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Records for Telarc

REVIEWS

MOON & CAMBRIDGE CD PLAYERS
AUDES, ROCKPORT, & SPENDOR SPEAKERS
PRO-JECT, KUZMA, & VPI LP PLAYERS
JAMES SUBWOOFER
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The nature of music is reflected by the passion of Dynaudio.

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Conventional wisdom has it that you should listen to an audio component, preferably in your own system, before you decide to buy it. But who, these days, has the opportunity to do this consistently? Even an audition in the store isn’t guaranteed; I have to drive two hours to get to the nearest dealer with decent customer service and a good inventory of interesting gear. And though he generally stocks a fairly wide range of components, like any dealer he carries only a small sample of all the hi-fi gear that’s currently, in principle, available.

Early last year, a shop here in Maine refused to let me audition in my home a pair of Vandersteen 2Ce Signature loudspeakers. This shop, which handles mostly car audio and mid-fi brands, had the Vandersteens badly set up in a poor room with mediocre components. I called the manufacturer to complain and ended up chatting for a while with Richard Vandersteen himself.

He took the dealer’s side, more or less. He regretted the lousy customer service I received, and the poor setup in the shop. But Vandersteen speakers, he argued, are well engineered, and will perform well in any well-engineered and reasonably well-matched system. Hence, a home audition isn’t necessary. Furthermore, it’s disadvantageous for a manufacturer to have a lot of “B stock” floating around, undermining the prices of new gear and complicating efforts at quality control. Bottom line: Vandersteen thought the shop’s policy on in-home auditions was just fine. This, he said, is how they do business, and it has served them well over the years. Take it or leave it, on their terms.

I might have been put off, but I wasn’t, or not by much. I found his amiable arrogance compelling; he wasn’t derisive, merely blunt. Also compelling was a long history of consistently strong, if not always glowing, subjective reviews, a flat frequency response, reasonable impedance characteristics, and two rare features that to me just make sense even if I’m not sure I can hear the difference: time and phase coherence. Why spend so much money and effort on source components, amplification components, and wire, I reasoned (as Richard Vandersteen had reasoned years before), only to have the audio signal distorted beyond recognition — by design — by the loudspeakers? I held my nose at the stinky dealer — the only Vandersteen dealer for many miles — and bought the Vandersteens without an in-home audition.

If, as Richard Vandersteen argued that day, a well-engineered component is likely to give a pleasing result when used with other well-engineered components — and if opportunities for in-home auditions are as rare as they seem to be — then measurements like the ones that accompany most of these products are not only expensive but also a low-cost alternative to decide which one to buy in-store. I have to drive two hours to get to the nearest dealer with decent customer service and a good inventory of interesting gear. And though he generally stocks a fairly wide range of components, like any dealer he carries only a small sample of all the hi-fi gear that’s currently, in principle, available.

I RESPECT MANY REVIEWERS, BUT HAVE TOTAL CONFIDENCE IN NONE OF THEM.

In the meantime, what are the options for consumers and enthusiasts? We can shop the mid-fi retail box stores. We can limit ourselves to mail-order components that offer in-home auditions — an increasingly appealing option these days, with a wide range of high-quality gear now available over the Internet — and be ready to return components that prove less than superb. Or we can take our chances on the used market, buying at prices we can sell at if we don’t like the way a component sounds.

But if we want to buy new, and we want stuff that’s marketed only through high-end dealers — and if we’re among the 99% or so of humanity who don’t have a buddy working at a high-end store — it’s unrealistic to expect an in-home audition. This is where review magazines such as Stereophile have an important role to play.

But unless you’ve got total confidence in the ears and integrity of your favorite subjective reviewer — I respect many reviewers, but have total confidence in none of them — well-conceived and executed measurements can be very reassuring. The combination of subjective reviews, effective in-store demos, and measurements that reveal the quality of engineering can combine to reduce the risks of a major hi-fi purchase.
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LETTERS TO THE EDITOR

Three reasons
Editor:
There are three major reasons I still subscribe to Stereophile:
1) Michael Fremer
2) Art Dudley
3) To see how many times Sam Tellig can ascribe "purity of tone" to the products in Sam's Space.!! Michael Crespo
mcrespo71@yahoo.com

iPod sound
Editor:
Has anyone tested the Apple Lossless Encoder for iTunes yet? All the music, half the space...sounds intriguing, but possibly one of those "if it sounds too good to be true..." things.
Bob Jenkin
bobjenkin@skglobal.net

I took an uncompressed 16-bit AIFF file, cued it using the Apple Lossless Codec included with iTunes 4.5 onward, then converted the compressed file back to uncompressed AIFF. I then did a hit-by-hit data comparison between the two files, and found they were identical. So yes, ALC works as advertised. I encoded a number of files of different kinds of music, and on average got a file-size reduction ratio of about 2.6:1. —JA

Show sound
Editor:
Congratulations on a terrific job at HE2004E: Five-plus hours per day, for three days, and I still did not get to hear everything. The best part about the show may have been the opportunity to meet the people behind the products. Special thanks for hospitality and friendliness in my case go to Ray Kimber and the folks at InnerSound, Hyperion, Gilmore/Triplanar/Atma-Sphere/Silver Cable, Blue Circle, and Merlin/Joule Electra. Sound in most of the rooms was pretty good to pretty darn excellent; I found only a few where the subs were hopelessly overpowered. Lots of cool record players, and boy, do I ever want an SJP turntable for Christmas (just kidding, honey).

Favorites included Ray Kimber's DSD master tapes played through the Tascam DA-98HS/EMM Labs DAC/Krell/Thiel CS6s, the new InnerSound Kachinas, the big Gilmores, and the Merlin room. I wanted to hear the Siemens Binoir horns in the Lamm/Damoka room played loud, but that didn't seem to be in the cards either time I was there. Interestingly, a visitor from Germany said the horns were using ribbon tweeters that would add air to what was a distinctively vintage sound (at the time playing distinctive vintage recordings).

Again, thanks for the great show, and thanks also for the free concert with Joan Osborne, Tom Scott, and friends. Hope I don't have to wait two years before HE returns to NY. Andrew Dubitsky
Andubitsky118@aol.com

CD sound
Editor:
I noticed with amusement the headline on the cover of the July Stereophile: "CD Sound Doesn't Get Much Better." Hasn't that been the problem with CD sound all along?
Richard Hayes
Milwaukee, WI
rhayes@uiwrr.com

Hi-rez sound
Editor:
Reading John Atkinson's review of the latest CD player from Arcam was more than a little irritating. I've been waiting for months for Stereophile to review an affordable universal player such as those from Denon, Pioneer, Integra, etc. to stop being available. You have barely acknowledged that they even exist.

Why would I be in the market for a CD player when I have been waiting for 20 years for the CD to go away? Finally, when SACD and DVD-Audio have come along and trumped the flawed CD medium, your publication ignores the players and spils much ink on speakers and amplifiers in issue after issue.

JA stated, in the conclusion of the Arcam review, that SACD and DVD-A are stalled and that for that reason we should consider purchasing a product like the Arcam. But do "Red Book" CDs sound better on the Arcam than do SACDs on a cheap Sony player or DVD-As on a cheap "Technics DVD-A" player? You need to let us know.
Nik Cotsarelis
nicksonic@netzero.com

Nudity
Editor:
From Art Dudley's July column, p.43: "I can't help but be astonished by the way American audiences have devolved to where slickness, flash, and a peculiarly dimwitted sort of sexuality are sufficient to impress them."

On the facing full-page ad: a half-dressed woman called "Dawn" with (no doubt expensive) interconnect cables wrapped tightly around her breasts, terminators nicely dangling, and nudge-nudge copy to make sure all the boys "get it."

Conclusion: the Empress of Stereophile has no clothes.
Robert Bray
Bloomington, IL
brbray@titan.iwu.edu

I have written many times in these pages, Mr. Bray, about the "Chinese Wall" that exists between editorial and advertising. How advertising doesn't influence Stereophile's editorial. But the converse is also true. I have no influence over the advertisers that companies choose to run in Stereophile. In fact, I don't even see the ads until the issue has been sent to the printer, nor do I want to. —JA

Stupidity
Editor:
I enjoyed reading Michael Fremer's review of the $350,000 Wavac SH-833 monoblocks in July (Vol.27 No.7). I felt as if I was getting a cheap ($12.95 annual subscription to Stereophile) 15-minute peeping pass to an exclusive club to which I have a little chance of ever belonging (not that I am sure I wish to). I then listened to Verdi's Requiem, played on a Nakamichi CD Player 4 ($300), through my Sennheiser HD580 headphones ($240) driven by a HeadRoom Little with More amplifier ($430), dipped on a Lynchberg lemonade made with Jack Daniel's ($25.95 for the bottle, on sale), and contemplated how great and how stupid humankind can be.
Dan Eshel
deshel@brooklyn.com

My sentiments exactly. —Mikey Fremer

Solidity
Editor:
Mr. Fremer must have had a screw loose in his July review of the Wavac SH-833 monoblock amplifier. For the $350,000 a pair of these amps cost, he could get life-

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time tickets for two to the best seats in the house for all the Los Angeles Disney Hall concerts, including air transportation from anywhere in the US, and including dinner for two at the best restaurants in L.A. And he would get to hear the "effervescence, transparency, and solidity of live music — all kinds of live music — as convincingly and effectively as reproduced by the Wavac SH-833.”

Jerome Hamburger
jh361@lafn.org

Candidacy
Editor:
Don't you think MF's review of the $350,000 Wavac Audio Lab SH-833 monoblock amplifier was a bit over the top? Without limits to the quality-at-any-price approach to selecting products for review, is a review of a $1 million amplifier out of the question? That might seem absurd, but it's less than three times the cost of the SH-833. And why stop there? Are reviews of $10 million, $100 million, or even $1 billion products out of the question?

My point is that there should be price limits on products for review. Not choosing any limit is simply avoiding the issue, abdicating your editorial responsibility. As noted in July's "As We See It," there might be a worldwide market for this product of 10 people. That group of 10 potential buyers, as a percentage of your subscriber base, is very close to zero. That ought to be a clue that it's not a prime audience for a review, don't you think?

Now, I'm not saying an article on such products has no place in Stereophile. On the contrary, extremes of any potential future trickle-down technology — but please don't call it a review, and please don't replace a review we can actually use. Otherwise, it looks as if our subscription fees are being used to fund playtime with whatever toy happens to come the reviewer's way. I'm sure it was a lot of fun, but the interests of Stereophile's readers — remember us? — would be better served by resisting temptation and instead reviewing products at least a few of us are likely to buy.

Bill Rusche
brusche@sbglobal.net

But we do review many affordable products, Mr. Rusche, as do the car magazines that also review million-dollar wheels. The difference is that the car freaks seem to have more fun reading about things they can't afford and/or might not want themselves. In the end, this is a big small tent, and, at least in part, a magazine like Stereophile is in the entertainment business. I thought that reviewing the Wavac amps might provide some entertainment. It did for some, but not for others... to those, I say,

“Lighten up!” — Michael Fremer

Reviewability
Editor:
Regarding the $350k Wavac mono amplifier's reviewability ("As We See It," July 2004), I'm enough of an economical fundamentalist to believe that the market will take care of any price imbalances imposed by manufacturers, regardless of the extent. Go ahead and review them, just don't make it a habitual practice.

Rick Goddard
Merced, CA

Equalizers, please
Editor:
I believe the main reason listeners like vacuum-tube amplifiers is their ability to partially equalize the frequency response of the speaker system. Because many of these amplifiers have very little feedback, they have both high distortion and a high internal output impedance, typically between 1 and 5 ohms. At some frequencies, such as at the fundamental cone resonance, and at crossover points where the impedance of the speaker system rises, the voltage divider effect causes the amplifier to deliver more voltage across the speaker terminals. With some speaker-amplifier combinations, the equalized frequency response is quite pleasing.

John Atkinson's measurements of the $350,000/pair Wavac SH-833 power amplifier show an extreme case of this equalization. Depending on the output tap and the load impedance, this amplifier boosts bass anywhere from 2 to 10kHz. Its distortion is disgraceful for even the cheapest amplifier. Bass boost that attenuates below 50Hz does not provide much of a foundation for the music. It should continue to increase down to 20Hz. I suggest a better solution is to use a real equalizer in conjunction with a low-cost, high-feedback semiconductor amplifier that provides flat response with any load and far more undistorted power.

Furthermore, the equalizer can balance the tone for a large number of program sources, as compared with only a small number that sound balanced with a fixed-frequency-response system.

Richard S. Brunven
Lexington, MA

More, please
Editor:
I just wanted to drop you a quick thanks for the mostly excellent July issue. In spite of reviews of a (by now, expected) preponderance of outrageously over-priced gear, I thoroughly enjoyed the issue, especially Keith Howard's article on loudspeaker diffraction. More in that vein, please!

Doug McCall
jdm56@sbglobal.net

New media metrics
Editor:
I believe Keith Howard's April article ("New Media Metrics") contains illuminating information on possible differences between DVD-Audio and SACD of interest to audiophiles. Mr. Howard failed to highlight or even to comment on these differences. I admit I missed them myself on the first pass through the article, in part because, at age 63 and with trifocals, I found the scale headings on Mr. Howard's charts almost impossible to read. I remember my initial reaction as being "So what's new?" reflecting in part Mr. Howard's own conclusion that there was not much practical difference between the two formats other than SACD's ultrasonic noise. (In fairness, his emphasis was on what they might add to records and ordinary CDs.)

By way of background, since SACD and DVD-A were launched, audiophiles partial to one or the other have argued their technical and sonic merits. Before, the SACD camp has argued that SACD's signal seems to sound more "analog" and to have both greater macrodynamics and more transparency/sense of microdynamic detail. Opponents of DVD-A argue that DVD-A has cleaner, more natural highs and that SACD's noise is an "artificial" contributor to "analog sound." You couldn't prove either by me, as I have two different players, neither Ultra-high-end, and so differences in players probably account for more than differences in format. However, I have heard enough to understand what both camps are talking about.

Mr. Howard's article measured both the DVD-A and SACD versions of Telarc's 1812 Overture and HRM's Samson Energy, by the Ray Brown Trio. It is important to realize that Mr. Howard's frequency scale on his DVD-A charts varies from DVD-A title to DVD-A title, and also dramatically from the SACD charts. So it is important to find common frequencies and understand the actual values shown. Once this is done, the data suggest that the SACD versions have an implied dynamic range greater by 6dB (Saccom Energy), to as much as 10—14dB (1812). This is derived by taking the difference between peak and average levels at 20kHz (the only frequency clearly delineated on both DVD-A and SACD charts) and then doubling it.

Mr. Howard's numbers also show a slew-rate difference greater than 33% in favor of SACD. Thus both sets of data
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Stereophile, October 2002

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John Atkinson, Stereophile, April 2004

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Paul Bolin, Stereophile, April 2004

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tend to support the SACD camp's claims. And in truth, on my system SACD has seemed to me superior on transients...with the result that orchestral music, snare hits, thumped strings, etc., simply seems a bit more lifelike and have the easy "floating" character that live music seems to have in concert.

Mr. Howard, as do many engineers, giving prominence to SACD's ultrasonic levels. In truth, this may be why DVD-A does seem to have an edge in high-frequency clarity. On my system, this can be heard on the two versions of Chesky's Swing Live, where the drum brushes, the guitar puckling, and the vibrato and clarinet overtone all seem to add a little extra sparkle to the sound that is missing from the SACD, no matter how realistic the SACD may sound otherwise.

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H.C. Lavo
Hollyoke, MA
hlavol@hotmail.com

I thank Mr. Lavo for taking the trouble to examine the graphs published with "New Media Metrics" so closely. But I would urge caution in interpreting them as he does.

I was careful to say in the text that the difference between the peak and average spectra "gives some indication of the music's dynamic range" (footnotes). One of the reasons for stating this cautiously is that the peak spectrum will vary somewhat according to precisely how the measurement frames are aligned with the music waveform. Because the signal data are windowed prior to spectral analysis, different portions of each frame contribute differently to the outcome. What this means in practice is that you would need to have precise alignment both of the recorded samples and of the measurement frames to be certain of comparable results.

As all the SACD material was recorded to hard disk via an analog connection and therefore unprocessed with the source, this was not possible to achieve. Some variation in the peaks spectra is therefore to be expected. The best that could be done to eliminate this is to repeat the analysis with offsets from 0 to 4095 samples, rather as I did for the rate-of-change measurements. Unfortunately, as I no longer have the relevant SACD and DVD-A material on hard disk (I had to delete it once the work was completed to free up space), this is not something I have been able to do. Of course, you would also want to make certain no other factors were affecting the results.

Just to make clear: the peak spectra were included in order to obtain a clearer indication of the recordings' spectral content at high frequencies. I did not generate them for the purpose of dynamic-range comparisons.

No alignment problem exists in comparing the rate-of-change results, but there are other factors that must be taken into consideration. First, the signal bandwidth is very different in the case of the two 1812 recordings, where the rate-of-change differences are most obvious, as a result of the stereo track on the DVD-A having a 44.1kHz sampling rate. Second, the SACD results may well be influenced by the additive effect of the medium's ultrasonic noise.

Again, then, I have to advise that your analysis be treated with caution. In all comparisons of DVD-A and SACD, you must be certain to compare apples with apples, and that doesn't relate only to the recording and mastering processes.

Keith Howard

As if
Editor:
I don't take issue with anyone who expresses that personal taste is what drives their interest in this hobby. I do take issue when Carlos Bauzá flatly stated that "This hobby is really about one's preferences, instead of fidelity to the source." (Letters, July, p.9). I attend a total of 16 symphony and pops concerts and at least one chamber concert each year, and what I'm trying to do, as much as room and budget will allow, is to create that "sound" at home. Fidelity is what got me interested in the first place, not making Madonna sound like Marilyn Horne.

Mannie Smith
Norfolk, VA
manniesmith@cox.net

Not in this lifetime
Editor:
With the echoes of "The Time Has Come Today," the Chambers Brothers song from the 1960s, providing inspiration, I've finally done it. For months I've wanted to express just how much enjoyment comes my way via the musings of Art Dudley. Maybe it's a matter of the parallel time of our interest in audio and calendar years, or perhaps his lucid and eloquent writing style; his column has become the one this reader heads for first each issue. Kudos, Art.

I, too, have discovered the simple goodness of the Tivoli Model One highlighted by Art in the July issue. This tiny guitar pleasure has not only increased the quality time I spend listening to our local public-radio offerings of classical and jazz, but has proven in a year of ownership to be as reliable as the somewhat pricier Audio Research gear that provides the heartbeat of my main system. Can a man ask for more, day in and day out, from a $100 investment? (The sheer fun I get from Henry Kloss' final classic is not unlike the warm and fuzzy reminiscences of my first audio system, based on a pair of Smaller Advents 30 years ago.)

To answer my own question: Not in this lifetime, folks.

Steve Greene
New Glarus, WI
sophdrummer@charter.net

Hit that nail, Art
Editor:
I'm writing to say that, for me (and perhaps others?), Art Dudley hit the nail on the head with his "Listening" column in July 2004. Specifically, his enjoyment of music at the ripe old age of 16, long before his enjoyment of music could be spoiled by his becoming an audiophile!

What prompted this letter began the other night, when taking a bubble bath with my three-year-old. As we were frolicking in the tub, we were listening to a transistor (mono) radio. I found myself bopping my head to the music! Enjoying it! I then remembered Art's article and agreed. I have spent enough time listening, for all the supposed things that my system should do, or fussing with it this way or that, and becoming so frustrated with it that I forgot why I had a system in the first place: to listen to music I like!

When I thought about it, I found I enjoyed music more in the car or at work, over less adequate conveyances. Is this because the expectations of a superior system are removed and don't get in the way? I can listen unhindered by "imaging," "depth," "dynamics," "extension," and a thousand other adjectives that, for the longest time, seemed to take precedence over the reason for owning a stereo in the first place. Like Art, my friends and I, as teens, would listen for hours to music on much less adequate stereo and love it. We didn't even know what those adjectives were.

I, too, am and remain an audio enthusiast and have made peace with all this. I want to listen for the fun of it and not be bothered with the pursuit of whether or not the system is doing it "right." If it makes me smile and tap my toes, then it is right. Don't get me wrong — I appreciate a good-sounding system. But if the pursuit becomes one of "a move in the opposite direction," then something is out of whack.

Thanks, Art, for putting it so succinctly, and for reminding me that the music and its effect on us is more important than the hardware it is played on.

Dave Smith
San Antonio, TX

Yes
Editor:
We all spend so much time and money trying to get the most out of our equipment, any thoughts about our cars? Should they be cleaned out or flushed occasionally?

Craig Bradley
Bradley@evironet.net
Cross over to the other side.

Xd.
The DEQX Calibrated™ DSP corrected powered speaker system is everything you've never heard before.

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WorldRadioHistory
US: LOS ANGELES

Barry Willis

The Recording Academy Board of Trustees announced in late June new categories of awards for surround-sound productions, to be added to the 47th Annual Grammy Awards, to be held in February 2005. The new fields include “Production, Surround Sound” and “Best Surround Sound Album.” The production award would go to “the surround engineer, if something is created in surround in its initial form, and/or the surround mixing engineer, and the surround mastering engineer,” according to Producers and Engineers Wing director Leslie Lewis. Should a remastered project win, the surround remix engineer would be honored.

The category is “open to all surround formats—DVD-Video, DVD-Audio, and SACD—and there are no restrictions on the types of music,” noted trade magazine Pro Sound News. The award is “for all genres,” Lewis stated.

US: YOUR LISTENING ROOM

Jon Iverson

Will surround sound rejuvenate the music industry? That’s the position many record-label execs took when adding the capability to DVD-Audio and SACD years ago. But while they wait for the hi-rez formats to catch on, SRS Labs has decided to add multichannel audio to the conventional compact disc.

SRS Labs recently announced that Lava Records artist Uncle Kracker has chosen the company’s Circle Surround (CS) multichannel encoding technology for Seventy Two & Sunny, which was released in July. According to SRS, CS provides the capability to encode up to 6.1 channels of audio for transmission or storage over standard two-channel carriers such as CD and stereo broadcasts.

“CDs encoded with the patented Circle Surround technology can be played back on any regular CD player,” says SRS, “unlike competing technologies that specifically require DVD-Audio or other special playback equipment.” The company says the process is compatible with all types of CD players and A/V receivers or preamps and with all playback environments, including mono, stereo, and other matrix surround systems. SRS adds, “One Circle Surround mix satisfies all playback environments.”

For listeners with a two-channel stereo system or who are using headphones, CS delivers “enhanced stereo,” explains SRS. “For those home theater installations or automotive systems with a 5.1 surround-sound system, Circle Surround-encoded CDs are decoded into full surround sound, with the output quality subject to the limitations of the specific decoder.”

The company suggests that for optimum surround playback from the format, a Circle Surround II-equipped receiver or preamp be used. SRS says that CS decoders are included in products from Marantz, Kenwood, Theta Digital, and Accuphase, as well as the software DVD player from Orion Studios.

When the material is broadcast over television or radio, compressed for distribution online, or stored digitally on standard media such as CDs, DVD-Rs, or personal music jukeboxes, SRS says, it still retains the surround-sound information. “This means radio stations that broadcast songs from Seventy Two & Sunny will in fact be broadcasting the music in surround sound without having to use any additional equipment or special processing.”

US: DAVIS, CALIFORNIA
Barry Willis

Audiophiles of every stripe know that achieving a realistic soundstage is maddeningly elusive — some would say impossible. When a system is right for some recordings, it’s far off for others.

It’s especially difficult with only a single pair of loudspeakers, due to huge variations in room acoustics and the almost always unknown but essential details of how a recording was made. Binaural recording and playback on headphones have always offered better spatial cues, sometimes with disturbingly realistic effects. Using a dummy head with microphones placed where human ears would be, recordists can capture enough lateral information to trick the brain into perceiving a three-dimensional soundfield when the recording is played back through headphones.

The effect is especially effective with sounds to the sides and rear of the listener, but less pronounced toward the front. Some technological artists have
Audio Technology featuring the new JMlab Utopia Beryllium and Electra Be Limited loudspeakers, as well as BAT’s new VK-5ix, VK-220, and VK-55 amplifiers. There will be refreshments, door prizes, and specials on JMlab and BAT products. RSVP: info@audiovisionsf.com or call (415) 614-1118.

Thursday, November 4–Sunday, November 7: Home Entertainment 2004 West, sponsored by Stereophile, Home Theater, and Stereophile Ultimate AV magazines, takes place at the Westin-St. Francis Hotel in San Francisco. See the ad in this issue for details.

Georgia
Friday, September 3, 4–8pm and Saturday, September 4, 9am–4pm: FusionPoint (Macon) will host an open house to introduce the new Linn Unidisk SC surround processor and universal disc player. Linn factory representatives will be on hand. All attendees will receive a Linn T-shirt and a copy of the new Linn hybrid SACD/CD sampler disc. For more info, call (800) 947-8460 or e-mail avsales@fusionpoint.net.

Michigan
Saturday and Sunday, October 9–10, 12–6pm: Superior Sight & Sound (West Bloomfield) will conduct a seminar featuring new products from dCS and Solid Technology. RSVP: (248) 626-2780 or e-mail superior@hotmail.com.

Minnesota

Texas
Wheatstone Audio is celebrating 10 years of business with a new location (2401 E. Sixth Street, Austin). For more info, call (512) 477-8503.

Netherlands
Friday–Sunday, October 1–3: The Audio Engineering Society will hold its 26th International Conference in Baarn. For more info, visit www.aes.org/events/26 or e-mail 26th_chair@aes.org.

INDUSTRY UPDATE

Researchers at the University of California at Davis have announced a breakthrough in “motion-tracked binaural” sound. recordings intended to be heard over speakers. Many audio engineers have theorized that a larger number of record/playback channels, including some for vertical cues, could re-create a much more realistic soundfield. Tomlinson Holman, developer of the THX system, believes that a “10.2” system, with 10 dedicated full-range channels and two low-frequency effects channels, would be sufficient to do so. But implementing such a system is probably not practical for even the most fanatical audiophile.

An intensely realistic system with headphones appears to be feasible, however. On June 29, researchers at the University of California at Davis announced a breakthrough in “motion-tracked binaural” (MTB) sound. The system “captures cues for direction, distance, and movement and the subtleties of natural, ambient sound that other systems don’t,” according to the announcement. Developed by Ralph Algazi, Richard Duda, and Dennis Thompson at the Interface Laboratory in the UC Davis Center for Image Processing and Integrated Computing (CIPIC), the technique (patent pending) “uses off-the-shelf equipment that won’t break the bank.”

Although the “head-related transfer function” — the way the head attenuates sounds from one direction to create spatial cues in the brain — has been recognized for decades, its only practical application has been in training airplane pilots. The UC Davis scientists tackled the age-old problem of capturing spatial cues in a novel way, leveraging computer technology not available to earlier generations of researchers. MTB is said to incorporate more information about the space in which recordings are made, and makes possible pronounced changes in perspective when listeners use a specially designed headset.

“Conventional audio playback [does not] reflect how you hear in real life,” Algazi said. “Your body, the shape of your head, and the room acoustics all affect how you hear.” Another persis-
For those who believe there is virtue in extracting the utmost from life's experiences, who therefore respond to the passion inherent in great music-making, we offer a loudspeaker designed in pursuit of perfection.

Drawing on technologies pioneered in the Alexandria X-2, the new MAXX Series 2 enthrones music in all its soul-stirring power.
the system, according to William Beck, a composer of electronic music and lecturer in the UC Davis Music Department. "The 'being there' feel is something people would really like," Beck said. Few audiophiles would argue with that.

The announcement didn't mention any commercial products that might incorporate MTB, but the application for a patent implies that it does have commercial potential. MTB could prove to be everything that hi-rez free-air technology is not. More info can be found at the CIPIC Interface Laboratory website, http://interface.cipic.ucdavis.edu.

United Kingdom

Paul Messenger

Marantz's annual get-together for the European press has become a key event on the audio calendar, not just for news about the brand's plans for the coming season, but also for its perspectives on the state of our industry, and for the chance to meet other journalists.

Marantz is now back under US control, allied with Denon as part of D&M Holdings, which, along with other brands (including McIntosh Laboratories), is itself part of the Ripplewood Group. Marantz and Denon each expect to retain full autonomy in both design and distribution; their new family ties seem likely to be closest in the areas of sourcing and manufacturing.

Ken Ishiwata, Marantz Europe's long-time technology supremo, offered an overview of the consumer-electronics scene that revealed that specialist hi-fi has had a pretty tough year. Most components (DVD players excepted) suffered significant declines in sales. Marantz, however, is not suffering too much from the downturn, because a number of the larger, mass-market electronics multinationals have stopped making hi-fi separates altogether. For example, Panasonic's once powerful Technics brand now seems to appear only on DJ equipment and electric organs. But Marantz is sticking with real hi-fi for the long haul. If their sales volumes have recently weakened, at least the retail prices of Marantz products have shown much greater stability than more mass-market products, which means it's still possible to make a profit by selling traditional two-channel separates.

Not surprisingly, the products showing strongest growth right now all fall into the video and home theater categories, notably DVD players, flat-screen displays, and recorders are growing rapidly, and that this product type can be expected to eventually take over the functions of both DVD players and VCRs.

The really big wind of change, however, is just beginning. According to Ishiwata, the 2004 Consumer Electronics Show saw the opening salvos in what promises to be a huge battle for the future of home entertainment, between the Japanese multinationals that dominate traditional consumer electronics and the US-based computer industry.

New products, such as Microsoft's Windows Media Center Extension and Intel's LCoS (the Liquid Crystal on Silicon technique used for video projection), are evidence that these major computer-industry players see their futures in home entertainment. Exactly how the battle will be joined is impossible to predict, as it will depend on how programming will be delivered, stored, and networked, and which protocols will become established standards.

While chatting with Ishiwata after the formal seminar, I expressed some skepticism that the relatively complex and crash-prone computer was a real threat to traditional components. However, Ishiwata doesn't see this as straight head-to-head competition. Rather, he sees the audio market as an increasingly complex array of complementary niches in which each successive generation of consumers tends to establish and stick with its own pattern of hardware use.

Younger consumers might therefore be busy using PCs to download music, burn CDs, and dump audio data onto what Europeans call SPAs (solid-state personal audios), while choosing mini and micro systems for use at home. Older people seem more inclined to remain loyal to traditional approaches such as separate two-channel hi-fi components, and copying via a CD recorder rather than a PC.

Which helps explain a couple of interesting surprises among the new Marantz components due to appear soon. First is the new and decidedly high-end Premium SA-1151 disc player, which combines state-of-art SACD and CD replay—but strictly in two-
channel mode. Marantz is by no means abandoning multichannel SACD — which several lesser models in their range continue to support — but is recognizing that many audiophiles, especially at the top end of the market, prefer to stay with stereo.

The CD format seems to have lost a bit of its luster. I was amused to hear that UK sales of CD singles have recently fallen behind those of cell-phone ring tones (!), and that 7” vinyl singles are making a comeback. And Britain seems to be the only major market that hasn't recorded a significant drop in CD-album sales over the last year.

Marantz’s product manager, Bert Kiggen, pointed out that SACD and vinyl are the two formats that are now actually showing some growth, albeit from small bases. This is why Marantz plans to soon equip all of its two-channel CD players with SACD replay capability, and why their second surprise is a serious and very good-looking turntable, complete with tonearm and cartridge, all sourced from Germany’s Clearaudio. The package will sell for around £1000.

Having experimented with multichannel surround sound and discovered that I’m happier with two-channel stereo, I’m comforted to discover that I’m not alone. For the genuine hi-fi music enthusiast, it’s equally encouraging to note that our industry looks likely to survive the technological swings and cinematic arrows that “progress” seeks to impose on us, even if it involves a bit of downsizing along the way.

**US: NEW YORK CITY**

Kalman Rubinson

At the end of June, I attended a demonstration of NHT’s new Xd DSP powered speaker system at the Plaza Hotel in New York City. Representatives from NHT and its supporting cast, DEQX and PowerPhysics, opened by explaining the philosophy behind the new product and the essential components contributed by each firm.

First up was NHT’s managing director, Chris Byrne, who said that the Xd represents the company’s approach to providing a small, “domestically acceptable” speaker system that wouldn’t sound like a small system, and that would satisfy critical and serious listeners. The use of DSP and class-D amplification with modern drivers and advanced cabinet construction has resulted in a system with wide dynamic range and flat frequency response, and that offers optimized performance without needing precise speaker placements or room treatments.

Next, Kim Ryrie, CEO of Australian company DEQX, explained how the inclusion of that company’s DSP capabilities provided extremely high-slope crossovers between tweeter, midrange, and woofer; driver-frequency correction for flat response above the bass; and time delays to compensate for the spatial offset between sub and main speakers. (While the DEQX system can be enhanced for room equalization, that is not included in the Xd.) Ryrie emphasized the importance of high-speed processing algorithms and the role of high-slope crossovers (more than 100dB/octave!) in improving system radiation and lowering distortion.

PowerPhysics’ president, Gordon Wanlass, described how PowerPhysics’ switching amps were small in size and high in efficiency, typical of their type. He also explained how their unique circuitry provides high-speed error correction during each switching cycle, thereby virtually eliminating distortion due to clipping.

The demo system consisted of a pair of small Xd9 satellites (1” neodymium-magnet tweeter, 5.25” metal-cone midrange) in a molded composite enclosure with wooden finish, a single XdW powered bass module (two opposed 10” drivers and a 500W amp) and an XdA DSP/Amplifier (DEQX DSP with 24-bit/96kHz A/D/A, six output channels, four channels at 100Wpc, or 600Wpc peak output). The XdA’s only controls permit the user to define the boundary equalization to adjust for each speaker’s relationship to room surfaces. The Xd system is thus, in effect, an active speaker system that requires a volume-controlled source such as a preamp or A/V processor. (Price for the complete system will be $5500, including two satelites, stands, bass module, amplifier/crossover, and cables. No prices have been set for the individual pieces.)

The finish of the speakers and electronics was first-rate; the Xd is also available as a multichannel system that retains the sound quality and advantages of the two-channel setup.

The demo revealed a sound that was surprisingly balanced and wide-range, despite an untreated hotel room with a large mirrored niche between the speakers. The clarity of the prepared demo material, as well as of my own discs, was excellent, and the bass was fairly deep and well defined.

I was impressed with these small, extraordinarily open, low-distortion speakers; nonetheless, they did still seem like small speakers. It will take a more extended audition in more familiar surroundings to circumvent this bias. I hope to review this exciting system very soon.

**UNITED KINGDOM**

Paul Messenger

One new loudspeaker design might be interesting in itself, but two surprisingly similar and equally radical designs from very different sources must be more than mere coincidence. More likely, its evidence of the way loudspeaker designers tend to think alike when working up a “clean sheet” design, and how each step along the road seems to follow
Refined.

A descendant of the critically acclaimed Nº32 Reference Preamplifier, the Nº320S continues a tradition of world-class Mark Levinson preamplifiers that began over a quarter century ago.

Designed to achieve remarkable channel separation, sonic imaging, and isolation from interference, the single-chassis Nº320S draws many of its design features directly from the critically acclaimed dual-chassis Nº32.

In fact, some audio circuits, including the discrete volume attenuators, are identical to those found in the Nº32.

The Nº320S exceeds all reasonable expectations for a stereo preamplifier. Its flexible design, including a surround sound processor mode and optional phono input module, allows it to accommodate a wide range of system configurations. Visit your Mark Levinson dealer and hear the difference the Nº320S can make in your music system or learn more at www.marklevinson.com.
quite naturally from the last.

Graham Foy and Laurence Dickie are both British speaker designers with fine track records, and both are responsible for new and innovative loudspeakers that are about to be launched. Neither was aware of what the other was up to, yet both have come up with designs that show a surprising degree of commonality, despite differing substantially in the details.

Most obviously, both new speakers have curvaceous molded enclosures. This sort of shape confers acoustic advantages over conventional rectangular boxes, both inside (by minimizing standing waves) and out (by reducing baffle-edge diffraction). Both designs also feature metal-diaphragm drive-units throughout, and go to some length to isolate the drivers mechanically from the front baffle.

Laurence Dickie—universally known as Dick—spent 14 years at B&W before going freelance in the late 1990s. His impressive CV includes B&W's Matrix cabinet-stiffening technique, but his pet project was B&W's dramatically original, spiral-shaped Nautilus speaker.

As a freelancer, Dickie has designed speakers for Blue Room, and currently works part time with Turbosound on high-quality PA systems. He's also spent time developing and refining his own advanced hi-fi drive-units, which are some of the key ingredients in the line of a new speaker manufacturer, Vivid Audio, based in South Africa.

Durban, in the province of KwaZulu-Natal, South Africa, sounds an unlikely place to set up a high-end speaker factory, but it's where Vivid Audio's principals, Philip Guttentag and Bruce and Dee Gessner, are based. The three have many years' experience in the hi-fi business and as acoustic consultants, and the Durban area has a good engineering infrastructure and competitive costs. Although diaphragms and surrounds are brought in from the UK, the vast majority of Vivid's work is done in South Africa.

When Dickie met up with Vivid, he found himself very much on their wavelength, and felt he could provide the extra engineering input they were looking for. He liked the molded-enclosure concept, and took charge of the new speaker's technical design, developing an advanced 3½-way lineup for the B1 model, which has an integral stand.

The Vivid B1's two 6.5" bass drivers are decoupled from the enclosure and mounted back to back, to cancel their reaction forces. The two ports are similarly opposed, for the same reason. The Vivid B1 somewhat echoes the original B&W Nautilus concept: each driver is intended to behave pistonically to well beyond its nominal operating range, while the 2" midrange dome and 1" tweeter are both loaded by internal transmission lines. However, the B1 is a regular passive design, and is expected to sell for around £6500/pair in the UK. US distribution has not yet been set up.

Graham Foy worked on Mordaunt-Short and Epos designs in the mid-1990s, when those brands were part of the TGI Group. He then provided some continuity when Audio Partnership bought Mordaunt-Short in 1999, and since then has been responsible for developing all current M-S speaker models, as well as setting up production facilities in the People's Republic of China.

The attractive but relatively conventional, bread-and-butter Avant series was Foy's first priority, but Audio Partnership's ambitious plans for the Mordaunt-Short brand also included
The Performance 6 is mounted on a substantial 22-lb (10kg) base of cast iron, to provide stability and a mechanical ground for the separately encased crossover network.

I haven't yet listened in my home system to the Vivid B1 or the Mordaunt-Short Performance Model 6, but I'm impressed with how speaker designers continue to come up with new ideas and techniques. I hope both of these interesting models will live up to the promise of their technical innovations.

US: NEW YORK
David Lander

Not long ago, while listening to a fine historical CD, The Supremes String Quartet with Benny Goodman (Bridge 9137), I noticed that someone named Norman Pickering had engineered three of its four selections. Was this the same Norman Pickering who, just after World War II, dazzled both the professional and consumer markets with an innovative phono pickup, but who soon after left the fledgling hi-fi industry? If so, would I still be able to speak with him?

Happily, the answer to both questions was yes.

Pickering, who turns 88 in July, lives at the eastern tip of Long Island with his wife, Barbara. He began studying violin at age seven, and later took up viola and French horn. After earning an engineering degree in 1936 from the school that has since become New Jersey Institute of Technology, then attending Juilliard, he played French horn with the Indianapolis Symphony for three years. He was employed by Conn, the musical instrument company in nearby Elkhart, IN when Pearl Harbor was attacked. He then moved back east and worked on aircraft landing systems at Sperry.

In his spare time, Pickering conducted a company orchestra, freelanced as a horn player, and began work on his phono cartridge. F. Sumner Hall, then one of New York's leading recording engineers, heard it and, Pickering recalls, "said on several occasions, 'If you can make these things after the war, I'll sell every one.'"

ON CHRISTMAS DAY 1948, NORMAN PICKERING WAS SHOWN A PROTOTYPE JUKEBOX, THE FIRST OF ITS KIND TO HOLD 100 VERTICALLY POSITIONED 45RPM RECORDS.

In November 1945, after cashing in his war bonds and securing $1000 from each of two backers, Pickering started a firm to manufacture his pickup, which employed a moving armature of special nickel-iron alloy drawn into a tiny, thin-walled tube. "That had never been done and required some fancy metallurgy," he said in a lengthy telephone interview. He added that the suspension had

Picture perfect. Surround spectacular.

Rotel's new RSX-1067 is the definitive Home Theater surround receiver. It is replete with all of the features a video fanatic could ever desire including: High Definition video switching, video transcoding, multi-zone, multi-source audio capability and seven channels of amplification. The RSX-1067 provides outstanding audio and video performance along with exceptional versatility. Hear it along with all of our other superb components at your authorized Rotel dealer.
both vertical and lateral movement, and a carefully controlled ratio between their mechanical impedances. The entire assembly had less than a tenth the mass of any other pickup then made.

After a call from the chief engineer of Capitol Records, Pickering “hot-footed it into the city” to demonstrate his device. Along with several executives—all with “long faces, a very solemn group”—Capitol’s president awaited. So did a master lacquer that the Western Electric 9A pickup they’d been using couldn’t track.

Pickering “could see from the reflection pattern that it was a pretty high-level recording.” Only when his pickup reproduced a very loud passage without breakup did the tension in the room dispel. “All of a sudden, everybody broke out into smiles,” and Pickering soon began supplying Capitol’s studios. Record critics and radio stations started buying from him as well.

In 1947, Pickering entered the consumer market with “a very beautiful little cartridge with a gold-plated case” that sold for $15. When General Electric introduced its variable reluctance cartridge at $10, Pickering relates, “people would call and say, ‘You guys are dead now. GE’s going to wipe you out.’”

Hardly. Pickering hired Sumner Hall as sales manager, and orders poured in from Liberty Music, Leonard Radio, Grand Central Radio, and other dealers of the day.

At about that time, Pickering had a consulting arrangement with George Szell, whom he advised for a few years on technical matters. The conductor had just happened to be walking past his house on Long Island—Szell was visiting friends nearby—when Pickering was practicing horn for a New York Philharmonic concert. Szell knocked on the door, introduced himself, and, in the ensuing conversation, expressed dissatisfaction with the lacquer-disc recordings of a performance of Mozart’s Don Giovanni he had just conducted at the Metropolitan Opera. Could this musician-engineer perhaps fix them? He could, and did—by re-recording the discs with revised equalization.

On Christmas Eve, 1948, Pickering was surprised by a phone call from the chief engineer at Seeburg, the Chicago-based jukebox manufacturer, who “ordered me to get on an airplane first thing in the morning and get out there,” cryptically adding that Pickering would always regret it if he didn’t. After arriving on Christmas Day, he was shown a prototype jukebox, the first of its kind to hold 100 vertically positioned 45rpm records. No pickup worked with that configuration.

Pickering was virtually held captive in Chicago for the two weeks it took him to design a dedicated two-sided cartridge, and Seeburg’s production demands subsequently led him to seek a business-oriented executive to manage his company’s growth. Though the man drove a hard bargain, he settled on one Walter Stanton.

After being stricken with hepatitis, which kept him out of the office for nearly a year, Pickering recalls returning to a company that had been reshaped by his manager. He says Stanton had also exercised stock options prematurely. Moreover, according to Pickering, Stanton had
tantalized the company's original investors with visions of wealth. They pleaded with Pickering to settle amicably with the usurper.

He says he tried, but that Stanton would agree to an arrangement one day, then renge the next. In 1950, worn down by the gambit, Pickering sold the firm to Stanton, who insisted he sign an agreement barring him from all audio design and production activities for life. "I just wanted to get out," Pickering comments. Walter Stanton died in 2001; the Pickering and Stanton brands both live on in the disc-jockey market.

At that point, using a brand-new device, the transistor, Pickering invented, patented, and manufactured a clock. It sold well, until the Japanese introduced a more accurate crystal model at half the price. He then returned to the aircraft industry, where he worked in high-level technical positions for a time.

He never abandoned music. He had already begun making stringed instruments, first a viola and then a violin, both of professional quality. Pickering's third effort didn't sound nearly as good, so he began an investigation into violin acoustics that has continued for more than half a century. Now one of the field's experts, he has written two books on the subject.

Pickering isn't tempted to return to phono-cartridge design. He'd rather build instruments and play the organ compositions of J.S. Bach. He spent years recording organ sounds digitally and, after loading the samples into his Roland and Kurzweil synthesizers, in effect now owns a virtual baroque organ. He and his wife also help run Pianofest in the Hamptons, an annual summer workshop for pianists, and he consults for D'Addario, a company that makes strings and other musical instrument accessories.

In 1950, Norman Pickering and the four principals of the Stuyvesant String Quartet founded a record company called Philharmonia. Its LPs, which sometimes featured other performers, earned widespread critical approval and made several best-of-year lists. Nevertheless, the firm barely earned expenses, and ceased recording in 1954 after producing just 11 albums. Pickering engineered all but a single selection on one of them.

The producer of The Stuyvesant Quartet with Benny Goodman, Jay Shulman, is a son of the Stuyvesant Quartet's cellist, Alan Shulman, whose compositions can be heard on that and another Bridge recording; he's also a nephew of Sylvan Shulman, the ensemble's first violinist. In the accompanying booklet, Jay Shulman cites a comment his father made to Pickering in the 1980s: "Those years we worked together were the happiest times of my life."

"They certainly were among the happiest," Pickering affirmed to me toward the end of our talk. "I've had a lot of happy years."

It's impossible to estimate the extent of Ray Charles' contributions to the fabric of American culture. US: Los Angeles Barry Willis

All of us at Stereophile were saddened by the death of Ray Charles. The giant of music passed away Thursday, June 10, at his home in Beverly Hills, surrounded by friends and family. He was 73.

The official cause of death was liver failure, according to the Los Angeles Times. Charles had undergone successful hip-replacement surgery last fall, and his liver ailment was discovered during his recovery. In April, he worked on a recording of duets with performers from a wide range of genres, and on April 30 made his last public appearance, at a ceremony hosted by the city of Los Angeles designating his recording studio a historic landmark. Failing health caused him to cancel a planned summer concert tour.

Ray Charles has been fully and deservedly eulogized by mainstream media throughout the world, to an extent that needn't be rehashed here. His achievements — a performing career that spanned six decades, more than 60 albums, innumerable hit songs, and dozens of Grammy Awards — comprise a record that will never be equaled. It's impossible to estimate the extent of Charles' contributions to the fabric of American culture. He was rooted in gospel (as a kid, he sang in a Baptist choir), but absorbed every imaginable influence — blues, jazz, swing, rock, country — borrowing from each and enriching them all. Many music writers attribute the emergence of soul music — a catchall term that encompasses a vast expanse of sub-genres — directly to Ray Charles.

Like all great art, his was both universal and personal. A charter inductee into the Rock and Roll Hall of Fame, Charles is also enshrined in the Country and Western Hall of Fame in Nashville, and received a Lifetime Achievement Award from the Grammy organization. He transcended the barriers of class and color with self-deprecating tales of bad luck and irresistible lust punctuated by infectious rhythms, his voice as wise as a grand-

father's and as intimate as a lover's. Brother Ray connected to his fans both viscerally and emotionally, but the genius of his delivery was that he was always inside your mind.

His life was the epitome of triumph over adversity. Born dirt-poor in 1930 in Albany, Georgia (a state that in 1979 adopted his version of Hoagy Carmichael's "Georgia" as the state song), Charles saw his brother drown in a backyard laundry tub, and by the age of seven had lost his eyesight to glaucoma. The blindness may have been good fortune in disguise; it led to his placement in the Florida State School for Deaf and Blind Children in St. Augustine, where he mastered the piano and many other instruments and learned to read music by Braille.

Orphaned at 15, Charles was living on his own in Seattle at the age of 17, playing in local jazz clubs and beginning to develop his own inimitable style. (Quincy Jones, a giant of music in his own right, was befriended by Charles in Seattle and learned from him the fundamentals of music composition and arranging.) Charles was barely of voting age when "I Got a Woman" began to climb the charts. With music coursing through his veins "like blood," he would say, and his wagon hitched to a star, Charles' career soared in a long, graceful arc that ultimately affected hundreds of millions of music fans.

I was one of them. My family moved from Oklahoma City to Akron, Ohio, in the early 1960s. Home to all the major tire makers — my dad was a mid-
EXTRAORDINARY INVESTMENTS
AN OASIS OF ARTISTRY IN A MARKETPLACE OF MASS-PRODUCTION AND PLANNED OBsolescence
"Valkyra bring the reality (to word I chose carefully) of..."
level executive for one of them—Akron may have been called “The Rubber Capital of the World.” I don’t remember. I do remember miserable winters when soot-encrusted slush the color of tepid coffee froze rock-hard for months, sweltering summers when the toxic sky would explode in end-of-the-world science-fiction sunsets, and year-round airborne dust like powdered charcoal cast its shadow everywhere.

The entire upper Midwest—the Rust Belt—was an industrial wasteland of short horizons and stunted opportunity. Grimmer places existed, but they were hard to imagine. Only a handful of the kids in my high school harbored any hope of college. The future for most consisted of the Army or jail or both, dead-end industrial production jobs, and years of hard drinking and bar brawling. With luck and an alcoholic haze, a few digits could be sacrificed to a punch press, the short route to early retirement on disability.

Adults still firmly in the grip of Eisenhower-era conformity kept the cultural lid screwed down tight. I was a pimply misfit whose urge for something more meaningful—maybe even a way off the fast track to nowhere—led to my hanging around a group of kids in a nearby university town. These kids were slightly older but vastly hipper than I—scruffy streetwise boys and willowy girls with exotic nicknames and the demeanor of European fashion models. They inhabited a parallel universe of foreign films, trendy art, and the latest music. I feigned panache, hoping the sophistication would rub off on me.

The ruse succeeded. One aimless evening, wandering the streets of Kent, Ohio, I was invited to an upcoming Ray Charles concert. In Oklahoma, I had seen a couple of country acts from a distance at the State Fair, but apart from a school-sponsored “music-appreciation day” that gave a busload of future rivet punchers a snippet of classical music from the local symphony, I’d never been to a real concert. I wasn’t yet old enough to drive. But my father’s love of jazz vetoed my mother’s misgivings about my going downtown at night with...that army crowd.

One of the girls wangled a car from her older brother. There were maybe eight of us jammed in there for the ride into the forbidding heart of darkness that was downtown Akron. We found the auditorium and tried our best to look as if we belonged in that sold-out house of very adult and mostly black hipsters. I knew I had entered another world entirely when the curtain rose on Brother Ray, his sparkling suit scattering the spotlight, his big band a phalanx between him and the stunning Raelettes in their shimmering turquoise gowns.

They had me from the first note. Ray grinned luridly under his blackout shades, pounding the keyboard as he leaned away, his legs flailing wildly. In that gravelly, world-weary voice, he wailed songs of longing and songs of regret as his horn section swung for the heavens, the Raelettes’ angelic voices a narcotic lure of seduction and denial. Eve bit the apple and opened her eyes; Adam stood helpless before her. Moth to the flame, fly to the spider, it all may come to no good in the end, but we cannot refuse the dance of love.

The Buddhists say that when the student is ready, the teacher appears. That night was just another road show for Ray Charles, one of thousands. For me, it was an epiphany. In three hours I learned that the forces of life and of art are as inseparable as sky and sea, that joy and elegance can exist amid squalor and hopelessness, that vision is bestowed not only on the sighted.

We came away from that concert transformed—me, in particular, with a feeling of hope that the future might not be a closed system. Still in us, the music lifted us above the grimy streets. The borrowed car floated through Akron as if through a celestial city. We abandoned all pretensions to cool and, in hoarse voices, sang “Let’s Go Get Stoned” all the way home.

For me, Ray Charles will always be the brightest star in the firmament. Rest easy, old friend. I can’t thank you enough.
"Let's test wine instead of loudspeakers," Giovanni Nasta suggested.

Signor Nasta is president of Opera Loudspeakers and Unison Research. You met him here last April, in Vol.27 No.4.

To underscore his passion for wine, Gianni reached for the latest issue of his favorite magazine — *Stereophile*, not *Stereophile*, but *Il Mio Vino* (My Wine). All about Italian wine. Is there any other? In Italy, no, just as there are no French restaurants in Italy; none that I've seen, anyway. French wine would be *il loro vino* (their wine).

Wine has been around for thousands of years, signor Nasta explained. It was here before hi-fi and will be here long after. Not that business is slow at Opera and Unison — far from it. But a loudspeaker or an amplifier is just a speaker or an amp. You can't bottle it, can't drink it.

"I could always get a job making wine," Gianni told my wife, Marina, and me. "Maybe Sam could get a job writing about Italian wine."

*Stereophile*’s real expert on Italian wines is Bob Reina. He even teaches seminars in the subject. Now he could get a gig writing about Italian wines.

Opera Loudspeakers and Unison Research share a factory in an industrial zone on the outskirts of Treviso, a half-hour north of Venice. The factory, which opened two years ago, is large, spacious, and visitor-friendly. Signor Nasta has seen to that — with a well-stocked café on the second floor where a refrigerator keeps Giovanni’s wines at the right temperature. At the bar, there’s a beautiful brass Elektra espresso machine, produced in a nearby factory.

Giovanni keeps most of his wine at the factory. I’m not sure how he keeps track of it. Maybe he doesn’t. I spied a case after case — here, there, everywhere. Some were stashed behind boxes of speaker drivers from Scandinavia, while others were stacked next to racks of Unison Research tube amplifiers in various stages of production.

"Look at this!" Giovanni marveled. "Two-channel tube amps. We can hardly make enough of them."

Back at the café, Giovanni popped the cork of a bottle of his favorite prosecco — Bisol Crede. "It’s made mainly from prosecco grapes," he explained. "The vineyard is only an hour’s drive away. Do you want to go tomorrow?"

"I thought we were going to audition loudspeakers."

"Test wine first," Giovanni said.

A prosecco has a cleaner, fresher taste than champagne — at least to my taste buds. There’s no afterkick — none of that slightly bitter, grassy aftertaste that so often mars the pleasure of champagne. Drink prosecco while it’s fresh, because this bubbly doesn’t keep very well. Alas, I pay $12 a bottle for a prosecco that, in Italy, costs closer to $6 — or $4, if you buy directly from the vineyard.

Fortunately, prosecco is becoming more available in the US — at least in the Northeast, where you can sometimes find Bisol.

It does seem that Giovanni would sooner talk about wine, food, and his native Napoli than about hi-fi.

"Food is so much better in the south," Giovanni said. "The fish. Mozzarella. There is no place like Napoli. You can make an entire meal around buffalo mozzarella, a few slices of bread, a bottle of wine. Gelato for dessert."

Giovanni invited us to Opera and Unison’s annual late-spring meeting. There were other members of the hi-fi press, including colleagues from the UK and Italy, along with Opera and Unison’s distributors from around the world. Marina and I were going to Italy anyway — we’re always going to Italy. Every trip to Italy is a trip to Russia postponed. We began our trip a few days early.

At the meeting, I met "Aruldas," a distributor from Dubai who talked about his favorite horn speakers, and about the problems of running tube amps in the desert. Sandstorms occur every few weeks or so, and there’s almost no way to stop grains of sand from flying into your hi-fi gear. Tube amps and turntables are especially vulnerable. It’s not easy being an Arab audiophile.

I met Winky, too — Mr. Winky M.W. Tse, general manager of Richcom Audio Video Co., Ltd., in Hong Kong. Besides Opera, Unison, and Audio Analogue, the young Mr. Tse handles McIntosh — a big brand in Hong Kong. Winky was all ears when I told him about the McIntosh MC275 I’d just reviewed for the July *Stereophile* (Vol.27 No.7). It’s great to see such enthusiasm for real hi-fi in a person who can’t be much older than 30.
Winky was headed down to Tuscany to visit Audio Analogue. I told him how to change trains in Firenze. "You want the local to Lucca," I explained, "or the through train to Pisa, which is faster and more comfortable. Don't forget to date-stamp your ticket!"

We were gathered to see and hear new products from Opera and Unison — so many that we didn't have time to audition them all, just look. This may be the busiest hi-fi factory in Italy. Is Vicenza the capital of Italian hi-fi? Maybe now it's Treviso.

The British contingent soon arrived, led by Nick Green, managing director of UKD, Opera and Unison's UK distributor, and his associate and my friend Simon Pope, former editor of Hi Fi Plus. I also had the chance to meet Roy Gregory, the affable chap who's that magazine's current editor. And Marco Cicogna, senior editor of Italy's Audio Review.


Ah. So we wouldn't be hearing Ken practicing his Italian.

Opera and Unison share the same front office, and overlapping ownership, but the two firms keep their engineering and production staffs separate. This is important, said Giovanni Maria Sacchetti, Unison's founder and a key figure in the development of Italian hi-fi.

Few manufacturers seem to be good at producing loudspeakers and electronics, signor Sacchetti observed. He once helped design speakers, but now works exclusively on electronics. Sacchetti runs Unison's engineering and production departments, while signor Nasta handles the business side.

Unison has vacated its old digs next to a pig farm in the hills above Vicenza. I shall miss the porkers, although the people from Unison don't. Swine are swell — if you don't have to live or work nearby. Some of the pigs would come up to the fence to say hello. Marvelous animals.

Like other Italian hi-fi firms, Opera and Unison have the feel of a family. Giovanni Nasta's two sons, Bartolomeo and Riccardo, work for the business. So does his wife, Donatella. Daughter Elisabetta will be doing so in a couple of years. Gianni also introduced me to his father, Bartolomeo, age 72, now retired. When you visit an Italian hi-fi firm, you'll likely meet everyone — aunts, uncles, cousins.

The elder Bartolomeo Nasta would be thrilled to see his photo in a hi-fi magazine. John Atkinson, can you oblige?

There's the extended Opera-Unison family, too, which includes Dr. Mario Bon, graduate of the University of Padua and part-time speaker designer. You'll meet him in a moment.

The Unison side of the family includes Dr. Leopoldo Rossetto, president (chairman) of the University of Padua's Department of Electronics — an objectivist with an open mind when it comes to subjectivity. Measurements are necessary, Leopoldo suggested, but the ear can tell you things that measurements can't. The fact that something measures well or that a circuit looks good on paper is no guarantee it will sound good.

After a tasting of prosecco, Giovanni Nasta invited us into the conference room to review new products from Opera and Unison. "This won't take too long," he told us. "Then more testing of wine."

One of Opera Loudspeakers' successes has been the Callas model, named after the great diva. This small, stand-mounted affair uses very-high-quality Scandinavian (ScanSpeak) drivers. I reviewed it last April (Vol.27 No.4), and it gets a Class A (Restricted LF) rating in Stereophile's "Recommended Components." John Marks is another fan of the Callas.

Nick Green, who has been associated with Opera from the firm's founding, filled me in on some of the Callas's history. The speaker was a success from the moment they put the drivers and crossover in the box, he said. The magic was there, with little tweaking necessary.

Now, Giovanni Nasta has come up with the idea of extending the Callas line. But that's not so simple. How can you retain the qualities of a superb stand-mounted monitor and turn it into a full-range floorstander? This would be a neat trick if he could pull it off. Many have tried — some less successfully than others. Fortunately, signor Nasta has help from Dr. Bon.

Dr. Mario Bon's specialty is superconductors. In Italy, you don't give up your day job to design loudspeakers — or electronics. His research into superconductors at the University of Padua helps him design speakers, Dr. Bon told me. When I understand how, I'll tell you. I suspect this may take at least one meal at Trattoria San Trovasano.

I asked Dr. Bon about the recently reopened Teatro La Fenice opera
about Venice restaurants. Important things first.

So many eateries are just for tourists, he told me. Among his favorites, though, is one of mine: the Trattoria San Trovisano, just around the corner from the Accademia art museum, but far enough away to discourage any tourist foot traffic. (Facing the building, you take the alley to the left, follow it to the end, and turn left—you can't turn right. The restaurant is immediately on your left. The place is always packed—and, seemingly, with local Venetians. The restaurant seems to be the place for lunch; it's a little easier to access for dinner.) You can eat superbly well in Venice, but plan on traveling a fair distance from St. Mark's Square.

Dr. Bon said he traces his lineage back to the founders of Venice—I guess that means to the Doges. You might mistake Dr. Mario for a gondolier, instead of a Doge or a research physicist—he's a big bear of a man.

Dr. Bon lamented about what tourists have done to Venice. "I must pay four euros for a bottle of water because that's what they can charge tourists," he told me. But despite all the hassles, he won't leave. Neither would I, if I were a native Venetian.

I had some time—between wine testings—to sit down and talk with Dr. Bon about the new Callas Divina and Callas Diva floorstanders. Both have beautiful cabinets with gently curved side panels, and both are constructed so that the speakers tilt back by about 2°.

The Callas Divina and Callas Diva are described as floorstanding bass-reflex speakers with a rear-firing port. Both models use the same ScanSpeak 1" tweeter and 5.8" woofer as the original Callas (which continues in the line). Much of the build cost is in the drivers, I was told, which are customized for Opera. (The prices aren't yet set, but should be about $8000/pair for the Callas Divina, $5000/pair for the Callas Diva.)

The cabinets, too, are costly. The curved sides are made from different layers of wood, lined with MDF for structural rigidity. (The small, squarish cabinet of the classic Callas is made of solid wood.)

For a while, signor Nasta tried producing cabinets on-site, at the new factory. He does love to work with wood. But this proved problematic. All that sanding, spraying, and finishing is not the best environment when you're assembling electronics nearby.

Gianni tried outsourcing his cabinets, with mixed results. Finally, he shrugged (I assume he shrugged) and bought a furniture factory. For all his humor, Gianni is a perfectionist who insists on getting things right. He's also very serious about hi-fi. His wife, Donatella, told us that he usually gets up before dawn to listen at the factory for two hours, early in the morning.

Dr. Bon described the new speakers as "two-way."

"Wait a minute," I interjected. "The Callas Divina has four woofers and the Callas Diva has two."

Dr. Bon opened his notebooks, in a very professorial way, to reveal page after page of measurements and exquisitely drawn diagrams.

The speakers are two-way, he continued. This was the secret to preserving the clarity and imaging ability of the original Callas, as well as a certain type of soundstage that signor Nasta prefers—one in which the sound is tightly focused between the two louds-

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The Divina appeared to preserve the imaging and soundstaging capabilities of the classic Callas, while the bottom end was far more extended. The bass was not just tight, but awesome in its impact. That is to say, fast.

Moreover, there was no need to place the speakers close to room boundaries for bass reinforcement. Signor Nasta placed the Callas Callas in the very same spots he uses for the classic Callas. This preserved the imaging and soundstage, he maintained.

As for the smaller Diva, I had time to listen briefly. This speaker, too, preserved the classic Callas qualities, but without the same bass extension and authority as the Divina. Some users might want to place the Divas closer to the room boundaries for bass reinforcement, signor Nasta told me — something that’s not necessary, or perhaps even desirable, with the Divinas.

Dr. Bon and signor Nasta are putting the finishing touches on the Divina and the Diva. I should receive a pair of Divinas this fall. Meanwhile, they’re also working on some other new speaker designs — including a super-high-end speaker system with subwoofers, and a minimonitor that’s smaller than the classic Callas.

Of course, signor Nasta chose Unison electronics to drive the Divinas — a Unico CD player and a Unico 200 integrated amplifier, a big beast of an affair that will sell for around $5000.

The Unico line has been filling out rather smartly. Regular readers know the Unico integrated amp (September 2002, Vol.25 No.9). As I stated then, “The Unico is fantastico.” While its price is up to $1895 with moving-coil/moving-magnet phono stage, it’s still a bargain. Power is rated at 70Wpc from a single pair of MOSFET output transistors per channel. As in all Unico amplifiers, the input stage is tube.

Now comes the Unico 200, with six pairs of MOSFET output devices per channel, conservatively rated to deliver 250Wpc into 8 ohms. A high-bias setting, which operates more into class-A, delivers a rated 50Wpc. Not that I initially heard much difference between the two settings. We’ll see when I get the Unico 200 at home. A phono card is optional.

More interesting to more people, perhaps, is the new Unico SE integrated, which is not just a souped-up

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version of the standard Unico with more expensive parts, etc. Expected to retail for around $2500 (with phono card) in the US, the Unico SE has two pairs of MOSFET output devices per channel to deliver a stated 140W. The amp is styled like the standard Unico, but the SE is taller. The faceplate is beautifully machined by signor Sacchetti himself.

I'll skip over Unico's new six-channel amplifier and go right to the Performance, a new dual-mono, single-ended triode tube amplifier that uses three KT88s per side to deliver a rated 45Wpc. The look of the amplifier is flabbergasting, with a wood-trim faceplate whose finish and grain will exactly match those of a pair of Opera speakers, if speakers and amp are ordered together. The Performance was ready for show but not quite ready for sound. Given its looks and build quality, the projected price of under $9000 looks most reasonable.

A funny thing happened with tube amplifiers, signor Sacchetti said. Just two years ago, it seemed as if Unison's all-tube designs were slowly fading from favor. I remember visiting the Unison factory then; signor Sacchetti seemed a little down in the dumps. Then, about 12 months ago, demand rebounded, making it possible to bring the Performance to market. Any guesses as to why the demand for tube amps appears to have strengthened? Sacchetti couldn't say for sure, but maybe there's a newfound confidence among audiophiles and ordinary music lovers in the future of two-channel.

Signor Sacchetti told me that each Unison product is produced in Italy and made from Italian parts, whenever possible. Look at the logo on those big red caps inside the Unico. Italia!

It cheered me up to see racks and racks of Unison tube amps - all current models - in various stages of production, headed for practically every corner of the globe. Dubai, Hong Kong, Holland, the UK, North America. If things get any busier, Giovanni Nasta will run out of places to store his wine.

By the way, Giovanni, Marina, and I did visit the Bisol vineyard the next day to test prosecco. The vineyard is in an area called la strada del vine bianco (the road of white wine), about a 40-minute drive from Treviso. Like almost every other area of Italy, this one is well worth a visit.

**Cambridge Audio Azur 640C D player and 640A Integrated Amplifier**

Two Cambridge Audio models were waiting when Marina and I returned from a week on the isle of Ischia: the Azur 640C CD player and the Azur 640A integrated amplifier. Each retailing for $529, and each was recently selling in Audio Advisor's mail-order catalog for $499.

"Welcome to Cambridge Audio" greets you on the home page of www.cambridgeaudio.com. "When you buy a Cambridge Audio product, you're not simply purchasing another piece of electronics, you are investing in more than thirty-five years of British engineering excellence."

Ahern. When you buy a Cambridge Audio Azur series 640C or 640A, you are "investing" in a product made offshore. So it says in teeny-tiny writing on a label affixed to the back panel: "MADE IN CHINA UNDER LICENSE." You tell me: Will many customers mistake these goods for British? Will some unscrupulous dealers simply peel off the "MADE IN CHINA" label? (Musical Fidelity builds some of its X-series components in Taiwan - to save labor costs, as they admit - so Cambridge Audio is not alone. But MF doesn't seem so surreptitious about it.)

The 640C player is built around a Sony transport mechanism and a Scottish-made Wolfson Microelectronics WM 8740 DAC that runs at 24 bits/192kHz. The player uses proprietary reclocking circuitry to reduce jitter, and features separate power supplies for the transport, converter, and audio sections, along with a vibration-damping chassis. Optical and
coaxial digital outputs are supplied. The 640C made a fine transport with the McIntosh MDA 1000 D/A converter ($8000), which I wrote about in July. I struggled to hear a difference between the Cambridge Audio Azur 640C, used as a transport, and the much more expensive Creek Audio CD50 Mk.2 ($1495), which I reviewed last month. I couldn’t.

I could hear a difference between the Cambridge and the Creek when using both as players. There was no surprise that the Creek player delivered even more detail and finesse. The Creek’s treble had a sweet, silky, shimmering quality, compared to which the Cambridge sounded a tad hard. But remember, the Cambridge is one third the price. Three cheers for the People’s Republic of China—and for British engineering, of course.

Both players delivered strong bass; but, once again, the Creek outclassed the Cambridge. Not that there was anything bass-shy about the Cambridge. This far-less-expensive player had surprisingly good weight, dimensionality, and speed.

At first hearing, the Azur 640A integrated amplifier seemed as impressive as its CD counterpart—and it, too, appears to offer good value. The amp uses a pair of bipolar output transistors per side to deliver a rated 65Wpc into 8 ohms or 100Wpc into 4 ohms. It had especially good low-level resolution for this price point. And tight, tuneful bass. (The Azur 640A has defeatable tone controls.)

Why the hesitation? First, the plastic speaker connectors are the flimsiest I’ve encountered in a long time. I was finally able to ram the banana-plug terminations on my speaker cables into the holes meant to accept bare wires. Cambridge Audio doesn’t pinch yuan when it comes to power supplies and the like. Why couldn’t they source better speaker connectors?

As for the sound, I’m frustrated about that, too. The Azur 640A presented exceptional low-level detail for an amplifier at this price. What’s more, the sound seemed very alive—almost illuminated from within, like certain single-ended triode tube amps, especially those of the 300B persuasion.

But I found the amplifier fatiguing to listen to over the long run—and I was mainly using classic Opera Callas speakers, which are not exactly known for a bright, edgy sound. I also tried Harbeth Compact 7 speakers, known for their BBC tonal neutrality. I heard the same glare. The amplifier seemed too brightly lit. Changing speaker cables—not easy with those clunky speaker connectors!—did little to change my sense of unease.

The Azur 640A’s low-level resolution was remarkable for the money, I call it the “Wow!” factor. Do audition at length, if you can, with your present speakers or those you intend to buy. You’ll find it hard to get this muchrez elsewhere for this little money. In the end, this may be your deciding factor. By the way, an optional plug-in phono board is available for $60, which accommodates moving magnet and high-output moving coil cartridges.

Both Azur products are available in black or silver. I find the silver much more handsome. A single remote controls both units—and an Azur FM tuner, too, if you’re interested. The remote looked especially well made.

Here’s one clever idea I wish other manufacturers would adopt: The writing on the Azurs’ rear panels is silk-screened both right-side up and upside down. When you bend your head to read the writing, you can read it right-side up and connect the right inputs, outputs, etc. Why didn’t they silk-screen “Made in China,” too?
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“Opera Sauvage are capable of handling all information with accuracy and musicality—a combination achieved only by the best in the business.” The Inner Ear report, Issue 13 #2.

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Chris Lewis, Home Theater, April 2003

“One of the more musically satisfying rooms I visited in Las Vegas...The bass was almost too good to be true...I enjoyed my time with the Opera Sauvage.”
John Atkinson, Stereophile, July 2004

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A young reader who's been a Stereophile subscriber since junior high, and an "Analog Corner" fan for nearly eight years, sent me a copy of "A Vinyl Farewell," by David Browne, which appeared in the October 4, 1991 issue of Entertainment Weekly. In the article, Browne kisses the LP goodbye, lovingly, nostalgically, and not at all dismissively. With the article is a photo, perhaps unintentionally suggestive, of an unusually large stylus floating above a record and about to make contact with a hairball of dust. The caption reads, "Playing an LP suddenly feels as foreign as a druidic ceremony."

"There's no denying one inescapable fact," Browne states in the first paragraph of the sumptuous, eight-page spread: "the vinyl LP is about to go the way of five-and-dime stores and the 50-cent gallon of gas." Though later in the article he admits that LPs are still available in small numbers, "Nonetheless, at some point the major record companies will finally pull the plug."

But 13 years later, they're still plugged in. Sony, Time Warner, and BMG still press LPs, albeit in limited quantities. Between them, the Indies, and the reissue labels, there's more vinyl available in 2004 than there was in 1991. From this, it's safe to conclude that more people today buy records and engage in druidic ceremonies than did back then.

Browne writes, "In the future, many in the business predict, other independents will license the rights to old albums from the major labels and reissue them on black plastic in limited quantities." Many in the business were correct.

Browne didn't predict the vinyl resurgence of new and older albums pressed on vinyl by major artists. Nor did he foresee digital downloading and MP3s. Instead, he saw a day, perhaps 20 years from 1991, when music consumers would be "hauling CDs with cracked plastic cases down to the used-CD shop to trade them in for DAT tapes or some other new technology."

Browne concludes that "maybe we'll be as sentimental about [CD's] demise as we are about the death of the LP. But only if that happens could it be said that the CD truly replaced the black vinyl and cardboard now collecting dust in our homes and our hearts."

No one today who has switched to MP3s is at all nostalgic about their CDs. Of the music fans I know who have large CD collections, few feel anything in their hearts for their rows of sterile, jewelboxed data dumps. Might as well move them to a server. Might as well get new music via download.

But irrespective of time and age, the LP is a cool way to package music, physically and sonically. The turntable is an exquisitely simple invention that time and digital technology have not yet been able to diminish — and probably won't, until everything turns to dust. If you doubt this, consider Pro-Ject's Debut II turntable.

**Pro-Ject Debut II turntable**

Earlier this year, I watched Debut II turntables ($279) being built at Pro-Ject's factory in the Czech Republic. The Debut II looked to be the ideal beginner's turntable, and I was curious to hear how it sounded. The price includes a decent moving-magnet cartridge, the Ortofon OM-5E, already mounted and aligned — all you have to do is add the antiskating weight and line, the drive belt, and the steel platter with felt mat. Remove the motor suspension's shipping screws and you're ready to spin LPs — even the counterweight is supposedly preset for the correct tracking force of 1.75gm. (Mine was set way too heavy; check before using.)

The motor drive system has a flat belt and a crowned pulley, and is suspended with an O-ring. It spins a subplatter attached to a chrome-plated stainless-steel spindle running in a brass bearing housing. The tonearm, a straight aluminum pipe with an effective length of 8.6", is nothing fancy. It has a bearing system of inverted points of hardened stainless steel and a silicone-damped cueing system. The Debut II is compact, nicely finished, and cheap. What's more, at 33½rpm and 45rpm, my sample ran about as close to dead-on (1004Hz on a 1kHz test tone) as you can expect from a 'table whose speed can't be adjusted. For 20 bucks more you can choose from among nine flashy colors. Best of all, its sound is well balanced, and reasonably detailed and complex.

The Pro-Ject Debut II proved that you have to work hard to make analog sound crappy. The 'table's sins were mostly of omission, and because those...
omissions were well balanced, I didn't much miss what was not there, and noticed nothing in particular that sounded wrong. The arm-cartridge assembly tracked cleanly, producing a picture that was tight, compact, somewhat bright, and just plain modest overall. But the music also managed to flow gracefully, due to the Debut II's remarkably well-controlled if somewhat limited bottom end. Images were stable and well focused, and background noise levels were low. Only when I played the same records on a $20,000 'table-arm-cartridge rig did the Debut's simplified picture—a sort of outline of what my reference produced—become obvious.

They know how to build turntables at the Pro-Ject factory. Although the Debut II is their el cheapo model, great care has been lavished on its component parts—most are made in house—and on the final assembly.

Before packing it up, I decided to try the Debut II with another inexpensive MM cartridge that's been highly recommended to me: the Audio Technica AT95E, available for under $50 at most online cartridge dealers. With its 3.5mV output, recommended tracking force of 1.5–2.5 gm, elliptical stylus measuring 0.4 by 0.7 mil, and moderately high compliance, the AT95E was a good match for the Debut's tonearm. The cartridge’s height was also about ideal for the arm, which does not permit adjustment of the vertical tracking angle (VTA).

With the AT95E tracking at 2 gm, the sound was richer, fuller, and a bit “fleshier” than with the Ortofon OM-5E. The bass was more robust, and the overall sound was slightly warmer. Again, the sins were of omission; in fact, listening to music via approximately $330 worth of ‘table, arm, and cartridge was more than satisfactory. Spend more and you'll get more—even a lot more—but if you prefer to proceed cautiously into analog without risking a lot of money, the Debut II turntable will communicate the essence of analog as well as any. In some ways, no CD player, no matter how much you spend, can compete.

Pro-Ject also makes an alignment tool ($100). It's well designed and built, easy to use, and works with all

Pro-Ject 'tables, as well as other brands.

Kuzma Stabi Reference turntable & Air Line tonearm

In his Stabi Reference turntable, Franc Kuzma has combined some of the best elements of turntable design from SME, Basis, and VPI, added his own innovations, and come up with an exceptionally fine 'table that's sold domestically for a very reasonable $7000. Compared to some other 'tables in the first tier, the Stabi Reference is a genuine bargain. In combination with the Kuzma Air Line tonearm ($8000), for a total cost of $15,000 you get what I consider to be top-shelf performance at a mid-level price. (I still have reservations about the Air Line's lack of damping. See the August 2004 Stereophile for my full review of the arm.)

What the Stabi Reference lacks in sex appeal it more than makes up for in rugged build quality and exquisite machining, and especially in its fundamentally proper and conservative but innovatively executed design. Kuzma's design is properly isolated, heavily mass-damped to prevent the transmission of energy and resonances, and more than sufficiently rigid to maintain all geometric playback parameters. Each level of the Stabi's heavy, split plinth consists of two plates of 10mm-thick aluminum sandwiching a plate of acrylic, all three layers held together with nonmagnetic stainless-steel screws. The top level of the plinth supports the platter and the inverted dual bearing, which has an oil bath and a ruby ball bearing. The suspension system comprises four corner-mounted springs submerged in silicone oil. The system's claimed resonant frequency is a very effective 2.2Hz; in other words, the playback system is isolated from frequencies above 2.2Hz. Lifting off the 'table's top plate for shipping automatically seals the four silicone-oil reservoirs.

The bottom plinth, containing two 24-pole motors positioned opposite one another, sits on three cones. The aluminum subplatter is driven by two crowned pulleys and a flat, precision-ground belt. The
outboard split-phase power supply is quartz-controlled and includes a 20W amplifier, and the motors’ speed can be adjusted ±4%. Generally, I’m no fan of multiple motors: when you double the number, you double the potential noise and vibration, and unless the multiple pulleys are perfectly machined, two motors probably end up doing more to hurt speed stability than help it. As I’ve done with other turntables I’ve reviewed recently, I’m making for editor John Atkinson a recording of the Kuzma Stabi Reference playing a 1kHz test tone. He’s preparing a compendium of performance results for a future story.

The Stabi’s oversized, 17.5-lb platter and removable armboard are also aluminum-acrylic-aluminum sandwiches. Cutting a custom armboard is best left to a professional or to Kuzma: the sandwich must be pried apart, and the aluminum and acrylic sections cut separately and then reassembled, which can be tricky.

The spindle is threaded for a clamp-weight mechanism of the kind I believe was originated by VPI. The platter features an integral mat of textile and rubber that superficially resembles the diamond-scrolled one SME supplies with its turntables. It is designed to offer the proper mechanical impedance matching with the LP’s vinyl material to dissipate vibrational energy created by the contact of the stylus with the groove. The entire package weighs an impressive 88 lbs.

Setup was simple, and the top plate is easily leveled via four large knobs.

Sonically, the combination of Stabi Reference and Air Line offered the kind of rock-solid, dynamic, stable, and dramatic performance you should expect for $15,000. Bass extension and control were authoritative and assured, with the start/stop abilities that produce rhythmic agility with full weight. The sense of physical stability produced by the Stabi delivered a combination of relaxation and musical certainty that put me in the state of suspended disbelief necessary to make recorded music sound live. When all musical hell broke loose on recordings, the Stabi Reference kept its cool.

As with the SME 30, the Stabi Reference’s “grounded” sound will not appeal to all listeners, despite what I think of as its fundamental neutrality. Some may prefer a lighter, airier, more delicate sound, but I’m not sure such a sound represents greater accuracy. With the Simon Yorke System 7 table, for instance, the Air Line arm seemed to have a slightly more romantic and airy upper midrange than with the Stabi, but not quite the same bottom-end heft and weight.

Is the Stabi Reference the equal of, say, the SME 20? Without both here to compare, I can’t say, especially since I only had the choice of the Air Line arm, but it’s certainly playing on the same field.

Compact, easy to set up, well engineered, and beautifully built, the Kuzma Stabi Reference is a relatively affordable, nontweaky, no-nonsense Class A turntable that does just about everything correctly except excite the eyes. What it does for the ears is a very different story.

VPI Scoutmaster turntable

I’ve reviewed a number of VPI turntables, and for many years owned a VPI TNT. The Scoutmaster ($2400) is among the least expensive VPIs I’ve auditioned, but it may be my favorite. For one thing, its fit’n’finish are easily the best of any VPI I’ve owned or reviewed. Beyond that, the Scoutmaster has a rigid, compact plinth comprising a 12-gauge steel plate sandwiched by two thick layers of MDF, an inverted bearing with Teflon thrust plate, and an outboard 300rpm motor in a solid aluminum assembly. An O-ring drives the 1¾"-thick acrylic platter via a dual grooved Delrin pulley.

Included in the price is the latest edition of VPI’s JMW Memorial umipivot tonearm, in a 9" version rigidly attached to the plinth. This arm offers azimuth adjustability via the counterweight’s offset hole. Rotating the counterweight changes the cantilever’s perpendicularity to the groove. The VTA is adjustable, though not during play.

The two biggest differences between this arm and the original JMW Memorial are that the main bearing is now directly “grounded” to the plinth instead of being cantilevered on an aluminum plate attached to a VTA adjustment tower, and the stabilizing ring surrounding the arm’s bearing housing is fixed. The original version had a rotatable offset weight suspended on a pair of O-rings. Rotating the ring changed the weight distribution, and thus the azimuth.

When I first reviewed the JMW Memorial, in the January 1997 issue (Vol.20 No.1), I found its sound smooth but a bit slow, and lacking in focus and impact. I couldn’t understand the rationale of having a pair of high-frequency springs (the O-rings) associated with the bearing housing, which would lead to a resonance developing, probably within the audible spectrum. Nor did I think hang-
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ing the main bearing out on an aluminum plate made for a good mechanical ground. I have also tried the 12" version of the JMWM. While these are popular in Japan, my feeling is that the longer arm's potential for lower tracking error is more than offset by the increased moment of inertia of the weight (cartridge) hanging off the end of the lever (tonearm), and the longer arm's potential for lower rigidity.

This new 9" version eliminates all of those problems, and guess what? I'm sure it sounds better. There are too many variables for me to be certain of that, but the taut, focused, remarkably coherent performance of this table-arm combo is testament to a fundamentally solid, well-grounded system that deals effectively with energy created at the stylus/groove interface.

There's still no real antiskating. I don't believe in twisting the arm wire as VPI suggests, because I don't see how the force applied could possibly be kept parallel to the plane of play: the azimuth would shift and vary across the surface of the record. But that's just me. VPI says a traditional antiskating mechanism will be available later this year.

Other changes from the original JMWM Memorial are that the arm's unipivot bearing point is sharper, to reduce the area of contact and thus the resulting friction; and there's no damping well. The latter results in a Parkinson's-like trembling of the JMWM when you use the finger lift or lower the arm via the cueing mechanism. I found this disconcerting, but it settled quickly; the arm appears to be extremely stable.

I reviewed the VPI combo with the SDS motor-controller option ($1000) and the outer record clamp ($500), which brought the total price to $3900 — still relatively modest for what you get, in terms of both build quality and performance. I also opted for a second arm assembly ($400) so I could also play mono records using the Helikon mono cartridge. Once the arm assembly is set up, it stays that way — changing arms is little more than a literal snap of the arm wire's Limo connector.

I began with the Graham Nightingale. This cartridge proved an outstanding match for the Scoutmaster, showing off the 'table's impressive transient clarity and speed, low-level resolution, and rhythmic authority. I think the $2400 Scoutmaster is probably a better turntable overall than the far more expensive TNT I owned until the late 1990s (and which had been upgraded numerous times until I sold it). The Scoutmaster's bass extension, and especially its rhythmic drive, seemed noticeably superior to the TNT's, though so much has changed (including my room) that I'm not absolutely certain. What I am certain of is that the Scoutmaster's bottom end rocked as the TNT's didn't. Bass was both tight and reasonably well extended, with pitch definition and control that had already escaped the grasp of my TNT.

Beyond that, the Scoutmaster was light on its feet, with snappy pacing and lithe rhythmic drive. I felt good listening to it. Its ability to produce a deep, stable, three-dimensional soundstage was particularly noteworthy.

So who needs antiskating? That's VPI's position, but I feel antiskating is necessary to prevent the stylus from riding on the inner groove — whether you hear it or not. The true test will be when VPI makes antiskating available on one of its tonearms; then we'll be able to listen with and without antiskating, and draw some conclusions.

I placed the Kuzma Stabi Reference and Air Line on one stand, the Scoutmaster on another, and swapped cartridges so I could compare the performance of the $15,000 rig with the $3900, fully-decked-out Scoutmaster. While the Kuzma system had greater weight, solidity, and dynamic slam, the Scoutmaster offered a lighter, airier touch with a faster sense of "stop and start," yet with sufficient weight and solidity to be more than credible. Still, the comparison was unfair; the VPI wasn't in the Kuzma's league.

Also unfair would be comparing the Scoutmaster's ease of use with the tweaky Air Line's. The Scoutmaster was a pleasure to use. The outer clamp ring fit tightly and cleanly, and, like other such rings, produced a marked improvement in bass extension, solidity, and especially background quiet. It's an upgrade that's easy to recommend.

Driven by the SDS motor controller, the Scoutmaster ran precisely on speed. But thanks to the graduations on the pulley, I could still get the 'table to run at the correct speed without that option. Still, the SDS improved the pitch stability, bass solidity, and sense of musical flow.

Overall, the Scoutmaster is the best-sounding, best-looking turntable I've yet encountered from VPI, though I've not heard the HRX or some of the other more recent models. I like it more than the more expensive Aries Extended (see my reviews in the March and November 2002 issues, Vol.25 Nos.3 and 11).

If you want to adjust VTA during play, then the Scoutmaster's JMWM Memorial arm won't be for you. But I'm more than willing to give that up to get the rock-solid bass and rhythmic musical underpinning provided by this arm's solid mechanical design.

You can start with fine performance for $2400, and then improve the Scoutmaster greatly by adding the ring record clamp and the SDS motor controller. Given the Scoutmaster's impressive hit/finish, performance, and reasonable price, and given the weak US dollar, it's no surprise that Scoutmasters are going overseas in great numbers, or that I had to wait many months for my review sample. The wait was worth it.

**Warning: Mat Toxic to LPs**

Back when Allsop marketed its original Orbitrac record-cleaning device, the...
company also sold an enhanced Executive edition, which came in a nice plastic case and included a four-piece mat you could arrange to form a circle big enough to hold an LP for cleaning. I never used the mat.

Last year, I was sent an Extreme Phono None-Felt Mat, which Sam Telig wrote up in August 2002 (Vol.25 No.8). I'd passed on the assignment because the Extreme mat is made of the same stuff as the Allsop Orbitrac Executive: an off-the-shelf material repackaged as a product specifically designed for LP playback. I didn't like that, so I ignored it.

I've since received a number of distressed e-mails from users who tell me that the mat material is apparently volatile. It reacts with vinyl if you leave a record on it for too long, and/or in a warm environment. According to the e-mailers, the mat can leave an imprint on the vinyl that doesn’t come off. Worse, the imprint creates noise during playback that none of the users have so far been able to eliminate.

So be careful. You have been warned.

**IN HEAVY ROTATION**

1) Bob Dylan, *Live 1964, Classic/ Sony Legacy 200gm SV-P LPs (3)
2) Link Wray and His Ray Men, *The Swan Singles Collection 1963–1967*, Sundazed 180gm LPs (2)
3) Modest Mouse, *Good News for People Who Love Bad News, Epic 180gm LPs (2)
4) HP Lovecraft, *HP Lovecraft I*, Radioactive 180gm LP
5) Ben Webster, *Sophisticated Lady, Speakers Corner 180gm LP
6) Ramones, *Live, Earmark 180gm LPs (2)
7) Primus, *Animals Should Not Try To Act Like People, Mobile Fidelity 180gm LP
8) Franz Ferdinand, *Franz Ferdinand, Domino/Epic 120gm LP
9) Mozart, K622 Mozart Clarinet Concerto, Musical Fidelity 180gm LP
10) Creedence Clearwater Revival, Absolute Originals, Analogue Productions 180gm LPs (7), 12" 45rpm EP

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Lists of Lists

or performers—which will vary in relative importance, anyway, depending on whether the selection is badly written, badly performed, or both.

On more or less the same note, I also feel compelled to share my list of...

The ten most critically overrated pop albums of all time
1) Eliza Carthy: Angels & Cigarettes
2) John Lennon and Yoko Ono: Double Fantasy
3) Lou Reed: Berlin
4) Patti Smith: Horses
5) Bob Dylan: Desire
6) Lou Reed: The Raven
7) Robbie Robertson: Robbie Robertson
8) Bruce Springsteen: Greetings from Asbury Park, N.J.
9) Michael Jackson: Thriller
10) Alanis Morissette: Jagged Little Pill

Note that I didn't say The ten worst pop albums, ever (although Lou Reed's The Raven could compete gamely in that event), but rather The most critically overrated—which is to say, records that, for one reason or another, have been wrongly praised by critics. People like me. People with glasses and patchy beards.

So then, from the top: Even overwrought, radio-conscious arrangements can't hide the wretchedly off-key singing on Eliza Carthy's debut, but because Eliza wrote angry songs about the way boys treat her, the critics fell all over it. Double Fantasy was praised for more benevolent reasons: It was John, and we all wanted it to be good. But it wasn't—it was mush. Lou Reed's canonization by some critics continues to mystify. That he's from New York probably helped, as did his purported flirtations with needle drugs and bisexuality. But don't hate Berlin just for that: Hate Berlin for containing couplets like, "Just like poi-

son in a vial / hey, she was often very vile." Oh, dear.

Patti Smith's Horses opens with the most pretentious, unintentionally funny utterance since Jim Morrison was crowned King of the Lizards or whatever the hell he was, and the music goes downhill from there, caterwauling and hiccuped badly. Desire is a diffuse collection of Dylan's weakest material, and although it might once have been true that Dylan's worst was better than most people's best, it no longer was by the time this turkey came out of the oven.

Given that Lou Reed looks more like Jerry Lewis every year, The Raven may in fact be a brilliant album—but a brilliant comedy album. There's no other way to explain lyrics like: "These are the stories of Edgar Allen Poe / not

EVEN OVERWRIGHT, RADIO-CONSCIOUS ARRANGEMENTS CAN'T HIDE THE WRETCHEDLY OFF-KEY SINGING ON ELIZA CARThY'S DEBUT.

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Nothing says "Let's fall in love" like a few roses and a card for no reason. Nothing says "I drink too much" like a scab on the forehead. And nothing says "Let's start a fight" quite like a list.

I don't actually like to fight, but I do like lists. Maybe it's because I'm superfluous by nature, or because, at age 50, I have too much useless information littering my brainpan—and so I'm forever on the lookout for ways to set it free, a little at a time. (My wife was utterly horrified two nights ago when she overheard me explaining to our six-year-old daughter how Superman came into being, during which fatherly lecture I rattled off the correct names of his relatives back on the planet Krypton. Before retiring to the bedroom, she addressed me as "Artie-El," and not at all pleasantly.) I should also say that, because I tend to travel by car and not by air, I enjoy passing the time with my driving companions by making up and comparing lists. Such as The ten best meals you've ever had. Or The most consistently good songwriters of our time. Or The most overpraised film directors. Or...
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you're a young woman of comfortable means with a shoebox full of "poetry," or have an academic interest in same. That Ms. Morissette's screams are not unlike those heard from Olive Oyl when sung over Bluto's shoulder does not help matters.

All right, then — here's something more pleasant...

**The ten greatest obscure pop albums of all time**

1) Big Star: *Radio City*
2) Pearls Before Swine: *One Nation Underground*
3) John Cale: *Paris 1919*
5) The Move: *Split Ends*
6) Fairport Convention: *Babbacombe Lee*
7) Donovan: *Open Road*
8) Big Dipper: *Craps*
9) The Dictators: *The Dictators Go Girl Crazy*
10) Martin Newell: *The Greatest Living Englishman*

Come back, critics — all is forgiven: Every good thing you've said about Big Star is true, and *Radio City* was their finest hour. Pearls Before Swine's *One Nation Underground* is smart and playful: a real period piece, but in an endearing way. The moody *Paris 1919* is unlike Cale's other albums — he more or less disowned it, telling an interviewer he didn't want to keep making "Procol Harum records" the rest of his life — but it stands above the rest. If you can find the multivolume *The Genuine Basement Tapes* collection but can't afford the whole set (average price: $150), settle for bringing home Vol.V, a collection of boozy performances of non-Dylan songs. It's fun, moving, and provides ample evidence for the notion that Dylan's brilliance as a writer comes from knowing what works.

The compilation *Split Ends* combines most of the Move's indispensable Message from the Country with their superb final singles. Fairport Convention's 1971 concept album, *Babbacombe Lee*, proved that the group had more going for it than just Richard Thompson and Sandy Denny. *Open Road* was Donovan Leitch's most muscular effort: 12 very good songs performed in an offhand, first-take way by a real group rather than session players. Big Dipper, a sadly underrated Boston band of the late 1980s, created catchy, thrashy power pop with a wicked sense of humor, as had Handsome Dick Manitoba and the Dictators before them. And Martin Newell's *The Greatest Living Englishman* is one of the few pop records of any era that has me reaching for the word genius.

Stereophile's readers don't all enjoy pop music, of course — but I think it's safe to say you all have at least some interest in home audio gear. So then, I'll play it safe and apply the same sort of thinking to...

**The ten greatest amplifiers ever made**

1) Naim NAP250
2) Fi 2A3
3) Conrad-Johnson Premier One
4) EAR 509
5) Audio Note Ongaku
6) Rankin Baby Ongaku
7) Quad II
8) Krell KSA-50
9) DNM PA3S
10) Lamm ML2.1

What I mean by greatest is a product that sounds wonderful, is well made, and has an influence, one way or another, on the rest of the industry. What I mean by ever made is, quite simply, an amplifier that I've heard more than once.

The Naim NAP250 holds the longevity record: It's probably at the heart of more English music-lovers' systems than any other amp. Fi's direct-coupled 2A3\(^1\) set the bar for very-low-power single-ended triodes, and its maker deserves praise for not pushing the price envelope in the manner of his more cynical competitors. C-J's Premier One was the first real superamp in the tube sector, its lack of rhythmic tautness made up for by uncommonly convincing spatial performance. The EAR 509 proved that amps that sound sweet can also play tunes, and the Audio Note Ongaku added a near-terrifying level of purity and directness to that same mix. (Terrifying price, too.) Wavelength's Gordon Rankin has designed some of the world's finest amps, but my favorite is a design he gave away to readers of *Sound Practices* magazine: a capacitor-coupled 2A3 amp built around Magnepost's silver trannies. (It was, in fact, Magnepost's Mike LeFevere who built the pair I tried.)

The Quad II has a longevity record of its own: No amplifier has embarrassed it. Ever. In the mid-1980s the KSA-50 was perhaps the best all-arounder you could buy, and it remains my favorite Krell. Apart from sounding brilliant, the DNM PA3S seems likely to influence other designers for at least the next half century.

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\(^1\) Don't get hung up on the name: The amp sounds magnificent with 45 tubes, as well — although that requires a different rectifier tube.
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And the Lamm ML2.1 is simply the best amplifier with which I’m presently familiar.

I’ve heard a Halcro only once (lovely, though), so I can’t really comment on that. The Ampzilla was never my cup of tea. Neither was the Dyna Stereo 70 nor the similar-sounding Audio Research D79, remarkable though they were in certain ways. And Mark Levinson amps are like Kinks albums: They confound list junkies, because there’ve been so many good ones that it’s virtually impossible to select only one.

I had a lot of fun writing all that, and some of it may even be true. But this sort of list is to rhetoric as ’Nilla Wafers are to cuisine: road food. Which is to say, while useful and briefly entertaining, it has its limits. For an approach that generates as much light as heat, one must turn to a master.

The listener as artist
The most remarkable thing about Songbook, Nick Hornby’s recent collection of essays on great pop music (Riverhead Books, New York, 2003), is the extent to which the writing mirrors the subject: To experience either is to gain more knowledge about oneself than any work so brief or so enjoyable would seem capable of giving, arguably because Hornby’s essays are not as much about music as they are about listening.

Songbook is an annotated list of 31 songs that Hornby happens to love, and, as he suggested in his 1995 novel, High Fidelity — itself a rambling annotation spun from its protagonist’s own obsessive list-making — popular music is so thoroughly intertwined with Hornby’s life that the latter is unthinkable without the former. Hornby is a dedicated listener, in other words; he’s not just a bloke who hears music and declares it pleasant, but one who decodes his cell with music in a manner that the music-makers themselves might not understand.

Thus, over the course of Songbook’s 200-odd pages, we have Ani DiFranco rubbing elbows with Led Zeppelin, Soulwax, Jackson Browne, Paul Westerberg — artists who not only create wildly different kinds of music, but who almost certainly wouldn’t appreciate each other’s work. In fact, in interviews granted to Rolling Stone, Melody Maker, and the like, more than one of the 30 other people on the list have trashed Led Zeppelin — as has Elvis Costello, an oft-cited Hornby fave who didn’t make the list — and while I don’t know for sure, I can well imagine what Paul Westerberg, the onetime frontman of the Replacements, really thinks of Jackson Browne’s “Take It Easy.”

But while an artist is often condemned to a limited point of view — I wouldn’t have wanted Joey Ramone to have a soft spot for Broadway show tunes — it’s a good listener’s responsibility to make sense of everything: to synthesize and come away from the experience knowing more, not less, about the world. In that sense, being a good listener is more like being a conductor than a composer. (At the beginning of his career, Arturo Toscanini studied composition — until he heard Wagner’s Tristan und Isolde, at which point he gave up writing his own music and dedicated himself to interpreting the music of others.)

Now go back to that list of amplifiers and ask yourself: Could any of those designers really appreciate the other products on the list? The answer is no, because that isn’t their job. But it is ours, because we’re listeners.

And think: Just as an artist can change the way we look at this or that part of our lives, so, too, can a good and convincing listener change another listener’s way of experiencing that art, especially by getting people to broaden their horizons somewhat. Hornby’s essay on Ian Dury’s “Reasons to be Cheerful” made me hear that song anew — as something more than just a likable novelty. And his chapter on Jackson Browne made me stop and reconsider that artist, too: Yes, on the one hand, my erstwhile disdain for “Late for the Sky” came from being fed up with introspection, overslick California session players, and bland chord progressions that rely too much on banging back and forth between the tonic and the suspended fourth. But more than that: I also thought Browne was irredeemably uncool. Hornby, above all other rock writers, manages to put all concern for cool in its proper perspective: Fun’s fun, but don’t let that baby go down the drain, old Art Dudley. Or, as Hornby puts it, “You’re either for music or you’re against it, and being for it means embracing anyone who’s good.”

None of the songs on Hornby’s list are older than 40, and if I didn’t know better — which is to say, if I didn’t already trust the author’s candor and intellectual honesty, from having read a few of his earlier books — I’d swear some of the selections betrayed a bit of self-consciousness, or what the paleos still titillate each other by calling political correctness. Never mind that. To a large extent, the songs and the artists themselves are irrelevant, as the author himself seems to declare — as when Hornby sets up Costello and the Clash as icons, then proceeds to ignore their output.

Songbook isn’t that kind of list. Hornby hasn’t set out to infuriate you or pat you on the back or provide conversation starters to patrons of trendy fern bars — or to me and my fellow travelers, for that matter. He just means to make us listen a little better.

Okay: just one more before I go, please — but a nice one. A non-snobby one. Here are my choices for...

Twelve huge pop albums that everybody — critics, record buyers, radio programmers — got right
1) The Rolling Stones: Sticky Fingers
2) The Beatles: Revolver
3) Tom Petty and the Heartbreakers: Southern Accents
4) Bob Dylan: Highway 61 Revisited
5) Joni Mitchell: Ladies of the Canyon
6) Radiohead: The Bends
7) Jimi Hendrix Experience: Are You Experienced?
8) Crosby, Stills & Nash: Crosby, Stills & Nash
9) Stevie Wonder: Innervisions
10) Roxy Music: Avalon
11) Neil Young: Harvest
12) Nirvana: Nevermind

2) Contrast this with the critic’s job, which is to rend and split and drive away all sense. And consider: For every Eduard Hanlick, the Brahms confidant who made a career out of loathing Wagner, there is a George Bernard Shaw, who dismissed Brahms’s music as “having no more artistic consequence than reflections seen in a shop-window” — and so it goes.

3) The only person I know of who writes about pop music with greater candor than Nick Hornby is the aforementioned Martin Newell, the latter usually in the liner notes to his own records. From his notes to his song “Mad March Hare”: “Hares were boxing in the fields and I came over all poetic. Pashetic really. A couple of pints and a slug would have done me more good.”
NEw FROM ArcAM

FMJ DV29 — ArCAM's BeST DVD Player, Ever!

When Arcam introduced the HDMI equipped DV79 ($1,799) earlier this year, the reviewers said things like:

"Arcam demonstrates that some digital pictures are more perfect than others."

"Arcam's DV79 sets the digital video standard... and raises the bar to a new and record height."

The downside? In at least some areas, the DV79 was better than Arcam's highly-acclaimed, and more expensive, FMJ DV27A. So it was no surprise when Arcam announced the new FMJ DV29. At just under three grand, this new player builds on the lessons learned during the development of both the DV27 and DV79. And, to the best of our knowledge, it is the first player in the world to use the new "second generation" HDMI chips with high-resolution audio support.

To find out more about this amazing player (and Arcam's complete range of high-performance DVD players, starting at under $1,000) visit www.audiophilesystems.com.

DIVA AVR250
7.1 Receiver

When it was launched at the beginning of 2004, the Arcam AVR300 set heads spinning as it delivered audio and video performance formerly associated only with much more expensive separates.

"We've been waiting in vain for a receiver like this to come along for over a dozen years - but finally, someone has done it... Extremely impressive... Arcam's AVR300 is a stunner." What Hi-Fi? Sound and Vision.

This fall Arcam will begin delivering the new AVR250, a scaled-down version of the 300, built on the same platform. Expected to retail for well under two grand, it dramatically lowers the entry price to true high-end audio/video performance. Get the latest news on the AVR250 at www.audiophilesystems.com.

DIVA CD192
Upsampling CD Player

By now most people have discovered that most DVD players do a terrible job of playing CDs. Arcam appears to offer the rare exceptions — a full range of DVD players that can all outperform similarly priced dedicated "high-end" CD players. However, at the very highest levels of performance there are still gains to be had by using a purpose-built CD player. Arcam proved this with their FMJ CD33, about which Stereophile recently said, "CD sound doesn't get much better!"

Now with the new DiVA CD192, Arcam brings the very same upsampling techniques used in the CD33 down to a much more affordable $1,699. With both SACD and DVD-A creeping along at a snail's pace, the CD192 provides the opportunity to dramatically improve the performance of your entire current CD collection. "For anyone with a couple hundred CDs, the Arcam CD192 is a no-brainer."

For more on the Arcam CD192 go to www.audiophilesystems.com.

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WorldRadioHistory
Wilson Benesch A.C.T. loudspeaker

The hallmarks of Wilson Benesch's "house sound" are extremely low distortion, seamless coherence, unfussy easefulness, rounded liquidity of tone, articulate dynamics, and seductively natural imaging and soundstaging. I think there are five major technical factors that contribute to making all these benefits possible.

- Carbon fiber's combination of low mass, high rigidity, and high self-damping results in an enclosure that contributes very little degradation in terms of time smear or ringing.
- In addition to enhancing rigidity, the cabinet's sloping top and curved shape reduce diffraction effects and make room placement less critical.
- The use of nearly identical drivers for the bass and bass-midrange—which makes the A.C.T. a 2.5-way design rather than a three-way—would seem to make dispersion more uniform (or, more precisely, make the rate of change of dispersion more uniform), and the transition between those two drivers harder to perceive. (The bass driver's cone is slightly more heavy and stiff than the midrange driver's; the voice-coils are also different.)
- Closely related to that, the A.C.T.'s crossover is very simple, aiming for the least possible compromise of phase integrity. The crossover's bass-driver section has one inductor, which rolls the woofer off above 500Hz. The bass-midrange driver sees all the same bass from the amplifier as does the bass driver, but its slightly lighter cone and higher port tuning are said to give it an acoustical low-bass rolloff.
- The bass-midrange driver section of the crossover (again) has one inductor, rolling it off at 5kHz. The tweeter crossover is a simple first-order design that rolls in at 5kHz; the tweeter's bandwidth is supposed to extend to 30kHz (-6dB).
- The use of a high-quality silk-dome tweeter avoids the problems potentially associated with out-of-bandwidth ringing from metal or exotic-material treble drivers. While I admit that people cannot hear steady tones above some
They’re nothing more than air molecules moving backwards and forwards.

They can’t be seen. They can’t be touched. But they succeed in creating music, moods and feelings in you.

A tango in Buenos Aires, a brass band in Manchester, drums from Osaka. The journey’s just beginning.

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frequencies, I remain convinced that the ear/brain system does in some way respond to transients in the high-harmonic range. "Keeping the bad stuff up where people can't hear it" is not a design goal I find myself instinctively agreeing with.

The A.C.T. One was the most strikingly elegant loudspeaker I had ever seen. Simply beautiful. It was about 42" high, 9" wide, and 14" deep. Its top was of solid cherry, tapering from rear to front. The front panel consisted of an alloy baffle in which the drivers were mounted, and, below that, furniture-grade cherry veneer. The side caps (vertical corner pieces) were solid cherry. Viewed from in front and above, the A.C.T. One had a front-to-rear shape reminiscent of a boat's prow, a bouzouki, a balalaika, or a bishop's miter: square at the bottom, the sides gently curving to meet a rounded point, which was the speaker's structural "spine." The side panels were made of glossy-black quilted carbon-fiber composite, the first such use in a loudspeaker.

I could easily envision a pair of A.C.T. Ones fitting right in a model room at the Winter Antiques Show, surrounded by Biedermier furniture, Persian rugs, and old oil paintings. Or, for that matter, in an austere loft. The styling was a neat hybrid of hi-tech and early 19th-century fruitwood-and-black.

The new A.C.T. is the same size and shape — the same entire "look" — as the One, but with the internal volume of the larger Two. That bit of legere-design was accomplished by replacing the older speaker's internal structural bracing, formerly made from wood-based composites, with a unitary assembly of laser-cut welded steel. Furthermore, while the older speakers used separate carbon-fiber panels for each side, the new A.C.T.'s carbon-fiber structure is a continuous monocoque in a U-shape or arch design. Wilson Benesch claims that the A.C.T. has the stiffest structure ever employed in a floorstanding loudspeaker system. As might be expected, the new speaker is heavier than was the One, at about 100 lbs. The review pair's side endcaps were finished in Regal Silver, while the tops were high-gloss black. The black fabric grilles are held on by elegantly machined posts.

The A.C.T.'s 7" bass and bass-midrange drivers are Wilson Benesch's proprietary Tactic drive-units, which have basket structures machined from solid metal billets, and cones made from isotactic polypropylene. This driver was first developed for, and at first exclusively available in, the company's flagship model, the Bishop. (The original A.C.T. One's drivers were sourced from ScanSpeak.) The tweeter is a new hand-painted silk-dome unit. Its mounting plate has a crescent shape cut out of its lower edge, in order to bring the tweeter's center closer to the bass-midrange driver's center.

The A.C.T. uses its predecessors' unique, cantilevered design of an intermediate plate plus a base plinth. The rear spikes attach to the steel intermediate plate; the front spikes attach to the base plinth proper. The A.C.T. also has a double-ported enclosure. One port is at the bottom, above the steel intermediate plate. There is also a small port near the top of the rear "spine." I gather that this is more along the line of pressure release for the midrange driver. The manufacturer specifies a -3dB point of 35Hz.

Binding posts of Wilson Benesch's own design, at the lower rear, provide for biwiring. Jumpers are provided for single-wiring, and high-quality wrenches for the spike nuts and binding posts. The spikes, nuts, wrenches, owner's manual, and jumpers come packed in a small plastic attaché case. The A.C.T.'s shipping cartons, by the way, are exemplary. Three large quarter-turn latches on an overlapping flap make them the first loudspeaker cartons I have ever seen that are reusable without packing tape. (Engineering elegance aside, I assume that having a carton that can be easily opened and closed for customs inspection is a rational concession to our post-9/11 realities.)

The A.C.T.'s standard finishes are silver and black. An upcharge applies to wood finishes in satin natural cherry, maple, and oak, or high-gloss stained red cherry, bird's-eye maple, or walnut Burl. The high-gloss woodwork is crafted by the same firm that provides dashboards for Anglo-German luxury automakers Bentley. Other loudspeakers have industrial design and fit and finish of about the same quality as Wilson Benesch's, but I can't think of one that surpasses.

Listening to the A.C.T. has been an immensely enjoyable experience. Some loudspeakers seem to bring out the neurotic audiophile in just about anyone, but Wilson Benesch is as far from that vibe as one can get. The speakers seem to say, "Please just sit down and enjoy the music." The A.C.T.'s were not "euphonic." They just got it satisfyingly "right."

There were no surprises in my listening sessions, just a renewed sense of recognition of the music. The A.C.T. sounded as you would expect: much like the A.C.T. One and Two, but with the work on refining the concept having yielded obvious improvements.

The new Wilson Benesch A.C.T., although quite reminiscent of its predecessors, reached a new level of magical organicity and seductive coherence. Their sonic presentation embodied near-electrostatic clarity of detail without ever sounding etched, tipped-up, harsh, or in any way unmusical. The A.C.T.'s imaging and soundstaging were just short of staggering; from time to time, the speakers really did seem to disappear.

Memory is fallible, but the new A.C.T. might make the One sound slightly
euphonic in the upper midrange, such as on Ella Fitzgerald's Easy to Love (CD, Verve 821 990-2). The A.C.T. also had even less of a sense of "boxiness" than the older speakers, and that is quite an achievement. Dispersion was excellent; there was no sense of horizontal or vertical constriction. Image height, width, and depth were superb.

I did have the impression of substantially more bass fullness with the new speaker. To say the least, it did not fall down on the job with organ recordings, both my own and ones from other labels, such as Michael Murray's inaugural recording of the Ruffatti organ at San Francisco's Davies Symphony Hall (CD, Telarc CD-80097). The A.C.T. rose to the occasion of Bach's textbook organ fugue "Kyrie, Gott heiliger Geist," BWV 671, with a thrilling display of power.

Admittedly, though, a speaker that is flat at 28Hz and has output below 20Hz will always have the ultimate advantage in terms of visceral impact on organ recordings when compared to a speaker, such as the A.C.T., that begins to roll off right below 40Hz. Partially compensating for its lack of deepest bass, the A.C.T. could play seriously loudly without any sense of strain, through the use of the Tactic drivers. WB claims 111dB are available at 1m. I'll have to take that on faith, but the old garage-door track on the Hi-Fi News & Record Review Test Disc (CD, HFN/Denon 003) was arresting.

Other favorite tracks through the A.C.T. were John Atkinson's recording of Cantus singing "Shenandoah" (CD, Cantus CTS 1201), Ensemble Amarcord singing "Juramento" (CD, apollon classics apc 10102), and the pizzicato-scherzo movement from Ravel's string quartet, played by Nuovo Quartetto (CD, Denon 33C37-7830, NLA).

This is as good a time as any to recommend that you check out (but not necessarily wholeheartedly embrace) Sixpence None the Richer's second major-label album, Divine Discontent (CD, Warner Bros. 886010). I have enjoyed the journey into the sonic and philosophical world of this record, despite having a couple of reservations. First, Leigh Nash is doubtless a very fine person, but her singing voice is a bit raspy and somewhat wavery — not quite out-and-out annoying, but not rapturously beautiful, either. Second, most of the tracks, by which I mean the individually recorded channels of music or vocal that were mixed to assemble the complete "track," do seem to have been dynamically compressed a bit too much, perhaps in an effort to make the finished product sound punchier on a car radio.

Nonetheless, this disc contains two or three truly exceptional songs. Sixpence's remake of Crowded House's "Don't Dream It's Over" is good clean fun, while their original "I've Been Waiting" is poignantly confessional. That song, addressed to a lover human or divine, has the refrain: "So I'm changing who I am / cause what I am's not good / And I know you love me now / But I don't see why you should."

However, if you want an object lesson in what separates well-intentioned neophytes from true artists, move from Divine Discontent to Elvis Costello's magnum opus of rage barely held in check, All This Useless Beauty (CD, Warner Bros. 46198). Apart from the essential musical value of the songs and the singing, the production values and added sounds are almost a history of making records, and of musical styles.

The first song includes the lines "as I sit here moping / With a bamboo needle on a shellac of Chopin." Later in the album you hear DJ-style scratching, and a panoply of production tricks that harks back to the dawn of "concept albums" such as Pet Sounds. Peter and Gordon, take a bow.

Elvis C. might not be everyone's cup of tea — listening to this album straight through might make one question whether Diana Krall really had any idea what she was getting into when she married him, though I guess that's none of our business — but if I had to pick one rock record that was the spiritual equal of Fitzgerald's The Great Gatsby, All This Useless Beauty would be it.

I drove the A.C.T. with Plinius' 9200 integrated amplifier, both on its own and as a preamplifier for the darTZeel NHB-108. As far as I'm concerned, the Plinius is the bargain champ in amplification. For a lot more money, the darTZeel amplifier is a wonderful complement to the A.C.T.'s bred-in-the-bone musicality. Stereovox, Nordost Valkyria biwire, and Wireworld Super Eclipse 5 biwire speaker cables all sounded wonderful — any preference was both amplifier-dependent and a matter of personal taste. With the Plinius integrated, it was the Wireworld by a nose; using the darTZeel, it was the Nordost by a nose.

The A.C.T.'s published impedance curve is quite benign, averaging 6 ohms and not falling below 4 ohms. Sensitivity is claimed to be 88dB. I've heard reports from the field that the A.C.T. works very well with tube amplifiers, even low-powered ones (by which I mean 20Wpc or so rather than 3Wpc).

The one point on which Wilson Benesch speakers have sometimes come in for criticism in the US press has been their handling of the very bottom octave. To avoid misunderstandings, midrange

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THE FIFTH ELEMENT

means having to do with middle C (262Hz) and the octaves on either side; 131Hz or thereabouts (gg, 140Hz) is thus a plausible dividing line between lower midrange and upper bass. An electric bass guitar’s low E is 41.2Hz. I would therefore posit 40Hz as the dividing line between “bass” and “low bass.” This makes sense, given that 20Hz, the pitch one octave below 41.2Hz, is generally regarded as the limit of human hearing’s pitch sensitivity.

As far as landmarks go, below E at 41Hz there are the notes D at 36.7Hz, C at 32.7Hz, B at 30.8Hz, and piano low A at 27.5Hz. Below piano low A there are only the additional bass strings of a Bösendorfer Imperial Concert Grand piano, organ pipes, percussion, sound effects, and synthesizers.

My impression was that the A.C.T. was flat at 41Hz and obviously lacking at 20Hz. I estimate that in my room it was down about 6dB at 28Hz — in other words, half as loud as at 41Hz. To put this in perspective: Unless you listen almost exclusively to organ or the largest symphonic works, I doubt that the A.C.T.’s comparative lack of low-bass extension will be much of an issue. (If your setup does double duty as a home theater, this is probably a nonissue; filling in the octave from 20 to 40Hz is what subwoofers are made for.) The A.C.T. was flat at electric-bass low E and really punchy on bass drum. In a word, it was a fantastic speaker for rock music.

I imagine it would have been possible for Wilson Benesch to get more bass extension out of the A.C.T., but (I assume) only at the cost of over-porting the enclosure, thereby running the risk of “one-note bass.” Keeping in mind the ever-present, serpent-in-the-garden temptation upon audio designers to design their products to be impressive during a brief showroom audition rather than building them to be appreciated and enjoyed over the long haul: at the end of the day, limited low-bass extension is, in my book, preferable to boominess or bass with poor pitch definition.

If you want more bass extension than the A.C.T. can provide, Wilson Benesch’s Chimera, at $20,900/pair, offers a larger cabinet with two pairs of isobaric woofers and a passive bass radiator. The added bass drivers result not only in more bass extension (their published –6dB point is 25Hz, compared to the A.C.T.’s published –6dB point of 32Hz), but also in better coupling to the room, and a greater sense of heft, authority, and dynamic ease.

Tosunup the Wilson Benesch A.C.T.:

Pros: Drop-dead gorgeous; extraordinarily low distortion; tonally seamless and coherent; superlative soundstaging; room-friendly and easy to set up; powerful yet nuanced dynamics.

Con: Although the new model’s improved bass is excellent — very quick, very clean, and powerful — larger and more ambitious speakers will do a better job with the lowest octave.

If you’re shopping for speakers in the $12,500/pair range, you’re doing yourself a huge disservice if you don’t audition the A.C.T. I haven’t heard another speaker in its price tier that I prefer.

If you’re not shopping in that range, you probably should hear the A.C.T., just to have an idea of what is possible in the, at times, seemingly absurd quest to reproduce some of humankind’s highest aspirations using coils of wire attached to domes and cones.

Verdict: Class A, Restricted Extreme LF. Questions or comments: jmrrds@jmrrds.com.
The good news from the Home Entertainment 2004 East show in New York City last May was that two-channel stereo and home theater seem to be thriving. But that was bad news for fans of multichannel music. Every multichannel sound system at HE2004E cohabited with a big video display, and the demo material was generally of the Big Bang variety. There were a few decent-sounding multichannel demos, but, mostly, one had to plead to hear some music played.

Linar and Gershman Acoustics repeated the successful exhibit they’d debuted at the Consumer Electronics Show in January, while the Piaga-Perreaux and Naim rooms were pretty good. My best multichannel music experience was at the Linn demo, when EarsNova’s Josh Cohn, hearing my request for a little classical music, invited me to load up a Linn Unidisk with Michael Tilson Thomas and the San Francisco Symphony’s Mahler Sixth SACD. We listened to the last movement through five small Linn Akurate 212s and the Akurate 221 subwoofer. Almost totally disassociated from the hardware, the sound was devoid of harshness and was almost, dare I say, analog in its clarity.

That was my most satisfying musical experience at HE2004E. I can only wonder at the potentials of the many systems that were presented in tightly scripted demos with restricted playlists, or with “Drumline” played so loud it drove me from the door.

No show report, even one as brief as this, would be complete without some mention of the ongoing format wars. There was no official representation of DVD-A at HE2004E, and the SACD contribution consisted of the now-familiar wall of discs and a tightly scripted demo by Sony. Many of us were depressed about the lack of any new Sony SACDs for the remainder of 2004, and surprised that SACD was featured much more prominently in Mike Fidler’s pep talk at Sony’s press conference and the demos than it had been at CES. Pride of place was given to the new Blu-ray disc format for high-definition video, which was developed by Sony, among others. When asked about Blu-ray’s compatibility with the burgeoning high-resolution audio and video media, Fidler said that the Blu-ray spec encompassed almost every possible audio format, including DSD. Imagine: Concert discs with hi-def video and hi-rez, multichannel audio!

Enter the Trinatural processor
One of the highlights (and award-winners) at the 2004 CES was Spread Spectrum Technologies Trinatural processor ($1500). The demo, with three VMPS speakers and Ampzilla2000 power amps (www.ampzilla2000.com/vmps.html), was outstanding for its spatial and instrumental integrity. While all the devices bore the stamp of longtime audio innovator James Bongiorno, it was the Trinatural processor that was the system’s most salient component. In this all-analog box, according to Bongiorno, “the stereo composite signals are algebraically revectorized into three front channels.” Doing so, he says, eliminates “cross-coupled error signals,” which, though needed for two-channel reproduction, create spurious directional cues, especially when one is not sitting rigidly in the central sweet spot.

I found the Trinatural’s instructions cursory, a bit confusing, and totally lacking in technical explanations. (They’re available online at www.ampzilla2000.com/trinatural_manual.html, where they’re still referred to as “preliminary.”) I was also a bit put off by Bongiorno’s bold warning that one should not compare Trinatural listening to two-channel
stereo, and that one needs to re-learn how to listen. He warns that, on hearing the Trinaural for the first time, many will find the center channel too emphasized, too “hot.” He then admonishes listeners not to turn down the center channel, and to listen for an extended period before judging the performance. To help ensure that this adaptation has enough time to occur, the Trinaural processor has no simple on/off switch.

Nor are any connection diagrams provided, or adequate explanation of the fact that the Trinaural’s Bypass function won’t let you use the main input signals without Trinaural processing. I did eventually figure it all out, and Bongiorno does encourage users to call if they have problems.

But can it really take two weeks before one’s ear-brain linkage has unlearned its old listening habits and adapted to the new? As a card-carrying neurobiologist, this bugged me. I know that the ear-brain has a remarkable ability to adapt, and that, with sufficient exposure, it can readily learn to accept as correct and normal almost any rearrangement of signal parameters. Besides, don’t some of us listen to real music in the real world all the time?

**Ready or not, here it comes...**

I fed the main stereo L/R outputs of the Sony SCD-XA9000ES SACD player into the Spread Spectrum Technologies Trinaural processor, and used the latter’s Bypass inputs for the Sony’s L/R/C/subwoofer signals. Next, I reconfigured my system to replace the Paradigm CC-470 center-channel speaker with a Paradigm Reference Studio 20, while the L/R speakers were Paradigm Reference Studio 60s. I’d been meaning to make this change for a while, and Bongiorno’s forceful urging to use a better center-channel speaker did the trick. I also listened for extended periods with three Paradigm Studio 60s across the front. Balancing levels with the Trinaural’s built-in signal generator is easy, and does not require a sound-level meter.

In my very first listening session, I did feel that there was too much center level (I checked it with a meter), but I didn’t find it too bright. The “centerness” was emphasized with orchestral recordings, but right from the get-go, solo voices with accompaniment were enticingly realistic in localization and solidity, with no changes in harmonic balance.

So I let it ride. For the next several months I did all of my non-multichannel listening, CD and radio, via the Trinaural Processor. My initial feeling of “centerness” faded quickly, despite the fact that I interspersed these listening sessions with multichannel sessions and weekly returns to my main two-channel system.

The Trinaural was consistently satisfying with a wide variety of two-channel music. I felt less constrained to sit in my “serious listening” position of the center of the couch. The performers were always firmly located in the middle of the front of the room, regardless of where I moved, although my perspective on the soundstage changed depending on my proximity to the left or right speaker. This, of course, is exactly what would have happened with real musicians in the room, assuming I had the audacity to walk around as they performed. Even more interesting was that there was less variation in sound and image in the vertical plane as well. We don’t walk around while listening critically, but many of us fidget or slouch while seated; with the Trinaural, that was just fine.1

Another improvement wrought by the Trinaural processor, probably as a corollary of its centered coherency, was a subjective improvement in the bass. Sure, there were now three sets of bass drivers, not two, but the improvement

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1 It also occurred to me that Trinaural processing might be just dandy for deriving side-channel signals from the front and rear signals of multichannel recordings. While the ear-brain may be able to synthesize a coherent phantom center channel from two channels, it is markedly more difficult to perceive the phantom sides required by most multichannel recordings. Imagine a pair of Trinaurals, each deriving an “algorithmically rectified” side channel, helping to create a seamless 360° sound space!
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was not due to any change in bass levels that I could measure. Deep bass seemed more firm and extended. I suspect Jim Bongiorno would say that this is the result of the elimination of those nasty "cross-coupled error signals," as most of the bass seemed to come from the new center channel. The Trinaural processor also has a sub-80Hz subwoofer output and a selectable high-pass filter for the main speakers. But with or without using the sub, Trinaural-processed bass was significantly more satisfying than the unprocessed variety.

So why Bongiorno’s dire warnings about needing to “relearn” how to listen? Switching between unprocessed sound and Trinaural processed sound (via the dual L/R outputs of the Sony XA9000ES or a pair of Y-connectors) affords the opportunity to determine that the processor neither introduces any audible distortion nor changes harmonic textures. However, switching back and forth was often disconcerting; I found myself listening for different things each time. The whole soundstage seemed wider without Trinaural, but so did instruments and voices.

With Trinaural, the performers were more coherently present in the center of the soundstage, and seemed to have greater depth as well as more discrete layering from front to back (or, in multichannel terms, from front to farther in front). I have yet to hear a two-channel recording in which the integrity of an ensemble was not as good as or better when subjected to Trinaural processing. I can say as much for good multichannel recordings with a discrete center signal, but my “old” two-channel recordings couldn’t get there without the Trinaural.

Overall, the Trinaural processor significantly improved most recordings while enhancing the spatial presentation, and had no real deficiencies.

Another fundamental adjustment

I’m a bit of a bass freak. While I resisted it in my stereo system, I like having a good subwoofer in my multichannel system, and Outlaw’s ICBM Bass Manager and Paradigm’s Servo-15 subwoofer provide the underpinning I need. The sticky issue is correct placement, and that is constrained by choices of furniture and décor. When I installed the Servo-15, I briefly tried only one or two other spots before ending up with the sub just to the left of the couch. The fact that level settings for the sub are quite critical suggests to me that this spot is less than ideal, but I had little choice.

While surfing the Web and musing about subwoofer isolation and supports, Acoustic Sciences Corp. sent me an e-mail about their new SubTrap, a type of Tube Trap designed to fit beneath a subwoofer and thus solve many of the problems encountered in real listening rooms (www.acousticsciences.com). When placed on a SubTrap, a subwoofer is physically decoupled from the floor and mechanical feedback is minimized. Well, that hasn’t been a problem for me, except when I jack the levels way up. However, the SubTrap is also designed to attack acoustic problems caused by the interactions of a subwoofer’s output and the room’s modes.

First, with a typical ceiling height of 8’, the mode is at 70Hz. Simple equalization can reduce the magnitude of the system response at that frequency, but can’t easily correct for the storage and release of energy over time, which leads to imprecise and inarticulate bass at and around 70Hz. Second, the common placement of a subwoofer on the floor puts it in a high-pressure zone — a room boundary where it more effectively loads and is affected by the modal resonance. The SubTrap targets both of these issues by providing ample energy absorption in the 70Hz range, more or less like one of ASC’s traditional Tube Traps, and by raising the sub above the floor boundary.

I had misgivings. A SubTrap is one big, chunky black box — stacking my sub on top of it created a monumental black tower that loomed over the listening position like one of those monoliths from 2001: A Space Odyssey. But it worked like magic. As soon as I’d set it up, it was obvious that the room acoustics had changed for the better. There was less apparent energy from clapping, loud conversation, or just stomping around. When I turned on the system, there was also less apparent bass energy from all widerange signals, even with the sub disconnected! Clearly, the SubTrap was minimizing the excitation of these room modes. I say “modes” because my multichannel room measures 16' by 16' by 8' (I know, I know...not room dimensions anyone would choose from scratch for audio reproduction), which means that the 70Hz trap was working on the fundamental of the major mode for the height, and the first harmonic of the major mode for the length and width.

With the SubTrap-stacked Servo-15 back in play, the bass was transformed. I thought I’d had it pretty good before, but now there was more bass detail, and so much deeper than I expected. In fact, I had to rebalance the subwoofer levels; pre-SubTrap, my ears and my SPL meter had been deceived by the encumbered resonances. With the true bass levels restored (and my wife outside in the garden), I unleashed my inner bass freak with Von Kessel’s Requiem (SACD, VK3583). This disc has lots of spacey synthesizer sounds compounded with assorted percussion (especially gongs!), but track 2, aptly titled “From DC to 60Hz Ahhhhh...” was particularly powerful. The combo of Servo-15 and SubTrap filled the room with throbbing, tuneful bass that moved me, but not the floorboards or the furniture. Ah, yes...
glorious bass without the boom!

With acoustic music, things were even better. Gary Border’s *Trumpet Works* (SACD, Artegra ART10001) is a collection of solo and concerted performances, beautifully recorded with different collaborators in different venues. On the opening solo, recorded in the Cathedral of St. Paul (Minnesota), I could hear the huge space of the cathedral, unencumbered by the modes of my room. On other tracks, where Border’s trumpet is accompanied by an organ, the fundamentals had a discreteness of tone that was new in this listening room.

Figuring merely to sample Gregorio Panagiu’s familiar La Folia in its new multichannel version (SACD, Harmonia Mundi HMC 801050), I was (sub)trapped by the natural ambience, startling transients, and incise percussiveness revealed by the removal of the room’s signature. I sat riveted in my seat for the whole disc. If you liked the original La Folia CD (or LP!) and you now have a multichannel system, you must get this SACD. I swear I could almost smell the little bus on the final cut.

The SubTrap is available in three sizes (15", 18", or 22" square) from ASC dealers. The ASC website offers some guidance in selection, relating the choice to subwoofer bandwidth and room dimensions. At ASC’s suggestion, and to fit the Servo-15’s dimensions, I went with the 22"-square model ($438).

I now face a serious disagreement with my wife re. the appearance of the room. Unless your room is conveniently dimensioned or otherwise treated, you, too, may have some serious domestic discussions ahead of you. But most of us with subwoofers will just have to have a SubTrap.

**Fuel on the flames**

A while back, we reported that Naxos had begun to offer releases on SACD as well as on DVD-Audio. When asked why, label head Klaus Heymann replied: “From the very beginning, I opted for DVD-A because it is the better surround format, and because there are zillions of DVD-V players installed in houses but only thousands of SACD players. DVD-A will win, but in the meantime there is an SACD market, especially in Asia, that we cannot ignore, which is why we will also release new blockbuster titles on SACD.”

Whether you agree or not with Heymann, many of us like having albums in duplicate formats. But unless they’re completely parallel productions, with no differences in the mastering, we gain little insight into the formats’ different sonic characteristics. However, while each Naxos DVD-A indicates how it was recorded and mixed (e.g., “48kHz, 24-bit resolution”), the companion SACD gives only recording date and venue. Thus, despite the SACD, DDD, and DSD imprints, I suspect that these SACDs were transferred from PCM masters and are not DSD originals.

I compared several of Naxos’ dual issues, playing the SACDs in Sony’s XA9000ES and the DVD-As in Arcam’s DV-79 (review in process). In each case, I preferred the DVD-A. A great example was Shostakovich’s Symphony 7, with Dmitri Yablonsky and the Russian Philharmonic (DVD-A, 5.110020; SACD, 6.110020). The DVD-A was more open and detailed, with greater lateral imaging and depth. The SACD seemed weightier, narrower, and a bit darker — but only in direct A/B comparisons with levels carefully matched. This is not to say that Naxos’ SACDs are inferior to the competition. Their SACD of Grieg’s Piano Concerto and Symphonic Dances (6.110060) is delightful in performance and sound, and the SACD of highlights from Mozart’s *Le Nozze di Figaro* (6.110014) is a sparkler that made me sorry they didn’t record the entire opera.

More comparisons loomed with the parallel releases of some of the Vanguard back catalog: on SACD by Artemis, and on DVD-Audio by Silverline. I played Maurice Abravanel’s venerable recording of Mahler’s Symphony 1 on the Sony and Arcam players mentioned above. Here my preference was decided for the SACD, even though, as above, it was darker and narrower in perspective than the DVD-A, and both had occasional and disturbing low-frequency rumbles.

Artemis’ SACD preserves the 4.0-channel mix of the original recording, and offers more than adequate spaciousness, weight, and detail. Silverline remixed the masters to offer full 5.1 on the DVD-A, and in so doing have given us a detailed, spread-out presentation with thin, wiry strings. In fact, the 4.0 SACD has better center solidity than the DVD-A, with its discrete center channel! Add to that the fact that the Mahler symphony is paired on the two-SACD set of *Berlioz Requiem*, which fairly demands the multichannel treatment, and you can easily guess which is the better buy.

Finally, I discovered that I was in possession of no fewer than four multichannel SACD recordings of Rimsky-Korsakov’s orchestration of Mussorgsky’s *Pictures at an Exhibition*. A shoot-out was inevitable.

The newest 5.1-channel issue is with Theodore Kuchar and the National Symphony of the Ukraine (Naxos 6.110061), which, PCM-derived or not, has a dynamic, full-bodied sound with excellent localization, detail, and balance. It also has a slight excess of reverberation, holl or otherwise, and is a little harsh at peak levels.

The 5.0-channel Vanguard/Artemis version, with Sir Charles Mackerras and the New Philharmonia (ATMCD 1504), is fairly dry, with excellent bass and some phasiness in the strings, this so far common to all Vanguard reissues.

Mobile Fidelity’s 4.0 remastering of Slatkin and the St. Louis Symphony’s recording (UDSACD 4004), originally released on Vox, while more distant than the previous two, has good imaging and superbly balanced sound from all the orchestral groups, but a hint of low-frequency hum when played at realistic levels.

Last up was Sony’s 5.0 remastering of an original surround recording with Thomas Schippers and the New York Philharmonic (Sony SACD 8771). This was a breath of fresh air. The dynamic and quite forward perspective matched well with the powerful performance to make it my favorite of the four.

**Next time**

I’ll be commenting on some new multichannel hardware, an innovative but simple multichannel switcher, a possible alternative to ASC’s big SubTrap, and more recordings. Some of my current favorites are in the sidebar, “Recordings in the Round.”
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WorldRadioHistory
by James Miller

This book is a tremendously valuable complement and counterpoint to Jim Cogan and William Clark’s Temples of Sound, which I reviewed in the July issue. That book did a marvelous job of laying out the what and the how of the golden age of recording popular music in the US. This intriguing and at times provocative book tackles the thornier questions of what difference it all made, and why.

James Miller is uniquely situated to have worthwhile opinions on such questions, because he was a member of the first generation of rock-music critics. His first nationally published record review appeared in 1967, in Rolling Stone No. 3, when his byline was “Jim Miller”; he was for 10 years the popular music critic for Newsweek; and he edited the first edition of The Rolling Stone Illustrated History of Rock and Roll. He is now professor of political science and director of liberal studies at the Graduate Faculty of the New School for Social Research.

Perhaps because Miller had already edited a rather encyclopedic history of rock and roll, he felt free to adopt a very different plan for a book that is as much social criticism as history. Flowers in the Dustbin (the title comes from a Sex Pistols song) comprises about 45 short chapters, each dedicated to a particular event that was a step in the process by which, over the course of 30 years, rock music evolved from an outsider’s enthusiasm to a cultural norm.

Many of the chapters are prefaced by an exact calendar date—such as July 9, 1972, when David Bowie made his Royal Festival Hall debut in London. This gives the writing a real sense of journalistic specificity; you feel that you’re getting a first-hand report. At the same time, Miller’s use of secondary sources is amply documented; this is a history, not a memoir.

The time frame of the book’s subtitle, The Rise of Rock and Roll, 1947–1977, was chosen because December 28, 1947 was the date of the recording session for Wynonie Harris’ “Good Rockin’ Tonight,” a jump-blues dance number that many believe was the first record that could be called “rock and roll”; and because August 16, 1977 was the date of Elvis Presley’s death. Miller’s book chronicles rock’s rise from a marginalized and at times despised music, to a position of such cultural ascendance that, upon Presley’s death, two of the commercial television networks replaced scheduled programming with special reports.

Implicit in Miller’s choice of 1977 as his chronology’s end point (although his epilogue does cover such post–1977 developments as Michael Jackson’s solo career and U2) is an assertion that, after cultural history through what he calls “critical moments.” For example, Ricky Nelson claimed that the amount of attention a girl he was dating paid to an Elvis song heard on his car’s radio caused him impulsively to tell her that he was going to make a record, and then he had to follow through. Or, to take a perhaps more significant example, how the LP reissue in 1961 of Robert Johnson’s 78rpm sides inspired Bob Dylan, Keith Richards, and Eric Clapton. Arguably, the soaring passion of Clapton’s guitar in “Layla” descends directly from Johnson’s work in 1936 and 1937.

...ROCK’S VERY SUCCESS MAY HAVE DESTROYED THE WELLSPRINGS OF ITS ORIGINAL VITALITY.

On the other side of the ledger, because Miller’s focus is on the hinges of history, some very popular performers who had already appeared on the scene in 1977—even some that were both popular and musically significant—get scant or no attention, examples being the Beach Boys, Elton John, and Steely Dan.

Miller’s anecdotal chapters are like pieces in a mosaic. By the time you’ve finished Flowers in the Dustbin, you’ll see the big picture of the first 30 years of rock music from a unique, albeit slightly world-weary, perspective.

My only constructive criticism would be that the music Miller chooses to discuss is so wide-ranging, and at times unfamiliar, that it would have made sense to try to obtain clearances for the most important songs, and bundle a compilation CD or CDs along with the book. The higher price would have been worth it.

I’ll let Miller himself have the last words:

“Whatever its expressible limitations—and they are manifold—rock and roll speaks to millions. Out of the chaos of our time has come a prerecorded music bearing the promise of redemption through Dionysian revelry.... And because people around the world want to hear this sound, and share in the fantasies it still excites, rock and roll is here to stay—for better; for worse; and for a long time to come.”

Highly recommended. —John Marks
British speaker manufacturer Spendor has been revitalized by Audiolab founder Philip Swift. Its $1649/pair S5e (right) sounded great at HE2004 and is reviewed in this issue by Art Dudley.

Abe Laboriel put on a master class in bass guitar technique in Glacier Audio's room, through Atma-Sphere MA II.3 tube monoblocks ($33,000/pair) driving Gilmore Model 2 planar loudspeakers ($19,500/pair).

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Her first audio show: Morgan Jet Stuelke, Stereophile managing editor Elizabeth Donovan's six-month-old daughter, clutches her Robert Silverman CD.

JA was impressed by the Hyperion HPS-938, from new company Studio Acoustics. A big sound, he thought, for just $4000/pair. A horn-loaded tweeter is allied to a carbon-fiber-cone midrange and two 8” woofers.

Epiphany's 12-12 floorstanding loudspeaker ($14,900/pair) has 12 midrange drivers and 12 ribbon tweeters, and a high sensitivity of 95dB/W/m. It was driven at HE2004E by Tenor HP-300 hybrid monoblocks and a combo of Philips SACD 1000 and EMM Labs DAC6.
Why is this man smiling? Teta's Adrian Butts must be thinking of the positive response his 505 loudspeaker (below, $8000–$10,000/pair, depending on finish) was getting at HE2004E. A 1” ScanSpeak tweeter works with an 8” Morel NeoLin woofer.

HE 2004
NEW YORK

DVD-Audio and vinyl recordings were selling briskly at Red Trumpet Audio's booth on the last day of the Show.

Themusic.com used Antique Sound Labs' AQ 1009 triode monoblocks ($5995/pair) to drive Reference 3A Royal Virtuoso speakers ($4500/pair). The amp uses two 845 output tubes to achieve 60W in push-pull triode mode.

Creek's OBH-22 remote-controlled passive line preamplifier ($500) includes a front-panel headphone jack.
Joule-Electra's VZN-100 Mk.IV 100W OTL tube monoblocks cost $18,000/pair.

Jim Thiel shows off his new Viewpoint wall-mounted loudspeaker ($1990 each). The Viewpoint's concentric driver is mounted on the angled baffle of its all-aluminum cabinet.

HE 2004 NEW YORK

The Second Rethm loudspeaker, featuring the quirky English Lowther full-range drive-unit, was demoed at HE2004E with the Red Planet Labs STR201 solid-state amp.

Michele Fredericks, of CT Home Automation, sells raffle tickets for the Elf Foundation, which supplies home-theater "Rooms of Magic" to hospitals to entertain recuperating children.

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BY ROBERT BAIRD

Mister Brown to You

ARMED WITH HIS GUIT-STEEL GUITAR, JUNIOR BROWN LEAVES NASHVILLE FOR CLEVELAND.

Junior Brown admits to not having known quite what to expect in his first recording session for Telarc, especially after he'd agreed to cut everything live in the studio with a full band.

"It was very similar to a jazz session—you have to jump in and hang on," says the man who first envisioned fusing the pedal steel guitar and a standard electric guitar into what he calls the "guit-steel." Leaning back in a mixing room at Telarc's headquarters, in Cleveland, Brown has the smile of a man proud of what he's done. "It was recorded almost entirely live [in the studio]."

It wasn't always that way—at least when it came to the proud part. Until recently, Junior Brown was mired in a record deal that had grown less than advantageous, especially for a musician whose decidedly round talents and ambitions never fit into neat square holes. In the early years, when
he was still seen as something fresh and new, Curb Records actively promoted his records, and Brown had an upbeat, anything's-possible attitude. But as artist and label grew apart, the deal soured. Ecstatic to have been given a fresh start with a label that, so far, appreciates him, Brown has made an album, Down Home Chrome, that is different from his previous albums, both in how it was recorded and in how it sounds.

"The first thing Junior told me was that his records had never captured his live performance," says Mike Bishop, Telarc's chief engineer, who helmed the sessions. Bishop asserts that, as with any other kind of music, knowing the style of music is the key to knowing how to record Brown and his unique guitar. He cites his experience "many years ago" of recording country gospel groups affiliated with Rex Humbard's Cathedral of Tomorrow, as well as a year on the road with Johnny Cash and his Tennessee Three, as what gave him the background he needed to get (sorry) the sound that he and Brown wanted for this record. "This record is a funny combination of old-style sound with new technology."

Brown and Bishop, a pairing for whom "get along" is too weak an expression, went into Nashville's Tracking Room studios with the intention of recording everything live, Bishop doing the mixes on the fly—in other words, the way records used to be made. But when Brown came down with a cold, which meant that his vocals had to be recorded later, they settled for recording as much live with the full band playing together in the studio as was possible. Still, some of the rhythm guitar and pedal steel parts ended up being overdubbed. Once he'd recovered from his cold, Brown recorded all the vocals in a single day. Most of his guitar leads—even in "Foxy Lady," the Jimi Hendrix cover he's played in concert forever but had never recorded—were cut live with the band. Even the edits that were done were minor.

"Rather than doing punch-ins," Bishop says, "we'd do an insert take, and I'd just paste it in."

"You're just fighting upstream when you do confetti mixes," Brown adds, referring to the old problem of "gain the perfect part but lose the feel," which often haunts records that have been extensively overdubbed. "Old country records, they recorded a performance, all the air was being pushed at the same time."

Just released on a hybrid SACD/CD, Down Home Chrome is the best-recorded album of Brown's career. When it came to mixing the SACD tracks, while the guitar picker had a say in what the final mixes would be, he left most of those decisions to Bishop.

According to Bishop, each instrument was miked, and a pair of ambient mikes was used for each instrument or group of instruments. Bishop worked on the Sony Sonoma DSD workstation and the SADIE system 5 DSD workstation which ran in synch. Brown, who played electric guitar and sang, was by necessity isolated in a separate room, but could see and interact with the other players. The sounds of the band bleeding into the ambient mikes was used as part of the surround mix.

"OLD COUNTRY RECORDS, THEY RECORDED A PERFORMANCE; ALL THE AIR WAS BEING PUSHED AT THE SAME TIME" —JUNIOR BROWN

Famed piano player Hargus "Pig" Robbins plays throughout the sessions and Brown's wife Tanya Rae plays guitar and sings backup on the track, "Let's Go Back."

"We focused on Junior's vocals and guitar, we didn't want anything to distract from that," Bishop says.

"Warmer is the first word that comes to mind," Brown says. "Bigger, fatter, basic. Nothing real dramatic, nothing jumping out of the rear channels and poking you in the neck."

Another tweak on these sessions is the drum kit, which consisted of only a snare and a ride cymbal.

"The bass drum is choppy," Brown says. "I got [the idea of leaving it out] from Hawaiian music. Hank Williams and Hawaiian music both have that. No bass [drum] makes it smoother."
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Both possess a bottom end authority that takes command of the music with astounding confidence, dynamics and ease while critical midrange performance is improved with more body and dimensionality. The introduction of the N°433, triple-mono amplifier later this year adds multi-channel system capability to this impressive series. All three models carry the refined, sculptural look that sets Mark Levinson apart from all others.

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Mister Brown to You

Smoother is also what Brown hopes his career will be, now that he’s moved to Telarc. But finding peace, at least in the beginning of his relationship with Telarc, may be a trick—Brown has never recorded for a label that cares as much about sound (calling a label “audiophile” unfairly circumscribes it; to paraphrase Stereophile founder J. Gordon Holt: “audiophile records sound good but I never want to hear them again because the content is so uninspired?”). By the same token, Telarc has never signed a roots-country-rock artist. In the label’s catalog, Junior Brown is a category unto himself.

“He is a career artist, meaning he’s an artist with an established career, both in recordings and playing live,” says Rob Saslow, Telarc’s VP of marketing. “He’s not a hit-driven artist. On a personal and artistic note, he has all that songwriting and performing integrity—he’s a serious player—but his ability to have fun with his music attracts audiences from all different walks of life.”

The appearance of a roots-country-rock guitar album on Telarc, a label best known for its extensive catalog of classical, jazz, and, more recently, blues recordings, should prove a challenge—both for the label, which has never marketed or sold such a disc, and for Brown, whose country- and/or roots-oriented fans are certain to ask, “Who’s Telarc?”

“We know we’re as well-equipped as any label to handle the full-service sales and marketing demands that Junior needs,” Saslow says. “We’re doing this because we want to show all the people who say ‘Who’s Telarc?’ that we can work with artists like this. We’re interested in looking at other established artists in this and other genres that don’t require a huge push on commercial radio.”

Airplay or no airplay, Brown’s records have always had a harder time finding where they belong on the air and in record bins precisely because he’s not hit-driven and his music touches so many bases—rockabilly one minute, deep-voiced country singer the next, and plain of string-twisting guitarist god the next. That’s mirrored in his fan base, which draws hits and pieces from a number of different musical niches. If Brown was ever close to being dedicated to one genre, it was in the mid-1990s, when he almost settled into being a country artist. Almost.

“I didn’t care [about fitting in], I just wanted to be an artist,” he says, voicing the kind of heresy that makes mainstream Nashville’s skin crawl.

“Miles Copeland, my first manager, wanted me to be a guitar guy, and in retrospect he was right. But the people I was working with at the time said, ‘No, we don’t have time for him to go off and play with Clapton and Jeff Beck and make a record, because there are nuts-and-bolts things in Nashville that he needs to be doing, and your people are not connected enough to do that.’ I ended up dropping him as a manager. It might have been a mistake.

“I DON’T CARE [ABOUT FITTING IN], I JUST WANTED TO BE AN ARTIST,” BROWN SAYS, VOICING THE KIND OF HERESY THAT MAKES MAINSTREAM NASHVILLE’S SKIN CRAWL.

“This was before Waylon and Willie, and country music was not hip. My friends thought I was crazy for playing in those places. But I loved the music, and I loved where I thought it could take me. The Byrds and Burrito Brothers had kind of messed with it, but really nobody else was messing with country at that time. Later on, there was Waylon and Willie. And then John Denver announces he’s a country artist, Olivia Newton John all of sudden is country, and then everything gets all mixed together. But before that, it was two different worlds, and if you played for those truck drivers you’d better play it right: they didn’t want any rock’n’roll or hippy leads or blues.

“Hey, I made $140 a week for six nights and I thought I was rich. I was buying Cadillacs — used Cadillacs, but Cadillacs.”

Brown, whose hair once hung down to his belt, is one of the few people today who still spices conversations with such words as hippy, no doubt relics from his days working the honky-totns. That, and the fact that he had his own hippy period in the 1970s, when he played as “J.B. Brown” in such cosmic cowboy country bands as New Mexico’s Last Mile Ramblers.

Although he worked for a time as a guitar teacher at Rogers State College in Oklahoma (where he met his wife, Tanya Rae), Brown continued working as a sideman until the mid-’80s. He then began to branch out and grow more musically adventurous, working with Asleep at the Wheel and the alt-rock country band Rank and File. But as the drunk-driving

JUNIOR BROWN

I don’t know, I can’t look back on that.”

Brown, whose given name is Jamieson, was born in Cottonwood, Arizona, in 1952. But thanks to his father, a college professor, Brown grew up in Wilton, Connecticut, Annapolis, Maryland, and finally in Santa Fe, New Mexico. When he found a guitar in his grandparents’ attic, he began plunking away on it.

“In the early ‘60s I was exposed to all this blues and folk that the college kids were listening to,” he says. “Kids my age were listening to the Beatles and the Beach Boys, and here I was hanging out with college kids listening to Lightnin’ Hopkins, Paul Butterfield, and stuff like that.”

After the usual raft of high school bands (“Harmonious Dischord—now how’s that for a band name?” he says with a maniacal grin), the fledgling guitar hero began to listen to country music almost exclusively. Soon he was working (with fake ID) as a teenaged sideman in honky-tonks, first in the Albuquerque area, then in California.
I couldn’t help it. The song was so sad. I looked over at my wife. Sure enough, there were tears streaming down Pam’s face as well. In my 30 years as an audiophile, I couldn’t remember this ever happening to me.

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laws changed and VCRs began eating up more and more of everyone’s leisure time, Brown saw that things were changing, and that he was going to have to find an angle to survive.

“I’d been waiting all this time for somebody to walk in and discover me, and I figured out that that wasn’t going to happen. I said to myself, ‘You’re going to have to take some steps that other people take to become a unique artist, someone that a record company might want to sign.’ I’d had some songwriter friends who had done well, so I started writing songs.”

It was about this time that the Junior persona that his fans now expect to see began to develop. He began wearing tailored Western suits, the most distinct in baby blue. He also began wearing a cowboy hat unmistakably reminiscent of the one worn by an early but persuasive influence, especially vocally: Texas troubadour Ernest Tubb. Brown’s singing, deep and resonant, is the side of his talent that’s often been overshadowed by his guitar theatrics.

The coup de grâce, however, to the creation of “Junior Brown: Solo Artist” was an instrument Brown still maintains he saw in a dream. The double-necked guile-steel is a melding (thanks to hefty amounts of resin and fiberglass) of the six-string electric and pedal steel guitars. Created by Junior and guitarist-maker Michael Stevens in 1985, the instrument is what’s made Brown that “unique artist” he wanted to be. In 1995, Brown and Stevens updated the design and made “Big Red,” the justly famous-looking and -sounding instrument he has traveled with ever since.

After moving to Texas and building a reputation as a solo artist by playing Austin’s Continental Club, Brown signed in 1992 with Curb Records, which a year later released *Guit With It*, on which Brown tackled Hank Garland’s epochal guitar workout, “Sugarfoot Rag,” as well as two of Brown’s best-known tunes, Red Simpson’s “Highway Patrol” and his own “My Wife Thinks You’re Dead,” the video for which won the 1996 Country Music Association’s Music Video of the Year Award. Later that year Curb released *12 Shades of Brown*. The album contains such Brown originals as “Too Many Nights in a Roadhouse” and “My Baby Don’t Dance to Nothing but Ernest Tubb.”

Although Brown was finding a measure of success, even in mainstream Nashville, he was never only a country artist. What is perhaps his greatest claim to musical fame, and what has won him devoted fans from the rock side of the spectrum, comes from another time and genre altogether.

“I don’t want to say Hendrix, ‘cause everybody says, ‘Oh, Hendrix, do Hendrix.’ It was more the approach of just jamming and freeing up wild guitar playing where it’s appropriate.

“The whole thing about throwing rock licks in there once in a while, that came out of being laughed at for doing the old traditional country. College kids would go, ‘Ah, hah, hah, hah,’ and make these little gestures like [in a goofy voice] ‘Oh, I can cut a rug to that’.

“And I’d say, ‘Okay,’ [with a vengeful sneer] run my hand across the volume control, and just smoke ‘em. And they’d be like [suddenly silent, eyes bugging out] with their ears bleeding. It was a defense mechanism, and I realized, ‘Hey, I can incorporate this in and it surprises them in a positive way.’ ”

In 1996, Brown cemented his already burgeoning reputation as a hard-to-define artist by releasing *Semi-Crazy*. Along with originals (“I Hung It Up”), the album contained a cover of Hoagy Carmichael’s “Hong Kong Blues” and a medley that touched on three surf-guitar classics: “Secret Agent Man,” “Walk Don’t Run,” and “Pipeline.” But as fun as such covers were, by the time *Long Walk Back* was released in 1998, Brown was writing almost all his own material. Though he’s gotten good at writing songs, he says, not surprisingly, that it’s infinitely more difficult than shredding on the guile-steel.

“It’s the hardest — to make yourself inspired. Playing’s not like that. No set pattern to the way you’re going to write a song, like there is with playing. You can sit down and learn anything you want to learn, but you can’t just sit down and write a song. Some guys can, I can’t.

“The more songs you write, the less material you have to delve into and write about. That’s why you hear good songwriters like Willie Nelson who’ve pretty much dried up as songwriters, because you say a few things and then you really don’t have any more to say. Unless you’re a song-mill type songwriter — five guys who sit down as a committee and drink coffee in the morning and write songs.”

For his Telarc debut, Brown concocted a typical Junior Brown album: a mix of rocked-up guitar showcases such as “Little Red Rive-Airhead” (Brown’s also a hot-rod enthusiast), traditional country numbers like the Waylon Jennings-influenced “The Bridge Washed Out,” and some curveballs: the horn-punctuated jump blues “Hill Country Hot Rod Man,” the near-jazz of “You Inspire Me,” and “Monkey Wrench Blues,” which Brown calls “Ernest Tubb on Beale Street.”

Then there’s his take on “Foxy Lady.” While faithful to the original — Brown indulges in the obligatory Hendrix ad lib of “Here I come baby, I’m coming to getcha” — the song is taken at a more measured pace, and includes Brown’s own muscular spin on Hendrix’s famous guitar solos. A particularly well-recorded snare drum is also a big part of the track’s success.

**THE COUP DE GRÂCE WAS AN INSTRUMENT BROWN STILL MAINTAINS HE SAW IN A DREAM.**

Best of all, Brown plays with the vocals, swinging from a dead-on imitation of Hendrix that will make you blink to a talky version of Junior Brown as rock god. Unquestionably the highlight of *Down Home Chrome*, “Foxy Lady” is also a career milestone — one of the most pungent tracks Junior Brown has ever recorded. While he may not like being compared to Hendrix (who does?), Brown is one of the few to have covered him with such authority and feeling.

The Hendrix cover aside, Brown did not, as so many older musicians have done recently, decide to reinvent himself for his first record for a new label. Artistic reinvention, it turns out, is one of Brown’s more passionate subjects.

“Most [artists] eventually cave in to pressure to reinvent themselves for a younger audience with a younger producer. It happens a lot. It happened to Johnny Cash. I think that worked, but I would have like to have seen him do that, rather than Rick Rubin tell him to do it, because I think it could have all come from him.

“The other side of the argument is that it brings their music to a younger crowd; it repackages it, it brings a fresh approach, new label, new crowd. That’s fine. But I think the artist needs to generate that himself, not say, ‘Hey, you’re a young producer, get some sloppy musicians in here and let’s be real earthy and play everything real sloppy and it will be real honest.’

“I don’t want to be someone I’m not. I’m not a blues guy, I’m not a jazz guy. I’m not really a country guy. I don’t try and push the way I see things on people. I just try and give them a little variety, ‘cause that’s what I like.”
EQUIPMENT REPORT

Simaudio
Moon Equinox
CD PLAYER

Simaudio has been doing well in the middle of the high-end market, providing products such as their Moon i-5 integrated amplifier (reviewed\(^1\) by Chip Stern in July 2002), which offers a glimpse of high-quality sound at an affordable price. That's not to say that the Canadian manufacturer neglects the cost-no-object market: the two-box, $5700, Simaudio Moon Eclipse CD player impressed the heck out of Brian Damkroger when he reviewed it for Stereophile in April 2001 (with a "Follow-Up" in April 2003). So when Simaudio's Lionel Goodfield offered me their Moon Equinox player ($2000) for inclusion in my irreligious series of CD-player reviews,\(^2\) I didn't need to be asked twice.

The Equinox...

...is a distinctive-looking "double-decker" player, its transport section mounted in a central hump above the display window, whose large, red, seven-segment numerals look rather garish beneath the central blue LED. (Adding to the garishness, these numerals flash ostentatiously when the player is paused.) Behind the ½"-thick front panel of anodized aluminum, the black-finished chassis is stiffened by the finned, semicircular side extrusions that have become a Simaudio hallmark. The Equinox offers unbalanced analog outputs only via the usual RCA jacks.

With its mechanically damped top cover removed, the Equinox's chassis is relatively empty. The Philips transport mechanism is mounted top center, above the printed circuit board carrying its control circuitry. A second, multilayer board occupies the real estate between the transport and the rear panel, carrying the power supply on its left-hand half. This is based on a small toroidal transformer and 13,200μF of reservoir capacitance.

Local three-pin regulators supply clean voltage where it is needed. The audio circuitry is based on a Burr-Brown PCM1730 DAC chip, located next to the master oscillator crystal. The '1730 is a two-channel, 24-bit device running at 352.8kHz. The incoming data are processed by the chip's internal 8x-oversampling digital filter before being fed to the DAC proper. (HDCD decoding is not offered.) Each channel of the DAC's current outputs appear to be fed to an NE5532 dual op-amp chip, though it is not apparent without a circuit diagram if these perform current/voltage conversion or DC removal (or both). The output stage is based on the popular Burr-Brown OPA2604 dual FET-input op-amp. A parallel signal path in the center of the board takes the recovered data from the transport to a Burr-Brown DIT4192 transmitter that feeds an S/PDIF-formatted stream to an RCA jack on the rear panel.

The Moon Equinox is intended to be left on, a button on the top left of the front panel switching it in and out of Standby. The plastic remote control is decidedly utilitarian. However, an aluminum remote is also available.

Sonics

Before I did any listening to the Equinox, I used it on Track Repeat for 48 hours

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

2 So far I have written about the Ayre Acoustics CX-7 (May 2003), the Classe CDP-10 (September 2003), the Mark Levinson No.390S (January 2004), and the Arcam FMJ CD33 (July 2004).
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to break in a pair of speakers in-house for review. (Simaudio's products have a reputation for needing a lengthy break-in period.) But when I did finally press Play on its cheesy remote, it was clear that the Moon Equinox is a contender. Its sound was refreshingly free from treble glare, or any tendency to brightness. Not that it sounded mellow or rolled-off—brash-sounding modern recordings (of which there are far too many) still sounded brash. Our June 2002 "Recording of the Month," Wilco's Yankee Hotel Foxtrot (CD, Nonesuch 79669-2), sounded just as in-your-face on the Equinox as it always has, while Los Lobos' new album, The Ride (Mammoth/Hollywood), continued to disappoint with its grainy sound.

But Mary Chapin Carpenter's vocals on "Grand Central Station," from Between Here and Gone (CD, Columbia CK 86619), hung between the speakers in a nicely present manner, the Equinox

THE MOON EQUINOX'S
BASS WAS BIG,
POWERFUL, WEIGHTY.

refusing to exaggerate the huskiness or sibilant edge of her voice.

The most obvious characteristic of the Moon Equinox was its bass: big, powerful, weighty. The low, fifth-string bass-guitar notes supporting Keb' Mo's vocal on "Over and Over," from our April 2001 "Recording of the Month," guitarist Jimmy Smith's Dot Com Blues (CD, Verve 01064-2), purred mightily without descending into soggy-sounding boom, while the awesome low frequencies that punctuate "Grand Central Station" were reproduced in reasonably full measure. But even the Equinox could do nothing about the bass-pedal mud that occasionally obscures Jupiter, from Peter Sykes' transcription for organ of Holst's The Planets (CD, Raven DAR-380).3 (The rever-

3 My thanks to Mr. Sykes for autographing this CD for me following his knockout performance of J.S. Bach's Goldberg Variations on the harpsichord at Home Entertainment 2004 at the end of May.

Simaudio Moon Equinox

THE MEASUREMENTS

The Moon Equinox inverted absolute polarity, something that needs to be allowed for in comparisons with other players. Its maximum output level at 1kHz was both to specification and conformed with the "Red Book" Standard at 2.01V RMS, while its output impedance was a usefully low 99 ohms. Error correction was superb, the player coping with gaps in the data spiral up to 1mm without any audible glitches. Only on track 32 on the Pierre Verany test CD, which has 1.5mm gaps, did it stumble.

The Equinox's frequency response was flat within the audioband, with a rolloff of a fraction of a dB apparent at 20kHz (fig.1, top pair of traces). This was due to the filter in the Burr-Brown DAC chip, which is specified as being -3dB at 21.6kHz. It appears that Simaudio's designers chose to implement de-emphasis in the analog domain, which has some theoretical advantages, rather than use the DAC's integral digital-domain de-emphasis. However, as the lower traces in fig.1 reveal, there must be some wrong component values, as a significant error in the mid-treble is apparent. (The expensive Moon Eclipse player suffered from the same problem.) The Equinox will sound a little recessed with those few CDs that are pre-emphasized. Channel separation (not shown) was superb, any crosstalk being buried beneath the noise floor in the midrange, and decreasing to a still excellent 96dB at 20kHz.

Fig.2 shows a spectral analysis of the Moon's analog output, made with a swept 1/2-octave bandpass filter while it played back data representing a dithered 1kHz tone at -90dBFS. The trace peaks at exactly the -90dBFS line, implying negligible low-level linearity error, and there are no harmonic distortion peaks evident. However, both channels feature spurious at the power-supply-related frequencies of 60Hz, 120Hz, and 240Hz. Yes, these are too low in level to be audible, but their presence suggests some small problems in the layout of the printed circuit board. (I could not eliminate these spurs by experimenting with the grounding between the Equinox and my Audio Precision test set.)

The spurious can also be seen in a similar, wider-band analysis of the player's output while it decoded data representing a 1LSB DC signal (fig.3). Note the steep rise in the noise floor above 20kHz in this graph, due to the aggressive noiseshaping used by the DAC chip to achieve its excellent audioband resolution. Confirming this resolution, the Equinox's linearity error was less than ±1dB to

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berant acoustics of Philadelphia’s Girard College cope much better with the slow movements of this work, such as *Saturn*, where the organ’s lowest notes have time to develop, then fade, before the next one comes along.

The soundstage was reproduced via the Equinox with a little less image depth than the best “Red Book” digital sources I’ve heard, such as the Lavry DA2002, which I reviewed in August. For example, I put on the SACD/CD of *K622* (Musical Fidelity MFSACD017), Antony Michaelson’s performance of Mozart’s Clarinet Concerto, which I produced and Tony Faulkner engineered (see my article in the August 2004 issue). The Equinox played the “Red Book” CD layer, of course, but there was not quite the degree of palpability to the image of the solo clarinet that I had become used to when working on the project using my long-term reference D/A processor, the megabucks Mark Levinson No.30.6, to decode the 16-bit PCM version of the session data.

That is not to say that the Simaudio player was inadequate in this area. It did a fine job of painting the acoustic of the cave that acts as sonic bookends for Andreas Vollenweider’s 1983 *Caverna Magna* (Swiss CD, Colombia 882-01).

**Comparisons**

My first comparison was with the Benchmark DAC1 D/A processor ($975), which has become my reference for affordable digital playback since I wrote about it in the May 2004 issue. I drove the Benchmark with the Moon’s S/PDIF output and, using the input Level Offset function of my Levinson No.380S preamp, was able to match levels to within 0.1dB at 1kHz. Playing Mary Chapin Carpenter’s “Grand Central Station,” the difference was relatively easy to hear, at least until I inverted polarity for the Canadian player (see the “Measurements” sidebar). Even so, I felt that the standalone processor had a slightly deeper, weightier bass and very slightly less mid-treble energy. Perhaps as a result of the latter, the image of Ms. Carpenter’s voice had a little more of a solid, “rounded” character via the Benchmark, the Equinox’s image sounding a little flatter. A similar difference could be heard with the Mozart Clarinet Concerto recording, the images of the clarinet and of the orchestra both having a little more depth when reproduced by the DAC1.

Back in the July issue (p.66), I had enthused over the FMJ CD33 player from English manufacturer Arcam, which, at $2499, is natural competition for the $2000 Equinox. Again matching levels and compensating for the Moon’s inverted polarity, the Arcam’s high frequencies sounded a little more delicate on my Mozart Flute Quartet recordings from *Editors Choice* (Stereophile STPH016-2). Conversely, the Moon Equinox had a warmer lower midrange, which gave the cello a little body. On “Danny Boy” on the same CD, from Minnesotan male choir Cantus, the Simaudio’s balance was more robust, the CD33’s slightly more delicate.

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**measurements, continued**

-110dBFS (fig.4). In fact, the error seen in this graph is almost entirely due to the 16-bit dither noise recorded on the test CD; the BB1703 DAC’s performance is better than is required for CD playback. Combined with the Moon’s low level of analog noise, the player’s reproduction of an undithered 1kHz sinewave at -90.31dBFS was essentially perfect (fig.5). Though a negative DC offset of 10µV can be seen in this graph, this is negligible.

The Moon Equinox featured very low levels of harmonic distortion. Fig.6 is an FFT-derived spectral analysis of its analog output while it drove a full-scale 1kHz signal into a low 4k ohm load. The left channel was a little worse than the right, at 0.0013% vs 0.0007%
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needed only one. As a result, I kept inadvertently comparing, say, track 10 of *Editor's Choice* on the Arcam with track 9 on the Simaudio—in which case the players sounded extraordinarily different!

The DVD alternative
A question I am increasingly asked is why an audiophile should buy a dedicated CD player at all when DVD-video players that play CDs are now widely available for less than $100. It's a good question—not only do DVD transport mechanisms, in my experience, tend to offer superb correction of disc errors, but below a certain price level, the audio circuits of both DVD and CD players tends to be based on the same integrated circuits. So why shouldn't the DVD player be considered in a high-end CD context?

The problem is that the master clock frequencies required by MPEG video decoding are very different from those required for CD playback. When play-

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**Simaudio Moon Equinox**

THD, but both figures are excellent. The highest-level harmonic was the second in both channels, at -99dB (0.001%) left, -106dB (0.0005%) right. Intermodulation distortion was also very low, with just 0.001% of the 1kHz difference component evident when the player drove an equal mix of 19kHz and 20kHz tones into 4k ohms (fig.7). The fairly slow initial rolloff of the digital reconstruction filter results in an aliasing product at 24.1kHz being visible at -86dB in this graph.

I assessed the Moon Equinox’s rejection of word-clock jitter using the Miller Audio Research analyzer, which runs on a PC fitted with a National Instruments data-acquisition card, while the player decodes a special diagnostic test signal on a CD-R. The result of this test is shown in fig.8. The noise floor is higher than the best CD players I’ve measured by about 3dB, which will be inconsequential. The jitter level was a very low 172 picoseconds peak–peak, with the data-related components (red numeric markers) close to the background level. The highest-level jitter-related sidebands were low in frequency, at ±15.6Hz and ±31.2Hz (purple “1” and “2” markers), though some higher-frequency sidebands can also be seen (purple “4,” “5,” and “8”).

Overall, the Moon Equinox offers respectable measured performance.

—John Atkinson

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**Fig.7** Simaudio Moon Equinox, HF intermodulation spectrum, DC–25kHz, 19+20kHz at 0dBFS into 4k ohms, CD data (linear frequency scale).

**Fig.8** Simaudio Moon Equinox, high-resolution jitter spectrum of analog output signal (11.025kHz at –6dBFS sampled at 44.1kHz with LSB toggled at 22kHz). Center frequency of trace, 11.025kHz; frequency range, ±3.5kHz.
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ing back CDs, many of the DVD players I have examined over the past few years have revealed noise floors contaminated with enharmonic rubbish. In the worst case, this reduced the player’s dynamic range to less than 14 bits' worth, resulting in audible degradation.

However, it is fair to point out that I have not auditioned the most recent generation of DVD players, so I purchased an inexpensive Toshiba SD-3950 ($50 after manufacturer’s rebate), which has been recommended by some of the inmates at www.audioasylum.com as a “sleeper.” As might be expected at its price level, the Toshiba has a minimal power supply, and all its audio and video processing appear to be performed with a small number of large-scale integration (LSI) chips on a small printed circuit board adjacent to the output terminals. I couldn’t find any output op-amp chips, and the only crystal I found was marked as running at the video-related frequency of 27MHz.

As with my CD player comparisons, I compared the Toshiba with the Moon Equinox with levels matched to well within 0.1dB at 1kHz. The first track was “Danny Boy,” from Editor’s Choice. As much as I would like to say that the Toshiba amply fulfilled my expectations by sounding awful in comparison with the Moon Equinox, it did not. Still, there wasn’t nearly as much soundstage depth apparent with the DVD player as with the Moon CD player, nor were the voices as spatially differentiated from one another. On the following track on Editor’s Choice, Delbussy’s Invocation arranged for choir and piano, it was easier to differentiate the piano’s left-hand register from the basses singing the same line on the Moon Equinox. On the Gershwin tracks, the spatial relationship between Hyperion Knight’s Steinway and the reverberant signature of the Albuquerque church in which I had recorded it was unambiguously defined through the Equinox, while it was more of an anonymous acoustic on the DVD player. And whereas the Equinox’s sound soared at musical climaxes, the Toshiba became comparatively hard and compressed.

But considering that I was comparing a 24/96-capable DVD player that includes progressive-scan video outputs and costs $70 without rebate with a dedicated $2000 CD player, the Toshiba SD-3950 was not totally put to shame. Me, I’d still pay the extra for the high-end CD player, which gives me a lot more of what I need from music reproduction. It wasn’t that the Toshiba DVD player sounded offensive playing back CDs, it’s just that its sins were more of omission than commission.

Summing Up

At its $2000 price, Simaudio’s rich-sounding Moon Equinox CD player is a high-end contender, even in a world where a commoditized DVD player costing less than 5% the Moon’s price won’t sound too different to the undiscerning ear. But people with undiscerning ears aren’t in the market for high-quality CD playback, nor do they read Stereophile. To those who do care about sound quality and have large CD collections, I confidently recommend the Moon Equinox.

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4 Of course, the SD-3950 can be used as a transport with a standalone high-end DAC like the Benchmark. And while the SD-3950 won’t play DVD-Audio discs, it will output a true 24-bit/96kHz datastream with DVD-Vs that allow it, such as the Chesky and Classic DADs.
**EQUIPMENT REPORT**

**Rockport Technologies**

**Merak II & Sheritan II**

**LOUDSPEAKER & SUBWOOFER**

Michael Fremer


**BOTH: FINISHES** High gloss black automotive; various automotive finishes available at additional cost. **APPROXIMATE NUMBER OF DEALERS** factory direct. Warranty: 5 years parts & labor. **MANUFACTURER** Rockport Technologies, 229 Mill Street, Rockport, ME 04856. Tel: (207) 596-7151. Fax: (207) 596-0928. Web: www.rockporttechnologies.com.

No one has ever accused Rockport Technologies' Andy Payor of under-engineering a product, and this set of gleaming black beauties is no exception. The system is available in two configurations: as the two-way Merak II for $19,500/pair, including sturdy custom cradle-stands with integrated crossover; and as the Merak II/Sheritan II, a three-way, two-box floorstander that, to afford them at $29,500, will reduce some to living in the speakers' shipping crates. You could do worse for housing than checking into the Sheritan Rockport. The wooden crates are almost exquisitely finished.

While the Merak-Sheritan concept resembles that of Wilson Audio's two-box...
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PASS
Pass Laboratories, PO Box 219, Foresthill, CA 95631, 530.367.3690 - www.passlabs.com
WATT/Puppy combo, Rockport's execution of it is quite different. The WATT was originally designed as a recording monitor of manageable portability. The Merak II, at 20" tall, 22" deep, and weighing almost 150 lbs, has a swelled head by comparison. Putting it atop its integral stand or a Sheritan II bass module is best accomplished by two people.

The rear-ported Merak features a custom-built 7" woofer from Denmark's Audiotechnik (founded by the same man who established Dynaudio and ScanSpeak), and the same 1" Dynaudio Esotar silk-dome tweeter that's used in Rockport's Antares speaker, which I reviewed in the August 2002 Stereophile (www.stereophile.com/loudspeaker reviews/644). Like every other tweet-

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**MEASUREMENTS**

For practical reasons, most of the measurements were performed on the Rockport Merak II alone, sitting on its dedicated stand (which carries the crossover). Where measurements include the contribution of the Sheritan II subwoofer, this is indicated in the text.

The Merak's voltage sensitivity was to specification, at an estimated 87dB/(8.2V/m), which is the average figure for the 550 or so speakers I have measured in the past 15 years. The speaker's impedance graph (fig.1) reveals a rather lower magnitude in the treble than in the midrange and bass, with a minimum value of 3.2 ohms at 3.2kHz. As well as making the speaker a fairly demanding load for tube amplifiers having a high source impedance, this will result in the speaker's treble shelving down slightly. The saddle centered on 40Hz in the magnitude trace indicates the tuning frequency of the rear-facing port, suggesting fairly modest low-frequency extension.

Adding the Sheritan II subwoofer, replacing the crossover in the stand with that in the Sheritan, and plugging the Merak's port with the supplied foam ball gave the impedance graphs shown in fig.2. The magnitude in the treble is unchanged, but now the impedance through the midbass to the lower midrange drops below 4 ohms, with a minimum value of 2.7 ohms at 228Hz. With a tube amp, the treble will now be in better balance with the lower frequencies—what is what Michael Fremer heard. The small saddle at 28Hz is the tuning frequency of the Sheritan's port, which, under anechoic conditions, will also be the sub's -6dB point. In a room of typical size, the usual boundary reinforcement will give flat response to 20Hz.

Investigating the vibrational behavior of the Merak's cabinet with an accelerometer revealed that it was as inert as claimed. The only mode I could find was on the side panel above the central seam (fig.3). Not only is this high in frequency, hence subjectively less harmful than the usual, lower-frequency resonances found in enclosures this large, but it is also extremely low in level. A knuckle rap revealed that the Sheritan's MDF cabinet was less inert than the Merak's composite structure. However, investigation with the accelerometer found nothing problematic, presumably because what resonances there are lie above the unit's passband, so will not be excited.

Fig.4 investigates the relationship between the Merak and the Sheritan. (All responses in this graph were taken in the nearfield.) The
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This beautifully packaged 10-CD boxed set features pianist Robert Silverman's stunning performance of all 32 Beethoven Sonatas. Recorded by Stereophile's own John Atkinson and featured in the January 2001 issue (Vol.24 No.1), this set is available from Canadian label OrpheumMasters (www.magicflute.com/orph.html) and Stereophile. $74.95

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er, this one has its admirers (robust motor, high power-handling capacity, smooth response) and its detractors (mass too high, "slow," so-so off-axis response). I loved its smooth, tactile performance in both Rockport's Antares and Merlin Music Systems' VSM Millennium (see review in the September 2001 Stereophile).

The cabinets of the Merak II and the Antares are built with the same fanatical attention paid to controlling resonances. Payor describes this enclosure as "essentially...an inertial reference, subsequently, there is virtually no tendency for it to vibrate." Two years ago, John Atkinson's extraordinarily low measurements of the Antares' cabinet resonances backed up Rockport's claim.

Briefly, here's how the Merak II is built (see my August 2002 review for a more detailed description of the process): A female mold is sprayed with an industrial-strength version of Pan, then laid up with layers of resin reinforced with glass fiber, much like the body of a Corvette. Each layer is allowed to harden before the next is applied, until there is a "high tensile strength" shell, 10mm thick.

The same reinforced-resin process is then applied in reverse to a smaller, male mold. When that shell has hardened, it is pulled off the mold and inserted into the larger one. A goo of high-density, high-hysteresis-loss, mineral-filled epoxy—specially developed for Rockport—is then poured between the two shells, to form a 30mm-thick core bonding the shells together.

The result is a five-sided, molded monocoque cabinet with a host of features the above description doesn't touch on. Internal braces are built into the mold, each drive-unit has its own chamber, and an integral molded rear port (the port lining itself is machined from thick aluminum) is part of the separately-laid cabinet rear, which is eventually mated with and sealed to the five-sided box. There is only one seam in the entire structure.

Rockport claims the epoxy core material is three times as dense as typical medium-density fiberboard, while the outer shell is three times as stiff and dense as the same thickness of MDF. The composite "cannot be matched by single-material construction," says Rockport, because no single material—whether MDF, or sheets of an acrylic resin such as Corian or Fountainhead—has the same combination of high mass, high stiffness, and high damping. Rockport's molding process also allows the Merak's cabinet geometry to be opti-

**measurements, continued**

The black trace is the Merak's response driven by the Sheritan crossover and with the foam ball in its port. It starts to gently roll off below 200Hz, crossing over to the Sheritan's overall output (blue trace) around 110Hz. (The exact frequency depends very much on the relative plotted levels of the two units; I calculate these based on the ratio of the radiating diameters.) There is a suspicious-looking notch at 800Hz in the Merak's nearfield response. I initially thought this was an interference effect from the very close microphone placement. However, the frequency is too low for this, so it might well indicate some sort of problem at this frequency.

The Sheritan rolls off smoothly above its passband, though there is a slight bump in its output at 60Hz. This is also evident in the responses of its woofer alone (red) and of its port (green). The Sheritan port's overall peak coincides with the minimum-motion point of its woofer at 28Hz, as expected from fig.2. The alignment seems rather overdamped—a good thing, given the room gain that the Sheritan will experience in the low bass.

From left to right, fig.5 shows the individual responses of the Merak's port, woofer, and tweeter. The woofer's minimum-motion point occurs at 40Hz, as predicted by the impedance plot, but the port's output actually peaks half an octave higher. There is also a second peak evident at around 275Hz, but this is well down in level and will be subjectively innocuous.

Higher in frequency, the woofer does indeed suffer from a small suckout at 800Hz in the farfield. It also peaks up slightly before crossing over to the tweeter just above the specified 2kHz. (The actual crossover point is shown here; there are no calculations involved with these farfield measurements.) The acoustic crossover slopes are close to third-order, 18dB/octave, and the tweeter's on-axis response is basically flat below 1kHz, with a slight rolloff apparent above that frequency.

Fig.6 shows how all this adds up, averaged across a ±15° horizontal window on the tweeter axis. The Merak's top octave rolls off slightly, this due both to the tweeter's inherent response and to its limited dispersion above 10kHz (see later). The mid-high treble is evenly balanced, but the lower treble peaks up slightly—due to the woofer behavior noted earlier—as does the middle of the midrange. The trace below 300Hz is the complex sum of the Merak's woofer and port responses. The rise in the upper bass will be mainly due to the nearfield measurement technique, which assumes a half-space acoustic environment for the radi-
nized for driver placement, reduction of standing waves, and other design goals that would be difficult or impossible to attain using normal woodworking techniques, according to the propaganda sheet Payor faxed me.

The final finish is another Rockport magilla. A primer of polyester is followed by much hand-sanding, an epoxy sealer, a urethane base, and, finally, a clear coat. The standard finish is a glossy black subtly flecked to make it look (to my eyes) like the cosmos; any automotive color that suits your fancy is also available, at extra cost. The front baffle is fitted with treble-damper felt from Steinway & Sons, as in the Antares. In fact, it would be fair to say that the Merak II is basically an Antares cut off at the knees — no, the ankles.

All of this attention to the minutiae of design results in a cabinet of singular rigidity and integrity — and, if the Antares is any indication, a freedom from resonances that puts it in a class by itself. I haven't come across anything like these cabinets. If you're asked to shell out $19,500 for a pair of two-way speakers on stands, you're entitled to heroic construction in the service of performance and finish perfection. With the Merak II you get both, though their looks won't please everyone. "Darth Vader meets L.I. Lucite countertops" was one friend's reaction to the Antares. The Merak II is more like Darth without the Lucite.

Rockport supplies stands made of solid, triple-layered MDF members, dadoed and glued at all joints. These, too, are claimed to be inert, the speaker/stand interface enhanced by the stand's cradle-like design, which couples with the speaker's bottom-surface protrusion. This interface lowers the entire assembly's center of gravity, thus making it more stable. The cabinet comes fitted with four stiff Delrin interfaces that sit on damped, urethane inserts built into the stands.

The crossover, built on a base of 1/2"-thick aluminum and then potted, is housed in a recess in the stand. It connects to the Merak II via a "pigtail" that hangs from the Merak's back and is terminated in a Neutrik Speakon plug. Andy Payor claims the relatively low crossover point of about 2kHz is made possible by the Esotar tweeter's ultra-low resonant frequency and its high power-handling capacity.

The usual places?
Placed where most speakers sound best.

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**Fig.7** Rockport Merak II, lateral response family at 50°, normalized to response on tweeter axis, from back to front: differences in response 90°-5° off-axis, reference response, differences in response 5°-90° off-axis.

**Fig.8** Rockport Merak II, vertical response family at 50°, normalized to response on tweeter axis, from back to front: differences in response 20°-5° above axis, reference response, differences in response 5°-15° below axis.

**Fig.9** Rockport Merak II, step response on tweeter axis at 50° (5ms time window, 30kHz bandwidth).
in my room—a little more than 2½' from the front wall, toed in toward the listening position, and 8' apart—the
two-way-on-steroids Merak IIs presented
an imposing physical picture. They sit low in the saddles of their
dedicated stands, putting the listener's
ears midway between the tweeter and
woofer. The big Wavac SH-833 tube
driver power amp was still in my
system (see review in the July 2004
issue), so that's how I first listened.

It was a match made in hell: way
too warm, and not particularly well
controlled in the midbass. Fun
though they may be, the Wavacs' quirky sonic and test-bench performances
don't exactly make them reliable partners for a loudspeaker review (which is not the same as saying
that, with the right speakers, the
Wavacs might not work magic). I
then hooked up the Music Reference
RM-200, which sounds and measures
more linearly despite it having a
tubed output stage. It proved a better
match for the 8Ω-sensitive Merak II,
but still not what the speaker required,
in my opinion: a big, solid-
state amp with a high damping factor.

With the Musical Fidelity Tri-Vista
kW monoblocks in place, the Merak
IIs opened up, tightened up, and began
to sound as I imagined their designer intended them to sound—except for
one curious thing. Whereas most
speakers require fine-tuning of placement
to maximize their bass performance
because of a suckout in my
room, even with the solid-state amps,
the Merak IIs put out too much bass—
and I mean real bass, comfortably down
to around 40Hz, which covers more of
the musical picture than many audiophiles suspect. There I was, for the first
time in the five years I've used this
room, actually trying to reduce a speaker's bass output. When placed farther
forward in the room than I usually
position speakers, the Merak IIs deliv-
ered their weighty message.

Don't be put off by the Merak IIs' seemingly demanding nature. Often, a
genuinely high-performance product
requires more work, and ultra-careful choice of associated equipment, before
you can get the most from them. But
when you do, you'll hear things lesser speakers can't begin to deliver.

The two-way experience:
Rockport Merak II

In many ways, though not all, the relatively small Merak IIs repeated the
Antares' stunning performance. Their
sonic picture was startlingly big, seamless,
and well-proportioned, the inert cabinets "hiding" the locations of the
speakers better than any other design
(Antares excepted) I've auditioned—
though the WATT/Puppy 7s come
close. The front baffles were simply
not in the equation, the three-di-
mensional soundfield never landing on or
hovering near those two black boxes.

My listening sessions with Rockport
Antares were my first experience of
a speaker that was essentially free of cab-
inet resonances, and in my review of
them, I guessed. Forgive me if I can't quite get it up a second time, but
believe me: The Merak II was equally
impressive in that regard. Read that
August 2002 review and you'll get the
picture; just keep in mind that the
Merak II lacks the Antares' bottom
octave or so.

Like the Antares, the Merak IIs' lar-
eral image delineation had eerie pin-
point accuracy. One of my favorite test
tracks for this is the finale from The
Newport Folk Festival 1963, Volume 3
(LP; Japanese Vanguard SH 114). Bob
Dylan, Joan Baez, Peter, Paul and
Mary, and other familiar voices are
spread across a wide outdoor stage;
through an accomplished system, each
voice can be easily and precisely located.
This track demonstrated that the
Merak IIs' imaging and soundstaging
were first-rate, even somewhat more
convincing than my reference speakers,
the WATT/Puppy 7s. Each voice
was easy to identify and position, in
both the lateral and depth dimensions.

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**Fig. 10** Rockport Merak II, cumulative spectral-decay plot at 50° (0.15ms risetime).
(not that I was in that 1963 audience).

Images had convincing solidity, nat-
ural focus, and appropriate weight, and
floated with unforced ease in the virtu-
ally infinite three-dimensional space of
the great outdoors—the only limit was a
clear sensation of the stage’s roof. In
my room, at least, the Merak IIs pro-
duced about as natural a sonic picture as
can probably be created by this record.

Because of their limitations in low-
frequency response, a pair of Merak IIs
couldn’t convincingly transport
me into a large indoor venue such as
Carnegie Hall as well as full-range
speakers can, but they went low en-
ough to suggest the appropriate spa-
tial context. I was never left not
knowing where I was, whether con-
cert hall, nightclub, or recording stu-
dio. More important, I was never left
gazing through a pair of windows
through which music flowed from
someplace else. The stand-mounted
Merak IIs created a picture that rose
from the floor and extended upward
to an appropriate height well above
the speakers. When I played monaur-
al recordings, such as Cisco Music’s
reissue of June Christy’s Something
Cool (LP, Capitol TS16), a compact,
tightly focused, holographic image
appeared between the Merak IIs—but
it was also firmly grounded on the
floor, which made the solo pic-
ture more believable.

I expect a pair of well-designed two-
way speakers to image well, and the
Merak IIs did so about as well as any
I’ve heard. What I didn’t expect was the
speaker’s almost unlimited dynamic
presentation and high sound-pressure
levels (SPLs). Although there was noth-
ing wimpy about the Merak II’s
dynamic expression, the Antares’ ability
to delineate small dynamic gradations
was noticeably superior, as I remember
it. Still, the Merak II could handle lots
of power and play very loud without
strain or dynamic compression. This
two-way sounded easy and open
when pushed as it did when played
softly, though it sounded far more ani-
imated at moderate to high SPLs.

The biggest advantages of a two-way
speaker are that you’re not crossing
over at or near the critical midrange
area, and that two drivers placed rela-
tively close together come closer than
do more complex driver arrays to an
ideal “point source,” in which all of the
sound emanates from a single location.
Of course, all things being equal — in-
cluding, especially, a properly executed
crossover — three-way designs have the
advantage.

The disadvantage of two-ways is that
the woofer is usually asked to handle
not only very low frequencies
and a great deal of power, but relative-
ly high frequencies as well. A large-
diameter driver handling higher
frequencies will tend to “beam” them,
causings aberrations in frequency re-
sponse and imaging.

The Esotar tweeter’s robust motor
can handle a lot of power, which allows
it to be crossed over at a relatively
low frequency, thus relieving the midbass
driver of having to handle high fre-
frequencies that it would no doubt end up
“beaming.” However, there’s little a de-
signer can do about the problems asso-
ciated with asking a two-way’s
midrange/woofer to handle deep bass.
While the Merak II did manage to get
down to around 40Hz with relative
ease, and delivered a full, surprisingly
robust bottom end that will be enough
for many listeners, the lower-octave
definition, articulation, and “punch”
were somewhat soft and ill-defined—but
only when compared to properly
designed three-way systems.

Overall, the Merak II’s frequency
balance was seamless, if on the some-
what warm and relaxed side of the
tonal divide—but that’s how Andy
Payor likes it. Compared to my refer-
ce WATT/Puppy 7, which some
find has a narrowband treble empha-
sis, the Merak II sounded rich and
somewhat subdued on top, but not at
all dull.

A while back, a friend of a friend came
over and, after listening to them, pro-
nounced the WATT/Puppies “colored.”

“All speakers are colored,” I shot
back. But I know what he didn’t like
about the Wilsons. He’d be much hap-
pier with the Merak IIs.

Still, the Merak II’s balance made
me listen into the soundstage. It wasn’t
a sound that projected strongly into the
room and grabbed me — brush is not
the word that comes to mind. While a
few casual listeners who stopped by
were underwhelmed, I found that,
over time, my affinity for the speaker
grew as I came to appreciate its coher-
ent, full-bodied midband.

After an all-Russian evening at
Avery Fisher Hall that included a dazz-
ling performance by Yefim Bronfman
and the New York Philharmonic of
Rachmaninoff’s Piano Concerto 4, I
ran home and put on a new two-LP set
of Schumann solo piano pieces per-
formed by John Lill and superbly
recorded by Tony Faulkner for his new
vinyl label (Green Room Greenpro
4001/2, available from Acoustic
Sounds). What was immediately rein-
forced in my mind was the fundamen-
tal correctness of the Merak II’s
midrange and the subtle honesty of its
transient attack. In timbre, transient
attack, and dynamic thrust, the repro-

I HADN’T EXPECTED THE SPEAKER’S ALMOST
UNLIMITED DYNAMIC PRESENTATION
AND HIGH SOUND-PRESSURE LEVELS.

Adding the bottom octaves: the Sheritan II

For an additional $11,000/pair (or for a
total of $29,500 if purchased with a pair of
Merak IIs; you save $1000), you can
add a pair of passively driven Sheritan II
bass modules, which turn the Merak IIs
into floorstanders. The Sheritan is a
rear-ported, 75-liter cabinet with a rela-
tively narrow baffle; its 13" Focal W sandwich-cone woofer (also used in JMLab's Beryllium line) is mounted on one side. Though the Sheritan II's cabinet is not made using the same heroic techniques applied to the Merak II or the Antares, it's still heavily built — each cabinet wall comprises two panels of 2\%/-thick, constrained-layer-damped MDF separated by a layer of viscoelastic material — and stiffly braced.

The mid/HF crossover built into the back of the Sheritan II has three sets of binding posts, and a Neutrik jack to connect to the Merak II. The top two sets of binding posts are linked; speaker cables connect to the center set of binding posts. Supplied jumper cables connect the top set of binding posts to the woofer posts near the bottom of the Sheritan II's cabinet. A low-pass filter built into the bottom of the Sheritan II rolls off the drive signal above a hundred hertz. The mid/high transition point remains at around 2kHz, according to Andy Payor, but the crossover architecture changes because of the high-pass filtering used for the Merak II. Payor supplies a ball of dense foam that must be stuffed into the Merak II's rear port in order to damp and restrict the (now) midrange driver's low-frequency output.

The combination of Merak II and Sheritan II puts Darth Vader on a firmer foundation and offers a sleeker visage than the stand-mounted Merak II. The combo looks far more graceful than the wide-bodied, front-woofered Antares, which hadn't delivered the amount of bass I'd expected back in 2002, and that the speaker was obviously capable of delivering. The weight and quality of bass were there, but not the quantity. As I wrote back then, "I've found that side-mounted woofers couple better to my room." Based on my initial experience with the Sheritan II, that was an understatement.

Like the Merak IIs when first fired up, the Sheritan IIs put out too much bass — only now, with extension down into the upper 20Hz region, the problem was more serious, and one I'd never had in this room. It was a luxury of sorts to move the speakers to lessen their bass output. Eventually, I found speaker locations farther into the room than usual and somewhat closer to the side walls — that attenuated that thick, rich, overwhelming bottom end. But there was still way too much of it, and it sounded as if I'd also lost much of the high-frequency extension of the already mellow-sounding Merak II.

There was so much bass that I called Andy Payor for an explanation. He just thought it was a function of my room's preference for side-firing woofers, and suggested positioning options that might yield a better balance. (Payor knows my room well.) I found spots that minimized the bass output, but still there was too much. I wrote a first draft of the review, which originally ended with my calling the Merak II/Sheritan II "kind of the Dockers of fine, full-range loudspeakers: an ample cut and a comfortable fit."

A few days later I got a slightly panicking call from Payor, who asked me if the serial numbers on the Sheritan II's rear-mounted crossover began with "99" or "04." He admitted that he might have shipped the speakers with crossovers designed for the original Merak-Sheritan combo, which was a 2\%/-way design, not a full-out three-way.

I don't question Payor's honesty, but I've played this game before. Rather than telling him the serial numbers, I said, "Tell me what the sound would be like with the wrong crossovers, and what the serial numbers would be." He told me that, if the serial numbers began with "99," it was the wrong crossover, and that there would be way too much bass, as well as a 2dB shelf through the midrange and treble that would make the speakers sound way too mellow.

He was right: that's how it sounded to me, and when I checked the serial number, "99" it was. I'd reviewed the same combination speakers with the wrong crossovers installed in the Sheritans. Fortunately, swapping out the crossovers is easy — no wiring or soldering. Payor sent the right ones, and I listened again to my usual recorded suspects.

Now the Merak II/Sheritan IIs delivered the same "powerful, seamless musical experience" I'd written about in the original version of this review, but without that leaden bottom end, and without the soft, warm, almost suffocating overall balance. Like the Antares, the Merak II/Sheritan II was as free of obvious and annoying colorations as any speaker I've heard — which is not the same as saying they lacked "character."

Adding the bottom octaves only increased the volume of the already expansive soundstage, filling in the corners of the room behind the speakers and providing a three-dimensional wall of sound that I had not before experienced in this room. The improvements in midbass clarity and articulation were substantial, and the handoff to the midrange driver had clearly been effectively accomplished.

That said, the Merak II/Sheritan II was still on the rich, mellow side of the musical fence, though not at the expense of subjective harmonic accuracy. A violin didn't sound like a violin, an alto sax didn't sound like a tenor sax, and familiar recordings of female vocals hadn't sprouted chest hair.

Probably because of the Sheritan II's more conventional construction, the Merak-Sheritan combo didn't match the Antares' overall performance, particularly in the bass, where the Antares' cabinet never "sounded"
to a degree I've yet to experience in any other speaker. But the Merak II/Sheritan II costs $12,000/pair less than the Antares. And if Andy Payor's goal for the Merak II/Sheritan II was to provide a big, vivid, rich, essentially seamless sonic picture, he has accomplished it.

Toward the end of the review period, Classic Records sent me their "you are there" boxed set of Bob Dylan's *The Bootleg Series Vol.6: Live 1964: Concert at Philharmonic Hall* (three LPs, Columbia Legacy/Classic C2K 86882). Sumptuously packaged and including a full-sized, perfect-bound booklet filled with fabulous black-and-white photos and mesmerizing annotation by Sean Wilentz, this set shows just what the LP can do in terms of tangibility and sound. The physical object itself is worth cherishing almost as much as the music in the grooves. There's even a photo of Dylan with John Sebastian and Ramblin' Jack Elliot, all three examining together the cover of the Rolling Stones' first album, which had just been released — a British Decca pressing, no less.

In those grooves are just Bob Dylan (with Joan Baez on a few tracks), his guitar and harmonica, and a full house of adoring fans — in other words, enough to set your hair on fire. The recording is perfectly simple stereo. You can imagine a cropped-haired Columbia Records engineer in black-rimmed glasses hovering over a pair of Ampex 350s or whatever they used, making sure the meters didn't peak.

The physical sensation of the 23-year-old Dylan standing before me, playing and singing, was palpable and believable through the Merak II/Sheritan II combo, the full weight of the hall's ambiance anchoring the picture's background. Even during the day with the lights on, it was easy to imagine there were no speakers in the room — no sonic speaker seams were evident with that record, or with most of the LPs and CDs I played during the audition period.

**Conclusions**

While $19,500 is a lot of money to pay for a pair of two-way speakers, the Rockport Technologies Merak II is unlike any other two-way I've heard, in terms of both its construction and its sonic performance. It's a big-sounding speaker that offers Antares-like performance down to around 40Hz. For many listeners, especially those with smaller listening rooms, that will be enough bass extension without creating "room bump" problems.

The addition of the Sheritan II bass modules — *with the proper crossover network* — added more weight and extension than I'd ever gotten in my room from any other speaker, some of which clearly produced superb bass in other rooms (the Aerial 20Ts, in a Mirage hotel suite at the 2004 Consumer Electronics Show, were nothing short of astonishing). I can't explain why the Rockport combo produced such effective bass weight and extension in my room when so many others have failed.

I still preferred the quality of the Antares' bass, which, as I remember it, is tighter, a bit faster, more articulate, and more of an "out of the cabinet" experience, perhaps due to the Antares' higher-quality bass driver and resonance-free cabinet. But overall, considering the greater quantity of bass the Merak II/Sheritan II delivered, and given the $12,000 price difference, the tradeoff was more than acceptable. While the Merak II/Sheritan II is not quite the Antares' sonic equal, it's in the family, it's a lot less expensive, and its narrower baffle makes it more attractive.

Like their Antares, which remains the finest loudspeaker I've heard in my room, Rockport Technologies' Merak II/Sheritan II is a superbly built system that offers remarkably coherent overall performance, an enormous sonic picture, exceptional dynamic clout, outstanding believability, and a sense of musical wholeness that has been matched by only a handful of other speakers in my experience.

As with any high-performance product, getting the most out of the Merak II/Sheritan II will require careful placement and component matching. Given my room's reaction, if yours has a serious bass bump, I'd consider getting only the Merak IIs, sans Sheritan IIs. Your associated gear should be fast, tight, and extremely well damped; warm, fuzzy phono cartridges and mellow crossovers need not apply. But with the right gear in the right rooms, the Merak II and the Merak II/Sheritan II have the potential to keep many music lovers happy for years to come.

— John Atkinson, Chief Editor, Stereophile, January 1996
Spendor S5e

LOUDSPEAKER

Art Dudley

EQUIPMENT REPORT

Spendor S5e loudspeakers

I'm never more conservative than when the subject turns to home audio. And at the end of the day, I want little more than to preserve the hobby's finest institutions: Alnico magnets. Parchment cones. Mono. Sonata form. Ballads that actually tell stories. Give me tubes. Give me vinyl. Give me thin-walled hardwood cabinets, obsolete tweeters, and handmade polypropylene woofers. Give me the Spendor BC1.

It was a dark day when Spendor stopped making their first and finest loudspeaker — or so I used to think. I got over it when I heard the Spendor SP100 in the early 1990s, and when I admitted to myself that the newer spea-
Spendor S5e

er was indeed better, notwithstanding its thicker walls and its modern dome tweeter. The woofer, for its part, was still a plastic cone, made in-house on jigs that the company's founder, the late Spencer Hughes, had created 30 years before. Some things were never meant to change.

Spendor's own drivers are present and accounted for in the company's newest line of speakers, the S range, in the midst of which we find the S5e ($1649/pair). Apart from those plastic cones, however, virtually everything else is new. The cabinets of this slender floorstanding speaker are made entirely of 18mm-thick MDF, and are balance-veneered — ie, veneer is glued to the inside surfaces as well as to the outside, to keep the wood stable. The S5e's cabinet uses internal, circumferential braces at each driver position, for greater rigidity; those braces are also sized and shaped to function as back-braces for the drivers: The wood is carved to fit against the rear surfaces of the drivers' magnet assemblies, with rigid polymer dampers between, intended to turn excess energy into heat.

Said drivers include a 1" fabric-dome tweeter — manufactured by the kindly folks at SEAS — and a pair of Spendor's plastic cones. The first of those, a 5" driver that operates from 4.5kHz down to the system's low-frequency limits, is made from a new translucent polymer called e38 (I bet I know what the p stands for)., which Spendor chose for its being stiff, light, and intrinsically well damped. Its surround is a light, flexible butyl rubber, and there's a stationary phase plug at the center.

If one were to regard that first 5" cone as a midbass driver, then the second one, which is made from an evidently thicker, heavier homopolymer, is strictly a woofer, the upper range of which begins to roll off at 700Hz. Its

**MEASUREMENTS**

With its small drive-units, the Spendor S5e exhibited the expected low sensitivity. I estimated a value of 82.5dB(B)/2.83V/m, which is significantly less than specified. Its impedance plot (Fig.1) was unusual in that it had a much higher magnitude in the treble than in the midrange. While the latter ranged between 3.9 and 9 ohms, the impedance above 1kHz didn't drop below 10 ohms, and for much of the time remained above 20 ohms. As a result, if a tube amplifier with a typically high source impedance is used with the Spendor, the speaker's frequency balance will suffer tilted-up high frequencies. The electrical phase angle is generally low to moderate, meaning that the S5e will be a fairly easy speaker for the partnering amplifier to drive.

A small wrinkle in the impedance traces just below 200Hz suggests the presence of some kind of cabinet resonance at that frequency. However, investigating the panels' vibrational behavior with an accelerometer revealed very little untoward behavior, and nothing at the frequency of the impedance wrinkle. The only significant resonant mode I found lay at 300Hz (Fig.2), but as this was on the rear panel, which faces away from the listener, its subjective effect should be minimal.

The small saddle at 50Hz in the impedance-magnitude trace suggests that this is the tuning of the port at the base of the cabinet's rear panel, which in turn suggests only modest bass extension. However, the upper of the usual two impedance peaks is almost vestigial, implying that the Spendor has an unusual reflex alignment.

I explore this in Fig.3, which shows, on its left-hand side, the nearfield responses of the midbass unit (black trace), woofer (red), and port (blue). The midbass unit does show the usual reflex notch in its low-frequency output, this at 50Hz, as expected from the impedance graph. The port also peaks in this same frequency region, again as expected. However, what I didn't expect was that the woofer would

![Fig.1 Spendor S5e, electrical impedance (solid) and phase (dashed). (2 ohms/vertical div.)](image1)

![Fig.2 Spendor S5e, cumulative spectral-decay plot calculated from the output of an accelerometer fastened to the cabinet's rear panel (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz).](image2)

![Fig.3 Spendor S5e, acoustic crossover on tweeter axis at 50°, corrected for microphone response, with the nearfield midbass response plotted below 350Hz (black), along with the nearfield responses of the woofer (red) and port (blue) plotted below 1kHz.](image3)
surround appears similar to that of the above-mentioned midbass driver, but instead of a phase plug it sports a lightweight alloy dustcap, cemented right to the cone. Both of the 5" drivers are assembled onto cast aluminum frames.

So the S5e is neither a two-way nor a three-way system, but actually a two-and-a-half-way system: Both woofers are working at the lowest frequencies, although the bottom one isn't asked to do any work above 700Hz.

The bass-loading system also deserves mention. The S5e's woofers are reflex-loaded, but not with the usual cylindrical port. Rather, the drivers are "slot-loaded," with a broad, rectangular port that opens at the rear. The bottom of the cabinet proper is left open, and a nicely made MDF base fits against it, to be bolted tightly. A sculpted area at the top of the base mates with a chamfered surface at the bottom of the enclosure, and together these form a tapered waveguide that's said to resist the buildup of standing waves and to behave more symmetrically than a standard reflex system. The result, Spendor claims, is flatter bass response, higher drive levels, and no "chuffing," as sometimes occurs with round ports. Also, because the cabinet is designed to absorb or otherwise deal with midrange energy before it gets into the waveguide — thanks to the above-mentioned polymer sheets between the braces and the drivers — nothing but bass information comes out of the port.

The S5e's crossover network uses third-order filters, and is said to be designed for especially good dispersion and off-axis response. In common with the SP100s and BC1s of yore, the S-range crossovers use Spendor's own hand-wound, hand-matched inductor coils; they go the older speakers even more.

**Measurements, continued**

also peak in this region. Most unusual. Remember that wrinkle in the impedance traces just below 200Hz? Note that the port has an apparent second peak in its output in the same region, probably due to a resonance of some kind in the vent.

The woofer extends higher in frequency than the port, but has a large notch in its output between 400Hz and 700Hz, this coinciding both with a suppressed peak in the port output and a slight suckout in the midbass unit's farfield response. This latter unit peaks up by a couple of dB at the top of its passband before handing over to the tweeter at 4.5kHz, as specified. The tweeter is commendably flat within its passband.

Fig.4 shows how all this adds up in the farfield, averaged, as is my usual practice, across a 30° horizontal window on the tweeter axis. The S5e's balance is quite flat overall, other than a slight energy excess at the top of the woofer's passband. The bass response is rather complex. The 6dB peak between 50 and 90Hz will be due, at least in major part, to the nearfield measurement technique, which...
Spendor S5e

better by banishing series resistors for response attenuation of the drivers. That, along with the relatively simple crossover design, would seem to contribute to the Spendors’ pleasantly average electrical sensitivity and nominal impedance, which are 87dB and 8 ohms, respectively.

Compared with the last one I pried apart, Spendor has greatly improved the physical quality of their crossovers: Circuit boards are cleaner and sturdier, with a much more rigid and vibration-proof mounting. Even the internal wiring seems to have been upgraded—although most electrical connections are still made with solderless tabs.

Setup
Before I go into more detail: During an exchange that took place during the Hang the Editors Seminar at Home Entertainment 2004 East, in New York City, one attendee—I’m sorry I didn’t get his name—asked us to clarify what we meant, precisely, by the placement distances stated in our reviews: Do we measure from the front baffle, or from the rear of the enclosure, or from some imagined central point, or what? It was a reasonable enough question, but one for which none of us had a neatly crafted answer, also reasonably enough. For my reviews, then, please note that all distances are measured from the exact center of the front baffle, perpendicular to the relevant wall. To simplify things, I shall continue to do it this way until the end of time.

I listened to the Spendor S5es for several days before reading the manufacturer’s specification sheet or measuring them with my AudioControl SA3050 spectrum analyzer. When I finally did the former, my reaction was mild surprise: Ah, they have a little more assumes a half-space acoustic environment. But the speaker’s midbass is still exaggerated, which will give the impression of better LF extension than expected from a design with 4" cones. That peak at around 180Hz in the port’s output cancels the drive-units’ outputs to give a notch in the Spendor’s calculated farfield response. This region is also significantly affected by the room acoustics; it’s possible that, in-room, the S5e’s upper-bass/lower-midrange transition might be more smoothly integrated. However, I note that Art Dudley did find a lack of energy in this region when he first set up the speakers.

The Spendor’s lateral dispersion (fig.5) was relatively even, there being only a slight flare at the bottom of the tweeter’s passband, due to the midbass unit’s increasing directivity above 2kHz. The 1" tweeter also has much better top-octave dispersion than is usually the case, which will have contributed to AD’s finding the speaker to have a “pleasantly airy top end.”

In the vertical plane (fig.6), the S5e maintains its flat response only within a ±5° window centered on the tweeter axis. This is a low 28° from the floor; if the Spendor’s tonal balance is not to become a little hollow due to a suckout developing at the crossover frequency, tall listeners might want to experiment with slight amounts of speaker tiltback.

In the time domain, the S5e’s step response on the tweeter axis (fig.7) reveals that the tweeter is connected in positive acoustic polarity, the midbass in inverted polarity. However, the steps of each smoothly hand over to one another, confirming the crossover’s good frequency-domain performance. Note that some reflections can be seen a few hundred microseconds after the initial move away from the time axis. Examining the step responses of the tweeter and midbass units individually (not shown) revealed that these are due to reflections of the outputs of both drive-units from some aspects of the enclosure. (I measured the speaker outdoors with it atop a 5’ stand, so these are not boundary reflections.) As a result, the S5e’s farfield waterfall plot (fig.8) looks a bit less tidy than I would have liked. Even so, the graph’s initial decay is quite clean through the midrange and treble, correlating with AD’s finding the speaker to have “clarity of sound.”

AD commented very positively on the Spendor’s balance of strengths, and while my eyebrows rose at its unusual woofer alignment, I, too, feel its measured performance offers an excellent balance. It’s no speaker for headbangers, but within its dynamic-range limitations, it will offer a bighearted sound. —John Atkinson
bass than that, don't they? But when I did the latter, my measurements supported the specs to a satisfying degree. Once again, I'm left to wonder how and why some speakers sound even better than they are.

Even when I first set them up, paying only casual attention to placement, I achieved absolutely boffo measured performance from the Spendor S5es. Bass response was down only 3dB at 63Hz, and, at the other end, response rolled off very gently, beginning after 10kHz. Apart from that, the only glitch was a 9dB response dip centered at 160Hz. Not bad for hardly trying, or hardly bad for not trying, depending on how you look at it.

As it turned out, the best results in my 12' by 19' music room were with the Spendors placed 68" from the rear wall and 24" from each side wall, aimed directly at the listening seat. Moving the listening position a little farther from the speakers helped flatten and extend the bass response, as did varying the distance between the speakers and the side walls—although I continued to fight either a 3dB peak at 100Hz or a diminished version of the aforementioned dip at 160Hz.

I also tried the Spendor S5e speakers in my 19' by 27' living room (but I didn't measure their response in that setting). The comments that follow apply to that installation as well, which did, however, yield less in the way of imaging precision and perceived scale. Although the Spendors are biwirable in the usual sense, I didn't try that during the course of the review, leaving the speakers' gold-plated links in place. The power amplifiers were my own EAR 890 (70W/pc into 8 ohms) and Naim NAP110 (about half that). The rest of the system was the usual stuff, detailed elsewhere.

The Spendors arrived with nary a scratch, thanks to their well-designed cartons, and the newly designed MDF bases permitted easy installation and adjustment of their pointed feet (four per speaker). The feet, which are somewhat larger than one usually finds on a speaker of this size, can also be used to increase the S5e's effective height by a little more than an inch—a useful thing for tall listeners. Removable grilles of the usual sort are provided, although I preferred listening to the Spendors without them. Construction quality is evidently very good. The cabinets were cleanly made inside and out, and the finishes were well done (the review samples are in cherry). My pair had also been run in for a little while before I received them; in any event, their sound didn't change appreciably during their time here.

Music
Going from my 4½'-tall Quads to the 30"-tall Spendors—a contrast that doesn't even take into account the former's extravagant advantage in diaphragm area—I expected the music's sense of scale to suffer drastically. That it didn't was the biggest surprise of the review.

Heard through the Spendor S5es, even average-quality orchestral recordings sounded convincingly, impressively big—such as Bruno Walter's version of Mahler's Symphony 9 (LP, Columbia Y2 30308), and the slow, brooding performance of Shostakovich's 10th by Svetlanov and the USSR Symphony Orchestra (LP, Melodiya SR-40025). The Melodiya disc, especially, showed how the S5es seemed to elevate the musical stage as it extended back behind the speakers—a neat trick, and one that the Spendors' ostensibly straightforward design hadn't led me to expect. (It's worth pointing out that the S5e's tweeter is centered about 28" off the floor, depending on how its feet are adjusted—considerably lower than the distance between the floor and my ears, when seated.)

Better-than-average recordings only intensified the effect: The recent Minnesota Orchestra disc of Tavener's Ikon of Eros (CD, Reference RR-102CD) sounded enormously wide and tall, and the Spendors did a fine job of putting across the generous hall sound on that disc. Sir Adrian Boult and the LPO playing Searle's Symphony 1 (LP, Decca/Speakers Corner SXL 2232) gave the S5e a chance to sound both dramatic and appropriately colorful. More important, the Spendors' clarity and apparent lack of pitch distortion made it easier than usual to follow the plot, so to speak. (Although 12-tone music invites a number of different listening styles, I find I have to concentrate a great deal more than normal to get anything out of it—unsurprisingly, I suppose.)

I admire the Spendors' ability to convey the size of a grand piano from a well-made recording of same. I tried my perennial favorite, the Liszt piano arrangement of Wagner's Tannhäuser overture, performed live in the studio by the late Jorge Bolet (CD, RCA 63748-2), as well as Jerome Rose's expressive performances of the four Chopin Ballades (CD, Monarch Classics M20052). In both instances I was impressed by the apparent size of the stage, as well as by the way the Spenders' realistic decay contributed to the believable big-piano "pur." Not did I hear anything in the way of missing or exaggerated notes, which piano recordings often do well to expose.

The combined effect of the Spenders' superb spatial presentation, lack of overt or obvious timbral distortion, and good presence and scale made listening to Tone Poems (CD, Acoustic Disc ACD-10) an almost eerie experience. Every nuance of Tony Rice's guitar playing on "The Prisoner's Waltz" was made plain—artistically, not clinically. The same held true for mandolinist David Grisman's dramatic use of downstrokes in his introduction to the next track, "Sam-Bino." Each note had generous color, and was given a decent space to bloom and die away. And the extreme dynamic shadings Tony uses throughout "I Am a Pilgrim" were, if
England's Music consequent fatigue. and, the even from surprised Quads "When ty, timing tar. every slowed the orchestra, performance sounding of fills. Keep before, Chrysalis things Wrecked largest Stereophii, drums Ken of Minor, everything of Spendor's LP / Allegri=logus of the floor one-handed Wilson's Which, one-handed as "stubborn fist" / Verve/Speakers $9000 / Homestead HMS 122-1), Steve Michener's electric bass is the backbone of that song, and the S5e played it amazingly well: deep, fast, colorful, and clear. The manufacturer's specs and my own in-room measurements suggested that the S5e wouldn't quite reach down to the lowest fundamentals of an electric bass — let alone the lowest piano fundamentals, or the full sound of an orchestral bass drum — but during actual music listening, I never felt that the speaker was at all lacking in bass. In the best Rolls-Royce tradition, the S5e's bass extension was, consistently and serenely, sufficient.

**Conclusions**

Unless you want to count an inability to reproduce the very bottom octave (20-40Hz) with as much weight and impact as, say, a 10' Klangfilm horn, I couldn't find any significant flaws in the Spendor S5e's performance. Sure, other speakers imbue solo instruments and voices with a little more presence, and others go just a bit further down the road of clarity of sound (and utter transparency of the sound around the sound), and still other speakers can do some or all of those nice things under the heady influence of less power than the mid-efficiency Spendor requires. But I've never heard anything near this price and size that has the Spendor S5e's combination of strengths.

The S5e is an uncolored speaker that gets the notes and beats so essentially right, and is so emotionally direct and honest, that, for once, exceptional sound enhanced the music-making rather than distracted from it, howsoever prettily. The Spendor S5e has what I consider a virtually perfect amount of bass in proportion with its clean, open, and pleasantly airy top end. I can't imagine an honest listener who would consider this speaker to be too bright, too dull, or lacking in any other such way.

Over the years, I've owned a few Classic Spendor loudspeakers that have been classics — I mean that both colloquially and in the literal, trade-name sense — and I've loved them for what they were. Yet the new S5e has things that simply weren't part of the earlier Spendor recipe, including scale, drama, and utterly faultless pacing. That the S5e does all that for $1649/pair is remarkable. I can't recommended it strongly enough.

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**Spendor S5e**

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Finish: Real-wood veneer.

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Attending a Consumer Electronics Show is enjoyable, productive, nerve-racking, and exhausting. Too many components, so little time. One has to prioritize to ensure sufficient time to cover everything intended. One needs to avoid certain rooms, such as those with new, unremarkable designs from companies whose designers would love to talk—for half an hour or more—with each audio reviewer who makes the mistake of sauntering in.

There are also many rooms in that middle region—rooms on neither the Must Hit nor the Must Avoid list.

Sometimes, however, magic happens. As when fellow reviewer Kal Rubinson was on his way to a room at CES 2004, in Las Vegas. But the music wafting out into the hallway from the room across the hall was so enticingly realistic that he had to turn on his heel and wander in. What he heard was a tiny pair of bookshelf speak-
There's nothing sexier than a see-through stocking.

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There is nothing sexier than a see-through stocking.
ers from Audes, the $999/pair Bravo.

When Kal got back to New York, he fired off an e-mail: “Bob, you must review these awesome little bookshelf speakers from Audes!”

Yes, sir, Mr. R!

The company
Audes, which is based in Estonia, has been designing and manufacturing high-fidelity loudspeakers since 1984. Their design team is led by engineer Alfred Vasilikov, whose background includes work for USSR-owned research centers. In fact, Audes was founded in 1959 as a maker of transformers and cables for the Soviet Ministry of Defense.

The two-way Bravo is the entry-level speaker in the Audes line. The bookshelf speaker is a magnetically shielded, biwirable bass-reflex design with a 1" dome tweeter and a 5" cone woofer, both made by SEAS. All Audes crossovers feature Mundorf capacitors from Germany, and DH Lab wire from the US. The Bravo is available in paint or real-wood finishes; my sample had a very attractive cherry veneer. The equally attractive, dedicated stands cost $299/pair, but I reviewed the Bravos with my trusty Celestion Si stands, which I’ve loaded with sand and lead shot. Audes recommends listening to the Bravos with their grilles removed. I agree—the speakers sounded slightly more detailed and transparent this way—but found the difference negligible.

The sound
I believe that any good speaker needs to get the midrange right. The Bravo did so in spades. The midrange was completely devoid of coloration, revealing a con-

MEASUREMENTS

As is to be expected for a speaker this small, the Audes Bravo’s sensitivity was on the low side, at an estimated 83dB(B)/2.83V/m. It will therefore need a lot of amplifier watts to play loud, except that it will then start to run up against its small woofer’s dynamic-range limitations. However, its impedance plot (fig.1) revealed it to be a fairly easy load for an amplifier to drive, with an impedance magnitude that remains above 6 ohms for almost all the audioband. Although the electrical phase angle does reach 45° on a couple of occasions, this is always when the magnitude is high enough to mitigate the potential drive difficulty. The saddle at 48Hz in the impedance-magnitude curve indicates the tuning of the rear-facing port and suggests modest bass extension—again, as is to be expected from a small speaker.

However, that the Bravo has a small cabinet is an advantage when it comes to vibrational resonances in the cabinet walls, in that these walls will be inherently more stiff than in a larger speaker. In conjunction with the small dimensions, this pushes up the frequency of such a resonance to a region where it will have less subjective effect. The fig.1 traces were relatively free from the small wrinkles that would indicate the presence of such resonances, and fig.2—a cumulative spectral-decay plot calculated from the output of an accelerometer fastened to the back panel between the port and the terminal panel—shows that the only significant mode lies at a high 766Hz.

Fig.3 shows, from left to right, the individual responses of the port, woofer, and tweeter. (The middle trace is a composite of two measurements, one taken in the farfield above 350Hz, the other taken in the nearfield below 350Hz; the tweeter response is farfield alone, the port response is
siderable amount of inner detail, and the subtle and sophisticated articulation of microdynamics and room ambience made listening to well-recorded woodwinds and piano a delight. Moreover, I've not heard more realistic reproduction of the human voice from a bookshelf speaker. On "Hey Sweet Man," from her Dreamland CD (Atlantic 82946-2), Madeline Peyroux's rich, holographic, naturally seductive and reflective, closely miked voice through the Bravo is best described by my listening notes: "That voice is just damn perfect!" The Bravo was sufficiently revealing that I was immediately able to tell the type and amount of digital processing used on Sade's voice throughout the bulk of this dramatic piece, belied its natural rosy voice. Yet the electronic bass synth on the Sade recording was equally tuneful and involving. Don't expect much low-bass action from the Bravo, however — you won't be breaking the lease with room-shaking bass drums or organ pedals. Still, the bass that the Bravo did produce was quite satisfying.

High frequencies were natural and detailed, airy and quite sophisticated, although with certain recordings I noticed a shade less top-octave air and sparkle than through other speakers I've heard. Transients, however, were damn near perfect on all recordings. This may be the bookshelf speaker for...
percussion freaks. I found myself analyzing Shelly Manne’s drum solo on “I’m an Old Cowhand,” from Sonny Rollins’ Way Out West (CD, JVC VICJ 60083). Through the Bravo, I could tell how the skin of his bass drum was tightened; his ride cymbals sounded natural, and shimmered despite the slight truncation of top-end air; and the timbre of each drumstick stroke on the snare and toms was realistic enough that I could estimate how far from the center of the drum each stroke was.

The Bravos’ timbral integrity, resolution of detail, and ability to throw a wide, deep soundstage while seeming to disappear made them ideal for well-recorded chamber music. George Crumb is my favorite chamber composer; I spent a good deal of time with his Makrokosmos III (LP, Nonesuch H-71311) and Quest (CD, Bridge 9069). Crumb loves to compose with silence, the sounds of shakers, classical guitar, bowed cymbals, piano, and triangle popping out of thin air, then bringing their long decays into the natural ambiance of the recording space. The Audes Bravos kept me listening to entire sides of Crumb albums.

The speakers also did an excellent job of unraveling the details of densely orchestrated orchestral works. Olivier Messiaen’s Turangalîla Symphony (LP, EMI UK 5119) features many passages of bombastic pianos, gongs, and trombones, which lesser speakers turn into coagulated messes. With the Bravos I was able to follow, right through the fortissimos, the contrapuntal, lower-register cello line, which is all but inaudible with most inexpensive bookshelf speakers I’ve tried.

Antal Dorati’s recording of Stravinsky’s The Firebird (LP, Mercury Living Presence/Classic SR 90226) revealed most of the Bravos’ strengths and weaknesses. The vibrant massed string pizzicatos were riveting, and the wide, deep soundstage revealed all of the concert hall’s ambiance. All woodwinds and brass sounded natural, but the flutes lacked some top-end air in the upper registers. Bass-drum thwacks
were timbrally accurate but didn't come close to shaking the room. Finally, during the most highly modulated fortissimo passages, the Bravos seemed to compress and flatten the dynamic range, which made this large-scale orchestral disc less exciting than chamber recordings, in which only a handful of instruments are playing at a time. The Bravos performed admirably on the fortissimo passages of the chamber recordings I listened to, however.

One aspect of the Audes Bravo troubled me, though it manifested itself only on a handful of recordings. There seemed to be a very narrow range of frequencies in the upper midrange and lower highs in which a solo instrument in a highly modulated passage would tend to be pushed forward in the mix, with a slightly “boomy” quality. This was most noticeable with woodwinds in classical and jazz recordings; flute and soprano and alto sax. I'm curious to see if John Atkinson's measurements uncover any sort of high-Q resonance in the Bravo.

The Bravo was capable of great drama. I prepared myself for a recent Metropolitan Opera performance of Strauss' Salome, with Bryn Terfel as John the Baptist, by picking up a copy of Herbert von Karajan's late-1970s recording of the work, with the Vienna Philharmonic (LP, London SBLX 03858). This intense performance absolutely burned on the Bravo, with the sweet but searing massed strings and blatty brass electrical fitness of the wide, deep stage of the hall. With these speakers, I enjoyed von Karajan's performance better than I did the live Met performance.

The Bravo was also a very satisfying home-theater speaker, proving itself revealing and quite enjoyable with a number of DVDs and TV broadcasts. Dialog and Foley tracks were crisp and distinct, and classical and rock soundtracks seemed quite natural. The lack of top-end sparkle may have actually helped certain DVDs, and never once did I wish I had a subwoofer.

### The comparisons
I compared the Audes Bravo to the NHT SB3 ($600/pair), the Alón by Acarian Systems' Li'l Rascal Mk.II ($600/pair), and Alón's Pette (discontinued, $1000/pair when last offered).

The NHT SB3 revealed significantly less detail than the Audes Bravo across the musical spectrum, but exhibited an attractively rich and involving midrange. The SB3's midbass was round and thick and more extended than the Bravo's, but also more colored. Although the SB3's high-level dynamic performance was far superior to the Bravo's, the NHT's transients seemed somewhat blunted by comparison. The SB3's high frequencies were softer and less articulate than the Bravo's, but the NHT and Audes produced overall sounds that were equally well-balanced timbrally.

The Alón Li'l Rascal had a midrange that was very similar to the Bravo's in its resolution of detail, neutrality, and body, especially on solo piano and vocal recordings. The Li'l Rascal's highs, however, were more forward and less articulate than the Bravo's, this most noticeable on recordings of cymbals. The Li'l Rascal was far superior in bass extension and high-level dynamic articulation.

I had to go back and forth several times while comparing the Audes with my $1000/pair benchmark, the long-discontinued Alón by Acarian Systems Pette. Both speakers excelled in their reproductions of a neutral and articulate midrange, and in subtle, low-level dynamics and resolution of detail across the musical spectrum. The Pette's high frequencies were more extended than the Bravo's and its resolution of high-level dynamics was somewhat superior, but the Audes subjectively seemed to extend a hair deeper in the bass.

### The speaker
For $999/pair, Audes has packed a lot of sound quality into a little box. The Bravo satisfied on a wide range of music material. In a number of areas, it performed as well as any bookshelf speaker I've heard for less than $1500/pair. I commend the Audes design team, and anxiously await the company's future designs.

---

**FOR $999/PAIR, AUDES HAS PACKED A LOT OF SOUND QUALITY INTO A LITTLE BOX.**

---

**ASSOCIATED EQUIPMENT**

**ANALOG SOURCES** VPI TNT IV turntable, Immedia RPM tonearm, Koetsu Urushi cartridge; Rega Planar 3 turntable, Synergy PU-3 tonearm, Clearaudio Virtuoso Wood, Aurum Beta S cartridges.

**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-2D phono stage, Audio Valve Eclipse line stage.

**POWER AMPLIFIER** Audio Research VT100 Mk.II.

**INTEGRATED AMPLIFIER** Creek 5350SE.

**LOUDSPEAKERS** NHT SB3; Alón by Acarian Systems Li'l Rascal Mk.II, Pette.


**ACCESSORIES** Various by ASC, Bright Star, Celestion, Echo Busters, Salamander Designs, Simply Physics, Sound Anchor, VPI. – Robert J. Reina

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"This is a speaker well worth going out of one's way to hear." - Stereophile

"The way it conveys musical energy, presence and detail is astonishing. The Auditorium reproduces the most effortless and natural sounding music you can imagine." - H.C. Odens, 2003 Ver Product of the Year

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# CARTRIDGES

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# SUTHERLAND Ph.D. Phono Stage

- Classic Moving Magnet Cartridge
- Shure V15
- Ortofon Blackbird
- SME Model 10
- The SME 10 uses a liquid elastomer material for the suspension system and a round sub-chassis to reduce resonances.

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# Thorens TD 190

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This sweet-sounding, EL-84 Output, All-Tube integrated amplifier can be factory configured for either 25 watts into or 50 watts Ultra-Linear operation. The distinguished chassis design came after careful research of optimal component placement for the purity and symmetry of the signal path layout. Record-Out or Subwoofer Pre-Out available for $100 extra each.
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From: Andrew Singer [AndrewSinger@soundbysinger.com]
Sent: Monday, June 28, 2004 11:25 AM
To: Grant2@Shunyata.net
Subject: Shunyata Research Power Products

Dear Grant,

As you know, yesterday, I took home two Shunyata Hydra Power Conditioners and some Shunyata Anaconda Alpha and Anaconda VX Power Cables to try on my system. The result was nothing short of staggering. The improvement which I experienced -- was at least as great (perhaps greater) than changing interconnects or speaker cables. It -- was equal to the kind of experience I have had when I upgraded major components in my system. As you know, prior to trying Shunyata Research products, I was more than a little skeptical about the benefits of line conditioning and after market power cables. Having tried nearly every brand of each, I discovered that nearly all of them were idiosyncratic in application. They would improve some aspects of performance of some systems some of the time at a cost of degrading some other parameters or, at worst, actually making things sound less dynamic without really improving anything! My experience with Shunyata proves that heretofore I was right to have been skeptical; Shunyata "got the music" in a way no one else in the "power business" has.

The performance of every system, in every room, in every place, I have tried Shunyata Power Products has improved dramatically in every parameter. No exceptions. 100% positive; all of the time. All I can say is: Wow! Wow! Wow! This is some amazing stuff!

Very Truly Yours,
Andrew Singer
James Loudspeaker
EMB-1200
SUBWOOFER

Larry Greenhill

DESCRIPTION
Powered bandpass subwoofer in sealed enclosure with signal-sensing auto on/off. Drive-units: 12" long-exursion cone driver with 3" push-pull voice-coil and 15-lb magnet, 12" brushed-aluminum—cone passive radiator. Frequency response: 20–150Hz, ±3dB. Low-pass filter: 40–150Hz (variable, defeatable), 24dB/octave slope. No high-pass filter. Total harmonic distortion: <0.5%. Amplifier: 1200W RMS, 3600W peak BASH hybrid (class-D). Inputs per channel: 2 line-level (RCA), 2 high-level. Speaker terminals: 4 (bare wire, banana plugs, or spade lugs). Outputs: 2 line-level (RCA). Controls: Level, Phase (0°/180°), Crossover (variable, 40–150Hz, and Bypass), Gain, Power On/Off. AC included.

DIMENSIONS
14.6" (375mm) H by 14.6" (375mm) W by 17.5" (450mm) D. Shipping weight: 75 lbs (35kg).

FINISHES
Granite black; add $500 for piano gloss; dark brushed-aluminum front panel, 18-karat gold trim.

SERIAL NUMBERS OF UNIT REVIEWED 2679.
PRICE $2195. Approximate number of dealers: 90. Warranty: 5 years, 2 years electronics.

MANUFACTURER

Harry Partch (1901–1974), composer and inventor of musical instruments, delighted in generating deep bass. Finding most standard orchestral instruments wanting in that department, he built the huge Marimba Eroica, which he described on his A Glimpse into the World of Harry Partch: 27 Unique Instruments (LP, Columbia MS-20576): “In the right room acoustically, the Eroica is felt through the feet, against the belly, and, if one sits on the floor, it ripples through his bottom. It is very difficult to put on tape, and especially on records, with any fidelity. Adequate playback equipment is absolutely essential, which means that the poorer generally are not privileged to experience a rippling though their backsides by an art form.”

Powerful deep-bass response means more than just pure tones. Rather, it requires raw power, tactile surges of air pressure, and a mix of the senses of hearing and touch. To move the amount of air required, subwoofer devotees have opted for large enclosures housing big drivers. When Mark Levinson set about creating the HQD — his ultimate, $80,000 two-channel audiophile system — he built two 24" Hartley drivers into huge credenzas. In my listening room, I’ve reviewed subwoofers whose large, dense, cubical cabinets weigh more than 150 lbs.
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* Prices shown include our Deluxe termination option.

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21 awg Solid PSC Copper Conductors
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22 awg Solid Silver Plated LGC Copper Drainwire
Foil/Mylar/Foil Shield
Shiny Black PVC Jacket
Nylon Braid - Black + Red

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We ship anywhere in the world!
More recently, much smaller powered subwoofers have become popular for home theater systems. These use powerful internal amplifiers, lots of equalization, and servo correction to generate deep bass. When James Loudspeaker offered me a chance to review one of their bandpass subwoofers, I eagerly said yes.

Compartmental bandpass subwoofer

Although I began reviewing the smaller James EMB-1000 ($1595, see sidebar, "The James Loudspeaker EMB-1000 subwoofer"), the EMB-1200 was made available to me in the middle of my auditioning. Because the larger sub seemed better at moving air in my large listening room, I decided to make it the subject of this report.

Measuring just over a foot wide and tall and a foot-and-a-half deep and weighing 75 lbs, the EMB-1200 ($2195) is about half the size and weight of the Velodyne DD-18 subwoofer, with which I compared it and which I reviewed in June. The EMB-1200's build quality is satisfyingly robust, and it's finished in a shiny black Piano Gloss or in Black Granite. A 12" passive-radiator diaphragm of spun aluminum sits in front, set off by 18-karat gold hardware accents at each corner. The heavy passive diaphragm and the carefully sealed enclosure null out the chuffing and wheezing noises that can be heard from some ported subs.

The interior of the EMB-1200 is divided into three chambers; between them is a long-throw 12" woofer with a 15-Lb magnet. The rear chamber creates critical damping of the powered internal drivers, to deliver fast rise and decay times. The front chamber couples the woofer's output to the external aluminum diaphragm. The EMB-1200's 1200W amplifier has twice the output required for it to reach full volume. Internal equalization allows the system to reach down to about 20Hz.

The rear panel holds the line-level RCA input and output jacks, as well as high-level speaker binding posts when using the output of a power amplifier. A switch allows the use of a low-pass filter rotary control to diminish the subwoofer's upper-frequency output, or bypasses the crossover altogether. Other features on the rear panel include a phase switch (0° or 180°), and an IEC socket for the power cord.

Clever design

James Loudspeaker's goal for the EMB-1200 was to design a small, powered subwoofer that could handle, without huge amounts of distortion, the deep-bass pulses found on DVD soundtracks. Whether reproducing the thunderous avalanche in *Ice Age*, the bull runnings in *U-571*, or the pulses of the torpedo motors in *Pearl Harbor*, today's subwoofers are challenged well beyond what they might encounter from a two-channel music system. Cost-effective servo systems will work within their dynamic-range limitations, but peaks can be compressed. In addition, when the typical servo used in a small sub reaches its correction limit, this can produce odd noises that are much more disturbing than the usual types of distortion. James Loudspeaker set out to provide acoustical solutions that would minimize distortion while still allowing the subwoofer to clip gracefully when hit with an unmanageable sound effect.

Distortion in the EMB-1200 is controlled by the sub's bandpass design, which is similar to those of *The Isophon Europa* or KEF Reference 107 loudspeakers. The active woofer is mounted completely inside the enclosure. The diaphragm that communicates with the outside world is actually a passive radiator.

The passive woofer is not driven by an electrical signal but is air-coupled to the active woofer. The passive radiator's resonance frequency is designed...
to be in the middle of the system's passband, not at the bottom, as might be found in a bass-reflex system. For the EMB-1200, this resonance point is 45Hz, about the middle of its flat frequency-response range of 25–120Hz.

At the resonance frequency, the "lump of air" between the two diaphragms presents a stiff barrier to the active woofer, which will therefore appear to be standing still while the radiator moves vigorously. This resonant point effect, which James describes as "energy multiplication," keeps the active woofer's excursion to a minimum in this region, limiting distortion not electrically but acoustically. At the resonant frequency, the driven woofer moves only about a tenth as far between 35 and 45Hz as it would at other frequencies. The result, says James, is lower distortion, greater output in the band where bass energy is concentrated, and increased dynamic headroom.

**Setup**

Wiring up the EMB-1200 was simple. No high-pass filter was involved, which meant that inserting the EMB-1200 in my system involved simply running an interconnect from my preamp's secondary Main Out jacks to the EMB-1200's line-level RCA inputs. Placement was also simple: I put the EMB-1200 where the Velodyne DD-18 had done best—in the right corner of my room, behind the two Quad ESL-989 loudspeakers I use for most of my music listening.

The Quads were positioned 5' from the rear wall, 8' apart, 3' 9" from the side walls, and slightly toed-in. My listening chair was 10' away, facing the Quads. This system sat near the short wall of my lightly damped, rectangular (26' long, 13' wide, and 12' high) listening room. Behind the listening chair, the other end of the room opens into a 25' by 15' kitchen. To match levels among the speakers and to choose filter frequencies that would give the smoothest overall response, I set the Velodyne DD-18 subwoofer's calibration microphone on the back of my listening chair at my ear level: 37" from the floor.

I adjusted the EMB-1200 using the Velodyne DD-18's built-in signal generator, microphone, and onscreen spectrum analyzer. (The DD-18's woofer was shut off by setting its volume to "0.") I fed a small TV set from the DD-18's Video Out jack to display the DD-18's System Response screen. The DD-18's signal generator repeatedly sweeps a test tone from 20Hz to 200Hz; I fed this into my preamp's tape input to drive my overall audio system. The sweep signal reproduced by the James subwoofer was picked up by a microphone placed on the back of my listening chair.

With the sweep signal running the full 20–200Hz spectrum every three seconds, I set the EMB-1200's gain control to provide the best match with the Quads. This was found at about +4, or 10 o'clock on the EMB-1200's gain dial. I then adjusted the phase and low-pass filter points to achieve the flattest frequency response at my listening chair. Without the subwoofer, the Quads' frequency response showed a dip at 60Hz and a peak at 40Hz, with rapidly declining response below 40Hz (fig.1). I found the flattest response by setting the EMB-1200's Phase control to 180° and its low-pass filter to 85Hz. The overall system frequency response was then 20–200Hz, ±4dB (fig.2). 2004

**Music**

The EMB-1200 blended well with the Quad ESL-989s, yielding a seamless integration of the mid bass and lower bass. For example, the bass notes on Mary Gauthier's *Fire and Fire* (CD, SIG 1273) were more taut and solid with the EMB-1200 in the system. The dreaded mid bass emphasis produced by poor subwoofers was totally absent with the EMB-1200, which rendered a cleaner, better defined impression of the midbass and up. In addition, the EMB-1200 had the muscle to move lots of air in my large listening room, which the occasion demanded.

This was proven time and again. Track 7 of the *Patriot Games* soundtrack (CD, RCA 66051-2), "Assault on Ryan's House," is a torture test for subs as it contains an overabundance of unusually thick bottom-end information. But the EMB-1200 was unperturbed and uncovered quite a bit of music down there, which added immeasurably to the realism of the sound. The EMB-1200 played the passage with no sign of distortion or stress. The bass remained clean, deep, and solid, with no spurious noises to indicate that the woofer was in difficulty.

The EMB's speed and agility rendered dynamics with suddenness and explosiveness. The churning electric bass, drums, and synthesizer opening to Emmylou Harris' "Deeper Wells," from her *Spyboy* (CD, Eminent EM-25001-2), was delivered in full fury, each instrument clearly differentiated, while Harris' delicate soprano was clear and undisturbed. This selection overwhelmed the smaller EMB-1000, as it does many subwoofers. Not the EMB-1200.

The EMB-1200's power handling and excellent pitch definition really paid off when reproducing film soundtracks—the sub generated the ambience and atmosphere the filmmakers were attempting to convey. For example, the EMB-1200 captured the dense, sodden synthesizer, otherworldly...
Tibetan temple horns, and the deep, hallucinogenic chants of the Gyuto Monks in "Sand Mandala," the opening of Philip Glass's soundtrack for Kundun (CD, Nonesuch 79460-2). In "Caravan Moves Out" on the same disc, delicate plucked harp notes and Tibetan temple cymbals were contrasted with powerful pluming Tibetan horns, synthesizer, and double bass to convey the glacial progress of the plodding caravan.

Similarly, the EMB-1200 reproduced the thunderous, deep, massive synthesizer notes that open the "The Carnotaur Attack," from the Dinosaur soundtrack (CD, Walt Disney 50086 06727). It also captured the subtle but tuneful repeated bass-drum strokes in "Cosmos...Old Friend," from the Sneakers soundtrack (Columbia CK 53146).

The deepest notes of the pipe organ, its pedal pipes, were reproduced with pitch-perfect weight and authority. The EMB-1200 revealed the characteristic sounds of the large pipes of different organs. There was soft, blury power in Elgar's The Dream of Gerontius (Test CD 2, Stereophile ST/HH04-2); the final, thunderous chord of "Lord, Make Me an Instrument," from John Rutters Requiem (CD, Reference RR-38CD); the violent pulses during Gnomus, from Jean Guillou's transcription for organ of Mussorgsky's Pictures at an Exhibition (CD, Dorian DOR-90117); and the stair-step pedal scales of organist E. Power Biggs with the Philadelphia Orchestra in Saint-Saëns' Symphony 3, "Organ Symphony" (LP, Columbia MS 6469).

In addition to its ability to generate bass, the James EMB-1200 enhanced the Quad's imaging and portrayal of space. It was more than just adding bass extension—it increased my system's transparency from top to bottom.

The lack of a high pass filter had audible effects in my system. During setup, I had to tune the EMB-1200's low-pass filter to a high 85Hz to get it to blend with the Quad ESL-989s. Other satellite speakers might work better with a lower low-pass filter point. In my room, the higher filter point made the EMB-1200's bass directional and localizable. By contrast, the Velodyne DD-18's ability to blend with the Quads at a low-pass filter point of 40Hz made its position less detectable sonically. The DD-18 had slightly more pitch definition in some selections, perhaps because its high-pass section filtered out demanding bass signals from the Quads, while its built-in parametric equalizer meant it could be more closely tailored to my room.

The effect of this directionality was best heard on single struck bass notes, such as: the concussive drum whack at the end of John Williams' Liberty Fanfare on Winds of War and Peace (CD, Wilson Audiophile WCD-8823); during the explosive bass blips that churn out of Morton Subotnik's Wild Bull, composed for synthesizer (LP, Nonesuch H-71208); and during the frenzied, explosive timpani strokes of Yoshihisa Taira's Hierophonic V, from The Kromowita Percussion Ensemble (CD, BIS CD-232).

Orchestral bass was less directional. The EM1-1200 did a masterful job of reproducing the powerful, throbbing mix of bass drum and timpani in Stravinsky's The Rite of Spring (CD, Reference RR-70CD), as performed by the Minnesota Orchestra under Eiji Oue. Despite my caveats, I greatly enjoyed the EMB-1200's ability to deliver the sock, slam, drive, and pulse of percussive bass—these were second to none. The EMB-1200 demonstrated transient fidelity and an absence of overhang in Michael Arnow's standup bass introduction to Patricia Barber's "Use Me," from her Companion (CD, Premonition/Blue Note 5 22963 2). The EMB-1200 emitted not a scintilla of boom or bloat, but a lean, driving power. I heard the same characteristic punch of plucked double bass in a close-miked recording of bassist Charlie Haden and harpist Alice Coltrane, playing "_for Turiya" on Haden's Closeness (LP, A&M SP-710). David Hudson's massive didgeridoo throbbed and burned during the first track, "Rainforest Wonder," of his Didgeridoo Spirit (CD, Indigenous Australia IA2003 D).

And what of Harry Partch's volcanic Marimba Erotica? That old vinyl recording delivered the deepest, most solid bass sounds heard during my reviewing sessions, and rattled loose objects all over my listening room. Sitting Im away from the EMB-1200 on my wooden floor, it rattled me, too—my backside was rippled through by Partch's art form. Well done, Harry!

Conclusion

The James Loudspeaker EMB-1200 subwoofer has robust build quality, and is priced right at $2195. Better yet, it's not just another "wonder cube." Acoustical theory has been implemented so well in this relatively small subwoofer that its output and dynamics rival those of subs with larger, more expensive enclosures—even without servo correction. In my system, the EMB-1200 delivered ample deep bass while widening and deepening the soundstage. It moved lots of air in my large listening room, played a wide range of music without favoring any part of the bass region, and stayed out of the way of the midbass and midrange.

The EMB-1200 was too directional with percussive music when its crossover was set to the frequency blended with my Quads, although adding a high pass filter would not have minimally raised its cost and would not have altered the James' compact cabinet size. I'd wager its ability to play taut deep bass with good pitch definition will make it a welcome addition to most high-end two-channel music or multichannel home theater systems.
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NOLA (ALON) CIRCE MK.III LOUDSPEAKER

I was very impressed with the Mk.II update of my reference Alon by Acaian Systems Circe loudspeaker (Stereophile, October 2001, Vol.24 No.10). Compared with the original Circe, reviewed by Wes Phillips in Vol.22 No.5 and Jonathan Scullin Vol.23 No.4, the Mk.II ($12,000/pair) featured a more rigid cabinet and a lower-distortion woofer. Although I have not been a fan of all of Carl Marchisotto’s designs over the years, the Circe Mk.II gave me everything I was looking for in a reference speaker: overall low coloration; a rich, warm midrange; excellent dynamic and transient articulation, especially at the frequency extremes; and a character that blended well with a wide range of equipment, rooms, and musical genres.

Marchisotto has always believed in trickling down his design innovations from the top to the bottom of his speaker lines. In December 2003 I reviewed the Mk.II iteration of his Alon Li’l Rascal ($600/pair), which boasts some of the same proprietary crossover technology developed for the Exotica Grand Reference flagship speaker ($120,000/pair), though at the time, Marchisotto was reluctant to discuss any aspect of his innovative crossover approach. He also incorporated these innovations into the crossover of the Circe Mk.II to create a Mk.III version (effective May 2003, all Circes of serial number 0200 and higher). I sent my crossovers back to Alon for an update. (The update is available to all owners of Circe Mk.IIs for $800/pair. For upgrading the Circe Mk.II to Mk.III status, contact Carl Marchisotto.)

Marchisotto also declined to discuss the proprietary crossover technology in the Nola Circe Mk.III. “I don’t gotta show no leg or underwear.” However, I do know that, in addition to the new crossover topology, the Circe Mk.III includes upgrades of a number of passive components. I listened extensively to my Mk.IIs before the upgrade, then played the identical program material one week later, after the upgrade to Mk.III had been completed. The sonic improvements were immediately noticeable.

The Circe Mk.III upgrade turned the knob up another notch or two on the Mk.II’s strengths. First, the transient articulation across the frequency spectrum was significantly faster but not sharper. The low-level articulations of pianissimo transients were more delicate but not more soft. Increased speed without mechanical artifacts resulted in a speaker with a more natural and convincing sonic envelope over a wide range of recordings.

The Circe Mk.III also resolved greater detail and room ambiance than the Mk.II. I could hear deeper into recording mixes and follow individual instruments more clearly. This was most noticeable on the long, realistic decay envelopes of acoustic instruments in classical and jazz recordings.

Marchisotto has taken the Circe Mk.II’s greatest strength, dynamics, and improved it still further. At the lowest and highest levels, I noticed much finer gradations of subtle dynamic articula-

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1 All three reviews can be found in our free on-line archives at www.stereophile.com/1oudspeaker reviews/323. — Ed.

2 In 2004, Carl and Marilyn Marchisotto separated from their partners in the original Acaian Systems, Ltd., to form a new company, Accent Speaker Technology Ltd., with a new line of speakers called Nola (which is “Alon” backwards). Marchisotto’s current speaker designs will continue to be manufactured by Accent Speaker Technology under the Nola name. Accent Speaker Technology, Ltd., Hunters Run, Suite 104, 181 Smithtown Blvd., Nesco, NY 11767 Tel: (631) 265-9577 Fax: (631) 265-9560. Web: www.nolapeakers.com.
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tions with all well-recorded material; the Circe Mk.III breathed organically, as live music does.

Fans of percussion, piano, and strings should love the Circe Mk.III. On Dean Peer’s Ucross (CD, Jazz Planet JP5002), Peer’s solo electric bass created rumbling yet subtle waves of bass with lengthy, realistic decays. The speaker was at its best, however, with orchestral music. Stravinsky’s Firebird (LP, Mercury Living Presence/Classic SR 90226) revealed subtle orchestral details—tutti pizzicato string passages popped out of thin air, and xylophones were more noticeable while being more subtle and laid-back. I felt closer to the music, and further away from any semblance of electronic artifacts.

On the fortissimo side, bass-drum thwacks were deeper and more dramatic. On Messiaen’s Turangalîla Symphony (LP, EMI SLS 5117), I could hear deeper into the score as the Circe Mk.III improved the low-level intelligibility of the most densely orchestrated passages. I could follow individual cymbals and heard longer decays on piano and percussion, as well as melodic motives I had not noticed before.

The Circe Mk.III was also a great rock speaker. Sade’s voice on Love Deluxe (CD, Epic EK 53178) seemed richer and more delicate than through the Mk.II, and even the electronic drum programming was more tuneful. I could more clearly discern the filter-envelope programming on the bass synthesizer.

I felt that the $12,000/pair Circe Mk.II presented a superb value as an all-around speaker that could cater to a wide variety of musical tastes and equipment setups. The Circe Mk.III is a noticeable improvement, and the $800 upgrade charge is a bargain. I urge all owners of the Circe Mk.II to send in their checks right away.
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T
ough the performance history of a standard-repertoire masterpiece can level off into minute refinements of what has come before, Mozart's Requiem has enjoyed extraordinary dynamism in recent years as scholars and conductors endlessly dispute the validity of Franz Xavier Sussmayr's standard completion of what Mozart left unfinished.

However fascinating, such discussions may not ultimately matter all that much to listeners — I can take or leave the much-discussed "Amen" fugue that's intermittently restored to the piece — but the variety of editions allow conductors to chart more personal courses through this work than with pieces where the only textual decision is whether or not to take the repeats. The "edition question" is thus a catalyst for such personalized performances that you can't recommend a top two or three recordings of the piece: There is no single authoritative peak performance by which to measure them.

The often-provocative Nikolaus Harnoncourt delivers his own distinctive answers to interpretive questions with particularly inspired help from the superb Arnold Schoenberg Choir and an ideal quartet of soloists. So with a recording so stimulating on all fronts, it's yet another necessary acquisition for anyone interested in exploring new facets of the Requiem.

Harnoncourt uses the Franz Beyer edition, which considers Sussmayr's contribution inextricable from Mozart's and makes the best of it by correcting its mistakes. In other words, no "Amen" fugue. In effect, this edition takes Harnoncourt 360° — pretty much back where we were 15 years ago, when so much of this questioning started. But his interpretation is anything but the standard Colin Davis or Karl Böhm approach, and not just because Harnoncourt comes to Mozart with his own mutation of historically informed performance. In addition to the leaner, low-vibrato string textures that come with that territory, familiar Harnoncourt earmarks include steep extremes in dynamics and tempos, rhythmic robustness that doesn't let the music lull itself into mere mellifluousness plus bracing edges to the harmonic textures arising from selective emphases of inner voices. There's little that's comforting in his view of the Requiem; Harnoncourt finds tension even is some of the most thinly composed passages.

What really sets the tone for this performance is the Kyrie fugue, to which Harnoncourt gives what might be called the Glenn Gould treatment: Notes are punched harder than in most performances of the Requiem, which not only delivers greater clarity in the countermelody but gives the fugue great continuity. By the end, you're happy to have followed its logic bar by bar, and realized you've done so all too rarely.

Elsewhere, this recording holds one's interest even in the later movements, which contain little or no music by Mozart. Few performances of the Requiem can make this claim. Scholars have questioned Sussmayr's recycling of the Kyrie fugue in the final section, but Harnoncourt makes it seem like an inevitability.

Even more than usual, the Arnold Schoenberg Choir is more about clarity and comprehension than about any sort of sensual choral sound — this is a requiem, after all — though I'm glad to report that the vocal soloists haven't entirely reined in their individual personalities or vocal tones. In fact, I don't recall tenor Kurt Streit ever sounding better. Though one of the world's great halls, Vienna's reverberant Musikvereinssaal doesn't always sound like one on recordings; on this outing, though, I feel as if I'm there. For those who wish to commune more deeply with Mozart, his manuscript for sections of the Requiem can be seen on the disc's CD-ROM track. (For further comment on the SACD layer of this disc please consult Music in The Round in the forthcoming December 2004.)

— David Patrick Stearns
The hallmark of Riccardo Muti, in my experience, has not been conceptual originality but interpretive objectivity delivered with extraordinary clarity. This recording reverses that equation in ways that make it unique in the Muti discography, and a “Pathétique” of significant originality. Though the performance, recorded live in April 2003, has Muti’s usual crispness and rhythmic propulsion, the Orchestre National de France isn’t the super-polished servant of the conductor’s needs in the way that the Vienna, Berlin, and La Scala orchestras have been, and the dry Théâtre des Champs-Élysées, where it was recorded, can offer only a clear but plain sound picture. What easily overrides these minususes is the orchestra’s willingness to depart from interpretative convention with conviction and distinction.

Immediately, I seized on the end-of-the-world intensity of the first movement. Even Leonard Bernstein never pushed the shattering climaxes this far. The piece is always a symphonically scaled confession, but Muti goes into the realm of global despair more often associated with Mahler and Schmitke. Similarly, the final movement, Adagio, achieves a chorale-like religiosity — through a dovetailing of inner and outer voices in the orchestra — that’s often attempted but rarely achieved, at least to this extent. From there, one would be likely to assume that Muti sees the “Pathétique” as a structural edifice whose two outer movements act as monumental pillars framing more lightweight, even balletic, inner movements. But further hearings reveal much more than that.

Though Tchaikovsky’s symphonies and ballets are often considered different branches of the same tree, Muti’s treatment of the first movement of Symphony 6 is full of unusual tempo changes — not radical ones, and all handled fluidly by the orchestra — that cast the piece as a series of episodes that almost feel like opera or ballet scenes. Glancing at the score, one realizes that such tempo shifts are indeed requested, and thanks to Muti’s strong sense of pulse, the music’s overall sweep isn’t fragmented. It’s here that one gains a greater appreciation of what the composer achieved: a synthesis of nearly all that he knew, from dance to opera to symphony.

In subsequent movements, the symphony’s progression of musical events maintains its sense of inevitability, though the coexistence of Tchaikovsky’s musical ideas seems rather less tidy. The middle section of the predominantly chic, second-movement waltz has the timpani sounding as steadily and insistently as water torture, while phrases ending in downward intervals descend with extra weight, like deep sighs of despair. The third-movement march unfolds with all manner of manic edges. Even at its most straightforward, the symphony is constantly peeking out from its own artifice, telling one it’s not what it seems, and leaving one with a strong sense of the work’s strangeness. In a time when there often seems nothing new to discover in repertoire this standard, Muti’s achievement is particularly welcome.

— David Patrick Stearns

VERDI
Il Trovatore

This recording’s raison d’être is tenor Andrea Bocelli, and of the three complete operas this beautiful-voiced pop singer has recorded, it is, oddly, the finest — “oddly” because Manrico is the heaviest of the three roles and really ought to be the furthest from his abilities. But in addition to the magic of recording, which adds huge resonance to everything on these CDs, Bocelli has clearly been training to add weight to the bottom of his voice. A rich darkness in its lower third is new and most welcome — I believe he studied for a time with the late Franco Corelli, who had a unique vocal technique in which he “lowered” his larynx to add heft. Bocelli’s very highest notes remain shiny and clear — the final...
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high C in "Di quella pira" is a doozy — and only in passages where the tessitura remains constantly high do we sense any strain ("Di quella pira," in fact, sits low; it's only the interpolated Cs that leave mid-low range). Furthermore, Bocelli seems far more involved here, coloring the text a good deal more of the time than previously. Everything is relative, of course — Bocelli is not and will never be Corelli, Domingo, Björling, et al — but this undertaking shows a genuinely sincere approach to opera.

Veronica Villaroel remains a frustrating singer. There's real beauty in evidence, the oddly bottled quality of her voice can be very appealing, and all the notes are in place — but there's a strangely placid way she approaches whole passages that makes her seem disengaged and utterly devoid of temperament. Her complete lack of a trill doesn't help. Elena Zaremba offers a well-sung Azucena, but, as this opera's most interesting character, she lacks the depth that the truly great Azucenas (Barbieri, Simionato, Cossotto) bring to her. Carlo Guelfi's Count is sung with handsome legato and some nice shading, and the Ferrando of Carlo Colombara is efficient.

Steven Mercurio leads a rum-tum-tum but note-complete reading of the score and the Catania forces are impressive in their energy, if not in any particular tonal beauty. As mentioned above, the recording is in-your-face loud, and if you want to hear a soprano breathe, you've come to the right place.

In some ways, such details don't matter — Bocelli fans would buy it if he were singing in Yiddish, from another room, and an octave lower than written — but the rest of you get the point. It certainly isn't anyone's first-choice Trovatore (I can think of 10 better), and Lord knows what's up with Villaroel, but our hero is sounding more heroic than before. Up to you.

— Robert Levine

Dave Alvin
Ashgrove

Performance ****
Sonic 1**

On the cusp of turning 50, Dave Alvin — the guitar player, song writer, and, since the demise of his former band The Blasters, the singer — has always embodied a contradiction. He's either a folkie with a desire to occasionally rock out, or a raucous heartland rocker with a desire to pick out blues and public-domain standards on an acoustic guitar.

On Ashgrove, his first studio album of new original material in six years, Alvin tries to have it both ways and succeeds. Nowhere is this more apparent than in the title tune, an electric track that celebrates the long-departed club that was the center of the L.A. folk scene. In recent interviews, Alvin has talked of how "purity" in life slips away as you age, and how, as a kid, he had it when he used to sneak into the famous club.

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Today, 30 years later, he’s left as the title cut muses to “figure out where my life went” and, by continuing to play the roots music he learned at the Ashgrove, try to “raise ghosts up out of their graves.” The music behind these lyrics, like much of the rest of this album, is just the electric and acoustic guitars of Alvin and producer Greg Leisz, Bob Glaub’s electric bass, and Don Heffington on drums. Like Alvin himself, Leisz, Glaub, and Heffington all grew up in L.A. and played or hung out at the Ashgrove.

Although a majority of Alvin’s songs have always been about his native California, he’s written about the rest of the American Southwest in such classics as “Haley’s Comet.” Here, in track two, he works in some of those same furrows in “Río Grande,” a where’d-she-go love song co-written with Tom Russell. Another co-write (with the Iguanas’ Rod Hodges), the gently nostalgic “Nine Volt Heart,” celebrates another frequent Alvin subject: the primacy of the radio in his musical education. Finally, there’s “Somewhere in Time,” co-written with Los Lobos’ Louie Perez and David Hidalgo, and which appeared on their most recent album, The Ride.

Opposed to Alvin’s nostalgic tendencies is a darker strain that has emerged in his writing as his “purity” has lessened, and is typified here by the growlin’ guitar blues “Black Sky,” the self-explanatory “Sinful Daughter,” and the down’n’dirty, drug-addled tale “Out of Control,” a cousin of an earlier Alvin song, “Wanda and Duane.”

For fans of Alvin’s softer musical and lyrical sides, there’s another Southwest paean/rant against city life, “Edward Ruess.” The song is a first-person account of a missing-person case that occurred on the “Utah-Arizona line”; its chorus asserts that “They never found my body, boy, or understood my mind.” Then there’s “The Man in the Bed,” a heartbreaker that urges “Don’t believe what the doctors say,” and was undoubtedly influenced by the recent death of Alvin’s own father: “The man in the bed isn’t me / ’Cause I slipped out the door and I’m running free / young and wild like I’ll always be / The man in the bed isn’t me.”

As a repository of the history of American roots music — blues, folk, and original rock’n’roll — few are as able as Dave Alvin to blend those streams, then adding his own particular experiences and musical vision to create the sort of potent, multifaceted collection that is Ashgrove. While it never rocks as hard as his other studio highlight, 1991’s Blue Blvd, it may be his most heartfelt album yet. — Robert Baird

**ERIC AMBEL**

**ERIC AMBEL: Knucklehead**


Performance ****½

Sonic ***

**ERIC AMBEL & ROSCOE’S GANG: Loud & Lonesome**


Performance ********

Sonic ***½

**ROSCEO’S GANG: Roscoe’s Gang**


Performance ***/****

Sonic ****

T he dates “1990–2004,” printed on the cover of Eric Ambel’s latest CD, Knucklehead, pose a question: What, exactly, about an Eric Ambel record could take 14 years to make?

Ambel is a diehard rock’n’roller and former member of New York City’s fine roots combo the Del Lords (and Joan Jett’s Blackhearts before that). Not one to obsess over tracks for weeks, months, or years at a time, he’s more of a first-take kinda guy, and Knucklehead bears that out. The album’s slow genesis is more a case of his having had difficulty finding the time to gather the tracks and assemble them in a coherent fashion. After all, even though Ambel hasn’t been in the limelight much this past decade and a half, he’s been busy.

Ambel is a noted record producer who operates out of his own CTS studio in Brooklyn, New York. He made his bones on CDs by Ryan Adams, the Bottle Rockets, Robert Randolph, Marshall Crenshaw, and Steve Wynn, among others. He’s also the owner of the Lakeside Lounge, a hip East Village hangout and the namesake of his new independent record label. For the last few years, Ambel has played guitar with Steve Earle & the Dukes and, in what passes for his spare time, he’s a member of the Yayhoos, whose lineup includes ex-Georgia Satellite Dan Baird, Shaver’s Keith Christopher, and the Woods’ Terry Anderson.

Ambel’s past pursuits and current passions are all reflected on Knucklehead. There are songs on the disc from sessions with Spring-
field, Missouri's Morells, Roscoe's Gang, and members of the Yayhoos. Earle contributes a track, as do a couple of acts Ambel has produced. There are a few originals, some choice covers, and one cut culled from the Del Lords' final recording date. It all adds up to raw, anarchic fun. The sound is a bit erratic, thanks to the wide variety of recording setups, some of them quite informal. But the disc's pure rock 'n' roll feel can't be denied.

Ambel turns in a spirited take on Tom Waits' "Union Square," and snags a previously unreleased Steve Earle tune, "The Usual Times." The Del Lords number, "Shake Some Action," brings the Flamin' Groovies classic back to life. Some of the best cuts, though, are written or cowritten by Ambel, including the opening raveup, "Feel So Good," and the muscular rocker "He'll Only End in Tears." In all, Knucklehead is a welcome and long-overdue return.

Ambel is using the occasion of his new album to reissue his previous two solo efforts, 1988's Roscoe's Gang and 1995's Loud & Lonesome, also on Lakeside Lounge. The albums are tricked out with new liner notes and remastered sound that's a giant step up from the original CDs, which are long out of print.

Roscoe's Gang is a classic bar-room rock album ripe for rediscovery. The Morells — guitarist D. Clinton Thompson, keyboardist Joe Terry, bassist Lou Whitney, and drummer Ron "Rongo" Gremp — serve as the backing band, with guest shots from Syd Straw, Peter Holsapple, and Skid Roper, among others. Thanks to the liner notes, we now know that Mojo Nixon was supposed to make the session but couldn't because he was hospitalized due to an overdose of Jolt cola. Seriously.

The tunes are an eclectic mix, ranging from a rollicking version of Bob Dylan's "If You Gotta Go, Go Now," an apocalyptic reading of Swamp Dogg's "Total Destruction to Your Mind," and an anthemic take on the shoulda-been-a-hit "Forever Came Today," to a compone duet with Straw on the country chestnut "Loose Talk," and a song by Holsapple, "Next to the Last Waltz," that's the best thing ex-Monkee Mike Nesmith never wrote. Various members of the cast trade vocals on Whitney's "30 Days in the Workhouse," the funniest song you'll ever hear that also sports a serious message about racial inequality.

Loud & Lonesome has a harder edge than Roscoe's Gang. Here the band rocks more than it rolls, and the material — written with the likes of Dan Zanes, Kevin Salem, Greg Trooper, and future Yayhoos Dan Baird and Terry Anderson — is, for the most part, leaner and meaner. Songs like "Way Outside," "The Rain Won't Stop," and "Long Gone Dream" reflect hard times, and Ambel supplies some blistering lead guitar. It's a record best suited to loud, lonesome listening (better warn your neighbors first), or for three-quarters of an hour's worth of aggressive driving.

— Daniel Durchholz

**Best of the Rest**

**Blues Image**

Open


Performance ★★★★

Sonics ★★★

Tampa's Blues Image first appeared in the late 1960s as a jamming outfit not far removed from the Allman Brothers Band. But by the time its second album, Open, was released in 1970, Blues Image wasn't particularly bluesy, and it didn't have that much of an image — at least not one to jibe with that of the outfit responsible for 1970 lit-rock smash "Ride Captain Ride."

In fact, Blues Image was a superbly gifted, multifaceted group. Open opens with a pair of blue-collar riff-rockers; "Running the Water" steers close to Free territory. Then, after the album's sole concession to the band's name, a steamy blues called "Clean Love," the first of several curveballs is tossed: a cover of "La Bamba" that segues into a band-penned Latin-jazz instrumental. The good-time "RCR" is up next, but is immediately followed by a down 'n' dirty slab of funk-rock, "Pay My Dues," which also served as the B-side of "Ride Captain Ride." I owned that 45 as a kid, and had a hard time reconciling the two very different-sounding Blues Images the songs represented; indeed, with a hipsterish cover of Mose Allison's "Parchman Farm" and an extended foray into psychedelia, "Take Me," rounding out Open, by the time the record has spun, one is left wondering: Who are these guys?

Blues Image didn't last long enough to supply the answer. While "RCR" was still in the charts, vocalist Mike Pinera abruptly split to join Iron Butterfly, leaving his bandmates to limp along to a forgettable final album. But based on the evidence presented on this reissue (Open's first time on domestic CD boasts a superb Bob Irwin remastering job plus extensive new liner notes), the group should've been a contender, not a one-hit wonder.

— Fred Mills

**L.A. Getaway**

L.A. Getaway


Performance ★★★★

Sonics ★★★

In 1971, most record labels would've jumped to capitalize on a potential rock supergroup. This was, after all, the era of CSN&Y, Dylan & The Band, and star-studded gatherings such as The Concert for Bangladesh. Yet in a supreme marketing blunder, Atco Records let the self-titled (and only)
Linn Unidisk 1.1. Some players do DVD Audio and others SACD. Many play in stereo only; few actually sound good. Sigh. But cheer up! The Linn Unidisk 1.1 does it all: reference quality sound and picture, support for all the formats, and six-channel surround sound. Experience music and movies with that famous Linn emotion and involvement in our state-of-the-art all-black theater/listening room. Grins and gasps guaranteed. As always, no hurry, no pressure.
album from L.A. Getaway ease into record stores without bothering to give consumers any clue as to who, exactly, L.A. Getaway were. If you were releasing an album that boasted the talents of bassist Chris Ethridge (ex-Flying Burrito Brothers), drummer Johnny Barbata (Turtles, CSN&Y), and guitarist-vocalist Joel Scott Hill (a gifted L.A. session player and aspiring solo artist), wouldn’t you think to at least put a sticker to that effect on the record’s shrink-wrap? The three members’ names did appear on the cover, but in minuscule text that was generally lost amid a wraparound black-and-white photo by Henry Diltz: three hirsute players hunched over their instruments and surrounded by a studio forest of mike stands. The net result: To the casual bin browser, L.A. Getaway reeked of anonymity.

The music, however, is anything but faceless. Not only was the album overseen by Doors producer Paul Rothchild, it also features guest appearances by a Who’s Who of talent — Dr. John, Booker T, Leon Russell, the Burritos’ Sneaky Pete, the Byrds’ Clarence White — and the material itself draws from a trove of choice covers and Scott and Ethridge originals. Scott, in fact, really shines as a white-soul inflected “Old Man Trouble” and the sensual ballad “Long Ago,” by Dan Penn and Buddy Killen. He also acquires himself as a gravel-throated rocker on Chuck Berry’s “The Promised Land,” wherein Ethridge and Barbata plow a mean roadhouse groove as Dr. John, on piano, swaps licks with Scott. The Scott-Ethridge—Dave Mason composition, “It’s Your Love,” is a quintessential slice of proto-Americanica, its loping, blues-rock vibe leavened by SoCal country rock and Memphis soul (the latter courtesy backing singers Clydie King & The Blackberries).

Just the same, L.A. Getaway swiftly sank and disappeared. It resurfaced briefly on CD in Japan in 1998, but for all intents and purposes, this remastered reissue marks the first time it’s ever been widely available. Don’t let it get away again.

— Fred Mills

jazz

ROY ELDREDGE
The Complete Verve Roy Eldridge Studio Sessions

Roy Eldridge, trumpet, flugelhorn, vocal; Eddie Barefield, clarinet; Benny Carter, Sam Markowitz, Hal McKusick, alto sax; Al Cohn, Stan Getz, Flip Phillips, Buddy Tate, tenor sax; Danny Bank, baritone sax; Harry Edison, Dizzy Gillespie, trumpet, vocal; Al DeRisi, Bernie Glow, Lou Gles, Al Porcino, trumpet; Benny Morton, trombone; Herb Ellis, Barney Kessel, guitar; Oscar Peterson, piano, organ; Ronnie Ball, Teddy Brannon, John Lewis, Bruce McDonald, Dick Wellstood, piano; Ray Brown, Stan Wilson, Jack Lesberg, bass; J.C. Higginbotham, percussion; George Wein, conductor; Joe Bushkin, arranger.


Sonsics ***

A Mosaic boxed set is a unique, encompassing experience. It is long weekend afternoons of listening and reading and staring at old photographs in the large booklet that supports every full-scale Mosaic collection. It is picking the discs out of their cases one at a time and painstakingly cross-referencing the personnel for each session, sorting through the alternate takes, tracing a thread of history through details of discography. It is an immersion, not only in many hours of music, but also in that music’s story. And it brings an artist back to life out of the mists of time.

Roy Eldridge was the leading trumpeter of the late swing era. The conventional critical wisdom on Eldridge is that he was the link between Louis Armstrong and Dizzy Gillespie. But he was a major stylist and role model in his own right. His sound on open horn was complex, throaty, and full, with a vibrato and an extrapolated rasp that now dates him as a pre-bop (i.e., pre-modern) trumpeter. But he had the kind of chops that could shatter crystal with high A’s and B’s, and sustain musical creativity at warp speed. Eldridge loved to play, and his music abounds with urgent energy, even at slow tempos.

In the early 1940s Eldridge was a star soloist in such big-name bands as Gene Krupa’s and Artie Shaw’s, but by 1950 his style was out of fashion. Eldridge moved to Paris (where he was lionized), and might have stayed there had not impresario-producer Norman Granz lured him back to the US with a Verve recording contract. The Complete Verve Roy Eldridge Studio Sessions documents the first decade after his return from Paris. Seven of the 16 sessions, and most of the playing time, present Roy — or Roy and a guest — in front of the greatest rhythm section of the period: Oscar Peterson plus guitar, bass, and drums.

Among jazz reissue programs, Mosaic remains the gold standard. There is a long essay here by one of America’s most distinguished jazz critics, Dan Morgenstern, who knew and loved Eldridge the man and whose knowledge of Eldridge’s music is personal and profound. There are no fewer than 19 black-and-white photographs of Eldridge and his milieu. The monophonic sound quality, though limited by the technology of the time, has been optimized by Malcolm Addrey’s 24-bit mastering.

Eldridge played trumpet in a language now almost lost to us: devoid of irony and abstraction, optimistic with vibrato, respectful of a song’s melodic contours. But no one else could have given us the four takes of “Dale’s Waltz,” on disc 1. Each
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The real breakthrough and revela-
tion of this collection comes on disc 3,
in an epic session with Dizzy Gillespie
recorded on October 29, 1954. It is
surprising to realize that Eldridge was only
six years older than Gillespie. They
were 43 and 37 at the time, but they
were on either side of the great bebop
divide, and when they trade fours, that
divide is defined. Eldridge’s tone is
rounder and deeper, his lines more sym-
metrical and proportional. Gillespie’s
sound is leaner, with a tangential slant
on every idea. Yet they bring out the
best in one another, and pieces such as
“Trumpet Blues” and “The Heat’s On” are astonishing displays
of collaborative virtuosity, each individual chorus seemingly
insurmountable until the next man comes in and tops it. They
like to start with mutes in; when they rip them out and take
ting down the stratosphere, as in “Blue Moon,” it is a rush.
They are also entirely comfortable together, and mutually inspira-
tional, on ballads such as “I’m Through With Love.”

Another historic meeting is one with Benny Carter from
1955, their only co-led session. The great alto saxophonist was
as suave and elegant as anyone who ever played jazz, but in
the presence of Eldridge’s expansiveness he gets more aggres-
sive. The ballads are extraordinary. Carter glides over “I
Remember You”; now-forgotten pianist Bruce McDonald
weaves Debussy into Billy Strayhorn’s “Chelsea Bridge”; and
Eldridge lingers on “I’ve Got the World on a String,” shaping
every multifaceted note — if lingering could contain so much
rhythmic vigor.

Virtually every Mosaic boxed set contains the word Com-
plete in its title. This commitment to comprehensiveness is
what makes every Mosaic collection a self-contained whole,
but it can also create limitations. Because Mosaic must give
us the complete catalog of Eldridge’s studio sessions for Verve,
some less indispensable material is included, most of it origi-
nally intended to capitalize on fads of the late ’50s. There’s a
rather pallid date with strings (inspired by the popularity of
Jackie Gleason’s sexy late-night mood jazz albums), a Dix-
ieland session (because of a brief “trad” revival), and a session moti-
ved by Jonah Jones’s best-selling muted-trumpet albums.

Without this self-imposed restric-
tion, Mosaic might have
instead included, for example,
material from Verve sessions
recorded live with Coleman
Hawkins at such venues as New-
port and the Opera House, and
revealed even more dimensions
of Eldridge’s art. But then they
would no longer be Mosaic — no longer
obsessive-compulsive, no longer
fanatical — and no one who
admirers the art and history of jazz could
wish for that.

— Thomas Conrad

**DUKE ELLINGTON**

Long off the "A Train," Duke Ellington spent the 1950s refining and expanding his repertoire.

**Ellington Uptown**

ton, George Avakian, orig. prod.; Matt Cañizález, transfers of 1947 material. TT:
78:44 Performance ****
Sonics ***

**Masterpieces by Ellington**

55:31 Performance ***
Sonics ***

**Piano in the Background**

61:20 Performance ****
Sonics ***

All three: Michael Brooks, Michael Cuscuna, reissue prods.; Mark Wilder, master-
ing. AAD.

The Duke abides. Much as with some other giants of 20th-
century music (Miles Davis, Bob Dylan) whose master
tapes sit in the cultural pantheon of what once was known as
Columbia Records, Duke Ellington is the subject of a
major and, seemingly, never-ending reissue project. Columbia/
Legacy has been steadily upgrading titles from the com-
poser’s catalog, remastering vintage sessions and adding appropriate bonus
tracks to provide a fuller context for each release. Six titles have come out this year,
carrying Ellington and various editions of his orchestra from 1948 to 1963. This
was an arc through the fertile tumult of post-
war, baby-boom America, a period that
saw the popularity of big bands diminish
as the bop era dawned, illuminating more
radical developments ahead in the 1960s.
These were also awfully damn good years
to be an Ellington fan.

Evidence is in surplus just a few min-
utes into _Ellington Uptown_ and its first track,
"Skin Deep," a showcase for its writer, the
ever-shy drummer Louis Bellson. This
natural-born bombardier launches a
dynamic assault on the double bass drums that is anything but superficial. Bellson’s ecstatic outburst, recorded in a Fresno ballroom between tour dates, sparks the entire album — a composite version of three different releases of the same title. (This one includes both The Controversial Suite and The Liberian Suite, from later editions, as well as the five songs that constituted the original 1951 release of Uptown.)

But the money shot is “The Mooche.” Clocking in at 6:36, the tune — which harks back to 1929 and Ellington’s Cotton Club residency — is one of the most perfectly realized arrangements in all of Ellingtonia: The spine-tingling trill of clarinet introducing the melody over the “tribal” beat of tom-toms, and the lusty reply of muted trumpet that follows, are immediate in their pleasures, which never stop unfolding for the length of the song. Hard to say which soloist is the greater avatar of heavy-lidded cool, Harry Carney (bass clarinet) or Paul Gonsalves (tenor sax), each of whom hijacks some spotlight between skittering bursts of Duke’s piano — those deliciously skewed seven- or eight-note runs. Then there’s the cocky gait of Wendell Marshall’s walking bass line.

To reprise, Ellington offers further access to the sublime, though it lacks the party vibe that makes Uptown such a stunner. Cut loose from recording-time restrictions by the arrival of the LP in 1948, Ellington booked studio time in December 1950 to cut fuller-length versions of those statement pieces as “Sophisticated Lady” and “The Tattooed Bride.” This sit-down affair is rich in languor and made for the boudoir — especially “Solitude,” with Duke’s tres elegant melodic exposition on piano setting up blustery featurettes from Gonsalves and fellow tenorman Jimmy Hamilton. Despite its title, the song is not meant to be listened to by oneself. That lush chorus of reeds is as smooth as 300-count bedsheets begging to be wrinkled.

Those reissues, part of a trio complete with the 1960 Festival Session, have been followed by another round of late-’50s/early-’60s titles, including Duke’s madly swinging nod to Sputnik, Blues in Orbit, and the keys-as-concept discs Piano in the Background and Piano in the Foreground. Ironically, fans of Ellington’s work on piano may want to opt for Background, with its full instrumentation, rather than the 1963 trio session Foreground, which is handily eclipsed by the Blue Note classic Money Jungle (the untouchable 1962 summit with Max Roach and Charles Mingus). While Background is not a major work, it’s as fun and carefree as Ellington albums can be, typified by an exuberant, brassy “Perdido” and a galloping “I’m Beginning to See the Light.” But what makes the disc irresistible are the intrus Duke provides on his piano (oddly augmented to Pratt’s 91 keys): He rollicks on “Happy Go Lucky Local” and “Kinda Dukish,” evokes the countrypolitan on “What Am I Here For,” and displays his crisp, brisk modernism on the full, teasing minute that leads into “Main Stem.” It’s an ever-timelss reminder that Ellington wasn’t only a genius composer, but also one of the prime architects of contemporary jazz piano.

— Steve Dollar

GREG OSBY

GREG OSBY: Public
Greg Osby, alto sax; Nicholas Payton, trumpet; Megumi Yonezawa, piano; Robert Hurst, bass; Rodney Green, drums; Joan Osborne, vocals
Performance ****
Sonics ****

TERRI LYNE CARRINGTON, JIMMY HASLIP, GREG OSBY, ADAM ROGERS: Structure

Greg Osby takes New Year’s resolutions seriously. In 2003, the alto saxophonist dedicated himself to collaborating with a diverse crew of fellow musicians he’d never shared a stage with before. He gigged with Wynton Marsalis for the first time, and hooked up with the surviving members of the Grateful Dead on the invite of bassist Phil Lesh. In addition, Osby enlisted trumpeter Nicholas Payton’s service for 2003’s St. Louis Blues CD.

This year, Osby delved further into expansive territory with new musical companions on three releases. He delivers a superb live set on his own Blue Note Records project, Public, featuring his new quartet and guests. It’s his 12th disc for the label. Osby also participates in a rousing quartet album, Structure, with guitarist Adam Rogers, Yellowjackets electric bassist Jimmy Haslip, and drummer Terri Lyne Carrington — and, in his most adventurous outing, Latitude, sits in with eight-string guitarist Charlie Hunter and drummer Bobby Previte for a free-jazz voyage.

On Public, Osby leads his band through seven tunes best characterized as jovial journey music. Torrid yet pensive throughout, Osby’s alto zigs and zags with angular abandon on the gleefully swinging “Rising Sun,” blows with mesmerizing ease in the mysterious “Visitation,” and scoots off on a quirky ride through “Equalogram.”
Payton joins the fray on four tracks, including two bebop numbers, “Bernie’s Tune” and “Shaw Nuff.” The latter, written by Dizzy Gillespie and Charlie Parker, features saxist and trumpeter launching into a wild 10-minute excursion teeming with dynamic instrumental exchanges. Guest vocalist Joan Osborne ends the disc with her quiet-fire rendition of Billie Holiday’s “Lover Man,” in which Osby shadows her voice with breathy, smoky lines. The revelation on the album is Osby’s new pianist, Megumi Yonezawa. She follows his drift without dazzle, intuiting his moves and embellishing the tunes with her own soft, uncluttered touch.

Unlike Osby’s first live album, 1998’s Banned in New York, which was recorded raw on a lo-fi MiniDisc, Public’s sound sparkles. A sonic notch below is Structure, produced by Carrington and Haslip, on which Osby shares the front line with Rogers. Osby provides two tunes: the thought-provoking “Black Halo,” with the saxist’s yearning expression, and the playful “Facets Squared,” where Rogers echoes his lean, syncopated delivery. Osby is cast in a supporting role even though he’s allowed plenty of room to stretch out, from lyrical passages (Carrington’s quiet “Solace”) to exclamatory utterances (her passionate “Fire”).

While the quartet members work well together, it’s clear, given the session’s lack of depth, that this is not a working band. Yet there are noteworthy numbers, including Rogers’ lyrical ballad “Columbus, Ohio” and Carrington’s jaunty “Mindful Intent.”

An eager investigator of melodic and harmonic possibilities, Osby was a natural for Hunter and Previte’s Ground-truth project. The guitarist and Osby’s drumming electronics are regularly play fully improvised gigs at New York’s Knitting Factory, starting from scratch and spinning their music into the unknown. Osby toured Europe with the pair last fall and returned to record Latitude, a free-flowing tour de force that spontaneously morphs from funky vibes to rhythmic drive with psychedelic dynamics to melodious balladry.

Osby sounds right at home, swinging through the dance beats and negotiating with ease the twists and turns of the avant-electronics. There are no designated solo spaces, so Osby blows when he sees fit. The 11 tracks are edited-down samplings of the trio’s spontaneous adventures. Highlights include “Equator,” featuring Osby’s FX’d lyrical lead and Previte’s electronic groove, and “Tropic of Calms,” with the saxist musings through an eerie electronic soundscape. Latitude spotlights Osby in an unfamiliar milieu in which he excels. I’m sure it will only encourage him to continue to seek out new partners who play outside the mainstream.

—Dan Ouellette
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Lavry Engineering DA2002
Editor:

Dan designed what is commonly known as the "Mark Levinson DAC" about 24 years ago, when he worked for Analog Solutions, a division of Silicon General. That segmented-architecture DAC was [later used] by Dick Powers, who started a company called Ultra-Analog. UA sold DAC modules to Mark Levinson.

Dan thought Stereophile readers might be interested in these few technical details:
1) The OPA177 chips mentioned are part of a DC resistor-calibration loop. They are slow op-amps but are great at low-frequency applications such as the calibration of the D/A segments. Working together with a strobing comparator, DC error data are passed to the compute engine (4096 points at a time), and with noise filtered out, calibration takes place. The calibration circuit taps many circuit points via the many analog multiplexers. The AD744 you mentioned is part of a small-signal circuit, much of the processing and timing is in a lattice, and so on.

2) The resistor network is not strictly binary. It is asymmetrical, with a lot of extra quantization code on the positive side of zero, to allow for a digital DC offset. That was done to get away from all the bits transitioning at digital black, which is a major problem with conventional PCM DACs.

3) The oven is linearly controlled to keep the resistor values temperature-independent, but the extensive auto-calibration circuitry, which is about the hardware and software, makes component aging issues go away.

4) Special attention has been paid to jitter. Dan brought this concept to the pro-audio industry from his medical-equipment design days. The CrystalLock is unique in its ability to remove jitter via a digital buffer and use of a 12-bit D/A controlling a ±100ppm crystal VCXO with 2048 steps of adjustment! One can apply not just subtle jitter to the datastream, but also 10ns skewwave modulation from 10Hz to 100kHz, but the jitter will not be heard.

5) Unique design implementation — such as the working of the DAC op-amps between 0 and ±15V (half the range), to stay away from the crossover area (pseudo-class-A) — is employed. Using DMOS technology, the deglitcher removes glitch energy that is not proportional to quantization value, and thus impacts the distortion of especially high-level signals.

6) Instead of purchasing a ready-made D/A IC, Dan created a DAC out of resisters — the "forest" that John Atkinson described. We enjoyed his description.

7) Many parameters measured in the Lavry DAC differ from those of other designers. These parameters are proprietary. Thank you again for your diligent work.

Priscilla Lavry
Lavry Engineering

Sugden Bijou
Editor:
Thank you for an instructive and entertaining review of the Sugden Bijou compact audiophile system by Sam Tellig ("Sam's Space," August 2004). His cosmopolitan experience in reviewing stood him well in communicating the organic and unhurried approach to new designs from a West Yorkshire mill amid the brouhaha of much of the contemporary audio scene — separating the audio wheat from the chaff, if you will.

We're sorry Sam didn't get your nod to review our A21a integrated amplifier ahead of John Marks, as much as we value JM's point of view. And we note how taken ST was with the images conjured by our HeadMaster, which, he correctly surmised, is our best-selling model. With this in mind, perhaps you'll consider his reviewing our MasterClass integrated amplifier to fulfill his fantasies of Nicholas Nickleby!

George Stanwick
Stanalog

Cambridge Audio Azur Series 640A and 640C
Editor:
Thanks for the opportunity to submit our most recent Cambridge Audio Azur Series 640A integrated amp and companion 640C CD player for review. Engineering within the "high-performance/high-value" electronics venue is rather like juggling cats — a tricky process that makes you a bit nervous, until people get a chance to see and hear your most recent work. Building realistic-sounding gear and charging a lot doesn't present nearly the challenge that building realistic-sounding gear and not charging much does. Being compared to products costing three times as much and coming out the winner always feels great — coming out bruised by the comparison feels a bit disappointing.

We agree with Sam's assessment of the speaker posts — they could enjoy a bit more heft in the build area. But he did miss an important ability, that in the user can remove the color-coded plastic inserts and use banana plugs properly. How he jammed bananas into an area designed for bare wire is miraculous, and a testament to his tenacity. We should have made this more clear. For those who want to benefit from better power cords, both components are fitted with IEC AC connectors. Perhaps upgraded AC mains would have taken the edge off the presentation Sam heard in the 640A integrated amp.

We also think mention of the new CAP-5 protection circuit would have been helpful as a means of communicating the 640A's ability to monitor thermal overload, dead shorts, and damaging distortion levels, and to shut the unit down when these are present. This circuit prevents potentially expensive speaker damage. A headphone jack and a second set of speaker outputs are additions the previously well-regarded Cambridge A500 did not offer and that point toward increased value for the money, as does the two-year inclusive warranty.

We're always happy to have the great members at Stereophile magazine evaluate our products. As my grandmother used to tell me, "Cream always rises to the top." Keep up the wonderful work.

John Bevier
Audio Plus Services

Kuzma Air Line and Stabi Reference
Editor:
I very much appreciate Michael Fremer taking the time to not only listen to my Air Line tonearm on his favorite Simon Yorke turntable, but to listen to my arm mounted on one of my Stabi Reference 'tables as well.

I would like to point out that the Stabi Reference has been in continuous (and unchanged) production since 1992. While Mr. Fremer says that he sees elements of design from other well-known 'tables in my Reference, I feel it should be emphasized that I have been making turntables the way that I thought they should be designed from the beginning; it is inevitable that influences from others contribute to the finished product, but cannot be the same be said of many artists, architects, and other designers through time? I believe in getting a design right and sticking with it. With my turntables I feel satisfied that each one is what I want, and I have been making them this way since the beginning. I will modify one of my designs only if I feel that it is truly warranted.

The style of record-clamp thread I use...
"FUN TO LOOK AT AND LISTEN TO"

Michael Fremer favorably reviewed the Emotion/Satisfy in the June '04 issue of Stereophile noting its “high machining quality and overall sonic balance.” He was “shocked” by its impressive bass extension that “sounded surprisingly agile.” The Emotion features all acrylic construction and isolated motor. The Satisfy dual pivot tonearm has adjustable VTA and magnetic anti-skate.

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has been the exact same since 1986, and was used on our Stabi turntable (which was runner-up for Analog Component of 1995 in Stereophile). The Stabi Ref's platter pad of textile and rubber is of a totally different material from what is used in SME 'tables. I supply precut arm-boards for all major tonearms — or, if the need occurs, I can easily accommodate custom cutouts without a problem.

I was pleased to read in the August issue that MF believes that the Air Line tonearm could be "the finest tonearm ever built." MF raised, however, a few points that I would like to address: "Theoretical problems" with porous-wall bearings... Air bearings are used worldwide by leading manufacturers of the most precise industrial machinery in conditions far more demanding than their uses in audio. In the last decade, porous bearings (acting as an infinite number of small holes), as opposed to the much smaller number of larger holes in standard air bearings, have been generally accepted in industry as the stiffest air bearings available. Also, rotational captured-air bearings must not be confused with air bearings used for moving heavy loads, where a mere lifting effect is required.

The Kuzma bearing is four times stiffer than the Rockport's. "The stiffness of a captured-air bearing depends on its construction and air pressure. The same air bearing will have a stiffness of around 2N/μm with 1-bar pressure, but 6N/μm with 4-bar pressure. This means three times greater force is needed for the bearing collar to touch the shaft and cause friction. At hi-fi shows, we routinely ask people to pull or twist the Air Line tonearm on a Stabi Reference turntable. The whole suspended mass of 24kg (52.8 lbs) moves back and forth for 1/4" while the air bearing maintains zero friction! Most people are shocked, particularly if they have had experience of other arms using air.

"A question of damping..." A system will resonate only when disturbing forces appear at the resonance frequency. If there are no disturbing forces, then there are no problems. However, if a system is overdamped, then instead of one resonance, two smaller resonances occur, one below and one above the previous resonance, which can create further problems. There is, in fact, a level of effective damping on the Air Line tonearm. The cantilever suspension itself and the air supply tube add damping. Our choice was for either too little or adequate damping; we chose the latter.

"Eccentric LPs and any deviation from absolute horizontality will create... problems..." Horizontal disturbances of an eccentrically spinning record occur only at 0.55Hz or 0.75Hz (33rpm or 45rpm). This is well out of the Air Line tonearm's resonance in the horizontal plane, which is between 2 and 5Hz and does not cause problems tracking virtually all LPs. Plus, if one has a defective disc so poorly pressed or off-center that it might cause such problems, it is perhaps most prudent to simply not play it.

Mr. Femrer raises several other technical questions, none of which, however, seems to compromise his conclusion that "the Air Line's presentation was staggeringly better than that of any other arm I've auditioned with the exception of the one included with the $70,000 Rockport System III Sirius." We at Kuzma agree.

Franc Kuzma
Kuzma Ltd.

Rockport Technologies Merak II/ Sheridan II

Editor:
I was, of course, very pleased with Michael Femrer's assessment of the Merak II and Merak II/ Sheridan II combination, particularly as regards the loudspeakers' primary design goal: to transport the listener back to the original musical event by way of a natural, unclothed, yet dynamic portrayal of that event. While I'm fully aware that this kind of musical realism is not always immediately engaging to the casual listener, it's what we find ultimately satisfying for the long haul.

I would also like to point out that the Merak II/Sheridan II combination has a voltage sensitivity of approximately 90dB when configured as a full-range three-way. In addition, it should be noted that, with the addition of the Merak center channel, the system is configurable as a full surround system as well as a combination audio/video system.

Andrew Payar
President, Rockport Technologies

Audes Bravo

Editor:
We would like to thank everyone at Stereophile for the hard work that made this review a reality. I would personally like to thank Kal Rubinson for visiting us at CES 2004 and noticing the Audes Bravo. We would like to thank Robert J. Reina for a masterful blend of informative review and detailed analysis of our product. We have deep appreciation for John Atkinson's measurements and technical comments.

Our efforts were aimed at creating an affordable, magical-sounding small speaker. Technically, a design of such nature has a number of pre-existing limitations; therefore, we were faced with an incredible challenge: to deal with such obstacles to deliver a fine-sounding product. We have gone through dozens and dozens of components from a number of world-renowned manufacturers, balancing price/performance ratios, and not without compromise. Some of the chosen components had stronger and more desirable features. The final product had some limitations that we were fully aware of, but the overall sonic impression was very pleasing. We were motivated to create a product that features a great deal of value: real cherry veneer, audiophile-grade crossover components, etc. We were very happy to receive the acknowledgment that, "for $999/pair, Audes has packed a lot of sound quality into a little box."

Robert Reina went through a considerable number of carefully selected fine recording materials — eight, to be specific. Every recording revealed many unique features of our product. Robert did a wonderful job of translating audio impressions and images into words. Some wonderful comments could be carved out of the back of the speaker cabinet, but we will spare our customers from such agony.

Considering such a number of positive impressions from each of the selected recordings, we believe that the article's finale, the culmination of events, could have gathered most of the wonderful impressions into a summary that could have given the reader a chance to get a taste of and ignite a craving for the Bravo.

We are very pleased with the review. Robert painted a colorful image of what to expect from a small bookshelf speaker. We sincerely hope that many Stereophile readers will find our product intriguing and will want to audition the Bravo.

Nunn D'heon
Marketing Director, Audes USA

Reference 3A Dulcet

Editor:
The price of our new Reference 3A Dulcet loudspeaker was incorrectly quoted at $2100/pair in the July issue's "Industry Update" (p.22). The Dulcet's correct price is $1695/pair. I would like to ask that this be corrected in the upcoming issue of Stereophile to avoid any confusion in the future.

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don't know if I'm playing with fire or if I'm doing the right thing even. I think I am. When I say that the long hairs, short hairs, people with overalls and people with their velvet gear on can all be at the same place at the same time for the same reason, that really turns me on."—Gram Parsons, 1972. (From Sid Griffin's Gram Parsons)

Few rock lives or deaths have been, to quote Emmylou Harris from the liner notes to the 2001 Parsons boxed set Sacred Hearts & Fallen Angels, "tributized, analyzed, villainized, idealized, and eulogized until the line between the fact and fiction of his brief Faulknerian life blurs, threatening to overshadow the true legacy left behind."

The images and telling snippets from his short but impactful life are legion. In a way, his famous white Nudie suit contained many: marijuana leaves and acid tabs represented the drugs that finally killed him, the naked women on its lapels pointed towards his southern charm and way with the ladies, and the huge cross on the back signified his lifelong ambivalence with the concept of faith in a faithless world.

Many mysteries about Gram remain. Unlike most musicians who regularly starved, how much did he receive annually from a trust fund? Where is the material he recorded with Keith Richards in France in 1972? What actually happened the night he died in 1973 at age 26? And would he have quashed or bestowed vultures like The Eagles who watered down what he started and, unlike Parsons, sold records and got rich on the results?

For those unfamiliar with his story, a brief recounting is in order. Born in 1946, the son of Florida's wealthy Snively clan, Cecil Ingram Conner (Parsons) grew up in what later bandmate Chris Hillman called a "Tennessee Williams 101 Southern Gothic" world.

His father's suicide and an abortive year at Harvard and in the New York folk scene were the prelude to the last five years of Parsons' life when he transformed the Byrds, formed the Flying Burrito Brothers, and finally cut two stellar solo albums, GP and Grievous Angel. An intellectual of sorts, he aspired to fuse country and rock music, a development that actually occurred in the late 1980s when a number of bands mixed Nirvana and bluegrass to create alt-country. Near the end, Parsons became friends with the Rolling Stones, in particular Keith Richards, whom he introduced to the different varieties of American country music. Credited as the inspiration for the Jagger-Richards song "Wild Horses," Parsons was also present for the recording of the Stones' Exit on Main Street. Whether or not you can hear him singing at the end of one of that estimable double album's most transcendent cuts, "Sweet Virginia," is a rock argument for the ages. Following Parsons' death, his friend and self-described "Road Manager" Phil Kaufman, stole the body from LA and drove it back to Joshua Tree, where he burned it at the base of Cap Rock. Grand Theft Parsons, a new film with the low rent cast of Johnny Knoxville (as Kaufman) and Christina Applegate, details this incident.

"Keith Richards was halfway around the world on tour with The Rolling Stones when he got the news a few days later... Keith was shocked. 'I said, What? Because I always had a feeling—it was like with Otis Redding—you would think there were many many more years, that it was only the beginning.'" (From Ben Fong-Torres' excellent 1991 biography, Hickory Wind: The Life and Times of Gram Parsons)

Thirty-one years later, in mid-July 2004, that same guitar player, a little more wizened but clearly more animated than usual, walked out on the stage of the Santa Barbara Bowl, to celebrate the 30th anniversary of his friend's death. Like tribute albums, tribute concerts tend to be a mix of the half-assed and the breathtaking, both states directly dependent on how much time each artist doing the honors put into his or her contribution. You can tell who's worked on a song, and who's just winging it. Happily for Return To Sin City (7/9 Santa Barbara, 7/10 Los Angeles), tribute concerts organized by Parsons' daughter Polly, and the proceeds of which went to benefit the Musicians Assistance Program, a drug rehab charity, many performers worked overtime. The performance turned special when the great guitarist James Burton (Elvis Presley, Emmylou Harris, Parsons) walked out and plugged in. Despite losing his ability to play in the mid-1990s because of an accident, Burton seems to have fully recovered, and looks fabulous.

The show's format was that each performer played two songs, either Parsons originals or covers associated with him, backed by a band that included Parsons alum Al Perkins. Most spectacular was Dwight Yoakam, who turned "Sin City" on its head, making it into a near-Twist. Lucinda Williams' mournful voice was a perfect match for Parsons' tender "A Song for You." The night's biggest surprise was Norah Jones—a big Parsons fan—who reached down inside to come up with a knockout version of what's arguably Parsons' greatest song, "She."

As is de rigueur with anything-Parsons, this show was not without its own controversy; summed up in one succinct question: Where was Emmylou Harris?

The climax was Keith Richards crooning his craggy way through Parsons' Byrds-era ringer, "Hickory Wind," then leading a version of "Wild Horses," and finally standing front and center for a rousing rendition of "Ooh Las Vegas." Both concerts were filmed for future DVD release.

In the end, the crowd in Santa Barbara was left with a renewed appreciation for what Harris called his "true legacy: Parsons' slim body of original songs; what she deemed "taking Hank Williams stuff forward." He didn't write much in his 26 years but what he did is uncommonly wise and sweet. Most songwriters are driven by a devotion to either style or emotion and like all the great ones, Parsons mastered a blend of both. Knowingly or not, he hailed his legacy in those oft-quoted lines from one of his most poignant songs, "In My Hour of Darkness:"

"Some say he was a star/But he was just a country boy/his simple songs confess/And the music he had in him/So very few possess."
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