Vandersteen Audio Model 3A Loudspeaker



By Duncan and Adrienne Hartley

The reference

ransparency, deep resonant bass, imaging with depth and breadth, musical detail, an extended upper register, and liquidity all in the same speaker. Thus reads the Audiophile Wish List. With huge expenditures of creative energy and money, designers and listeners relentlessly pursue the grail of real music, oftentimes coming close to fulfilling the Wish List. The new Vandersteen Model 3A loudspeakers reach new levels of delight: a real-world price for sound quality unbothered by the legendary curse of tradeoffs of one characteristic for another. For many listeners, it's all here.

That Vandersteen has accomplished such a feat should not be a source of astonishment to anyone familiar with the company's finely crafted speakers, fixtures of the audio world since 1977. Nonetheless, the 3A speakers are so exciting with sound so lifelike and full-bodied that you can't help be astonished. Frankly, we had begun to despair of finding this kind of sound in a speaker system priced under \$20,000. Even our magical \$6,000 Quads, regarded by many of us as the standard for transparency, liquidity and musicality, are

fairly weak in bass resolution and upper register extension. The 3As offer fine deep bass with precise control and resolution, a beautiful, exciting and liquid upper register that doesn't get hard even at high volume levels. and a midrange that yields the exquisite transparency that is the mark of real music. You just don't want to stop listening. To everything you own.

They are priced at \$2595 and come with a small stabilizer (not nearly as good as the Sound Anchor that can be purchased separately). Vandersteen Audio is located at 116 W. 4th Street, Hanford, CA 93230. Phone (209) 582-0324.

First, to focus on the basics. The speakers are 4 feet tall, weigh a formidable 88 pounds each, and are 16" wide by 10-1/4" deep. As if their size weren't already imposing enough, an optional cast-iron boot attaches to the speakers at the back and extends up to the aluminum mounting plate, with four metal shims of different sizes which can be removed in varying numbers to adjust the tilt of the speaker for an optimum listening window. According to Vandersteen, this 6" high listening window is

found when the listener's ear is at a height of 35 inches. We needed to increase the backward tilt. In all there are three very sharp metal cones anchoring the speakers, one at the base of the back leg, and one at each front corner of the speaker. Rock solid. Not easy to slide around for the meticulous tweaking and positioning that takes place in establishing the perfect setup configuration.

These handsome columns,

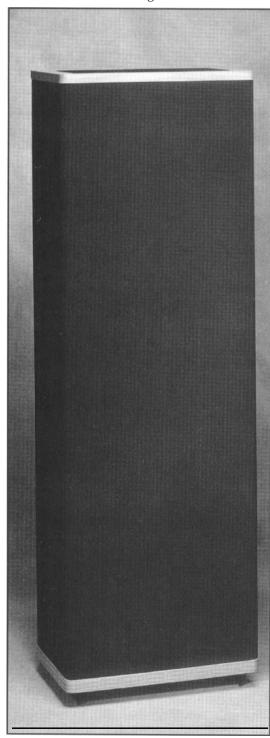
covered in black fabric with natural oiled wood veneer edges top and bottom, require very precise placement. Vandersteen suggests placing the speakers 12" from the back wall, with the distance between speakers approximately equal to their distance from the listener. This is a good starting point, but we found we had to move them closer together, farther from the back wall. and dead-flat, face forward, with one shim removed for increased tilt. However, our labors were richly rewarded with greater depth of field, even better bass reduction and increased transparency and liquidity.

Although the 3As look like cabinet speakers, they are not the conventional sort. The drivers are mounted on small open boxes just large enough to hold and seal the rear wave of the speakers. There are no baffles, and remaining spaces are filled with absorptive material to preserve but not re-radiate energy and information. The drivers are mounted within the top half of the speaker. The tweeter is a critically damped 1" metal alloy dome with a dual-chamber design and ferrofluid voice-coil cooling system. It is rated for 5 kHz to 30 kHz., The midrange driver is 4-l/2", with linear surround, curvilinear polycone and a proprietary die-cast basket for rigidity. Its magnet structure is designed to reduce or eliminate distortion of the secondary signal which can be created by internal diffraction smearing the sound of the driver in dynamic speakers. The test of the midrange is fine transparency, and listening to the 3As proves the effectiveness of this patented midrange driver system.

The excellent bass is created by the 8" long excursion woofer, also with a die-cast basket and curvilinear polycone. Both woofer and midrange driver employ stiff, low-weight polycones to resist flexing. The woofer has a l-1/2" two-layer voice coil with ventilated aluminum former, and a 40 oz. focused-gap magnet structure.

Also new in the 3As are a crossover with new circuit board design and enhanced phase compensation. The 3As have a double-spider acoustic coupler with a precision magnet assembly having copper end rings. Other changes from the Model 3 to the 3A include technical modifications to the tweeter, cabinet bracing newly designed to increase the inert structure of the speakers, and a recalibrated midrange. Since these speakers need an enormous amount of break-in time. Vandersteen's new accelerated break-in process for the midrange, equivalent to 1000 hours of normal use, is valuable indeed. All Model 3 speakers can be converted to 3As.

According to Vandersteen, these speakers are rated as follows: Impedance is 6 ohms nominal, 4 ohms minimum, efficiency is 89 dB with 1 watt of pink noise input at 1 meter on axis; frequency response is 26 Hz to 30 kHz+/-3 dB/30 Hz to 22



kHz+/-1.5 dB; dispersion is 26 Hz to 17 kHz +/-3 dB 30 degrees off axis. Recommended amplification is 100 to 200 watts per channel into 8 ohms, with the amplifier stable into a 4-ohm load. The speakers must be biwired. It is best to start out with a matched set of cables, and adjust them as you wish to compensate for specific sonic characteristics of the listening room.

Listening

The first CD we listened to was Pieces of Africa (Elektra Nonesuch 9 79275-2) by the Kronos Quartet. This wellrecorded group bows, slaps, plucks, shakes and strikes not only recognizable instruments like violins, violas and drums, but a variety of exotic instruments. On a wide soundstage. these instruments almost take shape, in spite of the fact that we have never seen most of them. There are rustling seeds, wooden striking sticks and the fine detail of the strings and bodies of violins. Transparency and true timbre provide beautiful contrast between bowed and plucked stringed instruments, full of resonance and full of gut.

The various drums and strong bass create a lively, highly rhythmic and exciting experience. Dynamic range is wide and well defined, and the air around the instruments allows for the kind of bloom that makes the music quite palpable. In fact, one singular-sounding instrument seems to light up the rear corner of the soundstage.

Alchemy, a fine live recording by the great Dire Straits (Warner Brothers 9 25085-2), provides many opportunities for auditioning audio components. The soundstage is wide and deep, the detail excellent,

and the rock music biting, husky and full of dynamic contrast. The Vandersteen 3A speakers probably provide the best definition and transparency on vocals we have heard. Knopfler is life-size, his voice

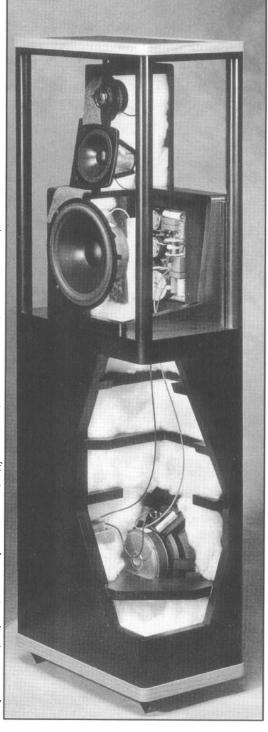
rich with nuance and the seductive throatiness that seems to suggest that this is, after all, rock of the first order. Air and bloom give great detail and life to the performance, and the voice joining Knopfler near the end of the first cut is distinct and harmonious. The fine midrange of these speakers give body and substance to the guitars, conveying their expressiveness and excellent attack.

Rock music needs emphatic bass, and the 3As have accurate, exciting, coherently assertive bass resolution. There is real richness and muscle in the performances, with the powerful bass underpinning the throaty voices and the alternately mellow and insistent guitars.

The combination of transparency, musical detail and full dynamic range contribute to the lifelike images. The applause from the crowd is generated by flesh and blood, the fireworks that arc across the background have substance, making their gradual decay as they disappear in the distance very convincing.

The bass is so impressive, especially

on the third cut of Lyle Lovett's *Joshua, Judges, Ruth* (MCAD-10475) that we felt it through the floor and in our bones. Deep, resolute, throbbing and pulsing, this bass is terrific. It goes beyond lifelike into the



wish-fulfillment category. Lovett's resonant, expressive voice, and the at times delicate, at times insistent guitar are liquid, transparent and exciting in contrast to the rich, deep, powerful bass.

Ricky Lee Jones combines her distinctive voice with Lovett's and you hear how exciting backup/duet can be. Their voices intertwine yet each remains distinct. She seems to shadow and harmonize, but with such presence and body she certainly is not secondary. The play of cymbals is breathtaking against the dynamic fullness of the performance, with softly metallic contrast.

In most respects, the Vandersteens create the best Modern Jazz Quartet we've heard. The For Ellington disc (East-West 7 90926-2) provides a "you are there" quality to the performance, full of nuance, subtlety, instrumental interplay and a musical presence. In one passage, the brushed cymbals and upper register of the piano play off against the resonance of the bass with its big body and vibrant strings. In another, we could almost measure the distance between the cymbals and the drum! Extraordinary imaging and transparency provide a precise soundstage, with excellent front to back placement the sense of air around them so fine we could chart the distances between musicians.

The music is exciting in soft passages, the vibes ranging from quietude to full, zingy, brass-filled pure tones. The ensemble playing highlights the way the Vandersteens maintain clarity, precision and liquidity. The 3As capture the mounting excitement as the ensemble moves into crescendos.

Fleetwood Mac's *Live!* (Warner Brothers 2WB 3500) is one of our favorite do-or-die test cuts.

(All our listening selections are chosen for their musical integrity.) Another live recording, this one can create dreamy and exciting harmonies. One cut, "The Farmer's Daughter," is a masterpiece of magic that reveals the capability of components rather quickly. The Vandersteens held us enthralled. The beautifully matched and complementary voices of Stevie Nicks, Lindsey Buckingham and Christine McVie sing as one, marked by individual sibilances and the sound of drawn-in breaths. The mingled voices are reedy, silky and almost in competition with each other for dominance without destroying the unison. Clearly not possible, but thrilling to listen to. With great transparency, the Vandersteens convey the fluid, sensual, sinuous qualities of the singers placed on a wide soundstage with their images as clear as life.

The Nylons on One Size Fits All (Open Air Records OA 0301) offer a great deal of musical fun. An all-male a cappella group from Canada, the five men weave their various voices together in harmony and counterpoint. And the Vandersteen 3As make the experience musical and relaxed. The transparency that is a mark of these speakers makes for a natural, precise sound. Each singer is clearly placed on a panoramic soundstage. The stage is excellent, front to back and left to

The Nylons are accompanied by percussion instruments, and they provide firm bass with good extension.

Conclusion

The new Vandersteen 3A loudspeaker is a reference-quality, full-range dynamic speaker at an unusually good price. The speakers have a midrange that

rivals the Quads for transparency and musicality. Framing the exceptionally fluid midrange, there is a beautifully extended treble and awesome bass. Orchestral music plays out on a fine soundstage with air and space in which instrumental timbre blooms. Massed violins stretch to the stars with neither edginess nor compression. Voices are compelling, from those we have described above to the gorgeous solos and harmonies of the Kings College Choir singing Mozart's Coronation Mass. Small groups, whether chamber or jazz, seem to be appearing right in front of you in the listening room.

Overall, the 3As offer an open, neutral sound, neither warm nor subtractive. In short, they faithfully and with impeccable accuracy produce the music that was recorded.

The 3As offer the transparency of planar or dipole speakers while yielding the dynamic range associated with cabinet speakers. The excellent design of drivers and crossover network allow for powerful, controlled, rich bass that many listeners demand. No matter your musical preference, these are speakers that deserve careful audition. And although a price tag of \$2595 is not inconsiderable, it represents extraordinary value. We found the Vandersteen 3As to be first-rate performers worthy of very high praise indeed.

Associated Equipment

Sony 650ES compact disc player, Arcam Black Box, Carnegie 1 cartridge, Zeta tone arm, Linn Sondek 12 turntable; Audio Research S-P 10 preamplifier: Audio Research D-115 stereo power amplifier: Quad ESL 63 loudspeakers: Audio Research cables and interconnects; MIT-750 cab1es.