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ACOUSTICS'
BEETHOVEN
A GRAND
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LOVER'S
SPEAKER**

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REVIVAL**

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» **A NEW
STEREOPHILE CD:
BEETHOVEN'S
DIABELLI VARIATIONS**

Vienna Acoustics Beethoven Concert Grand

LOUDSPEAKER

Michael Fremer

DESCRIPTION Three-way, floor-standing, reflex-loaded dynamic loudspeaker. Drive-units: 1.1" silk-dome tweeter, 6" X3P-cone midrange driver, three 7" XXP-ribbed, XPP-polymer-cone woofers. Frequency range: 28Hz–22kHz, limits not specified. Sensitivity: 91dB/W/m. Impedance: 4 ohms average.

DIMENSIONS 42.7" (1095mm) H by 7.5" (190mm) W by 15.7" (400mm) D. Weight: 72 lbs (32.7kg).

FINISHES Maple, cherry, rosewood, piano black.

SERIAL NUMBER OF UNITS REVIEWED 51418 (both).

PRICE \$4500/pair. Approximate number of dealers: 90. Warranty: 5 years parts & labor.

MANUFACTURER Vienna Acoustics, A-1935 Wien-Lehnergasse, Vienna, Austria.

Web: www.viennaacoustics.com.

US distributor: Sumiko Audio, 2431 Fifth Street, Berkeley, CA 94710.

Tel: (510) 843-4500.

Fax: (510) 843-7120.

Web: www.sumikoaudio.net.

I told a friend that I'd received a pair of Vienna Acoustics' new Beethoven Concert Grand loudspeakers for review. "They're designed more for music lovers than for audiophiles," he said. I can't imagine a more damning statement—about audiophiles.

"What are you saying?" I sputtered. "That being an audiophile and being a music lover are mutually exclusive? How can a speaker designed for someone who loves music *not* be a speaker designed for an audiophile?"

His cryptic reply: "Let me know what you think after you listen."

Until the Beethoven Concert Grands arrived in my listening room, I'd never heard a Vienna Acoustics loudspeaker, nor was I very familiar with the company or its products. I'd seen them, of course, at American distributor Sumiko Audio's exhibits at Consumer Electronics Shows, but during those visits I'd paid more attention to the flashier-looking Sonus Faber line, which Sumiko also imports.¹

I'd met Vienna Acoustics designer Peter Gansterer during a trip to Europe in winter 2004. It was a social call; I more clearly remember playing with his Rhodesian ridgeback hound in the company's sun-splashed offices than talking about loudspeakers. I do remember running my fingers over the speakers lined up in the office, noting the narrow baffles I'd come to appreciate while reviewing Audio Physic products, and pressing the unusual ribbed, transparent woofer cones, and admiring the overall superb craftsmanship, especially the woodworking.

Then, a few months ago, Sumiko's John Hunter asked if I'd like to review a pair of Vienna Acoustics speakers, and suggested the recently redesigned Beethoven Concert Grand. Knowing nothing about the VA line, or where in it the Beethoven fit, I said, "Okay."

Shortly thereafter, two tall, narrow boxes arrived, each light enough for one person to handle, but I decided to wait a few days for Hunter to arrive and go through Sumiko's traditional speaker-setup routine with Jennifer Warnes' "Ballad of the Runaway Horse." It didn't take him long to discover that the Beethoven Concert Grands sounded best when placed very near where every other pair of speakers has sounded best in my room.

Description

As John Hunter went about his work, I couldn't help noticing the quality of the Beethoven's workmanship and the careful attention paid to small details. The cabinet's curved front and rear baffles, meticulously veneered and lacquered, are 1/2" thick. The powder-black, high-pressure, die-cast aluminum vestigial stand, fitted with thick steel spikes, is among the sturdiest I've seen. It not only lifts the cabinet's base off the floor, it wraps around and protects the base like a scuff guard, its thick metal curving and tucking under the speaker for extra-rigid support. A narrow insert runs about two-thirds of the

¹ Sumiko Audio advertises on Michael Fremer's website, www.musicangle.com.



way up the speakers rear baffle and incorporates two ports and a single pair of knurled speaker terminals, and is finished in an opaque, soft-textured black that was especially pleasing to the touch.

Think of the Beethoven Concert Grand as a small (42.7" H by 7.5" W by 15.7" D), two-way, rear-ported speaker run almost full-range, with the good fortune to be integrated into a ported passive subwoofer-and-base. The five drive-units are all newly designed by Vienna: a 1.1" hand-coated, silk-dome tweeter (made by ScanSpeak), a 6" X3P-cone midrange driver, and three transparent, 7" XPP Spidercone woofers. While

they're all mounted on the same baffle, the midrange is internally isolated in its own chamber (its rear port shares the rear baffle with the larger woofer port). The result is 21" of woofer power that, thanks to being divided among three drivers, promises to be able to move a great deal of air while being fast and responsive.

XPP is a proprietary, Japan-sourced thermoplastic that VA molds in its own tools, then sends to ScanSpeak for final driver assembly. X3P is XPP with three more new polymers, to give the midrange driver an unusually wide bandwidth and high resolution of detail, per VA. The woofers are

ribbed with XXP for stiffness. The midrange and woofer drivers take advantage of a newly developed inverted rubber surround that VA claims offers a "break-through" in "no-loss" damping of cone edge resonances.

Also new in the Beethoven Concert Grand is a linear crossover layout to which are directly connected new gold-silver-alloy speaker terminals and new, proprietary internal copper wiring. Crossover components include 1%-tolerance MKP capacitors and 1% metal-film resistors. Even the grille is special: its aluminum frame is fitted with a V-shaped phase dif-

MEASUREMENTS

The Beethoven Concert Grand, measured on its tweeter axis without the grille, was of average voltage sensitivity, at an estimated 87.3dB(B)/2.83V/m, though it should be noted that this is significantly below the specified 91dB. The Beethoven is described as a "4 ohm" design, and its impedance remained between 4 and 6 ohms between 20Hz and 1.4kHz. However, as can be seen from the plot of its impedance magnitude and electrical phase against frequency (fig.1), the speaker's load drops to 2.83 ohms at 90Hz, which will stress tube amplifiers, given how much musical energy can be present at that frequency. Higher in frequency, the impedance in the treble is generally higher than it is in the midrange; with tube amplifiers, this will tilt the response up a little at high frequencies.

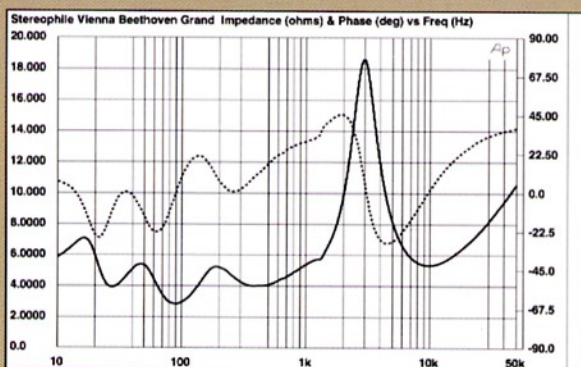


Fig.1 Vienna Acoustics Beethoven Concert Grand, electrical impedance (solid) and phase (dashed). (2 ohms/vertical div.)

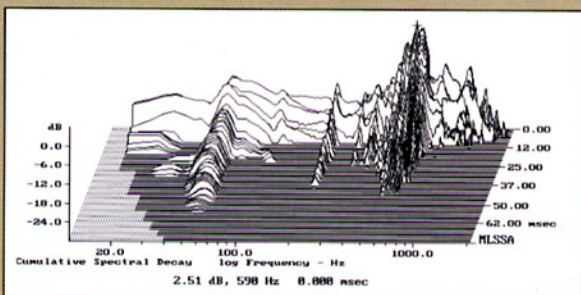


Fig.2 Vienna Acoustics Beethoven Concert Grand, cumulative spectral-decay plot calculated from the output of an accelerometer fastened to the cabinet's side panel level with the midrange unit (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz).

The impedance traces are free from the small glitches in the midrange that would suggest the existence of vibrational resonances in the cabinet walls. However, there is a suspicious-looking discontinuity around 1.2kHz. Investigating the matter with a simple accelerometer revealed the large cabinet to have some resonant modes present around 600Hz, particularly on the upper part of the side-wall (fig.2). However, because higher-frequency resonances tend to decay faster than lower-frequency ones, and because the higher in frequency a resonance is the more likely it will "fall between the cracks" in Western-pitch music, it is possible that this behavior looks worse than it sounds.

In the frequency domain, I examined the nearfield output of all three woofers and both of the rear-panel ports (fig.3). The behavior of the ports appeared to be identical within their nominal passbands, though the upper port had a little more spurious midrange energy than the lower one. The lower two woofers rolled off a little lower in frequency than the topmost one, but were otherwise tuned identically. The saddle at 27Hz in the impedance trace (fig.1) suggests that this is the tuning frequency of the ports. While the summed output of the ports does peak in the octave between 20Hz and 40Hz, the minimum-motion notch in the summed outputs of the woofers occurs a little higher in frequency, at 31Hz. The relative levels of the summed woofer and port out-

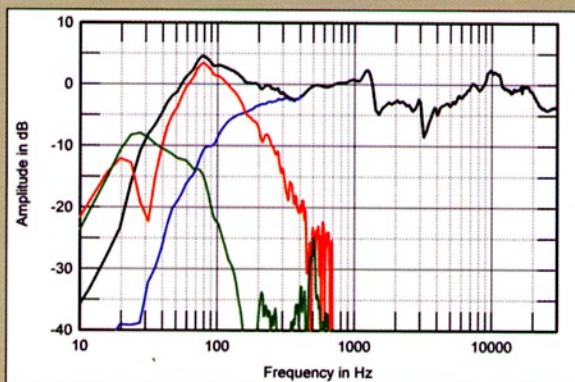


Fig.3 Vienna Acoustics Beethoven Concert Grand, anechoic response on tweeter axis at 50°, averaged across 30° horizontal window and corrected for microphone response, with the nearfield responses of the midrange unit (blue), woofers (red), ports (green), and their complex sum (black).

fuser to control tweeter dispersion. VA specifies 91dB sensitivity, a frequency range of 28Hz–22kHz, and a nominal impedance of 4 ohms. Sounds like an audiophile speaker to me.

First impressions

But Beautiful: The Best of Shirley Horn (CD, Verve B0004068-02) had arrived the day before the Beethoven Concert Grands were set up, and I very much wanted to hear the new bonus live tracks, recorded at New York City's Au Bar in January 2005, eight months before Horn's death (and when she was still playing piano in con-

cert). I popped the disc in the Musical Fidelity SACD player and went straight to the first bonus cut, track 12. (I liked the idea of first hearing something totally unfamiliar.) Halfway through Billy Eckstine's "Jelly, Jelly," with Roy Hargrove on trumpet, the first word that sprang to mind was *vivid*. The second was *rich*. The third was *inviting*, followed closely by *delicate*.

Horn's voice had a buttery, palpable presence, her piano sounded warm and clear, and drummer Steve Williams' snare had a nice *pop* and pleasing sizzle. Hargrove's trumpet was a little dry, Ed Howard's bass a bit prominent and boomy.

There was good soundstage depth, but that often goes along with excess midbass. However, not knowing the recording, I wasn't drawing any conclusions.

I skipped back to the familiar first track, "I Just Found Out About Love," originally released in 1991 on Horn's comeback album, *You Won't Forget Me* (CD, Verve 847 482-2). I concluded that the Beethoven Grand was a vivid, rich, inviting, and delicate-sounding speaker that produced good soundstage depth, but not because its midbass was excessive or boomy—that was an issue with the recording and/or mixing of "Jelly, Jelly." In contrast, the Beethoven's

puts, scaled in the ratio of the square root of the total radiating areas, suggest that the ports don't effectively extend the Beethoven Concert Grand's low-frequency response. In-room, however, the proximity of the Beethoven's lower port to the floor will boost its level somewhat. I note that Mikey did find that the speaker's bass sounded extended.

Higher in frequency, the summed woofer response peaks between 60Hz and 125Hz, which will in part be an artifact of the nearfield measurement technique. The crossover to the midrange unit appears to occur at around 160Hz, with second-order slopes. I do wonder if the fact that the relatively small-diameter midrange cone is being asked to handle upper-bass frequencies leads to the limited dynamic range MF noted in his auditioning. There is an apparent lack of energy in the lower mids, but more important, a sharp step is apparent in the midrange unit's upper-range output, this probably not coincidentally the frequency of the impedance discontinuity, above which the low and mid-treble are

shelved down by up to 5dB. MF did mention the recessed presence region and described the Beethoven's balance as a "somewhat laid-back, enriched harmonic presentation," which is just what I would have predicted from the speaker's on-axis response. In addition, my experience with speakers having a balance with a relative lack of presence-region energy is that you want to keep turning up the volume, but the speaker never sounds quite "loud" enough.

The on-axis peak between 8kHz and 12kHz could be heard on pink noise, accentuated by the lack of energy in the two octaves below. But when listening to music in a small room, it's possible that that peak will subjectively compensate to some extent for the 1" soft-dome tweeter's increased directivity in its top octave (fig. 4). Note also in this graph the slight flare at the base of the tweeter's passband, which coincides with a slight suckout in the on-axis response. Other than that, the horizontal radiation pattern is generally uniform.

In the vertical plane (fig. 5), a sharp suckout for axes above the tweeter develops at 3.1kHz, which I assume is the upper crossover frequency. However, this graph also shows that the low treble's lack of energy fills in a little for listening axes below the midrange unit. Sitting low might produce a better tonal balance than sitting on the 40°-high tweeter axis. Fig. 6 shows the spatially averaged response in Mikey Fremer's listening room: it doesn't hold any surprises, though it is worth commenting on the flatness of the treble balance. I could hear the slight excess of mid-treble energy on pink noise, but not to any great extent on music. The

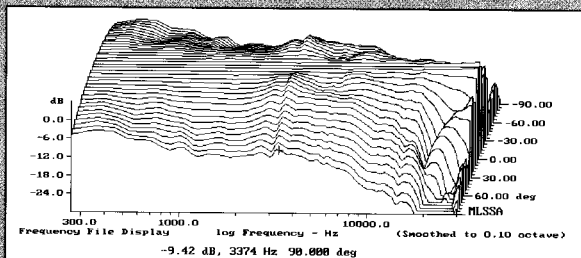


Fig. 4 Vienna Acoustics Beethoven Concert Grand, lateral response family at 50°, normalized to response on tweeter axis, from back to front: differences in response 90–5° off axis, reference response, differences in response 5–90° off axis.

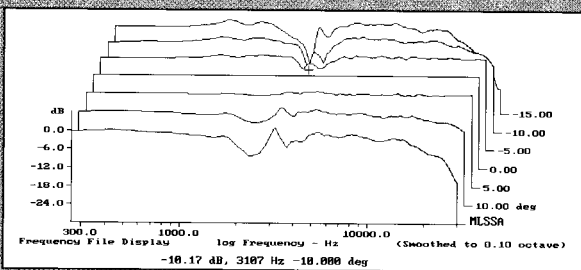


Fig. 5 Vienna Acoustics Beethoven Concert Grand, vertical response family at 50°, normalized to response on tweeter axis, from back to front: differences in response 15–5° above axis, reference response, differences in response 5–15° below axis.

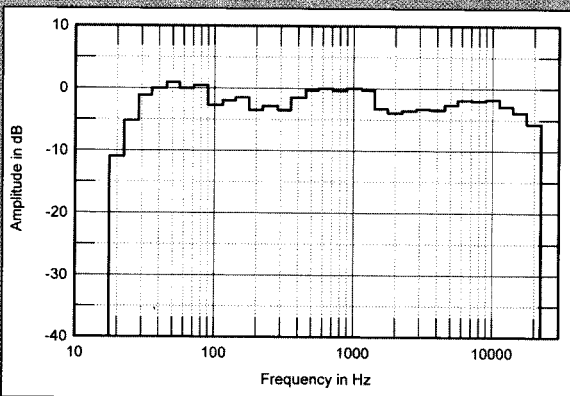


Fig. 6 Vienna Acoustics Beethoven Concert Grand, spatially averaged X-octave response in MF's listening room.

bass was articulate, detailed, and extended on the earlier track.

I then played the entire CD, the speakers producing in me a relaxation I usually associate with cognac. When the disc ended, I thought, *This speaker is designed more to draw you into the music than to bowl you over with it.* At the end of that first session, I concluded that while the Beethoven was drawing me in by slightly recessing and softening the presence region, designer Gansterer hadn't overplayed that card—the sound never led to boredom, nor did I hear any overt colorations. It was more a feeling and a sensation.

Wondering how the Beethoven might handle a sparkly harpsichord, I pulled out a Vox Box of music by François Couperin, performed by Alan Curtis (3 LPs, Vox SVBX 5448), that I've enjoyed for (gulp!) 36 years. The harpsichord—whose strings, unlike a piano's, are not struck but plucked—can sound raucous, but should sound brilliant (as in *bright*), with a buzzy

undertone. The Beethoven took a bit of edge off the transient attack, but not to where it sounded muted or soft, and there was plenty of air behind the instrument.

Recordings of solo piano demonstrated that the Beethoven was capable of handling that most difficult instrument without muting or softening it, though the accent was more on the piano's felt and wood than on its strings. One disc in a treasure trove of classical LPs I was recently given is a 1981 Chandos Super-Analog recording of pianist Lydia Artymiw playing Schumann's *Dauids-bündlertänze* and the *Humoreske* in B-flat Major (Chandos ABR 1029), recorded direct to Studer A80 at 30ips without noise reduction or compression. It's a wonderfully spacious, well-focused recording of a solo piano, though the Rosslyn Hill Chapel, in Hampstead, England, sounds somewhat hard and reflective. The Beethovens produced an impressively large acoustic—not in the same league as the Wilson Audio Specialties MAXX2s, but big enough to suggest a large

space—and reproduced the piano's transients and the hall's reflective character with sufficient speed and detail to make this a compelling listening experience.

Next I played the great Johnny Hartman's *Once in Every Life* (LP, Beehive BH7012), recorded in 1980 and impeccably engineered by Ben Rizzi, who today runs the Astoria Sound recording complex in Long Island City. Past his singing prime and sometimes forgetting the words, the deep-voiced Hartman still manages to turn in a superb performance, backed by Count Basie tenor-sax man Frank Wess, pianist Billy Taylor, and an ensemble of lesser-known but equally talented sidemen. Because Hartman's deep baritone can produce bloat and congestion, it's a tough test of a speaker's (and a room's) mid-bass-midrange clarity. The Beethoven Concert Grand delivered Hartman's rich voice with admirable clarity and appropriate warmth. I'm used to a bit more percussive edge to Taylor's piano in "Easy Living," but the Beethoven expressed Joe Wilder's flugel-

measurements, continued

bass is extended and the transition from the upper bass through to the midrange is well-balanced. The elephant in the room, of course, is that broad plateau in the upper midrange, followed by the 3dB step down to the treble. I could hear this as a slight nasal coloration on pink noise.

In the time domain, the Beethoven's step response on the tweeter axis (fig.7) indicates that the tweeter and midrange units are connected in positive acoustic polarity, but that the woofers are connected in inverted polarity, this confirmed by looking at the drive-units' individual step responses. What appears to be low-frequency ringing in the tail of the step between the 5ms and 7ms marks is actually due to the different arrival times of the three woofers at this microphone position. This will be less of an issue at greater distances, but I do wonder if it results in the slight lack of lower-midrange energy in the Beethoven's on-axis response.

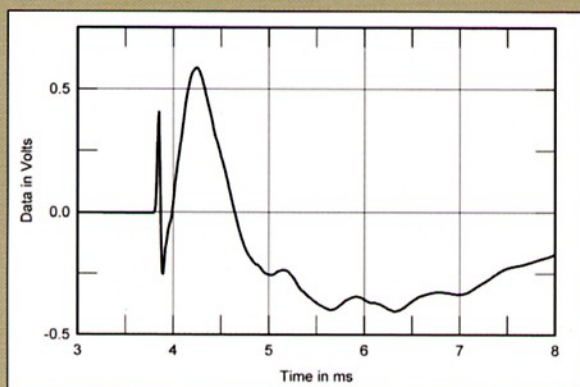


Fig.7 Vienna Acoustics Beethoven Concert Grand, step response on tweeter axis at 50° (5ms time window, 30kHz bandwidth).

The Beethoven's cumulative spectral-decay plot (fig.8) is superbly clean in the tweeter region, but is disturbed by two resonances at the top of the midrange unit's passband, both associated with small peaks in the on-axis response. I would have expected that this, together with the step down above the lower-frequency resonance, would add some nasal coloration and low-treble hardness to the speaker's balance. In fact, I suspect that it might be these resonances that contribute more to the speaker's limited dynamic range than the midrange unit's extended upper-bass response.

I was disappointed in the Beethoven Concert Grand's measured performance. I had expected more, both from Michael's auditioning impressions and from my experience of earlier Vienna Acoustics models. The Beethoven does offer superbly extended in-room low frequencies, however, and its laid-back tonal balance will be appreciated by many listeners who find most recordings too much in their faces. Perhaps this is why Michael's friend described the Beethoven as a "music lover's speaker" rather than one aimed at audiophiles.

—John Atkinson

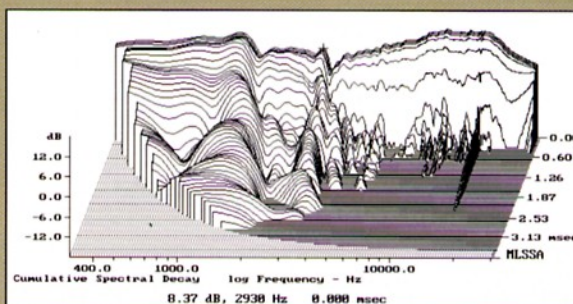


Fig.8 Vienna Acoustics Beethoven Concert Grand, cumulative spectral-decay plot at 50° (0.15ms risetime).

horn with exceptionally rich, wet, Technicolor-like textures. The refined yet detailed-sounding Beethoven completely aced this test of midbass clarity and freedom from midbass coloration.

Okay, so the Beethoven Concert Grand could handle solo and small-ensemble jazz and classical recordings exceptionally well. How about rock and large-scale symphonic music? I returned from a visit to Classic Records, where I'd witnessed the remastering of the Who's *Tommy*, with test lacquers of "Underture" and "Pinball Wizard." These weren't the final versions—when I played them through the big Wilson MAXX2s, they sounded slightly brittle on top and had a midrange suckout—but they were dynamically astounding, with startling clarity and resolution of inner detail.

I didn't expect the Beethoven to be able to express the Wilson's dynamic range, and it wasn't, but neither was it noticeably limited macrodynamically—at least until I cranked it up to high SPLs. That's when I discovered the speaker's most serious limitation: It didn't like to be pushed hard or played extremely loud. When it was, its pleasingly smooth tonal demeanor turned a bit hard and occasionally downright nasty, and dynamic compression set in. The good news is that I'm talking about playback levels that will approach the excessive in rooms of small to medium size—SPLs you'll hear at a live rock concert but are unlikely to experience in a concert hall or jazz club. In other words, the Beethoven Concert Grand shouldn't be cranked way up in a big room.

When I turned the volume down to less than ear-splitting levels for the *Tommy* lacquers, I found the Beethoven more than capable of rocking, with very good bass extension and weight on the nimble-fingered John Entwistle's bass parts and a nice *thwack* to Keith Moon's tom-toms and kick drum.

Long-term listening pleasure

For well over a month, the Beethoven Concert Grand provided me with exceptionally well-balanced, nearly full-range listening pleasure. On top, the speaker was silky smooth, airy, open, and neither overly aggressive (unless pushed) nor frustratingly polite and soft. Bass extension—down to the 30Hz area—was on the full, rich, supple side, but never sloppy or thick. The midrange was equally expressive and vivid, but not to where it was cloying or sounded like a col-

ASSOCIATED EQUIPMENT

ANALOG SOURCES Continuum Audio Labs Calibur, Simon Yorke S7 turntables; Continuum Robb, Graham Phantom turnarms; Lyra Titan (stereo & mono) Dynalator DRT XV-15 Clearaudio Concerto cartridges.

DIGITAL SOURCES Musical Fidelity KW SACD/CD player, Alesis Masterlink BPT-modified hard-disk recorder.

PREAMPLIFICATION Manley Stealhead, Einstein the Turntable's Choice phono preamplifiers.

POWER AMPLIFIER Musical Fidelity KW.

LOUDSPEAKERS Wilson Audio Specialties MA302.

CABLES Phono: CrystalConnect Piccolo; Interconnect: Acrolink 6100; Shunyata Antares; Transparent Audio Reference; Speaker: Shunyata Orion; Transparent Reference; AC: IPS; Shunyata Research.

ACCESSORIES Continuum Castellon magnetic isolation stand, Finite Elemente Pagode equipment stands; Audiodharma Cable Cooker; Shunyata Research Hydra 2, Hydra B power conditioners; Acrolink isolation transformer; ASC Tube Traps; RPG BAD & Abfusor panels; Hallograph Sound Field Optimizers; VPI HW-17F; Loricraft PRCA Deluxe record-cleaning machines. —Michael Fremer

oration. The speaker's rhythmic agility was well matched to its transient performance: not the fastest and cleanest, but pleasing and natural to the point where I felt the best-sounding recordings I own were worth a spin, while the shriller, less listenable ones became more pleasing. That strikes me as an excellent real-world balance. Wine analogy: less Cabernet than Merlot.

While the Beethoven could rock and deliver large-scale symphonic thrills at reasonable listening levels, it excelled at putting me in the room with small acoustic ensembles—especially those recorded live. Then, its airy, smooth, somewhat laid-back, enriched harmonic presentation offered a sufficiently well-developed illusion of reality to keep me coming back night after night, never feeling as if I were missing anything, and keeping me guessing the speaker's price.

Conclusions

I didn't learn the price of Vienna Acoustics' Beethoven Concert Grand until just before sitting down to write this review. It came as a bit of a shock.

This speaker is meticulously built, from the cabinet, to the 10 coats of lacquer applied to the natural veneers, to the custom drivers and crossover and speaker terminals, and it offers a pleasingly detailed, harmonically rich sound complete with the unlimited spatial vistas usually offered by narrow-baffled speakers.

The only clues to the Beethoven's low price were how it reacted to being pushed hard to perform at ultrahigh SPLs, and its restricted dynamic presentation when compared to more expensive systems. So while I hoped that the price tag would be well under \$10,000/pair, my guess of \$6000/pair was still too high by 25%. I like when that happens. No, \$4500 isn't pocket change, but for what you get, the Beethoven Concert Grand is an outstanding value. How many audiophile products can you say that about, other than a \$90,000 turntable?

The Vienna Acoustics Beethoven Concert Grand is an excellent value, both for its high build quality and for its carefully and pleasingly balanced set of sonic attributes, and its limitations in dynamics and output won't be issues for most listeners. Designer Peter Gansterer has nipped and tucked with surgical precision to produce an outstandingly musical loudspeaker for a very reasonable price.

I spent more than a month listening with complete satisfaction to every kind of music, only occasionally wishing for that Maxell Moment that only bigger, more powerful—and more powerfully priced—speakers can provide. I'll take Gansterer's carefully crafted compromises over a speaker that can play louder and perhaps faster, but fails to deliver the near-full-range tonal and harmonic satisfaction consistently served up by the Beethoven Concert Grand.

While no speaker will please everyone, and some listeners will be drawn to a brighter, more forward sound, many of you will still be happy to come home to the Vienna Acoustics Beethoven Concert Grands long after you've written your check for \$4500. And that will be true whether you're an audiophile, a music lover, or both. ■