

SVS Ultra Evolution Pinnacle

Ohio-based SVS throws all its speaker know-how into a high-value concave cabinet bristling with custom drivers
 Review: **Mark Craven** Lab: **Paul Miller**

Between 2017 and 2022, SVS comprehensively overhauled its range of subwoofers, introducing models from the 80kg PB16-Ultra to the compact 3000 Micro. A quiet spell followed as SVS tackled a new project – an all-new flagship loudspeaker series, topped by the model on test here.

The lineup is named Ultra Evolution, replacing SVS's previous Ultra range, which launched over a decade ago – but 'evolution' perhaps doesn't do it justice as this is no minor refresh. Yes, as before there are floorstander and bookshelf models, plus Ultra Centre and Ultra Elevation home cinema speakers, but their acoustic and physical design suggests an almost clean sheet approach, particularly in the case of the Pinnacle.

Since launching in 1998, SVS has earned a reputation for products that deliver value for money, and – though the Ultra Evolution Pinnacle's price tag pushes the company into a new segment of the market – that's probably not in danger. Selling for £5999 in a choice of Piano Gloss Black, Piano Gloss White, and Black Oak veneer finishes, this is a seven-driver, three-way floorstander measuring an imposing 1.26m tall and 46cm deep – although at 43.9kg it's thankfully not too much effort for one person to shift about.

RIGHT ON TIME

Accounting for its generous dimensions is a new cabinet architecture that features a multi-angled (not, strictly, 'curved') baffle for physical time alignment of its drivers [see PM's boxout, p55]. Top and bottom of a symmetrical layout are 200mm glass-fibre composite cone woofers, mounted in cast alloy baskets and with vented voice-coil formers. Two 135mm midrange drivers, also glass-fibre types, are next in line, while at the centre is the speaker's

25mm tweeter, these three all working into a separate, sealed enclosure.

SVS's tweeter debuts another new technology – a vapour-deposited 'diamond coating' for its alloy dome. This, it says, delivers an extended frequency response, while the tweeter's FEA-optimised diffuser/grille contributes to 'airy, unveiled highs'.

NEW BALANCE

There's another reason for the speaker's depth though: SVS has mounted two more 200mm bass drivers in its rear, each opposed to the corresponding front-firing unit in a 'force-balanced' configuration. It's a technique seen on the 3000 Micro subwoofer, plus speakers including KEF's Blade One Meta [HFN May '22] and Monitor Audio's Hyphn [HFN Jun '23], with claimed benefits including a more even in-room bass response and 'net-zero' cabinet vibration.

The Ultra Evolution Pinnacle's styling is

unusual, but easier on the eye than the trapezoidal bulk of SVS's out-going Ultra Tower, and both gloss finishes are very slick. The 25mm MDF front and rear baffles provide a firm footing for the bass drivers, with 18mm MDF used elsewhere. Internally, there's bracing and acoustic damping, plus the quartet of woofers and dual ports occupy the same acoustic space. While this arrangement is perhaps unusual, SVS explains that it helped to 'best match excursion and workload' between the drivers and 'spatially distribute the acoustic output at ported frequencies'.

RIGHT: Offered in Piano Gloss Black, Piano Gloss White and Black Oak veneer finishes, the Pinnacle's cunningly-crafted cabinet hosts a 25mm 'diamond-coated' alloy dome tweeter between a pair of 135mm fibre-glass coned mid units and matching pair of 200mm bass drivers

'It's capable of chest-thumping heft and fabulous lows'





KEEPING TIME

SVS makes play of the ‘time alignment’ of the acoustic centres of its five forward-facing drivers, a consideration that’s of increasing interest to audiophile speaker brands and championed most visibly by Wilson Audio in its exquisitely configurable XVX, Alexx V [HFN Jan ’22] and Alexia V [HFN Jan ’23] models. In essence this is an issue that stems from the physical design of traditional moving-coil drivers – rather less so with ‘flat’ ribbon or planar magnetic types. In an archetypal speaker with a conventional vertical baffle, the acoustic centre of its drivers – the point from which its sound appears to originate – sits progressively further back in the cabinet from tweeter to midrange to bass woofer. All of which means that the sound from the tweeter will arrive at the listening position slightly before that from the midrange and then from the woofer.

Short of actively compensating the phase of the drivers with an electronic delay line, there are various physical methods in use to time align differently proportioned drivers. KEF’s Uni-Q puts the tweeter in the throat of a midrange driver to create a coaxial and coincident driver array but larger drivers can be aligned – albeit not coaxially – by placing a physical step in the baffle, as demonstrated in B&W’s iconic three-way DM6 [HFN May ’76]. However, baffle steps can cause diffraction and unwanted reflections, so sloping the baffle backwards (or tilting the entire speaker backwards on its feet) avoids this, and is the most common method of alignment chosen by brands today. Mounting the drivers into a concave baffle, so the tweeter is pushed backwards and the deeper woofers brought forwards, makes for a more complex cabinet but this is the route adopted by SVS in its Pinnacle and, for example, Focal in its larger Sopra [HFN Sep ’15 & Sep ’16] and Utopia models [HFN Aug ’17 & Dec ’18]. In these cases, because the baffle is concave the drivers’ axial output is perfectly aligned at one ‘sweet spot’ listening distance. **PM**

Angled magnetic grilles are supplied, but while these certainly soften some of the Ultra Evolution Pinnacle’s looks they’re best left off [see PM’s Lab Report, p57]. Also included in SVS’s packaging are threaded metal spike feet to replace the pre-fitted elastomer studs if required.

Read the supplied manual and you’ll find that positioning recommendations are limited to a toe-in of some 25-30° but there’s no mention of minimum side/boundary wall distances. With those rear bass drivers and the ported cabinet, you may want to place the Ultra Evolution Pinnacle as far from a rear wall as possible.

TREASURE CHEST

The company’s stated ambition for its new top-of-the-range speaker is to challenge ‘high-fidelity’ rivals, but that doesn’t mean it ignores what’s come before. As devotees of SVS will expect (or even demand), bass output is the Ultra Evolution Pinnacle’s calling card. This speaker is not difficult to drive yet is capable of chest-thumping heft and fabulous lows. This contributes to a soundstage that

approaches vast at times, and a consistent feeling of fun and vibrancy to the performance. It can be insightful, detailed and atmospheric too, but not without adding some of its own character.

TRUE GRIT

Dua Lipa’s ‘Illusion’ [Radical Optimism; Warner Bros, 44.1kHz/24-bit] posed the loudspeaker no challenge at all. It was able to carry the disco-tinged synths and forthright kick drum with ease, bringing both weight and scale to the backing track while the pop star’s frothy lyrics were delivered clean and grain-free.

The Ultra Evolution Pinnacle leaned towards a slightly ‘dark’ overall sound here, a lack of brightness making it both unflagging but limiting the impact of some midband elements. The spoken word intro on ‘Golden Liar’, from Zeal & Ardor’s eponymous 2022 album [MVKA Music; 44.1kHz/24-bit], came through better, with a rich presence and plenty of grit to the voice, while the sheer depth and resonance to its ominous drums made the composition sound huge. Chants, whistles and other ‘incidental’ effects hung toward the back of a cavernous soundstage.

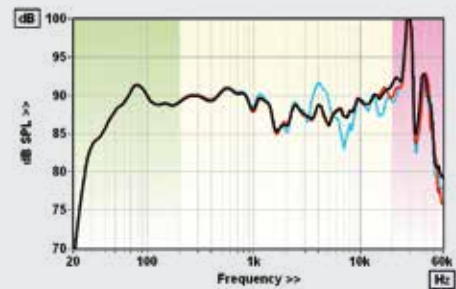
This track had me reconfiguring the positioning of the speakers slightly to bring them further from the boundary wall, as ➞

LAB REPORT

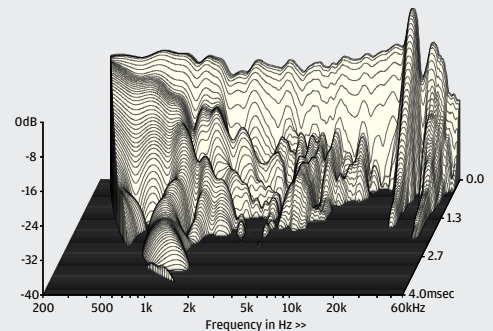
SVS ULTRA EVOLUTION PINNACLE

Measured at the statutory 1m, the Ultra Evolution Pinnacle's forward response shows a slight step at the point the 25mm tweeter takes over from the 135mm midrange at ~1.8kHz. The minor undulations that follow are picked up as cone modes [see CSD waterfall, Graph 2] and are responsible for the ±3.1dB response errors, respectively (all re. 200Hz-20kHz), although these are greatly exaggerated by the plastic grille [blue trace, Graph 1] which should be removed for 'serious' listening. Pair matching is an impressively tight 0.7dB (again, re. 200Hz-20kHz) while sensitivity matches SVS's specification at 88.2dB at both 1kHz and also when averaged over 500Hz-8kHz.

The ultrasonic resonance of SVS's alloy treble dome with its vapour-deposited 'diamond-like' coating is also clear at 28kHz (+12.5dB re. 1kHz), with a secondary mode at 40kHz [pink shaded area, Graph 1], but other brands have untreated metal domes with breakup modes pushed out to still higher frequency. At the other end of the scale, the 'peaky' alignment of those four 200mm woofers packs a thump at ~78Hz while the 30Hz port tuning helps serve up a low 32Hz bass extension (-6dB re. 200Hz), the output falling steeply thereafter [green shaded area, Graph 1]. This deep bass but – for the cabinet size and porting – modest sensitivity is achieved without punishing the partnering amplifier with a too harsh a load. In practice, its impedance lies above 4ohm from 160Hz-20kHz with a dip to 2.35ohm/86Hz suggesting a nominal 4ohm rating. The worse-case EPDR of 0.97ohm/74Hz is tough, but persists over a very narrow and, in all likelihood, programme-dependent band. PM



ABOVE: Response inc. nearfield summed drivers/ports [green], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. Left, black; right, red; grille, blue



ABOVE: Driver modes associated with the fibre-glass bass and mid units are visible at 1kHz and 6-10kHz

LEFT: Two further 200mm fibre-glass woofers, fed from the same split 140Hz crossover (facilitating separate bi-amp/bi-wire terminals) work into the same cabinet space and are reflex-loaded via two rear-facing ports

illustrated the speaker's delicate side as it teased out crowd cheers, ride cymbal strikes and the quick-fingered musicianship on show, making it easy to become swept up in the fast-blues rhythms.

BIG BUSINESS

On 'Son Of A Preacher Man [*Dusty In Memphis*, Rhino Atlantic R2 8214; 96kHz/24-bit], Dusty Springfield's vocals enjoyed an enticing, smooth timbre that was nicely lifted from the punchy trombone and sax, while the acoustic guitar-led 'Angeles' by Elliott Smith [*Either/Or*; Universal 0602557408720] impressed with its feeling of intimacy.

That said, SVS's speaker is at its most enchanting when you play to its obvious strengths. Alan Silvestri's orchestral score for *Back To The Future* [...*Original Motion Picture Soundtrack*; Geffen, 44.1kHz/24-bit] apparently arose out of a single suggestion from the film's director, Robert Zemeckis: 'It's got to be big'. And so it was through the Ultra Evolution Pinnacle, from the timpani strikes in '85 Twin Pines

Mall' to the brass intro of the main theme that raised goosebumps. When the music needs scale, weight and dynamics, this imposing floorstander delivers in spades. ☺

HI-FI NEWS VERDICT

The size and design of SVS's new flagship won't appeal to all, and nor will a voicing that favours vim and vigour over out-and-out neutrality. However, with the Ultra Evolution Pinnacle, the US manufacturer again delivers a performance that in many ways makes a mockery of the price point – particularly regards authentically deep, punchy bass and room-filling scale. Bang for your buck? Get it here.

Sound Quality: 84%



the bass guitar that kicks in around halfway sounded exaggerated on first listen. But even after making a change, the Ultra Evolution Pinnacle is never going to sound shy and retiring when it comes to the low-end, and on occasion its bass performance can be startling. The looping, groove-laden bassline to The Band's 'Up On Cripple Creek' [*The Band*; Capitol Records, 192kHz/24-bit] was rendered big, supple and warm but also firmly controlled – the loudspeaker in an instant sounding way above its price point.

It's a performance somewhat like that of SVS's more affordable Prime Pinnacle [*HFN* May '20], only everything has been ramped up, and not just in the low-end. The Allman Brothers' 'One Way Out', from the deluxe 2CD release of *...At Fillmore East* [Mercury 0600753270240],

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V – 1kHz/Mean/IEC)	88.2dB / 88.2dB / 87.0dB
Impedance modulus: minimum & maximum (20Hz–20kHz)	2.35ohm @ 86Hz 21.2ohm @ 22Hz
Impedance phase: minimum & maximum (20Hz–20kHz)	-58° @ 25Hz +38° @ 18Hz
Pair matching/Resp. error (200Hz–20kHz)	0.7dB/ ±3.1dB/±3.05dB
LF/HF extension (-6dB ref 200Hz/10kHz)	32Hz / 49.5kHz/49.4kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.4% / 0.45% / 0.6%
Dimensions (HWD) / Weight	1275x300x461mm / 22kg