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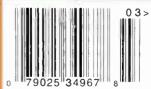
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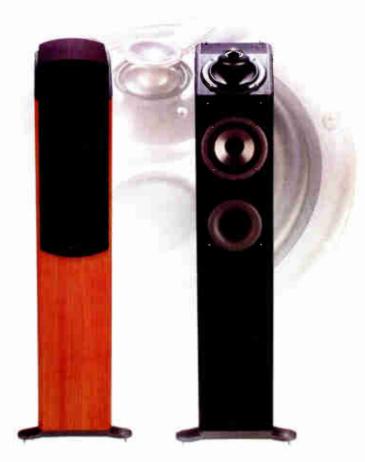
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As We See I

Jim Austin



here's a widespread myth that writers who get published are more talented than writers who don't get published, and that musicians who make records are more talented than musicians who don't make records. But anyone with any talent who has ever tried to earn a living as a writer, a musician, or any other kind of artist understands that the correlation between merit and success is, at best, loose. Some successful artists are talented. and some talented artists are successful. But for every talented artist who manages to make a living there are a dozen more, equally deserving, who have no choice but to keep their day jobs.

Unfortunately for consumers, for every one of these talented artists there are dozens of talentless pretenders vying for your attention, and that's why publishers and record companies exist. Historically, these arbiters of culture have performed an essential function, filtering out some of the dreck and helping to hook us, the culture consumers, up with artists who have

something to offer us.

I'm not sure this system ever worked well, but now it is pretty much broken. Merit is, apparently, off the radar screen of most of today's major-label talent scouts. With their conservative orientation and their bottom-line obsession. most of them end up working against the interests of both artist and audience. Commercial culture - an oxymoron in the best of times—becomes more oxymoronic with each passing day, as the people who ought to be nurturing art drive it into oblivion. And even as they reduce consumer choice, they raise prices and try to take away rights that consumers have long enjoyed. It's an appalling, exasperating, disheartening performance. What's a poor music fan to do?

Try classical.

On the face of it, this is an odd suggestion. The classical sector, after all, is probably the least healthy part of the whole music industry. Major labels are closing up shop or reducing their output. Recordstore listening stations in the classical section—the ones that haven't already been taken over by other musical genres—play symphonic mood music, hunky lovesinging tenors, and sexy electric violinists with pop record contracts.

But for all its apparent ill-health, classical music has much to offer music fans who, like me, are fed up with the conglomerates' corporate mentality. To a greater extent than other musical genres, classical music allows consumers to escape from high prices, celebrity culture, and the worst abuses of corporate art dissemination.

How? For one thing, classical music has already stood the test of time. The dreck was filtered out long ago. You can pick up a classical disc pretty much at random and be assured that it will have merit, even if it isn't your brand of scotch. You can sample even unknown works with confidence.

For all its apparent ill-health, classical music has much to offer music fans who are fed up with the conglomerates' corporate mentality.

Another important factor is that major artists increasingly choose to bypass the record companies altogether. Several major orchestras and opera companies, and at least one composer, have created their own labels. If you're a fan of the San Francisco Symphony, the London Symphony, the Vienna Philharmonic, Madrid's Teatro Real, or the orchestras in Portland (Oregon), St. Louis, Liverpool, or Manchester, you can—or will soon be able to—go straight to the source. And many of these artist-owned labels have distribution agreements, so you can still find their recordings online and in record stores.

Another factor is Naxos. Naxos may be a major label, but it's a major label with a difference. Unlike the others, it respects the interests, not to mention the intelligence, of its customers. [See Sam Tellig's interview with Klaus Heymann of Naxos at www.stereophile.com/showarchives.cgi?254.-Ed.] Although Naxos is younger than most other record companies, its catalog is vast, far deeper than the other labels. Naxos recordings are cheap (\$7.99 retail, often discounted), so you can try new music without great financial risk. Because Naxos selects artists by how well they play and not how they look, the standard of performance is generally higher than the cut of the musicians' skirts. And while it wasn't always true, these days Naxos recordings

are usually well-recorded and -engineered.

Naxos set the trend, and now other labels are following suit, issuing their back catalogs in new lines of high-value, low-priced releases. I recently paid \$4.99 for a disc of Debussy piano music performed by Arturo Benedetti Michaelangeli, one of the great pianists of the 20th century, on Apex. It's one of my favorite discs.

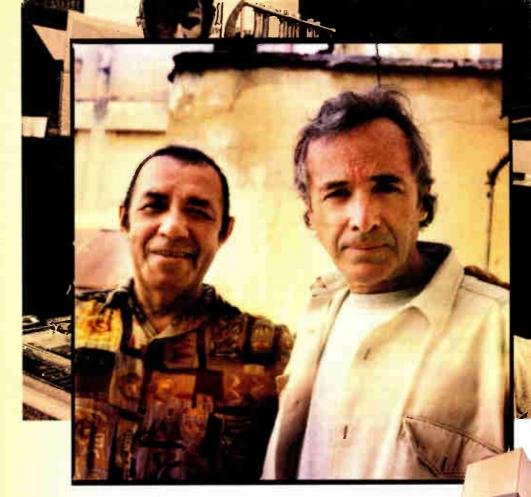
Which brings up the third reason for giving classical music a try: Many of the best performances in the long history of classical music recording have been preserved, and most are available - often remastered and sounding better than ever — at reasonable prices. Not only can you explore a vast array of classical music at bargain prices, you can also explore classical music's rich recorded history. And if allowances often have to be made for the sound quality of historical recordings, this needn't be seen as a disadvantage: For me, there is much that is appealing about vintage sound — a sense of event not unlike listening to a good live recording. The character of the live performance may be the ultimate audiophile objective, but it's not the only valid standard for listening pleasure. In any case, a little hiss and distortion (at \$7.99 retail for Naxos Historical recordings) is a small price to pay for some of the great artistic events in history.

In short, Naxos does what the other distributors should do, but don't: Where the other majors try to play king-maker, Naxos limits itself to a quality-assurance role, putting out a wide range of product manufactured to a high standard. They leave it to the customer to decide what to buy. Another thing you can feel good about in buying Naxos is the service they provide to musicians: musicians don't get rich on Naxos recording contracts, but they do get a chance to record on a major label, and to win recognition on the strength of their performances.

The bottom line: The record companies have proved that they cannot be trusted to do the filtering for us, so we have to do a little work to find out what we like. That's far easier in the classical realm, where much of the best music is available at bargain prices, and we don't have to get in bed with the major labels to hear it.

Jim Austin Ph.D. is an audiophile and science writer based in Maine. His bio can be found at http://nextwave.sciencemag.org/cgi/content/full/2001/07/11/4.

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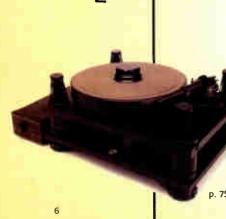
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Publisher	John B. Gourlay
Editor	John Atkinson
Music Editor	Robert Baire
Managing Editor	Elizabeth Donovar
Production Manager	Pip Tannenbaun
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Sam Tellig, Martin C	
Editor at Large	Art Dudley

Contributing Editors (Audio)

Paul Bolin, Lomic Brownell, Brian Damkroger, Robert Deutsch, Shannon Dickson, Larry Greenhill, Jon Iverson, David Lander, John Marks, Paul Messenger, Robert J. Reina, Richard J. Rosen, Kalman Rubinson, Markus Sauct, Chip Stern, Peter van Willenswaard, Barry Willis

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Bradley Bambarger, Les Berkley, Larry Birnbaum, Daniel Buckley, Jason Cohen, Thomas Conrad, Jed Distler, Daniel Durchholz, Hyperion Knight, Robert Levine, Michael Metzger, Fred Mills, Keith Moerer, Dan Ouellette, Wes Phillips, Craig Roseberry, Leland Rucker, David Sokol, David Patrick Steams. Zan Stewort, John Swenson, David Vernier

Editorial Assistant Stephen M	cjias
Assistant to the VP/Group Publisher Lynn Goldstein-Gan	quilo
Marketing Coordinator Josh Heitsenn	ether
Web Producer	rison
Graphic Design	
Cover Photo Eric Sava	nson

Advertising Sales

Drimodia Inc

Eastern Advertising Manager: Keith Pray 110 Fifth Avenue, 5th Floor • New York, NY 10011 (212) 229-4846 - fax (212) 886-2810 e-mail: keith_pray@PRIMEDIAmags.com

East of the Mississippi: Brian Georgi 110 Fifth Avenue, 5th Floor . New York, NY 10011 (212) 229-4868 · fax (212) 886-2810 e-mail: brian_georgi@PRIMEDIAmags.com

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Editorial fax
John Atkinson john_atkinson@PRIMEDIAmags.com
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- Andrew Marshall, Audio Ideas Guide on the Servo-15







Letters

Beautiful

Editor:

I received Stereophile's Mosaic CD for Christmas. The clarinet quintets are achingly beautiful. I have sat for hours, simply letting the music wash over me. Congratulations to Antony Michaelson, all of the musicians, John Atkinson, and everyone involved in the project. John Dean jndean@aol.com Asheville, NC

Frustrated

Editor:

I read with great enjoyment the article on Cantus' ... Against the Dying of the Light (December 2002, p.63). However, I was frustrated to find no mention of a website or source for buying the CID! Ted Rexing trexing685@earthlink.net

Glad you enjoyed Mosaic, Mr. Dean. There are 300 hours of my life wrapped up in that CD, so it is rewarding to learn that our efforts fell on fruitful ears. And you're right, Mr. Rexing. Mosaic, the Cantus CD, and all our other recordings can be purchased from the secure "Recordings" page at www.stereophile.com. -JA

Let's go to ...

Editor:

I'm very pleased that HE2003 will be held in San Francisco. I have attended six previous shows, and the Westin-St. Francis is my favorite venue. It's great to have you back out west!

James Schrimpf
jschrimpf@theriver.com

Teaching well

Editor:

I just wanted to take a moment to thank Stereophile and the audio press in general for helping me—or, I should say, training me—to trust my own ears. Special thanks to Michael Fremer, who taught me how to clean and play my records, and to Kalman Rubinson, who has managed to review most of my components after I've purchased them. I mention that because I believe you folks have taught me well.

Malcolm Baba babafink@pacbell.net

Working well

Editor

Stereophile works for me. With his lighthearted writing, Sam Tellig has helped me decide which speakers to choose. Michael Fremer has helped me enjoy the record collection I've treasured by insisting vinyl will never become obsolete. Robert Baird has pointed out new music releases to hear. I've read the letters and corresponded with some of the writers. It's a living, breathing magazine.

Recently, I entered the hospital for hernia surgery, and of course, I brought my December issue of the 'phile along. I kept it with me on the cart as I went in to surgery. But in recovery, it was nowhere to be found! A young man came in and asked if I needed anything, so I sent him on a search. He came up empty-handed. You folks write a popular rag! Mark Nelson marknelson65@msn.com

Wouldn't it be nice

Editor:

Thank you for bringing Art Dudley on board. I've been a longtime subscriber to *Stereophile* and have every issue of *Listener*. (The latter are treasured possessions.)

Commercial considerations aside, it would be nice to see *Stereophile* cover more analog, more tubes, more DIY, more affordable esoterica, more opinion and personality, and more of what used to make this a fun hobby. While I'm at it, how about fewer megabuck monoliths for conspicuous consumers, and fewer weary "Recommended Components" lists?

Tom Dressler Amarillo, TX tdressler@prpc.cog.tx.us

Very close

Editor:

I just wanted to thank all those responsible for getting Art Dudley into the pages of *Stereophile*. I enjoyed his work in *Listener*

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the short time I was aware of its existence, and think he adds a fresh perspective to your magazine. Truth be told, the columns are my favorite part of the magazine. I don't mean to slight the equipment reviewers, but the columns keep the magazine from getting stale.

It is writers like Art who are going to distinguish Stereophile from what is left of the competition. It is hard for any one magazine to be all things to all people, but with the right staff, Stereophile could be very close to that.

Travis Klersy

Fridley, MN Klersy@scc.net

A way with words

Editor:

It's nice to see Art Dudley in Stereophile. You needed a high-efficiency, mature-technology viewpoint. Art has a way with words and ideas. (Hopefully, he will manage to spare us his political views.)

Stephen DeGray sad@inetone.net

Desperate diatribes?

Editor:

I was saddened to learn that Art Dudley has joined your extended family. Stereophile must be desperate. Art used Listener to voice his left-wing political agenda, which is one of the reasons I canceled my subscription. Not only were his political views irritating and often disrespectful, but they were inappropriate for a publication supposedly devoted to hi-fi and music. We shall see how long it takes him to use Stereophile as a vehicle for his political diatribes.

Stuart A. Levy, MD Salevy1530@aol.com

What was once avant-...

Editor:

Robert Baird points out that the passion for music has lessened in the past 20 years ("Aural Robert," December 2002). Symphony orchestras and classical music labels have been saying the same thing for quite a while. I'm sure that psychologists could study this problem for infinity and never find all the answers. But I have some.

For one thing, I don't want to just hear music any more. For almost 70 years, I had no other option. But along comes TV, videotape, and DVD. I have another option: at long last, I can hear and see musical performances in my home. So I'nn not buying any more music-only CIDs unless they contain performances that I am not

Stereophile, March 2003



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ever going to be able to get in an audiovisual version. And I am definitely not interested in SACD or DVD-Audio or any other music-only medium, no matter how good it gets. The sound of DVD-Video may be inferior to that of SACD and DVD-A, but I'm willing to accept that.

Of course, some visuals are irrelevant or merely awful. Like a performance of Haydn's *Creation* during which the camera shows more of the sculpture in the hall than of the performance. And I will not buy any Naxos travelogue-with-music, as much as I respect Naxos.

But when the visuals are good, I can listen to a performance of Beethoven's Sixth and see how the flute and clarinet combine to produce a sound that I have never quite figured out. I become involved in the performance because the concentration required from the performers becomes evident, and it would be disrespectful were I not to respect their efforts. No more drifting off, thinking about other things, as the music flows.

You will notice one obvious thing about this letter: It does not, unfortunately, belong in *Stereophile*. Too bad. It's a sad thing when people who were once the avant-garde become the derrière-garde.

I can think of another, more basic, reason: The music we are immersed in when we are kids shapes our listening for the rest of our lives. My generation used to hear concert music on a regular basis via radio and movie soundtracks and live performances. That no longer happens. If kids do not hear concert music day after day—the way we used to—the chances of getting them hooked are nil.

Somebody needs to provide that exposure. I suggest, as one approach, widespread and free distribution of CD samplers containing examples of different types of concert music to as many parents of newborns as feasible, and urging them to play a track or two of the music to their infants every day. I guarantee that that will provide the basis for the future love for music among some small segment of those infants. Now all we need is some organization or person to spearhead that operation. Any volunteers?

Paul A. Alter

The way of the dodo

Editor:

Art Dudley, in his January 2003 "Listening" column, wonders why "good" music systems are going the way of the dodo. A few observations from my experience:

In college, I listened raptly to music. I had the time, and, aside from books, there wasn't much else to do with "quality" time than sit myself down in a chair and listen to audio from speakers placed 6' above the floor on the book rack at one end of my dorm room. TV wasn't an issue at that time, since we couldn't have TVs in our

rooms. This was in the early 1960s; obviously, things have changed since then.

By the time I left college, I had what was then a pretty good system: Fisher 500C receiver, AR 2 speakers, Miracord 10H player, Shure cartridge, and Sony open-reel tape deck. I upgraded these later in the Army, and finally, in the early '80s, finished the upgrades with Acoustat 3 speakers, Hafler 500 amp, and various other peripherals.

There things stood for 15 years. Why? I just didn't hear a big improvement in other components I auditioned, so there was no pressing reason to buy. Video came along, and the system morphed into a 5.1-channel Dolby system aimed primarily at video, not music.

Why the change? Time, mostly. I didn't have the ability to spend 30 or 60 minutes listening to music (unless I was on a plane). I had a job. I had other interests. I found that I would rather read and listen occasionally to music in the background than do nothing but listen. For background music, a Bose would be roughly as good as a \$200,000 system turned down to a background level. My concentration at home turned from music to videotape, laserdise, and lastly, DVD and HDTV.

Finally, there were the price increases. For the minimum acceptable cartridge I would have to spend at least \$900, per the January issue's Art Dudley recommendation. \$900 is *not* a bargain to me! Class A components cost more than my house. And why should I even dream of purchasing them if I didn't have time to devote to music in the first place?

And Sterophile itself? I appreciate that you are attempting to recommend that I audition (for some reason I hate that word) the best possible current equipment. But even if I liked it, I simply can't afford it.

Why are high-end sales going down the drain? Because the equipment is too expensive. Why don't more people have midrange component setups? Because there is no place they can go to listen to them. Why is hi-fi as a category going down the drain? Because few people any more have the time to appreciate it.

Rick Connolly (longtime subscriber)

Cpto@aol.com

Extinct?

Pittsburgh, PA

palter@juno.com

Editor:

Are the words "Not recommended" in your vocabulary? If they are, you missed a fine opportunity to use them before they become extinct in *Stereophile*. I won't fault Art Dudley for not using them. After all, he's a full member of the reviewer class, and we all know that the opinions they utter don't have to pass muster with reality. However, John Atkinson should have had his feet more firmly grounded (no pun). After describing the weirdness of the Final Laboratory components' measurements in January, he should have written

"not recommended, even at half the price."

Just look at the Music-6 power amplifier: high output impedance, poor channel separation, distortion that increases (!!) with negative feedback, crossover distortion (which ceased to be a concern in transistor amplifiers during the late 1960s) — all of this for only \$3250, plus \$700 for a battery holder (batteries included!).

And what does JA have to say about this? "Alarming behavior!" and "Ugh!" But then: "Fortunately, crossover distortion... decreases as a percentage of the signal as the signal level increases." Is he *serious*? Why, then, does he say that Art's very sensitive speakers would call for just a few hundred milliwatts? Talk about indecision! Yes, I know JA comments that "crossover distortion will still be an issue"; but that is the issue! This is probably the more objectionable form of distortion, much more so than poor high-frequency linearity.

JA was disappointed, but:

1) Did have some good news to report: the amplifier exceeded its rated power output with one channel driven at 1% distortion. Will wonders never cease?

2) The amplifier puts out 3.43A (about 5A peak) into a 1 ohm load. What's so respectable about that? It has 25V to work with (an ideal maximum of 25A), and a good alkaline D cell can put about 15A into a brief short circuit.

3) Art Dudley's comments were perhaps "more concerned with what the amplifier did right than what it did wrong." Oh my, I know about a lot of (cheap) amps that do a lot of things wrong and a few things right, but at \$3000+ (did I mention that batteries are included?), this shouldn't even have been an option.

4) "...the Final Laboratory components should not be used with other manufacturers' products. Their behavior appears to be optimized when they're used with each other." I would say that, at that price, they should not be used at all. Period.

5) "...perhaps the audibility of the amplifier's errors can be reduced for a specific loudspeaker." Yeah, right, a loudspeaker with optimized behavior (batteries included), also from Final Laboratory?

All of this could have been neatly summarized with "Not recommended." It could be, of course, that JA found himself with some spare space to fill.

Jaime Arbona jarbona@ece.uprm.edu

Music

Editor:

Finally! Richard Lehnert's Little Feat review (December, p.143) reminded me of the great article printed in *HFN/RR* in 1980, just after Lowell George died. Thank you, *Stereophile*, for recognizing such a truly marvelous band.

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Industry Update

US: ARIZONA Jon Iverson

Arizona-based Rockford Corporation announced at the end of December that it has acquired loudspeaker designer Now Hear This (NHT) from Recoton Corporation. Previous Rockford acquisitions include Fosgate, Hafler, Acoustat, and MB Quart. The specific terms of the agreement are confidential.

NHT, which markets home theater, stereo, custom installation, and professional audio products under the brand names NHT, Now Hear This, and NHTPro, was founded in 1986 by Chris Byrne and Ken Kantor and quickly established itself as an audiophile favorite. (Robert J. Reina favorably reviewed the NHT SB-3 loudspeaker in the November 2002 Stereophile)

In 1996, Recoton bought NHT from its founders as part of its acquisition of International Jensen. Recoton Home Audio Group's Hank Suerth told the press at that time that NHT's "mission to design and market high-performance, high-value loudspeakers for specialty audio" would continue. Byrne and Kantor later started up Vergence Technology, which licensed the NHT brand name from Recoton to create speakers for the pro audio market.

Of the Rockford acquisition, Byrne says, "We believe joining Rockford will be a tremendously positive stimulus to our business. There is a terrific fit of cultures, and Rockford's resource base,

logistic systems, and business acumen should help us grow the brand rapidly." Rockford notes that NHT's present management team will continue to operate product design, engineering, sales, and marketing as a separate entity in its current Benicia, California facility.

US: NEW YORK Barry Willis

Warner Music Group is supporting efforts by the DVD Forum to create a hybrid dual-layer CD/DVD-Audio disc, according to reports from New York last December (see "Industry Update," February 2003, p.11). WMG, a unit of AOL Time Warner, is one of the music industry's principal backers of the DVD-Audio format.

The creation of a hybrid disc would require amendments to the "Red Book" CID standard. CID players, under the current standard, can't read DVID-Audio discs—for that matter, neither can most DVID-Video players, which default to a DVID-Audio disc's alternate Dolby Digital multichannel tracks, as if the disc were a DVID movie. (A "Warner Vision" informational website, www.warner vision.com.au/dvd-a.asp, discusses DVID- A's capabilities in depth.)

DVD-Audio is hampered by a classic chicken-or-egg dilemma. All DVD video players can play CDs. Some look for a DVD table of contents first, and if it can't be found, default to CD playback. Others look for a CD ToC first, so

that music discs boot up quicker; in either case, the machines will ignore DVD-Audio content. In most cases, music fans who think they're listening to hi-rez audio are actually listening to Dolby surround sound.

Changing the CD specification would allow hardware makers to design CD players that could play high-resolution DVD-Audio content without the necessity of turning on a video monitor to scroll through a menu. DVD-A's reliance on a visual interface works contrary to the way most people play recorded music, a fact that wasn't overlooked by the designers of the SACD format.

Although both DVD-Audio and SACD offer clearly audible improvements over standard CD, it's unlikely that most music lovers care about the benefits. Both formats are top-down initiatives being pushed on a market that has never had any complaints about CDs. The stated agenda is making the listening experience more rewarding, but many observers believe that the real agenda is end-to-end control over how consumers can use the music they purchase—an end run around the music industry's copy-proliferation problem. CD-based content can be easily transferred to recordable CD, MP3, and other formats. or sent as audio files over the Internet. but at present there is no way to do that with DVD-A or SACD data.

At a European Conference held

Calendar

Those promoting audio-related seminars, shows, and meetings should fax (do not call) the when, where, and who to (212) 886-2809 at least eight weeks before the month of the event. The deadline for the May 2003 issue is March 3. Mark the fax "Attention Stephen Mejias, Dealer Bulletin Board." We will fax back a confirmation. If you do not receive confirmation within 24 hours, please fax us again.

Please note that it is inappropriate for a retailer to promote a new product line in "Calendar" unless this is associated with a seminar or similar event.

CALIFORNIA

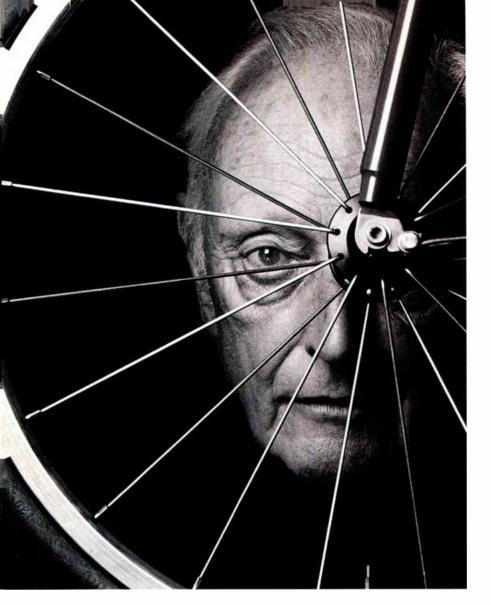
• Audio Limits is pleased to announce that we have just been appointed a California dealer for Halcro! We have discovered that the Halcro is the ultimate amplification for the new Reference Pipedreams Hemisphere speakers. If you are looking for a perfected combination of detail, dynamics, and soundstage, we will be conducting a seminar and auditions. For reservations, please call (661) 252-9222 or visit www.audiolimits.com.

COLORADO

• Friday, March 7, 6–9pm and Saturday, March 8, 12–5pm: *Moondance Audio* will host representatives from Focal-JMlab and Rogue Audio. Featured equipment will include the new Rogue Zeus amplifier driving JMlab's newgeneration Utopia speakers. For more info, call Moondance Audio at (303) 777-4449.

GEORGIA

Sunday, March 16, 2-5pm, the



Dr Alex Moulton

Designer of the Moulton AM7: Holder of the world unpaced cycling speed record.

Photograph by Jason Bell Jason Bell © 2002



CA201- Power Amplifier

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October 30 in Paris, the DVD Forum announced that it would begin investigating proposals for altering the CD specification to accommodate DVD-A. It was quickly pointed out that the Forum may not have the legal right to do this. Some Forum officials replied that if this is true, they can still create their own format.

JAPAN Paul Messenger

It's a sad duty to report the death of Dr. Noboru Tominari, founder and prime inspiration of Dynavector and a remarkable personality. While I didn't know him well enough to be on first-name terms, I met him on many occasions over 25 years, and we always got on well. Indeed, we'd spent the afternoon together in March 2001, just before he returned to Tokyo for the last time, and only two weeks before he was struck down by the brain hemorrhage that left him substantially comatose until he passed away peacefully, in the company of his family, on November 24, 2002.

Very much the perfect gentleman, Noboru Tominari was a big man in every respect—tall, solidly built, and very different from the Japanese stereotype, both physically and in his mental and cultural attitudes. He had a wonderful smile that could fill a room, a great sense of humor, and his taste in music was catholic and wide-ranging, though definitely oriented toward the western classical tradition. I also met Tominari's wife, Eiko, on several occasions. A liberated individual in her own right, she, too, is very different from the Japanese norm. Together they produced three boys — Taro, Jiro, and Saburoand made a formidable partnership.

Born in 1927, Noboru Tominari studied mechanical dynamics at Tokyo Uni-

versity, then served as professor of mechanical engineering at Tokyo Metropolitan University until 1974, when, at the age of 46, he established Dynavector Systems. The company's very first products were a range of tube amplifiers, which they sold while developing a line of moving-coil (MC) cartridges.

Under Dr. Tominari's inspiration and direction, Dynavector has always been among the most innovative hi-fi specialists. In 1978, the company introduced its radical biaxial DV-505 tonearm and the best-selling DV-10X MC cartridge; in the following year they released the first of the Karat MCs, with gem-stone cantilevers. Subsequent innovations have included a succession of Super Stereo analog time-delay processors (the friendly face of stereo/multichannel compatibility, in my opinion), the magnetic flux-damping system included in all cartridges after 1989, and the more recent alnico-magnet DRT-XV-1 cartridge.

Music and its hi-fi reproduction were lifetime hobbies and passions for Dr. Tominari that began in his boyhoodbut not at the exclusion of other engineering interests. These included work on automatic control engineering, especially in automotive fuel-injection systems, alongside Lucas, Daimler-Benz, Mikuni, and others. Dr. Tominari was also something of an anglophile. In the late 1980s he visited me in one of the substantially tweaked V12 Jaguar sedans that he drove in both the UK and Japan. To this day, Dynavector is the Japanese distributor of the very radical and advanced Alex Moulton line of bicycles.

Hi-fi has lost one of its most original thinkers and most charismatic personalities, but Noboru Tominari's creativity will live on. He left behind a legacy of new ideas that should keep Taro and the family firm busy for years. Three new

Calendar

Community Clubhouse (4522 Kingsgate Dr., Dunwoody): The *Atlanta Audio Society* is hosting a seminar featuring Michael Hobson, President of Classic Records. Mr. Hobson will demonstrate Classic's innovative Digital Audio Disc product line, the differences between the conventional LP profile and Classic's propriety Quiex Super Vinyl Profile, and the issues surrounding mono vs stereo Blue Note and other recordings. For more info, visit the AAS web page at

www.mindspring.com/~chucks audio/index.htm or contact Chuck Bruce at (770) 493-7105.

MINNESOTA

• Coming soon to the Audio Society of Minnesota: the Canton Karat Reference 2 loudspeaker! For details, check the ASM website at www. visi.com/~asm.

Dynavector cartridges are to be launched in 2003.

CANADA Barry Willis

Want your kids to grow up smarter? Have them study music. Want to hold off the mental ravages of old age? Listen to music. Want to get high (legally), feel ecstatic, make your pain disappear? Music is the cure for what ails you.

These are some of the conclusions reached last December by researchers at Dartmouth College and at the Montreal Neurological Institute. Dartmouth music psychologist Petr Janata led a team of scientists who studied the neural activity of people listening to music and determined that music prompts greater interconnectivity between the brain's two hemispheres and between the areas responsible for emotion and memory than does almost any other stimulus.

Janata's study, published in *Science*, reports that some areas of the brain are 5% larger in expert musicians than they are in people with little or no musical training, and that the auditory cortex in professional musicians is 130% denser than in nonmusicians. Among musicians who began their musical studies in early childhood, the corpus callosum, a sort of bridge between the brain's hemispheres, can be up to 15% larger.

These figures, among the first to quantify neural adaptations to music, appear to support studies that claim that early exposure to music makes humans smarter. The research "shows this link between music theory and perception and brain function," according to Frances Rauscher, who studies music cognition at the University of Wisconsin at Oshkosh.

Dartmouth researchers used a magnetic resonance imager (MRI) machine to monitor the neural activities in eight volunteers, each of whom averaged 12 years of musical training, to determine which areas of the brain were used while performing musical tasks, measured by increased blood flow and neural activity. One fascinating discovery is that a region near the center of the forehead called the rostromedial prefrontal cortex, which links short-term and long-term memory areas with emotions, is the area that tracks and processes melodies. The same melody played repeated times for each individual elicited a slightly different neural pattern each time, which could account for differing responses to the same stimulus at different times. (Audiophiles note: This could explain why your system sounds

Valhalla Speaker Cable Red Dawn Speaker Cable Blue Heaven Interconnect Quattro Fil Interconnect Vahalla Interconnect Cable

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Harry Pearson The Absolute Sound Issue 127 used with permission.

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Editors Choice and Award Winner Hi Fi News 2002

"These are sensational cables, and you'll love what they'll do for your system. The Valhallas get my very highest, most unconditional recommendation."

Brian Damkroger, Stereophile, November 2001; Recommended Component, Stereophile, April 2002





Editors Choice and Award Winner Hi Fi News 2002

NØRDOST

MAKING THE CONNECTION

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son ever, with 56 million items ordered worldwide from November 1 through December 23. Amazon's five best-selling items were DVD movies: The Lord of the Rings: The Fellowship of the Ring, Star Wars: Episode II—Attack of the Clones, Band of Brothers, Spider-Man, and The Lord of the Rings: The Fellowship of the Ring: Platinum Series Extended Edition.

As many respondents to our weekly www.stereophile.com polls have noted, high CD prices keep music fans from buying. In one of the most desperate strategies ever launched by any industry, record-label executives chose to raise prices in the face of declining sales as a way to maintain revenue. CD prices are now two or three dollars more per title than they were when the sales slump began more than two years ago. When the music industry is facing supremely tough competition for the consumer's entertainment dollar, such a move is inexplicable.

UNITED KINGDOM Paul Messenger

Every audio reviewer needs a certain number of reference components to do his or her job properly, and some companies are more generous than others when it comes to arranging long-term loans. But there's a crucial difference between a reference component that I merely want to borrow, and one that I consider essential to the future health and enjoyment of my reference system. I get to try a cornucopia of new audio delights during any given year, but the true measure of a device's value comes only when I start trying to figure out how to actually buy a component, for the simple reason that I can't go on living without it.

I purchase, on average, one "essential" new component a year. In Y2K it was Dynavector's lovely alnico-magnet XV-1 moving-coil cartridge, while 2001 found me shelling out for Magnum Dynalab's defiantly analog and conveniently remote-controllable MD102 tuner. But despite the general economic gloom, 2002 turned out to be something of a vintage year for new hi-fi components. As the year ended, I found myself facing financial ruin as I tried to finance no fewer than three new components, which together have dramatically improved my hi-fi system.

First of these was Rega's RB1000 tonearm. This new variation on the familiar RB theme is fitted as standard on Rega's recently revised, top-of-the-line P9 turntable. I've always respected the superb structural integrity of the RB arms, whose single casting encom-

passes headshell, armtube, and bearing housing. I'm even more impressed with the extraordinarily silky-smooth feel of this latest version's tight-tolerance bearings—the last time I felt bearings this good was on the exotic Swiss-made Breuer, way back in the 1970s. It's much easier to achieve "zero bearing tolerance" with a gravity-loaded unipivot than with Rega's multi-ball-race approach, though the latter has the advantage of restricting the degrees of freedom of the essential horizontal and vertical motions, eliminating any tendency to rock.

The key to the RB1000's superior bearing is simple enough: Rega makes hundreds of RB tonearms each mouth, but only a handful of RB1000s. Guess which tonearms receive the very best bearings. The result is a wonderfully clean and uncolored sound with magnificent definition and dynamic range. My LPs have never sounded more like master tapes.

The second essential new component was a no-brainer. I've been a satisfied user of a Naim NAC52 preamplifier for the past 15 or so years; it was almost inevitable that I'd want to upgrade to its replacement, the NAC552, which first appeared in mid-2002. The sound is significantly better, especially in dynamic range and top-end sweetness and transparency, thanks, presumably, to the NAC552's spring-decoupled anti-vibration circuit boards, 14 (!) separate power supplies, and "split-rail" architecture.

But if my enthusiasm for the new Rega and Naim components was more or less predictable, that wasn't at all true of my lust for a pair of very large loudspeakers that moved in last fall. Indeed, had someone told me a year ago that I'd be trying to find some way to afford a pair of bulky, expensive American loudspeakers, I'd probably have laughed.

I mentioned JBL's K2 S9800 in a piece about beryllium driver diaphragms in last month's "Industry Update," but there's more to this speaker than a fancy diaphragm. The K2 was designed for the Japanese market, and its distinctly unfashionable shape, bulk, and configuration probably explain why it wasn't being sold in the US when I first got hold of a pair. That regrettable oversight has since been rectified.

Conceived, according to designer Greg Timbers, as the "ultimate two-way" (albeit with an additional supertweeter coming in above 10kHz), the K2 flies in the face of today's trend toward slim speaker profiles: the center of its forward-firing 15" bass/mid driver

is 30" off the floor. This big driver hands over at 800Hz to a biradial horn with a 3" compression driver.

Fashion might not be with the K2 S9800, but its history is fascinating. The website www.audioheritage.org allows one to track the speaker's roots all the way back to 1937, when Lansing Manufacturing, ancestor of Altec and JBL, downsized the full-range horn system it was making so that picture palaces could show talkies, and created a speaker system called the Iconic. The name was appropriate; this large twoway, with a direct-radiating 15" bass/mid driver and a multicellular compression horn, was one of the world's first monitors. Although the Iconic was primarily intended for film soundtracks, www.audioheritage.org/ html/profiles/lmco/iconic.htm has a photo of Les Paul using one in his studio. While the Iconic itself used electromagnetic field coils, it was the ancestor of a long line of speakers, including JBL's famous 4320 studio monitor of the 1960s, its 4333 successor, and domestic L300 variation that used permanent magnets.

The K2 S9800 is an intriguing and impressive mixture of ancient and modern technologies. The bass driver uses a paper cone, a foam surround, and an alnico magnet, but the motor itself is extremely advanced, and the diaphragms of both horn-loaded compression drivers are fashioned from super-exotic (and very costly) beryllium foil. There's also a radical and novel crossover that uses a dry battery to prepolarize twinned capacitors.

But I suspect a key reason behind the K2 S9800's sonic strengths might well lie in the simple fact that it uses an 800Hz crossover point (as did, to my recollection, the original Quad Electrostatic). Because of their drive-unit types, the crossovers of most conventional two-way speakers are in the 2–3kHz range, aka the "presence" zone, where the human ear is most sensitive. Avoiding driver discontinuity in this critical zone seems to improve the clarity and coherence of voices.

I can't rank any of these three components ahead of the others, because each has a distinct role to play. Moreover, none has yet received a full *Stereophile* review. But they do illustrate to my satisfaction that, despite the economic strife of the past few years, serious two-channel hi-fi remains in fundamental good health, and continues to reinvent itself in plenty of new and creative products.

Stereophile, March 2003

Introducing the THIEL CS2.4

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- Uniform, resistive load works well with lower power amplifiers.
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"But I have to say that I like the way that a solidstate amplifier controls a loudspeaker. And you know, Sam, solid-state amplifiers can sound very refined these days."

So said Franco Serblin, of Sonus Faber, when I talked with him at the TOP Audio Video Show in Milan last fall.

Back home, for my January column, I auditioned the Sonus Faber Cremona speaker with the Musical

Fidelity A3.2 preamplifier and A3.2 power amp combination, and the YBA Integré Passion and the Unison Research Unico integrated amplifiers.

But I wondered what the Cremonas would do with a BIG amp. (Franco himself tends to favor Krell.) As luck would have it, Vince Galbo, of Advanced Audio Technologies, called and offered a Plinius SA-102 power amp for review.

"Εαιο," I told myself, having just returned from my weekly Italian lesson. "This might be perfetto."

A few days later, Vince came by with the amp. After a few minutes of listening, he shook his head. "You don't have a dedicated line, do you? Actually, I know the answer. I could see the lights dim when I turned it on."

"Ahem...no."

"To hear what this amplifier can really do, you should have one. Where does the power come into the house?

"Right under the living room."

"Perfetto," said Vince. "Videamo. (Let's take a look.)"

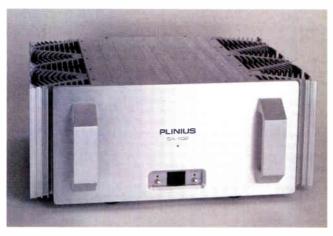
Vince offered to install the line himself, no charge. I couldn't accept.

"I have a plan," he declared after surveying the situation. "You buy the materials, and next time I come by I'll show you how it's done."

I hesitated.

"I insist. As the importer, I want the amplifier to perform at its best while under review."

For years, my late friend Lars was on



The Plinius SA-102 power amplifier.

my case to install a dedicated line. I hope he has one now, wherever he is.

Installation was a breeze, as Vince said it would be — but not a job for the inexperienced or the unsupervised. In a little more than an hour, the Plinius SA-102 was able to slurp juice from its own straw. There was nothing else on the line, not even other stereo equipment. (We used a PS Audio Power Port for the dedicated line's outlet.) Plinius wouldn't approve, though: they recommend running the whole system on the same line to minimize noise.

I was surprised by the difference the AC line made. As Gertrude Stein liked to say, "a difference that's no difference is no difference." This difference was a difference. I heard the improvement not only with the Plinius, but with *every* amplifier. The YBA Integré Passion and Unison Research Unico sounded more dynamic, smoother, cleaner.

It takes two people to lift and move a Plinius SA-102. This is one big, serious amp: 18 \(^8\)\" wide by 8 \(^8\)\" high by 13 \(^2\)\" deep. It weighs 83 lbs. The heat-sinks are humungous, as they need to be: most people will run the amplifier in class-A for much of the time, and they have to dissipate heat.

The SA-102 can run in class-A or class-A/B. Either way, it's rated to deliver 140Wpc into 8 ohms and 220Wpc into 4 ohms. The amp can be had in your choice of black or silver-anodized aluminum. The price is \$4995 — made

possible, in part, by the New Zealand dollar, which I last saw trading for US \$0.52.

Like other amps in Plinius' SA series, the '102 doesn't skimp on build quality. The internal silver wiring is by Siltech. The WBT made speaker binding posts are very high quality—two per channel for biwiring. Inside, the amplifier looks built to a very high standard. The owner can configure the SA-102 to be a stereo amp, a bridged mono amp, or, using XLR connectors, a

fully balanced monoblock.

Operation is straightforward. When you turn on the amp, it defaults to class-A/B with the speaker outputs muted. To get sound, flip down the lever to the left of the power switch. To cook in class-A, flip down the lever to the right. I use my right big toe. (I'd plopped the Plinius on the floor; but, as with any amplifier, don't place the SA-102 directly on a carpet. I used a piece of wood as a platform.)

"Is that amplifier *staying* on the living-room floor?" asked my wife, Marina.

"For the time being, yes." Marina does make sacrifices.

Once you flip the amp into class-A, it stays there for as long as you play music. But if the music goes silent for more than 30 minutes, the amp reverts to class-A/B, saving you money on your electric bill. The amp really cooks in class-A, but runs cool as a cucumber in class-A/B, thanks to the massive heatsinks.

The SA-102 requires a mere 800mV input to deliver its full rated power output, making it a better match than most amps for a so-called "passive" preamp. Being (at Marina's behest) more active these days, I opted for Musical Fidelity's A3.2^{CR} preamplifier. The CD/SACD player was a Sony SCD-XA777ES. For analog, I used my Rega P25 turntable with Goldring G1042 moving-magnet cartridge.

Plinius Audio products have been available in the US for 10 years. But the

company traces its beginnings to 1980, when Peter Thomson founded it, in New Zealand. As Pete once told me, that took pluck: there are more sheep than people in his country. A New Zealand hi-fi manufacturer must export. In 1987, Pete joined forces with Gary Morison to form Audible Technologies. Plinius is the company's brand. The company exports all over the world.

In my November 1998 column (Vol.21 No.11), I reviewed the Plinius SA-50 Mk.III, which sold for \$2995. It was a honey of a 50Wpc stereo amp. But audiophiles are...well, sheep...and want 100Wpc or more. The SA-50 was eventually discontinued.

When I wrote this month's column, it was Christmas season — summer in New Zealand. Christmas is their Fourth of July, as it were. Unfortunately, Pete Thomson was down with the flu, so I corresponded, by e-mail, with Gary Morison, the company's technical director.

Plinius has a distinctive house sound, as I noted when I reviewed the SA-50. They achieve that sound, in part, by using only NPN output transistors, no PNPs.

Output transistors come in two flavors: NPN and PNP. But, as Pete told me when I reviewed the SA-50, "the NPN transistor is a lot more linear and better-sounding than its PNP counterpart." In most solid-state amplifiers, an NPN is matched with a PNP to form a mirror-imaged pair of output devices. The Plinius approach is to match NPN with NPN — the SA-102 has three pairs of NPN/NPN output transistors per channel. The result is an asymmetrical deign, an output stage that's more push than pull. As Pete told me, this emulates the way sound behaves in nature - that is, in air.

In an NPN device current flows one direction; while in a PNP device, current flows the other way. I asked Gary how Plinius matches the devices:

"How do you make it work? Are the laws of physics reversed Down Under?"

Gary was having none of that; but he was reluctant to describe how the devices are matched — afraid, perhaps, that someone will knock off his engineering.

"Suffice it to say, there are a number of ways you can use NPN devices alone," Gary offered, sheepishly and perhaps a little stiffly. "We use one which allows reasonable efficiency."

NPNs aside, Gary was forthcoming - and, like many electronics engineers, eager to teach. He reminded me of Paul McGowan, of PS Audio, or Leopoldo Rossetto, of Unison Research. Here's what he told me:

"In the simplest sense [ie, mine], an amplifier is a device that takes a small signal and makes it bigger. Every gain stage in an amp or preamp attempts to do this. Ideally, the amplification of the signal produces an exact replica of the input signal, only a larger and more powerful one.

"You've heard the cliché 'straight wire with gain.' It's often rolled out to describe the perfect amplifier," Gary continued, warming up — like a Plinius amp in class-A. "In the real world, however, no amplifying device—tube, FET, or bipolar transistor - scales the signal perfectly. All have nonlinearities.

"An ideal device would have a transfer characteristic that is a straight line - the graph of the output signal would match that of the input signal. But all real-world devices have transfer characteristics that have some form of nonlinearity."

So a designer's task is to uncoil the kinks, as it were?

"In all Plinius products, we've adopted an asymmetrical topology," Gary continued, reinforcing what Pete had told me earlier. "This allows the music to come alive."

"Yeah, like in single-ended triode?" I shot back via e-mail.

"It's interesting that single-ended triode amps have found such favor. They have the same asymmetrical characteristic as our amps, but with much lower power and higher distortion."

"Why do you use class-A when it seems so inefficient?"

"We've found that biasing the output stage in class-A reduces nonlinearity. In addition, class-A operation ensures that the large output-stage current draw from the power supply remains constant, and this reduces power-supply modulation."

Or, in plain English, there's inherently lower distortion in class-A operation.

"And the result?"

"Pinpoint images. Tonal clarification." Gary was almost gushing. "Intertransient silence. More defined dynamic shadings. Inner detail and authority."

Resuming his scientific demeanor, Gary expanded on the benefits of class-A operation: "With class-A circuit topology, the total current that the amplifier is capable of delivering is kept flowing in the circuit, regardless of demand while in a class-A/B amplifier, current flow varies with demand. As current varies, the voltage on the rails as seen by the output stage varies too. This leads to the power-supply modulation common in class-A/B designs."

High-current capability is desirable in

an amplifier and a major reason why many audiophiles favor big solid-state amps. (Tube amps tend to do less well when it comes to sourcing current.) Vince Galbo told me that you can almost determine an amplifier's current capability by its weight: the heftier the amp, the bigger its power supply and transformers, and the more current it can supply.

"That's important in musical terms," Vince said. "When an amplifier isn't able to keep up with current demands, voltage sags and music suffers. You can hear it when a sudden drum beat comes along. If you don't have enough current, voltage falls down and the drum beat

loses its impact."

I certainly heard the kickdrum's impact on "Burning Love," on Elvis: 30 #1 hits (RCA 07863 68079-2). Other amps in house did not deliver the same impact as did the Plinius.

If memory serves me right, the SA-50 Mk.III sounded noticeably better in class-A than in class-A/B, where the amp seemed slightly cold or sterile by comparison. The SA-102 was different. I often had to look at the class-A LED (to the right of the On/Off switch) to see whether the amplifier was in class-A or not. Often it was working in A/B.

I often doze off in the evening. By the time I wake, the SA-102 has reverted to class-A/B. "Drat!" I declare, pulling myself up from my listening chair.

I posed the question to Gary: "Why does class-A/B now sound very close to class-A?"

"It's because we have a very-largecapacity power supply," Gary replied from sheep country. "It's not easily modulated by output-stage current variations. And we still run a generous amount of output-stage current in class-A/B."

So in class-A/B, the amp still operates in class-A - at least for a few watts.

Some manufacturers of big solidstate amps have gone to sliding-bias arrangements in which class-A kicks in as

Contacts

Advanced Audio Technologies, 9160 Clarence Center Road, Clarence Center, NY 14032. Tel: (716) 741-6063. Fax: (716) 741-6062.

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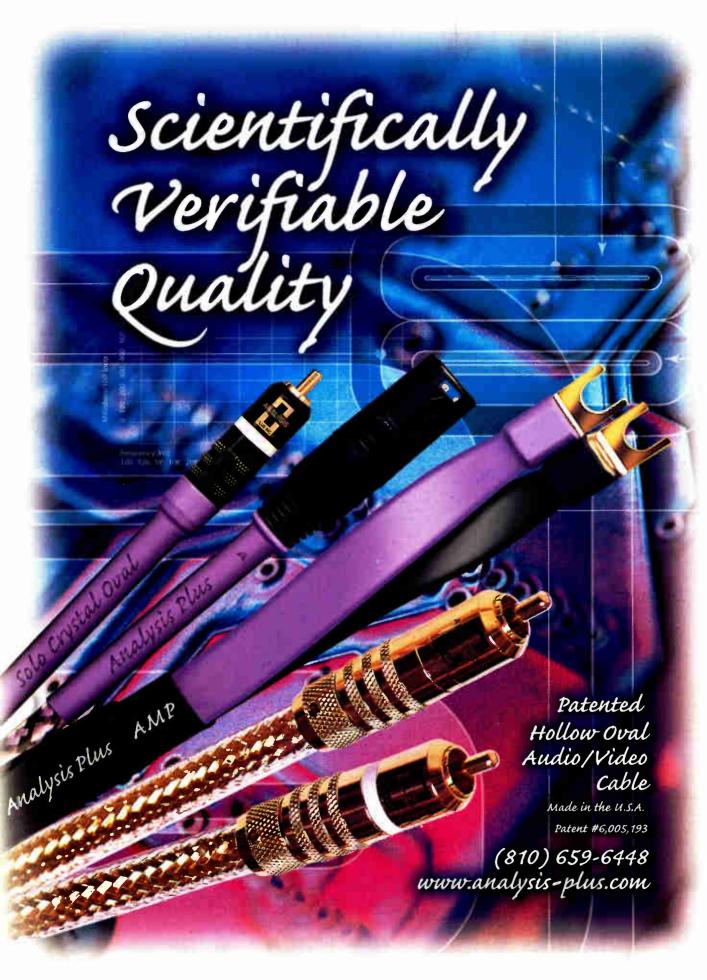
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needed, the amp stays cool, electricity is conserved, and so on. I call these things "miracle circuits." I asked Gary about them.

"Any sort of sliding class-A bias — no matter how well it is done — will have a negative sonic impact. The scheme will cause some of the amplifier's operating parameters to be modulated by the signal — exactly what most designers want not to happen.

"Sliding-bias schemes are usually used to reduce the large amount of heat generated in a class-A design. In the Plinius SA-102, we have enough heat-sink area to dissipate heat without turn-

ing to compromises."

I listened to the SA-102 for more than a month with the Sonus Faber Cremona speakers. I appreciated what Franco Serblin meant about "control." The Plinius SA-102 took charge of the speakers, especially the bottom end. I asked Gary whether this control came from a high damping factor.

"While we achieve damping factors of around 50 or 60 into an 8 ohm load, we don't focus on damping factor as an overly important parameter. The amplifier has a massive, very-low-impedance power supply, with high stored energy and high current capability. The output stage has such a huge capacity for current delivery that a woofer won't be starved, no matter how much current it needs."

The treble was sweetly and smoothly extended. Franco Serblin was right: solid-state amplifiers have become very refined — some of them, anyway. With the Plinius-Cremona combination, I heard a lovely liquidity — a total absence of the hardness or harshness that, in the past, I've so often associated with solid-state.

Two weeks before deadline, Renaud de Vergnette, of Triangle Electroacoustique, and Richard Kohlruss, of VMAX Services, his North American importer, arrived with the flagship Triangle Magellan speakers. These will likely retail in the US for around \$35,000/pair. It's fun to go hors de catégorie, as the French hi-fi scribes like to say. Some of the Magellan's technology and magic will trickle down to more affordable Triangle models. And soon.

When Renaud and Richard visited, we selected three SACDs: Berlioz's Symphonie Fantastique, with Paavo Järvi conducting the Cincinnati Symphony (Telarc SACD-60578); Rachmaninoff's Piano Concerto 3 and Scriabin Études with pianist Lang Lang, Yuri Temirkanov, and the St. Petersburg Philhar-

monic (Telarc SACD-60582); and Chet Baker's *Chet* (Riverside/Analogue Productions CAPJ 1135 SA).

We rotated the three discs, comparing the Plinius SA-102 (with Musical Fidelity A3.2^{CR} preamp) and two integrated amps: the Unison Research Unico and YBA Passion Integré. But after they left, I had another 10 days of listening on my own before deadline. and turned to non-audiophile material: Louis Armstrong in the 1920s and '30s. Ditto Duke. Count Basie's first recordings. The Chronological Bing Crosby on Jonzo Records. I played many of the historical classical CDs that Klaus Heymann, of Naxos, has sent me: Jascha Heifetz, Yehudi Menuhin, Artur Schnabel.

In many ways, vintage or "historical" recordings present the toughest challenge. Despite their lack of dynamic range, many of these recordings sounded smooth, sweet, and mellow-not at all harsh or thin. Old recordings or new, the Plinius controlled the Triangles' multiple woofers with an iron grip. Bass definition and extension were excellent. So was the overall resolution. I heard superb bottom-end control and a very sweet, smoothly extended midrange and treble. The Magellans are also capable of remarkable resolution, and the Plinius SA-102 did not disappoint. When I consider that these speakers retail for roughly seven times the amplifier's price, the latter's performance was exemplary.

Someone buying an expensive speaker like the Magellan might allocate more than \$5,000 for an amplifier. I wonder what two Plinius SA-102s might sound like. Bridge them into mono...or since the Magellan allows, leave the Plinius in stereo and simply biamp, horizontally or vertically. At a total price of \$10,000, two Plinius SA-102s might make an attractive proposition, possibly gaining you a more expansive soundstage and an even greater sense of dynamic ease.

There's something to be said for a big amp: it can make big sound. The Plinius SA-102 did this without ever turning hard or harsh, without sounding raucous or losing resolution and fine detail. This amp was as free of grain as any solid-state amplifier I have heard at any price.

heard at any price. Was it perfect? Comparing the Plinius SA-102 to the YBA Integré Passion and Unison Research Unico, I had one slight reservation. Mind you, those relatively small integrated amps did not control the Magellans' woofers as well as the Plinius did, and didn't play as loud. When I tried cranking up the YBA Integré to Plinius levels, the amp blew a fuse.

But I wonder whether the Plinius might have been a wee bit too polite. It's not that I heard any loss of resolution or detail—far from it. But I wanted Chet Baker's trumpet to be a bit more brassy, to have a bit more bite. Ditto with Paavo Järvi's recording of the Symphonie Fantastique. This piece can turn quite raucous, and Telarc's recording catches this aspect (accurately, in my view). With the Plinius SA-102, I felt that things were being smoothed over slightly, taming some of the music's bark, blare, and bite. (Gad, the music sounds like me.)

I missed some of the vibrancy and life that I hear with great tube gear —that "lit from within" quality that I especially associate with single-ended triodes. I'm not sure what to call this, but I thought that the Plinius —at least with the Cremona and Magellan speakers —lacked some degree of harmonic immediacy, leaving me sometimes less than fully engaged by the music.

But how much would I have to pay to get that harmonic immediacy and the Plinius's bottom-end control? I suspect a great deal more than \$5000.

Let's say you bought a tube amplifier for roughly the same price. In the words of my colleague John Marks—a big Plinius fan—"would such a tube amp wrestle the woofer to the ground"?

And system matching is everything. Sonus Faber speakers are all noted for having the company's unique sonic signature—never harsh, possibly a little soft in the upper midrange and treble. Triangle's Magellan seems to mark a departure for that company, especially in the treble region, where there was a smoothness, sweetness, and refinement I had not heard before from Triangle designs. Neither speaker could be called aggressive.

The Plinius SA-102 may be just what you need to control your speakers and tame any tendency they might have toward aggressiveness. For \$5000, you get superb performance, excellent build quality, and the smoothest midrange and treble this side of tubes.

And a dedicated AC line? I can imagine Lars reading this column and saying, "I told you so."

¹ In horizontal biamping, one amp drives the midrange/treble units, the other drives the woofers. In vertical biamping, a single amplifier drives a single speaker. You just have to feed the same signal to the inputs of both channels.



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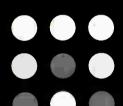
"In retrospect maybe we should have called it "SuperHero"."

Ray Kimber - Dec, 2002



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Analog Corner

Michael Fremer

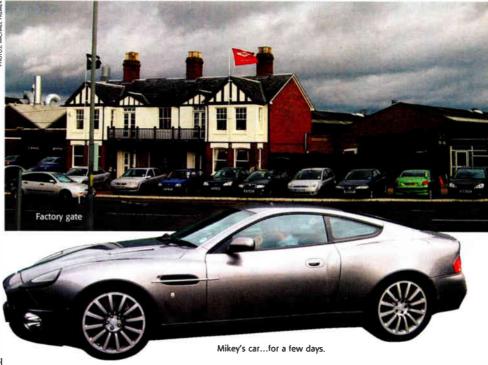
hy would any-\$74,000 for a turntable?" sputtered Peter Panarisi. Aston Martin's product press officer was showing me around the company's V12 Vanquish production facility in Newport Pagnell, Buckinghamshire, England. "What does it have to do," he continued incredulously, showing me how they handbuild the *a* \$240,000, 460bhp, 190mph two-seater, "but turn the record?"

I'll spare you my retort, but it included supermarkets, seats, steering wheels, and \$10,000 Hyundais, of which one could own 24 for the price of James Bond's latest set of wheels.

I was picking up a V12 Vanquish for a three-day spin through Scotland. Linn had built the car's Hyundai-priced (\$10,000) sound system, and my job my job, if you could call it that—was to review that system. Oh, lucky day...

Not that I hadn't prepared half my life for this assignment. What other Stereophile writers (other than former owner-publisher Larry Archibald) have rebuilt their own car engines? I have. I bored out the Saab (actually, Ford) V4's block, milled the heads, opened the exhaust ports, added a two-barrel manifold and Weber carb, and totally re-did everything myself, from the firewall forward: brakes, suspension, you name it (even if you can't). (Actually, a machine shop performed many of those steps, but I put it all back together.) The result actually ran - and pretty damn fast for an engine that's still used to run industrial sump pumps. It was still running more than a decade later, but I finally sold the car, ending a 27-year love affair. I still pine for it.

Funny thing: I went to a press conference recently for the DVD release of Men In Black II, with director Barry Sonnenfeld in attendance. I'd always wondered why they'd used an old Saab 96 in Thow Monuna from the Train, for



I was picking up a V12 Vanquish — Linn had built the car's Hyundai-priced sound system.

which he'd been the director of photography, so during the Q&A I asked him. "I used to have one of those—British racing green," he said, misty-eyed. "I regret to this day that I sold it."

"Me too," I replied. "Same color."

I'm probably one of two Jews outside of Tel Aviv who's done his own car work, and I'm proud of it. I mention this to establish my credentials and my right to spend most of three days driving this rocket sled around the lochs of Scotland.

That may sound defensive, but you wouldn't believe people's reactions when I told them I was about to, or had driven, this car. I've had some cool experiences in this job: reviewing mega-

priced gear I could never afford to own, visiting factories in exotic places, perusing a plasma television factory for *Stereophile Guide to Home Theater*. To those, people usually react with something like "Wow, that's cool." Their reaction to this assignment was, more often than not, a scowl followed by a hearty "Eff You!" I'm serious. Just yesterday, I got that from my dentist.

Where the Rubber Leaves the Road

Arriving at Heathrow in mid-November after an all-night flight, I was whisked away in a Passat by Linn's spin-meister, Brian Morris, to a posh London hotel for a day's shuteye. I don't care what travel experts say about staying awake to minimize jet lag—I needed serious mattress time to prepare for the next day's adventure.

That night, Brian "I like to walk" Morris led me on a marathon march through rain-soaked Chelsea, first to visit the Linn department at Harrod's, and then, after many shots of stomachwarming antifreeze at various pubs along the way, for dinner at Chutmey Mary's. The food was superb, but I

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Looks like belt drive.

barely tasted it: visions of the Vanquish danced in my head. Next morning, we set off for the factory before dawn to beat the awful London traffic.

At Ford-owned Aston Martin, there's no assembly line per se. Like many limited-production high-end audio companies, AM builds Vanquishes in small quantities (10 per week), the cars being moved from section to section. Body parts are pounded by hand on a special tool in one location, chassis

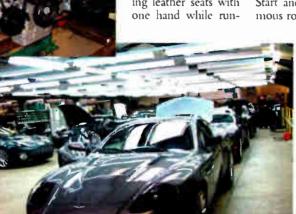
shells are composite-glued (no welding) in another, the leather is cut and the seats assembled in yet another. Each body panel gets eight coats of meticulously applied and buffed paint before it's attached to the car. The pace is slow, the work painstaking. For \$240k, you should expect perfection.

Workpeople sign off on each task; if there's a problem, the culprit can be identified and sent off to GM (GM owns Saab, so no indignant letters, please). Finished Vanquishes are pulled at random and sent to a special area where a quality-control fanatic checks every seam and stitch to make sure it conforms to the company's exacting standards. Hand-built, \$240,000, fully loaded Vanquishes are crash-tested front and rear, just like \$10k Hyundais. While touring the facility, I was hoping I'd be able to drive off and not crash the test car, in which, for three days. I'd be driving on the wrong side of the road.

Finally, it was my turn in the passenger seat of a moving Vanquish. And I do mean moving.

A professional driver was assigned to show me the ropes, and with him

behind the wheel, we left the factory parking lot. I admired the car's dramatic black-on-white instrument cluster, the rugged, brushed-aluminum dash with clown-red Start button and subtle, engraved Linn logo. I smelled and felt the rich, enveloping leather seats with one hand while run-



Almost ready to go...want one? There's almost a 2 year wait.

ning the other across the smooth suede headliner. The windshield view revealed the shapely curves of the familiar Aston nose rising gracefully on either side of the hood line—this long-legged beauty was waiting just for me.

A rare straightaway on a country road allowed the driver to take the 4100-lb cruiser from 30 to 130mph

in about three seconds. We then stopped and, as we waited for various body parts to catch up, he explained the Up and Down paddle shifters mounted on either side of the steering wheel, which actuate the automatic/manual six-speed transmission, the torque and handling characteristics (a bit of understeer, and some oversteer at higher speeds), and what I should never do: accelerate sharply with the wheel turned, which could cause the rear end to give way and send the car into a dangerous spin; or leave the car stationary while in first gear—instead, shift to neutral. The driver didn't say what

would happen if I left the car in first for a long time while stopped at a light, but I bet it wouldn't smell too good. Finally, it was my turn to get behind the wheel and drive.

Wow. And *gulp* — with the car's electric system on and the engine off, I pulled both paddles forward simultaneously to put the car in neutral — a big *N* appeared in the dashboard's gear LEID readout and the Start button lit up, letting me know all was ready. A push of Start and *washROOM*—a deep, enormous roar engulfed the rear of the car.

Who needs a \$10k sound system when you can hear that, I thought. Later, I found that hearing this baby start from outside is twice as exciting as from inside.

Having driven only manual transmissions was a big help—the Vanquish will roll back on hills like a "manual manual," until you hit the gas and the clutch engages. No problem. I took to the wrong side of the road like a



Dashboard view

pro, with lorries sliding by on the other side seemingly inches from the bumped-out rear-wheel wells. I took her up to around 4000rpm, hit the Up paddle, and the car shifted smoothly into the next gear. I popped the Down paddle and the computer did the old heel-and-toe for me, catching the revs before smoothly downshifting. For \$240k, you should feel in control, and I did. I could stomp down on the accelerator in any gear and the engine would roar into action, the G forces melting me into the seatback and sending a healthy surge of adrenalin through my system. Behind the wheel of this car, I was king of the world.

A few hundred feet from the factory gate on my maiden voyage and Boing—Skrape! I'd relaxed, allowing my instincts to take over, and the car had drifted to the left and kissed the curb. Dann! I pulled into the lot, wondering how much damage I'd caused, but fortunately it was just a touch of wheel grind. Embarrassing, but not fatal.



Aston Martin's analog corner.

arrangements. As we got ready to bid adieu to our Aston Martin hosts, I hit Play and out of the speakers poured the familiar "dum da da dum dum, dum dum..." theme. It embarrassed the hell out of Morris, which made it twice as mirthful for me.

sound. I wasn't prepared to hear the subtleties of high-end sound in a moving car. Once I'd grown accustomed to it, I realized how accomplished and transparent the system was, despite its complexity. Twelve trunk-mounted 75W amplifiers in a single, sleek, vertically mounted chassis drive 12 loudspeakers (four three-way modules that look like Linn Komris) with modular three-way active crossovers. Each module includes 130mm (mid)

24mm (HF), and 13mm (super HF) drivers crossed over at 100Hz (from the subwoofer), 2.4kHz, and 12kHz, respectively. The servo-controlled subwoofer is powered by its own 200W RMS amplifier.

Integration with the Global Positioning System navigation and phone system resulted in a seamless electronic package. The kind of person buying this

Door module

Before letting Brian "where the hell are my keys?" Morris drive the car from the lot and onto the motorway so I didn't have to deal with clockwise roundabouts and confusing right turns, I loaded Linn's six-disc, trunk-mounted CD changer. Linn had gotten involved in the sound-system project after the initial body shell design had been completed. It uses a control unit and preamp borrowed from Jaguar, which, like Aston Martin, is

owned by Ford. Spend \$240k and you still have to stop, get out, and load the trunk changer when you want to switch discs. Hardly Bond-like. Next time, maybe there'll be an in-dash CD slot. Hyundais probably have 'em...

I brought CD-Rs made from the Rockport turntable and the Boulder phono section (but none using both), as well as a few commercial discs—gold Mobile Fidelitys and DCCs as well as JVC XRCDs. I also snuck in a compilation containing all of the theme songs from the James Bond flicks' original soundtracks, as well as an Italian instrumental album of big-band Bond



"Package shelf" speaker array.

Listening on the Road

Once we were on the motorway, I counted the miles until the first rest stop, where we'd switch and I'd finally have a chance to really take the Vanquish for a spin. The car is gorgeous and dramatic-looking, but, unlike some of the Italian competition, its appearance is neither gaudy nor exaggerated. It didn't turn heads on the crowded highway, and that's good—you don't want to feel as if you're in a fishbowl. But the drivers who knew what it was nodded approvingly.

At first, the Linn sound system sounded underwhelming, but that's because I was so used to "car stereo"

car will not want to fiddle with tweaky audiophile stuff.

While Morris got his rocks off behind the wheel, I auditioned the sound system. Davey Spillane's "Atlantic Bridge" offers a true test of deep, powerful bass—if anything in my arsenal would rattle the Vanquish's system, it would be that track. It didn't. Instead, there was deep, tight, powerful, pitchperfect bass that didn't reverberate around the car's interior and didn't excite loose-fitting panels, windows, or other interior trim. The car was as tightly put together as it handled. Beyond the surprisingly smooth and seemingly flat fre-

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quency balance—110 carstereo "boom-tizz"—the system produced a remarkably stable, forwardsounding soundstage. There are two speaker modules mounted in the doors, fairly low down, and another pair on the "package shelf" under the rear window (the subwoofer's there too), and our knees blocked the sound, which should have limited HF dispersion yet the soundstage appeared in front of me with outstanding lateral balance.

When I later spoke with Linn designer Bill Miller, he told me that the sound system fudges the midrange separation somewhat to achieve that result. Whatever they did, Morris's knees didn't pull the balance my way, and my knees didn't pull it his way. I could adjust the subwoofer level electronically from one of the system menus, but I found that Flat was the preferred setting almost all of the time. The CD-R of Basie Jam that I'd brought, recorded off Analogue Productions' 180gm vinyl reissue, sounded very similar to what I hear at home, timbrally, spatially, and dynamically.

Overall, the system was easily the most accomplished car stereo I've heard: so well-balanced, transparent, and free of distortion that I could easily understand how the dumb twit at Newsweek could report that he didn't think much of the sound when he got a chance to drive the car. It's a sweet-sounding system that any audiophile would be happy to own. Now let me drive, okay?

Finally, a rest area. Morris decided

to park as far away from the crowds as possible, so we pulled in to a parking space. When we got out, we saw that the front airdam was clearing the curb by about a millimeter. Yikes. Had the curb been an inch higher, we'd have done some serious scraping. Heads turned as we walked away from Vanquish — two graying geezers in black jackets leather shades. We could almost hear the pair watching us: "What a lovely looking couple! I wonder which is the rich one?"



My Turn

Finally, I took the monster out onto the motorway, accelerating through the gears. Oh, what a feeling—and that's not spelled T-O-Y-O-T-A. I was up to 90mph before I could say "I think I've soiled myself."

Overall, the system was easily the most accomplished car stereo I've heard: well-balanced, transparent, and free of distortion...

Now let me drive, okay?

But all was not well. I was doing 90mph in the rightmost lane of the *left* side of a crowded six-lane highway. In my peripheral vision I saw three lanes of speeding, oncoming traffic on the

right — precisely the opposite of what, for decades, my brain has been wired to see. I was flipped, and there I was driving a \$240,000 car with a particularly thick "A" pillar.

Fortunately, the Vanquish's rear-corner "blind spots" are well covered by the mirrors; still, changing lanes was kind of weird. The experience was a combination of exhilaration, power, and serious discomfort. But when the darkness and rain hit, and the headlights speeding by

on the right side of the rain-slicked highway began blinding me, it wasn't long before I was worn out. At the next rest area, I let Brian drive the rest of the way to Glasgow, knowing I'd have a day's drive around the lochs on Saturday.

The Linn Factory

Friday's schedule featured a tour of the Linn factory, just outside Glasgow. Linn began as a turntable company almost 30 years ago, with the Sondek designed by founder and president Ivor Tiefenbrun, who now has "MBE" tacked onto his name. Analog been berry berry good to Ivor! (See the November 2002 issue and John Atkinson's roundup of the most important products of the last 40 years for the story of how the Sondek changed audio.)

Linn's factory vibe was similar to Aston Martin's: small by big-company standards, large by small-company standards. Work is done in sections; people have to sign off on what they do as products are constructed, and almost nothing is outsourced. It was easy to see why the

AM folks saw Linn as a particularly good fit for the Vanquish's sound system.

Linn's growth over the past three decades has been remarkable. During my visit, I saw a new wing of the Richard Rogers-designed factory being built. As Linn has moved into higher-tech products and production techniques such as surface-mount technology, some have felt the company has lost touch with its audiophile They've seen Linn go from point-to-point wiring to circuit boards with big



Aston Martin speaker array in less sexy surroundings.



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Analog Corner

resistors to circuit boards with small resistors to surface-mounting and switch-mode power supplies — by which point, for them, somehow the soul of hi-fi had been forced out.

Yet during my visit to Linn, a few things were apparent that disproved the allegations that the company has moved away from the High End-particularly their heavy commitment to R&D. Linn has a full-time engineering staff of more than two dozen people, of a total workforce of 300 - an impressively high percentage. During my visit, I saw a new surround-sound processor being designed from scratch, as well as a universal SACD/DVD-Audio/ DVD-Video player from which Linn will offer an OEM universal chipset.

What I didn't know about Linn until my visit was how vertically integrated and self-sufficient its manufacturing is. Linn stuffs its own surfacemount boards, and even makes and powder-coats its own component chassis. All parts machining for Sondek turntables is done in-house, including the tonearms, and while the production area devoted to turntables has shrunk considerably as the company has grown, Linn is still devoted to their manufacture. Speaker cabinets and drivers are outsourced, but all design and testing are done from within. Linn's CD12 CD player (\$20,000) is built from the ground up by Linn, including the transport and chassis, the latter milled from a solid block of aluminum. It might be

more economical to outsource some of these parts, but Linn feels customers who buy its premium products demand a certain high level of quality that the company can provide only from within. Linn does use outsourced parts in its less expensive lines; the combination lets the company compete at a wide variety of



The "boardroom" at Linn.



Larger components are added manually.



Board stuffer-reels contain component "tapes."

price points, sonically and aesthetically. My tour of the Linn factory left me impressed by the company's engineering prowess and its manufacturing capabilities. But more than that, there was a well-oiled vibe there that I could see and feel.

Late in the afternoon, after losing and finding his cell phone for the umpteenth time, Brian Morris ushered me into the listening room to hear the unorthodox Komri loudspeakers (\$40,000/pair) driven by a wall's worth of Linn Klimax power amplifiers as well as their own builtin powered subwoofers. I played the same stack of CDs I'd auditioned in the Vanquish and was not surprised by the similarity of the two systems' basic tonal balances. However the Komris may have measured in Stereophile's review last April, their sound was well-controlled, smooth, and revealing. It was a system that took well to being cranked; I turned it way up and had a blast. Only the bass told me the wrong things-too much of it, and kind of lumpy — but it sounded as if more careful setup of the subs might have solved the problem. All in all, I was impressed by the system's sound.

I'll Always Have Loch Lomond...

Saturday dawned at last. Once safely outside teeming Glasgow, Brian Morris pulled the Vanquish over and I took the wheel. We spent the better part of the day tearing up the winding two-lane roads along dramatic Loch Lomond, the mountains descending from the sky and reaching down into the water. A more dramatic setting in which to enjoy driving that car I couldn't have imagined. The low-to-theground Vanquish hugged the twisting asphalt as I'd hope it would, responding happily to my subtlest whim and my most brazen demand. Passing slower cars on the winding

roads was a lark. On the rare long straightaways, a tap of the Down paddle and a twitch of the accelerator sent the car hurtling down the road at ridiculous speeds. But then it got dark and began to rain. I knew my dream drive was over. Morris took over and we reluctantly drove back to Glasgow.

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That final evening in Scotland, we joined Ivor Tiefenbrun and a friend for an evening of modern dance. Watching guys in bulging tights (bigger bulges than I could fill them with) and anorexic women cavorting around a stage is not usually my idea of a good time, but the George Piper Dancers won me over with their athleticism, ingenuity, and

But then it got dark and began to rain. I knew my dream drive was over.

good humor. At the conclusion of the last piece—a representation of a boxing match in which two dancers perfectly expressed the emotions of a fight without ever pantomining any actual boxing movements—I erupted in applause and cheers as if I was at a rock concert.

Then it was dinner, wine, and lots of laughs at a great restaurant in the heart of a town in which every Saturday night is a lot more raucous than New Year's Eve in New York City. And finally to bed, visions of the Vanquish still shifting gears through the asphalt of my mind.

In Heavy Rotation

- 1) Low, Trust, Kranky LPs (2)
- Beth Gibbons & Rustin Man, Out of Season, Go Beat import LP
- The Soft Boys, nextdoorland, Matador LP & bonus 7" single
- The Who, My Generation: Deluxe Edition, Polydor import LPs (2)
- Count Basie, Basie Jam, Analogue Productions 45rpm 180gm LPs (2)
- Dolly Varden, Forgiven Now, Diverse 180gm import LP
- 7) The Streets, Original Pirate Material, Atlantic LPs (2)
- 8) Grey De Lisle, Home Wrecker, Hummin'bird 180gm LP
- Pete Townshend, Swop, Eel Pie/Classic 200gm Quiex SV-P LPs (2)
- Otis Rush, Mourning in the Morning, Sundazed 180gm LP

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Stereophile, March 2003 35



Reduction to the essentials: The Karat series from Canton combines pure design with pure listening pleasure. State-of-the-art technology in simple yet elegant furniture quality cabinets represents the Canton ideal of loudspeakers. Information about the Karat series as well as the complete line of Canton loudspeakers is available in our new "Living HiFi" Magazine. To receive a free copy, please contact Canton, 1723 Adams Street NE, Minneapolis, MN 55413, call 612-706-9250, or visit www.cantonusa.com.



Listening

Art Dudley

f I wrote a column for a car magazine and I learned that the magazine's readers were using their cars to run over kittens, I would be deeply troubled. I would beg them to stop. Failing that, I would find another line of work.

I'm faced with a similar dilemma: Some audio enthusiasts are listening to the worst junk imaginable on their expensive hi-fis—listening to it and apparently liking it, or at least not finding it sufficiently objectionable to stop.

Is an audiophile's choice of listening material really just a matter of taste? Up to a point, yes. I don't share some listeners' love for Frank Zappa, Bruce Springsteen, or Gilbert & Sullivan, yet I can understand their appeal to others: The aforementioned are, or were, artists of talent and vision, whether or not I enjoy their music.

But certain absolutes govern the universe: There's no reason to listen more than once to a recording of New Orleans jazz played by Scandinavian men in cardigans, howsoever skillful or sincere. With so many superb symphonic performances in the catalog, paying to own a record of a third- or fourth-rate orchestra stumbling through the standard repertoire is at least mildly perverse. And while I can comfort myself with the assumption that singer Carole Pope now limits her microphone time to such free verse as "price check at register two," the notion that anyone on God's great earth would want to waste a minute of their lives listening to the recordings of her hilariously awful band, Rough Trade, remains, for me, one of life's minor mysteries.

Welcome to the world of audiophile recordings, where disc-buying decisions are motivated not by a love of music but by a love of sound. What's worse is that the people who drive this market don't even use their own ears to select software: They buy what the audio critics and salon owners and other gurus tell them to buy. Then, after pretending to enjoy this vomitus for as long as they can, they either abandon consumer electronics altogether or shuffle over to the home-theater market, where the demonstration software at least stands a chance of being entertaining. Say what

you will, but *The Fifth Element* and *Mission: Impossible* are well-crafted films that can succeed in holding the average viewer's attention for reasons beyond the mere quality of their camera work; on the other hand, bad travelogue music and arrangements of Wagner overtures for wind ensemble don't succeed on any artistic level, and undiscovered lounge singers tend to stay undiscovered for a very good reason.

There's no reason to listen more than once to a recording of New Orleans jazz played by Scandinavian men in cardigans, howsoever skillful or sincere.

In fact, audiophiles could be forgiven for wondering if some reviewers are pulling their legs, so perversely awful are their choices in software. My friend and former Listener colleague Rob Doorack and I once considered exploiting that axiom for the sheer nasty fun of it: While shopping for used LPs in Greenwich Village one Saturday afternoon, we stumbled on a copy of a (mostly) spoken-word record by the late US Senator Sam J. Ervin, Jr., a folksy raconteur who gained fame as the chair of the Senate Watergate hearings. The record, Senator Sam at Home (Columbia KC 32756), was meant to paint an aural picture of Ervin speaking from the rocking chair on his front porch. Rob and I had the idea to do a bit of embroidery, in an effort to wind up our audiophile friends—to suggest, for instance, that when played on systems of the highest resolution, it would be possible to detect the hinges on Sam's screen door quietly squeaking, or to hear all the way back into the kitchen...

That brings to mind another unfortunate characteristic of the relationship between audio gurus and their followers: the sickeningly devotional urge of the latter to offer up records to the former, in hopes that those records will gain recognition as being of Reference Quality, perhaps even offering something that's never before been described in print: subway trains, crickets, cufflinks, digestive noises, whatever. I admit, I did the same thing myself when I worked for *The Absolute Sound*, leaving records in the former editor's mailbox the way Renfield offered up flies to *his* master.

But in time, I remembered what it was that drew me to the hobby in the first place, and I redirected my attention toward the music itself. It wasn't too late to save myself, but it was too late to save the hundreds of dollars I'd wasted in an effort to punctuate my collection with records that I mistakenly thought would guarantee my permanent membership in The Club. In a selfless effort to keep you from wasting your time and money, I offer the following list of the Five Warning Signs of Musical Bankruptcy, which you may also think of as ...

Records To Die From

Burt Bacharach: Casino Royale (soundtrack), with Herb Alpert & his Tijuana Brass, Colgens COSO 5005

There are many sad things in audio, but the saddest of all is the image of grown men paying hundreds of dollars for an out-of-print album of bad gameshow music: Can't you just imagine almost any of these tracks behind a television announcer as he oils his way through a list of consolation prizes? ("Well, Chuck, from Samsonite we have a beautiful five-piece set...")

The album's single exception, the late Dusty Springfield singing Bacharach and David's "The Look of Love," is nice but hardly worth the price of an average CD, let alone the crazy prices this overhyped cow flop has been known to command.

Leroy Anderson: The Music of Leroy Anderson, vol. 2, Frederick Fennell, Eastman-Rochester Pops Orchestra, Mercury 289 432 013 2

In the 1950s and '60s, evil movie-theater owners tortured children by attract-

Stereophile, March 2003



WHERE'S NAGRA?

You know Nagra for their award-winning audio components. But, did you know that Nagra is a five billion dollar Swiss high-tech pro-audio and satellite communications company? Nagra's won three Oscars and an Emmy. They supply both the CIA and FBI with miniature recording devices. And they sponsor the Montreux Jazz Festival. They're everywhere!

Play the Where's Nagra? game. Be the first to spot a Nagra and report it to us, you'll win a Nagra Montreux Jazz Festival T-Shirt. Email sightings to wheresnagra@aslgroup.com (see www.audiophilesystems.com/nagra for complete game rules).

Here are last month's Nagra Spotters:

CO (mowe) - C. Burke Baxter, III
JAG Irinity Senes (TV) - Philip Baugh
Jazz At The Pawnshop (CD) - John J. Van Shura, Jr
Sopranos - third season (TV) - Armin Paya
Stereophile (April 1999) - Douglas Erickson
The Equalizer (TV) - Roger A. Miller
Law & Order - Ote 24th (TV) - Jeffrey Catalano
Deep Throat (movie) - Dan Barnhardt
The Manhattan Project (movie) - Robert B. McKeever
Con-Air (movie) - Marc Drevich
Stereophile (November 2002) - David MicLeod

For David McLeod it was almost too easy. He spotted the Nagra PL-L Preamp on the cover of the November Stereophile. Of course, so did hundreds of others. So, our congratulations to David for his quick response. For the rest of you, keep in mind that the more obscure the sighting, the better your chance of being first. Think you've spotted a Nagra that everyone else has missed? For a complete list of past sighting, visit our web site at www.audiophilesystems.com/nagra.



U.S. Importers & Distributors 1-888-272-2658 www.audiophilesystems.com ing them to Saturday matinees, then delaying the show while they played light classical music over the sound system: the kind of fey crap that would make the devil himself beg for a bottle of sleeping pills. Leroy Anderson's "The Syncopated Clock" and "Fiddle Faddle" are a little worse than that.

As if that weren't enough, *The Music of Leroy Anderson, vol.* 2, like so many other Mercury classical albums, sports a cover that makes the compact disc and its miniature sleeve seem like a good idea: The centerpiece is a hideous stuffed cat with a human face, juxtaposed against a pale mint background that screams "1960s" more loudly than sack suits and hairspray. Holy cripes.

Various Artists: The Sheffield Track Record, Sheffield Labs LAB-20

The Sheffield Track Record is to rock music as "Fiddle Faddle" is to classical: It uses some of the same instruments, but that's about all. The playing is soullessly slick in a way that suggests the musicians spent most of the rest of their time playing jingles and giving lessons at the local music store, and the compositions themselves are so witless and uninspired they don't even deserve to be called "product."

As a surprise bonus, the recording isn't even that good: I could name literally hundreds of rock records, from indies to the major labels and everything in between, that sound better—and so, I'll bet, could you.

Dick Schory: Music for Bang, Baa-ROOM, and Harp, RCA Living Stereo LSP-1866

I feel guilty in a way for slagging this admittedly superb recording of undiluted nerd music, if only out of sadness for the fact that an album like this could never get made today—at least not by a major company like RCA. As it was, the musicians and producers behind MFBBEH returned a number of times to the scene of this crime.

Still, Schory's recordings should and would have faded away for good if not for the "discovery," decades later, that they contained "greater stage depth at the extreme left and right than we heretofore dreamed possible." Or something.

Mark P. Wetch: Ragtime Razzmatazz, Wilson Audio (no catalog number)

Come back, Dick Schory. All is for-

Did I call Music for Bang, Baa-ROOM, and Harp "nerd music"? Sorry. That was before I remembered this stinker—a

razor-sharp, kissing-close recording of that most cloying of instruments, the tack piano. In light of an album like *Ragtime Razzmatazz*, Dick Schory sounds moody and cerebral.

Don't feel had if your stereo doesn't transport you to a different place: If it did, the people who live there would beat you up for listening to this.

Dishonorable Mentions: Few things smell up a room as effectively as the tone-challenged saxophone solo in Donald Johanos and the Dallas Symphony Orchestra's recording of Rachmaninoff's Symphonic Dances (Vox Turnabout TV 34145S). Although the performance as a whole isn't out-and-out dreadful, much better ones are easy to find (try Ashkenazy—as conductor—on London), some sounding just as good in their own way (try Goossens on Everest). And Jazz at the Pawnshop (Proprius PRCD 7779) deserves every rotten thing that has been, or ever will be, said about it: If you're out shopping for hi-fi gear and a salesman suggests giving it a spin, go someplace else.

I'm a big Phil Ochs fan, although I think that his mid-period records fall short of the brilliance of his early ones but only because so many of the otherwise effective songs on those later albums are hobbled by wretchedly inappropriate arrangements, many featuring what can only be described as Carpenteresque (as in Richard, not John) piano. But don't take my word: Listen for yourself to 1967's Pleasures of the Harbor (A&M SP 4133) and 1969's Rehearsals for Retirement (A&M SP 4181) and see what you think. If you agree that the arrangements are overwrought, overplayed, and just plain stinky...well, there you go: Not much we can do about it, Phil being dead and all.

But if you listen to those records and find yourself wishing for less Phil and more filler, then you might actually enjoy the recordings that the pianist assigned to Ochs, one Lincoln Mayorga, went on to make for the record label he co-founded, Sheffield Labs. Your choices would include Lincoln Mayorga and Distinguished Colleagues, Vol.III, The Missing Linc, and Growing Up in Hollywood Town. Please, help yourself.

NB: Not all audiophile labels really are audiophile labels. Just because a record company is small and pays attention to sound quality, that doesn't mean they can't sell good music. Chesky Records has a roster that includes the great David Johansen, a man incapable of making a boring record; and on the clas-

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Arcam's awesome amps

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Seven digital (two opti-

Component video

Composite/S-Video

cal), eight analogue

(including phono)

Matrix 6.1. DTS-FS

Discrete 6.1

WHEN YOU WIN the lottery and begin to plan your ultimate home cinema system, there are two brands you'll probably be steered towards: Lexicon, from the US, and Meridian, from dear old Blighty. And there's a good reason why: these two brands have consistently pushed the home cinema boundaries further, and for longer, than any rival, and at the high-end of AV, it's track record, not brand name, that counts. Without a home cinema pedigree, trying to gain membership to this particularly prestigious private club is hard with a huge H.

But that doesn't stop the occasional brave soul from trying, and this month it's Arcam's turn, with the launch of the AV8 surround processor and its matching multichannel power amplifier, the P7. There's no point beating about the bush: we reckon that they've cracked it. The AV8/P7 pairing is very, very special indeed

There's so much technology on show, it's hard to know where to start, so forgive us if we head to the highlights. The AV8/P7 is a THX Ultra2 certified surround-sound pairing (see panel) designed to provide the very best in home cinema performance, as well as excellent hi-fi quality. The £3000

AV8 supports pretty much every surround processing mode around: THX Surround EX, Dolby Digital, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1, DTS Neo:6, Dolby Pro-Logic II,

the lot. It also allows you to run in THX Ultra2 mode, with seven speakers (two as 'centre-rear' units) and, as you'd expect, has a vast array of audio inputs and outputs. The £2500 P7, meanwhile, delivers a spectacular 150w into seven loudspeaker channels (rated at 8 ohms), rising to 230w x 7 into 4-ohm speakers. Put another way: the P7 can provide 1610w. Blimey.

Set-up is made as easy as it could be by virtue of top-quality onscreen graphics and a fine learning remote handset. And once you've configured



your speaker system, assigned all your digital inputs and done all the other tweaks that a top-end AV set upentails, there's only one word to describe the resulting sound: sensational. During a particularly powerful passage from Sur Wars: Atuack of the Clones, one reviewer commented that the hairs on his head were standing up, but it wasn't just excitement that was disturbing the coiffure: it was sheer sonic force, out-

right air-shifting, sofa-shaking muscle. And that's quite something, especially because the Arcam manages to generate such amazing levels of force and drive while remaining utterly

smooth, composed and refined. In short, it makes everything you play sound good, and with the best-quality soundtracks, it elevates the home cinema experience on to a truly cinematic plane.

We'll leave you with this: this Arcam is one of the most impressive products we've heard this year. Had it got to us in time for our Awards, we would have given it a gong. And that exclusive Lexicon-Meridian private club we mentioned? It might well have just acquired a new member...

Lexicon MC-12 £8100 ★★★★★ April 2002 Team with the LX-7 power amp (£5750)

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HOW IT WORKS

What is THX Ultra 2?

THE LATEST EVOLUTION of THX's ever-changing home cinema performance standard, THX Ultra2 is designed to provide optimum performance for both music and movies using seven loud-speakers and a subwoofer (or multiple subwoofers). The arrangement of loudspeakers uses two 'centre-rear' designs, two conventional rears, and the standard three front speakers; and Ultra2-certified processors are capable of source signal, whether conventional 5.1 or true 'extended-surround', through all seven speakers.

As yet, only two manufacturers have produced THX Ultra2 speaker systems — comparatively reasonably priced kit from Jamo and one super-high-end offering from Snell — although you can use existing THX Ultra speaker systems with good results if you prefer (assuming, of course, you purchase an additional pair of centre-rear loudspeakers).

The £3000 coiffure: it was s

The Arcam generates
amazing levels of
force and drive while
remaining utterly

smooth and refined"

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U.S. Importers & Distributors for Arcam, Acoustic Energy, dCS, Nagra, Verity Audio, Nottingham Analogue & eXpress



sical side, Chesky also happens to have the best Schmidt Symphony 4 in the catalog (Chesky CD143, with Martin Sieghart and the Bruckner Orchester Linz). And my colleague John Marks has produced a number of irreplaceable albums on his own, eponymous record label, many featuring violinist Arturo Delmoni, whose skill and exquisite tone place him in the first rank of contemporary players (which for me also includes England's brilliant Tasmin Little, who has the added advantage of being beautiful).

Real Music

Now, since I'm writing this at Christmastime, and because, deep down, I really am the kind of guy who sees a half-full glass wherever he goes (and then, of course, empties it), let me bring to your attention five albums of real, bona fide, artistically legitimate, fun-to-listen-to, honestto-God great music that also happen to sound at least as good as any of the above. Please note that these records contain normal, accessible music-I'm not here to convince you that I'm too cool to listen to anything other than snuff rock, Peruvian mummy chants, or John Cage - as written and performed by people of whom the average record buyer has indeed heard, and all are on major record labels. Most of this stuff is also fairly easy to find at reasonable prices.

Mendelssohn: String Quartets, The Eroica Quartet, Harmonia Mundi USA 907245

As someone whose hobby seems stuck at the altar of the great recordings of the late 1950s and early 1960s—not without reason, of course—I'm happy to say that the finest chamber-music recording I've ever heard was made in 1998, by a group of musicians who are apparently at the peak of their form. (Their Schumann disc of last year was equally

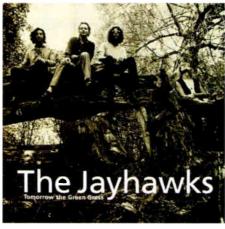
schiy at the peak of their form. (Their Schumann disc of last year was equally thrilling, musically, if not *quite* as good a recording as this one.) The Eroica Quartet pays homage to a golden age of a different sort, given their self-directed roles as period (*ie*, gut string) players, and this recording does justice to their gorgeous tone, not to mention their vigorous and fresh-sounding performances.

The Beatles: Anthology 3, Capitol CDP 8 34451 2

I'm reluctant to recommend antholo-







gies over original albums, but Anthology 3 is a different case: alternate performances of well-known songs, mixed in a modern setting from the original—and mostly quite good—studio tapes. Though the quality varies somewhat, and even the best of the original tracks are a bit over-compressed, some of these songs sound startlingly present and real, especially "Good Night," "I'm So Tired," and a lovely version of "The Long and Winding Road," ninus Phil Spector's awful string and choir arrangements. Engineer Geoff Emerick deserves a knighthood for this.

Frank Sinatra: Moonlight Sinatra, Reprise 1018

The concept, if you want to call it that, is hokey: a bunch of songs that all have "moon" in their titles. But the execution is superb, thanks in part to Nelson Riddle's fine arrangements. Best of all, Sinatra's voice sounds less baggy here than on many other of his Reprise-era albums. "Oh, You Crazy Moon" is especially great: more swing than swagger, for once.

And the sound? Unbelievably good. In fact, this album brings me as close to the "demo disc" experience as I ever come. Thankfully, the music on it is worth the ride.

Mendelssohn: A Midsummer Night's Dream, Peter Maag, London Symphony Orchestra, Decca SXL 2060 (also available on a reissue LP from Speakers Corner)

There are lots of capable performances of this music in the catalog, many of which offer good sound as well — but this one rings both bells in a way that few others do. Despite a few tentative bars, the playing is precise and assured, and the orchestra bends easily to conductor Maag's vigorous and witty point of view. The instrumental sound is of the highest caliber in every way, the singing only slightly less so.

This recording is also available on an easy-to-find London Stereo Treasury Series LP (STS 15084), and apart from a curious bit of center-fill vagueness (oh, hell, now they've got me doing it), it sounds every bit as good as the original. Yes (he said wearily), the trains running underneath the hall are clearly audible on both versions.

The Jayhawks: Tomorrow the Green Grass, American Recordings 43006-1

This 1994 release was the last Jayhawks album featuring Mark Olson as co-singer and -writer alongside present frontman Gary Louris, and while the group remains vital, Tomorrow the Green Grass was the last time their vocal harmonies had this kind of magic: Every line is so fresh and interesting that no one emerges as the "main" melody (think: American Beauty-era Grateful Dead). The 13 songs on the easy-to-find LP wed impressionistic lyrics with country, folk, and middle-American rock touches, but unlike many of the Jayhawks' rootsy contemporaries, the playing is competent, and the recording

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is free of posing and pretension: If anything, this album feels friendly.

The recording itself is superb, thanks no doubt to the fine ears of producer George Drakoulias (Tom Petty's recent output has gained from his touch, too): Every instrument sounds like itself, and the voices are so there it's almost scary. Why can't everyone make records this good?

Honorable Mentions: A few spots of tape overload prevent me from adding to this list the great Du Pré/Barbirolli recording of Elgar's Cello Concerto (EMI ASD 655), but even if it sounded like mud, that record would still belong in everyone's collection. The John Culshaw production of Georg Solti's recording of Wagner's Ring cycle (London OSA 1309, et al) deserves every accolade heaped upon it, as does that other Wagnerian effort, The Very Best of Roy Orbison (Monument SLP 18045).

And believe it or not, the very best recording ever made of a rock band with a symphony orchestra—for those whose lives seem incomplete without knowing this — is in fact a bootleg, albeit an easy one to get hold of: Delicado (Lobster CD012), an unofficial document of a one-off Procol Harum concert at the Hollywood Bowl with a pre-Salonen L.A. Philharmonic and the Roger Wagner Chorale, recorded in September 1973. Apparently taped straight off the mixing board (people who were there say the live sound was in fact horrid), the only sonic flaw is that a microphone was apparently too close to the orchestral percussion players, and so one cymbal in particular makes its existence known a little too often. Otherwise, this is another startlingly real-sounding disc. The performances are superb all around, and the arrangements are incandescent: "A Christmas Camel," uninspired in its original incarnation of self-conscious Dylanizing, here becomes part oratorio, part sea-chantey, and their last big hit, "Conquistador" dedicated to "any American-Mexicans in the audience"—sounds more vigorous than usual. This one pops up on eBay now and then, and it's worth the effort if you enjoy 1970s art rock in general or Procol in particular.

The Moral of the Non-Story

Most people prefer good sound over bad, and I'd be lying if I said I don't go out of my way now and then to play things that make my system sound impressive and real. If I had a good car and the opportunity arose to take it to the track or try it on a skidpad, I'd do it—every now and then. But most of the time I drive on real roads, and I have a destination in mind.

I got into this hobby a long time ago, solely because I spent almost all my free time listening to records. Along the way I started hanging out with audio enthusiasts who punctuated every get-together with flowery, ostentatious toasts "To Music!"—and then refused to listen to anything on their systems that wasn't either one of the above-mentioned stinkers or something that they considered to be of Reference Quality. Those people wouldn't waste their time with

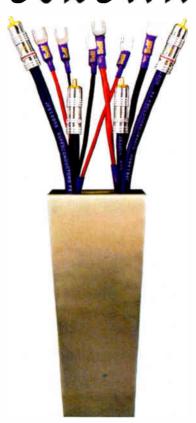
The better component or system will always be the one that delivers the deepest emotional or intellectual response to the music.

classical recordings on Columbia (too bright), Deutsche Grammophon (too multimiked and bright), or anything at all from the mono era, which means they cut themselves off from a huge chunk of their recorded heritage.

I'm sorry, but listeners who would turn up their noses at Leonard Bernstein, Carlos Kleiber, and Wilhelm Furtwängler in favor of a more or less steady diet of Frederick Fennell and Eiji Oue are not music lovers but ignoramuses — and in saying so I mean no disrespect for Fennell or Oue. (In case you think I'm letting the Flat-Earthers off the hook, make no mistake: They were as bad in their own way. For a while, it seemed as though all they were allowed to listen to was Ben Sidran — whose music is just this side of *The Sheffield Track Record*, if you ask me.)

As I said, it took a while, but I found my way again. I'll probably always appreciate good sound, but good music remains more important, and good music must and will always determine my listening habits. That's important when it comes to evaluating audio equipment, too: The better component or system will always be the one that delivers the deepest emotional or intellectual response to the music — but if the music is junk, or if it's some tired old demo disc that's been trotted out over and over and over again, there can be no response but boredom or disgust. Life is too short.

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The Fifth Element

John Marks

The lease said about my and my fathers trip from the Bureau of Manhattan to our new home the soonest mended. In some way ether I or he got balled up on the grand concorpse and next thing you know we was thretning to swoop down on Pittsfield.

Are you lost daddy I arsked tenderly. Shut up he explained.

—Ring Lardner, "The Young Immigrunts" (1920)

nd you are shocked—shocked—to learn that "Shut up he explained" is something of a catchphrase in our household.¹ Hold that thought.

My wife has wonderfully sensitive hearing, and she calls them as she hears them. We once attended a stereo-shop open house, and were asked, "What do you think?" I thought the sound

was uninspired and uninspiring, but I nonetheless uttered a benign platitude. She grimaced, shook her head, and said, "Sorry, something is wrong." The owner looked pained, but went away to check the setup. Within moments he had powered the system down, and was correct-

ing a relative phase inversion (one speaker hooked up in opposite electrical phase from the other). He did come back to thank her, which was nice.

Anyway, a few weeks ago my wife came home after working late, and while she and I were eating dinner, two rooms away our daughter was listening—not at all loudly—to Jennifer Warnes' Famous Blue Raincoat. My wife cocked her head and observed, "I've never heard that particular [vocal] swoop quite so clearly."

I chortled triumphantly. "While you were at work, a new isolation platform

arrived for the [Marantz SA-14] SACI) player, and I set it up."

"Oh just shut up," she explained.

My wife loves music but has a low tolerance level for audio tweakery and very expensive gear. The \$21,000 price tag for the Wilson Benesch Chimera speakers was merely "appalling." The Halcro dm58 amplifiers' \$25,000 was "obscene." On the other hand, the first time she heard a Custom Power Cord Company power cord (the A/B test track was from Encarnación Vázquez's Cuando Dos, Urtext JBCC 013, one of my 2003 R2D4s), her response was, "I wish I could say that you guys were all full of poop, but that really sounds much better."

I value her reactions in large part because she has absolutely no emotional investment in a tweak's working or not. As important, just because something

not. science is indisp ning Disc is an analog by analog means ed as though data. Just turntal tion divie

JM says it is effective and future-proof: Symposium Ultra isolation platform.

SYMPOSIUM Pettra

sounds different, she's not willing to give it the benefit of the doubt and assume that it sounds "better." Cases in point I can recall include the SACD of Glenn Gould's *Goldberg Variations* ("Is there something wrong with the system?") and a cryogenic-process experiment on an Arturo Delmoni CD ("It sounds like he's playing a viola in the fifth position").

Please note that, except for the CPCC power cord, which she was aware of and initially scoffed at, the cited instances were all blind listening. So her hearing from two rooms away the enhancement in resolving power and lowering of noise floor that I believed I heard after setting up Symposium Acoustics' Ultra isolation platform was quite gratifying (www. symposiumusa.com).

The Ultra platform is a variable-com-

ponent-sized shelf (review size: 19" wide, 14" deep, and 3.5" thick). The top and bottom are aluminum, while the middle is made up of several unequal-thickness layers of vibration-damping material. It comes with a set of three air-craft-aluminum blocks, each about the size of two stacked dominos, to couple your component to the platform by bypassing its (presumably) compliant feet. The Ultra platform was designed primarily to drain vibrational energy away from your component, rather than to provide isolation from external vibrations or footfalls.

Despite clear evidence to the contrary, some people still maintain that factors such as vibration control cannot affect digital playback. Apart from the evidence of the ears of people who can hear, the science is indisputable: The Compact Disc is an analog medium that recovers by analog means data that are later treat-

ed as though they represent digital data. Just as the case with an LP

turntable, attention to vibration control will yield sonic dividends. Superabundant proof of that pudding can

be found in any trade journal devoted to optical-media manufacturing engineering: the ads for the ritziest glass-

mastering setups boast air bearings. And no vinyl anywhere in sight. Huedathunguet.

When I later had time to rearrange things so I could use the Ultra platform with the set of Symposium Roller-blocks I already had, the improvement was even more noticeable, and totally without any adverse side effects, as far as I could tell. However, if I had to pick only one, it seemed that the Ultra platform alone lowered noise and enhanced resolution more than did the Rollerblocks alone.

The Ultra platform with three large couplers retails for \$599. That is a fair chunk of change, but it seems worth it, given the entirely subjective sense of ease it brings to listening. And, it's future-proof. So, should everyone go out and buy one? Not necessarily. I place a higher priority on speaker location, assisted by computer software, if

¹ A little birdie informed me that there is something of a betting pool in the august precincts of Sterophild's editorial offices, with odds being laid whether any particular column I file will include the Casablanca reference "Shocked—shocked". So now we have a wonderful meta-moment: I am shocked—shocked!—to learn that there is gambling going on in Sterophild's offices!







Neither a Peugeot, nor a Porsche, nor a Bose: Grace's 901.

gear I've played with in a dog's age: Grace Design's Model 901 professional headphone amplifier (\$1495; www. gracedesign.com).²

It is often a sure indication that a product will turn out to be tremendous when its maker designs it for himself and a couple of friends, never intending to make a commercial product of it, because he doubts that the larger marketplace will "get it." Give me inner conviction over market research, any time.

Michael Grace made a headphone amp for his own use. Pretty soon, enough of his friends had asked him to make one for them that he made it a formal product with a model designation and an initial production run of 25 pieces. Those vanished in a trice, and he found himself in the headphone-amp business with a product that was selling briskly by word of mouth, and a few reviews in the professional magazines. I was knocked out by its looks, and asked for a review sample. I was predisposed to like it anyway, in view of sound engineer Jerry Bruck's having used Grace microphone preamplifiers on some of my JMR recordings.

The Grace 901 is approximately one professional rack unit high and half a rack unit wide. It is 8.5" deep and weighs about 6 lbs. The front panel is thick aluminum, polished to a high gloss. Frontpanel controls are, from left to right: stepped resistor volume control, additional gain, digital or analog source, digital sampling rate (32–96kHz), two standard phone-plug headphone jacks, and power. The additional gain, input

On the rear panel are an IEC inlet for the power cord (no plug-in transformer); optical, S/PDIF, and AES3 digital inputs; and left and right RCA and XLR analog inputs. Industrial design and fit'n'finish are surpassed only by the likes of Nagra

The 901's essential sonic character was refreshingly rich and full-bodied, without being sludgy or lacking detail.

and the Jeff Rowland Design Group, which means that just about everyone else was left in the dust miles behind. Meanwhile, the 901 just sits there, quietly screaming professional competence (in an elegantly understated way).

The only thing I can't figure out is the threaded hole in the middle of the bottom panel. For mounting on a mike stand or camera tripod, perhaps, for musician foldback at sessions?³

It is the 901's ability to take a high-resolution digital input that distinguishes it from most headphone amplifiers. The 901 accepts digital inputs from 32kHz to 96kHz, and indicates the sampling rate with front-panel LEDs. Apart from the convenience of needing only one signal cable, having one's headphone amp provide an internal DAC of known quality removes two variables from recording system monitoring: an outside DAC and its interconnects.

The Grace 901 performed flawlessly. Its only quirk was a slight *pop* on power up and down—but no headphone amp should be powered up or down while anyone is wearing the headphones anyway. The 901's essential sonic character was refreshingly rich and full-bodied, without being sludgy or lacking detail. Perhaps what I was hearing was equally attributable to its power reserves. I can't say for sure. But its circuit is based on a telecommunications—current-feedback amplifier chipset that can drive five miles of copper wire if it has to, so 10' of headphone cable was doubtless a snooze.

Perhaps it's just me, but fine as the Grace's internal DAC was, I preferred by a slight margin the sound of its analog inputs when connected to the Marantz SA-14's analog outputs by Stereovox analog interconnects. Yeah, I know—for \$2500 a meter pair, they should sound good.

A headphone amp is pointless without headphones. My rough'n'ready Audio-Technica ATH 1240s are distinguished more by their relative indestructibility than by any excess of subtlety. Sennheiser kindly lent me a pair of H12 600s, a Bob Ludwig fave. The H12 600s balance delicacy of detail with dynamic range and bass extension, which goes a long way toward justifying their \$450 price.

It appears that for every pro user who auditions the 901, two buy it, so there is that. But that doesn't answer the question whether—massive coolness factor aside—it's a good use for that spare \$1500 you just happen to have lying around. The answer, as usual, is: It depends.

The 901 is built like a brick, is quiet as a mouse, and is very relaxing to listen to. However, it's a pro unit that was designed to let you hear a mike feed or do quality control on a mix or a mastering job. (Bob Ludwig bought five 901s for Gateway Mastering and DVD, which should tell you something.) The 901 therefore lacks the frequency, temporal, or cross-feed processing functions that other headphone amps offer as means of trying to make the headphone listening experience more like listening to speakers in a room. I don't mind the "inside the head" effect of listening to non-binaural stereo recordings on regular headphones, but it's your call. Whether the 901 is for you probably comes down to how much headphone listening you do.

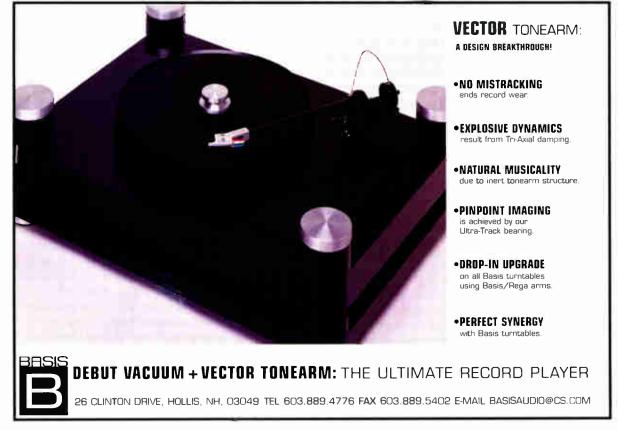
Comments, questions, "Howls of derisive laughter, Bruce"? jmrcds@jmrcds.com.

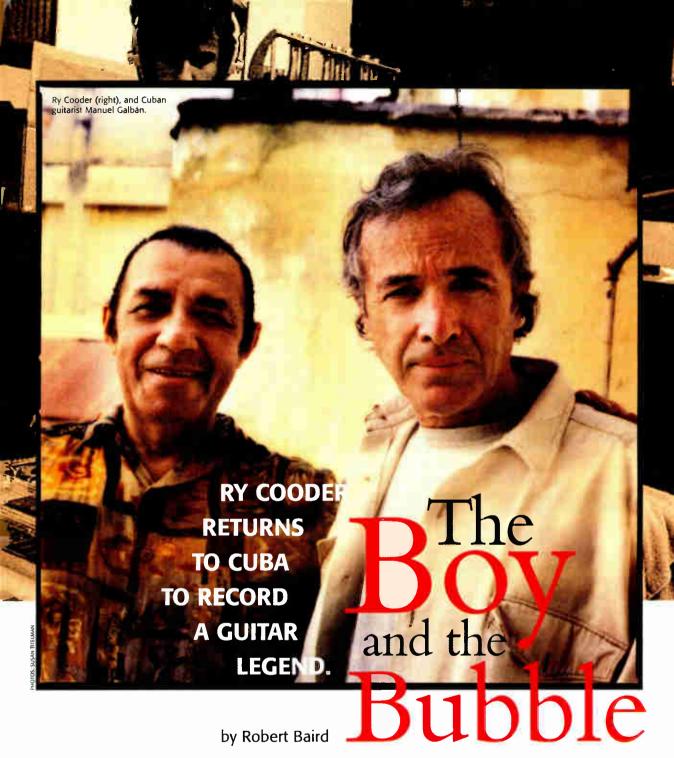
selector, and power switches are illuminated buttons of the sort I refer to as being of the "Ph.D." variety, as in: Push Here, Dummy. Gotta luvvit.

³ My two goals in writing are to amuse John Atkinson, and to convince him that I have actually removed the piece of gear in question from its box.

^{2 &}quot;901" is an interesting choice of model number. Porsche's 911 was originally intended to be called the 901, but on the eve of its auto-show debut, Peugeot asserted trademark rights in all possible numeric designations for automobiles consisting of three digits with a zero in the middle. Which always struck me as piggish. I know about WWH and all that, but everyone bates a sore winner. And let us not forget Bose's 901, Julian Hirsch's review of which fairly electrified me way back when. But 1 digress.







here can you go in the world anymore where you can be in any kind of atmosphere other than the postmedia, post-consumer world that we live in now—one that's available and that's musically rich? So it's very attractive in that way."

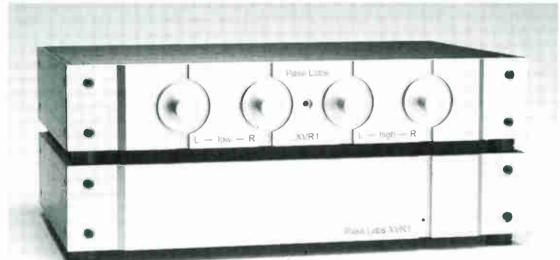
The land and culture Ry Cooder is speaking of are Cuba's. Whether it was luck (as he would have it), or his canny sense of the larger world being ready for something real, the always adventurous Cooder, who had a long and distinguished career prior to 1997, will now always be remembered as the man behind the breakout success of *Buena Vista Social Club*. His collaboration with

the fast-disappearing generation of older Cuban musicians such as Compay Segundo, Ibrahim Ferrer, and Eliades Ochoa was a bestseller—and the album and Wim Wenders' accompanying film were critical successes as well, and made Cuban music a cause célèbre for several years following their releases.

In 1998, two years after *Buena Vista*, Cooder returned to Cuba to make a solo album with Cuban septuagenarian singer Ibrahim Ferrer, a journey many thought might be the end of his romance with the island. But in 2001 Cooder returned, this time on an even more exotic musical mission: to make an instrumental album with legendary Cuban electric guitarist Manuel Galbán.

Stereophile, March 2003



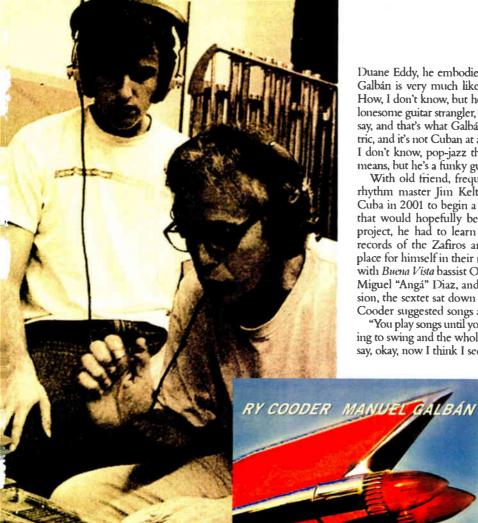


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Duane Eddy, he embodies this, and made a career out of this. Galbán is very much like that. He's also a big fan of Duane. How, I don't know, but he is. But there's something about this lonesome guitar strangler, as Mac Rebennack [Dr. John] used to say, and that's what Galbán is. That's what he did on the electric, and it's not Cuban at all, really. It's some sort of hybridized, I don't know, pop-jazz thing. He's not a blues player by any means, but he's a funky guy, he plays good funk on the guitar."

With old friend, frequent musical partner, drummer and rhythm master Jim Keltner in tow, Cooder went back to Cuba in 2001 to begin a dialogue in the studio with Galbán that would hopefully become a record. To even begin the project, he had to learn a lot. He spent hours listening to records of the Zafiros and similar groups, trying to find a place for himself in their music. Finally, with a band filled out with Buena Vista bassist Orlando "Cachaito" López, conguero Miguel "Angá" Diaz, and Cooder's son, Joachim, on percussion, the sextet sat down to work on material for the album. Cooder suggested songs and Galbán did the same.

"You play songs until you like them, until the drums are starting to swing and the whole thing is starting to move. Then you say, okay, now I think I see this. You imagine and anticipate.

"For me, it was like film scoring, where you're confronted with something that you have to experiment and find the answer to quickly. I did a lot of that in film scoring. It's scary sometimes. It has to be fast, and you can't stop and think about it, so you just act. Film is great because it tells you in a way what to do, it's speaking to you.

"We didn't have film behind us here, but what we did have is the Cuban resourcefulness, which they all have, and the ability to react to things. It's like having a hemi motor in a Volkswagen—you step on it and you are gonna move down the road. So you rely on this.

"Galbán, in his mind, already knew from long experience what would work. You take the voice away, and what's left? Cubans are very ingenious with their song constructions; masters of the three- or four-minute song. It has a form and it has a melody and there are enough surprises in it, one or two notes that make it interesting, so halfway through you're not bored. And so this is the trick."

Cooder's entire career has been something of a rarified experience. A virtuoso on any fretted string instrument, Ryland Peter Cooder, now 55, was playing onstage at L.A.'s Ash Grove folk club by age 16. He played and record-

The guitarist and arranger for Los Zafiros, one of the most famous vocal groups in Havana between 1962 and 1972, Galbán, who also plays piano and organ, had played with various Cuban music groups before the Ferrer sessions where he and Cooder met for the first time. This time it was he who was the subject of Cooder's seemingly Midas touch. The resulting sessions in Havana yielded Mambo Sinuendo (Nonesuch), a new Cooder-Cuba project that is electric, even rocking to a point, and, overall, very different from Buena Vista Social Club. It's also Steveophile's "Recording of the Month" for March (see p.107 for full review).

"With Galbán you have a classic electric guitar player," Cooder says when we meet in Nonesuch's New York office. "This is the kind of thing we haven't seen since Jimmy Bryant or Merle Travis—people who took the electric guitar when it was just beginning to bloom as a technical thing, as an innovation, as an instrument, after the war, and made these glorious-sounding records like Speedy West and that country swing, and all that kind of stuff. The sound of the electric guitar in those days was pretty much of a hook, and you can see why. It was big and pulsating, the way it hit the microphone, 'cause those guys didn't play loud. They played in a large way, but not so loud.

"Galbán, to me, is a twanger. He's a twangy man. What do we think of as twang? It's a certain kind of hybrid, goofy thing.

"You play songs until you like them, until the drums are starting to swing and the whole thing is starting to move. Then you say, Okay, now I think I see this."





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ed with Taj Mahal in the now-famous Rising Sons from 1964 to 1966, before joining Captain Beefheart in 1968. He played on three Rolling Stones albums—Beggar's Banquet, Let It Bleed, and Sticky Fingers—before launching a solo career with his first album, Ry Cooder, in 1970. For a time, Cooder's solo career and stints as a sideman ran concurrently. As a sideman, he's played on a diverse list of classic records, from Randy Newman's 12 Songs (1970) and Good Old Boys (1974) to Little Feat's eponymous debut (1970) to Rodney Crowell's Ain't Living Long Like This (1974) and Steve Young's Seven Bridges Road (1978).

Since the late '70s, Cooder has also provided music for a number of films, including *The Long Riders, Cocktail, Steel Magnolias*, and *Paris, Texas*. In 1992, he was briefly in a latter-day roots-rock "supergroup," Little Village, which tried unsuccessfully to re-create the magic that the same four players (Cooder, John Hiatt, Nick Lowe, and Jim Keltner) had tapped into while making Hiatt's *Bring the Family* in 1987. His venture into world music began in 1993, when he recorded *A Meeting by the River* with V.M. Bhatt for Water Lily Records, an independent audiophile world-music label. And in 1994, Cooder and West African guitarist Ali Farka Toure won Grammys for their collaboration, *Talking Timbuktu* (Hannibal).

Prodding practicing musicians into speaking about the sound of their records can be hard work. Most are content to leave such matters to producers or, more likely, engineers. Hence all the genuinely bad-sounding rock records out there

crowding for shelf space. *Mambo Sinuendo* does not suffer from that problem. If anything—it's almost a pleasure to be able to write this—this album may have suffered from *too much* attention paid to its sound.

Cooder and engineer Jerry Boys went to great lengths, both in the Egrem studios in Cuba and while mixing the project back in the States at vintage Capitol Studios in L.A., to get the sound right. An innocent question about sound unleashed from Cooder a torrent of response, the likes of which 99.9% of modern musicians would neither care about nor understand.

"In Egrem you could see that the sound of Galbán's electric guitar was fantastic. It filled the room in such a way, in a saturated way, that we don't think of electric guitar these days. To my ears, I don't hear this. What I hear (today) is direct. I hear a lot of signal-processing. I hear a lot of stuff that shrinks (the sound) down so it cuts through this or that foot pedal, so it cuts through this or that thick web of effects. And clean. Cleaner and cleaner.

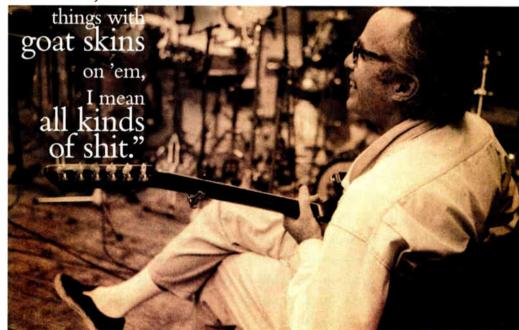
"Egrem is a studio with tall ceilings, very deep. And it has "You've got like
10 different bass
drums that
are being hit,
garbage
cans, little

all these wood surfaces, the floor is wood, old, distorted from time and water damage. Very porous, you know. There's so much water damage, it's like a honeycomb, like a sponge. So it breathes and moves and you really can feel this. Moreover, it's on the second story of a building, so underneath there's a lot of air. So it has a certain breathing in the floor, as opposed to cement — the idea of a studio within cement I just think is totally wrong. Stability is not the key. It's movement that is key.

"The first *Buena Vista* record [also recorded at Egrem] was an exercise in acoustic music. So it was a lot of people. By the end of that record, we pretty much understood where in the room you go. There's a halfway imaginary line down the middle of the room, and if you're way in the back, it doesn't happen — you've got to get towards the front. And you set up around the bass, as they used to do, see. I looked at a lot of pictures of where were they standing, how far apart. I studied all these things.

"But then you add electric instruments and a snare drummer and some cymbals. Two drummers with maybe 50 surfaces between them...well, more than that. You've got like 10 different bass drums that are being hit, garbage cans, little things with goat skins on 'em, I mean all kinds of shit —a cymbal the size of a gong. So you know that the drums take over and so the drums are key. So you have to position the microphones, the people around the drums to make sure that the drums on one hand feel good, and that they combine to the microphone as one. Because if the microphone hears two drummers, it's going to feel very strange. It's going to feel very clumsy. But if they can play as one, which they know how to do, so not everybody's hitting the bass drums, not everybody's playing snares - more of a spectrum, you know, like film music. Because if it's pop or rock, then it's very programmatic, and everybody's business as usual and so what's the point? But if you do it as though it were a film score, then you have space and you have size and it's sort of a little more complex, a little more interesting.

"There's a war between too much sound in the mikes and not enough excitement. Usually, when you have enough



Stereophile, March 2003 53

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excitement and everybody's really rocking, you know, it's so goddamned charged and saturated you can't work with it. That's like direct to 78 or something. And I don't think we wanted that, because then you lose the fantasy of the environment. It sounds too much like a jam. Like a garage record."

Fantasy of the environment? Before I can ask about this, Cooder is answering in one long rush of thought.

"I always thought that the early music from the '30s and '40s had a very flat quality. So you don't feel environments, you don't even hear it—unless you're talking about Caruso in Carnegie Hall, (where) you might catch some of it. But generally you don't, because they hadn't invented tape, and tape is very good for this. And the microphones were good, but they got better, a lot better. So the microphones picked up more ambience and more harmonics, and harmonics is really what it is. Because harmonics live in an air space. We hear harmonics very well—which to me is the halo, or the bubble, as I like to call it. It's like a very transparent sheen on everything. And the bubble is a good feeling. It's like a balloon you can feel the edges of. If it's diffused and goes away, then that's loss of energy, loss of emotional containment, and I'm just as bored as anything. I can't stand that.

"Either it's very flat and down on top of you like modern records are, which are totally unemotional—all that is is product and I don't like it—or it's got some environment to it, but they neglected to trap the harmonics up here and so it feels weak.

"The bubble is the thing. You're in it and the music is in it, and if you really go for this and really get this, then the listener will feel it too. I'd say to Jerry Boys, 'I don't hear the bubble.' During the *Buena Vista* [sessions], we were just getting acquainted, you know, and he'd look at me: 'Bubble, hmmm'.

"Bubble! I'm going, you know what I mean, 'Bubble, Jerry!' 'Errrrr, bubble, uh-huh,' he'd say, like I was crazy." Cooder bursts into laughter, mostly at his own bad imitation of Boys' English accent. "He had to figure it out. Well, it was the room mikes. 'Ohhh, you want to really hear this happen,' he finally said to me one day.

"Personally, I want it to feel like a jukebox," Cooder says, using one of his favorite examples. "What makes you feel good is a jukebox. Big speaker, big cabinet, small joint, drinking the beers. Like Galbán said, it's the 10-cent beer and the 5-cent tunes. Now that is elegance at popular prices. That's a wonderful environment and a very full physical experience. The jukebox is a physical bubble. It's a machine of the bubble."

Thanks to Buena Vista, Cooder's career is no longer on the

bubble. He may, however, be done with Cuba for a while, partly because of the same problem he eventually had with his first loves, American roots-music forms like New Orleans blues/funk, Delta blues, and hillbilly music—like them, the old music of Cuba is becoming a museum piece.

"In the last two years, my gosh, what happened (to Cuba): hip-hop. The country is totally invaded. Totally attacked by hip-hop — Latin hip-hop, really, because they don't have American hip-hop down there. The people have embraced

this as a form, especially the younger folks.

"The old music is virtually dead. If it exists at all, it's for tourists. The salsa and timba forms of fast dancing and night-club music, which I think of as Miami music, you see a lot of this down there. It's a popular form. So is Marc Anthony, as far as that goes. He's revered in Cuba. So you will always have this pop Latin thing. And what it is in the Latin world, it's no different in Cuba. So you have this dun da da dun da dun da da, hip-hop 2, 3, 4." He counts off beats. "Everywhere you go, you hear it in cabs and you hear it in bars.

"I think to myself 'Why do they like it?' But it's got another reason (for being so popular), many other reasons that mean nothing to me, because I'm obviously the dilettante, carpetbagging white guy from Santa Monica with a round-trip ticket, as so many people have wanted to portray me."

Despite this swipe, complete with satisfied smirk, at those who take him to task for being a culture vulture in much the way Paul Simon was pilloried for using South African music on *Graceland*, Cooder is already pondering his next cross-cultural experiment. When asked about film scoring, he half-heartedly says he wants to do more. As for solo records, he

quickly says, "No more I-me records." Translation: no more attempts to turn him into a solo attraction or, worse, a rock star.

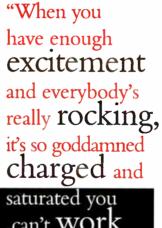
You thought Cuban music was exotic? The next thing Cooder wants to immerse himself in and learn to play is *Cai Luong*, a longform Vietnamese music whose melodies are what he calls "operatic," and have been known to go on for 10 minutes or more.

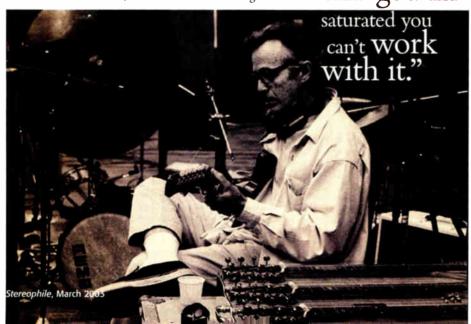
"It's fantastic. It's like the weirdest funk I've ever heard, the most hypnotic funk I've ever heard. But it's not done anymore."

He goes on to say he also loves obscure French music before returning to a tale about a Cai Luong musician who played Cuban music on lap-steel guitar in French clubs in Hanoi before the Vietnam war.

"Hey, all things happen by accident. You hope, as a musician, these things will happen."

For some reason, Ry Cooder is more accident-prone than most.







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udging absolute sound quality under the unfamiliar circumstances of an audio show is always fraught with difficulty. If a system sounds bad, there are so many possible reasons for it to do so that pointing a finger of blame at the components is possibly unfair. Conversely, when a room sounds good at a show, it is probable that the components being used deserve some recognition. Such was the case at Home Entertainment 2002 in New York last May, when Dynaudio's Confidence C4 made its debut.

Driven by a Naim CD player and Naim amplification in a fairly large room, the loudspeaker impressed me with its lack of coloration, the range of its dynamics, and the broad sweep of its sound-staging. Accordingly, I asked for review samples to be sent, to finish up the minisurvey of expensive, floorstanding speakers I've been publishing in recent issues.¹

Description: Three-way, reflexloaded, floorstanding loudspeaker. Drive-units: two 1.1" (28mm) softdome tweeters, two 6" (150mm) Magnesium Silicate Polymer (MSP) cone midrange units, two 8" MSP-cone (200mm) woofers. Crossover frequencies: 730Hz, 2kHz (8kHz from two to one tweeters). Crossover slopes: 6dB/octave, first-Frequency response: 27Hz-25kHz ±2dB. Sensitivity: 90dB/2.83V/m. Nominal impedance: 4 ohms, 3.3 ohms minimum. Impedance phase shift: -57° to +21° +24° (20-200Hz), -4° (200Hz-20kHz). Long-term power handling (IEC): 400W (4 ohm).

Dimensions: 69" (1750mm) H by

Trickle-down...

...was the term I used to describe the new Dynaudio speaker on this issue's cover, to the puzzlement of some staffers. This was because, despite its \$16,000/pair price, the C4 has much in common with its cost-no-object cousins in Dynaudio's Evidence line: the \$85,000/pair Master and the \$30,000/pair Temptation, reviewed by Larry Greenhill in May 2000 and December 2001, respectively.²

Like the Evidences, the C4 is a tall, narrow floorstander with twin tweeters flanked first by twin midrange units, then by twin woofers. In combination with the first-order crossover slopes, this vertically symmetrical array of driveunits narrows the vertical radiation pattern, resulting in a claimed 75% reduction in the energy reflected from the ceiling and floor. Referred to by the manufacturer as Dynaudio Directivity Control (DDC) and reminiscent of the similar arrays used by John Dunlavy in his designs for Duntech and DAL, this will make the speaker's sound less dependent than usual on individual room acoustics.

16.5" (420mm) W (with base) or 10" (250mm) W (without) by 17.5" (445mm) D. Internal cabinet volume: 60 liters. Weight: 110 lbs (50kg) each. Finishes: Maple or rosewood veneer (other finishes by special order), black fabric grilles.

Serial numbers of units reviewed: 668139 & '140.

Price: \$16,000/pair. Approximate number of dealers: 32.

Manufacturer: Dynaudio A/S Sverigesvej 15, DK-8660 Skanderborg, Denmark. Tel: (45) 86-523-411. Fax: (45) 86-523-116. US distributor: Dynaudio North America, 1144 Tower Lane, Bensenville, IL 60106. Tel: (630) 238-4200. Fax: (630) 238-0112. Web: www.dynaudiona.com. Usually, having spaced tweeters covering identical frequency ranges will result in some top-octave vertical lobing as the drivers' outputs interfere away from the central axis. However, in the DDC array, the upper tweeter is used only between 3kHz and 8kHz, to narrow the vertical dispersion in the region where the radiating diameter would otherwise be smaller than the wavelengths of sound being emitted, reducing the presence-region "flare" in the speaker's reverberant soundfield.

The Confidence C4's tweeter is the new Esotar2 unit, which is also used in the Danish company's 25th-anniversary Special Twenty-Five loudspeaker, which so impressed John Marks in our January issue (p.55). A ferrofluid-cooled, 28mm, fabric-dome type, the Esotar2 uses a powerful neodymium magnet and aluminum voice-coil wire. Both the 6" midrange drivers and the 8" woofers feature molded plastic cones loaded with mineral powder (magnesium silicate), and again use low-mass aluminum wiring. Each of the woofers is reflexloaded with a 2.75"-diameter port with flared inner and outer openings on the rear of the enclosure.

The first-order crossover network uses what Dynaudio refers to as "zero-compression" resistors and capacitors with low dielectric loss and is mounted on a glass-fiber-reinforced printed circuit board in a separate internal chamber. Electrical connection is via a single pair of gold WBT binding posts.

With its narrow, 10"-wide profile, the wood-veneered cabinet looks smaller than it really is, though a 16"-wide base, fitted with spiked feet, provides mechanical stability. The drive-units are carried on a gray sub-baffle sculpted from 40mm-thick MDF, which is attached to the front of the enclosure. Fit'n'finish were superb, as should be the case at this price level.

System

Vinyl was played on my Linn Sondek/Cirkus/Trampolin/Lingo (new version)/Ekos/Arkiv LP player sitting on a Sound Organisation table and am-

¹ This survey began with the Wilson Audio Sophia (\$11,700/pair) in July 2002, and proceeded to cover the mbl 111B (\$17,000/pair) in August of that year, the Mission Pilastro (\$35,000/pair) in December, the Canton Karat Reference 2 DC (\$10,000/pair) in January 2003, and the KEF Reference 207 (\$15,000/pair) in February, punctuated by auditions of the more realistically priced Thiel CS1.6 (\$1990/pair) and RBH 641-SE (\$1499/pair) last September and October, respectively.

² All reviews mentioned are available free online in the archives at www.stereophile.com.

John Atkinsor

Dynaudio Confidence C4 loudspeaker



Dynaudio Confidence C4

long decay time allows the composer's suspensions and unresolved harmonies to float in the air around the singers. This effect can be addictive, but demands a speaker that is both uncolored and highly resolving in both amplitude-response and imaging domains for the reverberation not to "rattle," and for the presentation not to be degraded into a "bathroomy" soup of sound.

The C4s were indeed highly resolving when it came to stereo imaging. "Diraiton," the fifth and final song in Lauridsen's Les Chauson des Roses on the Lux Aetema CD, is the only one in which the singers are accompanied, by a piano. The women extend from the center of the soundstage to the left speaker, the men to the right, with the piano clearly and unambiguously set via the C4s in the center but behind the singers. In the Debussy Invocation on Cantus' ... Against the Dying of the Light (Cantus CTS 1201), I mixed the piano so that its image was positioned on the right of the stage,

almost level with the singers. However, when tenor Brian Arreola solos in the work's central section, he stood *behind* the piano—this is clearly what I heard via the Dynaudios. In addition, Brian's

The C4s were indeed highly resolving when it came to stereo imaging.

image remained small and well-defined, even when his voice soared at the climax before the key change that presages the choir's re-entry. It is this ability of speakers not to bloat image size as the level increases that I value highly, and that helps distinguish great speakers from the merely good.

Looking through my auditioning notes, I see that I listened to a great deal of choral and vocal music through the Confidence C4s, which bears testament to their uncolored, naturalsounding midrange. The midrange, roughly the decade from 200Hz to 2kHz, is where melody instruments and voices have their fundamental energy and where the music has its tonal center. If a speaker gets the midrange wrong, then what it does right at the frequency extremes to a large extent doesn't really matter. This Dynaudio got the midrange right, to an extent equaled only by the Wilson, Mission, and KEF, of the speakers I have recently reviewed. Its presentation was also seamless across the audioband.

When it comes to treble, I have yet to hear a speaker in my room that equals the omnidirectional mbl 111B. Once you've experienced that speaker's topoctave delicacy and ethereal extension, it becomes harder to accept the relative

Measurements

ing room. The response trace, an average of 120 measurements taken individually for the left and right speakers and weighted toward my ear position, shows the low-frequency emphasis that I noted in my auditioning and found in the nearfield measurements, broken only by the usual lack of measured energy in the 50Hz and 63Hz bands, something that appears to be typical of my room. Lower in frequency, even though the Confidence's summed nearfield response rolls out below 50Hz, the speaker's inroom output is maintained for at least an octave lower, due to boundary effects. This speaker will clearly give a more neutral bass balance in rooms that are larger than mine.

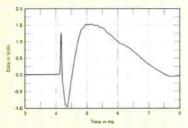


Fig.6 Dynaudio Confidence C4, step response on lower tweeter axis at 50" (5ms time window, 30kHz bandwidth).

I was surprised by the energy excess in the mid-treble revealed by this graph—this was not what I heard. I can imagine only that, instead of my ears locking on to the midrange level as their reference and thus perceiving the upper-frequency balance as boosted, they were instead taking the latter as their reference (aided in this by the boosted lows) and perceiving the mids as being laid-back.

The C4's step response (fig.6) indicates that the upper-frequency drivers are all connected with positive acoustic polarity. The woofers, however,

appear to be connected in inverted polarity with respect to the midrange units, which is presumably to optimize both the frequency-domain integration between the drivers and the speaker's vertical dispersion. The cumulative spectral-decay plot on the lower tweeter axis (fig.7) in general reveals superbly clean die-away, disturbed only by a residual mode at 5kHz. It's no wonder the C4's treble sounded so grain-free.

-John Atkinson

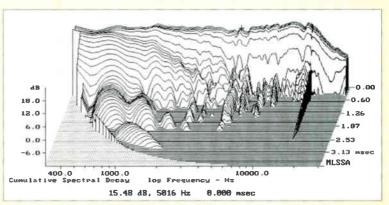


Fig.7 Dynaudio Confidence C4, cumulative spectral-decay plot at 50" (0.15ms risetime).

but inevitable lack of in-room energy offered by dome tweeters with diameters of 1" and greater. But other than that qualifier, the C4's Esotar2 tweeters offered a grain-free, transparent presentation of music's high frequencies that was effortlessly seductive.

The February issue's "Recording of the Month," the CD set of Beethoven's violin sonatas from Augustin Dumay, accompanied by Maria João Pires (DG 471 495-2), spent a lot of time spinning in my players over the holiday season. The Dynaudio C4 and a well-recorded classical violin, as this is, were made for each other. Even when Augustin plays without vibrato, there was no feeling of "scratch." When I was an active violin player, a touch of what (with hindsight) I now recognize was synaesthesia made me hear the over-close sound of a rosined bow catching on the strings as a distinctly sour taste in my throat. There was no such sourness with the C4s, just treble sweetness—no sense that the high frequencies were a little too high in level, as they were with the otherwise superb-sounding Cantons.

And even when the recording's highs are overcooked, as they are on the Roger Waters In the Flesh—Live

DVI)-V (Columbia Music Video CVI) 54185, LPCM soundtrack auditioned in two channels), the forgiving nature of the Dynaudio's tweeters, coupled with the speaker's apparently limitless dynamics, allowed the music to communicate *most* effectively. The Americans may have invented rock, but it was the British who elevated it to a mature art form, in this lay person's opinion, at least as evidenced by this concert recording.

Summing up

While the Dynaudio Confidence C4's low frequencies will sound most neutrally balanced in large rooms, its top octave might then sound a little mellow. But in the right room, the listener will be knocked out by its natural-sounding midrange, its high-frequency transparency and lack of grain, and its welldefined, stable stereo imaging, none of which have been achieved at the expense of the speaker's musical communication. I can confidently recommend the Confidence C4, offering as it does much of the performance of this Danish manufacturer's cost-no-object Evidence models at a considerably more affordable price.

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Polk Audio LSi7 loudspeaker

n my review of Polk Audio's RT25*i* loudspeaker (September 2001, Vol.24 No.9), I was mightily impressed with Matthew Polk's execution of this \$320/pair design. Although it has since been replaced by the RT*i*28, with slightly modified cosmetics and a different tweeter, the RT25*i* remains my favorite loudspeaker costing less than \$500/pair.

Since that review, I've often wondered how Polk might fare with a speaker at a higher price. I'd been very impressed with Polk's demonstrations of their flagship LSi line at the Home Entertainment 2001 and 2002 shows, so when I learned that the least expensive entry in that series, the \$820/pair LSi7 bookshelf speaker, just scraped the \$800/pair ceiling of my self-imposed "affordable speaker" price bracket, I thought I'd give it a whirl.

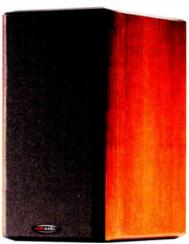
Design

The Polk LSi7 is a two-way, ported, design. It has a 5¼" woofer and a 1" ring-radiator tweeter, both magnetically shielded for use in home theaters. The mid/woofer is made of foamed polypropylene that includes tiny bubbles of air to better suppress cone resonances. There are two ports: one 1" in diameter positioned on the front baffle next to the offset tweeter; the other 2" in diameter and positioned on the rear of the speaker. This fires into a diffusor that allows the speaker to be positioned close to the wall behind it.

The tweeter appears similar to the drivers seen in recent models from Krell, Audio Physic, and Mission. Its ring-shaped diaphragm is supported at both its outer and inner circumferences, with the voice-coil positioned midway between the two. Such a mounting is said to push the first breakup-mode resonance beyond the upper limits of audibility. Two sets of binding posts are provided to allow biamping and biwiring.

The walls of the LSi7's enclosure are made of MDF and internally braced, and finished in high-gloss laminate. Two "cheeks" are attached to the enclosure's side panels to provide further damping; these can be veneered in





Polk LSi7 loudspeaker

ebony or cherrywood. I found the cherry veneer on my review samples understated but attractive.

Testing Methodology

I listened to the Polk LSi7s on Celestion Si stands, loaded with sand and lead shot, in both of my listening rooms. Polk recommends listening with the speakers' grilles removed, which I did, but I also tried them with the grilles on. Removing the grilles squeezed an extra iota of detail and transparency from the LSi7s while leaving their tonal balance unchanged; audiophiles who like the looks of the LSi7 with its grille on won't be missing much.

Finally, Polk's instructions recommend using the LS/7 with solid-state gear. Using tubed gear is not prohibited, but Polk feels the LSi7 "likes" solidstate. Although I did most of my listening using the Creek 5350SE integrated amplifier, I also tried the Polks with the Audio Valve Eklipse line stage and Audio Research VT100 Mk.II power amp. While the LSi7 proved an excellent match for the tubed ARC amp, I found no deterioration in performance with the solid-state Creek.

Sound

I immediately noticed four areas in which the LSi7's performance excelled:

1) Continuous and extended dynamic range on all types of music, from the softest passages to the loudest bombast. Although I've heard some affordable speakers that excelled at microdynamic resolution and others that had dramatic

Description: Two-way, stand-mounted, reflex-loaded loudspeaker. Drive-units: 1" ring-radiator tweeter, 5½" polypropylene-cone woofer. Frequency response: 53Hz–26kHz, –3dB. Nominal impedance: 4 ohms. Dimensions: 14½" H by 85%" W by 10½" D. Weight: 21 lbs each. Finishes: Ebony, cherrywood.

Serial numbers of samples reviewed: 00924.

Price: \$820/pair. Approximate number of dealers: 150.

Manufacturer: Polk Audio, 5601 Metro Drive, Baltimore, MD 21215. Tel: (800) 377-7655. Fax: (410) 358-2870. Web: www.polkaudio.com.

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capabilities in high-level dynamics, this is the first affordable speaker I've heard that excelled at both.

- 2) Extraordinary retrieval of detail and ambience.
- 3) Pinpoint image specificity on a wide, deep soundstage.
- 4) Detailed, extended, airy, and natural high-frequency resolution.

Fans of jazz drummers should die for the LSi7. On Dexter Gordon's Go (LP, Blue Note BN ST84112), I found myself analyzing Billy Higgins' crisp, tuneful percussion as it emerged from the naturally ambient space, his organic and lively snare and hi-hat work demonstrating clearly why he's one of the jazz greats. Similarly, on Shelly Manne's solo on "I'm an Old Cowhand," from Sonny Rollins' Way Out West, (LP/CD, RCA/JVC VICJ 60088), I could tell how tightly the skins on Manne's snare and toms had been adjusted. On the Modern Jazz Quartet's Concorde (LP/CD, Prestige/JVCXR LP7002), I was captivated by the intimate interplay between Connie Kay's brushwork and John Lewis' subtle piano counterpoint. Best of all, Milt Jackson's vibes sounded pristine, sharp, and resonant, but completely natural. I've never heard a more realistic reproduction of the vibes from an affordable speaker.

Modern classical chamber music was also a good match for the LSi7. With the 1995 Santa Fe Chamber Music Festival performance of Kohjiba's Transmigration of the Soul (CD, Stereophile STPH007-2). the speakers "disappeared" - all of the subtle definition of harp, violins, and cello were palpable in the natural room sound. Similarly, the subtle percussion figures emerging from space on George Crumb's Quest (LP, Bridge 9069), combined with the delicate classical guitar technique, made me forget I was listening to a hi-fi system. With larger orchesworks, the Polk's superior high-frequency resolution rendered the piccolos in Messiaen's Turangalila Symphony (LP, EMI SLS 5117) and the massed violins in Stravinsky's The Firebird (LP, Mercury Living Presence/Classic SR90226) without a trace of coloration.

Measurements

The Polk LSI7 is of slightly aboveaverage voltage sensitivity, at an estimated 88dB/2.83V/m. The impedance is specified as 4 ohms, but as the plot of impedance magnitude and phase against frequency shows (fig.1), the load remains above 6 ohms for much of the audioband, with a minimum value of 4.2 ohms at 212Hz.

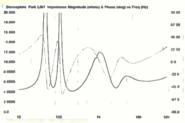


Fig. 1 Polk LSi7, electrical impedance (solid) and phase (dashed). (2 ohms/vertical

However, the electrical phase angle is quite severe in the upper bass, which will add to the drive difficulty. A good amplifier or receiver rated at 4 ohms will work best with the speaker.

A slight discontinuity between 800Hz and 900Hz in this graph's traces implies the existence of some kind of resonant problem. Examining the vibrational behavior of the LSi7's cabinet walls with an accelerometer revealed a strong mode present on the sidewalls at 656Hz (fig.2), with a second mode detectable on the top panel at 1kHz (not shown). Both resonances are of high Q (Quality Factor), which means they need to be hit with music at their specific frequencies for quite a long time to fully develop, which will work against their audibility. In addition, the higher the frequency of a cabinet wall resonance, the quicker it decays, which again works audibility. But as neither mode lies in the range where the impedance plot indicates a problem, something else must be lying in wait.

Fig.3 shows the individual farfield responses of the woofer and tweeter, along with the nearfield responses of the woofer and the two ports. The crossover between the two drive-units clearly lies at 2.2kHz, with approximately third-order acoustic slopes. The tweeter's output is smooth within its passband, though shelving down slightly above 10kHz. However, the woofer's output features a peak just below 1kHz, which coincides with sharp spikes of energy in the outputs of both ports. (These also have a peak apparent in their output at half the frequency of the big peak.) The responses of the low-frequency radiators are

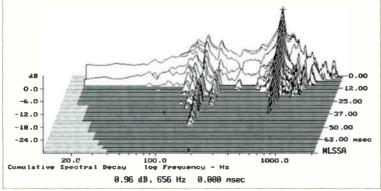


Fig.2 Polk LSi7, cumulative spectral-decay plot calculated from the output of an accelerometer fastened to the cabinet's side panel. (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz.)

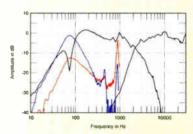


Fig.3 Polk LSr7, acoustic crossover on tweeter axis at 50", corrected for microphone response, with the nearfield responses of the woofer (black trace), front port (red), and rear port (blue) plotted below 400Hz, 1kHz, and 950Hz, respectively.

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In terms of overall tonal balance, however, the LSi7 had a number of characteristics that, depending on the recording, could detract from the realism. On the plus side, the speaker's bass response was fairly extended—in both of my listening rooms, using the chromatic-scale track on *Stereophile's Test CD 3*, I heard response into the low 50Hz area. Bass drums and timpani, as well as bottom-register synthesized drums, were realistic and dramatic on all recordings.

However, there was a midbass thickness, the effect of which varied with the recording. These effects were subtle on electronic rock records with synthesized bass; the bass-synth blasts on Jeff Beck's Guitar Shop (CD, Epic OE 44313) and

Grandmaster Flash and the Furious Five's The Message (LP, Sugar Hill SH584) still managed to sound powerful, fast, and tuneful. On Dean Peer's solo electric bass outing, Ucross (LP, Jazz Planet/Classic JP5002-1), the lowerregister notes were noticeably thickened but didn't detract from the performance. However, on Gary Wilson's highly figured bass lines on "When You Walk into My Dreams," from You Think You Really Know Me (CD, Motel MRCD007), the lowerregister notes seemed boosted in volume. Finally, the string basses on most acoustic jazz recordings tended to sound fat and overly ripe.

This midbass thickness extended into

the upper bass and lower midrange to give male vocals a thick, "chesty" quality (Mighty Sam McClain, Give It Up to Love, CD, JVC XRCD 0012-2). The same went for the lower registers of some female vocals (Madeline Peyroux, Dreamland, CD, Atlantic 82946-2). This was rarely noticeable on instruments, except for the occasional close-miked tenor sax playing in its lower register.

Further up in frequency, I noticed a forward resonant quality that tended to affect middle- to upper-register female vocals, the upper register of the tenor sax, and the middle registers of the trumpet, clarinet, and soprano sax. But again, the extent to which this character was bothersome depended on the

Measurements

plotted in the ratio of their radiating diameters, which means that the 1"-diameter front-facing port (red trace) has a significantly lower output than the 2"-diameter rear port (blue trace). However, it is the front port that features the highest-level peak, at 900Hz, and I must assume that it is the presence of this internal resonance that gives rise to the coloration Bob Reina noted on female vocals and wind instruments.

The notch at 72Hz in the woofer's output in fig.3 (black trace) coincides with the maximum output from both ports, as expected from the saddle in the fig.1 magnitude trace at the same frequency. This implies only moderate low-frequency extension, which is confirmed by the trace on the left side of fig.4, which shows the sum of the low-frequency nearfield responses, taking into account both acoustic phase and the

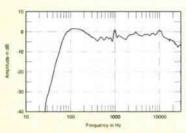


Fig. 4 Polk LSi7, anechoic response on tweeter axis at 50", averaged across 30° horizontal window and corrected for microphone response, with the complex sum of the nearfield woofer and port responses plotted below 300Hz.

different distances of the radiators from a nominal farfield point. Though 3dB of the apparent peak in the LSi7's upper-bass output is in fact an artifact of the nearfield measurement technique (which assumes a

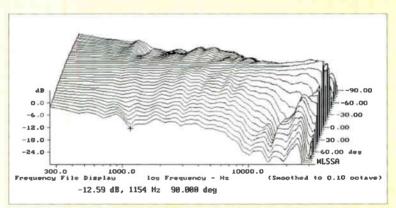


Fig.5 Polk LSi7, lateral response family at 50", normalized to response on listening axis, from back to front: differences in response 90°–5° off-axis on port side of baffle, reference response, differences in response 5°–90° off-axis on tweeter side of baffle.

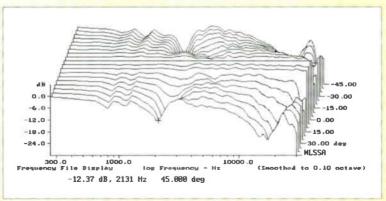


Fig. 6 Polk LSr7, vertical response family at 50", normalized to response on tweeter axis, from back to front: differences in response 45°–5° above axis, reference response, differences in response 5°–45° below axis.

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recording. It was most noticeable in loud or highly modulated passages, or during the most energetic passages in instrumental solos. I heard it only in certain soprano-sax passages in the Crumb recording, but throughout Miles Davis' and Cannonball Adderley's solos on trumpet and alto sax, respectively, on Kind of Blue (LP, Columbia/Classic CS 8163). But the anomaly was missing altogether from "Some People's Lives," from Janis Ian's Breaking Silence (LP, Analogue Productions CAPP 027), as both vocal and piano tended to avoid the problematic frequency region.

Overall, the strengths and weaknesses of the LSi7 should be weighed in consideration of your listening biases,

musical taste, and associated gear. There are always tradeoffs to consider when shopping for a speaker costing less than \$1000.

Comparisons

I compared the Polk LSi7 to my usual suspects: the Paradigm Atom (\$189/pair), the Polk RT25i (\$319/pair), the NHT SB3 (\$600/pair), and the Alon Petite (\$1000/pair).

The Paradigm Atom was not as detailed in the high frequencies as the Polk LSi7, but its midrange was more natural and more intimate. It was not as extended or detailed in the high frequencies and was not as airy, but it had a lower-midrange thickness similar to

the Polk's. Bass extension and high-level dynamics were far inferior, however.

The Polk RT25*i* also had inferior bass extension and high-level dynamic performance, but its upper bass was cleaner, its midrange more neutral. High frequencies were not as detailed or extended as the LS*i*7's, however.

The NHT SB3 had a midbass thickness similar to the LSi7's, but this did not alter its upper-bass or lower-midrange timbres, and its midrange was more natural. The NHT's high-level dynamic capabilities were as impressive as the LSi7's, but the SB3's high frequencies and low-level dynamic resolution weren't as delicate or as detailed.

Finally, the Alón Petite was far inferi-

hemispherical acoustic environment for the radiators), the rest is real, correlating with BIR feeling the speaker to have some "midbass thickness." Speaker designers will very often go for this kind of reflex alignment to give the listener the impression that a small speaker goes deeper in the bass than it actually does. However, my experience has been that getting this right is quite tricky, and whether the excess upper-bass energy will be perceived as power and extension (good) or boom and thickness (bad) will also depend on the speaker's upper-frequency balance.

The right-hand trace in fig.4 shows that when the LSi7's tweeter-axis output is averaged across a 30° lateral window, its treble balance is quite flat, though the shelved-down top octave can again be seen. This is because the ring-radiator tweeter has limited dispersion above the mid-treble (fig.5). However, this graph also reveals that the Polk has good, even dispersion

below that region. In the vertical plane (fig.6), suckouts develop at extreme off-axis angles, but the balance otherwise remains broadly the same over a ±10° range. The speaker will be fairly uncritical regarding listener ear height, therefore. The tweeter's suppressed off-axis output can also be seen in this graph.

In the time domain, the Polk's farfield step response (fig.7) indicates that both drive-units are connected in positive acoustic polarity, with the tweeter's output leading the woofers by a quarter of a millisecond or so. The speaker was raised well away from any reflecting surfaces for the acoustic measurements, meaning that the ripples in the decay of the woofer's step are intrinsic to the speaker. Not coincidentally, their period of just over a millisecond correlates with the fre-

quency of the spike apparent just below 1kHz in fig.4. Peculiarly, however, the LS/7's cumulative spectraldecay plot (fig.8) indicates only a minor amount of delayed energy in this region, and is actually superbly clean over most of the region shown. Undoubtedly, this correlates with BJR's very positive feelings about the speaker's clarity and presentation of detail, particularly in the region covered by the tweeter.

Overall, while the Polk LSi7 does many things well, its low-frequency alignment appears to be balanced a little too much on the "ripe" side, and that resonant behavior just below 1kHz bothered me. —John Atkinson

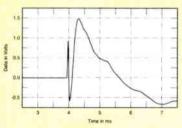


Fig.7 Polk LS/7, step response on tweeter axis at 50" (5ms time window, 30kHz bandwidth).

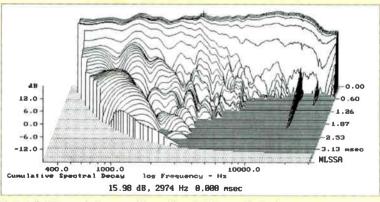


Fig.8 Polk LSi7, cumulative spectral-decay plot at 50" (0.15ms risetime).

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or to the Polk LSi7 in bass extension and high-level dynamics, but had more natural mid- and upper bass, as well as a neutral, detailed midrange. Although the Petite's high-frequency performance was excellent, the LSi7's detail and delicacy were better still. The Polk LSi7 was the first of the dozen-odd affordable speakers I've reviewed whose HF performance bettered the Petite's. That's quite a feat. In fact, I've heard no other speaker costing less than \$2000/pair whose HF performance approached that of the Polk LSi7.

Wrapping Up

Life is full of tradeoffs, especially among affordable speaker designs. In the areas of detail resolution, high-frequency performance, soundstaging, and widerange dynamics, I doubt there's another affordable speaker that can approach the overall performance of the Polk LS/7, As for its other timbral characteristics, you should, as you would with any speaker, consider the LS/7's performance within the context of your listening biases, musical taste, and the rest of your system.

Associated Equipment

Analog sources: VPI TNT IV turntable, Immedia RPM tonearm, Koetsu Urushi cartridge; Rega Planar 3 turntable, Syrinx PU-3 tonearm, Clearaudio Aurum Beta S cartridge.

Digital sources: California Audio Labs Icon Mk.II Power Boss, Creek CD53 Mk.II CD players; Pioneer DV-333 DVD player.

Preamplification: Vendetta Research SCP-21D phono stage, Audible Illusions Modulus L1 line stage, Audio Valve Eklipse line stage. Power amplifier: Audio Research VT100 Mk.II.

Integrated amplifiers: Creek 5350SE.

Loudspeakers: Alón Petite, NHT SB3, Paradigm Atom, Polk RT25*i*.

Cables: Interconnect: MIT MI-350 CVTwin Terminator, MIT MI-330SG, MIT Terminator 2. Speaker: Acarian Systems Black Orpheus.

Accessories: Various by ASC, Bright Star, Celestion, Salamander Designs, Simply Physics, Sound Anchor, VPI, Echo Busters.

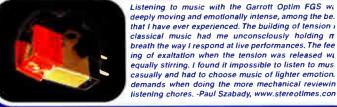
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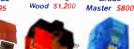


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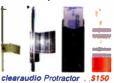


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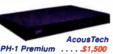
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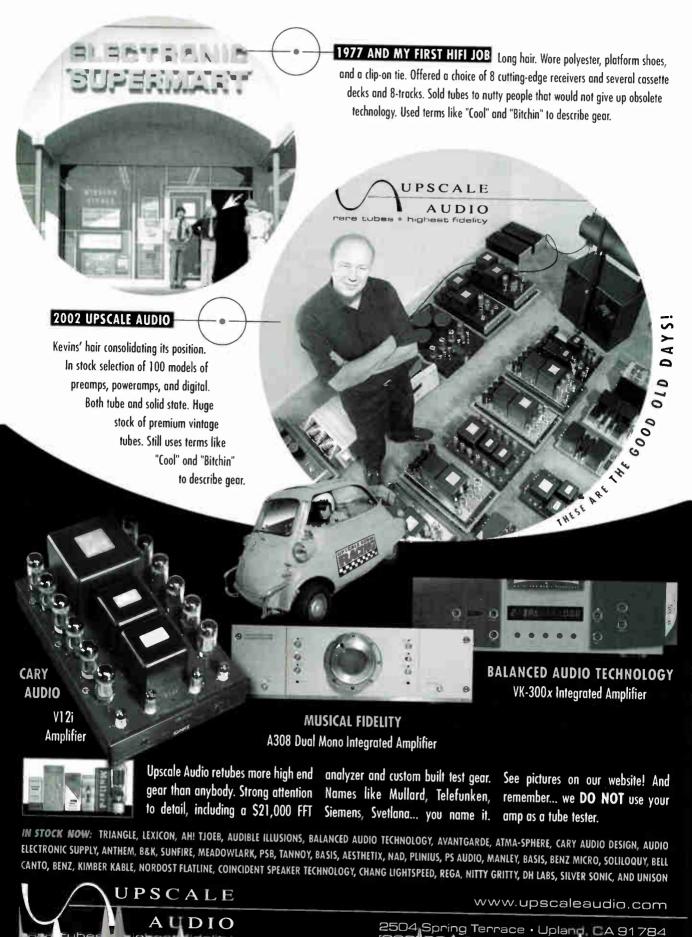
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SME Model 30/2 turntable

ense, compact, and built to run O-rings around the competition, SME's flagship turntable makes every other design I've encountered-with the possible exception of Rockport's System III Sirius - look almost homemade. I don't mean to insult the many fine, well-engineered designs out there, but I've seen nothing else to compare with SME's tank-like approach to spinning a record. Comparing the Model 30/2 to a tank isn't exactly fair: the machining is done to higher than mil-spec tolerances. I don't think anyone else building turntables today is capable of this level of construction quality, never mind design ingenuity and fit'n'finish.

So many fanciful pieces of acrylic eye-candy are designed to appeal first to the visual sense, and so many have design "features" that simply don't make technical sense. But this impressive hunk of black metal is *not* the turntable to impress your friends with—until you play a record on it. The no-nonsense SME 30/2 is, as Rockport's Andy Payor describes a turntable's true role, a genuine "reverse machine tool."

From Crate to Playback in Minutes

Weighing 94 lbs, the SME 30/2 comes packed in an industrial strength wooden crate designed for rough handling and easy opening. Unless you've been pumping iron, lifting this turntable out of its box is a two-man operation. Place it on a sturdy stand and you're 15 minutes or so from your first spin (not counting arm and cartridge setup).

First, you inject (with the supplied syringe) a pre-measured charge of oil into a pre-fitted adapter located at the base of the bearing. You then unscrew and save the adapter. Then, all that's left to do is unlock the four suspension towers using the supplied ball-ended wrench, unscrew the motor transit screw using the supplied tool, adjust the motor-height screws using another supplied tool and height adjustment gauge, unlock the main bearing, fit the drive belt and platter, and, finally, level the base via the four threaded feet (a spirit level is built in). At this point you're



SME Model 30/2 turntable

ready to install an SME tonearm, using the supplied mounting plinth of solid brass, or a plinth appropriately drilled for your choice of arm.

All of these preparatory maneuvers reinforce the precision engineering and design acumen that went into the 30/2's construction. The machining quality of the proprietary setup tools and the smoothness and unfailing certainty with which the various locking screws rotate in their threaded sockets—not to mention the feel of the unlocking mechanisms—enhanced my confidence that the buyer's money will be well-spent. The 30/2 is an heirloom product meant to be enjoyed and passed down from generation to generation.

Once the arm plinth has been secured with the four supplied socket-cap screws, all that's left to do is adjust the height of the suspended subchassis, fit the motor-controller cord to the chassis-mounted DIN jack, and plug the unit into the AC. There's no fiddling with setup, and the few adjustments that need to be made have a certainty about them that won't leave you feeling the need to tweak.

Design Rationale

High mass, compactness, and stiffness combine to reduce flexing and vibrating—two things you don't want a plinth to do. The SME 30/2's base of \(^5\mathbb{8}''\)-thick aluminum alloy (plus support pillars)

Description: Belt-drive turntable with O-ring/fluid-damping suspension and three-phase, eight-pole motor with electronic motor controller. Speeds: 33 ¹/₃, 45, 78rpm, all trimmable. Wow and flutter: not specified. Rumble: not specified. Included: soft dustcover, tools, gauges, strobe disc, other accessories.

Dimensions: 17.75" W by 8.67" H by 13.75" D. Weight: 94 lbs.

Serial number of unit reviewed: 0110.

Price: \$25,000 without tonearm. Approximate number of dealers: 25. Manufacturer: SME Ltd., Steyning, Sussex BN44 3GY, England, UK. Tel: (44) (0)1903-814321. Fax: (44) (0)1903-814269. US distributor: Sumiko, 2431 Fifth Street, Berkeley, CA 94710. Tel: (510) 843-4500. Fax: (510) 843-7120. Web: www.sumiko audio.net.

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and its 3/4"-thick suspended subchassis weigh 38 and 35 lbs, respectively, with approximate dimensions of 17.75" wide by 13.75" deep—truly, a compact disc player! An additional bar of aluminum alloy runs the length of the subchassis at about a third of its width for additional stiffness and mass. A damping layer appears to have been added to all surfaces, further reducing the amplitude and Q of whatever vibrational modes remain. Tapping on any of the surfaces yielded a short, lifeless, colorless thup.

Designing a suspended subchassis that will operate at the effectively low resonant frequency of 3Hz that's necessary for true isolation is fraught with difficulties. SOTA and Rockport tried this, and both companies' results were equally problematic. On some SOTA models, the spring-hung subchassis oscillated like a porch glider when the arm's mass would shift back and forth due to record eccentricities. Ditto the air-suspended Rockport Capella, which I reviewed years ago for The Absolute Sound. The motors of both 'tables were hardmounted to their bases; when the subchassis was horizontally deflected, the platter-to-motor pulley distance would vary, causing speed irregularities. On the Rockport, the problem was exacerbated due to the linear-tracking tonearm's relatively high horizontal mass. Fitting the SOTA with an Eminent Technology arm (a popular combo in the early 1990s), with its moving rail and thus even higher horizontal mass, created an even bigger deflection — but even a pivoted arm caused movement.

SME's solution to the "porch glider" effect was to hang the subchassis on 48 specially made O-rings (12 per tower), for a total of 96 strands, in combination with damping systems of a paddle in thick fluid: one damping system per tower. Should you need to replace the O-rings (not likely, unless buying the 'table causes a divorce and your soon-to-be-ex takes a box-cutter to them), it can be done almost instantaneously — even while a record is playing, according to SME. The damping system all but eliminates horizontal deflection, while the adjustability of the degree of damping lets the user adjust the system to various conditions of acoustical and floor-borne feedback.

And, of course, the four towers are easily locked down to prevent fluid spillage during transportation. A.J. Conti's Basis Debut uses a cartridge-based fluid-damping system that's quite effective in its own right, while Harry Weisfeld's TNT and HRX 'tables use air bladders, which must be carefully

under-inflated to keep their resonant frequencies low enough to be effective. However, other than the air-suspension system used in Rockport's System III Sirius, SME's is the most effective isolating system I've seen.

The oversized (13", 17.6 lbs) platter rotates on a 6.75"-long, ¾"-diameter spindle bearing made of high-carbon, chrome-tooled steel machined to a 1µm tolerance (better than mil-spec) and enclosed in a sealed oil bath. The bearing runs on individually fitted sintered bronze bearings enclosed in a massive sealed housing rigidly fitted to the suspended subchassis.

Once a speed has been chosen, the platter reaches speed quietly, smoothly, and quickly.

The three-phase, eight-pole motor is electronically commutated, free of "cogging effect," and weighs 5 lbs. It's isolated on adjustable urethane mounts, and drives the platter via a crowned stainless-steel pulley machined to ±2.5µm. The pulley is secured to a ground tungsten-steel shaft with twin grub screws to maintain concentricity and rotational balance. When you see a pulley mounted with a single set-screw, think about it: for the shaft to fit into it, the diameter of the pulley's mounting hole needs to be wider than the diameter of the shaft. If you secure the pulley with a single set-screw, it must be offset from the shaft's center—no matter how well it's machined, it's not going to be concentric.

The motor drives an 8.25", 5-lb subplatter via a ground-rubber belt. Three selectable, trimmable speeds—33 ½, 45, and 78rpm—are available from the outboard power supply. Once a speed has been chosen, the platter reaches speed quietly, smoothly, and quickly. A greater variation in speed is available for 78s, for which there were so many non-standard speeds.

Other points worth mentioning: As with the far less expensive SME Model 10, which I reviewed in the April 2000 Stereophile, the platter face is made of softer-than-vinyl Isodamp, diamond-turned with a fine scroll that imparts a fiber-like finish said to improve record-

platter intimacy. There's a heavy, screw-on, machined reflex clamp. The heavy brass arm-mounting plate fits on tiny alignment pins and is machined to such tight tolerances that two small "jacking screws" are threaded through the plate—you have to screw them down to lift the plate, and even then, it's not easy. This is indicative of the 30/2's machining quality and fit'n'finish, and it's what you should expect in any 'table costing more than \$10,000. Should you use a variety of tonearms, your setup will be precisely maintained.

There you have it: a no-BS, industrial-grade turntable using *one* high-quality motor plus electronic drive, a crowned stainless-steel pulley, a compact, high-mass plinth system, ultra-low-tolerance machining everywhere, zero use of acrylic, and a truly effective isolation system.

I went into the listening part of the review figuring I'd *like* the sound of the 30/2. As much as the Rockport System III Sirius that I reviewed in August 2000? I sure hoped so, considering the differences in price, size, and complexity. If the 30/2 was *almost* as good as the Rockport—let alone *better*—that would be good news indeed.

Hello, Darkness, My Old Friend

Jim Alexander, Sumiko's analog specialist, stopped by to set up the Model 30/2, though it was so simple that even a hi-fi dealer could do it. The supplied SME IV.VI tonearm (\$3000 without cable) was fitted with a Sumiko Celebration cartridge, so that's what I listened to first.

I was surprised by what I heard. In my original review of the Celebration in the February 2001 Stereophile, I described it as "an extremely well-balanced, richsounding, reasonably detailed transducer. Its pronounced but not excessive bass response helped create big but well-controlled sonic pictures, the midrange was on the warm yet slightly dry side, and the top was extended but certainly not up there with faster, airier, ultra-detailed ... cartridges." I continued: "the Celebration, like the EMT TU-3 Geyger I reviewed [in February 2000], sounded rich and vivid, with a slight but cannily drawn bass bump, a golden midrange glow, and a crisp, grain-free, but not hyper-extended top end."

Mounted on the combo of SME IV.Vi plus 30/2, the Celebration sounded far more neutral, with outstanding bass control and rhythmic certainty. I heard no "bass bump" or "pronounced... bass response" or "golden midrange glow."

While I'd enjoyed the Celebration before, it now sounded much better, more neutral. Of course, the Celebration was "voiced" on the SME 30/2 with SME IV.Vi arm!

The combination of this tonearm, cartridge, and turntable produced a singularly neutral-sounding front-end. Music emerged from velvety quiet, jet-black backgrounds reminiscent of what the Rockport System III Sirius had produced. Bottom-end control and, especially, bass weight were remarkably solid and confident, with impressive pitch definition and dynamic control, and without romantic midbass overhang or warmth.

Those Sumiko boys listened well, but what I heard provoked as many questions as it answered. Was the Celebration sound I'd originally heard the actual sound of the cartridge, accurately reproduced via the Yorke-Immedia's neutral front-end? Or was that front-end adding "character" to a neutral cartridge? If the former was true, the SME arm/table combo imparted a lean, bass-subtractive quality to the sound, neutralizing the cartridge's attractively rich qualities. That would play into the hands of the 30/2's detractors, who say it sounds "antiseptic," unable to convey the "tune" (the Linn Sondek's most oft-cited positive attribute). Which was it?

Some CD-Rs I'd made using the Rockport and the Boulder 2008 phono preamplifier (though not at the same time) were somewhat helpful in answering this question. Too bad I no longer had the Boulder available, but the combination of Manley Steelhead and Model 30/2 was quietly spectacular, even in comparison to nothing but real live music.

Using the SME 30/2 was a consistent pleasure. Once set up, it stayed that way, requiring no further fiddling or maintenance. I divided my listening time between the SME and the budget 'tables surveyed in the January and February 2003 installments of "Analog Corner" (losing SME time hurt!), and the single biggest difference noted between any of those budget 'tables and the SME was the 30/2's pitch-black backgrounds. More than just the welcome silence, dropping the noise floor to free-fall levels had the effect of dramatically upping the dynamic range. No CD player I've ever heard matched the dynamic capabilities of the SME 30/2—I don't care what the specs say.

An electrical engineer named Ronald Baumann wrote a paper someone sent me, arguing that a proper reading of analog vs digital specs confirms what vinyl enthusiasts hear: LPs do have wider dynamic range. But that's for another discussion. For this one, thanks in part to its superbly quiet, ultra-low-tolerance bearing, the 30/2 delivered the quietest jet-black backgrounds I've heard yet from a turntable. Only the Rockport System III Sirius offered competition.

Antiseptic?

Perhaps if you're used to and comfortable with such typical turntable colorations as midbass warmth induced by plinth vibrational energy, and upper-frequency sparkle caused by microvariations in speed and/or spring-suspension resonances, you might find the SME Model 30/2 "antiseptic," as its detractors claim. What I experienced was along with the Rockport System III Sirius — the most neutral, colorless, stable, and revealing turntable I've (n)ever heard. This 'table ruthlessly revealed less-than-perfect cartridge alignment; until this was correct in every parameter, the sound could be cold, off-putting, relentless - like bad digital. But blaming the turntable for delivering the message is ridiculous. Once the setup of any of the cartridges I auditioned had been corrected, the 30/2 delivered the glories of great analog you'd expect and demand from a \$25,000 turntable. Remove the turntable colorations, and the sonic differences among cartridges and arms are clarified and magnified.

Rock-Solid Bass

Bass control, definition, extension, dynamics, and harmonics were better through the SME 30/2 than through any other turntable I've ever heard, including the Rockport. This is the one place where the SME had a decisive edge. Image solidity and textural clarity in the bottom octaves were unsurpassed by a wide margin in my experience—which includes the Boulder-Yorke combo, and the Yorke is damn good on the bottom. You have to experience a familiar, well-recorded timpani thwack through the SME to understand what I'm talking about.

Spectacular Attack!

Most obvious among the SME Model 30/2's many strong suits were its transient speed and attack. Like the Rockport, the 30/2's rendering of the piano on even mediocre recordings was in another league compared to every other 'table I've heard (though my reference Simon Yorke is very good in this

regard). Attack and control of the piano's lowest notes was rock-solid, creating a strong rhythmic foundation for the notes in the middle and at the top of the keyboard. Post-attack, the 30/2 delivered the piano's harmonics with greater clarity, solidity, and seamless integration than any other 'table I've heard—and that includes via the Rockport.

The 30/2 delivered individual piano notes with a physical palpability that made each an event worth notingsomething often heard in concert, but rarely on records. What the Boulder 2008 had managed electronically the SME accomplished mechanically. What the two together would deliver, and whether it would be positive, I can't say. Analogue Productions' 45rpm edition of Bill Evans' Waltz for Debby (AJAZ 9399) delivers the piano cleanly, minus the usual boxiness and fog. Via the SME, this recording had a physical solidity and harmonic richness I didn't think could possibly be on the tape. The set had arrived after the SME, so I needed to go back to the 33 \(\frac{1}{2} \) edition to determine how much of what I was hearing was the record, how much the turntable. The 33 1/3 version, while not as good, was far more impressive than I remember it being, so accomplished was the SME's speed stability and lack of coloration.

Glorious Decay, No Zippy Edge

With its exceptional speed stability, apparent lack of mechanical resonances, quiet bearing, and superb isolation, it was no surprise that the SME 30/2 produced exceptionally solid, stable images — but those qualities also helped the 'table to deliver believable decay and noticeably low harmonic coloration. Like a low-resonance, flatresponse loudspeaker, on first listen the SME 30/2 could sound soft and muted on top, and lacking in detail resolution (but if the cartridge was poorly set up, it could sound bright, hard, and unpleasant). Once I'd adjusted to the 30/2's apparent lack of high-frequency resonances, I realized I was hearing more harmonic and event details, and fewer of the edgy peaks that induce false details.

Losing the peaks radically improved the harmonic believability of instruments while accentuating differences in the high-frequency performance of cartridges. The high-frequency response characteristics of such top-of-the-line cartridges as Koetsus, Dynavectors, van den Huls, Benzes, Transfigurations, Clearaudios, Lyras, Grados, and others vary greatly. With the SME, even subtle tonal differences among cartridges registered; as with the Sumiko Celebration, I found myself surprised by the sounds of even more familiar cartridges.

Lyra's Helikon and Titan cartridges sound extremely neutral to me, though those who like the lusher sound of some Benzes and Dynavectors find them drab and colorless. But instead of sounding even more colorless through the less colored SME, the Helikon and Titan actually sounded richer, more fleshed-out and coherent, than I was used to hearing them through the Simon Yorke. How can that be? I figure the Lyras' extended high-frequency energy (compared with the more muted-sounding cartridges) excited resonances in the Yorke but not in the SME, hence the latter's smoother

One night I went through almost the entire The Complete Studio Recordings of the Miles Davis Quintet: 1965-1968 (Mosaic MQ10-177, 10 LPs), marveling at the precise image of Miles standing before the microphone, and the wealth of musical and thought detail I'd simply never heard before. I pulled out what I'd thought was an undistinguished-sounding disc, an original RCA Ziggy Stardust (UK, SF 8287), and found that it was amazingly distinguished. And I discovered that when mastering engineers play serious games with EQ, the "ledges" stick out obtrusively, as on too many original Mobile Fidelity Sound Lab LPs.

The problem with telling such hyperventilating stories only a few months after my July 2002 review of the Boulder 2008 is that it sounds like the same old song. The fact is, the SME 30/2, like the Boulder, actually is that good—and better. It allowed every record I threw at it to sound more detailed, yet less edgy and artificial. Its sense of rhythmic certainty and its ability to unravel and clarify complex musical passages never failed to amaze. Was it better than the Rockport? In the bass, yes. I'm confident of that, despite the changes in my system since that review. Otherwise, I'd say the SME and the Rockport are at least on a level playing field, with tradeoffs on both sides.

I found no negatives. While I'd found the SME 10 to sound somewhat dry, with perhaps a "skeletal" harmonic quality from the midbass to the upper midrange, the Model 30/2 exhibited no such coloration. The SME 30/2 is perhaps the most tonally neutral turntable I've ever heard. Only the Rockport

System III Sirius, which includes an integral tonearm, is in the same league, and it doesn't stand up to the SME's low-frequency extension and solidity.

Choice of Arms?

My review sample of the SME Model 30/2 came with the SME IV.Vi tonearm, which I covered in the SME 10 review in the April 2000 issue, so I won't repeat myself here. But I did get hold of a Graham armboard so I could

Associated Equipment

Analog sources: Graham 2.2, SME IV.Vi tonearms; Lyra Helikon SL, Lyra Helikon mono, Lyra Titan (prototype), Audio Tekne MC-6310, Sumiko Celebration cartridges.

Digital sources: dCS Elgar/Verdi/Purcell SACD, CDto-DSD playback system; Musical Fidelity Tri-Vista SACD player.

Preamplification: Hovland HP-100 preamp, Manley Steelhead phono preamp.

Power amplifiers: Parasound Halo JC 1 monoblocks, Musical Fidelity Nu-Vista 300.

Loudspeakers: Audio Physic Avanti III, Aerial Acoustics SW-12 subwoofer.

Cables: Phono: Hovland Music Groove, Audio Tekne, Graham IC-70. Interconnect: Analysis Plus Solo Crystal Oval 8, Harmonic Technology Pro-Silway Acoustic Zen, Wireworld Gold Eclipse, Discovery Essence. Speaker: Analysis Plus Solo Crystal Oval 8, Harmonic Technology Magic Woofer. AC: JPS Labs Kaptovator and Aluminata, PS Audio Lab, Wireworld Electra Series III, Shunyata Research Anaconda, Synergistic Research Designers' Reference.

Accessories: PS Audio Power Plant P300, Shunyata Research Hydra power-line conditioners; Sounds of Silence Vibraplane active isolation platform, Symposium Rollerblocks (Tungsten, Grade 3 superball), Finite Elemente equipment stands, Audiodharma Cable Cooker 2.0, Walker motor drive & Valid Points, ART Q dampers, ASC Tube Traps, Shakti Stones & On-Lines, RPG BAD & Abffusor panels.

- Michael Fremer

try two arms. Rick Rosen was visiting when I decided to make the switch. We listened to the SME IV.Vi for a while, then auditioned the Graham 2.2. One of the records we played was a test pressing of the vinyl edition of Alison Krauss's Forget About It (Diverse DIV 002LP), cut from a DSD master. We compared that to the SACD (Rounder 11661-0465-6) on the recently arrived combo of dCS's Elgar DAC, Purcell upsampler, and Verdi SACD transport (currently under review).

Interestingly, the Graham 2.2 (with Lyra Titan cartridge) more closely resembled the SACD than did the SME IV.Vi. Both the SACD and the vinyl through the pairing of Graham 2.2 and SME 30/2 revealed a pleasant, warm cushion behind Krauss's voice. The SME IV.Vi dried that out a bit, giving the overall sound the precise "skeletal" harmonic quality, from midbass to upper midrange, that I'd complained of in the SME 10 review.

In any case, while both arms sounded great on the SME 30/2, Rick and I agreed that, if we were buying an SME 30/2 for my system, we'd go for the Graham 2.2. Detractors of unipivot arms would say that the Graham's inability to control bass energy was adding the warmth we heard and preferred, but we heard it on the SACID too. That was good enough for us.

Conclusions

A tour of the SME factory a few years ago and a visit with designer Alastair Robertson-Aikman convinced me that few, if any, companies in high-end audio can match SME's machining prowess. The company does precision CNC machining and measuring for the medical industry, for Formula One racing, for aerospace and aviation, and, fortunately for audiophiles, for the audio industry.

The SME Model 30/2's precision-machined parts (including an ultraquiet, ultra-smooth-running main bearing), its superb damping and isolation, its high-mass, low-flex plinth, its accurate, stable drive system, and, most of all, its sound or lack thereof, might just make it the finest turntable in the world. It's certainly one of the two best I've (n)ever heard, and the other one costs more than twice as much (but includes an integral arm).

I ended my review of SME's Model 10 with "Can SME's \$22,000 Model 30/2 really be *that* much better?" The answer is "Yes!" Overall, the SME Model 30/2 is the best turntable I've heard.

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47 Laboratory 4715 D/A processor & 4716 CD transport

ack in 1984, when I still had all my hair and began listening to digital audio (*wait* a minute...), I was disappointed with the compact disc. Most of that disappointment came from the format's musical performance, which was poor, but a portion of my dismay came from realizing that my days as a hands-on hobbyist were numbered: I was used to selecting and setting up my own turntable, tonearm, and cartridge, but a CD player defied such involvement. Plugging it in and playing it were all that I or most anyone else could do.

Small consolation came when the first outboard D/A converters were introduced to the consumer marketplace: Some of our freedom to throw money at our stereos had been restored, along with a bit more of the music (sometimes). But the thrill wore off as the numbing sameness of most DACs—and, for that matter, most transports—became obvious. We still had the right to spend money, but that was about all.

Things are better now. We can choose digital technologies that suit our music, or at least our ways of imagining how music ought to be replayed. Even if we ignore such higher life forms as SACD and focus solely on "Red Book" CID, we can buy whatever it is we think we want: oversampling, upsampling, multi-bit, single-bit, one-box, two-box (red-box, blue-box)...

It seems to me that the two-box Shigaraki combo from Japan's 47 Laboratory is aimed more at that old-style hobbyist—the individualist, if you will—than the average audiophile. There are no doors or drawers on the



47 Laboratory 4715 D/A processor & 47 Laboratory 4716 CD transport (front) with power supplies.

4716 transport, and the user must manually clamp the disc on its exposed drive hub. (The manufacturer suggests keeping the lightweight magnetic clamp in place when not in use, to protect the laser lens from dust.) He or she must also press a button to get the player to read the disc's table of contents prior to playback. And the low-contrast display won't even say if the disc is HDCD-encoded or not, let alone what song happens to be playing at that moment.

Of course, there's a bigger reason for that last bit: The Shigaraki combo doesn't do HDCD, because it doesn't have a digital filter. This is an extremely strippeddown digital playback system whose designer, 47 Laboratory's Junji Kimura, has disregarded current digital practice in favor of what he believes is required to preserve and retrieve the most essential elements of the music. Or, more to the point, what *isn't* required.

Let's take a closer look at that transport: The Shigaraki 4716 seems about as simple as such things can get, and the only reason it's even this large is because it uses old-fashioned resistors and capacitors on single-sided boards, rather than the surface-mount approach used in such high-tech things as MP3 players and my daughter's talking Barbie-as-Rapunzel doll. The laser unit is a straight-line, flatgear sled from C.E.C., the only "modification" being its attachment to a chunky slab of ceramic. (The ceramic used,

Description: "Zero-oversampling" 16-bit D/A converter and companion CD-only playback transport, both with remote power supplies. D/A input: coaxial only (S/PDIF). D/A output: phono jacks (unbalanced). Maximum D/A output level: 2.1V. Transport output: S/PDIF on 2 phono jacks. HDCD: No.

Dimensions: 4715: 3" W by 3" H by 3" D (DAC), 3" W by 3" H by 6" D

(power supply). 4716: 11.25" W by 3.25" H (including clamp) by 7.25" D (CD transport), 3" W by 3" H by 6" D (power supply).

Finishes: Dark gray Shigaraki ceramic (DAC, power supplies), brushed stainless steel with integral Shigaraki ceramic platform (CD transport).

Serial numbers of units reviewed: 80072 (DAC, auditioning); 80030 (DAC, measuring); not found (CD transport).

Prices: \$1250 (DAC), \$1750 (CD transport). Approximate number of dealers: 13.

Manufacturer: 47 Laboratory, Kichijoji, Japan. US distributor: Sakura Systems, 2 Rocky Mt. Road, Jefferson, MA 01522. Tel: (508) 829-3426. Fax: (508) 829-3426. Web: www.sakura systems.com.

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Shigaraki, is the origin of this product line's name.) The main circuit board also looks distinctly OEM, its only alterations being the addition of metal heatsinks to a few of the active parts. Digital output is S/PDIF coaxial only, although the user has a choice of two RCA jacks: one in which DC is present, and one with a capacitor for blocking same. The former is intended for use with the companion 4715 D/A converter.

The 4715 is surely among the smallest DACs in high-end audio, and the main reason for that is Kimura's desire to keep signal paths as short as possible. Mission accomplished, I'd say. The converter is the more radical of these two products: It has no digital filter chip—so it can run neither resolution-en-

hancement schemes à la HDCD nor bog-standard oversampling—and it doesn't even contain an analog filter. What it *does* contain is a total of only 20 parts: 7 resistors, 3 film capacitors, 6 electrolytic capacitors, 2 voltage regulators, and 2 chips. Of the last, one is a Philips TDA1543T 16-bit dual DAC, the other a Crystal CD8412 input receiver. That's it—that and a tiny circuit board, a few jacks, and a neat-looking ceramic box. There isn't even an opamp for converting current to voltage at the output, because that's done passively, with two resistors.

Now let's go back to the DAC's curious lack of oversampling, an otherwise common scheme in which digital spuriac are pushed into a higher frequency

range, where they can then be removed by a more benign filter than the rightly maligned "brick walls" of yore. (I admit that such "make things worse before you make them better" techniques appeal to me, at least in theory — like early Dolby NR, or the fact that fishhooks. once embedded in your skin, have to be pushed in deeper before they can be got out.) The reason for omitting an oversampling filter has to do with that other CD bugaboo, jitter, which, as you know, refers to timing errors in the digital domain. Japanese audio writer Ryohei Kusunoki describes a parameter called "timing-error threshold," which is the amount of jitter allowable in a digital system before it corrupts the post-conversion waveform. Kusunoki predicts a

Measurements

Shipping damage prevented me from measuring the sample of the 4715 D/A converter that had been auditioned by Art Dudley (serial no. 80072). Yoshi Segoshi of 47 Laboratory's US distributor therefore arranged for me to borrow, at very short notice, a sample (serial no. 80030) from Manhattan audiophile Steve Yagerman. My thanks.

I used a standard 75 ohm S/PDIF cable to connect the 4715 to the 4716 CD transport, using what I understood to be the latter's appropriate RCA jack. The transport offered excellent error correction, coping with gaps in the CD's data spiral up to 2mm in length without audible glitches. The 4715's maximum output at 1kHz was 0.1dB below the CD standard's 2V RMS. This was for the left channel; the right channel was another 0.1dB below this. The DAC's output impedance was quite high, at 2.3k ohms across the audioband. This would suggest that a preamp with a high input impedance would be optimal. However, as will be seen later, there are other things at work here.

Looking inside the 47 Laboratory components, I was struck by the extent to which the designer has been able to eliminate circuitry that others would think important. The separate power supplies, for example, consist of a transformer and a single diode, while a look inside the 4715 left me gasping at both the minimal circuitry and at the time-consuming care with

which it had been assembled—some wires were hand-soldered to the individual pins of the surface-mount chips!

Without either digital or analog reconstruction filters, the raw DAC output is fed directly to the output jacks. This can be seen in fig.1, the waveform of a full-scale 1kHz sinewave. What would, with conventional CD playback, be a clean sinewave constructed by the low-pass filters (see www.stereo phile.com/showarchives.cgi?25) instead broken by 44 stairsteps. It does look like a sinewaye, but at high frequencies, the data-point sparseness results in something more like a squarewave (fig.2). It's important to note that the harmonic content that differentiates between 44.1kHz-encoded sine- and squarewaves lies above 20kHz for signal frequencies above 6.7kHz, so the difference should not be audible. Again, however, it is fair to note that there are other factors to take into consideration.

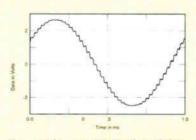


Fig.1 47 Laboratory 4715, waveform of 1kHz sinewave at OdBFS.

The 4716's data output does pass on the pre-emphasized data flag, but the 4715's minimal analog circuitry means that it cannot provide the necessary de-emphasis. As a result, the small number of pre-emphasized CDs will suffer from a severe treble boost (fig.3, top pair of traces). The vast majority of CDs, however, will be reproduced with a slight top-octave rolloff (fig.3, bottom traces).

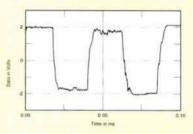


Fig. 2 47 Laboratory 4715, waveform of 20kHz sinewave at 0dBFS.

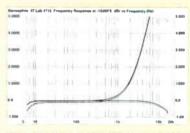


Fig. 3 47 Laboratory 4715, frequency response without (top) and with (bottom) de-emphasis, at -12dBFS into 100k ohms (right channel dashed, 0.5dB/vertical div.).

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timing-error threshold of 173 picoseconds for a 16-bit digital playback system with a 44.1kHz sampling rate (1+44.1kHz+216=173).

In other words, you can have up to 173ps of jitter in the digital domain before it distorts the analog waveform. However, if you apply that same mathematical distribution to an 8x-oversampling scheme with its 20-bit word length, you'll see the timing-error threshold drop to 1.35ps. The point being: Oversampling makes your waveform vulnerable to such a low level of jitter that the jitter can't realistically be avoided or removed. Interesting—and I'm extremely curious to see what John

Atkinson uncovers in his measurements of the Shigaraki system.

There are no big ease-of-use issues here, apart from the aforementioned need to clamp the disc and to coax the system into manually reading the ToC, and the fact that you can hear some motor noise if you keep this exposed-hub player close by and at ear level. (I don't think that intruded too much, and in any event the noise can be avoided with a bit of placement ingenuity.) The same model of 12V power supply is included with each; these, too, are enclosed in gray Shigaraki ceramic boxes that match the converter and the base of the transport.

As with the Final Laboratory components I wrote about in the January 2003 issue, I admire the fact that these and other 47 Lab products are no bigger or heavier than they need to be: Energystoring bulk has been banished, and there is no more vacant real estate inside either box than might be required to maneuver parts for servicing.

The only downside is that the DAC, in particular, is too light to be conveniently used with certain cables. The Green Hornet digital cable from Creative Cable Concepts, which I like, is so stiff that it tends to push the little Shigaraki DAC around, and I have a hard time getting both the transport and

Measurements

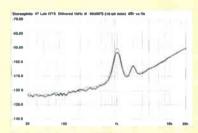


Fig. 4 7 Laboratory 4715, ½-octave spectrum of dithered 1kHz tone at -90dBFS, with noise and spuriae (16-bit data, right channel dashed).

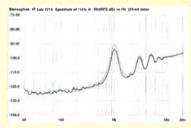


Fig. 5 47 Laboratory 4715, ½-octave spectrum of dithered 1kHz tone at -90dBFS, with noise and spuriae (24-bit data, right channel dashed).

Channel separation (not shown) was only fair at 55dB (L-R) and 61dB (R-L) at 1kHz.

Fig.4 shows the \(\frac{1}{3} - \text{octave audioband} \) spectrum of the 4715's outputs while it decoded dithered 16-bit data representing a 1kHz tone at -90dBFS. The noise floor seen is primarily due to the dither; commendably, considering the 4715's half-wave-rectified topology, power-supply spuriae are absent. However, some second-harmonic distortion is apparent in both channels, while the left channel shows some negative linearity error. Increasing the data word length to 24 bits (fig.5) minimizes the second harmonic, but the third through ninth harmonics make appearances, due to the Philips DAC chip truncating the incoming data to 16 bits and thus eliminating the 24th-bit dither. This will not be an issue for CD playback, but it will be if the 4715 is used with hi-rez data sources. A similar but wider-band analysis performed with the DAC being fed 16-bit digital black data

(fig.6) reveals the presence of energy in its output at the CD's 44.1kHz sample rate and its odd harmonics.

Plotting the 4715's output amplitude against absolute signal level gives the traces of linearity error in fig.7. As expected from fig.4, the right-channel behavior is excellent, the left channel less so. The effect of noise in this graph is less than I would have expected from the minimal power supply and the passive I/V conversion. However, the lack of any output filtering results in a poor-looking waveform with an undithered 1kHz tone at –90.31dBFS, with sharp spikes of ultrasonic energy evident at the zero-crossing points (fig.8).

Without an output buffer, the DAC chip is exposed to the vagaries of the outside world. To my surprise, it produced higher levels of harmonic distortion when driving high impedances than the usually more demanding low impedances. This is illustrated in figs. 9 and 10, taken with the 4715 driving a full-scale low-frequency

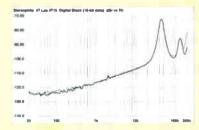


Fig. 6 47 Laboratory 4715, 1/3-octave spectrum of digital black, with noise and spuriae (16-bit data, right channel dashed).

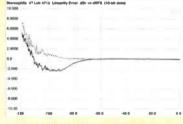


Fig.7 47 Laboratory 4715, departure from linearity, 16-bit data (2dB/vertical div., right channel dashed).

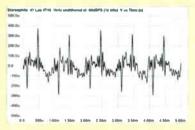


Fig.8 47 Laboratory 4715, waveform of undithered 1kHz sinewave at -90.31dBFS, 16-bit data.

the DAC to face the same way on my table. Is *that* why some manufacturers put such thick faceplates on their gear?

Listening

I spent a longer time listening to the 4715 DAC than to the 4716 transport, partly because the former has been on the market longer, and partly because I had reviewed the DAC a short while back, for *Listener* (Vol.8 No.3). Taken together, the Shigaraki DAC and transport imparted the same qualities to my system that I heard using just the DAC with a variety of other transports: Music sounded softer, more distant, and alto-

gether a bit less hi-fi than when I use my Sony SCID-777ES SACID player as a standalone CID player. Yet, ironically or not, the 47 Lab combination rendered music just a little bit more involving, with slightly improved rhythmic capabilities in particular.

Take, for example, the Brandis Quartet's recording of Beethoven's String Quartet in B-flat, Op.18 No.6 (Nimbus NI 5353): It's hard to find a CID player anywhere, of any technology, that makes music like this compelling enough for me to listen with total concentration all the way through—not that I don't enjoy the genre, but rather

because, for me, most of this music's appeal is carried by the rhythmic subtleties brought to it by first-rank musicians, and subtle rhythmic distinctions are the sorts of things that digital audio, in general, creams. The Sony SCID-777ES, for instance, does only a fair job: Its ("Red Book") CD performance simply isn't good enough to get at the heart of this stuff.

But the Shigaraki was just better enough to say so in that regard. Although I hesitate to use the word, charged as it is with so many unpleasant Ben Sidran-isms, the Brandis played with more verve when heard through

Measurements

sinewave into 100k and 600 ohms, respectively. Into what would be considered the "safe" load (fig.9), a veritable picket fence of potentially audible distortion products is evident, with the third harmonic the highest in level at -52dB (0.25%). But into the very low load (fig.10), the harmonics either disappear or drop below -80dB (0.01%), with the second now the highest in level.

This perverse behavior was also evident when I tested the 4715 for high-frequency intermodulation: lower load impedances reduced the level of classic intermodulation products.

However, the absence of an output low-pass filter means that the mix of 19kHz and 20kHz tones I use to test this performance aspect results in aliased tones being dumped back down into the audioband, which can be seen in fig.11. The audibility of this behavior is unpredictable, as it will very much depend on the music's spectral content. However, I do wonder if it is associated with the softness of the 4715's sound noted by AD.

Despite the designer's claims, an area where the 47 Laboratory gear did trip over its own feet was in its rejection of word-clock jitter. I used the Miller Analyzer to search for sidebands in the 4715's analog output that would result from jitter, among other things, while the 4716 transport

played a disc containing a high-level 11.025kHz tone over which had been laid a 229Hz squarewave at the LSB level.

The absolute jitter level was a high 1.47 nanoseconds peak-peak. The resultant narrowband spectrum is shown in fig.12; it can be seen that almost all the jitter components lie at 229Hz and its harmonic multiples to either side of the 11.025kHz tone (red numeric markers). I suspect that this, too, contributed to the audible softening of the 4715's presentation. But apart from these and the low-frequency jitter sidebands (purple circles), the 4715's noise floor is actually a lot cleaner than I expected.

In fig.12, the low-frequency sidebands indicated with a gray "5" lie at

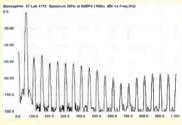


Fig. 9 47 Laboratory 4715, spectrum of 50Hz sinewave, DC-1kHz, at 0dBFS into 100k ohms (linear frequency scale).

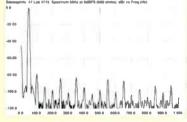


Fig.10 47 Laboratory 4715, spectrum of 50Hz sinewave, DC-1kHz, at 0dBFS into 600 ohms (linear frequency scale).

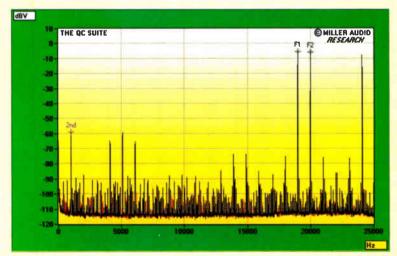


Fig.11 47 Laboratory 4715, HF intermodulation spectrum, DC-25kHz, 19+20kHz at 0dBFS into 8k ohms (linear frequency scale).

the 47 Lab combo. I thought that the instruments lost a bit of color through the Shigarakis by comparison, but that difference was small.

In general, the Shigaraki was also well-textured, and could sound rich enough when called on to do so, although its version of "richness" was different from that of other hi-fi gear: It sounded deeply but not brightly detailed. The lowest cello strings thrummed well through this player, as did the strings of Tony Rice's famous old Martin guitar on his recording of Bill Monroc's "Jerusalem Ridge" (Church Street Blues, Sugar Hill SH-CI)-3732).

There were other differences between the Sony and the 47 Lab combo. of course. The Shigarakis sounded more midrangey, even to the point of some not-unpleasant pungency on certain instruments and voices. Looked at another way, the Sony, which is not at all bright-sounding in the pejorative sense — and a great many other players of my experience—reach further into the frequency extremes. The very full, sumptuous electric bass in Aimee Mann's "Humpty Dumpty" (Lost in Space, SuperEgo SE 007) was less so when played on the Shigaraki combo. At the same time, the Shigaraki had less shimmer and sense of air, and there was less precision in stereo image placement.

On "The Last DJ," from Tom Petty's recent album of the same name, the 47 Lab combo again showed itself to be a shade more on the money rhythmically, if not quite so accomplished in a hifi sense. Here the percussion and the attack components of the deepest notes in the bass line were more in sync: The song was propelled more effectively although a song this great can't easily be blunted by anything. On the same album's "Have Love, Will Travel," with its very real-sounding lead vocal which, interestingly, isn't terribly distinct spatially but is nonetheless clear and present—the 47 Lab combo again lacked the Sony's sparkle and air, but for all that, with the Shigarakis there was no less "there" there. If anything, for whatever reason, Petty's amazing voice came across as more real through the 47 Labs.

Given the strengths I've described here, I thought I'd prefer the Shigaraki combination on Strauss's Tod und Verklärung (Lorin Maazel, Bavarian RSO, RCA Victor 63265-2), where the ability to maintain a precise rhythmic pattern against sustained notes and chords is so important. But, good as the Shigarakis were, I thought my Sony did a slightly better job. There, the Shigarakis could've used that extra bit of color and (especially) bass depth, to complement their already fine temporal abilities. And did the Sony sound a little cleaner and the 47 Lab combo a little noisier in the very quietest parts? Or was that, in fact, a distraction of the Shigaraki transport's noisier motor drive?

The 47 Lab combination was emotionally satisfying nonetheless. Try something amateurish-but-sincere like my 1991 collection of the choral music of Randall Thompson (Arkay AR6110), a DDD recording so crappy I swear I can hear the quantizing noise on some numbers. Yet the charmingly dated mid-20th-century harmonies, not to mention Robert Frost's motley moods, came across directly and entertainingly, maybe even uniquely so. Or the great wail and verve (there's that dann word again) of Clarence White's B-bender Telecaster on The Byrds' Live at the Fillmore, which is so strong a dose of good guitar playing you'll want to put the intro to "Drug Store Truck Drivin' Man" on repeat for a while: The Shigarakis brought out the best in that one.

You should also try Barbirolli's Mahler Third, released way posthumously on BBCL 4004-7. The Shigaraki

the ±75Hz subcode frame frequencv; the ones indicated with purple numeric markers lie at ±17.6Hz and its harmonics. These sidebands appear to be associated with the 4716 transport. When I used the 4716 to drive other processors, these sidebands appeared in their analog output spectra; if I drove the 4715 with my usual PS Audio Lambda transport, they disappeared from the 47 Lab's output spectrum (though the data-related sidebands were as strong as before). Though the noise floor in fig.12 is about 6dB higher in level than that of the best CD playback systems I have measured, it is lower than the noise floor of other players that use passive I/V conversion—the Balanced Audio Technology VK-D5, for example (see www.stereophile.com/showarchives.cgi?570:7).

The 47 Laboratory components had idiosyncratic measured behavior that, while not as bad as I would have expected in some cases, certainly suggests that they will have readily identifiable sonic characters. And a preamp with a lower-then-usual input impedance would appear to be essential to getting the most linear performance from the DAC.

-John Atkinson

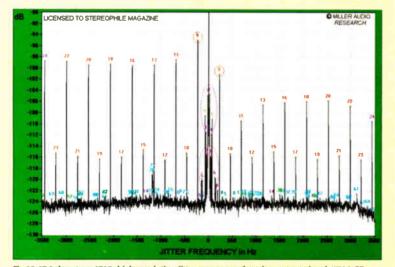


Fig.12 47 Laboratory 4715, high-resolution jitter spectrum of analog output signal, 4716 CD transport via 1m, 75 ohm S/PDIF link (11.025kHz at -6dBFS sampled at 44.1kHz with LSB toggled at 229Hz). Center frequency of trace, 11.025kHz; frequency range, ±3.5kHz.

Stereophile, March 2003 87

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Audio-Video L • O • G • I • C

3025 100th St. Des Moines, IA 50322 515-727-2279 combo had a direct, emotive, and ultimately extremely involving way with this music, even if the top end wasn't as sparkly as that of the Sony or of numberless other players. In fact, when you get right down to it, the 47 Laboratory combo was a little quacky by comparison-so midrangey it made Barbirolli sound almost like Toscanini, if you know what I mean. The Sony is also better at letting you hear Sir John's rather loud cantabile during Kerstin Meyer's "O Mensch! Gibt acht!" But for their part, the Shigarakis were better at getting the tears flowing at the end of the great Adagio. There you go.

Conclusion

If I were describing the 47 Laboratory combo to a friend and I didn't have to worry about being circumspect and professional, I'd put it like this: 47 Lab equipment, in general, performs like classic mid-1980s Naim gear, but sounds more crisp and has significantly more color, if a little less "authority." 47 Lab's digital gear follows suit, except you can leave out the part about sounding more crisp.

Junji Kimura's designs tend to focus on the essence of the music they're playing, sometimes at the expense of hi-fi trappings and sometimes not. For all its rhythmic strengths, the Shigaraki CID system was easy to listen to, with no high-frequency nasties. It had decent color, if not quite the last word, and no less drama than any other "Red Book" playback system I know. It even imaged acceptably well, although that is far from its raison d'être.

Associated Equipment

Digital Source: Sony SCD-777ES SACD player.

Preamplifiers: Fi, Audio Note M3.

Power amplifiers: Fi 2A3 Stereo, Audio Note Kit One.

Loudspeakers: Lowther PM2A drivers (15 ohm version) in modified Medallion horn enclosures, Linn Sizmik subwoofer.

Cables: Digital: Creative Cable Concepts Green Hornet. Interconnect: Audio Note AN-Vx, Nordost Valhalla, plus homemades. Speaker: Audio Note AN-SPX, Nordost Valhalla, Nordost Flatline.

Accessories: Mana stands under turntables, Shun Mook Mpingo discs. —Art Dudley

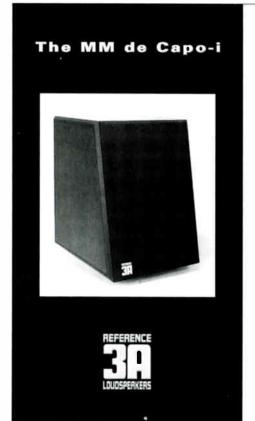
The way I hear it, some audio products have a better or worse sense of flow than others, of presenting music as the involving continuum it really is, rather than as just a succession of pretty-sounding stills - in much the same way that different conductors can be better or worse at finding and unraveling the singing line at the core of virtually all Western music. In this regard, I heard no huge differences between the Shigaraki combo and my Sony SCD-777ES SACD player playing CDs: Sometimes the Shigarakis seemed as if they might have had slightly better flow, but much of the time they sounded no better in that regard (although they never sounded worse). The distinctions I heard were no greater than might be accounted for by a headache or a bad mood.

Incidentally, I consistently hear a better sense of flow—drastically better—with SACD than with any "Red Book" CD system. SACD sounds more like analog and more like real music to me, which is why I like it.

Overall, I slightly preferred the way the Shigaraki combination played music as compared with the standalone Sony, although the difference wasn't big enough on most music to make me want to give up one for the other. I do, however, enjoy the Shigarakis as things, if you know what I mean, and I enjoy using them. I like the ideas behind them, which I think is an important thing to confront and admit.

Both the 4715 DAC and the 4716 CD transport are largely hand-built, the former obviously more so once you look inside it. Neither offers superb value for money; neither offers notably poor value, either. If anything, the 4715 DAC is a better value for what it is, an observation echoed in and reinforced by its performance. Although my job is to tell you how this package performed in my system, I can't escape the fact that the DAC was the more musically influential of the two.

If I didn't care for SACD as a whole, and I were just starting out with "Red Book" digital, I'd consider buying both Shigaraki components. As it is, and based on my experience, I'd lean toward combining an inexpensive SACD player with just the Shigaraki DAC doing the conversion honors for regular CDs: That's a system to be reckoned with for the listener who stresses music over sound and wants to enjoy the (musical) best of both worlds right now.





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Hifi Farm Newswire

News for the world's audiophile community Issue 108 · Volume 1 · Number 9 · Page 1 of 2

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Audiophiles Begin to Embrace and Install 5.1 DVD-Audio Systems

In This Issue

Bringing The Best 5.1 DVD-Audio System Nome

Stove Bavis, Stower of Militar AIX Records Captures 192 kHz Music for New Sampler

Alternative Mixes: A Unique AIX Feature

Mark Waldre

Recent AIX Records Reviews & Comments

Things are slowly but surely beginning to change in the high-end audio business...and the trend promises to enhance all music experiences for die hard music fans at every level. The move from traditional stereo to multi-channel and the adoption of high-resolution playback systems is bringing new levels of fidelity into homes. When HiFi Farm first began to embrace the world of surround sound and DVD-Audio some many month ago, there was a constant flow of interested music fans coming into our showroom to experience for themselves the tremendous improvements in sonic accuracy and emotional impact inherent in the new format. Those initial listening sessions and subsequent follow-ups have led many to acquire the same system that we installed in the Los Angeles studio of AIX Records, one of the leading producers of DVD-Audio software. The entire first shipment of Piega speakers fresh from Switzerland and Aloia amplifiers from Italy has been distributed to consumers. The response has been overwhelming.

In all my years of researching, recommending and selling high-end audio gear, I

have never seen this level of excitement in a new format. A recent DVD-Audio demonstration in our newly designed 5.1 channel surround facility was typical. The customer, a longtime friend and dedicated two-channel audiophile, called me and asked to come by for

an extended explanation and listening session of 5.1 hardware and discs. We set up an appointment, blocked off time in the room, closed the doors, turned off the cell phones and spent two and half hours immersed in 5.1 music. We talked about stereo systems, sound stage, mixing variations and frequency and dynamic resolution. At regular inter-

vals, we auditioned a particular piece of music to verify and compare our thoughts with the realities of high-resolution audio playback. The results were exactly as I expected the customer exited the demo room and promptly ordered a complete 5.1 channel DVD-Audio system consisting of Piegas, Aloia, Cardas and Integra equipment. He commented, "the intimacy of the sound, the range of the dynamics and the shear sense of involvement that I heard was unlike anything I've ever experienced while listening to stereo." I couldn't agree more.

Of course, not everything he wanted is available in high-resolution surround but the number of titles is increasing daily and the number of companies like AIX Records producing new 5.1 tracks at 96 kHz/24 bits is growing as well. Close your eyes and listen...you won't be disappointed!

HiFi Farm is an independently owned Audio retailer. Sanibel Sound is an independently owned distributer. Steve Bavis is a consultant to and director of Sanibel Sound in charge of product acquistion. Steve is the owner of MiFiFarm.

192 kHz/24 bits on New AIX Sampler!

AIX Records has just about exhausted its supply of its acclaimed FREE sampler and has been busy preparing an upgraded version for distribution at the 2003 CES show in Las Vegas. Included

will be a variety of new tracks recorded at 96 kHz/24 bits AND several stereo tracks recently recorded at 192 kHz/24 bits! Audiophiles will be able to compare the stereo "ultra high-resolution" tracks with the 96/24 versions mixed in stereo and 5.1.

The new recordings were captured "live" using the High Speed Mic Pre from Audio Upgrades into a Model-2 HDCD Analog to Digital Converter supplied by Euphonix/ Pacific Microsonics and was recorded on a Sonic Solutions HD Digital Audio Workstation.



Alternative Mixes: An AIX Feature

of multichannel DVD-A..."

The idea of mixing music into more than just two speakers is now new, it's been happening for decades in movie theaters and concerts. The really important question is how one chooses to distribute the individual instruments [channels] among the increased number of speakers. As a producer and recording engineer of multi-channel. high
"...AIX discs fulfill the promise

recording engineer of multi-channel, highresolution recordings, I'm regularly confronted with decisions

regarding instrument placement within a 5.1 channel surround mix. However, rather than force my personal/artistic preference on all purchasers of AIX DVD-Audio products, as almost all other labels do, I opted to include three different mixes on each disc, in an attempt to cater to the different tastes of our

AIX Records Catalog Listing:
80005 Brahms Piano Quintet, Op. 34
80006 Beethoven 6th & Respighi Pines
80014 Frederic Chopin, Four Ballades
80009 Piano, Bass & Drums, Jazz
80011 The Latin Jazz Trio, Jazz
80010 The Paul Smith Trio, Jazz
80018 Nitty Gritty Surround, Bluegrass
80013 Peppino D'Agostino, guitar/pere.
80012 Zephyr: Voices Unbound, voices
80015 The Jim DeJulio Quintet, Jazz
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Stravinsky/Ravel - Firebird/Bolero

All of the recordings in the AIX catalog were recorded, mixed and mastered at 96 kHz/24 bits. Each disc contains at least four distinct mixes: Stereo PCM, 5.1 MLP, 5.1 "Audience" Dolby Digital & 5.1 DTS "Stage". Multiple pairs of stereo mics were used (up to 24 tracks) during the recordings but no compression/limiting, EQ, or artificial reverberation was employed. These are REAL high-resolution tracks!

customers. All of our discs, therefore, include a high-resolution, stereo PCM mix, a so-called "stage" 5.1 mix and an "audience" 5.1 mix.

The "stage" mix is admittedly my personal favorite. As a musician, I am comfortable sitting close to the sources of the sound AND having

the sound emanate

from all directions as

Michael Fremer if I was sitting on the stage with the group as they performed for each other...not arranged to present their music to an audience. The "audience" mix changes that perspective by moving the listener to the "best seat in the house" position. The surround channels in an audience mix contain only room ambience in this model. Finally, there is a stereo version created from a limited number of microphones, usually a stereo pair in front of the musicians and the

omni-rectional pair placed out in the house

to capture reverberation.

The DVD-Audio/Video discs that AIX Records produces and releases have two sides: a DVD-Video side and a DVD-Audio side. On most of the titles, the DVD-Video side is actually a dual-layer disc, meaning it has twice the amount of data as a regular disc. Once the mixes have been created, a decision must be made as to what encoding method will be used for each mix. The options are Dolby Digital. DTS, PCM and MLP [Meridian Lossless Packing]. Due to storage limitations and playback compatibility, the highest quality encoding scheme [MLP] can be applied to only one mix perspective. I have to choose which of the two 5.1 mixes will be presented in full high-resolution quality. Most of titles that I've released thus far use the "audience" mix encoded in MLP for the DVD-Audio side [the exceptions are Nitty Gritty Surround and Zephyr]. I make this choice because it seems most reviewers and audiophiles prefer to hear music coming from in front of them...if I'm wrong please feel free to contact me with your thoughts.

The possibilities for 5.1 channel surround mixing are as varied as there are mixers working in the area...everyone has their own tastes. It may be true that some music benefits from a "stage" perspective

More AIX Reviews & Comments

"If you want to hear the full potential of DVD-Audio, check out the AIX discs. The represent the state of the art in original made-for-DVD-A multichannel recordings."

Michael Fremer - Stereophile Guide to Home Theater

"At the 2002 Home Entertainment Show the AIX DVD-As were, by far, the most impressive multi-channel demonstrations."

The 2003 Music Direct Catalog

"[Zephyr:Voices Unbound]...but it's the full-boat MLP 5.1 "stage" mix that provides an exceptionally involving experience: You're in the middle of that circle and these people are singing for you."

Andrew Quint - Golden Ear Award 2002/Absolute Sound

"[Latin Jazz Trio] Here is another triumph from Mark Waldrep and his fledgling AIX label. ...he has captured them in sound that has just the right amount of everything: presence, clarity, and warmth."

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John Henry www.audaud.com

while other repertoire works better from the "audience" point of view, but I'm not yet convinced that a single "mixing" philosophy will come to dominate the world of 5.1 music.

Mark Waldrop, Ph.D. is the founder and chief engineer at AIX Records, a company dedicated to recording and producing multi-channel music using state-of-the-art, high-resolution equipment. He is also on the DMA faculty of CSUDH in SeCal. Email him or visit the website:

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MSB Platinum Link Plus D/A processor

have a warm spot in my heart for MSB's approach to product development. They come from a tweaker heritage and still practice the art: MSB will happily install a 24bit/192kHz upsanipler in your CD player, a 5.1channel input in your DPL amp or receiver, and true 24/96 outputs in your DVD player. Their standalone products, starting with the original Link DAC, are designed from the start to include space for later additions and enhancements. In fact, the most significant trend I see in the progression from the original Link DAC to the II and III is the ease and convenience for the user of enhancements such as balanced outputs, HDCD, upsampling, and better power-supply options. MSB gilds the lily by offering Half-Nelson, Full-Nelson, and Gold versions, each with a higher quality of parts.

Of course, one can go only so far with such an approach, and MSB acknowledges this by offering their Platinum Link Plus DAC and its sibling, the Platinum Reference CD player. These designs start with a much more technologically advanced platform than the regular Link series: four dual 24bit/100Mbit/s, sign-magnitude, R2Rladder discrete DACs which are custom designed by MSB. The intent is to achieve true 24-bit performance by paralleling, for each of the stereo channels, two DACs with 23-bit resolution per signal phase. These outputs are combined to drive each side (+ or -) of the balanced output directly without any additional analog stages or filters. For coax output, the outputs are combined differentially. In both cases, DC offset is supposedly nonexistent; therefore, no servos or (de)coupling caps are required on the 75 ohm outputs.

Of course, we expect upsampling and other options with an MSB product, and the Platinum Plus has them aplenty. Just look at the front panel: Beginning on the upper left, the first button-LED pairing, labeled 4x Upsample On, indicates that incoming data can be upsampled 4x, up to 192kHz, or left as is. The Option button-LED is reserved for future use with an optional remote-controlled stepped



MSB Platinum Link Plus D/A processor

attenuator. Below this are the Input Select button and its associated row of LEDs, which indicate which of the five inputs is in operation. Left in Auto mode, the Platinum Link Plus will select the active input by itself; you can override that selection manually.

At the top of the right-hand column of button-LED pairs is one for 16x interpolation. Pressing this button switches between 8x and 16x. While MSB's manual says that "Interpolation is much like oversampling," it offers no further distinction between the two. It does suggest that "16x is more appropriate for low sampling rates and 8x would be better for 96kHz or 192kHz sources."

Description: Platinum Link Plus Sign-Magnitude Ladder digital-toanalog converter. Inputs: 5 digital, S/PDIF coax, S/PDIF TosLink, AES/EBU, 2 MSB Network, 1 pair balanced (XLR) analog bypass. Outputs: 2 pairs analog output jacks XLR). Sampling 32-96kHz input (192kHz via MSB Network). Upsampling ratio: 4x. Interpolation: 8x, 16x. Dynamic range: 136dBa. Signal/noise ratio: 136dB. Channel separation: >130dB. THD+noise: 0.006%. AnaNext down is Filter On, which adjusts the slope of the digital filter. MSB suggests the default gentle slope for higher sampling rates and the brick-wall filter for low sampling rates, but, again, without real explanation. The bottom button-LED, Phase Invert, inverts the output polarity in the digital domain.

Compared to the front panel, the rear is fairly self-explanatory. The upper left has one pair each of RCA and XLR output jacks, along with a pair of analog XLR inputs, which bypass the DAC. MSB suggests that the latter might be used for the analog outputs of an SACD player. This turned out to be quite handy—I could alternate between

log outputs at OdB: 3.6V RMS (RCA), 7.5V RMS.

Dimensions: 17" W by 3.5" H by 14" D. Weight: 36 lbs net.

Serial number of unit reviewed: 15053.

Price: \$3995. Approximate number of dealers: 15.

Manufacturer: MSB Technology Corporation, 14251 Pescadero Road, La Honda, CA 94020. Tel: (650) 747-0400. Fax: (650) 747-0405. Web: www.msbtech.com.

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SACDs and CDs with the Sony XA-777ES SACD player and, with the MSB's auto-switching of active inputs, get CD through the Link Plus's conversion and SACD direct. I could also easily compare the D. A conversions of the MSB and the Sony, but no more easily than with my preamp.

The middle portion of the rear panel has AES/EBU, coax S/PDIF, and TosLink digital input jacks. On the extreme right are two CAT-5 connectors—proprietary MSB Network inputs that can accommodate multiple inputs, channels, and control lines. I had no devices with which to use this; see www.msbtech.com for a full explanation. At the bottom of the rear panel is a standard IEC power connector, a voltage selector switch, and a DIN connector to provide power to an auxiliary device.

The Platinum Link Plus has the same footprint and is twice as high and exact-

ly twice as heavy as the Link DAC III. The Link Plus's built-in power supply is the P1000 Power Base, which I thought was a profound improvement when I reviewed the III in September 2000.

DAC on the Block

I seem to experience a feeding frenzy of DACs every year or two, and the Platinum Link Plus arrived while I was in the midst of the latest one. On the one hand, these frenzies make it easier

Measurements

he MSB Platinum Link Plus locked on to S/PDIF and AES/EBU datastreams with sample rates ranging from 32kHz to 96kHz. However, at the highest sample rates, the 4x oversampling button changed to 2x oversampling, meaning that the DAC chips run at the same high rate when fed 44.1kHz and 88.2kHz data. The maximum output level at 1kHz was 7.046V from the balanced XLR jacks, 3.522V from the unbalanced RCAs. The latter is almost 5dB higher than the CD Standard's 2V RMS. meaning that care needs to be taken to match levels in A/B comparisons. The Platinum didn't invert absolute polarity as long as the front-panel LED wasn't lit. The source impedance was 50 ohms from the unbalanced outputs, and double that, as expected, from the XLRs. Both figures are still on the low side, however, which will minimize compatibility problems.

CD frequency response was dead flat (fig.1, top pair of traces), and while the response with de-emphasis had a very slight swayback (fig.1, lower traces), this will not have an audible consequence. Fig.1 was taken with the brickwall filter switched out of circuit. To my surprise, switching in the filter had no effect on CD response. However, it did affect the ultrasonic rolloff with 96kHz-sampled data (fig.2, top traces), extending the flat response to 42kHz. Without the filter, the response starts to roll off above 29kHz, reaching the -3dB point at 45kHz. This premature ultrasonic rolloff is associated with betterdefined time-domain performance, which some commentators feel gives a more analog-like sound quality.

Channel separation was better than 120dB in both directions from both

sets of outputs, which is superb performance. However, traces of powersupply noise in the Platinum's outputs can be seen in fig.3. This graph shows spectral analyses of the DAC's analog output while it decodes both 16- and 24-bit data representing a dithered 1kHz tone at -90dBFS. The drop in the higher-frequency noise floor resulting from the increase in word length is almost 24dB, implying a true 20-bit dynamic range, which is extraordinary! However, the presence of tones at 60Hz (due to magnetic coupling from the AC transformer) and 120Hz (due to ripple from the fullwave-rectified power supply) interferes with the MSB's superb DAC performance at low frequencies.

It's fair to point out that these spuriae, ranging from -117dBFS to -136dBFS, aren't going to bother anyone. But with the bar raised for DAC dynamic range by the Weiss Medea reviewed last month, that they exist at all should be pointed out.

The Platinum demonstrated superb DAC linearity, with any error (fig.4) remaining below 2dB to below -115dBFS, which is as good as the Weiss Medea DAC. As a result,

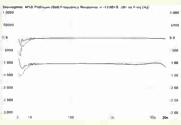


Fig. 1 MSB Platinum Link Plus, balanced, frequency response without (top) and with de-emphasis (bottom) at -12dBFS into 100k ohms (right channel dashed, 0.5dB/vertical div.).

the MSB's reproduction of an undithered 16-bit/1kHz tone at

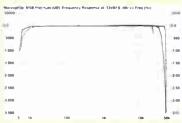


Fig. 2 MSB Platinum Link Plus, unbalanced, frequency response at 44.1kHz (bottom at 20kHz) and 96kHz sample rates with brickwall filter switched in (top at 40kHz) and out at -12dBFS into 100k ohms (right channel dashed, 0.5dB/vertical div.).

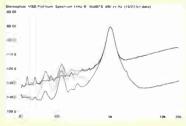


Fig. 3 MSB Platinum Link Plus, balanced, \(\frac{1}{2}\)-octave spectrum of dithered 1kHz tone at -90dBFS, with noise and spuriae, 16-bit (top) and 24-bit data (bottom). (Right channel dashed.)

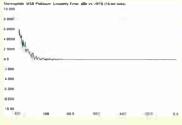


Fig.4 MSB Platinum Link Plus, departure from linearity, 16-bit data (2dB/vertical div., right channel dashed).

to set up comparisons that emphasize specific differences; on the other, they make it hard for me to keep an undivided mind in my time with a single product. In the case of the MSB Platinum Link Plus, such extended and exclusive auditioning was even more important, since it has so many options that demand individual comment.

My first listening session involved using the coax S/PDIF feed from a Meridian 508-24 CD player and the MSB's XLR analog outputs connected to the Sonic Frontiers Line-3 preamplifier. MSB offers minimal guidance with regard to the various options, leaving the user to choose what he thinks works

best. I began with 4x upsampling, 16x interpolation, and the steep filter on. This seemed to work fine, so I settled in

My initial impression was of great midrange clarity and good dynamics.

to become familiar with the MSB before pushing any more buttons.

My initial impression was of great midrange clarity and good dynamics, but with greater harmonic fullness in voices, and the extension of this purity well into the treble compared with the less-expensive Link DACs. The bass extension and spectral balance were unexceptional in the best sense: They didn't call attention to themselves except when musically warranted. The bass and low percussion on "Jailbird Love Song," from David Johansen and the Harry Smiths' Shaker (CD, Chesky JD236), was potent and well-defined but appropriately resonant, as it should be — it was recorded in an old wooden church.

Keep in mind that the Platinum Plus incorporates MSB's PS1000 power supply, which I concluded in Vol.23 No.9 was the most important

Measurements

-90.31dBFS was essentially perfect (fig.5). Increasing the data's word length to 24 bits resulted in an excellent sinewave shape (not shown), despite the very low signal level and the lack of linearizing dither.

Harmonic distortion was very low, even into the punishing 600 ohm test load (fig.6), where the highest-level harmonic was the second, at -94dB (0.002%). However, I was a little bothered by the appearance of higher-order harmonics in the spectrum,

so I repeated the test using a higher frequency and an analyzer with a higher dynamic range than the Audio Precision System One. Fig.7 shows that the MSB does indeed produce some odd-order harmonics. While these are still at a very low level, they will, all things being equal, be more audible than the more usual second and third harmonics, due to the reduced level of masking by the primary signal. Intermodulation distortion was very low (fig.8), if not quite to the vanishingly small levels of the Weiss Medea.

I used the Miller Audio Research Jitter Analyzer to examine the MSB Platinum's rejection of word-clock jitter. The result was very dependent on the datalink used. Feeding the Platinum from my reference PS Audio Lambda CD transport via a 6' coaxial datalink gave a low 197 picoseconds of peak-peak jitter. The spectrum of this jitter is shown in fig.9; it is mainly data-related (red numeric markers), though sidebands ±15.6Hz (purple "1") and ±120Hz (blue "4") contribute to the measured figure. But when I changed the data source to WAV-file playback on my PC, using an RME Digi96/8 PRO soundcard to drive the MSB via a 15' length of plastic TosLink, the wordclock jitter shot up to 572ps. Not only did the primary data-related sidebands at ±229Hz rise alarmingly—shown by the grayed-out trace in fig.9 - but

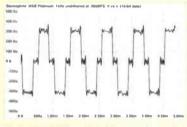


Fig.5 MSB Platinum Link Plus, waveform of undithered 1kHz sinewave at -90.31dBFS, 16-bit data.

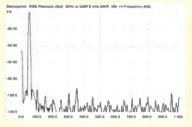


Fig.6 MSB Platinum Link Plus, balanced, spectrum of 50Hz sinewave, DC-1kHz, at 0dBFS into 600 ohms (linear frequency scale).

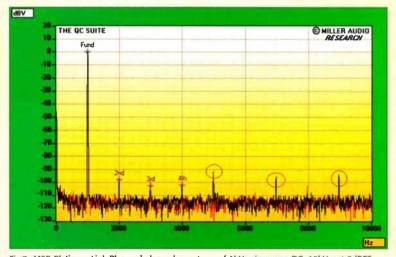


Fig.7 MSB Platinum Link Plus, unbalanced, spectrum of 1kHz sinewave, DC-10kHz, at 0dBFS into 8k ohms (linear frequency scale).

option available for the original Link DAC. Since there's no stock wall-wart for swapping, I couldn't tell how much the PS1000 contributed to the solidity and tightness of the Platinum Link Plus's bass or, indeed, to its overall lack of grunge anywhere. However, I'm sure that it made a mighty contribution to the processor's ability to drive long interconnect lines, balanced or unbalanced, with rock-solid grip and without noise. I briefly ran the Platinum Plus driving my amps directly, using the Z-Systems rdp-1 as the system controller. This experience showed that the Platinum Plus, along with the Weiss Medea, is one of the

few DACs that can handle long lines and demanding loads as well as the best line preamps.

The Platinum Link Plus's spatial presentation was better than the Link III's, extending well beyond the speaker positions laterally and longitudinally. But here was where I found the imperfection in the Platinum Plus's performance. Progressively more distant sounds, regardless of level, were progressively softer and less detailed. This appeared to correlate with a concomitant softening of treble detail at low levels.

When I listened to Colin Davis and the London Symphony's recent recording of Berlioz's Symphonie Fantastique (LSO Live LSO0007), paying attention to strings toward the back of the stage required a bit more effort unless I turned up the gain somewhat more that usual. This was not due to a lack of treble extension or, it seemed, to any graininess at these levels, but the low-level treble was characterized by a marginally audible uncertainty. In fact, this presentation was quite natural in that it reminded me of a mildly reduced treble signal/noise ratio—except that I couldn't hear the noise itself, just the effect. The upside was that I never heard the Platinum Plus make an ungraceful sound. Those who have groped for gadgets with which they

a slew of low-frequency sidebands made an appearance around the central tone. The moral is obvious: Owners of the MSB Platinum need to use a good coaxial datalink and steer clear of the bandwidth-limited TosLink connection.

While I was performing the jitter measurements, I happened to glance at the screen of the analog oscilloscope that I use to monitor the output of the device under test and noticed something unusual. Fig.10 shows both the data points and the ideal reproduced waveform of the analytical signal used by the Miller Analyzer. Developed by the English engineer Julian Dunn, the signal consists of a high-level tone at exactly one quarter the sample frequency, Fs/4, which is therefore represented by the same four data points in each waveform cycle. (This is overlaid by a 229.68Hz squarewave, Fs/192, at the LSB level, which maximally tests a DAC's rejection of word-clock jitter.) It is the interaction between these

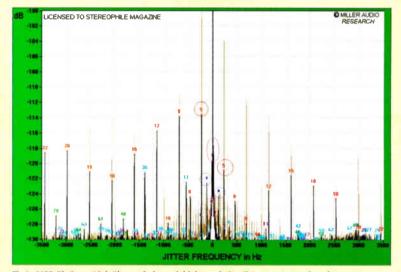


Fig.9 MSB Platinum Link Plus, unbalanced, high-resolution jitter spectrum of analog output signal, PS Audio Lambda via 6' S/PDIF datalink (11.025kHz at -6dBFS sampled at 44.1kHz with LSB toggled at 229Hz). Center frequency of trace, 11.025kHz; frequency range, ±3.5kHz. (Grayed-out trace is with WAV-file playback on PC fitted with RME Digi96/8 PRO soundcard via 15' plastic TosLink.)

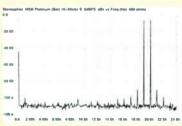


Fig.8 MSB Platinum Link Plus, balanced, HF intermodulation spectrum, DC-24kHz, 19+20kHz at 0dBFS into 600 ohms (linear frequency scale).

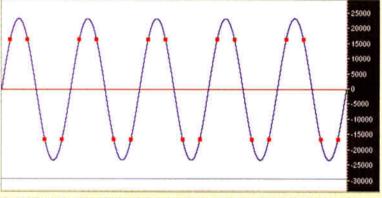


Fig. 10 Miller Audio Research Jitter Analyzer, waveform of Fs/4 test data (4 data points/cycle).

Stereophile, March 2003 97

Some Things You Really Must Have

Evidently, some total headphone geek over at Sennheiser got to run the company for the last year or so, because they've just come out with one of the most bitchin' pairs of headphones ever, the PX 100. The good news is that you're going to love them for much more than their amazingly low \$39.95 (!!!) price tag. The bad news is that, well, you're going to have to buy them (but trust us: that's not really a bad thing).

Here at HeadRoom, the number one priority is sound quality, so we aren't going to tell you these are the best sounding headphones ever—they're probably tied with the Koss PortaPro on that front (which is pretty darned good for portable/lightweight headphones). However, the PX 100 just may be the best cans we've ever seen at any price from an overall ergonomics standpoint. Sure, we've used headphones that fit well, but we've never experienced the almost hypnotic harmony of use that this product seems to emit. They fit snugly but not vise-like; they don't pinch or press any hot spots at the temples or on top of your head; and they fold up flat to fit into a very cool storage case that looks like it's made for a pair of sunglasses. All in all, these 'phones exhibit a most excellent and elegant design (and one, by the way, that none of us seems to be able to break). To know this product is to make it a part of your daily life. And don't forget that they sound great, too!

The PX200's (and the 100's) fold up handy-dandy to stow away in your pocket.

High praise for such inexpensive

headphones? You bet! But sit down, 'cuz there's more. Not only has Sennheiser version for air travel and commuting.

created the perfect replacement for the included-in-the-box crap-phones you got with your iPod—or whatever portable you've got-but they've also come up with a sealed version to keep the outside world outside, and a noise-canceling

look like a total headphone geek. (although... we don't see a problem with looking like a headphone geek.)

The PX 100's are light and

comfy, and they

don't make uou

Take the PX 100 and add isolation and you get the PX 200 (\$49.95). Although their bass isn't quite as good as that of the PX 100, we find that the usually annouing "bass boost" circuitry of portable players compensates admirably, delivering an unusually satisfactory listen. But the most important benefit of these cans is their sealing effect against ambient noise. Walking

around in the city is typically a rather loud affair; with these cans a significant amount of background noise is reduced —without the complete loss of situational awareness that comes with in-ear-canal headphones—and listening becomes a more private pleasure.

Take the PX 200 and add some good noise-canceling circuitry and you get the PX 250 (\$129). When planes, trains, and commuter vans enter the picture, the PX 250 become the noise-canceling headphone of choice. Not only has Sennheiser done a great job with the NC circuitry in the PX 250, they've been successful in doing it while still producing a headphone that sounds good. If you've ever listened to noise-canceling headphones, you'll appreciate what we're saying here—our hats are off to them. Although we think that the Shure E2C and Etymotic EA-6 and EA-4 series are the clear leaders in isolation and sound quality, lightweight headphones like the PX 250 are clearly more convenient (especially when it comes to taking them on and off over the course of a day). It's great to finally have an option we can recommend in this category!

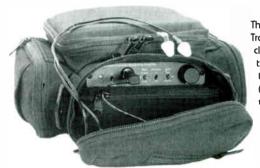
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Associated Equipment

Analog source: Heybrook TT2 turntable, SME III tonearm, Ortofon SME30H cartridge.

Digital sources: Meridian 508-24 CD player, Meridian Reference 800/861 DVD-Audio player/control unit, Sony SCD-XA777ES SACD player; Mark Levinson No.360S, Musical Fidelity A3²⁴, and Weiss Medea DACs.

Preamplification: Sonic Frontiers Line-3 line stage, Audiolab 8000PPA phono stage.

Power amplifiers: Bel Canto eVo2, Sonic Frontiers Power-3, Classé CAM-350 monoblocks.

Loudspeakers: Revel Ultima Studio.

Cables: Interconnect: Audio-Quest Anaconda, Python, balanced; Cardas Cross, unbalanced. Speaker: AudioQuest Gibraltar. AC: PS Audio Lab, JPS Aluminata.

-Kalman Rubinson

can filter out digititis from their systems will never need them with this DAC.

Those observations in mind, there was nothing to do but see if the use of the Platinum Plus's many options would affect my impressions. The general answer: The MSB usually sounded as good as possible with all its options invoked. As a result, I couldn't find a consistent reason not to upsample or interpolate, except to convince myself of the value of these features. Sure, there were specific instances where I was motivated to try because I didn't find the sound perfectly satisfying, but the fault in those cases was, ultimately, the source material.

Was the sound worse without upsampling and/or interpolation? Only by a very little, and this was revealed only by a slight loss of the MSB's smooth frequency and spatial integrity. MSB has done their homework in adapting their algorithms to interact optimally with each other, and that's the best we can ask of a design team. In fact, one might question the necessity of having these as options and not as fixed settings.

I found the Phase Invert switch and the filter-slope adjustments useful. The need for the former is, despite much debate, still controversial among many audiophiles. Nonetheless, digital phase inversion is as clean as reversing speaker leads, and a lot easier. Some older, nastier brass sounds were different with inversion, and while I can't know what they really sound like live, inverting phase made them easier to listen to.

The filter slope, on the other hand, was probably the only front-panel switch that made an almost universally useful difference. Switching in the brick-wall filter had two effects. First, it seemed to reduce the vague low-level indeterminacy to comfortable levels; second, it pulled all the primary voices and instruments just a bit forward compared to the gentler slope setting. Most revealing of this was the Orlando Consort's The Call of the Phoenix (Harmonia Mundi HMU 907297), in which there are four male voices in the foreground, and richly resonant spaces to the sides and back that are stimulated by the voices but return to us as indepen-

Measurements

sparse data points and the DAC's lowpass filter (see my article on the subject in our online archives, www.stereo phile.com/showarchives.cgi?25) that

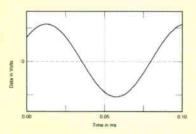


Fig.11 Musical Fidelity X-24K, output waveform when decoding fig.10 data.

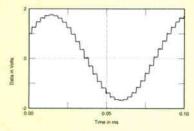


Fig. 12 MSB Platinum Link Plus, 4x Upsampling turned off, output waveform when decoding fig.10 data.

completely reconstructs the analog waveform. That this is the case is demonstrated by fig.11, which shows the reconstructed output waveform from a conventional D/A processor: a perfect sinewave.

However, fig.12 shows what comes out of the MSB's output when the 4x oversampling filter is switched off. Instead of the smooth sinewave seen in fig.11, there is a staircase wave, with 32 distinct sample points evident per cycle. (Remember, there were only four data points per cycle in the original data.) It looks as if the data are being oversampled by a factor of

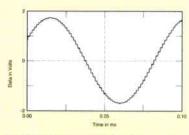


Fig.13 MSB Platinum Link Plus, 4x Upsampling turned on, output waveform when decoding fig.10 data.

eight, but no reconstruction filter is being used. (The sharply defined steps in the waveform imply the existence of content well above the signal's nominal passband of 22.05kHz.)

This waveform was not affected by pushing the Platinum's front-panel buttons marked "16x Interpolation" or "Brickwall Filter On." However, switching in "4x Upsample" gave the waveform shown in fig.13. The number of sample points per waveform cycle has indeed increased by a factor of four, to 128, giving a better representation of the sinewave. However, it still doesn't approach the smoothness of a band-limited sinewave produced by the conventional combination of digital oversampling filter and analog low-pass filter seen in fig.11, and again, the sharp corners of the waveform imply the existence of ultrasonic content above the nominal passband.

I have no idea whether this behavior is just a quirk or is essential to getting the best sound quality from the MSB Platinum Link Plus. But I was certainly surprised by it!

- John Atkinson



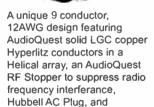
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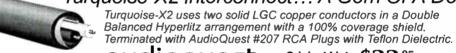




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dent sources and, of course, interact with the voices. With the gentle slope filter, the echoes seemed detached from the voices, creating a larger space that somehow seemed separate from the singers. When I switched in the brickwall filter, the voices edged just a little bit forward and gained a bit of crispness, but melded seamlessly with the ambience. It was an altogether more engaging and involving presentation.

Not every recording benefited similarly. The Berlioz on LSO Live, which has no instruments miked as closely as the Orlando Consort's voices, showed a little highlighting with the brick-wall filter; I preferred the more spacious presentation of the gentle slope filter.

Final Variations

During the Platinum Link Plus's visit, several other DACs came and went but, unfortunately, no two were comparable in price. Two sonic features distinguished the Link Plus from the significantly less expensive Music Fidelity A3²⁴: a more rounded, pearly, and slightly forward midrange, which made almost all recordings more lively; and the filter-slope option, which let me tune the Link Plus to the recording. The

comparisons were brief—the A3²⁴ developed a bad case of treble rolloff—but before that happened and the Musical Fidelity had to be returned, there seemed to be more treble energy coming from the MF, more midrange detail from the MSB.

The Platinum Plus is a superbly satisfying DAC that improved the sound of every player I tried with it.

Comparisons of the Platinum Link Plus with the Mark Levinson No.360S and the Weiss Medea always favored those more expensive boxes. Both seemed to have a much greater signal/noise ratio in the treble range, which served to separate voices in the space both from each other and from the space itself. And though neither the No.360S nor the Medea had much in the way of overt sampling and filtering options, neither seemed to need any. Of

course, for their higher prices the Weiss also gives you a sledgehammer of an output driver, and the No.360S flexible control and programming facilities that the Platinum Link Plus lacks.

Conclusions

If it seems that I've been damning the MSB Platinum Link Plus with faint praise, that was not my intent. The Platinum Plus is a superbly satisfying DAC that improved the sound of every player I tried with it. The exception was the Meridian Reference 800 DVD-Audio player, but even then, the MSB provided an alternative but not inferior sound. The Platinum Link Plus distinguished itself from the lessespensive, similarly priced MSB Link III and the Musical Fidelity A324 by its more open and transparent midrange, supported by its full, secure bass. The Platinum Plus's treble, which is somewhat manipulable with the filter and (perhaps) some other settings, was smooth and forgiving, and probably its most defining characteristic.

At \$3995, the MSB Platinum Link Plus is not inexpensive, but it is a good value if you enjoy its generous sound and flexible options.



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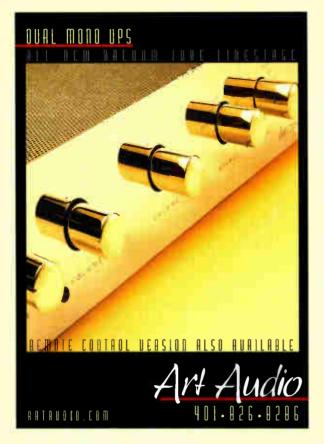
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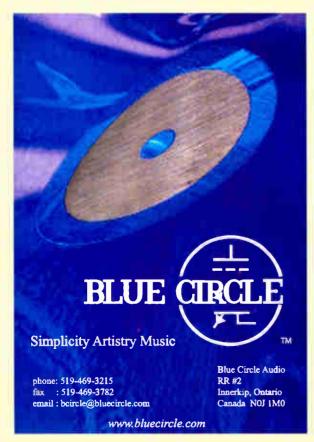
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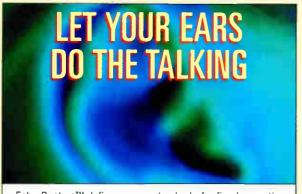








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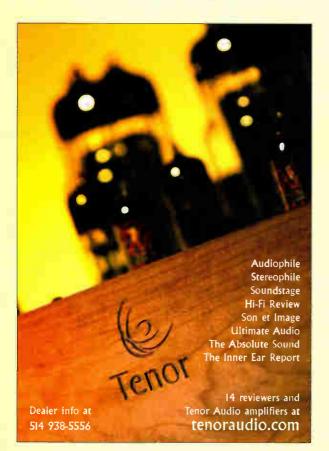
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Recording of the Month

RY COODER MANUEL GALBAN

MAMBO S

RY COODER & MANUEL GALBÁN: Mambo Sinuendo

Perro Verde/Nonesuch 79691-2 (CD). 2003. Ry Cooder, prod.; Jerry Boys, eng. AAD? TT: 50:31

Performance ★★★★½

hen it was announced in 2002 that Ry Cooder was going back to Cuba to make a third record of music from that frozen-in-time musical terrarium of the western hemisphere, it was sure to mean one of

two things: either enough time had passed since 1997's breakthrough *Buena Vista Social Club* that it would work, or, more fatefully, no well of music was this deep, and Cooder had unwisely gone back one time too many.

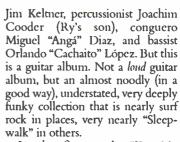
But then, Ry Cooder ain't your average, garden-variety musical genius—not by a long shot. Once a reluctant rock star, more recently a reticent SoCal legend, he's a tremendously skilled guitarist who, at least in his Cuban adventures, has had no problem checking his ego at the door to play with older players who force him to stretch, learn, and challenge himself. So if Cooder was returning to Cuba, there must be quite a reason.

In guitarist Manuel Galbán, Cooder has uncovered yet another long-lost Cuban treasure. The two musicians are clearly simpatico, and just as clearly, Cooder respects Galbán enough to give him—another guitar player, no less—the unquestioned spotlight.

Raised in the Holguin province of western Cuba, Manuel Galbán began playing guitar professionally in 1944, at the age of 13. In 1963 he joined the Havana-based vocal group Los Zafiros, who mixed Caribbean forms such as Calypso and Bolero with more American musical forms, such as R&B and doo-wop. The band was a huge hit early in its career, but disbanded after Galbán left in 1972. Since then, the guitarist, who also plays piano and organ, has played and arranged for several Cuban groups, most notably the Dirección Nacional de Música (the Cuban National Music Ensemble).

Galbán did not take part in the original *Buena Vista* project; he met Cooder when both played on the 1999 solo album by *Buena Vista Social Club* singer Ibrahim Ferrer. Unlike Compay Segundo and Eliades Ochoa, who, with Cooder, played most of the guitar on *Buena Vista*, Galbán plays in a unique electric style that borrows from Duane Eddy and surf guitarist Dick Dale, and sometimes sounds like a more laconic version of Nokie Edwards of the Ventures. Throughout *Mambo Sinuendo*, Cooder lays back, content to add accents and follow Galbán's lead.

The characteristic rhythmic vitality of Cuban music, as heard in *Buena Vista*, is heard throughout *Mambo Sinuendo* as well, thanks to the inestimable American rock drummer



In the first track, "Du Me Negrita," echo drenches both

Galbán's single-note leads and Cooder's Bixby pedal-steel accents, while Keltner keeps just the right amount of dirty-sounding cymbal slush happening in the background. In the jumpier "Monte a Dentro," a chorus of female backup singers adds vocal accents before Galbán leaps in to rip off a fast example, dense in ideas, of what Cooder calls his "tough" guitar style. Galbán then shows a tender touch in the gorgeous "Secret Love." On "Caballo Viejo," Galbán shows off his way with the organ.

The album's only familiar number—at least to gringos—is "Patricia," which was a hit for Cuban mambo king and 1950s big-band leader-arranger Pérez Prado. In Galbán's reading, an easygoing lead line draws a new mood and feeling from a tune that has too often been denigrated as being mere "pop." But as many and varied as are Mambo Sinuendo's charms, its highlight is the sprightly but too short title tune, which features all the album's musical elements—female voices, Galbán on organ (with burbly effects), and one new addition: trumpets, by Herb Albert.

When Cooder first explained to me his fairly involved theory of the sort of sound he likes, I had to go back and listen closely to *Mambo Sinuendo* to reassure myself that he and engineer Jerry Boys hadn't sucked the life out of the music in their quest for what Cooder calls the "bubble." (See feature story on p.49). Happily, the sound is huge, spacious, and every bit the "bubble" Cooder wanted. On "Bolero Sonámbulo," the famed nuances of Havana's cavernous Egrem studios makes for a wide and very tall listening experience. Like those of all the *Buena Vista*—related albums, the textures of *Mambo Sinuendo*'s rhythm sections and guitars are extraordinary.

Cuba has been, to quote Garrett Morris from the old Saturday Night Live, "Berry, berry good" to Ry Cooder, and to everyone interested in the fabulous, nearly extinct musical traditions of this culturally rich island. While it may have seemed logical that, five years after Buena Vista Social Club, the wellspring of Cuban masters needing rediscovery had finally run dry, with Mambo Sinuendo and fellow guitarist Manuel Galbán, Cooder has found and invested in his most personal and challenging Cuban collaboration yet.

—Robert Baird

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classical

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VÁCLAV TALICH: Great Conductors of the 20th Century

Czech Philharmonic Orchestra, Slovak Philharmonic Orchestra

EMI Classics 5-75483-2 (2 mono CDs). 2002. Stephen Wright, John Pattrick, prods.; Paul Baily, remastering eng. ADD. TT: 2:37:18

Performance ****

Sonics **

KAREL ANCERL: Great Conductors of the 20th Century

Czech Philharmonic Orchestra, (2 CDs). 2002. Stephen Wright, John Pattrick, prods.; Paul Baily, remastering eng. ADD. TT: 2:35:35 Performance ****

Performance ****
Sonics ***

ast, valiant historical surveys of classical performers seem bound to be flawed and controversial, as was Philips' 100-volume Great Pianists of the 20th Century project. With more than 20 volumes already released and aiming for 60, EMI's Great Conductors of the 20th Century series of two-CD anthologies draws on the company's own capacious archives, the holdings of other major and indie labels, and unlike the Philips line — the often untapped vaults of European radio stations. Significantly, this series was conceived by London's savvy IMG Artists firm, which masterminded The Art of Conducting films and the BBC Legends CD line. So, while a few Great Conductors titles are disappointing, many offer fresh views on golden-age artists who are in danger of slipping into the mists of time. Two of the most compelling titles are devoted to prime exponents of the deeply musical Czech conducting tradition.

Václav Talich (1883-1961) was something of a prodigy. He served as concertmaster of the Berlin Philharmonic at age 20, and eventually acted as Prague's leading musical light until the persecutions of first the Nazis, then the Communists. He endured the torment to return triumphantly to the Czech Philharmonic, with which he made many fine recordings for the Czech state label, Supraphon. The strength of his Great Conductors set is its ideal match of artist to repertoire; everything here - Benda, Dvorák, Janácek, Novák, Smetana, Suk - is from Talich's home soil, except for a Tchaikovsky miniature and a live broadcast of the Symphony 33 of

Mozart, Prague's honorary native son.

From 1954, Talich's third and final Supraphon recording of Dvorák's "New World" Symphony doesn't have the monumental dynamism of Leonard Bernstein's 1962 New York version (which finally blossoms fully in the Sony SACD transfer); nor does it have the acute detail of the recent, richly recorded Nikolaus Harnoncourt disc with the Concertgebouw Orchestra on Teldec. Yet Talich's taut Czech Philharmonic interpretation boasts its own naturally expressive rightness. The real draw here, though, is Talich's own suite from Janácek's magical, moving opera of 1924, The Cunning Little Vixen. This performance doesn't have the sonic lushness of the 1981 Decca recording led by Talich pupil Charles Mackerras. but the elder artist's special interpretation, earthy and ethereal by turns, brims with idiomatic life.

Born in 1908 and a disciple of Talich. Karel Ancerl was a Jew, so his sufferings under Nazism were extreme — he survived Auschwitz, but his family did not. He won new life in postwar Czechoslovakia but was abroad during the 1968 Communist crackdown and remained in exile until his death in 1973. Beyond a Shostakovich overture, Ancerl's anthology features an all-Czech program, including a real rarity - Otmar Mácha's Variations on a Theme by and on the Death of Jan Rychlik, a memorial that manages to be both grim and fantastical, like a Kafka story. Other treasures here include Novák's achingly bittersweet tone poem In the Tatra Mountains and Martinu's Symphony 5. The luminous Martinu Fifth stems from a 1971 CBC broadcast with the Toronto Symphony, which Ancerl galvanized in his last years. He conjures a gripping perfor-

mance of a work he undoubt-

edly felt in his bones.

Despite some incorrect track timings on the Talich set and wrong birth and death dates on the back of the Ancerl, these albums are annotated and packaged with a class common to this series. Although not done at EMI's Abbey Road studios, surprisingly, the remastering has summoned remarkably vivid sound from the vintage sources. The Great Conductors albums devoted to Ernest Ansermet, Fritz Busch, and Serge Koussevitzky are also especially attractive. The series is a welcome enterprise, given the record industry's

increasingly selective memory.

-Bradley Bambarger

BRAHMS

Violin Concerto & Double Concerto
Gil Shaham, violin; Jian Wang, cello; Berlin
Philharmonic, Claudio Abaddo
Deutsche Grammophon 469 529-2 (CD). 2002.
Christian Gansch, Christopher Adler, prods.; Mark
Buecker, Hans-Ulrich Bastin, engs. DDD. TT: 71:19
Performance ****

ll Shaham and Claudio Abbado's performance of the Brahms Violin Concerto is one of the most exciting, heartfelt, and ravishingly executed performances of this warhorse on disc. On every level, it proves far superior to Abbado's 1988 Berlin Philharmonic traversal with soloist Shlomo Mintz. Each movement benefits from fleeter basic tempos (possibly the fastest since the 1955 Heifetz-Reiner version), greater rhythmic force, and more nuanced, characterful phrasing. With woodwinds and brass more prominently and diversely balanced (as in Klemperer's classic recording, and in contrast to Abbado's previous string-dominated conception), Brahms' orchestration emerges with more transparency and textural variety than he is traditionally accredited. Note, too, the heightened intensity that Albrecht Mayer brings to the slow movement's opening oboe solo.

Shaham is simply stupendous, bringing to the solo violin part all the passion, fire, and technical aplomb one could wish for. Like Hilary Hahn in her recent and equally stunning Sony recording, Shaham always puts musical considerations ahead of technical expedience. The most telling example of this occurs in measures 348–361 of the first movement, a series of two-note patterns that are infinitely easier to execute if one ignores Brahms' over-the-bar-line phras-





Gil Shaham Jian Wang Berliner Philharmoniker Claudio Abbado

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ing, as most violinists do (including Heifetz and Oistrakh). Shaham not only adheres to Brahms' phrasing, but also inflects the awkward interval leaps more meaningfully than Hahn. DG's vividly detailed engineering nearly belies the fact that the performance was taped before a remarkably silent concert audience.

Given the stunning results achieved in the Violin Concerto, one perhaps should not expect an equally incandescent Double Concerto to match, and so it proves. Cellist Jian Wang's rounded, occasionally precious tone (his phrasing of the main

theme at the third movement's outset) and soft-grained articulation don't match Shaham's assertion and sheer presence. While Wang and Shaham play well together, they fall short of the astounding unanimity of ensemble and spirit distinguishing the collaboration between violinist Frank Peter Zimmermann and cellist Heinrich Schiff, with Wolfgang Sawallisch at the helm (EMI). Still, it is Shaham's standard-setting Brahms Violin Concerto that will entice repeated hearings and keep aspiring violinists humble for years to come. -Jed Distler



rock/pop

CAT POWER

You Are Free

Matador OLE 427-1/2 (CD). 2003. Adam Kasper, prod., eng. AAD.? TT: 53:14
Performance ****

han Marshall, sole owner of the feminine mystique and Southern drawl behind the minimal, indiefolk Cat Power, has some explaining to do: about her purported mental instability; about the five-year gap between her last album of original material and this new one; about her 2001 stopgap album, *The Covers Record*, on which she cut the choruses out of Stones and Dylan tunes and rendered them rhythmless and unrecognizable; and about her infamous live performances, which often end up with Marshall cowering in the corner of a stage or melting down completely and wandering out the club's back door.

The first track of You Are Free, "I Don't Blame You," is a piano-and-voice group hug that immediately takes care of that last concern: "They wanted to hear that sound / But you didn't want to play." Once Marshall relieves herself of these pressures of minor celebrity (we're not talking about Mariah-sized popularity here), the album settles into the moody grooves of the finest Cat Power effort to date.

But what does that distinction mean, exactly? For starters, the album—morose by popular standards—is a pep pill compared to the lugubrious, too-haunted *Moon Pix* (1998), on which she was backed by two-thirds of Australia's outback-impressionist Dirty Three. You Are

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Elvis on acid? Stud Cole brooding in 1968.

Free finds Marshall's spare, Leonard Cohen-like songs cushioned somewhat; perhaps noted loud-rock producer Adam Kasper (Foo Fighters, Pearl Jam, Queens of the Stone Age) can be credited with punching up "Free" and "He War," which shimmy with genuine rock guitar and drums. And, in a stroke of serendipity, avowed Cat Power fans and Kasper clients Eddie Vedder and Dave Grohl found time to stop by to contribute vocals and percussion, respectively. But Marshall's personality - a New York City thrift-store gal with a big, complex heart - and full-bodied, often multitracked voice dominate such twangy tearjerkers as "Good Woman," and soul-searching piano ballads like "Maybe Not."

Not since Alex Chilton lost his mind on Big Star's *Third* has a Southern-born avant-pop figure so eloquently captured on polycarbonate desperation and its measures — psychological trauma, isolation, drugs, etc. But whereas Chilton cracked up, Marshall pulls all her pieces together. *You Are Free* is proof that her fragile psyche is making good.

- Matthew Fritch

STUD COLE

Burn Baby Burn

Norton CED-293 (CD). 2002. No prods. or engs. listed. AAD. TT: 38:56 Performance ****

Sonics ***

t says a lot about America's bottomless capacity for producing one-of-a-kind musical eccentrics that enterprising archivist labels such as New York's Norton Records continue to unearth all manner of unsung fringe auteurs—a phenomenon of which Burn Baby Burn is a particularly fascinating example.

Stud Cole was the brooding alter ego of Patrick Tirone, a young Buffalo, New York-bred 'n'roller who relocated with his family to Southern California in the late 1950s. A decade later, he reinvented himself as the fearsome, tortured Stud, merging the swaggering greaser rock of his teens with seething, rawnerved psychodrama. The result was a ragged but riveting mutant hybrid that suggests what might

have occurred had Elvis fired the Colonel, skipped Vegas, dropped acid, and embraced primal-scream therapy.

Eleven of Burn Baby Burn's 16 tracks are drawn from a privately pressed demo LP that the artist put together in 1968, in the naïve hope that his raging rant-rock might gain a sympathetic music-industry ear. Although largely unheard since then, the 1968 tracks—whose emotional extremes might verge on self-parody if they weren't so intense—mark the late Tirone/Cole as a compellingly over-the-top original.

Whether pledging his lust ("Feels Good"), excoriating a faithless lover ("Don't Do That"), or exorcising some unidentified private hurt ("Stop the Wedding"), Cole delivers his entreaties with visceral immediacy. The unhinged menace of his drawling wail and stream-of-consciousness lyrics are accentuated by volatile, pulsating instrumental tracks that incorporate such frills as the title track's acid-blues guitar and the disturbing double-tracked lead vocals of "The Devil's Comin'."

The 1968 material is consistently amazing; the early tracks that round out this collection—including a 1963 radio jingle for the Tirone family's real estate firm—are mainly conventional, somewhat wobbly rockabilly, and offer an interesting glimpse of the artist as a more optimistic, less tormented young man.

It's hard to imagine Stud Cole winning a mainstream audience in any age, let alone at the height of the Woodstock era. But the deeply felt outsider rock on *Buni Baby Buni* transcends time and trendiness to deliver a bracing blast of undiluted human soul.

- Scott Schinder

jazz

MILES DAVIS

The Complete Miles Davis at Montreux 1973–1991 The Last Word: The Warner Bros. Years

The Complete Miles Davis at Montreux 1973–1991

Miles Davis, trumpet, organ, keyboards; many others Columbia/Legacy 86824 (20 CDs). 2002. Claude Nobs, prod.; David Richards, eng. AAD. TT: 19:12:09

Performance ***
Sonics ***

The Last Word: The Warner Bros. Years

Miles Davis, trumpet, synthesizer; many others Wamer Bros./Rhino R2 74360 (4 CDs). 2002. 20 orig. prods.; 32 orig. engs.; Matt Pierson, Adam Holzman, reissue prods. AAD/ADD/DD? TT: 5:04:21

Performance **
Sonics **½

hen Miles Davis, one of the greatest artists of the 20th century, began to appear in public in polka-dot pantaloons and red lamé waistcoats and play one-chord vamps over maniacally monotonous backbeats, it was the single most controversial career move in the history of jazz. Jazz has always sparked controversies, but most of them work themselves out over time. It is now generally accepted, for example, that Paul Whiteman's detractors and Ornette Coleman's defenders were correct. What is unique about the electric period of Miles Davis is that, after 30 years, the arguments still rage.

These two boxed sets will not settle the issue, but they shed some new light on it. The Complete Miles Davis at Montreux 1973–1991 is a 20-CD monster that "contains every single note that...Miles Davis played at the Montreux Jazz Festival on Lake Geneva in Switzerland." The Last Word: The Warner Bros. Years contains all the studio albums that Davis recorded between 1985 and 1991 for his last record label. Here are Tutu and Music from "Siesta" and Amandla and Doo-bop, plus some previously unreleased live and soundtrack material.

The enormity of the Montreux box becomes more manageable when you break it down. It contains 11 sets recorded on 9 different dates over 18 years. Many players move through Davis' bands, but there are threads of continuity, such as Bob Berg and Kenny Garrett on reeds, and John Scofield and Joe "Foley" McCreary on guitar. The repertoire obsessively repeats itself. There are nine versions of Cyndi Lauper's "Time

After Time" and seven of Michael Jackson's "Human Nature."

In his liner note for the Montreux set. Nick Liebman claims that, during his last years, Davis' live music was much stronger than his studio work. But very little live music from this period has been previously published. Considered together, these two collections do indeed establish that, during this era, studio Miles was inferior to live Miles. Warner Bros. albums like Tutu and Amandla insert Davis' trumpet into artificial electronic ensembles built up in overdubbed layers. They are highly produced studio artifacts as precisely contrived as advertising jingles for Fortune 500 companies, albeit with more ferocious rhythmic grooves. There is nothing in the Montreux set as embarrassing as Doe-bop, a collaboration with the hiphop/rap artist Easy Mo Bee, who brings in his samples and loops and drum machines and humiliating lyrics. Doobop is some of the silliest drivel that any great artist has ever released. It is toxic enough to kill the plants in your house.

The Montreux box, by contrast, presents in-the-moment living music played before wildly enthusiastic live audiences. Raw excitement happens often here, when the keyboards shriek and bass riffs knock you down. There are some scaring solos from the best of Davis' sidemen, and of course there is Miles. He is still capable of occasional epiphanies like breaking light, such as his extended 1990 contemplation of the poignant harmonic suspensions of "Time After Time."

But this music is also severely diminished by its underlying assumptions: The grinding, fixed backbeats. The airless, turgid ensemble densities. The slick, locked-down arrangements. The lightweight thematic material. The twittering toy sounds of the electric keyboards. The tensions that are never released. Worst of all, the disconnect between the specificity of Miles' trumpet lines and the churning soup of his accompaniment. The problem with fusion is that it didn't fuse.

The only previously released material is CD 19, which contains a famous Montreux event in 1991, two and half months before Davis' death. Quincy Jones put together a 50-piece orchestra and revisited Davis' classic orchestral works with Gil Evans, Miles Ahead and Porgy and Bess and Sketches of Spain. The disc is heartbreaking, because it shows

what Davis might have continued to achieve in the last years of his life had he not lost his way. The music matters so much more, not because it is acoustic or because it comes out of the great jazz tradition—it was Davis' role to shatter traditions and start new ones-but because it clarifies an aesthetic focus, and enables deep, complex, open-ended encounters with the space and time of experience. Technically, Davis is far from the top of his game. But on pieces like "My Ship," within musical forms and with musical company worthy of him, he tells truths of the human soul that only he was empowered to reveal.

Davis is famous for having said, "I have to change, it's like a curse." It is true that, as he changed the course of the art form, evolving from cool jazz to hard bop to orchestral jazz to modal improvisation and finally to jazz-rock, he constantly challenged and even threatened his audience. But, sadly, it is also true that, when he made his one disastrous change - his decisions to make kitsch instead of art and to become a pop superstar—he stopped. The last path Miles Davis chose was a blind alley, and he stayed there for 20 years, until he died. - Thomas Conrad













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Avantgarde Music & Cinema

Editor:

First things first: Having followed his writing in *Listener*, it's great to see Art Dudley writing for *Stereophile*.

As Art observed in your February issue (p.35), Avantgarde Music & Cinema is unlike any other audio store. Contrary to the standard "high-end audio salon" formula, the mission of Avantgarde M&C is to spread the excitement by exciting the senses. We're confident that the proof is in the listening: Our customers have been known to develop goosebumps, and a few may have shed a tear or two during demonstrations. (And no, they weren't crying because it was a bad demo.) This emotional connection to the music is what Avantgarde is all about.

But...it's not really about equipment, not even ours—it's about feeling the music that you love and making this experience an integral part of your daily life.

We invite both New York area musiclovers and NYC visitors to give us a call, make a private appointment, and discover what it's like to really feel the music.

Bob Visintainer & Jim Smith Avantgarde Music & Cinema

Clearaudio Virtuoso Wood

Editor:

Thank you, Bob Reina, for your words on the Virtuoso Wood [December 2002]. and to John Atkinson and Stereophile for expanding the focus on analog products and allowing more reviewers to participate in this active segment of our industry. This is almost as exciting as Bob's searing guitar work on a cherry-red Gibson SG, matching Carlos lick for lick, at a CES party performance of "Green Magic Marker," done to Santana's "Black Magic Woman." Killer. Although I haven't heard Robert play classical music, after this experience and his wonderful B3 work in a jazz trio with both JA and Allen Perkins of Immedia, I have concluded that Robert Reina may be the definitive reviewer of choice when it comes to kicking out the jams.

Not one to miss the opportunity to tote out the soapbox, here are a few additional comments.

As with all excellent high-end designs, stricter tolerances resulting in increased linearity, better frequency response, and improved mechanical characteristics should always yield positive improvements without negative side effects. To

quote the reviewer, "superior detail resolution and transient articulation...improved ambience and air as well as longer decay times...pristine, extended, uncolored high frequencies...a bit sweeter and airier, with more detail." It is no paradox that "there was no touch of softening or rolloff—in fact, it seemed as if the transient attacks on percussive instruments were faster still, but without a trace of hardness or edge."

This is the sonic signature of Clearaudio products, and the improvements one gets as you move up through their line. These are the qualities we all seek when we upgrade our systems. This adherence to stricter tolerances resulting in increased linearity, better frequency response, and improved mechanical characteristics is the same design philosophy that applies to the Clearaudio moving-coil cartridge line. Fernambuk wood, used in the construction of violin bows and possessing ideal resonant characteristics, ensures a natural quality to music reproduction when used in phono cartridges. Clearaudio uses Fernambuk on their topof-the-line moving-magnet, the Virtuoso Wood, as well as their top-of-the-line moving-coil, the Insider Reference Wood.

Clearaudio products allow music-lovers to appreciate those qualities and get into the performances, as RJR did. His use of phrases such as "analyzing the dynamics of Jimmy Cobb's technique of positioning his drumstick on the ride cymbal" and "studying the piano's hammers" did not bespeak somebody missing the forest for the trees, but someone fully appreciating every aspect and nuance of the recording and performance.

Musical Surroundings makes it possible to upgrade from the Aurum Beta S to the Virtuoso Wood for only \$425, and from the Aurum Beta to the V Wood for only \$475. And beyond the V Wood, for those with high-gain phono stages, upgrading to the entry-level Clearaudio Sigma Wood moving-coil, normally \$1200, is only \$750. By the way, check out our website when you're looking for affordable highgain phono stages.

Finally, regarding the review's first statement, that "There is no better time than now to invest in audiophile-quality vinyl playback gear": Of course, there is no reason to wait, given the abundance of vinyl, the wonderful products and upgrade possibilities, and the confusion surrounding the corporate haggling over

digital formats. But since I started Musical Surroundings in 1990, and for my 11 years in the high-end industry before that, I have always believed that it was the right time to invest in audio-phile-quality analog playback gear. Peter Suchy founded Clearaudio in 1978; we have taken the same path, and now join together on our journey.

On behalf of Peter Suchy and his sons, Robert and Patrick, and all of us at Musical Surroundings, thanks to one and all for spinning the black disc.

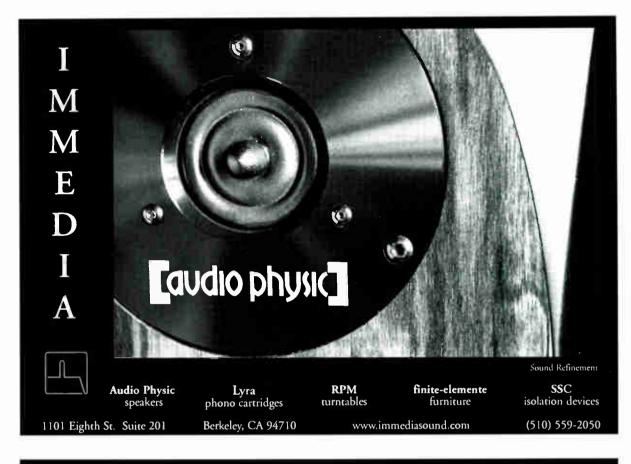
Garth Leerer President, Musical Surroundings

Polk Audio LSi7

Editor:

We'd like to thank Robert Reina for his well-written and balanced review of the Polk Audio LSi7. We think that Mr. Reina did an excellent job of describing the many strengths of the LSi7, such as its wide dynamic range, "extraordinary retrieval of detail and ambience," its wide, deep, precise imaging, and its exceptional high-frequency resolution. In addition, we would like to thank Mr. Reina for an unusually insightful and accurate discussion of the tradeoffs made in designing smaller loudspeaker systems, such as the LSi7, that offer both performance and value. We think that Mr. Reina's comments and comparisons will be a very helpful guide to anyone looking for a speaker system in this price range. As always, however, listeners should decide for themselves, and we hope that the LSi7s will be first on their audition list.

We would also like to thank John Atkinson for continuing to provide some of the most relevant loudspeaker measurements and analysis available in print. Most interesting in the measurements of the LSi7 is the identification of a resonance at 900Hz from the small port on the front baffle. For clarification, this small front port, or ARC (Acoustic Resonance Control) port, functions to suppress the internal front-to-back standing-wave resonance of the cabinet by resonating out of phase and at the same frequencyapproximately 900 Hz in the LSi7 (see fig.3, red trace). The waterfall plot (fig.8) shows very little delayed resonant energy for the complete system in this region, which is good objective testimony to the effectiveness of the ARC port in suppressing this cabinet resonance.



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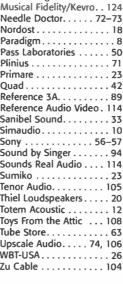


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Aural Robert

Robert Baird

o there we were, deep in a Manhattan night, bellied-up to a downtown bar: a gaggle of record-label publicists and journalists, both groups trying to scam free drinks off the other, but in general having a fine time discussing the increasingly comical but worsening woes of the world's music business.

"How is it," asked one writer several cognacs past his prime, "that a business that claims to have had nearly 20 albums go gold over the Christmas season just past can be in such trouble? Where the hell did all that money go?"

For another reveler, a 2002 baseball metaphor seemed to sum it up. In a country with a growing population, the music business as a whole sold 100 million fewer CDs and cassettes (cassettes? what're they?) in 2002 than they did in 2000. It's just like baseball tickets. On top of that, the price of "the talent" (a hiss arose) and the associated marketing costs have gone up. Just like baseball. And thanks to the ink spilled over the biz's paranoid attempts to stop file-sharing and protect copyrights, the major labels' many years of greed and gouging have now destroyed any measure of sympathy they might have once had. Just like baseball.

Tired of the gallows humor, and fuzzy from the seeming Balthazar of Argentinean Malbec I'd quaffed, I stepped outside into New York's Arctic chill for a breath of fresh air. There, in the world where the music business's best earner was now dangling hooded babies off balconies, I was confronted by a CD pirate—not the eye-patch-and-shiver-me-timbers variety, but a guy with a CD burner, a van, and a blanket (for display) who was doing a brisk business in CD-Rs of current music titles for \$4 a throw.

Not that this was a shock. Buying illegal items on the street mostly from enterprising foreign nationals is all part of the grand spectacle of living in Gotham. Curious to see which titles were selling best, and needing fresh ammo for the ongoing verbal mélée inside, I leaned over to view the wares of this cold-tolerant buccaneer. While I know that Sony cries when J-Lo's masterworks are copied (did

Tommy Mottola get out while the gettin' was good?), I shed no tears when I saw scads of her latest release being paid for and quickly stuffed into coat pockets.

What surprised me was the fact that Elvis (as in Presley, the King, not Mac-Manus, the guy who once wishfully titled an album King of America) was also selling like, if not exactly hotcakes, then like those peanut-butter-and-banana sandwiches that abetted his final topple from the throne. It almost gave me hope that a new compilation Elvis: 30 #1 Hits was not only back on Billboard's Top 200, where it peaked at No.1, but was also a pirate's bestseller.

Much, but certainly not all, of what's interesting from the record industry now are reissues. (For something new, see the review of Cat Power's You Are Free on p.111.) The 25th anniversary of Elvis' death last summer inspired BMG, the Cincinnati Bengals of majorlabeldom, and others to refocus on their Presley catalogs. While the 30 #1 Hits may be the best-known and best-selling of the recent Elvis releases, it's not the best—not for those who want something more than the radio-exhausted hits.

Except for a few successes, such as Johnny Cash's Love God Murder box, thematic compilations of previously released material are a bad idea turned travesty. I prefer straight reissues of the original albums. However, BMG Heritage, a new arm of the company charged with mining the BMG/RCA catalog, much as Columbia/Legacy does for Sony Music, has actually done Elvis right in four new titles: Heart & Soul (love songs), Great Country Songs, Elvis: Can't Help Falling in Love (The Hollywood Hits), and a straight reissue of the Elvis 56 album, which was released in 1996 in a bound collector's edition with several now-deleted pages of black-and-white photos by Alfred Wertheimer. Other than the material he recorded for Sun Records (available on several BMG boxed sets and single-disc reissues — see www.stereophile.com/ showarchives.cgi?751) and the 1969 Memphis sessions, the tunes on Elvis 56, from "Heartbreak Hotel" to "Don't Be Cruel" to "Rip It Up," are his most potent



legacy. In all four, the biggest attraction is the sound, which has been greatly improved by use of Direct Stream Digital (DSD) technology.

Two other Elvis items of note and recent release are Today, Tomorrow & Forever, a four-CD boxed set of unreleased material from the BMG vaults. From a 1954 take of the sappy "Harbor Lights" through seven live cuts from Little Rock in 1956, to five tunes from an August 1970 midnight show in Las Vegas to three recordings done at Graceland in February 1976, this is a must-have for collectors, and a meaningful addition to the Elvis canon.

Speaking of Elvis live, Tomato Records' fascinating curio Roots Revolution, which features Elvis' much-traveled Louisiana Hayride recordings with the instrumental tracks "repaired" and re-recorded by modern musicians, actually works. Lastly, there's Rhino Home Video's Elvis: The Great Performances DVD set, covered in—you guessed it—blue suede.

Back at the bar, the news that Elvis was giving J-Lo a run for her money was met with knowing or slightly inebriated smiles. Music old and new is being pirated. Customers are staying away. Real music is back on the charts no matter what its age. A business that's lived off reissues for years now must live within its means. And talent? Well, the time for more compelling content is now. The king was right. Lawdy, Miss Clawdy, there's no tellin' where this is gonna end.

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