Thiel's CS3.7 loudspeaker

SONIC ELEGANCE

SPEAKERS AT ALL PRICE LEVELS
Snell, Gini, Fried, Chario, Verity

SMAUDIO MOON i-1
Value-for-money integrated amp

THE 750K SUPERCHARGER
Musical Fidelity's best-sounding amp ever

ON-LINE AUTHORITY: WWW.STEREOPHILE.COM
"Unprecedented exhilarating listening experience."
- Nelson Brili
The Stereo Times

"THE PRINCE V2 is a truly special speaker."
- Wes Phillips
The Stereophile
Morale Will Continue Until The Beatings Improve

Art Dudley

I f home-gallows prices keep coming down, people won't go to public executions anymore. The home-brothel has reduced the amount of cash American men spend each year on banging strangers. And thanks to the home sweatshop, the CEOs of all the major clothing manufacturers have been forced to take pay cuts. (I mean, come on: It was either that or something totally unimaginable, like shipping American jobs overseas, or cutting healthcare benefits for the rank and file.)

So the anecdotal news of a decline in hardware sales in the home-theater industry—a very real segment of the consumer-electronics marketplace that once seemed to support audio manufacturers—has come as a surprise.

It's a surprise because, earlier this year, instead of spending $4.30 a gallon to drive across their states to visit Splash Danger Canyon or the Enchanted Water Safari, American motorists stayed home in record numbers. Rising food prices put the hurt on the restaurant industry. The mortgage debacle helped slow the construction of new hotels. Throughout most of the spring and summer, according to the leading travel-industry stock index, of 42 stocks, only two—Priceline.com and Hawaiian Airlines—weren't in the toilet.

Today, forecasters suggest that high energy prices in general, and negative feelings about apparent big-oil profiteering in specific, had enough of an impact on consumer psychology that even now, as oil prices once again dip below $100 a barrel, American consumers are unlikely to resume their wasteful ways anytime soon.

One more thing: A recent Zagby poll indicates that the average consumer's interest in seeing first-run films at a theater has continued to decline. By a striking margin, the majority of Americans say they would rather have $100 worth of DVD rentals than $100 worth of theater passes.

Allegedly then: If people aren't traveling, they must be staying home. And if people aren't watching movies at the local cinema, they must be watching movies at home. (Hollywood will keep making them, of course, although Hollywood may have to raise home media prices—and, I'm sorry to say, the delicious epithet "direct to DVD" will lose its bite.) So it would have been reasonable to expect a bump, not a dip, in the sales of home-entertainment gear, right?

Wrong.

The correct answer is one that audiophiles have known all along but were afraid to say out loud while surrounded by shopkeepers heady with success: Most consumers don't care all that much about widescreen this or tingle-tush that. TV sets and video players have come a long way since the birth of the industry—and for the average Joe, good enough is good enough.

Besides, a home theater—like a home brothel or a home bowling alley or a home car wash—is a luxury. It's something most people can get by without for a time. Can people get by without music? Apparently not. From what I've seen, most American consumers are capable of responding positively to a film without feeling the need to ever see it again, but I have yet to meet the person who can respond positively to a symphony or a song without wanting to hear it again. And again.

Most people need a reliable source of music in their lives, even if it's just a table radio or an iPod. From there on up, it's a matter of degree—all the way to the things that Stereophile writes about. In a world where everybody eats, we're a gourmet magazine.

And this particular gourmet magazine is doing well—not that I intend to cock-fight the enthusiast press of one hobby against that of another. (Those who would compare audio and home-theater magazines ignore the former's DIY and tweak contingents and the latter's near-total lack of the same; the two tend to be read for different reasons, and with different degrees of intensity.) But the simple fact is, Stereophile has continued to maintain its circulation over the past few years and has even posted modest gains, as noted and confirmed by the Audit Bureau of Circulations.

There's more: In August, John Atkinson sent a memo to all of Stereophile's contributors, with good news from Source Interlink Media's research department: "Looking at the audio and home theater publishing market as a whole [my emphasis], it is Stereophile, a pure audio magazine [J.A.'s emphasis], that has had the dominant market share—just under 27 percent—for the past two years." John accompanied the memo with data showing that, in terms of number of paid advertising pages published, we're ahead of the leading home-theater titles and showing a modest increase. And that's under market conditions widely regarded as recessionary.

And in case the mere mention of advertising is too much for your inner hen, let me remind you: Those gains took place during a two-year period in which I wrote that Exposure's new upmarket integrated amp isn't as good as its less expensive predecessor, Musical Fidelity's latest integrated is outshone by the competition when it comes to driving most loudspeakers, Rega's new flagship moving-coil phono cartridge isn't ready for prime time, and some very expensive digital source components don't play music as well as a second-hand Sony PlayStation from the Salvation Army. All of those observations affected companies that advertise in our pages—and those were just the observations I happened to make.

Perfectionist audio isn't out of the woods yet, and I don't think Stereophile will feel entirely comfortable, let alone complacent, anytime soon. (After all, the percentage of American workers who can afford a home, never mind a music system to put in it, has been pointed in the wrong direction for a few years.) Some reasonable questions remain: When will the leading digital-audio companies wean themselves from the tax of high-ticket sales and take up the challenge of making a single-box CD player that most hobbyists can afford? When will the number of startup companies that exist only to bring to market $25,000 ego-wank loudspeakers finally begin to shrink? Where are the good, un-stupid-looking, high-efficiency speakers to go with the low-power tube amps that have attracted so many younger enthusiasts to our hobby over the past 10 years? Why can't somebody in America make a really good-sounding $500 integrated amp—and, perhaps more to the point, why can't a talented businessman figure out how to make a reasonable profit selling such a thing?

Well get those answers, and more, just as we'll see a few more dead leaves shaken from the trees in the mouths to come. But the simple fact remains: I don't remember a time when I've felt this good about every corner of our hobby—analog and digital, DIY and high-end, vintage and cutting-edge. Not to be erased about, but I don't remember a time when I've found myself spending money so freely on new records and even new playback gear. Not to be mushy about it, but I don't remember a time when I've felt this kind of hope.

---

2 "Fringal Haunts Likely Won't Change as Oil Falls," Associated Press, September 14, 2008.
4 The Audit Bureau of Circulations (ABC) is a non-profit watchdog agency funded by member publishers and regarded as the sole reliable source of honest circulation information about American periodicals.
FEATURES

55 The Products of the Year
Stereophile's editors and writers vote for the products that impressed them the most in 2008.

71 Basic Black: The LP Revival Comes To Brooklyn
Press up that goo! Trim off that flashing! Go get a slice! Brooklyn Phono is one of the small pressing plants on the cutting edge (literally) of vinyl's revival. By Robert Baird.

EQUIPMENT REPORTS

78 Thiel CS3.7 loudspeaker
Wes Phillips

89 Chario Academy Sovran loudspeaker
Michael Fremer

101 Snell Illusion loudspeaker
Larry Greenhill

115 Musical Fidelity 750K Supercharger monoblock power amplifier
John Atkinson

125 Simaudio Moon i-1 integrated amplifier
Robert J. Reina

FOLLOW-UP

135 Fried Compact 7 loudspeaker
John Atkinson

136 GINI Systems "LS3/5a" loudspeaker
John Atkinson

137 Musical Fidelity 550K Supercharger monoblock power amplifier
Erick Lichte
COLUMNS

As We See It
Art Dudley muses on why people can apparently get along just fine without high-end home theater but can't manage without music in their lives.

Letters
Why references to Global Warming have no place in Stereophile, and why they do.

Industry Update
High-end audio news, including forthcoming dealer seminars, Paul Messenger on how the acquisition of French speaker company Cabasse by Canon will affect the brand's market profile, and Markus Sauer on Acousence, a new German classical record label that is releasing LPs.

Want to know more? Go to the "News Desk" at www.stereophile.com for up-to-the-minute info.

Sam's Space
Sam Tellig gets musical sounds from the Verity Audio Parsifal Ovation loudspeaker.

Analog Corner
Michael Fremer continues his survey of phono preamplifiers with models from Pro-Ject, Bel Canto, Vacuum State, and Lehmannaudio, and cleans his LPs with the Clearaudio Matrix.

Listening
Art Dudley explores his anachrophilic passion, playing 78s with a new monophonic phono cartridge from Miyabi.

The Fifth Element
John Marks returns to the Fried Compact 7 loudspeaker, and auditions an affordable clone of the classic BBC LS3/5a minimonitor from GINI Systems.

Record Reviews
December's "Recording of the Month" is Threshold of Night, an SACD of gorgeous modern choral music from Tank O'Regan. In Classical, there's the latest from former Kronos Quartet cellist Joan Jeanrenaud. In Rock/Pop, we have reviews of new recordings by Joseph Arthur, Okkervil River, and Rory Block. And in Jazz, we look and listen to the latest and greatest reissue of Miles Davis' Kind of Blue.

Manufacturers' Comments
Comments on this issue's reviews from Verity, Bel Canto, Vacuum State, Clearaudio, Fried, Snell, and Simaudio, with more on speaker measurements from Harbeth's Alan Shaw.

Aural Robert
The LP lives (again)! Robert Baird talks to Mosaic Records and Capitol Records about why both are getting back into vinyl.

INFORMATION

Audio Mart
Manufacturers' Showcase
Dealers' Showcase
Advertiser Index
Listen.

www.totemacoustic.com
“MOON”... the leading edge...

A musical experience that takes you where no man has gone before

SuperNova CD Player | P-7 Preamplifier | W-7 Power Amplifier

Fully balanced, Dual-mono design
Passionately and meticulously handcrafted in Canada

MOON

www.simaudio.com
877-980-2400
LETTERS TO THE EDITOR

Mourning the loss of youth
Editor:
No shortage recently of letters from readers and comments from Stereophile writers about not being able to recapture the joy of listening to their first stereo as a teenager. Don’t blame it on your $50,000 system, because few experiences in later life are as sweet as the life-changing experiences of our youth. Music meant more, movies were better, young women were within reach, and there was hope for the future. In later life, all experiences seem dulled by comparison, and we become cynical and jaded by the tragedy that is the real world. Perhaps, if you’re rich enough play sugar daddy to young babies, you can temporarily recapture the thrills of youth, but in the end it’s not worth it for you. So hail your teenage stereo out of mothballs (if it still works) and give it a listen. Chances are it won’t be like you remembered and you’ll prefer your megabucks system. Even though you’re no longer truly hearing the music anymore, it will sound better on your current system.

—Joel Counter
Pasadena, California
jcounter@sbcglobal.net

He loves Stereophile
Editor:
My God! I’m only an eighth of way through the October issue and I am in hysterics! I’m a longtime subscriber, and I have to say this is the best issue yet. From Alan Cook’s letter parodying finger-wagging curmudgeons (I think I’m down to $12/ year) to Art Dudley’s take-no-prisoners reminiscence (Amanda McBrumme—just shoot me) to Fremer’s review/dis of his German cartridge alignment competitor, I am seriously dying.

Thank you for always being informative, but I have never found you this amusing. I love Stereophile.

—Tim Harrigan
thisboy47@gmx.net

Stereophile sucks
Editor:
First we’re hit with an article [in the October issue] that appears to have been ghostwritten by Chicken Little (or Al Gore—same person), about the specter of Manhattan being under water because of greenhouse gases; something that people would need to buy “carbon credits” to balance. We can turn off the world, relax, and enjoy. We see it section of the October issue. Buzzing around the room corner while he was in Manhattan, he might even have seen one of those sign-carrying prophets on the street corner.

—Russ Schaeffer
Valencia, CA
cschaff@adelphia.net

Supports our advocacy
Editor:
Thanks very much for turning over October’s “As We See It” to Jason Victor Serinus and his impassioned essay on the coming environmental crises (not to mention the ones we’ve already experienced or are enmeshed in). I was gratified to read about what some industry groups are doing to help make audio and home entertainment more responsible pastimes. Surely we can all, at this point, recognize the serious nature of the situation and act like grownups—even as we continue to enjoy this wonderful hobby. You will probably get some disgruntled letters from other readers, wondering once again why anyone allowed the real world to intrude on their leisure activities. I just wanted you to know for sure that your advocacy in this arena has supporters too! The problem is too big to label “political” and then ignore or defame.

—Lawrence Schenbeck
lschenbeck@verizon.net

The way forward
Editor:
I wanted to share my thoughts on the “As We See It” section of the October issue. First, let me applaud the nonpreachy way in which the writer details the steps that he is determined to take to play a part in supporting efforts to address climate change. This is certainly more effective than telling everyone else what they should be doing. But expanding on this topic, it occurs to me that the right combination of actions will be different for each person, depending on what each values most and what each can afford. For instance, I may choose to use CFL bulbs, lower my thermostat, and listen to a class-D amp, but drive a gas-powered car, whereas someone else may drive electric while running a honking big tubed class-A amp 24/7. Sure, in an ideal world there would be no tradeoff of sound quality for energy efficiency with respect to amplifier
Velodyne has a passion for producing the ultimate bass experience. Bass you feel. Bass that is pure.

Behind every Velodyne subwoofer is over 25 years of experience producing legendary high-performance, low distortion bass. Through the use of DSP, servo, built-in room EQ, powerful amplifiers and world-class drivers, we meet the demand for truthful, accurate sound. Our commitment to seeking the ultimate perfection in bass for music and movies can be heard throughout our entire product line. We have a sub that can fit any need, any room.

Digital Drive

www.velodyne.com
topology (but there is, today at least), and there would be no tradeoff of safety of riding in an Escalade vs a Prius (but there is). So I think that perhaps the first contributions to come from Stereophile to address this problem can be in a couple of forms, none of which, I hope, are too radical.

First, what if equipment reviews included a "carbon footprint" specification? Let's develop a standard "typical usage" timeframe for this specification. For example, let's say that the average audiophile uses his/her system 2 hours each weekday and 10 hours each weekend, for a total of 20 hours per week, times 50 weeks of nonvacation per year, for 1000 hours per year. Now buy yourself one of those Kill-A-Watt devices and run a component being tested through it for 10 hours, recording the power consumption. Multiply by 100 to get the annual kWh— if a product is not designed to be easily turned off when not in use, we may want to also record its "idling" power usage, and add another 7760 hours of idling per year to the result—then by whatever metric to convert into CO₂ (the conversion seems to be between 1 and 2 pounds of CO₂ per kWh). Then people can include this in their buying decisions—not that they will necessarily always opt for the "greener" component, but it can now be part of the collective lifestyle equations with which they make efforts to manage their CO₂ emissions.

Consumers are well accustomed to making tradeoffs of price vs performance; now that price can include the larger environmental cost. By informing consumers, you alter the marketplace in favor of greener products. In altering the marketplace, you encourage manufacturers to improve their products.

Second, how about a "green product spotlight" in each issue? One of the reviews could be dedicated to a product that is sought out both on the basis of its sonic performance, and because it offers unique features that qualify it as green (eg, high energy efficiency in use, low resource intensity in manufacture, etc.). And apart from the spotlight, continue to review the "regular" equipment, or even a mega-amp that can heat a football stadium in the fall, or a novel speaker that produces sound directly by the combustion of modulated crude oil—just so long as their carbon footprints are revealed.

—Agim Perolli
Carmel, NY
agim@perolli@gmail.com

Review the Reviews...

"... excellent compared to anything that I have encountered at any price... the beginning of a new era in audio."
Robert E. Greene - The Absolute Sound, Issue 183

"I haven't found a product so instantly and confidence-inspiring in years."
Ken Kessler - HiFi News, July 2008

"Thanks to all those inputs, the DAC1 Pre is a digital source lover's dream come true."
Jeff Dorgay - ToneAudio Review; 2008

Read all reviews at www.DAC1PRE.com

...Experience the Experience

Experience the DAC1 PRE with a 30 Day In Home Trial*. Order yours at: www.DAC1PRE.com

—Jeffrey Kaschek
jkaschek@comcast.net

As I explain in this issue's "Manufacturers' Comments," my policy is not to respond to letters in that section. My writers and I have had our say in the review pages; "Manufacturers' Comments" is where those we write about can have their say. However, I did return to the subject of my measurements of the Harbeth M40.1 in the November issue, and Alan Shaw responds in turn to that Follow-Up in this issue.

—John Atkinson
NP
EVOLUTION SERIES

...Setting a new standard for compact and affordable state-of-the-art transducers.

Stiff and lightweight diaphragm materials are driven by powerful ceramic and neodymium magnetic structures, their precise performance orchestrated by our revolutionary control networks. Superb transient speed and dynamic impact blend seamlessly, immersing the listener in legendary Avalon Acoustics holographic soundstaging.

Whether you desire an exceptional 2-channel or home theater experience, full spectrum high-end sonics have never been so accessible.

"The NP 2.0 - it knows no peers at or near its price."
-Roy Gregory, HiFi +

"I've heard many a costly speaker that came nowhere close to the accomplishment of the NP 2.0..."
-Martin Collums, HiFi News

"These speakers offer their owners a sanctuary from all that is overly hyped, overly complicated, and overly disappointing in the current state of the audiophile world."
-Michael Galvin,
Secrets of Home Theater and High Fidelity

Best loudspeaker over $2,000/pair HiFi News 2007
Best loudspeaker under $4,000/pair HiFi News 2006

avalonacoustics.com
Those promoting audio-related seminars, shows, and meetings should e-mail the when, where, and who to stephen.mejias@sourceinterlink.com at least eight weeks before the month of the event. The deadline for the February 2009 issue is December 1, 2008. We will reply with a confirmation. If you do not receive confirmation within 24 hours, please e-mail us again. If you prefer to communicate through fax, the number is (212) 915-4164.

Attention All Audio Societies: We now have a page on the Stereophile website dedicated entirely to you: www.stereophile.com/audiophilesocieties. Check it out and get involved! If you’d like to have your audio-society information posted on the site, e-mail Chris Vogel at vgl@atlantic.net and request an info-pack.

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

FRANCE: PLOUZANE, LIFRE
Paul Messenger

In 1950, Georges Cabasse founded his eponymous loudspeaker company in his home territory of Brittany, in the extreme northwest of France. With an enviable reputation for quality, decades Cabasse was a cornerstone of France's domestic hi-fi industry. However, as has often been the case for private companies in recent years, after Cabasse retired, and in October 2006 the company was bought by Japanese multinational Canon Inc.

Perhaps due to its market dominance in France and Switzerland, or perhaps because of the strength of the UK’s own speaker brands, throughout most of its long history Cabasse didn’t seem all that interested in exporting to the UK. I wasn’t exposed to their speakers until 1992, when Cabasse finally decided to sell its products in Britain, and Georges Cabasse’s son Christophe brought round a smallish but high-sensitivity two-way speaker called the Bisquine. That first attempt to establish a UK presence fizzled, as did, to my knowledge, at least two subsequent distribution arrangements.

Coincidentally, at about the time that Cabasse first appeared on the UK’s hi-fi radar, Canon was trying to establish itself as a specialist speaker company combining Japanese ideas and investment with British acoustic engineering and manufacturing. This, too, proved unsuccessful, perhaps because the acoustic mirror and lenses of its Wide Imaging Stereo (WIS) feature—see www.stereophile.com/standloudspeakers/695canon—was too radical for an essentially conservative marketplace.

Now we'll see how the combining of the talents of these two very different companies will fare in the tough UK market. While several members of the Cabasse family, including Christophe, are still involved, Canon has re-organized the company's structure and component sourcing, and the reconfigured Cabasse is bringing its latest, unique speaker technology and design back to Britain.

Sort of. Nowadays, European economic unity and transnational shippers means that the traditional audio distribution channels are easily bypassed, with significant cost savings. Like a number of other brands, Cabasse will conduct its UK operations directly from its headquarters at Ploizane in northwest France, and, working closely with Canon Bretagne's manufacturing and logistics plant in nearby Lifre, will be able to ship stock to its UK dealers within 48–72 hours of receiving an order.

The existence of a long-established (25 years) Canon plant nearby goes some way toward explaining why Canon considered Cabasse a good fit. A more important reason is probably that Cabasse brings to the party its own unique coaxial drive-unit technology, as well as considerable acoustics expertise, both of which deserve wider exploitation. Besides management, sales, marketing, and administration,
Tuesday, January 27, 7–9:30pm: The Arizona Audio Video Club will hold its monthly meeting. Club president Adam Goldfine will offer his CES report, discussing the latest developments in two-channel and multichannel audio and home theater. The club will also hold its annual elections. A raffle is planned and refreshments will be served. Guests and new members are invited. For more info, visit www.azaudioclub.com or call Adam Goldfine at (602) 524-3974.

CALIFORNIA

Sunday, November 16, 2–5pm: The Los Angeles and Orange County Audio Society will hold its monthly meeting at Sunny’s Home Theater & Music Systems (1370 E. Cypress Street, Covina). The primary demonstration will feature Wilson Audio Specialties loudspeakers, Boulder’s new 2000 Series amplification, and the Sooloos music server. The second system will feature T+A’s new Power Plant and Music Player, combined with Amphion Argon Anniversary speakers and Transparent Cable’s MM2 cables. A home-theater demo will include a Runco projector, Aerial Acoustics System 1 speakers, and JL Audio’s Gotham subwoofers. A raffle is planned and lunch will be served. Guests and new members are invited. For more info, visit www.laocas.com or call Bob Levi at (714) 281-5850.

Saturday, December 13, 11:30–4pm: The Los Angeles and Orange County Audio Society will host its 15th Anniversary Celebration and Gala at the Buena Park Holiday Inn (7000 Beach Boulevard). Ray Kimber, president of Kimber Kable, will be there to receive the Society’s 2008 Founders Award, and John Atkinson, editor of Stereophile, will address the Society and offer his unique perspective on the state of our hobby.

25 of the 35 staff in the Plouzane facility work in Cabasse’s well-equipped R&D labs.

The core unique selling point behind Cabasse’s current marketing strategy lies in those coaxial drivers, named the Spatial Coherency System (SCS) and claimed to offer precise aural images across an unusually large sweet spot. These drive-units see their ultimate use in Cabasse’s awesome flagship speaker, the powered La Sphère (reviewed by Michael Fremer in the June 2008 Stereophile, Vol.31 No.6). The dozen or so models below La Sphère fall into three price strata and are of two basic types: traditional-enclosure models incorporating separate bass drivers, and elegant Design satellite-subwoofer systems.

Only time will tell how successful the Cabasse-Canon union will turn out to be in the UK and the pairing’s other major target markets, Italy and Japan. However, the synthesis of two very different corporate cultures and skill sets would seem to hold plenty of promise.

GERMANY: WÖLLESTEIN

Markus Sauer

These days, starting a new classical record label is a labor of love. It’s not something you do because the business prospects are exciting, and it’s not the choice of profession you’d expect of someone who studied applied physics and acquired a degree in integrated circuit design. But Ralf Koschnicke has turned his love of classical music and his knowledge of technology into a living, first by getting an additional degree as a Tonmeister (sound engineer), and then by founding his own label, Acousence Records (www.acousence.de).

Koschnicke put the Acousence name on the map with a CD that combined works by Mahler and Hans Rott, a forgotten contemporary whom Mahler acknowledged as an inspiration. That disc sold out quickly and led to further recordings of Rott compositions. Other Acousence recordings are of works by Schubert, Schumann, and Wagner, for example. Almost all Acousence recordings are recorded live in concert. Koschnicke finds that he’s able to capture more of a sense of occasion this way, the musicians putting in just that little bit extra when an audience is present.

And there’s an audiophile angle. As you’d expect from a label chief with Koschnicke’s background, he has thoroughly researched the technical side of recording and come to some unusual choices. Koschnicke’s recordings are done with high-quality microphones, mostly Neumann and Microtech Gefell. His approach to recording is pragmatic—he generally uses five to seven main mikes, and if he needs a feeder mike to make audible in the mix a particular passage from a group of instruments, he’ll use one. The mike amplifiers are of his own design.

Koschnicke records digitally with Alesis analog-to-digital converters running at 24-bits. Having tried ADCs with 192kHz sampling frequency, he settled on Alesis hardware because it sounded most natural to his ears. Mix-down is done in the analog domain on a console that Koschnicke has extensively modified for low noise and wide bandwidth. (He has written in a studio magazine about the technical reasons for this choice, which center on time-domain aspects.) After mixing, Koschnicke returns to the digital domain for final mastering, this time at 24/192. That final mix is then trimmed back to 16/44 for the “Red Book” CD release. Koschnicke finds the loss of sound quality resulting from downscaling to 16/44 very audible; in fact, he says that once one has developed an ear for the high-frequency sound of CD, one feels.”

---

1 Microtech Gefell was initially founded by Georg Neumann; after WWII, Gefell happened to be on the Eastern side of the iron curtain, so Neumann started anew under the Neumann company name in West Germany.

2 www.studio-magazin.de/Leerproben/Zeitaufloesung.pdf (in German only)
Compact Performance: Excite X16.

There is now a high-end loudspeaker that does not require only the highest grade amplifier in order to sound convincing. The new Excite loudspeaker models combine high-end audio performance and pure musicality. This is because the Excite models make the most of any amplifier's or receiver's power, quickly and precisely following the music signal, efficiently converting every watt into nothing but exceptional sound quality. Dynaudio took advantage of its vast knowledge of loudspeaker design to develop a unique and unrivalled driver technology. The Dynaudio Excite models allow the musical capabilities of every audio system and any source will be fully experienced - with any style of music.

Dynaudio specializes in high-end loudspeakers for Home Systems, Professional, Automotive and Multimedia. Dynaudio Home Systems includes several loudspeaker ranges for hi-fi and home theatre: Excite, Focus, Contour, Confidence, Evidence, Subwoofer and Installation Products. Further information is available through our authorized Dynaudio dealers or from Dynaudio North America at 1140 Tower Lane, Bensenville IL 60106. Tel: 630.238.4200, E-mail: info@dynaudiousa.com | www.dynaudio.com
There will be "an extravagant holiday buffet" and raffle prizes. Guests and new members are invited. For more info, visit www.laocas.com or call Bob Levi at (714) 281-5850.

Sunday, January 25, 2-5pm: The Los Angeles and Orange County Audio Society will host its monthly meeting at Definition Audio Video (2909 West 182nd Street, Redondo Beach). Featured gear will include Vienna Acoustics' new Klimt Series reference loudspeaker, Tannoy's new Signature Series loudspeakers, and Accuphase's reference electronics, all wired with Kimber Kalb'e cables and interconnects. Representatives from these companies will be present to speak to the membership. As raffle prizes, Kimber Kable will donate their cables and offer an in-home demo. Lunch will be served, and guests and new members are invited. For more info, visit www.laocas.com or call Bob Levi at (714) 281-5850.

MICHIGAN

Saturday–Sunday, December 13–14: Kyomi Audio and Esoteric will hold a seminar featuring Esoteric's P-01 VU SACD/CD transport, D-01 VU mono D/A converters, and G-Orb Rubidium master clock. All cabling will be provided by Stealth Audio Cables, and Stealth's Serguei Timachev will be on hand to discuss his newest designs. For more info, visit www.kyomiaudio.com or call George Vatchnadze at (517) 755-6651.

VIRGINIA

Sunday, November 16, 5–8pm: With a focus on "Systems by Budget," the Richmond Audio Society will hold its year-end meeting, presenting three hi-fi systems at three different price points: $2500, $5000, and $10,000. Tentative plans for the upcoming year will also be discussed. For more info, visit www.richmondaudiosociety.org. RSVP: c.alan.givens@dom.com.

It tends to stand out like a sore thumb.

What medium does he think is best suited to bringing the sound quality of the 24/192 master to the end user? Koschnicke has experimented with DVD and SACD, but to his surprise, he finds analog LPs closest to the 24/192 digital master. Consequently, he has launched a series of vinyl releases called Artistic Fidelity Reference Recordings.

Fig.1 Spectral analysis of a short tutti passage from the master of the second movement of Shostakovich's Symphony 15 shows significant high-frequency content above 20kHz.
A Company That Listens

The reference-quality performance for which the Revel® brand is renowned is due to much more than the sum of its component parts, its exquisite craftsmanship or relentless R&D.

Test equipment can't begin to appreciate a symphonic score, the rhythm of reggae, or the urban pulse of hip-hop. And for all its sophistication, a computer cannot match the most sensitive component of all – the human ear. This is why the Revel team listens, and questions. Nothing is left to chance.

The Revel Multichannel Listening Lab (MLL) is only one example of the advanced listening techniques the Revel team has devised to provide an accurate correlation between laboratory measurements and sonic performance. MLL is the industry's most sophisticated listening facility, allowing panelists to compare speakers under genuine "double-blind" conditions.

For the first time, sound quality can be accurately assessed beyond mere opinion. In fact, Revel loudspeakers must be proven to be sonically superior to competitors before production can begin!

Nothing can prepare the discriminating listener for the full Ultima2 experience, regardless of orientation. From the traditional two-channel audiophile, to the dedicated surround-sound cinema or high-resolution multichannel enthusiast, there is a Revel Ultima2 Series system designed to exceed every listener's expectation.

Experience a revelation – the Ultima2 Series by Revel.
ferred to the LP with astonishing fidelity (fig.2, although a bit of HF noise is also visible in the plot), while the CD (fig.3, still in print) truncates the highs. Koschnicke thinks it's the HF cutoff that makes CD sound less natural than hi-rez digital—or vinyl, when done properly. The plots show that the LP faithfully preserves the HF content of the 24/192 master.

Koschnicke is confident that the quality of his recordings is more than competitive with discs from vinyl's Golden Age. Several more LPs from Acoessence are in the pipeline, including Rimsky-Korsakov's Scheherazade, again with Darlington-Duisburger.

UK: HUNTINGDON
Paul Messenger

The typical specialist audio company tends to be a rather modest affair, sometimes consisting of just one man and the proverbial dog. Even the more successful high-end brands tend to number their staff in the dozens, not the hundreds. Hi-fi is mostly an industry of small scale, primarily based on individual skill and enthusiasm in the designing and building of simpler components, and relying on outside suppliers to make up for an inevitable lack of resources in an increasingly hi-tech world.

That has long been the case with basic components from tubes to transistors, which are almost always re-purposed from other applications, but it's particularly true of the relatively complex optical disc drives used in CD players, which have always tended to be bought in as complete assemblies from outside suppliers.

Back in the 1980s, when "Red Book"-standard music CDs were the only game in town, things were simple enough. CD drives were dedicated to playing music in real time and were available from only a few sources, who merely needed to be convinced of the buyer's creditworthiness. Once CD had taken off, with lots of plants churning out 4.75" optical discs, all sorts of other technologies (eg, computer makers, film studios) thought it a handy format for storing digital data of all kinds, and demand also arose to use CDs in such hostile environments as cars and portable players.

Today's CD drives (I refuse to call them transports, as nothing is transported; we don't play LPs on "vinyl transports") therefore tend to be versatile devices able to handle a wide variety of different applications. But after researching the available CD drives a few years ago, Peter Bartlett, managing director of Cyrus Audio, concluded that the traditional drive is a jack of all trades and a master of none.

After also checking out digital music servers, Bartlett decided that the demand for simple, straightforward CD replay would continue for many more years, and that the key to achieving superior sound from the format was in getting the data off the disc as cleanly as possible, with a minimum of error correction or servo activity. But instead of taking the line of least resistance and opting for a standard off-the-shelf package aimed at mass-market applications, Bartlett made an ambitious and costly decision: He would design and manufacture a unique Cyrus disc-playing mechanism specifically designed to play music CDs.

The key element of this project turned out to be engineer Jonathan Green, who joined Cyrus four years ago after a brief sojourn at IAG, but who had spent the six-plus years before that working on optical disc-drive servo chipsets at Philips' semiconductor division (NXP) in Southampton, UK. That experience had given him a comprehensive understanding of how the various elements of these highly complex mechanisms work together.

Cyrus's new drive, which can be described as a "kit of parts," brings together such bought-in components as the loader, the servo, and the optics. Crucially, it is Cyrus's kit of parts, each element specifically selected for its audio performance and linked by Cyrus's own software. Green explained to me why he'd opted for a recently developed Sanyo optics set, a Philips CD102 servo with a low-noise current input, and a slot-loading mechanism that grips the disc's outer edge instead of its surface. Putting the entire package together includes matching the servo's digital proportional integral differential (PID) controller to the optics to take account of any mechanical resonances in the drive. The action of the various
We make sure the only drama in your home theater is on the big screen.

Your home theater is your passion. You've spent thousands of dollars on equipment and countless hours on research and installation... How are you protecting this investment?

Power fluctuations are a leading cause of equipment malfunction. Unfortunately, the demands on our antiquated power grid increase daily, meaning that the threat of damage from bad power is here to stay. With APC AV® Power Solutions, you can eliminate bad power as a source of AV signal degradation by filtering out noise and regulating the voltage. Some advanced models even offer battery backup power to reduce interruptions when the power goes out. The new S20 provides multiple options for managing the unit and monitoring environmental conditions, which can reduce service calls and improve the performance of your system. The S20 is also easily integrated and managed with Crestron, AMX, and any other whole-home automation network or vendor. Designed to maximize your home theater experience, APC AV power solutions boast the engineering expertise to guarantee protection of your investment against the dangers of unstable power.

Over 30 million customers already trust us to protect their PCs from power problems. You can trust us to protect your home theater. Go to www.apcav.com for more information.

Engineered for high performance AV systems by APC power experts, APC AV Power Solutions will:

- Protect your equipment and presets from harmful power fluctuations
- Eliminate bad power as a source of signal degradation or equipment failure
- Prevent missed DVR recordings and corrupted multimedia server data
- Reduce component and home automation control lock up, reducing intrusive service calls
- Prevent damage to costly projector and display bulbs

Most products are available in black or silver.

Enter to WIN an H15 Power Conditioner - valued at $399 ERP.
Call 888-289-APCC x8081 Visit www.apc.com/promo Enter Key Code e509w

©2008 American Power Conversion Corporation. All trademarks are owned by Schneider Electric Industries S.A.S. American Power Conversion Corporation in those countries in which these trademarks are owned by others.
servos can then be tweaked to optimize their performance with music CDs, using a selection of "Red Book" test discs and monitoring the error activity.

To cut short this story of four years and an investment of half a million dollars: The result is a disc-drive mechanism that, when mounted in the Cyrus CD 8 SE (for Servo Evolution), is claimed to deliver sound demonstrably superior to that from its predecessor in the Cyrus range, the otherwise identical CD 8x. Peter Bartlett reports that he's already been approached by other manufacturers interested in purchasing his disc drive—and putting this story together has whetted my own appetite to try the new machine.

UK: SALISBURY
Paul Messenger

Although I'm unlikely ever to get the chance to drive a Bentley, the prospect of sitting in a stationary example of the latest model and hearing Naim's new in-car system at a recent auto show was a temptation I couldn't resist.

The "Naim for Bentley" system, briefly mentioned in my May "Industry Update" (Vol.31 No.5), is a downstream option: a package comprising electronic processing, amplification, and speakers, fed from a standard front-end of radio tuner and CD changer. The extra cost is small change compared to that of the cars themselves, so Naim is hopeful of a good take-up rate among Bentley customers. They'll need it to recoup the considerable development effort and costs involved.

Naim's processor-amplifier is extraordinarily compact, incorporating 15 channels of digital amplification with a total power output of 1100W, not to mention a load of DSP functions, thanks to six layers of double-sided circuit boards. Fed analog signals from the sources, it converts them to 24-bit/96kHz digital in order to be able to apply the various DSP functions. Eight operating modes provide different types of equalization, or optimize the sound for different seats within the car, and the whole system is under dynamic equalization control to compensate for differences in the noise level inside the car due to changes in driving speed. Naim is also responsible
for the complement of 1”, 3”, 5”, and 8” drive-units, each actively driven, and selected and mounted for each model of Bentley.

It's impossible to meaningfully assess an auto sound system while listening to it in a stationary vehicle whose engine is shut off, nor are these ideal conditions for a system that can draw as much as 100 amps at 12V—which seemed to be a limiting factor in the first car I tried. The results were much more impressive in the second car, which delivered thoroughly entertaining and involving sound well up to the highest standard of aftermarket car sound, and was well able to uphold the reputations of Bentley and Naim.

At the Lightning Cars stand, I ran into Conrad Mas from UK turntable manufacturer Avid. Avid operates out of the same industrial estate as Lightning, has done some machining of parts for them, and helped specify the in-car system. However, the Lightning is interesting for another reason. It's a good-looking luxury GT car powered entirely by electric batteries—the NanoSafe Lithium-Ion battery technology from Akairnano of Reno, Nevada. These batteries are claimed to deliver +700bhp and acceleration of 0–60mph in 4 seconds, with a range per charge of 200 miles and a recharge time of just 10 minutes from a regular electricity outlet. In an era when increasing mains pollution threatens to undermine the performance of high-end hi-fi, such impressive specs indicate how electric cars are stimulating dramatic progress in battery technologies.

In the May 2006 “Industry Update” (Vol.29 No.5), I reported on an audio system, powered by lead-acid batteries, that drove the Living Voice demo at the Bristol show. A few months later I tried this system at leisure at home. The batteries clearly lowered the noise floor of the system, but also somewhat reduced the speed and attack. The interesting and, as yet, unanswered question is what sort of compromises might be involved if one used the more modern Lithium-Ion—or, for that matter, Nickel Metal Hydride—battery technologies.
Want to sell your records?
We buy pre-owned LP collections, large and small!

Call 1-800-716-3553 or email paul@acousticsounds.com

OUR INTERESTS: MoFi, Nautilus, Japanese Pressings, original jazz, classical and pop, white-label promos and more.

1500 S. Ninth, Salina, Kansas
www.acousticsounds.com

NOW ONLINE: THE ACOUSTIC SOUNDS SHOWROOM

We built the Acoustic Sounds Showroom so that we'd have a dedicated area to evaluate our audio equipment and recordings. It also serves as a space to offer our customers products that may not be available through our mail-order catalog. We invite you to hear exceptional Hi-Fi for yourself. Call us at 800-716-3553 to make your appointment.

The Acoustic Sounds Showroom features these brands:

AKG
AcousTech
Antique Sound Lab
Apex
Audience
AudioQuest
Audiaflies
Avalon Acoustics
Bev
Billy Bags
Boston Audio Design
Cambridge
Cardas
Cayin Audio
Clearaudio
Creek Audio
DBS Systems
Demon
Disc Doctor
Derr
EAT
Echo Busters
Epos
Exposure
Finetôle
Funk Firm
Futurola
Gibgit
Graham
Grow
Harbeth
Hermon Audio
Hi-Fi Taming
IsoTech
Klipsch
Koetsu
Lyra
Manley Labs
MoFi Group
Music Hall
Musical Fidelity
Musical Surroundings
Nitro Grady
Oracle
Parasound
Pass Labs
Pro-Ject
PMC
REL
Richard Gray
Rogue Audio
SME
Sennheiser
Sherer
Shure
Silver Circle Audio
Sound Anchor
Star Sound Tech
Stirling Broadcast
Sonus
Sutherland
Symposium
Target
Thorson
Tivoli
Ultrasone
Vandersteen
VAS Audio
VPI

Territorial restrictions apply on all bold listings.

http://showroom.acousticsounds.com

The Acoustic Sounds SHOWROOM
**Turntable Set-Up**

Purchase a turntable from Acoustic Sounds, and we'll set it up free of charge. We've got qualified, trained technicians who have been doing just that for more than 25 years apiece. They've got all of the best set-up equipment at their disposal, and they know exactly how to dial in a rig for peak performance. You'll be ready to plug and play. Call us at 800-716-3553.

---

**FOR EVERY AUDIOPHILE**

We have the world's largest supply of LPs, turntables, cartridges, inner sleeves and accessories in stock! Budget or not, we've got you covered. With a staff who seriously gets in to analog, we can answer any question or talk hi-fi — all day, any day. Give us a call at 1-800-716-3553 or go to www.acousticsounds.com — we add new items daily!

---

**Analogue Productions**

**ULTIMATE ANALOGUE TEST LP**

“The Ultimate Analogue Test LP from Analogue Productions is the quintessential tool for setup and fine tuning of ALL analog systems...Pure Science yields High Performance.”

- Dan Babineau, Technical Editor, TONEAudio Magazine

**ANALOGUE PRODUCTIONS**

Ultimate Analogue Test LP $39.99

---

**Aqvox**

**2Ci MKII Balanced Phono Preamp**

“...I'm not sure I've ever heard a more transparent phono preamp at any price, save for the Boulder 2008 – the "blackness" of the backdrop was startling...if you like unforced detail and resolution, as if looking through a just-cleaned or just-removed window on the action, the Aqvox will deliver that...Used with moving-coil cartridges in balanced current mode, the Aqvox 2Ci is one of those products that will inspire you to rediscover your vinyl collection. Its sound is transparent, expansive, hi-rez, and ultradetailed, but neither etched nor bright.” - Michael Fremer, Stereophile, July 2008

**AQVox 2Ci Phono Stage** $1,999.99

---

**SIGN UP AND WIN A BLUE NOTE TEST PRESSING!**

Winner every month! Just sign up for our newsletter at acousticsounds.com. Get the lowdown on all our latest releases plus specials exclusive to subscribers!

---

**www.acousticsounds.com**

THE WORLD’S LARGEST SELECTION OF AUDIOPHILE RECORDINGS!
seeing and hearing like never before

Be transformed. By notes that soar to new heights and bass that grabs your heart and never lets go. By powerful speakers that allow you to hear in ways you’ve never dreamed of. By incredibly moving sound that touches you in ways you didn’t know existed.

Experience the next generation EX Series Speakers.
I don't know about you, but I get a heap of electronic junk mail.

"She smiled at me hornily." This is the first time I have encountered that adverb.

These are less oblique: “Swing a larger club today.” “Girth and length are guaranteed.” “Organic solution to increasing your trouser package.”

Sometimes the spelling is bizarre: “Dont let your wife be nagry with you because of bad potence.” Translated from Chinese?

Another from my in-box: “Long-range HDMI extender from Tributaries.”

I first thought this was something along the lines of “Increase your length.” Instead, it was Tributaries Cable announcing their two-piece HXMin5 HDMI cable booster, said to pump “pristine hi-def video” and audio more than 300 feet.

“Restore power to your groins,” urged “Sorin,” from Japan.

With certain speakers, I am happy with 3.5W of power, thank you.

“Never pay for detergent again.”

Sorry, I never open these things. I might have been able to clean up.

I am also peppered with electronic press releases, especially each December, before the annual Consumer Electronics Show in early January—and each August, before the CEDIA Expo in early September. Like this one: “Salamander Designs Begins Shipping Jump Seat Ottoman.”

My late friend Lars would have yumped at the opportunity. I say groin and bear it.

The Jump Seat Ottoman looks like a traditional ottoman, or what my gran-nny quaintly called a hassock. It unfolds to reveal a hideaway home-theater seat, complete with cupholder and compartment for a remote control or game controller. The Jump Seat starts at $999 retail and jumps from there.

A press release from B&W announced “A Zeppelin in the Living-room.” Expect to see this iPod speaker system in “impressive boutique hotels.”

Not the digs Marina and I frequent, alas. “Knowledgeable designers are very careful about loading up a room

with the bulk and busyness of high-tech audio and with good reason,” the press release informed me.

As I look to shrink my system and sell our house, I know all about bulk and busyness. I’d better not let Boris’s wife, Natasha, know about the Zeppelin. She’ll want one instead of a proper pair of Bowers and Wilkins speakers.

So far as I know, Verity Audio, based in Quebec City, Canada, has never issued a press release. Without hype, they have made serious headway over the past 14 years in producing loudspeakers of very high quality. Our own Fred Kaplan owns Parsifal Ovations, a pair of which lately visited my listening room.

Lars first put me on to Verity Audio and introduced me to its founders, Julien Pelchat and Bruno Bouchard, whom he called “the Verity boys”—as if he were the company’s godfather. They were boys at the time. The Parsifal, introduced in 1994, was their first product.

Lars was usually fickle about hi-fi. He would adopt obscure cables, digital processors, and amplifiers, talk about how they were the greatest in the world, then banish them to Siberia—or Sweden.

I wish Lars had been here to help set up the Parsifal Ovations in my listening room. He would take a tape measure, have me hold it to the tip of my nose, then extend the tape to the center of the midrange driver. The distances to the left and right loudspeakers should be equal.

But what if I wanted to move my head? Or my chair? What about measuring from my left and right ears? Or from my left and right nostrils? Would any of those measurements have yielded better results?

“Moving your chair is not allowed,” said Lars. He was serious.

Our mutual friend, The Brass Ear, decided to out-tweak Lars. He bought, second-hand, a height-adjustable barber’s chair, with which he could adjust his vertical listening angle—and stick it to Lars and his Ikea couch. Brass finally hung up on hi-fi and took his suffering sinuses to Surprise, Arizona, along with a Bose Wave Radio.

Lars was a maven, perhaps the maven, when it came to setting up Verity Audio speakers. He achieved a degree of soundstaging and resolution, with ordinary CDs, that I could scarcely believe possible. Indeed, it was this that caused me to question the premise and the promise of SACD.

That, and the fact that I loathe surround sound.

Lars achieved his best sound with Lamm electronics, but he later had a falling-out with Vladimir Lamm. The result of the ensuing silence of the Lamm was that Lars moved on, eventually to Tenor Audio. Sweden and Russia have been at war before.

Lars placed Shun Mook Mempo discs strategically throughout the room. (Tice clock, anyone? He had one of those, too, which I once mischievously switched for the RadioShack lookalike.) Do such devices amount to the audio equivalent of homeopathy? Since I can’t ask Lars for a little while longer,
try Clark Johnsen, author of The Wood Effect.2 Remember: If you want to hear a difference, you will hear a difference. In Lars's memory, his Mpingo discs now reside in the listening room of the Verity Audio factory.

The Parsifals are soundstaging champs, and Lars was a champ at getting them to soundstage; the speakers “disappeared.” Unfortunately, so did Lars, as Audiophilia nervosa took its toll.

I had to decide whether to place the Parsifals in my listening room, for nearfield listening and maximum soundstage, or in our larger living room, for deeper bass. Part of the design brief for the Parsifal, Julien Pelchat told me, was to develop a full-range speaker with a small footprint. Marina actually wanted these speakers in the living room. (Boris needs to see these speakers before Natasha takes a flyer on the B&W Zeppelin.)

The Ovation is only the third iteration of the Parsifal.3 The second was the Parsifal Encore. The Parsifal Ovation, like its predecessors, comes in two pieces: a minimonitor on top and a bass cabinet below. Make that three pieces, counting the solid aluminum middle plate, sandwiched with Sorbothane, that separates the two cabinets. “We tried other materials besides aluminum,” Pelchat told me when I visited the factory last year.

Other manufacturers have used this similar arrangement—minimonitor atop separate bass cabinet—but I’m not sure anyone has done so more successfully than Verity. The Parsifal produces none of what I used to tell Lars was “The Hump”—an excess of energy in the upper bass. Filtering out bad vibes is tricky.

If you desire, you can have half a Parsifal—the minimonitor only, called the Parsifal Ovation Monitor—but that’s a little like seeing only the first three acts of a four-act opera. I tried the Monitors on 20” stands and couldn’t live with the lack of bass extension. But if you already own a pair of good subwoofers, this might be an option.

In piano-black lacquer, the Parsifal Ovation Monitor costs $9495/pair. This includes the isolation platform for use with appropriate speaker stands, which are on you. The complete Parsifal Ovation system, including bass cabinets, goes for $20,995/pair in piano black. Add more for other finishes, including makore (African cherry), silver, and sycamore. Ante up even more for Quilted Big Leaf Maple: $26,995 is the total tab.

This is not a cheap way to build loudspeakers, but it does make sense. It’s a way to get bass extension without compromising the performance of the midrange and treble or having to endlessly fiddle with subwoofers. There’s another advantage: less hi-fi clutter. What B&W calls “busy-ness.”

You can’t mass-produce speakers like this. As I saw at the Verity factory—an impressive, attractive, well-lit facility—they build speakers on workbenches. The cabinets—usually with a lacquer finish—are produced off-site, which is more or less standard for speaker makers. You don’t want sawdust, and the fumes from stains and lacquers, fouling the air of a speaker factory. Giovanni Nasta, of Opera Loudspeakers, tried that, and it doesn’t work. It did work when Gianni had a lumberyard out back. (Literally true: The original Opera factory had been a lumberyard.)

The Parsifal Ovation System—Monitor plus bass cabinet—measures 41” high by 10.5” wide by 14” deep (1041mm by 260mm by 350mm) and weighs 90 lbs (82kg). The fact that each speaker comes in two parts makes it easier to haul and handle. Still, this is a job for your dealer. You can use gliders until you get the speakers into their sweetest spots; then install the spiked brass and steel cones.

The Monitor is a two-way, with a 1” (25mm) soft-dome Scan-Speak tweeter, modified in-house by Verity, and a 5” doped-polypropylene midrange driver custom-made by Audio Technology, of Denmark. “Man, that midrange driver is quick,” I said, slowly, to John Quick, sales and marketing manager of Verity Audio and, through his Tempo Sales & Marketing, Verity’s US distributor. And, being a dope myself, I asked Bruno Bouchard what “doped polypropylene” means. Treated with mineral and silica, he said. For stiffness. Heh-heh. “We gain a lot of deep bass without having to increase the excursions of the driver. So we can offer a wide-bandwidth loudspeaker in a small enclosure.”

The aim, Julien Pelchat emphasized, is not to achieve some arbitrary measurements, but to “get as close to real music in a real live studio as possible.” Fred Kaplan, apparently concurring: The Parsifal Ovation is his reference speaker.

Bruno, even quieter than Julien, broke his silence: “Everyone knows that a minimonitor has better soundstaging ability than a big floorstander. It’s also much easier to control panel resonances when a loudspeaker has small rather than large panels.” (A point that John Marks has made in these pages.) “When you have a tweeter that extends up to 50kHz, the cone displacement of that driver is extremely small while the acceleration factor is very high. When you have a woofer with a large cone displacement in the same enclosure, it can rock and shake the whole enclosure. So isolating the upper cabinet from the lower cabinet just makes sense.”
Unprecedented.
In 2008, The Absolute Sound honored three of our subwoofers with an Editors’ Choice Award.
(The other two haven’t been reviewed yet.)
Pelchat described the isolation platform, which Lars was correct in identifying as the key to the Parsifal's performance: “We wanted to find a wide-bandwidth filter—a combination of two kinds of filters. The mass of the aluminum plate is quite heavy. This mass is suspended between the Sorbothane, which acts like a really lossy spring. The mass of the aluminum vibrates such that it filters all the low frequencies that are trying to go from the bottom to the top cabinet, while the Sorbothane filters control how the mid- and high frequencies reach the bottom cabinet.”

In the bass cabinet, the 8” woofer cone is also doped polypropylene, the driver from Audio Technology. In most installations, the woofer will fire to the rear. But you can turn the cabinet around so that the woofer fires forward. Pop off the Verity badge to reveal an extra pair of speaker terminals.

Most users will run a single pair of cables to the bass cabinet. A pair of jumper cables connects the bass cabinet to the Monitor on top. Those into biamping take note: There’s a crossover built into the bass cabinet to stop the Monitor from operating almost full-range. If you want to biamp, you’ll need an external high-pass filter from Verity. The first person to request this was... Lars, for his Larnms. Lars was so close to the Parsifal that, in some ways, this speaker is a memorial tribute to him.

The Monitor’s midrange driver operates almost as a full-range driver, which is one reason the Parsifal sounds so seamless. The crossover point to the woofer is 150Hz, the one to the tweeter is 5.5kHz. According to Julien Pelchat, all slopes are 6dB/octave except to the tweeter, where the high pass is 18dB/octave.

Bruno broke in: “When you look at the Fletcher curve of the sensitivity of the human ear, you realize the ear is very sensitive—especially sensitive—between about 900Hz and 2500Hz. We wanted to avoid any crossover in that range, because any phase shift would be easily perceived by the human ear. This is how we settled on 150Hz for the bass.

“We were concerned, too, with the dispersion pattern. We originally set the crossover point at 3kHz and used a third-order filter. But there was a resonant peak. We wanted to solve the breakup problem in the driver itself rather than add more parts to the crossover. This is why we changed the midrange driver, effective with the Parsifal Encore. Originally, the midrange driver had a long voice-coil and a short gap. The weight difference between the cone itself and the voice-coil created a resonance at the juncture of the two.

“So we redesigned the driver to have a short voice-coil and a long gap, in order to have the two masses the same. The acceleration factor improved. We reworked the crossover on the fly at around 5.5kHz. The minute we listened, we knew that the short-voice-coil/long-gap combination gave us the sound we wanted.

“When designing a loudspeaker, you have to find the right balance and compromise,” Bouchard philosophized. “You always have to compromise, and this is why the ear becomes so important. We are able to take very precise
to achieve an arbitrary set of measurements—speakers by the numbers, as it were. This, of course, is what less experienced audio engineers tend to do. These days, speaker-design software is such that they can’t go too far wrong. But the measurements—and the software—don’t guarantee the most musical results.

Don’t trust a loudspeaker designer under 40. You can’t voice a great loudspeaker at your workstation, but you can spare yourself from making a bad or even a mediocre one. The late Julian Hirsch’s dream has come true: all well-engineered speakers sound more or less alike. Ah, but not quite.

Verity’s John Quick delivered the Parsifal Ovations in their school-of-hard-knocks Air Transport Association (ATA) containers, which is what all Verity speakers come packed in. These hard, metal flight cases with interior padding are the kind that photographers and cinematographers haul from location to location. We set up the Parsifals in my listening room, where I can (sometimes) achieve phenomenal imaging, though not the most extended bass response. But I really wanted to listen to these in the nearfield, more or less as Lars did. But unlike Lars, I insist that no room treatments be used. I find that books and LPs create an acoustical environment that’s just fine.

I don’t suggest that the Parsifal Ovations were unduly twitchy, but they did respond—spectacularly—to proper room placement and Lars-like freeranging to get everything just right. John Quick didn’t ask me to hold a tape measure to the tip of my nose, but he did use a Leica Disto laser tape measure. I have to get one of these things. They’re useful for getting distances precisely equal.

Mostly I used Conrad-Johnson’s CT5 line-stage preamp and ET50S tube/solid-state hybrid power amp, rated at 250Wpc into 8 ohms, which I reviewed in July 2008 (Vol.31 No.7). I also tried a pair of Musical Fidelity 550k Superchargers, rated at 550W into 8 ohms. Both amplifiers gave gratifying results in terms of extended, tight

THE MONITOR’S MIDRANGE DRIVER OPERATES ALMOST AS A FULL-RANGE DRIVER, WHICH IS ONE REASON THE PARSIFAL SOUNDS SO SEAMLESS.
bass. You can run the Parsifal Ovation on less power: its sensitivity is given as 89dB/2.83V/m on-axis. Its impedance is 8 ohms nominal, 4 ohms minimal.

The Parsifal Ovations sounded dynamically constrained and shy of bass with small single-ended triode (SET) amps in my listening room. I tried the Quicksilver SET monos, rated at 9W into 8 ohms. Lovely midrange and treble, but not enough power to control the Parsifal’s woofers. I couldn’t see much point in trying my flea-watt Sun Audio SV 2A3, with 3.5Wpc.

Unless you’re prepared to spend big money for big-time tube amplification, I suggest solid-state. Don’t overlook Musical Fidelity’s 550k Supercharger, which is an excellent amp and a great value in its own right; you don’t have to buy into this business of using the Superchargers to amplify another amp.

The Parasound Halo JC 1 monoblocks would have been paragons, too, but I wasn’t up to moving them from the living room. I did try my reissue edition of the tubed McIntosh MC275, rated at 75Wpc into 8 ohms. Okay, but I couldn’t get the Parsifals to open up, dynamically, and growl.

With powerful amps I got powerful sound, and a stage that seemed to make the speakers disappear almost as it had more than a decade ago, for Lars. (Lars used solid-state amps on the Parsifal woofers.) If you can, bring along your amp(s) for a dealer demo of the Parsifal Ovations and hear for yourself whether it’s up to driving these speakers. It would be a shame to spend all this money—more than $20K—and not get true full-range performance. In many ways, the Conrad-Johnson combo was the best I tried.

John Quick’s setup resulted in superb soundstaging and pinpoint imaging, even with the speakers placed far apart: about 4' from the sidewalls, 6' from the front wall, and 8' apart. I sat about 10' away. Lars would have placed magic dots on the drivers—and on my forehead, for that matter.

Instrumental timbres were immediate and convincing. This is not a speaker that took the sound over the top. Because I listen to a lot of chamber music and opera, this is especially important for me. It was hard to make the Parsifal sound hard—but pushing a small amp beyond its limits could do it. There’s much to be said for using a soft-dome tweeter. It was especially welcome with older jazz and historical classical recordings. Good CD transfers of late-1930s 78rpm discs by Bing Crosby and Duke Ellington never sounded better.

There’s also much in favor of a mid-range driver that works over such a wide range: 150Hz–5.5kHz. That’s most of the music and most of what you hear, and I’m sure such a broad bandwidth is what gave the Parsifal its exceptional clarity and coherence, and its truth of timbre. This driver is made exclusively for Verity Audio—no other loudspeaker manufacturer has it—and Julien and Bruno tell me that it’s very pricey. Pelchat and Bouchard do not seem like people who overbuild and overcharge, but it’s true that they’ve decided, as a small company, not to compete in the mass market.

Few other loudspeakers can top the Parsifal Ovation in terms of delicacy, detail, and resolution, without that tipped-up treble favored by certain audiophiles. At the risk of repetition, music lovers sometimes suffer terribly at the hands of audiophiles, who prefer piecemeal performance over general musicality—you know, the kind of nerd who hangs out on the Internet and probably never goes to live concerts. This is not what the Parsifal offers, and if this turns away some customers, Julien and Bruno seem to shrug it off.

There was nothing exaggerated about the sound of the Parsifal Ovation. This can also mean that a demo won’t knock your socks off. With a loudspeaker so highly refined and carefully tuned, I appreciate the subtleties and musicality more over extended listening; nothing leaps out from the loudspeakers to grab me. Which is as it should be. This speaker is more about music than about hi-fi thrills.

The Parsifal will not be updated again anytime soon, say Bruno and Julien. This stability is one thing I greatly admire about Verity Audio. Fourteen years on, they are not already on Series 7 or VIII of the Parsifal.

The appearance of the Verity Audio Parsifal Ovation is stunning, and its sound quality is beyond reproach. I know that all hi-fi products, especially speakers, represent a series of compromises, but I hear no significant flaws here. Aside from the high price—necessary, considering the quality of design and construction—the only thing that might give a person pause is the bass, which is not gut-wrenching.

For me, so much the better.
STILL THE BEST-SELLING JAZZ ALBUM. EVER.

Starring: MILES DAVIS, JOHN COLTRANE, CANNONBALL ADDERLEY, BILL EVANS, WYNTON KELLY, PAUL CHAMBERS, and JIMMY COBB

COLUMBIA

KIND OF BLUE
MILES DAVIS

50th ANNIVERSARY
COLLECTOR'S EDITION

IN STORES NOW

THIS ONE-OF-A-KIND COLLECTION contains the complete studio sessions on 2 CDs, including false starts, alternate takes and a 17-minute 1960 live version of “So What,” an 80-minute DVD featuring a new documentary and the 1959 program “The Sound of Miles Davis,” a 60-page 12x12 deluxe full-color book, a limited edition blue vinyl LP and more.

BARNES&NOBLE
BOOKSELLERS
www.bn.com

World Radio History
Phono Preamps You Can Afford!

Michael Fremer

I n the November "Analog Corner, I reviewed the cost-no-object TnLife Audio Reikon and the Naim Superline with SuperCap2 power supply. But it's obvious that not everyone can spend $43,000, or $10,000, or even $5000 on a phono preamp, so this month I review three affordable phono preamps and a budget-priced one.

Pro-Ject Phono Box II USB phono preamplifier

This moving-coil/moving-magnet phono preamp gets the job done, and its specs are decent for something costing only $200. The gain is 40dB (MM) or 60dB (MC), the signal/noise ratio (no reference level or conditions quoted) is >79dB (MC) or >88dB (MM), the RIAA accuracy is within 0.5dB, 20Hz-20kHz, and the total harmonic distortion (THD) is <0.01% (MM and MC).

The Phono Box II USB is quiet, and avoids the major fault of most inexpensive phono preamps: It doesn't sound hard or brittle, and it doesn't blur images or sharpen things presented. But it's obvious that not everyone is fine with SuperCap2 power supply. Using the highest-quality interconnects, I used TARA Labs Zeros ($16,000/pair), as well as some available at prices less stratospheric. After a lengthy break-in period using the Thor Phono Burn, I first listened with the wall-watt power supply, switching between the JLTi and the ultra-expensive TnLife Audio Reikon and the Naim Superline/SuperCap2.

Not surprisingly, given its specs, the JLTi PhonoPre was extremely quiet, with plenty of gain for all but the low-output MC cartridges. Even with its standard, low-grade power supply, it avoided all of the deficiencies of cheap phono preamps, particularly brittleness and harmonic stinginess. In fact, the sound was on the warm, rich, slightly soft side. Lyra's Titan i cartridge, mounted in the Continuum Cobra/Caliburn tonearm/turntable sounded best at the JLTi's default 47k ohms load (no RCA plugs inserted).

Compared to the far more expensive competition, the JLTi's dynamics were particularly impressive job of sorting out the goods; though its dynamic presentation was hardly anemic. Bass, while rich and extended, was somewhat soft and diffuse. Spatially, the stock JLTi did an extremely good job of sorting out the goods; though it didn't place things as far out on the soundstage as is possible, it came remarkably close to fully revealing the long, long reverb trails on those great records we all know and love, and its retrievals of low-level detail and microdynamics were particularly impressive for $1650 and a wall wart.

Vacuum State JLTi PhonoPre phono preamplifier with external power supply

This diminutive, Swiss-made phono preamp, designed by industry veteran Allen Wright, offers MM and MC compatibility, and loading via resistor-fitted RCA plugs. It costs $1650; add $950 for the outboard power supply (a wall-watt power supply comes standard).

The JLTi PhonoPre features zero negative feedback, passive RIAA equalization, and no op-amps in the signal path (not that there's anything wrong with op-amps these days). MC gain is 55dB, MM 40dB, with an adjustment range of 20-58dB (though that's best done by a technician). The claimed figures for noise and harmonic distortion are exceedingly low (~97dBV at 1kHz MC, under 0.0009% second-order harmonic distortion), the output and overload margins commendably high (9.0V RMS output, 40dB overload for a 0.4mV MC cartridge). The claimed RIAA accuracy is ±0.1dB, 10Hz-50kHz. According to Vacuum State, these numbers are actual, taken from production units.

Because Vacuum State recommends using the highest-quality interconnects, I used TARA Labs Zeros ($16,000/pair), as well as some available at prices less stratospheric. After a lengthy break-in period using the Thor Phono Burn, I first listened with the wall-watt power supply, switching between the JLTi and the ultra-expensive TnLife Audio Reikon and the Naim Superline/SuperCap2.

Not surprisingly, given its specs, the JLTi PhonoPre was extremely quiet, with plenty of gain for all but the low-output MC cartridges. Even with its standard, low-grade power supply, it avoided all of the deficiencies of cheap phono preamps, particularly brittleness and harmonic stinginess. In fact, the sound was on the warm, rich, slightly soft side. Lyra's Titan i cartridge, mounted in the Continuum Cobra/Caliburn tonearm/turntable sounded best at the JLTi's default 47k ohms load (no RCA plugs inserted).

Compared to the far more expensive competition, the JLTi's dynamics were particularly impressive job of sorting out the goods; though it didn't place things as far out on the soundstage as is possible, it came remarkably close to fully revealing the long, long reverb trails on those great records we all know and love, and its retrievals of low-level detail and microdynamics were particularly impressive for $1650 and a wall wart.
Is it fair to compare this tiny dancer to the very best? If it weren’t, I wouldn’t do it. The Vacuum State JLTi didn’t embarrass itself in that race, and for $1650, which includes an MC input, that’s amazing. And don’t forget, I was using it with a phono cartridge and turntable priced in another galaxy.

I also tried the JLTi’s MM section, with both the Lyra Titan i and a few MM cartridges I’m reviewing, including the excellent Ortofon 2N Black. The MM section sounded more open and better controlled in the bass with both the Lyra and Ortofon, though not surprisingly, there wasn’t enough gain for the MC Titan i to be used in the MM mode.

Adding the outboard power supply ($950) took the JLTi’s performance up a few notches, particularly in terms of the all-important rhythmic grip and the preamp’s ability to deliver musical meaning. However, the JLTi’s basic character remained unchanged: on the warm, slightly soft side, with dynamics that were modest compared to those of far more expensive phono preamps, and instrumental images that tended to blend together instead of being entirely separate in space.

The Vacuum State JLTi PhonoPre is among the best values currently available in MM-MC phono preamps, particularly at $1650 with wall-wart power supply. There’s serious competition from EAR’s 834P and Simaudio’s Moon Classic LP5.3, though if the JLTi’s specs are accurate, it offers more accurate RIAA and overload margins than the Moon LP5.3 John Atkinson measured in the October and November 2007 issues of Stereophile. At $2600 including the outboard power supply, there’s some competition from Whest Audio and a few others, though I was unable to do any direct comparisons.

If you’re considering the Vacuum State JLTi PhonoPre, start with the $1650 edition; then, once you’ve gotten a handle on its performance, try it with the external power supply. It’s a better phono preamp at $2600, but a far better value at $1650.

Bel Canto e.One Phono3 phono preamplifier
I wrote the above before I’d checked out Bel Canto’s new e.One Phono3. At $1495, the Phono3 competes directly with the wall-wart version of Vacuum State’s JLTi PhonoPre ($1650). However, the Bel Canto is made in the US, and therefore has the advantage of not having to compete with the Swiss Franc.

The Bel Canto comes housed in an impressively sturdy chassis with a ½"-thick faceplate. Its RCA jacks are chassis-mounted rather than being fixed to the printed circuit board. Gain and loading are via two DIP-switch panels, each containing nine settings, with a choice of 40dB or 60dB gain, five resistances, and three capacitances. The result is a total of 14 possible loadings ranging from 47k to 24 ohms, and a choice of eight capacitances. You’re pretty much covered.

Laid out on the four-layer circuit board are audio amplifiers and output drivers based on class-A integrated circuits of low noise and low distortion. The internal power supply has “ultra-low-noise second-stage, dual independent regulation” for the class-A amplifier sections. Bel Canto claims for the Phono3 a bandwidth of 1Hz–50kHz;
ANALOG CORNER

The e.One Phono3's dynamic delivery was immediately and obviously superior to the JLTi PhonoPre's. The Bel Canto also managed to separate individual instruments on the soundstage with greater precision, and was overall a far boisterous, more exuberant performer, pushing appropriate images well in front of the speakers. Its bass attack was more precise though less supple, and not as well textured. In fact, its attacks seemed overall cleaner and more precise, including the sound of cymbals, though with a trace of edge.

On the other hand, even with the Phono3 loaded down to 100 ohms, there remained a trace of brightness and smear to sibilants, with a slight hollowness to the overall picture. That's the tradeoff at this price. Also, images were somewhat enlarged, with less finesse to the decay.

The Vacuum State JLTi PhonoPre offers greater midrange resolution and overall smoothness and finesse, a lower noise floor, and definitely better resolution of low-level detail—but also a more smothering softness and some bass limpness. By contrast, the Bel Canto e.One Phono3 is brasher and more dynamically sounding, with better high-frequency attack, but you run into a bit of edge.

Using both of these affordable preamps, I played a test pressing of an upcoming, excellent-sounding vinyl edition of the Eagles' Hotel California, cut by Kevin Gray at AcousTech. The differences couldn't have been more clear: the Bel Canto made the toms pop. The Vacuum State JLTi produced a softer, perhaps more nuanced skin tone, but it couldn't make the toms pop. You definitely want to hear "Victim of Love" through the Bel Canto e.One Phono3—even the piano on "The Last Resort" sounded more convincing through it. But a piano concerto? The nod goes to the JLTi in terms of the hammer touch and low-level resolution, but the ultimate choice will probably depend on your system and cartridge. If your cartridge is soft and wimpy, the Bel Canto might wake it up. If it's bright and aggressive, the Bel Canto might make your ears bleed, while the Vacuum State might provide...
ESPRIT Ex
live sound.

"The ESPRIT 'COMETE' Ex is a fine thing: a much better and more musical loudspeaker than one usually finds at this price and size..."

Art Dudley, Stereophile.

www.triangle-fr.com
just the softening cushion you need. The Lyra Titan 1 sounded clean and bracing through the Bel Canto, a bit soft and sluggish through the Vacuum State, though the latter revealed more of the Lyra's retrieval of low-level nuance and detail.

Lehmannaudio Black Cube Decade phono preamplifier
Much has occurred in the analog world since 1995, when Norbert Lehmann introduced his original budget phono preamp, the Black Cube. For one thing, there now is an analog world—back then, there was an analog ghetto.

Lehmannaudio now has a broad line of phono preamps, topped by the Silver Cube ($5199). Just below the Silver Cube is the Black Cube Decade ($2399 in black or silver), a two-box model with an outboard power supply with a 30W toroidal transformer, connected to the preamp module with a Neutrik multipin connector.

Lehmann is the least forthcoming with specifications of the manufacturers here, but here's what I found: The input stage includes pro-audio op-amp used in mixing consoles and mike preamps, and the passive RIAA equalization is done with precision MKP caps. A slot in the circuit board allows you to choose the resistive loading via a bank of chassis-mounted DIP switches: 100 ohm, 1k ohm, or 47k ohms, and three choices of capacitance for MM cartridges. The front-panel switches allow you to activate a rumble filter set to 6dB/octave below 60Hz, switch between gains of 36dB (MM) and 56dB (MC), and, should you need it, add another 10dB (MM or MC), for a total gain of 66dB.

The sound spoke for itself. The Black Cube Decade decoded the most inner detail of the four phono preamps discussed here, improving on the Vacuum State JLTi PhonoPre's detail retrieval while retaining the Bel Canto e-One Phono3's dynamic thrust. It also produced excellent bass dynamics that were similar to the Bel Canto's, but with greater subtlety and textural resolution.

The Black Cube Decade produced what the JLTi PhonoPre hinted at but couldn't quite deliver in terms of bass elasticity. If you're listening through small two-way speakers, these bass issues may be less important than if you're listening to big full-range speakers.

The Lehmann pushed the soundstage back and relaxed the transient presentation compared to the Bel Canto, permitting subtle gestures to assert themselves more fully; and it was, by a wide margin, the most transparent of these four phono preamps. It managed the most nuanced and complex reproduction of cymbals, though in doing so it traded away some shimmer and sparkle.

The Black Cube Decade's most prominent negative was a slight grayness to the overall sound, and a hint of "oiliness" that I could hear as overly smooth vocal sibilants. Over prolonged listening, this minor aberration became inaudible. I noticed it only because I was switching among a number of different phono preamps.

For instance, on Warner Bros.' upcoming reissue of Van Morrison's Moondance (the vinyl fairy has been good to Mikey), cut by Kevin Gray, the acoustic guitars on "Caravan," not to mention the background voices, were revealed with incredible delicacy. I could feel fingers touching fretboards as they created the chords, and sensed the subtest of strumming gestures. Van's voice went from cardboard-cut-out to the sort of reality-based voices only the very best phono preamps can deliver.

The Lehmann's overall timbral presentation, slightly on the warm side of neutral, was akin to the Vacuum State's, but with better articulation of bass transients and more precise separation of instruments. Microdynamics and retrieval of low-level details were also improved. The Black Cube Decade's reproduction of decays of instrument sounds was in a class by itself among these four phono preamps, but it really set itself apart in terms of textural superioriety. The congas on Van Morrison's "Come Running" said it all. I could hear and feel the elasticity of the pop of the struck drum skin that, to one degree or another, was missing through the other preamps. The Decade also managed the most nuanced and complex reproduction of cymbals, though in doing so it traded away some shimmer and sparkle.

The Black Cube Decade's most prominent negative was a slight grayness to the overall sound, and a hint of "oiliness" that I could hear as overly smooth vocal sibilants. Over prolonged listening, this minor aberration became inaudible. I noticed it only because I was switching among a number of different phono preamps.

In many ways, the Lehmann Black Cube Decade reminded me of Ray Samuels' op-amp-based phono preamps: very smooth and well-detailed, with a laid-back overall sound and that slightly "oily" but easily ignored sonic aftertaste.

If you have $1495 or $1650 to spend on a phono preamp, the Bel Canto e-One Phono3 and Vacuum State JLTi PhonoPre are attractive if soni-
cally different choices. But if you can spend up to $2399 or even $2600, instead of investing another $950 in the JLTi's optional power supply, get the Lehmannaudio Black Cube Decade. That's what I'd do.

Clearaudio Matrix record-cleaning machine
I asked distributor Musical Surroundings for one of these swell-looking machines in clear acrylic to use in shooting the record-cleaning section of my new DVD, It's a Vinyl World, After All! (now available). The Matrix costs $3600 in black. It's beautifully made, relatively quiet, pumps cleaning fluid onto the record automatically, spreads it via a microfiber brush whose height is adjustable, and has a bidirectional platter, as well as a record clamp that's fitted with a gasket to keep you from wetting your collectible record's label (or your pants) if you get too liberal with your fluid. There are even two suction levels: Regular and Turbo.

In terms of build quality, quiet operation, and smooth performance, the Matrix is superior to VPI's HW-17F. Why VPI's Harry Weisfeld has yet to offer a gasketed clamp is a mystery to me.

The Matrix is Deluxe with a capital D. If you've got the money and want a machine that will look great in your listening room, you can't go wrong here—especially if your significant other doesn't want to hear a loud vacuum cleaner other than when he or she is cleaning the carpet—or making you do it. But I can't say that the Clearaudio Matrix is better at squirting fluid on or sucking it off LPs than the VPI, which costs only $1325 and includes a cooling fan for continuous operation. In fact, though I own an HW-17F, I never use its fluid reservoir and pump—I prefer to apply the cleaning fluid manually. I even remove most of it manually, using the vacuum and its precious velvet lips only to remove applications of superdistilled water (for reasons explained on my DVD). And because I don't spend all day every day cleaning LPs, VPI's basic HW-16.5 ($540) is all I, and probably you, really need.

Unless you want something far quieter, much better built, and costing seven times as much. If money isn't an issue, seriously consider the Clearaudio Matrix. Otherwise, you can get the same functionality for a lot less. But if I had $3600 to burn, I'd buy one.
New Aerial designed woofers produced by Scan Speak with exclusive 3-layer cones consisting of a rigid German Rohacell core with woven carbon fiber and glass fiber surfaces. Long linear drive. All-new crossover networks. High power true-ribbon tweeter. Two piece, double wall cabinets. Premium finishes in high gloss paint as well as beautiful mirror imaged veneers.

Crystal Cable wishes you Happy Holidays!

www.crystalcable.com
To a child with a mono cartridge, everything is a horizontal modulation

I'm also old enough to remember when "Made in Japan" was an insult. As a child, I saw that phrase on only the cheapest or craziest toys—some stamped out of tin and cupped together by a tab with a flimsy edge, some molded from a distinctively smooth, brittle plastic. The latter included a wind-up bunny on wheels that my father brought home one day: my favorite toy, ever. (It came with a double-barreled dart gun that I seldom used, partly because I loved the bunny too much to shoot it, and partly because the suction-cup darts didn't stick to that kind of plastic in the first place.)

Things changed. By the time I was in sixth grade, my friends and I had transistor radios, all made in Japan. They looked gaudy and cheap, but worked beautifully well. In the daytime, after school, they picked up the New York City AM stations we lounged to hear (I can still remember how the Cyrkle's "Red Rubber Ball" sounded on mine), and at night they pulled in music from as far away as Detroit. It was a magical time, now lost to us forever, having been flushed down the toilets of talk and technology.

Things changed again. By the time I graduated from high school, we all wanted amplifiers from Pioneer or Sansui, just as we all wanted to drive Datsuns or Toyotas.

Such were the growing pains and pleasures of Japan's postwar industrial economy, the so-called "Japanese miracle" of the 1960s. What we didn't know—we, in this instance, being the myopic consumers of the no less miraculous West—was the nearly inestimable importance of craftsmanship within Japan's 16,000-year-old homogeneous culture: No one on Earth understands and appreciates sheer quality more than the Japanese. And for as long as I've been alive, Japanese artisans have created goods that stand alongside, if not above, the things made anywhere else in the world.

But the key word is *artisan*. Think high price, limited production, less-than-universal appeal. Think handmade knives and saws, handwoven fabrics, hand-cut papers, hand-painted stoneware and ceramics.

Think mono phono cartridges!

**Between formats**

Mono was the only game in town during most of the history of recorded sound, from Emil Berliner's commercial discs of 1894 to the first stereo discs of 1958. But most of the recordings made during that time exist only as 78rpm shellac records: Microgroove mono LPs didn't come around until 1948. Thus, given both a very long life and a willingness to buy into every new analog format as it was introduced, your collection of flat, grooved records would represent 54 years of 78s and 50 years of stereo LPs—only 10, possibly 20 years of mono LPs.

The point being: Despite the sheer, undeniable brilliance of the music recorded during that period of time—historic recordings by Miles Davis, Duke Ellington, Lester Young, Billie Holiday, Walter Gieseking, Fritz Kreisler, Wilhelm Furtwängler, Bill Monroe, the Stanley Brothers, Josh White, Elvis Presley, Buddy Holly, and more—and despite what I or a handful of other mono enthusiasts might tell you about the wonders of well-reproduced mono sound, the market for mono cartridges is and always will be limited. To put it mildly. That's fine with Haruo Takeda, the former Audio-Technica employee who went on to design and build phono cartridges for Krell, Mark Levinson, and Cello, and who even lent his talents to Koetsu in that company's early days. Approximately 30 years ago, Takeda-san began making his own artisanal phono cartridges, which he sold under the trade name Miyabi—a word that can be traced to a Heian emperor's court, and describes a subtle, refined, "toned-down" aesthetic infused with sparkle and grace.

In recent years, Hanto Takeda has made Miyabi cartridges specifically for the Japanese audio company 47 Laboratory and its American distributor, Sakura Systems—an arrangement that resulted in the enduringly well-received Miyabi 47 ($4400), a low-output moving-coil cartridge that's among my own references. Now Sakura Systems has begun shipping Takeda-san's first new-production cartridge in years, the Miyabi Mono ($2800).

Although the Miyabi Mono is outwardly identical to the Miyabi 47, it's a different animal underneath, with higher output (0.7 vs 0.3mV) and higher DC resistance (3.4 vs 2 ohms). The new cartridge has the same aluminum-alloy cantilever and line-contact stylus of the Miyabi 47, but Yoshi Segoshi of Sakura Systems says the Miyabi Mono was designed specifically and exclusively for mono playback. In particular, according to Segoshi, the Mono's cantilever suspension is intended not to move in the vertical plane at all, so that its motor will respond exclusively to mono (horizontal) groove modulations. Thus the new Miyabi should never be used to play stereo records, he says, lest its suspension be damaged by the steady tattoo of vertical bumps.

Segoshi sent me a review sample of the Miyabi Mono a few months ago that I've now used in two different

2. For that reason, out of respect to manufacturer and distributor, I decided against performing the "test" I usually apply to mono pickups: that of playing the vertical-only (left-minus-right) track on the Hi-Fi News Test Record and listening for rejection of the 39kHz tone.
tonearms: the Naim Aro and, by means of the Yamamoto HS-1A ebony headshell, the EMT 997. I've also played the Mono through a number of different step-up devices: active preamp boards for DNM 3D Primus and 3D Six preamplifiers, plus step-up transformers from Lundahl, EAR, Auditorium 23, and Koetsu. With regard to passive gain devices, the new Miyabi resembles the old in its preference for the lowest-impedance primary coils. The recommended downforce is 2gm, and the distance between its stylus tip and the cartridge mounting bolts is such that the Miyabi Mono exhibited nearly perfect van Baerwald overhang in the Naim Aro's fixed headshell.

I started, as I often do, with good keyboard recordings: the above-mentioned Walter Gieseking, along with Wanda Landowska's very deliberate traversal of J.S. Bach's Goldberg Variations (RCA Victor LM-1080). In particular, the former's wicked-fast performance of Beethoven's Sonata 21, "Waldstein" (Angel 35024), had sonic presence and musical flow in abundance. The Miyabi played Gieseking so well that I could relax and enjoy the humor he found in the piece—as well as the humor he found in much of Debussy's music with which I'd begun, and which this cartridge honored so well. The Miyabi was second to none—and well beyond the Lyra Helikon Mono—at conveying both the substance and the scale of good monophonic recordings.

The Miyabi Mono compelled me to return again and again to the solo-piano music with which I'd begun. It wasn't until I auditioned, and ultimately bought, the EMT OFD 25 monophonic pickup head ($1500) that I could appreciate Arturo Toscanini's recordings with the NBC Symphony of Respighi's Pines of Rome and Fountains of Rome (RCA Victor LM-1768), an LP that had languished in my collection for years. The Miyabi Mono didn't play it with the same intensity of color as the EMT, but the new cartridge was just as dramatic and tactile, making the piano's entrance particularly striking and believable. Individual notes within the many harp and celeste arpeggios appeared and died away with realistic beauty and clarity, and strings sounded surprisingly sweet and well textured for a recording from the early 1950s. That last description could also apply to the sound of Sonny Rollins' saxophone on his 1951 debut album, Sonny Rollins Quartet (Prestige PRLP 137). Interestingly, Sonny's tenor is the most believable sound on the recording—the timbre of Kenny Drew's piano seems especially weird to me, regardless of playback gear—and the Miyabi Mono honored it to the fullest. Like the Miyabi 47 cartridge, the Mono was dynamically well nuanced and, again, dramatically intense: a perfect vehicle for the jazz of that era.

Still, the Miyabi Mono compelled me to return again and again to the solo-piano music with which I'd begun, and which this cartridge honored so well. The Miyabi was second to none—and well beyond the Lyra Helikon Mono—at conveying both the substance and the scale of good monophonic recordings.

I have nothing against two-channel recordings: the above-mentioned Wiley Gieseking, along with Wanda Landowska's Goldberg Variations (RCA Victor LM-1080). In particular, the former's wicked-fast performance of Beethoven's Sonata 21, "Waldstein" (Angel 35024), had sonic presence and musical flow in abundance. The Miyabi played Gieseking so well that I could relax and enjoy the humor he found in the piece—as well as the humor he found in much of Debussy's music with which I'd begun, and which this cartridge honored so well. The Miyabi was second to none—and well beyond the Lyra Helikon Mono—at conveying both the substance and the scale of good monophonic recordings.

THE MIYABI MONO COMPelled ME TO RETURN AGAIN AND AGAIN TO THE SOLO-Piano MUSIC WITH WHICH I'D BEGUN.

Haruo Takeda, who works alone in a studio just a few train stops from his home in Tokyo, is 75 years old this year. "He's in good health," says Yoshi Segoshi, who visited Takeda-san two weeks ago as I wrote this. "But in five years, I'm not so sure he'll want to do this anymore." The Miyabi Mono would be a wonderful thing to have even if it were built on an assembly line; as the product of a true artisan whose production is limited in more than one sense, it may be considered both a highly recommendable product and a wise audio investment.

Between seasons
In the middle of the Summer I spent several hours at the Grey Fox music festival, which was relocated from its original site in the Hudson River Valley to a farm not far from Albany. Late in the Summer I spent a number of hours running errands in my old home town of Oneonta, NY. On the whole, Grey Fox had cleaner walkways and better food, not to mention revelers without the thuggish vibes.

There was music, too. Most was at least very good, and some was brilliant—the latter including David Grisman's Bluegrass Experience, anchored by Jim Nunnelly on guitar (borrowed...
Imagine Is might be one of the best $2000/pair loudspeakers I've ever heard.


Imagine a new method of cabinet construction yielding seamless, curved, wood veneered forms that are supremely solid, and acoustically inert.

Imagine a new clay-ceramic-polycone material that optimizes internal damping, low mass and stiffness more effectively than any polypropylene compound we've used to date.

Imagine PSB's relentless attention to the hundreds of small details necessary to make music and movies truly come alive.

Make imagination reality.

Experience PSB Imagine

For more information call 1-888-772-0000 or visit www.LenbrookAmerica.com

The Finest Selection of Audio Components in the World.
LISTENING

Finally, An In-Wall Speaker With Nothing to Hide!

The Insider's clarity and realism sets it apart from other in-wall speakers. $2499/pair

"No one in the room could believe such powerful, accurate sound was emanating from these diminutive in-walls... Though the Insiders were located high on the wall, the music was very good at ear level and the dispersion was excellent"

-Mike Quinn, Jazz Times

"The gasps of disbelief when Jeff Joseph revealed the source of his demo's sound proved how effectively the Insider counters conventional wisdom"

- Wes Philips Onhiifi

from Jon Reischman and the Jaybirds) and Grisman's son, Samson, on upright bass. The seminal band Hot Rize regrouped in celebration of their 30th anniversary, with the always amazing Bryan Sutton standing in on guitar for the late Charles Sawtelle, and their set was nothing short of transcendent. As usual, the Del McCoury band demonstrated that "slick" needn't mean "soulless," and the Infamous Stringdusters did much the same (though I missed Critter Eldridge, who departed the group in order to join Chris Thile’s new project). The Gibson Brothers sang sweetly, Dan Paisley sang distinctively, mandolinist and national treasure Ron Thomason told some new stories, and Béla Fleck turned heads, albeit more for the songs he didn't play than the ones he did. Apart from the above-mentioned Bryan Sutton, the festival was conspicuously short of world-class guitarists (Tony Rice was booked elsewhere, David Grier was in Nashville working on a new studio album, Norman Blake didn't tour this year, and I have no idea where Russ Barenberg was), but there's always next year—and I'll definitely be back. And I do intend to stand in that field, by myself if need be, when Grey Fox turns 33.3 years old in November 2009.

I will not, however, spend another weekend of my life camping at any of the smaller, less-well-run festivals that pock the summer landscape. In August, I took a chance on a bluegrass bash that was new to me, held on a working livestock farm. The people were nice and some of the music was good, but the stage turned out to be the front porch of the farmhouse, the sound system was marginal, and late in the following week I fell ill from a water-borne parasite, Cryptosporidium parvum, that landed me in the hospital for a few days. I'm not kidding in the least when I say that, for more than two weeks, I associated the sound of hardcore bluegrass music with colonoscopies, a diet of clear liquids, and the metallic taste that comes from two courses of anti-parasite drugs. It was like that scene in A Clockwork Orange.

Granted, I'm not descended from the hardiest stock. Even when I worked as the Equipment Editor for Backpacker magazine, my idea of a rough breakfast was to sit at the counter of the diner instead of taking a booth. And the older I get, the less willing I am to pay for a few sets of good music with 12 days of diarrhea and permanent gallbladder damage.

I remain a staunch and stalwart supporter of the singularly American art form known as the bluegrass festival, and I'll continue to recommend the same to my readers. But for your peace of mind and my own, I suggest you stick to the largest, best-run events—Grey Fox in New York, Telluride and RockyGrass in Colorado, Merlefest in North Carolina, Wintergrass in Washington, and so forth—and consider leaving the tent in your garage and making reservations at the nearest Marriott, Microtel, or Motel 6. I've come to realize that there are times in every music lover's life when soullessness is not entirely without appeal.
From Tibetan waterwheel chants to Mississippi Delta blues, Mark Levinson® components will perfectly reproduce music and movie performances of every variety in your home — as critical listeners of every kind have been graciously acknowledging for nearly 40 years.

The Mark Levinson N°53 reference power amplifier is a case in point. To say it outperforms any of the brand’s previous amplifiers is to state — definitively — that the audio world has a new reference standard. Featuring Interleaved Power Technology, a new approach to digital amplification with shorter signal paths and improved cooling, the N°53 responds faster, and with greater linearity and less distortion, than any Mark Levinson product that has come before it, uncovering incredible depth and detail in any source material.

**Simply the Finest Home Audio and Video Components Built Today.**

marklevinson.com

Incorporated, registered in the United States and/or other countries.

Harman International Industries, Incorporated. All rights reserved. Mark Levinson and the Mark Levinson logo are trademarks of Harman International Industries, Incorporated.
The heart of Burmester’s Reference Line System is the newly introduced and already world renowned 069 belt driven CD-Player. With its sensational sound characteristics, superior technical features and unsurpassed manufacturing quality, it will proudly continue Burmesters tradition of setting the highest standards in music reproduction. Combined with the legendary 808 MK 5 Pre Amplifier and the 911 MK 3 solid-state Amplifiers, the B 100 Reference Line loudspeaker drives to perfection. The world patented 948 Power Conditioner eliminates all DC voltage pollution in parallel mode and supplies the whole system with pure balanced AC power. All components are handmade in every detail and entirely assembled in Berlin. Custom made finishes are certainly available on request.

Experience our philosophy: Burmester - Art For The Ear
The GINI Systems “LS3/5a” is an unlicensed and inexact replica of the celebrated LS3/5a outside (remote location) broadcast monitoring loudspeaker originally developed by the BBC in the early 1970s. (For a précis of the LS3/5a’s history, see www.stereophile.com/thefifthelement/690.)

Stereophile reviewed the BBC’s 1977 version of the LS3/5a in March of that year. The directory at the bottom of the webpage devoted to that review (www.stereophile.com/loudspeakerreviews/361) provides links to coverage of later self-proclaimed LS3/5a incarnations, but not to speakers such as Harbeth’s HL-3PES-2, which, although designed as drop-in replacements for BBC-spec LS3/5as in professional use, significantly departed from the original design. Harbeth importer Walter Swanbon of Fidelis AV (www.fidelisav.com) kindly lent me a broken-in pair of HL-3PES-2s ($1850/pair) for comparison with the GINI Systems minimonitor. (My take on the HL-3PES-2 can be read at www.stereophile.com/thefifthelement/1005fifth, and John Atkinson’s “Follow-Up” at www.stereophile.com/loudspeakers/1293harbeth/index5.html.)

GINI System’s LS3/5a homage comes at two very attractive prices: $490/pair in kit form, $560/pair assembled. It’s obvious that a lot of hard work and care have gone into it; the vibe I get from this product is one of GINI’s admiration for, even veneration of the LS3/5a. Rather than a cynical exploitation of the BBC’s heritage, it seems to be a sincere attempt to make the LS3/5a’s virtues available at lowest cost.

I requested that my evaluation pair come already assembled and broken in, but the speakers were nonetheless accompanied by a copy of the assembly instructions, which appear nearly foolproof. These instructions and the owner’s manual are clearly written and well laid out. Those who buy the kit receive with it all necessary tools (no soldering required). The speakers come two in one box, in cloth bags, and securely packed in compliant, noncrumbly foam. Good show, as far as that stuff goes. However, all was not beer and skittles.

The cabinet is clad in high-gloss real walnut veneer on all sides except the front baffle, which is in the traditional BBC livery of black panel with tweeter surrounds of black felt. The brown fabric grille is a faithful copy of the original. The gold-plastic GINI logo, however, seems larger than most of the other LS3/5a badges I’ve seen. Binding posts are for single wiring, and are substantial—more so than on the original. The GINI design apparently departs from the BBC original by not including transformers in the crossover circuit, hence my placement of “LS3/5a” in scare quotes.

The good news is that, for remarkably little money, GINI’s homage approximates the old LS3/5a sound. The so-so news is that, at least for my ears and listening environment, the GINI replicates the old speaker’s vices as much as its virtues—and then some, perhaps. I don’t think the GINI fares all that well in direct comparison with speakers made in the spirit of the LS3/5a but which have “moved on” regarding driver selection and crossover circuitry (and which, of course, cost far more).

I first heard LS3/5as in Nashville in 1979—I believe they were the Chartwell version. I was bowled over by their incisive clarity and punchiness. However, there’s a wonderful French expression: une fausse idée claire. A word-for-word translation does not do it justice, though “a deceptively clear idea” is a good try. Part of the original LS3/5a’s projection of impressive clarity was the result of its lack of complete accuracy: it favored frequencies that convey intelligibility information over those frequencies that convey power and heft. While the various incarnations of the LS3/5a always had an arrestingly natural lower midrange, the upper midrange could be nasal, the treble a bit tizzy, and the upper bass had a designed-in boost: the “BBC hump.” Ongoing design revisions authorized by the BBC helped put things back on track, to a degree. But some time ago, two of the original BBC licensees, Spendor and Harbeth, dropped the pretense of continuing to make “real” LS3/5as, and today offer substantially evolved, quite different-sounding designs as drop-in functional equivalents.

I did nearly all of my listening with Carat’s class-leading I57 CD receiver ($1995) and Cardas Neutral Reference speaker cables, and with the GINIs’ grilles installed. I began, as I usually do, with the electric-bass channel-ID and phasing tests found on tracks 1 and 2 of Stereophile’s Test CD 2. On Richard Lehnert’s spoken introductions, the GINIs showed a noticeable chest resonance and more than a bit of excess sibilance. It also appeared that one speaker’s terminals were wired in reverse. At the time, I didn’t think that very significant, given that the importer had assembled the kits as a courtesy to me. However, my mistake was in not investigating beyond the electric-bass channel-ID and phasing tests. I should
In 1996 Ayre introduced the K-1 preamplifier — a design so innovative and with such advanced technologies that more than a decade later it is still considered one of the finest components available. Now in 2008 history repeats itself — the new KX-R elevates the art of preamplification to a higher plane. Building on Ayre’s zero-feedback, fully-balanced foundation, the KX-R transcends all other designs with its radical new concepts. The revolutionary Variable Gain Transimpedance (VGT) amplification circuit eliminates the conventional attenuator-based volume control completely. This simplified signal path delivers the music directly for a full and complete experience. Destined to become an instant classic, the Ayre KX-R is the reference for the next decade.
have checked each speaker alone with pink noise, and then with the midrange and treble frequency sweeps. Mea culpa. Swapping the speaker cables from hot to cold corrected the woofer, but then put that speaker's tweeter in improper phase, as JA discovered when he measured the GINIs (see “Follow-Up” elsewhere in this issue).

So the GINI LS3/5as had to come back for a relisten after John had snipped and swapped the internal leads from the crossover to the woofer. (JA had e-mailed me his graphs to show the woofer inversion, but I deliberately did not make a detailed study of the test results lest they influence my listening.) The biggest change I noticed on setting up the rewired GINIs was that the “BBC hump” was now more noticeable—not at all what I would have expected. Belatedly listening to pink noise through the GINIs, I found that the transition from woofer to tweeter was noticeable: there seemed to be separate sound sources for the higher and lower components of the pink noise.

The string bass on Time for Love: The Best of Julie London (CD, Rhino R2 70737) was a bit lumpy and bumpy compared with how it sounds through Eminent Technology’s LFT-16, whereas on Bill Berry and the Ellington All-Stars’ For Duke (CD, M+K Realtime RT’001), the GINI’s absence of deep-bass extension was obvious—again, compared with the LFT-16. On Jim Hall’s Concerto (SACD, CTI/Mobile Fidelity Sound Lab UDSDACD 2012) there was a decidedly uncomfortable emphasis of the cymbals on “You’d Be So Nice to Come Home To.” (NB: The Carat I57 is the mellower of the four CD receivers I have on hand at the moment, and the Caras speaker cables are anything but tipped-up in the treble.) The GINI fared better with Donald Fagen’s The Nightfly (CD, Warner Bros. 23696-2), with some, but not too much, of the “typical” small-monitor inciseness. But the treble was still perceptible as such and, overall, borderline fatiguing to listen to, depending on the recording.

The irony of this is that I cheerfully admit that the things I’m being picky about now are probably the same things I’d be less than thrilled about if I had a 1979 pair of Chartwell LS3/5as here. Perhaps GINI Systems’ mistake was in making too faithful a copy of the earliest original LS3/5a. I think it might be the result of the GINIs having been built to meet an unrealistically low price. It could be that increasing the retail price per pair by $100 or $200 would permit the use of a more refined tweeter.

When I switched from the GINIs to the Harbeth HL-3PES-2s, I immediately relaxed. This was really more like it: The Harbeth’s treble was sweeter and smoother, its midrange both fuller and more detailed. Its bass was crisper and deeper. It was, overall, a more "composed" presentation, and so easier to listen to. But for more than three times the price, the Harbeth should be easier to listen to. (For what it’s worth, the Harbeth weighs noticeably more than the GINI.)

During the forthing and backing arrived Arcam’s Solo Mini, a half-rackwidth, half-price, half-power ($999, 25Wpc) version of the category-establishing Arcam Solo Music CD receiver. I had a brief listen with the rewired GINIs; the sound was presentable and workmanlike, but with no hint of magic, no shock of recognition. I think the Solo Mini would work better with a speaker without the GINI’s emphasis on intelligibility, and that the GINI needs somewhat euphonious electronics. I liked the GINI more after the wiring error had been corrected, not hugely, but enough to bump my overall estimation of it up at least a notch.

Despite my concerns about the GINI LS3/5a’s somewhat hot treble and overemphasis in the “intelligibility” (or “presence”) band, I found it capable of delivering an engaging, pleasant musical experience. Taking price into account, it’s a huge bargain—if its sound appeals to you. My recommendation, then, is a qualified one: If your system is more synergistic with the GINI LS3/5a’s virtues than with its vices, and the vintage LS3/5a sound is what you’re after, this speaker should make you quite happy. (GINI also offers, at $630/pair, a combination woofer-stand to make the Harbeth’s own Compact 7 ES-3 into a three-way speaker.)

The other half of my bottom line is a reaffirmation that, as much as I truly love what Harbeth’s HL-3PES-2 does right, its lack of deep bass makes it a somewhat iffy proposition for fans of classical music with great dynamic range and bass (lute sounds heavenly, of course; as does chamber choir)—or, for that matter, rock. Or jazz: the Harbeth’s bass on For Duke lacked just enough weight to be a bit frustrating, and ultimately disappointing. But to get the HL-3PES-2’s refined listenability plus greater dynamic and bass capability (eg, Harbeth’s own Compact 7 ES-3, $3495/pair), you’re moving outside the budget or bargain aisles. So the search must continue.

Fried’s Compact 7 revisited

In my October column, I “non-recommended” Fried Products Corporation’s Compact 7 loudspeaker ($1795/pair) because of an obvious hollow-clapping coloration in the pair the manufacturer submitted for evaluation. John Atkin-

1 After all these years, I have finally been able to place the brief quotation beginning at 2:36 in “Take the W Train”: It’s from “Bewitched, Bothered, and Bewildered,” and a very elegant job of molding the latter’s melody to the former’s rhythm it is!
Ready for your catalog?

800 283 4644
info@legacyaudio.com
son's measurements (October, pp.184-185) confirmed what I had heard: the frequency-response graph of the original samples of the Compact 7 is the worst-looking I can remember in more than 30 years of reading Stereophile.

I expect that controversialists may have second-guessed my decision, once I heard that coloration, not to immediately halt the review process and contact Fried. (I write this before the October issue has been published and any reader comments received.) There were two reasons I went forward with the review. First, the two Compact 7s sounded (and measured) identically, so I ruled out shipping damage. Second, a statement on Fried's website—"Loudspeaker design and performance has little to do with producing a flat frequency response"—indicated to me that what I was hearing was intentional. The sound wasn't flat-out horrible, just sufficiently flawed to be uncom-metrical when, after standing at the listening position, I sat down. (However, the higher- and lower-frequency components of the pink noise no longer seemed to be coming from differ-

The first CD I put on was Attention Screen's Live at Merkin Hall (CD, Stereophile STPH018-2). There was quite a contrast to the aggressive sound of the GINI LS3/5a: the Frieds were quite smooth—a bit too smooth for my taste—but at least the hand claps at the end of "Mansour's Gift" sounded sincere rather than hollow. I then put on Anthony Newman and the Graham Ashton Ensemble's Music for Organ, Brass and Timpani (SACD/CD, Sonoma SAC 001), which sounded a bit veiled, and with the tail of the hall acoustic cut off a bit prematurely. I then put on a new discovery, the John Coltrane Quartet's Ballads, from 1962 (CD, Impulse! GRD 156). If Coltrane's reputation as an "angry tenor" blowing out "sheets of sound" has kept me away, this gentle, quiet collection of Test CD 2, the Fried now sounded at least in the ballpark of respectable and recommendable speakers. The electric bass had both snap and sustain, and RL's speaking voice was natural, with only the touch of sibilance that I think is on the recording. Even better, the differences between the in- and out-of-phase speaking voices and bass tracks were close to the greatest I have ever heard—always a promise of good things to come.

The only thing that raised an eyebrow during my preliminary listening was that the character of the pink noise on track 15 of Test CD 2 changed dramatically when, after standing at the listening position, I sat down. (However, the higher- and lower-frequency components of the pink noise no longer seemed to be coming from differ-

THE NEW FRIEDS WERE INDEED NEW, NOT REBUILDS OF THE FIRST SAMPLES, AND WERE CLAD IN HANDSOME BOOKMATCHED MAPLE VENEER WITH A CLEAR GLOSS FINISH.

ent sources.) A quick listen to the Tallis Scholars' new recording of Allegri's Miserere (CD, Gimell CDGIM 041) produced the same effect: heard from standing up, the timbres were veiled, the soundstage radically foreshortened; when I sat down, all clicked into focus and sounded very nice indeed. I could get halfway excited about this. I next put on Jackson Browne's Late for the Sky (CD, Elektra) and found myself singing harmony on "Fountain of Sorrow"—always a good sign. The cymbal on Jim Hall's Concierto was now in its proper perspective.

I then used, as a torture test, organist James Busby's performance of Herbert Howells' Master Tallis's Testament, from Pipes Rhode Island (CD, Riago 101), in which a 32Hz pedal tone is backed up by a 161Hz suboctave pipe. Nice, as far as it went, which was somewhat short of doing full justice to that 32Hz low C. I ended with cuts from Anna Netrebko and Danielle de Niese. Again, nice, but not as transparent and extended as I have ever heard.

I think that there are more refined and extended tweeters out there—at a price—and Fried must agree with me: their more expensive models have different tweeters. I also think that the
ALL our amps, which start at $1299, share...

- **Soft-start Circuit** Extends component and tube life by powering up the amp gently every time you turn it on.
- **Adaptive AutoBias™** Exclusive to PrimaLuna (and our new Mystère brand), monitors and adjusts bias automatically, lowering distortion and allowing the use of many different power tubes with zero adjustments.
- **Custom Designed Output Transformers** Encapsulated low hum, wide bandwidth for great bass and extended highs.
- **Premium Parts** Fully vented chassis, chassis-mounted ceramic tube sockets, Nichicon and Realcap capacitors. WBT style speaker terminals. Gold plated input jacks. Toroidal power transformer for low hum, and a front end that is dead quiet.
- **Point to point wiring**, with workmanship equal to or better than any product you can buy at any price, period.
- **Heavy gauge steel chassis, and a five step automotive quality finish.** Each coat hand rubbed and polished.
“...the world’s deepest soundstage from CDs that I have ever experienced...a straight Class A recommendation.”


“A no-brainer recommendation at even several times its asking price and a must audition!”

— Dick Olsher, *The Absolute Sound*, Issue 183
Compact 7’s woofer is too large to do complete justice to the midrange. However, what your incremental dollars buy you over the three-way, $1090/pair Renaissance Audio MLP-403.5 that I wrote about in August 2008 is not only better industrial design and fit’n’finish, but a more coherent sound. And while the Renaissance’s bigger woofer might give you more bass extension, the Compact 7’s bass is faster and punchier.

Fried’s Compact 7 is handsome and well made. Furthermore, when the right crossover is properly connected to the woofer and the tweeter, it has a very respectable sound that I can get enthusiastic about, though by no means insanely enthusiastic.

The obvious comparison is with Harbeth’s HL-3PES-2, which costs only $55 more per pair. It’s a straightforward tradeoff of sonic quality for sonic quantity: The Harbeth nails the midrange and treble in a way the Fried does not, but the Fried produces a bigger sound, and does dynamics and bass better.

If you were to splash out on an Arcam Solo Mini, the Fried Compact 7s, some speaker cables, and some tallish stands, then, for an outlay of about $3500, you’d have an attractive system that should give lots of pleasure with minimal fuss. By “attractive,” I mean a decisive step up in sound quality from a den/library/dorm room-type “second” system. But the search will continue!

2 After writing this column, and at the risk of opening up another can of worms—and I sure don’t want to do that—I swapped the Fried Compact 7s left to right and turned them upside down so that the tweeters were above the woofer. The result was pretty much a one-to-one tradeoff. The treble was now more prominent, but less well integrated with the midrange. If I had to live with these speakers forever, I’d probably want stands taller than 36”, and I’d experiment more extensively with associated equipment and speaker cables.
ADVANCING THE LEGEND.

Introducing Prelude Forty.

The Infinity® Prelude name was first introduced more than a decade ago, with some of the most critically acclaimed and fondly remembered systems in Infinity history. The new Prelude Forty loudspeaker, featuring proprietary CMMD® drivers—including dual 8" side-firing woofers, a four-driver array of midrange transducers and a 1" dome tweeter—owes a clear design debt to the Prelude systems that have gone before. But with MRS™ flat-panel driver technology for exceptionally flat, broadband frequency response and uniform on- and off-axis dispersion, the Prelude Forty system achieves a level of sonic realism all its own, with a warmth that reveals the soul of any musical performance. Visit www.infinitysystems.com.
Thorens turntables combine 125 years of tradition in excellence with innovative high-end analogue technology to create a captivating sound experience.

2CHANNEL DISTRIBUTION Exclusive USA distributor for

TD 350

TD 170-EV

TD 850

TD 2030

1.888.526.2564
2channeldistribution.com

Where Acoustic Sounds stores its out-of-print LP treasures...

THE VINYLVault

Out-of-print LP Treasures
Step into the Vault, and discover loads of MoFIs, Penguin Record Guide Rosettes, Japanese pressings, titles from the TAS recommended list, Deccas, EMIls, RCAs, Mercury, plenty of jazz and classical, white-label promos, first-edition pressings of all the biggest rock and pop titles, test pressings...it goes on and on in The Vinyl Vault. You'll find record cleaning products, too. We have over 20,000 titles and are adding more daily, so we may in fact have records that aren't yet posted on the site. If you have a wish list, are interested in the complete discography of a certain artist, or don't find what you're looking for, email Paul at paul@acousticsounds.com.

www.audiophile-records.com

ACOUSTIC SOUNDS
1500 S. Ninth, Salina, KS 67401 • 800 716-3553
2008 PRODUCTS OF THE YEAR

GEAR OF THE YEAR

Times are hard. Our current economic landscape bears more than a passing resemblance to that darkest of American nightmares, the Great Depression.

As I write this, the House of Representatives is set to vote on a $700 billion bailout plan to buy distressed mortgages and thereby offer a crutch to our ailing financial system. Times are hard, yet we persevere. Though we may lack some discretionary income, we find ways to maintain the essentials: food, clothing, shelter, and, for audiophiles, music. So for a short while at least, let's put aside our struggles and lighten up. After all, this great hobby of ours is meant to be fun, and is supposed to cure any depression. Let's celebrate music, and those wonderful audio components that bring us closest to it.

Since 1992, Stereophile has named a few choice components as its “Products of the Year.” In doing so, we happily recognize those products that are capable of providing musical pleasure without boundary, far beyond our formal review period. We break it down into five categories: “Loudspeakers” (including subwoofers), “Amplification Components” (preamplifiers, power amplifiers, etc.), “Digital Sources” (transports, processors, music servers, disc players), “Analog Sources” (phono cartridges, turntables, tonearms, FM tuners, etc.), and “Accessories” (all those little extras that keep us busy and satisfied).

New for this year, our writers and editors declare their personal favorite components. Finally, the two most important categories are self-explanatory: Our overall “Product of the Year” is the best of the best and our “Budget Component of the Year” leaves us with the most cash to spend on new records—an economic bailout of sorts.

The voting was simple: Each of Stereophile’s 14 hardware reviewers and editors was asked to nominate up to six components in each of the eight categories. To be a contender, a product had to have been reviewed in one of the 12 issues of Stereophile from November 2007 through October 2008, in a full Equipment Report, a Follow-Up review, or in one of the regular columns by Art Dudley, Michael Fremer, John Marks, Kalman Rubinson, and Sam Tellig. That way, only those components could be nominated for which a writer had put his opinion in print for public scrutiny. We then compiled a ballot form listing all components nominated by three or more writers and/or editors. This process ensured that most nominees in most categories will have been auditioned by the most reviewers. Each editor or reviewer gave three votes for his first choice in each category, two votes for his second choice, and one vote for his third choice (if any). A consensus emerged, and the winners became clear. Editor John Atkinson tallied the votes—see JA’s comments on how the voting process works www.stereophile.com/awseeit/1207awsi—address your love letters and hate mail to him.

The prices listed were current as of the end of September 2008. To order back issues mentioned in this article, call (888) 237-0955, or visit www.stereophile.com (MasterCard and Visa only). “WWW” indicates that the review is available free of charge in our online Archives.

And the winners are...
Joint Loudspeakers

KEF Reference 207/2
($20,000/pair; reviewed by John Atkinson, Vol.31 No.2, February 2008 WWW)

Revel Ultima Salon2
($22,000/pair; reviewed by Larry Greenhill, Vol.31 No.6, June 2008 WWW)

Two state-of-the-art speaker systems share the honors this year. While the impressive KEF Reference 207/2 received the most first-place votes, the revamped Revel Ultima Salon won the most votes overall. The race was just too close to call; both of these outstanding performers are entirely devoted to the music and, therefore, deserve the highest recognition.

Back in 1999, the original Revel Ultima Salon impressed our reviewers with its exotic, curvaceous cabinet and its extraordinary sound, enough to warrant its status as “Joint Loudspeaker of the Year.” Though radically different in design, its successor does not disappoint. Built into a much slimmer and more room-friendly column, the Salon2 is 23" taller, 3" narrower, 7" shallower, and 72 lbs lighter than its predecessor, but manages to reach higher levels of musicality. Larry Greenhill was astonished by the speaker’s combination of powerful bass extension, timbral accuracy, and superb dynamics. He raved: “The Revel Ultima Salon2 is the best-performing, most natural-sounding full-range loudspeaker I have auditioned in my listening room since I started writing for Stereophile in 1984.” John Atkinson couldn’t let Larry have all the fun; our editor was so swept away that he requested a second sample for a Follow-Up. Wait till you hear what he thinks.

JA did have the pleasure of living with the mighty KEF Reference 207/2, albeit for too short a time. Like the Revel, our other joint winner is the product of ardent dedication to engineering and design. Outwardly similar to the original 207, with a handsome, graceful cabinet that belies its considerable bulk, the 207/2 features a completely redesigned coaxial two-way Uni-Q drive-unit that eliminates the need for a separate supertweeter. The result was awesome dynamics, coupled with a treble response so natural and free from grain that JA couldn’t contain his excitement. I saw it—the dude positively glowed. His comments echoed LG’s sentiments: “The 207/2 is overall the best-sounding full-range speaker I have used in my current listening room. To all intents and purposes, it is without flaw.”

Wow.
**2008 PRODUCTS OF THE YEAR**

**Digital Source Component**

**Sooloos music server system**
($7900–$10,500; reviewed by Jon Iverson & Kalman Rubinson, Vol.31 No.9, September 2008 WWW)

This winner doesn’t represent a hardware solution so much as it does a software solution. In a component category usually occupied by SACD players and D/A processors, and in a time marked by music lovers longing to reconnect with their libraries, the Sooloos hard-drive–based networked music system takes an undeniably fun and fresh approach to sorting, organizing, and experiencing music.

The Source:One currently uses RME-sourced 24-bit/192kHz converters, while the Twinstore hard drive is capable of holding over 2000 losslessly compressed CDs. What makes this product truly special, however, is its 17” Control:One touchscreen, which allows the user to find and play music in several intuitive ways. After only a few taps on the screen, our reviewers were entranced and invigorated by the Sooloos’s potential.

Jon Iverson was won over immediately: “Using the Sooloos got me more deeply involved with my music library than at any time since I began collecting many years ago.” Kal Rubinson was similarly swayed: “I am now convinced that, if you can afford it, the Sooloos is the way to go for CD listening.” High praise, indeed, for a highly ambitious product. Thank you, Sooloos, for bringing us closer to our music.

**2008 RUNNERS-UP**

(in alphabetical order)

- **Ayre Acoustics CX-7e CD player** ($1500; reviewed by Robert Deutsch, Vol.31 No.1, January 2008 WWW)
- **Bel Canto DAC3 D/A processor** ($2495; reviewed by John Atkinson & Wes Phillips, Vol.30 No.11 & Vol.31 No.2, November 2007 & February 2008 WWW)
- **Benchmark DAC1 USB D/A headphone amplifier** ($1275; reviewed by John Atkinson, Vol.31 Nos.1 & 4, January & April 2008 WWW)
- **Esoteric DV-60 universal player** ($6000; reviewed by Kalman Rubinson, Vol.31 No.3, March 2008 WWW)
- **Grace m902 D/A preamplifier/headphone amplifier** ($1695; reviewed by Sam Tellig, Vol.31 No.10, October 2008 WWW)
- **Krell Evolution 505 SACD player** ($10,000; reviewed by Fred Kaplan, Vol.31 No.9, September 2008 WWW)
- **Linn Klimax DS network D/A processor** ($18,500; reviewed by Wes Phillips, Vol.31 No.3, March 2008 WWW)
- **Oppo DV-980H universal player** ($169; reviewed by Kalman Rubinson, Vol.31 No.5, May 2008 WWW)
- **PrimaLuna Prologue Eight CD player** ($2499–$2734; reviewed by Fred Kaplan & John Atkinson, Vol.31 Nos.7 & 10, July & October 2008 WWW)
- **Simaudio Moon Andromeda CD player** ($13,500; reviewed by Brian Damkroger, Vol.31 No.1, January 2008 WWW)
- **Wadia Digital 170iTransport iPod Dock** ($379; reviewed by Wes Phillips, Vol.31 No.10, October 2008 WWW)
If You Can’t Hear the Difference, You Probably Don’t Need These.

“...a level of sonic reproduction I never thought I could achieve.”

Joshua Fineberg, PhD
Composer of contemporary classical music and a Professor of Music at Harvard

Proven Improvement — Find out why the planet’s top musicians and audiophiles all over the world make Analysis Plus cables part of their system, visit www.analysis-plus.com

* WEINHART DESIGNS LA, CA * SOUNDINGS Denver, CO * TCDA’S AUDIO Burton, MI * JS AUDIO Bethesda, MD * Please see our website for other fine dealers near you.
With three first-place votes and ten total votes apiece, the Continuum Audio Labs Criterion and Rega Planar P3-24 came in at a precise tie. And with the recent explosion of new LP releases and the success of popular vinyl reissues, it shouldn't come as a surprise that there's a $55,000 difference in price between our two winners. Vinyl is being appreciated by more people, from more walks of life, than at any other time in recent memory.

While the Criterion may be Continuum's entry-level model, it offers veritable exit-level performance. While borrowing much of the technology and design found in the $125,595 Caliburn-Cobra combo, the Criterion lacks its big brother's dedicated Castellon stand. But like the Caliburn, the Criterion can be simultaneously fitted with two tonearms, and uses Continuum's arm-board-isolation system. Its self-damping magnesium-alloy chassis is a bit smaller and lighter than the Caliburn's, however, for a sleeker package. Mikey Fremer was so impressed by the Criterion's punchy, exciting rhythm and pacing that he nearly forgot all about his Caliburn.

For vinyl lovers on tighter budgets, Rega provides an excellent solution in the updated P3-24. Identical to its predecessor in appearance, Rega's most celebrated turntable now uses an AC synchronous motor for lower noise and improved stability, while its lower-mass plinth is made of a phenolic-resin laminate for increased rigidity. "An evolutionary step forward, physically, sonically, and ergonomically," praised Mikey. The Rega's slightly warm sound and large, fleshy images combine for an exciting listening experience, but, most important, the P3-24 serves the music before all else. And that's why we've recognized it.

Denon DL-103 phono cartridge ($229; reviewed by Art Dudley, Vol.31 Nos.10 & 12, October & December 2008 WWW)
EMT 997 tonearm ($4895; reviewed by Art Dudley, Vol.31 Nos.7 & 9, July & September 2008 WWW)
Koetsu Unushi Vermillion phono cartridge ($4300; reviewed by Michael Fremer, Vol.31 No.1, January 2008 WWW)
Kuzma Stabi SD turntable & Stogi 5 tonearm ($6150; reviewed by Michael Fremer, Vol.31 No.7, July 2008 WWW)
Music Hall MMF-9/1 turntable ($2195; reviewed by Michael Fremer, Vol.31 No.7, July 2008 WWW)
Soundsmith SMCC1 phono cartridge ($750; reviewed by Michael Fremer, Vol.31 No.4, April 2008 WWW)
The Well Tempered Record Player ($2950; reviewed by Art Dudley, Vol.31 No.1, January 2008 WWW)
Zu Audio DL-103 phono cartridge ($399; reviewed by Art Dudley, Vol.31 No.12, December 2008 WWW)
Stereophile’s new CD: An evening of magical music in a superb acoustic space, a miracle captured, and a dream fulfilled:

**ATTENTION SCREEN: LIVE AT MERKIN HALL**

*February 10, 2007 – New York City*

The four players in Attention Screen perform six spontaneous jazz improvisations. An honest reflection of musical life recorded, mixed, and mastered by John Atkinson, using no equalization, compression, or artificial reverberation.

“This disc proves that you can make it new every time out and capture it.” —Wes Phillips

Special Introductory Price: $12, plus shipping & handling
Order online at www.stereophile.com’s e-commerce page.
“Then something almost unbelievable happened ...”

"... the sound took a significant leap forward. At first I thought I was imagining things, so much more immediate, present, dynamic, and musically thrilling were these sides.

An e-mail exchange with Joe Harley confirmed my suspicion: “I wish we could go back and remaster the first four records” Harley said, “but since then, I went through AcousTech’s mastering system and made a major upgrade in cabling.” "Uh, with AudioQuest cables?,” I asked. "Precisely," said Joe.

Just when you’re convinced that it couldn’t get any better, it does. Horace Parlan’s classic “Us Three” sprang to life with a vividness, weight, and clarity that left the already fabulous-sounding first batch choking on vinyl dust. Veils were lifted, dynamics unleashed, and a connection to the original session was established to a staggering degree."

Wayne Garcia (The Absolute Sound, Issue 180) on the improvement AudioQuest wiring made to the AcousTech Mastering chain. Music Matters’ Definitive Blue Note LPs are mastered by AcousTech. (www.musicmattersjazz.com)
Joint Amplification Components

Conrad-Johnson ACT2 Series 2 preamplifier
($16,500; reviewed by Wes Phillips, Vol.30 No.11, November 2007 WWW)
Parasound Halo JC 2 preamplifier

Tubey or not tubey? That’s always the question. But why choose? The best of high-end audio provides both. And our two Amplification winners were separated by a single vote.

The original Conrad-Johnson ACT2 tubed line preamplifier impressed Wes Phillips with its uncanny ability to transport the listener to the musical event, and it went on to be named our Joint Amplification Component of 2006. In the Series 2, single-stage regulation is used in place of the original ACT2’s cascaded power-supply regulators. Higher-quality Teflon capacitors replace the original’s polystyrene capacitors, while an internal mechanical shield has been added to further reduce residual noise. The sound, Wes sighed, was even more dynamic and detailed, prompting him to declare that he would “gladly forsake all others for it.”

If tubes aren’t quite your thing, however, the Parasound Halo JC 2 provides state-of-the-art solid-state design at a real-world price. Though manufactured in Taiwan to cut costs, the Halo JC 2’s design, circuit layout, and parts selection, by a team led by veteran engineer John Curl, are “unabashedly American.” Each channel of the fully balanced preamp is on a separate PCB, with the audio and control power supplies on separate circuits, isolated from each other by ⅛"-thick aluminum partitions. Like the C-J ACT2 Series 2, the Parasound Halo JC 2 has the “ability to let the listener hear deep into the recesses of a recording’s genesis,” marveled JA. Which reminds us yet again that getting closer to the real thing is what this game is all about.

2008 RUNNERS-UP

(in alphabetical order)
Anthem Statement D2 multichannel preamplifier-processor ($7499; reviewed by Kalman Rubinson, Vol.31 Nos.9 & 11, September & November 2008 WWW)
Ayre Acoustics A-7xe integrated amplifier ($3500; reviewed by Wes Phillips, Vol.31 No.3, March 2008 WWW)
Creek Destiny integrated amplifier ($2495; reviewed by Robert J. Reina, Vol.31 No.1, January 2008 WWW)
MBL 6010 D preamplifier ($23,800; reviewed by Michael Fremer, Vol.31 No.10, October 2008 WWW)
Nagra PL-L preamplifier ($9495; reviewed by John Atkinson, Vol.31 No.6, June 2008 WWW)
Nagra VPS phono preamplifier ($5995; reviewed by Michael Fremer, Vol.31 No.9, September 2008 WWW)
VTL MB-450 Series II Signature monoblock power amplifier ($15,000/pair; reviewed by Michael Fremer, Vol.31 No.1, January 2008 WWW)
VTL Signature TL-6.5 preamplifier ($11,500; reviewed by Larry Greenhill & Wes Phillips, Vol.30 No.6 & Vol.31 No.7, June 2007 & July 2008 WWW)
The Best Brands • The Best Service 30 Day Money Back Guarantee

The Analog Specialists 20 Years in Business • Free Setup

Music Direct Carries the World's Best Vinyl From All Over the World. Here is a Small Sample of Our Best-Sellers:

- Rush: Permanent Waves
- Radiohead: OK Computer
- Led Zeppelin: Mothership (4LP)
- John Lennon: Imagine (MoFi)
- The Beatles: Love
- Steely Dan: Aja
- Led Zeppelin: IV
- Jennifer Warnes: Famous Blue Raincoat
- Bob Dylan: Bootleg Vol. 8 (4LP)
- The Band: The Band
- Santana: Abraxas (MoFi)
- John Coltrane: Blue Train
- Dave Brubeck: Time Out
- Van Morrison: Moondance
- Miles Davis: Kind of Blue
- Pink Floyd: Dark Side of the Moon
- Herbie Hancock: Headhunters
- Allman Brothers Band: Idlewild South (MoFi)
- Beck: Modern Guilt
- Roy Orbison: All-Time Greatest Hits
- Van Morrison: Astral Weeks
- The Beach Boys: Endless Summer

ph. 800.449.8333

It's the Music That Matters™

musicdirect.com
2008 Products of the Year

Joint Accessories

Above: AudysseyPro room equalization. Right: Shure SE530 in-ear headphones

Our writers’ passionate votes were scattered among the diverse contenders in the Accessories category, but two very fine products led the bunch. Shure’s top-of-the-line in-ear headphones pack two woofers, a tweeter, and a crossover network into a discreet, ergonomically efficient shell weighing just over an ounce. Their modular cables, volume attenuator, variety of isolating sleeves, and handy carrying case make the SE530s exceptionally versatile. Couple that with their extended bass and smooth top end, and you can understand why the SE530s quickly became Wes Phillips’s everyday choice for listening on the go.

Back at home, however, audiophiles struggle with the imperfections of their dedicated listening rooms. The AudysseyPro room-equalization software, designed for use with Audyssey MultEQ XT-enabled audio/video receivers and preamp-processors, provides user-friendly digital room correction, thus eliminating the need for costlier architectural changes or obstructive room treatments. With AudysseyPro, you and your loved ones can sit back in the comfort of your own home and enjoy your favorite music, resonant room modes be damned.

AudysseyPro room equalization
(Included with many A/V receivers and preamp-processors; reviewed by Kalman Rubin- son, Vol.31 No.5, May 2008 WWW)
Shure SE530 in-ear headphones
($430; reviewed by Wes Phillips, Vol.30 No.12, December 2007 WWW)

(2008 Runners-Up)

(in alphabetical order)
AcousTech The Big Record Brush
($29.95; reviewed by Michael Fremer, Vol.31 No.9, September 2008 WWW)
Bag End E-Trap active bass trap
($1500; reviewed by Kalman Rubin, Vol.31 No.7, July 2008 WWW)
Meridian F80 portable music system
($3000; reviewed by Wes Phillips & John Marks, Vol.31 Nos.4 & 10, April & October 2008 WWW)
Ultimate Ears UE-11 Pro in-ear headphones
($1150; reviewed by Wes Phillips, Vol.31 No.5, May 2008 WWW)


World Radio History
“Just when I thought I was out, they pull me back in!” You’ve heard the line. It’s usually spoken in a hoarse gravelly voice. This time it’s got a Danish accent. And the subject matter isn’t from the dark side. But no other phrase can better describe the rebirth of PBN’s WAS-2 speaker.

Well, maybe there is one other: “Back by popular demand.” That is literally what happened. Peter Bichel Noerbaek (that’s where the initials PBN comes from) developed these classic speakers over a decade ago. In the fast-paced speaker industry, new developments usually render speakers obsolete within four or five years.

Sometimes the very best speakers last seven years on the market. It’s not that Noerbaek hasn’t tried to move on to the next generation. He has. The KAS-2 was designed to replace the WAS … a previous version of his largest speaker. Eventually it became the second largest speaker in the PBN lineup when the Master Reference was introduced in 2006. Sometimes you can’t kill a good thing no matter how hard you try. That is precisely what has happened, when an updated version (the WAS-2) is now being reintroduced into PBN’s lineup of speakers.

It’s at this juncture I must point out what W-A-S stands for: Whup-Ass Speaker. That being so, you could have guessed that K-A-S is another variation on the same theme, meaning Kick-Ass Speaker. In all candor you must understand that, by and large, the Danes are (how does one put it?) a bit daft. In particular they have a fixation on Americanisms. I describe them as Germans with a sense of humor.

Similar to the Germans, they have a fascination with detail and high-tech perfectionism. Unlike the Germans, they are far less neurotic. Peter is a splendid example of the cleverness and dedication we expect. Therefore we should not be surprised that a speaker Noerbaek had attempted to replace has become irreplaceable. Despite all his valiant attempts, audiophiles have delivered one clear message: “The WAS-2 is alive and well and we’ll keep buying it.”

Being the practical businessman he is, Noerbaek was forced to resurrect the WAS-2 and, once again, include it in his lineup. It could be said: The Whup-Ass Speaker refuses to be whupped.

(619) 440-8237  
380 Vernon Way  
Suites I & J  
El Cajon, CA 92020  
www.pbnaudio.com
This is very important: There is no magical price point that characterizes a product as “high end.” If a component conveys the emotional truth of music, to leave the listener feeling powerless, overcome by the musical performance, and to forget that he or she is listening to a stereo system, then that component is worthy of the High End. Our Budget category is where young and cash-strapped audiophiles should begin their quest for hi-fi bliss. Starting with our two Budget winners, you can put together a complete system that will reward you with a lifetime of beautiful music. I can think of only a few more valuable investments.

The Atom v.5 is the latest version of Paradigm’s bargain-basement, two-way bookshelf design. It has a 1” titanium-dome tweeter and a 5.5” copolymer-cone bass/midrange driver with a diecast chassis. This small, unassuming marvel produced a rich, natural midrange, gobs of inner detail, and pristine, extended high frequencies. At just $300/pair, the Atom v.5 was a no-brainer. Several of our writers agreed: The Atom matched the Sooloos music server system for the most total votes within any one product category.

Coming in a very close second was the Rega P3-24 turntable. The Rega’s no-muss, no-fuss design and attractive price make it a fun and easy choice for those new to the vinyl craze. There’s nothing intimidating about the Rega; it practically sets itself up and begs to be played. And for fans who want to liven up its drab gray plinth, Rega now offers the P3-24 in five bold, high-gloss finishes. Supplied with Rega’s TT-PSU power supply for greater stability and pushbutton speed selection, the newest Rega costs just $1295. I ordered one for myself! The only problem with the Rega is that, once you buy one, you’ll find yourself spending wads of cash on LPs. Times are hard, but not that hard.
Make room for life

With Sanus Systems, you'll always get smart design, high quality and patented technology. Our new, innovative products are easy to install and easy to use, giving you more time to enjoy cherished moments with friends and family. Learn more at www.SANUS.com.
Sooloos music server system

With four first-place votes and 16 votes overall, the Sooloos music server takes this year's ultimate prize.

Web Monkey Jon Iverson—who has been calling for intuitive, user-friendly, computer-based systems for over a decade—shocked no one when he dove so eagerly into the deep possibilities of the Sooloos system. It was just what he’d ordered. “This was clearly no me-too product,” he said, “but a complete reinvention of how we relate to music.”

But... Michael Fremer? Yes, even Mikey, our sober-minded analog guru, was held captive by the Sooloos. In fact, he bought one. With it, MF can finally get rid of all those annoying CDs, and convert his vinyl to digital for easy access via the Sooloos’s touchscreen. When you consider that the Sooloos system does a better job of communicating the addictive, visceral pleasure of a music collection better than anything this side of a 12” black disc, it sort of makes sense after all.

Sooloos Music Server System ($7900–$10,500; Vol.31 No.9, September 2008). “Easy ripping, instant access, iPodouch remote controlability, great graphics, auto-downloaded credits from AMG, ingenious interface; sound—that’s as good as if not better than direct CD playback, and, best of all, it clears the shelves to make room for more vinyl.”

Larry Greenhill: Revel Ultima Salon2 loudspeaker ($22,000/pair; Vol.31 No.6, June 2008). “My new reference standard in floorstanding loudspeakers for its ability to combine neutrality, top-to-bottom coherence, resolution of detail, dynamics, transparency, and a bass response that is pitch-perfect, powerful, and extended.”

Jon Iverson: Sooloos Music Server ($7900–$10,500; Vol.31 No.9, September 2008). “A bitchin’ software/hardware interface that makes it a piece of cake to manage thousands of albums of music. A well-thought-out, top-to-bottom music-server system that focuses on the music and sound and hides all the tweaking, importing, and backup issues behind a simple yet powerful approach.”

Fred Kaplan: Krell Evolution 505 SACD player ($10,000; Vol.31 No.9, September 2008). “Through its CAST outputs, the Krell Evolution 505 is the best CD player I’ve ever heard in my house—maybe the best I’ve ever heard, period. I found its sound jaw-droppingly superb.”

John Marks: Grace m902 D/A preamp/headphone amplifier ($1695; Vol.31 No.10, October 2008). “Rich-sounding, versatile, easy to operate, beautiful to look at, and built like the pro gear it is. Bravi, bravi, bravi.”

Stephen Mejias: Rega P3-24 turntable ($395–$1295; Vol.31 No.7, July 2008). “Ever since this damn turntable came into my life, I haven’t been able to stop buying records. Dammit!”

Wes Phillips: AKG K 701 headphones ($595; Vol.30 No.12, Vol.31 Nos.6 & 9, December 2007, June & September 2008). “Every time I think I have discovered how good these headphones are, I discover that they’re even better than I thought—for example, hearing them through a single-ended balanced headphone amp recently showed me that, previously, I had only reached the limits of its ancillary components. If literature is news that stays news, maybe a high-end classic is one that makes everything sound new.”

Robert J. Reina: Audio Valve Eclipse line preamplifier ($4795; Vol.31 No.6, June 2008). “A neutral, detailed, liquid, and dynamic performer with solid-state–like, kick-slam bass whose performance rivals that of competitors triple its price.”


Sam Tallig: Harbeth Compact 7 ES3 loudspeaker ($3495/pair; Vol.31 No.6, June 2008). “Combines the (almost) full-range sound of a large monitor with the imaging of a small one, and that classic BBC sound that never goes over the top.”
“The Chagall’s … just seemed to melt away and reveal the music … Aside from being such beautiful works of art, the Chagall’s were easy to lose days on end to… the endless layers of detail kept me hypnotized… A visual treat with glorious sound to match … the price tag concurrent with the craftsmanship.”

– Jeff Dorgay, Tone Audio
Off the R train, at 36th Street Station in Brooklyn, is not the place all those sleek urban magazines trumpet as New York's hottest borough—here instead of the pretensions of four-to-an-apartment white, hipster, alt-rock country (Williamsburg), or the welcoming, multicultural oasis of baby carriages and shifting sexual orientations (Park Slope), you find gritty, working-class and immigrant-filled Brooklyn. It's what old-timers yearn for when they deride yuppies and delude themselves about the charms of shabby, crime-ridden "Old Brooklyn."

The main economic engines here are bodegas—corner stores with windows plastered solid with "WIN A MILLION DOLLARS FOR LIFE" lottery signs, cold-cut advertisements, and the ubiquitous green-neon "ATM" beacon. As a result of the latest of the successive waves of immigration that have made up the history of this borough, the Sunset Park neighborhood is now predominately Mexican. Restaurants serving enchiladas and beer, are in the middle of every block along Fourth Avenue, and every corner has a pizza-slice joint. The sidewalks are covered with spots of chewing gum, long blackened by the combination of filth and baking sun. A south-of-the-border version of Vinnie Barbarino strolling by, swinging a paint can, would not be out of place.
WBT-0610
New angled banana with nextgen™ technology!
The banana plug for the future

- signal conductor made of pure copper or silver
- nextgen™ principle of less material
- constant high contact pressure
- CE and IEC compliant

WBT 801.821.1500 www.wbtusa.com
A block farther west and Third Avenue is shadowed by the massive, green, dripping steel platter that supports the uplifted Brooklyn Queens Expressway. Between the BQE and New York harbor are blocks of warehouses that contain what remains of industrial Brooklyn. It’s no garden spot, and nowhere to be after dark. It’s also the kind of place responsible for the resurgence of the LP—where music, once again, is being pressed onto molten plastic.

On 42nd Street—“that’s 42nd street in Brooklyn?” the car-service driver asks me on the way over—there’s a strip joint at the corner of Second Avenue, a Korean deli on the corner of Third. As I walk up to 270 42nd, a pair of two-story garage doors are open wide, and from inside come the telltale hissing and humming of steam and hydraulics. Entering from the street, the first thing I see is a nonfunctioning record press for 7” 45rpm singles. Past that, on the same side of the 6000-square-foot space, are five LP pressing machines, three of which are running. The usual cadre of human assistants attends these splendid children of the 1970s. While one man keeps a sharp eye on the presses’ slow, repetitive motions, others, at a long table set up directly in front of the machines, inspect the new records, slide them into white paper sleeves, and the sleeves into preprinted album covers. The far wall is covered by cardboard boxes, some filled, some waiting for product.

Among the LP-addled, watching vinyl being pressed has been known to engender delirious weeping, and is akin to a trek to Lourdes. It’s the central act of the LP religion. When I arrive at Brooklyn Phono, they’re pressing copies of the MC5’s Back in the USA. Over and over, I watch a Tootsie Roll of vinyl placed between the labels and the press slowly rise, melt, and squeeze the black goo into the grooves of the stampers. The flashing is trimmed away, and the finished record slides onto a spiral, atop a stack of other newly pressed LPs.

Even less likely than its location is Brooklyn Phono’s proprietor, Thomas Bernich, with his nearly shaved head, thick oversized glasses, spattered painter’s pants, and flip-flops. When we meet, Bernich instantly shoots me a big smile and a friendly roll of his eyes, and soon he’s excitedly showing me his collection of photos of record presses of various vintages and countries of origin. From first glance, he’s clearly a representative example of the obsessive small businessmen, quality freaks, and oddballs who have powered vinyl’s new life.

His shop, at the smaller end of the scale, is newer than most (he began in 2002), and at 35, Bernich is younger than most LP pressers. I decided to seek him out when I found out that two of this magazine’s favorite reissue labels, Sundazed and Norton, use Bernich’s glorious 1978-vintage Southern Machine Technology (SMT) presses to make their wares.

Finding and recycling vintage pressing equipment is the “secret sauce” of making records. Though cagey about saying exactly where his presses and their attendant parts, such as dies and extruders, came from, Bernich mentions California, Canada, and “a scrap yard.”

“You have to be a plumber. And a mechanical engineer. And a chemist. And a few other things,” Bernich says, ending his list with a shake of his head and a “No, really” laugh. “It’s like a bronze foundry. Not everyone can go pour the bronze. So somebody works very hard, and they make the clay, and then you make the mold, and then you pour the bronze. It feels like that. We’re the workhorse, we’re the middle man, and we just don’t want to fuck it up.”

Brooklyn Phono was established around New Year’s in 2002, but didn’t press its first record until the following September. Even then, things remained shaky. Making those round black discs is harder than it looks, and chief among the enemies are dust and dirt, even the smallest particle of which can work its way through electroplating.

“Those first records were for the birds. They were horrible. I couldn’t have sold them to any customer,” Bernich says. “There were a ton of things wrong with the entire system. And it was another year-and-a-half until I got all the bugs out.”

www.stereophile.com, December 2008
Introducing Naim’s HDX
The World’s First Performance Upgradeable Audiophile Hard Disk Player

- Naim CD player sound quality
- Bit-perfect CD ripping and data storage
- Two 400GB internal drives for storage and back-up
- Front panel touch screen and intuitive user interface
- Naim Extended Music Database for simplified browsing and detailed search
- WAV, FLAC, AAC, WMA and MP3 files played from any USB-connected storage device
- 24 bit/192kHz internal architecture with support for hi-resolution audio formats
- Upgradeable with external Naim XPS or 555 PS power supply
- IP-enabled for audiophile multi-room replay of up to 6 streams over a home network

www.naimusa.com/hdx
While running a record pressing plant requires the diverse skills Bernich mentions above, as well as a few he doesn’t, such as salesman, employee manager, and gambler (a number of the newer pressing plants have shut down in recent years), it probably helps that Bernich, who grew up in the Lefferts Garden section of Brooklyn, is also a consumer of the product his cottage-industry plant is producing.

“I always loved [vinyl]. I grew up in the ‘80s, when it was everywhere and deejaying was becoming popular. Every friend that I had who had a turntable. I was always over at their place, playing one record after another. It was always someone else’s turntable, and I was always a very respectful guest. It was always innocent, but a good time, good company always. And it was always tactile. Putting a CD on, putting a CD on—it’s not the same. You could tinker a little bit with a record.”

Like a magazine editor who can’t remember what was in the last issue of his magazine, Bernich can’t remember what records he pressed yesterday. However, he mentions as a favorite one record, by the band I Love You But I’ve Chosen Darkness, that he pressed a few years back for the label Secretly Canadian. Jason Durham, Brooklyn Phono’s production manager, says he’s a fan of Japanese pressings of Charlie Parker albums, as well as obscure opera vinyl, such as a rare pressing of Krzysztof Penderecki’s Die Teufel von Loudon that he hunted down a few years back. Durham, who has worked in music-business pursuits as diverse as Tower Records (R.I.P.), a jingle house, and as a copyist for the Orchestra of St. Luke’s, has a succinct response to my question about the oft-discussed “warmth” of the sound of vinyl: “If you hear it, it’s true. On a bad day, that’s pops and clicks. On a good day, it’s warmth.”

Opening Brooklyn Phono, scavenging for parts, and learning how to make LPs has been a trial-and-error process for Bernich, who doesn’t have a technical background (he attended Brooklyn’s Pratt Institute for a degree in sculpture). He and his wife, Fern, who handles Brooklyn Phono’s sales and marketing, own the business together: Bernich has even begun teaching their two-year-old daughter, Hazel, how to play LPs.

At first, just getting the cranky machines, built between 1978 and 1983, in working order was a monumental struggle. Then, because the presses are hydraulic but use steam to generate heat, there were plumbing problems to deal with. In August 2008, Brooklyn Phono was replumbed for the third time in six years, and Bernich says that when he gets his two still-inactive machines running, he’ll need a bigger boiler. “If you look at us one way, we look brilliant and bright and shiny, but there’s still so much that we’re polishing in the meantime.”

Perhaps Bernich’s biggest challenge, given the current state of the world, is finding quality materials. “Because petroleum is becoming a funny issue and vinyl is a petroleum-based product, it’s becoming harder to process the material to make the records sound good.”

“Because petroleum is becoming a funny issue and [vinyl] is a petroleum-based product, it’s becoming harder to process the material to make the records sound good.”

Contuined on page 149
The best loudspeaker on Earth. Period.

Reason #2: No "Voicing" = no colorations

We realize that the statement in our ads has caused some audiophiles and manufacturers concern, others a smile. We stand by it for a number of good reasons. Take a look at reason #2 with more reasons to follow:

YG Acoustics uses no "voicing" to artificially "beautify" the sound; to us, live sound is the only truly beautiful experience. In order to achieve total realism, the tools currently available were not nearly accurate enough. Instead, we developed our own optimization software and assessment methods. These provided us with the precision necessary to create speakers that sound real because they are engineered correctly.

Contrast this with the "industry standard": a designer sits in front of the partially-engineered speaker, and balances shortcomings through trial-and-error, until the sound pleases them. Some call it "art". We jokingly call it bad science.

Following is evidence that YG Acoustics' approach is far superior; it results in speakers that reproduce, rather than reflect the tastes and biases of their maker.

We still listen at every turn, to verify that measurements closely correlate to the human experience. This is part of what makes YG Acoustics loudspeakers the best on Earth.

Voicing - a term used in the audio industry to describe a process in which the designer listens to the product, and intentionally deviates from neutrality according to their liking.
"Voicing" is mostly associated with frequency response. This study focuses on another significant aspect — enclosure vibration. All measurements were performed at YG Acoustics' state-of-the-art lab. YG Acoustics constructs enclosures of aircraft-grade aluminum, precision-machined and pressure-assembled using exclusive technology. This quality is unparalleled in the audio industry, including by others who use metal. The leading competitor uses resin for the bass, and wood-based midrange enclosures. They claim that the latter produces greater "beauty", which is indicative of "voicing".

Below is vibration analysis of both speakers' bass enclosures — the lower the graph, the quieter. Both speakers exhibit excellent behavior. YG Acoustics falls "below the floor" from 40–200 Hz, and is very low throughout; the competitor stays "above the floor" through most of the measurement, but remains low. YG Acoustics scores a win here; nonetheless, both speakers' bass enclosures were well-engineered (contrast the leading European competitor).

YG Acoustics bass enclosure.
20–2,000 Hz. 5 dB div.

Leading competitor's bass enclosure.

Below is vibration analysis of both speakers' midrange enclosures. YG Acoustics is on average 8 dB quieter than the competitor, which has an apparently "voiced" peak at 500 Hz. They may not have been able to eliminate vibration sufficiently; instead, they chose a material with resonances that are less apparent with wooden musical instruments. Not surprisingly, brass instruments and human voice have improper timbre. YG Acoustics delivers a far more natural presentation, for truly authentic reproduction.

YG Acoustics mid-tweeter enclosure.
20–2,000 Hz. 5 dB div.

Leading competitor's midrange enclosure.

The Experts Agree

To confirm that YG Acoustics speakers are verified by human ears but not voiced by human bias, we consult top-tier classical musicians. Here are their comments:

Ms. Yumi Hwang-Williams
World-renowned violinist
Concertmaster of the Colorado Symphony Orchestra.
Concertmaster of the Cabrillo Festival Orchestra.

"From the very first listen to YG Acoustics speakers, I was thrilled by the extraordinary clarity and purity of sound. I could immediately relate to the premise of YG Acoustics — reproduce live sound, without interference or pretensions. As a musician, I see my violin as a conduit for the composer's intentions. It's my responsibility to convey the music in the most truthful, transparent way — a goal that these unique speakers achieve. I've truly never before heard such warm, true sound outside the concert hall. Incredible! BTW, I love the speakers' metal finish and sleek, contemporary looks."

Mr. Daniel Williams
World-renowned horn player
Senior musician of the Philadelphia Orchestra.
Long-time audiophile.

"In listening to speakers throughout my career, I have sought the same sound that I have heard during 30 years of sitting in the middle of the Philadelphia Orchestra. That goal has not been accomplished until now. The Anat Reference II is the first speaker that truly replicates the live sound I hear everyday in my professional life. There is clarity in the details that no other speaker that I have heard over the years has come close to matching. It is a privilege to recommend this break-through in hi-fi. One that finally lets the listener experience the music the way it was meant to be heard."

Conclusion

Are we saying that the leading competitor's flagship is a bad speaker? No — it is a good product. We are saying something more decisive — that ours is the best on Earth. With a correct system and setup, the YG Acoustics Anat Reference II Professional is indistinguishable from live sound. Period.
The Rogue Audio M-150 Tube Monoblock

150 watts of pure tube power • 5Hz - 50kHz bandwidth • Triode operation • $4495 per pair

Rogue Audio, Inc. • Brodheadsville, PA • 570-992-9901 • www.rogueaudio.com

The next generation

Introducing the Chord QBD76, the world’s most advanced DAC
Includes USB and digital Bluetooth inputs

Visit us at CES Venetian 31-231

DISTRIBUTORS OF EXCEPTIONAL AUDIO PRODUCTS FOR MUSIC LOVERS
CHORD ELECTRONICS • EXPOSURE • SPENDOR • VAN DEN HUL
THIEL CS3.7

a conventional design. On examination, the “corrugations” prove to be radial lobular indentations in the aluminum.

“This allows us to use a very thin diaphragm that operates pistonically—very close to ideally,” said Thiel. “It’s linear up to around 20kHz, which is unheard of.” That’s not simply because of the driver’s complex shape, however. The diaphragm is driven by a massive 3" voice-coil and a powerful neodymium magnet, which give it “exceptional circumferential strength.”

The 1" aluminum-dome tweeter, too, is new. It has five neodymium magnets (four magnetized radially, one axially), which, Thiel said, “exert enough brute force to raise sensitivity and reduce distortion.” He also pointed out that, mounted as it is inside an essentially flat driver rather than a shallow cone, the tweeter doesn’t suffer from the “shouty” coloration that plagues many coincidentally mounted tweeters.

The woofer is another essentially flat driver with radially mounted strengthening lobes. It, too, boasts a 3" voice-coil and a massive (5-lb) magnet. Like the midrange driver, it also employs Thiel’s long-gap, short-coil drive system, which keeps the coil within a uniform magnetic field throughout its entire range. Jim Thiel believes that “most” loudspeaker distortion is caused by the voice-coil experiencing fluctuations in the magnetic field as it gets farther from the magnetic gap. A short coil, a humongous magnet, and a copper “focusing” sleeve on the voice-coil former ameliorate the problem, he says.

As always, the crossover is first-order and complex. It’s a Thiel, after all.

MEASUREMENTS

The Thiel CS3.7’s voltage sensitivity is specified as 90dB/2.83V/m. My B-weighted estimate on its tweeter axis, assessed with DRA Labs’ MLSA system, was slightly above that figure, at 90.7dB(B)/2.83V/m. This may well have been affected by the Thiel’s frequency response (see below). The sensitivity is usefully higher than average, which is a good thing considering that the CS3.7’s impedance remains between 2 and 3 ohms over much of the audioband (fig.1), and that there is a demanding combination of 3.8 ohms and –40° capacitive phase angle at 60Hz. Thiel specifies the impedance being nominally 4 ohms, with a minimum of 2.8 ohms. I actually found the minimum impedance to be 2.4 ohms at 125Hz. The difference between 2.8 and 2.4 ohms is academic, either mandating use of an amplifier that has no problem delivering high currents.

The traces in fig.1 are smooth, but I did find a couple of resonant modes in the cabinet’s walls. Fig.2, for example, is a cumulative spectral-decay plot calculated from the output of an accelerometer fastened to the sidewall below the cast-aluminum dome 10" from the top. The modes are both low in level and high in frequency, both of which will minimize any audible effects they might have.

With a speaker such as the CS3.7, which has a sloped baffle and first-order crossover filters, it is important to measure its frequency response on the optimal axis, which is where the outputs of the multiple drive-units arrive at the
Inner beauty

Série ACT • A3

Today the ACT line of speakers from BC Acoustique is seen as a reference in French HiFi. Reknown internationally, the ACT line is the result of many years in development with thorough and repeated testing by engineers, acousticians and designers. With new technical solutions, the ACT line is an accomplishment with remarkable sound qualities. Now, let technology disappear and enjoy the best of what music and sound can offer.

For ESOTERIC brand products or a dealer nearest you, visit our website: www.teac.com/esoteric

Musical Sounds (203) 877-7776 www.musicalsounds.us

Audio Dream (403) 280-5894 www.audiolream.ca

BC Acoustique +33 (1) 43 68 25 00 sales@bc-acoustique.com

www.bc-acoustique.com

ESOTERIC technologies are not simply mundane improvements in design. ESOTERIC technologies are the summation of fresh ideas achieving uncompromised goals.

Precision design teams embrace a uniquely singular principle of technological fusion: the absolute best in mechanical, electronic, acoustic and visual design elements fused into superior audio-video products.

ESOTERIC technologies are not simply mundane improvements in design. ESOTERIC technologies are the summation of fresh ideas achieving uncompromised goals.

Precision design teams embrace a uniquely singular principle of technological fusion: the absolute best in mechanical, electronic, acoustic and visual design elements fused into superior audio-video products.

Golden Ear Award Winner 2007 the absolute sound

Product of the Year Award Winner 2007 the absolute sound

Editor’s Choice Award Winner 2008/2007 the absolute sound

Editor’s Choice Award Winner 2006 The Perfect Vision
Vista 300 (480W into 4 ohms) on hand, and the Musical Fidelity Nu-MX-R monoblocks (600W into a 4 ohm load) and the Ayre C-5xe universal player to repeat the preamp, and head off to my office each day, I'd cue a CD, set the Thiel speakers share a common sound: They're articulate and consistent over their frequency response, but they also tend toward a hyperarticulation that a less charitable listener might call brightness. The CS3.7 does not share that family trait. Oh, it's articulate all right, but it sounds relaxed as well. That coincidental tweeter-midrange is a genuine breakthrough for Jim Thiel.

Listening to "Flor de Azalia," from guitarist Phil Manzanera's *The Manzanera Collection* (CD, Blue Plate/Caroline 1798), I drowned in the sultry purr of Tania Libertad's voice. How warm! ¡Que dolor! Nope, not even the teensiest bit too much brightness. Jes' right. But as I swayed entranced by the inner rhythms of Zacarias Gomez Urquiza's lyrics, I had another epiphany: The CS3.7 was a wizard at conveying subtle rhythmic information that more uptight, gringo-hipped loudspeakers just bulldozed through.

**Measurements, continued**

I use a speaker's step response to investigate this aspect of a speaker's operation; fig.3, for example, shows the CS3.7's step response at a distance of 50" on its tweeter axis. The sharply defined, positive-going attack at 3.8ms is the output of the coaxial tweeter and midrange unit, but its output is rapidly dropping back toward the time axis by the time the output from the woofer arrives at the mike (the slower-rising, rounded peak between 4.2 and 5ms). This axis, which is 40" from the floor, is too high for the drive-unit outputs to integrate properly. Moving the microphone down by 6" gives the step response shown in fig.4—though there is still a touch of overshoot evident on this axis, the outputs of all three drive-units arrive at the microphone at the same time, resulting in an excellent, time-coincident, right-triangle shape to the step response. Moving the microphone down even farther eliminates the overshoot, but slows the rise of the step's leading edge, due to the woofer's output now arriving a little earlier (not shown). I therefore used the axis 34" from the floor, where the speaker's output is time-coincident, for all subsequent measurements. This height is also close to the average listener ear height, which was investigated by *Home Theater* senior editor Tom Norton when he worked for *Stereophile* in the mid-1990s. (Remarkably, he found that both tall and short people have their ears within a couple of inches of 36" from the floor when sitting in typical lounge chairs.)

Fig.5 shows how the speaker's response changes above and below this axis. Basically, the higher you sit, the more you'll be bothered by a lack of energy in the crossover region between the woofer and midrange; the more you slouch below 34" from the floor, the more the speaker's balance will favor the lower mids rather than the treble. The black trace above 300Hz in fig.6 is the CS3.7's farfield response on this optimal axis, averaged across a 30° horizontal window. The response smoothly and gently slopes up between the midrange and the top octave. Not only will this boost the measured sensitivity a little (see Keith Howard's article on assessing loudspeaker sensitivity in *Hi-Fi News*, October 2008), but all things being equal, I would have thought it correlated with WP's observation that Thiel speakers tend toward "a hyperarticulation that a less charitable listener might call brightness." Except that he
"If you could significantly improve the sound of your audio system for under $50, would you do it?"

SOME AUDIOPHILES BELIEVE that acquiring a particular audio component will move their system to a much higher level of performance. But should that be the next step?

The reason I ask

Hello. My name is Jim Smith. You may know me from a few years ago when I imported Avantgarde Acoustic loudspeakers, as well as Audiopax and Zanden. And you may have read my booklet, 31 Secrets to Better Sound. Over 15,000 audiophiles received it. Hundreds wrote or called to thank me for the big improvement in their systems.

During that time, I visited numerous audiophiles and listened to their systems. In all of those visits, I never encountered one system that was performing anywhere near its potential! I know that there must be some, but I certainly never encountered one.

Is it OK to tell the truth?

Few of those systems were performing at even half of the performance of which they were capable! And yet, the common denominator among their owners was the question, “What about upgrading to the current rave XYZ component?” Clearly, they thought that buying a new component—amplifier, CD player, etc.—was the path to audio nirvana.

But their priorities were misplaced. There was no need to spend another dime on components until they had gotten their system optimized to be able to “play the room.”

Throwing money out of the window

Let’s face it. Buying a new component without getting the performance that you ought to get from it is about the same as throwing money out of the window!

Srajan Ebaen wrote eloquently about this subject in a provocative article for Positive Feedback Online.* That kind of thinking drove me to create the set-up manual for audiophile music lovers, Get Better Sound.

Srajan Ebaen wrote eloquently about this subject in a provocative article for Positive Feedback Online.* That kind of thinking drove me to create the set-up manual for audiophile music lovers, Get Better Sound.

...Jim’s book is one monster shortcut for the rest of us...if we’re serious about this business of better sound...”
—Srajan Ebaen, Publisher, 6moons.com

Disagree slightly

I really appreciate Srajan’s recent comments about Get Better Sound. However, I think of the manual not so much as a shortcut, but as a crucial—and affordable—next step to get better sound from any system.

My goal is to show you how to greatly improve your sound, and how to do it without spending a fortune. Plus, when you do make a purchase, you’ll be confident that you’ve selected the very best component. The 202 tips in this manual have provided the highest levels of performance in audio systems around the world—in systems just like yours.

No more secrets

Now you can use the same techniques that I used to win those “Best Sound of Show” press comments* and to receive continuing acclaim from my personal clients for over 35 years.

For much more information, including how to order your copy of Get Better Sound, visit www.getbettersound.com. E-mail: jim@getbettersound.com, or, if you prefer, call me at 770-777-2095.

Best regards,

Jim Smith

*Excerpts and links at www.getbettersound.com

Get Better Sound: The Reference Set-up Manual that guarantees better sound from any home audio system!

Internet: www.getbettersound.com • Phone: 770-777-2095 • E-mail: jim@getbettersound.com
ensues. The song seems so simple, while also seeming profound—and the Thieles conveyed that passion and communication as well as I have ever heard it done.

At one point in "Vague," they scared the crap out of me. I was intently listening to the call and response between Brahem and Couturier when Matinier also seemed profound—and the fields ensues. The song seems so simple, while also being a stranger materializing in my living room.

Williams puts the magic into the magic drummer is slapping the box or rattling out—not even through the fields—if the guitar, bass, and a box. I can never figure out what's happening with the drums. I was intently listening to the call and response between Brahem and Couturier when Matinier also seemed profound—and the fields ensues. The song seems so simple, while also being a stranger materializing in my living room.

Choose not alone a mate

I briefly auditioned the Thieles while the Avalon Indras that I reviewed in October were still here. The two speakers were essentially cut from the same cloth—both had startling clarity and detail without the in-your-face quality usually implied by "detail." Like the Thieles, the Indras lack a sock-em bottom end. Of course, the difference in price could buy the Thieles a pretty good subwoofer system. But shipping schedules kept the Indra/Thiel comparison brief, so I trotted out the trusty Wilson Audio WATT/Puppy 8 system, because it's such a known reference point for a compact high-quality monitor.

The title track of the Dave Holland Quartet's Conference of the Birds (CD, ECM 1027) perfectly illustrated one of the W/P 8's greatest strengths: The speaker propels music forward through its bottom-end impact. With Holland's big acoustic bass setting the pace, the piece loped along splendidly, with Sam Rivers and Anthony Braxton chattering away on flutes and soprano saxophones (switching from one to the other as required), while Barry Altschul supplemented the sound as needed with trap set, chimes, gongs, and marimba. The Thieles did a good job of delivering all that harmonic complexity, but the Wilsons had the nod in the slam department—which also means they had better pace.

"A Chromatic Love Affair," from Duke Ellington's The Jaywalker (FLAC download, HDTracks), proved that low bass is important in establishing a sonic identity. It wasn't so much the acoustic bass that the Thieles scanted, it was also Paul Gonsalves' tenor-sax presence. The Thieles shrunk Gonsalves a tad, robbing

---

found that the CS3.7 didn't conform to that generalization. The black trace below 300Hz in fig.6 is the complex sum of the nearfield responses of the midrange unit (green trace), woofer (blue), and passive radiator (red). The peak in the midbass will be almost entirely due to the "2pi" boost that results from the nearfield measurement technique; the CS3.7 will be flat anechoically down to 35Hz or so, lower than I had anticipated from WP's auditioning notes. The crossover from the midrange to the woofer occurs around 300Hz, though the use of first-order filters results in a large amount of overlap, of course. The passive radiator is tuned to the frequency of the woofer's minimum-motion notch at 31Hz, with a well-defined bandpass output.

A speaker's horizontal dispersion will also affect its perceived balance. The CS3.7's dispersion, shown in fig.7, is remarkably even between 800Hz and 10kHz, something that always correlates with stable, accurate stereo imaging. But it also means that the Thiel is putting out a lot of treble energy into the room; acoustically well-damped rooms will work better than live ones. WP's room is fairly large, with quite a lot of absorption at high frequencies. The Thieles'
Established 1979

- KIMBER KABLE SELECT KS-1030 $1890 METER PAIR
- KIMBER KABLE SELECT KS-1021 $1125 METER PAIR
- KIMBER KABLE KCAG $860 METER PAIR
- KIMBER KABLE HERO 1AIBT-144 $262 METER PAIR
- KIMBER KABLE TIMBRE $138 METER PAIR
- KIMBER KABLE 4TC BARE-BARE $206 8FT PAIR
- KIMBER KABLE Select KS-1011 $700 METER PAIR
- KIMBER KABLE KCAG $860 METER PAIR
- KIMBER KABLE SILVER STREAK $432 METER PAIR
- KIMBER KABLE HERD WBT-144 $262 METER PAIR
- KIMBER KABLE TIMBRE $138 METER PAIR
- KIMBER KABLE TONIK $74 METER PAIR

Toll Free 800.229.0644 | Phone 612.378.0543 | Fax 612.378.0924 | Email info@NeedleDoctor.com
419 14th Ave SE, Minneapolis, MN 55414

www.needledoctor.com
him of the stature he deserves. On the other hand, they did a superb job—every bit as good as the Wilsons—at resolving the inner voices of the woodwinds. While the Wilsons did give François Couturier’s piano in Brahms’s “Vague/E la nave va” a slightly more vivid presence, I felt the Thiels did a better job of seeing into the heart of the music. What does that mean? It wasn’t a matter of soundstaging or holographic imaging—both speakers were champs at that—but the Thiels had a quality I can describe only as grace. Grace is like a soap bubble: Try to dissect it and it’s gone. Perhaps a better way of putting it would be that the Thiels got out of their own way, to present a kind of thing, this is the thing you’re going to like. I can’t do that this time. I loved, loved, loved the Thiel CS3.7. It’s not perfect, but its major flaw is subtractive: not enough deep bass for many listeners. Well, that’s easily fixed with a high-quality subwoofer, and Thiel makes some awfully good ones you could afford with what you save buying the Thiels instead of speakers costing two to three times as much—which is what I’d have to compare them with. That’s not to say that $12,900 is cheap or a bargain. It’s just to say that to find a speaker as good as the Thiel CS3.7, you’d have to spend more, and sometimes a lot more.

On Phil Manzanera’s “Flor de Azalia,” the Thiel flat-out seduced me. Tania Libertad’s voice was so warm, so caressing, so fully fleshed—I melted. If you’re a fan of the voice—any voice, but especially the female voice—you have got to hear these speakers:

> Cuando escribo que inverte lleva el caudal so río
> Flor de Azalea la vida en su avalancha te arrastró
> pero al salvar hallar pudiste protección y abrigo

I don’t know how you’ll answer that question, but I’m thinking I can’t live without the Thiel CS3.7. It might be the speaker of my lifetime, too.

Finally, the CS3.7’s farfield cumulative spectral-decay plot (fig.9) reveals a superbly clean, fast initial decay, though with some low-level hash visible in the treble. Speakers using first-order crossover filters have very often had some frequency-domain problems to put against their ability to present a time-coincident wavefront over a wide bandwidth. But the Thiel CS3.7 manages to offer the best of both worlds, and offers its owner some excellent speaker engineering in a beautifully finished package.

—John Atkinson
The best relationships in the world work in true harmony, true balance and of course - true love.

bergmann

TRUE

Bergmann understand that when it comes to technology and design - less is actually more.

Specialising in Airbearing Turntables and Airbearing Arms, each bergmann product is a strikingly beautiful piece of art - that's state-of-the-art.

Every Bergmann piece is designed and handmade in Denmark by passionate music lovers who don't compromise.

Bergmann believe that when it comes to listening to music, you should not compromise either...

BERGMANN AUDIO, Vallerbøksvej 112, 7470 Karup, Denmark, Phone: +45 2291 0773
info@bergmannaudio.com, www.bergmannaudio.com

Vitus Audio are a family of Hi-Fi components for your living space, which include: Amplifiers, CD Player and Cables. Each will bring you closer to your music because each speaks to the mind, to the ear and most of all, to the heart.

Every Vitus Audio piece is designed and handmade in Denmark by passionate music lovers who don't compromise.

Vitus Audio believe that when it comes to listening to music, you should not compromise either...

VITUS AUDIO, Virkelyst 80, Gjellerup, DK-7400 Herning, Denmark, Phone: +45 9626 8046
info@vitusaudio.com, www.vitusaudio.com
Three-way, floorstanding loudspeaker.
Drive-units: 1.2" (32mm) Silversoft tweeter, 6.7" (170mm) aperiodically loaded Rohacell cone mid/woofer, two 8" (200mm) isobarically loaded woofers. Frequency range: 35Hz–20kHz. Nominal impedance: 4 ohms. Sensitivity: 90dB/2.83V/m. Recommended amplification: 180W into 4 ohms.

Dimensions: 47.6" (1220mm) H by 9.4" (240mm) W by 17.2" (440mm) D. Weight: 103.4 lbs (47kg).

Finishes: Solid walnut or cherry.

Price: $17,000/pair. Approximate number of dealers: 7.

Manufacturer: Chario s.r.l., Via Bergamo 44, 23807 Merate (LC), Italy. Tel: (39) (0)3992-75-370. Fax: (39) (0)3992-84-764.
Web: www.chario.it. US distributor: Koetsu USA, PO Box 1909, Carolina, PR 00984-1909. Tel: N/A. Fax: (787) 752-8688.

Italian manufacturer Chario Loudspeakers has never had a strong presence in the US. No wonder, then, when confronted by these exquisitely finished beauties of solid hardwood, many American audiophiles think, “Sonus Faber rip-off.” Without knowing the musical history of the 1960s, had you heard Badfinger first, you might have thought the same thing when you then heard the Beatles. Similarly, Chario, by far Italy’s largest maker of high-performance speakers, was founded in 1975, eight years before Sonus Faber. While SF has its drive-units built to its own specifications by other firms, Chario designs and builds its own.

In short, Chario is a veteran Italian speaker manufacturer with a long history of innovation. Still, Chario’s new US importer, Puerto Rico–based Koetsu USA, is facing
Meridian F80. Listen closely.

The Meridian F80, developed in collaboration with Ferrari, represents 30 years of audio research and manufacture condensed into a small and beautiful shell. It's a complete system: a CD and DVD player with iPod connectivity and AM/FM/DAB digital radio. You'll be amazed that something so compact allows you to hear more of your music, recovering buried information from the recording and producing a sound full of detail and depth. But then it shares the same technologies as Meridian's flagship components and loudspeakers: sound systems so advanced that if a microphone can detect it, the system can reproduce it. Hearing really is believing.

Call (404) 344-7111 to arrange a demonstration of the F80's outstanding performance.

"a brilliantly designed and made compact music system"
Hi-Fi World

"truly unbelievable performance"

"there is nothing available elsewhere that compares"
AVReview.co.uk

Buy the F80 on-line - visit www.thef80.com

Produced under license of Ferrari S.p.A. FERRARI and the PRANCING HORSE device, all associated logos and distinctive designs are trademarks of Ferrari S.p.A. iPod is a trademark of Apple Inc.
a challenge in getting that point across in the crowded American loudspeaker market. They offered for review the Sovran, a brand-new model in Chario’s top line, the Academy series, hoping its relatively modest price (for a high-performance speaker) of $17,000/pair would do just that.

**Three-Way, Two-Box Design**
The Sovran is just under the top model of Chario’s Academy series, the Serendipity. The new speaker comprises two cabinets. On top is a two-way box of solid walnut or cherry with a front battle of high-density fiberboard (HDF), containing a 1.2” Silversoft soft-dome tweeter that fires at a (seated) ear height of 35”, and above it a 6.7” Rohacell Full-Poly-Ring mid/woofer. This is loaded with a slot that fires to the rear.

Below this sits the subwoofer tower, decoupled from the upper cabinet with four proprietary circular elastomer “puffers” that fit inside cylindrical recesses machined into both boxes. Inside the isobarically loaded woofer box, close to the floor and a little more than 1m away from the upper box’s mid/woofer, are two vertically arrayed 8” natural-fiber drivers configured “cone to cone.” These are wired out of phase with each other so that the two cones move as one.

The motors of all drive-units are based on neodymium magnets. WBT speaker terminals—two pairs on the subwoofer tower, one pair on the woofer/tweeter cabinet—allow bi-amplification as well as standard hookup via a supplied set of jumpers. The Academy Sovran’s exquisite woodworking and overall design meet the way, the much higher impedance magnitude throughout the treble compared with the lower frequencies. This will boost the Sovran’s high-frequency output when the speaker is used with a tube amplifier, such as MF’s Music Reference RM-200.

The traces in fig.1 have a noticeable wrinkle just below 500Hz, which implies the existence of some sort of cabinet resonance in this region. Investigating the two enclosures’ vibrational behavior with a plastic-tape accelerometer, I found a single, very strong mode present on all surfaces of the midrange-treble enclosures (fig.2) that was also detectable, though at a much lower level, on the panels of the bass bins. The speakers had been returned to the importer before I analyzed these measurements, but this resonance is so well defined that I suspect it is not actually a panel resonance but is instead due to the interaction between the head-unit’s mass and the spring formed by the four compliant rubber feet that separate it from the subwoofer enclosure.

Chario specifies the subwoofer loading as “vented isobaric compound”; looking at fig.1, the shape of the magnitude trace below 100Hz suggests that it is a coupled-cavity type tuned to 36Hz. (The isobaric-loaded drivers fire into an internal cavity that communicates with the outside world without grille (black), averaged across 30° horizontal window and corrected for microphone response, with the nearfield responses of woofer (blue), head-unit port (green), and subwoofer (red), plotted in the ratios of the square roots of their radiating areas below 300Hz, 500Hz, and 850Hz, respectively, and the complex sum of nearfield responses plotted below 300Hz (black).
This is a remarkable product. And, in my experience, audibly superior to every other ‘conditioner’ I have tried out (and given the peculiarities of the power network in New York, I have tried more than a few over the years). It is, to use a word from the earliest days of the high-fidelity movement, simply much more transparent than the competition. And Audience lets you hear more ambient information, more definition and articulation of the musical images, and all that with what sounds like a reduction on those hard-to-describe distortions that ride atop a musical (or electrical, one supposes) signal. More to come.” Harry Pearson

The SG-2’s phenolic, vinyl and graphite platter with decoupled bearing and high inertia drive ring delivers unparalleled speed stability and tonal balance.

With its exchangeable arm-board, custom motor controller and easy user set-up, you are guaranteed convenience with performance. American Craftsmanship

INTRODUCING

SG-2

510.559.2050 www.immediasound.com
the highest expectations for an Italian-made loudspeaker. The speaker's size and shape (48" tall by 9.5" wide by 17" deep) makes it ideal for rooms of small to medium size.

In a booklet accompanying the Sovran, Mario Marcello Murace, an electrical engineer and Chario's head of research and development, provides an unusually detailed technical explanation of the speaker's design. Unfortunately, the cumbersome translation renders incomprehensible many concepts that, to begin with, are difficult to grasp. This is not helped by Chario's penchant for trademarking terms it then fails to define.

A careful reading of the booklet indicates that Murace has attempted to keep parallel the phase-delay slopes of the crossovers between the subwoofer and mid/woofer and the mid/woofer and tweeter, in order to produce uniform off-axis performance. This, he claims, lets you toe the speakers in for greater soundstage depth, or fire them straight ahead for a soundstage wider than the distance between the cabinets, without affecting the Sovrans' reproduction of timbres.

Murace also claims that the relatively large distance between the floor-hugging subwoofers and the mid/woofer, combined with a crossover network that produces a large overlap of frequencies, extending from 80 to 250Hz, reduces the effects of room modes that lead to low-frequency peaks and dips, and diminishes a spaciousness-reducing phenomenon Murace describes as bass mono, caused by the similarity of direct and reflected low-frequency energy in a small room.

via the vents at the bottom of the enclosure side panels.) The red trace in fig.3 shows the subwoofer's output, measured in the nearfield. It comprises a bandpass response peaking in the octave between 40 and 80Hz, with a 24dB/octave, fourth-order rolloff below that region and an initially slower rolloff above it. While some upper-frequency modes are present in its output—always a problem with coupled-cavity loading—these are well down in level.

Turning to the head-unit, the woofer's nearfield output is shown in blue in fig.3, that of the rear-facing port (which was stuffed with foam) in green. Called by Chario a "back-firing slot with aperiodic loading," this tuning is not a classic reflex alignment. There is no minimum-motion notch in the woofer's output, the port's output peaks at the same frequency as the woofer's, and the outputs of the woofer and port appear to be in phase below the port resonance—all of which suggest that the woofer's loading is more akin to a transmission-line. Note the broad overlap between the mid/woofer and the subwoofer, which, as MF points out, is deliberate.

Higher in frequency in fig.3, the integration of the woofer and tweeter outputs on the tweeter axis is not quite optimal, this indicated by a lack of energy between 3 and 6kHz. All things being equal, this would give the Sovran's balance a very slightly polite character. However, the top two octaves rise by 6dB or so above the midrange reference level. I would have thought this boost to be too high in frequency to be perceived as "bright," though MF did characterize the Sovran's balance as having "a slight tilt toward brightness." He also remarked on the speaker's "exceptional resolution of high-frequency detail" and its highs as being "on the airy, exuberant side," both of which would also result from this measured behavior. The rather clunky grille introduced +3/-6dB irregularities in the Sovran's tweeter-axis response (not shown); I recommend leaving them off for serious auditioning.

1 In this respect, the Sovran is very similar to Chario's earlier Academy One, reviewed by Larry Greenhill in March 1998—see www.stereophile.com/standloudspeakers/398chario—John Atkinson
Kimber Kable invites you to

ENJOY THE SHOW

HD29

individually hand tested in the USA with elevated current caps

HDMI v1.3 Certified with support for:
- True HD Audio
- Dolby TrueHD, MasterAudio HD
- 5.1 Dolby Digital
- 7.1 DTS
- 1080p 60Hz P-EP Color
- XV Color Lossless PCM audio
- High Speed 10.2 Gbps

0.5 to 20 meter lengths

come see us at Venetian #29-210

KIMBER KABLE
Ph: 801.621.5530 Fax: 801.627.6980 www.kimber.com

Ph: 801.621.5530 Fax: 801.627.6980 www.kimber.com

USB DACs taking computer audio to an entirely new level.

Fine instruments created one at a time.

WavelengthAudio.com
Full Line Catalog
USB DACs.com
Award Winning Computer DACs
Guitar-Engines.com
Custom Guitar Amplifiers

Guitar courtesy of David Schneider @ SchneiderGuitars.com

Digital Music made perfect with USB DACs and Tubes!

Wavelength Audio, ltd. 513.271.4186
Much of the technical description, while useful, is incomprehensible and should be rewritten. In the end, what matters is the sound. But even a fuzzy understanding of Murace’s design goals for the Sovran helped explain why these speakers were unusually easy to position in my room.

Setup

Moving the Academy Sovrans around the area of my room where most speakers have performed best produced the fewest shifts of bass quality and timbral accuracy I’ve ever heard. The Sovrans were the least fussy speakers I’ve ever set up in my current room.

Likewise, whether set up toed-in or firing straight ahead, the Sovrans’ tonal balance remained remarkably consistent. Only their spatial performance changed, as described in the manual. Toed-in, they produced a deeper but somewhat narrower soundstage; with their side panels parallel to the room’s sidewalls, the stage widened, opening up to extend beyond the baffles, but wasn’t as deep.

Ultimately, I preferred the Charios toed-in. I lined up their front baffles along the marks that describe the positions of my reference speakers, the Wilson Audio Specialties MAXX 2s. Based on my experience, I’d say that if you can afford the Sovrans, they’d be a better bet than most to perform well in situations where speaker-placement options are few.

Hardly romantic sound

Most audiophiles associate Italian loudspeakers with a warm, romantic sound, hear ultradeep bass, and I didn’t. But the bass the Sovran did produce sounded nonmechanical, natural, and as musically accurate as I’ve heard from any speaker at any price.

The bottom octaves were exceedingly clean and nimble. While 35Hz can’t give upper-bass energy. The lows do usefully extend to 30Hz, however. A slight excess of energy in-room in the middle of the midrange will reduce soundstage depth, but the treble is very flat up to 6kHz, above which the on-axis boost makes its presence known.

Turning to the time domain, the Sovran’s step response on the tweeter axis is shown in fig.7. The tweeter and mid/woofer are connected in positive acoustic polarity, the subwoofer in inverted polarity. The woofer’s output arrives a little late on this axis to integrate properly with the decay of the tweeter’s step—inevitable, given the tiltback of the front baffle and the fact that the tweeter is mounted below the mid/woofer—which results in the lack of presence-region energy seen in the on-axis frequency response. The cumulative spectral-decay plot on the tweeter axis (fig.8) is superbly clean overall.

While some aspects of the Chario Academy Sovran’s design puzzled me a little, overall it performed very well on the test bench.

—John Atkinson
"★★★★★" Hi-Fi World

6 MOONS
LUNAR ECLIPSE AWARD

POSITIVE FEEDBACK ONLINE
Writers’ Choice Award

DRUID

$3400 pair

www.ZuAudio.com
you the full bottom weight, the Sovran more than compensated with clarity and ultralow coloration, which are easily preferable to greater bass extension that comes at the price of bloat, overhang, and detail-obscuring warmth.

The Sovran's complete freedom from midbass overhang meant that, until I got used to the speaker's clarity and honesty in the lower octaves, I had to check to make sure the woofers were working, because they were impossible to "hear." When called on to produce deep bass, they did. When not, they shut up.

The Sovran's integration of its bass, midbass, and midrange outputs was also subjectively seamless, producing spectacular resolution of "event detail" with individual instruments. Voices, especially, "popped" brilliantly in three-dimensional space, and were never obscured by "warm" zones. The handoff from the mid/woofer to the tweeter, which according to a graph in the manual occurs at an unusually low 1180Hz, was also smooth and impressively transparent. Not surprisingly, male and female voices sounded pleasingly coherent and fundamentally correct.

It's always fun to hear a new tweeter, and Chario's Silversoft dome proved highly resolving, ultradetailed, and "fast." If the Focal 1037 Be's inverted beryllium-dome tweeter sounded on the warm, smooth, burnished side of detailed, Chario's was on the airy, exuberant side—much like Dynaudio's famed Esotar tweeter.

All together, I heard a tonal balance that was predicted with remarkable accuracy by the frequency response graph printed in the Sovran's manual. According to that plot, the speaker rolls off steeply below 35Hz and is remarkably smooth through the midbass. A dip beginning at around 800Hz extends up to about 4kHz, with then a rising response up to 8kHz, followed by another slight dip, and then by a peak at around 15kHz.

The Sovran's overall timbral balance was on the lean and cool side of neutral, but just slightly so—the kind of smooth, measured tonal balance that's easy to fine-tune to neutrality with accessories and good choices of associated gear.

Driven by the warm, smooth, detailed Luxman M-800A power amp (see my review in the November issue), or the Music Reference RM-200, the Chario Sovran produced a nearly ideal tonal balance with just a slight, smooth glisten on top, whether the speakers were toed-in or firing straight ahead.

Driven by the Musical Fidelity kW monoblocks, they sounded a bit cooler than ideal, but the combination still made for pleasing, exciting listening.

While a number of other speakers have matched the Academy Sovran's impressive timbral neutrality, few at any price have managed the believability of its reproduction, even straight out of their crates, of the sounds of musical instruments. I didn't hear music pouring forth from a pair of boxes, nor did instruments within a given frequency range sound tied together in a "frequency zone." There were no zones of warmth or coolness through which I had to listen to reach the instruments. The Sovran was one of the least colored speakers I've heard, with an addictive immediacy and vibrancy to its presentation.

Julie London's Julie Is Her Name (45rpm LPs, Liberty/BoxStar) produced a mesmerizing combination of vocal detail and instrumental clarity. The Sovrans presented London's voice vividly in three-dimensional space with sufficient presence and resolution to be believable without sounding over-analyzed. Barney Kessel's guitar comping produced effervescent rhythmic zip, as well as delicacy and harmonic and textural complexity. A test pressing of a new Warner Bros. reissue on vinyl of Van Morrison's cosmic Astral Weeks revealed the Sovrans' ability to present images super-cleanly in space and make the speaker baffles seem to disappear. The delicate finger cymbals on "Sweet Thing" floated as tangible crystalline presences well in front of the baffles, their decays trailing off for what seemed impossibly long times.

If you like a warm, fuzzy, comfortable sound, the Chario Sovran might not be for you. If you like a tightly sprung ride with great clarity of attack, clean sustain, and long decays that glorify great recordings, the...
How Much Class A?

Our meters don’t go to zero like other meters. They show the current draw of the amplifier’s circuit, which has a fixed minimum known as the bias. When the meter isn’t moving, you are in the Class A region. When the meter moves, you have moved into Class AB.

Class B circuits have no bias current, and they enjoy severe distortion due to the abrupt transition between the positive and negative halves of the output stage. Class A circuits run so much bias current that they have no transition, but they run hot as hell. Class AB amplifiers are a compromise, where a moderate bias current smooths the transition, and they operate in Class A until the output current exceeds twice the bias current.

How much bias do you want? As much as you can get. The amplifier’s distortion is inversely proportional to the bias current. Most Class AB amplifiers operate as Class A for a small fraction of a watt. At Pass Labs, the least of our amplifiers operates Class A to 15 watts, and our biggest amplifier peaks at 400 watts in Class A.

And that’s why our meters don’t go to zero.

If you would like to know more, Nelson has written a detailed article on the subject of bias at www.passlabs.com
Academy Sovran will give you all that and more. But be prepared: this speaker gives problematic recordings nowhere to hide their junk.

Though not a large speaker, the Sovran could play loudly without strain, and maintained its clarity and cohesiveness with equal competence at the level of a whisper. Instruments maintained their timbral and physical integrity, and their images were placed well clear of the baffles at high, low, or medium SPLs.

If I had to sum up the Sovran in a single phrase, it would be “well organized.” It spoke with one voice, rhythmically, harmonically, and dynamically, and produced sonic pictures that sounded as if produced by a pulsating sphere—more so than even Cabasse's La Sphere, which is a sphere. It was as if the sound were being launched from a single point.

Reference Recordings recently released Tutti!, a sampler of spectacular orchestral recordings from its catalog (SACD/CD, RR-906SACD). This sort of musical fireworks display has been a staple of audiophile lore since the 1950s, and Tutti! delivers the goods with such familiar sonic blockbusters as Rimsky-Korsakov's Dance of the Tumblers (from The Snow Maiden) and Mussorgsky's Great Gate at Kiev (from Pictures at an Exhibition), both with Eiji Oue conducting the Minnesota Orchestra. While the Sovrans couldn't match the Wilson MAXX 2's massive attack or depth-charge bass punch, they did produce different but equally impressive facsimiles of these Prof. Keith John- son recordings that were more compact, tightly drawn, and spatially coherent, particularly in terms of soundstage depth and the clean separation of individual instruments.

The Sovran did rock and jazz as well as, if not better than, it did classical (which was plenty good), where ultradeep bass is more important. (You might be surprised by how little bass there is below 35Hz in most rock and jazz recordings.) The Sovran shone on such well-recorded rock albums as Elvis Costello's Trust (LP, F-Beat XX11LP). The cymbals shimmered brilliantly, the snare popped, and the drum kit appeared tightly focused in space. Steve Nieve's piano produced a pleasing sparkle above the instrument's harmonic envelope, without ever hardening or turning brittle. Costello's voice floated convincingly between the speakers, fully fleshed out, each ironic inflection communicated with great clarity.

Hearing the 45rpm reissue of the Bill Evans Trio's Waltz for Debby (LPs, Analogue Productions) through the Charios was a real treat. The Sovrans placed me in the Village Vanguard, close to the stage. Paul Motian's cymbal work produced brilliant shimmer, palpable textures, and a lot of air. I could feel Scott LaFaro's bass plucks, the weight of the instrument, and its tightly defined image in space. Evans' piano combined a complex percussive attack, a woody-metallic sustain, and delicate decays that lasted even as the notes piled up. Time and

Visiting audiophiles, novices and veterans alike, were impressed by the Sovrans' lack of obvious colorations, their rhythmic snap, their spatial coherence and three-dimensionality, and especially their effervescence—these speakers' ability to quickly conjure up and make vanish musical moments in time. So was I.

Conclusions
Elegantly conceived and beautifully built, Chario's Academy Sovran offers a high level of sonic performance in every possible category except the deepest bass—and

THE US LOUDSPEAKER MARKET MAY BE OVERCROWDED, BUT THERE'S ALWAYS ROOM FOR A SPEAKER AS WELL DESIGNED AND EXECUTED AS THE CHARIO ACADEMY SOVRAN.
Actually, you CAN have it both ways. The lucidity and harmonic “rightness” of a tube amplifier and the muscle and control of a solid-state amplifier.

Introducing the conrad-johnson ET250S enhanced triode amplifier. The sole source of voltage gain, a single-ended triode establishes the harmonic character, while a high-current, high damping factor transistor output stage produces the muscle (250 watts/ch) and control. Hear one for yourself at your nearest conrad-johnson dealer. Write or visit our web site for more information.

conrad-johnson it just sounds right.
2733 Merrilee Dr • Fairfax, VA 22031 • phone 703-698-8581, fax: 703-560-3360 • www.conradjohnson.com

As close as you’ll get without buying the ticket.

e.One
REF100C mkII and REF500
Mono Audio Power Amplifiers
New for 2008

bel canto
Get Closer.
www.belcantodesign.com
Snell Illusion

EQUIPMENT REPORT

LARRY GREENHILL

Three-way, reflex-loaded, floorstanding loudspeaker.

Drive-units: 1" (25mm) silk-dome tweeter, two 5.25" (135mm) magnesium-cone midrange units, two 10" (250mm) magnesium-cone woofers. Crossover frequencies: 250Hz, 2.5kHz. Frequency response: 27Hz-40kHz, ±3dB. Sensitivity: 89dB/2.83V/m. Impedance: 4 ohms. Recommended power: 250-1000Wpc. Maximum output level per pair: 111dB.

59" (1499mm) H by 15" (381mm) W by 21" (533mm) D. Weight: 178 lbs (77kg).

High-gloss automotive black under multicoated, hand-rubbed clear lacquer; other custom colors using high-gloss automotive paint, add 20% to cost.

How do you make an object common as a box iconic?” asked Bob Graffy, Snell’s vice president/brand manager. He and Joseph D’Appolito, Snell’s chief design engineer, were sitting in my listening room, discussing cabinet designs. Graffy noted that KEF had sought the same in their distinctive, silvery, cylindrical Muon loudspeaker ($150,000/pair). For the flagship model in their Illusion series, Snell commissioned Gerd Schmitz, former designer for Ideo, to integrate D’Appolito’s wish list for an ideal enclosure: a narrow, rounded upper baffle for the midrange and tweeter, wider at the base for the woofers, holding a constant cross-sectional area while maximizing cabinet volume, and compliance with a 15° tip test.

A Remarkable Shape

In the 30 years before the Illusion became a gleam in D’Appolito’s eye, Snell Acoustics had already designed and manufactured six full-range, floorstanding Type A

We have been working to bring 33 years of knowledge to You.

chario
Technology For Your Dreams

Distributed by
www.chariousa.com
Tel (718) 265-3312
Fax (718) 265-3310

Chario Academy Series - For Further Information about all Chario Products www.chario.it
models. The first Type A was an "upright brick of polished wood and stretched cloth" that functioned best when standing against a wall (see www.stereophile.com/looordispersers/378snell). The last Type A, the Reference, was designed by Kevin Voecks, who is now with Revel. Its 600 lbs of wood and steel included two 6'-tall midrange-tweeter Towers, two 5'-tall SUB 1800 bass enclosures, massive loons of Kimber Kable, and an external crossover. In his "Measurements" section accompanying my review in the March 1996 Stereophile (Vol.19 No.3), John Atkinson said that the Type A Reference possessed an ultraflat frequency response and a superb coupling of low frequencies with room acoustics.

The new Illusion ($50,000/pair) is 6" shorter, 6" wider, 9" deeper, and 25 lbs heavier than its predecessor. It has two 10" woofers per enclosure, not the single 18" woofer per channel used in the Type A Reference's SUB 1800, a lower voltage sensitivity (89dB vs 92dB(H)/2.83V/m), and a much higher maximum amplifier power rating into 4 ohms (1000 vs 600W). And, of course, it's a three-way system rather than a 4.5-way system.

Gerd Schmitt's enclosure looks nothing like the slim tower of the Type A Reference. No surface is parallel to any other; the Illusion is a gracefully tapering column whose top and bottom surfaces are ellipsoids of equal area but different shapes. The column maintains a consistent cross-sectional area, with greater width at the bottom for the two 10" woofers, but a narrower top to limit high-frequency corner diffraction of the tweeter's output. Sonic reradiation is further curtailed by the smoothly elliptical radius of the speaker's front baffle. Like those of the buildings designed by Frank Geary—such as the "Fred and Ginger" office structure in Prague—the asymmetrical profile of the Illusion presents a changing profile from every viewed angle.

The Illusion's enclosure of costly, four-layer, sandable MDF (standard MDF tears or pills when sanded) is milled by a CNC router. The cabinet's

[Fig.1: Snell Illusion, electrical impedance (solid) and phase (dashed). (2 ohms/vertical div.)]

[Fig.2: Snell Illusion, cumulative spectral-decay plot calculated from output of an accelerometer fastened to the center of the side panel 17 from the top (MLS driving voltage to speaker, 7.35V; measurement bandwidth, 2kHz).]

[Fig.3: Snell Illusion, quasi-anechoic responses of tweeter (black) and midrange unit (green) on tweeter axis at 50°, corrected for microphone response, with nearfield responses of midrange unit (green), woofers (blue), and ports (red), plotted in the ratios of the square roots of their radiating areas below 350Hz, 750Hz, and 500Hz, respectively.]

My estimate of the Snell Illusion's voltage sensitivity on its tweeter axis was 89.5dB(B)/2.83V/m, which is usefully above average and within experimental error of the specified 89dB. The speaker's plot of impedance magnitude and phase, however, reveals it to be quite a demanding load for the partnering amplifier, the magnitude remaining between 3 and 4 ohms for much of the upper bass and midrange (fig.1). There is also a tricky combination of 4.5 ohms and -48° capacitive phase angle at 50Hz. A good amplifier rated at 4 ohms will be needed to drive the Illusion to high levels without strain.

The traces in fig.1 are free from the small, sharply defined discontinuities that would suggest the presence of cabinet resonances, but I note that LG did find a section of the side-wall adjacent to the ports that seemed to vibrate strongly. Investigating the enclosure's vibrational behavior with an accelerometer, I found several relatively strong resonant modes on the sidewalls, the highest of which lay at 254Hz (fig.2). These could be heard as a touch of overhang with the half-step-scaled toneburst track on Editor's Choice (CD, Stereophile STPH018-2), but the main problem was lower in frequency, around 100Hz, where a distinctly warm character was audible both on the tonebursts and on the bass guitar on my recording of Attention Screen's Live at Merkin Hall (CD, Stereophile STPH018-2).

The saddle centered on 21Hz in the impedance-magnitude trace suggests that this is the tuning frequency of

AUDIO INTERCONNECTS

- AUDIOQUEST SKY $2500 meter pair
- AUDIOQUEST NIAGARA $1500 meter pair
- AUDIOQUEST COLORADO $800 meter pair
- AUDIOQUEST COLUMBIA $400 meter pair
- AUDIOQUEST KING COBRA $225 meter pair
- AUDIOQUEST COPPERHEAD $95 meter pair
- AUDIOQUEST SIDEWINDER $60 meter pair
- AUDIOQUEST G-SNAKE $35 meter pair

SUBWOOFER CABLES

- AUDIOQUEST SUB3 $220 2.0 meter
- AUDIOQUEST SUB1 $110 2.0 meter
- AUDIOQUEST SUBX $55 2.0 meter

HDMI DIGITAL AUDIO/VIDEO CABLES

- AUDIOQUEST HDMI-3/BRAID $275 meter
- AUDIOQUEST HDMI-1/BRAID $175 meter
- AUDIOQUEST HDMI-X/BRAID $95 meter
- AUDIOQUEST HDMI-G (CL3/FT4) $60 meter
- AUDIOQUEST HDMI-A (CL3/FT4) $30 meter

www.needledoctor.com
SNELL ILLUSION

The exterior is finished using an automotive process of multiple coats of primer and paint followed by hours of polishing with a buffing wheel. Each Illusion is shipped in a thick wooden crate that weighs 75 lbs when empty.

The Illusion flagship was designed by Joseph D’Appolito, whose vertical driver array of midrange-tweeter-midrange bears his name and is used by many other loudspeaker manufacturers. Properly implemented, a D’Appolito array can produce a horizontal radiation pattern of widely dispersed sound while minimizing the music-blurring first reflections of soundwaves off the floor and ceiling. D’Appolito computer-modeled the Illusion’s exact driver configuration using the drive-units’ dimensions and parameters, the crossover’s time-domain characteristics, and the cabinet’s interior volume. The resulting vertical array places the tweeter 42.5" above the floor and is designed to deliver a ±15°-wide vertical dispersion pattern with 30° nulls, in order to reduce floor and ceiling reflections and thus maintain the speaker’s transparency while promoting good soundstage imaging and depth.

The Illusion’s drivers and rear ports are held in rigid alignment by massive, precisely machined bezels of cast aluminum alloy. Further rigidity is achieved by machine-screwing the drivers to the bezels, not into the cabinet’s MDF. All drivers are wired in positive polarity.

The soft-dome tweeter—a 29mm, top-of-the-line SEAS Crescendo—boasts resonance-free output up to 40kHz, and very-low-distortion performance well down into the midrange for proper

---

**Fig.4 Snell Illusion, anechoic response on tweeter axis at 50°, averaged across 30° horizontal window and corrected for microphone response, with the complex sum of the individual responses plotted below 300Hz.**

**Fig.5 Snell Illusion, 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.6 Snell Illusion, vertical response family at 50°, normalized to response on tweeter axis, from back to front: differences in response 15°-5° above axis, reference response, differences in response 5°-15° below axis.**

---

The asymmetrical profile of the Illusion presents a changing profile from every viewed angle.
SNELL ILLUSION

blending of amplitude and directional responses of the D’Appolito array. The tweeter’s low 600Hz resonance gave D’Appolito confidence that it could be smoothly crossed over to the midrange driver at 2.5kHz. This tweeter employs SEAS’ highly efficient Hexadym magnet structure (patent pending), a ring of six small, radially magnetized neodymium magnets in a focused hexagonal array. The motor’s open-backed structure is said to eliminate backwave reflections, and the silk dome is free from the single breakup mode that is characteristic of metal-dome tweeters.

D’Appolito requested that SEAS fine-tune its top-of-the-line 5.25” midrange driver to expand its frequency response to five octaves. This cast-magnesium cone of this driver (two are used in the Illusion) has optimal stiffness and minimal mass; its natural-rubber surround is said to eliminate edge resonances, and its open basket of injection-molded aluminum alloy permits the free movement of air behind the cone, to reduce cavity resonances and turbulence noise in this driver’s transmission-line subwoofer. A scaled-up Hexadym magnet similar to the one used in the tweeter includes heavy copper components that surround the pole-piece to optimize dynamic linearity and power handling. The aluminum-magnesium cones of the two 10” woofers are cast and machined for an optimal ratio of stiffness to mass. Each has a high-temperature, 2” voice-coil, a prominent T-shaped pole-piece, and heavy copper support rings and phase plug. A stiff, injection-molded alloy basket maintains complete structural stability while allowing air movement.

quite a wide listening window. This is just as well, considering that the tweeter is a high 42.5” from the ground.

The trace in fig.7 was derived by averaging 20 individual 1/4-octave smoothed responses for each speaker in a vertical rectangular grid centered on the position of LG’s ears in his listening chair. The spatial averaging minimizes the effect of room-acoustics problems, but there are still slight peaks evident at 105 and 55Hz. These can also be seen in the spatially averaged response of the Revel Ultima Salon2 speaker, which LG reviewed in June (see www.stereophile.com/floorloudspeakers/608revel/index5.html), but the Snell is actually better balanced than the Revel in the lower midrange. The Snell’s midrange and treble are superbly flat in-room, though with a bit more mid-treble energy apparent compared with the Revel. The low bass in-room is down just a couple of dB at 20Hz.

Turning to the time domain, the Illusion’s step response on its tweeter axis (fig.8) reveals that all five drive-units are connected with the same positive acoustic polarity, this confirmed by looking at the individual step responses. The decay of each drive-unit’s step is smoothly integrated with the start of the step of the next lower in frequency, which correlates with the superb frequency-domain integration of their outputs seen in fig.4. Finally, the speaker’s cumulative spectral-decay plot on the tweeter axis (fig.9) is very clean, with only a very-low-level ridge of delayed energy evident just above 4kHz.

In almost every way, the Snell Illusion’s measured performance is textbook in nature—which is perhaps to be expected, given that its designer, Joe D’Appolito, literally wrote the book on how loudspeakers should be measured (Testing Loudspeakers, Audio Amateur Press, 1998). But it leaves me all the more puzzled why that port resonance just below 100Hz escaped Dr. D’Appolito’s scrutiny. I am told that our review samples were from very early production of the Illusion, and it’s also fair to say that this problem occurs right in the middle of the frequency region where room-acoustics resonant modes are endemic. Even so, both Larry Greenhill and I could detect its presence as an added warmth on recordings of bass guitar.

— John Atkinson

---

**Fig.7** Snell Illusion, 1/4-octave, spatially averaged response in LG’s listening room.

**Fig.8** Snell Illusion, step response on tweeter axis at 50” (5ms time window, 30kHz bandwidth).

**Fig.9** Snell Illusion, cumulative spectral-decay plot on tweeter axis at 50” (0.15ms risetime).
upscaleaudio.com
Fully Stocked?
“Yes, Sir!”

Vincent™ SP-331
Stereo Power Amplifier

Can’t find it?
We have it—in stock!

CARY CAD 120S Amplifier
Switchable 120 watts/ultralinear; 60 watts/triode

DECCO Integrated Amp
Tube High End meets Computer Audio!

MANLEY
Steelhead Phono Preamplifier

SONUS FABER
Cremona M

Upscale Audio retubes more high end gear than anybody. Strong attention to detail, including a $21,000 FFT analyzer and custom built test gear. Names like Mullard, Telefunken, Siemens, Svetlana... you name it.

IN STOCK NOW: ACOUSTIC ZEN, AESTHETIX, AMI TJOEB, ANTHEM, ARCAM, ATMA-SPHERE, AUDIO ELECTRONIC SUPPLY, B&K, BALANCED AUDIO TECHNOLOGY, BENZ MICRO, CARY, CHANG LIGHTSPEED, CLEARAUDIO, COINCIDENT, DECCO, DH LABS, DYNAVECTOR, ERA, EQUI-TECH, EXACTPOWER, GALLO, GRAHAM, JM LABS FOCAL, KIMBER KABLE, LYRA, MAGNUM DYNALAB, MANLEY, MUSIC HALL, NITTY GRITTY, NORDOST, NOTTINGHAM, OPERA, PATHOS, PRIMALUNA, PRIMATE, PS AUDIO, PSB, REGA, REL, SME, SONUS FABER, TRIANGLE, TRI-PLANAR, UNISON, VPI, VINCENT, VIENNA ACOUSTICS

See pictures on our website! And remember... we DO NOT use your amp as a tube tester.

www.upscaleaudio.com
2504 Spring Terrace • Upland, CA 91784
(909) 931-9686 FAX: (909) 985-6968

World Radio History
to reduce reflections, cavity resonances, and low noise. The woofers' rear reflex ports open above the service panel.

The crossover frequencies are 250Hz and 2.5kHz. The crossover itself—a fourth-order Linkwitz-Reilly filter network wired acoustically in phase—employs 100% polypropylene capacitors and air-core coils for all drivers except the woofers, for which a steel-core coil is used. All internal electrical connections are fastened with silver-solder. The Illusion has three pairs of binding posts, one each for the tweeter, midranges, and woofers. Each post can accept bare wire, banana plugs, spade lugs, or pins.

My review pair of Illusions had a deeply lustrous, black automotive finish under multiple coats of clear, hand-rubbed lacquer. Any wood finish, deep-luster lacquer, color or shade, and/or other special finish is available by special order for an additional cost of 20% per pair. As evidenced by the precision machining of the bezels, the rear port openings, the cast four-spoke feet, and the rear service panel, the workmanship on the Snell is peerless. This speaker's extraordinary finish make it an artistic sculpture.

Each Illusion takes Snell more than 30 hours to make: 6 hours to mill the bezels and cabinet, 3 to assemble the crossover, 6 for assembly of parts, 9 to buff the finish, 4 of final assembly, and 2 hours to tune each speaker to within 0.5dB of the frequency response of Snell's factory reference. Snell plans to build three pairs of Illusions per month.

**Setup**

The big Snell required more than the usual amount of fine-tuning to sound its best. I began this process just after Snell's Wally Kilgore and a friend had carried each 178-lb speaker up the short flight of stairs to my listening room and deposited it in one of the spots where my Quad ESL-989s sound best: 3' from the sidewalls and 5' from the front wall, facing the full length of the room.

First, I had to move my listening chair 6" to the right before I could unambiguously hear the difference between the in- and out-of-phase tracks on John Atkinson's Editor's Choice (CD, Stereophile STPH016-2), which suggested that the Illusion's imaging sweet spot would be small. When I locked in the best imaging, the Snell's soundstage stretched from wall to wall but was somewhat shallow, which made the sound somewhat uninviting—I didn't feel immersed in the music. My son-in-law noted that while the speakers had fantastic frequency range and dynamics, they left him outside rather than immersed in the music. "If I won the lottery tomorrow, I'd have to think long and hard about whether I'd buy these speakers," he said. Clearly, more setup work was needed.

The owner's manual proved helpful. Page 13 recommends setting the Snell's toe-in between 45° and 60°, as viewed from above, and that the distance between them be 0.85 times the distance from each to the listener. With the speakers 84" from my chair, I adjusted the speakers until their centers were 72" apart. This deepened and slightly narrowed the soundstage, and made the music more involving overall.

That accomplished, I played the usual Editor's Choice test tracks—phase, low-frequency warble tones, pink noise—and did some comparative nearfield (8') and farfield (16') listening. The pink noise revealed that the Illusion's treble balance didn't change during the "sit down, stand up" test, even though its tweeter is 5" higher than my ears when I'm seated. The low-frequency warble tones were clearly audible, and pitch-perfect down to the 30Hz 1/8-octave band. I felt some useful output down to 25Hz, which is not quite low enough to rattle the baseboard radiator panels at the other end of the room, as some speakers have done. Lower frequencies produced some doubling (ie, second-harmonic distortion) when I drove the Snells with a pure 20Hz tone.

**Listening**

I used two different solid-state amplifiers: first, a pair of Mark Levinson ML-2 monoblocks (50W into 4 ohms), and later, a single stereo Mark Levinson No.334 (250Wpc into 8 ohms). (Because of the differences in their voltage-gains, I was unable to simultaneously use all three Mark Levinson amplifiers—the 25W ML-2 monoblocks on the tweeters, the 150W ML-2 monoblocks on the midranges, and the 500W ML-2 monoblocks on the woofers.)

**ASSOCIATED EQUIPMENT**

**ANALOG SOURCES** Linn Sondek turntable with Lingo power supply, Linn Ittok tonearm, Spectral cartridge; Day-Sequerra Classic FM tuner.

**DIGITAL SOURCES** Bryston BCD-1 CD player, Sony SCD-C555ES SACD/CD player.

**PREAMPLIFIER** Mark Levinson ML-7.

**POWER AMPLIFIERS** Mark Levinson ML-2 monoblocks & No.334.

**LOUDSPEAKERS** Quad ESL-989, Revel Ultima Salon2.


**ACCESSORIES** Torus AO24-ACB-A1AB Power Isolation Unit, ATI SLM-100 analog sound-level meter. Listening room: 26' L by 13' W by 12' H with semi-cathedral ceiling, moderately furnished with sound-absorbing furniture. The left wall has a large bay window covered by Hunter Douglas Duette Honeycomb fabric shades. The rear of the room opens into a 25' L by 15' W by 12' H kitchen through an 8' by 4' doorway.

—Larry Greenhill
In 2002, the Focal Grand Utopia Be was the most technologically advanced mega speaker of its time, and the only transducer using a 100% pure beryllium tweeter. Now, 6 years later, Focal JM Labs has created a new world reference loudspeaker, the Grand Utopia EM, the only speaker in the world to employ an electromagnetic (EM) woofer.

Reintroducing a concept first pioneered in the 1930's by Bell Labs, Focal has replaced the limited magnetic force available from a conventional woofer, with the virtually unlimited and completely flexible force which electromagnetism affords.

Until the Grand Utopia EM, this "ancient" technology was seen as being too complex to employ in home audio speakers; too complex, that is, until Focal figured out how to do it!

The external electromagnetic power supply uses a signal recognition system and offers 6 electrical adjustment levels for a delivered power to the 15 3/4" woofer of 9 watts to 90 watts, permitting virtually unlimited control of the speaker/listening room coupling. As a result, the bass is as close to perfect as can be achieved in any environment; big room, small room, live room, dead room, or a completely acoustically neutral setting!

In addition to solving bass/room coupling issues, Focal extended the frequency response and efficiency of their now famous Beryllium tweeter ensuring seamless blending between drivers and extraordinary focus.

To ensure further that the Grand Utopia EM would be equally at home in rooms of any size and acoustic properties, Focal has incorporated a simply employed system of adjustments for infrabass, bass, midrange and treble, which permits the user to achieve the refined personalization of sound required by the specific listening environment. Though its 1,458 possible adjustments may seem daunting, in fact, the Focal Grand Utopia EM can be optimized for room acoustics in a few minutes by following the computer generated table of settings supplied with the speakers which describe which adjustments to use in a given acoustical setting.

The Grand Utopia EM's spinal column hints at its ability to be easily mechanically adjusted by turning the supplied handle so that the tweeter and midrange drivers can be set precisely for any distance between listener and speakers. Turn the handle and the enclosure spread out or contract as required to achieve perfect focal distance between you and the sound.

What do you get when you combine an electromagnetic woofer, a wide bandwidth high power handling extremely efficient Beryllium tweeter, 1,458 frequency/phase adjustments and perfect listener to speaker focal length?

The most compelling, musically involving, transcendental moment you have ever experienced in front of a pair of speakers, that's what! A sound which emanates from the stage in front of you as if there were no speakers-only the music.

Grand Utopia EM, a giant leap forward for audio which takes you beyond "speakers" altogether.
ers and midranges and the 250W No.334 on the woofers—to biampify the Snells.) The ML-2s delivered their typically dark, dynamic, three-dimensional sound at moderate volume levels, while the No.334 was brighter in the midrange, with greater bass dynamics that produced room-shuddering chords from synthesizer and sustained organ pedals. All listening was done without speaker grilles or spikes, neither of which were supplied.

Set up properly, the Illusions produced broad, detailed, involving, three-dimensional imaging with vivid dynamics. Again and again I was involved in music that was spacious, vibrant, and clear. "Speak To Me," from a hi-res re-mastering of Pink Floyd's Dark Side of the Moon (SACD, EMI 82136-2), presented a wide soundstage for this track's collage of dramatic, cinematic sound effects. This imaging depicted separate and distinct voices discernible, even during crescendos. A Gaelic Prayer, from the Illusion's transmission of the When Hany Met Sally ... soundtrack for the When Hany Met Sally ... soundtrack (CD, Epic EK 44313); Jeff Beck's guitar "She Misunderstood," from Richard Thompson's Rumor and Sigh (CD, MCA MCD 95136), formed a chillingly realistic, three-dimensional image of Vega's voice centered between the speakers. Similarly, the Illusion transmitted more of the timbres and harmonics of male singers' voices, with no midbass tubbiness. "Who's Loving You," from Cantus's 1989/90 tour, was clean and translucent, with normal emphasis in the presence range and no sodden overtones when he used the sostenuto pedal. Suzanne Vega's a cappella "Tom's Diner," from her When Hany Met Sally ... soundtrack, was strikingly natural. Cymbals were particularly translucent and sweet, whether tapped gently with a stick, as in "Noumenon," from Patricia Barber's Toronto, Blue Note/ Mobile Fidelity Sound Lab UD 82136-2), or stoked softly with wire brushes, as in "Fruit Forward," from Attention Screen's Live at Merkin Hall. The subtle dynamic shadings during the decays of clashed cymbals were discernible during the overture from A Chorus Line, on Fredrick Fennell and the Dallas Wind Symphony's Readings (CD, Reference RR-62CD).

The Illusion's bass both delighted and vexed me. It delivered tuneful, dynamic, punchy, powerful midbass and lower bass with excellent pitch definition, but seemed to weaken on the lowest bass notes. It captured the power and presence of Jean Guillou's organ-pedal chords in Chopin's Mola Criolla (CD, from his transcription of Mussorgsky's Pictures at an Exhibition (CD, Dorian DOR-90117), but didn't cause the air in my room to pulse or objects to rattle. Instead of extension, the Snell's strengths in the low bass were pitch definition and power, which made it possible for me to hear many things: the telltale sound of a fabric-covered stick striking a large bass drum in H. Owen Reed's La Fiesta Mexicana, from Howard Dunn and the Dallas Wind Symphony's Fiesta (CD, Reference RR-38CD); the plosive synth-bass pulses that drive the rhythmic power of "Something's Wrong," from Randy Edelman's soundtrack music for My Cousin Vinny (CD, Varése Sabarande VSD-5364); and Jerome Harris's careful bass work weaving in and out of "The Mooche," from Roadtoz (CD, Stereophile STPH013-2).

Although the Illusion captured the pitch and power of pipe-organ bass, I didn't feel the room "lock"—a level of deep bass sufficient to be felt as a pressure wave—from the 32Hz pedal note that ends James Bush's performance of
Herbert Howells' *Master Tallis's Testament*, from the *Pipes Rhode Island* collection (CD, Riago 101). The sustained low G played by the double basses in the introduction to Strauss's *Also sprach Zarathustra*, from Erich Kunzel and the Cincinnati Pops' *Time Warp* (CD, Telarc CD-80106), was more indistinct than I expected, with evidence of doubling. Bass notes slightly higher in frequency, such as the synthesizer in the beginning of Jerry Goldsmith's "Star Trek: Main Theme" from the same album, played with good definition and even produced room lock.

Listening to the Snell's cabinet sidewall level with the tweeter through a stethoscope while playing the chromatic half-step sinewaves on track 19 of *Editor's Choice*, I was able to hear a resonance excited by the toneburst at 261Hz. I also heard an emphasis at 125Hz, and felt a slight buzz when I rested my hand on the cabinet. This sensation was particularly evident when Attention Screen's Chris Jones played his fretless bass at high levels on "Blizzard Limbs," from *Live at Merkin Hall* (CD, Stereophile STPH018-2).

**Conclusion**

The Snell Illusion is a flagship loudspeaker in terms of price, iconic enclosure design, the deep luster of its automotive black finish, and its stunningly realistic midrange and treble dynamics. The setup requires time and patience to extract the Snell's best imaging, and the widest sweet spot necessary for optimal listening, but then the speaker's bass response, at least down to 30Hz, is extremely well defined, coherent, tuneful, powerful, and satisfying. The Illusion's dynamic capabilities are almost without equal. Its reproduction of orchestral music has a startling, dynamic, almost Technicolor quality that rapidly became addicting. Over the years, I've auditioned many Snell flagship systems; the Illusion is the most listenable, exciting, and satis-
There is a reason why you have heard so much about Magico Speakers lately....The reason is there's so much to hear!

THE MAGICO MODEL V3

“When I spoke with Alon Wolf and listened to his speakers, I was immediately aware that he is only interested in achieving the “ultimate” in music reproduction. He is not interested in how many speakers he can build, only in how good they will be. To achieve his goals, he has fabricated new materials for speaker cones, designed his own CAD programs, and created precision computer emulation models. He then listens with a fine musician’s ear. These qualities are rare, and only a few companies like Magico exist in high-end audio. They are the ones we look for at Overture.

Listening sessions with the Magico V3s provided an “experience” that was immensely enjoyable. They played back the recordings in a way that was musically accurate, totally involving, and immensely enjoyable. When the music was over, I opened my eyes, and, for an instant, I was surprised that I was in my listening room. That is what we want our customers to experience.”

—Terry Menacker, founder of Overture

Hear the Magico V3s at their best at Overture. For more information, please call 1.888.838.1812.
WORLD AUDIO DISTRIBUTION
AESTHETICALLY SOUND SOLUTIONS OF THE HIGHEST QUALITY

SSC

String Suspension Concept, SSC, is a puck and base technology designed to significantly enhance sound production of all audio components. In audio accessories, SSC offers a unique variety of solutions for CD and DVD players, loudspeakers, turntables, amplifiers, and phono preamplifiers. SSC products are easy to use and are extremely well priced. All products are made in Germany and employ the highest quality of materials.

COLD RAY

Cold Ray is a revolutionary resonance control product by Lars Kristensen, designed to make significant improvements to the quality of sound produced by loudspeakers and electronic devices. With solid mechanical stability and a smart design, Cold Ray does not simply prevent coupling, but serves as a resonator. The effect of Cold Ray is quickly evident, resulting in a much better sounding system, with greater clarity, amplification, tonal balance, and bass control. When used along with Plasma CTV’s and DVD Players a difference in picture quality can be detected, producing more natural color visibility and sharper contrast.

ATACAMA

Atacama offers a comprehensive range of speaker stands and hi-fi & home cinema equipment racks. With an emphasis on superior design, optimal performance and an unparalleled aesthetic appeal, Atacama products redefine the concept of audio-visual equipment support. Setting higher standards with every product line, Atacama strives to meet the evolving needs of customers. The Equinox and Europa models offer this facility, while achieving cutting-edge style and sonic performance far beyond their price tag.

PLEASE VISIT US AT THE VENETIAN HOTEL AT THE 2009 CONSUMER ELECTRONICS SHOW (CES)
DEALER INQUIRIES WELCOME 355 8TH STREET, SF CA 94103. 415-558-8771 WWW.WORLDAUDIODISTRIBUTION.COM
Musical Fidelity
750K Supercharger

MONOBLOCK POWER AMPLIFIER

EQUIPMENT REPORT

JOHN ATKINSON


Dimensions: 22" (560mm) H (including feet) by 8.5" (215mm) W by 8.75" (220mm) D (including terminals). Weight: 37.75 lbs (17.2kg).

Serial numbers of units reviewed: Z2049 & '54.

Price: $10,000/pair. Approximate number of dealers: 70. Warranty: 5 years parts & labor.

Manufacturer: Musical Fidelity Ltd., 24-26 Fulton Road, Wembley, Middlesex HA9 0TF, England, UK. Tel: (44) (0)181-900-2866. Fax: (44) (0)181-900-2983. Web: www.musicalfidelity.com.


Musical Fidelity's “Supercharger” concept is simple, which is perhaps why no one had thought of it before: If you love the sound of your low-powered amplifier but your speakers are insensitive, or you just need more loudness, you insert the high-power Supercharger amplifier between your low-powered amp and speakers. The Supercharger loads the small amplifier with an easy-to-drive 50 ohms, and, in theory, has so little sonic signature itself that it passes on the sonic signature of the small amp unchanged, but louder.

Michael Fremer reviewed Musical Fidelity’s first Supercharger amplifier, the 550W 550K ($5000/pair), in September 2007 (see www.stereophile.com/solidpoweramps/907mf). Using the 550K both as a traditional monoblock power amplifier and as a Supercharger to increase the dynamic range of his beloved Music Reference RM200 tube amp, a 1964-vintage Scott 299D integrated amplifier, and some solid-state designs, Mikey was impressed by what he heard. “Using a variety of very different-sounding amplifiers of various power outputs overwhelmingly demonstrated to me that the 550K Supercharger will retain the sonic attributes of your favorite low- or medium-powered amp (50–200Wpc), whether tubed or solid-state, while increasing its output by 10dB or more... The result will be dynamic realism and, in most cases, better overall performance. You can have your cake and make it rock, too.”
Live Your Music

SV-236: 2008 TAS Editors Choice Award Winner

CD-S6: “From build to performance, it’s the best CD player I have evaluated.” – Aaron Weiss in SoundStage

Vincent

WS Distributing, LLC. 3427 Kraft SE, Grand Rapids, MI 49512
Phone: 616.885.9809 • Fax: 616.885.9818 • Dealer Contact: Tom Myers 866.984.0677 tmyers@wsdistributing.com
In my own auditioning of the same pair of 550K Superchargers, used as conventional monoblock amplifiers, I was very impressed by their effortless dynamics and iron-fisted control of the loudspeakers' bass. However, I ultimately felt that the 550Ks did have some character, sounding lean compared with my reference Mark Levinson No.33H monoblocks, and with a less liquid midrange. Overall, the 550Ks sounded very similar to Musical Fidelity’s flagship dual-mono kW behemoth, which Michael Fremer reviewed in January 2004 (see www.stereophile.com/solidpoweramps/1043mf), but perhaps with less delicacy.

Of Musical Fidelity’s high-powered amplifiers, I much preferred the balance of the kW750 (750Wpc into 8 ohms, $10,000; see www.stereophile.com/solidpoweramps/1205mf). I had first encountered this stereo design with a loaner sample of a Musical Fidelity product (other than the usual measurement sections that accompany reviews by other Stereophile writers).

1 In May 2008, I used the review samples of the 550K for a rather unusual purpose: driving Revel Performa F30 loudspeakers as a super-high-quality sound-reinforcement system for a series of concerts by male choir Cantus in Minneapolis’s Southern Theater (see http://forum.stereophile.com/photopost/showphoto.php?photo=1665). Following the shows, I asked Cantus producer Erick Lichte, with whom I have worked for eight CDs now and whose ears I respect immensely, to give the 550Ks a listen, using them to Supercharge his sweet-sounding Pass Labs A20. His report appears in this issue’s “Follow-Up” section.

2 Readers should note that, at the end of 2003, Musical Fidelity’s Antony Michaelson asked me to produce a recording of him performing Mozart’s Clarinet Concerto, K.622, which was released on SACD and LP. To avoid any appearance of a conflict of interest, I waived any fee and paid my own expenses to attend the sessions in London’s Henry Wood Hall. I also imposed a moratorium of five years on my writing a review of a Musical Fidelity product (other than the usual measurement sections that accompany reviews by other Stereophile writers).

MEASUREMENTS

I examined the Musical Fidelity’s measured behavior primarily using Stereophile’s loaner sample of the top-of-the-line Audio Precision SYS2722 system (see the January 2008 “As We See It” and www.ap.com); for some tests, I also used my vintage Audio Precision System One Dual Domain.

My first test of an amplifier is to run it for 60 minutes at one-third its specified power into 8 ohms, which is thermally the worst case for an amplifier with a class-B or -AB output stage. The 750K got very hot very quickly, its cooling fans turning on after two minutes, its side-mounted heatsinks reaching 60°C (140°F) after five minutes, and the fans switching to their maximum speed at eight minutes. I ended the test after 10 minutes, before the 750K’s thermal sensor cut in, because the Supercharger doesn’t have enough heatsink area for sustained operation at high powers. But of course, it can be argued that that is beside the point, as its large output-voltage swing capability is intended to handle musical peaks without waveform clipping. During my auditioning, though the heatsinks did get quite warm, the cooling fans rarely turned on.

The voltage gain into 8 ohms was a fairly high 29.9dB for the balanced line-level input, 29.2dB for the unbalanced input. The speaker-level inputs offered just 7.1dB of voltage gain, close to the specified 6.9dB. All three inputs preserved absolute polarity; ie, were non-inverting. The speaker inputs offered an input impedance almost identical to the specified 50 ohms, at 49.5 ohms, while the line-level input impedances were 47.5k ohms (unbalanced input and each leg of the balanced input) at high midrange frequencies, dropping slightly and inconsequentially to 40k ohms at 20kHz.

The output impedance was a little higher than usual for a solid-state design, at 0.11 ohm at 20Hz and 1kHz, rising to 0.22 ohm at 20kHz, which resulted in frequency-response variations of ±0.1dB with our standard simulated loudspeaker (fig.1, red trace). The small-signal bandwidth was a wide 150kHz into 8 ohms (fig.1, blue trace), but dropped with decreasing load impedance, reaching −3dB at 56kHz and −1.35dB at 20kHz into 2 ohms (fig.1, magenta.

MEASUREMENTS

Fig.1 Musical Fidelity 750K Supercharger, frequency response at 2.83V into simulated loudspeaker load (red), 8 ohms (blue), 4 ohms (green), 2 ohms (magenta). (0.25dB/vertical div.)

Fig.2 Musical Fidelity 750K Supercharger, small-signal 1kHz squarewave into 8 ohms.
operation, orange for thermal overload. However, while the new amplifier shares the 550K’s 8.5” diameter, it is just over 6” taller, and its aluminum cap has a mesh-covered vent, through which two temperature-controlled fans exhaust hot air. (There are discreet inlet vents at the sides; the fans run briefly when the amplifier is first switched on, then remain off until the heatsink temperature rises above a preset threshold.) There is now a balanced XLR input jack on the rear panel in addition to the 550K’s single-ended RCA. The maximum power is specified as 750W into 8 ohms or 1150W into 4 ohms, an increase of 1.75dB compared with the 550K, though the price is 6dB higher: $10,000/pair compared with $5000/pair.

Sound
Psychoacousticians tell us that our aural memories are reliable only in the short term (though that doesn’t tie in with the fact that we instantly recognize friends’ voices on the phone despite the lack of fidelity). But from the instant I powered up the 750K Superchargers in my system, using them as conventional monoblocks from their balanced inputs, I was immediately reminded of the kW750. A warmish midrange, sweet-toned high frequencies, tight, deep low frequencies, and a voluminous, stable, well-defined soundstage—all were exactly what I remembered of the sound of the kW750 positioned in space; it was very easy to perceive when the tenors turned away from the microphones to add spaciousness to their sound. And the character of the voices was as natural-sounding and as unforced as I expected, with no added

FROM THE INSTANT I POWERED UP THE 750K SUPERCHARGERS IN MY SYSTEM, I WAS IMMEDIATELY REMINDED OF THE kW750.
HIGH PERFORMANCE AUDIO, VIDEO & HOME THEATER SYSTEMS

For those with Exceptional Taste.

Expert Custom Installation
Call for an Appointment
Regular Hours - Monday thru Friday, 9am to 5 pm
Evenings, Saturday & Sunday by Appointment

The World's McIntosh Headquarters

NYSS Home Theater
High Definition Televisions • Audio Components
20 Industrial Drive, Middletown, NY 10941  (845) 692-9000

WANTED!!!
TOP PRICES PAID FOR YOUR OLD MCINTOSH,
WILSON or B&W COMPONENTS

Now in South Florida!
(954) 975-8800

Be sure to visit our web-site at www.nysshometheater.com
If there were an Olympic event for loudspeaker design, then this would win America the Gold...
hardness in the climaxes of the suite, *A Sound Like This*, by Edie Hill also featured on the CD. (Male voices singing close harmonies at high levels provide the perfect test signal to reveal shortcomings in amplifiers and loudspeakers.)

The Musical Fidelity's enormous dynamic range and bass control got the best from *Live at Merkin Hall*, my recording of Stereophile reviewer Bob Reina's jazz group. Attention Screen (CD, Stereophile STPH018-2). I use as few mikes as possible when I record a drum kit: two cardioids overhead as an ORTF pair, a Shure cardioid clipped just above the snare drum's top skin, and an AKG dynamic mike in front of the kick drum's front skin. I time-align the outputs of the two spot mikes with the outputs of the cardioid pair, my goal being to capture both a natural image of the drums and their natural dynamic range. With an empathetic drummer capable of optimally tuning his kit—e.g., Attention Screen's Mark Flynn—almost no equalization or compression is required in postproduction. And Mark hit the heck out of his Gretsch kit that February night in Merkin Hall. There are some snare-drum shots on "Blizzard Limbs"—the three beats at 3:40 that divide the rocking improvisation that begins the piece from the more contemplative second section, for example—that go from -60 to 0dBFS from one sample to the next. Amplifiers that can't swing as many volts as the 750K will clip those peaks, unless you play the music too quietly. With the Musical Fidelities, I could play this track at live levels without waveform clipping.

It being the end of September as I write these words, I had to get the Led out, specifically *How the West Was Won* (DVD-Audio, Atlantic 83587-9), recorded live at two L.A. concerts in 1972 by Eddie Kramer. Yes, suck-and-blow compression is obvious at times, but this set features great recorded drum sound, with tangible space around and between the drums. Forget "Stairway to Heaven," "Immigrant Song," "Whole Lotta Love"—the highlight of this album is the blues "Since I've Been Loving You." Even at ear-bleed levels—is there any other way

### Measurements, continued

into 4 ohms can be explained by the fact that while I have a dedicated 20A AC line feeding power to my test bench, I don't hold the AC voltage constant. So while the AC supply was 124.9V with the 750K idling, it dropped to 121.5V with the amplifier clipping into 8 ohms, and to 119.8V with it clipping into 4 ohms.

Plotting the THD+N percentage against frequency at a moderately high power level (fig.5) again shows that the Supercharger is more comfortable driving 8 and 4 ohms than it is 2 ohms. The THD starts to increase above 8kHz or so, due to the amplifier starting to run out of open-loop bandwidth and thus having less gain margin available for the negative feedback to work its magic. Nevertheless, the 750K is still a very low-distortion design. And at moderate powers, the distortion—what there is of it—is subjectively benign low-order harmonics, primarily the third (fig.6). The distortion spectrum looks similar at very high powers into both 8 ohms (fig.7, blue trace) and 4 ohms (red trace), though you can see a power-supply component present at 120Hz, which suggests that the amplifier is breaking a bit of a sweat at these levels. Sidebands at ±120Hz can also be seen flanking the 19 and 20kHz fundamentals as the amplifier drove these HF tones around 3dB below waveform clipping into 4 ohms (fig.8). Actual intermodulation products in this graph are all low, at ~90dB or below. Overall, Musical Fidelity's 750K Supercharger offers excellent measured performance, but there is no clue as to why I preferred its sound to that of the similarly well-measuring 550K.

—John Atkinson
Benz Micro announces their most affordable, Swiss hand-made moving coil, the ACE, now in S Class.

Available in low (0.4mV Red), medium (0.8mV Clear) and high (2.5mV Blue) output.

Our new flagship – The LP S Class

The continued evolution of the Benz cartridge line and the culmination of years of research and manufacturing refinements. The S Class incorporates advancements in moving coil and suspension design, materials and new Dynascan stylus.

Musical Surroundings
5662 Shattuck Avenue, Oakland, CA 94609 phone: 510.547.5006 fax: 510.547.5009 www.musicalsurroundings.com
to listen to Led Zeppelin—the Superchargers allowed me to hear into the layering of the soundstage, with Bonzo’s drums behind Jimmy Page’s guitar and “Percy” Plant’s wailing.

Looking back at what I’ve written, I seem to have concentrated on the 750K’s abilities to play loudly and cleanly—which they indeed did. But for all their ability to kick loudspeaker butt, the Musical Fidelity could still do delicacy with aplomb. Robert Plant and Alison Krauss’s Raising Sand (CD, Rounder 11661-9075-2) has been in heavy rotation chez Atkinson since I picked it up while killing time at a Starbucks a year ago. The double bass on this disc can be problematic with some amplifier-loudspeaker combinations, as its considerable midbass energy demands an amplifier capable of retaining control of the woofers if the sound is not to degenerate into mud, while at the same time allowing this recording’s wealth of midrange detail to emerge unscathed. The bass in Gene Clark’s “Polly Come Home” had the appropriate combination of weight and definition, without obscuring Plant and Krauss’s mysterious-sounding harmonies as they soared over Marc Ribot’s contemplative guitar figurings, all against a richly ambient backdrop.

Again looking back, I see I have avoided mentioning how the Musical Fidelitiks coped with complex classical music. They did very well with naturally miked recording’s, as they soared over Marc Ribot’s contemplative guitar figurings, all against a richly ambient backdrop.

As against my long-term reference amplifier, the Mark Levinson No.33H (150W, $19,900/pair when last available), the Musical Fidelity surprised me by having better-defined, more extended low frequencies. The Levinson sounded somewhat “pudgily” in direct comparison—not at all what I had expected. The Levinson had slightly sweeter mids and highs, but it was a close-run thing. Next up was the Parasound Halo JC 1 (450W, $7000/pair), a long-term favorite of this magazine’s review team and of mine. The Parasound had low-frequency slam and definition to match the Musical Fidelity’s but was cooler-balanced overall, sounding similar to the 550K, though its highs were smoother.

My auditioning of the Musical Fidelity750K was interrupted by two weeks spent with the Ayre MX-R preamplifier, reviewed last month by Wes Phillips, along with the Ayre MX-R monoblocks (300Wpc, $18,500/pair) he had used to prepare the review. In direct comparison, the Ayre matched the 750K’s slam, bass definition, and soundstaging depth, and offered a slightly sweeter high end. I mean no disrespect to the 750K when I say that the MX-R could be my ultimate amplifier. But the price difference is significant, and I could happily live with the Musical Fidelitiks.

THE 750K SUPERCHARGER IS THE BEST-SOUNDING AMPLIFIER I HAVE HEARD FROM MUSICAL FIDELITY.

Summing Up
Sounding significantly less lean than both the kW and the 550K, the 750K Supercharger is, without a doubt, the best-sounding amplifier I have heard from Musical Fidelity. While I still prefer the Mark Levinson No.33H for ultimate midrange sweetness, the Levinson is outclassed by the 750K in bass solidity, control, and overall dynamics. At $10,000/pair, it is undoubtedly expensive, but its immediate competition is more expensive or less powerful, or both (eg, Ayre’s MX-R). Forget the Supercharger nomenclature—this is a power amplifier that can stand on its own feet.

--John Atkinson
Nuts About Hi-Fi and Focal...

Cranking out great sound for the past 30 years

NUTS ABOUT HI-FI
9960 Silverdale Way
Silverdale, WA - 98383
Phone: 360.698.1348
WWW.NUTSABOUTHIFI.COM
Fearless leader called me and asked if I’d be interested in reviewing the Simaudio Moon i-1 ($1500), the entry-level integrated amplifier in Simaudio’s Classic line. Hmmm. I’d been very impressed by all of the more expensive Simaudio products I’d heard at Stereophile’s Home Entertainment shows over the years, and the 50Wpc Moon i-1 would be an interesting match for the affordable speakers I’ve had in-house lately. Send it on, JA!

Design

The Canadian-made Moon i-1 is a full-functioned integrated amplifier with remote control. It has six line-level inputs—including one front-mounted mini-jack for personal media players—and a headphone jack. It also has a RS-232 port for fully bidirectional feedback in custom-installed systems and firmware updates, as well as an infrared input for external control. The remote control is designed to control other Simaudio products (eg, CD players) as well. The i-1 has a separate Preamp Out to enable its preamp section to drive external power amplifiers.

The Moon i-1 is claimed to output 50Wpc into 8 ohms or 100Wpc into 4 ohms, and the bipolar output devices are biased into providing class-A output up to 5W. Its oversize power supply uses a custom-designed toroidal transformer—the largest I’ve ever seen in an integrated amp. Looking at it gave me a hankering for a Chicago-style deep-dish pizza. The circuit-board traces, of pure copper with gold plating, are designed for low-impedance characteristics. The all-aluminum case is rigidly built to minimize external vibrations, but there are no external heatsinks—the i-1 is designed to be left on at all times for optimal performance. Simaudio claims that its low operating temperature will make it last longer. I left my review sample on all the time; the chassis barely rose above room temperature.

I tested the i-1 in my affordable reference system, using as reference speakers the Monitor Audio Silver RS6s. The Simaudio lacks a phono stage, so I spun vinyl using the Creek Destiny phono stage into one of the i-1’s Aux inputs via a pair of MIT interconnects.
mystère

“The most beautiful thing we can experience is the mysterious.”

— Einstein

the ia11 $1999
40 watts per channel

the ia21 $2999
50 watts per channel

For more information:
Upscale Audio at 909/931-9686
www.mystere-usa.com

A limited number of dealer and manufacturer’s representative positions are open

Stepped attenuator volume control.
Exotic, expensive and unheard of in this price category.
Sound
Immediately, the Moon i-1’s rich, holographic, detailed, lifelike midrange made me want to mine my collection of vocal LPs. “Eli’s Coming,” from Laura Nyro’s Eli and the Thirteenth Confession (LP, Columbia CS 9626), revealed her tremendous range, as the Moon rendered her soaring, silky voice with vibrant verisimilitude. Similarly, Frank Sinatra’s rendition of “My Funny Valentine,” from Swinging Easy: Songs for Lovers (LP, Capitol W587), revealed the rich lower midrange of the bottom end of Ol’ Blue Eyes’ range with an articulation of low-level dynamics that was reminiscent of expensive tube electronics. From my notes: “Are you sure there are no tubes in this thing?” The Moon unraveled inner-midrange detail unlike any piece of electronics I’ve heard in its price range. Throughout all of the coherent, tactile, dirty mess in the mix of Tom Waits’ Real Gone (CD, Anti-86678-2), I was able to follow the discrete portrayal on each track of guitarist Mark Ribot’s delicately picked textures.

With all recordings, the high frequencies were silky, silvery, and extended, with an effervescent sheen reminiscent of more expensive solid-state electronics, but with the organic liquidity of expensive tube gear. On Tomiko Kohjiba’s Transmigration of the Soul, from Festival (CD, Stereophile STPH007-2), Carol Wincenc’s flute was appropriately metallic, airy, and sweet as it floated over the crystal-clear individual lines of every member of the 10-piece chamber ensemble. The two violins were biting yet sweet, and all the upper-harmonic partials of all the instruments glazed, as in the live performance documented on this disc. On “Urge for Going,” from Joni Mitchell’s Hits (CD, Reprise 46326-2), the tactile and transient textures of her finger-picked acoustic guitar, a Martin flattop, were amazingly lifelike, even when listened to from the next room.

At the opposite end of the frequency spectrum, the Moon i-1 impressed me mightily with most tracks. Ben

MEASUREMENTS
I primarily used Stereophile's loaner sample of the top-of-the-line Audio Precision SYS2722 system (see www.stereophile.com/asweseeit/108awsi and www.ap.com) to examine the Simaudio’s measured performance.

Before performing tests on an amplifier, I thermally stress it by running it for 60 minutes at one-third its specified power into 8 ohms, which is the worst case for an amplifier with a class-B or -AB output stage. Despite its lack of external or obvious heatsinking, the Simaudio Moon i-1 survived this preconditioning period without incident, though the distortion rose from 0.015% with the amplifier stone cold to 0.028% with it baking hot. (Actually, only the bottom panel got that hot; the top panel was merely warm.)

The maximum voltage gain from the speaker terminals (into 8 ohms) was 35.75dB, and a sensibly low 5.7dB from the preamplifier output jacks. The i-1 was non-inverting from both sets of outputs; i.e, the amp preserved absolute polarity. The input impedance was a moderately low 11.3k ohms at bass and midrange frequencies, dropping to 7k ohms at the top of the audioband. The source impedance from the preamp output jacks was 100 ohms across the band; from the speaker terminals, it was 0.075 ohm at low and middle frequencies, rising inconsequentially to 0.1 ohm at 20kHz.

As a result of this low output impedance, the modification of the amplifier’s frequency response due to the Ohm’s Law interaction between the impedance and that of the loudspeaker (fig.1, green trace) was minimal. This graph also shows that the i-1 has a very wide small-signal bandwidth, at least into higher impedances, the response
On-line purchasing is easy, it's the research that's a pain in the butt. We thought a good list of 'satisfaction guaranteed' gifts might come in handy.

**Grado SR60**
This sweet sounding little headphone has been the de-facto standard for entry level high-end headphones for a couple of decades now. Gift your music loving student or budding audiophile a pair, and watch them smile.

**Denon AH-D1001k**
Stepping up a notch, and adding the ability to seal out outside noise, you'll find these Denon cans to be a wonderful way for your favorite giftee to wrap themselves in a cocoon of music wherever they may roam.

**Shure SE530**
Want to step up to the top of the portable sealed headphone ladder? The SE530 is the finest ear canal headphone available (short of the thousand dollar custom molded products), and are guaranteed to WOW! You gotta really love someone to shell out the bucks for these, but we promise they'll love you back.

**AKG K702**
If you have a hard-core audiophile at home ... well, we're sorry. We know the disease. The good news for you is we also know the cure. The newly released K702 is a gorgeous sounding headphone splitting the difference between lean and lush perfectly.

**HeadRoom Total BitHead**
Once the headphones are sorted, why not go the extra mile and help your loved one drive them with a proper amp? The BitHead is the perfect mate for those on the move with an iPod or other portable player. And its USB input will transform the sound of their computer listening.

This is a very good list that's guaranteed to please (we have a 30-day satisfaction guaranty that's transferable to your loved one), but we certainly know of lots more terrific products that would be wonderful gifts for you to give this holiday season. Please feel free to call us or check out our website for lots more ideas. There's nothing we'd like better than to help you give the gift of music, right between their ears.

* lower pricing available, call us for best price

Contact HeadRoom at 1-800-828-8184

Visit Our Site at www.headphone.com
Tucker’s double-bass solo in “Comin’ Home Baby,” from The Best of Herbie Mann (LP, Atlantic), was appropriately warm, woody, and lifelike, floating on a bed of air. As I cranked up the volume on the title track of Hole’s Celebrity Skin (CD, Geffen DGCD 25164), the bass guitar was slamming and soooo tuneful—I was able to hear all the layers of the engineering in this intoxicatingly catchy hard-rock track. As I tucked into “Kicks,” from the Greatest Hits of the greatly underrated Paul Revere and the Raiders (LP, Columbia KCL 2662), Mark Volk’s melodic Vox Phantom Bass was natural, coherent, and tactile as I followed his infectious descending line in this tune’s bridge. As I plumbed deeper into the bass region, the Moon i-1 impressed me even more. The organ pedals in Timothy Seelig and the Turtle Creek Chorale’s performance of John Rutter’s Requiem (CD, Reference RR-57CD) were natural, tuneful, and forceful, with no trace of overhang or distortion.

On a few tracks, I felt the Moon was a bit warmer in the midbass than I would have liked. Tony Scherr’s string bass on “The Days of Wine and Roses,” from Bill Frisell’s East/West (CD, Nonesuch 79863-2), was a touch too ripe and sluggish in both the walking-bass line in the tune’s head and in his solo. I had a ready suspected that the amplifier would misbehave into that load.) The traces in fig.3 slope down with increasing power below a few watts, indicating that the measurement is dominated by noise rather than actual distortion in this region. There is a very slight rise in THD with the amplifier delivering a few tens of watts, but the transition to actual waveform clipping is very sharply defined.

THE HIGH FREQUENCIES WERE SILKY, SILVERY, AND EXTENDED, WITH AN EFFERVESCENT SHEEN REMINISCENT OF MORE EXPENSIVE SOLID-STATE ELECTRONICS.
the sound experience
High Performance Audio for Every Lifestyle

Come visit our new state of the art listening rooms and experience sonic perfection first-hand.

Hansen Audio, Airtight, Sonus Faber, Chord, Simaudio Moon, Esoteric, Tri-Planar, Stealth Audio Cables, Boulder, Transrotor, PrimaLuna, Zanden, Harmonic Resolution Systems (HRS), Graham Engineering, Bel Canto, Siltech, Transfiguration, Audience, Koetsu, PS Audio, TAOC Component Racks, ModWright Instruments, Running Springs Audio, SME, Oracle Audio, Dynavector, E.A.R., Wavestream Kinetics...

233 South Federal Highway, Boca Raton, FL 33432
(561) 391-7868 | www.thesndexp.com
similar reaction to Jerome Harris’s playing in “The Mooche,” from his Rendezvous (CD, Stereophile STPH013-2). But I didn’t hear this with most of the recordings I played; I’m a bit inconclusive as to why this warmth reared its head on some tracks and not on others.

The Simaudio’s reproduction of transients made it an excellent reproducer of percussion recordings. Listening to Charles Wuorinen’s Spealium Speculare (LP, Nonesuch 71300), I could follow every detail of Richard Fitz’s broad range of percussion instruments, which the Moon i-1 reproduced with perfectly fast and lifelike transients. And when I played this recording at a tad above concert-hall level, Fitz’s slamming bass drum shook the room.

The Moon i-1 never seemed to run out of steam. The bass synths and electronic drums of Kraftwerk’s Minimum/Maximum (CD, EMI ASW 60612) shook the walls. I found my legs twitching and my voice singing along as I scribbled “This can’t be only 50Wpc.” Traffic’s The Low Spark of High Heeled Boys (LP, Island ILPS 9180) seemed to gather together the best of the Moon i-1. Steve Winwood’s rich, well-recorded voice floated on a bed of air over the perfectly coherent interplay of bass and drums. But the track that really revealed the Moon’s magic was “Fruit Forward,” from my quartet Attention Screen’s.

Fig.4 plots the i-1’s THD+N percentage against frequency at a level (10V) where the distortion components at 1kHz are starting to rise above the noise floor. The distortion into 8 and 4 ohms (blue, red, cyan, and magenta traces) rises a little in the upper octaves, but not to high levels. However, the amplifier is not happy driving 2 ohms (green trace), suffering from a catastrophic rise in distortion at this output voltage. At only slightly higher output levels into 2 ohms, the amplifier went into protection and shut itself down, fortunately without suffering any damage.

The distortion with higher load impedances is predominantly the subjectively innocuous third harmonic (fig.5), though higher-order harmonics appear as the amplifier is asked to simultaneously deliver high voltages and high currents (fig.6). Even so, the harmonics are all lower than the level of the power-supply component at 120Hz, which lies at -80dB (0.01%). The only real clue that this is an affordably priced amplifier is the appearance of sidebands at the power-supply-related frequencies of ±120Hz around all the harmonic components at powers close to clipping, both with single tones (fig.7) and with an equal mix of high-frequency tones (fig.8). I suspect that it is this lack of power-supply grunt that leads to BJR finding the i-1’s mid-bass to sound a touch warm. Actual intermodulation products with the latter are all below -74dB (0.02%), however.

You can’t expect bombproof behavior from an amplifier costing just $1500; the trick the designer needs to pull off is to make sure that the amplifier’s performance in the middle of the envelope is not compromised, while allowing it to misbehave at the extremes. Simaudio’s Moon i-1 integrated amplifier gracefully manages that trick; the real mystery is how it can be possible for a Canadian manufacturer to make this product at all in North America while keeping the price competitive.

—John Atkinson

THE SIMAUDIO’S REPRODUCTION OF TRANSIENTS MADE IT AN EXCELLENT REPRODUCER OF PERCUSSION RECORDINGS.
“In our reference rooms, Shunyata Research Hydra’s and Helix power cables have removed noise and increased music involvement to astonishing levels.

Come in and experience these amazing products for yourself!”

— Paul Chambers, Manager, Goodwin’s High End
Live at Merkin Hall (CD, Stereophile STPH018-2). The Simaudio's lifelike realism and ability to unravel gobs of midrange detail let me follow and unravel the compositional structure of this wholly improvised performance. It opens with a simple bass solo in which Chris Jones sets up a fairly straightforward yet rigid harmonic and rhythmic structure that creates the architecture of the entire piece. As the rest of us enter, we build and shape on what Chris has constructed as he and drummer Mark Flynn subtly twist the rhythmic structure and the piece descends into free soloing, then recapitulates the material introduced in a simple wind-down in which Chris restates the opening motive.

I enjoyed listening to this piece through the Moon i-1 almost as much as I did playing it live.

**Competition**

I compared the Simaudio Moon i-1 ($1500) with two other integrated amplifiers, both from Creek: the Destiny ($2500) and the 5350SE ($1595, now known as the Classic).

The Creek 5350SE had a slightly less liquid textural presentation than the Moon, but I wouldn’t call it dry, and its lower midrange was a bit less rich. The Moon’s high frequencies were sweeter and a bit cleaner, with more detail. However, the 5350SE had the Moon’s bottom-end slam and high-level dynamic capabilities, though with not a trace of the midbass warmth I heard from some recordings with the Simaudio.

The Creek Destiny shared the other two integrateds’ deep-bass definition and dynamic capabilities, but without a trace of warmth in the midbass. However, it also shared the Moon’s sophisticated high-frequency reproduction, and was perhaps just a touch more extended, and just as silky. The Creek Destiny shared the Moon i-1’s ability to resolve midrange detail, but the Simaudio seemed a tad richer in this region.

**End**

I was very impressed with the overall performance of this rugged, sexy-looking integrated amplifier from Canada. It shared many of the attributes of more expensive gear, both tubed and solid-state, and with all recordings it sounded far more powerful than its rated output of 50Wpc indicates. In fact, its lifelike performance gave me a hankering to listen to more products from Simaudio. The Moon i-1 is a must-listen for anyone considering an integrated amplifier in the under-$2000 range. Thanks, JA, for sending it my way.
Reference Series

It's been a tough day and you just need to listen to your music and relax. On the drive home you're already setting up your playlist — getting ready to unwind in that first nuanced chord. With Canton's new Reference Series, listening to your music is no longer simple gratification; it's a passion that starts long before the first chord and resonates long after the song's end. For more information on Canton's Reference Series, please visit www.cantonusa.com

Canton, 504 Malcolm Avenue SE, Suite 400, Minneapolis, MN 55414, 612.706.9250.
Smartketing, 6555 Saint-Denis Street, Montreal, Quebec H2S 251, Canada. 514.279.6006.
Fried Compact 7 loudspeaker

In “The Fifth Element” in the October issue (p.46), columnist John Marks was disappointed with the sound of Fried Products’ Compact 7 two-way, stand-mounted loudspeaker ($1795/pair). It turned out, as I reported in that issue’s “Follow-Up” section (p.184), that the woofers of both samples of the pair (S/Ns D50057 & ‘58) had been wired in the wrong polarity, which Fried’s David Finley confirmed in his “Manufacturer’s Comment” (p.201).

We asked Mr Finley to send us a second, correctly assembled pair for “Follow-Up” coverage in this issue; John discusses their sound in his column. But before shipping them to him, I performed a full set of measurements on both samples (S/Ns DF0061 & ‘62).

This time, the woofers were correctly wired. The blue trace in fig.1 shows the step response of the new Compact 7 on the listening axis. The sharp positive-going spike at 3.7ms is the tweeter’s output, which blends smoothly into the negative-going step of the woofer. The red trace in this graph shows the step response of one of the first samples; both drive-units are connected with the same, positive-going polarity, which results in an enormous suckout in the frequency region in which these outputs overlap (fig.2, red trace). By contrast, the opposite-polarity connection of the drive-units in the new sample results in a smooth, even frequency response in the same region (fig.2, blue trace), though there is now a small suckout evident between 5 and 7kHz. The level of the tweeter in this new sample also appears to have been increased by 3dB, perhaps to address JM’s criticism of the earlier samples not having a particularly extended HF region. The large suckout in the lower midrange remains unchanged, however, as does the sharp rolloff below 75Hz or so.

The blue and red traces in fig.3 show the individual outputs of the woofer and port, respectively, measured in the nearfield. Although Fried refers to the Compact 7 as a “line tunnel,” the speaker is really a reflex design, with a nominal port tuning frequency of 70Hz, the frequency of the minimum-motion notch in the woofer’s response. The port’s output actually peaks a little higher in frequency, however, which results in an overall LF response that rolls off more rapidly than in a typical reflex design, with then a notch in the midbass. What can also be seen in fig.3 is a very high resonant peak at 290Hz in the port’s output. In fact, this port resonance is so high in level that it results in a distinct step in the summed LF response at its center frequency (fig.3, black trace), and probably contributes to the speaker’s relative lack of energy in the octave between 300 and 600Hz. In this respect, the new sample behaved almost identically to the first—behavior that, I feel, contributed to JM finding the speaker’s balance “entirely too tailored and polite.”

This lack of lower-midrange energy is hinted at in the Compact 7’s cumulative spectral-decay plot (fig.4), though unfortunately this graph lacks resolution in this region. The treble region is basically clean, but with some low-level hash evident in the region of the on-axis notch.

Finally, while the Fried Compact 7’s voltage sensitivity is a high 91.5dB(1)/2.83V/m, its impedance plot (fig.5) indicates that the speaker is really a 4 ohm
design. The twin peaks in the bass in this graph also confirm the woofer alignment to be basically a reflex of some kind with a port tuning frequency of 70Hz; the unevenness of the trace at 290Hz confirms the existence of a cabinet resonance at that frequency.

The new samples of the Fried Compact 7 definitely measure better than the first samples, at least in regard to the integration in the treble of the woofer and tweeter outputs, and also demonstrate superb pair matching. But I am still concerned about that odd behavior in the lower midrange, and about what appears to me to be the woofer's suboptimal reflex tuning.

—John Atkinson

GINI Systems "LS3/5a"

John Marks writes about this unauthorized copy of the classic BBC-designed minimonitor in his "The Fifth Element" in this issue. As John writes, he sent me the pair to measure because he suspected an internal wiring problem in one of the speakers. This turned out to be the case: as you can see in fig.1, which shows the step responses of both samples, while both speakers had the tweeter wired in inverted acoustic polarity, one speaker also had the woofer wired in negative polarity (red trace) rather than positive (blue trace). Having the woofer and tweeter in the same polarity results in a suckout in the crossover region between the woofer and tweeter, so I rewired the red sample to be the same as the blue one. Before I returned the GINIs to JM for him to finish his report, I took a complete suite of measurements.

Assessed with DRA Labs’ MLSSA system, the GINI Systems "LS3/5a"'s voltage sensitivity on its tweeter axis is a low 83.5dB (blue trace). Having the woofer plotted below 300Hz across 30° horizontal window and corrected for microphone response, with the nearfield responses of the woofer plotted below 300Hz (blue); response under identical conditions of 1978 Rogers LS3/5a (green), offset by -10dB.

As John Marks suspected, the rise in the bass is also a little more exaggerated than in the real LS3/5a (green trace, offset by -10dB for clarity), which also rolls off a little earlier.

One of the characteristics of the original BBC speaker was the slight peak between 1 and 2kHz, though the exact height and frequency of this peak varied considerably, depending on the manufacturer and vintage. The GINI speaker has a similar upper-midrange peak, though it is both broader and higher. The 44-ohm impedance peak at 87Hz tells us that this is the tuning frequency of the sealed-box woofer, which is a little lower in frequency than that of the original speaker. Sure enough, the GINI's bass response, measured in the nearfield, humps up in the upper bass, with a second-order rolloff below 90Hz (fig.4, blue trace).

As John Marks found the GINI to add a noticeable chest resonance to Richard Lehnert’s spoken introductions to some of the tracks on Stereophile’s Test CD 2 (Stereophile STPH040-2).

The 44-ohm impedance peak at 87Hz tells us that this is the tuning frequency of the sealed-box woofer, which is a little lower in frequency than that of the original speaker. Sure enough, the GINI’s bass response, measured in the nearfield, humps up in the upper bass, with a second-order rolloff below 90Hz (fig.4, blue trace).

As John Marks found the GINI to add a noticeable chest resonance to Richard Lehnert’s spoken introductions to some of the tracks on Stereophile’s Test CD 2 (Stereophile STPH040-2).
between the GINI's woofer and tweeter to be noticeable with pink noise.

This peak, however, might look worse than it sounds, as the GINI's lateral dispersion (fig.5) has an off-axis suck-out in the same frequency region. In the vertical plane (fig.6), the speaker's treble balance changes considerably over a narrow angle above and below the tweeter. More than usual, the GINI owner should experiment with stand height to get the most neutral treble balance.

Finally, the GINI "LS3/5a"'s cumulative spectral-decay plot, assessed in the farfield, is dominated by two broad ridges of resonant energy, one at the frequency of the on-axis peak and the other at the top of the upper-midrange peak in the on-axis response (fig.7). The former would lead to JM's feeling that there was a "decidedly uncomfortable emphasis" to the sound of cymbals, and though he conjectured that the problem had to do with the tweeter, I feel it is actually the woofer behaving badly at the top of its passband.

John Marks wrote that he felt that GINI Systems has made too faithful a copy of the original LS3/5a, but their version seems to me more like an exaggeration of the classic speaker's character. On the other hand, when you consider that modern LS3/5as sell for up to $1995/pair, the GINI is relatively inexpensive.

—John Atkinson

Musical Fidelity 550K Supercharger

Back in May, my vocal ensemble, Cantus, gave a series of concerts in which we covered pop tunes. I'd really enjoyed the sound John Atkinson had gotten on his live Attention Screen CD, so I asked John to
FOLLOW-UP

come out to Minneapolis and record us. I also thought it might be fun to make John abandon any remaining pretense of “minimally miked” recording and do it up with lots of mikes, like real rockers do. John will be the first to tell you that I’m a bad influence on him.

In order for us to sing with the bass guitar, keyboard, drums, and 20 or so other instruments that would appear in the show, we needed to provide house sound for the singers. I wanted to bring some high-end sensibilities to our audience, so I decided to make the PA out of a real high-end system. My Revel F30 speakers, I thought, would just about crush any Electro-Voice stack out there, or those crappy Bose “professional” speakers I see everywhere—but we needed powerful monoblock amps to drive them. Not owning anything that would fit the bill, I called John and asked if he had any that he could bring.

“Oh, I can bring the Musical Fidelity 550k Superchargers, which Michael Fremer reviewed in September 2007. We’ll use them just as amps through their line-level input.” Gosh, John is helpful.

We hooked up the PA, which consisted of the Superchargers and my Revel F30s, to the other end of John’s recording gear—see http://forum.stereophile.com/photopost/showphoto.php/photo/1665—and performed and recorded three nights of shows. It was one of the most natural amplified-concert experiences I’ve ever heard. As our show included rocking versions of such songs as Pink Martini’s “Donde estas, Yolanda?,” this system had to play loud. It sure did, but in a way that never drew attention to itself, and with a full-ranged coherence and balance with the other instruments and the venue’s acoustics that you rarely hear at amplified shows. The Superchargers never put up a fuss, and after each show were only warm to the touch. I was impressed.

As we packed up after the final concert, I joked to John, “If you want to leave the Superchargers here with me in Minneapolis, I wouldn’t mind. Har-har-har.”

“Sure,” said John. “Why don’t you take them and write a “Follow-Up” to Michael Fremer’s review? It could accompany my review of the more powerful 750K Supercharger.”

Musical Fidelity’s Supercharger

---

3 See www.stereophile.com/solidpoweramps/907mf.
FOLLOW-UP

concept is that using it between the owner's loudspeakers and current, probably low-powered amplifier will preserve the original amplifier's sound quality even as the Supercharger's enormous power allows the speakers to be driven to much higher levels.

I was a good candidate for this—my main amp at home is the diminutive, 30Wpc Pass Labs Aleph 3.

First, I listened to the Superchargers alone, operating as standard mono-blocks, and fed directly from my Benchmark DAC1 via their single-ended line-level inputs. Just as at the Cantus concerts, I was impressed with the big dynamics and bass control. These things could play LOUD. However, I was also struck with how forward the upper midrange was, how aggressive the treble sounded compared with the Aleph 3, and how flat the soundstage had become. I switched interconnects, messed with AC cables, left the 550Ks playing continuously for a few weeks, and did a few voodoo dances, but was never able to change this fundamental characteristic of these amplifiers. I'm probably more sensitive than most listeners to overly bright systems—I can still

4 Reviewed in April 1997; see www.stereophile.com/solidpoweramps.674.

Stahl-Tek's Vekian DAC has 4 inputs (including usb), dual 24-bit dacs and 100% audio magic. Its the finest dac I have ever heard. Perfect for music servers like Sooloos 2-channel or home theater. We've been selecting the finest products for music lovers for over 20 years. Call us or come in and experience what's possible.

weinhart design
Changing the way you listen
2337 Roscomare Road Studio 1, L.A., CA 90077
P: 310-472-8880  www.weinhartdesign.com

Tyler Acoustics
Factory Direct
Manufactured in Kentucky
Hear the Difference!!

Money Back Guarantee
Free Shipping

www.tylerracoustics.com
Phone (270) 691-9500  Fax (270) 691-9600
e-mail: tyleracoustics@mindspring.com
International Orders Welcome
I don't know what you put inside MondoTraps, but the result is amazing. I just wanted to control the lows in my room, but what I got was an impressive improvement in stereo imaging, sound stage and overall clarity of sound. Even my wife—who hates my stereo—noticed that the sound has really improved. Since I have added more MondoTraps, MiniTraps, and RFZ Panels, I must say that the sound of my DCS Scarlatti, Conrad Johnson LP275M and Revel Salon is better than I have ever heard in music shows or professional shops. Definitely, MondoTraps have made the most audible improvement ever in my stereo system. —Claudio Cavicchioli, Zurich, Switzerland

Learn why REALTRAPS is the most sought-after brand for treating home theaters and 2-channel listening rooms as well as professional recording studios. Please visit our web site for a wealth of product information, demo and educational videos, and some of the clearest explanations of room acoustics you'll find anywhere.

Toll-Free: 866-732-5872 www.REALTRAPS.com

regularly hear up to 18.5kHz—but from about 1kHz on up, the Superchargers imparted to the sound a harshness and a harshness that were not subtle. I then Supercharged my Pass Aleph 3. This was both a step forward and a step back. On the one hand, adding the Aleph returned a bit of neutrality to the midrange, filled out the midbass, softened the aggressive treble, and added a little depth to the soundstage—but this was still not the pure sound of my sweet little Aleph merely writ large. On the other hand, through the amps in tandem, there also seemed to be much less actual information passing through the system. What openness and transparency the Superchargers had on their own now seemed obscured by a slight veil, albeit with a more natural tonal balance. I returned to my Aleph 3 sans Superchargers. By itself, the Aleph exhibited a neutral, open midrange, a natural extended treble that was free of glare, and a great layering of the soundstage. To be sure, the Aleph's bass control was not even close to what the Superchargers could do, nor did the Aleph give me the feeling that I could keep turning it up forever without it ever clipping. The Aleph played as low as the Musical Fidelities, but lacked the ability to stop and start my F30's big ol' woofers with impunity.

For the final showdown, I pitted the little Pass Aleph 3 against the Superchargers and judged both by the standard set by Musical Fidelity: the big
dynamic range of a symphony orchestra. I called on the forces of the City of Birmingham (England, not Alabama) Symphony Orchestra and its former music director, Sir Simon Rattle, performing Stravinsky’s The Firebird (CD, EMI CDC 7 49178 2), as well as my trusty RadioShack SPL meter, set to C weighting and Fast peaks. The little Aleph was able to create dynamic peaks of around 98dB at my listening chair. The sound was involving and layered, with a very natural orchestral perspective. I could hear the Aleph rounding out the bass-drum thwacks, but I never heard it clip. I could tell that the Aleph wasn’t going to play any louder, but it was plenty loud enough for me.

Turning to the Superchargers, I pushed the volume up to peaks of 100dB. Now the leading edges of transients were completely uncompressed, the peaks razor sharp—but so was the sound. Violins sounded steely and brasses as if the sound was coming straight from their mouthpieces instead of their bells.

Musical Fidelity’s 550K Supercharger is a neat idea, and I really wanted the pair of them to transcend my system’s limitations. But using them either as standalone amplifiers or to Supercharge my own amp, I found their tonal balance too bright and forward of neutral to preserve the magic of the less powerful amp strapped to them, or of the recording itself. The whole point of the Supercharger is to let your system play louder than it would be able to otherwise, but turning them up to the levels suggested by Musical Fidelity made their unforgiving sound only more prominent. While the 550K Superchargers could play loud, in other important musical ways, that was exactly what they couldn’t do.

—Erick Lichte
What you can expect from us:

- Excellent Customer Service.
- Speedy & Safe Delivery.
- Expert Help & Advice.
- The Best in Audio Equipment!
- Great Selection of Music from ABBA to ZZ Top!

A plethora of products to make your precious music collection sound better than the day you bought it!

The Perfect Holiday Gift
Elusive Disc Gift Certificates!

www.elusivedisc.com
Call Today! 800-782-3472

fax: 765-608-5341 Info: 765-608-5340 • 4020 frontage rd anderson, in 46013 • sales@elusivedisc.com • m-f 9-6 sat 11-3 est
Describing the music of 30-year-old British composer Tarik O'Regan, one must mention Renaissance polyphony and other contemporary composers of choral music, then put them aside. Yes, O'Regan's debts to medieval music, both direct and via Arvo Pärt, are clear; there are hints of Ivan Moody in his fondness for pure, high-flying soprano lines, and he's into layering like Veljo Tormis, though the latter composer's folk-song roots could not be further from O'Regan's sensibility. O'Regan's music is primarily tonal, and complex, with much going on at all times: vocal lines rising and falling, imitation, solo voices or duets (or, at one point, an octet) breaking out from within the choir, rhythmic motifs that repeat and repeat, a chug-chug throbbing that gets the heart beating, and wicked dissonances, some quickly resolved, others lingering. But it isn't a challenge to enjoy, and there's never a sense of thorniness for its own sake—it sounds simultaneously ancient and modern. Stravinsky is tougher to enjoy, and rarely reaches the levels of sheer beauty of sound that O'Regan finds almost everywhere.

O'Regan, educated at Oxford and Cambridge, moved to New York a few years ago, and, as the notes accompanying the CD tell us rather noncommittally, these works, all composed since that move, "reflect the cultural plurality of today's urban environment." This nonsensical statement meaning everything and nothing is happily followed by "Here is an art that seeks to forge a link between the spheres of 'the ecstasies above' and the harsh realities of life on earth." Translated into English, I believe that means that O'Regan's music can be alternatively beautiful and unsentimentally rough, whatever you want to call it, it hypnotizes. Almost every piece on the CD contemplates life, death, the afterlife, or some other bit of existentialist thinking. The title work is based on the poem by British poet and Blake scholar Kathleen Raine (1908–2003), whose own bent was spiritual and prophetic. It was written for Advent, a time of waiting and searching for guidance; coincidentally, O'Regan's composition was completed on August 29, 2006, a year to the day after Hurricane Katrina devastated New Orleans. The text has odd resonance with the anniversary: "Go back, my babe," intoned over the heart beating, and wicked dissonances, some quickly resolved, others lingering. But it isn't a challenge to enjoy, and rarely reaches the levels of sheer beauty of sound that O'Regan finds almost everywhere.

The disc opens and closes with settings of poems by Emily Dickinson, each about two minutes long. For this most economical of poets O'Regan does not waste a note or moment, and the complex textures, with solo soprano and solo tenor breaking out occasionally, speak to the layers of meaning Dickinson so efficiently conjures in so few words. In Had I Not Seen the Sun he uses a repeated, downward motif that abruptly stops to give us the "wilderness" Dickinson speaks of. It's stunning. In Triptych, the first part (about death and eternity) is a manic, fast-moving combination of massed voices and strings. The second part (concerned with remembrance) begins immediately after the first, on a pure C on violins; a brief harmony enters and leaves, then a new harmony enters and moves into dissonance. At 1:26 a gorgeous, easy melody appears, and 20 seconds later a solo voice enters to alternate with the chorus over a high string drone for a couple of minutes. The string-voice textures begin changing frequently, and a section for strings alone follows until the solo voice re-enters with the beautiful tune first heard at 1:26, before fading into nothingness. It is touching in the extreme. The third movement (about resurrection and peace) then attacks and goes full speed ahead with hurtling strings and voices, and only tiny and occasional pizzicato interruptions. It's an almost exhausting 17 minutes that you'll want to hear again immediately.

A setting of Pablo Neruda's "Tal Vez Tenemos Tiempo" (Maybe we have time) is a gentle, homophonic oasis in mid-CD; it and Threshold of Night are the only two vocal settings unaccompanied by strings. Edgar Allen Poe's rumination on the heavens and the angel Israfel, which O'Regan titles The Ecstasies Above (a phrase from the poem), is in three movements, scored alternately for full chorus or vocal octet with string quartet. It interchanges dance rhythms with long phrases, and sparse passages with full-on polyphony. Cura Charming Sleepe, on a text by the 17th-century poet John Fletcher, is a dense but straightforward work for double choir and strings.

The performances and sound are spectacular. The Troy Savings Bank Music Hall in Troy, New York, is a fine, warm venue for the recording, with little decay time. Conspira Company of Voices, led by Craig Hella Johnson, is a precise, passionate, seemingly fearless vocal group, able to turn on a dime and negotiate tricky rhythms, harmonies, and intervals with the same ease as they do more straightforward, melodic moments. And kudos to the Company of Strings for their virtuoso accompaniment and solos.

If you don't know Tarik O'Regan's work, you should. He is now working on a chamber opera based on Conrad's Heart of Darkness, which seems right up his compositional and temperamental alleys. And this CD is magnificent.

—Robert Levine
I have the greatest respect for cellist Joan Jeanrenaud. In her 20-year stint in the Kronos Quartet, she ably and intelligently anchored works by nearly every great composer of our age, and grew to be one of the most complete cellists ever to lay bow and fingers to strings. She has the chops to transcend any style, and the ability to bring organic senses of tone, timbre, color, and virtuosity to any work on her music stand. So when I read of her latest solo release, Strange Toys, I was excited, and even more when I discovered that this CD would comprise 14 of her own compositions. As I typically do, I listened to it a few tracks at a time in my car to get the individual pieces in my ear before doing any critical listening at home. While I wasn’t riveted, I generally liked what I heard. All of that changed when, in the house, I listened to the disc in full.

Strange Toys falls into the same trap as do many solo efforts fleshed out with overdubbing: an overall lack of variety. While sprinkled throughout, Jeanrenaud’s gift for color and timbre is too pervasively stuck in slightly sad, Middle Eastern–inspired modes. Worse yet, several tracks are twice as long as the material can support. Midway through the CD, my ear was sated with the sound of Jeanrenaud’s cello. The best tracks are the shortest, and most varied, notably the opening work, the atmospheric, Crumb-like Sling Shot; and Dervish, a moving duet with marimba player William Winant. On the minus side, the tediously thick, dreary, and inaccurately titled Transition, which features cellist Alex Kelly and viola da gambists William Skeen and Joanna Blendulf, is a textbook example of what not to do with some fine musicians.

—Daniel Buckley
RECORD REVIEWS

**RECORD REVIEWS**

they come. *Temporary People* is a career-capper (to this point) in every sense of the word, and an album that should permanently install Joseph Arthur in the public mind as a major artist. —Fred Mills

**RORY BLOCK**

*Blues Walkin' Like a Man: A Tribute to Son House*


Performance ***

Sonic ***

Once a teenager obsessed with acoustic blues, Rory Block is today perhaps the chief inheritor of what has become known as the Delta style. Look her up on YouTube and you'll find many haunting performances in the unusual mode of musicians who plied their craft decades ago.

Block has always included traditional songs in her performances and recordings. Her last CD, *The Lady and Mr. Johnson*, was a tribute to Robert Johnson; she has also produced *Rory Block Teaches the Guitar of Robert Johnson*: two instructional DVDs that explain, note for note, Johnson's individual approach to acoustic guitar.

So I guess it should be no surprise that Block would follow *The Lady and Mr. Johnson* with an album of songs written by and associated with Eddie "Son" House. Block is in a unique position to do this. House's association with Johnson was similar: he mentored each when they were in their teens. "He was the most influential blues master to me," Block has said of House. "I would say I learned more about delivery and how to express passion from Son House than anyone else."

*Blues Walkin' Like a Man* validates that claim. Save John Sebastian's harmonica on a few tracks, it's just Block, her guitar, and whatever she can summon from music conceived and written more than 70 years ago. The authority and vitality she brings to "Death Letter," "Preachin' Blues," and "My Black Mama," and the decidedly female edge she gives to songs like "Shetland Pony Blues," match the intensity you see in performances by her mentor filmed in the 1960s.

There are plenty of references to House's influence in Johnson's songs, even though House is considerably less well known (except among blues aficionados). His original recordings, like those of Charley Patton, are burdened with static and noise, and even a fan can find them difficult and daunting to appreciate. Perhaps the most important contribution of Block's *Blues Walkin' Like a Man* is that it brings the songs of an important but obscure artist of the 20th century into the 21st.

What's next? How about an album of Charlie Patton material? —Leland Rucker

**OKKERVIL RIVER**

*The Stand Ins*


Performance ***

Sonic **

This Austin, Texas band takes its name from a short story by Leo Tolstoy's great-niece, Tatyana Tolstaya. Her "Okkervil River" is about a man's obsession with a singer. When he finally tracks her down, the singer turns out to be an aged, imperfect version of the man's fantasy vision. The six-piece band, led by singer and songwriter Will Sheff, is obsessed, too—not with a particular singer, but with the role of the artist in our culture. Over and over in his songs, Sheff explores the various stages of stardom—ascend, unqualified adoration, and the inevitable twinkle's end—and how they warp art, artist, and listener.

*The Stand Ins* is a sequel to 2007's critically acclaimed *Stage Names*, a disc of elegant song-stories about life on stage and in the cheap seats. One of that album's ruminations on pop music is "Plus Ones," a playful study of hit songs with numerical themes ("99 Luftballoons," "96 Tears," etc.).

*The Stand Ins* is effectively *Stage Names Plus One*, conducting further examinations of the overwhelming evidence that strongly suggests there's

JB Audio
World's Best Used High-End Audio Store
Buy Sell Trade

www.jbaudiopimp.com

100 Red Schoolhouse Rd, Suite A-12 Chestnut Ridge, NY 10977
Ph: 845 352-0008 Fax: 845 352-1492
jbaudio@optonline.net

AudioWaves
the finest in affordable audio

AUDIOQUEST • CREEK • SUMIKO • KIMBER
TRIANGLE • CAMELOT • BENCHMARK
REGA-GRADO • PROJECT • MUSICHALL
TARGET • MAGNUN DYNALAB • GRAAF
UNISON RESEARCH • APOLLO • HEGEL
HARMONIC TECH • SPENDOR • ATOMAH
AUDIO ANALOGUE • PLINIUS • ROKSAN
DIAPASON • OPERA • BILLY BAGS
AULENCE • PATHOS • EPSON • VINCENT
INDIANA • BDR • PS AUDIO • MSB
GOLDING • JOLIDA • EQUITECH • JPS
BELLES • MONOLITHIC • SHANLING
NHEST • ASL • AUDIOPRISM • ATOLL
ANALYSIS PLUS • AUDIBLE ILLUSIONS

800.510.4753 Mon. - Fri. 8-5:30 Sat. 10-3 PST
www.audiowaveshifi.com
P.O. BOX 461 TRINIDAD, CALIFORNIA 95570
PHONE/FAX 707 677.3299 audiowaves@com.com
FREE SHIPPING No Local Dealer? Call Us
Check Our Website for Current Specials
no business like show business for turning artists into glittering prostitutes. Yet Sheff is such a supple, intelligent writer that his stories—full of braided wordplay, forlorn vocals and melodies, and insider/outside observations of the music industry—manage to turn that much-handled evidence into appealing, literate pop.

"Starry Stairs" is a sumptuous song about the audience's vampire desires for more, more, more, and the artists they leave behind, wrung dry. It's reminiscent of R.E.M. at its apex of grace and power, DeVotchka's ornate ache, and the Kinks at their wry best, with one eye on the mirror and the other on the stage. "Oh, what a trip," Sheff sings in what serves as a description of the lush music, "oh, what a shimmering silver ship." "Blue Tulip," an exploration of hero worship and evisceration, is an almost unendurable foreplay of sweet strings and slow blaze of guitar that builds to operatic satiation.

Opening with a couple of notes plunked on a banjo, "Lost Coastlines" details the bewilderment and chaos that is life on the road. Propelled at a gallop by acoustic and electric guitars, its "la la la" chorus sounds like lyrics repeated so often in front of strangers that the words have become gibberish even to those who wrote them.

With all its swelling and soaring and its ringing, iridescent vibe that surrounded those early gigs. The transformation of "King Solomon" into "Red Dress" at the end of disc 2 is a Radiators trademark. Volker had written "Red Dress" for the Rhapsodizers, but when these musicians played the song the way he wanted to hear it, the Radiators were born. Singer-guitarist Dave Malone's "Last Getaway," which has become a staple of the band's live shows over the years, is another gem from Luigi's, along with "Hard Core," known by Fishheads as a nasty set-closer.

The other legendary Radiators venue was the Dream Palace, on Frenchmen Street, the source of another handful of tracks from the 1980s, including some with great vocals by Malone: "House of Blue Lights," "Hard Time Train," "Stand By Me, Baby," and "Like Dreamers Do." The Dream Palace tracks also include one of Volker's more eccentric cameos, "Hard Rock Kid," the novelistic Volker set piece "My Home Is on the Border"; and a fascinating pre-Epic version of "Doctor Doctor" centered around Camille Baudoin's prepossessing vocals and melodies, and insider/outside observations of the music industry.

The Radiators returned to being a New Orleans institution, playing at numerous local events, as well as at annual parties thrown by longtime fans in cities around the country. With a book of well over 2000 songs, the Radiators never decided to form a band. The Radiators quickly became the hottest rock band in town. They recorded a couple of indie albums they still sell at gigs, and by the mid-1980s were signed to Epic Records, for which they made two excellent albums, Law of the Fish and Total Evaporation, before asking to be released from that contract after Sony bought Columbia/Epic and drastically cut the artist-development budget.

The Radiators were a New Orleans institution, playing at numerous local events, as well as at annual parties thrown by longtime fans in cities around the country.

With a book of well over 2000 songs, the Radiators never seemed historically defined by any single album, but Wild & Free gets the job done. Compiled by Volker with input from his bandmates, and taken from a variety of sources that span the group's history, this two-disc set gives a better overall sense of what the band is about than any previous release.

THE RADIATORS
Wild & Free

Performance  ****
Sonic****

Thirty years ago, members of two popular New Orleans bands, the Rhapsodizers and Road Apple, met for a jam session in the garage of songwriter-vocalist-keyboardist Ed Volker. After a few hours together, they decided to form a band. The Radiators quickly became the hottest rock band in town. They recorded a couple of indie albums they still sell at gigs, and by the mid-1980s were signed to Epic Records, for which they made two excellent albums, Law of the Fish and Total Evaporation, before asking to be released from that contract after Sony bought Columbia/Epic and drastically cut the artist-development budget.

The Radiators returned to being a New Orleans institution, playing at numerous local events, as well as at annual parties thrown by longtime fans in cities around the country.

With a book of well over 2000 songs, the Radiators never seemed historically defined by any single album, but Wild & Free gets the job done. Compiled by Volker with input from his bandmates, and taken from a variety of sources that span the group's history, this two-disc set gives a better overall sense of what the band is about than any previous release.

The title track, a studio recording from 2000, is a kind of statement of purpose for the group: Volker's celebration of the joys of playing to a crowd of New Orleans fans. The song conjures visions of the Radiators' annual performance on the final day of the New Orleans Jazz & Heritage Festival, closing out the Gentilly stage before a crowd of more than 10,000.

I just can't figure it out, it's a great big mystery
But what the hell, I love the smell of the mighty Mississippi...
You don't know what it means to me
To be here with you, wild and free.

Over the years, Volker has recorded many Radiators shows, and has drawn on that collection to provide aural snapshots of some of the nights that created the band's legend. Many of the Radiators' earliest gigs were at Luigi's, a pizza joint near their practice space, where the band's sound was codified through risk-taking and spontaneity. The gem from that period is "Suck the Head, Squeeze the Tip," a live 1980 recording of one of the band's signature tunes in which, over a stark, soulful groove, Volker offers instruction in the eating of crawfish.

The song was originally released as a two-part single, but this remastered version is definitive. The funky "All Meat Off the Same Bone" and the hair-raising medley of "King Solomon Don't Mind"/"Red Dress," all recorded in 1978, within months of the band's formation, give a sense of the vibe that surrounded those early gigs. The transformation of "King Solomon" into "Red Dress" at the end of disc 2 is a Radiators trademark. Volker had written "Red Dress" for the Rhapsodizers, but when these musicians played the song the way he wanted to hear it, the Radiators were born. Singer-guitarist Dave Malone's "Last Getaway," which has become a staple of the band's live shows over the years, is another gem from Luigi's, along with "Hard Core," known by Fishheads as a nasty set-closer.

The other legendary Radiators venue was the Dream Palace, on Frenchmen Street, the source of another handful of tracks from the 1980s, including some with great vocals by Malone: "House of Blue Lights," "Hard Time Train," "Stand By Me, Baby," and "Like Dreamers Do." The Dream Palace tracks also include one of Volker's more eccentric cameos, "Hard Rock Kid," the novelistic Volker set piece "My Home Is on the Border"; and a fascinating pre-Epic version of "Doctor Doctor" centered around Camille Baudoin's precise, horn-like lines on slide guitar.

The Epic years introduced the band to a whirlwind of nonstop touring. "Have a Little Mercy," one of the best tracks on Wild & Free, comes from a 1989 gig at The Ritz in New York, a venue that also yielded "Oh Beautiful Loser" and "I Want to Go Where the Green Arrow Goes." The traveling circus also hits St. Paul, Minnesota, where two of the most interesting live recordings were made, in 1992: the atmospheric "Strangers" and the lessons-for-life philosophy of the suite "Songs from the Ancient Furnace." Volker's R&B vamp "Love Trouble" comes from a 1978 show at Tipitina's.

Though most of the record is live, several studio tracks stand out. "Tear My Eyes Out" is an astonishing vocal performance from Malone of a Volker song whose theme has
fascinated artists at least as far back as Sophocles. "When Her Snake Eyes Roll," a sleek and slippery vehicle for Volker, comes from the same 2000 session as the title track. The earliest studio material is from the band’s first year, when they swapped recording time for session work, backing up other singers at Knight Studio. The narcotic, stutter-step Caribbean pulse of “One-Eyed Jack” rides on Reggie Scanlan’s bass, and the tuneful “Cupid’s Got a Mighty Arrow” suggests that this band could have had a hit well before Epic ever heard of them.

Earlier this year, to bring the project full circle, the Radiation went into the Music Shed in New Orleans and recorded two new tracks. Volker’s beautiful “The Girl with the Golden Eyes,” which appeared in a different version on his solo album The Lost Radio Hour, gets a gorgeous treatment here, and Malone delivers a deep-dish helping of bayou humor on the cleverly arranged swamp rocker “Where Was You At?”

With so many different sources of material in various states of preservation, there are a few tracks (“Tear My Eyes Out,” “Love Trouble”) where sound quality is sacrificed to historical importance or extraordinary content, but Bruce Barielle’s brilliant mastering job keeps the disparate sources from sounding out of place. His performance is, in an unusual way, the most valuable of this project. — John Swenson

Kind of Blue calls one of “the single greatest achievements in recorded music.”

Given all the foreign pressings, it’s hard to pinpoint how many times Kind of Blue has been reissued over the years, but the number is somewhere in the neighborhood of 25 just since the early 1980s. For those who have purchased any of these—which are often billed as the last word on Kind of Blue—the prospect of shelling out $100 or thereabouts seems a little absurd. What makes this new set worth any attention, let alone dollars?

These are the 1997 analog remixes, previously reissued several times, which were pitch-corrected to compensate for the slow three-track tape deck used in the March sessions. This music was recorded quickly and in whole takes, so there never was much extra material to reissue. Five false starts, the “studio sequences,” are this set’s only new remastering jobs, and comprise most of the set’s unreleased material. They are interesting if only to hear Miles’ great cool cat gravel voice. The other new bit—new only because this is its first “authorized” release (it’s been heard before, on bootlegs)—is a 17-minute performance of “So What” recorded live in Holland in 1960.

What’s really new here are the packaging and a DVD. The DVD incorporates material from a 2004 documentary film, Made in Heaven, that’s entertaining and includes some great ruminations by musicians and lovers of the record. Herbie Hancock calls Kind of Blue “So fine-tuned without being rigid,” and Carlos Santana wonders, “How do you go into the studio with regular stuff and come out with eternity?” Other DVD features include a 26-minute performance by the Kind of Blue band recorded for CBS TV in 1959, and a gallery of photos of the sessions taken by Columbia photographer Don Hunstein.

For Miles collectors and aficionados, the real bait is the extremely well-done book: 60 perfectbound pages containing a mix of photos and text about the record. Also included are five promo photos from the record’s release; a reproduction of an original sales solicitation; a copy, in Bill Evans’ handwriting, of his original liner notes; and, to seal the deal—open those wallets, vinyl collectors!—an LP edition of the original record pressed on blue vinyl. A gimmick? Yes, but a sweet one, and so obvious that it’s surprising it hasn’t been done before.

An album that rapper Q Tip says is “like the bible,” done up in a gorgeous package complete with tasty extras? It’s a combination that aliens, let alone primitive 21st-century music fans, might not be able to resist. — Robert Baird
are paying off, because the quality of the materials is going down, and yet the quality of our equipment has gone up enough that we’ve stayed ahead of the curve. Part of that is by looping [reusing] regrind; the other part is that we’re not using the tooling that the rest of America is using, so we’re very proud of that. In tooling, we’re using something a little more modern and it does give us a good product, so as the material goes down, we have a little bit bigger production window to squeeze through.”

Not surprisingly, Bernich is a fan of vinyl’s recent resurgence. Although he’s profited from vinyl’s recent resurgence, he estimates that for every Sundazed Music, there are many more of his customers who are onetime buyers who scrape together enough money to press one album, then disappear. Bernich also says that the customers who have to have everything done yesterday are also the slowest to pay.

Lowering his voice a notch, Bernich mentions that vinyl’s return to prominence has a darker side: pressing LPs of unlicensed music. Bernich jokes that if he were more focused on absconding with the profits to Costa Rica than on plowing them back into his business, then going illegal might make sense. He says he’s even had his chances. One customer who showed up with a master he wanted pressed stands out in his mind.

“The engineer I was working with put it on, and it’s four bars of rap, and then it’s four bars of [the group] War. We kicked him out, and gave him his money and his metalworks back. This will get you into trouble on a grand scale, specifically with [the] RIAA, and what will happen is they’ll send the Federal marshals in and shut you down and seize all your equipment.”

Even more than the sound issues between analog and digital media, Bernich feels that vinyl is a unique medium for music because it provides a bulwark of sorts against downloading. “It’s a closed market. If it’s on the Internet, it’s everywhere. If you want to keep it from going everywhere, then you can put it on vinyl. [To put it on the Net,] you have to make a copy; and the vinyl, it’s never the same each time. It’s not the same for somebody who is used to nice, clean digital.”

“If it’s on the Internet, it’s everywhere. If you want to keep it from going everywhere, then you can put it on vinyl.”

No one can answer the looming questions facing the vinyl boom: Will new sources of high-quality raw material emerge? How far will vinyl’s reestablished celebrity spread? How much new music will be released on LP? However, The Berniches and Jason Durham know that Brooklyn Phono is growing, and in the borough to stay.

“I’m about being a Brooklynite. I’m about servicing the customers and making them happy and getting their business to grow. What we get passing through here is unique. It’s nice to be involved with the creative side of things. But, [given the challenges with material and machines], we’re always a seesaw on the edge. Every day is like, ‘Wow, we’re still doing this.”

Wildly Seduced by Vinyl at CSA!

Like many of you, we still love vinyl. Among our favorites is the supremely musical Space 294 from Nottingham Analogue. And, marrying the accuracy and full sound of the 294 to reference quality speakers like B&W’s 800 Series is a match made in audio heaven. Before you invest in any high end two-channel component visit us and discover the best brands and an attentive, knowledgeable staff that loves music (and movies!) as much as you do!
Great components are just the beginning of exceptional sound.

Cable-matching can balance the interactions between your components. Example: your amp + speakers + speaker cables is a “circuit.” Changing any of these variables will change the sound. Unlock the potential in your fine components by careful cable matching. We can help. Use our Cable Library containing $2.5 million in cable samples to know for sure before you buy.

The Cable Company. The Cable Library. We can get you there.

And beyond cables, more tools for audio and video system enhancement:

Power Line Products
Dozens of Line Filters and Legions of AC Cables available for in-home audition!

Acoustics, Racks, & Resonance Control
We have it all including the breakthrough $90 acoustic panels from Cathedral Sound.

Accessories
#1 Audio Desk Dealer. Hundreds of Accessory Products.

Light a fuse!

+ try the new HiFi-Tuning Noise Destroyer & Quantum Plug

Good people. Good advice. Great systems, one customer at a time.
125 Union Square • New Hope, PA 18938 • 1.800.FATWYRE • 215.862.4870 • Fax: 215.862.4871
Email: cable@thecableco.com • visit our new site at www.thecableco.com
All major credit cards • Free consultation • Most orders ship free!
Statement of Ownership, Management, and Circulation

1. Publication title: Stereophile
2. Publication number: 0585-2544
3. Issue Frequency: MONTHLY
4. Number of Issues published annually: 12
5. Annual subscription price: $19.94
6. Complete mailing address of known office of publication: 261 Madison Avenue, New York, NY 10016-2503
7. Full names and complete mailing addresses of Publisher, Editor, and Managing Editor:
   Publisher: Rob MacDonald, 2400 E. Katella Ave. 11th Fl, Anaheim, CA 92806
   Editor: John Atkinson, 261 Madison Avenue 6th Fl, New York, NY 10016-2503
   Managing Editor: John Atkinson, 261 Madison Avenue 6th Fl, New York, NY 10016-2503
8. Owner: Source Interlink Companies, Inc, 27500 Riverview Center Blvd, Bonita Springs, FL 34134-4431

11. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None

12. Publication of Statement of Ownership: X If the publication is a general publication, publication of this statement is required. Will be printed in the Dec '08 issue of this publication.

13. Publication Title: Stereophile
14. Issue Date for Circulation Data Below: Sept '08

<table>
<thead>
<tr>
<th>Average No. Copies</th>
<th>No. Copies of Single Issue Published</th>
<th>Return to Filing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each Issue During Preceding 12 Months</td>
<td>88,576</td>
<td>90,545</td>
</tr>
</tbody>
</table>

15. Extent and Nature of Circulation:
   a. Total number of copies: 88,576
   b. Paid circulation (by mail and outside the mail):
      (1) Mailed outside-county paid subscriptions stated on PS Form 3541 (include paid distribution above nominal rate, advertiser's proof copies, and exchange copies): 66,810
      (2) Mailed in-county paid subscriptions stated on PS Form 3541 (include paid distribution above nominal rate, advertiser's proof copies, and exchange copies): 5,930
      (3) Paid distribution outside the mail including sales through dealers and carriers, street vendors, counter sales, and other paid distribution outside USPS: 5,930
      (4) Paid distribution by other classes of mail through the USPS (e.g. First-Class Mail): 0
      (5) Total paid distribution (sum of (1), (2), (3), and (4)): 72,740
   d. Free or nominal rate distribution (by mail and outside the mail):
      (1) Free or nominal rate outside-county copies included on PS Form 3541: 3,255
      (2) Free or nominal rate in-county copies included on PS Form 3541: 0
      (3) Free or nominal rate copies mailed at other classes through the USPS (e.g. First-Class Mail): 0
      (4) Free or nominal rate distribution outside the mail (Carriers of other mailing): 0
      (5) Total free or nominal rate distribution (outside the mail): 3,255
   e. Total distribution (sum of 15b and 15d): 91,995

16. Publication of Statement of Ownership: X If the publication is a general publication, publication of this statement is required. Will be printed in the Dec '09 issue of this publication.

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

The midrange used in the Parsifal Ovation is largely unchanged from that which we initially used in the first Parsifal some 14 years ago.

Last but not least, in addition to his formal review of the Parsifal Ovation, we were delighted to take a step back in time with Sam to remember one of our most passionate supporters, Sam’s dear friend and neighbor, Lars. We mention Lars insomuch as to share his memory as to also relate to the Parsifal’s 14 years of successful, continuous production and refinement. We are reminded by owners on a regular basis how unique and captivating the Parsifal has been for so many over the years. Audiophiles being audiophiles, perhaps it is quite common for us to speak with end-users who once owned the Parsifal, and who, after years of searching for something different, have decided to buy their second pair, and sometimes their third. In our experience, there are precious few products that achieve this kind of loyalty.

Bruno Bouchard, Julien Peltier, John Quick
Verity Audio

Bel Canto e.One Phono3

Editor:

Many thanks to Stereophile and Michael Fremer for reviewing our e.One Phono3. With his comments, Michael well captures the intent in the design of the Phoneo3. I would just note that the CadLock resistors used in the Phoneo3 do require considerable break-in time to reach their final sonic potential. Break-in of these devices results in a fuller and richer sonic picture, while retaining the detail and dynamics of which Michael speaks so highly.

John Stronczek
President, Bel Canto Design

Vacuum State JLTi PhonoPre

Editor:

Michael has done a fine job with his in-depth evaluation and delineation of Vacuum State’s JLTi PhonoPre phono stage—bravo! However, what would a manufacturer’s response be without any quibble or added perspective to enhance the value of the review? It is in this light that we would like to share why the JLTi has proven to be even more special than just its sonic virtues would indicate.

The JLTi first made its debut at an audio-club gathering of five analog fanatics, in a shoot-out of eight other phono stages that ranged up to $7000, and five of which were over $2000. After playing top dog for a couple of hours, the JLTi was inserted. The shock and awe were instantaneous, surprising the heck out of everyone other than the member who’d brought it, who smiled gleefully. Results at the end of the day were that only the five-times-more-expensive ASR Basis Exclusive was judged clearly better (and yes, it does have better dynamics). What made and makes the JLTi so special is its ability to quickly pull people into the music and disappear. All five of us in attendance realized that a new star had been born.

We believe Michael’s review delivers what is most appreciated by readers: a direct comparison with competition. This is what we do here frequently to learn what sounds like what; in fact, I’m scheduling our next phono-stage shoot-out the day I write this. However, if we may be so bold as to suggest: What is missing here is reference to how listenable and enjoyable each product is beyond just its sonic evaluation. This is where the JLTi shines above the competition. Not only is it up for performing with a turntable and cartridge from “another galaxy,” as Michael says, but its pervasive musicality and involvement are what truly set it apart.

We also agree with Michael that the standard version is “among the best values currently available,” and over half of JLTi owners stay with the standard power supply. True enough, the dedicated outboard PS does kick the performance up nicely. The good news is that you don’t lose any money by starting with the standard and later upgrading to the custom PS, which is available on free trial.

Technical clarification: The wiring and jacks are not cryogenically treated. While the gain can be changed, it should never be necessary, and hasn’t so far, as the JLTi readily accommodates virtually any MM/MC as-is. Michael noted that it “is extremely quiet, with plenty of gain for all but the lowest-output MC cartridges”—which, in our experience, is 0.2mV (unless you have a passive or very-low-gain preamp; then, probably, 0.3-0.4mV would be the limit). There are only a couple cartridges on the market with outputs lower than 0.2mV.

Money clarification: True, the JLTi benefits from being made with Swiss precision, and is imported. However, unlike with the euro, the US dollar hasn’t shrunk compared to the Swiss Franc, and unlike with most imported items, there is no middleman. Audio Revelation is a direct agent for Vacuum State, and the price here is the same as abroad. The shipping and import duties into the
Editor: Thank you to Michael Fremer and Stereophile for reviewing the Clearaudio Matrix record-cleaning machine (RCM) and featuring it in MF's upcoming DVD. Looking forward to getting my copy.

Michael's clear-acrylic version of the Matrix is used for trade shows (and, in this case, his DVD). It allows one to look inside to see how an RCM really works. In the case of the Matrix, one can see the deluxe build quality, including the platter motor (a windshield-wiper motor sourced from BMW). The fluid injector (a windshield-washer system sourced from Mercedes-Benz) and the air audio Matrix are used for trade shows (and, in March, featuring it in MF's upcoming DVD).

We have developed an enzyme-based record cleaning system. The Matrix incorporates sound-damping panels on the inner walls; thus, it is even quieter than Michael's sample. I have personally sold many brands of RCMs and record-cleaning fluids in my +30 years in this industry, and have owned quite a few. Cleaning records has never been considered an enjoyable chore, but one that returns a definitive improvement in the sound from vinyl records and your system. There are many different methods of cleaning records, including different fluids, rinses, home brews, etc. While one can endlessly debate which is the most effective, we believe the best technique is to make it as easy as possible. The Matrix accomplishes this with its build quality, quiet operation, and automatic features. We have developed an enzyme-based one-step cleaning fluid, Record Time, to make record maintenance fast and effective.

Garth Leerer
Musical Surroundings

John Atkinson states in his Follow-Up review of the Compact 7 in John Marks' "The Fifth Element" column. The first pair he reviewed, in the October issue, "...virtually all measurements were identical to our own product specifications, with one exception: signal/noise ratio, wideband, unweighted (ref. 1W)."

JA found 60.4dB; in our own engineer lab, we found 70.4dB. Given how everything else falls completely in line with the crossover and damping were not completed. The end result was a poor review of a faulty product. For those who purchased the Compact 7: no production loudspeakers were shipped to customers assembled with the wrong configuration.

John Atkinson states in his Follow-Up report that the Compact 7 is a reflex design. In actuality, the Compact 7 is indeed a transmission-line design, folded three times. Typical transmission lines stuffed with wool or synthetic fibers have only one resonance peak on the impedance curve; however, our "free-flow" damping produces two resonance peaks, just as in a reflex design. The advantage of "free-flow" damping is improved transient attack, dynamics, and bass articulation because the drivers are not restricted over the entire frequency spectrum due to the overdamping presented by traditional methods. As stated by JM, the strengths of the Compact 7 are dynamics and bass performance.

The tweeter level was not altered because of comments made in the first review. As explained previously, the woofer was changed in the first review pair, but the correct crossover was not installed. The new woofer has a different sensitivity; therefore, the tweeter level was not properly matched.

We concur that 28" is the absolute minimum listening height, and that the speaker may require higher stands depending on the height of the listening position.

The tweeter used in the Compact 7, although not as expensive as used in our other products, is still far more advanced than those used in older Fried models, and shares some technology used in more expensive Scan-Speak tweeters.

The impedance of the Compact 7 is 4 ohms, which is stated throughout our literature. In fact, all of our current loudspeakers have 4 ohms, to take advantage of the increased sensitivity to expand dynamic capabilities. The Compact 7 has received very favorable press since its introduction. Moreover, the Compact 7 was the speaker of choice for a prominent amplifier shoot-out due to its superb articulation and dynamic presentation.

We invite prospective buyers to audition the Compact 7 and make their own judgments.

David E. Finley
COO, Fried Products

We also compliment John Atkinson on his excellent set of measurements highlighting the "superb" horizontal coverage and controlled vertical coverage of the MTM array, which anchors our excellent "3-D" imaging. With regard to the slight midbass emphasis, we are aware of this issue. The problem is not port resonance, but a standing-wave phenomenon associated with the enclosure height. Early production models did not have sufficient damping material in the upper third of the enclosure to fully suppress the standing wave. This problem is being corrected in current production.

Per your comments regarding cabinet resonance, we plan to reexamine the brace locations.

We appreciate the thorough investigation of the Illusion launched by LG and JA. We take their research to heart, and will use their comments to provide further refinements to this and other models.

Joseph D'Appolito, PhD
Chief Engineer, Snell Acoustics

Simaudio Moon i-1 Editor:
We would like to thank both Robert J. Reina and John Atkinson for their insightful review of the Moon i-1 integrated amplifier.

Based on his thorough editorial, it's clear that Robert experienced sheer musical enjoyment listening to his favorite recordings through the Moon i-1, and at the end of the day, that's what it's all about.

We opted not to include a phono stage in the i-1 for two reasons: the nature of the large power-supply circuit would have compromised phono-playback performance, and increased the retail price well beyond our target. For customers who wish to use a turntable with the i-1, the Moon LP3 external phono preamp represents a solution both sonically fulfilling and affordable.

Regarding measurements, JA certainly put the i-1 through a rigid process, especially given its relatively small power-output rating. The results clearly demonstrate the amount of engineering invested in this integrated for its price point. Virtually all measurements were identical to our own product specifications, with one exception: signal/noise ratio, wideband, unweighted (ref. 1W). JA found 60.4dB; in our own engineering lab, we found 70.4dB. Given how everything else falls completely in line with our own test, we can only surmise that this could very well be a typo.

JA also raises a very important question at the end of his measurements: "the real mystery is how it can be possible for a Canadian manufacturer to..."
For over 23 years Audiophiles around the world have relied on __HCM Audio__ as their #1 source for the superb line of AudioQuest cables, including fantastic bargains on discontinued models unavailable anywhere else, like these great buys! See the entire selection at: [www.hcmaudio.com](http://www.hcmaudio.com)

Moving up to AudioQuest may be easier than you think...

* Prices shown include our Deluxe termination option.

---

**AudioQuest GBC Deluxe SST 12 awg Speaker Cable**

<table>
<thead>
<tr>
<th>Length</th>
<th>Sale Price</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 foot pair</td>
<td>$79.95*</td>
<td>$244.00</td>
</tr>
<tr>
<td>12 foot pair</td>
<td>$91.95*</td>
<td>$276.00</td>
</tr>
<tr>
<td>15 foot pair</td>
<td>$100.95*</td>
<td>$300.00</td>
</tr>
<tr>
<td>20 foot pair</td>
<td>$115.95*</td>
<td>$340.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length</th>
<th>Sale Price</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 foot pair</td>
<td>$130.95*</td>
<td>$380.00</td>
</tr>
<tr>
<td>30 foot pair</td>
<td>$145.95*</td>
<td>$420.00</td>
</tr>
<tr>
<td>40 foot pair</td>
<td>$175.95*</td>
<td>$500.00</td>
</tr>
<tr>
<td>50 foot pair</td>
<td>$205.95*</td>
<td>$580.00</td>
</tr>
</tbody>
</table>

---

**A Perfect Match For GBC... AudioQuest Coral/CQ Interconnect Cable**

<table>
<thead>
<tr>
<th>Length</th>
<th>Sale Price</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 meter pair</td>
<td>$52.50</td>
<td>$115.00</td>
</tr>
<tr>
<td>1.0 meter pair</td>
<td>$65.00</td>
<td>$150.00</td>
</tr>
<tr>
<td>1.5 meter pair</td>
<td>$77.50</td>
<td>$185.00</td>
</tr>
<tr>
<td>2.0 meter pair</td>
<td>$90.00</td>
<td>$220.00</td>
</tr>
<tr>
<td>2.5 meter pair</td>
<td>$102.50</td>
<td>$255.00</td>
</tr>
<tr>
<td>3.0 meter pair</td>
<td>$115.00</td>
<td>$290.00</td>
</tr>
<tr>
<td>4.0 meter pair</td>
<td>$140.00</td>
<td>$360.00</td>
</tr>
<tr>
<td>4.5 meter pair</td>
<td>$152.50</td>
<td>$395.00</td>
</tr>
<tr>
<td>5.0 meter pair</td>
<td>$165.00</td>
<td>$430.00</td>
</tr>
<tr>
<td>6.0 meter pair</td>
<td>$190.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>8.0 meter pair</td>
<td>$240.00</td>
<td>$640.00</td>
</tr>
<tr>
<td>10 meter pair</td>
<td>$290.00</td>
<td>$780.00</td>
</tr>
<tr>
<td>12 meter pair</td>
<td>$340.00</td>
<td>$920.00</td>
</tr>
<tr>
<td>15 meter pair</td>
<td>$415.00</td>
<td>$1130.00</td>
</tr>
<tr>
<td>20 meter pair</td>
<td>$540.00</td>
<td>$1480.00</td>
</tr>
</tbody>
</table>

**Our special volume purchase** makes it easy for you to upgrade to the superb sound of AudioQuest's Solid PSC copper conductors. Coral/CQ is an extremely musical and transparent sounding cable, outperforming older AudioQuest models costing many times the price, thanks to the use of their superior PSC Solid conductors in a Double Balanced configuration with foamed polyethylene dielectric, and 100% coverage foil shield. Coral/CQ is terminated with the AudioQuest CQ Gold Plated RCA plug with Teflon Dielectric.

### AudioQuest GBC

- SST Spread Spectrum Technology
- 6 Conductor Spiral Design
- Helical Array Geometry
- LGC Copper Conductors
- Cold Weld Termination
- Beautiful PET Outer Sleevng
- Top Line P8MS Spades or BER Bananas

The AudioQuest GBC is an excellent sounding cable in all areas. The midrange has a very smooth and lifelike quality, while the most minute details in the high end are revealed with great accuracy. And then there is the bass, the foundation of all music. With its special bass conductors, Helical Array geometry, and its large aggregate size of 12AWG, the GBC delivers a tight, detailed, and thunderous bottom end. The beautiful woven PET outer sleeve on GBC is available in your choice of Black, Blue, or Clear. GBC comes standard with AudioQuest's best spade lug, the #P8MS, but a wide range of connector options are available. Single BI-Wire termination is also available for an additional $30/pr. For other lengths and options please visit our web site at [www.hcmaudio.com](http://www.hcmaudio.com)

---

**AudioQuest Coral/CQ Interconnect Cable**

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

---

**HCM Audio**

800-222-3465 • 530-891-8326 • Fax 530-345-7269
2725 Hwy 32, Suite C, Chico, CA 95973
e-mail: sales@hcmaudio.com

We ship anywhere in the world!
Editor:

Art Dudley's rave review of the Harbeth Monitor 40.1 in the October issue, and its swift placement in Class A of your "Recommended Components" section, is most grateful. Three cheers to AD and John Atkinson for their efforts. Critical acclaim is wonderful, but what is even more important to us is the unanimously positive feedback from customers, both consumer and professional, affirming our belief that we have achieved our design objective: to take all the strengths of the previous generation of the BBC-style three-way monitors and make them even more domestically friendly.

Stereophile should be applauded for their continuing efforts to balance subjective reviews with technical measurements, even though we have differences of approach and interpretation. If I, as a speaker designer, were sitting in the editor's shoes, it would be with considerable trepidation that I would contemplate making technical measurements of the loudspeakers that cross my desk. I would surely have sleepless nights, wondering if I'd overlooked something through my inexperience or human error. That's the thing with measuring speakers—just when you think you really understand them, they surprise you.

Nevertheless, we speaker people are well served by the audio test-equipment/software industry, and acoustic-test equipment packages have been available to even impoverished DIY speaker enthusiasts for years; even the most basic equipment can give surprisingly useful results. That leaves three significant areas of uncertainty when measuring loudspeakers: the appropriateness of the measuring technique and its variables (often concealed), the environment in which the speaker is measured, and, crucially, the interpretation of the results.

As I mentioned in my previous comment (October 2008, p. 203), I believe that the most useful and consumer-friendly way to measure a loudspeaker is under conditions where the room is completely removed from the measurement. This implies a reverberant environment (an anechoic chamber or, more honestly, a freefield room), or placing the speaker on a high pole on a warm and windless day, outside in the open. Assuming similar temperatures and equivalent path length from the loudspeaker to the nearest reflective surface, in my experience the anechoic chamber and the backyard should give and can give comparable results. In fact, even the BBC's anechoic chamber has noticeable reflections from the metal arm supporting the microphone boom, and from the metal-grid floor (which, for safety reasons, cannot be completely removed). There are also other small, irritating reflections—from the thermostat housings, light bulbs, and cables—that are absent in backyard measurements. These would not have been noticeable in the 1950s using paper-trace pen charts, but modern computer systems clearly reveal all imperfections onscreen.

So there are reflections in real-world anechoic chambers that limit their usefulness. At lower frequencies, the wedges are neither long enough nor absorbent enough to prevent the low-frequency sounds from bouncing off the chamber walls and disturbing the measured response. Though imperfect, anechoic chambers around the world of similar dimensions and with similarly absorptive linings can be expected to provide a comparable frequency-response measurement of a loudspeaker under test. They are, then, an international yardstick by which loudspeakers can be evaluated, with little or no argument or need for interpretation.

We, the industry, have to admire John Atkinson's energy and willingness to even attempt the measurement of loudspeakers without the convenience (and confidence?) of an anechoic chamber, or an industrial hoist capable of lifting heavy speakers at least 3m skyward. As I understand it, Stereophile's measurements are made on or near the ground, with the microphone brought very close to the speaker drive-units. If the speaker (like the M40.1) has only a single pair of terminals, the cabinet is not opened to disconnect the individual drive-units—all drive-units are fully operational during all measurements. I could not design a speaker without being able to isolate the contribution of the individual drivers; and, conversely, I could not accurately deduce each driver's (or port's) unique contribution under measurement conditions in which all drivers are being driven, due to cross-pollution at the microphone at the low frequencies/long wavelengths.

The nearfield measurement proposed by Keele was a development of Small's earlier work, when he proposed drilling a hole in the cabinet to measure the driver's sum composite pressure inside at low frequencies. I have some limited experience of comparing the Keele nearfield measurements against those made in the farfield in an anechoic chamber. In my testing, a sealed box (no port) with the Keele-method microphone placed within 2-3mm of the cone, plotted and overlaid on the anechoic response, is often revealing of the limitations of the chamber. The real challenge is using this technique on a loudspeaker that has multiple bass units, and/or that has one or more ports, and scaling their contributions. In the anechoic chamber, when the microphone is some distance from the loudspeaker, it will collect the soundwaves from all sources, regardless of whether the low frequencies are from the bass unit(s) or port(s). The microphone, just like the ear, is unable to distinguish the true source of the sound, so the frequency response is a composite of the entire output at low frequencies.

Keele's approach assumes that a microphone placed extremely close to the drive-unit or port will drown the reverberations so that, at an extreme, a kitchen or bathroom could be used as the test room. His objective was to produce a "poor man's" anechoic response without the need for a nonreverberant space. But I don't think that he was attempting to predict how a speaker would measure (or sound) in a domestic listening room; that's a wholly different matter. But if I understand it correctly, Stereophile's particular measurements strategy from Keele's (quasi-anechoic) technique is offered as a prediction of how the speaker will behave in the reader's room—not the chamber. From a quasi-anechoic response prediction to an in-room prediction is a significant intellectual leap for a rather basic measurement technique. Of course, there may conceivably be a speaker and room combination that measures in-room as it would anechoically (or quasi-anechoically), but that's probably rare. But what listening room would the curves actually represent? A New York apartment or a Miami beach house? It's impossible to predict or define a "standard" listening way.
This is just a glimpse.

To see and hear these fine musical instruments, we invite you to visit our showroom.

Aspara | Bel Canto | Cambre' | Copland | Hanni
Lyra | Nordost | Nottingham | Quicksilver | Reference 3A
Denver, Colorado  www.HeirloomAudioLtd.com  By-appointment

Once Is Not Enough...

I really am not interested in making the quick, one time sale. Rather, I want you as a long-time repeat customer. Earning your confidence is the key to this philosophy. I do this by offering honest, knowledgeable service tuned to your specific needs. Your goals determine our careful recommendations, not the equipment occupying space on the warehouse floor.

-Galen Carol

Jeff Rowland Design, Shunyata, Audio Physic, Musical Fidelity, Quicksilver, MBL, Jadita, Basis, Sim Audio, Quad, Spendor, Rega,
WAVAC, NuForce, Creek, VPI, Convergent Audio, Pass Labs, Michell, Gamut, MadWright, Shanling, Audible Illusions, Art Audio, Graham, Spectran, Esoteric... and many more!

We carry virtually all cable, cartridge and accessory lines.

P.O. Box 17562 San Antonio, TX 78217
(210) 805-9927 Fax:(210) 805-9928
email: galen@gcaudio.com

www.gcaudio.com

Limited edition wonders direct from Nelson Pass' kitchen table to you.

for more information: 775.829.7332

www.renohifi.com - www.firstwatt.com

Audiomania

Premium online retailer offering unique and original high quality sound products.

SPEAKERS
CABLES
CONNECTORS
POWER FILTERS
POWER STRIPS
VIBRATION CONTROL AND MORE!

www.audiomania.com

Take advantage of this fully enabled E-commerce web store, navigate through the product line, gain useful information about product specifics, safely make purchases online - all from the comfort of your living room.

info@audiomania.com  415-558-8771
The People with the BEST Audio Systems
in the World...

Still Listen to Steve Davis

Call Today for A Free Consultation or Visit
Our Central Florida Showroom

800-752-4018
sanibelhifi.com

All three MBL lines are available for audition!
Basic • Nobel • Reference

We have the legendary MBL 101E speakers with
the MBL REFERENCE electronics connected with
Tara Labs "The Zero" and "Omega" cables.

United Home Audio is a
Tara Labs Elite dealer!
Please visit our showroom in Orange County, CA for an audition.

www.DMC-ELECTRONICS.com (714)534-8780 Best Prices!

âméle

Loudspeakers extraordinaire

- Unmatched realism
- Excellent design
- Unparalleled performance
- Innovative technology

www.highend-electronics.com

USED CABLE

The on-line used cable clearing house.

We buy cables. We sell cables. Good advice.

www.soundanchors.com  ph.(321)124 1237

COUNTERPOINT OWNERS DID YOU KNOW...

That when you get an ALPS or DACT volume control upgrade for your Counterpoint preamp we can also install a remote control for it. Check it out.

Upgrades and servicing for Counterpoint gear since 1998. By the guy that designed it.

www.altavistaaudio.com

Love Your Music!

Tempo
electric

ARTHUR LOESCH HOME AUDIO
www.TempoElectric.com

Nuts about Audio & Video?

Call or Visit Today!

audio
video
cable
- system tuning & more!

1.877.944.5505
www.audionut.com

www.partconneXion.com

NEW

www.abbild.com

1-866-681-9602
Ph. 805-681-9602  FAX. 805-681-9602

NEW & NOS Tubes

NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!

NEW & NOS tubes, in stock!


NASHVILLE AREA'S NEWEST PLACE for the Best in high end A/V is not that new! We’ve been Serving S.W. FL for 5 years with names like KEF, Dynaudio, Parasound, Simaudio. TARA Labs & StraightWire Precision. Lifestyles is now open in the Nashville area! Call (615) 799-8002 or visit us at www.premieracoustics.com.


AUDIO ART, est. 1976—Edge-of-the-art audio components dedicated to serving music. Avalon, Ayre, Aestheis, Cajin, Classe, Jeff Rowland, Martin Logan, Vandersteen, Aerial, Acoustic Zen, SME, VPI, Shinjyuta, Cards, Kimber, PATHOS, Project, Clearaudio, Music Reference, Rega, Music Hall V/F/(804) 358-5300, AudioArtUSA@aol.com, Richmond, VA.

LUXURY HOME THEATER SHOWROOM SUNSET BLVD. HOME THEATER & HOME SYSTEMS: 1370 E. Cypress Street, S. D. E. Cotina, CA 92714 Tel: (626) 966-6259, Cell: (626) 975-1353. www.sunnysystem.com. Email: smr19@aol.com.


AUDIOCLASSICS — Buys-Sells-Training-Repairs-Appraisals, New, Used & Vintage McIntosh, Krell, Marantz, Klipsch and other US made audio equipment. 3501 Vestal Road, Vestal, NY 13850. (800) 321-2834.

USHER AUDIO Award winning BE-718 (Tiny Dancers) with custom built Skylab 718 stands designed specifically for Everest Audio. Check out the speakers, stands, and the complete Usher line at Canada’s authorized Usher dealer www.everestaudio.com.


Audio Isolation by Miller - Did you hear the one about the $10,000 amp sitting on a 3" thick cutting board!! Who does that? Check out our products and see the difference audioisolationbymiller.com.
s everyone who loves music and collects the stuff already knows, vinyl is creeping back into the marketplace. Yes, downloads are the inexorable future of music for a large segment of the buying public, but those big black discs—which many of us did not entirely abandon 20 years ago—are again sending hearts aflutter.

The new vinyl boom seems to include three kinds of buyers. There are the true believers who stayed with analog, and are now looking to replace old records that were never reissued on CD or LP. There are audiophiles who love the impact of the sound of well-recorded vinyl. And, most tantalizingly, there are young people who are buying their first turntables and discovering the joys of analog anew.

The vinyl-reissue trend has now spread to major labels like Capitol, and also back to specialty indie labels like Mosaic Records, whose releases, along with those of Germany’s Bear Family Records, represent the ne plus ultra of the boxed-set milieu.

“We never totally got out of the LP business,” says Mosaic cofounder Michael Cuscuna. “We were still putting out on vinyl the Miles Davis sets that were coming out on Sony. But the writing was on the wall when we’d sell maybe 250 vinyl sets over three years. The minimum to reorder them was 250. You can’t buy a three-year supply of a lot of titles without going out of business fairly quickly.”

So Mosaic began to allow their prized LP sets go out of print, though in most cases their CD counterparts remained available. Eventually, they stopped making LP editions altogether.

Now however, Cuscuna and his partner, Fred Pustay, are set to re-enter the LP market in a different way. Instead of the label’s past completist model of unwieldy, very expensive boxes of 15 LPs or more, Cuscuna wants to start slow, with more concept-driven projects and LP sets that focus on a certain period of an artist’s career.

“For example, the Modern Jazz Quartet made three-and-a-half albums between 1963 and ‘64 which are some of their best and most ignored work. There’s The Sheriff, Collaboration: The Modern Jazz Quartet with Laurindo Almeida, and Plays George Gershwin’s Porgy and Bess. I want to do a three-LP set of those.”

Cuscuna also mentions he’s “put in” for (industry parlance for: formally requested the rights to release) Thelonious Monk’s Live at the It Club. “Our LPs will be a little more focused and not so complete and all-encompassing as the CD sets,” he says.

Mosaic also intends to open an all-LP online store, www.thebestvinylshop.com, which, like the label’s new vinyl sets, will not operate on a completist model, but will instead offer the best choices from an artist’s catalog. Nor will it be limited to jazz; according to Cuscuna, the site will also offer classic rock, blues, and singer-songwriter recordings, as well as work by artists who defy easy definition, such as Willie Nelson.

As someone who’s worked for both a major label (Sony) and his own boutique indie label, Cuscuna has a unique perspective on the major labels’ renewed interest in LPs, such as Capitol’s new “From the Capitol Vaults” reissue program of 180gm LPs.

“I don’t think they would even be looking at vinyl except that the rest of the business is shrinking so fast. I think this is a honeymoon that will be over at some point. Big corporations have a very short attention span, and once something stops paying for itself, they drop it like a hot potato. It’s inevitable, because the numbers are still too small for corporate thinking.”

Not so, says Jason Boyd, senior director of sales for EMI Music Marketing (Capitol’s parent company). “We’ve seen the numbers we need so far,” Boyd says. “My initial thought was it was going to be a blip, but it’s transitioned into much more than that. All of a sudden, these major retailers—like Best Buy, Costco, Fred Meyer, and Borders—are taking LPs and dedicating space to them. I think you’re going to see this continue all the way through the end of next year.”

So far, the “From the Capitol Vaults” LPs are distinct sonic upgrades over earlier CD and LP editions. The discs are nicely packaged, and not unreasonably priced at $20.98 each. Boyd estimates that the first batch of “Vaults” vinyl titles, released in August 2008 and heavy on albums by Coldplay and Radiohead, has sold “thousands” of units each. On September 30, Jimi Hendrix’s Band of Gypsys (on red vinyl) and John Lennon’s Imagine were released, followed on October 28 by a second group of 13 titles that included the Band’s Music from Big Pink, the Verve’s Urban Hymns, and Paul McCartney and Wings’ Band on the Run.

“In corporateland, they are looking positively at the results that we are doing,” Boyd says. “Granted, when we first started, there was some skepticism. But it’s not like the music business has a ton of physical formats to keep selling, so let’s give it a shot.”

Meet and Greet

AURAL ROBERT
Robert Baird

BRIAN WILSON
THAT LUCKY OLD SUN
RAL "THE MEETING" WILSON

RADIOHEAD
THE BENDS

Meet and Greet
Headlines:
Siltech presents the new Classic Anniversary Series!

In order to commemorate 25 years of class leading audio cables, Siltech research presents a newly designed spectacular sounding high value series. The all new Classic Anniversary Series™ is created by using many elements of Siltech’s most advanced technology used for the Royal Signature series. To name a few highlights: all G7 pure silver-gold conductors*, advanced aerospace-technology insulation, precision dual balanced construction, smallest possible tolerances in industry.

SCALA UTOPIA™

Touched by a Grande inspiration

FOCAL
the Spirit of Sound