**JUNE 2014** 

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## LOUDSPEAKER

Three-way floorstanding loudspeaker Made by: Wilson Audio Specialties, Utah, USA Supplied by: Absolute Sounds Ltd Telephone: 0208 971 3909 Web: www.wilsonaudio.com; www.absolutesounds.com Price: £28,500

# AUDIO FILE

# Wilson Audio Sasha Series-2

## Design details from Wilson Audio's mighty Alexandria XLF flagship have now trickled down to the Sasha W/P Review: **John Bamford** Lab: **Keith Howard**

t has been almost five years since the evergreen WATT/Puppy modular combo transmogrified into the Sasha W/P, during which time Utah's Wilson Audio has certainly not been resting on its laurels. The company's awesome flagship Alexandria XLF [HFN Nov '12] hit the headlines not only for its majestic 'concert level' performance envelope but the eye-watering circa £200k price tag. Technology details from the XLF then trickled down to the £50k Alexia [HFN Mar '13], and now some of those design features are being employed to upgrade the more affordable Sasha too.

Enter this brand new Sasha Series-2.

The Sasha W/P (to give it its full nomenclature) has been Wilson's best-selling model, its DNA dating back to the 1980s and the famous WATT/Puppy two-box combination [see boxout]. As Wilson

Audio followers will already appreciate, the Sasha W/P is no longer a twoway mini-monitor sitting on top of an optional passive subwoofer pedestal.

It might look as if it is, since it retains the W/P's two-box enclosure paradigm with its separate mid/treble 'head'; but the Sasha is a complete three-way floorstander with its crossover in the upper portion of the woofer enclosure 'pedestal'. Two umbilical cables terminated with spade connectors exit the top of the woofer cabinet and attach to a terminal block at the rear of the Sasha's upper module, one each for the midrange driver and tweeter.

Costing £1000 more than the outgoing Sasha, the Series-2 stands just a centimetre or so taller (a fraction over 1.2m tall on its floor spikes) and now sports a customised version of the company's Convergent Synergy Tweeter first introduced in the XLF.

This is a 25mm doped silk dome HF unit, replacing the Sasha's inverted titanium dome. Overall the cabinet is subtly more contoured, showing more than a little influence of the bigger Alexia. There are also some changes around the back, including the fiendishly clever Alexia-style alignment mechanism for adjusting the position of the upper module, which now offers much greater flexibility (20 positions). The woofer enclosure with its twin 20cm bass drivers has been substantially upgraded. And the connection plate to the input terminal block is no longer

'The image scale defies the Sasha's relatively modest proportions' recessed, making it easier to use heavy duty speaker cables with thick spade connectors.

Wilson claims a 30% reduction in its already vanishingly low

cabinet resonances, the company's laser vibrometer instrument capable of measuring panel movements as small as one-millionth of an inch, we're told.

#### **CRITICAL TIME ALIGNMENT**

I can't imagine any loudspeaker designers arguing against the notion that precise time alignment of a speaker's drivers relative to one's listening seat is critical to achieve accurate reproduction of harmonic expression and holographic imaging. Hence many manufacturers' endeavours to produce perfect point source transducers. For Dave Wilson, the

**RIGHT:** Series-2 Sasha has sturdier enclosures and employs Wilson's latest 25mm tweeter, married to a 178mm midrange driver and two 203mm woofers







#### WATT/PUPPY LEGACY

The story of the WATT/Puppy one of the audio industry's more endearing legends. Recording engineer Dave Wilson had already produced his go-for-broke multiple-enclosure Wilson Audio Modular Monitor (WAMM) speaker system, but required a compact mini-monitor for use 'in the field' at recording sessions. In the early '80s he built the Wilson Audio Tiny Tot (WATT), a twoway in a truncated pyramid enclosure – never imagining that hi-fi enthusiasts would want to buy it. But they did. And after Wilson made a pedestal woofer enclosure to accompany it, the Puppy, the WATT/Puppy two-box system became the most popular loudspeaker worldwide in the over-\$10k price sector. It's been constantly refined; the W/P's ninth iteration (2009) dispensed with the mini-monitor and separate subwoofer approach to become the buy-it-all-at-once Sasha W/P floorstander.

primary thing that counts is the quest to reproduce music in a way that 'preserves the numinous and emotional impact of the live event'.

Being able to adjust precisely the position of each driver fore and aft and its firing angle *in situ* in a listening room is necessarily complicated (and expensive) to attain in a domestic situation.

In the three-box Alexia the tweeter and midrange are housed in separate modules, the position of each adjustable in minuscule amounts to dial-in a nominally perfect group delay performance. (Visitors to *HFN*'s The Hi-Fi Show in Windsor last October will have witnessed a demonstration of the efficacy of this.)

The Sasha isn't quite so elaborate as the tweeter and midrange unit are housed in a single head module. But of course they reside in individual chambers within, and in the Series-2 the construction of the upper module is much more intricate. It now features a two-plane baffle to better optimise the axis response angles of HF and midrange drivers.

The tweeter portion of the baffle is made of Wilson's proprietary X-Material composite (as in the Alexia) while the midrange portion remains formed of the S-Material that the company developed specifically for use in midrange baffles. There are separate tweeter and midrange grilles, each designed to lessen frame induced diffraction.

The cabinets are finished in a range of automotive grade paints – including the gold shown on this month's cover and the delicate

green of our review sample, called 'Sea Foam'. The speaker ships with a detailed user manual containing propagation delay tables to assist accurate setup. For most purchasers the expertise of a Wilson-trained installer will best ensure they are calibrated for ultimate performance.

## DUTS YOU 'THERE'

For auditioning the new Series-2 Sasha I was privileged to have the speakers driven by Constellation Audio's fabulous Virgo II line stage preamp with its separate power supply and a pair of partnering Centaur Mono power amps [*HFN* Jul '13], using a Metronome Technologie T6A/Nausicaa Signature CD transport/DAC combo as a source [*HFN* Dec '13]. Cabling throughout was courtesy of Transparent. The resultant sound was nothing short of sublime.

If you asked me to cite specific qualities that characterise the sound of the new Series-2 Sasha, the two that come instantly to mind would be resolution and dynamics, the speaker serving up elegant and unforced details that sounded more like the real thing than simply hi-fi artefacts.

Hearing Natalie Merchant's *Live In Concert* [Warner/Elektra 7559 62479-2] showcased the speaker's ability to 'put you there', the scale of the image it delivered defying the Sasha's relatively modest proportions. Merchant's utterly charming interpretation of Bowie's 'Space Oddity' and her cover of Neil Young's 'After The Goldrush' found me as if transported to the  $\ominus$ 



best seats in the house in New York's Neil Simon Theatre in 1999. The distance in the fore-and-aft plane of the soundstage I was witnessed was all-enveloping.

Similarly with a 1968 recording of Alfredo Catalani's opera *La Wally* [Decca 425 418-2], the soprano voice of Renata Tebaldi was projected into the listening room in quite remarkable fashion, the power and emotion of the performance spine-tinglingly authentic in timbre, dynamics, and scale.

#### EFFORTLESS HIGH LEVELS

What really struck me was the *height* of the perceived image. Properly calibrated, the speaker images way beyond its boundaries and the confines of your listening space, allowing you to clearly perceive varying acoustic envelopes of different recording environments.

Will this new Sasha rock? You betcha. Spinning up the CD of

LEFT: Reflex bass enclosure vents via a rear-firing port, as does the midrange chamber in the upper module. Back plate conceals resistors for level matching the midrange driver and tweeter

Keith Richards' Main Offender [Virgin CDVUS 59] and pressing vigorously on the system's loud pedal showcased the Series-2's ability to stop and start with breathtaking alacrity. On the rollickin' track 2, 'Wicked As It Seems', Richards' electric guitar sounded spookily real, while the sizzle of the snare and the crack of the rim shots caused me to wince, highlighting the Sasha's lightning-fast transient attack. I flinched more than once, then steeled myself in preparation for a ruckus when the bass guitar enters the melee, only to discover that the speaker was barely cruising. Again, it held everything in realistic proportion: the bass guitar sounded 'just right'.

When you want to rave, this Sasha Series-2 will seriously kick ass – with dangerous SPLs. The majestic bass underpinning George Michael's 'Spinning the Wheel' from Older [Ægean/Virgin CDV2802] was delivered without any hint of drama from the Sasha. Everything appeared utterly effortless and grounded, the stygian bass unfolding in a natural way as it pressurised the room.

Wilson's new Sasha 2 is a fabulous speaker. Is it worth £28.5k? Well, it's £20k cheaper than Wilson's slightly bigger Alexia. And with many exotic speaker designs costing considerably more, any music lover would have to declare the Sasha Series-2 not only wonderful but also a steal. (b)

#### **HI-FI NEWS VERDICT**

Judged alongside competing high-end models Wilson's Sasha Series-2 is certainly a lot of speaker for the money. And given its overall capabilities – its transparency to source, fearsome dynamics and proficiency in creating an enormous soundstage with lifelike height – it should really come with a warning sticker, as to hear it is to want it. Driven by suitably high quality ancillaries it'll blow you away.

Sound Quality: 88%

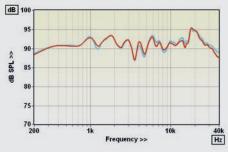
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### LAB REPORT

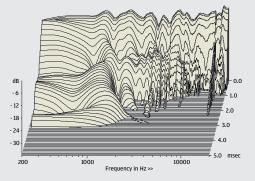
#### WILSON AUDIO SASHA SERIES-2

Wilson Audio claims 92dB sensitivity for the Sasha Series-2 which accords pretty well with our measured pink noise figure of 91.5dB. But whereas I was recently able to say of the smaller Duette Series 2 [*HFN* Apr '14] that this 'is achieved without recourse to punishingly low impedance', that isn't so of the new Sasha. Wilson Audio specifies a minimum modulus of 2.17ohm at 90Hz; we measured a dip down to 2.0ohm at that frequency. Were it not for quite well controlled impedance phase angles then the minimum EPDR (equivalent peak dissipation resistance) would surely have fallen below 10hm but in actuality it bottoms out at 1.10hm at 72Hz – still a very challenging load for the partnering amplifier albeit not quite as scary as the 0.90hm we recorded for the Alexia. Contrast these figures with those recorded for the Duette S2 and the Alexandria XLF which were 2.0 and 1.70hm respectively.

The on-axis frequency response trend – measured here at a typical seated ear height of 97cm from the floor – is essentially flat in trend except for the merest hint of a presence band dip and a peak in output just below 20kHz [see Graph 1, below]. Response errors of  $\pm 4.2dB$  for both speakers and pair matching of  $\pm 1.2dB$  (300Hz-20kHz) is fair although not outstanding at the price. Diffraction-corrected near-field measurement of the LF response recorded a bass extension of 4.9Hz (-6dB re. 200Hz) but the slow roll-off beginning at 90Hz should make it easy to achieve a more extended bass in-room with the assistance of boundary gain. The cumulative spectral decay waterfall [Graph 2, below] evinces fast initial energy decay but a few resonances are visible as ridges in the treble. KH



ABOVE: The Sasha 2's forward response is flat in trend, albeit with a hint of a recessed presence band



ABOVE: Very fast decay of any cabinet resonances with only a few ridges visible above 3kHz

#### **HI-FI NEWS SPECIFICATIONS**

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	92.1dB/91.5dB/91.4dB
Impedance modulus min/max (20Hz-20kHz)	2.0ohm @ 90Hz 7.8ohm @ 19.7kHz
Impedance phase min/max (20Hz–20kHz)	-42° @ 61Hz 34° @ 3.5kHz
Pair matching (200Hz–20kHz)	±1.2dB
LF/HF extension (-6dB ref 200Hz/10kHz)	49Hz / >40kHz/>40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.1% / 1.0% / 0.3%
Dimensions (HWD)	1146x356x562mm