

# HOME THEATER

## ➤ Compact Speaker Systems

### Cabasse Artis Baltic Evolution Speaker System and Pioneer Elite VSX-94TXH A/V Receiver

By Mark

Fleischmann • May, 2008

*Let's face it: The French have a better shape.*

To Americans accustomed to seeing other Americans waddling through shopping malls—and let me be the first to admit I've been doing a fair amount of waddling myself lately—the streets of Paris come as a pleasant shock. How do people who feast on duck liver and red wine stay so lean and sexy? Perhaps that eternal mystery springs from the same source as Cabasse's fashionably thin Artis Baltic Evolution tower loudspeaker. Like one of Frank Lloyd Wright's amazing cantilevered houses, it seems to defy gravity, the sphere holding its coaxial driver array floating on a skinny diagonal slash of solid wood. I suspect that the people who designed the speaker sat down to an excellent dinner afterward.



With a rated sensitivity of 90 decibels, the Baltic Evolution is fairly home theater friendly. It can even run off a receiver, so long as it's a better-than-average one. For this Spotlight System review, it mated with the Pioneer VSX-94TXH A/V receiver, a features-laden dynamo from the company's step-up Elite line.

## Round and Round

Cabasse hails from Brest, a town in Brittany, the Celtic region in the northwestern tip of France. The company was founded in 1950 by Georges Cabasse, whose lineage reaches back five generations to violin makers of the 18th century.

The Cabasse speaker you're most likely to have seen a picture of in a blog is Le Sphère, a cyclops-like device whose name suggests its shape. Our subject for today, the Baltic Evolution, is part of the Artis line, along with the differently shaped but equally striking Karissima, with its bulkier but handsome folded-wood enclosure. For something similar but smaller-scaled, check out the iO2 line. Then there's the Eole, reviewed here in December 2007, that incorporates small spheres in a compact sat/sub set; the Xi and Ki, which offer tubular accompaniment to flat-panel displays; the Altura, more conventional in shape, although still rounded at the sides and back; and the MT3 and MT4, conventional boxy speakers with a value orientation.

All of the spherical models use a coaxial driver array in a fiberglass housing reinforced by bits of MDF (medium-density fiberboard). While it's not strictly relevant here, Le Sphère's housing is more elaborate, adding a layer of a damping material that was originally designed for Airbus planes, flying helicopters, and European rockets. The Baltic Evolution adds a veneered MDF stand and a base with a beautiful painted finish.

Although I've reviewed coaxial speakers before, this marked the first time I've had a three-way coaxial design. The TC23 triaxial unit consists of three drivers made of various high-tech plastics. These include a 1-inch polyether dome tweeter, surrounded by a 5-inch P2C convex ring midrange, itself surrounded by an 8-inch Duocell convex ring woofer.



Polyether is a type of polymer. P2C is polypropylene charged with calcium carbonates. Cabasse manufactures Duocell using their own process. It's a form of Rohacell, a rigid, lightweight, low-density foam used to make plane and boat hulls. Cabasse's computer-driven proprietary process produces a diaphragm that doesn't delaminate because it's not a sandwich and has "unrivaled rigidity/damping/weight ratios." That's some awesome plastic.

Placing the smaller drivers within the larger ones enables all of them to fire at your ears from roughly the same position. This minimizes phase problems, simplifies crossover design, and allows the speaker to exhibit more even off-axis response. The downside in less finely tuned coaxial speakers can be a sonic character reminiscent of a cupped-hands effect. Cabasse seems to have shrewdly minimized this. The tweeter is located within a waveguide, within the midrange, within the woofer. You're free to remove the grilles and see for yourself. Without the grilles, the speakers have a crisper treble (and look very cool). I felt that there was plenty of information coming through even with the grilles on and, therefore, left them in place.

The spherical enclosure is mounted atop the thin end of a 48-inch-tall solid wood-veneered MDF pillar sitting on a round, multilayered MDF base with a 16-inch footprint. Transparent plastic-nut binding posts rise out of the back of the base, pleasing design elements in and of themselves. Be sure to fill them with some kind of suitably attractive speaker-cable jewelry. The included fat steel spikes have a dark chromed finish and look great. It's a shame they have to hide beneath the base, although they do serve an important function there—stabilizing an otherwise top-heavy speaker. Three color schemes are available. All of them contrast the color of the pillar with that of the spheres and base. The review samples came in pearl fiberglass with a black pillar and a base with pearl-paint finish.

For surrounds, I used the Baltic Evolution Murale, which comes with a wall bracket, and the Baltic Evolution Centrale, which stands on a circular base. Otherwise, they use a three-way driver array identical to that of the floorstanding model. The photo shows you what both options look like.

Both come hardwired with 16 feet of 12-gauge speaker cable terminated in soldered tips. This posed an installation problem in my room, where the surrounds need 25 feet of cable to reach the rack. I used heavy single banana plugs to clamp the soldered tips onto the bare tips of 12-gauge extension cables and wrapped the whole thing in duct tape. I also used banana plugs at the receiver end.

Cabasse eliminated the speaker terminals for aesthetic reasons; in the wall-mount version, the cable goes through the bracket straight into the wall. The supplied cable (while of decent quality) is intended for temporary testing by a custom installer. When making the final installation, he or she would replace the cable with something more appropriate.



Hailing from the Altura line, the Largo sub under review has a 12-inch Duocell-coned front-facing driver with ports firing downward into the gap between the enclosure and its base. The

extremely attractive, tinted-cherry-veneer enclosure—called santos, after the original (but endangered) santos mahogany—is rounded at the sides and back. Its minimal depth produces a fairly modest footprint; big it is, ugly or ungainly it is not.

### **Pragmatic Second in Command**

Pioneer's VSX-94TXH is second from the top in the brand's higher-end Elite line and sells for \$1,600. There's quite a gap between this and the top-line SC-09TX that sells for \$7,000. I guess Pioneer wants the Elite line to remain competitive at relatively real-world price points while still providing high performance and the most desirable features. The manufacturer also maintains a separate budget line with models ranging from \$199 to \$499. The VSX-94TXH is THX Select2 certified, meaning that it can achieve reference-level volumes (which to me is earsplitting) when connected to THX Select-certified speakers in a room of 2,000 cubic feet or less.

There are a few new (to me) refinements in MCACC. That's the Multi-Channel Acoustic Calibration System, Pioneer's auto-setup engine. (A macaque is a charming breed of monkey.) As usual, newbies can simply hook up the supplied mike to the front panel, let the program run, and start having fun. But there's also an Expert mode that allows six different selectable setups for different listening positions or preferences. For instance, you might not want to play movies and games from exactly the same seat or with the same settings. MCACC can measure from three points and analyze them for standing waves, compensating as needed. If you wish to go further, as always, you can tweak the settings manually.

One Elite feature you won't find in Pioneer's less expensive receiver line—or even in junior Elite models—is the Home Media Gallery. It can pull music out of Windows PCs via a wired router, conjure up Internet radio stations, and (this was a new one for me) play audio files from a USB drive. More on that later.

No present-day receiver is complete without an iPod dock—in this case, the IDK-80, a \$99 accessory. The receiver came with a note saying the cable that connects the dock had been “delayed in transit” (call customer service to get it). This model is also XM and Sirius satellite radio ready when you add the appropriate antennas.

While Pioneer has seemingly thought of almost everything, the back panel could use a second HDMI output. The target buyer for such a sophisticated receiver might well want to feed two HDMI-compatible video displays. Also, the plain monochrome menu graphics are crude compared with what manufacturers like Sony and Denon are doing. And although the remote (with its small LCD window) is reasonably functional, the navigation keys are a bit small. A second-from-top model really should come with a more substantial remote.

In addition to the Pioneer receiver, associated gear included a Pioneer BDP-HD1 Blu-ray player, whose familiar amber display and decorative horizontal blue LED harmonized with the receiver in a common spirit of Pioneerishness. My trusty Integra DPS-10.5 served DVD and SACD duty.

### **Premonitions and Flying Cars**

The Blu-ray release of *Premonition* took a ridiculous length of time to load, but the results were worth it. Sandra Bullock plays a woman haunted by premonitions of shocking events, her loss of control signified by a seamlessly hallucinatory melding of orchestration and effects. This beautifully executed surround material could be both unnerving and moving. I was glad I didn't have to hear it through a less well-focused set of speakers—the triaxial array proved its worth. In a movie full of quiet moments, the Baltics also exhibited superb low-level resolution, the soundfield holding together even at almost subliminal volume levels. The high-quality soundtrack

(in this case, uncompressed PCM) surely helped.

*Meet the Robinsons*, in Dolby Digital 5.1, gave the subwoofer plenty of opportunities to deliver loud midbass effects—enough, in fact, to make me turn it down. Most of them were connected with flying cars and surreal fight scenes involving a T-Rex. Here, the receiver's power reserves were essential to keep the aggressive effects from collapsing raised voices and other small denizens of the busy soundfield. **Vocal clarity was so good, I could visualize the flesh-and-blood actors standing on the dubbing stage. The real treat was the musical soundtrack, featuring several achingly lovely songs by Rufus Wainwright.**

There wasn't much surround goodness in the Dolby Digital 5.1 soundtrack of *A Mighty Heart*, a dramatization of the terrorist murder of journalist Daniel Pearl. Vocals were recorded in a flat, claustrophobic void that eerily complemented the tragic story. Occasional musical elements sweetened the mix—a little warm acoustic guitar here, a pulsing bass line there—and the speakers and sub made the most of them.

### Fresh Fruit Is Good for You

*Eat a Peach* is one of the artifacts of my youth—sort of. I never bought the double-LP set by the Allman Brothers Band because songs like “Melissa” and “Ain't Wastin' Time No More” were all over the freeform FM radio stations of 1972. Yet the SACD surround mix is like an old friend, aside from the underuse of the center channel. Pretty much any playback system would convey the essential warmth of tubed guitar amps, Hammond organ, and Georgia-inflected voices. **What the Baltics and Pioneer did especially well was sharpen the leading edge of Duane Allman's and Dicky Betts' electric guitar lines and focus the soundfield without letting go of the warm, tubey vibe.**

PentaTone's SACD release of Prokofiev's *Peter and the Wolf* includes a second work, *Wolf Tracks*, and narration by an all-star cast including Sophia Loren, Bill Clinton, and Mikhail Gorbachev. Loren's honeyed voice had a touch of nasality or spurious warmth—this was as close as the system ever came to an objectionable coloration. Still, the string sound of the Russian National Orchestra was plangent and woody. The reeds, too, were full of resonant character, most noticeably those representing the cat (clarinet) and the grandfather (bassoon). Overall, the presentation was detailed and focused without seeming forced or unnatural.

Thelonious Monk's *Straight, No Chaser*, again on SACD, displayed the bandleader's piano in an entirely natural way. Charlie Rouse's tenor sax emerged warm, but not ponderous, and the weight of the rhythm section was right.

*Natty Dread* by Bob Marley & the Wailers (on a mere CD) put the system to the reggae rhythm-section test. **Would the midbass aggressiveness of *Meet the Robinsons* be repeated? No, the bass was a deep, true tone. The thump of the kick drum was fat and solid but not bloated or sloppy. The Altura Largo sub is musically trustworthy.**

### Home Media Gallery

Not all receiver makers are hip to what can be accomplished with a



connection to a broadband router. Pioneer moves up a notch in my estimation with the Home Media Gallery. Setup couldn't have been easier. I ran my trusty super-long Cat-5 cable from my router and selected HMG as an input source without further ado—except for an upgrade from Windows Media Player 10 to version 11, required for the PC link.

Starting with Internet radio, I navigated by location (the other options were genre, podcasts by location, podcasts by genre, new stations, and most popular stations). I selected Africa, then Mali. The next set of choices were: all stations, news/talk, and variety. I picked all stations and got a choice of three stations. In no time at all, I was enjoying sprightly West African pop music.

Pioneer's front-panel USB connection proved to be an inspired plus. First, I bumped a few MP3 album folders to a thumb drive. The USB drive appeared in the Gallery menu, and I was able to select and play tracks. But I wondered, if a thumb drive is good, wouldn't it be even better to plug in one of the external hard drives on which my entire music library is backed up? Yup.

Either way, when it came to displaying titles, there was a character limit, 21 in the folder menu and 24 on the playback screen. Another limitation on the access of a large music library—either from my PC's main hard drive or the external one connected directly to the Pioneer—was navigation speed. It took about a second per line to step down through the album folders. When the list was lengthy, those seconds added up. Breaking a giant run-on folder list into smaller subfolders would help. The receiver can also register up to 20 playing or highlighted items in a favorites menu, but the function works only with the PC drive or Internet radio, not with the USB drive.

### **Cheers**

Cabasse, where have you been all my life? The Artis Baltic Evolution delivered a whole range of authentic musical experiences. It also supported movies in the most critical areas—dialogue intelligibility, soundfield precision, and bounteous low-frequency effects.

And finally, it sidestepped the whole question of "How do you make speakers disappear?" If they're attractive enough, there's no need to make them disappear. And although I didn't have a chance to try them in a far off-axis listening environment, the triaxial driver array just might ameliorate some of the acoustic problems of such a setting. Bravo, Cabasse.

Pioneer, meanwhile, upholds the high standards of their Elite line with the VSX-94TXH. It had no problem providing the speakers with the reserves of power necessary to make them sing and produce a commanding soundfield. Time and again, it combined with the speakers to produce a rainbow of midrange and other tone colors, revealing good and bad recordings for what they were. THX certification, auto-setup refinements, and the Home Media Gallery all contribute value points to an impressive package, especially the USB connection. This essentially means you can bump your entire music library to a cheap external hard drive and make it another component in your home theater system. Bravo, Pioneer.

## **At A Glance: Cabasse Artis Baltic Evolution Speaker System**

### **Speaker: Artis Baltic Evolution**

Type: Three-way, floorstanding

Tweeter (size in inches, type): 1, polyether dome

Midrange (size in inches, type): 5, P2C convex ring

Low Midrange (size in inches, type): 8, Duocell convex ring

Nominal Impedance (ohms): 8

Recommended Amp Power (watts): Up to 220 continuous, 1,540 peak

Available Finishes (standard, pillar/speaker): Wild Cherry/Black Pearl, Santos/Black Pearl, Wenge/Pearl

Dimensions (H x W x D, inches): 48.5 x 13 x 17

Weight (pounds): 42

Price: \$8,000/each

### **Speaker: Artis Baltic Evolution centrale/murale**

Type: Three-way, pedestal

Tweeter (size in inches, type): 1, polyether dome

Midrange (size in inches, type): 5, P2C convex ring

Low Midrange (size in inches, type): 8, Duocell convex ring

Nominal Impedance (ohms): 8

Recommended Amp Power (watts): Up to 220 continuous, 1,540 peak

Available Finishes, Centrale: Black Pearl, Pearl

Available Finishes, Murale: Black Pearl, Pearl, Paintable White

Dimensions (H x W x D, inches): 11 x 11 x 11

Weight (pounds): 15.5

Price: \$5,422/each

### **Subwoofer: Altura Largo**

Connections: Speaker- and line- level, stereo

Enclosure Type: Vented

Woofer (size in inches, type): 12, Duocell cone Power Rating (watts): 750 peak, 250 RMS

Crossover Bypass: No

Available Finishes: Wild Cherry, Santos Wood Veneers

Dimensions (H x W x D, inches): 20.1 x 13.8 x 21.7

Weight (pounds): 64

Price: \$3,000

### **General information**

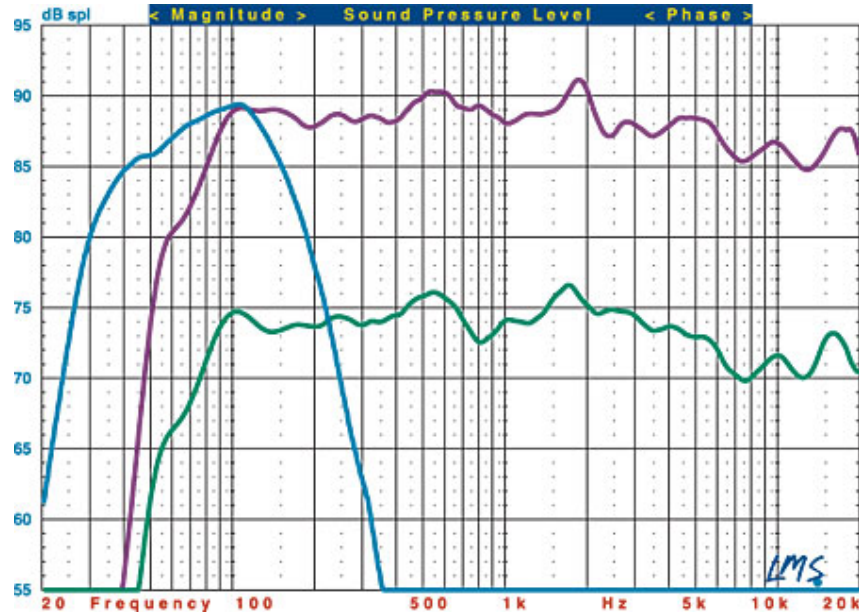
Cabasse

<http://www.cabasse.com/>

## HT Labs Measures: Cabasse Artis Baltic Evolution Speaker System

L/R Sensitivity: 89 dB from 500 Hz to 2 kHz

Center/Surround Sensitivity: 89 dB from 500 Hz to 2 kHz



This graph shows the quasi-anechoic (employing close-miking of all woofers) frequency response of the Artis Baltic Evolution L/R (purple trace), Altura Largo subwoofer (blue trace), and Artis Baltic Evolution Centrale center/surround (green trace). All passive loudspeakers were measured with grilles at a distance of 1 meter with a 2.83-volt input and scaled for display purposes.

The Artis Baltic Evolution's listening-window response (a five-point average of axial and  $\pm 15$ -degree horizontal and vertical responses) measures  $+2.10/-3.68$  decibels from 200 hertz to 10 kilohertz. The  $-3$ -dB point is at 84 Hz, and the  $-6$ -dB point is at 73 Hz. Impedance reaches a minimum of 4.02 ohms at 230 Hz and a phase angle of  $-63.17$  degrees at 136 Hz.

The Artis Baltic Evolution Centrale's listening-window response measures  $+2.54/-4.24$  dB from 200 Hz to 10 kHz. An average of axial and  $\pm 15$ -degree horizontal responses measures  $+2.64/-4.11$  dB from 200 Hz to 10 kHz. The  $-3$ -dB point is at 79 Hz, and the  $-6$ -dB point is at 69 Hz. Impedance reaches a minimum of 4.12 ohms at 235 Hz and a phase angle of  $-62.80$  degrees at 139 Hz.

The Altura Largo's close-miked response, normalized to the level at 80 Hz, indicates that the lower  $-3$ -dB point is at 45 Hz and the  $-6$ -dB point is at 34 Hz. The upper  $-3$ -dB point is at 147 Hz with the Crossover Frequency control set to maximum.—MJP