



# Perlisten Audio S4b stand-mount loudspeaker

Alan Sircom

**P**erlisten Audio from Wisconsin, US, has a bold mission statement; it's out to change the way we think about loudspeakers. It's also one of those companies that sees no distinction between hi-fi and home cinema/home theatre, as the company was the first to bring the THX Dominus loudspeaker specification into the home. Such is the antipathy felt toward home cinema in some audiophile circles, just mentioning THX might send some of the hi-fi hardcore into a 'nope' spiral. Well, more fool them because the S4b stand-mount is a great loudspeaker, whatever you play through them.

I was tempted to say 'great *little* loudspeaker' in that previous paragraph because Perlisten class the S4b as a 'bookshelf' design. If that's true, they must have some pretty big and weighty books in Wisconsin, because the S4b stands some 42cm tall and each weighs in at 11kg.

## Perceptual Listening

Perlisten is a portmanteau of 'PERceptual LISTENing', the company's core consideration in the design and manufacture of its loudspeakers and subwoofers. Although the mechanics of listening in this way are unclear, the results of this Perceptual Listening programme are anything but. This is related to the DPC (directivity pattern control) >>



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» array, which combines a 28mm beryllium dome tweeter sandwiched by a pair of 28mm 'Textreme' thin-ply carbon diaphragm (TPCD) midrange units, all in an acoustical lens waveguide. This is joined by a 180mm TPCD bass unit, with the woven thin-ply diaphragm said to be almost a third lighter than carbon-fibre drivers of the same diameter. These sit in a CNC-machined front baffle.

Where Perlisten scores highly is in its no-nonsense approach, publishing a comprehensive datasheet on its products, one that is healthily free from wild claims and pseudoscience. This throws down a fairly large gauntlet to other manufacturers; Perlisten isn't a huge brand, and yet it can produce an honest account of its products, shouldn't more companies do the same? Sadly, I suspect the reason they don't is that honesty is not always the best policy.

### Subwoofer required?

That honesty extends to the stated frequency response, listing its frequency extension to  $\pm 1$ dB limits. This means that within this unusually strict threshold, the loudspeaker rolls off at 100Hz. The specified -10dB looks more real-world at 36Hz and the typical in-room bass extension even more so at 30Hz, but Perlisten makes it abundantly clear that for optimum results the S4b is best used with a subwoofer, ideally a Perlisten one. We tried it with and

without an active subwoofer, not from Perlisten, and they are right; it's best in a 2.1 channel context.

'Better' does not mean 'mandatory,' however. What you get is a very clean roll-off into the bass, and that's a lot better than a raggedy response and a bass bloom around 80Hz. While the latter is a classic psychoacoustic trick, designed to make a loudspeaker appear larger than its cabinet volume suggests, the more natural roll-off into the bottom end makes it both intrinsically more 'correct' and makes this speaker easier to match with a sub should you go down that recommended route.

### Not your father's loudspeaker

This is perhaps best described as an 'unconventionally conventional' loudspeaker design. The sealed cabinet is cleverly internally braced allowing the mid-bass unit to be isolated from the mid-tweeter-mid array, and every aspect of the cabinet – from the dish shape of the GRP waveguide to the placement of the drivers in the cabinet has been the subject of some hardcore computer modelling.

Perlisten's design is also not as easy to drive as many similarly sized stand-mounts in its class. With a rated sensitivity of just 85dB and an impedance that drops to 3.2 $\Omega$ , it requires a good amp to drive it. Let's be honest, neither a brute nor a powerhouse is necessary here. But if you are looking for a partner to that 300B single-ended triode amp... keep looking. I suspect that finding the ideal power partner would be something the people at Perlisten would be perfectly happy about too.

The company is less fussy about where the loudspeaker sits in the room, a function of the directivity of that driver and a sealed box. It has mounting bolts for wall attachment, and – while not an intrinsically boundary design – its sensitivity measurement (tested in a 2pi space) does strongly imply a life at the edges of your room is anticipated and in use they work best close to the rear wall. However, by close, I still find they work best around 0.25m from the rear wall. They are not position fussy, though, and a mild toe-in is the closest concession to hi-fi hood.

This is a loudspeaker all about honesty and integrity. It doesn't hark back to classic thin-walled BBC designs of the 1960s and 1970s, but in a way it's like Perlisten is conceptually a next step in 'what happened after', at least from a sonic perspective. If you draw an imaginary line from those BBC designs to classic ATC-style studio monitors, the Perlisten S4b is one of the logical extensions of that design criteria, both from an observational and objective side. »



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### » Speaking truth to power

There is no sugar-coating of sound here, but neither is there masking or veiling or distortion. This is an extraordinarily accurate, truthful and faithful sound. Given its almost brutalist exterior, it's a surprisingly fleet-footed and elegant sound. Sure, driven powerfully (I used the new Moon North power amplifier... but more on that next month) the S4b has some oomph and energy, but it's never going to be top of the list for dub reggae fans without some bottom end reinforcement. But in a very real way, I feel that isn't the point of the S4b at all; this is a loudspeaker that is designed to be a part of an array that includes a low-frequency unit. The Perlisten works to the maxim that the best place for mid and treble in a room might not be the best place for bass tones, so it hands those frequencies over to another so that it can get on and make music beautifully.

The first and most immediate aspect of the Perlisten's performance is the sheer amount of detail and spatial detail it delivers. You can really feel the separation between instruments within a soundstage and you can hear a lot going on within those instruments, such as subtle finger squeaks on fretboards and the sounds of hammers hitting strings in a piano. This is the kind of loudspeaker that gives you great insight into the mix; and even Glenn Gould's sometimes annoying humming sounds while playing Bach [Goldberg Variations, Sony] are a joy to hear.

This makes vocals come to life, too. Yes, bass baritones lose the last parts of their register here – the S4b is a 'bookshelf' design after all – but as said earlier the roll-off is natural so they are still singing in the bass, just a lot quieter. Strangely, such voices still sound rooted in space, despite that supposedly being a function of really deep bass.

As you might imagine in a loudspeaker that makes such a thing of directivity, it's directivity is unusually good. The Perlisten projects sound along the listener's axis with aplomb and doesn't beam too much musical information into the first reflection points on the floor or ceiling. This means more than one listener gets a good sound, and an image is projected well around the room.

All this talk of subtlety and restricted bass is going to make people think it can't rock, but they would be very wrong. The energy of Rammstein's Drop-G tuning is all there and at once exciting and menacing. The low energy of the recordings are retained by the Perlisten S4b, but without the feeling of being slammed against a wall by all that bass guitar and drum sound. The Perlisten S4b acquits itself well on any musical genre.

But I think where these loudspeakers come into their own is resolving fine detail on well-recorded albums. It's a joy to sit in and listen to an old Nat King Cole or Buddy Holly outtake through these loudspeakers as you really feel like you are in the room with these musical titans of their age. The resolution of space and depth of image and the sheer amount of articulate voicing going on is almost breathtaking. And then there's Nat King Cole's voice and Gordon Jenkins arrangement on 'Stardust' [*Love is the Thing*, Capitol]... it doesn't matter whether it's the mono or stereo versions, it's just sublime!

### Stand back!

I was already enjoying the sound of the S4b when I was informed that a slight back tilt helps the performance still further. I tried it and it's absolutely the case, with a lot more energy and a bigger, more fleshed out wall of soundstage too. With that slight tilt in place, which is possible if you use dedicated Perlisten stands, the S4b goes from 'great' to 'wow!' This is a stunningly honest loudspeaker that can move from being refined and graceful to packing a punch at the turn of a crotchet. Its bass is controlled and needs a great sub like, say, the Perlisten D12s to extend it (watch this space), but I think I'd rather have its laser-like musical fidelity than a more full-range design that lacks the transparency of the Perlisten S4b. +

### Technical specifications

**Type** three-way acoustic suspension stand-mount loudspeaker

**Drivers** DPC Array (28mm beryllium dome tweeter with 2x 28mm textreme TPCD midrange), 180mm Textreme TPCD woofer

**Sensitivity (2pi)** 85dB @ 2.83v/1m

**Impedance** 4Ω nominal, 3.2Ω minimum

**Frequency response** 100Hz–20kHz ±1.5dB, 36Hz–37kHz -10dB

**Typical in-room bass extension** 30Hz

**Finish** Piano black, gloss white as standard, High Gloss Ebony, Natural Cherry, Natural Ebony, Natural Black Cherry available for an additional £1,520

**Dimensions (H×W×D)** 42 × 24 × 18.5cm

**Weight** 11kg

**Price** £7,600 per pair

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**Manufacturer** Perlisten  [www.perlistenaudio.com](http://www.perlistenaudio.com)

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**UK distributor** Karma AV

 +44 (0)1423 358846  [www.karma-av.co.uk](http://www.karma-av.co.uk)