



MODEL SEVEN REFERENCE LOUDSPEAKER

The Model Seven advances the State of the Art in loudspeaker design with new very low distortion driver technology. The Model Seven is the ultimate embodiment of advanced Vandersteen design principles bringing you a new experience with the music.

- * Time and phase correct 4 way.
- * Powered push-pull subwoofer with a 400 Watt Amplifier.
- * 11 Band Room Compensation Control.
- * Five Layered Carbon Fiber constrained layered damped panels bonded to a Carbon Fiber skeletal structure.
- * Patent pending Carbon Fiber/Balsa sandwich mid-bass, midrange and tweeter diaphragms allow pistonic operation in the pass-band.
- * Fully balanced first order crossovers impedance compensated.

DRIVERS

- SUBWOOFER : Vandersteen 12-inch dual-motor, push-pull subwoofer with die-cast basket and a curvilinear aluminum cone. Precision-formed magnet assemblies with copper Faraday rings provide over 1 full inch of linear excursion. Built-in 400-watt amplifier with user adjustable low frequency contour and multi-band room response compensation.
- WOOFER : ScanSpeak Illuminator 7-inch die-cast basket, long excursion woofer with our proprietary Carbon Fiber/Balsa sandwich composite cone and an Aerodynamic Neo Magnet System.
- MIDRANGE : Vandersteen Patented open basket 4 1/2-inch midrange with our proprietary Carbon Fiber/Balsa sandwich composite cone and proprietary high performance die-cast basket an Alnico Magnet Assembly to reduce internal driver reflections and improve linearity. Copper Faraday ring on pole piece. Ferrofluid voice coil cooling. Transmission-line loading.
- TWEETER : ScanSpeak Illuminator 1-inch critically damped, low-distortion, dual-chamber, with our proprietary Carbon Fiber composite dome with a Neo Air Motor.
- ATS TWEETER : 3/4-inch critically damped, low-distortion alloy dome tweeter. Ferrofluid voice coil cooling.

SPECIFICATIONS

- FREQUENCY RESPONSE : 22Hz to 40kHz + or - 2Db
- EFFICIENCY : 85dB at 1 meter with a 2.83 volt input.
- RECOMMENDED AMPLIFIER : 40 TO 300 watts per channel into 8 ohms for the upper section, 400-watt subwoofer amplifier built in.
- IMPEDANCE : 4 ohms nominal, + 4 -.5 ohms minimum.
- CROSSOVER : 100Hz, 600Hz, 5000Hz and adjustable H.F., 6dB per octave.
- PHASE : All the drivers are connected in positive absolute phase and pistonic in pass-band.
- UPGRADEABLE MODULES : Totally modular design. The driver, crossover and amplifier modules can be removed to accommodate future upgrades.
- PHYSICAL : 44" high, 14" wide, 20" deep.
170 pounds net, 215 pounds gross, each.



Posted by: Robert Harley at 11:11 am, January 13th, 2009

One of the “must-hear” systems at CES was Richard Vandersteen’s all-new Model 7 loudspeaker. The buzz surrounded not just the exceptional sound the system produced, but the radical departure that the Model 7 represents for Vandersteen Audio. The \$45,000 Model 7 is an advance not just in technology and sound quality, but also marks Vandersteen’s entry into a completely new price category after more than 30 years of producing value-oriented loudspeakers.

Walking into the Vandersteen room, I was surprised that the Model 7 is actually smaller than Vandersteen’s Model 5. I was also surprised to see the speaker finished in a bright red, high-gloss paint.

The Model 7 is a four-way system employing a 12” powered (400W) push-pull woofer taken straight out of the Model 5. The midrange, mid-bass, and high-frequency drivers, however, are made from a three-layer sandwich of balsa wood flanked by carbon fiber. Even the ScanSpeak Illuminator tweeter uses Vandersteen’s sandwich dome. Vandersteen makes the cones and ships them to ScanSpeak, who builds the drivers. Vandersteen has applied for patents on this cone and dome technology.

The enclosure is made from five layers of carbon fiber in a constrained-layer-damping configuration that is then bonded to a carbon-fiber skeletal structure. The faceted shape makes it difficult to apply wood veneers, but Vandersteen intends to offer veneered versions in the future at a price premium.

The crossovers are fully balanced (each leg of the balanced signal is filtered) and the capacitors are battery biased with a small amount of DC. Of course, the crossovers are all first-order to maintain the time and phase coherent nature of all Vandersteen loudspeakers.

The Model 7’s sound was extraordinary: coherent, open, uncolored, dynamic, and with a purity of timbre that was striking. But the Model 7 really excelled in resolving very low-level details such as reverb decay and the sense of space around instruments. I’ve heard Stevie Ray Vaughan’s Couldn’t Stand the Weather on many systems over the years, but I’ve never heard the sense of presence to his guitar, the vivid impression of a guitar amplifier in the studio, and of the fine texture of the instrument’s decay that I heard from the Model 7.

Incidentally, the rest of the system included the Aesthetix Io and Callisto line and phonostage, Aesthetix Atlas solid-stage amplifiers, and the Clearaudio Statement turntable. There was no digital playback in the room

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Best Intros at CES: Vandersteen Model Seven



Posted by: Jonathan Valin at 8:08 pm, January 13th, 2009

Contrary to what some people may think (see my Magico M5 blog), I did listen to other ultra-high-end speakers besides the Magico M5 at this year's CES, and after the M5 the two I thought best (there is a third but you will have to wait for our show issue to learn what it is) were the \$68k Wilson MAXX Series 3 driven by Boulder electronics and the \$45k Vandersteen Model Seven driven (marvelously) by Aesthetix electronics and the Clearaudio Statement turntable (there was no digital source in the room).

Although both speakers took me utterly by surprise, I'll begin with the Vandersteen since it is such a dramatic departure from previous Vandersteen designs.

Technologically, the Model Seven is a huge step away from 70s/80s thinking into the twenty-first century for designer Richard Vandersteen, who has been working on this project for better than three years. As Robert has already noted in his blog on this speaker, the powered 12" woofer in the "New School" Model 7 is the same as the woofer in the "Old School" Model 5, but just about everything else is different. The midbass, midrange, and tweeter are now made from a three-layer carbon-fiber/balsa wood/carbon-fiber sandwich (an unusual combination but, when you think about it, not really that much different than a carbon-fiber/Rohacell sandwich).

The pretty little enclosure is made entirely from carbon fiber, five layers of "skin" bonded to a carbon-fiber skeleton. There is an "ambience tweeter" on the back of the Seven, which Richard Vandersteen says you can use if it helps (although he generally doesn't).

Since I brought my own vinyl to the show I can comment with some confidence about the sound of the Model Seven, which was just as revolutionary as its build. On Norah Jones' "Come Away With Me" (from *Live From Austin Texas*), for example, the Seven sounded very neutral, open, and high in resolution, with exceptional low-level dynamic nuance on Jones' voice and excellent control in the bass. (This is a cut that can test woofers, easily making them sound out-of-control since the Fender bass is, in fact, rather too big and fat. Here the bass was just right and superbly integrated with the rest of the speaker.) There was no sense of a cottony scrim overlaying the sound and obscuring very-low-level detail, as there has been (for me, at least) in previous Vandersteen models. Indeed, I wrote down in my notes: "Right up there with the MAXX III for best intro at CES." There was a liveliness, presence, and breathless to the sound, without a hint of darkness. Though they weren't quite as "there" or as "transparent" as MartinLogan CLXes or Magico M5s, the Sevens were nonetheless superb--the Audio Research of full-range transducers.