

Full-Sized Speakers

Martin Logan Makes Hi-Fi Magic

The Smarthouse Team - Tuesday, 9 January 2007

This electrostatic speaker from Martin Logan proves hi-fi exotica needn't cost the Earth.

Martin Logan Vantage | \$10,995 | ★★★★★ | www.kedcorp.com.au

For: Colourful tonality, an expressive mid and top.

Against: The impedance rating dips to around one ohm near 20kHz.

Verdict: Gloriously open and vivid, full of depth.

MartinLogan Summit represents a new direction for MartinLogan. After reaping excellent reviews on both sides of the Atlantic, the company has climbed down from the Summit, and here is the follow up, the release of a down-sized Vantage version.

This speaker retains most of the virtues of the original, in a somewhat smaller enclosure, at a much lower price. It sacrifices nothing but a few Hertz from the bass end and perhaps a few dB off the maximum SPL. What the Vantage is not, however, is in any meaningful sense inferior to the Summit. It does slightly less, but it does it almost as well, and moreover there is a way the differences can be bridged. I have heard the Vantage described as 80 per cent of a Summit for 50 per cent of the price. There's an element of bravura here, but this characterisation is not too far from the literal truth. Some might even prefer the newer model on a straight comparison, even taking no account of price or size.

Visually, if you didn't have the two side by side, you might not realise that they're different models. At 144.7cm, the Vantage stands 5cm shorter than the Summit, while the groundplan is 27.3x41.3cm for the Vantage, 32x52cm in the case of the Summit. They're both rated at an impressive 92dB/W/m sensitivity, but the frequency response extends down to only 34Hz in the case of the Vantage, and a more impressive 24Hz for the Summit, both -3dB, though the difference on audition appears less than the numbers imply. But perhaps the important difference is that the Vantage's crossover is set to 400Hz (against 270Hz for the Summit), which implies a key difference in the ELS panel design.

Even the Summit's bad habits are [carried](#) over. The four ohm nominal impedance is not an issue in itself, but the impedance rating dips to around one ohm near 20kHz, which is very reminiscent of the Summit. This single fact underscores the importance of choosing an amplifier that can cope, and to choose a loudspeaker cable that doesn't add too much loop impedance, as this will result in audible modifications in frequency response, in addition to other changes. All of which will be apparent through a loudspeaker as transparent as the Vantage.

Under the skin, the designs are clearly related. The electrostatic panel is very similar, and features all the now familiar technologies, including the laterally curved (by 30 degrees) panel which is housed in what MartinLogan describes as an 'Ultra-Rigid Air frame', which features very finely and closely perforated stators, front and rear, and a diaphragm which is said to have almost twice the radiating area of MartinLogan's earlier ELS panels. The new Airframe construction, the structural element of the ELS panel, which includes polymer billet horizontals (aluminium for the Summit), and internally tensioned extruded aluminium tube verticals, anchors the stators and the enclosed diaphragm around the edges.

The transparent ClearSpar spacers (you'll only see them from close quarters) maintain t

he spacing between the working elements, and helps control the compliance and tensioning of the diaphragm. The diaphragm fabrication, and the way it is fixed in place, has also been improved, but those improvements were ushered in with the Summit.

The bass section should also be familiar to MartinLogan watchers. The active element is a single 200mm aluminium cone bass driver driven by a 200-watt (at four ohms) internal amplifier – the Summit has two 250mm drivers, a significant difference – and can be fine tuned by a level tone control on the back panel. This pivots the response around 35Hz.

SOUND QUALITY

As MartinLogan points out, true dipole speakers send very little sound to the sides of the room, minimising early side-wall reflections with short arrival times that tend to interfere with and muddle perception of the direct sound. Their strong rear radiation, however, produces later-arriving, ambience-enriching reflections off the back wall. It is worth noting that the Vantage is only dipolar above 400Hz.

It turns out that the Vantage is quicker to run-in than previous MartinLogans, and this may be because the panel design is less stressed because it is not required to handle the frequency band between 270-400Hz.

Using a very low crossover frequency has been something of an article of faith for MartinLogan over the years, so what are the trade-offs? Less than you might think. On the whole, the crossover has been handled with considerable aplomb. Contradicting the lean and occasionally brittle presentation of some electrostatics, this one has a surprising warmth and grace. The Vantage bass is moderately deep and full in character, but it's a well designed bass (it has the benefit of being inherently tweakable, too). Best of all, the handover to the panel is almost inaudible. It's not quite as spacious as the Summit, or as full in the upper bass, but if anything the low end of the panel's coverage has real poise. On the whole, you won't hear the two drive units in their own right, which is a remarkable tribute to the designer's craft.

By the time you get up into the midband, the Vantage's electrostatic panel is in full swing, sounding gloriously open and vivid. The slightly smaller size of the Vantage panel may perhaps explain why it sounds, if anything, even more balanced and at ease than in the Summit, but the higher crossover frequency does nothing to determine why the speaker sounds so homogenous. It's certainly in tune with previous MartinLogan speakers, quintessentially, of course, the Summit.

The Vantage delivers vivid, colourful tonality, an expressive mid and top, and a bass that is essentially simply an extension of the midband in a downwards direction. Imagery is not as 'in your lap' as with some previous electrostatics, but there is plenty of presence, and good differentiation by depth, while a [carefully](#) positioned pair will provide a large image scale. It's all down to [creative](#) and sympathetic use of room reflections.

We briefly experimented with the use of a small external subwoofer, augmenting the bass, but running it out of circuit just where the Vantage is beginning to hit its stride – around 30-35Hz. This worked extremely well, adding stature, depth and power, without distorting the image as a single subwoofer usually does if it crosses over at a higher frequency. The REL R-305 is barely larger than the bass section of the Vantage itself, so the combination remains quite user friendly. But subwoofer or no subwoofer, the Vantage is something of a gift at the price – and one that keeps on giving.

