### EQUIPMENT REVIEW

# Vienna Acoustics Beethoven Baby Grand Reference Loudspeakers

by Roy Gregory

here is a perplexing and occasionally bizarre dichotomy that exists at the heart of audio fashion and, by extension (or perhaps as a result of) reviewing. The products that get the most attention seem to fall into two opposing camps: those that are (or claim to be) so cutting-edge that they risk injuring themselves or anybody coming into contact with them, and those that rely on some obsolescent (and preferably unobtainable) technology or component. Barely a month goes by without some new, all-conquering plasma coating or NOS tube being touted as the latest big thing. But while marketing men and manufacturers alike, love to love a silver bullet solution, more often than not it's those products that stand astride the middle ground of proven technology and established engineering that actually deliver the most balanced performance and the greatest musical satisfaction - and in no part of the market is this more obvious than loudspeakers.

At first glance, the latest models from Vienna Acoustics, the very essence of a company with a "ploughing their own furrow, established technology, gradual evolutionary" approach to product development, might appear to have made a grab for the tail-board of the latest passing band-wagon – what with their talk of "composite-cone" drivers. But for once, the oft-used (and almost as often misused) description is as accurate in the engineering sense as the benefits are real





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▶ in the musical sense. With not a potential poisonous metal, diamond coating, ceramic cone or carbon-fibre in sight, Vienna Acoustics have, nonetheless, managed to advance the performance of their in-house drivers significantly. Also, they have hiked the performance bar in what is arguably the most competitive area of the audio market as a whole. Meet the Beethoven References, speakers that 250 years after their namesake's birth could (and probably should) do to the world of mid-priced, floorstanding loudspeakers what he did to classical music.

Amidst all the marketing, mechanical and materials mayhem, Vienna Acoustics has long been an island of reliable if singular sanity. Their designs have always been long on proven approaches and carefully chosen materials, cost-effective construction and niceties that actually matter - factors that combine to create finished products that offer performance that's as exceptional and deliverable as the fit and finish is understated and remarkable for the price. But even by their exacting standards, Vienna's latest offerings are more than just a little bit special. The fact that they embody a (slightly tongue in cheek) sideswipe at their more technologically ostentatious or constipated brethren broadens the smile they bring to this listener's face. The term "composite" might conjure images of carbon-fibre and stealth fighters, but in engineering terms it's a far more broad-based concept than that. A composite construction is one that employs more than one material, be that steel-reinforced concrete or glass fibre - the end-product extending the mechanical properties of the individual elements involved - the very essence of the whole exceeding the sum of its parts. When Vienna Acoustics dubbed their latest driver construction as composite, they were being almost prosaically accurate, the driver's diaphragm combining two distinct materials to achieve a single goal.

Vienna is one of the few companies still working with modified polypropylene compounds for their bass and mid units. It might be deeply unfashionable these days, but nobody said that fashion makes sense, and in this case, it ignores both the physical and mechanical advantages of the material. By carefully selecting additives, a designer can stiffen or damp the polymer, a physical quality reinforced by the ability to mould it into complex shapes. Combine that with advanced FEA techniques, and you've got a highly tuneable material with

which to work. Several years ago, Vienna introduced their new X3P formulation and used it to create coincident, treble/midrange drivers for their flagship designs. These used silk dome tweeters surrounded by flat diaphragms, stiffened with carefully profiled, radial buttresses, visible through the clear plastic faces, an arrangement that eliminated many of the acoustic and phase related issues that bedevil more traditional coincident designs.

The drivers in the Beethovens take things a further, generational step forwards, introducing flat "spider cones" moulded from the latest X4P polymer compound into both mid and bass units for use in the company's more affordable speakers, where they are paired with their established 28mm coated silk dome tweeter. Just how clever these drivers are can be seen in the complex profiling of those buttresses, whose depth, shape and thickness is frequency specific to the driver's purpose, engineered to create a perfectly even, phase-coherent impulse response across the entire surface. Having three dimensions to work in (rather than just the profile and thickness of a cone), allows for remarkable manipulation of the mechanical characteristics of the diaphragm and, just as importantly, the precision and repeatability with which its output and roll-off can be controlled.

But where things get really interesting is in the centre of each diaphragm. The drivers feature large, 5cm voice coils, meaning that the central area becomes a major contributor to the driver's output, especially at the upper end of its frequency range. Rather than a conventional dust cap, Vienna has opted for a carefully calculated inverted dome, formed from fabric, double-coated on its reverse side to create a symbiotic extension of the radiating surface, two elements that mechanically and acoustically act as one. This helps control the upper frequencies generated by the driver and improves dispersion, making the transition between different frequency ranges far smoother and more contiguous, easing the job of the crossover and minimising the single biggest flaw in all multi-way, dynamic loudspeakers – irrespective of price.

But there are plenty of designs out there with clever drive-units. What makes the Beethovens so unique is that these clever drive units are mated to cabinets and crossovers that embody Vienna's already superb attention to detail. The enclosures might be essentially conventional, but the materials

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> are exactingly selected, the venting, bracing and internal damping is exhaustively optimised, and the construction on the inside is every bit as consistent as the fit and finish on the outside is flawless. To which you can add the familiar, substantial, alloy outriggers together with the vast yet elegant and easily adjustable spikes from the Liszt, a set of Vienna's excellent binding posts and magnetically fixed grilles that offer protection that's so easy to remove and replace that, well... why wouldn't you? What you end up with is a potent combination of careful innovation, proven engineering, attention to detail and sheer practicality that doesn't just promise performance, it actually delivers it. This cocktail of musical capability and sheer practicality is what Vienna Acoustics seems to nail so effortlessly - and is what has always allowed their speakers to deliver so impressively. But in terms of pound for pound performance, the Beethovens are their most impressive achievement yet.





There are two Beethoven models, both three-way designs, the larger Concert Grand with three 7" bass units and the Baby Grand reviewed here, with two 6" bass drivers. In audio, size definitely matters, but building on Vienna's well-established reputation for developing useable, highquality bandwidth from surprisingly compact enclosures, the smaller Beethoven won't leave you feeling short-changed. In fact, in many ways, it matches the quality (if not the easy breathing scale) of its bigger brother, in a smaller and easier to accommodate package. On paper, you are giving up 1dB of sensitivity and 5Hz of extension, but short of a side-byside comparison, you're not going to miss them, testament to the Baby's beautifully balanced voicing. However, what those numbers do hide is that other Vienna attribute, a preference for power, Both Beethovens are rated as 4 Ohm loads, If Vienna suggests a 40 Watt minimum amplifier requirement for the Baby Grand, I'd suggest nearer to 100 Watts if you >

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want to really appreciate what they can deliver. I used both the Levinson 585 and Gryphon Diablo 120 to considerable effect, as well as the even more powerful Moon 860 v2 mono-blocs. The results with the Canadian powerhouses were undoubtedly impressive, but so too were those achieved with the high-end integrateds, amplifiers which together with the Baby Grands offer source-plus system solutions of remarkable performance for the combined price.

Experience with other Vienna speakers has instilled healthy respect both for their capabilities and the care needed to realise them fully. Their characteristic family sound has always been long and smooth, integrated sound and a rich tonal palette underpinned and filled out by extended bottomend extension. It's a balance of virtues that cost you efficiency but reward you with natural warmth, weight, scale and presence. But even by Vienna Acoustic's standards, the Baby Grand delivers superb, seamless integration, a quality that contributes directly to a more natural and impressive sense of weight and musical coherence. Considering its modest cabinet dimensions and the limited swept area of its paired bass-units, this speaker has a greater sense of power, scale and musical purpose than it has any right to deliver. Yet deliver it does, irrespective of the nature or genre of the recording, the size of or energy emanating from the band. It has an uncanny ability to sound like real people in a real space, but that doesn't mean it shies away from synthesised sound or studio effects. Just bear in mind that that solid, purposeful, engaging and convincing sound depends on working with the speakers' positioning, attitude and height off the floor until the bass weight and extension supports rather than embarrasses the rest of the range. You'll get close quite quickly, but there's a (perhaps) natural tendency to over-voice the bottom end, and that's where the excellent spikes really come into their own, allowing you to lift the cabinets a quarter turn at a time until you dial in the bottom end.

Once you do, it binds all that weight and body generated by the slim cabinets to the rest of the range, which produces the sense of presence and dimensionality so characteristic of Vienna's speakers – except that in the case of the Baby Grand you get a whole new understanding of power and purpose too. It's perhaps appropriate that you'll hear it most obviously on piano recordings, the instrument taking on a

sense of solidity and physical volume. This sonorous musical authority is both planted and, when called upon, explosive. It encompasses both Benedetti Michelangeli's deft fluidity and impressive power and Uchida's delicacy, precision and sublime phrasing. But you'll hear the benefits on every recording, from the winsome vocals and retro-tech production of Vampire Weekend's Father Of The Bride to the elegiac swell of Barbirolli's Enigma Variations, punctuated by its percussive cannonades and wind accents. The soundstage on the venerable EMI recording is deep and the perspective natural. You'll hear speakers that are more obviously transparent, with more explicit separation, but few if any of those will match the Baby Grand's spatial, musical and rhythmic coherence - or its rich tonal colours. The Viennas' overall balance and natural tonality are remarkably convincing, their dynamic response sufficient (and sufficiently discriminating) to bring immediacy and impact to musical interjections, intimacy and body to vocals. However, they do not allow those musical moments to break free from and shatter the coherence of the acoustic space, the illusion of the live event. Not so long ago, this level of spatial and dynamic control and coherence was the exclusive preserve of much more expensive designs. Now, the Baby Grand achieves it with the sort of nonchalance that allows it to pass virtually unnoticed, just another part of the natural musical fabric - unless you go looking for it.

That sense of scale and power is just as effective on the swelling, throbbing synths that underpin music as diverse as Birdy or Nils Petter Molvaer's brooding classic, Khmer. The sheer substance behind a track like 'Wings' or the subtle patterns and prods that drive the jaunty rhythms of 'Maybe' give The Fire Within the sort of emotional connection and impact that you usually only experience with far larger and much more expensive systems. But they also hint at the impressive dimensionality, natural size and intimacy with which the Baby Grand can invest an exposed vocal. Birdy might possess an impressive voice for a teenager, but it can still lack power - especially if the system lets it. The Viennas hold her vocal utterly stable and render it solid, that seamlessly integrated bass filling out and supporting the broad mid-band, just like the theory says it should. It's this sense of integration that allows the Baby Grand to do not just impressive scale and power, but communication and immediacy too. It's a musically

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potent combination of virtues and one that allows the speaker to spread its largesse across almost any genre, but also to embrace nearly any recording. Audiophile discs are going to sound great, but as Birdy so ably demonstrates, musical power will always trump a modest, studio recording, while various bootlegs served up the requisite drama and energy, despite their limited quality and bandwidth.

If you want a single phrase to encapsulate the Baby Grand's character and achievement, then you could do worse than "punching above its weight." It captures both the way the speaker has jolted the price/performance equation and the manner in which it's done it. With its almost physical sense of musical coherence, its ability to present the engaging, communicative quality in a performance, but above all, its uncanny grasp of musical purpose, it has, in a single step, usurped the role of high-end stand-mounts and junior floorstanders alike. Where once we aspired to those semiaffordable, trickle-down designs from the high-priced brands that consider themselves loudspeaker royalty, their appeal has just been eclipsed by not so much a trickle-up as a tidal surge in ambitious models from manufacturers who excel in delivering affordable performance. Riding the crest of that wave, you'll find the Baby Grand, the larger, more capable and even more demanding Concert Grand and the various Auditorium models from Living Voice, especially the most affordable of them all, the R25. It should come as no surprise and is certainly no coincidence that all three are evolutions of existing models albeit evolutions that provide a step-change in performance. Between them these latest incarnations of established designs threaten to alter the loudspeaker landscape, ripping up the rule-book, defying fashion and ultimately shifting the expectations of customers shopping in what is already the most fiercely competitive area of the market. The R25 is the most affordable of the three and with its higher sensitivity and benign load, the easiest to drive. The Baby Grands cost more, deliver more and demand more - distinctions that will probably dictate your choice. Just don't be fooled by the numbers. On paper the Vienna speaker boasts an extra 2Hz of low-frequency extension; in practice, the bottom-end is significantly deeper, weightier and more powerful. That means that it mandates greater control from the driving amplifier and more real-estate in which to breathe. But feed it properly, and

it will reward you with a performance that is as satisfying and musically compelling as it is astonishingly impressive.

Some speakers do big and there are speakers that do enthusiastic. Some speakers do presence and others that do startling immediacy. Then some do seamless and those that do colour. But the best speakers do enough of everything: go deep enough and loud enough, with enough clarity and musical coherence to actually convince. They let the music step away from the speakers and into the room. They bring the performance to you and you to the performance. They have always been few and far between and invariably somewhere the wrong side of expensive - until now. All of a sudden, a few genuinely exceptional speakers have hit the market, shattering the glass ceiling that's restricted affordable speaker performance. Vienna Acoustics' Baby Grand is the tip of that wedge, setting the pace and setting the standard. This is one speaker where you need to trust your ears. Hear them doing their thing, and like me, you really won't believe your eyes - whether you are looking at that slim cabinet or the price ticket hanging from it. Prepare to be surprised - and impressed: very impressed indeed! +

#### TECHNICAL SPECIFICATIONS

Type: Three-way loudspeaker with rear reflex loading

Driver Complement: 1× Vienna Acoustics 28mm

soft-dome tweeter; 1× Vienna Acoustics 150mm X4P

composite midrange driver; 2× Vienna Acoustics

150mm X4P composite bass drivers

Bandwidth: 33Hz-23kHz ±3dB

Sensitivity: 89dB Impedance: 4 Ohms

Dimensions (W×H×D): 182 × 1095 × 330mm (incl. spikes);

260 × 330 (footprint)

Weight: 26kg ea.
Price: £6849

Manufacturer: Vienna Acoustics

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