

# SOPHIA<sup>®</sup>

Series 3



## *Video Links*

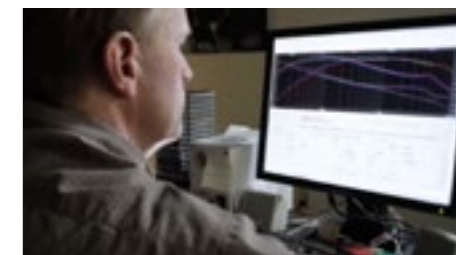
### [Dave Wilson talks about Sophia 3](#)

Dave Wilson talks about his design goals and philosophies for the new Sophia. He also compares the Series 3 to the Series 2, and speaks about some of the technologies used the new Sophia.



### [Building a New Loudspeaker: The Creation of Sophia Series 3](#)

Meet the multi-disciplinary team of engineers and artisans responsible for translating Dave Wilson's vision into a product that improves Sophia's performance without altering it's essential beguiling character.



## Sophia Series 3

**D**ave Wilson recently observed that when the original Sophia was launched in 2001, it was inevitably described in the audio press as Wilson Audio's "entry-level" floor-standing loudspeaker. While Sophia remains Wilson's most affordable floorstander, focusing on price obscures an important fact—price was incidental to Sophia's actual design objective. What Dave and the Wilson design team set out to create was a loudspeaker that—unlike its siblings at the time, X-1 Grand SLAMM and WATT/Puppy—was less demanding of rooms and electronics. Sophia was designed to be a product easy to drive, easy to own, and one which invited its owner to just relax into the enjoyment of music.

*To emphasize that point, Dave Wilson played a trick on the journalists gathered to hear Sophia at the 2002 CES.* The visual evidence in the room led listeners to believe they were hearing the loudspeaker powered by an expensive high-end amplifier. Once the reviewers had ample opportunity to revel in the impressive sound, Dave pulled back the curtain to reveal that the speakers were in fact being driven by a modestly priced amplifier.

**S**ophia's true magic is that a speaker designed to sound so good with modest electronics can still reveal the nuance and detail of state-of-the-art gear. Sophia's update to Series 2 in 2005 incorporated many of Wilson's advances in cabinet materials, anti-jitter crossover technology, and driver design—advances designed to raise the bar on high-end performance in the realms of dynamic contrast, low noise and coloration, and transparency—all the while maintaining the charm and ease of the original.

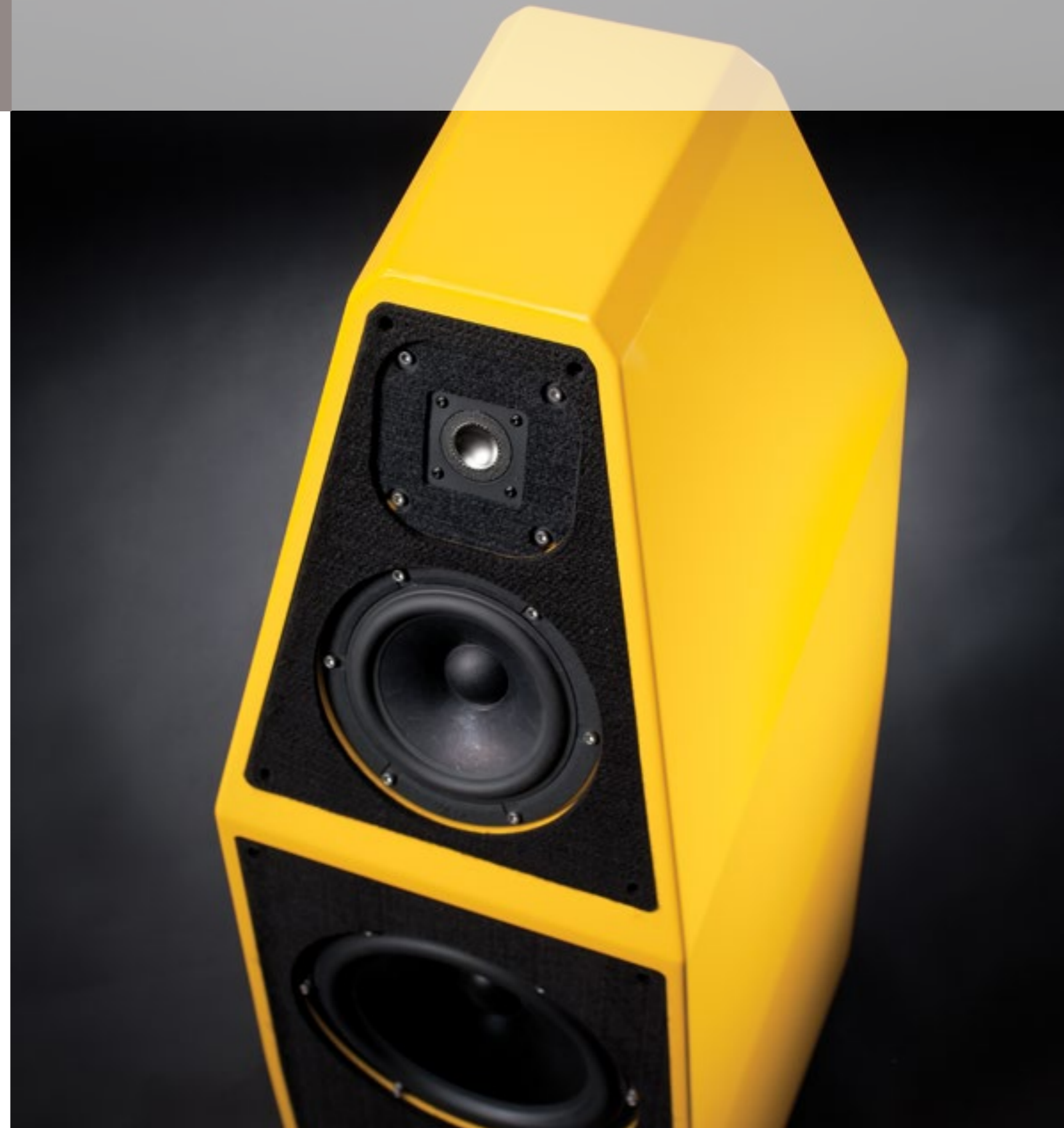
*Impressive sales aside, it is Sophia's "cult status" among audiophiles that speaks to the success of the original vision.* It is not uncommon for Wilson customers who could easily afford the company's more expensive loudspeakers to choose Sophia—just because they love the sound.



Sophia Series 1 2001



Sophia Series 2 2005





**B**eauty, to the power of 3.

*Sophia's new form is a visible manifestation of its function.*

*The softly sculpted side panels* evoke the increased volume of the cabinet. The X material enclosure is thicker, with a new internal bracing strategy. Further reducing Sophia's already low cabinet coloration achieves greater dynamic contrast and tonal accuracy.

*The midrange/tweeter section* of the enclosure's baffle is made from S material, Wilson Audio's newest proprietary composite. First used in the midrange baffle in Sasha W/P, S material provides a near perfect balance between resonance control and the preservation of midrange beauty.

*The angle of the midrange/tweeter baffle* more correctly aligns the drivers for coherence in the time domain, presenting the listener with a detailed and transparent soundstage of proper width and depth.



*Sophia Series 3*



## Sophia Series 3

Since Sophia Series 2 was introduced, Wilson Audio has made vast improvements in driver technology. The tweeter developed for MAXX Series 3 and subsequently used in Sasha W/P features a new topology that reduces the back-wave reflections that otherwise propagate through the diaphragm, adding noise and distortion to the primary signal. By significantly reducing this source of distortion, the highs have more dynamics, air, and resolution -- free of the grain nearly all other tweeters exhibit. This tweeter is now part of Sophia Series 3.

The proprietary Wilson midrange driver, which transformed the sound of Alexandria X-2 Series 2, and was subsequently deployed in MAXX Series 3 and Sasha, now, in a simplified version, finds a home in Sophia. No single driver is more responsible for the tonal accuracy and beauty of the Wilson Audio sound.

The Sophia woofer, which debuted in the Series 1, has undergone major modifications. The Sophia Series 3 woofer features a magnet structure twice the size of its predecessor. While maintaining the tunefulness of the original design, the overall impact, speed, agility, and linearity of the bass is significantly enhanced in the new loudspeaker.

The crossover that links these drivers has been completely reworked (see the following page), and the user-changeable resistors, which formerly were located on the bottom of the enclosure, now move to an easily accessed panel on the rear of Sophia.



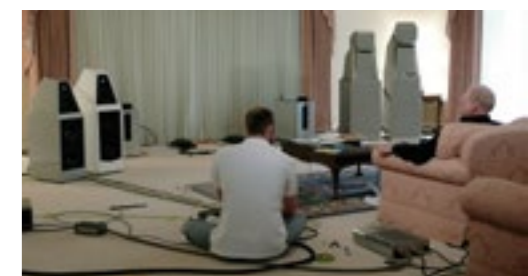
## Refining the Crossover

Key to making any loudspeaker sound truly great in real world environments is getting the crossover right. One goal is to integrate the drivers properly with each other and with their enclosure.

Before any physical crossover is built and tested, it is first created and tested in a virtual world. Electrical Engineer Vern Credille has designed and programmed proprietary software to model the box, the drivers, and the crossover circuit. By changing component values, he shapes the frequency and time-domain response to a good starting point for actual listening. The first listening trials take place in a room Dave Wilson calls "loudspeaker boot camp." This room is completely adjustable to present a variety of real-world challenges. It is utterly unforgiving of even the best "theoretical" designs.

Once a crossover design has evolved to the point that it sounds good in the first room (no small task), listening and testing moves to a larger room with an extremely low noise floor. Dave describes this room as like "putting on a pair of headphones." Here, further anomalies are discovered and corrected.

Finally, the loudspeaker moves to the music room in the Wilsons' home and more listening and testing is performed. Multiple amplifiers (tubed and solid state) allow Dave to hear the speaker perform in an environment where it can show its true potential. Further refinements are made—and only then is it ready for production.





## Specifications

Woofers: One – 10 inch {25.4 cm} aluminum cone

Midrange: One – 7 inch {17.78 cm} Cellulose/Paper Pulp

Tweeter: One – 1 inch {2.54 cm} inverted titanium dome

Sensitivity: 87 dB @ 1 watt @ 1 m @ 1 kHz

Nominal Impedance: 4 ohms / 3.1 ohms minimum @ 98 Hz

Minimum Amplifier Power: 25 Watts per channel

Frequency Response: 20 Hz – 22.5 kHz +/- 3 dB

Room Average Response [RAR]

Overall Dimensions: Height: 41 5/32 inches (104.54 cm)

with Spikes: 43 13/32 inches (110.22 cm)

Width: 13 5/8 inches (34.61 cm)

Depth: 18 15/16 inches (48.12 cm)

System Weight per channel: 165 lbs (74.84 kg)

Total System Shipping Weight (approx.): 485 lbs (219.99 kg)

