

# System Audio Legend 60.2 Silverback

Danish brand's flagship floorstander really comes on song in fully active 'Silverback' guise, with room bass-tuning to boot  
 Review: **Mark Craven** Lab: **Paul Miller**

There's more to System Audio's flagship floorstander than meets the eye. Outwardly, the £7000 Legend 60.2 Silverback, available in satin black and satin white, appears to be an archetypal slender, tower loudspeaker. Peer around the back, however, and you'll find a metal plate – the Silverback of its title – with IEC mains inlet, XLR and USB connections, plus a bank of status LEDs below legends including 'Wireless', 'Centre' and 'Subwoofer'. So not only is this an active model, it's one with wireless and multichannel ambitions. Furthermore, above this amp/control panel are two rear bass-reflex ports, even though this is described as a sealed loudspeaker. As I said, more than meets the eye...

'Wireless' and 'subwoofer' are perhaps words to be made a bona fide stereophile shudder, so I must stress that the wireless element here is smarter than average. WiSA, a transmission standard developed by the Wireless Speaker and Audio Association (a 60-member organisation founded by HDMI-partner Silicon Image), claims low latency and rapid synchronisation, and supports up to eight 96kHz/24-bit channels simultaneously – hence the multichannel potential.

## MEET THE HUB

A WiSA module is built into the 60.2 Silverback meaning it can be paired with any WiSA source (aka 'transmitter'). Options include hardware from the likes of Harman Kardon and Primare, but System Audio steers buyers towards the Stereo Hub, a compact 170mm-wide unit from fellow Danish brand Platin Audio and Chinese OEM company Hansong.

Priced £400 when bought with System Audio's Silverback speakers (or £700 separately), the Stereo Hub is lightweight in build but heavyweight in terms of connectivity – three optical, one coax, USB-B, HDMI ARC for connection to a TV, and 3.5mm aux and

RCA analogue inputs. System Audio describes it as 'the meeting point for all your audio devices', and this refers to wireless ones too – Chromecast, Bluetooth, Spotify Connect and Apple AirPlay are also integrated. It also facilitates sub-300Hz low frequency in-room bass correction [see boxout, p59].

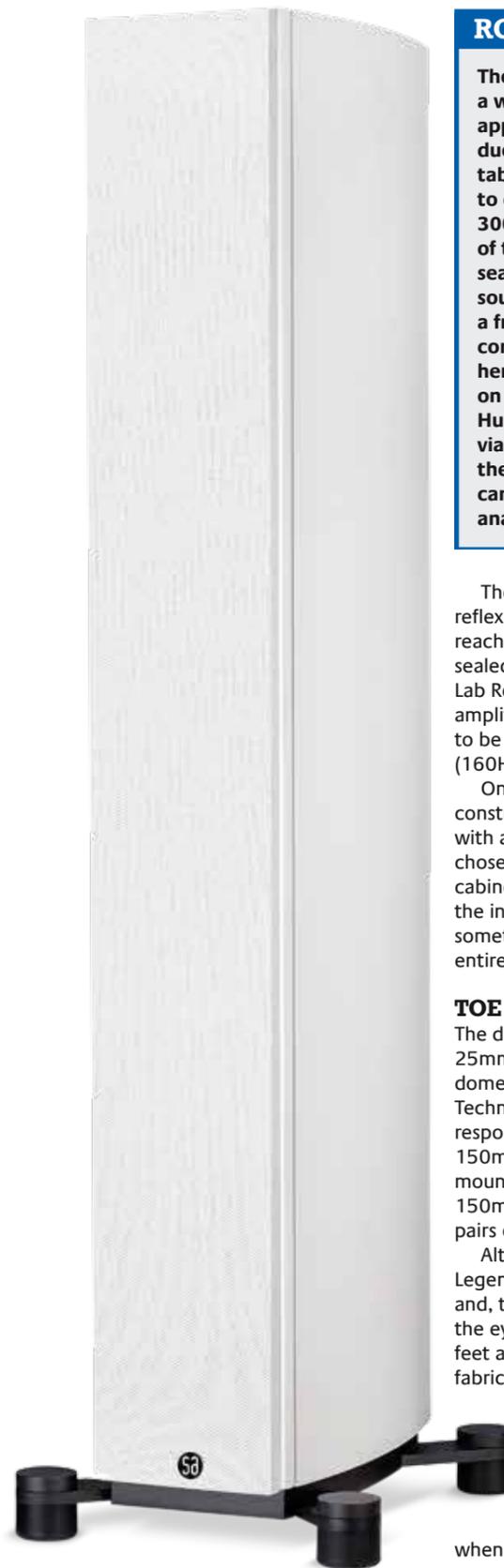
## FOUR BY THREE

One curious omission from this little black box is an Ethernet port. This would surely help streamline an installation process that may prove frustrating depending on your general attitude towards 'smart tech'. My own experience took nearly 30 minutes courtesy of a repeated error message within the Google Home app, which is used to establish a network connection to the Hub (a web browser is an alternative) – although once set-up is complete WiSA doesn't use your home network to stream.

There's also quite a lot of pressing of buttons on the back of the Hub, the back of the 60.2 Silverbacks, the Hub's remote and your own smartphone until everything is singing from the same hymn sheet.

Anyway, back to the speakers themselves, and those two rear ports. System Audio, which builds all of its loudspeakers by hand at its Danish plant, sells both active and passive versions of its Legend models. The Legend 60.2 Silverback is therefore identical in appearance to the passive Legend 60.2 (£5400). However, the introduction of an Analog Devices DSP-based crossover and 560W-worth of Class D amps (with integrated DACs) has allowed the company to rethink the loudspeaker's sound profile.

**RIGHT:** 150mm woven-fibre midrange [top] and four 150mm bass drivers look identical but the mid unit has a shorter (lighter) voice-coil. The tweeter with DXT lens/waveguide was developed with the Danish patent holder



## ROOM SERVICE

The Platin Audio Stereo Hub is not simply a way to feed the Legend 60.2 Silverback a wireless signal – it also works in conjunction with System Audio's Room Service app. Available at present for iOS (Apple) devices only, but with an Android version due to arrive soon, Room Service uses the microphone within your smartphone/tablet to measure the response characteristics of your listening room. It then aims to correct the Hub's output signal to compensate for bass peaks and troughs below 300Hz, while capturing higher-frequency data to help 'identify the natural response of the loudspeaker'. Unlike some platforms that work on one or more specific seating positions, here a one-minute sweep across the soundstage ('continuous soundfield sampling') is performed. Room Service displays a frequency plot of your room, overlaid with the corrected response [see screenshots, inset here]. This EQ'd profile is then stored on an Analog Devices DSP within the Hub, and can be disabled if desired via the app. As it's not stored within the 60.2 Silverback's own DSP, it can't be used with playback via the analogue XLR input.



The Legend 60.2 is a three-way bass-reflex design with a rated 30Hz low-end reach, but the Silverback version is sealed, and claims to hit 17Hz [see PM's Lab Report, p63]. Because of those four amplifiers, System Audio deems the speaker to be a 'four-way', but it retains a three-way (160Hz/3.2kHz) crossover.

One could argue that the best way to construct a sealed loudspeaker is to start with a sealed box. Instead, System Audio has chosen to retain the Legend 60.2's ported cabinet and then block the outlets from the inside. This strikes me as unusual, and something that my listening suggests isn't entirely fool-proof.

## TOE THE LINE

The drivers remain the same, of course. The 25mm high-frequency unit is a woven silk dome with a DXT (Diffraction eXpansion Technology) lens to fine-tune its off-axis response and better integrate with the 150mm woven-fibre midrange driver mounted below it. There are then four 150mm woven-fibre woofers, running in pairs off separate internal amplifiers.

Although certainly tall at 118cm, the Legend 60.2 Silverback is just 20cm wide and, thanks to its curved sides, easy on the eye. Outriggers with spikes and rubber feet are supplied, as are full-length black fabric grilles. System Audio's placement recommendations are for a toe-in of 15°, a listening distance between 2.5m and 3m, and rear wall clearance of 20cm-40cm.

After experimentation, I found the greater distance gave better results when it came to bass performance, even

with the sealed design making near-wall positioning more appealing.

## FULL THRUST

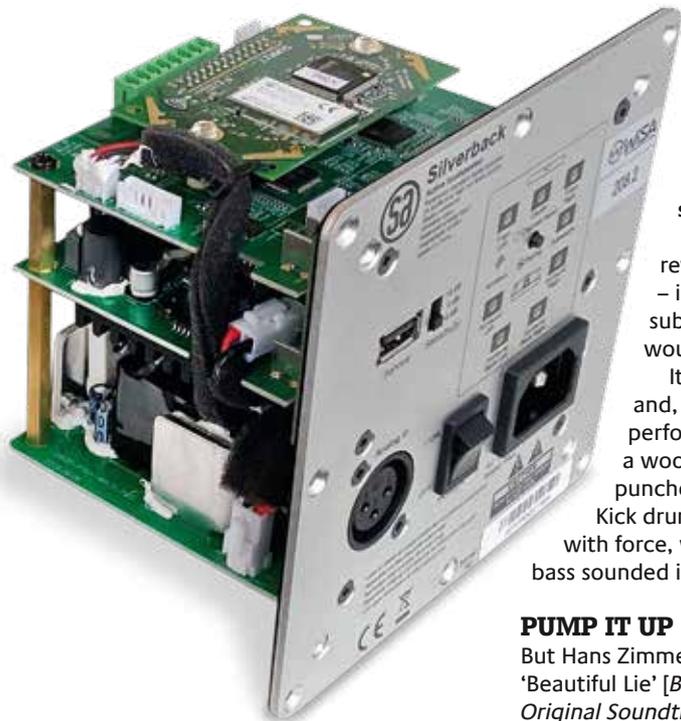
There's a feeling of latent energy when listening to this towering active speaker. A dozen drivers in your eyeline implies a full-range, full-scale sound, and that's what the Legend 60.2 Silverback delivers. It's therefore a clear-cut partner for cinematic, instrument-packed soundscapes, but proves equally at home with 'the small stuff'.

The voicing replaces overt bass warmth with sheer bass weight and energy (arguably too much energy at times), while there's a bright, sparkly grasp of upper registers and impressive imaging. My initial grumbles about the set-up process rapidly started to fade when the music began to flow.

All of the above is largely true whether you opt for wireless connection or the analogue XLR input (give or take any changes to response characteristics introduced by the Room Service app, see boxout, above). With a Primare PRE35 preamp [HFN Dec '19] connected directly to the speakers, the Silverback sounded a shade richer, with more of a forward thrust to vocals.

Yet using the Stereo Hub with room correction applied (which aimed to correct bass dips at around 70Hz and 150Hz in my room) helped smooth a low-end performance that, at times, could sound rambunctious – even though the Room Service compensation never approached the

## ACTIVE LOUDSPEAKER



**LEFT:** The wireless WiSA receiver, ADCs, DSP-based three-way crossover, and four Texas Instruments-sourced Class D amps are all contained in the Silverback 'pack' built into the lower section of the 60.2's cabinet

revealed a bass extension – in my room – that some subwoofer manufacturers would be proud of.

It was rather eye-opening and, thankfully, this facet of the performance didn't come with a woolly edge – this speaker punches like its gorilla namesake. Kick drums, in particular, arrived with force, while the metallic-tinged bass sounded impossibly huge.

### PUMP IT UP

But Hans Zimmer and Junkie XL's 'Beautiful Lie' [*Batman v Superman Original Soundtrack*; Water Tower Music 88985301172] caused a raised eyebrow, when one particularly low note came with an audible flutter from one of the Silverback's sealed ports. Thankfully, at all other times the ports were as quiet as a church mouse.

Okay, this active speaker can come across as a bit over-eager in the bass department, but it's tailor-made for high-volume listening and sounded sublime with well-mastered tracks. Mike Oldfield and York's remix of 'Ommadawn' [*Tubular Beats*; Ear Music] delivered a soundscape that washed over my listening position and felt completely removed from the slim cabinets up front. Nudging the volume via the Hub's remote found the active 60.2 retaining clarity and tonality – the onboard amplification seems up to the challenge presented by the driver sextet and cabinet size.

'Rocket Man' by Elton John [*Honky Chateau*; Mercury 528 ↗]

**LEFT:** Front (top) and rear views (bottom) of System Audio's wireless Stereo Hub. Analogue ins are on RCAs and a 3.5mm jack socket with digital via optical (x3), HDMI (ARC), coax, USB-B and USB-A. Google Chromecast, Apple Airplay, DLNA UPnP, Spotify Connect and Bluetooth are supported

## OLE WITTHØFT

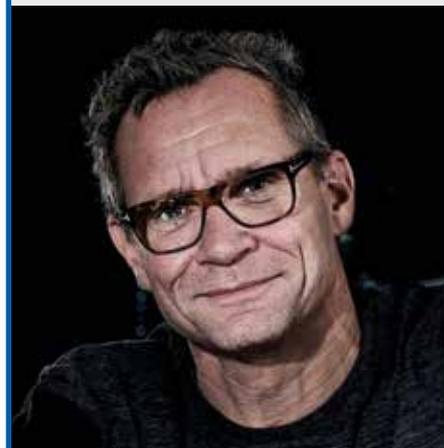
Denmark's System Audio was founded in 1984 by Ole Witthøft – a former musician – after he wondered why loudspeakers 'were competing about the best technical specifications when it is the sound that matters'. Thirty-seven years later, he's head of R&D at a company whose speakers never seem to stand still. An example of this is something System Audio calls 'RAM Tweaks'.

'RAM Tweaks are upgrades that you download and install [via USB] in your Silverback speakers', explains Witthøft. 'Digital technologies are developing at speed – a RAM Tweak is a way to stay updated, if you want.'

System Audio intends to roll out a selection of these DSP overhauls offering different sound profiles – at the time of writing it had begun with the smaller Silverback 40.2. 'I hope that people will try RAM Tweaks to find the perfect match for speakers and room. It's a unique tool and far easier to hear than experimenting with cables and spikes.'

Such upgrades might appeal to those who aren't using the speaker's wireless input and SA's Room Service app. Yet the latter is also being redesigned, and not just for Android compatibility – the new version will include Room Service, plus 'manual EQ and setup management of wireless WiSA speakers'.

So why the initial delay on an Android app, by far the world's most popular smartphone platform? 'Android does not have a strict standard for mics, so we can't rely on an Android device for precise acoustic measurements', says Witthøft. 'Android users will use a wireless microphone supplied by us.'



'night-and-day' feeling of, for example, the Dirac Live system used by Arcam and NAD.

System Audio's claim is that the Legend 60.2 Silverback musters 'the deepest bass' even at low listening levels. There was an element of truth to this. With Robbie Williams' 'Shame' [*In And Out Of Consciousness*; Tidal Master] burbling away quietly

via Chromecast, there was still a chewy, textured and fulsome quality to the bassline. Yet it's when you crank the volume that the 60.2 Silverback's bass energy becomes its party trick. KOAN Sound's 'Funkblaster' [Funk Blaster EP; Tidal Master]

'Mick, Keith and gang sounded imperious'

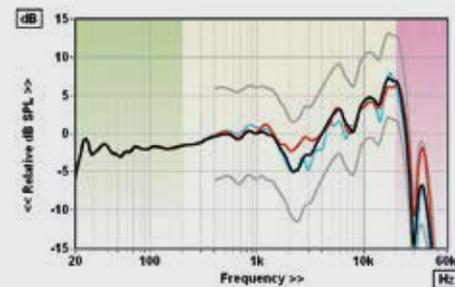


## SA LEGEND 60.2 SILVERBACK

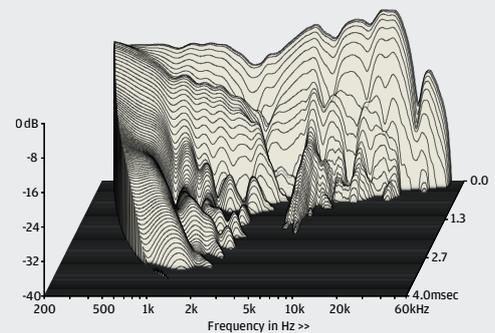
As Mark discusses in our review, this 'Silverback' version of the Legend 60.2 is very much more than an actively-driven version of the 'passive' 60.2. Same cabinet and same combination of four 150mm carbon-fibre reinforced bass units, except the ports in the Silverback are internally 'shorted' to yield something closer to a 2nd-order sealed-box bass alignment. In practice these foam bungs do not provide an hermetic seal, so the alignment is slightly 'leaky'. Moreover the quad woofers are separated into two pairs, each driven in parallel from one TI Class D amp and delivering a useful -6dB bandpass of 18Hz-130Hz. With Room Service correction applied [see boxout, p59] the bass is extended to circa-20Hz [-6dB re. 200Hz; green shaded area, Graph 1].

The forward response, however, shows a generally uptilted trend from bass through to treble, albeit with an upper mid/presence band depression. This was a more significant -5dB/2.1kHz dip in the 'left' speaker compared to -2.5dB in the 'right' and responsible for the below average 4.7dB pair matching [black/red traces, Graph 1] and higher ±6dB response error in the 'left'. That the mid/treble crossover is increased from 1.85kHz (passive 60.2) to a higher 3.2kHz in the 60.2 Silverback, thereby stretching the reach of the 150mm mid driver, may not be coincidental, but toeing the speakers a little off-axis certainly tempers the brightened treble.

The blend of rigidity and self-damping offered by SA's bass/mid cone material is ably illustrated by the low-level of breakup modes [CSD waterall, Graph 2]. THD, meanwhile, is a low 0.3-0.35% through bass and mid (re. 90dB SPL/1m) and principally 3rd harmonic, though this segues to 2nd harmonic at higher frequencies as the ultrasonic response is limited to ~26kHz (-6dB re. 10kHz) via the soft dome tweeter [pink shaded area, Graph 1]. (TI's 'Ultra-HD/PurePath' Class D modules will accept 96kHz digital inputs, conferring a potential ~48kHz bandwidth.) PM



ABOVE: Response inc. corrected nearfield <200Hz [green], freefield corrected to 1m [yellow], ultrasonic [pink]. Left speaker, black (with grille, blue); right speaker, red; ±6dB settings, grey (from 400Hz)



ABOVE: Low-level modes visible from the four bass units up to 2kHz and mid at 6kHz but tweeter is clean

**LEFT:** The 'Silverback' version of the 60.2 has its ports plugged to give a sealed-box bass alignment. Input is via XLR or wireless via the Stereo Hub. Gain/sensitivity can be adjusted by ±6dB and the speaker configured for stereo or multichannel duty via the back panel

gang sounded at their imperious, foot-tapping best. Switch to low-key compositions, and the appeal of the 60.2 Silverback becomes more about its sense of mid and treble clarity, and expansive soundstaging. J J Cale's 'After Midnight' [*Naturally*; Mercury] has an oddball stereo mix – the kick drum patrols the left channel, while the snare sits right – but Cale's voice and guitar solo shone through, the former blessed with a close-mic'd presence that hung in the centre, the latter seeming to emerge from nothing.

### FREE FLOW

It's a revealing presentation too, so you'll need to accept the deficiencies of some of your favourite tunes, or upgrade your diet. Listening to a CD-res stream of Lynyrd Skynyrd's 'Call Me The Breeze' [*Second Helping*; MCA] had me hankering for something else, for both the soundstage and dynamic range had shrunk, with just the Floridian rockers' tight groove to latch on to.

Something else came in the form of Adele's tear-jerker 'Hello' [25; XL Recordings XLCD740]. Not always my cup of tea, but I lapped it up here. The way these floorstanders planted the singer in my room, revealed every vocal inflection and handled the dynamic ebb and flow was stop-what-you're-doing captivating. ☺

### HI-FI NEWS VERDICT

System Audio's slim, active Silverback speakers mix the powerful bass-rich sound you'd expect with top-end refinement and a wide, open image. The Stereo Hub brings welcome extra functionality and connectivity – but it does lengthen the set-up process! While unlikely to appeal to traditionalists, these are still a smart choice for those looking to incorporate modern sources while also cutting cable clutter.

Sound Quality: 84%



162-2] began with a widescreen soundstage of rolling piano, clean, upper-range bass guitar and well-resolved vocals. It was here I got a better understanding of the 60.2 Silverback's delicate higher-frequencies and imaging capability. The opening hi-hat 'tings' had a crisp, precise nature, while cymbal crashes hit without hashy noise. The ARP synthesiser added another instrumental layer for the 60.2 Silverback to dig into, and it painted a picture of both width and height.

Sticking with classic tracks from 1972, The Rolling Stones' 'Shine A Light' [*Exile On Main Street*; Polydor] showed this level of performance wasn't a one-off. Mick, Keith and