

THOMAS J. NORTON

Vienna Acoustics Beethoven Baby Grand Symphony Edition

LOUDSPEAKER

was stationed in Germany in the Air Force for two years in the 1980s, and for one long weekend off had to decide whether to visit Berlin, or travel to Austria and see Vienna. I was told that Berlin, then still divided by the Wall, consisted of late-20th-century high-rises (West) and Concrete Collective Chic (East).

I went to Vienna. It was and is a beautiful city, with much of its late 19th- and early 20th-century character still intact. And while there will always be other claimants to the hono; it's arguably still the classical-music center of the planet. I managed to score standing room for a performance of Poetcin's Fumedate at the Vienna State Opera (as I read, standing room at the time was the equivalent of about \$1 US). Act I was orough that it evoked catcalls from the unforgiving Viennese audience, but after that, things settled in nicely.

Vienna is also the headquarters of Vienna Acoustics, says Capt. Obvious fhough today you can't always be sure of such things). Peter Gausterer, who remains both its head and chief designer, founded the company in 1989. My first experience of listening to their loudspeakers was some 10 years ago, at a Consumer Electronic Show. When I walked into VAS 100m, the speakers I spotted very much resembled, at least physically, the company's current Concert Grand Series—the same slender cabinets populated by several drive-unity, the alpress of which was about 6° in diameter but looked smaller, and the same transparent plastic cones, ribbed to enhance their pistonic movement.

But it wasn't the beautiful cabinets and unusual-looking drivers that seized, then held my attention. It was the sound. In a sea of speakers humming away in other rooms at that show, many of them apparently designed to sound polite and laid-back in the fashion then and still popular, the Viennas jumped out and grabbed me with their punchy, quick, even vivid sound. But they weren't just impressively dynamic; they sang to me. The audition was far too brief though I've long forgotten most rooms at most audio shows, that one I remember.

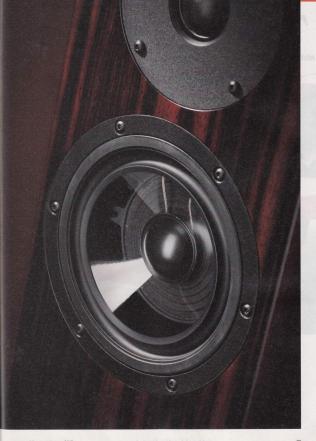
But while I've been reviewing speakers longer than the company has been in business, never, until now, had I had the opportunity to live with a pair of Vienna Acoustics for an extended period. The plantest were never quite in alignment, perhaps because by the mid-1990s I had become occupied with Steerophile Guide to Home Theater, and Vienna Acoustics didn't enjow wide visibility in that part of the audio market. Much later, Steven Scone reviewed their Strauss surround-speaker package in SGPIT; but I never beauth the system. Currently, Vienna Acoustics offers the leadth the system. Currently, Vienna Acoustics offers the leadth the system currently demand acoustics offers the in SCONCET Grand series that's also suitable for surround use, and the Poetry, a center-channel for its unmarket Klimit line.

All of the final assembly for Vienna Acoustics speakers takes place near Vienna, but the cabinets are actually made in Italy. The company also designs its own drivers, and has them built to its specs elsewhere in Europe, by companies such as Scan-Speak and Eton. Driver design and speaker system design are very different skill sets, and while many speaker makers say that they design and sometimes even build their own drivers, that's often a bit of a stretch. But I can confirm that the woofer and midrange drivers in the Beethoven Baby Grand-Symphony Edition (\$6000/pair) look like nothing I've seen elsewhere. I'm quite familiar with the stock catalog drivers made by companies such as SEAS, Scan-Speak, Vifa, Eton, and others-many are firstclass products, and you might be surprised by the pedigrees of the companies that use them. But some manufacturers want something more exclusive, or have ideas of their own they want implemented. Vienna Acoustics is clearly one of

SPECIFICATIONS

Description Three-way, floorstanding, bass-reflex loudspeaker, Drive-units: 1.1" hand-coated, silk-dome tweeter, 6" X3P midrange; two 6" X3P Spider-Cone woofers. Bass function: impulse-optimizing QB3 (Quasi-Butterworth). Crossover frequencies: 150Hz, 2.3kHz. Crossover: three-way, 6dB and 12dB Bessel. Frequency range: 50Hz-22kHz. Sensitivity: 91dB. Impedance: 4 ohms. Recommended amplification: 40-250W. Dimensions 39.6" (1016mm) Hby 8.4" (216mm) W by 14.6" (375mm) D. Weight: 61 lbs (27.75kg) each.

Finishes Piano Black, Cherry; for Piano White, Rosewood, add \$500/pair. Serial number of units reviewed 32321. Price \$6000/pair. Approximate number of dealers: 90. Manufacturer V.A. Lautsprechermanufaktur GmbH, Boschanstrasse 3. 2484 Weigelsdorf, Austria. Tel: (43) (1)88-96-815. Fax: (43) (1)88-96-599. Web: www.vienna-acoustics. com. US distributor: VANA Ltd., 778 Third Street, Unit C. Mukitteo WA 98275. Tel. (425) 610-4532. Fax: (425) 645-7985. Web: www.vanaltd.com.



the latter. For example, the tweeter used in the Baby Grand is new with the Symphony Edition but is also used in some of VA's pricier designs. It looks generic, but the secret sauce of any driver is seldom revealed by looks alone.

Verma Acoustics calls the unique, transparent material used in the Baby Grand's woofer and midrarge come X3P—ir's a combination of the thermoplastic TPX and three polypropylene-based synthetics. The stiffening ribs in the woofer cones are clearly visible—Vienna Acoustics call this their Spider-Cone design, for obvious reasons. But the midrange driver omits the ribs. This must have been a deliberate design choice—the midrange in the cattler version of the Beethoven Baby Grand (the non-Symphony Edition)—does have the ribs. The speaker's crossover network employs first—and second—order filters at 150Hz and 23kHz.

and 2.58/EZ.

The cabinets aren't all that large by the standards of 56000 pair floorstanders, but they're solidly braced and beautifully made. Of the four available finables, Flauor beautifully made. Of the four available finables, Flauor beautifully made. Of the four available finables, Flauor warples were in a Piano Black that would likely meet with seriously's approach. The cabinet is amone, but subliked by outriggers fitted with spikes hefty enough to secure the rail to not first leg of California's planned high-speed train to nowhere (with apologies to Frestnouns and Bakerfieldsins). They can be easily adjusted and locked from the top.

Around back are a single port and a single pair of binding posts; Vienna Acoustics is no fan of biwiring, but these are some of the best posts I've seen. They can accept banana plugs or spades, are well spaced and not recessed, and can

Peter Gansterer, who remains both its head and chief designer, founded Vienna Acoustics in 1989. be easily tightened with the fingers. Grilles are provided, but were not used in the review.

Room, Setup, Gear I set up the Beethoven Baby Grands in my listening room, which is 27' long by 15.5' (at

its wides! by 8 high. All of the windows are blocked with lighthweight soundboard (Homasote, or something similar), installed to accommodate the video-projection chores I was doing for SGHT when If first set up shop here, in 2000. (SGHT was retitled Sterophile Ultimate AV in 2004, and was combined with Home Theater magazine in 2008; the latter morphed into the present Sound & Vision in 2013.) The soundboard does have some acoustic effects in addition to its primary purpose of blocking light for daytime video-caulations, and it's certainly more accountically dead than the glass window itself, which occupies much of the long wall adjacent to the right speaker.

The sexup I still employ was judged optimal when I acquired this room in 2000, and since then has changed only slightly—mostly with a wider loudspeaker spacing to accommodate a new, 96"-wide projection sercen (fered and out of the, um, picture for this review). The front speakers is about 7" out from the short wall behind them, firing down the room's length. The left speaker is about 4" from the left well, the right speaker about 3" from the

MEASUREMENTS

used DRA Labs MLSSA system and a calibrated DPA 4006 microphone to measure the Vienna Acoustics Beethoven Baby Grand SE's frequency response in the farfield, and an Earthworks QTC-40 for the nearfield responses. Vienna Acoustics Specifies the Baby Grand's sensitivity as a very high 91dB. My estimate was significantly lower as 65-5dB(b); 233Vm. The impedance is specified as 4 dhms, and while the swenger magnitude in with the impedance drops to 2.3 dhms at 90Hz (fills. 5db) frace), a frequency

Demonstration of Agriculture (Agriculture (A

Fig.1 Vienna Acoustics Beethoven Baby Grand SE, electrical impedance (solid) and phase (dashed) (2 ohms/vertical div.).

where music has high energy. The impedance also remains above 5.5 ohms for the entire treble region. Fortunately, the electrical phase angle remains relatively benign, but I would still recommend a good 4 ohm-rated amplifier to drive this speaker.

A discontinuity is visible in the impedance traces around 1.2kHz, but nothing else in the midrange suggests the presence of cabinet panel resonances. However, when I investigated the vibrational behavior of the enclosure's walls with a simple plastic-tape accelerometer (similar to a piezoelec-



Fig. 2 Vienna Acoustics Beethoven Baby Grand SE, cumulative spectral-decay plot calculated from output of accelerometer fastened to center of side panel level with upper woofer (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz)

tric acoustic-guitar pickup), I found a strong mode at 734Hz that was present over most of the side panels (fig.2), as well as on the baffle between the midrange unit and the upper woofer. Fortunately, this resonance is sufficiently high in frequency that I doubt it would lead to coloration, though it is fair to note that Tom Norton heard some emphasis on piano notes.

The saddle between 30 and 40Hz in the impedance-magnitude trace suggests that this is where the single port on the rear panel is tuned, and indeed, the summed output of the woofers (which have identical responses) has the expected minimum-motion notch at 39Hz (fig.3, red trace). The port's output (blue trace), however, peaks slightly lower in frequency, though its upper-frequency rolloff is smooth and free from resonant modes. The crossover from the midrange unit (green trace) appears to occur at the specified 150Hz, with a third-order acoustic rolloff for the midrange driver. This low crossover frequency means that that single unit handles all fundamentals and almost all harmonics of male and

right, and both are tood in toward the center listening sear. A carpet covers most of the oak floor, which is laid over a crawl space, not a concrete slab. With the carpet, the soundboard, and a few additional acoustic panels, the acoustics of the room are a bit better damped than a typical domestic room of this size. Selvels roll of LPs, CDs, SACDs, DVDs, BDs, and even LDs (laserdiscs) provide useful diffusion. The walls are lah and plaster, nor drywall. A selvel representation of the selvel representative the contraction of the selvel representative the con-

The Beethoven Baby Grand Symphony Editions arrived in two shipping boxes joined at the hip. Each box was little wider than the speaker inside and, by itself, very unstable. Unless the two boxes are lashed together, they can easily fall over in shipment. Both speakers bore the same serial number, which suggests that they were matched at the factory (though Vienna makes no such claim).

I drove the Viennas full-range with two-channel sources, at first using my resident Integra DTC-9.8 surround-sound processor strictly as a 20-channel digital preamp, and later swapping it for a strictly analog leff Rowland Design Group Consummate preamplifier. The primary power amplifier was a Parasound Halo A 51-a five-channel amplifier, though for this review I used only two channels. The source was a Marantu UDPOOT universal Blu-ray player connected to the Integra with a coaxial digital cable, or to the Consummate via analog interconnects.

Most of my listening was to CDs, but I also used the Marantz for SACDs (two-channel DSD tracks only), which



"Wow, do these speakers do detail," reads p.1 of my listening notes.

were played only through the Consummate preamp and its two-channel analog link to the player.

Some manufacturers recommend breaking in their speakers for ungoldy amounts of time. Others disdain the break-in concept, apart perhaps for a few minutes to allow the drivers' asspensions to loosen up. In my opinion, listening to music while speakers settle in is a questionable practice; it's just as likely that your cass are breaking in to the sound of the speakers than anything dramatic happening to the speakers themselves. Nevertheless, I followed my usual practice of playing pink noise at moderate levels through the Viennas for about 100 hours before doing any serious listening. (The speakers faced each other and were wired out-of-phase, to minimize the noise.) After that, it was time for music.

Listening

Though a precise comparison of the sounds of the Symphony Edition of the Beethoven Baby Grands and that Vienna Acoustics demo of a decade ago is of course impossible, my

measurements, continued

female voices and TJN did comment very favorably on how the Beethoven Baby Grand reproduced vocals. The wooders roll off with a second-order slope above their relatively restricted passband of 60-120Hz, and there are no significant resonances in their morange united the significant resonances in their trace below 300Hz). The complex sum of these nearfield outputs (black trace below 300Hz) has a broad peak between 60 and 150Hz, but this will be mainly due to the measure-



Fig. 3 Vienna Acoustics Beethoven Baby Grand St. anechoic response on tweeter axis at 50°, averaged across 30° horizotal window and corrected for microphone response, with nearfield responses of: midrange unit (green), woders (blue), port (red), with their complex sum of nearfield responses respectively plotted below 300Hz, 750Hz, 450Hz, 300Hz.

ment technique, which assumes a 2pi (hemispherical) loading for the drivers. The low frequencies are down by 6dB at the port tuning frequency of 39Hz. As TIN says, this is still a relatively small floorstander, and should not be expected to offer prodigious amounts of low frequencies.

Higher in frequency in fig.3, the midrange unit's output rises to reach a peak just above lik-lz, which is suspiciously close to the frequency of the discontinuity noted in the impedance traces. There is then a disruption in the response trace at 3kHz, above which the tweeter's output is relatively even all



Fig. 4 Vienna Acoustics Beethoven Baby Grand SE, lateral response family at 50°, normalized to response on tweeter axis, from back to front: differences in response 90-5° off axis, reference response, differences in response 5-90° off axis

the way to 30kHz, the upper limit of this graph. All things being equal, I would have expected the lower-frequency peak to have added a slight nasal coloration. However, while TN didn't remark on any such coloration, he did write that "female and male voices and sool instruments, in addition to being uncolored, often sounded surprisingly uncolored, often sounded surprisingly uncolored, often sounded surprisingly that the Vienna Counties speaker to be the surprise of the sur

Grand's horizontal dispersion (fig.4) reveals that the suctout between and 5Hz tends to fill in to the speaker's sides Gkhown by the cursor position), which in a moderately sized room with the hypical furnishings will make the speaker's treble sound better in balance with the midrange than the on-asid curve suggests. Other than that, the contour lines in this graph are evenly spaced, with the speaker becoming increasingly directional in the top octave, as expected from a 1"-dome tweeter. The plot of the Beethower's vertical dispersion of the speaker becoming increasingly directional in the top octave, as expected from a 1"-dome tweeter. The

general reactions to both were very similar. "Wow, do these speakers do detail," reads pt of my listening notes. I heard subtleties I'd missed before. But while it would be appropriate to call these speakers a bit bright—"open and airy" might be more accurate—in no way did they sound hard. If fact, if anything, they sounded slightly forgiving in the mid-treble or "Priviptimes," reach.

Male voices—such as Aaron Neville's on his Warm Your Heart (CD, A&M 397 148-2) and Michael Ionasz's on his La Fabuleuse Histoire de Mister Swing (CD, WEA 22924)-sounded clean and neutral, with no clearly recognizable coloration. The unique textures of these singers' voices were clearly reproduced. Sibilants were audible, but in a way that close miking might have produced, and were neither unnaturally sibilant nor sizzly. The soundstage was also impressive, with the singers tightly locked in to the center. The latter, however, was no surprise; it's more common than not in my room, likely the result of speaker placement well clear of adjoining walls, particularly the wall behind the speakers. The downside of such positioning is that the bass was a bit subdued, as was evident with the usually bass-heavy Jonasz album. But it wasn't lean, and listeners unfamiliar with this recording might not be aware that anything was missing.

Overall, the bass seemed more subdued than smashmouthed, but I never found it lacking. Some basic measurements showed it to be reasonably strong down to 40Hz, but largely gasping for air at 30Hz—not surprising



Solo-piano recordings sounded well balanced on the bottom end and clean and clear through the middle.

from a relatively small floorstander. For bass testing I often pull out a compilation CD-R given me some years ago by a manufacturer at a CES. The sources of the tracks aren't well specified, so I can't give you precise references, but they run the gamut from pipe organ to synth to bass drum. Yes, I've heard far more room-shaking bass in my relatively large listening room than the Viennas offered, though usually from either a much larger speaker or a subwoofer. But even with the bass-heavy selections on this and other discs. I rarely missed that bottom octave. The Baby Grands responded rapidly to leading-edge transients, and since the "quickness" of a drumstroke is defined primarily by its higher overtones, drum recordings of all types, from timpani to Kodo drums, often made me sit up and take notice, While the very bottom end lacked the range to get that deep-down, low-frequency, reverberant hall sound, with less transient-loaded bass information it was nevertheless very

measurements, continued

sion, referenced to the tweeter-axis response (fig. 5), shows that a strong suckout develops at 2.8kHz more than 5° above the tweeter. Don't listen 5° above the speaker on this plinth, the tweeter 16° 40° from the floor, which is 4° higher than the typical can height of a seated listener. Fig. 5 also reveals, however, that the Baby Grand's response doesn't significantly change up to 10° below the tweeter axis.

The Beethoven Baby Grand's step response on the tweeter axis (fig.6) indicates that its tweeter and midrange unit are connected in positive acoustic polarity, its woofers in inverted polarity.

But, as always, what matters more than absolute polarity is how the individual



Fig. 6 Vienna Acoustics Beethoven Baby Grand SE, step response on tweeter axis at 50" (5ms time window, 30kHz bandwidth).

Beethoven Baby Grand Symphony Edition's measured performance suggests a carefully balanced design, the effects of measured flaws in the midrange unit being reduced by other factors.— —John Atkinson



Fig. 7 Vienna Acoustics Beethoven Baby Grand SE, cumulative spectral-decay plot on tweeter axis at 50" (0.15ms risetime).

response, differences in response 5-10° below axis.
stereophile.com = January 2015

Fig.5 Vienna Acoustics Beethoven Baby Grand SE, vertical response family at 50", normalized

to response on tweeter axis, from back to front:

differences in response 15-5° above axis, reference

satisfying, and never thin or anemic.

Even with pipe organ, the Viennas had enough bass power to provide a railstic feel, hough organ fars may want to look further to get that count-the-cycles feeling was that only much larger speakers and provide. Two only once experienced the deepset bass in John Rutter's Requiens as performed by Timothy Seelig and the Turtle Creek Chorale (CD, Refrence RR-57CD): in a show demo that included an 18° Rewel Ulfiama subwoofer. The Viennas couldn't do that, but, again, most listeners won't think anything is missing. The VAs' base provided a generous, warm undertone for the singers, which the speakers also reproduced with excellent depth and dimensionality.

I did find the Vienna's bass to be a little soft and furry with some recordings, and more so with such transientlimited material as pipe organ or bass synth than more percussive bass

The Baby Grands responded rapidly to leading-edge transients.



ASSOCIATED EQUIPMENT

Digital Source Marantz UD7007 universal Blu-ray player. Preamplification leff Rowland Design Group Consummate preamplifier, Integra DTC-9.8 preamplifier-processor. Power Amplitier Parasound Halo A.5. Cobbes Interconnects: Kimber Kable AGDL digital coaxial (sources to pre-pro.). TARA Labs Rectangular Solid Core original (sources to preamp). Cardas Heulink (preamps to power amp). Speaker. Monster Cable M15. Accessories Monster Cable H155000 Reference Power

WHAT'S UP WITH FLAT?

Center (preamps, source),-Thomas J. Norton

Some 30 years ago (yikes! has it been that long?), the late J. Gordon Holt, founder of Stereophile, wrote an 7% We See It* Column titled Town With Flat* (see www.stereophile.com/ asweesel/138/index.html). It raised some has/des. Gordon, of course, didn't littled it to mean that smooth response (not necessarily the same thing as flat) wasn't desirable, and he was clearly speaking of a speaker's in-room and he was clearly speaking of a speaker's in-room. Yet was the service of the se

We'll see what JA's measurements have to say about the Beethoven Baby Grand – Symphony Edition, but in the meantime, I simply had to see how they measured in my room. However, I took these measurements only after I'd done all of my listening tests and finished the "Listening" section above.

Having JA do the honors was impractical—we live 3000 miles apart. And while ny measurements were taken at the listening position, and averaged 21 readings taken at and around that location, hely can't necessarily be compared with the in-room measurements. JA performs for some of Sterophile's speaker reviews. I used the Omnimic system from Parts Express, a less sophisticated setup than JA uses.

The in-room response curve (fig.1) was relatively flat, about ±468 from LISHs to 10kHz, with the expected uniformity issues common to my room below 125Hz, including a prominent peak at about 80Hz. But the top end was surprisingly smooth. A small dip in the 3-4kHz range (relative to the average responses between 15 and 3kHz and between 4 and 9kHz) may explain the Vienna's lack of hardness and edge, despite its slightly bright sound. The most prominent feature was a plateau of roughly 5dB between 700 and 100Hz (relative).

the levels at 450Hz and 1.5kHz). This could well explain the Beethoven Baby Grand's immediacy with voices and solo instruments.—Thomas J. Norton

Vienna Acoustics Beethoven Baby Grand SE, spatially averaged response in TJN's listening room.



instruments—but that's been true of most speakers in my room. I've said it before, and it's worth repeating: A reviewer can tell you only how a speaker will perform in the bass in his or her room—never in *your* room.

Other recordings continued to impress me. Solo-piano recordings, such a Minoru Nojimi's Nojima Plapt List (CD). Reference RR-25CD), sounded well balanced on the bottom end and clean and clear through the middle. My only reservation was that some of the very highest keys sounded too preminent. Percusion recordings were exceptionally, often shockingly well defined. Yet, cymbal could sound hard and metallic through the Benchovens, but if you've never as within 20 of an orchestra's percussion section, as I once did, don't tell me that orchestral cymbals should sound weret. If they're close-miked, they certainly should sound weret. If they're close-miked, they certainly

GOOT.

Female and male voices and solo instruments, in addition to being uncolored, often sounded surprisingly immediate, but without turning edgy or in my face. The Viennas seemed to love this sort of music most of all; many of the more memorable moments I had with them were with just such recording.

To check how the speakers responded with a different front end, I later replaced the Integra pre-pro with my classic but still pristine Jeff Rowland Consummate preamp, connecting the latter to the two-channel analog outputs of the Marantz player. The amp was still the Parasound Halo A 51, and this time the sources were both CDs and SACDs.

The top end of the system was now sweeter—not surprising, as that's part of the Rowland's signature sound. So while there was a little less air and sparkle than before,

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with leading transient edges slightly softened, all of my other observations remained the same. Imaging was precise, bass clean and perhaps a bit warmer than with the Integra, and voices and instruments just a bit forward (though a little less than before). The SACDs I played also sounded impressive—none more so than Oma's Nebourage so than Oma's Nebourage so than Oma's Nebourage.

sampler (SACD/CD, Opus 3 SACD 21000), one of the best-sounding SACDs Fve heard. I'm still wrapping my head around high-resolution recordings—in my opinion, they matter only if the original recording is pristine, and this one certainly is. The Viennas handled all of it beautifully.

Conclusio

Despite its tongue twister of a name, I thoroughly enjoyed my time with the Vienna Acoustis Beethowen Baby Grand Symphony Edition, Yes, \$6000/pair is a little pricey for its zie in today's market, but not outrageously so, given the speaker's first-class European labor and workmanship. That aide, its lively but always natural-sounding balance kept me listening to recordings long after I'd planned to move on to others. The Beethoven Baby Grands's up-front but not overripe nature may not suit everyone, but for some, it will certainly be lowe at first listen. ■

