

Amphion Krypton3X

floorstanding loudspeakers

Steve Dickinson



I've spent a lot of time with its loudspeakers, so I think I know what Amphion's house sound is like. However, quite a lot of what I thought I knew, doesn't apply here. To be fair, the largest speaker in the Amphion pantheon has always been somewhat different, and the latest iteration, the Krypton3X takes some of those differences closer to their logical conclusion, so it isn't entirely surprising. This, then, is a statement speaker in many respects. It represents what Amphion wants us to know they are capable of, when cost constraints, or likely partnering equipment, aren't so limiting.

And on that note, it's also a significant departure from Amphion's usual, budget-friendly pricing: a pair of Krypton3X will set you back almost £18,000, three-and-a-half times the price of the next model down, the Argon7LS floorstanders. That's a big gap, but you do get a lot of loudspeaker for your money, more than 20cm taller, over 10cm deeper, and almost three times the weight of the Argon7LS. Part of the need for the size is that, unlike the Argon, the Krypton3X is a 3-way design.

Familiarity

There's the familiar tweeter, set back in its waveguide, albeit this one is a very high-performance, and robust, 25mm titanium dome specially built for the Krypton3X, with a large magnet for low distortion and wide frequency extension. This is flanked by a pair of 8" paper-papyrus midrange units in Amphion's familiar d'Appolito arrangement, but in the Krypton3X these are augmented by a sideways-firing 10" bass unit. The midrange cones are ribbed, which makes them perform more like a 4" unit in the critical 600Hz-2kHz range, with the speed, responsiveness and detail that implies, but with the benefits of the larger diaphragm for moving air.

The midrange arrangement is also unusual in that the sides of the cabinet are perforated by numerous small holes, forming neat triangular vents in the area behind each of the 8" drive units. These drivers sit in their isolated chambers, and the vents control their dispersion into a cardioid pattern, the better to integrate the midrange with the waveguide-controlled treble unit. The 10" aluminium woofer with its large double-magnet motor sits in the





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» bottom half of the cabinet, vented by a pair of small, rear-facing reflex ports positioned high up, behind the tweeter. It's strictly a low-frequency unit, whose directionality isn't critical so the sideways-firing configuration integrates rather better than some similar designs with smaller units that reach higher. Finally, there's the crossover and, true to form, it's also a bit different.

A lot different

Well, a lot different, conceptually, because it's a series design. Nearly all passive crossovers are parallel circuits, you build a low-pass and a high-pass filter network and these split the low and high frequencies as they enter the network and route the signal, in parallel, to the relevant drivers. The series crossover is a more elaborate construct, especially tricky to implement for a three-way design, but offers some worthwhile advantages.

Essentially, the low-frequency driver's high-frequency response is damped by a capacitor's decreasing impedance, while a high-frequency driver's resonant frequency is damped by an inductor's decreasing impedance. The capacitors and inductors change in impedance as the signal moves outside their operating range, acting as a shunt for the relevant driver, damping it more effectively than a parallel circuit ever could, and where they need it most (ie, outside their design frequency band). In a parallel crossover, by way of contrast, the drivers become decreasingly damped, as you depart from their operating range.

The Krypton3X uses a second-order series crossover, with a bass passband below 160Hz, and midrange passes to tweeter at a low 1600Hz, the better to keep the crossover activity outside the ear's most sensitive region between 2-4kHz. Amphion proudly claim that



the series crossover integrates the Krypton3X drivers into one coherent system in a way that no other filter network possibly can, also providing a balanced load for the amplifier, thereby improving stability and damping over the audio band.

Organised sound

It's fair to say that probably the most noteworthy early impression, on a first listen, was the way the sound is so *organised*, both spatially and temporally. There's soundstaging, and then there's Krypton3X soundstaging: depth and spaciousness to orchestras you feel you can walk around, and a stability and structural integrity to the music, however complex or layered, that just inspires confidence. Take Henry Purcell, *Funeral Music for Queen Mary* (Decca), there's a cavernous acoustic space, and the sense of the funeral procession getting closer in the opening march is effective. The brass is very clearly delineated and the bass drum is sonorous and solid. Dynamics are natural, with little sense of compression. There's a sense of solemnity and, well, majesty.

The polyphony of the following *Canzona* is easy to appreciate because of the sheer level of definition, tonally and spatially, of the separate parts. If this is what a series crossover brings to the party, it's a neat trick. And I'm sure the superb tweeter in its waveguide, the cardioid midrange and d'Appolito configuration, and the bass unit that only operates in that bottom three octaves, all contributes to a level of coherence and cohesiveness you rarely get in a large, three-way design at this price.

It's not just large-scale music that benefits from the Krypton3X's ability to organise things, Hiromi's work with a string quartet on the *Silver Lining Suite* (Telarc), a piece about the Covid





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» pandemic, brings to life the interplay and contrasts between Hiromi's playful, freewheeling piano and the controlled, tight, structured playing from the quartet.

The first track, 'Isolation' builds, instrument by instrument and each has its own discrete space; as the music gets more complex and interwoven, these spaces are preserved, you hear how the music builds and develops, and there's that satisfying moment of payoff when a complex line comes to its conclusion with all players in lockstep. The piano has mass and body, strings have texture and grain, the rhythmic tapping and slapping in 'Fortitude' is tight, together and true to life. Music is not overly lit, just naturally presented, the speaker clearly in its comfort zone.

Understated

The review pair came in Amphion's smart, understated black, a satin finish that reflects just enough light to tone it down to something more like a dark charcoal grey. They did dominate my modest sized listening room somewhat, visually at least; more than one visitor was moved to remind me of the monolith from *2001 A Space Odyssey*. Amphion recommends installing the speakers so the bass units fire inwards, but if you've got a large space to fill, you could set them up with the bass units firing outwards for a more expansive, but perhaps less focussed sound.

My room is approximately 20m² so we really tested Amphion's claim that their loudspeakers are very adaptable to smaller spaces, and inward firing was very much the preferred option. But to be fair to Amphion's claim, after a little tweaking of position and support (I settled on a pair of AcouPlex slabs below the plinths, which is when they really began to show their mettle) they integrated into this smallish space, sonically, really rather well.

In Abdullah Ibrahim's 'African Marketplace' (Enja) the music starts chaotically, melody emerges from this chaos then the chaos returns, the piano imposes order and calm, then the chaos returns. There's an arc of a story here, but without the levels of organisation the Krypton3X are capable of this is easily missed; much of the way this is brought out – the way the soloists integrate their work with the NDR Big Band, for example – often escapes notice. There's unfettered enthusiasm here in this most ebullient of pieces, but it's not uncontrolled; free but not loose, dynamics are bold and expressive, but always in proportion. The difference between 'unfettered, and 'uncontrolled' isn't always obvious but the big Amphions let the musicians walk that line remarkably well.

A keeper

Overall, whether it's the Hiromi string quintet, a big band playing jazz, or a large orchestra in full flight, there's a sense of collective effort resolved to the level of individual parts, but neither deconstructed nor spotlit. The Amphion Krypton3X's ability to spatially and temporally organise the disparate elements, with a surefootedness that eludes many rivals, means there's a profound sense of being present at an event, of being in the space, not just experiencing a recording. If I had a bit more room, these might just be a keeper.

This last sentence also hides a bonus to the Amphion Krypton3X. The reason why I say "if I had a bit more room" has nothing to do with the sonics; it's that a loudspeaker this physically large in a relatively small space can look imposing, especially in the review sample's dark grey livery. However, from a pure sound quality perspective, the Krypton3X manages to achieve the near impossible; it works in rooms far smaller than it should, as well as spaces far larger than you might expect. Bad pun time; small rooms are usually Kryptonite to big speakers. But not here. That speaks to the sophisticated engineering and design criteria applied by Amphion. And that's why it's a keeper after all. +

Technical specifications

Type: Three-way, vented, floorstanding loudspeaker

Driver complement: 1 x 1" titanium tweeter; 2 x 8" paper midrange; 1 x 10" aluminium bass.

Crossover frequency: 160Hz and 1.6kHz

Crossover type: Single wired, passive second-order series design

Power handling: 100-300W (recommended)

Frequency response: 21Hz-55kHz (-3dB)

Impedance: 4Ω

Sensitivity: 89dB @ 2.83V / 1 metre

Dimensions (HxWxD): cabinet: 137 x 33 x 478cm

Weight: 70Kg each

Finishes: White; Black; Walnut veneer

Price: £17,600, \$24,000, €20,000 (White/Black) per pair;
£18,600, \$25,000, €21,000 (Walnut veneer) per pair

Manufacturer Amphion Loudspeakers Ltd

🌐 www.amphion.fi

UK distributor Auden Distribution

🌐 www.audendistribution.co.uk ☎ +44 (0)7917 685759