrete components. The four included hot-swappable capsules let users change heads without having to power down. Simply pull the entire grille/capsule assembly from the body and plug in another assembly for a different classic sound. The capsule is housed in a nickel plate and mesh grille assembly; the body is a powder-coated cylinder.

UPGRADES AND UPDATES

WiebeTech offers an improved version of its 40GB MicroGB+™ FireWire pocket drive (measured at approximately 25 MB/sec), for increased performance in Final Cut Pro or Pro Tools applications. Visit www.wiebetech.com...**E-mu's Vintage Keys** keyboard is a 61-note keyboard version of its Vintage Pro module, combining classic sounds from the '60s/'70s/'80s with the synthesis features and sound quality of its Proteus products. It includes more than 30 keyboards: from the Hammond B-3 and Wurlitzer electric piano to legendary analog and digital synths like the ARP 2600 and CP70. Check it out at www.emu.com... ***Mastering Audio: The Art and the Science*** by Grammy Award-winning engineer Bob Katz, is a 319-page, $39.99 text outlining the steps in CD production, from creation to final pressing. Topics include the mysteries of jitter, dither and wordlengths; high sample rates; distortion; headroom; monitor calibration; metering; mastering; compression; digital interfacing; and more. Go to www.focalpress.com...***The Recording Studio*** Test CD from Tejera Microsystems Engineering includes test tones for audio system calibration, plus spoken directions that walk the user through all of the tests. Data files containing printable instructions and a glossary of audio terms are included. Visit www.tmenet.com...**Middle Atlantic Products' UL Listed FC-4 Fan Control** automatically triggers fan operation when a rack's internal temperature reaches one of three user-selectable degree settings. The FC-4 can control up to four 120VAC fans and may be mounted stand-alone or inside MAP's MPR Modular Power. For info, call 973/839-1011 or visit www.middleatlantic.com...**My Dog Rax's Steel Classic stainless** steel rack system is offered in 19- and 29-space models. Featuring a 2-inch square tubing frame faced with natural woods set into the sides and top, the Steel Classic may be customized with drawers, lighting and more. Call 310/621-8871 or surf to www.mydograx.com...The **$34.95 Sonic Stop.com Hotbox Volume 1 hip hop-style drum loop package** has over 175 hip hop drum loops and 100-plus samples of hi-hats, kicks, snares and other percussion in Mac and PC formats, including Reason Refill, Acidized .WAV 16/24-bit and Rex 2. Visit www.sonicstop.com...**SpinAudio's RoomVerb M2** has been updated to Version 1.1. The $145 VST/DX reverb plug-in has over 200 presets. Separately controlled room dimensions can vary from one to 200 meters, with up to 200 seconds of reverb time and up to 100 early reflections with six decay envelopes. Download a free demo version at www.spinaudio.com...**Gefen's VGA-to-ADC conversion** box links Apple's new 12-inch PowerBooks to any Apple flat-panel display, including the 23-inch HD cinema display. Visit www.gefen.com...**VirSyn's CUBE Soft Synth additive synth** for both Mac OS and Windows can run as a standalone app or as a VST/AudioUnit plug-in with up to eight independent outs, four morphable sound sources, morphable filter banks, three envelopes with temp sync, two LFOs (64 time/level segment per envelope) and a comprehensive effects rack. Check it out at www.virsyn.com...Now shipping, **Spectrasonics' Trilogy Total Bass Module** software plug-in instrument integrates a custom 3GB core library with hundreds of new bass sounds and an interface to create custom user patches. Trilogy is designed to function as a native plug-in instrument, without the need for a sampler, in hosts such as Logic, Digital Performer, Cubase VST, Nuendo and Pro Tools. It's distributed in the U.S. by Ilio Entertainments; visit www.ilio.com. ■

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are very sensitive to the touch, without being touch-sensitive. However, with the slightest finger movement, a controlled parameter's information is changed in one, two or several displays.

The central display can also show data from an external device via a standard VGA connection. Therefore, info from Pro Tools, SADiE, Nuendo, Logic, etc., can be displayed directly on the C200's central screen without additional cumbersome laptops or monitors perched and taking up unnecessary space. The C200's control tools—the tablet/pen, mouse and transport/function buttons—are automatically configured to the specific DAW/sequencer system connected to the desk. It also accepts RGB signals (with a converter), so the screen could double as a picture monitor for DVD, television or film production. Wow!

PANNING AND AUTOMATION

For straightforward stereo production, a large fader left/right and a small fader left/right pan is all that you need. To do 5.1, you'll need more control: The small fader can be set to handle front/back panning levels. The 12 main buses can then be combined to form simultaneous 5.1 program outs, a master 5.1 compressor, a dedicated master fader and an 8-channel insert point—all easily applied, stored or recalled.

The 12 buses are displayed in a user-determined matrix with LCR/Ls/Rs/sub, and Stereo Mix L/Mix R program points. Several surround and 5.1 presets are also preprogrammed into the matrix, and user-determined options can be named and stored. This gives joystick-style control without needing a joystick on the console. SSL determined that a joystick seems to imply it's an out-and-out film console, which the C200 isn't. But now you know why I originally said this mixer could be used for post-production and film. SSL user feedback seems to indicate preferences for the on-screen type of display; after all, real-time fader movement can be saved, stored and edited exactly the same way as with a joystick.

The automation can be locally or globally turned on or off, and changes made in several levels. For example, if you want to mix simultaneously in 5.1 on the large faders with a stereo mix on the small faders, you could then globally or individually automate parameters for full automated 5.1 and stereo panning, and A/B between the two. This is great for DVD or television production. With a fully fitted DSP complement, you could have 192 fully automated 5.1 channels at 96 kHz—scalable in any configuration!

ROUTING

From the routing matrix in the master control section, you can route to any channel—or range of channels—and patch into the large fader, the small fader or the insert point for that path. For my field test, a TC Electronic M5000 and Lexicon PCM90 were controlled. It was simple to assign the device to a channel or group of channels, and then control—via the master control section on the C200—the effect parameters in real time or through some timecode trigger function, EDL or MIDI control.

It's easy to source an FX device and route the left channel/right channel across an 8-channel group. When routing, just choose whether you want the source to "increment" or "sum." This is great, because most digital consoles tend to make each task within the operating system far too complicated to use in real-world situations.

FRAME SIZES

The C200 can be provided in a frame as small as two bays of 16 channels with a master section, much like the broadcast-oriented C100. However, as all 96 channels have dedicated buttons within the master central section—regardless of how many bays are in your frame—DSP power will determine the number of channels needed. Your budget and space restrictions will also determine the physical frame size for your needs. Sure of the C200's potential, SSL foresees its multiple uses: in configurations from stage sound, live sound, in the back of a truck and from a television post console to music production. It's even possible to configure the control surface to remove the central master control area and mount the central monitor on an external screen. This gives more faders for your space—ideal for inside a truck perhaps?

CENTURI PROCESSOR CORE

The heart of the system is the new Centuri processor, housed in a 15U chassis that hosts up to six DSP cards, each of which can handle up to 32 channels per card at 48 kHz, but are switchable to 16 channels per card if used at 96 kHz. The console provides a full 48 mix buses and 12 aux sends—either at 48 kHz or 96 kHz. I/O card options cover just about every need, with analog, AES/EBU digital and MADI all available, operating at 24 bits and with sample-rate conversion for digital I/O as standard.

In short, whatever your setup, requirements or media application, you'll never run out of I/O processing power. SSL even provides a single card slot for GPI (General Purpose Interface) I/O, with up to 60 GPI inputs and outputs available, so that in a conventional recording environments, for example, the master control section's "source bus" buttons can be used for individual and trigger serial track-arming and the like.

In addition, the Centuri core's internal routing card may be fitted with up to four fiber expansion cards, each daughter card handling up to four fiber links. This is especially important for live and stage applications using either the SSL C-SB (C Series broadcast stagebox) fitted with up to eight inputs per card—48 mic inputs in total—with the stagebox placed up to 550 meters from the Centuri core, or the SSL C-Super-Pre (C Series super pre) remote preamp with up to 24 mic/line inputs and optional insert points for analog processing before conversion. You can even add optional redundant PSUs for added resilience, and with up to 16 stageboxes possible using the fiber links, huge orchestral/scoring sessions should not be a problem.

FUTURE-PROOF?

The Centuri core has an RS-232 port for local processor diagnostics. In real terms, if your desk ever goes down—the worst nightmare for any digital console owner—then the SSL's tech engineers are only a phone call away, anywhere in the world. Connecting your console using the SSL NetBridge system (a secure log-in facility) allows techs to discover and, even more importantly, solve the problem via remote access. C200 software updates can be uploaded either at a predetermined downtime or covertly in the background during operation so that the C200 can expand with new or updated operating systems as they become available.

According to SSL, a typical studio system starts around $275,000. However, the C200's control surface really does match up to just about everybody's wish list. Not only does this board offer an entirely new digital control surface with every bell and whistle, but one with a tried-and-tested tradition, which end-users helped to determine.

For that reason alone, I expect the C200 to be very successful. It will live up to its billing because it really does provide everything that you would want.

Solid State Logic, 212/315-1111, www.solid-state-logic.com.

MIX ONLINE EXTRAS

The former editor of Audiomedia, *Rob Alexander is a musician, engineer, journalist and globe-hopping bon vivant.*

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One of the strongest suits in the Samplitude family is absolute sound neutrality – Comparable in fact with high end analog consoles. The sound always remains full and transparent, retaining its depth without tingeing. Highly developed digital algorithms, absolute phase stability and constant use of floating point computation ensures that the sound retains its positive sound nuances during intensive digital editing. These are: transparency, neutrality, preservation of transients and stereo field, best possible receipt of the signal form.

Samplitude 7 now comes with POW-r, a high-quality dither algorithm. Developed and patented by the POW-r Consortium, it reduces word lengths of 20, 24 or 32 bits to the standardized 16 bit CD format with a high degree of perceptible signal dynamics and low noise level.

Comprehensive Editing Functions

Samplitude offers a huge range of professional editing functions. Recorded samples can be arranged in any way, cut, and be reworked into soft crossfades. Dozens of tools are available. Precision volume and pan envelopes that can be automated while remaining true to the original sample round off the tool pallet. Of course, editing is performed virtually – and therefore non-destructive – so that every parameter can at any time be altered without losing valuable material.

Unique Object-Oriented Editing

As an enhancement to the traditional concept of mixer-supported editing of complete tracks, all versions offer countless possibilities for direct real-time sample editing. Recorded audio tracks can thus be cut into as many objects as you wish. Every object can be edited with individual fades and effects, such as Equalizer, Timestretching, Pitchshifting or plugins. Samplitude also offers Aux-Sends on the object level, the well-known linearphase mastering effects, and a widely variable signal flow.

First Class Effect Setups

From mixing to mastering, all production needs are met: Award-winning equalizers, various dynamic processors, Timestretching, Pitchshifting, Reverb and Delay, plus the high-end mastering effects: Multi-tape compressor, Multi-band stereo enhancer, FFT filter with over 30,000 bands, Amp Simulator, Vocoder, room simulator with folding principle, Denoiser (utilizing the noiseprint method) and Dehisser for real-time noise reduction. Besides routing possibilities for all effects that allow a freely configurable signal flow, these possibilities are not only available to the object level, but also in each mixer channel.

Further features: improved solo effects, unlimited routable busses and Aux-send busses, VST and DirectX plugin support, flexible routing of all integrated and plugin object effects and mixer channel effects.

Burning CDs

It couldn't be easier: Red Book-compatible audio CDs can be burned on-the-fly from the arrangement, without having to take any destructive intermediary steps. The continuously updated support makes sure that even the latest models burn perfectly with Samplitude.

Track Speed and Stable Playback

Intelligent cache management means that the harddisk installed will be used to its fullest capacity – confining to history the old problem of too few tracks while producing with 24 bit/96 kHz. Stable playback: Arrangement playback has priority over all other operations such as opening menus. No more crashing or bumping playbacks!

2 GB File Breakthrough

The Windows WAV file size limit of 2 GB is history. Now you can record up to 2 billion stereo samples. That means 10 hours of sounds in just one file with 44,1 or 48 kHz. Complete radio broadcasts can now be recorded in one take.

Further Features

- Easier handling: Work area presets offer interface clarity whereby only the pallet of the function being used currently is displayed
- 5.1 Surround capability (only Samplitude Pro /Sequoia)
- Midi and VST* instruments (Samplitude Pro/Sequoia)
- Support of all audio and internet file formats, such as Broadcast WAV, MP3, OGG Vorbis and WMA
- Visualizer: optimal metering with highly precise and size-variable peakmeter and spectroscope
- Total control via configurable shortcuts: Samplitude is renowned for its flexibility and effective functionality. For almost every command there's an individually configurable shortcut available (only Samplitude Pro /Sequoia)
- Support of all important driver models: ASIO*, WDM, MME
- Outstanding helpful user community.

* ASIO and VST are tracemarks of Steinberg Media Technologies AG

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TC Works Assimilator Plug-In for Powercore

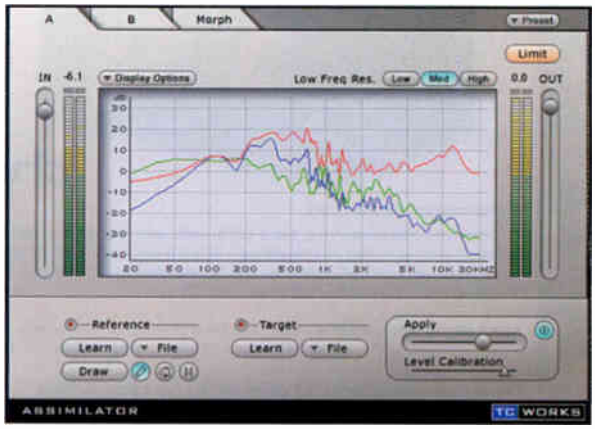
Rethinking the Concept of Equalization

Have you ever sat there in front of the console, putting the final touches on a track, and felt like something was missing? For whatever reason, when you A/B your material with someone else's, you can't help but get that sick feeling that something is fatally wrong with your mix. Or worse still, you track some of the best guitar sounds of your life, and you pop into the studio the next day only to find that something has changed or somebody forgot to take notes on the settings, leaving you to eternally ask yourself, "What if?" Thankfully, these horrific scenarios may soon be a thing of the past. Enter the new Assimilator plug-in from TC Works.

Designed for the Powercore platform, Assimilator ($299) is designed to intelligently analyze different pieces of audio and apply the EQ "fingerprint" of one piece of audio to another. The two EQ curves are referred to as the Reference curve (your original signal) and the Target curve. It sounds simple enough, but the applications for a piece of software like this are limitless. A vocal track recorded months ago in a different studio with a different vocal chain can be morphed to mimic the sound of a vocal recorded yesterday and vice versa. For mastering chores, the global EQ of an entire album can now be much more consistent. And then there are the more sinister uses: You can't figure out how Bob Rock gets that monstrous snare sound? Just pass a few bars of Metallica's "The Unforgiven" through Assimilator, and you're on your way. Or, perhaps you don't feel like paying for a mastering engineer and you need to get a track up on your Website in a hurry. Find a piece of music that has that sound you want, and the sound is yours.

UP AND RUNNING

With Assimilator, TC has employed one of the more interesting packaging concepts I've seen in a while. When I first attempted to install the software, I did what anyone would do: I opened the box and dropped the CD-ROM into my computer, expecting to be under way shortly. To my surprise, the plug-in itself was not there. The CD included manuals and tutorials but no real installer. Users are instead directed to the TC Website, where they're instructed to enter their Powercore card-authentication number and Assimilator serial number. From there, you're permitted to download the plug-in. The complete plug-in package also includes a second piece of software called the Assimilator Compensator, which comes with its own documentation and Assimilator presets. At this point, I was a bit confused by the entire process.



Screen A in Assimilator, showing target and reference EQ curves

I copied the Assimilator plug-in into the Powercore folder inside of both Cubase and TC Spark 2.5. And after quickly reading through the included PDF manuals, everything became clear. Assimilator works off both the Powercore, as well as pulling a tiny bit of bandwidth off of the host CPU, thus requiring a different compensation plug-in than the standard Powercore Compensator. For those of you who already own a Powercore or are familiar with other card-based plug-in packages, this should all make sense. For everyone else, this subject requires a bit of an explanation.

Plug-ins that run off TC's Powercore card incur a slight amount of delay because they get slowed down when crossing back and forth over the PCI bus. In an average session, where some audio tracks will have Powercore plug-ins inserted on them and others do not, this delay can cause things to play back out of sync. Most DAWs automatically account for this delay when these effects are used as standard inserts on single or stereo audio tracks. For whatever reason, the same is not true when Powercore effects are used on a group bus (a common issue with most host applications). And for this reason, the various compensation plug-ins are included. The quick fix when using Powercore effects on group channels is to set up a secondary group bus for all of your non-Powercore tracks, insert the appropriate compensation plug-in (set to the number of Powercore plug-ins in use) and route it to the stereo master. If you want to skip this step, the Assimilator Compensator PDF includes a table that tells you how far (in samples) to nudge your non-Powercore audio tracks so that everything plays back in sync: a tedious process at best.

The Assimilator Compensator includes an extra item that is different from the standard Powercore Compensator: Inside of both the Assimilator and the Assimilator Compensator are settings for low-frequency resolution. The settings are low, medium and high, and the default setting for both is medium. These two settings must be the same for the plug-in to function properly. As far as the resolution settings, the same theory applies here as with any plug-in. With the higher-resolution setting, you can expect better low-end detail and separation with a higher Powercore DSP load.

The overall system requirements are pretty basic. For Windows, you'll need Powercore System 1.6.1, Windows 98SE/ME/2000/XP, PIII/500 or better, 128MB RAM and a VST host application. On the Mac front, the requirements include Powercore System 1.6.1, Mac OS 9.04 or higher, G3/300 or better, 128MB RAM, and a VST or MAS host application.

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75 years later... Nothing has Changed!

2003 - UM92.1S capsule.

1957 - UM57 capsule.

Gefell M930 Stereo X/Y

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From the 1st generation multi-pattern UM57 to the fabulous UM92.1S, Microtech Gefell continues the tradition with the legendary 'tube sound' that is only possible with the original M7 capsule. That's right, the original M7, with gold sputtered PVC, hand made in the Gefell factory.

(Left to Right) Tube mics: Original UM57 (1957), UM57 V.E.B. (1972), and today's Gefell UM92.1S

That's not to say we have rested on our laurels... Since the beginning Gefell has set the pace for microphone innovation and continues to elevate the bar: The Gefell UM900 Phantom, the world's only 48V phantom powered tube mic; the Gefell M930 Compact, a large-diaphragm studio condenser with optical isolation and the lowest self-noise in the business; and now the Gefell MV230 digital for better than 140dB performance. But wait, there's more...

Today, Gefell measurement microphones lead the world in metal diaphragm technology. For those 'in the know', nothing compares to the precision of an ultra-thin 0.8-micron pure nickel membrane for true, full bandwidth performance. This incredible technology is now available with the new Gefell M295, a low profile cardioid that will absolutely blow you away.

Of course there are lots of mics to choose from and for the average person, a mass-produced copy is just fine. But if you want something truly special and a cut above, visit one of our exclusive Gefell Dealers and listen to the difference that quality, tradition and pride can make. You may be surprised at how good a hand-made microphone can truly be.

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INTERFACING WITH THE COLLECTIVE

The Assimilator interface is deceptively simple. It includes three main screens or pages that are broken down into screen A, B and Morph. The first two screens are exact duplicates of each other (the A/B pun should be obvious to all), and the Morph page allows you to blend the results of page A and B—more on this later. The A/B screens include an analysis display that shows the various EQ curves in real time. There are also input and output gain controls, reference and target EQ controls, preset management, low-frequency resolution settings, limiting, level calibration and a slider that mixes the reference and target EQ signals. For the truly tweaky, Assimilator also allows users to customize their EQ settings with three tools: The pencil tool allows you to create your own reference curve by simply drawing it in; the magnet tool glues a section of the reference curve to the target curve; and, finally, the magnet tool also groups EQ points, enabling you to move them as a group.

To make Assimilator work properly, you must do two things: First, you need to pass your reference audio (the piece of music you want to alter) through the plug-in. To do this, simply insert the plug-in on the channel in question, press the Learn button under the Reference heading and hit Play. You'll notice a real-time analysis curve appear in the main screen. The curve doesn't bob and weave to every note of the music; rather, it is looking for an average EQ signature. (If you stop playback, then the curve will slowly come back to zero.) Once you've played your reference piece through the plug-in, it's time to find your target EQ. Under the Target heading, press the Learn button and repeat the same process as before. This time, however, you're going to send your target material through Assimilator. After the plug-in has both curves stored and analyzed, it's possible to hear what it can really do. The slider under the Apply heading allows you to blend between the untreated source signal and the custom curve that the plug-in has created.

The Morph function offers a slight variation on the process. Inside both the A and B pages, users must first move through the same analysis steps as above. Once that is completed, they can move over to the Morph page and blend between the results of four EQ curves (two reference and two target). For DAWs capable of plug-in automation, this makes it possible to move between two radically different EQ settings in real time.

WHOLESALE THEFT

After first auditioning the plug-in and getting a clear picture of what it can do, I immediately turned to my CD collection and began making some extensive notes. I wanted to hear some of my own material processed with the EQ curve of a number of my favorite recordings, and my preset names were just as shameless as my intentions. Some of the best/worst included "Sweet Spawn of Mine," "March of the Sheep," "Space Not-So-Oddity," etc. And the results were fabulous. I found that moving the Apply slider all the way to the right produced some extreme results, and it didn't quite work on full mixes. The happy medium seemed to be somewhere in the middle, and especially with things like snares, hats and higher-register rhythm guitars, the results were very satisfying and instantly apparent.

The plug-in's real magic is its ability to match up different recording sessions. About two years ago, I recorded a number of guitar and vocal tracks in my old studio space. And, as is so often the case, those songs got shelved, and it wasn't until recently that my band and I felt the need to finish tracking them. So rather than start from the beginning, we recorded only the parts that we needed and I began the task of matching everything up. In this instance, the Morph function was a lifesaver. Inside screen A, I processed the old tracks against the new; vice versa in the B screen. Between the two Apply sliders and A/B morph, the dry tracks sounded nearly indistinguishable.

As mentioned previously, the package also includes a number of self-contained presets, as well as an extensive collection of target curves. The target curves are all divided into aptly named subfolders, and some of the preset names are as ridiculous as my own ("Nu Metal," "Heavy Anger Metal" and "Deutsche Disco," to name a few). They include curves for individual instruments, vocals, FX cues and full mixes. And for tasks like tweaking a snare channel or an acoustic guitar, they were all great jumping-off points.

CHECKING OUT

While a fabulous product, Assimilator didn't really strike me as the kind of processor you would want to use in a multitrack session. While it's totally capable of working in that kind of environment, I felt that it was much more at home inside of a 2-track editor. The plug-in sometimes produces extremely subtle results, and it would behoove users to work with it in a less cluttered environment.

The ability, however, to match up or blend different recordings will prove to be a godsend for many engineers. With so many artists working out of project studios or whacking down vocals in hotel rooms with less-than-ideal signal paths, a tool like Assimilator is priceless. And for those shameless practitioners of gonzo engineering like myself, Assimilator will afford us even more bragging rights. All in all, it seems silly for any Powercore owner not to cough up the extra cash for Assimilator. I'm keeping this one.

TC Works, 805/379-2648, www.tcworks.de.

MIX ONLINE EXTRAS

Robert Hanson is Mix's assistant editor.

POWERCORE 1.6.1

When Powercore was launched in June of 2001, it was heralded as one of the most innovative products in recent memory. Unfortunately, the operating system for the original Powercore left a little to be desired. While the OS did essentially what it was purported to do, it was plagued with a number of bugs. With Version 1.5, released in December 2001, the entire OS was more or less rewritten and the product was relaunched. Since then, the performance has been rock-solid. Even with sessions that push the unit to its limits, freezes and crashes caused by the Powercore have been all but eliminated.

Now in V. 1.6.1, a number of refinements a have been added to the package including: "No Latency" mode in Windows; less RAM usage and improved multiprocessor support in DP3; MegaReverb and ChorusDelay work at 96 kHz in all applications; and more. The basic Powercore bundle currently includes the 24/7 Compressor/Limiter, Classic Verb, Master X3, MegaReverb, ChorusDelay, EQSat, Voice Strip and the Powercore 01 Synthesizer. The company has also launched the Powercore FireWire, which moves the Powercore from a PCI-based unit to a 1U chassis that can now work with any FireWire/IEEE-1394-enabled computer.

—Robert Hanson

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NUENDO

nuendo... a producer's dream

chuck ainlay

Arguably the hottest producer/engineer in Nashville, **Chuck Ainlay** recently put the flexibility of the NUENDO system to work on **Mark Knopfler**'s latest solo release *The Ragpicker's Dream*.

"My progress from using NUENDO as an editor with EQ to a full multi-track recorder, processor, and sequencer has been astonishing to me!"

Chuck was able to combine tracks transferred from analog with comps of Mark and his guitar, overdubs by other musicians, and even material recorded on the rooftop of Mark's London studio with a laptop using the NUENDO Audiolink 96 series hardware. NUENDO gave Chuck the technical ability and sound quality that would have not been possible with analog while allowing him to capture all the magic of live recording.

"There are so many ways that I have found the NUENDO system superior to all others that I will never be able to go back."

nuendo producers group

This group of world-renowned producers including industry notables such as Chuck Ainlay, Elliot Scheiner, Phil Ramone, Frank Filipetti, Alan Parsons. Rory Kaplan and Greg Ladanyi know what it takes to be the best. They also know why NUENDO is the best digital audio production tool available and have partnered with Steinberg to ensure that it will continue to meet the needs of tomorrow.

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Mesa Rectifier Recording Preamp

That Classic Amp Sound Comes to the Studio

Some years ago, I hired Night Ranger's Brad Gillis to do some sessions that required a bit of amazing guitar pyrotechnics. He showed up at my studio with nothing more than a vintage Fender Strat and a Mesa Boogie Guitar Studio Preamp. I felt a little let down: No racks? No stacks? No pedals? As it turns out, all Gillis needed was that rig and a ¼-inch cable, and he proceeded to lay down some of the most amazing guitar tracks I'd ever heard. You can hear them now at www.mp3.com/arielrocks.

The Studio Preamp and other Mesa tube preamps that followed (such as the Quad Preamp and the Triaxis) captured that classic Mesa Mark Series tone that was part of the sound of performers such as Pete Townshend, the Stones, Larry Carlton, Carlos Santana and a billion other artists. However, the earlier preamps couldn't duplicate the raw, aggressive modern sound of Mesa's popular Rectifier Series amps, favored by groups such as Limp Bizkit and Soundgarden.

With that in mind, Mesa started a three-year R&D project to develop a box that would not simply model, but could actually create the blazing fire of a Recto Stack without the volume or hassles of amp miking. The result is the $999 Rectifier Recording Preamp, a two-rackspace, steel-encased chassis that seems to weigh as much as the stacks it replaces. But beyond acting simply as a preamp, the unit's recording outputs are designed to capture the sound of a tube amp reacting to a dynamically active speaker load, with a studio mic reproducing all of the nuances in detail.

You won't find any digital circuits here. It's all analog, with six 12AX7 tubes providing the punch of 12 Class-A triodes. Even the rear panel is nearly overwhelming in the interfacing it provides, with two balanced TRS stereo recording outs, two stereo "live" outs to connect directly to a power amp, effects loop output sends and returns (with a wet/dry effects control, ¼inch switch outputs for the included channel switching and "solo" footswitch), a "modern" mode output to use with

Mesa's Rectifier Stereo power amp and an extra input jack (paralleled to the front-panel input) for permanent in-rack installs.

The front panel is no less versatile. Each of the switchable two channels has gain treble, mid, presence and master pots. Both share output section controls such as a "live/bright" and "warm/record" preamp voicing switch, channel 1/2 switching for non-footswitch channel selection, and output level knobs for solo level and the recording and live output jacks.

Although each channel's knobs are similar, their sound is anything but. Channel One—the "clean" channel—also includes switches for bright boost, -3dB pad and a three-mode Clean/Fat/Brit tone switch, with the latter kicking in a circuit from Mesa's Road King amps for a wider tonal palette in recording situations.

Rather than offering the edgy, in-your-face sound that Recto is known for, Channel One provides a smoother effect for blues, rock and even country rhythm parts. Of course, amps are meant to be abused, and if nasty is what you're looking for, then crank that gain knob up to 11 and you'll have no shortage of distortions—lead or rhythm. Using high-gain settings in the Clean and Fat modes, however, resulted in an overwhelming wash of low bass that muddied up the sound. But turning the bass control way down restored the tonal balance. With more low-mid emphasis and a low treble bump, the Brit mode was useful for single-note soloing, power chording or crunch rhythms.

The fun really kicked in on Channel Two, which also offers three tonal modes (Raw/Vintage/Modern) to play with. Here, users should be aware that there's a small volume dip to the record outputs when switching into the Modern mode, so don't fall into that "louder is better" trap when making A/B/C comparisons between modes. Despite its name, the Raw mode offers a lower-gain and less saturated sound that worked equally well in blues rhythms or smooth solos.

The Vintage and Modern modes are closest to what people expect from a Mesa Rectifier amp, and give users a higher-gain punch with a choice of standard Recto sounds or a more aggressive, attenuated top end in the Modern position. Here, I encountered the best sounds by keeping the gain setting in the 9:30 to 2:00 range; less than that didn't pack any wallop, and much more than that seemed way over the top, although it's hard to say what *your* music requires. That said, very small variations in the gain (within the above range) were capable of huge tonal changes, depending on the master setting, of course. So here, a little studio experimentation really pays off.

Speaking of settings, the preamp's manual, which is very good overall, provides pages of suggested settings for different sounds, although there are no blank sheets so users can easily archive their own "presets." Also, as this is a studio product, I wish the unit's balanced recording outputs were XLR (or Neutrik Combo) rather than ¼-inch TRS, but this is a minor point, as is a lack of a headphone output to practice or silently audition sounds in the studio. Maybe next time.

The Mesa Rectifier Recording Preamp doesn't create every amp sound on the planet and it doesn't pretend to. But for disciples of that elusive Recto sound, this is a serious tool that provides that tone (and a few others, as well) in a convenient recording package.

Mesa Engineering; 707/778-6565; www.mesaboogie.com. ■

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Aviom A-16 Personal Monitor Mixing System

Hearing Is Everything

We spend years tweaking and experimenting, constantly trying different pieces of gear and techniques to achieve the perfect mix. However, while creating monitor mixes (whether onstage or in session), we have to please the performers themselves—some very particular customers. After all, artists perform better when they like their monitor mixes.

We always seem to experience a shortage of pre-fade console sends, limiting the number of available cue mixes. So do you please the drummer, the bassist, the singer or the lead guitar player, not to mention three backup vocalists, two keyboardists, a horn section and a conga player? Even in pro live sound with a dedicated monitor engineer, do the backup singers really get as much attention to their mixes as the diva—or divo? And time is always tight, whether during soundchecks or setting up for a tracking date.

One possible solution to this situation is the Aviom A-16 Personal Monitor Mixing System, which gives performers individual control over 16 input channels to create their own stereo monitor mixes. Custom mixes can be saved for later recall, and the mix output can be routed to headphones, spot monitors, floor wedges or in-ear monitors.

One thing that sets the Aviom A-16 apart from earlier monitor mix systems is its use of A-Net, a proprietary LAN technology optimized for real-time multichannel digital audio transmission. A-Net allows the transmission of 16 channels of 24-bit digital audio over a single Cat-5 cable, with up to 500 feet between components. The protocol is based on—but is *not*—Ethernet, although the A-16 uses RJ-45 network connectors and standard Cat-5 interface cabling.

The system comprises a single-rackspace A-16T Transmitter ($749.95), which takes up to 16 analog line-level inputs, converts them to 24-bit digital form and packetizes those channels into the A-Net format, which is sent out over Cat-5 cable to any number of A-16 Personal Mixer units ($439.95/each). The A-16T's front-panel controls include switches for input level matching, with four settings (-10/0/+4/+22 dB); switches for linking channels to operate as stereo pairs; individual signal presence and clip lights for each of the 16 channels; and an RJ-45 A-Net output jack. The rear panel has 16 ¼-inch TRS inputs (accepting balanced or unbalanced sources) and 16 identical channel thru jacks, which provide a copy of the signal that is plugged into the input jack above it. These are ideal for applications where users don't have 16 available sends and want to use channel or group insert jacks to interface with the Transmitter.

Once at the A-16 mixer, the channels are converted back to analog and users have fingertip-control over volume, panning, mutes, grouping treble and bass. There are 16 memory locations to store user presets. The mixer's connections include A-Net input and output (the latter for daisy-chaining another A-16 mixer into the system), master output (with volume pot) for headphones or driving powered monitors, and power input for the (included) external DC power adapter.

System setup is straightforward: I patched the A-16T's inputs into my console, flipped the unit's gain switches until the clip lights went off, ran the A-Net cable from the Transmitter to the first A-16 mixer and I was set—sort of. You see, I have in-wall snakes for mic lines, headphone feeds and even low-capacitance MIDI cabling from my control room into the studio. However, I don't have any Cat-5 runs, so we had to route the cable out of the control room's door to reach the studio. In my room, the supplied 30-foot cable wasn't long enough, so we substituted a 50-foot network cable (available at most computer stores or from Aviom) that worked fine. Running a cable out the door, down the hall and across the floor wasn't pretty, but it worked, and because the cable is very small in diameter, it can be concealed/routed much more easily than a 16-line analog snake! Also, Cat-5 cable is relatively easy to install and can be run through walls and terminated in an RJ-45 jackplate for permanent installs.

Once hooked up, everything went smoothly, with the main snag being that the mixers are lightweight and, with three or four cables attached, tend to slide off surfaces. This is solved by an optional $24.95 mic stand mount.

Creating A-16 monitor mixes is no sweat: Just press the Select button for any of the 16 channels, turn the gain and pan knobs to your liking, and repeat the process on the other channels. The whole procedure takes about a minute or two. Multiple faders can then be grouped for soloing or muting and saved for immediate recall, which takes no more than five minutes to master. Simplicity is the key here. The treble and bass controls are ±12dB shelving filters at 160 Hz and 9 kHz and are quite musical. The output control was loud enough to drive drummer headphones—no problem here—and system latency was virtually imperceptible.

The A-16 system works well and does what it promises. For anyone seeking more advanced control, the rackmount $799.95 A-16R Personal Mixer (shipping this month) can substitute for any A-16 mixer in the chain, adding balanced outs, stereo insert points and a stereo aux mix input (for click tracks, other source feeds, etc.). But either way, the A-16 system puts cutting-edge technology into an affordable and flexible solution for musicians onstage or in the studio.

Aviom Inc., 610/738-9005, www.aviom.com. ■

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—FROM PAGE 22, BEAT TO HELL

Slow Blues, Music for Over 150 mph, Albums I Have Done, Best Songs of All Time, Real Blues, Subwoofer Workouts, whatever. Or I can instantly get all the SRV I own or instantly delete all Yanni with a single keystroke! Mmmm...I might actually get some Yanni and rip it just to do this. Or I can get every version of "Blue Moon" I have in two seconds. I have nine. And four of "All Your Love," four of "Alley Oop," five of "Angel in the Morning" and on and on. For a person whose life has always been music, this is an incredibly cool way to listen and learn.

AND BUY?

I don't buy squat. You know, in this way, I may actually be typical after all. The difference is that I'm not buying because I don't hear anything I want, whereas the majority of music-lovers aren't buying because they are stealing. For every 15-year-old who actually buys a CD, how many do you think KaZaA it instead? *But*, the solution to both problems is the same. How incredibly fortuitous.

THE MUSIC INDUSTRY IS DEAD

This is a popular statement these days, but is it accurate? Well, let's take a look at what's wrong with the music industry today. It's really not that much: content, pricing and delivery media.

Oh, wait, that's everything. The entire model is archaic. Obsolete. It relies on the *physical* delivery of music and all the "protection" that comes along for the ride.

But isn't the path to resurrection and growth obvious to all? Isn't the green light at the on-ramp to the Great Digital Highway (Route 10100110) burning brightly enough for all to see? Well, ya'd *think*, wouldn't ya?

With the transition model so clearly defined, and with kids (illegally) blazing new trails that actually show the way to success, why are the labels stymied? Why are they fighting so hard against this? Why are they refusing to move to this model? Why are they attacking and suing instead of joining?

There seems to be only one possible answer. They are so criminally greedy and short-sighted that they literally cannot grasp it. Maybe they can only understand the concept of continuing to rape the artists and customers in the full-blown old-school fashion until one day (Thursday), it all collapses and they just stay home with their billions until they die. Sadly, I honestly believe that this is *exactly* how they think. I cannot see any other explanation for their behavior. They are actually fighting the Internet itself and turning their backs to its virtually unlimited potential. Hell, they are attempting to fight Internet radio!

Just like the Monsters in the technical stock market, they are not at all interested in having their values corrected. They dread the idea of operating with numbers that reflect their true value. So they resist. They dig in, deceive, sue and fight. And what will this get them? Just like the stock market, when the music industry finally does adjust and true values are established, the artificially inflated entities will collapse with an earth-shattering, resounding rumble. Wait...did I just hear something?

In all financial models, overvalued sectors hold on for dear life out of fear and greed, trying to artificially sustain their positions long after the true values of the market dictate a catastrophic collapse ("correction"). There will be no survivors.

And you know what? Screw 'em. But not without building a better system.

AND THAT WOULD BE?

To survive when faced with total annihilation (make no mistake, this is an accurate assessment), the members of any collective entity must pull back and think. Whether the entity is a race of life forms or an organization such as a corporation, group of companies, country or even a planet, stark evaluations of what it *is* and what it *must become* are mandatory. Once those two definitions are clear, a plan must be developed to make the transition. Then people have to actually do it.

This is most difficult and deeply disruptive. When all you know—all you *are*—is suddenly wrong, and is in fact actually killing you, it is almost incomprehensibly painful to shake off the shock and rise to the occasion.

But the answer itself is actually quite simple. We all must mutate to survive and revive.

Let's take a classic sci-fi model. I've always found this one provocative: humans migrating to Mars to survive as the Earth collapses under the stress of humanity's growth. In this scenario, mankind is forced to migrate (big deal—just a technical problem) and then *mutate* (the real big deal). In 5,000 years, people may be living openly on the surface of Mars with the help of technology, but in 20k years, they will actually *be* Martians. Having fully adapted to their new environment, they may well be unrecognizable, a far cry

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from their forgotten earthling ancestors, but they will *be*. And they will prosper. You might not love the idea, but it will probably be the best that man can do when the time comes.

Sometimes you have to give up what you think you are to survive.

And that time has come (and is about to go) for the music industry. Mutation is the only path possible at this critical point. And it has to be *now*.

OKAY, FINE. HOW WOULD THAT WORK, EXACTLY?

I directly address the labels themselves:

First, the ridiculously obvious: Stop spitting up-wind and use the damned Internet. Hell, my *cat* uses it to buy catnip, and a year ago, she downloaded a picture of a bird.

It is not your enemy. In fact, it is inherently capable of fulfilling all of your dreams, including the ones that could never before be realized.

Last, join the program. The era of superstar mega-budget packaging and overhead is gone. The decades of gouging are over.

The world has spoken. Prices are set. No more iron fist. If the public feels prices are too high, then they will simply steal the songs. When they've stolen a certain amount, you will die. That will be real soon.

That's it. Two steps. I don't think you can do it. But here goes anyway...

HOW TO SAVE THE MUSIC INDUSTRY

That big, bad scary Internet promises exactly what you have always wanted: incredibly accurate and prolific market data. You could target your product with unprecedented speed and accuracy, all for 1% of what you now spend on slow, imprecise and questionably accurate market analysis.

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And the customers themselves actually do all the work for you, for free, and voluntarily. Come *on* guys. You *gotta* love this!

Here's how it works. Let's take Internet radio, one of the more viable concepts flying around. Whether or not it is paid subscription doesn't really make much difference, as long as the fee is low enough not to antagonize the target audiences and the payment method is simple and secure.

First, the client would fill out a profile online and customize his "channels." He has all the incentive in the world to reveal his true likes and dislikes here: incredibly valuable information.

While live Web radio would, of course, be available whenever it is wanted on personal computers, it seems to me that the real goal would be to have digital radios in cars and homes that use this profile in the same way.

The client receives music streams that are selected based on his profile. As the Internet radio system learns his tastes, it automatically selects songs to play that *better* fit his profile, have a higher chance of appealing to him, and therefore a higher chance of him buying. Invaluable data that BigMusiCo has historically spent millions collecting is suddenly available for free and instantly, not to mention the fact that it increases close ratios automatically, as well.

And this little detail makes it all workable: You have TiVo-like thumbs-up/down function keys on your computer and dedicated buttons on your

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see the obvious. Specific companies that own songs that we would all love to have are not taking *any* steps at all to make their huge libraries accessible within *any* new model, Internet or otherwise. They are just sitting on them, claiming they will just be stolen or no longer sufficiently profitable if they are made available in this brave new world. They are clueless.

And sadly, those with the vision to make this work have no significant catalog. They are faced with a *real* problem: how to build a functioning marketing model with no songs to kick-start the effort. They can only build on the future, without a catalog of existing tunes. Now *that's* tough.

I see two paths out of this mess: one short, one long.

If we are lucky, the big labels will get a clue and join the program. They mutate and survive and the world goes back to buying music before people forget how. Short path.

The long path is a bit more rocky. The labels remain stupid. They die. We have no music. *Eventually*, the properties will be sold for pennies on the dollar to young Turks who understand the brave new world and its terrifying Internet, and we all relearn that we have to buy music. This is a very, very long path. I can see two decades without access to today's music, and then it will all be oldies.

New music will, of course, proliferate regardless of the path taken, and frankly, it might grow faster if the horrid Long Path is our destiny.

THE END

So there you have it. The prognosis is bleak. The record industry is critically ill, and it *will* die. Very soon.

The question is whether or not anybody out there has the power and foresight to genetically redesign a successor while there is still time, so that we may all continue our spoiled capitalistic musical folly.

And though I dislike the labels and what they represent intensely, I must say that if the concept of intellectual properties having intrinsic value collapses, the world will rapidly become a much less friendly and beautiful place. Who wants that? ■

This famous line from the movie Network *is so perfect here that I just can't pass it up: "I'm mad as hell, and I'm not going to take it anymore!"*

—FROM PAGE 26, THE KIDS ARE ALL RIGHT

out and buying a CD is worth it now. Any other company that would still have the same product for 20 years wouldn't be in business without upgrading their product a substantial amount. It's the labels saying, "We own 80 percent of the market, and we can do anything we want. This is the product, you buy it." And it came to a point where, don't we have a say in it anymore?

Any other company that would still have the same product for 20 years wouldn't be in business without upgrading their product a substantial amount. It's the labels saying, "We own 80 percent of the market, and we can do anything we want. This is the product, you buy it." —*Eric*

Are you happy with the sound quality of the music you download?

Wayne: I don't really hear the difference between the MP3s I download and a CD I bought in a store. On the vinyl, the ranges are bigger: Instead of a flat sound, it's more spread out, more of a live feel. It does sound better.

Rob: I've downloaded enough now to hear the difference. I used to think that MP3s sounded good, and I still do, but when I started getting MP3s and then the CDs, I'd hear all of this other stuff. The more I listen to MP3s, the more I notice little compression artifacts like poor stereo separation or a smearing of higher-frequency content, like hi-hats. So, I'll typically go out and buy the album, turn off the PC and listen to the disc with headphones. Especially if you've got a really carefully made album with really good engineering.

Amelia: Sometimes you get bad ones. We'll download it and say to each other, "Wait a minute, does that sound right to you?" You can tell. Sometimes, there's a difference between the better MP3s and the CDs, but not really. I'll download a song, and then I'll listen to a friend's CD, and it's, "Well, same thing to me."

Chris: I sometimes forget it's compressed, and I'll listen to a song, and I'll think this band is great, but the sonic quality isn't very good. And then I'll think, "Oh, right, it's MP3."

Eric: I don't think there's much of a difference. A lot of programs out there can convert MP3s into .WAV files, and that creates a clearer sound. It's just a notch below the quality of a CD.

Are there advantages to having a CD vs. downloading an album?

Amelia: The booklet. I read a lot about artists, and the booklet has pictures and credits and thank yous. And since everyone's using samples, with every song they tell you who they sampled from, so you can go and listen to the original. And also lyrics: if you want to know the words of the song. I have all of my discs together in a little zipper container, and I arrange it so I have the covers outside and the CDs inside.

Rob: I have a couple of friends who have record collections, and it's really satisfying for them to go over to the shelf and take out a record and put it on the turntable and put the needle on. For me, the same thing goes for CDs. And you're not just hearing one song by the artists, but you're hearing the entire picture of what the artist has to present.

What happens when you leave school and you don't have a free broadband connection anymore?

Chris: I become much more frugal in what I listen to. I spend a lot more time listening to the CDs that I already have.

Terri: I can't imagine not spending the money for a somewhat speedy Internet [connection]. That would drive me insane. You want to use it for Internet anyway, so the music is a bonus.

Rob: If I didn't have that connection, I would probably not have had nearly as diverse music tastes. Over the past few years, I've switched back and forth between a high-speed connection and a modem, and my musical interests have expanded at a more rapid rate when I have had access to a broadband connection. I have AOL DSL at home.

How do you hear about new artists?

Amelia: Usually, I get recommendations from my friends whose taste I like or I see a new artist on television. When artists first come out, you'll hear them on the ra-

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dio or see them on TV, or there's an article in the paper.

Rob: I'll read articles about the bands that I like, and if I read in an article of another band that's one of their influences or is like them, I'll go and check them out.

Chris: I like to look at amazon.com lists: a customer bought this one, he also bought these. Go to that, listen to the samples, "Hey, that's not bad." Read some of the editorial reviews: This CD was at the top of the indie rock charts in 1994, and they were a really influential band and this should be in your collection. Okay, so I go out and I get that. From e-mail lists, I get announcements about different shows, or people open up for other people, you get into them there. When I'm looking for a song on the P2P networks, maybe I'll find a guy who has six songs by the band I want.

Could the record labels be doing more to get you to listen to new artists?

Eric: On a DVD, you have coming attractions for stuff that's the same genre. You could do that on a CD or on the Web. The labels should figure out a way to get together with KaZaA, so that when you type in a band you like, a popup comes up for a different band.

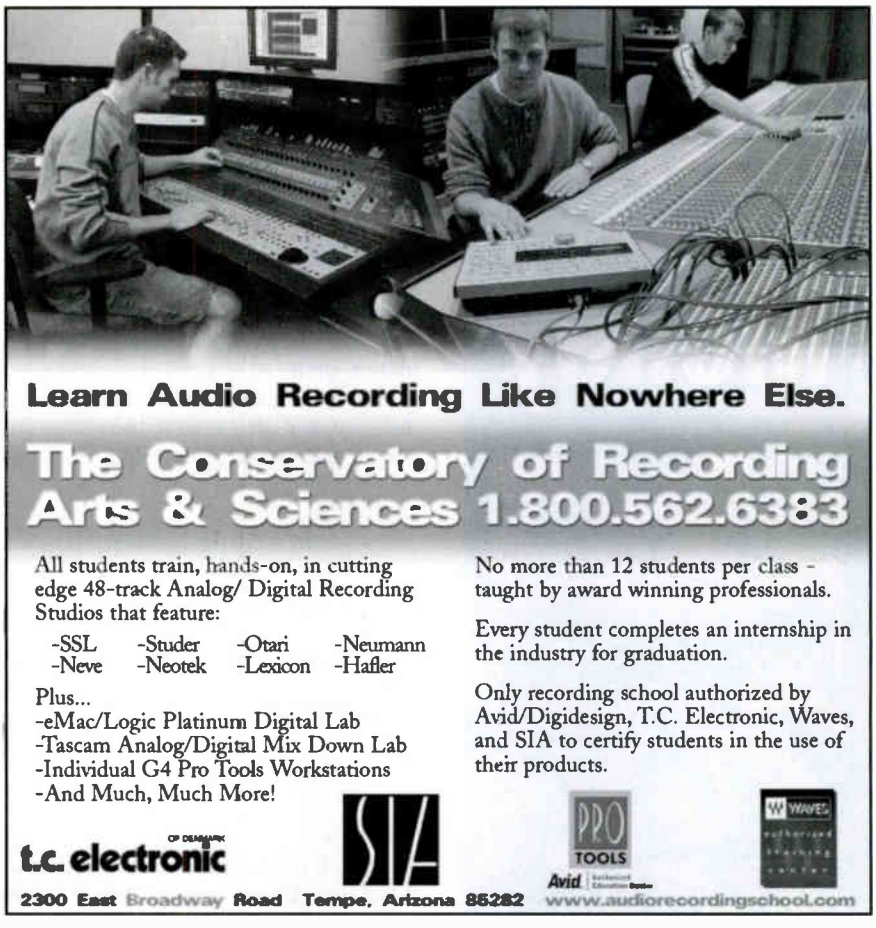
Terri: How are you going to reach people? What are people really doing? Maybe commercials on TV. Kids are sitting and watching TV. Or doing popups: different things that will let you listen to something for 10 seconds and see if you like it. Or they could buy a word in a search engine, and when someone looks for it, it shows all of the new people in that genre and what they're doing, and you can listen to a little snippet of it. Isn't that how you grow a fan base? By familiarizing a person with a band.

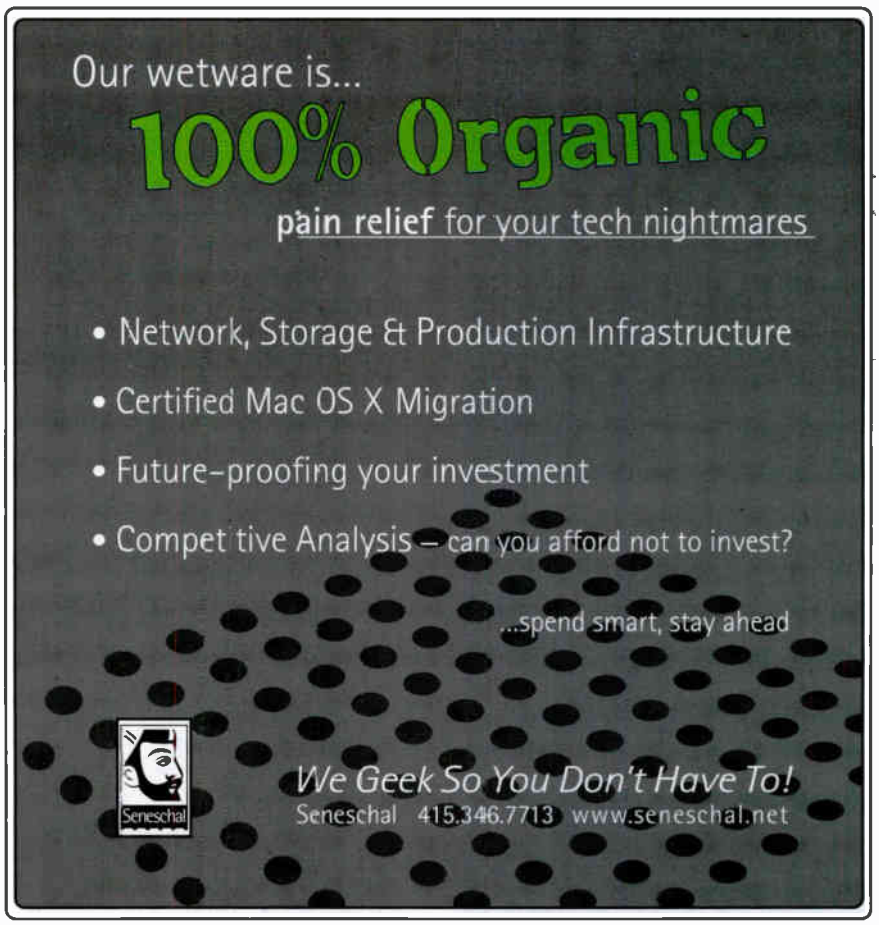
Wayne: The music hasn't been so bad—it's good. But I don't know where they get these singers—they're whining and pissing and moaning about nothing. They sound like they're getting their ass kicked while they're trying to sing. I won't buy that. That's why everybody I know hasn't bought any new CDs in a long time. It's, for lack of a better word, propaganda. You flood everybody with something more and more, and after a while, they think they like it.

Can radio help?

Terri: People are in their cars and traveling, and they want to listen to music, so it's never going to go away, but as a way of pushing new artists, it's on the way out.

Eric: I don't think XM and satellite ra-





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dio are going to do that much, because people aren't willing to pay for a CD right now, never mind a fee every month for a radio station. They do offer a lot, but how do you get 10 to 15 dollars a month out of someone's pocket when they can listen for free? I don't think Clear Channel is doing a very good job. You don't hear a lot of new music promotion on it.

Wayne: I turn on the radio and immediately turn it off. I'll go to the oldies station or the classic rock station in hopes that they'll play Zeppelin. Radio's dead.

What would get you to spend more money on recorded music?

Rob: More albums by bands that I like. And if there were extra content, I would pay for it. One thing that comes to mind, which I personally would find interesting, would be if they could give you more than two audio tracks so you could mix it yourself. If it were a band I liked, I would have no trouble spending $50 on a disc that had a lot of tracks I could do that with. I would play with that to no end. And they should do a "making of the CD" like they do on DVDs.

Eric: I would suggest three different things. One is [guitar] tab music. You see all of the commercials for "music makes you smarter"? That's a booming industry right now, and to go along with that, you put tab music in there. So you can buy a band's CD and you can learn their songs right off the bat. I think a lot of people go through stages where they want to pick up a guitar and learn how to play, and they never really end up playing but try to learn a couple of songs. Two, I think PC-enabled CDs, with interviews with the band, are a great idea. They should put that on every disc, instead of one in 100. This is why they took a year to do it in the studio, and this is how they wrote the song, and this is how it came about. People would start buying stuff like that for 15 or 16 bucks. And then, like on DVDs, there's coming attractions on the disc itself. You put the freeware for playing the stuff on the Website, so consumers have to go there.

Wayne: If it's quality music, I'll support the band. If I like it, I'm more inclined to buy it: to show support. If something is out just because it's trendy, I'm not going to spend money on it; I'm just going to download it.

Amelia: I can't think of any reason to spend more money on music. If there were better artists, more artists that I liked, I would buy their CDs. I would download it first, of course, but then I'd go out and buy it. But there are so few that I like.

Chris: CDs under nine bucks. Avril Lavigne did a CD for 7 to 8 dollars, and they sold 4 million of them.

Are the record companies still necessary?

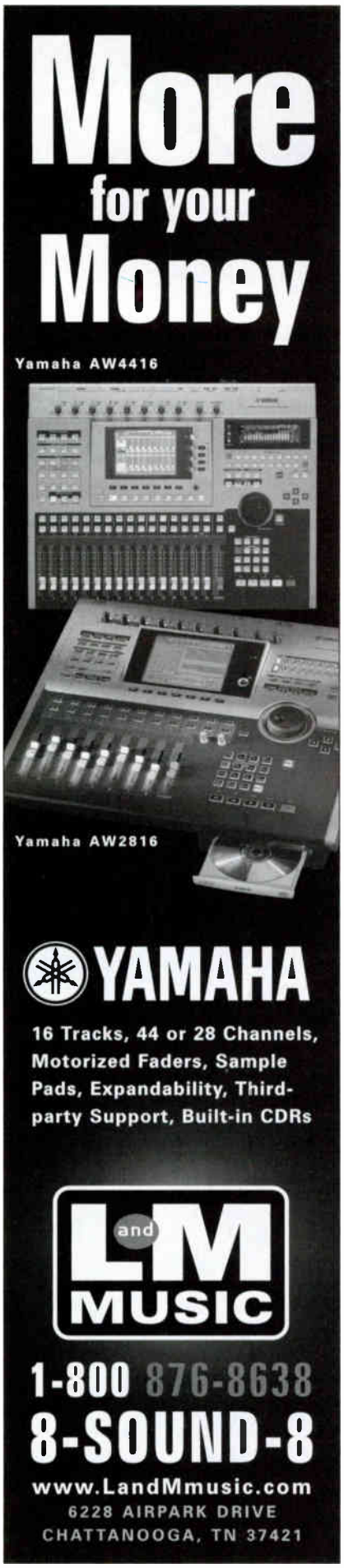
Eric: They are to the extent that they are able to market a name nationally or worldwide. But that's pretty much all they're good for.

Terri: I think they should cut back on all of the people they're paying. It seems like they pay a lot of people to do...what exactly? (Laughs) They need the musicians, but why do you need legislative executives?

Rob: Some parts of the industry are just not going to be around much longer. My dad told me that there was a place near where he grew up that made stagecoaches. Even in the age of cars, that's all they made. And they were around even up until my dad's lifetime. They were this completely stubborn company, and, of course, they went out of business.

Terri: It might be a little scary for them, but I think if one of the major five labels were to just step out from that whole circle of monopoly and say, "You know what, we're a good company, we're going to treat our artists right and this is what our name stands for," I think more people are going to honor and respect that. And, in turn, they'll get more artists and consumers that way.

> The more I listen to MP3s, the more I notice little compression artifacts like poor stereo separation or a smearing of higher-frequency content, like hi-hats. So, I'll typically go out and buy the album, turn off the PC and listen to the disc with headphones. —*Rob*



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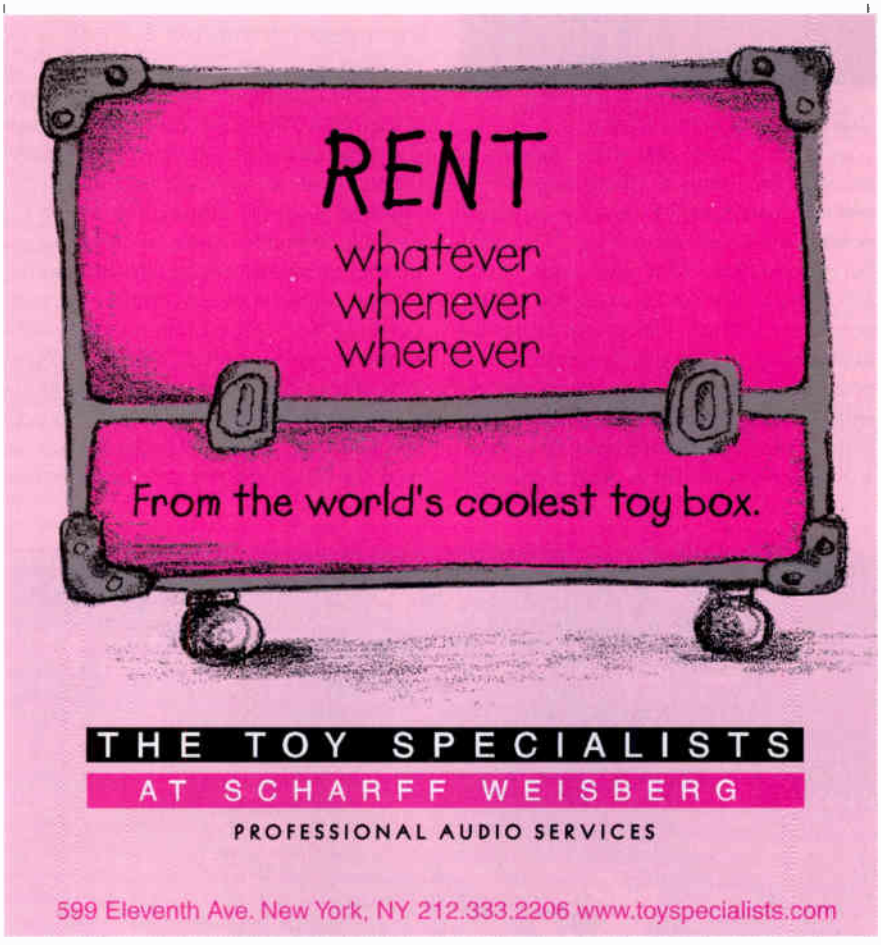
Eric: I think that the RIAA is going about it in totally the wrong way. They're trying to represent themselves as promoting new ideas, when, really, they have none. The scariest part for them is that they can't point a finger at anyone. They can't say, "The guy on the street corner, this business exec, he's downloading the most." It's everybody. The numbers for downloading are showing that what they're doing is not working. If they got their hands on it when it first came out, they could have done anything. There would have been infinite possibilities. But they let it grow too big for them to hop on it now. The thing that really shows me how badly they're doing, how desperate they are, is this new "kidpop": reissuing their old catalog and aiming it toward kids so that the baby-boomer parents will buy it all over again.

Should the record labels set up their own downloading networks?

Anna: I personally don't like having to have my computer on all of the time if I want to listen to music. If a record company's really looking to make money for an artist, I don't think selling MP3 singles on the Web is going to do it. I think their main objective should be to gain loyal fans—fans of the artist, not the single track. That's why I prefer CDs, because you see more of the depth of the artist when you listen to more of the songs. If they're looking to have a solid fan base, the way to do it is to sell the artist, not the single.

Terri: They could offer something more than just the music from the site. Like a drawing: win Dave Matthews tickets, or go backstage, or meet the press—something that's going to attract people who say, "Wow, I might be able to do this extra thing and get involved."

Rob: I wouldn't pay to download an MP3. I think that what they should do to make people buy CDs should be what they did with VHS. Originally, VHS players were just for people to tape off their TV. But then the studios went out and saturated the market and made VHS tapes of everything they had: movies and all kinds of stuff. If the record companies would just saturate the MP3 market with free or very easily duplicatable copies of the songs at, like, 96 kilobits or some really low quality, I think that people would download it and notice the difference in quality. People who are really interested in an artist and hear a really bad-quality MP3 floating around would go out and buy the CD. ■



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Paying to Play

—FROM PAGE 76, PAYING TO PLAY

count off of their first three months of service. According to Katie Rae, VP of product marketing for Terra Lycos, which powers the Rhapsody service, "The number of subscribers who have signed up for Lycos Rhapsody has far exceeded our expectations in their willingness to pay for high-quality, value-added services. This promotion makes it even more convenient—and more affordable—for our users to try." Listen.com also recently dropped its 1-track download cost to $0.49 from $0.99 to compete with other services and to draw in more new users. Dave Williams, VP of product management for Listen.com, says, "More than 75% of people who try Rhapsody become subscribers, so we know that our users are satisfied with the service. Offering $0.49 CD burning lets us reward existing subscribers and provides a great incentive for new people to try Rhapsody."

The response to MusicNet's AOL partnership (with 27 million potential subscribers) could prove to be the strongest indicator of consumer readiness to join a music service at the terms offered. "Broadly speaking, we believe that the launch on AOL for MusicNet was a huge milestone for us because we got in front of a mass audience with a powerful brand and marketing apparatus attached to it," says Hirschhorn. "It's the first milestone for the industry: getting in front of a big audience and seeing who's going to pay for this. We're very encouraged by the AOL launch so far: All of those numbers have been skyrocketing, and we really will be able to get concrete data and usage and mapping out of pricing and conversion. But so far, not speaking just for MusicNet but for the whole industry, it's really hard to speak with a great degree of certainty because there's such a limited sampling and time period over which to analyze."

Of course, the AOL/MusicNet deal is still in its beginning stage, but MusicNet is already setting its sights even higher to expand its distribution base: "We started with AOL and Real [Networks]; we plan on expanding to a variety of other distribution partners that might be outside of the ISP space; in retail, OEM agreements such as with PC manufacturers, cable broadband, media companies and the like."

NOW, OR IN FIVE YEARS?

What will it take for music sites to succeed in such uncharted territory? In the future, will there be some monolithic, "getall yourmusichere.com" one-stop shop for the entire online music community? Or, will many sites thrive in a competitive marketplace that offers a variety of services for discriminating music fans? Will long-term anti-piracy campaigns ever make a big enough dent in the peer-to-peer file-swapping traffic? It's anyone's guess at this point. But most agree that someone will be cashing in. pressplay's Oster says, "It's very early on, and once we start marketing, there'll be a much better sense of where our customers are. But we know they're out there, and they're out there in a very large number."

Emusic's Grady muses that this isn't the first time that an existing model's been challenged by new business, "and most of the time, the result is a new revenue stream; in many cases, it's bigger than the old revenue stream. I think that if you're optimistic and you believe for the most part that customers are willing to pay for things that offer them value, then there's a lot of money to be made out there by somebody. So we hope it's us, but I think it's not going to be just us. I think that there's going to be a lot of people that make a lot of money in this area, and consumers are ultimately going to benefit greatly."

MIX ONLINE EXTRAS

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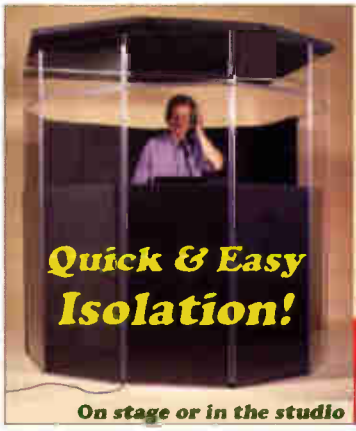

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UAD-1 Version 3 is here, with multi-card support and many other enhancements. Run dozens of sophisticated effects plug-ins inside Digital Performer without bringing your Mac to its knees. What's the secret? UAD-1 is a custom DSP-equipped PCI card. It's like adding an extra $20,000 worth of effects gear to the dozens of native plug-ins included with DP. UAD-1 ships with a growing list of powered plug-ins, including Nigel, a complete palette of guitar tones combined with every effect a guitarist could ever need. Authentic vintage sounds include the Pultec Program EQ, a stunningly realistic recreation, and the1176LN Limiting Amplifier and Teletronix LA-2A Leveling Amplifier, two more analog classics reborn inside Digital Performer. Apply liberally with host CPU cycles to burn.

THE MOTU STUDIO AT SWEETWATER
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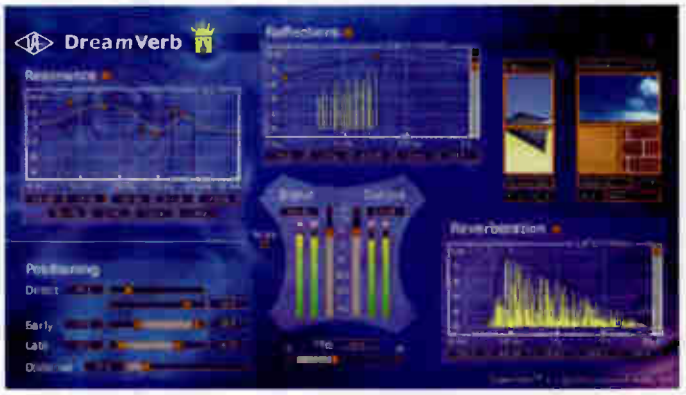
Universal Audio Cambridge EQ for UAD-1

Add smooth British equalisation without taxing your CPU

The Cambridge EQ, with its surgical precision, is the perfect complement to the warm, musical Pultec. In addition to its five-band fully parametric EQ, Cambridge features high and low cut filters with a wide variety of filter types and curves, and switchable shelving filters for each EQ band. Cambridge uses complex lattice filters and a special algorithm to achieve a warm analog sound without oversampling. An A/B function allows for quick comparison of two different settings. Cambridge also features a graphic display of the EQ curve, which has "edit handles" for click and drag control of the EQ parameters, plus editable text displays for parameter values. A must-have addition to your Digital Performer plug-in arsenal.

Universal Audio DreamVerb for UAD-1

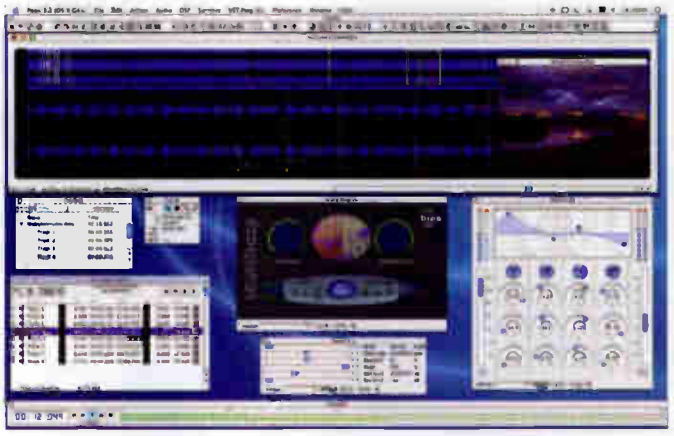
New flagship reverb for DP from the gurus at Universal Audio



DreamVerb's unparalleled flexibility, power and intuitive interface allows you create any acoustic space inside Digital Performer using a huge list of different materials and room shapes. Blend or "morph" different room shapes and surface materials, adjusting the effect of the room materials on the sound space, and even varying the density of the air to simulate different ambient situations. With flexible 5-band active EQ and unique level-ramping for the early and late reflections, you can create sounds ranging from ultra-realistic dynamic room simulations to lush reverb effects. Universal Audio's proprietary smoothing algorithm lets you adjust parameters in real-time with no "zipper-noise" or other undesirable artifacts.

BIAS Peak 3.2

The ultimate waveform editing companion for Digital Performer



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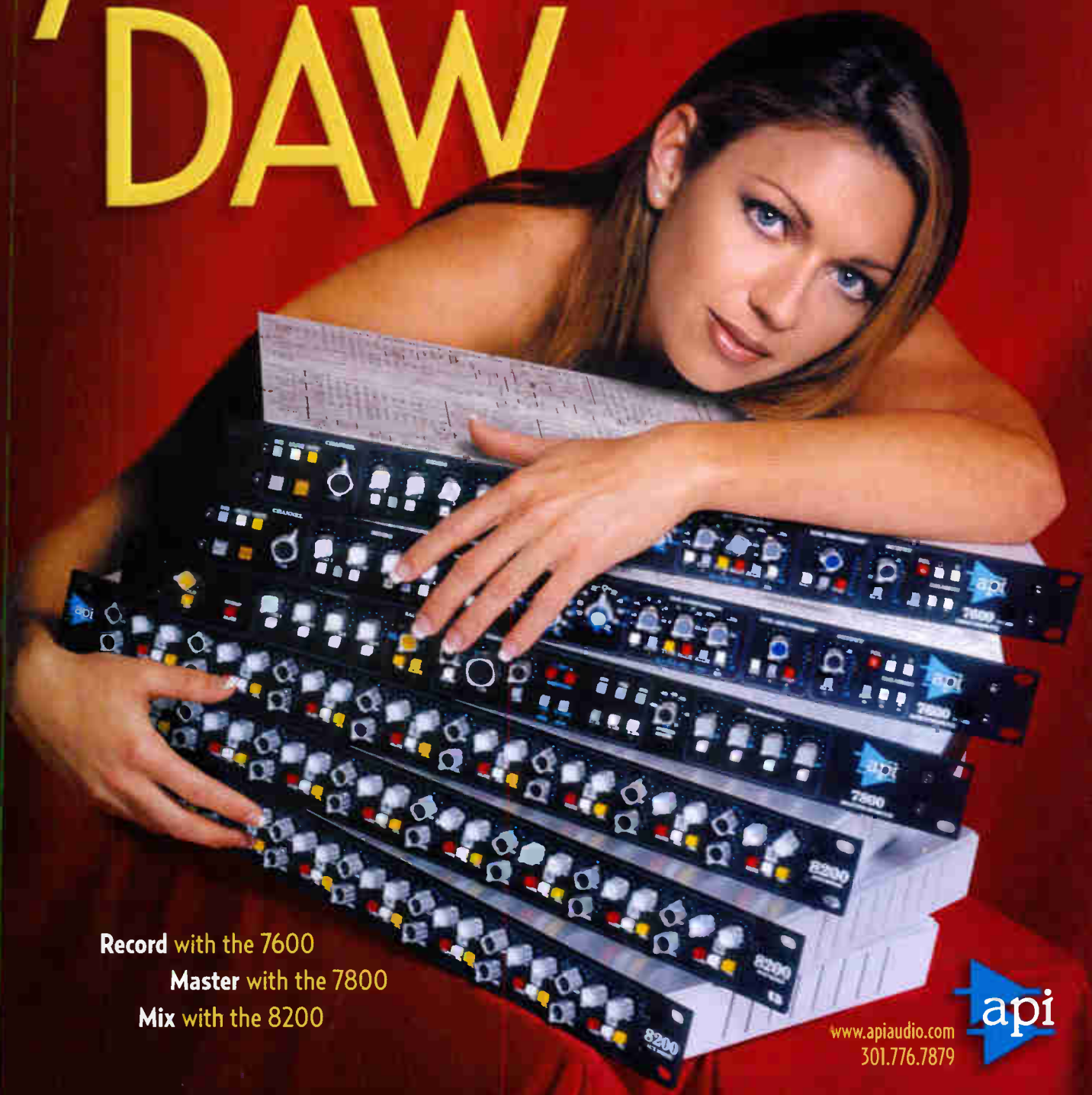

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