Orpheus

Aurora 2 Generation III Loudspeakers

Curved cabinets are currently all the rage, and deservedly so. The boring, flat-sided boxes of yesteryear are no more. Best of all, loudspeakers with curved sides don't just look better: they sound better as well.

Curving the sides of a loudspeaker cabinet gives it far greater structural integrity, making the cabinet more rigid, which reduces cabinet resonances. The curvature also means the sound can't bounce back and forth as it does between facing flat panels, so there's less cabinet-induced colouration, and no more 'boxy' sound.

Equipment

Like many Australian manufacturers, Orpheus is having its cabinets made in China (which is also the only way you'd ever get a cabinet with a curved sides at this price!), but the complex crossover networks are still hand-made right here in Australia, and the drivers are sourced from Danish company Tymphany.

The new Aurora 2.3 is a 2½-way floorstanding design, with a pair of woven Kevlar-coned bass/midrange drivers crossing to a 25mm silk dome tweeter. Designer Brad Serhan has configured the two Kevlar drivers so the two work in tandem at very low frequencies, and you have twice the cone area delivering the bass. However, as the frequency being reproduced gets higher, the lower driver does less and less work until, at midrange frequencies, only the upper Kevlar-coned driver is operating. This ensures true point-source localisation through the midrange and means the frequency response cannot be adversely affected by phase cancellation effects between the two drivers.

The Kevlar cones have Theile/Small diameters of 110mm, but their overall diameter is 156mm, hence Orpheus' specification. The roll surround is made from rubber, rather than foam (foam deteriorates in Australia's humid climate) and the roll surround in turn connects to an ABS frame that supports a large, shielded magnet. The voice-coil is additionally vented via an under-spider arrangement. The internal wires that lead down to the crossover network are soldered to the driver terminals to ensure there is no contact resistance to increase over the years, as can happen when manufacturers use spade-lug connectors — as most do.

Although many manufacturers use the '2½-way' driver arrangement (some call it a 'quasi-three-way' which we think is stretching a point),

it works very well in this design because the smaller driver makes for a particularly good midrange speaker. You'll find designs using the same technique with larger drivers are often far too beamy and don't transition well to the tweeter.

However small-diameter drivers are not ideal for delivering low bass, so Serhan gets around this by differentially loading the drivers. In most 21/2-way systems the backs of the two cone drivers share the same space in the cabinet. This means the rear radiation from one cone affects the other, which is not ideal, but also means the bass reflex port must be tuned to a single frequency. With differential bass loading, each driver has its own isolated 'chamber' inside the cabinet, so the rear radiation from one driver can't affect the cone of the other. More importantly, it allows the designer to use two bass reflex ports and tune them differently, which enables the bass to extend much lower down than is possible with only a single port.

Although Orpheus used differential bass loading with previous Aurora designs, developing a new cabinet means the design works better than ever before, because there's no rear baffle to interfere with the sound coming from the ports. The ports exit through a curved section, finished in piano black, which makes a nice contrast to the veneer.

Our review samples were finished in a lovely Australian Jarrah veneer which is made all the more impressive by the curved sides of the cabinet and the narrow baffle area. The speakers are also available in Black Oak, Cherry and Beech. The cabinets stand 930mm high, 333mm deep and are 202mm wide at their widest point.

Performance

Orpheus is renowned for building speakers with perfectly balanced frequency responses, which is one reason so many have ended up being used as monitors in radio stations and recording studios. We're happy to report the Aurora 2.3 continues the company's unblemished reputation for tonal accuracy, with an overall response that's so smooth and harmonious it's impossible to tell where the midrange takes over from the bass, and where the midrange hands over to the treble.

The minimalist crossover design means Orpheus hasn't constrained the natural dynamics of the bass/midrange drivers so you still get that





raw 'you are listening to live music' impression when listening — and in this case the sound seems enhanced at the bottom end thanks to the lack of cabinet resonances. The tweeter has a pure, transparent tone quality, even at high volume levels, and unlike neodymium tweeters, there is no gradual reduction in high-frequency output after several hours of listening.

Bass reproduction is particularly good. It was, too, on the earlier Aurora, but the upper bass from this new 2.3 model is faster, tighter and more tuneful.

Conclusion

In the past, Orpheus has depended almost entirely on sound quality to sell its speakers. Now, with this new cabinet design improving both the look and the sound quality, we predict sales will rocket.

