

Wilson Audio Alexx

Wilson Audio's latest masterpiece features its most versatile cabinet yet, and hints at the upcoming WAMM Review: **José Victor Henriques** Lab: **Keith Howard**

Wilson Audio's Alexx loudspeaker aims to surpass the performance of its Maxx 3, and ultimately replace it. It's the new-born child of Alexandria, sister to Alexia [*HFN* Mar '13], cousin to Sabrina [*HFN* Aug '15], and a precocious WAMM granddaughter. In a word, it's a genetic cocktail that 'incorporates Wilson's latest thinking on loudspeaker design in the areas of time-domain geometry, driver configuration, and driver development'.

The XLF resemblance is obvious [*HFN* Oct '12], albeit smaller but still room-dominant: 158cm tall, 226kg in weight (each) and costing £109k. The Alexx is made of X-material – a proprietary ultra-rigid military grade phenolic composite – cut and shaped with special tools, assembled by hand using proprietary adhesives, coated with several layers of car-grade paint and polished to Wilson Audio's high standard. The review pair was dressed up in one of Wilson's 50 shades of grey (silver), and *quite* sexy too, but you can order other standard colours, like Obsidian Black and Titanium Brown, or opt for a custom-painted pair at a premium.

A MODULAR SYSTEM

The Alexx is a modular system consisting of a bass enclosure and an MTM-configured (mid-treble-mid) head composed of three compact, vertically stacked enclosures for lower mid, tweeter and upper mid, respectively. Two drivers of different size and origin are now used to cover the midrange, including the 7in driver used in the XLF and Sabrina's own 5.75in unit.

This configuration is new to Wilson and draws from the upcoming WAMM, thus lifting a veil on what we might soon expect [see PM's boxout, p39]. It's the egg of Columbus, with each driver covering the band best suited to its strengths and dispersion characteristics and making the Convergent Synergy silk-dome tweeter's

life easier – unlike in the XLF, which uses two identical mid drivers handing over to the tweeter at a vertiginous 1kHz. The Alexx also does without the XLF's rear-firing supertweeter.

TAILORING ADJUSTMENTS

As with all Wilson's top-guns the MTM module allows for 'Aspherical Propagation Delay Adjustment': the individual modules can be moved fore-to-aft and rotated on their axes to achieve geometric driver time-alignment through a complex set of grooved plates, sliding wedges, spikes, bolts and locking clamps. Just follow the charts in the manual to determine the best position and rake angle for a given distance and height, or rather let the distributor do it for you. The Alexx is a premium product so you deserve the best service out there!

The rib across the wings that lodge the MTM array in place is also a platform for the upper midrange enclosure [see p43]. Otherwise, the tweeter and lower midrange enclosures are not directly supported by the wings, but are

instead stacked by means of isolating alignment spikes, firmly bracketed with metal plates, and bolted once the set-up is finished. Although solid, the wings vibrate if you hit them with the palm of your hand and a faint, undamped metallic resonance occurs which may partially account for the treble ripples measured during *HFN*'s lab tests [also p43].

I have often debated the merits of the aspherical adjustment system. I contend an average fixed geometric alignment, phase-tuned by the crossover, could better guarantee rigidity and immediate universal use. It's kind of selfish to align it for your own height when seated, anyway. Isn't

RIGHT: Drawing on both the Alexandria XLF and forthcoming WAMM, the Alexx combines a 1in tweeter, 7in and 5.75in mids with 10.5in and 12.5in woofers in a highly adjustable cabinet



WAITING FOR THE WAMM

Currently scheduled for release at the end of 2016/beginning of 2017, David Wilson's self-styled 'Magnum Opus' was first shown, albeit under wraps, to *HFN* at a private briefing during CES 2015. Much about Wilson's ultimate flagship is still shrouded in mystery and even its name – 'The New WAMM' – is likely to change. Nevertheless, the speaker will certainly be a 'Wilson Audio Modular Monitor', a two-tower system standing 84.5-86.5in (2.15-2.2m) and weighing 1000lb *per channel*. The original WAMM's electrostatic midrange will not be retained, suggesting it'll look more like a grand Alexandria XLF, but with five modular enclosures comprising a treble section sandwiched between two pairs of midrange modules in a huge D'Appolito array. Offering the possibility of precise and intricate time-alignment, this top section will be married to dual woofers in a separate bass enclosure. A sub-20Hz bass extension is claimed, even before one, two or more partnering WAMM subs are integrated into the speaker system. PM



there anybody else out there to listen, too?

And the tweeter module always ends up recessed in relation to the upper and lower mid modules, a configuration prone to diffraction effects, despite the chamfered angles. Or so I thought, until I heard the audible difference it can make when Peter McGrath, Wilson's Director of Sales, worked for hours on a pair of XLFs last time he visited. It's like reverting to manual focus, bypassing the AF in macro photography for the sharpest image possible. Besides the minute detail that was previously missing, you also get a more coherent and nuanced image with better tone and colour. What's next? A motorised contraption with a remote for real-time alignment while seated...?

The bass enclosure has the option for front or rear reflex ports. The baffle is slightly angled to allow for better time-domain integration, and boasts two drivers of different sizes: 10.5in and 12.5in hard paper pulp cone woofers that 'were developed for the WAMM project with technology that evolved from the Alexia project'. Unlike the two mid drivers, the Alexx's woofers

cover the same frequency bandwidth, share the same enclosure space, work as one composite driver and have the same acoustical crossover slope. All of which makes Wilson's Alexx a four-way, five-driver loudspeaker system.

As I have implied, the Alexx needs time, patience and expertise to set up properly. And I don't mean just the upper module's delay alignment. The trial and error method of placing the loudspeaker in the right spot without upsetting room resonance modes, or letting it fall inadvertently into a dark cancellation hole, is paramount too. The manual is very thorough, and if you follow its guidelines you'll set it up eventually... I used Teflon sliders under the spikes to move those hefty 226 kilos over a carpeted floor with ease. But don't try to do this alone.

In a dedicated, well-treated listening room with golden dimensions and a sloped, perforated ceiling, the speakers ended up roughly 10ft apart. They were judiciously toed-in, 6ft from the rear wall, about 4ft from the side walls (give or take, as we opted for asymmetric positioning) while the delay adjustment was set to 13ft at a seated height slightly below 3ft.

DYNAMIC PLENITUDE

Wilson's Alexx follows the 'path of universality' opened by its smaller Sasha loudspeaker [*HFN* Jun '14]. Gone was the American upper-bass bravado, and mid and treble stridency typified by some predecessors, including the venerable Watt/Puppy. Being as amiable in nature as the Sabrina, the Alexx aims at a more global acceptance, although few speakers can convey this sense of dynamic plenitude with such intricate texture and tone, or offer a voluminous soundstage with such transparency and image stability. ➔

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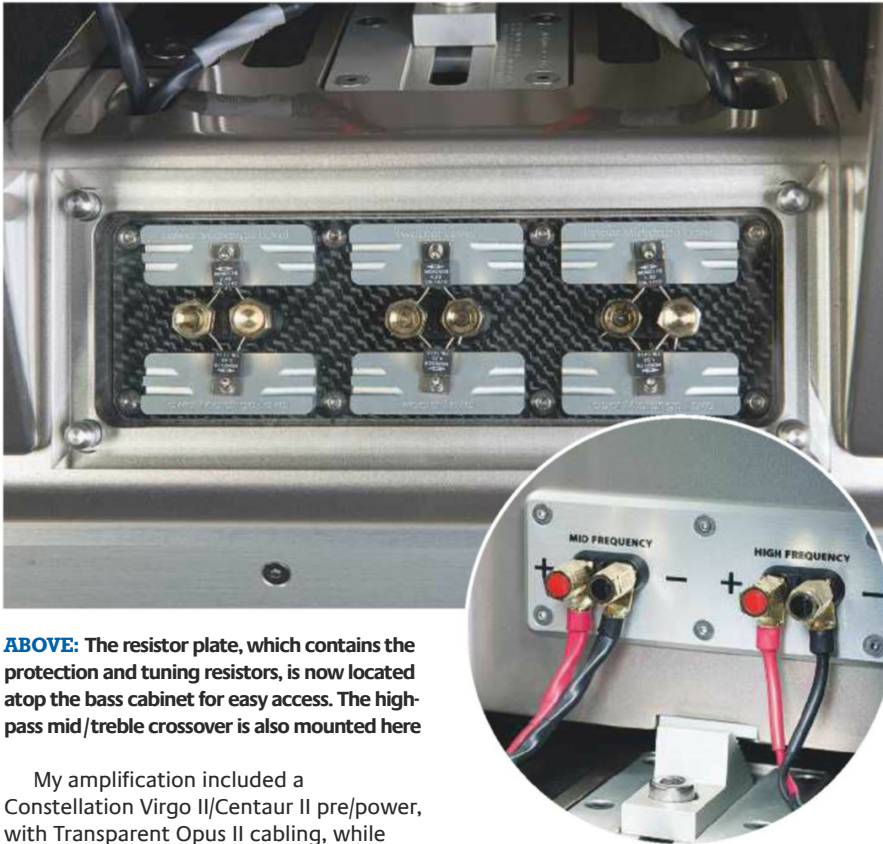
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LOUDSPEAKER



ABOVE: The resistor plate, which contains the protection and tuning resistors, is now located atop the bass cabinet for easy access. The high-pass mid/treble crossover is also mounted here

My amplification included a Constellation Virgo II/Centaur II pre/power, with Transparent Opus II cabling, while music was sourced from a Metronome Calypso transport and Audio Research DAC8. So I just sat there oblivious of my duty as a critic and watched the music run effortlessly into a vast ocean of sound where the sail of a violin, the beam of an organ or the flight of a piccolo were all perfectly depicted, and I listened in awe to the ebb and flow of the soundwaves. Yet something was amiss.

To find out how low a speaker can go with real music, not just test signals, I like to open the hostilities with 'Le Temps Passé', by Michell Jonasz [*La Fabuleuse Histoire De Mr Swing*; EMI France]. The vicious synthesized bass notes at 0m 22s, 0m 42s and 1m 06s will escape from the loudspeakers, crawl like a python snake across the floor, and shake you from foot to hair root. Surprisingly I did not feel this was entirely the case with the Alexx which had a disquieting feeling of up-tightness, of not letting go. For such a big girl, the Alexx could sound a tad shy in power and bass extension. When you look at the sheer size of those woofers your expectations rise so high that the 'lows' might, perhaps, at first let you down.

In which case Wilson suggests you should opt for the rear reflex port instead

'Crawling like a python, its bass shakes you from foot to hair root'

of the one on the front. I tried it and I didn't think it helped. On the contrary, bass sounded drier, sucking life out of the lower mid too: a room-induced cancellation effect, perhaps. Nor was there any improvement in extension. So I reverted to the front port.

TUBE FRIENDLY

Peter McGrath says the Alexx is 'amplifier agnostic'. Well, Peter, I beg to differ. I substituted my favourite ARC REF10/GS150 [HFN

Mar '13/Jan '15] combination for the otherwise excellent Constellation combo and got even better results. Impedance dips notwithstanding, the measured high sensitivity at least is 'tube' friendly [see Lab Report, p43], and the Alexx seemed to thrive on the ARC's lower damping factor diet without ever losing control. The GS150 somehow managed to free the Alexx from 'electrical constraints' and I could feel Jonasz's snake undulating toward me again. I was finally ready to listen and forget about the hi-fi paraphernalia set in front of me.

To keep it all in the family, I dug into my archive for two very special records: *Virtuosa Valentina Vol.2*, recorded by

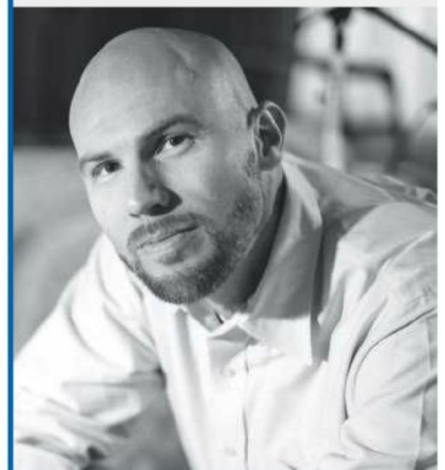
DARYL WILSON

It took him years to take credit publicly for a Wilson speaker: the Sabrina. Now, with the Alexx, he is giving the XLF a run for its money. Daryl is currently VP of New Product Development. 'I am responsible for the creative process from speaker concept to a finished product'.

So far Daryl has been involved in the production of many speakers since 2007 including, more recently, the Alida, Sabrina and Yvette. 'And the best is yet to come'.

Daryl has worked his way up through this family-owned company. 'I've learned, and intimately understand, the business, design and manufacturing processes that a Wilson Audio product goes through before it reaches the customer. From taking the raw materials and shaping them into an enclosure, to crating the finished product in shipping, has given me the utmost respect for how much time and attention to detail is involved in producing the world's best speaker systems. My father wisely mentored my development and methodically had me work through most of the departments at Wilson Audio'.

So just how close is the Alexx to the XLF and WAMM? 'Size constraints make it impossible to replicate the mass of the XLF and the new WAMM and their superior mechanical damping'. And how do you see the Wilson brand evolving? 'We will be ready to adjust where needed. You can rest assured that it will be done with passion, excellence and it will be authentic to Wilson Audio's culture. We did not come here to be average...'





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WILSON AUDIO ALEXX

Wilson Audio unusually claims a spot-frequency sensitivity for the Alexx of 91dB at 1kHz, which according to our measurements is an underestimate of the impressive broadband figure, our pink noise result of 91.9dB suggesting that a 92dB specification is justifiable. Very low impedance is used to help achieve this, though, the modulus dipping to a minimum of 1.4ohm at a high 2.9kHz. Together with moderately high impedance phase angles, the low modulus contrives to drop the EPDR (equivalent peak dissipation resistance) to an extremely challenging minimum of 0.72ohm at 3.4kHz, although a second dip to 0.94ohm at 60Hz may be more relevant in practice.

The forward frequency responses, measured on the tweeter axis with all grilles removed, improved with measurement distance from 1m [Graph 1, below] to 1.5m, reducing the response peak at 1.6kHz and the dip at 3.1kHz. The improvement would almost certainly have continued had it been possible to increase the microphone distance to that at which the speakers were focused. I'm confident that the recorded response errors of ± 3.5 dB and ± 4.3 dB respectively overestimate what will occur at the listening position. Pair matching over the same 300Hz-20kHz was fair at ± 1.2 dB. Diffraction-corrected nearfield measurement recorded a -6dB bass extension of 37Hz (re. 200Hz), while at the other frequency extreme the tweeter reaches out to comfortably beyond 40kHz despite its soft dome. The CSD waterfall [Graph 2] shows a cluster of low-level low-treble resonances, plus a high-Q tweeter dome resonance at about 14kHz. KH

LEFT: The Alexx head assembly features two 'stair steps', one for each midrange module, for precise time alignment of the drivers. As usual, the main speaker connection is single-wire only

and warm, and utterly un-hi-fi-ish. The Alexx's changed the mood accordingly and delivered the duo as if they were playing just for me in the room. When a loudspeaker can deal successfully with these two extremes: power, macro dynamics and bravura versus subtlety of timbre, purity of tone, micro detail and intimacy, everything in between should fall into place eventually. And, indeed, it did.

MAKES YOU SHUDDER

Sinatra sings 'Fly Me To The Moon' with perfect diction, swinging, in perfect time with Count Basie [*Ultimate Sinatra*; Ume 002243602]. Holy Cole's 'Smile' is delivered in a dynamic crescendo few speakers can hold to till the end [*Blame It On My Youth*, Manhattan 07779734924]. Wagner's *Siegfried* opening by Solti [Decca 4783702] sounds menacing with strings, brass and woodwinds lurking in the background, while Mime, the dwarf, forges a sword and makes you shudder each time he hits it with a hammer.

The wall-to-wall cascade of percussion drawn by Cassandra Wilson in 'Dance To The Drummer Again' [*Dance To The Drums Again*; Columbia 472972 2] was no less awe-inspiring. I could give a thousand examples of how the Alexx deals so magnificently with all kinds and genres of music, instruments and voices. But you get the picture... ☺

HI-FI NEWS VERDICT

The Alexx loudspeaker is a Wilson Audio *tour-de-force* cocktail, a family recipe exquisitely mixed and shaken, not stirred, by David Wilson's son, Daryl. The ingredients are heady: pour two thirds of XLF into an X-material shaker, add a drop of the secret WAMM ingredient and a twist of Alexia, infuse with the sugar of Sabrina and garnish with the automotive grade paint colour of choice. Enjoy responsibly.

Sound Quality: 88%

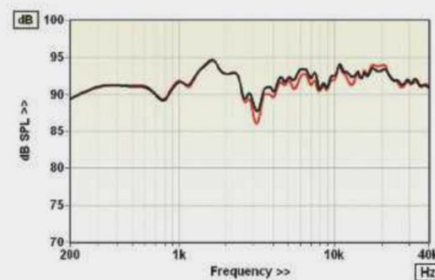
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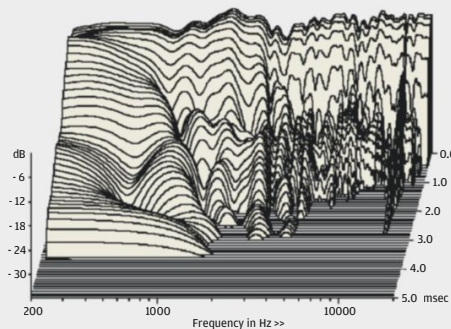
Peter McGrath [Audiofon CD72070] and Beethoven's Violin Sonata, Op.96, recorded by David Wilson [Wilson Audiophile WCD-8315].

Valentina Lisitsa plays the piano with technical flair, virtuosity and bravura. She attacks the keys impetuously, exploring the full range of the Bösendorfer to great effect. Her Liszt is so energetic and fast it verges on frenetic and there are only a few loudspeakers capable of delivering this sonorous cascade of sound. Wilson Audio's XLF is one of them but the Alexx comes disarming close.

With Wilson's CD, a Guarnerius violin and a Hamburg Steinway were recorded by a spaced pair of Schoeps microphones driving a vacuum tube line-level preamplifier. The resulting sound is pure, clean, stable, focused, fast, yet sweet



ABOVE: Pair matching is good while the peak at 1.6kHz and dip at 3kHz smooths out with distance



ABOVE: Cabinet shows quick decay but note treble resonances coincident with the 'rippled' response

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms - Mean/IEC/Music)	92.4dB/91.9dB/91.8dB
Impedance modulus min/max (20Hz-20kHz)	1.4ohm @ 2.9kHz 8.9ohm @ 38Hz
Impedance phase min/max (20Hz-20kHz)	-52° @ 54Hz 41° @ 4.3kHz
Pair matching/Resp. Error (300Hz-20kHz)	± 3.5 dB/ ± 4.3 dB / ± 1.2 dB
LF/HF extension (-6dB ref 200Hz/10kHz)	37Hz / >40kHz / >40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.1% / 1.3% / 0.4%
Dimensions (HWD)	1582x400x680mm