The Silverflame

MARTIN COLLOMS ASSESSES AN EXOTIC SWISS DESIGNED, AUSTRIAN MANUFACTURED AUDIOPHILE LOUDSPEAKER

umen White audio products are designed by Lumen White Research Group in Monaco and Switzerland and manufactured under license in the EU." Lumen White promotional material could be accused of demonstrating a high degree of self belief. (Not to mention some inconsistency, as elsewhere on the website its research groups are described as Swiss and UK based.) That said, the company is certainly adept at showing its best points, employing tasty highlights from published review successes, of which there are quite a few.

The company favours those uncompromising pure piston ceramic diaphragm drivers manufactured by German driver specialist Accuton, and its three designs marry a quite similar collection of these in vertical arrays, mounted in unusual, modern and elegant curved side enclosures.



The systems are claimed to be time aligned and time coherent, "due to the driver technology and the particular crossover design". The other headline feature is the absence of any acoustic absorbent or panel damping, as the designers consider that damping results in audible weaknesses that compromise sound quality by imparting delay and information smearing, observations that contain an element of truth. Instead, in order to control both structural and acoustic resonances, the curved shape helps dissipate internal resonant modes, while the enclosure panels themselves are free from the familiar acoustic signatures of the usual rectangular panels which designers of conventional speakers struggle to suppress. Lumen White explains that its enclosures are certainly naturally resonant, but in the consonant manner of a musical instrument.

Technically the *Silverflame* is described as a "time coherent, phase coherent, resonance coherent five-driver, 3-way, ultra precision monitor, with a claimed frequency response: 20Hz - 35kHz -3dB, a sensitivity of 91.5dB, and a recommended power of 20 - 300 watts". Claimed impedance is 50hm, and the pure piston driver array comprises a 1in (25mm) inverted ceramic dome tweeter, a 5.5in (140mm) inverted ceramic dome midrange, and three 7in (180mm) inverted ceramic dome woofers.

The heavy enclosure is laminated from resonance optimized plywood in a compound construction, with no MDF, synthetics or damping. Connection is made *via* a single pair of WBT *Goldline* socket/binder terminals. The internal wiring is described as a state-of-the-art wire harness, custom manufactured by US cable maker Shuntyata Research. The *Silverflame* has strongly curved sides with circumferential bracing, and a vertically oriented. rear located port slot near the base is carved with a Venturi contour.

This quite imposing loudspeaker stands nearly 1.2m high and is a substantial 64 cm deep. Its organic curves look different from every viewpoint, but the driver mounting baffle is still a flat surface with a simple finely radiused edge, showing little consideration for diffraction or edge reflections. The midrange unit has its own sealed-box sub-enclosure, while the treble driver is almost perfectly centred in the upper section (which will tend to maximise diffraction irregularities). In practice there is no physical time alignment, and no compensation for different driver directivities, and the Accuton ceramic drivers have inherent response artefacts, as do all drivers regardless of whether they are pure piston

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