

## Wilson Benesch Vector loudspeakers

By Alan Sircom

**W**ilson Benesch's Geometry Series is a real grower, in both senses. If you play a pair, they quickly grow on you, and where first there was just a Vertex, now there's a Vector, a Fulcrum centre channel and even a Cardinal. There's a clever play on words here, because W-B's previous flagship was called the Bishop. Mixing mathematics and religion... how very Pythagorean.

The Vector is the floorstanding bigger brother of the Vertex we liked so much in issue 88. It retains the same boat-tailed shape and the monocoque ACT/poly alloy bodyshell structure that has more in common with Formula One design than the gluin' and screwin' woodwork that often passes for speaker engineering. The advantage to this is it means the rear-ported tower is so damn stiff, it needs no internal bracing, which means the internal volume is dramatically increased. It's not bigger on the inside – this is the application of science, not a treatment for a Dr. Who episode – but it does mean a larger sounding loudspeaker in a smaller than expected cabinet. It also gives the Vector a powerful physicality for what is

a relatively small floorstander. This is a pseud's way of saying "it looks the business", and it feels the business too. Sitting on four well-constructed feet on a skeletal, yet solid plinth, and offset by the glossy top plate, the whole Vector loudspeaker looks purposeful and elegant.

If you read the Vertex review in issue 88, two of the two-and-a-half way loudspeaker drivers are familiar; the 170mm Tactic II mid-bass unit and the 25mm Semisphere tweeter. They are successfully redeployed here, with a second, but not identical 170mm Tactic II unit used purely for bass purposes. Here's where it gets really clever: the Tactic II units crossover at an extraordinarily high 5kHz, meaning the tweeter really does just do the job of tweeting (in the birdy, rather than the social media, sense) and the minimalist 1st order crossover at the top and at the bass roll-off, means a simple crossover network. Saying goodbye to most of the crossover network also says goodbye to phase distortion and – because they are designed to work this way – integration issues. It's also like having one big active loudspeaker! Of course, this means there's a lot of onus on getting the mid and bass units absolutely right.

Just because the tweeter has less of a job to do, doesn't mean it is an afterthought. In fact, as I discussed with the Vertex, it took Wilson Benesch a decade of R&D to realise. It's a tweeter dome material with a very low mass, sitting in a very high mass assembly, with both side-and-rear venting into a silencing chamber, a first resonance point at nearly 6kHz and with no distortion in the audible band. The loudspeaker tops out at around 30kHz (just enough to keep the high-rezzers sweet) and hits a realistic 35Hz in room. ▶

*"This is a pseud's way of saying 'it looks the business', and it feels the business too."*



The specs make it seem like a reasonably easy load; 89dB sensitivity, six ohm nominal and four ohm minimum impedance, and no big, scary phase angles and not much of a crossover in the way all point to a loudspeaker that is a friend to amplifiers worldwide. But in reality that's not the whole story. Yes it's easy to drive, but easy doesn't mean it also forgives electronics that don't sound up to the mark. You might not need an amp the size of a Buick to drive the Vector, but you do need an amp that is either fundamentally neutral, or one that makes a sound you are really, really sure you like. Too much one way and the sound is very uneven, too much the other and it's bland. This is not a fault of the loudspeakers and in fact they should be praised for being so open and honest that they show up the limitations of what comes before them. But it does mean you can't build a random and haphazard system without it sounding, well, random and haphazard. The loudspeakers spent their first couple of days in the company of a Naim SUPERNAIT; a fine amp, and one that sounds good on the Vector, but you can do better. I moved over to the Devialet D-Premier and the speakers came to life, and they stayed there when I moved over to the Edge G3 integrated. You could clearly hear the benefits and limits of the SUPERNAIT, and you could even hear something close to the integration point between Class A and Class D amplifiers on the D-Premier too.

The Naim amp gave the sound a taut sense of rhythm and a deep, powerful bass, but it also gave the midrange some grain and shine. Swapping to the D-Premier sacrificed some of the timing precision, but gave the mid and top a clean and open presentation that on balance won the day. The Edge (the amp not the guitarist) then managed to do the Goldilocks thing and have a just right balance between the two. It's a mark of how little the Vector holds things back that these differences in amp were thrown into sharp repose.

In some respects, this is unimportant next to the final result. The way it highlights the performance of the upstream electronics is fascinating for a reviewer and good to know when building a system, but when the system-building is done, the demand switches to how good it is at playing music. And the Vector doesn't disappoint.

Wilson Benesch loudspeakers are detail extractors. They give you near enough the unvarnished truth when it comes to extracting information from record, disc or disk. And the Vector is no exception. The loudspeaker is extremely detailed, a profound insight into what was going on in the studio, concert hall and control room. It's odd, but the noise floor of a loudspeaker shouldn't be a major concern compared to electronics, but this one seems quieter than most (this might also be why the SUPERNAIT wouldn't be my first choice of amps, you can hear the baseline noise of the amp that would usually be below the threshold of audibility from the loudspeaker itself).

You want big imagery, find a disc that throws out a big image. You want effortless edge of the seat dynamics... buy the Ring cycle. You want a loudspeaker that plays along with the music... go look for something else. For me, the greatest strength of the Vector, like the Vertex before it, is it has no strengths. Or weaknesses. It simply gets on with the job of playing what it is given, without grace or favour.

While that kind of honesty makes the job pig-difficult for a reviewer (put disc on, disc sounds like disc, repeat until frustrated), it does make for one heck of a loudspeaker. That naturalness and honesty creeps up on you from the bottom up; you notice it first on basslines and the resolution of the left hand of the piano. Musical intervals in those last octaves seem more clearly defined, not simply an amorphous low clang, but very obviously a low note that was a whole tone apart from the last one. Not only could musos use the speaker for ear training, but it means bass notes are clearer and more defined. Then you begin to notice the same across the frequency range. No moments of revelation, no obvious musical examples, just pulling ahead of the pack cleaner.

Given the proximity of the reviews in print, in fact the performance of the Vector is very much in line with the Magicos way of thinking. It's not hard to imagine someone trying on a pair of Magicos, and choosing the Vector and a nice car instead. Both have got the same sense of rightness to the sound, both need some energy behind them to make them sing, and both give good bass. Of course, in this case that bass is constrained by the sheer physical nature of the Vector's size and lack of a pair of 250mm drivers, but while it loses a few notes from that last octave, and a lot of the resolution of the bigger speakers, they have a lot more in common than they have apart. Most notably, lack of distortion.

The Wilson Benesch Vector is an outstanding loudspeaker. You need to take some care in what it works with, but when suitably fettled, the Vector tells you the truth, the whole truth and nothing but the truth. If you want to know how your music sounds, it sounds like this. +



## TECHNICAL SPECIFICATIONS

2.5 way linear phase, free-space ported floorstander

**Drive units:** 1x 25mm Semisphere soft dome tweeter; 1x 170mm Tactic II mid/bass driver; 1x 170mm Tactic II bass driver

**Frequency Response:** 35Hz-30kHz ( $\pm 2$ dB, on axis)

**Sensitivity:** 89dB

**Impedance:** six ohms nominal, four minimum

**Input connections:** bi-wireable, block manufactured in house

**Internal volume:** 44 litres

**Dimensions (HxWxD):** 91x23x37cm

**Weight:** 31kg

**Price:** £8,059 per pair (standard finishes); £8,575 (wooden finishes)

**Manufactured by:** Wilson Benesch

**URL:** wilson-benesch.com

**Tel:** +44(0) 1142 852656