NEW RELEASE • STEREOPHILE JAZZ CD

The brilliant Bowers & Wilkins 800 Diamond loudspeaker

DIAMONDS ARE FOREVER

THE INDUSTRY’S MOST IN-DEPTH REVIEWS:

HIGH-END LP PLAYBACK
from Brinkmann

AFFORDABLE LP PLAYBACK
from Rega

CUTTING-EDGE DIGITAL
from Rega, Yamaha, Head-Direct

GREAT-SOUNDING ENTRY-LEVEL SPEAKERS
from Totem & Audioengine

Plus

DIGITIZE YOUR VINYL
with Music Hall’s plug ‘n’ play USB turntable

Online authority: www.stereophile.com
Great sound and great pictures, music that consumes you, movies that transport you around the universe ... comes from honoring the original signal.

An unavoidable fact-of-life: Every component and cable in a system causes some amount of distortion. These aberrations add up, like layers of foggy glass between you and the image. The goal of high quality components and cables is to be like clean clear panes of glass, altering and distorting the information as little as possible.

Some of the most fundamental distortion mechanisms are honored and addressed by AudioQuest's 4-Elements. Any improvement in these areas of design and materials results in less damage and a more effective immersive experience.

**Solid Conductors**

Electrical and magnetic interaction between strands is one of the greatest sources of distortion in normal cables. Separate solid conductors prevent interaction between strands.

**Insulation**

In addition to insulating, all conductor coatings are also a "dielectric." Signal flow is slowed down and distorted by a dielectric, making the choice of material, and AQ's Dielectric-Bias System, very important.

**Geometry**

The relationship between conductors, whether of the same polarity (+ & +) or opposite polarity (+ & -) affects many electrical and mechanical parameters, including capacitance, inductance, RF Interference, etc.

**Metal Quality**

Conductor material quality has a pronounced effect on the signal passing through. Different materials have more or less impurities, grain-boundaries, surface irregularities, etc.
When the Music’s Over

It's one of those good news/bad news stories: more people are listening to music than ever before, but the major record labels are in dire straits. Some of the reasons for the record industry's malaise are easy to spot—teenagers and grandmas grooving to music-streaming services like Spotify, Pandora, and MOG, or ripping each other's CDs—but the music industry's problems run deeper than lost sales. Digital audio mortally wounded recorded music's creative mojo in 1982, and the record industry never fully recovered.

The arrival in that year of the Compact Disc at first brought booming sales and profits, so digital's negative effects weren't immediately obvious. Labels large and small reissued their back catalogs on CD as fast as pressing plants could pump out silver discs. The audiophile community split into pro- and anti-digital factions: Stereophile's founder, J. Gordon Holt, quickly embraced the new format, while The Absolute Sound's editor Harry Pearson remained staunchly anti-digital throughout the 1980s.

CD sales were so brisk that no one saw that digital was stifling creativity in rock and jazz—or was it just a twist of fate that the analog era coincided with rock's greatest creative leaps? From its beginnings in the early 1950s through the early 1980s, rock reinvented itself every few years. Bill Haley and the Comets' first hits, "Crazy Man Crazy" and "Rock Around the Clock," released in 1953 and '54, respectively, sounded dated by the time Chuck Berry released "Johnny B. Goode" in 1958. The times were changing fast; the early 1960s brought girl groups like the Shangri-Las, the Ronettes, and the Supremes, and surf music had a good run. A couple of years later, the soul music of Motown and Stax had people dancing in the streets, and rock forever lost its roll when the Beatles landed in New York City in early '64, and Dylan went electric in '65. By 1967, West Coast bands like the Grateful Dead, Sly and the Family Stone, and Santana had raised the stakes again. The changes in the '70s weren't as fast or as furious, but the music transitioned to newer wave and punk in the late '70s, and the creative leaps grew smaller and less frequent.

Michael Jackson's Thriller, released in 1982, was the biggest event of an otherwise musically pathetic decade, and while some were still saying that rock would never die, it was in a deep coma. Rap and hip-hop, born in the digital era, were the only new musical forms that had any real traction, but they initially thrived outside the rock establishment. The 1990s brought stirrings from Nirvana and Pearl Jam, but the decade was mostly unremarkable, and the 2000s were no better. Most of the 1960s and '70s bands that are still together and making new music pack their concert set lists with their old, analog-era hits. The Rolling Stones, for example, can still sell out stadiums, but no one gives a hoot about the Jagger-Richards tunes from the six studio albums they've recorded since 1983. Stacked up against the Stones' analog efforts, their best digital-era albums look downright pathetic.

The analog trajectory of jazz had a much longer arc, starting with ragtime at the turn of the last century, then progressing from Dixieland through swing, big band, bebop, Afro-Cuban, free jazz, and fusion in the late 1970s, before digital stagnation brought evolution to a halt. Some might say that jazz never recovered its groove. Jazz schools turn out technically proficient players year after year, but the schooled generations have yet to produce a single talent on the level of a Coltrane, an Ellington, a Mingus, a Monk, or a Davis. Jazz still has terrific players, sure, but great composers? Not so much.

Don't get me wrong—dead rock has been recorded since the dawn of the digital age. I love Arcade Fire, Avey Brothers, Bright Eyes, the Dirtbombs, Drive-By Truckers, Iron and Wine, My Morning Jacket, The National, and the White Stripes. But today's rock music scene is fragmented; it doesn't coalesce into a recognizable form or movement.

There were megasales chart successes in the digital age, but you no longer have to sell millions of CDs, downloads, or LPs to have a No.1 record on a Billboard chart. In early February 2011, Amos Lee scored a No.1 on the chart by selling 40,000 copies of his new album, Mission Bell, in a week, making it the poorest-selling No.1 album since 1991, when SoundScan began tracking record sales. I don't think today's bands are any less talented than they were before 1983, or that the record business's greed has thwarted creativity. But something went wrong, and the industry doesn't appear to be able to conjure new types of rock or jazz that connect with people on a mass level.

Is digital the cause of music's doldrums, or has it been the instatable drive for technical perfection that has sapped music's spirit? No one can say for sure, but it's a fact that music's function has morphed so slowly from foreground to background listening that most people haven't noticed it happening. One thing is certain: Recorded music doesn't engage listeners the way it did in the analog days. Music now serves as a backdrop as people talk, read, drive, work, exercise, etc. Foreground listening is what audiophiles do—but other than us, very few people really listen to music anymore, even when attending live concerts. If recorded music isn't worth your undivided attention, it's not worth paying for.

I'm not claiming that digital has or will destroy music—just what's left of the record business. Musicians will continue to play music, and concerts won't disappear, but income from recorded music will continue to decline. Obviously, we can't turn back the clock and return to the analog era; I'm just not sure what it would take to get people listening again.
FEATURES

61 Attention Screen Takes Flight at Yamaha
Jason Victor Serinus and John Atkinson discuss the making of Stereophile's new live jazz CD.

EQUIPMENT REPORTS

72 Bowers & Wilkins 800 Diamond loudspeaker
Kalman Rubinson

83 Totem Dreamcatcher loudspeaker
Robert J. Reina

95 Vincent C-60 CD player
Brian Damkroger

105 Rega RP-1 turntable
Art Dudley

111 Brinkmann Bardo turntable
Michael Fremer

114 Brinkmann 9.6 tonearm
Michael Fremer

114 Brinkmann Pi phono cartridge
Michael Fremer

FOLLOW-UP

21 Musical Fidelity M1 DAC D/A processor
Sam Tellig

55 Sony XA-5400ES SACD player
Kalman Rubinson

55 Oppo BDP-83SE Blu-ray player
Kalman Rubinson

57 Meridian Reference 861 v6 surround processor
Kalman Rubinson

119 Head-Direct HiFiMan HM-602 digital audio player
John Atkinson
As We See It
Steve Guttenberg asks if digital technology is the cause of music's current dole-
drums, or did the insatiable drive for technical perfection sap music's spirit?

Letters
Readers enjoy our music coverage, complain about our digital coverage, and offer
mixed opinions on the value of tweaks.


Industry Update
High-end audio news, including the dealer-sponsored events taking place in May
and June, while Paul Messenger offers some European audio sales statistics and
reports on new developments in measurement techniques.

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

Sam’s Space
Sam Tellig listens to the new Rega DAC, but not before digressing into the world
of apps for his iPhone.

Analog Corner
Michael Fremer lives with the Nitty Gritty 2.5Fi-XP record-cleaning machine
and auditions the Transfiguration Axia phono cartridge.

Listening
Art Dudley continues his love affair with moving-coil step-up transformers and
vintage phono cartridges with reviews of the affordable Silvercore One-to-Ten
transformer and the EMT TSD 15 A-style pickup head.

The Entry Level
Stephen Mejias lives with the Head-Direct HiFiMan HM-602 portable music
player, Music Hall USB-1 turntable, and Audioengine 5 powered loudspeakers
while preparing the best meatloaf Natalie and Nicole will have eaten.

Music in the Round
Kalman Rubinson reports on the multichannel music he heard at last January's
Consumer Electronics Show, upgrades his Meridian 861 Reference Digital Sur-
round Controller to v6 status, and compares the Yamaha Aventage BD-A1000
Blu-ray player with his reference Sony and Oppo players.

Record Reviews
For May’s “Recording of the Month” we venture into the lair of Greg Dulli and
choose Dynamite Steps, the latest from his post Afghan Whigs project, The
Twilight Singers. In classical music this month, we have a new recording from
violin phenom Lisa Batiashvili. In rock/pop, there are reviews of new albums by
The Decemberists, The Spanciniato Brothers, and Warren Haynes. In jazz, a criti-
cal ear is bent towards new recordings by Benito Gonzalez and Henry Threadgill.

Manufacturers’ Comments
Mango, Nitty Gritty, Head-Direct, Toem, and Brinkmann respond to our cover-
age of their products.

Aural Robert
Norman and David Chesky's high-resolution download store, HDtracks, is now of-
fering the early Rolling Stones catalog. Can the Fab Four be next? asks Robert Baird.
SILTECH

ROYAL SIGNATURE

Series

A royal force for every kind of music

To experience music with Siltech and for all information and enquiries about our products contact our US distributor Audio Plus Services.
Call the toll free number: 1-800-663-9352 or go to www.audioplusservices.com.

www.siltechcables.com
Brass studs isolate speaker from vibration

Pillars can be filled with shot or sand for exceptional stability

The ultimate level in sound.

Raise your AV system’s acoustic performance with Foundations Ultimate Series speaker stands. Our quest for the sweetest sound began with a custom base, designed to reduce vibrations. Next came a support of three large-diameter steel pillars for added weight and resistance to vibration. We finished with an ultra-heavy-gauge steel top plate complete with brass isolation studs. The result is clean, clear sound for ultimate audio perfection.  www.sanus.com

Cork damping rings absorb acoustic resonance

High-tech poly-mineral composite base reduces vibration

Neoprene gaskets isolate speaker from ambient room vibration

High-strength custom carpet spikes create stability

Sanus
**Thanks**
Editor:
Thanks so much for John Atkinson’s wonderful recommendation of Peter Gabriel’s Scratch My Back in Stereophile’s “Records To Die For” (February, p.74). I hadn’t bought a Gabriel disc since So—his music had just sort of gone out of my consciousness, despite how much I used to love it. I sampled Scratch My Back after you made me aware of it, bought the disc, and haven’t stopped listening to it since. This recommendation alone was worth Stereophile’s subscription price.

—Kevin Kunnun
kevin@kevinkunnun@yahoo.com

**Applause**
Editor:
It’s not often we see David Bowie grace the pages of Stereophile (February, p.79). I would like to applaud Michael Fremer [see “Analog Corner” in this issue—Ed.] and Jon Iverson for mentioning two great records by one of the most courageous, creative, diverse, and interesting artists of my time. Thank you!—Mike Desouza
desouza@igt.net

**Yeah yeah yeah**
Editor:
After reading Robert Baird’s “Streets of Fire” in the December 2010 issue (“Aural Robert,” p.154), I felt compelled to finally write to Stereophile for the first time. I have been a subscriber for the last 35 years, but I hadn’t read an article like this before that had brought back so many memories. I remember seeing Springsteen perform “The Darkness Tour” in Atlanta back in 1979, and agree with Mr. Baird that few shows I’ve seen since had that much energy. Ya just had to be there.

Those were the days. The music never gets old. Only we do. The technology moves on and the equipment changes, and there is still all that incredible music between then and now that keeps growing for us to enjoy. I have owned everything from Hafler kits to Krell, but my music collection has always been what is most stable. Sure, I still continue to purchase and enjoy some of the more recent tunes, but pulling out an album I haven’t listened to in 20 years and throwing it on the turntable is like meeting up with an old friend. It just reinforces what I have been reading in these pages all these years: It’s the music that matters. Yeah Yeah.

—Allett Ferararo
Simi Valley, CA
w6aax@hotmail.com

**Crap crap crap**
Editor:
Holy crap. I had misplaced my January issue. Just read it, and it was just digital. Not much else. Crap. Crap crap crap. Whine, whine, whine, not wine, wine, wine. Oh well. Glad to read about the revival of equipment shows around the globe. See you in June at T.H.E. Show in Orange County, with vinyl in hand: bluesback, silverback, 12/14, 13/15, Mercury Scratchers, bootleg Maria Callas, Carmen Dragon, Music for Non Thinkers, Mario del Monaco, Clemens Krauss, Grace Slick and the Great Society, cantor Louis Danto. All good stuff.

—Dave Rutkoff, man about wine
drnolkoff@yahoo.com

**Audio snake oil**
Editor:
Jim Austin’s March 2011 “As We See It” (“Audio, Meet Science,” p.3) pointed out what I had thought for many years. Too bad audio reviewers are not better trained in the scientific method and statistical analysis. If they were, I think they could deliver better analyses of audio equipment and provide to your readers better recommendations of truly cost-effective designs.

I suspect most of your readers are not well trained in objective data analysis, so they may not even appreciate a more rigorous approach to reviewing equipment. One has only to look at some of the snake oil that is sold at ridiculous prices to conclude the above. So I will continue to ignore Art Dudley’s drivel and enjoy the honest approach of Sam Tellig. I do appreciate the fact that you test equipment and comment on the engineering of the equipment. On balance, I enjoy Stereophile. I just wish it could be more objective and more scientific.

—Allen Schmidt
alsaudio44@yahoo.com

**Dotty**
Editor:
I heartily agree with Jim Austin’s conclusion wishing for “a little more space between the creations of a skilled audio designer and, say, a jar of pretty rocks” (March, p.3). To that end, I think his juxtaposition in the text of Machina Dynamica Brilliant Pebbles and Marigo Audio Lab Dots shows the depth of his confusion.

I’ve used the Marigo Tuning Dots in two rooms now, because the application of constrained-layer damping gives me decent soundstage depth without having to shut the curtains. The effect on room acoustics could be measured with a microphon and software, the same as my bass traps.

---

LETTERS TO THE EDITOR should be sent as faxes or e-mails only (until further notice). Fax: (212) 915-4167. E-mail: 51Letters@SourceInterlink.com. Unless marked otherwise, all letters to the magazine and its writers are assumed to be for possible publication. In the spirit of vigorous debate implied by the First Amendment, and unless we are requested not to, we publish correspondents’ e-mail addresses. Please note: We are unable to answer requests for information about specific products or systems. If you have problems with your subscription, call toll-free (800) 666-3746, or write to Stereophile, PO Box 420235, Palm Coast, FL 32142-0235.
don't own Machina Dynamica Pebbles, because I think their impact should be measured on a sense-of-well-being scale.

I credit your writers generally with a little more sense of which is wheat and which the chaff, which needs sorting by measurement. —Michael White

Barnum was right
Editor:
I read with interest Jim Austin's “As We See It” in March (p.3). I Googled Machina Dynamica and their Brilliant Pebbles. My jaw hit the floor as I viewed their amazing tweaks. Clocks, pebbles, bowls of water—the list is stunning.

It occurs to me that they are missing a simple new application of one of their existing products. The human skull is hard bone, correct? This structure must be prone to all sorts of resonance problems, and your poor ears are attached to said structure. How about some Brilliant Pebbles strung together as headbands and necklaces? Fashion and resonance control! Hmmmm...what if I swallowed a few of the smaller ones? Internal resonance control!

Ah, P.T. was right: there is one born every minute. —Glenn Kirryon

Nyquist was right and wrong
Editor:
Re. "Shame on Art Dudley" ("Letters," March, p.11): Nyquist theory states simply that the sample rate should be twice the bandwidth of the maximum bandwidth of interest. Since the audio bandwidth is at most 20Hz–20kHz, it is reasonable to assume that ("Red Book") 44.1kHz sampling will accurately capture the full audioband to 16-bit accuracy. The associated image filter, however, introduces temporal (phase) distortion in the reconstructed analog signal. With higher sample rates (such as 96kHz), a less steep image filter introduces less phase distortion. Sampling to 24-bit accuracy also helps. Whether the ultrasonic (>20kHz) information captured at 96kHz is perceived by human ears as improved soundstaging remains a matter of speculation.

—Kevin Johnstone, PhD

See my measurements of the Head- Direct HiFiMan HM-602 in this issue’s “Follow-Up” (p.119) and “Manufacturers’ Comments” (p.131) for some discussion of whether or not a steep-rolloff anti-imaging filter is needed. —John Atkinson
History Repeats Itself...

Twenty-years ago Nordost’s revolutionary Flatline cables rewrote the rulebook, their unique combination of speed, detail, transparency and phase coherence completely redefining audio cable performance, challenging even the most highly rated and costly conventional designs. And they did it at a fraction of the price.

Well, we’ve gone and done it again. By combining the benefits of our proprietary, extruded FEP construction, superior materials and minimalist design philosophy, with the lessons learnt from the development of our game-changing Valhalla and Odin lines, we’ve just raised the bar once more. And not by just a bit: not just better cables but a better way to use them too.

The new Leif (say “Life”) series cables take things a whole stage further by creating a coordinated, universal solution to system wiring. Not only are there four different levels of interconnect and speaker cable to match your ambitions, we’ve created specific source and power cable designs, employing high-speed, low-loss Micro Mono-Filament construction in these critical applications. The result is a unified family of products that can be built into a coherent cable loom that’s finally capable of releasing the scale and drama, the sheer musical power captured in your recordings. Visit your nearest Nordost dealer and you’ll discover that it’s never been easier – or more affordable – to realize the full potential of your system. It’s never been easier – or more affordable – to bring music back to life.

Leif by name, Life by nature.
UK: LONDON
Paul Messenger
"BFA R.I.P." was the rather shocking and sad topic that was highlighted at the recent Annual General Meeting of the British Audio-Visual Dealers Association (BADA). The British Federation of Audio (BFA), the hi-fi industry's trade body, which had long provided a collective voice in British hi-fi's dealings with government authorities—and had succeeded the Federation of British Audio, founded in the mid-1960s—was wound up at the end of 2010, and would be deregistered at the end of March 2011. The reason? A steady decline in the number of member companies, which led to net financial losses for the BFA in each of the last three years.

Happily, BADA, formed in 1982, plans to take up the slack. BADA, primarily organized by and for more than 80 of Britain's specialist hi-fi dealers, is strongly oriented toward giving training courses in new technologies such as computer networking, but its additional 27 Associate Members include a good selection of manufacturers and distributors. According to BADA chairman Simon Byles, of retailer Infidelity, "BADA will be using the next twelve months to move enthusiastically forwards to the next stage of our development, by turning BADA into the industry's association with representation for all parties."

After the main meeting, market-research organization GfK presented a rundown of the latest sales statistics for the UK marketplace that was full of interesting details. Whereas the audio/video sector fell 6.7% in value by the end of 2010 compared to the end of 2009, the decline in sales of separate audio components was just 1.7%. However, the long-term pattern over nearly 20 years shows a far more depressing picture for separate audio systems: Last year's sales of £185 million ($301 million) were well down from a peak of £419 million ($682 million) in 2001, and even significantly below the average of £244 million for 1992-94. Figures for the final quarter of 2010 over the same period in 2009 were doubtless adversely affected by the appallingly freezing weather that hit the UK in late November and lasted almost until Christmas. That said, the fall in CD-player sales was substantial (29.9/34.8% by volume/value), and most other audio sectors also declined—amplifiers, for example, were down 13.1/10.6% by volume/value. Overall growth was seen in just three of the traditional product categories covered (vinyl replay was entirely ignored!). Loudspeakers grew by 3/5.3%, headphones by 6.8/10.6%, and clock radios (!) by 3.8/14.8%.

Compensating for the decline in CD-player sales is the growth of a product category that is arguably its natural successor, "Audio Server/Streamer," which showed year-on-year value growth above 20%. Interestingly, while the dominant sub-£500 segment has grown 37%, the over-£1000 sector has increased by an even greater 46%.

And by large, GfK's figures tend to confirm anecdotal reports. While the audio separates sector has been declining since 2001, the last few years have seen things starting to stabilize, so there's at least some grounds for optimism.

GfK also presented an analysis of the year-on-trends in total consumer-electronics sales, by value, across most of Europe. Not too surprisingly, the strongest growth was mostly found in the East: the Baltic States, Ukraine, Kazakhstan, and Turkey, with Croatia and Slovenia rapidly growing, and Russia not far behind. Many Central and Western Europe countries also grew steadily, especially Denmark, Italy, Austria, Portugal, Slovakia, and Serbia, while Germany, Switzerland, and Spain also showed some growth. Little change was recorded for France, Sweden, Finland, the Netherlands, Ireland, and Romania. The UK, Belgium, Poland, the Czech Republic, Hungary, and Bulgaria all showed significant declines—though none matched Greece's downturn of 12.7%.

While these figures are interesting in

---

GALICIA

The end of March 2011. The reason? A steady decline in the number of member companies, which led to net financial losses for the BFA in each of the last three years.

Happily, BADA, formed in 1982, plans to take up the slack. BADA, primarily organized by and for more than 80 of Britain's specialist hi-fi dealers, is strongly oriented toward giving training courses in new technologies such as computer networking, but its additional 27 Associate Members include a good selection of manufacturers and distributors. According to BADA chairman Simon Byles, of retailer Infidelity, "BADA will be using the next twelve months to move enthusiastically forwards to the next stage of our development, by turning BADA into the industry's association with representation for all parties."

After the main meeting, market-research organization GfK presented a rundown of the latest sales statistics for the UK marketplace that was full of interesting details. Whereas the audio/video sector fell 6.7% in value by the end of 2010 compared to the end of 2009, the decline in sales of separate audio components was just 1.7%. However, the long-term pattern over nearly 20 years shows a far more depressing picture for separate audio systems: Last year's sales of £185 million ($301 million) were well down from a peak of £419 million ($682 million) in 2001, and even significantly below the average of £244 million for 1992-94. Figures for the final quarter of 2010 over the same period in 2009 were doubtless adversely affected by the appallingly freezing weather that hit the UK in late November and lasted almost until Christmas. That said, the fall in CD-player sales was substantial (29.9/34.8% by volume/value), and most other audio sectors also declined—amplifiers, for example, were down 13.1/10.6% by volume/value. Overall growth was seen in just three of the traditional product categories covered (vinyl replay was entirely ignored!). Loudspeakers grew by 3/5.3%, headphones by 6.8/10.6%, and clock radios (!) by 3.8/14.8%.

Compensating for the decline in CD-player sales is the growth of a product category that is arguably its natural successor, "Audio Server/Streamer," which showed year-on-year value growth above 20%. Interestingly, while the dominant sub-£500 segment has grown 37%, the over-£1000 sector has increased by an even greater 46%.

And by large, GfK's figures tend to confirm anecdotal reports. While the audio separates sector has been declining since 2001, the last few years have seen things starting to stabilize, so there's at least some grounds for optimism.

GfK also presented an analysis of the year-on-trends in total consumer-electronics sales, by value, across most of Europe. Not too surprisingly, the strongest growth was mostly found in the East: the Baltic States, Ukraine, Kazakhstan, and Turkey, with Croatia and Slovenia rapidly growing, and Russia not far behind. Many Central and Western Europe countries also grew steadily, especially Denmark, Italy, Austria, Portugal, Slovakia, and Serbia, while Germany, Switzerland, and Spain also showed some growth. Little change was recorded for France, Sweden, Finland, the Netherlands, Ireland, and Romania. The UK, Belgium, Poland, the Czech Republic, Hungary, and Bulgaria all showed significant declines—though none matched Greece's downturn of 12.7%.

While these figures are interesting in
The Los Angeles and Orange County Audio Society will hold its monthly meeting at Brooks Berdan Ltd. (110 W. Olive Avenue, Monrovia). Featured gear will include loudspeakers from Wilson Audio Specialties and electronics from VTL and McIntosh. Stereophile's editor, John Atkinson, will be on hand to address the Society. A special software raffle is planned and dinner will be served. Guests, visitors, and new members are invited, and parking is free. For more info, visit www.iaocas.com or call Bob Levi at (714) 281-5850.

Colorado

Tuesday–Thursday, May 24–26, 5pm: ListenUp will host a series of Music Matters events featuring Stereophile's editor, John Atkinson, and representatives from Musical Fidelity, Peachtree Audio, AudioQuest, Classé, B&W, Sonus Faber, PrimaLuna, and others. Tuesday's event will be held at ListenUp's Denver location (685 S. Pearl Street); RSVP (303) 778-0780. Wednesday's event will be held at the Colorado Springs location (888 E. Woodman Road); RSVP (719) 633-2600; Thursday's event will be held at the Boulder location (2034 Arapahoe Avenue); RSVP (303) 444-0479.

Delaware

Thursday, May 5, Time TBA: HIFI House (2304 Concord Pike, Wilmington) will host a "Big Three themselves, and give some indication of the state of the various countries' economies, they must be treated with great caution. They gloss over the enormous cultural differences that exist across Europe, and the wide variations in maturity of the different markets.

UK: MANCHESTER, LLANDRINDOD WELLS
US: ASHLAND, MA
Paul Messenger

In the November 2009 “Industry Update” I reported on what has become known as the Knowledge Alliance, an ambitious attempt by the UK's Vertex-AQ and US cable maker Nordost, alongside British measurement specialist Acuity Products, to try to develop advanced techniques that would be able to measure differences among audio components that some of us hear clearly enough but that have so far eluded technical analysis. Nordost and Vertex-AQ make what are normally called accessories or peripherals—the cables, support furniture, power-line conditioners, and so on, that, since the 1970s, have become increasingly important parts of serious hi-fi systems.
Summit,” featuring Dan D’Agostino of D’Agostino Master Audio Systems, David Wilson of Wilson Audio Specialties, and Karen Sumner of Transparent Audio. For more info, call (610) 544-4420 or e-mail jrobbins@hifihousegroup.com.

**GEORGIA**

Thursday–Sunday, April 14–17: Audio Expo North America (Axpona), sponsored by Goldmine and Stereophile, will be held at the Sheraton Atlanta Hotel (165 Courtland Street NE, Atlanta). Michael Fremer will be demonstrating how to get the best from your LP player and John Atkinson will be giving seminars on how to interpret the loudspeaker measurements published in Stereophile. For more info, visit www.axpona.com or call (877) 246-3892.

**MARYLAND—VIRGINIA—WASHINGTON, DC**

Friday–Sunday, July 8–10: The Capital Audiofest will be held at the Crowne Plaza Rockville Hotel (3 Research Court, Rockville, MD). For more info, visit www.capitalaudiofest.com or call (703) 839-5684.

**MASSACHUSETTS**

Saturday, May 14, 12–6pm: Goodwin’s High End (899 Main Street, Waltham) will host the world premiere of the Magico Q3 loudspeaker. Magico’s Alon Wolf will be on hand to present and demo the speaker. RSVP: (781) 893-9000. For more info, visit www.goodwinshighend.com.

**MINNESOTA**

Tuesday, May 17, 7–9pm: The Audio Society of Minnesota will hold its monthly meeting at the Pavek Museum of Broadcasting (3517 Raleigh Avenue, St. Louis Park). Refreshments will be served, and guests, visitors, and new members are invited. For more info, visit http://sites.google.com/site/audiosocietyofminnesota.

**NEW YORK**

Wednesday, April 27, 6–9pm:

I well recall the raging controversy that erupted in 1977 when, for Hi-Fi News & Record Review, I helped translate an article by Franco-Japanese journalist Jean Hiraga that asked “Can We Hear Connecting Wires?” Hiraga assumed that we could, though no credible tools then existed to provide objective confirmation. There was considerable skepticism about this notion among HFN/RR readers, a skepticism that remains widespread to this day. But it hasn’t stopped the cable and accessory sectors of the hifi industry from growing into significant forces in the years since, based purely on subjective evaluation (often laced with a good helping of BS), even though objective proof remains elusive.

The purpose of the Knowledge Alliance has therefore been to try to find new measurement techniques that could find that objective proof. The first phase of the project was to establish whether Acuity Products’ test techniques could distinguish between accessories that had been steadily improving in sound quality.

Acuity avoids frequency-domain and steady-state FFT techniques. Instead, its measuring is based on real-time analysis.

Without the Proper AC Foundation... You Are Not Hearing Your System's True Potential

**PS Audio P5 Power Plant** $2,995

**PS Audio P10 Power Plant** $4,695

**Shunyata Hydra Triton** $4,995

**Shunyata Hydra Talon** $2,995

Call us to discuss which power conditioner is right for your system.

ph. 800.449.8333
musicdirect.com
The Ayre VX-R stereo amplifier gracefully integrates all of the technology, performance, and sophistication of the world renowned MX-R monoblocks into a single radiant chassis.

The VX-R features our exclusive EquiLock technology and fully-balanced circuitry in our original zero-feedback design for the most resolute and coherent sound available.

Reveal hidden textures, unlock the most intimate details, and enter deeper into the world of music. Audition the new reference in stereo amplifiers at your Ayre dealer today.
Innovative Audio Video Showrooms (150 East 58'h Street, New York) will host an evening with Dan D'Agostino to present his new Momentum monoblock power amplifier. Refreshments will be served. Space is limited. RSVP: info@iavn.com or (212) 634-4444. For more info, visit www.innovativeaudiovideo.com.

Pennsylvania

Wednesday, May 4, Time TBA: HiFi House (509 York Road, Jenkintown) will host a "Big Three Summit," featuring Dan D'Agostino of D’Agostino Master Audio Systems, David Wilson of Wilson Audio Specialties, and Karen Sumner of Transparent Audio. For more info, call (610) 544-4420 or e-mail jrobbins@hifihousegroup.com.

Utah

Friday, May 13, 2-6pm: Utah Audio (10661 S. State Street, Sandy) will host an open house with representatives from Totem Acoustic and Naim Audio. For more info, call (801) 619-6262 or e-mail info@utahaudio.com.

of audio signals using algorithms originally developed to extract valid information from submarines' noisy sonar signals. The initial technique involved copying a short extract of music to a PC as a WAV file to create a reference. The same extract was then played from the analog output of a CD player into the PC, using a high-quality soundcard. This produced a second WAV file that was subtracted from the first to generate what is called a difference plot. The procedure was then repeated when the CD player was used with a VertexAQ power cord and support platform, plus Nordost Quantum QX2 AC line conditioner. Comparing the two difference plots showed that the accessories reduced time-domain errors by more than 50%. The graphs are reproduced in the full Briefing Paper on VertexAQ’s website: http://tinyurl.com/6zt8swr.

Having established that it was possible to measure the effects of the accessories, the next task—a far more complex one—was to understand more about the differences and what they mean. Whereas the first phase examined time-domain errors, refining the software enabled Acuity to also include instantaneous amplitude errors in the difference plots. The work is ongoing, but has already led to a number of interesting findings, including the fact that the more complex the music signal, the greater the effect the accessories have in reducing errors. Also, the accessories seem to benefit short-term errors, while separately identified longer-term errors seem to be largely typical of the CD player being used for the test.

Those intrigued by the entire problem of how to come up with accurate ways to measure what we hear from hi-fi equipment should check out the full document. Nordost and VertexAQ plan to turn the complex algorithms Acuity has developed into a software suite that others can use for themselves.

My own experiences with Vertex-AQ’s products have been very positive. Indeed, despite my innate skepticism about costly speaker cables, I was so impressed by the company’s new HiRez Moncayo speaker cables that I felt compelled to buy some, despite the substantial financial burden involved.
CALL THE TURNTABLE SPECIALISTS

When you buy from Acoustic Sounds, you’re not just shopping the most select lines of equipment, you’re also getting the experience and expertise that allow us to boast the best service in the industry. Our audio experts each have more than 20 years of experience building systems for all budgets. This is our passion. We’re not box movers. We’re music lovers. Our experts know what will work best for your parameters. Call us to experience the difference - 800-716-3553.

Miles Davis - Someday My Prince Will Come
LP = AAPJ 8456-45 $50.00
SACD = CAPP 8456 SA $30.00
Two LPs

Sam Cooke - Night Beat
LP = AAPP 2108-45 $50.00
SACD = CAPP 2709 SA $30.00

Nat “King” Cole
The Story Box Set
LP = AAPP 1613-45 $150.00 (5 LPs)
SACD = CAPP 1613 SA $65.00 (2 CDs)

Elvis Presley
24 Karat Hits!
LP = AAPP 2040 575.00 (3 LPs)

Find all this and much more at
WWW.ACOUSTICSAOUND.COM

Call to get your FREE Acoustic Sounds Catalog.
800-716-3553

World Radio History

A COUSTIC SOUNDS INC.
www.acousticsounds.com

Miles Davis - Someday My Prince Will Come
LP = AAPJ 8456-45 $50.00
SACD = CAPP 8456 SA $30.00
Two LPs

Sam Cooke - Night Beat
LP = AAPP 2108-45 $50.00
SACD = CAPP 2709 SA $30.00

Nat “King” Cole
The Story Box Set
LP = AAPP 1613-45 $150.00 (5 LPs)
SACD = CAPP 1613 SA $65.00 (2 CDs)

Elvis Presley
24 Karat Hits!
LP = AAPP 2040 575.00 (3 LPs)

Find all this and much more at
WWW.ACOUSTICSAOUND.COM

Call to get your FREE Acoustic Sounds Catalog.
800-716-3553

World Radio History
Cherry-picked lines from around the world - something for every budget
Call for our recommendations - 800-716-3553

Parasound Halo JC3 Phono Preamp
$2,350.00

Exposure 3010S2 Integrated Amp
$2,195.00

Rogue Audio Ares Tube Phono Preamp
$1,995.00

Symposium Acoustics
Ultra Platform $899.00 - Large

Rogue Audio Cronus Magnum Tube Integrated Amp
$2,195.99

Symposium Acoustics
Rollerblock Jr. $228.00 - Set of 3 (Tungsten)

Analytical Acoustics
Ultra Platform $899.00 - Large

Disc Doctor Record Cleaner
$67.00 (First Kit) $157.00 (Gallon Kit)

Keystone
Next Generation Universal Protractor $249.00

Musical Surroundings
Fozgometer - Azimuth Range Meter $250.00

Spin Clean Record Washer Complete System Kit MKII $174.99

Acoustic Productions - The Ultimate Analogue Test LP $39.95

WWW.ACOUSTICSOUNDS.COM
The world's largest selection of audiophile recordings!

Call to get your FREE Acoustic Sounds Catalog
800-716-3553

ACOUSTIC SOUNDS
P.O. Box 1816, Salina, KS
www.acousticsounds.com
Dude, it's music, not rocket science.

SUTHERLAND
20/20 Phono Stage $2200

PRIMALUNA Prologue Premium
Integrated Amp $2299

"If you are in the market, buy one; if not buy one anyway."
—Brian Damkruger, Stereophile, February 2011

NOLA
Boxer
$1500

Peachtree Audio
iDac $995

MYSTÈRE CA-21 Preamplifier $2295

Tube upgrades! Huge stocks of cryogenically treated, current production and vintage new old stock (N.O.S.) tubes. See how we do it at upscaleaudio.com

IN STOCK: Acoustic Zen, Aesthetix, Ah! Tjoer, Anthem, Arcam, Meta-Sphere, Audio Electroninc Supply, B&K, Benz Micro, Cary, Chang Lightspeed, Clearaudio, Coincident, DH Labs, Dynavector, Era, Equi-Tech, Exactpower, Gallo, Graham, Jr, Audio, Kimber Kable, Lyra, Magnun Dynalab, Manley, Martin Logan, Music Hall, Mystère, Nitty Gritty, Nola, Nordost, Nottingham, Opera, Pathos, Peachtree, Primaluna, Primare, PS Audio, Quad, Rega, Rel, SME, Sooolos, Sonus Faber, Sutherland, Tri-Planar, Vpi, Vincent, Vienna Acoustics

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

World Radio History
Pope Benedict XVI has urged all Christians to embrace digital communication and make their presence felt online. "I invite young people above all to make good use of their presence in the digital world," said the Holy Father.

A few days later, Patrick Leinen, an Indiana software developer, announced an iPhone app called Confession. Leinen, of Little iApps, said that several priests had guided him in the app’s development, and that Bishop Kevin Rhoades of the Diocese of Fort Wayne had given the Church’s blessing, if that’s the right word (see www.bbc.co.uk/news/technology-12391129).

“Our goal with this project is to offer a digital application that is truly ‘new media at the service of the word,’” Leinen avowed, calling it “the perfect aid for every penitent.” The Confession app allows each penitent to keep track of her or his sins and prepare for confession. It is not a substitute for visiting a priest for absolution.

Confession is available from iTunes for $1.99. I’m not sure if the Church’s imprimatur extends beyond the Diocese of Fort Wayne. Ask your parish priest. Meanwhile, all of us can take the Pontiff’s words to heart: “It is important always to remember that virtual contact cannot and must not take the place of direct human contact with people at every level of our lives.”

I don’t think absolution via iPhone is coming any time soon. iConfess?

The irreverent Roy Hall, of Music Hall, put me on to an iPhone app with eschatological implications. It’s iDie, by Joseph Kumph (see http://tinyurl.com/68in8z2k), who calls it “a dead simple life expectancy calculator.” You might pull up this one, too, as you prepare for confession.

Roy demonstrated: You input your date of birth (and the time, if you know it). Based on actuarial tables, the app will predict the date and time of your statistical, if not actual, demise. For each day you last beyond your expiration date, life expectancy lengths. If you are 110 years old and the app says you have 10 days to live, guess what? At the end of 10 days, you have nine more. Roy Hall calls this app a “conversation stopper.”

Who knows? Maybe I’ll listen to music on my iPhone, too. I already have the Koss Porta Pro headphones I reviewed in the February issue: “the ultimate in personal listening” (it says so on the box).

I often take a pass on newfangled things, preferring to hang on to the oldfangled as long as possible. My wife, Marina, calls me a technology refusenik. I think of myself as a slow adopter. “We are in a technology tsunami,” someone recently told a New York Times reporter, in an article about how technologies run us. There’s a tidal wave?

I ALREADY OWN 6000 EXAMPLES OF THE IDEAL MEDIUM FOR COMPUTER AUDIO.

IT’S CALLED THE COMPACT DISC.

Computer audio? When it’s fast, fun, and free, I love it. In terms of hours per day, my main source of music is Internet radio. I subscribe to my favorite podcasts, too—without owning an iPod, of course.

I tootle around in my Mini Cooper— to the gym, the library, the senior center (heh-heh)—while listening to snippets of Fresh Air, On Point, and The Diane Rehm Show. MP3 files of each show are delivered automatically each weekday to my iTunes podcast directory.

My favorite podcast is In Our Time, with Melvyn Bragg. Each week, this BBC 4 program explores a different (serious) topic—from St. Thomas Aquinas to Maimonides; Aristotle’s Poetics to imaginary numbers. I’d tell you more, but I don’t want to Bragg. Go to www.bbc.co.uk/podcasts/series/iot to listen to recent shows—er, seminars—and subscribe. Enrollment is open and free.

I listen to these podcasts at leisure. I burn the best of them to CD-R to store the discs, booklets, and tray cards under the cellar stairs. I can move these files across computer. About the only thing I can’t do is rebroadcast or sell them. If high-resolution downloads were this easy—no fussing with FLAC and Fluke, no USB-to-S/PDIF bridges—I’d be all ears. I’d even be willing to ante up.

I have my favorite CDs to a hard drive or music server, jettison the jewel boxes, and store the discs, booklets, and tray cards under the cellar stairs. I hate it when people who never liked the Compact Disc in the first place tell me to ditch it and get on their bandwagon. Some of these same folks
mised. I wish I had 24/96 sound—on discs, without downloads, with no software struggles, without Digital Rights Management (DRM).

Don't let on to Mikey, but the 33.33rpm LP, too, was a compromise. The LP was developed not to advance sound quality over that of 78rpm records; it was developed because the post—World War II sales of 78s had taken a shellacking, and something needed to be done to revive commerce. (Which is the same reason that, 30-some years later, Sony and Philips developed the Compact Disc—another brilliant engineering compromise.) About the slowest speed at which a record can spin without serious losses in sound quality is 33.33rpm, as those who prepared transcription discs for radio rebroadcast already knew. There was an even slower speed: 16.66rpm, used mainly for talking books for the blind. CBS labs didn't “invent” that. Nor did RCA, which had introduced the first commercial vinyl 33.33rpm in 1931. It flopped—the needles of the day gouged the groove so deeply that each disc could be played only once.

A 45rpm disc delivers superior sound, and some of today's audiophile vinyl is issued at that speed. But a 12" 45rpm disc is a short-playing record; albums typically spread out over four sides. Sound quality was traded off against playing time when CBS chairman William S. Paley told CBS Labs that he wanted a “long playing record.” When those at CBS Labs suggested a shorter-playing version, he demurred—to say the least—thus enabling David Sarnoff's team at RCA to come in with the 45rpm single. There were 10" LPs, of course.

The long-playing record was the result of a series of engineering developments and brilliant compromises. Two keys to the LP's success were the low-mass tonearms and high-compliance cartridges designed by Belgian-born engineer René Snepvangers. Columbia Records produced both. Big deal if you tell me that "perfect sound forever" isn't.

I once met some of the people from CBS Labs, on High Ridge Road, in Stamford, Connecticut. The first LPs were pressed at Columbia's plant in nearby Bridgeport.

Reina unreined

My colleague and friend Robert J. Reina has scooped me again. In his March 2011 review of Marantz's CD5004 CD player ($350), BJR wrote: “Even as Mikey Fremer and Stephen Mejias salivate over the resurgence of vinyl, others are hearing, or calling for, the death knell of the Compact Disc. I'm not one of them—although I own 12,000 LPs, I listen to CDs much more often than to vinyl or my iPod, and I don’t think I'll ever get on the digital-server bandwagon.”

Bandwagon? Where have I heard that before? If I wrote that, John Atkinson would call me incendiary.

It's ironic that CD playback has become so good at the very moment when so many seem eager to ditch the CD and are telling me to do it, too.

In the same issue as Bob's review of the Marantz player, I wrote about Musical Fidelity's splendid M1 DAC, which goes for $695—another top choice for wresting the best sound possible from CDs. (I borrowed that verb from JA.) The M1 DAC is an excellent choice for those who want to, um,
Roy Gandy told me about one Rega turntable that did break. It seems a bloke had a fight with his wife: he grabbed one side of the turntable, she the other. The 'umble 'table landed on the floor, its glass platter shattered, its plinth cracked. What, if anything, could be salvaged? I find it very British that the gent seemed at least as concerned about saving his turntable as his marriage. I forget the outcomes.

Rega has gone upmarket with a number of products, including two CD players, both named Isis: $8995 solid-state, $9995 tubed. That’s right: tubed. Terry Bateman has always been keen on valves: "Just give me a pair of 6BQ5/EL84 tubes any day and I’ll go away a happy bunny," he wrote in an e-mail. The Isis players are anything but 'umble eye-fye. When I heard that some of their technology had trickled down into the Rega DAC ($995), I gave Rega's US distributor, Steve Daniels, at The Sound Organisation, a bell, as the British like to say. Or a tinkle. I
.005 or 17

Which is the more significant number?

One is a measure of precision, the other a measure of experience.

.005 is the acceptable tolerance range of the capacitor values in a Wilson Audio crossover. 17 is the number of years Joe Allan, our Quality Assurance Supervisor, has worked at the company.

Both numbers are measures of a culture—a culture organized around the central belief that building extraordinary loudspeakers is a combination of art and science. Mandating the most exacting specifications is an exercise in wishful thinking without experienced craftspeople dedicated to achieving that level of perfection day in and day out.

You can't dictate a passion for quality. It has to come from within. Paychecks and perquisites, while nice, are poor incentives when compared to the inner reward of satisfaction at a job done well by a group of people who love what they do.

We've persuaded some of those people to tell their own stories on our website.

[Image of people working]

www.wilsonaudio.com/company_html/av_intro.html

We think you'll enjoy watching them at work, sharing their passion.
What if we all loved our jobs this much?
ity of the Rega DAC is its small IEC C5 mains input, chosen to save space. If you want to use an aftermarket power cord, your Rega dealer can supply an adapter; I didn’t ask for one.

Bateman doesn’t see USB “as a high-tier audio interface. . . . I came to this decision whilst researching professional studio-based outboard audio equipment, and nearly all the digital audio interfaces are AES/EBU (close relative of the S/PDIF format) and not USB.”

In an earlier e-mail, Bateman had said something about USB’s convenience and utility. I think he’s spot on about that. I tried listening to Internet radio and my favorite podcasts from my computer, via USB, to the Rega DAC. I used my Musical Fidelity’s V-Link BC1 speakers? afternoon, via LFD speaker cables. For direct comparisons, I connected the Musical Fidelity M1 DAC to the LFD interconnects.

The Rega DAC had a richness, a fullness of tone, a certain lightness and fleetness of foot, more apparent air and openness in the top end. There seemed to be more space between the notes.

In its own way, each DAC was thoroughly convincing; listening to one, I did not terribly miss the other. But I was trying to hear differences, so of course I did. Scientific researchers call this Positive Expectation. Or Negative Expectation, as the case may be. You get the results you want.

This puts me in a pickle. There were times when the Rega’s weight and bass authority stunned me and the M1 seemed lean by comparison: austere is probably the right word. It happened again last night, when I played Haydn’s Symphony 103, “Drum Roll,” with the Vienna Philharmonic conducted by Nikolaus Harnoncourt (3 CDs, Vienna Philharmonic 2009). The drum rolls practically rolled me out of my seat—and this was with the somewhat bass-shy, stand-mounted Triangles.

Here’s another great disc (of course, you’ll want the CD, not MP3 downloads): Black Coffee, by Ann Savoy & Her Sleepless Knights, with violinist Kevil Wimmer and guitarist Tom Mitchell (CD, Memphis DOT 0225)—inspired, I’m sure, by Joe Venuti and Django Reinhardt. Known for Cajun music, Savoy sings in English and French; try “Cette Chanson est pour Vous.” Both DACs did splendidly with this album, which should be far better known. When it comes to popular taste, I must be totally asynchronous, which the Rega DAC isn’t.

Asynchronous means that the clock on your computer (or server) and the

The Rega DAC.
ALWAYS WORTH THE DRIVE!

Celebrate our 20th Anniversary with us.
Come hear these Flagship models in stock now!

• ARC REF-40 & REF-210
• B&W 802D & 804D
• JBL Everest
• Krell Evo 402 & Evo 202
• Magico V2 & 03

• McIntosh C-2300, C-50, MC-452 & MCD-500
• Nordost Valhalla
• ProAc Carbon Pro 6 & D-40

• PS Audio PWD & PWT
• TAD Reference One & Compact Ref One
• Wadia 71s

ONCE IN A LIFETIME SPEAKER, ONCE IN A LIFETIME CHANCE TO OWN!
Your chance to own the JBL Everest DD66000, the best speaker in JBL's 65 year history, is now! Everest production continues in rosewood and ebony, but enjoy attractive closeout pricing on cherry finish while they last. Territory restrictions do apply on this special product.

Authorized dealers for:
• Audioquest • Audio Research • B&W • Billy Bags • Demon • Epson • Grado • JBL Everest • JVC DLA
• Krell • Magico • McIntosh • NHT • Nordost Reference • Panasonic • Peachtree • Pioneer Elite • ProAc • PS Audio • Rega • Rotel • TAD • Velodyne • Wadia

www.AudioVideoLogic.com

“A Reference Granite”
Model Shown
LINN AUDIO
OF NEW HAMPSHIRE
HOME OF THE FINEST LOUD-SPEAKERS IN THE WORLD!

97db Efficient
450 lbs. Each
20Hz - 40Khz
Dual 15” Woofers
83”x27”x28”

Visit our website at:
www.LinnAudioNH.com
or email dni2co@juno.com
or call: (800) 558-7413

Dealers and Distributors
Wanted! Contact Us.

clock in your DAC are out of sync—ie, they work independently of each other. I asked Terry Bateman about this stuff, since any USB DAC that isn’t asynchronous is a nonstarter, at least for some hi-fi scribes. “I feel the subject of asynchronous vs synchronous USB is getting tiresome, and I personally don’t see USB as a high-tier audio interface anyway,” he said.

But “completely synchronous” is “old-school,” Bateman also wrote. That’s “where the DAC is completely controlled by the computer.” If the computer speeds up, the DAC follows and the reverse happens if it slows. Instead, the Rega DAC reclocks the incoming datastream “on the fly,” in order to avoid data loss and reduce jitter—exactly what Bateman said you would achieve with independent asynchronous DACs.

In the case of direct USB connection, the data go to that Burr-Brown PCM2707 receiver mentioned above. With S/PDIF inputs, the data go to a Wolfson Microelectronics WM8805 receiver chip. “There are no sample-rate converters driving the Wolfson DACs, so the sample rate that goes in gets sent to the DACs.” Bateman refers to the parallel-connected Wolfson WM8742 DAC chips, not the Rega DAC as the entity itself. In other words, when I connect my Sony player to the Rega DAC, the receiver chip sends the 16/44.1 data to the Wolfson DAC chipsets unchanged. However, the Wolfson WM8742 DACs do oversample the “native” datastream.

You can upsample with the Rega DAC, using a software program like Foobar to convert your 16/44.1 CDs (stored on your hard drive) to 24/192. Alex Ross, classical-music critic of The New Yorker, calls such measures “bitty manipulations.” Terry Bateman seems to suggest that they’re better avoided. If you have a program like Foobar, you can fuss with the data rates all you want. The fact that the Rega DAC itself doesn’t upsample may provide a clue, or even the key, to its unforced, organic sound quality. I wish I had better words, but I think you’ll hear what I mean. There are other factors, too, such as close attention to power supply design. Like other great DACs, the Rega DAC represents more than the sum of its parts.

So that the user has something to play with, Rega included 10 digital filters: five for data rates of 48kHz and under, five more for data rates up to
192kHz. The filters, in effect, come with the Wolfson WM8752 DACs; all Rega had to do was supply the buttons and LEDs. They did so. This fits with Rega's philosophy, as Bateman expressed it: "Keep things simple and straightforward."

But there are complications. While Rega recommends using Filter Setting 1 as the default, you might find that Filters 4 and 5 have their charms. (I could not and so did not try the filters for higher data rates.)

Filters 4 and 5 are apodizing filters. Apodizing is another buzzword: it means a minimum-phase digital filter that avoids introducing pre-echo, or pre-ringing, to the signal. The result should be quicker, cleaner, clearer transients—exactly what I heard. But don't make life complicated; Terry Bateman is right to say that the effects of the different digital filters are subtle. When I told him of my fondness for Filter 4, I could see him nod, even though I don't have Skype. I found Filter 4 most apodizing.

So which should it be—the Musical Fidelity M1 DAC or the Rega DAC? At $995, the Rega DAC costs about 30% more than the M1 DAC, at $695. One could buy both, as I ended up doing, and still not be an audio spendthrift. But it's mere reviewer's artifice to pretend that the M1 DAC and the Rega DAC are the only two choices. There's also BJR's Marantz CD5004 player, which I haven't heard yet.

I'll be danged if I know which DAC, since each wrests such great sound from those much-despised (though not by me) CDs. Your choice, if it is between these two, might come down to brand preference. If you want Musical Fidelity's matching M1 HPA headphone amp, then you'll probably want the M1 DAC. Keep in mind, too, that the M1 DAC has balanced XLR analog outputs; the Rega DAC does not.

If you're a Rega person, you'll gravitate toward the Rega DAC for its distinctively Rega sound quality: rich, full-bodied, almost tube-like. I can't think of any better way to upgrade while keeping, say, a Rega CD player as a transport.

Then, too, your choice might come down to your speakers and the rest of your system. If your amplifier and speakers lean toward leaness, the Rega is your obvious choice. If your speakers have a different, darker tonal balance, then perhaps you'll prefer the lightness, openness, and airiness of the M1 DAC. With the Triangle Comète Anniversaire speakers, I prefer the Rega; when I switch back to my Harbeth Compact 7 ES3 speakers, I might fancy the Musical Fidelity.

Ideally, you'd find a dealer who carries both and audition both. Even more ideally, you could borrow both and take them home. Even more ideally—and why not, if Bernie hasn't made off with your money—you could buy both. One good DAC deserves another.

Here's what I love about the Musical Fidelity M1 DAC and the Rega DAC: Each enables a bloke to wrest from Compact Discs the best sound possible. You can be stuck in the past without forestalling the future. My blessings on both—my imprimatur, as it were. And may you enjoy a long life to go along with them, before you iDie!
THE ORIGINAL KIMBER KABLE

RAY KIMBER TALKS ABOUT HIS 1979 CREATION
WWW.KIMBER.COM/VIDEOS/4PR
After reading my thumbnail review of one of my choices for February's "Records To Die For," David Bowie's Station to Station (p.79), recording engineer Harry Maslin contacted me via Facebook. The review heading credits him as the recording's engineer, but he told me that, with Bowie, he also produced the album. Maslin also directed me to www.davidbowiestationtostation.com, the website of the reissue project for the album, where I read a great deal of interesting information about the original recording and the process of its rerelease. Of particular interest to analog fanatics is that the LP included in the Station to Station boxed set was cut from the original analog master tapes with a preview head on the playback deck—which means that it's AAA, according to Abbey Road mastering engineer Sean Magee, who was also involved in the 2009 reissues of the Beatles' catalog.

Magee is also involved in preparing the boxed set of Beatles reissues on vinyl, which for various reasons keeps getting delayed. My sources tell me it will eventually appear, but the LPs won't be cut from the analog master tapes. It was difficult enough to get Paul McCartney, Ringo Starr, Yoko Ono, and George Harrison's heirs to sign off on the 24-bit/192kHz digital masters used for the CD and USB releases. The wrangling would have to begin again; instead, they'll use digital masters, but whether or not at 24/192 is still unclear. Let's hope so.

**Nitty Gritty**

My sources tell me it will eventually appear, but the LPs won't be cut from the analog master tapes. It was difficult enough to get Paul McCartney, Ringo Starr, Yoko Ono, and George Harrison's heirs to sign off on the 24-bit/192kHz digital masters used for the CD and USB releases. The wrangling would have to begin again; instead, they'll use digital masters, but whether or not at 24/192 isn't yet clear. Let's hope so.

**Nitty Gritty's faith-based 2.5Fi-XP record-cleaning machine**

Three American companies make velvet-lipped record-cleaning machines: Nitty Gritty, SOTA, and VPI. Two use full-size record platters; Nitty Gritty does not. Instead, a grooved rubber idler wheel on a sprung pivot spins the record, which rests on a round, labeled-size piece of hard plastic, topped by a grippy puck of hard, foamy material that fits over the spindle.

Nitty Gritty has been making and upgrading such record-cleaning machines since the early 1980s. Their latest model, the 2.5Fi-XP ($899), adds the convenience of two separate fluid chambers and hand pumps, and has a new venting system that permits the cleaning of more records before the motor gets too hot and needs to cool down.

One advantage touted by Nitty Gritty for its platterless system is that you don't lay a dirty LP on a platter, clean the side, then turn it over and lay the cleaned side down on a platter just dirtied by the still-uncleaned side 2.

True enough, but let's not get carried away. When I use VPI's HW-17F or Loricraft's PRC4 Deluxe record-cleaning machines, I keep a "dirty" mat handy: That's what goes on the platter when I clean side 1 of a dirty record, and I remove it before I place the LP's clean side on the clean platter. End of problem.

The other advantage of Nitty Gritty's system is its compactness. No machine with a platter saves as much space—the 2.5Fi-XP is easy to store, and easy to lift onto a table when you want to clean some records.

Two! Two! Two Pumps in One! With the 2.5Fi-XP's two pumps, you can put purified water in one reservoir, Nitty Gritty's own PUREnzyme+ fluid, for example. Or you can put your choice of fluid in one and water in the other, or a different cleaning fluid in each reservoir, or whatever. And having two reservoirs is particularly useful when you're using an enzymatic or other fluid, such as Disc Doctor's, that requires a follow-up water rinse.

With but one reservoir and pump, you do a lot of record flipping: You apply fluid to the record's underside, vacuum it dry, turn it over, rinse it with water, flip it over and dry, then flip it over again to repeat the entire process. True, you could apply fluid to side 1, dry, flip, apply fluid to side 2, dry, rinse side 2, flip, dry, apply fluid to the other side, flip, and dry. But either way, that's a lot of flipping compared to how you'd do it with a record cleaner with two reservoirs and two pumps.

I call the 2.5Fi-XP a faith-based system because, for starters, unless you want to bend over and look under the record to be sure the fluid has been spread evenly across its underside, then again to see that it's been entirely vacuumed off, you have to rely on faith. Having faith is better for your back. You also have to believe that the reservoirs aren't empty and you're not just pumping air. Nitty Gritty should supply dipsicks, but you can make your own. (I use pipe cleaners, which I carefully wipe off.) Another good idea would be a window gauge in the reservoir, but that would add to the price.

On the other hand, you can feel when the well has run dry by the diminished pressure it takes to depress the pump's...
plunger—but by then, can you be sure that the last record you cleaned got a full dose of fluid or water? That will keep some faithless obsessives bending and peering.

Using the 2.5Fi-XP: Nitty Gritty's PUREnzyme+ cleaning fluid went in one reservoir, Audio Intelligent's Ultra-Pure water in the other. If you don't want to spend $20 for a quart of Ultra-Pure, you can use Aquafina bottled water (www.aquafina.com)—it might not be quite as pure, but it's pretty pure! Just don't use Dasani bottled water—after purifying it, they add minerals back in.

Nitty Gritty supplies some round colored labels so that you don't have to remember what you've put in which reservoir. They also supply a small squeeze bottle and an applicator brush so that, while you're applying fluid with the pump to the LP's down side, you can simultaneously apply fluid by hand to the up side. Good idea, but don't apply too much force to the up side—held only between a spindle and a hard place, the record isn't exactly stable. Even a light amount of brush pressure will bend the record down. This is where a clamp or a nice, heavy weight comes in handy.

You put the record on as described, top it with a weight, apply fluid to the auxiliary applicator, push the rocker switch to start the record turning, then depress the fluid pump's button four or five times with one hand while, with the other, applying fluid to the exposed upper side. Flip the rocker switch the other way to start the vacuum pump; the record should be dry in fewer than three revolutions. Then flip the switch back the other way to spin the record without the vacuum engaged and pump the water reservoir. After a few spins, flip the rocker switch the other way to vacuum up the water. You've already wet the top side, so just flip the record over, vacuum, then repeat with water.

Much easier than with just one reservoir. But what if you don't want to use enzymatic cleaning fluid for every record? No big deal: You just use another applicator to apply fluid by hand to the top side first, etc. (Never use a brush for multiple fluids unless, between fluids, you rinse the brush in purified water and then carefully dry it.)

How Well Does It Work? You have to have faith here, too. I've always been a bit queasy about Nitty Gritty's velvet-lipped systems: Fluid is pumped up to wet the cleaner's two lips, and as
the record spins, the lips spread the fluid on the record. The same lips that do the spreading of the fluid then vacuum it up. Can that really be sanitary?

An album pressed on transparent vinyl—Jenny and Johnny's *I'm Having Fun Now* (Warner Bros. 525076-1)—exposed just how the fluid spreads. It comes up through a series of small holes arrayed across the trailing lip, and during the LP's first revolution appears on its surface as concentric rings of fluid. The revolution spreads the fluid, but still not evenly or completely across the entire surface. Yet when you switch on the vacuum pump, the liquid appears to be simultaneously spread evenly and sucked back up.

A very dirty record (the Pogues' *Poguetry in Motion EP*) that would not have "dry-vacuumed" clean was pristine at the end of the 2.5Fi-XP's rinse cycle. What's more, the lips themselves were dry and looked clean. Still, I'd follow Nitty Gritty's advice: If you haven't used the 2.5Fi-XP to clean any records for a while and its lips are completely dry, brush them with the supplied cleaning brush. It also makes sense to cover the lips with plastic when not in use. I used an oblong Glad food container.

 Unlike all the velvet-lipped competition, Nitty Gritty's design positions the vacuum suction directly under the lips, which produces strong, uniform suction across the entire lip surface. That's probably why their system, which in some ways seems counterintuitive, works so well: The record dries quickly, as do the lips.

Those who think that vacuuming a record sucks chips of vinyl from the groove won't buy any of this, but that's their problem. For a month or so, I put away my Loricraft PRC4 and VPI HW-17F machines and cleaned my LPs exclusively with the Nitty Gritty 2.5Fi-XP. Two wet thumbs up!

FOR A MONTH OR SO, I PUT AWAY MY LORICRAFT PRC4 AND VPI HW-17F MACHINES AND CLEANED MY LPS EXCLUSIVELY WITH THE NITTY GRITTY 2.5FI-XP.

TWO WET THUMBS UP!

2.5Fi-XP. Two wet thumbs up!
And Nitty Gritty's new PURE-Enzyme+ enzymatic cleaner? It did a very good job on some really dirty garage-sale LPs excavated from a record shelf I hadn't explored in at least a decade. Better than Audio Intelligent's Enzymatic Formula? I can't say. I will say this, though: We're fortunate to have so many companies providing for our fluid needs.

**Transfiguration Axia phono cartridge**
I'm not sure Transfiguration knows how to make a bad-sounding cartridge, or one that doesn't try to honestly present what's in the grooves without added sizzle or romance. The new...
To create a new Reference of Integrated Amplifier, the Vitus Audio design team started with a blank sheet for the SIA-025.

The end result is not only an amplifier with 5 inputs (balanced and unbalanced), a preamplifier output (for biamping purposes) and balanced speaker outputs - the SIA-025 raises VA technology to a new level of integration of parts. Integrating all these specialist parts into the same slim-line chassis as the SS-010 and SS-050 was a major undertaking.

The output stage of the SIA-025, is taken from the SM-010 monaural amplifiers and re-engineered to fit within one chassis with a balanced input buffer. The main task for this buffer, is to separate the new simplified relay based volume control from the selected source.

By putting all our efforts into developing this true balanced integrated class A amplifier, the SIA-025 will exceed the highest expectations in performance. Together with our SCD-010 CD Player, this amplifier will form a simple, cool looking system that delivers a breathtaking performance.

Reference Series
Signature Series
Masterpiece Series
Design Studio Series

Manufacturer
Vitus Audio, Denmark
+45 9626 8046
www.vitusaudio.com

Distributor
For details of your nearest Distributor/Dealer, please visit www.vitusaudio.com

www.vitusaudio.com
lower-priced Axia ($1950), housed in a resonance-controlled body of machined aluminum, is yet another in a long line of Transfigurations that have gotten out of the way more than they've created an enticing "sound."

True, I mounted the Axia on Kuzma's 4Point tonearm ($6500, review in the works), which gave it a better ride than it's likely to get, given its price, but I'm sure the 4Point got everything there was to get out of the Axia, and none of it was bad. The Axia's price may be "entry-level" for a Transfiguration phono cartridge, but $1950 for anything is a lot of money in the real world—for that much, you're entitled to expect something that's well made and performs at a high level.

The Axia's parts are of high quality. Its motor's coils operate within a double-ring magnet, which results in tight magnetic coupling and reduces mass. Attached to the coils is a 0.3mm-diameter boron cantilever, to which is affixed an Ogura PA 3x 30um diamond stylus, a model used by a number of other cartridge manufacturers as well as in the Orpheus L, Transfiguration's most expensive cartridge ($7000).

The stylus's tall, narrow, microline contact profile means that it's extremely sensitive to stylus rake angle (SRA); no one expert responds that their tall, narrow contact patches, as experts. Ask about line-contact styli with tall, narrow contact patches, as in the Orpheus L, Transfiguration's most expensive cartridge ($7000).

A digression: There is so much misinformation online from people posing as experts. Ask about line-contact stylus and one expert responds that their tall, narrow contact patch requires precise adjustment of azimuth. Granted, that's important too, but this expert doesn't even mention SRA, the correct setting of which is far more critical for a stylus of this shape. As if that weren't bad enough, this expert then wonders if, "when it comes to azimuth," unipivot tonearms might be "more forgiving" of styli with tall, narrow contact patches, because the cartridge is then "free to tilt a little and 'snug' itself into the groove even if the azimuth is off." Oh yey!

Not that I'm guiltless. In this column I've extolled the virtues of the anti-skating test band on Telarc's Omnids, wherein an audible pilot tone lets you hear, as the modulation level increases, which channel breaks up first: "If the left channel breaks up first, that means too much antiskating is applied; if the right channel breaks up first, there's too little antiskating. When both start to break up simultaneously, antiskating is set correctly," I wrote in December 2007, and have claimed at seminars, but that's really wrong.

When Wally Malewicz, maker of Wally Tools, measured the modulation level where most of today's excellent-tracking cartridges begin to mistrack, it was far beyond that found in any normal music recording. So if you set antiskating there, you're more than likely setting it too high. Ideally, you should get to the point where both channels break up simultaneously, then moderately decrease the antiskating setting (assuming your tonearm has continuously variable adjustment).

The Axia's internal impedance of 8 ohms means a minimum resistive loading of around 100 ohms, but don't be afraid to go lower, or somewhat (though not much) higher. (Rule of thumb: The resistive loading should be ten times the internal impedance.) Its output of 0.4mV makes the Axia friendly to phono preamplifiers, and in the Kuzma 4Point arm it tracked nicely at the recommended tracking force of 2.0gm.

So how much of a $7000 Transfiguration Orpheus L can you get for $1950? The Axia gives you a well-drawn, basic outline of what the Orpheus L itself presents in greater detail. The Orpheus L also offers more spatial and textural complexity, greater harmonic resolution, wider dynamic contrasts, and greater extension at the frequency extremes. The Axia is so accomplished at doing what it does well, however, that it's easy to forget what you're missing. When you play the same record with a top-performing cartridge, you realize why people are willing to pony up for the top cartridges—but when you go back to a well-executed, moderately priced cartridge like the Axia, you realize just how much you can get for under $2000.

With low- and midpriced cartridges, I like to play LPs I've never played before, then listen to them with such references as the Ortofon A90 or the Lyra Titan i. The best low- and midpriced cartridges commit acts of omission. The lesser ones divulge their faults, tonal or otherwise, even with unfamiliar records.

From another shelf I hadn't touched for years, I pulled out at random a disc I'd never played but that was quite dirty: The Best of John Fahey 1959-1977 (2 LPs, Takoma). After cleaning it with the Nitty Gritty 2.5Fi-XP, I played it with the Transfiguration Axia.

The attacks of Fahey's acoustic guitar were clean and precise. Its image was stable, compact, and well focused, the reverber clean delineated beyond the image. I sat and enjoyed all of side 1, marveling at Fahey's technical precision and emotional depth. The presentation was convincing. Then I played it with the Ortofon A90.

Oh. Now I heard a textural picture that the Axia had only partially expressed. The same went for the guitar's harmonic structure. It's not that
the Axia sounded brittle—its transient performance was clean and true—but it couldn’t dig deeper below the surface gestures of the signal to get what the A90 revealed: the elasticity of the plucked strings, the full woody resonance of the guitar. The A90 presented a layer of mid-to-upper-midbass detail that the Axia shortchanged. Still, I’d bet the Axia would mate well with a two-way, stand-mounted speaker whose frequency response included a midbass bump to compensate for its lack of deep bass. A warmish tube preamp, too, might complement it.

I then played the stupendous reissue of Count Basie & the Kansas City 7 (two 45rpm LPs, Impulse!/Analogue Productions A-15). This music’s greater musical and timbral complexity made the differences between the cartridges even more profound—Count Basie’s one-finger piano, center stage, went from bud to flower. You’d hear similar differences as you ascended Lyra’s line of cartridges, from the equally adept and comparatively priced Delos to the Kleos, Skala, and Titan.

The Transfiguration Axia is easy to recommend at its price.

IN HEAVY ROTATION

1) Jackson 5, ABC, Motown/Speakers Corner 180gm LP
2) John Coltrane, My Favorite Things, Atlantic/Rhino 180gm LP
3) Alejandro Escovedo, A Man Under the Influence, Bloodshot LP
4) Count Basie, Count Basie & the Kansas City 7, Impulse!/Analogue Productions 45rpm 180gm LPs (2)
5) Elio Villafranca, Dynamic Resolution, 16 Eyes 180gm LP
6) Christopher Clause, Round, Foot 180gm LP
7) Dead Can Dance, Spirit Chaser, 4AD/Mobile Fidelity Sound Lab LPs (2)
8) Eric Bibb, Friends, Telarc/Pure Pleasure 180gm LPs (2)
9) Gabor Szabo, Jazz Raga, Impulse!/Light in the Attic 180gm LP
10) Allen Toussaint, The Bright Mississippi, Nonesuch 180gm 45rpm LPs (2)

Visit www.musicangle.com for full reviews.

MyAudioListing.com
CLASSIFIED LISTING SITE FOR AUDIO & VIDEO COMMUNITY
List, Buy, Sell with us. It’s FREE!
- Instant access to dealers and sellers world wide
- Expert resources for questions and answers
- Interactive social networking capabilities
- Simple posting process with rich features
- No fees or commissions
- Safe and secure listings with feedback system

Come see the listings from our sponsored dealers.
Adona Corporation • ADONA adonacorporation.com
Audio Art Cable • AUDIOART audioartcable.com
Audio Connection • AUDIO CONNECTION audiococonnection.com
Dedicated Audio • DEDICATEDAUDIO dedicatedaudio.com
Home Theater Solutions • HTESOLUTIONS htesolutions.com

LIST WITH US ONCE AND YOU’LL BE HOOKED!
For more information contact us at: sales@myaudiolisting.com
©2011 MYAUDIOLISTING.COM ALL RIGHTS RESERVED.

Something Super-Natural has Arrived.
The revolutionary new Magico Q speaker is now at Weinhart Design: The finest audio video dealer in Los Angeles. Make an appointment today to hear and see for yourself what’s possible in Audio and Video.

weinhart design
Monday – Friday 10 AM - 6 PM
Weekends and Evenings by appointment
Trades Welcomed!
Changing the way you listen

2337 Roscomare Road Studio 1, L.A., CA 90077 P: 310-472-8880
www.weinhartdesign.com

Visit www.musicangle.com for full reviews.

Lightning Strikes Twice

Prepare yourself to experience the new LSiM from Polk Audio, the next generation of our legendary high performance LSi loudspeakers. The professional audio press calls these new loudspeakers "a treat... with real depth and presence," and "staggering, [with] tremendous clarity, strong imaging [and] very high impact... spectacular," and "uncompromising."

Discover more about Polk Audio’s great sounding products at www.NewLSiMSeries.com

polkaudio®
the speaker specialists®
ike most people who are neither radio talk-show hosts nor members of the Westboro Baptist Church, I'd rather be known for my loves than my hates. And after wandering this audio wilderness for unpteen years, I can stand before you and say without shame: An unlovable phono transformer has yet to step into my path.

No surprises there. After all, a phono transformer requires only a primary-coil impedance that's electrically right for the cartridge in use, and a gain capability—itself determined in part by the transformer's turns ratio (see "Listening" columns passim)—that likewise suits the user's gear. Given all that, one can assume virtually any phono transformer to be more or less wonderful.

But the distance from more to less is greater than usual these days, given the appearance of some truly exceptional new transformers: an unmixed blessing. The latest samples to come my way are from a German firm called Silvercore. Founded eight years ago by an engineer named Christof Kraus, Silvercore designs and builds their own nice-looking tube amps and preamps. And central to everything they manage, and so well that all of Silvercore's transformers are commendably free of resonant frequencies within or even near to the audio range; consequently, Silvercore step-up transformers are among the few that don't require the use of damping resistors (which Kraus quite rightly calls "veiling" resistors).

Tightly wound

Silvercore offers transformer-based products for a number of domestic audio chores: eliminating hum from non-balanced systems (the Groundbreaker), interfacing single-ended and balanced connections (the Symmetrizer), and even converting stereo sound to mono (the Monokonverter). But the stars of the Silvercore show are their three basic models of moving-coil step-up transformers: the One-to-Ten ($585), the Silvercore MC ($1250), and the Silvercore MC Pro ($4800).

Silvercore products are distributed in the US by Oswalds Mill Audio, whose proprietor, the estimable Jonathan Weiss, loaned me samples of the three models named above. (The middle model, the Silvercore MC, was supplied in a version called the Silvercore SPU Spezial, having been tailored specifically for Ortofon's classic low-output, low-impedance pickup heads.) I hope to write about the two more expensive models by and by, but it's their cheapest phono transformer that's captured my heart in the here and now.

The Silvercore One-to-Ten contains a stereo pair of toroidal transformers, wound from copper wire on proprietary amorphous cores, with a primary-coil impedance of 100 ohms. Given that a cartridge performs best when driving a transformer load that's between two and six times its own coil resistance, this Silvercore model would seem a perfect match for such things as the EMT TSD 15 and variants (24 ohms), the Denon DL-103 (40 ohms), and most Allaerts models (22-32 ohms). You'll be unshocked to know that the turns ratio of the One-to-Ten is one to ten (1:10), which is also the transformer's voltage-gain ratio. Thus the 0.3mV output of the Denon DL-103 becomes 3.0mV, and the 1.05mV of the EMT TSD 15 becomes 10.50mV. (Most hobbyists would consider the former to be fine and the latter to be a little high but not problematically so, as long as the preamp's volume knob stays toward the left of its range.) Remarkably, Silvercore's entry-level phono transformer is built into a substantial case made of polished stainless steel: irresistibly pretty, charmingly
LISTENING

EMT Studiotechnik GmbH,
Industriestrasse 25, 77972
Mahlberg, Germany. Tel: (49)
(0)7825-879-47-0. Fax: (49)
(0)7825-879-47-15. Web: www.
emt-studiotechnik.de. US distribu-
tor: Tone Imports, 20 Continental
Avenue, Suite 5H, Forest Hills, NY
11375. Tel: (646) 425-7800.

Silvercore, Coppistrasse 74,
D-04157 Leipzig, Germany.
Tel: (49) (0)341-9112571, (49)
(0)177-9112571. Fax: (49) (0)341-
9015411. Web: www.silvercore.de.

nonmagnetic.
That reminds me to remind you
to use numbers as a guide, but not to
let them be 'The Decider.' Don't cheat
yourself out of hearing some amazing
combinations, such as using the Hom-
mage T1 transformer—the input im-
pedance and turns ratio of which are
very low and very high, respectively—
with EMT's highest-output pickup
heads: Like bumblebees and copious
amounts of second-order distortion, it
shouldn't fly but it does. Bear in mind,
too, that the greatest of all modern iro-
nes takes root in the world of fashion:
The garments most associated with
the axiom one size fits all are the ones
we wear on our heads.

With the One-to-Ten in my sys-
tem, sandwiched between the EMT
TSD 15 pickup head and the 47k
ohm phono inputs of my Shindo
Masseto preamp, music sounded
more transcendently, touchably won-
derful than the Silvercore's relatively
humble price might have led me to
expect. Dynamic nuances—the touch
of music—were excellent, from disc to
disc. Listening to the pizzicato strings
in the fourth and final movement of
the Brahms Clarinet Quintet, Op.115,
recorded a half-century ago by mem-
bers of the Vienna Octet (Decca SXL
2297, in one of Speakers Corner's fin-
est reissues), the terrain of their physi-
cal presence, for want of a better word,
was distinct and solid. At the louder
end of the scale, when I listened to
the indispensable 1976 recording of
Beethoven's Symphony 7 by Carlos
Kleiber and the Vienna Philharmon-
ic—in which neither conductor nor
orchestra hit their stride until three or
four minutes into the first movement,
but which is incandescent thereafter
(LP, Deutsche Grammophon 2530
706)—the sense of abandon with which
the timpani are played came across bet-
ter than ever.

The One-to-Ten had a rich, lovely
way with timbral colors. The double
basses in the Kleiber Beethoven were
thick and velvety, with a generous but
by no means excessive decay. The same
was true of the string sound in the
Ramor Quartet's recording of Schoe-

nberg's Verklarte Nacht (LP, Vox Turn-
about TV 54032 S): rosiny, resiny, and
right.

Another good test of a transformer
is that it resists being overwhelmed by
intense musical passages (although to
fail in that regard is just as often a mat-
ter of electrical mismatching, given the
ease with which overloading can occur;

Simple Solutions
you never thought of...

Have great components and still lack exceptional 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.

Cable-matching can balance the interactions between your components.

Example: your amp + speakers + speaker cables is a "circuit."

Changing any one of these variables will change the sound.

Good amp? Good speakers? Mediocre sound? Let's rethink your cable choices!

The Cable Company. The Cable Library.
Bright ideas.

World Radio History
LISTENING

see paragraph 8 and temporarily disregard paragraph 9). The Silvercore One-to-Ten, presumably well chosen, performed brilliantly in that regard. Like most of Elgar’s oratorios, The Music Makers has some densely scored measures, as one can hear in the recording by Sir Adrian Boult and the London Philharmonic (EMI ASD 2311). The Silvercore remained poised throughout, never sounding strident or artificial—yet never with a shortage of force in even the softest passages, such as the five-note rhythmic figure that precedes Janet Baker’s penultimate solo.

Unlike Silvercore’s other phono transformers, the One-to-Ten doesn’t have a switch for lifting the ground connection (although they all have the same very nice banana-plug ground socket). The lack of a lift wasn’t a problem in my system, where quiet, hum-free performance was had by grounding my EMT 997 tonearm straight to my Shindo Masseto preamp and leaving the Silvercore’s ground connection unused. Physically, of course, the One-to-Ten was position-sensitive: Audible hum could be induced by moving the transformer casing too close to the power-supply end of the preamp—but that’s common to every trannie I’ve tried.

I just about adored this transformer. Hell, I even loved the box it came in: Rather than wrapping it in last week’s newspaper (which pisses me off because it’s insultingly inappropriate for an expensive product), or putting it in some elaborately made jewelry box of a thing (which pisses me off because I know my money isn’t going where it ought to go), Silvercore packages the One-to-Ten in a lidded box of pulpy gray fiber, held together with silver-colored rivets. Just about perfect: a nicely made, nicely styled thing that isn’t foolishly lavish—but that I needn’t hide in a closet.

My enthusiasm for Silvercore’s One-to-Ten doesn’t mean I’ve banished its predecessors from my home and my heart. Indeed, the intensely huge and dramatic-sounding Hommage Ti ($4995) remains, for me, the one to beat. At the more affordable end of the spectrum, the phono transformers offered by Bob’s Devices are enduringly good, and enduringly superb values.

(Little else can be said of a company that locates, tests, sorts, and sells vintage Altec transformers for as little as $700.) Consider, too, that the always-recommendable step-up kit from K&K Audio has just been upgraded with a new version of Lundahl’s own amorphous-core transformers.

But the Silvercore One-to-Ten is a standout. It sounds far better than average—forceful and dramatic, yet colorful and sweet—with the historic EMT pickup head, and sells for considerably less than average. I don’t know how an imported audio product this good and this pretty can be made to sell for just $585, but I’m thoroughly impressed.

Totally spherical

I admit feeling blasé about any audio designer whose product line ziggs and zags from one extreme idea to another, and that’s especially true when it comes to phono cartridges. Sure: having a choice of different output levels is great. Ditto different stylus types, and maybe even different cantilever materials. But when I see too little theme and too much variation—particularly...
The Gold Standard in Audio Cables

“After two months of listening on four systems, I can say these Au24e interconnects and cables are just stunningly neutral and musical”

Robert H. Levi - May '10

POSITIVE FEEDBACK ONLINE

“Audience’s Au24e interconnects and speaker cables perform as well as any cables I’ve heard.”

Brian Damkroger - June 2010

stereophile

audience-av.com (714) 402-1760 (800) 565-4390
troubling are motor structures that are grossly dissimilar from one model to the next— I lose interest, if only because it seems to me that the best products have usually come from people whose point of view is distinct and unwavering.

Electrical Measuring Technology (EMT), based in Mahlberg, Germany, is nothing if not a company with a point of view. Established in 1940, first as a designer of test equipment and later as a manufacturer of transcription turntables, EMT entered the cartridge business by supplying their broadcast clients with Ortofon pickup heads. Soon thereafter EMT began making their own Ortofon-inspired mono pickups, such as the very high-output, very low-compliance, and altogether wonderful OFD 25. Then, in 1965, EMT produced a broadcast-quality stereo pickup head of their own design, the TSD 15.

Some 46 years later, the TSD 15 remains the cornerstone of the EMT line, and is virtually unchanged: Of all the notably long-lived products in perfectionist audio, today's TSD 15 seems the closest to its original forebear. Moreover, beginning in the late 1970s, the TSD 15's basic motor unit has been popular with such OEM cartridge manufacturers as van den Hul, Roksan, and Brinkmann, and remains so to this day.

In its most traditional form, the TSD 15 is an A-style pickup head ($1900) weighing just over 175gm and available with either EMT's proprietary diamond-shaped output-pin pattern or the more common SME square pattern. (EMT refers to the latter, with a trace of a sniff, as the international pattern, designated on their headshells with an i.) As with the Ortofon SPU pickup heads, the TSD 15's motor unit is removable from its headshell but remains electrically untethered from its output pins. Mechanically, though, the EMT is a bit more adaptable than the Ortofon to life in the nude. And even when it does stay in its shell, the position of the TSD 15 motor can be adjusted very slightly, to fine-tune the overhang. Which is very cool.

The pertinent specs: The TSD 15's armature is wound with enough fine wire to give it both a high impedance (24 ohms) and a high output (1.05mV). Its compliance is low but not exceptionally so, the recommended downforce being a perfectly reasonable if nonetheless nerd-curdling 2.5gm. (Compare that with a recommended downforce of 4gm for the 32gm Ortofon SPU Classic A.) The TSD 15's basic stylus is a conical diamond with a tip radius of 15μm—quieter in the groove than the SPU's, but that may be a function of the EMT's softer suspension making for a less perturbable motor. (One must also consider that an EMT tonearm will, for whatever technical reasons, be kinder to an EMT pickup head.)

**THE EMT TSD 15 IS A FINE ALL-AROUNDER, COMBINING STARKLY HONEST MUSIC-MAKING WITH THE SORTS OF REFINED SONIC ATTRIBUTES MOST AUDIOPHILES CHERISH.**

MBL Akustikgeräte amplifies its proven expertise with a new subsidiary, MBL North America, Inc.

Import • Distribution • Dealer Network
Customer Service • Marketing • Warranty

Coming Summer 2011: MBL Corona Line.
An intelligent, alluring new addition to the MBL family of Reference and Noble Line products.

www.mbl-northamerica.com • info@mbl-northamerica.com • (212) 724-4870
Please contact us for all things MBL in North America.
With summer on the way, nude cartridges such as this TSD 15 are not uncommon.

fine-line elliptical styli. For that edition, the price climbs to $2000, to cover the extra $100 worth of sheer cool: worth every damn dime.

Speaking of which, it may seem reasonable to wonder whether the large stylus profiles—and generally low compliances and high tracking weights—of the phono cartridges preferred by anachrophiles should keep us awake at nights, worrying about our records. I have some guesses on the matter, but let me emphasize that that’s all they are: Lest this column touch off yet another flurry of Rope Dudley in letters from the preposition-danglers among our readers, I’m very much open to opposing points of view, especially when accompanied by believable supporting data.

That said, I’m enduringly untroubled for one reason in particular: Of the LPs I’ve bought brand-new, a significant portion were purchased during my teens, when the only phonograph at my disposal was a Welcor record player fitted with a piezoelectric cartridge, the stylus of which was wide enough to deserve a pair of mud flaps with Yosemite Sam’s picture on them. But I kept that stylus clean, and I kept the records clean, too—and today the vast majority of those records sound fine (more so the ones on Reprise label, less so the ones on Capitol, for whatever reason). As for the LPs that’ve come my way secondhand, which now constitute a slight majority of my collection, most are classical LPs manufactured between 1949 and 1969, the Devonian Age of stylus tips. Nonetheless, most of my secondhand records sound good, and about 20% of those sound creepy good. I can’t imagine that many of them were played with elliptical or hyperelliptical tips: It was a spherical world back then.

Yes, I used to read Stereophile Review. Yes, I remember all those scare-stories about stylus mass and groove heat and how my records and I would go to hell unless I bought the latest Trackmaster SUX5000 Mk.II (and then the Mk.III the next year, and the Mk.IV the year after that . . . ). Yes, I bought some of those cartridges. Yes, they tracked beautifully, but otherwise made my records sound tizzier and tickier and more skeletal than ever. Yes, in the late 1970s I bought my first low-compliance moving-coil cartridge and started loving my records again. And, yes, I remain of the opinion that my records are in greater danger of being damaged by space debris than by high-compliance cartridges and spherical stylus.

My advice today is just another variation of my advice from yesterday and the day before: Life is brief, so work hard, read everything within reach. help the needy, take care of your kids and your elders, and buy something really nice for your spouse. Then, with the money left over, buy something that’ll please you, not the guru du jour. And sleep tight.

2 By believable I mean “quantified data adhering to scientific principles that are recognized by the majority of experts as germane to the discussion at hand,” and not the sort of “I have concluded, after a week of speculation, daydreaming, and doodling in the margins of my Twilight notebook, that Cleopatra was a sexually liberated and intellectually advanced master of diplomacy” nonsense that passes as scholarly work within the rotted carcass of American higher education and the burning whorehouse of mainstream publishing.
YG Acoustics’ BilletCore™ drivers start life as massive slabs of aircraft-grade aluminum alloy. The drivers are then precisely machined (slowly carved), until over 99% of the material is removed as tiny chips for recycling, and only the desired shape remains. The material is not bent, stamped, stretched, woven, cracked or otherwise stressed into submission. Any of those methods always induce fatigue.

BilletCore™ drivers, in contrast, retain the full strength of the material. They are, however, significantly more difficult to manufacture: a full day of machining is required to produce a single BilletCore™ subwoofer cone from a solid slab of aircraft-grade aluminum alloy. The finished cone is 0.008” (0.2 mm) thick and weighs under 1 oz (30 g), whereas the raw solid billet is 2.5” (64 mm) thick and weighs 16 lbs (7 kg).
What are the advantages of BilletCore™ driver technology?

BilletCore™ drivers possess the following overwhelming advantages over conventional designs:

**High Rigidity**

Breakup modes are moved farther outside the drivers’ pass-bands. This guarantees that drivers operate as pure pistons.

**Accuracy**

The tolerances of machining are far tighter than those of stamping, weaving or casting (molding). Thus, BilletCore™ drivers are more consistent, and a better left-to-right match is obtained.

**Advanced design features**

YG Acoustics™ BilletCore™ drivers include unique, computer-optimized ribs (both axial and radial), which give them a phenomenal strength-to-weight ratio. In contrast, ribs on stamped cones mandate recesses on their opposing face, which are not nearly as effective. With woven cones the situation is even worse – reinforcements cannot be introduced at all, as they would severely diminish tensile strength.

**Superior Reliability**

BilletCore™ drivers are extremely reliable thanks to the total lack of weak-spots. In comparison, deposited (typically ceramic) cones are brittle and develop cracks over time. Woven cones do not crack, but their weaving loosens over time and they lose strength.

**Lower Distortion**

Aircraft-grade aluminum, which is the raw material for BilletCore™ drivers, offers excellent stiffness-to-weight ratio. While some exotic materials offer better specs as a solid, unprocessed chunk, in a stamped or woven cone the weakest link lies within the micro-cracks where the material is bent or stretched respectively. The end-result is apparent when looking at distortion measurements of the finished product – a speaker using BilletCore™ drivers has far lower distortion than speakers using exotic materials.

This independent measurement was conducted by the Canadian National Research Council (NRC).

**VG Acoustics™ Anat III™ Main Module with BilletCone™**

THD 90 dB @ 2 m (96 dB @ 1 m) 200-20k Hz. 10 dB div.

Competitive with woven carbon micro-membrane cones.
The only coloration is silver or black.

GTT Audio & Video
www.gttgroup.com
Long Valley, NJ Tel: 908.850.3092
av@gttgroup.com

Let me hear your body talk.
—Olivia Newton John

But first a confession: I'm not the hip young man you might like me to be (or the one that might like me to be). I'm actually sort of old-fashioned. While my taste in music is nearly as uninhibited and adventurous as that of anyone I know, I prefer to enjoy that music in ways far more restrained and much less modern. I think I would have been right at home in the 1950s, wearing Ray-Bans and Levi's, listening to (and loving, equally and deeply) the music of both Jack Scott and John Cage, and playing my records on a record player.

I heard from Kelli recently. She said something about moving all of her music into the clouds.

"Huh?"
"Cloud music," she said.
"What music?"
"Oh, yeah—I forgot who I was talking to. Ha!" I could hear her blue eyes sparkling as she laughed.
"Very funny," I said. "But, seriously, what is it?"
"Cloud music? It's the way of the future..." 

Kelli was not referring to Iannis Xenakis's Bohor I, which is playing as I type. Bohor I sounds like hundreds of chandeliers put into careful motion, swaying gently, and falling and falling and falling from a very high place to gradually come into contact with hundreds of pianos, their lids removed, so that the brass and glass of the chandeliers rattle and clash against the pianos' steel and copper strings. In the liner notes to my copy of the album (LP, Nonesuch H-71246), Xenakis discusses his brand of cloud music: "You start with a sound made up of many particles, then see how you can make it change imperceptibly, growing, changing, and developing, until an entirely new sound results." In the case of Bohor I, the listener is asked to surrender for almost 22 minutes as something at first soothing and seemingly innocuous grows in volume and intensity until it has transformed into something terrible and disturbing. The final sounds are thrilling, powerful, and maddening—just as I jump up to lower the volume, the piece comes to a sudden end.

Today's cloud music, as I fail to understand it, is a sort of music library without chairs, walls, or card catalogs, manageable by any of several portable music players or streaming audio devices, and accessible from anywhere in the world—or, potentially, the universe. I guess. (Aliens tapped into our Katy Perry Clouds are probably like, "OMG, WTF is wrong with these humans?") Cloud music is also invisible, and takes up hardly any space at all. I'm pretty sure there's an app for it. And, as far as I'm concerned, cloud music is completely impossible to love.

Did I mention that I hate computers?

"Hate is probably too strong a word. I don't necessarily hate computers the way Mikey Fremer hates computers. I just don't want a computer getting all cozy with my music. I don't see the need. (Jon Iverson and John Atkinson are shaking their heads in disgust.) For me, the question is not whether computer-based audio outperforms older, more traditional modes of music playback. I am much more interested in exploring what we humans actually need to survive and grow. Do we need computer-based audio? Does it nourish our minds, bodies, and souls? Are we even interested in being human anymore? I understand that high-resolution downloads are becoming more widely available and thus increasingly popular, and that technology is making it easier to set up a music server that will save time and space and deliver true high-quality sound with just a few clicks of the mouse. But why do I need that? And why would I want that when I've got fully functional limbs, live in a 300-square-foot apartment, love surrounding myself with beautiful objects, and dislike listening to music while commuting or running errands?

Head-Direct HiFiMan HM-602 portable music player

These thoughts swirled through my old-fashioned brain as I crossed Marin Boulevard, on my way to Shop-Rite, while listening to John Vanderslice's new album, White Wilderness (CD/LP, Dead Oceans DOC052), through the Head-Direct HiFiMan HM-602 portable music player ($439) and Klipsch S4i in-ear headphones ($99). The music was excellent. So was the sound.

The experience? Not so much.

Head-Direct's HiFiMan HM-602 is the second in a growing line of perfectionist-quality portable music players designed by Fang Bian, a 31-year-old audiophile and student of nanotechnology at the City University of New York's Hunter College. Bian's first HiFiMan design was the larger, heavier, more versatile HM-801 ($790; see my review at http://tinyurl.com/4a3nlut). In building the HM-602, Fang sacrificed the '801's removable amplifier module, 15V rechargeable battery, and coaxial input, thus creating a smaller, more portable product. Much sleeker and less substantial than the '801, the HM-602 measures approximately 4" L by 2.5" W by 1" D and weighs just 7oz—it can rest comfortably in the palm of a hand or a coat's inner pocket.

Overall, the HM-602 has a handsome, rather serious appearance: With its gold controls and its fine metallic finish, which at times seems a deep green and at others takes on a smoky charcoal,
abkco’s HD Remastered Series

The Rolling Stones

The Rolling Stones

The Rolling Stones No. 2

Out of Our Heads

Big Hits (High Tide and Green Grass)

Let It Bleed

Through the Past, Darkly (Big Hits Vol. 2)

Out of Our Heads

December’s Children

Aftermath

176.4 kHz/24 bit and 88.2 kHz/24 bit downloads

Now available exclusively at HDtracks.com
the HM-602, like its predecessor, exhibits an air of elegance and sophistication. And while the HM-801 proudly takes after Sony's famed Walkman—Fang Bian once owned every available model of the now-discontinued portable cassette player—the HM-602 much more closely resembles Apple's iPod Classic. On its front panel, below the 2" LCD screen, the HM-602 has a four-way control ring similar to the iPod's scroll wheel, and three sliding switches: Power, Hold (deactivates controls while music is playing), and DAP/USB.

The HM-602 is equipped with an inexpensive 5V, 1A power charger. On a full charge, the battery is good for about 10 hours of music, but be sure to keep the battery charged before any long listening session. As I discovered, the HM-602 doesn't shut down gracefully. One quiet afternoon, while casually listening to music, I was terrified by what sounded like a loud, violent siren announcing the end of the world. Fight-or-flight took over—I ran from the kitchen toward my bedroom, where the sound seemed to have originated. Once there, standing in the doorway between bedroom and listening room, I realized that the music had come to an end, and that the awful sound was actually coming from my speakers. I turned to the HiFiMan and noticed that its battery had run dry, thus causing the player to send out a death signal. Fang Bian might consider augmenting his player with some sort of soft mute to avoid any catastrophic damage to speakers—or to their owners.

According to Bian, the HM-602 is the first portable music player to use the Philips TDA-1543, a 1990s-vintage 16-bit DAC chip, which, he says, offers a sound similar to that of the Burr-Brown PCM1704 in the HM-801. For its amplifier section, the HM-602 uses the '801, the HM-602 as I do my iPod Nano: as a dedicated source in my main system. Over time, in both applications, the HiFiMan distinguished itself as the more engaging player, with enhanced bass weight and control; a more expansive soundstage; larger, more precisely placed images; and a richer, fuller overall sound. In direct comparisons, the iPod consistently sounded restricted and more mechanical, with less clarity and definition. Additionally, and most important, the HiFiMan exhibited a greater sensitivity to nuances of tonal color, enabling it to reveal deeper levels of musical meaning. Through the HiFiMan, music made more sense and was therefore more enjoyable and more enriching. Each time I went back to the HiFiMan, I suddenly felt more relaxed and more engaged. My body was talking to me, and it was saying, "This is right."

As I crossed Marin Boulevard, I was nearly hit by a speeding car. I hadn't heard it coming—the Klipsch S4is were the most comfortable in-ears I've ever tried, but I still don't like wearing them. I remain an over-the-ear kind of guy. I wrapped up the S4i's cord, shut down the HiFiMan, and bought ingredients for a meal of meatloaf, mashed potatoes, and Brussels sprouts: Natalie and Nicole would be coming over later for dinner.

If all goes well, I thought, I might just get the girls to listen to some records!

Audioengine 5 powered loudspeakers

Back at home, between boiling potatoes and chopping onions, I connected my iPod Nano to the Audioengine 5 powered loudspeakers ($349/pair in satin black or high-gloss white; bamboo adds $100/pair). The sound was surprisingly good, and I must admit that it was nice to not have to worry about flipping records with fingertips smeared with ground beef. It was similarly nice to not have to think about which record to play next. The iPod's...
The Audioengine 5s provided a big soundstage and glorious bass.

The Audioengine 5s provided a big soundstage and glorious bass.

Evans explained that the company put the final bass weight and control unlike any I’d ever heard in my room. I wondered if I’d been dreaming about for months: I could pair them with the Music Hall USB-1 turntable.

And that is what I did. But first I blended together two eggs, two tablespoons Worcestershire sauce, two tablespoons Tabasco sauce, three tablespoons Peter Luger’s barbeque sauce, and one cup Wolfgang Puck’s beef broth. This would be the best meatloaf ever.

**Music Hall USB-1 turntable**

The two-speed, belt-driven Music Hall USB-1 turntable ($249) measures 17.7" W by 5.7" H by 13.8" D, weighs 9.35 lbs, and looks a lot like an old-school Technics SL-1200. It comes in an attractive carton with a plastic handle, making the machine almost portable. The turntable is equipped with an aluminum platter and felt platter mat, an S-shaped tonearm with detachable headshell, a serviceable Audio-Technica AT3600L moving-magnet phono cartridge, anti-skating and pitch controls, and a thick dustcover. The USB-1 also has a built-in phono preamp and a USB output for converting vinyl to WAV files on your Mac or PC; a USB cable and easy-to-use Audacity software are included.

Leland Leard, Music Hall's VP of sales and marketing, has worked hard to get the USB-1 into great record stores across the nation, and you can now find it for sale in Los Angeles' Amoeba Records and Chicago's Dusty Groove—a good thing for everyone. When I asked Leard what had inspired the USB-1's design, he told me he’d answered my question after his ladies had given him a break from “sunscreen duty.” By this, I think Leard meant that the Music Hall USB-1 turntable is all about fun.

Compared to Uncle Omar's Rega P1 ($395) with Ortofon 2M Red cartridge ($99), the much less expensive Music Hall USB-1 had a slower, darker, less rhythmically assured sound, with smaller images and muted tonal color. I
OVER 150 CHANNELS
$29.99* FOR 12 MONTHS
The CHOICE™ package
After rebate
Prices higher and terms & conditions vary in select markets.

DIRECTV

Lock in your price for ONE YEAR!

2 FREE Upgrades®
HD DVR & HD RECEIVER
With activation of the CHOICE XTRA™ package or above.

FREE HD Access
HBO, STARZ, SHOWTIME, cinemax
With activation of the CHOICE XTRA™ package or above.

FREE for 3 months
HBO stem : Mourn cine.

FREE Pro Install
IN UP TO 4 ROOMS

NO EQUIPMENT TO BUY!
NO START-UP COSTS!

Switch in minutes! 1-877-320-7028
or directv.com

All offers require 2-year agreement.™ Package pricing may vary in certain markets. Free HD requires Auto-Bill Pay. Offer ends 7/22/16. Credit card required (except in MA & PA). New customer activation only (install required). $19.95 handling & installation fee may apply. Applicable use tax adjustment may apply to the retail value of the installation. See details inside.
Get America’s

ONLY DIRECTV GIVES YOU:

- **Worry-free Signal Reliability**
  DIRECTV delivers worry-free signal reliability.

- **Cutting-edge Technology**
  With DIRECTV® DVR Scheduler, you can easily set your home DVR from any cell phone or computer.²

- **Exclusive Sports Packages**
  Only DIRECTV gives you access to NFL SUNDAY TICKET™ and NASCAR HotPass™. Plus, every MLB game, the most golf, the most tennis and the most soccer.³

- **Customer Satisfaction**
  For 10 years running, DIRECTV has been rated higher in customer satisfaction than cable. Among the largest national cable & satellite TV providers. 2010 American Customer Satisfaction Index.

**DIRECTV CINEMA™**
Get 400 of the newest releases. Plus instant access to over 6,000 shows and movies, at no extra charge. Additional fees required for new releases.

**NEW! DIRECTV Whole Home DVR Service**
The DIRECTV Whole-Home DVR service lets you record, watch and delete programs in any room, no matter which TV you recorded them from—all with one HD DVR. You can start watching in one room and finish in any other room.⁴

**GET OVER 150 CHANNELS**
Local Channels Included! in over 75% of the U.S.

**CHANNELS**

**NEW! DIRECTV CINEMA™**
Get 400 of the newest releases. Plus instant access to over 6,000 shows and movies, at no extra charge. Additional fees required for new releases.

**DIRECTV Whole Home DVR Service**
The DIRECTV Whole-Home DVR service lets you record, watch and delete programs in any room, no matter which TV you recorded them from—all with one HD DVR. You can start watching in one room and finish in any other room.⁴

**Switch in minutes! 1-877-320-7028 or directv.com**

*Bill credit/programming offer. If by the end of promotional price period(s) customer does not contact DIRECTV to change service then all services will automatically continue at the then-prevailing rates. Free SHOWTIME for 3 months. A value of $119.50 for HBO, Showtime, Showtime Anytime and Cinema for 3 months. A value of $32. Commission from participating companies varies. © 2011 DIRECTV. All rights reserved. DIRECTV Connects and its associated logos and designs are trademarks of DIRECTV. All other trademarks are the property of their respective owners. DIRECTV's 10-Year Customer Satisfaction Index is higher than that of the largest national cable and satellite TV providers. Information subject to change. See directv.com for details.**
#1 Satellite TV Service

THE LEADER IN HD²

FAVORITES

SPIKE 111 HD

Bravo

Lu La Lu

ltne serelarm 3 ate 

FAMILY

NATIONAL GEOGRAPHIC

ESPnmo

SPORTS

MOVIES

HBO

FX • • •

HONEM MOVIES

NEWS

C-SPAN  C-SPAN2

LOCAL CHANNELS¹

et  NBC HD

0 PBS I I-0

FOXHD

PBSD HD

DIRECTV CINEMA. Access to DIRECTV CINEMA programming available at no additional charge is based on package selection. Actual number of TV shows and movies will vary. Some DIRECTV CINEMA content requires an HD DVR (HR20 or later) or DVR (HR22 or later). DIRECTV CINEMA Connection Kit & broadband Internet service with speeds of 750 kbps or higher and a Wi-Fi router with an available Ethernet port are required. DVR Service required for DVR and HD DVR Receivers. HD Access required for HD DVR. Visit directv.com for details.

1. Eligibility for local channels based on service address. HD local channels not delivered in HD in all markets.
2. To access DIRECTV HD programming, HD Access fee ($10/mo). HD equipment is required. Number of HD channels varies by programming package selection. Visit directv.com/hd for details. 3. Professional installation highly recommended. Land-based phone line connection required. DVR Scheduler requires internet access via computer or mobile phone and direct TV login. Remote connections may vary in rare instances. Schedule recording(s)/may not be recognized. Only available on certain receivers. 4. DIRECTV Whole-Home DVR service requires a DIRECTV Plus HD DVR, a Whole-Home enabled HD Receiver for each additional TV. 5. Actual number of games varies by market and based on day games. Blackout rules and other conditions apply. 6. Unlimited PVR services available in 1080p. To view programs in 1080i, the following are required: a DIRECTV Plus HD DVR Receiver (models HR20 or later) and an HDMi cable connecting the receiver and the television, and a high-definition 1080p television. Not all models are compatible. Access to DIRECTV CINEMA programming available at no additional charge is based on package selection. Actual number of TV shows and movies will vary. DIRECTV CINEMA requires an HD DVR (HR20 or later) or DVR (HR22 or later). DIRECTV CINEMA Connection Kit and broadband Internet service with speeds of 750 kbps or higher and a network router with an available Ethernet port. DVR Service required for DVR and HD DVR receivers. HD Access required for HD DVR. Programming, pricing, terms and conditions subject to change at any time. Pricing residential. Taxes not included. Receipt of DIRECTV programming subject to DIRECTV Customer Agreement, copy provided at directv.com/legal. 7. NFL SUNDAY TICKET TV service requires a DIRECTV whole home system, including a DIRECTV service agreement. 

DIRECTV and the Cyclone Design logo are trademarks of DIRECTV, Inc. All other trademarks and service marks are the property of their respective owners.

ACT NOW and get all this:

2 FREE Upgrades

HD DVR & HD Receiver

Models may vary.

Set your home DVR from your computer or cell phone.¹

With activation of the CHOICE XTRA package or above. Whole-Home DVR service required for second receiver upgrade. Additional fees required. With 2-year agreement.¹

FREE HD Access

Over 160 HD channels available²

With CHOICE XTRA package or higher, and Auto Bill Pay. HD Channels based on package selection.

FREE for 3 months

Get 33 movie channels

Over $130 value!

With activation of the CHOICE XTRA package or above.

FREE Pro Install

in up to 4 rooms

IT'S FAST! IT'S EASY!

Custom installation entry. Additional fees required.

Switch in minutes! 1-877-320-7028 or directv.com
Pick your package and lock in your price for ONE YEAR!

$29.99/mo. FOR 12 MONTHS
The CHOICE™ package
Over 150 channels including local channels¹

$34.99/mo. FOR 12 MONTHS
The CHOICE XTRA™ package
Over 210 channels including local channels¹
+2 FREE Upgrades
HD DVR & HD Receiver
Additional fees required¹
+FREE HD Access¹
Ask how.

$39.99/mo. FOR 12 MONTHS
The CHOICE ULTIMATE™ package
Over 225 channels including local channels¹
+11 extra movie channels
+2 FREE Upgrades
HD DVR & HD Receiver
Additional fees required¹
+FREE HD Access¹
Ask how.

EVERY PACKAGE INCLUDES:
- 100% DIGITAL QUALITY PICTURE AND SOUND
- WORRY-FREE SIGNAL RELIABILITY

EVERY PACKAGE INCLUDES:
- 100% DIGITAL QUALITY PICTURE AND SOUND
- WORRY-FREE SIGNAL RELIABILITY

DIRECTV CINEMA
Get 400 of the newest releases. Plus instant access to over 6,000 shows and movies, at no extra charge.

ACT NOW AND GET:
2 FREE Upgrades
HD DVR & HD RECEIVER
+$298 Value!

FREE Pro Install
IN UP TO 4 ROOMS
It's fast! It's easy!
Custom installation extra. Handling and delivery fee of $19.95 may apply. Applicable use tax adjustment may apply on the retail value of the installation.

Prices higher and terms & conditions vary in select markets. All offers require 2-year agreement. Package pricing may vary in certain markets. Free HD requires Auto Bill Pay.

1. For 3 months FREE & WiTIME Over $30 value!

For 3 months FREE
HBO & STARZ
Over $130 value!

For 3 months FREE
HBO & STARZ
Over $130 value!

FREE Pro Install IN UP TO 4 ROOMS
It's fast! It's easy!

Additional fees required. 6,000 titles available with the CHOICE XTRA™ package and above. Options lower in other packages. Offers end 7/20/11. Credit card required (except in MA & PA). New approved customers only (lease required). Hardware available separately. Additional fees required $19.95 Handling & Delivery fee may apply. Applicable use tax adjustment may apply on the retail value of the installation.

Switch in minutes! 1-877-320-7028 or directv.com
wasn't bothered by these shortcomings because, after all, the USB-1 was easy to set up, easier to enjoy, and it made sweet music. Meanwhile, compared to the PSB Alpha B1 loudspeakers ($279/pair), the Audioengine A5s lacked some high-frequency detail and delicacy, but made up for it with their outstanding bass control, transparency, drama, and flexibility.

The real fun, however, came when I finally partnered the USB-1 turntable with the A5 speakers. This was a heavenly match, with deep, taut bass; eerily quiet backgrounds; an open, un-restricted soundstage; fine stereo imaging; a good sense of drama and scale; satisfying resolution; engaging musical flow; and additive immediacy and transparency. The Audioengine A5s and Music Hall USB-1 turntable made one stripped-down, bad-ass, bitchin' little system. For a grand total of $600, including cables, I could play and digitize LPs, play and charge my iPod, and experience real, soul-stirring hi-fi. While the iPod proved adequate, adding the HiFiMan HM-602 portable music player made the experience even better, and enjoying this simple system made me feel that anything else, or anything more, would only prove unnecessary.

Like a good, modern-day audiophile, I ripped several CDs to a Dell laptop and transferred the resulting WAV files to my iPod and to the HiFiMan. I also digitized one side of Cat Power's 'Woman Left Lonely' with Coleman's 'Lonely Woman' and prayed that dinner would be okay, it occurred to me that I had also prepared several versions of Ornette Coleman's spectacular 'The Shape of Jazz to Come' (CD, Rhino 8122723982), which includes one of my all-time favorite songs: "Lonely Woman." Pairing Cat Power's "Woman Left Lonely" with Coleman's "Lonely Woman" felt like a stroke of magnificent serendipity, and, best of all, I didn't need my iPod to come up with it— I'd just used my brain. Again, "Lonely Woman" sounded best—by turns swinging, rocking, bleeding, yearning, searching, insistently, and always emotionally involving—when played back through the HiFiMan and Audioengines.

Dinner that night was very good—Natalie and Nicole decided that it was, in fact, the best meatloaf they'd ever had. Afterward, we sat together in the listening room, and I explained why the little system of Audioengine 5 speakers and Music Hall USB-1 turntable was so special, versatile, and simple. I don't think the girls cared much. They were more interested in the music. We started with "My Girls" from the Dominant Legs' 'Young at Love and Life EP,' and Natalie was immediately impressed by those deep, taut drum-machine beats and the swelling acoustic guitars.

Natalie was harder to convince. "I don't really pay attention to music," she protested. "My mind wanders, and I can't hear differences between speakers or anything."

So I played a few more albums, including a red-vinyl edition of one of Nicole's favorites, Sunny Day Real Estate's 'Diary' (LP, Sub Pop SP246), and, all too soon, it was time to say goodnight. Before the girls left, however, I packed them some leftovers, and Natalie expressed interest in buying a turntable and speakers, while Nicole asked to borrow my copy of Nick Cave and the Bad Seeds' 'Dig Lazarus, Dig!' (CD, Anti- 886493), which includes "More News from Nowhere."

"Absolutely," I said, feeling something like a drug dealer.

The next day, Nicole confessed that the sound of her car stereo was nothing like the sound of the system she had heard in my apartment. "I'm not sure if I can live with it now, Stephen, and I'm not sure if I'm happy about that!"

"This is going in the column," I told her.

The meatloaf, too, she said, was even better for lunch that day than it had been for dinner the night before. I nodded and smiled, knowingly. My secret plan was working just as I'd hoped it would. Despite my old-fashioned ways, I felt like a man who could walk on clouds.

Share your stories: stletters@sorc.com.
Sound - Innovation - Reliability - Service

Pass Laboratories, Foresthill, CA 95631 • (530) 367-3690 • passlabs.com
CES 2011, a Yamaha Universal player, & Meridian’s 861 v6 Surround Controller

A

other Consumer Electronics Show has come and gone, and, by the looks of Stereophile’s comprehensive report (www.stereophile.com/category/ces-2011), there was a lot to see. For those of us with an abiding interest in multichannel sound, however, it was business as usual. Just as Stereophile does, the high-end exhibitors at the CES venues of the Venetian, the Mirage, and the Hilton last January emphasized two-channel equipment because that’s what the majority of their customers want. However, many displayed neat and interesting multichannel stuff at the side or in a back room. And, of course, home theater ruled at the Las Vegas Convention Center, where multichannel audio was presumed an integral component of a home theater system.

Over at the Renaissance hotel, Denon and Marantz were making big noises about the addition of Apple’s AirPlay networking feature to several products for the nominal cost of $49.95. However, I was more excited by the news that Denon would be providing a potent upgrade for their flagship preamplifier-processor, the AVP-A1HDCI(A) ($7500). As HDMI 1.4, 3D compatibility, and Audyssey MultEQ XT32 found their way into Denon’s AVRs, A1 owners were wondering where that left them. Expect to send your (big) baby back to Denon in October for this, but for about the time you read this. I hope to say

Yamaha Aventage BD-A1000 universal Blu-ray player

You may already have ripped all of yours to a computer or music server, but most of us still own lots of CDs—as well as other 5" optical-disc formats that are not so easily ripped and stored. DVD-Audio may have faded, but the occasional new DVD-A is still released. SACD slogs on with analog 5.1/7.1-channel outputs slowly being eliminated. An issue for me is being certain that the HDMI output from SACDs is available both as DSD and as, at least, 24-bit/88.2kHz PCM. Some manufacturers have limited their players’ PCM outputs to 24/48, or even 16/44.1! This should not be condoned, even in a $100 big-box-store special.

There’s no such shortchanging of resolution with Yamaha’s Aventage BD-A1000 universal player ($699.95). Though labeled a Blu-ray player, the list of types of discs and files the BD-A1000 can play is longer and more comprehensive than other players’ lists of discs/files they can’t. Included are Blu-ray (including dsdHD Master Audio and Dolby TruHD), DVD (in all its many varieties), CD, and SACD, as well as DVD-ROM, DVD-R/RW, CD-ROM, and CD-R/RW. It will also stream content from Netflix, Blockbuster, and YouTube, and play many audio and video formats via its USB and network ports. The only glaring omission is its inability to play FLAC and AIFF—while you can convert such files yourself to WMA or WAV or PCM, why should you need to?

But I’ll stick with the good news: The BD-A1000 will output DSD from SACD, if your AVR or pre-pro can handle it, or output it at up to 24/176.4 PCM! Now, that may not surprise you, as the Yamaha and many other players will output 24/192 via HDMI from
High-end audio within reach

The new DM models are true high-performance loudspeakers featuring Dynaudio’s renowned driver technologies and celebrated sound quality: excellent dynamics, detailed highs, natural midrange and extended bass. Thanks to their functional design, the compact yet powerful DM models complement any room or amplifier, while delivering a performance that can best be described as a remarkable value-for-money.

Audition the new DM models at your nearest dealer to hear just how within reach high-end audio can be, and receive a copy of Dynaudio’s free promotional test CD.

Visit www.dm.dynaudio.com

Take the CD home and compare Dynaudio’s DM models to your speakers!
The players from Oppo BD-A1000 seemed likely to be a high-output sampling rate at will, so I can’t say players that will output 24/176.4, such as Sony’s, won’t play DVD-As at all.

So what? Well, I have not yet had a player that will let me switch the output sampling rate at will, so I can’t say that there will be an audible difference between 88.2 and 176.4kHz. In fact, I doubt there would be. On the other hand, since the difference in hardware is the manufacturer’s choice of chip, why should we have to settle for less than what’s on the disc?

With such a lack of significant limitations on paper, the Aventage BD-A1000 seemed likely to be a high-quality do-it-all player. I had to have one. And at $699.95, it seemed reasonably priced for its potential.

I was impressed with the BD-A1000’s sophisticated, sharp-edged appearance, which matches that of Yamaha’s new Aventage AVRs. The front panel is a uniform gloss black, with a basic set of disc-operation controls, a USB port, and only a few indicator LEDs (SACD, Pure Direct). In fact, the very legible display can be turned off completely, leaving no indication at all of its window—a great option for home theaters in which any offscreen light source is a distraction. On the other hand, their black-on-black design and subtle labeling can make these controls a bit frustrating for those who want to manually use them in a darkened room. The remote control is both comprehensive and comfortable to use, but not illuminated.

The BD-A1000’s rear panel has all the requisites of a modern universal player. From the right are: an IEC power inlet and a grille for the cooling fan, optical and coaxial digital outputs, composite and component video outputs, dedicated mixdown for the two- and 7.1-channel analog outputs, and USB, HDMI, and Ethernet ports. Above those last three are in/out control ports and an RS-232 connector.

I plugged the BD-A1000 into the Marantz AV-7005 pre-pro (see “Music in the Round,” March 2011) via HDMI and up popped the onscreen menus to do the usual setups. Such menus, regardless of manufacturer, seem to be converging on common content and arrangement; using it was pretty much as I had done with many other players, so I thought the BD-A1000 would be “good to go” right out of the box. Not so. Every time I put in a Blu-ray disc, this annoying warning was displayed: “THE SETTING IS PROHIBITED, PLEASE SETUP AGAIN.” I had to hit Enter to continue. Why? What setting? Well, it turns out that, although I didn’t have the BD-A1000’s Ethernet port connected to my network (and told it so), I still had to say “Yes” to BD Live before I could bypass that obscure warning.

After that, all went swimmingly. The BD-A1000 did, indeed, play every type of optical disc I had on hand, including its CDs. The Yamaha’s sound was noticeably open and transparent, with a wide soundstage, whether it was playing good multichannel discs or even CDs. The balance was good, from very grain-free treble. I noticed no lack of warmth, but the midbass didn’t call attention to itself, as with players that purport to offer a more “analog” type of sound. Overall, the BD-A1000’s sound seemed fairly devoid of any distinctive character, and that’s a compliment.

I compared the BD-A1000 with the Sony XA-5400ES SACD player using the Marantz AV-7005, AudioQuest Carbon HDMI cables, and SACDs and BDs that I had in duplicate. The Marantz’s readout indicated that both players were outputting 176.4kHz, but while I could distinguish them by ear, choosing a preference was difficult. Sara K.’s voice in “Set You Free,” from her Hell or High Water (SACD/CD, Stockfisch SFR 357.4039.2), was slightly mellower and more forward through the Sony, but the Yamaha countered with superior delineation of instruments and ambience while retaining a quite convincing rendition of K.’s voice. The curious thing is that, each time I switched between the players, each spinning a copy of the same album, I was impressed with what the “new” player offered, whether Sony or Yamaha. I repeated this comparison with Riccardo Muti and the Chicago Symphony’s recording of Verdi’s Requiem (SACD/CD, CSO-Resound CSOR 901 1008) and reached a similarly complex conclusion. That this recording is a little thin and bright, was apparent with both players. Still, the Sony sounded decidedly more “present” and palpable, especially with the solo voices, while the Yamaha offered a bigger, more spacious soundstage. The Sony had more weight, especially in big climaxes, but I was more involved while listening to the Yamaha.

The wonderful Blu-ray set of Eric Clapton’s Crossroads Guitar Festival 2010 (BD, Rhino 525668) served only to confirm that, without an exact reference standard for what the original sound actually was, the players offered two different but equally satisfying renditions. Bass was richer and more prominent with the Sony, but seemed to extend deeper and with better delineation with the Yamaha. I got a better sense of the stadium environment with the Yamaha; the Sony made it sound more like a very good studio recording.

I did a similar side-by-side comparison of the Yamaha with Oppo’s BDP-83SE universal Blu-ray player, this time in my Manhattan system with Meridian and McIntosh electronics and AudioQuest Vodka HDMI cables. The Oppo’s output was sampled at 88.2kHz, and since the Meridian HD-621 can’t handle sample rates above 96kHz, the Yamaha automatically reset its output.
The Award-Winning Wharfedale Diamond 10.1
Music Direct’s Budget Speaker of the Year

Wharfedale

"[The 10.1s] flooded my listening room with pure emotional intensity so rich and sumptuous I could cry, I realized the Wharfedales weren’t performing only as great jazz speakers, but also as emotional conductors!"
—Stephen Mejias, Stereophile, April 2011

"Such was our admiration for these Wharfedale bookshelf speakers that we gave them a What Hi-Fi? Product of the Year award... arguably Wharfedale’s best budget speaker yet... We are huge fans!"
—What HiFi?, Product of the Year Award Winner

List $349, Special Price $299/pair

Marantz TT-15
VPI Classic I
Clearaudio Concept
Rega P-3 24

We are Your Analog Experts

musicdirect.com
ph. 800-449-8333
to 88.2kHz. The playing field was thus level. I used the Pipes Rhode Island anthology (CD, Riaga CD 101), Richard Egarr and the Academy of Ancient Music's set of J.S. Bach's Brandenburg Concertos (SACD/CD, Harmonia Mundi HMU 807461.62), and Ole Bull's delightful La Verbena de San Juan, with violin soloist Annar Folleso and Ole Kristian Ruud conducting the Norwegian Radio Orchestra (BD+SD/CD, 2L 2L-067-SABD). With the pipe organs recorded on Pipes Rhode Island, I found the Yamaha was able to render the various church acoustics more naturally, though I did take pleasure in the Oppo's slightly richer midrange. With the Bach, individual instruments seemed a bit more rounded through the BD-83E, but there was a distinctly greater sense of ensemble with the BD-A1000, if tinged with a bit of tizz. The contest was more lopsided with the Bull. Although both players beautifully presented the solo violin at dead center, I found the Yamaha's recreation of the very surround-y orchestra beguiling, with amazingly taut and powerful low-bass.

I assessed the BD-A1000's analog outputs in two ways. First, I fed them into the stereo analog inputs of the Marantz AV-7500 and the Meridian 861 and allowed both to redigitize the Yamaha's analog signal so that I could A/B it with itself via HDMI. Allowing for the fact that the analog signals were being subjected to additional processing, the Yamaha sounded clean and open, and much like its HDMI output. Second, I compared the Yamaha's stereo outputs to the analog outputs of the Sony and Oppo players via the Parasound Halo JC 2 BP preamplifier. Here, too, each followed suit, except that the Yamaha's more noticeable lack of mid bass warmth might sound thin in some systems, its prodigious bass notwithstanding. The BD-A1000's HF detail and delicacy were less tolerant of bright recordings than were the smoother trebles of the Oppo BDP-83E or the Sony, but were similar to that of Oppo's BDP-83.

You may be as incredulous as I was that there was a difference between players used as digital transports via HDMI. Yet, as I compared the Yamaha with the others in both of my systems and with a variety of recordings, the consistency of what I heard forced me to accept it: The other players presented soloists and ensembles more directly, and brought them into my rooms. Conversely, the Yamaha BD-A1000 was better able to re-create larger spaces with larger ensembles, albeit at the expense of some midbass richness.

Yamaha's Aventage BD-A1000 is a sharp-looking, great-sounding machine that will play any extant digital format well. It sounded better in my better system, where I could really refine its low-frequency performance. It also offered a remarkably broad, deep soundstage that, given the right recordings, transported me to the concert hall more convincingly than did the other players. The Aventage BD-A1000 works for me.

**Meridian 861 Reference v6 Digital Surround Controller**

My first Meridian component was a used 201 preamplifier that I picked up in a shop in Virginia while on a vacation two decades ago. It was an analog preamp with a phono stage, a separate power supply, and a remote control as large as the preamp itself. The remote should clue you in to the fact that, analog though it was, the 201 was controlled by a microprocessor. Inside were circuit boards studded with many discrete components such as would raise the neck hairs of most high-end "purists" of the day.

I experienced my next Meridian product when I reviewed a full 5.0-channel Meridian system (http://www.stereophile.com/hirezplayers/201/index.html). That was a revelation, and my curiosity about multichannel sound became a commitment. The 861 Reference v2 processor in that system ran counter to the styles of the late 1990s, with a modular construction that had more in common with contemporary personal computers than with typical high-end audio components. What the 861 v2 offered was a degree of control and audio processing beyond the expectations of the typical audiophile, along with outstanding sound quality, and the promise of continuing upgrades to keep pace with new formats and codes.

I bought an 861 Reference v2, and soon unhesitatingly upgraded it to v3 and, later, to v4 (http://www.stereophile.com/musicintheround/706mitch/index.html). The addition of a multichannel analog input board allowed the 861 to accept multichannel signals from SACD and, now, Blu-ray players, but that incurred additional A/D conversion that, while ostensibly transparent, was less than ideal. But with the rise of HDMI, Meridian was faced with the issue of whether to incorporate the video-based communication link into a new input board, and thus introduce high-resolution (and high-frequency) digital video signals into a complex and sophisticated audio-only component. Instead, Meridian opted to keep the 861 Reference v4 isolated from digital video, and its potential for noise that could corrupt the audio signal, by offering the HD621 HDMI Audio Processor ($2995). This box provides six HDMI inputs, and separates the digital audio signals for output to the 861 via multiple S/PDIF-like connections, or via Meridian Multichannel High Resolution (MMHR) using an RJ-45 Ethernet-like connection. It also offers the possibility of upsampling with Meridian's apodizing filters (http://www.stereophile.com/content/music-round-38-page-3).

At this point in the saga, Meridian had been advancing their digital-processing and D/A-conversion technologies in other products, particularly the 808.2 Reference, which John Atkinson called "the finest-sounding CD player I have ever heard" in his April 2009 review. For the 808.2, Meridian, in their words, "designed a much improved analogue output card. It has better analogue, digital, power supply and clock..."
circuits . . . partly possible because CPLD (Complex Programmable Logic Device) technology had improved since the original 808." This would be transferred to the 861, but "with different combinations of balanced and unbalanced outputs. . . . However in both 808.3 and 861v6 the clocks are also used in a different way. Where possible (from analog, CD or Sooloos) we have a pull-clock system that gives the jitter isolation benefit of the FIFO system but with an even more stable output clock." The hardware and clocking improvements had other consequences. "For example, the reference oscillators were upgraded to lower-noise and more controllable designs and relocated on the digital output cards to squeeze extra performance." Stereophile readers can find out about upgrading 861 Reference v1-4 by e-mailing stereophile@meridian.co.uk.

On the outside, the 861 Reference v6 ($25,995) looks like a shiny new 861 with a new Meridian "M" escutcheon on the front replacing the word "Meridian," but under the skin it’s all new. Some older modular boards are still compatible, and an array of new boards and functions is offered. Most significant are SpeakerLink connections for Meridian’s DSP speakers, inputs for MMHR, an “endpoint” card for optimal performance with Meridian’s Sooloos music-server systems, a unique, proprietary apodizing upsampling filter for all digital inputs, and 24-bit/192kHz DACs.

I have said before that speakers and room acoustics are the biggest determinants of system performance, and that the electronics, assuming they are of requisite quality, can have only a much more subtle effect. Since I have been listening to music in my Manhattan room for years, and the acoustics and speakers have been a constant for months, I expected that swapping out only my v4 for the almost identical v6 digital processor would require that I go through lengthy comparisons with my reference discs to hear any differences. But I was absolutely stunned. It was as if the entire system had been wiped away. I was hearing music with newfound clarity and smoothness. The changeover occurred with my FM tuner tuned to WQXR and their oh-so-familiar voices. No longer were those voices overripe, as if the announcers were too close to the microphone; instead, they sounded natural and seemed to be right in the center—which, of course, was not even playing for this two-channel broadcast. With all voices, and with music, there was a sense that the cobwebs had been brushed away, particularly those that affect the low end of the human voice. I immediately hauled out Lorraine Hunt Lieberson’s disc of Handel arias with Harry Bicket and the Orchestra of the Age of Enlightenment (SACD/CD, Avie AV0030), one of my references for voice quality, balance of soloist and orchestra, and all-out loveliness. The hush the Meridian seemed to cast over the room I attribute to its exquisite delineations of Lieberson’s voice and of the instruments, each of which was placed securely in the soundstage and unencumbered by false interchannel cues. The midrange and treble were delicately pure and transparent. This clarity and lack of distraction benefited every recording I played,
from Pavlo Beznosuk’s instrument in J.S. Bach’s Sonatas and Partitas for Solo Violin (SACD/CD, Linn CKD 366) to Szymanowski’s hugely powerful King Roger with Mark Elder and the Vienna Symphony (BD, C Major 702904). Everything seemed to emerge from a velvety silence unclouded by spurious resonance but fixed firmly within the recorded ambience. The 861 Reference v6’s delivery of power and dynamics was readily demonstrable with the opening movement of Rimsky-Korsakov’s Scheherazade, in the classic recording by Fritz Reiner and the Chicago Symphony (SACD/CD, RCA Living Stereo 66377). From the opening solo-violin passages, through the building crescendo with its emphasis on brass and upper strings, to the blossoming of the orchestra with the low strings, I felt the size and weight of a full symphony without electronic limits. And the drum kits in any track on Eric Clapton’s Crossroads Guitar Festival 2010 (BD, Rhino 525668) let me appreciate how the Meridian’s huge “music to noise” ratio contributes to dynamic impact.

Sure, I used Meridian Room Correction (MRC), carried over intact from v4 to v6 of the 861, and it did contribute to the quality of the sound. Depending on the profile chosen—Music, 2 Channel Logic, Multichannel—a total of 15 to 23 filters was applied to up to six channels (in my system, two B&W 800 Diamonds for front L/R, one B&W 802D center, two B&W 804S surrounds, and one JL Audio Fathom f113 subwoofer). But the major impact of the 861 Reference v6 was clearly audible even before I switched in MRC. MRC only put the icing on the cake, smoothing the in-room response of all the speakers below 250Hz, and shortening decay at several frequencies to create an overall room decay of about 350 milliseconds. From 250Hz up, the 861 v6 applied no EQ, and all was open and grainless.

How to reconcile the internal complexity of Meridian’s 861 Reference v6 with the disarming purity of the sounds it reproduces? If I had to, I could ascribe it to the long and logical evolution of the 861, during which Meridian has spared no technological expense in the effort to improve all aspects of performance from the perspectives of both engineering and psychoacoustics. Still, it perplexes me that all of its sophisticated machinery leaves fewer fingerprints on the music than do simpler designs. I just have to accept this latest version for what the 861 Reference has always been and still is: the best-sounding audio processor I have heard.
FOR THE FIRST TIME EVER OWN A BRAND NEW $15,000 SPEAKER FOR ONLY $3,750

VR-33

“...A triple crown winner. This is a product we need right now and a product we'll remember for a long time to come.”

- JOHN ZUREK
Positive Feedback - Issue 50

“I have heard nothing over the last 30 years that can touch the VR-33 in terms of imaging, soundstaging, and bass performance for anywhere NEAR their price.”

- GREG WEAVER
Positive Feedback - Issue 51

Full Range 25Hz - 30kHz | 10” Woofer | Premium European Components
Can be placed against the wall in any size room | Hand Crafted in California

Only available factory direct, your money goes to sound quality instead of mark-up, overpriced veneers and paint finishes.

VON SCHWEIKERT.COM :: 951.682.0706

We offer a full line of High End Audio and Home Theater Speakers as well as a complete line of cables.

World Radio History
How am I to convince music lovers that this CD is markedly different from Attention Screen's first two live CDs?

The question kept running through my head as I marveled at the breadth and maturity of Attention Screen's remarkable improvisations during a pre-concert sound check in the Piano Salon of Yamaha Artist Services, Inc. (YASI), at 689 Fifth Avenue, in the heart of Manhattan.

Attention Screen impressed even more at the public concert the following night, April 24, 2010. As the band members engaged in one improvisational miracle after another, fearlessly exploring new territory, the beauty and inventiveness of their playing astounded me.

Yet the question kept nagging. What could I do to convince those who might be tempted to dismiss the evening as yet another experiment in weirdness that Attention Screen's live performance at the YASI Piano Salon was an animal entirely different from those recorded by John Atkinson in February 2007 for Live at Merkin Hall (CD, Stereophile STPH018-2), and in fall 2006 and spring 2008 for Live at Otto's Shrunken Head Tiki Bar & Lounge (CD, Stereophile STPH020-2)? The differences were not merely of ambience and vibe; the increase in musical coherence was striking.
With the same innovations as KEF's revolutionary Concept Blade technology showcase, the all-new Q Series from KEF performs like speakers from a higher price class in terms of realism, musicality and off-axis dispersion.

**Q Series**

**All new Uni-Q array.**
Sweet, spacious and true, wherever you sit
A large vented tweeter in the centre of the bass/midrange driver, with a 'tangerine' waveguide and unique Z-flex surround to combine unrivalled dispersion with generous travel for the aluminium MF/LF cone.

**Advanced bass technologies.**
Deeper, tighter and more accurate bass
Inside the fashionably rectilinear cabinets, the new bass driver combines a rigid superlight cone with a massive vented magnet assembly and an oversized voice coil for exceptional sensitivity and distortion-free power handling.

**Total system design.**
A holistic approach, with no compromises.
These advanced new drivers only need first order crossovers, maximising fluency and transparency, and KEF's legendary attention to detail extends from innovations for easier bi-wiring to environment-friendly finishes.
Convincing disbelievers would not be an easy task. After all, Attention Screen was founded by a fellow contributing editor at Stereophile, Robert J. Reina, and recorded by our editor, John Atkinson. No one in his or her right mind would expect me to do anything but praise all concerned. How could I establish that my praise is genuine?

If only, I thought, I could get people to sample the CD’s first two tracks, “Sleeping Metronomes Lie” and “Ear Topology.” The former begins simply, with Bob Reina laying down a beguiling theme on the Yamaha AvantGrand N3 electronic piano (see www.stereophile.com/content/yamaha's-revolutionary-avantgrand-piano). After variations on the theme, it begins to morph chromatically. Despite a very low, ominous rumble from Chris Jones’ fretless bass guitar, matters seem under control until a single splash of cymbal from percussionist Mark Flynn opens wide the improvisational gates.

Way off on the left, in language all his own, Don Fiorino enters the conversation on electric guitar. As Chris begins to rumble, melodic themes slowly crumble, and the music transports players and listeners to a universe where galaxies could collide at any moment. Without notice, Bob shifts into swinging bebop mode, and Mark’s percussion strokes even out. Even Chris stops rutting in the mud long enough to bop along. Only Don continues on his own path, absorbed in his groove. It’s quite the ride, building in intensity until, quite unexpectedly, the players discover they have reached the end.

“Ear Topology,” an 11-minute “space music special” (to borrow John Atkinson’s words), starts as if from afar. As Chris’ fretless bass guitar engages in a wordless, outer galaxy call-and-response with Don’s echoing strings, drummer Mark’s beautifully judged percussion subtly frames and deepens the experience. Without warning, ET or his distant cousin appears on the scene. As he attempts to get a word in edgewise, Mark pounds just a bit harder, as though trying to cleave an opening between ET’s galaxy and his own. Only at 3:23 does Bob sound his first modest arpeggio on the Yamaha piano. Where the music goes from there provides proof of the quartet’s freshness.

In subsequent tracks more miracles await. Especially fascinating is the juxtaposition of “Yamanization,” recorded at Yamaha.
the concert, and "The Deer and Buffalo God Churches," recorded at the sound check the day before. Don begins both inquiries with the same short, catchy riff on acoustic guitar. What happens on each version after that is vastly different, yet so equally compelling as to serve as proof of the band's ever-inventive quest for musical and spiritual unity.

Whether you listen to Attention Screen Takes Flight at Yamaha (CD, Stereophile STPH021-2) by itself or in the context of the two previous Attention Screen CDs, you'll hear an ensemble whose members are wide open to new musical possibilities. The quartet's music is all its own, and all it needs to be. Inhabiting an improvisational universe that not only crosses and confounds genres but also makes fertile any attempt at categorization, Attention Screen has come of age.

But perhaps I get ahead of myself. Time to let John Atkinson discuss how and why he recorded the alchemical quartet known as Attention Screen in Yamaha's YAS Piano Salon.

—Jason Victor Serinus

Live Recording: Documentary or Artifice

I learned my way around a recording studio during my brief career (1972-1976) as a professional bass guitarist, during which time I recorded three albums and some 20 singles with various bands and singers. But I grew increasingly dissatisfied with the conventional practice of overdubbing voices and instruments onto a basic rhythm track until the producer deemed everything perfect. I was redoing my bass part on one session when it dawned on me that even though the notes I was playing fitted better with the overdubs and were technically better played, the organic feel that the drummer and I had created with the original track had been replaced by sterility.

As a result, with the recordings I now produce on my own account, I am biased toward the documentary approach. The musicians or singers perform together in the same space, and my job as the engineer is simply to capture their sound in as honest a manner as possible. This, for example, is how I recorded Attention Screen's second Stereophile CD, Live at Otto's Sinwaken Head (STPH020-2, http://tinyurl.com/4hyz7ve).

In the perfect hall, which Otto's certainly wasn't—I used two mikes to keep the set-up and load-out times to a minimum—you would need simply to put up a pair of perfect microphones in the perfect place and press Record. But as I have described in previous articles, such honesty can be an elusive target. Halls are never perfect, and even when they come close, finding that perfect position for the microphones is a task that can rarely be completed in the time available. And microphones are even less perfect than halls. As with the photographer's lens, there is no more critical decision when making a recording than choosing which microphones to use. That's why you rarely find used studio-quality microphones offered for sale; engineers never discard a tool that one day, under a new set of circumstances, might prove to be the best choice.

With literal honesty an unattainable goal, engineering thus becomes art, with artifice used to create a recorded sound that can convince listeners that they are present at the live event.

Recording engineer Jim Watson expressed this best on a pro-audio mailing list to which I subscribe: "All recordings are lies. The best recording/mix engineers are the best liars."
I wrote about this paradox at length in the September 2007
issue of Stereophile, explaining how I recorded and mixed At-
tention Screen’s Live at Merkin Hall (Stereophile STPH018-2,
www.stereophile.com/content/attention-screen-making-
live-merkin-hall-page-3). Manhattan’s Merkin Hall has a
beautifully ambient acoustic for a relatively small hall (it seats
400 people), but practical considerations forced me to depart
from documentary honesty in that project. I had to make each
instrument individually, as well as use two distant mikes, and,
from the resulting 10 tracks, create in the mix my concept
of what the listener in the hall’s Platonically ideal seat would
have heard. Artifice in the service of Art

Setting up my gear in the Yamaha Artist Services piano sal-
lon in midtown Manhattan presented me with a different set
of problems, which again worked against a purist approach
to capturing the sound of the band, forcing me to tell lies.
The salon seats up to 125 people, but is fairly deep and rela-
tively narrow, with a low ceiling. In addition, the low, shallow
stage has a vestigial proscenium arch that created some early
reflections that confused the imaging. The hall is fitted with
Yamaha’s Active Field Control sound-reinforcement system,
which overlays the basically dry acoustic with synthesized re-
verberation to give the illusion of a larger performing space.
While this worked well for the audience, I was dubious about
it offering the same enhancement if I used a single coincident
pair of microphones to record the band.

Then there were the issues raised by Yamaha’s AvantGrand
N3 piano. This purely electronic instrument—see www.stereophile.
com/content/yamaha’s-revolution-avantgrand-piano—repro-
duces the sounds of a sampled Yamaha concert grand, the com-
pany’s top-model CFHIS, from an array of four tri-amplified
loudspeakers where a conventional grand’s soundboard would
be and positioned at spots roughly corresponding to where the
sampling microphones were placed in the CFHIS. The N3’s
hammers strike sensors that play the samples at the pianist’s
intended volume levels. An adjustable “soundboard resonator
built into the cabinet emulates the resonances of an acoustic
piano’s soundboard. In addition, Yamaha’s Tactile Response Sys-
tem (TRS) uses two transducers in the soundboard to reproduce
throughout the entire instrument low-frequency vibrations that
can be felt by the player’s feet as they rest on the pedals. I thought
about taking a direct feed from the instrument as well as mixing
it, but while it does have stereo output jacks, using these.mutes
its acoustic output, which would not have been of much use to
the rest of the band, let alone the audience.

So, as with the Merkin Hall project, I was going to have to
mix each instrument separately and re-create the ideal sonic
picture of the event in the mixdown. I dealt with the problem
of stage acoustics by moving the piano and drums to the front
of the stage, though this gave rise to some problems with the
musicians not being able to hear one another as much as they
wanted. As the piano projected most of its sound forward to
the audience, guitarist Don Fiorino couldn’t hear as much of
pianist Bob Reina’s playing as he needed.

I could, of course, have sent a submix to wedge monitors
at the front of the stage, but my experience has been that
these overlay live recordings with a fat wodge of monos al-
convy something without speaking. When you know
somebody for so long, you can signal something that is
recognized right away.”

Although not by nature a contrarian, Don offered a
different take on how Attention Screen’s music may
develop. “Sometimes we can evolve into a groove that’s
okay, but it makes me wonder how long it’s going to
be on. At that point, I’ll take my guitar and crank up the
pedal and just do something jagged in there that changes
the direction. Or Chris may suddenly interject one of his
’humpback-whale screams,’ and then we’ll change into
another mood. I’ll pick up a slide in my right hand,
and start playing some scratchy overtones to break the
momentum before it becomes monotonous. You don’t
want to hook into just one thing that keeps on grooving
until we do a dance groove. We’re not a dance band, and
we’re not playing for a dance party.”

Don usually brings to a gig four or five different instru-
ments. At the YASI concert, he played his regular six-string electric
guitar, an electric mandolin, a lap steel guitar, and a former
12-string acoustic guitar that now has a nonstandard tuning
and only 11 strings. To ensure that the band doesn’t lock
in to the same grooves, he intentionally alters instrumental
combinations, colors, and dynamics at different gigs.
“I view it as packing my paint box before I go to the big
canvas,” he says. “I look at the gig as the big canvas, and
see what happens from there.”

Mark operates similarly, bringing different drums and
percussion to different gigs. Don once brought along a
tongue drum for him to play, and Mark has been known
to show up with various Korean drums. All of this ensures
that they won’t repeat what happened at one particular
gig that followed their Merkin Hall concert in 2007, when
they kept playing the same instruments and falling into
the same patterns.

“We definitely got into a rut,” says Bob, “but Chris
broke us out quickly. It was mostly my fault for trying to
structure pieces in advance. I’d say, ‘Let’s do these eight
pieces in this kind of style. Don will play this, and Chris
that.’ But we broke out of that. We basically slapped
ourselves across the face and said, ‘It’s not working.’ Now
everything is completely free. When we go to a performance,
I don’t even know what instruments Don or Mark are
gonna bring until they take them out of the case.”

Leave it to Don, who has an extensive background with
Vajrayana Buddhism, to sum things up: “The spirit of detach-
ment that you pick up through your meditation certainly
comes through in improvisational music because you ride
the flow with an improvising spirit.”—Jason Victor Serinus


World Radio History

65
Details...
At Emotiva, we sweat over things you’ll never see; like the stitched tinsel leads in our subwoofers.

Why?
Because it is the correct way to design high reliability woofers that will play loud and low... forever.

Quality.
It’s in the details. It’s our way of life.

depth or deeper.
your choice.

passion • performance • technology

www.emotiva.com
ATTENTION SCREEN TAKES FLIGHT AT YAMAHA

promise between the competing requirements of recording and performing. I aimed Don's guitar amp, at audience left, diagonally across the stage so that Bob, at audience right, could hear him. I rotated the piano slightly, so that some of its sound reflected off the lid would reach Don.

The miking was basically identical to what I'd used at Merkin. For the piano, I used a pair of Neumann TLM103 solid-state cardioids, about 15" above the AvantGrand's array of speakers. The Neumanns were initially arranged as an ORTF stereo pair (7" apart, angled at 110°), but I ended up pulling them farther apart to give a more even stereo spread from low to high frequencies. For the guitar, I used a single Shure SM57 cardioid, placed about 1" from one of the Fender Vibrolux amplifiers' twin speakers and midway between the dustcap and the surround. For the bass guitar, I took a direct feed from Chris Jones's Trace Elliot bass amp.

I used four microphones for Mark Flynn's drums. An AKG D112 was placed just in front of the kick-drum's front skin, near the felt damping strip, and a tiny Shure Beta 98 capacitor mike was clipped to the snare-drum shell so that its capsule was about 2" above the top skin. These close mikes would give me a good representation of the drums' "body tone," while the snare-drum mike would also capture some of the attack on the hi-hat cymbals. I used a pair of DPA 4011 cardioids as an ORTF pair over the drums, around 3' above the cymbals. This would give good pickup of the cymbals, toms, and snare wires, but also some hall sound, and a stereo picture of the drums that I would use as a backdrop in the mix.

I positioned a spaced pair of Earthworks QTC-40 omnis just in front of the front row of audience seats. These mikes fed the low-noise mike preamps of a Metric Halo ULN-2 two-channel audio interface, and those signals were converted to digital with the ULN-2's 24-bit A/D converters running at 88.2kHz. The ULN-2 was connected via FireWire to a Mac mini computer, which would store the data on its internal hard drive. The other seven mikes and the bass-guitar feed fed a Metric Halo MIO2882+2d, an eight-channel preamp-A/D converter also operating at 24-bits/88.2kHz and slaved to the ULN-2 with an AES/EBU link. The MIO2882 was also connected to the Mac mini via FireWire. Because the MIO2882's mike preamps are not as quiet as the ULN-2's, I used low-noise Millennia Media HV3 mike preamps for the pairs of mikes on the piano and drums.

The 10 channels were recorded as mono AIFF files with the Record Panel of Metric Halo's MIO console. The mixdown to a 32-bit stereo file for each improvisation, with some slight equalization as well as some notching of AC buzz from the guitar amp, was done using Adobe Audition 3 running on a PC. For the mastering, sample-rate conversion, and dithering, I used Bias Peak Pro XT on my MacBook.

Mixdown

The key to a successful mix of a live recording is to echo the musicians' positions on the stage. The basic mix has the piano's stereo image panned from stage center to far right, the stereo drum image covering the full width of the stage, the guitar panned hard left, the bass guitar placed at the center of the stage, and the kick drum a little to the left, where it had been in real life. The snare-drum mike was initially also placed in the center, but I eventually moved it a little to the right of center so that the hi-hat image was appropriately placed in the soundstage.

We'll let the experts do the talking ...

"Through the Wharfedales, the percussion and brass sounded so sweet and compelling that I couldn’t help but think again that the Diamond 10.1 is a great jazz speaker. But when the violin and clarinet came waltzing in, sorrowfully and methodically, to flood my listening room with pure emotional intensity so rich and sumptuous I could cry, I realized that the Wharfedales weren’t performing only as great jazz speakers, providing nuance and resolution, but also as great emotional conductors."

- Stephen Mejias, Stereophile / April 2011

Wharfedale USA / Sound Import, LLC
14 A Rosenfeld Drive
Hopedale, MA 01747
508-422-9788

Wharfedale
THE WORLD'S MOST FAMOUS SPEAKERS ... SINCE 1937

www.wharfedaleusa.com

100% of components in every Wharfedale speaker are manufactured in-house with no middle vendors. This dedicated process results in exceptional sound and build quality for an unrivaled value.

BDP-95 Universal 3D Blu-ray Disc Player

- A universal player for audiophile users
- SABRE Reference Audio DAC
- Blu-ray, DVD, SACD and DVD-Audio
- FLAC & WAV playback from USB & network
- Dual HDMI, RS232, eSATA, Wireless-N

- Toroidal Power Supply
- Dedicated Stereo Output
- XLR Balanced Output
- Latest Qdeo video processing
- 2U Rack Mountable

For product information and availability, please visit www.oppodigital.com.

OPPO Digital, Inc.
www.oppodigital.com (650) 961-1118

2629 Terminal Blvd. Suite B
Mountain View, CA 94043
However, while my first mixes were clean, they were also very dry. The distant audience mikes, fed to the left and right channels, just didn't pick up enough of what little hall ambience there was. While the Merkin Hall acoustic had added a rich warmth to Don's guitar, the instrument sounded one-dimensional in the YAS salon recording. And although Don was using both reverb and repeat-echo effects pedals, his sound resolutely emanated from one position in space.

It was time to step even further away from my purist, documentary approach and tell even bigger lies. I created an additional stereo guitar track using the audience mikes and the spot mike on Don's amplifier. This I treated with some of Adobe Audition's reverb algorithms to mimic those in Don's Boss effects pedals so that, with judicious use of panning and gain riding (both of which can be automated in Adobe Audition's multitrack mixing window), the effect would be to make the images of Don's instruments sound both more solid and more true to what the audience heard live. I did take the liberty, however, of expanding on what had happened at the concert in the second track, "Topology," where Don is already using reverb effects to create washes of sound. What you hear for much of this track is the enhanced stereo version of the guitar track, which adds an element of spaciousness to what Don was playing.

I used a similar philosophy at the climax of "13 Trojans of Vundo" to give the impression that Don's lap steel is both expanding in size and rising in the air as his playing increases in frequency—an especially cool effect with headphones. Everything else that sounds out of the ordinary on this recording, however, stems from Chris Jones's inventive use of his Boss digital delay and Mooger Fooger ring-modulator pedals.

But the mix still sounded very dry. And the dynamic range was extreme, which meant that, too much of the time, the CD would be very quiet. In the mastering, therefore, I used two tools from Metric Halo, implemented in the MIO288+2d's DSP circuitry and applied to the 24-bit, 88.2kHz two-channel files. First, the processor's Transient Control engine permits gentle and thus virtually undetectable reduction of dynamic range. I used Transient Control as I had on the Otto's Shrunken Head CD, to reduce the transient peaks by 3dB. This allowed me to bring up the average level, hence the album's overall loudness, by the same 3dB. For the recording engineers reading this, my goal was for the album's dynamic range to conform to K-20 on a meter calibrated with the scale developed by Bob Katz, which is typical of audiophile and orchestral mixes.

Second, Metric Halo's Haloverb is one of the better-sounding reverberation algorithms around; I adjusted its parameters to synthesize a room acoustic very similar to that of the YAS salon, but less dry. I used just enough of this synthesized acoustic to add some dimensional modeling to the instrumental images—to glue them together, as it were—but not so much that it would be perceived as audible echo. In effect, while the direct sounds of the instruments were what you would have heard in the front row of audience seats that night in April 2010, the balance between those direct sounds and the hall ambience would be what you would have heard a few rows farther back. The best of both worlds. Artifice in the service of Art.

You can buy the Attention Screen Takes Flight at Yamaha CD from our online shop (http://shop.stereophile.com), with 24-bit/88.2kHz FLAC files eventually available as downloads. I hope you enjoy listening to the music as much as the sold-out audience did. — John Atkinson
CLOSEOUT - LIMITED QUANTITIES
CANTON KARAT 755
CENTER CHANNEL SPEAKER
List Price: $1000 SALE: $599

CLOSEOUT - LIMITED QUANTITIES
CANTON KARAT 750 SUBWOOFER
List Price: $2000 SALE: $1199

STAX SR-507
ELECTROSTATIC HEADPHONES
$1100

CLOSEOUT - LIMITED QUANTITIES
EPOS AVS 5.1 SYSTEM
- SATELLITES
- CENTER CHANNEL
- SUBWOOFER
List: $1800
SALE: $1299
*stands sold separately

MUSICAL FIDELITY M1 DAC
$699

MUSICAL FIDELITY V-DAC
$299

FURUTECH GT-40
$525

HRT MUSIC STREAMER II
$149.95

NITTY GRITTY RECORD MASTER
$375

SPIN CLEAN RECORD WASHER
$79.99

MO-FI RECORD SLEEVES
$20

ONZOW ZERODUST
$69

IN THE GROOVE RECORD CLEANER
$19.99

ACOUSTECH STYLUS
FORCE GAUGE
$79.99

REK-O-KUT DISC STABILIZER CLAMP
$50

NEW MUSIC HALL RECORD MAT
$50

Hi-Fi News
TEST RECORD
$44.99

MILTY ZEROCAST GUN
$100

DB SYSTEMS
PROTRACTOR
$49.99

(Not shown)
CANTON KARAT 790
FLOORSTANDING SPEAKERS
List: $4000 pair
SALE: $2399 pair

Established 1979
NEW LOCATION!

Toll Free 800 229.0644 | Phone 612.378.0543 | Fax 612.378.9024 | Email info@NeedleDoctor.com
6006 Excelsior Blvd., St. Louis Park, MN 55416

www.needledoctor.com
As B&W's 800 Series has evolved, *Stereophile* has reported on its progress. Lewis Lipnick reviewed the Matrix 801 Series 2 in 1987 (www.stereophile.com/content/bw-matrix-801-series-2-loudspeaker), and Wes Phillips wrote about the Nautilus 801 in 1999 (content/bw-nautilus-801-loudspeaker). I reviewed the B&W 800 Signature in 2002 (content/bw-signature-800-loudspeaker), and the 802D in 2005 (content/bw-802d-loudspeaker). This is getting to be a habit.

In the years I've lived with the 802Ds, they've continued to provide wonderful musical experiences, and, like an old married couple, we've adapted to each other. I've adapted to their slight emphasis of the high frequencies and their upper-bass ripeness; they, in turn, have blended comfortably into my room's décor. But recently B&W sent me a pair of 800 Diamonds, the flagship model of their new range, to challenge my resident 802Ds and the audio world at large.

The 800 Diamond doesn't look radically different from its predecessors. Indeed, from the introduction, just before 2000, of B&W's Nautilus series, with its distinctive midrange and tweeter enclosures of tapered Marlan, to the new Diamond series, any changes in appearance have been fewer and subtler than those seen in automobiles each year. However, B&W has advanced the technology with each series, and there is always something new under the hood. With the 800 Diamond, though, some of the visible changes are themselves functionally significant.

First, the new grilles for the woofer and midrange cones are attached to the front panels by invisible magnets, as were only the tweeter grilles on the earlier three-way, vented-box, floorstanding loudspeaker. Drive-units: 1" (25mm) diamond-dome tweeter, 6" (160mm) woven-kevlar FST-cone midrange unit, two 10" (250mm) Rohacell-cone woofers. Crossover frequencies: 350Hz, 4kHz. Manufacturer's specifications: Frequency range: 25Hz-28kHz, ±3dB on reference axis. Dispersion: within 2dB of on-axis response over 60° (horizontal) and 10° (vertical) arcs. Sensitivity: 90dB SPL (2.83V/m). Harmonic distortion (second and third harmonics, 90dB, 1m): <1.0%, 45Hz-100kHz; <0.5%, 80Hz-100kHz. Impedance: 8 ohms nominal, 3.1 ohms minimum. Recommended amplification: 50-1000W into 8 ohms with unclipped program. Maximum recommended cable impedance: 0.1 ohm.

### Measurement
- Frequency: 32Hz-28kHz, ±3dB on reference axis.
- Dispersion: within 2dB of on-axis response over 60° (horizontal) and 10° (vertical) arcs.
- Sensitivity: 90dB SPL (2.83V/m).
- Harmonic distortion (second and third harmonics, 90dB, 1m): <1.0%, 45Hz-100kHz; <0.5%, 80Hz-100kHz. Impedance: 8 ohms nominal, 3.1 ohms minimum. Recommended amplification: 50-1000W into 8 ohms with unclipped program. Maximum recommended cable impedance: 0.1 ohm.

### Price
- $24,000/pair. Approximate number of dealers: 250.

### Manufacturer
- B&W Group Ltd., Dale Road, Worthing, West Sussex BN11 2BH, England, UK.
- Tel: (44) 01903-221500.
- Fax: (44) 01903-221501.
- Web: www.bowers-wilkins.co.uk.
- Tel: (978) 664-2870.
- Fax: (978) 664-4109.
“Clearaudio has infused the Concept with much of the decoupled DC-motor technology from its classy Innovation Wood turntable... it's the 'table to beat in this range.'
—Wayne Garcia, The Absolute Sound, September 2010

“One of the Greatest Bargains in High End Audio”
—The Absolute Sound, November 2010

“Clearaudio created something special with the Concept...it almost matched my reference SME 30 for detail, if not for absolute extension and transparency...we are dealing with something beyond the ordinary”  —Ken Kessler, HiFi News, July 2010

“Fantastic value from Clearaudio: what a Concept...I feel this table is the new benchmark in its price class.”  —Jeff Dorgay, Toneaudio, August 2010

“Easy to set up; great build; excellent all-round sonic performance.”  —What HiFi, August 2010

“Combines some stunning innovations along with other improvements that have been applied to much of the Clearaudio line during the past four to five years, like ceramic magnetic bearing (CMB) technology...the sound is big, dynamic, and bold, as you hear it in a concert hall...the leading edges of transients are preserved so percussion instruments have amazing snap, and tympani strikes are so explosive they’ll send shivers down your spine. PRAT fans will love the way the Clearaudio keeps their toes tapping on a wide range of recordings...a brilliant achievement and sets new price/performance standards in several areas.”  —Jim Hannon, The Absolute Sound, August 2010

Musical Surroundings
phone: 510.547.5006 www.musicalessurroundings.com
B&W 800 DIAMOND

series. While that provides for a clean appearance when the grilles aren’t in place, it also eliminates the need for any fussy swapping of the phase plugs on the Kevlar FST midrange driver. Previous 800s had a solid phase plug of shiny brass, but before affixing the grille it was necessary to unscrew this and replace it with a hollow plastic plug with a hole in its tip, which served to accept the grille’s mounting pin. Who wants to mess with that before receiving visitors, especially if they bring the kids?

Second, and more significant in terms of performance, the Rohacell woofers have smaller dustcaps, but their smaller size is a function of a B&W’s new “mushroom” diaphragm construction, which bonds the cone, dustcap, and voice-coil bobbin into a single unit rigid as a girdle. B&W’s earlier Rohacell woofer cones had a huge central convexity that was part of the diaphragm’s design. A more potent electromagnetic engine drives the new woofers, powered by a motor system with two neodymium magnets to provide a more symmetrical magnetic field over long excursions, thereby reducing distortion and increasing dynamic response.

Third, B&W’s diamond tweeter has been reengineered. It has a new suspension, and four high-permeability magnets are used to reduce dynamic compression at high volumes.

Fourth and finally, the use of gold-silver-oil Mundorf capacitors in the HF crossover filter—like the diamond tweeter, once restricted to the earlier 800D—is now used throughout the 800 Diamond series, including the 805 bookshelf and the two Diamond center-channel models, the HTM2 and HTM4. This will contribute to more accurate timbral matching in multichannel arrays.

My review samples were finished in a superlative Gloss Piano Black accented with gold trim lines around each driver. The body of the 800 Diamond is supported above the substantial base by five sturdy pillars, three at the front and two at the rear. The space thus created and the matte silver finish of the base top and pillars create the illusion that the large main enclosure is floating in air. Thus, while the 800 Diamond is

---

**Measurements**

I used DRA Labs’ MLSSA system and a calibrated DPA 4006 microphone to measure the B&W 800 Diamond’s frequency response in the farfield, and an Earthworks QTC-40 for the nearfield responses. For logistical reasons, the loudspeaker I measured was not one of the samples auditioned by Kal Rubinson. My estimate of the B&W’s sensitivity was 90.2dB(B)/2.83V/m, which is within experimental error of the specified 90dB. This is higher than average, but is offset by the fact that the speaker’s impedance drops below 4 ohms for most of the midrange and some of the bass (fig.1). There are minima of 3.15 ohms at 91Hz, 3.1 ohms at 620Hz, and 3.67 ohms at 21kHz. Given that there are current-hungry combinations of 4 ohms and -52° electrical phase angle at 62Hz and 5.3 ohms and -39° phase angle at 8.6kHz, I believe this speaker should be rated as a 4 ohm load rather than the specified 8 ohms.

The traces in fig.1 are free from the discontinuities that would imply the existence of cabinet vibrational resonances; using a simple plastic-tape accelerometer, I found nothing. Fig.2, for example, is a cumulative spectral-decay plot calculated from the accelerometer’s output while it was fastened to the side of the 800’s bass enclosure, level with the upper woofer. There is almost nothing to be seen.

The blue trace in fig.3 shows the response of the woofers (which behaved identically), measured in the farfield above 350Hz and in the nearfield below that frequency. The upper-bass peak in their output will therefore be due to the assumption in the nearfield measurements that the drive-units are operating in a 2πi acoustic environment; i.e., mounted in a baffle that extends to infinity in all directions. The notch in the woofers’ output at 25Hz confirms that this is the tuning frequency of the flared, downward-firing port.

---

**Fig.1** B&W 800 Diamond, electrical impedance (solid) and phase (dashed). (2 ohms/vertical div.)

**Fig.2** B&W 800 Diamond, cumulative spectral-decay plot calculated from output of accelerometer fastened to center of side panel adjacent to upper woofer (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz).
only an inch taller than the 802D, and while the 800 Diamond is larger and heavier than the black-based, rosewood-finished 802D, it doesn’t look it when placed next to the earlier model.

**Set-up**
The 800 Diamonds’ shipping cartons are huge—I was grateful for the assistance of Park Avenue Audio in unpacking and positioning the speakers. (Actually, I watched, they worked.) Shortly after they had made the carton disappear, B&W’s Doug Henderson and Park Avenue’s Dennis Yetikel showed up to advise on the finer points of speaker setup. Henderson had brought along a favorite recording with very full, tight bass, with which he tried to optimize the 800s’ sound for maximum bass and without excessive bloom. He did that, but I think none of us was really satisfied—there was a lot of bass power, but with a bit of flab.

Not until I had at last been left alone with the 800 Diamonds did I discover that my Classe CT-SSP surround-sound processor was still configured with bass room-equalization settings for my resident 802D speakers, and that these filters were still in circuit. When I bypassed that EQ, the bass immediately became more taut and defined. (Henderson e-mailed me a copy of his test track and with a little tweaking, I could confirm that the bass was well-defined.)

**Sound**
But I’m getting ahead of myself. My first impression of the 800 Diamond was that it played much louder than the 802D, even though the two speak-
ers’ claimed sensitivities are identical. It wasn’t long before I realized that the cause was a distinctively more smooth and balanced midrange that projected voices and melodies into the room. As a result, for a typical comfortable listening level, my preferred volume settings for the CT-SSP were 4-5dB lower than for the 802D. That’s significant in terms of amplifier power, and may go a long way toward mitigating the general observation that B&W’s past 800 models demanded gobs of power.

There’s another way to look at this phenomenon. Both the 802D and 800 Diamond could play at very high levels without distress, but I found I could play the 800 at much higher levels without evoking any listener stress. The 802D seemed to have a slight built-in “loudness compensation” that tipped up both the upper-bass and mid-treble; while that was warmly pleasant at normal listening levels, at much higher levels it sounded somewhat overwhelming. Strangely, the larger 800 Diamond had less artificial “authority” at all levels, while lacking nothing in terms of power, impact, bass extension, or weight.

Boccherini’s La Musica Notturna delle strade di Madrid, from the Stuttgart Chamber Orchestra’s Die Rohre—The Tube (SACD, Tacet 5 074), which sounds so impressive through the 802Ds, was even better with the 800 Diamonds, with both ample and right, as revealed by the fourth movement of Mendelssohn’s Organ Sonata 1 in F, as performed by Thomas Murray (CD, Raven OAR-390): as the pedal notes descended, each shudder was not an ambiguous roar but had a clearly discernible pitch.

Bigger ensembles were magnificently portrayed by the 800 Diamonds.

My first impression of the 800 Diamond was that it played much louder than the 802D, even though the two speakers’ claimed sensitivities are identical.

Fig.6 B&W 800 Diamond, 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.

Fig.7 B&W 800 Diamond, 1/4-octave smoothed, averaged response of left and right speakers at 1m in KR’s listening room (blue); spatially averaged LF response of left speaker at listening position (4m) in KR’s room (red).
HIFIMAN HE-6
PAY LESS FOR WORLD'S BEST HEADPHONES

The HE-6 features a gold diaphragm and a highly efficient magnetic orthodynamic circuit design. Orthodynamic technology is a design in between dynamic and electrostatic headphones and speakers. Orthodynamic headphones have lower distortion than dynamic headphones and can be driven by standard dynamic headphone amplifiers.

HE-4
Pay Entry Level price for real Hi-end
$449 MSRP

HE-5LE
Beat competitors twice its price
$699 MSRP

EF5
An affordable amplifier to bring out your headphones' best
$399 MSRP

HiFiMAN
Head-Direct Corporation
Customer Service Tel: 1-347-475-7673
Fax / Voice mail: 1-718-766-0660

www.head-direct.com

---

Unparalleled Clarity and Sound

A beautifully produced song is like a painting, layer upon layer of details added throughout the mixing process. With conventional earphones, hearing each detailed reproduction at its highest quality is extremely difficult. reavoice earphones are built to enable you, the listener, to explore your music as if you were right there in the studio. Whether the emphasis is on strong vocals or smooth sounding classical music, reavoice is the preferred choice of the discretionary listener.
and pianist Menahem Pressler (CD, Philips 438 700), which is a bit brighter than the recent version from Christian Tetzlaff, Marie-Elisabeth Hecker, and pianist Martin Helmchen (SACD/CD, Pentatone PTC 5186 334). The older recording conveys a sense of time stopped, while the newer makes more of the passionate contrasts; the 800 Diamonds presented both with sweet, round string tone and no harshness or grain. However, with lesser source material, the 800 Diamond's tweeter could reveal blemishes with clinical honesty. Digital music files streamed at low bit rates demanded a high-frequency filter, as did some high-definition downloads (6181)—had more sizzle and snap than was comfortable for me.

But most important, the 800 Diamond sounded absolutely devastating with really good recordings, particularly in its revelation of voices, both solo and in groups. I've pretty much given up on "audiophile preferred" recordings, but demos at the 2011 Consumer Electronics Show confirmed my decision. The older recording conveys a sense of time stopped, while the newer makes more of the passionate contrasts; the 800 Diamonds presented both with sweet, round string tone and no harshness or grain. However, with lesser source material, the 800 Diamond's tweeter could reveal blemishes with clinical honesty. Digital music files streamed at low bit rates demanded a high-frequency filter, as did some high-definition downloads (6181)—had more sizzle and snap than was comfortable for me.

But most important, the 800 Diamond sounded absolutely devastating with really good recordings, particularly in its revelation of voices, both solo and in groups. I've pretty much given up on "audiophile preferred" recordings, but demos at the 2011 Consumer Electronics Show confirmed my decision.
The NEW VTL MB-450 Series III with fully Balanced Differential Drive
Power, control, and tonal accuracy.

User-adjustable Damping Factor with zero global negative feedback for musical control.

VTL amplifiers use a simple, pure circuit path, extended bandwidth transformer, and a high-capacity power supply to provide the dynamic power to handle your most complex music, while delivering the agility and sweet tonal purity that only a tube amplifier can.

See and hear the latest VTL products for yourself soon.
Contact us today for the name of your nearest authorized VTL dealer.

VTL Amplifiers, Inc. 4774 Murrieta St., Suite 10, Chino CA 91710, Tel: 909-627-5944, mail@vtl.com

www.VTL.com
Electronics Show exposed me to many impressive examples. Thanks to Philip O'Hanlon of On a Higher Note, who gave me a CD-R copy of his "Demo Mix XIII," it was easy to try some of these tracks with the 800s. Wow! In the *Agnus dei* from Ariel Ramirez's *Missa Criolla*, conducted by José Luis Ocejo, tenor José Carreras's voice simply floated in space, but with great warmth and presence, as the supporting voices and instruments were arrayed across the soundstage (CD, Philips 420 955 or First Impression Music LIMK2HD040). The voices of Shirley Horn ("Beautiful Love," from *You Won't Forget Me*, Verve 847 482-2) and Renée Fleming (singing Leonard Cohen's "Hallelujah," from *Dark Hope*, Decca 80014186-2) were magically close and lush, and cushioned in a relaxed, spacious ambience. These recordings, of course, were selected for just these qualities, but if memory serves, none of the hotel-room demos I heard at CES could approach the delight of what two 800 Diamonds did in my living room. My taste in Ms. Fleming's repertoire, however, veers to Richard Strauss and his devastatingly luscious valedictory, *Four Last Songs* (Renée Fleming, Münchner Philhamoniker/Christian Thielemann, Decca 478 0647). Here Ms. Fleming's glorious soprano soared over the spacious carpet of Strauss' orchestra and thrilled me more than Cohen's wry "Hallelujah." For any audiophile worth his salt, what could be more satisfying?

**Comparisons**

How did the 800 Diamond compare with other speakers that have graced my room in recent months? Without hearing them side by side, I must rely only on my notes to supplement my memory, but here goes. From the midrange down, the Canton Reference 3.2 DC that I reviewed in June 2010 seemed most similar in performance to the B&W, but while the Canton was a bit reticent with voices and throughout the upper midrange, the B&W was more transparent and open. The trade-off was that the Canton was more than forgiving of steely violins and the hashy HF of Web radio streamed at low bit rates, where the B&W was fairly ruthless.

As for B&W's own 802D, see my comments above; in brief, the 800 Diamond was distinctly more even throughout the audioband. The 800 Diamond lacked the 802D's generous warmth in the range around 100Hz and, yet, it had a stronger low end with decidedly more dynamic punch. This performance makes me wonder if JA will find the same "awkward combination" of low impedance and phase angles in its test.

**BOWERS & WILKINS' 800 DIAMOND WAS, OVERALL, SIMPLY A PLEASURE TO LISTEN TO.**

The bass as he did with the 802D. As for the Revel Ultima2 Studio (reviewed in March 2008), memory won't permit me to say much more than that I recall it sounding as open and balanced as the 800D, but with a bit less focus in the extreme HF. He is there to an audio salon and compare them for yourself.

**Conclusions**

Bowers & Wilkins' 800 Diamond was, overall, simply a pleasure to listen to. B&W continues to improve the underlying technology of its 800 series speakers and the result is apparent in the 800 Diamond's sound. Its overall honesty, attested to by the 800 series' heritage as studio monitors, lets the 800 Diamond get the most information out of all recordings without, as far as I could tell, any practical limitation in dynamic range. Better yet, the 800 offered the same balanced sound at all listening levels, and the pair of them threw a remarkably huge and detailed soundstage. And surprisingly for such large, elegant-looking speakers, they seem to disappear from your awareness to leave the listener alone with just the music.

---

**ASSOCIATED EQUIPMENT**

- Sony XA-5400ES SACD/CD player, Oppo BDP-835SE universal Blu-ray player.
- Parasound JC2 BP, Classé CT-SSP surround-sound processor, Meridian HD621 HDMI audio processor & 861 Reference v4/V6 digital surround controllers.
- McIntosh MC303 (three-channel), Bel Canto Design REF1000mkII (monoblocks).

---

-Kalman Rubinson
**KIMBER KABLE SPEAKER CABLES**

- **KIMBER KABLE BIFOCAL-X**: $1988 per 8 ft pair
- **KIMBER KABLE MONOCLE-X**: $1510 per 8 ft pair
- **KIMBER KABLE HERO V11E37-144**: $352 per meter pair
- **KIMBER KABLE HERO ULTRAPLATE**: $200 per meter pair
- **KIMBER KABLE GO MINI- CU**: $90 per meter pair
- **KIMBER KABLE TONIK**: $74 per meter pair
- **KIMBER KABLE CADENCE ULTRAPLATE**: $90 per meter
- **WBT-0144**: $129 per meter
- **W8T-0102CU**: $175 per meter

**HDMI CABLES**

- **KIMBER KABLE HD-29**: $277 per meter
- **KIMBER KABLE HD-19**: $139 per meter
- **KIMBER KABLE HD-09**: $79 per meter

**IPOD CABLES**

- **KIMBER KABLE HERO WBT-144**: $262 per meter pair
- **KIMBER KABLE HERO ULTRAPLATE**: $200 per meter pair
- **KIMBER KABLE PBJ**: $108 per meter pair
- **KIMBER KABLE TONIK**: $74 per meter pair

**TONEARM CABLES**

- **KIMBER KABLE TAK CU**: $300 per meter

**SUBWOOFER CABLE**

- **KIMBER KABLE CADENCE SUB**: $90 per meter

**NEW LOCATION!**

To Free 800.229.0644 | Phone 612.378.0543 | Fax 612.378.9024 | Email info@NeedleDoctor.com

6006 Excelsior Blvd., St. Louis Park, MN 55416

www.needledoctor.com
The two-way, biwirable, rear-ported Dreamcatcher is designed and manufactured in Canada; its drive-units are designed by Totem, but made and assembled in Europe. The 1" titanium-dome tweeter, manufactured by German Acoustik, is mated to a 4" Scan-Speak woofer. Totem founder Vince Bruzzese feels very strongly about sourcing his drivers in the West. In the past, he got his small woofers from Peerless in Denmark, but switched to Scan-Speak when Peerless started manufacturing in China. Bruzzese also pointed out that the tweeter used in the Dreamcatcher costs him 16, more than 15 times as much as most similar Asian-made tweeters.

The Dreamcatcher is built using lock-mitered construction, a technique derived from the construction of heirloom furniture, which Totem claims contributes to a speaker cabinet’s rigidity, longevity, and visual beauty. The speakers are available finished in Black Ash or genuine Mahogany ($575/pair), Cherry ($625), or White ($650). My white samples were quite attractive, blending with my room’s décor without calling attention to themselves.

When I knocked on a Dreamcatcher’s cabinet, I could sense no trace of cabinet resonance—something I expect to experience only with much more expensive speakers. Totem strongly recommends that the Dreamcatchers be listened to with their grilles removed. I listened with and without the grilles, and heard a negligible difference; grille-less, there was a touch more transparency. I was further encouraged to leave the grilles off because they made the Dreamcatcher look cheap; naked,
INNER STRENGTH OUTER BEAUTY

Reference USB Audio Cables
Fastest Transmission Speed
Lifelike Sound Quality

DNA Helix™ Design with isolated power lead
*Patent Pending

Platinum Starlight USB
6 solid-silver signal conductors
(Twice as many as other USB cables)

Silver Starlight USB
6 silver-clad OFC conductors

Wireworld is the premier provider of leading edge digital and analog A/V cable technology, with a comprehensive range of objectively superior interconnect, speaker, power and HDMI cables.

www.wireworldcable.com
sales@wireworldcable.com • www.twitter.com/wireworldcable
the speakers looked like much more expensive speakers. Totem also recommends that the Dreamcatcher be given 40–50 hours of break-in before any serious listening is begun. (My review samples had already had over 100 hours of break-in when I received them.) As usual with bookshelf models, I placed the Dreamcatchers on my steel Celestion Si stands, which I’ve filled with sand and lead shot.

**Sound**

The Dreamcatcher has been one of the most difficult speakers I’ve reviewed, with a sound very different from that of any other affordable speaker I’ve heard. It took me many hours of listening to get to the bottom of what made this little speaker tick, and to find the appropriate words to describe its performance.

It’s easiest to describe what the Dreamcatcher doesn’t do. The laws of physics dictate that there is a limit to the bass extension possible from a small bookshelf speaker. Although the Dreamcatcher didn’t sound bass-shy to me, we’ll see where John Atkinson’s measurements reveal its lower limit to be. It’s also not physically possible for a speaker this small to create the high-level dynamic slam of a larger floorstanding loudspeaker, especially with recordings of dramatic orchestral works. Finally, the Dreamcatcher didn’t strike me as being the most well-balanced speaker—its high-frequency reproduction is very extended compared to its limited bottom-end extension. The Paradigm Atom v.5, for example, has a much better-balanced sound in which its subjective HF attenuation seems to match its lack of bass extension. But the Dreamcatcher never sounded bright, and its extended HF performance didn’t emphasize the lack of low bass, for example, as did the original ProAc Tablette when I last heard it.

Those minor caveats out of the way, I can comfortably say that the Totem Dreamcatcher’s performance was just about flawless throughout my listening. From its taut, tuneful, perfectly clean midbass to the highest frequencies, there was no trace of coloration or distortion, and the ability of the pair of them to throw a wide, deep soundstage, even when I sat off axis, was beyond reproach. And for

---

**Measurements**

I used DRA Labs’ MLSSA system and a calibrated DPA 4006 microphone to measure the Totem Dreamcatcher’s frequency response in the farfield. For the nearfield response, I used an Earthworks QTC-40, which has a ¼” capsule and therefore won’t appreciably change the tuning of the small-diameter port. Despite its small size, the Dreamcatcher’s sensitivity was average, at an estimated 87.5dB/2.83V/m, which conforms with the specification. Its impedance (fig.1) remains above 6 ohms for most of the audioband but does drop to 3.8 ohms in the lower midrange. The combination of 5 ohms and –38° electrical phase angle at 170Hz will make a good 4 ohm-rated amplifier optimal for use with this speaker.

Bob Reina noted that he could detect no cabinet vibrational resonances, and the impedance traces below 1kHz are free from the small wrinkles that would indicate the presence of such resonances. Even so, examining the behavior of the undamped cabinet walls with an accelerometer revealed strong modes at 613 and 1100Hz (fig.2); these were present on all surfaces. There is a slight discontinuity in the impedance traces at this frequency, as well as another at 1500Hz, and as I was taking this measurement I could hear a whistle-like character to the sound of the MLS noise. These modes therefore appear to be not vibrational modes as such, but strong acoustic pipe resonances in the deep, narrow port.

This was confirmed by measuring the port’s output in the nearfield (fig.3, red trace), where the upper-frequency modes are higher than the port’s output in its tuning region, and even give rise to a small peak in the Dreamcatcher’s farfield output. I dismantled one of the speakers and saw that the inner opening of the port almost touches the tweeter magnet. I conjecture that this restricted access means that the circular edge of the port acts like an edge-blown flute mouthpiece. However, these resonances are of very high Q (Quality Factor), so may not be as audible as suggested by this graph. (The higher its Q, the longer a resonance needs to be stimulated with energy at the same frequency for it fully to develop.) Other than that problem, the port is tuned in classic manner to 57Hz, slightly lower in frequency than the minimum in the impedance-magnitude plot (fig.1, solid trace), with a well-behaved bandpass nature and a corresponding, well-defined notch in the woofer’s response at the same frequency (fig.3, blue trace). The speaker offers a flat midrange, but the use of a first-order crossover—a single air-cored inductor is in series with the drive-unit—
DAC1HDR
Stereo Pre-Amp with Remote Control
DAC / Headphone Amp / USB

Made In
Syracuse, NY, U.S.A.
800-262-4675
BenchmarkMedia.com

Voxativ has partnered with Schimmel Pianos of Germany to create the Ampeggio, the world’s finest wide band & full range speaker. With unrivaled efficiency, the promise of low power amplifiers is finally realized.

Voxativ is represented exclusively in North America by Audioarts.

On display at Audioarts, New York City.
such a tiny bookshelf, the Dreamcatcher was able to reproduce, with dense orchestral fortissimos, a reasonable sense of high-level drama without compression or strain. Even in my large listening room, it behaved like a much larger speaker.

Five attributes of the Dreamcatcher combined to create a breathtaking level of realism that I'd never heard from any other bookshelf speaker. First, the degree of resolution in the midrange let me listen deeply into each recording to uncover an extraordinary amount of detail. This, combined with the best low-level dynamic reproduction I've heard from any speaker—a completely linear integration of loudnesses from pppp to p—made the Dreamcatcher an extremely realistic re-creator of all voices and acoustic instruments. And unlike most bookshelf speakers of this size, which tend to have a subtle thinness in the lower midrange that adds a touch of pristine high frequencies was the best I'd ever heard from a small bookshelf, and more akin to what I'm used to hearing from more expensive electrostatic speakers. And finally, the Totem's perfect reproduction of all transients, with lightning-fast attack and recovery but no trace of sharpness, gave a startling level of realism to all percussion instruments and plucked strings.

FROM ITS TAUT, TUNEFUL, PERFECTLY CLEAN MIDBASS TO THE HIGHEST FREQUENCIES, THERE WAS NO TRACE OF COLORATION OR DISTORTION.

**measurements, continued**

means that the woofer's output extends throughout the treble, with a strong peak evident at 12kHz. The tweeter is fed via a single 4.1μF plastic-film capacitor and, as Bob noted in his auditioning, the highs are a little elevated.

However, other than the port resonant problems and the elevated top octaves, the speaker actually has quite a flat balance, with a low-frequency response that reaches down to 60Hz or so (fig.4). But when Bob wrote that "the degree of resolution in the midrange let me listen deeply into each recording to uncover an extraordinary amount of detail," I do wonder if he was responding, not only to the flat tonal balance but also to the speaker's resonant problems emphasizing recorded detail.

To investigate this behavior further, I set up the pair of Dreamcatchers in my own room, sitting them on 24" Celestion stands and driving them with Musical Fidelity's AMS-100 class-A amplifier. They were positioned where minimonitors have always sounded at their best in my room, each about 27" from the nearest sidewalls (measured from the woofer) and well in front of the wall behind it.

Though the overall presentation was light in weight, the highs were clean and open-sounding. There was also enough upper-bass energy present on bass guitar to balance the highs. Double-bass did sound a little gruff, however. Listening to the ½-octave warble tones on Editor's Choice, I could hear a respectable amount of low-frequency energy down to the 50Hz band. The imaging was well-defined, if not quite up to the standard set by the 34 year-old pair of.

**Fig.4** Totem Dreamcatcher, anechoic response on tweeter axis at 50", averaged across 3e horizontal window and corrected for microphone response, with complex sum of nearfield woofer and port responses plotted below 300Hz.

**Fig.3** Totem Dreamcatcher, acoustic crossover on tweeter axis at 50", corrected for microphone response, with nearfield woofer (blue) and port (red) responses plotted below 300Hz and 2kHz, respectively.

**Fig.5** Totem Dreamcatcher, spatially averaged, 1 octave response in JA's listening room (red) and of BBC LS3/5a (blue).
The Dreamcatcher’s magical combination of these attributes let me hear into recordings in a way I’ve rarely been able to with any component I’ve reviewed. It’s one thing for a speaker to let me hear, in a familiar recording, new things for the first time; it’s another if that recording is the Beatles’ Abbey Road (CD, Apple 3 82468 2), and yet another if I hear something new in every track! Using my Creek Destiny combination of CD player and integrated amplifier, I played the entire disc, marveling at the resolution I was able to hear, in a familiar recording, new things for the first time; it’s another if I hear something new in every track!

Returning to the Dreamcatcher, its lateral dispersion measurements, continued:

BBC LS3/5as that I had been using for the prior week, and the soundstage spacious. Though the port’s resonant problems could be heard at the listening position with pink noise from my Editor’s Choice CD (StereoWire STPH016-2), I must admit that it was considerably more difficult to hear them consistently with music.

However, the more I listened, and more importantly, as I listened to a wide range of different kinds of music, I became aware of a degree of congestion in the upper midrange and a slightly nasal coloration. Both characteristics were apparent with solo piano recordings. With my recording of Robert Schumann’s Symphonic Études, which is scheduled for release in the early summer, piano notes in the region of the upper-frequency port resonances were accentuated, jumping forward a little in the soundstage. Richard Lehnert’s speaking voice on Editor’s Choice plays the organ in “Comes the Sun,” and how that texture subtly supports the broken chords on acoustic guitar in the front of the mix. Finally, the Totem’s overall reproduction of piano and synthesizers in “Maxwell’s Silver Hammer” subtle and ingenious, and had a similar reaction to how Paul’s piano phrasing in “You Never Give Me Your Money” dovetails perfectly with the guitar and bass figures. My favorite keyboard arrangement, however, is the three-way arpeggio interplay of guitar, harpsichord, and synthesizer in “Because”—through the Totems, each instrumental line was clear as a bell. And for the first time, I focused on the electric guitar played through a Leslie amp (a technique more often used by Pink Floyd than by the Beatles) in “Here Comes the Sun,” and how that texture subtly supports the broken chords on acoustic guitar in the front of the mix.
of Abbey Road hit me emotionally, reminding me that I was listening to this gorgeous music in the 30th-anniversary year of John Lennon's death. In the end, it made me sad.

But the Totem had gotten my Beatles jones working, and during one of the many annoying snowstorms in New York City this past winter, when my entire family was trapped in the house, I cued up The Beatles in Mono (CD, Apple 5099969945120) and listened to the entire boxed set in one sitting. Although I enjoyed using the Dreamcatchers to analyze every detail of the band's evolution, my wife was less enthused. During a recent dinner party to celebrate her birthday, I again cued up the Mono Masters disc from this set, but my wife's reaction to the music contained a hint of A Clockwork Orange: "Is that all you ever play around here—the Beatles?" My son Jordan said, "How about some Lady Gaga?" So we cued up "Eh, Eh (Nothing Else I Can Say)," from the Lady's The Fame Monster (CD, Streamline B0011631-02), at about 90dB. In my large listening room there was plenty of bass-synth slam and tuneful rhythmic bounce as, once again, I analyzed every detail of the layered electronic instruments in this track. Although I feel that Lady Gaga is a very talented singer and pianist and an even more talented composer, the Totems very dearly revealed that her greatest skill is in arranging.

The Dreamcatcher's aforementioned transient capabilities combined with the seamless integration of its midrange and high frequencies to make it a natural showcase for well-recorded percussion works. "Welcome Blessing," from Jack DeJohnette's Oneness (CD, ECM 1637), opens with a delicate and gradually building percussion solo from Don Alias that runs the gamut of percussive textures. The Totems completely "disappeared" with this tune, the startling realism of the widely varying transient and dynamic envelopes of Alias's bag of tricks was virtually indistinguishable from a live performance.

There was an interesting paradox in the way the Totem unraveled the differences among recordings of varying sound quality, clearly distinguishing between great and merely good recordings while still allowing me to enjoy the latter. For peak at 1100Hz also rolls off to the speaker's sides, which is why a notch appears at this frequency in this graph, which is normalized to the on-axis response in the vertical plane (fig.7), a suckout develops quite quickly as you move below the tweeter axis, suggesting that low stands will work better than high ones. The 24" stands that both Bob and I used will have been about right.

In the time domain, the Dreamcatcher's step response on its tweeter axis (fig.8) suggests that the tweeter is connected in inverted acoustic polarity, the woofer in positive polarity. This was confirmed by the individual step responses of the two drive-units in fig.9, where it can also be seen that the decay of the tweeter's step blends smoothly with the start of the woofer's, suggesting optimal crossover design. The tail of the woofer's step, however, is broken by ringing with a period of just under 1ms. The Totem's cumulative spectral-decay plot on the tweeter axis (fig.10) shows that there is indeed a ridge of delayed energy at 1110Hz, and another at 1420Hz. There is also a ridge of delayed energy at 10.7kHz, which emanates from the woofer.

Bob Reina says that "The Dreamcatcher has been one of the most difficult speakers I've reviewed, with a sound very different from that of any other affordable speaker I've heard." I believe the Totem's measured performance reveals why it sounds different, but not why he liked that sound as much as he did. Yes, the Dreamcatcher is a very affordable loudspeaker, and it does have a flat midrange, an open-sounding and spacious presentation, and respectable low-frequencies for such a small speaker. Nevertheless, I was disappointed by its measured performance.

—I John Atkinson
The HeadRoom UltraDAC features the warm, jitter-free performance of the Sabre ESS9018 up-sampling processor, delivering luxuriant vinyl sonics reminiscent of an upscale boutique LP turntable. HeadRoom's Ultra Balanced Desktop DAC accepts S/PDIF digital audio signals at standard rate depths (44.1kHz, 48kHz, 96kHz, and 192kHz from 16 to 24 bit word depth) on both coax RCA and TOSLINK optical connections, and decodes 44.1/16 digital audio from any computer via USB. Whatever the incoming sample rate (44.1kHz, 48kHz etc.), the UltraDAC always up-samples all digital sources to 192kHz. Connect the UltraDAC to any source using Balanced Neutrik XLR or unbalanced Cardas RCA outputs.

For more information and great package options visit our website at headphone.com, or feel free to call our helpful sales staff at 800-828-8184. After all, we're here to help you get it right between your ears.

Audioengine affordable audio!

Experience our award-winning sound, high-quality materials, and truly useful features.

Audioengine 5 (A5) Premium Powered Bookshelf Speakers

"You'd be hard-pressed to find a pair of powered speakers at this price point that sound better..." – CNET Reviews

Audioengine N22 Premium Desktop Stereo Amplifier

The N22 is a compact integrated amplifier and high-performance headphone amp that's perfect for desktop audio.

P4 passive speakers starting at $249/pair

Audioengine 5 shown in Solid Bamboo ($449)

$199

Works with all your gear - All cables included - 30-day audition - 3 year warranty

Visit our website for more product info, reviews, and awards: www.audioengineusa.com
example, I’ve always been a fan of Richie Havens’ Nobody Left to Crown (CD, Verve Forecast B0011631-02), but only when I listened to it after hearing Sonic Youth’s Washing Machine (CD, Geffen DGCD-24825) did I realize that the Sonic Youth album is sonically far superior, even if its primary textures are those of distorted electric guitars and processed voices.

Working from home one day during yet another snowstorm, I was on the computer, two rooms away from my large listening room, where I’d cued up Louis Thiry’s solo pipe-organ performance of Messiaen’s La naissance du Seigneur (CD, Calliope CAL 9928). This complex work, which I’ve heard performed live, puts the realism of the Totem’s reproduction of the organ so arresting that it was difficult for me to work. It sounded as if an actual pipe organ was being played two rooms away, and the music was demanding that I pay attention to it. Finally, during a high-level passage for pedals that covers the 20-40Hz range, I raced into the listening room. The Dreamcatchers were trying their best, but the woofer cones were audibly flapping—fearing the speakers were about to be damaged, I turned the volume down.

This Messiaen recording illustrated the Dreamcatcher’s greatest strength: It forced me to involve myself in the experience of listening to music. Every hour I spent listening to the Totems made me want to listen for another hour. About halfway during the reviewing process, when John Atkinson told me that publication of this review would be delayed, I was elated: I now had at least another month to listen to the Dreamcatchers before I’d have to make room for something else.

Toward the end of my reviewing process, I would enter the listening room, look at the Totems, and smile. The mere sight of those little white beauties brought me happiness, and triggered memories of many hours of enjoyable listening sessions. At one point I even postulated that, should I ever decide to throw in my reviewing towel, I could sell my Audio Valve Eclipse line stage, Audio Reference Reference 110 amplifier, and Alón Circe loudspeakers, get a pair of Dreamcatchers and an ARC VS60 integrated amp (which I enthused about in the September 2010 Stereophile), and be a happy camper for many years.

The Totem Dreamcatcher is more than just another speaker—any speaker—I itched to involve myself in the experience of recorded music, when I removed them from the system and substituted another speaker—any speaker—I itched for the Totems’ return.

**Comparisons**
I dismissed out of hand the idea of comparing the Dreamcatcher with bookshelf speakers costing three to four times as much. So I out came the Epos M16i ($1998/pair) and Linn Majik 109 ($1590/pair). The Epos M16i shared with the Totem a gorgeous, silky midrange, but had a bit less resolution of detail. The Epos’s high frequencies were also slightly less detailed and extended, but were a bit more silky than the Totem’s. At the low end, the Epos’s midbass was richer and its bass extension was deeper, with a greater sense of high-end dynamic slam.

**Conclusions**
The Totem Dreamcatcher is more than a nearly flawless affordable bookshelf speaker that competes with speakers at triple its price. Never before have I heard a small speaker whose sound was so enticing and intoxicating that it made me want to never stop listening. Of all the speakers I’ve reviewed in the last 28 years, I have never enjoyed music more through anything else, regardless of price.

---

**ASSOCIATED EQUIPMENT**

**ANALOG SOURCES**
VPI TNT IV, Rega Planar 3 turntables; Immedia, Syrinx PU-3 tonearms; Koetsu Urushi, Clearaudio Virtuoso Wood cartridges.

**DIGITAL SOURCES**
Lector CDP-7T, Creek Destiny CD players.

**DREAMAMPLIFICATION**
Vendetta Research SCP-2D phono stage, Audio Valve Eclipse line stage.

**POWER AMPLIFIER**
Audio Research Reference 110.

**INTEGRATED AMPLIFIER**
Creek Destiny.

**LOUDSPEAKERS**
Epos M16i, Linn Majik 109.

**CABLES**

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

**World Radio History**
I think audiophiles who hear these speakers will consider them one of the all-time great values in sound. - Sound and Vision

The speakers reproduce music with an uncommon, delicate finesse and transparency typically found in speakers costing much more, which makes them an exceptional value. In fact, the Carnival 2s may be one of the best-kept secrets in recent memory. - About.com
Triangle 30th Anniversary New Nordost Red Dawn Cable

Simaudio Moon 30th 600i & 750D

1603 pine street san francisco ca. 94109
ph:415-614-1118
www.audiovisionsfsf.com

Knowledge is based on Experience, Everything else is just Information.

Come in and Experience
Triangle Loudspeakers, Simaudio Moon Electronics, Nordost Power & Signal Cable, at our

BIG EVENT!!!
04/28/11 at AVSF (please rsvp)
BRIAN DAMKROGER

COMPACT DISC PLAYER

Vincent Audio

C-60

Single-chassis, top-loading CD player. Fully balanced, hybrid circuitry with 8x oversampling and 24-bit/192kHz D/A conversion, tubed power supply, and user-selectable tubed or solid-state analog output stages. Tube complement: two 6922EH, one 6Z4. Inputs: none. Digital outputs: S/PDIF, 1 coaxial, 1 optical (TosLink). Analog outputs: 1 pair unbalanced (RCA), 1 pair balanced (XLR). Analog voltage output: variable, 2.5V maximum. Frequency response: 20Hz–20kHz, +0/-0.5dB. Signal/noise ratio: >90dB. THD: <0.003%. Dynamic range: >100dB. Channel separation: >90dB. Power consumption: 50W.

Dimensions 17.7” (450mm) W by 4.6” (118mm) H by 15.4” (395mm) D. Weight: 26.5 lbs (12kg) net, 28.6 lbs (13kg) shipping.

Serial number of unit reviewed 010210V205102.

Price $4695. Approximate number of dealers: 55.

Manufacturer Vincent Audio, Germany. Web: www.vincent-tac.de.

US distributor: WS Distributing, 3427 Kraft SE, Grand Rapids, MI 49512.
Tel: (616) 885-9809.
Fax: (616) 885-9818.

Vincent Audio

C-60

S

should an audio component accurately reproduce the signal it’s fed, or should it evoke the sound and feel of live music? Accuracy or musicality? This question has been at the heart of high-end audio since its inception. Back then, the question often took the form of the tubes-vs-transistors debate. Proponents of solid-state pointed to the far superior measured performance of transistor designs, and claim that they thus more accurately reproduced the input signal. tube lovers steadfastly maintained that their gear sounded better, more natural—more like music. Since then, both camps have eliminated the obvious colorations of their respective technologies, and the levels of performance of today’s best tubed and solid-state gear have converged. At the same time, the circuits themselves have blurred into hybrids of various sorts, different mixes of devices and circuits.

The Vincent C-60 CD player ($4695), designed in Germany but manufactured, I believe, in China, is a throwback to when there were large differences and clear battle lines between the tube and solid-state camps. Rather than a single optimized—or even hybrid—analog output stage, the C-60 gives the user a choice of two. Per US importer WS Distributing’s website: “If you’re in the mood for rich, romantic audio performance that brings analog complexity to compact discs, then bask in the vacuum tube output stage. But if you want a bit more edge to your music, you can simply switch to transistor output instead by clicking the C-60’s front panel switch.”

www.Stereophile.com, May 2011 95
NuForce Announces the Superlative DAC-9

With its six digital inputs offering compatibility with all existing digital sources, the NuForce DAC-9 stands as the definitive digital-to-analog conversion hub. The DAC-9's defeatable volume control also permits its use as a purely digital device. For added convenience, the DAC-9 includes a high-performance headphone output with an independent volume control.

Features: 6 inputs (USB, AES/EBU, RCA/BNC, RCA, Toslink, 3.5mm Optical) and 4 outputs (XLR, RCA, 3.5mm and 6.3mm headphone) with remote volume control.
The Vincent Audio C-60 is a thoroughly modern take on the tube-transistor hybrid design that reflects the best of today’s concepts. For example, physical and electrical isolation were a major consideration, so the C-60 actually consists of four isolated subchassis, each floated off a common backbone. Front and center is the top-loading disc transport, made by Philips. Just behind this, a second subchassis houses the power supply for the digital circuits. A full-depth subchassis on the left houses the main power-supply elements, two huge toroidal transformers, and, on a small board, the output stage supply. The latter is itself a hybrid design incorporating both solid-state elements and a 6Z4 rectifier tube. On the right, another full-depth subchassis supports the fully balanced audio circuits, including digital-to-analog converters based on Burr-Brown’s PCM1792 24-bit/192kHz chip, as well as the tubed and solid-state output stages. Other, smaller boards handle such ancillary duties as the control buttons and the front-panel display.

The C-60 is nicely styled and built, with a handsome, solid chassis that incorporates into its exterior design such functional elements as a beefy aluminum top plate, a thick, smooth-sliding disc drawer, and oversized tower feet. The top plate incorporates buttons for the drive control functions, two mesh-covered windows that show off the tubes, and a nifty, countersunk logo plate of glass that can be illuminated by flipping a small rear-panel switch. The rear panel has both balanced (XLR) and unbalanced (RCA) analog outputs, coaxial and optical (TosLink) digital outputs, and a standard IEC receptacle for a removable power cord. On the front are a large, well-lit display and two more buttons, one for power and the other to switch between the tubed and solid-state output stages. There’s also a small, rubber-surfaced magnetic clamp to hold the CD in place.

The C-60 uses a Philips top-loader transport, opening or closing the cover with audible glitches in its output until the gaps in the test disc’s data spiral reached 2.4mm in length. However, monitoring the error flag in the player’s S/PDIF output with RME’s DIGICheck program revealed that errors were being interpolated once the gaps in the data spiral reached 2mm.

The Vincent’s frequency response rose very slightly in the top octave (fig.1, top pair of traces), but with preemphasized data there was a prominent suckout in the treble (fig.1, bottom traces). Channel separation was excellent, at better than 90dB at 1kHz.

Analyzing the spectrum of the Vincent’s balanced tubed output while it decoded data representing a dithered 1kHz tone at 90dBFS (fig.2, ½-octave analysis; fig.3, FFT analysis) revealed minimal level error and a noise floor dominated by the dither noise used to encode the signal. There was a commendable absence of both harmonic and supply-related spurious, though at low frequencies the right channel was very slightly noisier than the left. Linearity error was very low to below 100dBFS, and again was dominated by...
stops or starts the playing process—or at least that's how it's supposed to work. Not infrequently, the C-60 would refuse to acknowledge that there was, in fact, a disc in its transport. The C-60 eventually did play every disc I threw at it, but something about its drive or error-correction circuitry was finicky. Often, discs that would play perfectly in a half-dozen other players needed a fresh, more careful cleaning and polishing before the Vincent would read them. But other than that occasionally finicky drive, the Vincent was completely intuitive to operate, and proved bulletproof over several months of heavy use.

Listening

The months the C-60 spent in my system overlapped with the visits of a number of other review products. Although the C-60 did have a recognizable sonic signature—actually, more than one, as I'll discuss in a moment—its performance was easy to incorporate into my reference system. I never felt I was degrading the system's performance or changing its fundamental character by using the C-60 as a source. In fact, the ability to switch between the player's two different-sounding output stages proved a benefit as I tweaked the system around other components I was reviewing.

I did play with the volume control some, including driving my amplifiers directly. The control's range was such, however, that I could only use the first one or two "clicks," so I ended up using the Vincent with the volume control set to its maximum.

**Tubes or transistors?**

I've always been a tube kind of guy, so I expected to prefer the sound of the Vincent's tubed output stage. That proved to be the case, so that's the configuration I'll discuss. The differences between the two output stages weren't huge, though, so most of the comments below apply equally to both.

The recorded dither noise below that level. With its excellent linearity and low noise, the C-60's reproduction of an undithered tone at exactly 90.31dBFS was superb, with the three DC voltage levels defined by this signal clearly evident and with excellent waveform symmetry (fig.4). I wasn't surprised to find that the C-60's tubed output suffered from rather high distortion. Fig.5, for example, shows the spectrum of the player's balanced output with a full-scale signal into the benign 100k ohm load with the volume control set to its maximum ("26"). A regular series of distortion harmonics is evident, with the second and third harmonics around −70dB in the left channel (0.03%, blue trace), but the second harmonic highest in the right channel at −64dB (0.06%, red trace). Halving the level by lowering the volume control to "20" (fig.6) dropped the level of the distortion harmonics, though the level of the second harmonic in the right channel was still −69dB (0.03%). I was surprised to find that switching in the FET buffer did not change the distortion's level or spectrum (fig.7). Obviously, the FET stage follows the tubed stage with the latter's bent transfer function. So while the FET stage won't change the C-60's intrinsic sound quality, it does
Glowing tubes, glowing praise

As Steve Guttenberg pointed out in "Being There," his "As We See It" in the November 2010 issue, audio systems tend to better approximate the feel of live music with recordings of smaller-scale performances, where they don't have to cope with the huge and complex dynamics, or the sheer size of an orchestra and concert hall. Indeed, with such recordings as Warren Zevon's solo *Learning to Flinch* (CD, Giant 24493-2) and Rickie Lee Jones' *Naked Songs* (CD, Reprise 45950-2), the Vincent C-60 did a stellar job of capturing the live feel of these intimate concert performances.

The Vincent's superb resolution of low-level detail was a big part of how it re-created this live feel, and one way that it distinguished itself from most other CD players I've heard. Many CD players, even some of the very best, struggle at the very softest end of the volume spectrum, losing the finest, lowest level of detail in a digital silence that feels a bit electromechanical. With the Vincent, those tiny details were there, distinctly drawn yet coherent, with a realistic surrounding ambience, just as they are with a top-flight analog front end—or a live performance.

Even more unusual among CD players, and even more impressive, was the C-60's ability to resolve and distinctly render these low-level details beneath and behind much louder voices and instruments. Track 1 of the Zevon disc, "Splendid Isolation," was a great example of this. Zevon's 12-string Ovation guitar was miked much more closely than his voice, so there is relatively little ambience information around the guitar. All spatial cues and information about the audience and venue are superimposed on the vocal track. The guitar is also balanced very high in the mix, so with most CD players I've heard, the volume and sheer presence of his guitar overpowers all the spatial and ambience

enable the player to better drive preamplifiers with low input impedances. Without the FET stage, the distortion at low frequencies is high, even at low levels (fig.8).

With the FET stage in-circuit, the low-frequency distortion remains at acceptable levels (not shown); I was not surprised that BD found that "The solid-state output..."
Life Is Too Short For Boring Music, Put Some Excitement Into Your Music Collection

"Brinkmann Bardo ...should be auditioned by anyone looking for a turntable for $15,000, or even more. It sounds that good, and its build quality and fit'n'finish are worthy of 'tables costing far more."

Michael Fremer, Stereophile, My 2011

"The Bardo came across as a fast and muscular record-playing engine. There was a sense of propulsion and accuracy."

Dennis Davis, The Audio Beat, December 2010

Brinkmann have reinvented the magnetic drive turntable system to give you less noise, less speed variation & more enjoyment. Rediscover your record collection - you will be amazed at how much satisfaction can be dug out of those old grooves. But Brinkmann did not stop there. To deliver the perfect synergy, Brinkmann offers three different tonearms with the Bardo & Oasis as well as two different cartridges - all play beautifully together. No drama, just music. The Brinkmann Bardo turntable starts at $7,990 and includes an outboard power supply & polished granite base.

"Audio Revelation is an analog specialist that's had the opportunity to evaluate many hi-performance turntables over $20,000. Since the Bardo arrived last summer it became apparent that spending double or even triple its price had questionable return. While we continue to have five $5,000+ tonearms and seven cartridges between $5000 and $15,000 on demonstration, our top reference tables are no longer $20,000 and $30,000. It is the Bardo."

— Jay Kaufman, Audio Revelation

Call 760 944 0444 or visit us at www.audiorevelation.com and let us demonstrate how Brinkmann have raised the bar on turntable performance.

On a Higher Note LLC
U.S. importer
phone 949 488 3004 www.onahighernote.com
information, leaving no clear picture of the stage or venue. The Vincent beautifully sorted out all of this. The guitar chops rang brightly, with the power and energy that the instrument has live, and all of the instrument's complex harmonics and body resonances were rich and distinct. At the same time, Zevon's gruff, hoarse voice, while lower in level, was perfectly reproduced, and the way it spread out and filled the space painted clear pictures of the different recording venues.

The ability to re-create three-dimensional images and soundstages was a consistent strength of the C-60. With smaller venues, such as on the Zevon and Jones discs, I could close my eyes and be there, in the audience. Jones' "Chuck E.'s in Love"—or, more correctly, the audience's applause, laughing, and whoops during the song—were goose-bump moments. The combination of Jones' voice and Rob Wasserman's double bass drawing the stage, and the audience defining the venue, described the space so precisely that I felt the hairs on the back of my neck rise with the electricity and excitement in the air. And with works of larger scale—some of my favorite opera and orchestral recordings, for example—I felt as if I could stand up and walk around the hall and out onto the stage, among the performers.

The Vincent's reproduction of multi-miked studio recordings was superb as well, and again, felt more analog than digital. Regardless of the mix, it created solid, well-defined, three-dimensional images that were precisely located in a soundstage, albeit an often artificial one. Also, the C-60 consistently captured the harmonic richness and complexity of instruments and voices, and beautifully reproduced the fine, inner detail that distinguishes individual voices in a chorus, or individual violins in a large orchestral section. The II, a collaborative album by Emmylou Harris, Linda Ronstadt, and Dolly Parton (CD, Asylum 62275-2), had never really impressed me through other players, but I absolutely loved it through the Vincent. Listening to "High Sierra," I noticed how realistic the voices sounded, and how "right" it felt when the three merged during the choruses.

John Coltrane's classic 1958 recording with the Red Garland Trio, Sentit the Blues (CD, JVC XRCD2027-2), really showcased the C-60's strengths. Arthur Taylor's faint cymbal strokes at the opening of "I See Your Face Before Me" had a gorgeous mix of ringing, overtones, and metallic sizzle, and faded perfectly into the surrounding space. Coltrane's tenor sax reminded me anew of how masterfully he simultaneously worked every aspect of the instrument, getting a level of expression that far transcended other, even virtuoso, players' work. Throughout the recording, I was impressed with the level of natural, organic detail in each of the instruments, but I kept coming back to Taylor's brushed cymbals and how perfectly the succeeding waves of sound cascaded over each other, each with exactly the

---

John Atkinson
right mix of a bell-like ring decomposing into a bright, metallic hiss.

Dynamic transients through the Vincent were satisfyingly large, if not unusually so. Smaller works again fared best, with the guitars on Learning to Finish and Naked Songs being great examples, both having a good portion of the power and presence they do live. Both the leading and trailing edges of sharp transitions were always crisp and clean, and the C-60 did a great job of reproducing the pace and flow of a performance. This latter characteristic was especially evident on temporally complex works, such as much of Settin' the Pace, where dramatically different lines need to mesh for the piece to work. Each player, heard on his own, seemed to be using different timing and chord structures, yet from a step farther away—and through the C-60—they all came together as a coherent whole.

All of these strengths were evident on large-scale performances as well, especially if the overall illusion wasn't quite as realistic. Performances don't get much larger than Fritz Reiner and the Chicago Symphony's of Sunrise, from Strauss's Also sprach Zarathustra (CD, RCA Living Stereo 61494-2); while the Vincent didn't re-create the CSO and Orchestra Hall in my listening room, it certainly captured enough of the thunder and bombast to take my breath away.

This isn't to imply that the C-60's soundstage was smaller than those of other source components. To the contrary, the Vincent's soundstage was consistently large, extending well outside the speakers, projecting slightly in front of them, and creating whatever depth had been coded into the bits and bytes. Images were always appropriately sized, and I never felt that the Vincent was expanding or limiting the scale of the players or stage. In fact, the C-60's knack for reproducing fine detail behind louder, more prominent lines worked well with recordings of a soloist and orchestra. Listening to Jascha Heifetz's performance of the Allegro vivace of Tchaikovsky's Violin Concerto, with Reiner/CSO (CD, RCA Living Stereo 61495-2), I noted how clearly and consistently the orchestra was portrayed, even behind Heifetz's most forceful and dramatic passages. Even the faintest horn lines from the very rear of the stage were lifelike, and very obviously the work of a group of individual players.

Solid state, solid performance

In both cases—in fact, across the board in my listening sessions—I preferred the sound of the Vincent's tubed output stage, but had to admit that the solid-state stage sounded more accurate and more tonally neutral. Coltrane's tenor was a little sweeter through the tubes, for example, but its honk didn't have quite enough edge or bite to be realistic. The same was true for women's voices; they were richer and sweeter through tubes, but their initial transients had a more realistic bite through transistors.

The solid-state output stage also had a little more bottom-end punch than the tubed stage, and notes stopped and started with a bit more precision and authority with the transistors. Conversely, individual instruments were more distinct through tubes, with a better sense of a resonating, wooden instrument following the initial transient. In the Dvorák concerto, for example, it was a little easier to sort out the bass drum, timpani, and sharp double-bass notes through the tubes, but the lines sounded quicker and had a bit more impact via solid-state. On top, the transistor stage might have been more extended, but didn't have quite the harmonic richness of the tubes. For example, the brushed cymbals on "I See Your Face Before Me," from Settin' the Pace, were largely a metallic hiss, without a distinct ring at their core.

The two output stages also handled detail differently. Spatial detail, for example, was more precise and more sharply defined through the transistors. On the other hand, the tubed section did a better job of capturing the subtleties and complexities within an instrument's tone or voice. The tubes also did a much better job with the lowest-level information, the point where a note finally disappears into the surrounding space. Combined with the tubes' slightly better re-creation of low-level ambient information, the way notes faded out felt much more real, the instruments and singers more three-dimensional.

The transistor output stage matched, or perhaps even slightly bettered, the tube stage's large, open soundstage. When I dissected the sound and concentrated on audiophile criteria, I noted that images were more sharply defined with the transistors, with more open space between them. But when I listened to...
the overall performance—to the music itself—sonic images interacted with the surrounding space in a way that felt more natural through the tubes, and I found it much easier to close my eyes and imagine the hall or club in front of me.

Accuracy or musicality—40 years later and we still have to choose?

Comparing the C-60's solid-state and tubed output stages was a fascinating exercise. Both were excellent, but while the differences between them weren't huge, they were profound. In most cases, I felt the transistor configuration was more accurate, and would have fared better on an audiophile scorecard. At the same time, I found the tubed section to be more musical, more evocative of the original performance, despite its more obvious colorations.

The solid-state section of the Vincent C-60 is an excellent performer, and I can imagine many listeners preferring its more neutral sound—its leaner tonal balance, sharper transients, and tighter, more powerful bass. It's well designed and beautifully built, and completely in line with the competition at $4695. The C-60's solid-state section didn't quite match the resolution, or the overall flow and clarity, of far more expensive, super-premium solid-state players such as the Simaudio Moon Evolution Andromeda ($12,500), but it handily outperformed really good midpriced players like my Primarc CD-31 ($2500).

Thirty-some years ago, I chose musicality over accuracy and traded my dorns of "Red Book" CD performance, sounding more like a good analog rig—or, better yet, and sometimes more like a live performance. Its tonal balance was probably a little warmer and sweet-er than reality, but instruments and voices had an uncannily lifelike energy and presence. Players, singers, and the space around them were re-created in a way that just felt a bit more real than

AT THE SAME TIME, I FOUND THE TUBED SECTION TO BE MORE MUSICAL, MORE EVOCATIVE OF THE ORIGINAL PERFORMANCE, DESPITE ITS MORE OBVIOUS COLORATIONS.

solid-state Audio Research D-120 amplifier for a tubed Audio Research D-76A. Night after night, I made the same choice with the Vincent. The solid-state configuration was good, but with its tubed output stage in circuit, the C-60 transcended the performance of the similarly priced players I've heard. In many ways, it sidestepped the limitations of "Red Book" CD performance, sounding more like a good analog rig—or, better yet, and sometimes more like a live performance. Its tonal balance was probably a little warmer and sweeter than reality, but instruments and voices had an uncannily lifelike energy and presence. Players, singers, and the space around them were re-created in a way that just felt a bit more real than

through the transistor stage, or through most other CD players. With the tubed stage, it was as if the Vincent were vanishing and taking the rest of my system with it, letting me hear back through the recording chain to the original performance or session. Was it completely accurate? Maybe not. Did it evoke live music? Absolutely!

AN AUDIO WAVES
the finest in affordable audio

Audioquest • Creek • Suntax • Kimber
Bellari • Triangle • Benchmark
Music Hall • Grado • Project • Rega
ASW • Target • Magnun Dynalab
Unison Research • Apollo • Qarat
Plinius • Atoma • Harmonic Tech
Diapason • Audience • Billy Bags
Audio Analogue • Opera • Roksan
Vincent • Pathos • Epos • HRT
BDR • Indiana • MSB • PS Audio
Goldring • Eoltech • Jolida • JPS
ASL • Musical Surroundings • Benz
Belles • Atoma • Whew • AudioPrism
Audible Illusions • Analysis Plus

800.510.4753 Mon-Fri 8-5:30 Sat 10-4 (PST)
www.audiowaveshifi.com
P.O. BOX 461 TRINIDAD, CALIFORNIA 95570
PHONE/FAX 707.677.3299 info@audiowaveshifi.com
FREE SHIPPING NO LOCAL DEALER? CALL US
CHECK OUR WEBSITE FOR CURRENT SPECIALS

800.510.4753 Mon-Fri 8-5:30 Sat 10-4 (PST)
www.audiowaveshifi.com
P.O. BOX 461 TRINIDAD, CALIFORNIA 95570
PHONE/FAX 707.677.3299 info@audiowaveshifi.com
FREE SHIPPING NO LOCAL DEALER? CALL US
CHECK OUR WEBSITE FOR CURRENT SPECIALS

SALE!
Rega
RP-1
RECORD PLAYER

ART DUDLEY


Rega RP-1 Performance Pack: Upgrade kit for Rega RP-1 comprising new drive belt & platter mat, new Rega Bias 2 moving-magnet cartridge: recommended downforce, 1.75gm; output, 6.8mv.

17.5" (450mm) W by 4.5" (115mm) H (including dustcover) by 15" (385mm) D. Weight: 9.2 lbs (4.2 kg).

Medium-gray semigloss (dark gray and white semigloss available).

Serial Number of Unit Reviewed: 000213.


I tried to name a high-end audio product that's been recommended more often than the Rega Planar 3 turntable. I failed. The closest I could come was Rega's own RB300 tonearm, surely the best-selling perfectionist tonearm of all time. After that came the Rega Planar 2 turntable, a sample of which I owned and loved in the early 1980s. Next on my list was the original Rega Elys, a moving-magnet cartridge that sounded as chunky and direct as it was cheap and magenta.

All the products on my list were simple, purposeful, cost-effective things lacking in pretense and filigree; much the same could be said of Rega's latest record player, the entry-level RP-1 ($445). And while the greater good may come from long production runs and stable product lines, I was nonetheless encouraged by this replacement for the scarcely-four-year-old Rega P1: At a time when most manufacturers of high-value gear are either chasing the bigger profits they think exist upmarket or throwing in the towel altogether, Rega Research seems more dedicated than ever to the giving of more for the taking of (relatively) less.

Description
The austere RP-1 appears to have nothing up its sleeve: a simple, oblong plinth—a board, really—with a plain-looking platter, a plain-looking tonearm, and a plain-looking on/off button. Like a rowboat or a pair of pliers, if the thing were any simpler, it simply wouldn't work.

But the board turns out to be of a well-chosen wood composite, with a nice looking—and presumably vibration-damping—outer skin. And the RP-1's suspension turns out to be the same simply made yet cleverly designed rubber feet that...
Let The World’s Finest High End Audio Store Show What Expertise Beyond Compare Can Do For You.

And What Oracle’s Fabled Delphi MK VI Can Do.

Oracle’s esteemed Delphi turntable is one of high end audio’s most enduring components, a genuine treasure with a striking visual appearance that mirrors its sonic merits. It was first unveiled in 1979, and decades of continual improvement have resulted in the MK VI version, which lifts analogue sound to new heights. The Delphi embodies a form-follows-function ethos; its three supporting towers are essential elements of a unique suspension system that allows its stylus to maintain optimal contact with record grooves. Bring in a few favorite LPs for us to play on the Delphi and you’ll immediately hear the result — musical realism approaching the impossible. Then, if you purchase a MK VI from Lyric, you can have our longtime turntable expert, Bob Herman, set it up in your home for years of flawless performance.
have supported Rega turntables since time out of mind. Rega must've bought a million of those things.

At the approximate center of the plinth is a sign of Rega's precision-engineering pedigree: a platter bearing a brass ball, a small steel thrust ball, and a 0.32"-diameter steel spindle, its bottom machined flat (not unlike that of the larger and ball-less Garrard 301). The bearing spindle is pressed into a 4"-diameter molded hub that serves as a subplatter—another of those things that Rega seems to have bought in bulk.

Using a small rubber belt of round cross-section, the molded subplatter is driven by a 250rpm synchronous motor, a nice-looking Dutch component apparently not too different from the ones used in Rega's more expensive turntables—or the Linn LP12, for that matter. (Until the late 1990s, Rega used a second rubber belt in each turntable, forming it into a suspension "cradle" for the motor.) The bottom of the motor is cushioned with self-adhesive foam strips, and its axle is topped with a molded pulley, with separate "steps" for 33.3 and 45rpm: In this part of Sparta, changing the speed, when needed, is done manually.

The RP-1's platter is molded from phenolic resin, a comparatively ancient sort of thermoset plastic that's similar but not identical to Bakelite. (The latter is something you could even make at home, assuming your home is well supplied with formaldehyde and carbolic acid. Look around!) I'm not sure why Rega abandoned the wooden platter of the P1 and various OEM turntables they've made in the past. (Termites?) But, when tapped, the resin platter sounds a bit less thwocky than the wood, and more of its mass seems—there's that word again—concentrated around its periphery: a good thing.

The tonearm is Rega's new RB101: the latest variant/descendant of the tried and true RB300, and a slight upgrade from the RB100 tonearm of the P1. The RB101 uses a simpler version of the alloy armtube casting that was developed for the RB300, with a separate, glued-in headshell and a plainer bearing housing. The armtube's diameter is 0.5", the effective length is 240mm, and antiskating force is applied with an adjustable (and calibrated) magnet. I'm not much of a tonearm-tapper—I consider the practice inconclusive at best, mildly silly and fatuous at worst—but

I tried it anyway with the RB101, and heard a sound that was timbrally similar to that of the resin platter. (The platter's sound was a little lower in frequency,) I suspect that these are very good things, but I don't really know.

The cartridge supplied with the Rega RP-1 is an Ortofon OM 5E, a moving-magnet type that weighs 5gm, tracks at 1.75gm, exhibits a compliance of 20um/mN (which is on the high side of acceptable for a decidedly medium-mass arm such as the Rega), and puts the correct downforce with a ca 5gm cartridge—or the Ortofon OM 5E. Sure enough, I measured just under 2gm with my Technics electronic stylus gauge.

The RP-1 is supplied with a cardboard protractor for cartridge alignment, but the instruction sheet offers an alternate suggestion: that lining up the stylus tip with the front edge of the frontmost hole on the headshell, viewed from above, will give the correct alignment. That proved untrue for me: When I used Rega's own protractor to correctly align the OM 5E, I noted that the stylus tip was more or less at the center of said hole. As pleased as I was by the RP-1's modest setup time, and as loath as I am to inspire tweakanxiety in the minds of newbie phonophiles, I think it's a good idea to confirm proper cartridge alignment within a few days of purchase, if not on that happy first night. In any event, if only because the hole method puts one at the mercy of his or her visual perspective, I recommend the protractor approach. (The user must bear in mind that Rega does not observe the popular van Baerwald standard in selecting the "null" points—and thus the precise stylus overhang—for their tonearm geometry. Rather, they cleave to the less popular Stevenson alignment geometry, which places the innermost "null" point about 60mm from the spindle center.)

To check the accuracy of the RP-1's speed, I used my well-loved Linn Speedchecker kit, the strobe of which fits the Rega's dustcover hinge just as neatly as it does the Linn LP12's. With no LP on the mat the Rega's platter speed was almost dead-on perfect at 33.3rpm, and 45rpm was about 0.3% fast. Loaded with the stock cartridge tracing a 10" record placed atop the Speedchecker disk, 33.3 was about 0.3% slow, 45rpm just about perfect. It seemed that the Rega's motor, while commendably quiet, doesn't have a lot of torque. Whether

WHEN TAPPED, THE RESIN PLATTER SOUNDS A BIT LESS THWOCKY THAN THE WOOD, AND MORE OF ITS MASS SEEMS CONCENTRATED AROUND ITS PERIPHERY: A GOOD THING.

that's important to music playback continues to be a matter of some debate.

**Listening**

Ask a dozen audiophiles what kind of sound they expect from budget products and you'll get a dozen variations on the same word: bright. Yet while the cheapest audio products often sound lean and light compared to the pricey stuff, the Rega RP-1 was a blessed exception. If anything, its top end was very slightly rolled off: never a bad thing in an affordable product that may be called on to work in the context of other budget products, let alone play records that are in less than pristine shape.

The RP-1 had a pleasantly full and totally well-balanced sound overall, and its very decent bottom-octave performance confounded the subconscious expectation that low-mass turntables deliver low-impact bass. When I listened to the famous recording of Saint-Saëns's Symphony 3, with Charles Munch and the Boston Symphony Orchestra (45rpm LP, RCA/Classic LSC-2341), the low D-flat pedal tone that heralds the organ's entrance was reasonably solid and full. And with most well-recorded pop records I tried, the RP-1 allowed a satisfying degree of weight and whomp to electric bass and kick drum. (Neither of those instruments extends below 40Hz, of course; they just sound deep in their own contexts.)

Speaking of which, though it's become something of a cliché to underscore the prowess of Brit-f with up-tempo pop music—and there have been more than a few times in our hobby's history when Rega, Naim, Linn, and perhaps one or two others seemed to make the only gear that didn't dog the music's rhythmic arteries—it must be said that this Rega played with un-failingly good timing and momentum. Higher-torque turntables usually have more sheer pull than the RP-1, but the Rega never allowed musical lines to seem slow, inconsistent, or uninteresting. That quality was underscored by my playing of Captain Beefheart's rhythmically complex Strictly Personal (Blue Thumb BTS1), Trum Mask Replica (Reprise 2MS 2027), and Clear Spot (Reprise 2115), all occasioned by the passing of Don van Vliet (aka Captain Beefheart) during the RP-1's stay.

The musical performance level and overall sonic character of the RP-1 were remarkably close to those of my own, older-issue Rega Planar 3, THE CHIEF DIFFERENCE BEING IN THE AREA OF PITCH STABILITY. Indeed, few people would expect a bare-bones budget player to do everything well, and the Rega RP-1 didn't, but it did reproduce all the flesh and blood of musical sound. Given a direct-sounding, in-your-face record such as Neil Young's raggedy but brilliant Time Fades Away (Reprise MS 2151), the RP-1 offered a clean, musically competent idea of the performance. But I didn't hear the same whap of drum sound—among the most uncompressed on record, in my experience—or the deep, stringy whomp of electric bass, that I get from my reconditioned Garrard 301 with EMT 997 tonearm, or my Thorens TD 124 Mk.II with the same arm, or even my Linn LP12 with Naim Aro arm.

But neither can I write such a comparison without laughing at its silliness: Each of those combos costs between $4000 and $8000. And as you and I both know, there are some four-figure turntable-tonearm combinations that don't sound as good as direct, as bold, as downright music-loving as the three-figure Rega RP-1. While I can think of a very few other three-figure products that sound better than some of their own four-figure competitors (HRT's Music Streamers, Denon's DL-103 cartridge, and various phono transformers from K&K Audio, Bob's Devices, and Silvercore Audio immediately to mind), such things are awfully thin on the ground.

**RP-1 Performance Pack**

At the time of its release, the retail price of the Rega RP-1 was $50 higher than that of its predecessor, the P1: unfortunate but inevitable, and a bit vexing for all concerned, given how close that brought the price to that of Rega's P2 record player ($545).

The solution may please a greater number of people than is usually the case: Rega discontinued the P2, and introduced...
a $195 upgrade kit that's said to bring their entry-level player to at least the P2's level of performance.

There are three major components to this RP-1 Performance Pack, as it's called. First is a drive belt that not only looks different from the original—the new one is white, and appears very slightly thicker than the old one—but actually feels somewhat different. (I'm probably the only nerd left who remembers, as a child, buying white silicone-rubber tires as upgrades for my Aurora model race cars, and that's the recollection conjured by the new Rega belt. Sad, isn't it?) The second component is a notably thicker (ca 2.5mm vs 1.75mm) platter mat made of 100% wool felt. Third and perhaps most conspicuous is a replacement for the Ortofon phono cartridge: a Rega Bias 2.

I tried each component separately, beginning with the new belt. I confess a prejudice: I expected not to hear a difference between the two drive belts. But the new one was different—and better. And although the difference was subtle, it was consistently audible, particularly with classical music: bowed strings had more force and texture, making the playing sound more human and convincing. Pianos, too, seemed to gain a better sense of touch with the white belt.

My next step was to trade out the original cartridge. Like all of Rega's unique MM pickups, the Bias 2 is built into a polymer (Pocan) body, and has a nonreplaceable stylus—a deliberate and, I think, canny choice intended to eliminate the poor mechanical link found in virtually all other MM pickup designs. Like the Ortofon, the Bias 2 has an elliptical stylus on an aluminum cantilever, with a recommended downforce of 1.75gm: apples to apples, as it were.

As hinted above, I'm a big fan of the original Rega Elys (I have yet to hear its replacement, the Elys 2), and the Bias 2 sounded at least as good. The change from Ortofon OM 5E to Rega Bias 2 can be summed up quite neatly: It was like finding a knob on my preamp labeled Chunkify and turning it up a few notches. Installing the Bias 2 brought more tactile, more physical: in those regards, more like a piano than a guitar.

But the biggest surprise was that thick wool mat—which, again, I had thought would be no big deal. It was a big deal, but when I reverted to the Ortofon cartridge and tried the wool mat again, I heard little if any difference at all. Then it all became clear: The Rega Bias 2 is a good deal less tall (measured from the surface of the record to the underside of the headshell) than the Ortofon OM 5E; in a perfect world, its installation should probably be accompanied by a concomitant lowering of the tonearm, to maintain a reasonable or at least consistent vertical tracking angle. The thicker mat accomplished pretty much the same thing.

Did the replacement mat also sound better because it's woolier? Beats me. And unless you can devise an appropriate test, it probably beats you, too.

Conclusions

My favorite local used-record store also sells trading cards, paperback books with their covers torn off bobblehead figurines, and baldy-boomer magazines such as Goldmine and Vintage Guitar: noble wares, all. But I'll never cease to wonder why they don't sell good-quality record players, too. After all, that's why PetSmart sells hungry dogs. In retailing, no customer is quite as valuable as the one who buys a reason to keep coming back.

The Rega RP-1 would certainly keep me coming back. It's well-made, attractive, apparently durable, and demonstrably superior to any other self-standing audio source at its price. Perhaps best of all, the RP-1 is easy to own and to use. It's not just that I can't imagine $445 buying more happiness; I can't imagine so modest an investment in money and effort buying more music.

For the audiophile who has yet to take the vinyl plunge, and to whom a $445 purchase isn't too big a deal, THE REGA RP-1 IS AN EASY, ENTHUSIASTIC RECOMMENDATION.

FOR THE AUDIOPHILE WHO HAS YET TO TAKE THE VINYL PLUNGE, AND TO WHOM A $445 PURCHASE ISN'T TOO BIG A DEAL, THE REGA RP-1 IS AN EASY, ENTHUSIASTIC RECOMMENDATION.
THE BIG THREE SUMMIT

Join us for an evening with Legends of Audio
Two nights only, May 4th & 5th
Live only at HiFi House

Dan D'Agostino
D'Agostino Master Audio Systems

Karen Sumner
Transparent Audio

David Wilson
Wilson Audio

There's never been a greater meeting of audio legends under one roof in Philadelphia. Dan D'Agostino from D'Agostino Master Audio Systems, Dave Wilson from Wilson Audio, and Karen Sumner from Transparent Audio will be together for two nights, May 4th & 5th-only at HiFi House. They'll demonstrate their latest masterpieces, share their experience, and answer questions from the audience. It's a guaranteed sell out, so please call to reserve your spot today.

May 4th, Jenkintown
509 Old York Road
Jenkintown, PA 19046
RSVP to: (215) 885-5300 or tzwaan@hifihousegroup.com
Hors D'Oeuvres and Refreshments
6pm-9pm

May 5th, Wilmington
2304 Concord Pike
Wilmington, DE 19803
RSVP to: (302) 655-4780 or tzwaan@hifihousegroup.com
Hors D'Oeuvres and Refreshments
6pm-9pm

www.hifihousegroup.com
Brinkmann Audio
Bardo

MICHAEL FREMER

DESCRIPTION
Direct-drive, suspensionless turntable with eight-pole, speed-controlled motor.
Speeds: 33.33 & 45rpm, each variable within a range of ±10%.
Wow & flutter: 0.07% linear, 0.035% weighted DIN 45507. Rumble: –64dB.

DIMENSIONS
Turntable: 16.4" (420mm) W by 3.9" (100mm) H by 12.5" (320mm) D. Weight: 32.6 lbs (14.8kg).

SERIAL NUMBER OF UNIT
USUR054K.

PRIECEs
Bardo turntable, $7990, with vinyl platter mat and a polished granite base, but no record clamp; optional stainless steel and precision-ground crystal platter mat and a Brinkmann screw-down record clamp, $1500; 9.6 tonearm, $3990; Pi moving-coil cartridge, $2699. Optional Balance power supply (not reviewed) costs $1490.

Approximate number of dealers: 10.

MANUFACTURER
Brinkmann Audio GmbH, Im Himmelreich 13, 88147 Achberg, Germany. Tel: (49) 8380-981195. Fax: (49) 8380-981233.

US distributor: On a Higher Note LLC, PO Box 698, San Juan Capistrano, CA 92693. Tel: (949) 488-3004.
Fax: (949) 488-3284.


won't debate here how to make a turntable's platter go around. Choose your favorite: belt vs direct drive, idler wheel vs belt, spring-windup vs wind power, whatever. As far as I'm concerned, there's nothing to debate. Each of these technologies has its pluses and minuses, but none can produce CD's accuracy of speed and inherent freedom from wow and flutter.

Despite that, you'll never convince me that CDs produce music that sounds better or more lifelike than LPs, or that CDs even come close to communicating music's ability to evoke emotions from listeners, or the sensation that you've been transported to the concert hall, or that the musicians are in your room performing for you. They just don't.

Play the best CDs for an hour and convince yourself that the technology has gotten really good—and it has—then play an LP on even a modestly priced turntable, and the sensations of quiet, relaxation, and relief are profound. As one friend who hadn't heard vinyl in years said when he heard The Clash on my turntable, "That's the sound I've been missing!" His decision was made in an instant: He got rid of most of his CDs and replaced them with the LPs he'd ditched when he went digital.

The Bardo

Brinkmann Audio built its reputation for turntables on belt drive. Then, wanting to produce a less expensive model, they devised an elegant direct-drive system for the Oasis, their first turntable to incorporate a plinth. More recently, founder Helmut Brinkmann has designed the Bardo, essentially a plinthless Oasis that more closely resembles the company's sleek, plinthless, belt-driven La Grange but costs less than either.

The basic Bardo costs $7990 and shares the superbly designed and machined spindle and bearing used in the Oasis, the La Grange, and Brinkmann's top turntable
The Get Better Sound Manual
Did you know that, no matter how great your audio components are, you’re probably not getting more than half of their full potential? Get Better Sound shows you how to get the crucial other half of your sound, and how to get it without spending a fortune.

Get Better Sound is not about how components work...
There are already plenty of excellent books on this topic, written by experts in the field. They provide valuable information for those who enjoy reading these near-textbooks.

...GBS is about how to make your components work better
Only one book is available from someone who has professionally installed and voiced many hundreds of systems around North America. Presented in a conversational style, GBS is based not only on physics, but also on successful voicing experience gained from over 35 years of doing it in homes, manufacturer and dealer showrooms, and at audio shows.

Get Better Sound is not about selling you another component
The only agenda is making those components that you already own come alive in your room.

GBS has been reviewed in Stereophile, Hi-Fi+, 6Moons, Enjoy the Music, Positive Feedback Online, TNT Audio, and more.

The Get Better Sound DVDs
Why is there a DVD when there is already a Set-up Manual?
It all started when Jim Smith began traveling around North America, voicing systems belonging to readers of GBS. One thing kept occurring...
Even though his readers had reported a real improvement in their sound after employing the tips in GBS, they were all amazed at the additional level of improvement when Jim voiced their systems. This happened at every site.

Seeing is Believing
When asked why the sound was so much better, Jim found himself replying that he employed exactly the same tips & techniques found in the GBS Set-up Manual. But he finally realized that actually SEEING and having the steps explained was more powerful and more effective for some people than only reading about them. And so, the GBS DVD series was born.

In addition to some all-new topics, Jim has chosen the most relevant tips from the Get Better Sound set-up manual. They are things that you will want to do. He discusses them in an easy-to-understand style. But he pulls no punches to be sure you have the information that will make a REAL difference.
And when you realize it's three DVDs, for the price, it's a steal.

RoomPlay™ Custom Voicing
As Jim has traveled around, voicing North American readers' systems, four things were very obvious:
1) Audiophiles have standards that are too low. They accept much less than they paid for.
2) It's not really their fault. They simply don't have a reference for how good their systems can be.
3) Addressing how electrons travel in wire and electronics is one thing—addressing how sound waves are launched into the room and how they are received at the listening seat is far more critical and pays far bigger dividends.
4) A $10,000 system properly “playing the room” (working with the room, rather than against it) is vastly superior to a $100,000 system that isn't.

Most important component
It will always be your room. Proper system voicing to your room yields greatly enhanced dynamics, presence, liveliness, tone, and soundstaging. Therefore, your musical involvement is enhanced as well.
That's why Jim's RoomPlay™ voicing clients are no longer replacing components. They're off the equipment merry-go-round. These days, they shop for music.

How to place an order—or get more info...
Visit www.getbettersound.com, e-mail jim@getbettersound.com, or call 770-777-2095.

Get better sound from any home audio system!
Internet: www.getbettersound.com • Phone: 770-777-2095 • E-mail: jim@getbettersound.com
Brinkmann will substitute for the standard acrylic platter mat an integral one made of precision-ground crystal glass, and add a screw-on record clamp. The glass mat includes for the record label a recessed area of stainless steel around the spindle to accept a raised washer insert. Screwing down the clamp produces a force around the record’s perimeter that flattens it against the platter. A second option ($1490) adds a heavier outboard power supply for the motor, with a larger transformer that’s said to increase the bass response. A slab of polished granite measuring 18” W by 12.5” thick by 12” D for the turntable to sit on is standard in the US. An isolation base, made by Harmonic Resolution Systems, which has had a long relationship with Brinkmann, is available.

The Bardo supplied for review included the glass platter and clamp but not the power-supply upgrade, in a complete plug'n'play package that included Brinkmann’s 9.6 tonearm ($3990) and Pi moving-coil cartridge ($2700). Brinkmann will supply custom-drilled armboards for your choice of tonearms; Helmut Brinkmann was kind enough to include boards for my Graham Phantom II and Kuzma Point arms.

What any mass-loaded turntable sits on will have a great effect on its sound. The Bardo sat on my HRS rack atop an HRS isolation base tuned for the ‘table’s weight. In my opinion, the HRS rack is one of the greatest audio products ever manufactured.

A Non—Disco-Friendly Direct Drive

The Bardo and Oasis share the same neat, efficient direct-drive motor, designed and manufactured by Brinkmann. It consists of a large, eight-pole ring magnet mounted in the subplatter bearing housing, and a series of coils arrayed on a circuit board mounted below the magnet. An aluminum subplatter holds the steel bearing shaft, the ring magnet, and the tachometer. A circular fixture of machined aluminum, bolted to the plinth, contains the electronic drive circuit and the four field coils, which, interestingly, are not symmetrically arrayed at 90° angles to one another. Instead, the coils are arrayed at 22.5° angles, with the more poles, the more cogg ing. Nothing to counteract the motor cogg ing that inevitably occurs directly within the platter of a high-torque, low-mass, direct-drive turntable, large amounts of wow and flutter are also inevitable.

The concept is not new—see my review of the Grand Prix Audio Monaco direct-drive turntable in the November 2007 Stereophile, Vol.30 No.11—but the execution appears to be. Though Thorens is credited with developing the earliest direct-drive turntables decades ago, modern direct-drive technology took into account the quick-start, quick-stop needs of radio stations and DJs. Thus, motors were high-torque, platters light.

Virtually all electric motors “cog,” ie, their rotational speed regularly fluctuates above and below the average speed as each magnet pole goes past each coil. A high-torque motor needs a greater number of poles—in some designs, dozens—and the sound of Technics’ now-discontinued SL1200 series of direct-drive turntables, and explains why, despite their high build quality and relatively low price, few are used in serious audio systems, though some listeners claim that these ‘tables can be modified to improve their sonic performance.

In designing his direct-drive system, Helmut Brinkmann chose to flip the direct-drive paradigm and go with a 22-lb, “resonance-optimized,” aluminum-alloy platter and a relatively low-torque motor that takes about 12 seconds to get the platter up to 33.33rpm. Brinkmann claims that, once set in motion, the massive platter requires but a small electronic “nudge” to maintain accurate speed; thereafter, the ultra-low-friction bearing requires very little energy to maintain correct speed. Brinkmann also claims that the heavy platter and the close-proximity coil array’s overlapping magnetic fields help minimize cogg ing effects. The geometry of the coil array, he says, was arrived at through listening. Brinkmann uses the same platter bearing in his belt-driven ‘tables. While in those designs the bearing is electrically heated, that’s not necessary in the Bardo, he says—the motor’s quiescent current produces enough warmth.

The Bardo’s speed control is analog—Brinkmann felt that the radio-frequency interference from a digital system
would degrade the sound. An optical reader measures the tachometer’s strobe frequency, converts it to a voltage, and compares that to a temperature-stable variable reference voltage. Trim pots for the two speeds can vary the reference voltage, and thus the platter’s speed of rotation, within a range of ±10%.

I appreciated that Brinkmann’s technical descriptions of what he’s done don’t minimize the difficulties of designing belt- or direct-drive turntables, and that he claims perfection for neither of his designs.

**The Bardo’s Other Parts**

The self-contained motor and bearing system attaches to a substantial, resonance-optimized, tear-shaped, 16.4”-wide chassis of duralumin, to which are fitted three adjustable feet of machined metal. A circular platform accepts machined-aluminum armboard inserts that can be easily rotated to achieve the proper pivot-to-platter distance with a wide variety of tonearms, before being secured with three locking bolts.

The chassis’s far side holds a pair of RCA jacks (XLRs are an optional extra) that terminate in a DIN plug under the housing of the tonearm mount. An umbilical from the outboard power supply, which is housed in a nicely machined chassis, connects to a three-pin jack adjacent to the analog outputs.

**Setup and Use**

If you order the Bardo with the 9.6 and Ph, it will be delivered with the arm and cartridge already installed, even though there is no stylus guard. Not a problem, as you’ll see when you unbox it.

After carefully removing a black nylon tie that holds the arm tightly to a rod threaded into the spindle, you place the arm on its rest, then remove the threaded rod and the orange protective tape around the subplatter-and-bearing assembly. Carefully place the heavy platter on the subplatter assembly, level the turntable, add the counterweight to the back of the arm, set the tracking force, and in less than 30 minutes you’re just about ready to play records. All that’s left to do is connect your choice of output cables to your phono preamp, attach the umbilical to the power supply, and plug that into the mains. It doesn’t get much easier—particularly for a sophisticated turntable with such high performance aspirations.

Place a record on the platter. (If you order the optional platter mat and clamp, you’ll have to insert a washer into the recess around the spindle before placing an LP on the platter and apply the clamp.) Flip the switch to the correct speed, and you’re playing records.

A word of caution: If you reach directly for the Bardo’s on/off switch, your arm can easily collide with the stylus. It doesn’t take long to get accustomed to reaching around the tonearm to get to the switch rather than directly toward it.

Brinkmann’s specified pivot-to-platter distance measured correctly per the requirements of the German company’s longer, more expensive legendary Breuer. The new arm includes the same headshell, armtube, mounting socket, and cueing device used in the other arms. The bearing system differs, though the Swiss-made ball bearings are identical.

While the more expensive arms use traditional fixed-gimbal bearings, the 9.6 has a unipivot-like construction for the horizontal bearing. The weighted arm housing sits on a small ball that rests on a pivot, also as in a typical unipivot design. A second ball at the bottom of the housing prevents “arm lean,” but since the arm’s weight rests on the top ball, the lower one isn’t critical, and I could feel some play when I handled the arm. Vertical arm motion is effected via a second pair of captured bearings. This arrangement allowed the use of less costly parts and kept the price down, Brinkmann says. The arm’s effective length is 248mm (231.5 from pivot to spindle, plus 16.5mm of overhang), while its effective mass, referenced to the center position of the headshell slot, is 12gm.

The 9.6 arm’s design is basic: The counterweight slides freely on a shaft aligned with the armtube and is secured with a grub screw, as is the vertical shaft used to set vertical tracking angle (VTA) and stylus rake angle (SRA). Setting the cartridge’s vertical tracking force (VTF) is therefore less convenient than with a threaded rod, but if you carefully set the grub screw, you can nudge the counterweight along in small enough increments.

A threaded rod extending through the armrest platform to the base permits easy adjustment of arm height, hence VTA, after you’ve loosened a collar-mounted grub screw. This is less convenient than and not as easily repeatable as vernier-dial VTA adjustment, but unless you’re delusional, you shouldn’t need to change the arm height for every thickness of LP. The antiskating can be adjusted via a system of a magnetic ring opposed by a threaded pin magnet.

As with the other Brinkmann arms, the headshell has vertical walls that do not increase its rigidity, but also limit the width of the cartridges that can be used. Even if your wide-bodied cartridge of choice fits, be sure there’s enough room to adjust its zenith angle. And as with some fixed-gimbal arms, the 9.6 offers no way to adjust a cartridge’s azimuth. The arm’s instructions include a method by which the azimuths of some cartridges can be adjusted by using a 10x or greater magnifying glass to insert, into the small lateral hole drilled in the rod that presses the transducer onto the rubber damper, a 0.8mm-diameter steel rod, and . . .
preferred overhang position. It turns out the original setting was deliberate. Brinkmann uses the Dennesen alignment protractor (in fact, he offers a nicely machined version of it) and a slightly different geometric methodology, describing the details of which space doesn’t permit. As I say in my seminars on turntable setup, there are many ways of setting overhang to minimize tracking distortion. After our conversation, I returned the Pi’s stylus to Brinkmann’s preferred overhang position.

Using the Wally Tools Wallyskater, I found that the antiskating was set a bit too high—but again, skating is dependent on groove modulation, vinyl formulation, where on the record you measure it, and, for all I know, the day of the week. I suspect a modulated groove test was used to set antiskating; if that modulation was higher than what’s found in typical musical signals, the setting will be too high.

When I checked the SRA with a digital microscope, I measured 90°, or 2° lower than what my experience has shown me is optimal. Raising the arm pillar 4° would produce an approximate 1° change in SRA, so I decided to raise it about 5mm, but not before listening to it as delivered. A digital oscilloscope and a Fozgometer (which in this case correlated well with internal/Analogue Productions APP-SWCL

But don’t even think about it. In short, what the 9.6 lacks in bells and whistles it made up for in the excellence of its machining and construction. The 9.6 tonearm is a very well made, basic design, but at $3990 it faces some stiff competition for not that much more money—competition that offers greater functionality, perhaps with greater dynamic capabilities and more precise extraction of information from the grooves.

The Brinkmann Pi cartridge’s Benz-Micro heritage was obvious from the get-go. The motor is built to Brinkmann’s specifications by Benz-Micro and includes a Micro-Ridge stylus. The cantilever material is not specified. The Pi’s output is approximately 0.25mV, and its compliance is moderate at 15μm/mN. Recommended are a tracking force of 1.8-2gm, a VTA of 23°, and a resistive load of 600 ohms.

Helmut Brinkmann says he tweaked the Pi’s design for a year and a half before he achieved the results he desired, including making the tiny set screws out of various materials. The Pi, with a body of machined aluminum designed to control the dissipation of resonant energy, weighs a hefty 14gm. Brinkmann supplies aluminum screws and titanium washers, which, he claims, in combination with special damping between the cartridge body and headshell, have been “sonically tuned to create a unique musical instrument.”

The Pi cartridge strikes me as very competitive at and above its price of $2700, but its lack of a stylus guard could be problematic for those with cats or ham-handed domestic help. Its tonal balance was slightly on the lean side of neutral but only slightly so, and its overall extension at both frequency extremes was impressive, as was its tracking ability.

—Michael Fremer

THE BARDO-9.6-PI PRODUCED SUPERBLY WELL-ORGANIZED SOUND WITH CLEAN, SHARP ATTACKS, REASONABLY STRONG SUSTAIN, AND PRONOUNCED DECAY, ALL AGAINST A JET-BLACK BACKDROP.

Some stiff competition for not that much more money—perhaps with greater dynamic capabilities and more precise extraction of information from the grooves.
1613) brought nothing but pleasure: the warmish-sounding opening tracks had the proper mellow richness. (Though everything was rerecorded in stereo for this 1961 release, the earlier tunes were kept in the warm style of the mono originals, with minimal stereo separation.) Cole's creamy voice rides atop the sound of the somewhat softly recorded piano with the kind of clarity and definition that 1940s recordings couldn't produce. The Brinkmann combo did a very good job of capturing this, though it seemed a slight bit of edge remained on top that became more obvious as, in "Nature Boy," the producers maximized the stereo separation.

Switching to the equally remarkable *Ella Fitzgerald Sings The Rodgers and Hart Song Book, Volume I* (45rpm LPs, Verve/ORG 055), there was a bit more edge than I'd been used to from Fitzgerald's voice, and the huge kick-drum *whomp* in "You Took Advantage of Me," though deep, seemed robbed of the last bit of low-frequency extension and dynamic energy. Instrumental separation could have been more pronounced.

To get to the bottom of this, I made some 24-bit/96kHz recordings of the Fitzgerald, using my Alesis Masterlink hard-disk recorder as well as "Green Shirt," from Elvis Costello's *Armed Forces* (LP, Mobile Fidelity Sound Lab), then took a deep breath and began mastering the setup of the considerably more expensive, more complex, more massive Kuzma 4Point tonearm ($6500, review to come) on the Bardo, with the Pi cartridge. I listened again to the same tracks, then recorded them, again at 24/96, so that I could do direct comparisons.

**Verdict:** The Bardo is orders of magnitude better than I would have believed had I used it only with Brinkmann's own 9.6 tonearm. That's not to say the 9.6 isn't a good arm at its price, or that the Bardo didn't sing and swing when connected to it, or that, in a less revealing system whose speakers and amp don't add up to $100,000, the Brinkmann combo wouldn't be among the best analog front-ends you can own for under $20,000. It's just that the costlier Kuzma 4Point is considerably better, and let the Bardo express itself more fully in every way.

With the Pi cartridge riding in the massive 4Point, the top end smoothed out considerably and was less pronounced without losing any air, transient speed, or high-frequency extension. Ella Fitzgerald's voice became more three-dimensional and nuanced and less bright, in part because the reverb better separated out into its own space instead of being submerged in the sound of her voice. The kick drum's energy produced a greater wallop and more satisfying *whomp*. More than that, the wind instruments in the right channel took on a richer, rounder harmonic sheen, while the piano in the left sported more wood and less cardboard. Images became more stable and solid—and through the 9.6 they'd already been plenty good in that regard.

The Bardo's dynamic presentation was very, very good, but not complete—and that's where some of the more massive and expensive turntables can beat it. But unless the rest of your system can express the full dynamic palette, you won't miss what the Bardo omits.

**Comparisons**

All that was left to do to really get the Bardo's number was to record the same Fitzgerald and Costello tunes with my reference Continuum Audio Labs Caliburn turntable, Cobra tonearm, and Castellon stand—which together cost more than ten times the price of the Bardo-4Point combo—then mount the Ortofon A90 cartridge in the 4Point on the Bardo and record them again. (Thanks to the digital USB microscope and an oscilloscope, I could be sure what I was hearing was not due to variations in setup, though with

**THE BARDO IS ORDERS OF MAGNITUDE BETTER THAN I WOULD HAVE BELIEVED HAD I USED IT ONLY WITH BRINKMANN'S OWN 9.6 TONEARM.**
deeply and transparently into the recesses of recordings—a function of both micro- and macrodynamic range that I heard with the first LP I played on it almost six years ago—the Bardo stopped just as it entered the darkness.

However, you pay a lot to go that extra distance—as you do going from the Bardo to the Balance, which, as I remember (I was about to buy a Balance when the Continuum came along), gets you way into the depths of what's in the grooves of your favorite recordings. The Bardo, at a much lower price, does not. On the other hand, I know a few analog devotees who find the Balance's sound "polite," even boring. They're misguided, in my opinion, but they might be thrilled by the Bardo, regardless of prices.

With the Ortofon A90 in the Kuzma 4Point playing MoFi's stupendous reissue of Dead Can Dance's *Into the Labyrinth* (LP, 4AD/Mobile Fidelity Sound Lab 2-001), or España from Ernst Ansermet and the Suisse Romande Orchestra (LP, ORG 014), or The Nat King Cole Story, the Bardo addressed with great precision every aspect of analog playback and left little to be desired. Its minor errors were those of omission, as previously described.

**Conclusions**

As a plug'n'play record-playing system costing just over $16,000, Brinkmann Audio's Bardo turntable, 9.6 tonearm, and Pi cartridge have a value greater than the sum of their parts. If you're new to analog and can afford to spend this much, but don't want to get too heavily involved in setup and/or have to buy a boxful of setup tools, you can't go wrong with this combination. Even a novice with a digital stylus gauge can probably unbox it, set it up, and be playing LPs within an hour.

The Bardo is beautifully made, smartly designed (I think the high-mass platter and low-torque motor are key to its performance), looks elegant, and has no outboard motor and belt to potchky with. Out of the box, it's plenty good—and once you're hooked, you can make it even better. At $9490 with glass and stainless-steel mat and record clamp, the Brinkmann Bardo is a contender for the best turntable under $10,000, and probably should be auditioned by anyone looking for a turntable costing $15,000, or even more.

**THE BRINKMANN BARDO IS A CONTENDER FOR THE BEST TURNTABLE UNDER $10,000, AND PROBABLY SHOULD BE AUDITIONED BY ANYONE LOOKING FOR A TURNTABLE COSTING $15,000, OR EVEN MORE.**

---

**The Finest Built Speaker In The World is at David Lewis Audio**

- ACCUPHASE
- AERIAL
- ASTHETIX
- AIR TIGHT
- AUDIENCE
- BAT
- BENZ MICRO
- BERGMANN
- BOULDER
- BRINKMAN
- CANTON REFERENCE
- CAT
- CLEARAUDIO
- CHORD
- CONRAD-JOHNSON
- DCS
- DYNADLO
- ELECTROCOMPANET
- GENESIS
- KIMBER KABLE
- KOETSU
- KUBALOSOSNA
- LUXMAN
- LYRA
- MAGNUM DYNALAB
- MARK LEVINSON
- MARTEN DESIGN
- MONITOR AUDIO
- NAGRA
- NAIM
- NORDOST
- OCTAVE
- PEAK CONSULT
- PROJECT
- SHELTER
- SIMAUDIO
- SIMON YORKE
- SME
- SONUS FABER
- SONY SS-AR1
- TAD REFERENCE 1
- TRANSROTOR
- VAC
- VAN DEN HUL
- VERITY
- VIENNA ACOUSTICS
- VIVID AUDIO
- YG ACOUSTICS

**David Lewis Audio LTD**

8010 Bustleton Avenue • Philadelphia, PA 19152-2802

(215) 725-4080

DAVIDLEWISAUDIO@GMAIL.COM • WWW.DAVIDLEWISAUDIO.COM

---

**World Radio History**
Head-Direct HiFiMan HM-602 Digital Audio Player

Stephen Mejias, who writes about his experience with this $439 player in this issue's "The Entry Level," loaned me the review sample so I could check out its performance on the test bench. I used Stereophile's loan sample of the top-of-the-line Audio Precision SYS2722 system to perform the measurements on the HM-602 (see www.ap.com and the January 2008 "As We See It"); for some tests, I also used my Audio Precision System One Dual Domain and the Miller Audio Research Jitter Analyzer. To test the HiFiMan's performance as a USB DAC, I used my MacBook running OS10.6 and Bias Peak Pro 6 to play WAV files, switching the HM-602 from "DAP" to "USB" mode with its top-panel switch. To test it in DAP mode, I loaded WAV and FLAC files representing 16- and 24-bit test tones—the HM-602 doesn't play AIFF or ALAC files—into the HiFiMan's internal flash memory, a procedure as simple as plugging the player into my computer's USB port and dragging'n'dropping the files.

In USB mode, Apple's USB Prober utility identified the HM-602 as being a two-channel "USB PnP Sound Device" manufactured by "C-Media Electronics Inc." and operating in isochronous adaptive mode. The bit depth was identified as 16, and the HM-602's USB receiver operated at just two frequencies: 44.1 and 48kHz. By contrast, in DAP mode, in which the HM-602 can access data stored in its internal memory, it played WAV and MP3 files with sample rates up to 48kHz and FLAC files up to 96kHz, including 88.2kHz. An oddity was that while the HM-602 would play 24-bit FLAC files, trying to play a 24-bit WAV file caused the player to momentarily freeze, then reboot. The measurements were taken with the HM-602's battery fully charged and its equalization turned off. Turning the EQ on and setting it to Normal didn't change the measured performance.

The maximum output level from the line-level output was 1.79V, sourced from a 214 ohm impedance at high and middle frequencies. This increased to 558 ohms at 20Hz. In the Low Gain setting, the headphone output's maximum level was 1.85V, sourced from a constant 12 ohms across the audioband; High Gain increased the maximum level by 3.2dB, to 2.69V. While the headphone output preserved absolute polarity, the line output inverted polarity, as can be seen in fig.1, which shows the HM-602's impulse response. More interesting, this response indicates that the HM-602 either doesn't use a digital reconstruction filter, or uses one optimized for its time-domain behavior. Head-Direct's Fang Bian confirmed that the HiFiMan player doesn't use a digital reconstruction filter, just a slow-rolloff analog low-pass filter. While exotic D/A processors from Audio Note and Zanden use the so called "non-oversampling" topology, the HM-602 appears to be unique in that it is the first portable player to go NOS.

Fig.2 shows the HM-602's frequency response with 44.1kHz data. While the low-frequency rolloff is very mild, the top-octave output does roll off prematurely, due to the analog low-pass filter that follows the DAC. This should not in itself have any audible consequences, however. The channel matching is good, with just a 0.04dB imbalance evident. Channel separation (not shown) was good rather than great, at 90dB in the midband, decreasing slightly at the frequency extremes.

The TDA1543 D/A chip used by the HiFiMan dates back to the early 1990s, and is a 16-bit part. So while the HM-602 will play 24-bit data files, and while doing so even displays "24bit" rather than "16bit" on its screen, it will always truncate those data to 16 bits when they are presented to the DAC. The TDA1543 does operate up to 192kHz but doesn't offer the excellent low-level performance offered by more modern chips. Fig.3, for example, which shows a ½-octave analysis of the player's line output while it played a 16-bit WAV file representing a dithered 1kHz tone at ~90dBFS, indicates that both channels suffer from a high level of second-harmonic distortion, and that the left channel (solid trace) also has a significant degree of negative amplitude error.

This was confirmed by FFT analysis (fig.4) and by the plot of linearity error (fig.5). The top trace in fig.5 is the right channel; as the tone drops below ~85dBFS, the measurement begins to be affected by noise. By contrast, the left channel (bottom trace) suffers from an increasing amount of negative amplitude error as it drops below ~70dBFS. What is happening is that the DAC has some missing codes and, as a result, is starting to act as a frequency doubler at low levels, pumping energy into an odd harmonic (fig.4) and by the plot of linearity error (fig.5). The top trace in fig.5 is the right channel; as the tone drops below ~85dBFS, the measurement begins to be affected by noise. By contrast, the left channel (bottom trace) suffers from an increasing amount of negative amplitude error as it drops below ~70dBFS. What is happening is that the DAC has some missing codes and, as a result, is starting to act as a frequency doubler at low levels, pumping energy into a tone an octave higher (hence the high
level of second-harmonic distortion) and, as it does, reducing the level of the fundamental. You can just make this out in the plot of an undithered waveform at -90.31dBFS (fig.6), where the left channel (blue trace) has more zero crossings than the right (red), though this is obscured by the high level of high-frequency noise.

The HM-602's distortion was generally higher than I like to see, with both many harmonics evident between -80 and -90dB (0.003-0.01%), and a granular-looking noise floor with the headphone output set to Low Gain and driving a full-scale tone into 300 ohms (fig.7). The line output was only slightly better driving 100k ohms, and couldn't drive loads below 1k ohm at full level without asymmetrical waveform clipping appearing. Don't plug your headphones into the line output! The granular noise floor can also be seen in the spectrum of the line output while the player decoded a 16-bit VJAV file representing an equal mix of 19 and 20kHz tones (fig.8). More important, the absence of a reconstruction filter gives rise to very strong images of the tones appearing at 24.1 and 25.1kHz, as well as other enharmonic products that fold down into the audioband.

This transferal of ultrasonic energy into the audioband was also evident with 96kHz-sampled data.

Playing 16-bit data from its internal memory, the HM-602 offered quite good rejection of jitter. The spectrum of its output while playing the J-Test tone (fig.9) does show some emphasis of the 229Hz-spaced sidebands, which the Miller Analyzer calculated as 659.4 picoseconds peak-peak in the left channel and 573ps p-p in the right. Operated as a USB DAC, however, the HM-602 gave a level of jitter so high that the Miller Analyzer couldn't reliably measure it. The spectrum is shown in fig.10: Not only are the 299Hz-spaced sidebands extremely high in level; the central peak that represents the 11.025kHz tone also has a significantly broadened base, suggesting the presence of very high random low-frequency timing variations. This poor performance rules the HM-602 out of contention for use as a USB DAC, in my opinion, but it's possible that our sample was broken.

In playing 16-bit/44.1kHz music files from its internal memory, the Head-Direct HiFiMan HM-602's sound will be dominated by the designer's decision to forgo a reconstruction filter. There are those who strongly believe that such an approach results in digital sound quality that is considerably more analog-like. But I still don't much like the behavior of the TDA1543 D/A chip—my iPod Classic 160GB offers significantly better measured performance than the HM-602 in every way. There was much discussion on the Internet about the fact that the HM-602 will play high-resolution files. But, as I've pointed out here, it truncates 24-bit files to 16 bits, and its NOS DAC topology doesn't measure well with high sample rates; I'm not sure, therefore, what benefit other than convenience this ability confers on the HM-602. —John Atkinson
Picking legends is a tricky game. But, with the **Magico Q3** we think we are on solid footing.

Building on the groundbreaking design and construction techniques of the unparalleled Q5, the new Q3 promises to continue the Magico trend of resetting the bar and upsetting the "established" order of the speaker world.

*Don't miss this introduction!*

---

**MAGICO Q3**

World Public Debut

at Goodwin's High End

May 14th, 11a.m.- 6 p.m.

Please RSVP

Call to audition Magico loudspeakers in one of our state-of-the-art listening rooms.

899 Main Street
Waltham, MA 02451
781.893.9000
goodwinhighend.com
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 ABB & ZZ Top!

Subscribe Today & Get Your 25th Title FREE!

“I recommend these highly. If you want the best digital versions of these great Blue Note albums, grab these. In my opinion they are the best that have ever been done and probably the best that ever will be. They can’t stay in print forever so don’t delay!” - Steve Hoffman

Call for Special Package Pricing!

Keep Your Precious LP Collection Clean! Spin Clean, Nitty Gritty & VPI Record Cleaners

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

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
unleash “Retarded,” the unforgettable first track of Up In It (1990), the Afghan Whigs’ first Sub Pop album—the one with the eerie stitched-up hand on the cover—and immediately the madness seeps out. No one has ever done the angry leer and tormented spat quite like AW singer/songwriter Greg Dulli. As the charismatic leader of one of the nastiest, hardest-edged live acts ever to prowl a 1990s indie-rock stage, he and the Whigs were one of the Yo MTV 120 Minute generation’s most striking acts—one that combined buzzy guitar thunder with odd but welcome leanings toward classic R&B that persist to this day in the Twilight Singers. The assault of the Cincinnati-based Whigs was led by Dulli, a seemingly normal Ohio boy whose unhinged wailing, self-flagellating lyrics, and shrieking, Cobra-like stage persona made him a rock star: dangerous candy for the girls, unhinged fury for the fellas.

Although the Whigs barely made it into the new century before splitting up in 2001 (a reunion seems highly unlikely), some of Dulli’s old ferocity resurfaces three tracks into Dynamite Steps, in the urgent “Waves,” which mixes clouds of swarming guitars à la the Whigs with his pleading half-screams. In “On the Corner” (not a Miles Davis cover), the first new single in five years from Dulli’s post-Whigs band, he again becomes the sinister exhorter committed to evil alive like, “From the Field / The Border / Gomorrah / On the Corner / Lick your lips / Desire / The Liar / Becomes Divider.” Thus loosed, in the next number, “Gunshots,” Dulli exults in the seductive power he still sees in a world of darkness and damage: “Gunshots, baby / Let’s cut through the crowd.”

The overall mood and lyrical bent of Dynamite Steps clearly work in the same vaguely horror-movie drift Dulli has been enamored of since forming the vampirically titled Twilight Singers. The album’s spooky gray-and-black packaging and inside photo of a winged vampire-clown thing (one of the Wicked Witch of the West’s flying monkeys, all grown up?) only add to the Goth flavor, as does repeated use of such comic-book terms as demons and dark circles, and menacing couplets like “Covering the walls in Shadow / Faster than the sound of speed / Never seen no devil / Now it’s all that I can see.” Yet longtime fans will know that Dulli isn’t trying to tap into the current (yet mercifully fading) mania for all things fanged. As always, it’s the inner monsters that Dulli does battle with, and writes about with such vicious vividness.

Yet while Dulli’s overarching subject may not have changed, his craft has become more intricate and careful. In the first track, “Last Night in Town,” he builds from plainsong acoustic piano into a soaring, layered pop tune. The opening of the title track deftly mixes electronics and an acoustic guitar. In “On the Corner,” the fabulous but very simple and unaffected use of a drum machine adds much before the tune works, to great effect, the loud/soft/loud dynamic that all ’90s alt-rock players seem to have in their DNA. In “Get Lucky” Dulli mixes acoustic piano, cellos, and violins with one of his most unaffected and in-tune vocal performances ever.

Twilight Singers guitarist Dave Rosser, bassist Scott Ford, and guest drummer Gene Trautmann all provide solid support throughout, though it’s the record’s guest list—headed by Mark Lanegan (Screaming Trees), Dulli’s partner in the side project Gutter Twins—that adds buzz. Singer-songwriter/painter Joseph Arthur plays harmonica on several tracks, while Ani DiFranco, who seems an odd choice, adds her voice to the duet that is “Blackbird and the Fax.” Nick McCabe, guitarist for the now-defunct UK act The Verve, plays guitar on “Be Invited.”

Dynamite Steps was recorded—or, as Dulli puts it, “shot on location”—in Los Angeles and New Orleans, where he has homes, and was worked on by a slew of engineers. It does sound large, and blurred in spots, but it can also be very delineated and detailed in the quiet spots—a necessary ingredient of the loud/soft approach. Dulli even uses a vocal processor with admirable judiciousness.

Perhaps the strongest collection since the Twilight Singers’ second record, Blackberry Belle (2003), Dynamite Steps is, again, Greg Dulli at his best—or, as he put it in a recent interview in TheDailySwarm.com, “The darkness never leaves. You have to learn how to let the sunshine in and get your Vitamin C on. You don’t want to find yourself running to stand still: you want to see a new road ahead.”

—Robert Baird
HIGH END® 2011
THE BEST SOUND * THE BEST PICTURE

THE TRADE FAIR FOR EXCELLENT HI-FI AND HOME CINEMA EQUIPMENT

19TH - 22ND OF MAY 2011
M.O.C. MUNICH GERMANY

FROM 10AM TO 6PM
THURSDAY, MAY 19TH TRADE VISITORS ONLY
classical

LISA BATIASHVILI
Echoes of Time

Performance **** Sonics ****

This is the debut DG recording of the young Georgian violinist Lisa Batiashvili. Her father played violin in a quartet, and her teacher was a pupil of David Oistrakh’s, to whom Shostakovich dedicated his violin concertos. Having been steeped in the tradition, it’s no wonder that Batiashvili’s CD is so impressive. She captures well the inwardness of the first movement of Shostakovich’s Violin Concerto 1, but the second movement, which Oistrakh characterized as “demonic,” she plays less for its terror than for its twisted, dancing wit (those familiar with Lady Macbeth that Batiashvili’s CD is so impressive. She captures well the certos. Having been steeped in the tradition, it’s no wonder

Giya Kancheli’s unique, 11-minute V & V, for violin, taped voice, and strings, is a moody piece, quiet, with long lines and rare changes in dynamics. Kancheli says something about “the Divine Voice” when describing it, but it doesn’t matter—it’s hypnotically lovely and just a bit eerie. Shostakovich’s Lyrical Waltz, from Seven Dolls’ Dances, shows us the composer at his most charming and benign; Batiashvili plays it with charm. She is joined by pianist Hélène Grimaud for Arvo Pärt’s Spiegel im Spiegel (Mirror in Mirror), surely one of this minimalist’s most minimal pieces, Grimaud accenting certain notes expressively and Batiashvili playing gently: The work’s inherent, undeniable sadness is wonderfully frozen in time. The duo end the recital with a hit: Rachmaninoff’s Vocalise, played gorgeously and, the players realizing that the fat content is high enough in the notes and melody, with very little schmaltz added.

The program is, indeed, accessible. The only truly thorny work is the concerto, and Batiashvili and conductor Esa-Pekka Salonen take a mellower, less in-your-face approach than the norm. The rest of the CD is just pure beauty and charm. The Bavarian Radio Symphony Orchestra plays with utter dedication for Salonen, and the sound is excellent. This is perhaps not as severe a program as some might prefer, but Batiashvili should be heard. —Robert Levine

VIVALDI
Ercole sul Termodonte

Rolando Villazon, Ercole; Viveca Genaux, Antiope; Joyce DiDonato, Ippolita; Diana Damrau, Martesia; Patrizia Ciofi, Orizia; Romina Basson, Theseus; Philippe Jaroussky, Alceste; Topi Lehtipuu, Telamone; Europa Galante, Fabio Biondo
Virgin 6 94545 0 (2 CDs). 2010. Daniel Zalay, prod.; Benjamin Riffole, eng. DDD. TT: 2:24:01
Performance **** Sonics ****

This opera, originally presented in Rome in 1723, has been reconstructed by conductor Fabio Biondo from the complete libretto and a few extant arias and other numbers. Biondo has composed the recitatives and orchestrated the arias, duos, and instrumental passages, using as guides historical sources and his own expertise. He has also taken arias from other Vivaldi operas and plugged in the Ercole texts. Since Vivaldi’s operas had not been heard in Rome, Vivaldi himself used arias from at least eight of his earlier works in Ercole.

The plot involves Hercules’ mission to obtain the sword and girdle of the Amazon Queen, Antiope, who, with her sisters and daughter, are quite the family. He is joined by the heroic Theseus, Telamon, and Alcete. They attack and capture Martesia, the queen’s daughter, while the Amazons take Theseus. When her mother threatens to kill Theseus, Martesia falls in love with him out of pity, but after the two warring sides get to know each other and there’s a lot of flirting, the goddess Diana, speaking through Hercules, orders the marriages of Hippolyte to Theseus and Martesia to Alcete. Hercules tells Antiope that she need not hand over her weapons. Everyone is happy.

A quick look at the cast reads like a Who’s Who of early-music singing, with one exception: Rolando Villazon, fresh from some serious time out due to surgery on his vocal cords. He is, of course, a great tenor, and his Ercole (Hercules) is very much the conquering hero. But there’s no denying that Villazon’s big, dark-hued sound is the antithesis of what we think of when we think of early music: he approaches recitatives and arias as if they were composed in the 19th century, where the core of his repertoire lies. Purists will balk, but I find it exciting. Since the opera was composed for Rome, where women were not permitted onstage, all of the female parts—as well as Alcete, the King of Sparta; Theseus, Prince of Athens; and Telamone, King of Ithaca—were written for castrati. On this recording, women fill most of the roles; countertenor Philippe Jaroussky sings Alceste, while light tenor Topi Lehtipuu is Telamone; only Villazon truly stands out, holding up the low-lying title role.

If you’re concerned about Villazon, try his opening aria, “Vedra l’empia” (CD 1, track 13), a teeth-clenched description of how he will subdue Antiope; and the flashy “Non fia della vittoria” (CD 2, track 25), with its wild coloratura. No problems. And happily, no two of the high voices sound alike: Vivica Genaux as Antiope uses her warm tone and signature buzz with terrific spite and belligerence: “Scendo, volero, gridero” (CD 2, track 39), an oncoming train of an aria, is spectacular, although Genaux softens for the occasional reflective moment. Diana Damrau, her voice less bright than usual in the sympathetic part of Martesia, sounds the ingénue nicely. The role of Ippolita is taken by the invariably perfect Joyce DiDonato, sounding here more soprano than mezzo-soprano. Her four arias (five, actually, but
The Very Best In Sound and Screen Gathered From Around the Globe!

June 3, 4, & 5, 2011  T.H.E. Show  Newport Beach, CA

Bring your own CD's; flash drives; i-pads; i-pods, vinyl records; memory sticks
and hear what they REALLY sound like on state-of-the-art equipment
AS YOU HAVE NEVER EXPERIENCED BEFORE!

T.H.E. Show
Newport Beach

Open to the Public!

Also: Great Jazz Entertainment,
Wine Tasting and Car Show
All at T.H.E. Show Newport
Newport Hilton
right across the street from
Orange County/John Wayne Airport

Also: The absolute sound  stereophile

Widescreen Review

theshownewport.com

Buy your tickets and
discounted hotel sleeping rooms on-line.
one is cut; the booklet explains derivations and excisions) are in contrasting moods, and she nails every one of them. Singing doesn’t get any greater. Rounding out the Amazon family is Patrizia Ciofi’s conquering Orizia: Her sound is gentle but firm, her high notes solid and easy.

The “men” (other than Ercole) are easy to distinguish. Romina Basso as Teseo (Theseus), has handsomely dark, contralto-like tones that are a great change from the lighter voices, and Philippe Jaroussky uses his exquisitely countertenor to add sincerity to Alceste’s music—he’s looking for a woman who knows not only how to make war, but to love. Both of his arias are used frequently in Vivaldi’s operas. Topi Lehtipuu’s tenor is impressive in Telamone’s single aria.

Fabio Biondi has made something quite special out of this pastiche, and his own playing (solo violin and viola d’amore) and that of his approximately 30-piece band, Europa Galante, leave nothing to be desired. This is a semi-serious opera, though you’ll probably applaud before you laugh. But remember, in Baroque opera, the entirety is not the point; it’s the dramatic viability of the individual arias and the way they’re performed. Looked at that way, this set is a brilliant success, with all singers and players theatrically engaged. And the sound could not be better: warm, broad, and ideally highlighting each solo instrument (when called for) without fake manipulation.

—Robert Levine

**rock/pop**

**THE DECEMBERISTS**

*The King Is Dead*


Performance **** Sonics *****

The prevailing story behind *The King Is Dead* is that Colin Meloy simplified the Decemberists’ sound in reaction to negative criticism of the concept album *The Hazards of Love*. What’s lost in this analysis is the fact that, this time around, the Decemberists have realized the ultimate goal of all great pop music: the creation of songs built of strong, seductive melodies in service of archetypal themes that leave explication to the listener’s imagination. *The King Is Dead* doesn’t have to be a concept album to sound all of a piece. It tells a rough tale without requiring a libretto. Though the songs range from postapocalyptic anthems to simple relationship ballads, each feels like part of the same dreamscape, a surreal alternate world filled with animate nature, human interactions, and a numinous sense of wonder.

The album’s great irony is that, for all its supposed lack of theatricality, it opens with one of the most dramatic tropes Meloy has ever thrown: “Don’t Carry It All” begins *The King Is Dead* with a funeral procession that illustrates the album’s title. “The body of a boy” is being returned to the soil with a promise of a great monument “beneath the arbor.” Meloy’s stalwart tenor conveys not grief but a kind of pantheistic joy at the way the seasons turn, just as death follows life. The order of nature follows the order of society, which continues because each member shares “a neighbor’s burden within reason.” The song has all the Celtic mythology and moral philosophy that Hazards delivered, but in a condensed, poetic form whose symbolism requires only a small amount of interpretation.

“Calamity Song” follows, on a related theme of the ultimate tragedy, “the war of the end-times.” In this case, all are receded in the loam, just as the boy king was, but for Meloy this is still cause for speculation about the future: “Will we now build a civilization below ground?”

Given current events, such speculation is hardly fatuous. *King*, though not a strict concept album, nevertheless has its themes: war and human strife (“Rise to Me,” “All Arise!” “This Is Why We Fight”); the struggle for small-town transcendence (“Down by the Water”); and the worship of nature that explicitly drives “January Hymn” and “June Hymn” but that suffuses every song on the album. The music, and the band’s outstanding performance of it, hold this all together most dramatically, from Meloy’s striking colloquy with the otherworldly warbling of Gillian Welch to the stately pulse and flow of the beautifully ordered arrangements. Guest artist Peter Buck adds his great, identifiable feel to the album’s strong string-band ambiance, leading to many R.E.M. comparisons that miss the point. This is all lazily labeled “Americana,” a term now used so broadly that it’s practically meaningless. The music is absolutely Celtic in origin, but it’s not the wild forays of abandon practiced by the Pogues and the Waterboys. The strict formalism of this music, in which every harmonica solo and fiddle break is carefully measured and the drums apply foursquare rhythms to structures that could drive an army, sounds like nothing so much as the carefully constructed British folk-rock of producer Joe Boyd’s recordings of Fairport Convention. At least four songs here are so good that Meloy will be required to play them until he himself recedes into the loam.

—John Swenson

**WARREN HAYNES**

*Man in Motion*


Performance **** Sonics *****

Okay, Gov’t Mule, Allman Brothers, and Grateful Dead fans: ya say ya know guitarist Warren Haynes? Brawny, hard-rockin’ blues and rootsy, jammy psychedelia, end of story? Guess again. Over the years, myriad other genres have surfaced in Haynes’s songwriting and playing, including country, folk, jazz, funk, and soul, and it’s the last two that power his first solo studio album since *Tales of Ordinary Madness* (1993).

Taking a cue from the classic Stax/Volt, Motown, and Muscle Shoals–spawned Atlantic sides he heard growing up in the late 1960s and early ’70s, Haynes lets his soul shine...
GET INSIDE THE WORLD OF SOUND

THE BEST IN AUDIO COME TOGETHER THIS OCTOBER
Marriott Denver Tech Center
October 14, 15, 16

Over 100 Listening Rooms
Systems for all Budgets
Seminars by Industry Experts
Live Entertainment

Bring your iPods, CDs and Vinyl to Sample the Systems!

Rocky Mountain Audio Fest
Largest Consumer Audio & Home Entertainment Show in the US!

www.audiofest.net
brightly across Man in Motion. He’s long demonstrated an affinity for the aforementioned touchstones, particularly in the way his singing style has evolved, and this album, recorded in Texas at Willie Nelson’s studio, scans like a labor of love.

Among the treats: a kinetic, sax-laced “Sick of My Shadow”; the psychedelic funk of “River’s Gonna Rise” (with Ivan Neville on keys, and Ruthie Foster in a sassy vocal duel with Haynes); “Save Me”’s straight-up Southern gospel; and the bluesy, horns-laden soul of “Take a Bullet,” wherein Haynes channels both Duane Allman and Steve Cropper. Also spotlit is a cover of William Bell’s “Every Day Will Be Like a Holiday.”

Abetted by Neville and Foster—plus bassist George Porter, Jr., drummer Raymond Weber, pianist Ian McLagan, and sax man Ron Holloway—Haynes drapes his material in such unforced authenticity, and the sound has such vintage-analog warmth and crackle, to suggest he has no truck with rote genre exercises. To that, I can testify: I was on hand for the official unveiling of a number of these songs last December, at the annual Warren Haynes Christmas Jam in Asheville, North Carolina, and several of these players were in the band—the delighted grins and pinch-me glances they exchanged were proof that everyone on stage was feelin’ the spirit move.

—Fred Mills

THE SPAMPINATO BROTHERS
Pie in the Sky

RBQ fans know bassist Joey Spampinato as the writer of such indelibly appealing songs as “You Can’t Hide,” “Green Lights,” and “I Love Her, She Loves Me.” Blessed with a sparkle in his eyes reminiscent of the young George Harrison and a soulful country heart (he and Skeeter Davis were married back in the day), Joey—along with wildman keyman Terry Adams and guitarist Al Anderson—made up the songwriting backbone that propelled the longstanding classic Q lineup. When Anderson left the band in the early 1990s, Joey’s kid brother Johnny, a longtime member of the Incredible Casuals, was the natural replacement.

Fast-forward. Joey and Johnny, whom their Bronx-residing mom calls “the most beautiful creatures in the world,” have concocted their first non-Q album together, and with a spot-on band, no less. As expected, it’s bouncy and informal, dexterous charm oozing from every track. The opener, “Let Him Think on That,” sounds like a mischievous twist on the Beatles’ “You Can’t Do That,” right down to the cowbell; and “You Wanna Be Free,” cowritten by the brothers, could be a lost gem left off a vintage Elvis Costello album. There’s nothing like brotherly harmonies and vocal interplay, and they abound on Pie And in the CD’s most poignant moment, the Spampins cover “I Say Good Day Goodnight.” This +40-year-old nugget (originally playfully titled “I Say Goodday Goodnite”) was written by the late but legendary Steve Ferguson, NRBQ’s jaw-droppingly fluid original guitarist, and recorded by the band in its earliest incarnation. Unbearably catchy and cool, it clocks in at just over 90 seconds.

Smart, punchy music isn’t quite the vibrant form it was in the last millennium, but Pie in the Sky inspires the sentiment summed up in the title of Hall! Hall! Rock ‘n’ Roll, the 1987 Chuck Berry movie that starred not only Keith Richards but Joey Spampinato. Long live this sibling revivalry. —David Sokol

TEENAGE FANCLUB
Bandwagonesque

DBQ fans know bassist Joey Spampinato as the writer of such indelibly appealing songs as “You Can’t Hide,” “Green Lights,” and “I Love Her, She Loves Me.” Blessed with a sparkle in his eyes reminiscent of the young George Harrison and a soulful country heart (he and Skeeter Davis were married back in the day), Joey—along with wildman keyman Terry Adams and guitarist Al Anderson—made up the songwriting backbone that propelled the longstanding classic Q lineup. When Anderson left the band in the early 1990s, Joey’s kid brother Johnny, a longtime member of the Incredible Casuals, was the natural replacement.

Fast-forward. Joey and Johnny, whom their Bronx-residing mom calls “the most beautiful creatures in the world,” have concocted their first non-Q album together, and with a spot-on band, no less. As expected, it’s bouncy and informal, dexterous charm oozing from every track. The opener, “Let Him Think on That,” sounds like a mischievous twist on the Beatles’ “You Can’T Do That,” right down to the cowbell; and “You Wanna Be Free,” cowritten by the brothers, could be a lost gem left off a vintage Elvis Costello album. There’s nothing like brotherly harmonies and vocal interplay, and they abound on Pie And in the CD’s most poignant moment, the Spampins cover “I Say Good Day Goodnight.” This +40-year-old nugget (originally playfully titled “I Say Goodday Goodnite”) was written by the late but legendary Steve Ferguson, NRBQ’s jaw-droppingly fluid original guitarist, and recorded by the band in its earliest incarnation. Unbearably catchy and cool, it clocks in at just over 90 seconds.

Smart, punchy music isn’t quite the vibrant form it was in the last millennium, but Pie in the Sky inspires the sentiment summed up in the title of Hall! Hall! Rock ‘n’ Roll, the 1987 Chuck Berry movie that starred not only Keith Richards but Joey Spampinato. Long live this sibling revivalry. —David Sokol

RECORD REVIEWS

BENITO GONZÁLEZ

Circles

Benito González, piano; Myron Walden, soprano & alto saxophone; Ron Blake, Azar Lawrence, tenor saxophone; Christian McBride, bass; Jeff "Tain" Watts, drums


TT: 68:37

Performance **** Sonics ****½

The sidemen on this record are mostly well known and the leader is not, but you will be hearing more about Benito González. He echoes McCoy Tyner in his ferocious pianistic percussiveness, his careening, crashing left-hand chords, and a right hand that sprays ideas like a fire hose. But González’s energy sounds even more maniacal than Tyner’s in his prime, more on the edge of rocketing out of control. And it contains sublimated rhythmic elements and melodic colors from Venezuela, where he grew up.

González is also a talented composer, and a bandleader with a concept. Circles is a complete album statement. González believes that all lives proceed in circles, and the music here sums up the current cycle of his life. But while his tunes tell a story, they also serve as launch pads for the individual firepower in this ensemble. Circles is a kick in the pants because of the solos. Myron Walden, who has a substantial discography but who may never have played better on record than here, absolutely smokes the title track. On soprano saxophone, he follows González’s torrential solo (not easy) and pushes right to the precariously brink of chaos.

Tenor saxophonist Azar Lawrence played on Miles Davis’s Dark Magus and one of McCoy Tyner’s greatest albums, Enlightenment, in the early 1970s, when he was barely into his 20s. Then he dropped off the jazz radar for 30 years. He is back, with a vengeance. The naked aggression of his onslauts in “Journey’s End” and “Taurus” will knock you right on your ass.

Tenor saxophonist Ron Blake is, in relative terms, the voice of reason. On the album’s only cover, Tyner’s “Blues on the Corner,” he offers a detailed, comprehensive exposition that, in this wild company, sounds almost scholarly.

It takes a strong leader to form the colorful personalities on Circles into a real band instead of a mere all-star group. It helps that the rhythmic foundation is first class. Christian McBride and "Tain" Watts give this ensemble its tight, hard thrust.

—Robert Baird

ANGELICA SANCHEZ

A Little House

Angelica Sanchez, piano

Clean Feed CF206 (CD). 2010. Angelica Sanchez, prod.; Joe Marciano, eng. AAD?

TT: 58:00

Performance **** Sonics ****

As active as she is in New York City’s underground jazz circuit, pianist Angelica Sanchez doesn’t often record as a leader. But her first album, Mirror Me (2003), and its follow-up, Life Between (2008), both featuring Sanchez’s husband, Tony Malaby, on tenor sax, are exceptional pieces of work—full of fire and dark shadow, skirting the edges of tonality, balancing poetic themes and torrid free improvisation. If her new solo-piano disc, A Little House, doesn’t have the same by-the-lapel energy, it’s
voiced and bold sonic elements offer jagged edges, Sanchez finds breath in from trumpet great Wadada Leo Smith tick as a musician. Versatility is one of Sanchez's strengths—her sidetperson gigs range from trumpet great Wadada Leo Smith to indie-folk sensation Iron & Wine—so there's nothing jarring in the transition from the first track, the brusquely atonal "Chantico," to Hank Thompson's "I'll Sign My Heart Away," a country ditty about lost love and divorce lawyers. Thompson's original includes the balking insertion of a bar in 2/4, which Sanchez discards. She begins in loose ballad mood, then renders the melody on a bell-like toy piano—an instrument featured in more dissonant contexts here in "Crawl Space" and the final track, "Mimi."

The tones on the recording are balanced and clear, though A Little House perhaps sounds best with the volume set a few notches higher than your norm. Through headphones the experience is more intense; Sanchez's voice becomes dimly audible, her unconscious murmuring drawing us inward into her improvisations. The clanging, hissing sounds of prepared piano in "Stretched" and "Crawl Space," and the ominous muted-string timbres in the Brazilian folk song "A Casinha Pequenina" (Portuguese for "a little house"), also come across with bite and definition.

While the session doesn't lack for jagged edges, Sanchez finds breath in the quietly evolving E-flat major sonorities of "Glow," one of her most disarming and effective moments. Her rich tonal vocabulary and creative range make A Little House worth adding alongside Vijay Iyer's Solo, Omar Sosa's Calma, and Benoît Delbecq's Circles and Calligrams as one of our day's top solo-piano documents. —David Adler

HENRY THREADGILL ZOOID
This Brings Us To, Volume II

Henry Threadgill, flute, alto saxophone; Jose Davila, trombone, tuba; Liberty Ellman, guitar; Stomu Takeishi, bass guitar; Elliott Humberto Kavee, drums

Volume I of This Brings Us To was one of the most decorated jazz albums of 2009. In the "Album of the Year" category of the four most important critics' polls (JazzTimes, Downbeat, The Village Voice, the Jazz Journalists Association), it placed from second to fourth. Volume II will further solidify Henry Threadgill's renown. For over 40 years and 30 albums, as a point man for the jazz avant-garde, he has pursued a fiercely independent, uncompromised creative mission. His music sounds like no other.

Free jazz is usually loud and dangerous. Threadgill's music is measured and often quiet. Its oddity begins with the instrumentation.

Because Jose Davila's tuba sometimes functions as a bass, Stomu Takeishi on fretless bass guitar is able to move forward and configure intricate guitar choirs with Liberty Ellman. There are no apparent starting melodies or chord progressions. Instead, voices emerge and, before receding, overlay patterns of rarefied cumulative counterpoint. For all its complexity, most of this music feels airy and spare. On "Extremely Sweet William," Ellman's quivering guitar lines, floating in time, intersect Threadgill's esoteric flute filigrees, while Davila's tuba bumps along the bottom.

In an interview with Howard Mandel in the July 2010 Downbeat, Threadgill discussed the theoretical underpinnings of his current ensemble. He said that his compositions are "modular," and that he assigns blocks of pitch intervals to each improviser: "I want my musicians to play spontaneous ideas. The only way to get them to do that is to get past the usual cues."

This music is strikingly devoid of "the usual cues." The five players (none famous except Threadgill) offer provocative, unfamiliar concepts during their individual moments. But no one quite "solo." Everyone here has internalized Threadgill's system of group improvisation. Elliott Kavee's drums wash and stir. Independently and obsessively, Davila's tuba sings a guttural song. Ellman's guitar fidgets in place. The juxtaposed textures make new forms of order.

The limitation of this music is that its laconic cleverness engages the intellect long before it arouses emotion. It is not until late in the fourth and next-to-last track, "Polymorph," that any of the players sound more excited than thoughtful. Threadgill's Zen is a little cold, but anyone interested in the leading edge of the current jazz art form needs to hear Zooid. —Thomas Conrad

Since 1989, the Haven for Music Lovers in the Washington DC Metro Area.
Ayre Acoustics
Bryston
Grado
Linn
Lyra
Magnepan
Marantz
Mark Levinson
Mordaunt-Short
Nitty Gritty
R.E.L.
Sonus Faber
Transparent
Thiel
VTL
Visit soon.
5720 Pickwick Road
Centreville, Virginia
703-818-8000
www.giftedlistener.com
Marigo Audio Lab Tuning Dots
Editor:
My company, Marigo Audio Lab, was referenced in the March 2011 "As We See It." I wish to respond.

The Marigo Audio Lab Tuning Dots referred to in that article constitute a unique product line developed very carefully and refined over a period of years. One of the most respected, well-known high-end electronics companies in the US, reviewed numerous times in Stereophile, very critically tested and evaluated Marigo Tuning Dots. This company has now been incorporating our Tuning Dots into their products for over five years. (Like many manufacturers, this company requires a customer-vendor confidentiality agreement. This helps to shield their developed or incorporated technologies from their competitors. I have e-mailed you privately the company's name and CEO contact for verification of my claims.) This company gratefully uses our product, because our Tuning Dots are extraordinarily powerful damping devices, with a very wide bandwidth as well as linear absorption characteristics. This translates, in application, to an unaltered frequency response, which is extremely desirable. The damping characteristics are optimized simply by using the correctly sized Tuning Dots at the correct positions. This is the "tuning" aspect of the Marigo Tuning Dots: the optimum amount of correctly engineered damping.

There is no "smoke and mirrors" here, or any type of incomprehensible pseudo-technology. The Marigo Tuning Dots utilize well-known techniques of constrained-layer damping. The Tuning Dots are fabricated in-house, on custom-made equipment, using materials that we have developed through careful R&D. Marigo Tuning Dots remain highly affordable, as we decided to base pricing on our costs to manufacture, rather than on performance gains that can be achieved. Also note that The Absolute Sound magazine, in their March 2011 issue, chose Marigo Tuning Dots for a 2011 Editor's Choice Award. We stand behind our products 100%, with an audition period of one month with a guarantee of complete satisfaction or full money back.

--

Nitty Gritty 2.5Fi-XP
Editor:
A note of thanks to Michael Fremer for his review of our 2.5Fi-XP—the double-pump model—which is the newest addition to the Nitty Gritty family. Seeing "Two wet thumbs up!" is like getting an early Christ-
sound is theoretically impossible, but reproductions of that sound will become more real as the technology develops. Modern sound-measurement instruments have been developed for about 100 years, and are definitely helpful in designing audio products. On the other hand, human ears are more important, because they have been developed over billions of years, and continue to evolve. In addition, the goal of designing audio products is to satisfy human ears, not instruments. That is why audio design is still somehow a state of art, not a state of technology. However, as a scientist, I am confident in the development of science. I believe that, sooner or later, scientists will discover at least part of the solution of why subjective listening sometimes does not agree with the measurements.

Fang Biam
Head-Direct

Totem Acoustic Dreamcatcher

Editor:
Magic exists in all Totem speakers. Totem models remain at the very apex of musical communicability, not only because of their excellent performance and build, but also because of certain attributes that are not measurable yet are nearly impossible to achieve or duplicate. Our lowest-cost speaker, the Dreamcatcher monitor, exemplifies this best... as per our original motto, "Listen and Believe."

We thank Bob Reina for realizing the great attributes of this fantastic little sophisticated bomb, the Dreamcatcher.

Vince Bruzzese
Totem Acoustic

Brinkmann Audio Bardo, 9.6, Pi

Editor:
We would like to thank Michael Fremer for his unprejudiced/objective review of our new direct-drive turntable. The direct-drive technology seems to polarize many audiophiles; MP's technical explanation of the direct drive is very thorough and well written—there is not much to add.

Just one little thing for everyone who is interested: Michael posed the question "Why the (asymmetrical) space between the coils doesn't cause asymmetrical rotational performance, I don't know." The coils are asymmetrically arrayed because there is always one pole of the magnet at a time that is at the right angle to be set in motion by a coil, so the motor starts to turn, and so the next pole of the magnet comes in at the right angle to be set in motion by the next coil. This way, the motion starts and is kept moving. If the coils were arrayed symmetrically to the poles on the magnet, no movement would be possible because the magnet would stay in the position of the maximum magnetic pull. Or you can see it as a linear motor bent in a circle around the bearing. This asymmetrical array is no issue for the bearing and oil film, as the platter needs very little power during running, and the driving force produces no radial pressure from one side.

To keep the heavy platter precisely on speed, we use very slow-reacting regulation; the control circuit works below the audioband to keep it from having any audible influence. Within the audioband, the platter spins without control, and all dynamic tracking moments have to be driven only from the platter mass. In this way we achieve a natural, nontechnical sound.

Finally, it is with regret that Brinkmann is no longer able to ship cartridges mounted on the tonearm, because of the possibility of tonearm bearing damage due to shippers' rough handling.

Thanks to Michael for comparing the Bardo (our smallest baby) with one of the biggest turntables in the world. As long as they are making music, we are glad to enjoy it.

Helmut Brinkmann
Brinkmann Audio

Single-ended or push-pull. The choice is yours.
- Speed
- Detail
- Resolution

AVAILABLE AT
THE CABLE COMPANY
1.800.FATWIRE
cable@theCableCo.com

ADVERTISING INDEX

Acoustic Sounds ......... 18-19
Aerial Acoustics .......... 27
April Music ............. 133
Audience ............... 40
Audio Arts ............. 86
Audio Plus Services ..... C4
Audio Video Logic ...... 26
Audio Vision SF ......... 94
Audioengine ........... 90
AudioQuest ............ C2
Audiomagics ........... 103
Ayre Acoustics .......... 16
Benchmark ............. 86
Cable Company .......... 38-39
Crystal Cable ........... C3
David Lewis Audio ...... 117
Dynaudio .............. 54
Elusive Disc .......... 30-31, 122
Emotiva Audio ........ 66
Esoteric ............... 17
Get Better Sound ....... 112
Gifted Listener Audio .... 131
Goodwin's High End .... 221
GTT AV ................ 46
Halide Design .......... 11
Hammer tone ........... 22-23
HDtracks ............... 48
Head-Direct ........... 78
HeadRoom .............. 50
HiFi House ............. 110
High End Society ....... 124
Joseph Audio .......... 43
JPS Labs ............... 130
KEF ..................... 62
Kimber Kable .......... 28
Linn Audio ............. 26
Lyric High .............. 106
Manley Labs ........... 133
MBL of America .......... 42
Music Direct .......... 14-15, 56, 96
Musical Surroundings .... 74
My Audio Listing ...... 35
Mystere ................. 59
Needle Doctor .. 10, 34, 70-71, 82, 92-93, 104, 118
Nordost ................. 12
NuForce ................. 96
On A Higher Note ....... 100
Oppo Digital ........... 68
OSD Audio .............. 6
Pangea ................. 11
Pass Laboratories ....... 52
Polk Audio ............. 36
PrimusLuna ............. 58
Rocky Mountain Audiofest .. 128
Sanus ................. 8
Siltech ................. 7
Sound Import .......... 68
Spider International .... 78
T.H.E. Show .......... 126
Thorens ................. 11
Upscale Audio .......... 20
Usedcable.com ........ 134
Viamedic ............... 135
Vincent Audio .......... 11
Vitus Audio ........... 32
Van Schiwerk ......... 60
Voodoo Cable .......... 134
VTL ................... 80
Wavelength Audio ....... 80
Weinhard Design ....... 35
Wilson Audio Specialties .. 24
Wireworld ............... 84
WS Distributing ........ 11
YG Acoustics .......... 44-45

Listed in this index is done so as a courtesy. Publisher is not liable for incorrect information or excluded listings. Advertisers should contact their sales representative to correct or update listing.

Stereophile (USPS 4734-970 ISSN 0585-2544) Vol.34 No.5, May 2011, Issue Number 376. Copyright © 2011 by Source Interlink Media, LLC. All rights reserved. Published monthly by Source Interlink Media, LLC, 361 Madison Ave, 6th Floor, New York, NY 10016-2303. Periodicals postage paid at New York, NY and additional mailing offices. Subscription rates for one year (12 issues) US, APO, FPO, and US. Possessions $ 19.94, Canada $ 31.94, Foreign orders add $ 24 (including surface mail postage). Payment in advance. U.S. funds only. Canada Publications Mail Agreement No. 40632608. Return undeliverable Canadian addresses to Pitney Bowes International Mail Services, P.O. Box 25542, London, ON N6C 6B2. POSTMASTER: Please send address changes to Stereophile, P.O. Box 420235, Palm Coast, FL 32142-0235. Mailing Lists: From time to time we make our subscriber list available to companies that sell goods and services by mail that we believe would be of interest to our readers. If you would not like to receive such mailings, please send your current mailing label, or an exact copy, to: Stereophile, Mail Preference Service, P.O. Box 420235, Palm Coast, FL 32142-0235. Subscription Service: Should you wish to change your address, or order new subscriptions, you can do so by writing to the same address. Printed in the USA.
Please visit our showroom in Orange County, CA for an audition

www.DMC-ELECTRONICS.com  (714)534-8780  Best Prices!

Audio Intelligent Vinyl Solutions

Record Cleaning Products
Turntables and Analog Gear
Electronics  Loudspeakers
Osage Audio Products, LLC
www.osageaudio.com  573-696-3551

The Maestro Outlet

Because it all starts at the wire!

www.maestroaudio.com/maestro

The _ Maestro Outle, Because it all starts at the wire!

The premier source for TARA Labs cables is www.hifijunkie.com

For all things TARA Labs we are the lowest price online. New, Used, Discontinued, Monthly Specials, & Consignment

LARGEST AUTHORIZED TARA LABS E-SELLER

www.dedicatedaudio.com  Scottsdale, Arizona USA  480-991-8181

www.viamedic.com  800.551.0463

SAFE • SECURE • DISCREET

HABLA Ñ ESPAÑOL

www.viamedic.com  800.551.0463

ORDER ONLINE BY PHONE OR MOBILE DEVICE

Order online at
www.stereophile.com

Stereophile
Editor’s Choice:
Sampler & Test CD

You’ve got a Class A audio system — here are some Class A recordings to show it off at its best

Stereophile’s John Atkinson selects the best of his recordings from the past 10 years — from solo violin to jazz.

23 tracks of Stereophile’s audiophile-approved recordings, every one recorded, edited, and mixed by the editor of Stereophile:
— 2 system diagnostic tracks
— 14 music tracks
— 7 test signal tracks

Allows you to set up your system and speakers without test gear

Hear recorded music as it was meant to sound, with natural dynamics and hi-rez sound quality

Retail Price: $9.97

Order online at
www.stereophile.com

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


www.Stereophile.com
AUDIO MART

AUDIOCLASSICS.COM Buys-Sells-Trades-Repairs-Appraises, New, Used & Vintage McIntosh, Krell, Marantz, Klipsch and other US-made audio equipment. 3501 Vestal Road, Vestal, NY 13850, (800) 321-2854.

AUDIO ART, est. 1976—Edge-of-the-art audio components dedicated to serving music. Sonus Faber, Audience, Avalon, Ayre, Aesthetix, Benz, Classe, Jeff Rowland, Martin Logan, Primare, Spendor, Vandersteen, SME, VPI, Shunyata, Cardas, Kimber, Pro-Ject Series, Clearaudio. Music Reference, Rega, Music Hall. (804) 358-5300, AudioArtUSA@aol.com, Richmond, VA.


AUDIOQUEST CABLE SPECIALS. Silver Extreme interconnects with solid FPS silver, originally $400, now $79.95 per pair. Coral/CO interconnects originally $150, now $65. GBC Deluxe Hyperlitz speaker cable originally $244, now $99.95. Order these and other great bargains online at www.hcmaudio.com, or call 877-234-3465. HCM Audio. Authorized Audioquest Dealer Since 1980.

BEST_AUDIO_AND_VIDEO_IN_THE_BAY_AREA - Used and New Equipment. Expert in Analog Setup. Bruce Moore was the Principal Designer of Precision Fidelity. Audible Illusions, MFA and Bruce Moore Audio. www.rbhomecinema.com and www.rbhomecinema.com Consultation call: 925-918-3714

HCM AUDIO - We are proud to be authorized dealers for Audioquest. Creek, Epos, Goldring, Grado, Music Hall, Musical Design, Nitty Gritty, Sonic Horizon, WMS and more. Weekly/ Monthly specials. Call for price quotes. Fast shipping, great prices. 877-234-3465 www.hcmaudio.com or email sales@hcmaudio.com

SONORE REFERENCE MUSIC SERVERS 24Bit/192KHz AES/EBU, SPDIF, USB or Analog Outputs. Control from free iPhone/iPad app. Authorized dealers for Cardas, Weiss, Lyn Studio and HBT. Free 24Bit/96KHz sample - www.sonore.us - (305) 629-3996

SONORE #1 RETAILER of Dynaudio. Simaudio & Parasound - because we're the only one! Authorized dealer Est. over 10 years ago in SW FL and now TN. Premier Acoustic Lifestyles is proud to feature TARA Labs, KEF, Denon & more! Let us build, install or consult you on your dream system. (615) 799-8002. premieracousticlifestyles.com.


Sound Anchor
Hi-Performance Monitor Stands
Custom Sized
Single Post, 3 Post, 4 Post
Adjustable and Motorized Models
www.soundanchors.com
321 724 1237

Audiomania
Premium online retailer offering unique and original high quality sound products.

Analysis Plus
Arslab
Audioengine
Atacama
Cold Ray
ETI
Furutech
Lightspeed
Onetech
SSC
Soundcare
Vibrapod
Wavecor
WBT

Audiomania.com
Speakers, Speaker Stands, Power Filters and Strips, Connectors, Cables, TV & Electronics Stands, Vibration & Resonance Control Accessories, DIY Components.

315-558-8771
info@audiomania.com

2nd Annual Capital Audiofest
Washington DC Metro Area
July 8-10, 2011
Ask the Audio Experts
303 691-3407
www.AudioUnlimitedDenver.com

Audio Unlimited

www.capitalaudiofest.com
capitalaudiofest@gmail.com

CD Exchange
Serving audiophiles and music lovers since 1987

Specializing in:
- Audiophile CDs and LPs
- New & used CDs and LPs
- All types of music
- Turntables - cartridges and analog accessories
- Turntable set-ups and service
- Our own high-end speaker line
- Music/concert DVDs
- Headphones
- Audio equipment & mini systems

Authorized dealer for:
- Sumiko
- Project
- Grado

610-777-2310

CD Exchange
Station Pond Plaza, 303 E. Womissing Ave.
Mohnton, PA 19540 - Approx. 50 miles NW of Phila.
cdexchange@comcast.net
cd@netzero.net

AudioArt cable
CONNECTING YOU WITH THE MUSIC
819.255.6491 AudioArtCable.com

Stereophile.com, May 2011
Sharpening The Stones

"Listen—digital for a long time has gotten a bad rap," says David fervently. "It's not really digital; it's the execution of digital on a silver disc. You have error correction, jitter, you have all these problems. All of a sudden, with HDtracks, you can download a high-resolution file, and you're playing it back on a computer or a device that's playing it back off RAM, flash memory, so there's no moving parts, there's nothing to corrupt it. If you play it back into a really good DAC, it's an amazing roller-coaster ride. You're gonna hear resolution that you've never heard before, and you're gonna hear soundstage spaciousness that's amazing. We're taking this entire industry and we're going to kick it up to another level. It's going to be better sound; it's gonna inspire people to make better amplifiers and better DACs, it's going to be an explosion of new industry."

The first five Stones records that went live for purchase on HDtracks on March 1, 2011, were: The Rolling Stones, The Rolling Stones No. 2; 12 X 5; Big Hits (High Tide and Green Grass); and Through the Past, Darkly (Big Hits Vol. 2). Future releases will continue through the final ABKCO record, Get Yer Ya-Ya's Out! (The rest of the Stones catalog, much of it recorded for Rolling Stones Records/Atlantic, is now owned by Virgin.) The albums will be available as FLAC files (a free lossless audio codec) at the super-high resolution of 24-bit/176.4kHz and the easier-to-play 24/88.2.

The download files—the work of Teri Landi, ABKCO's engineer and archivist—were made from the same new masters that were used in ABKCO's Rolling Stones Remastered Series. Some of the more exciting tidbits to emerge from that process included the discovery of stereo masters from the Stones' 1964 Chess Studios sessions, speed-corrected versions of Beggars Banquet and Let It Bleed with splicing that indicates that the original intention was to leave little spacing between songs. Bob Ludwig mastered the DSD files, which sound very alive and finely detailed.

David Chesky speaks with his usual zeal: "A producer and a band. You take a band. They spent eight months in a recording studio. They're working their tails off every day. They listen to snare drums all day long. They EQ all day long. They're doing all this work, and at the end of the day they didn't do this so the arena to play it back would be a laptop while someone is surfing the Net. We're selling art. At the end of the day, HDtracks is about communicating art to people."

“We want to be Switzerland,” Norman takes another tack. “We want to get all the labels. For HDtracks to be successful, it's not about just getting Chesky or Reference [Recordings] or a few of the high-end [labels]; it's really about getting the music community. It's about getting the major labels. And it has not been easy at the beginning, but it's starting to come together.”

David Chesky is also an edgy, avant-classical composer who has written operas and also ballets, two of which, Urbanicity and The New York Variations, appear on his new recording, Urbanicity. While those pieces are well-crafted and listenable, it's his Concerto for Electric Guitar and Orchestra that's sure to generate some controversy, melding as it does a sampled acoustic orchestra with that bête noire of all things classical: rock music's instrument of choice.

"Orchestra people have a problem with electric guitar. But hey, we live in a world of electricity. We have computers. We take elevators. So it's a real instrument. Guitarist Bryan Baker is as good as any violinist or flute player in any major orchestra. He has technique as good as any orchestra player. It's about time that we took this instrument and put it into an orchestral setting. We make the electric guitar a legitimate orchestral instrument, and at the same time we are bringing an orchestra into the present and not leaving it back 300 years ago, playing music that was written for a king sitting on a throne 6000 miles away."
“Engaging, fluid and unfailingly musical, there’s nothing hyped about the Piccolos. They make beautiful music based on the music’s beauty.”

Roy Gregory

A comprehensive range of Interconnects, Speaker, Digital, HDMI, Fire Wire, USB and AC cable available from $500.

Distributed by Audio Plus Services - www.audioplusservices.com - 800.663.9352
Once in a generation a company will emerge with a concept so original and innovative that it has the capacity to re-define the expectations of a product genre. That company is Devialet.

Paul Miller
Hi-Fi News Editor